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Filed:	10/28/19
49th Day:	Waived
Staff:	W. Deppe-V
Staff Report:	11/4/21
Hearing Date:	11/18/21

STAFF REPORT: APPEAL - SUBSTANTIAL ISSUE

& DE NOVO REVIEW

Appeal No.:	**A-4-MAL-19-0202**
Applicant:	**GKGD Heritage Trust**
Appellants:	Dorinne and Dennis Graves
Local Decision	Approval with Conditions by the Malibu City Council on September 9, 2019 (Coastal Development Permit No. 15-042, Variance No. 15-021, Variance No. 15-022, Variance No. 18-042, and Offer-to-Dedicate No. 18-002)
Project Location:	20222 Pacific Coast Highway, Malibu, Los Angeles County (APN 4450-003-012)
Project Description:	Construction of a new 2,536 square foot two-story single-family residence, with an attached two-car garage with roof deck, retaining walls, hardscaping, seawall, and new onsite wastewater treatment system, removal of existing timber bulkhead, and offer-to-dedicate a lateral public access easement.
Staff Recommendation:	Substantial Issue Exists; Approval with Conditions.

IMPORTANT HEARING NOTE PROCEDURE

The Commission will not take testimony on this "substantial issue" recommendation unless at least three Commissioners request it. The Commission may ask questions of the Applicant, any aggrieved person, the Attorney General, or the Executive Director prior to determining whether or not to take testimony regarding whether the appeal raises a substantial issue. If the Commission takes testimony regarding whether the appeal raises a substantial issue, testimony is generally (and at the discretion of the Chair) limited to three minutes total per side. Only the Applicant, persons who opposed the application before the local government (or their representatives), and the local government shall be qualified to testify during this phase of the hearing. Others may submit comments in writing. If the Commission finds that the appeal raises a substantial issue, then the Commission takes jurisdiction over the underlying Coastal Development Permit (CDP) application, and it will then review that application immediately following that determination (unless postponed), at which time all persons are invited to testify. If the Commission finds that the appeal does not raise a substantial issue, then the local government CDP decision stands, and is thus final and effective.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission determine that a substantial issue exists with respect to the appellants' assertions that the project is not consistent with the City of Malibu (City) Local Coastal Program (LCP) policies related to hazards and shoreline development, and that the Commission take jurisdiction over the coastal development permit (CDP) application for the project as a de novo CDP application. Further, staff recommends that the Commission approve the de novo CDP application, including revisions proposed by the applicant to the project, and subject to seventeen (17) special conditions.

The Malibu City Council approved the subject CDP on September 9, 2019 for the construction of a new two-story single-family residence with an attached two-car garage with roof deck and associated retaining walls and hardscaping, excavation for and construction of a new onsite wastewater treatment system (OWTS), construction of a seawall for the OWTS, and removal of an existing timber bulkhead, located at 20222 Pacific Coast Highway in the Big Rock area in the eastern portion of the City of Malibu (**Exhibits 1-4**). The City also approved three variances: (1) to reduce the required amount of unenclosed parking to one space; (2) to reduce the required factor of safety; and (3) for construction on slopes steeper than 2.5 to 1. Additionally, the approved project included a lateral public access easement offer-to-dedicate.

The project site is vulnerable to coastal hazards and flooding and is located entirely within the southern boundary of the Big Rock Mesa Landslide (BRML), a large, active landslide complex, described in more detail below. The property was previously developed with a single-family residence but it was demolished by the previous property owner in 1985 after storm damage. The subject site is now a vacant infill lot within the existing Big Rock beachfront residential community along Pacific Coast Highway (PCH).

The City's permit action was appealed by Dorinne and Dennis Graves **(Exhibit 5)** who live on the adjacent property at 20224 Pacific Coast Highway. The appeal contends that that the approved project is not consistent with the provisions of the City's certified LCP that relate to geologic hazards, visual and scenic resources, and neighborhood character. Specifically, the appellants assert that the project does not meet the factor of safety requirements in Local Implementation Plan (LIP) Section 9.4(D) and there has not been adequate demonstration by the City that the project will not have significant adverse impacts on site stability and structural integrity from geologic, flood, or fire hazards as required by LIP Section 9.3(A). The appellants also assert the City's findings for a variance to reduce the required geotechnical factor of safety related to the underlying landslide did not provide substantial evidence that there are special circumstances or exceptional characteristics applicable to the subject property, as required by LIP Section 13.26.5.A. In addition, the appellants contend that the project does not meet the LCP's requirements for new development on ancient landslides, unstable slopes and other geologic hazard areas and express concern that the approved development and seawall will adversely impact site stability and endanger their home, and the piles supporting their home. The appellants also assert that the proposal for a residence built to the maximum height allowable by the LCP is inconsistent with the neighborhood character and the City's findings that the proposed project will blend in with the surrounding development are false.

The applicant's geotechnical reports characterize the Big Rock Mesa Landslide (BRML) as a deep-seated bedrock landslide, approximately one mile in length and half a mile in width that spills out onto the adjacent coastal platform. This landslide was reactivated in 1983 due primarily to elevated groundwater levels associated with a series of winter storms. The geotechnical information contained in the City's permit record clearly establishes that the 1.5 factor of safety (static) standard contained in the Malibu LCP, specifically LIP Section 9.4 (D), is not currently met by the project site. However, none of the geotechnical reports provided an assessment, by the project geologist or engineer, of the technical and economic feasibility of undertaking site-specific (or other) stabilization measures that would increase the factor of safety at the project site above 1.5. Additionally, the geologic reports contained in the City's record did not fully evaluate the project site's potential vulnerability to seismically-induced landsliding, and indicated the need for a more detailed, site-specific assessment of the potential for seismic reactivation of the BRM Landslide and the hazard this may pose for the project site.

As such, the City's action does not adequately demonstrate that the approved development would minimize risks to life and property and assure stability and structural integrity. Further, the City's action to grant relief from the minimum required factor of safety provisions of the LCP was not adequately supported by substantial evidence in the record. For these reasons, staff recommends that the Commission determine that a substantial issue exists with respect to the grounds raised by Dorinne and Dennis Graves in the subject appeal with respect to the consistency of the approved development with the hazard policies and provisions of the City's certified LCP.

With respect to the de novo CDP, the applicant has worked with Commission staff to (1) provide additional information not included in the City's record to address the issues

raised in the subject appeal, and (2) revise the proposed project to address other hazard-related issues of the approved development. The applicant provided a geotechnical letter by SubSurface Designs, Inc., dated June 12, 2020, to provide additional information and evidence related to the factor of safety. Additionally, the applicant provided an updated wave uprush study and coastal engineering report for the project site by Pacific Engineering Group, dated September 8, 2020. The project approved by the City was designed based on a wave uprush study dated May 19, 2015, using outdated sea level rise predictions. The 2020 report uses updated sea level rise predictions consistent with the Commission's Sea Level Rise Policy Guidance. Based on the consultant's analysis using the updated sea level rise projection of 6.15 feet, the report concludes that the residence will be safe from hazards during much of its 75-year life, recommends a Mean Sea Level trigger of 8 feet NAVD88 for examination of possible adaptation measures, recommends that the minimum elevations for the proposed finished floor of the residence be no lower than 24.75 feet NAVD88 (21.0 feet for the lowest horizontal structural member), and also concludes that any proposed OWTS located on the subject site will be in the wave uprush zone and will require a shoreline protection device for storm generated wave uprush, beach scour, and tsunami hazards, and recommends a minimum seawall design elevations.

Further, the applicant has revised the project to address this updated wave uprush study. Specifically, the applicant has modified the proposed project in two significant ways: (1) to increase the finished floor elevation on the ocean side of the house from 23.5 ft. to 24.75 ft. NAVD88 (and associated design changes to other heights of the ocean side portion of the structure) and (2) to increase the top of seawall elevation to 22.25 ft. NAVD88, as well as other modifications to the OWTS design, as discussed below. The applicant submitted revised project plans incorporating these changes for the proposed project to be considered in the subject de novo CDP review **(Exhibit 6)**. In this case, the proposed structure is sited as far landward as is feasible to minimize the risks from storm wave action and beach erosion, and will be safe from wave uprush for the estimated project life without a shoreline protection device (with the exception of the OWTS for which a seawall is proposed), consistent with the Malibu LCP. Revisions were made to the OWTS design based on subsequent analysis by the applicant's consultants (EPD Consultants, and Pacific Engineering Group) in response to concerns raised by Commission staff related to future increase in groundwater elevations expected in association with future sea level rise. Based on this analysis, the OWTS design life is approximately 30 years (as compared to the design life of residence is 75 years), at which time a future replacement leach field may be needed that is approximately 3 feet higher than the current proposed leach field to maintain current regulatory clearance distances above future projected groundwater associated with sea level rise. Malibu Land Use Plan (LUP) Policy 4.37 requires that shoreline protection devices shall not be permitted to protect new development, except when necessary to protect a new septic system and there is no feasible alternative that would allow residential development on the parcel and the septic system is located as far landward as feasible. The proposed OWTS to serve the residence is located as far landward as feasible; however, it would be located below the FEMA base flood elevation for the area (21 ft. NAVD88) and within the wave uprush zone or within 15 feet of the wave uprush limit line and a seawall is necessary to protect the proposed OWTS. Therefore, the

proposed project includes construction of a seawall to protect the OWTS, and both the seawall and OWTS have been sited as far landward as feasible consistent with the requirements of the City's LCP.

Staff recommends **Special Condition 2** to confirm that the applicant is not entitled to shoreline protection for the residential development approved by this permit, with the exception of the seawall authorized solely for protection of the OWTS, and to waive rights to future shoreline protection, or rights to augment the OWTS shoreline protective device in a manner that would extend the seaward footprint of the shoreline protective device approved pursuant to this coastal development permit and to provide conditions for removal if necessary. Further, **Special Condition 3** requires the landowner to remove the development if (1) any government agency has ordered that the structure not be occupied due to coastal hazards, or requires the structures to be removed; (2) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (3) removal is required pursuant to LCP policies for sea level rise adaptation planning; or (4) the development requires new shoreline protective devices that conflict with LCP or relevant Coastal Act policies.

In addition, the public trust boundary may migrate landward over the life of the development in response to rising sea levels and it is important to ensure that the development remains on private land. Staff recommends **Special Condition 3** which specifies that in the event that the public trust boundary migrates landward such that (1) any portion of the approved development encroaches onto public trust lands, and/or (2) public trust land reaches the approved seawall[1], based on a Mean High Tide Line (MHTL) survey, the applicant shall submit a complete coastal development permit amendment application within 180 days of the subject MHTL survey date to seek authorization to retain, relocate, and/or remove the development. Imposing a condition requiring a current MHTL survey prior-to-issuance of the permit, and periodic MHTL surveys every five years thereafter, will help provide evidence that the development is located on, and remains on, private property, as required by **Special Condition 17**. Because the risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. **Special Condition 4**, will ensure that the applicant is aware of and appreciates the nature of the hazards that exist on the site, and that may adversely affect the stability or safety of the development it protects, and will effectuate the necessary assumptions of those risks by the applicant. This condition will also ensure that the applicant is aware of the ambulatory nature of the seaward property boundary, and that this boundary may move with sea level rise. It further ensures that future property owners will be made aware of the risks and limitations placed on the development by this permit, so that any future owners can properly assess risks before purchasing property.

[1] Since the approved seawall may stop the landward migration of the MHTL, this trigger is reached in the event that the MHTL reaches the approved seawall.

Lastly, staff recommends **Special Conditions 1-17** to ensure consistency with the hazards and shoreline processes, public access and recreation, visual resources, water quality and marine resources, and other development standards, policies of the certified City of Malibu LCP, and the public access and recreation policies of the Coastal Act. The motions and resolutions to act on this recommendation can be found starting on page 9.

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EXHIBITS

I. MOTIONS AND RESOLUTIONS

A. Motion and Resolution for Substantial Issue Determination

Motion:

I move that the Commission determine that Appeal No. A-4-MAL-19-0202 raises **NO** substantial issue with respect to the grounds on which the appeal has been filed under § 30603 of the Coastal Act.

Staff Recommendation to Find Substantial Issue:

Staff recommends a **NO** vote. Failure of this motion will result in a de novo hearing on the application, and adoption of the following resolution and findings. Passage of this motion will result in a finding of No Substantial Issue and the local action will become final and effective. The motion passes only by an affirmative vote by the majority of the Commissioners present. A tied vote results in a finding that a Substantial Issue is raised.

Resolution to Find Substantial Issue:

The Commission hereby finds that Appeal No. A-4-MAL-19-0202 raises a substantial issue with respect to the grounds on which the appeal has been filed under § 30603 of the Coastal Act regarding consistency with the certified Local Coastal Program and/or the public access and recreation policies of the Coastal Act.

B. Motion and Resolution for De Novo Coastal Development Permit

Motion:

I move that the Commission **APPROVE** Coastal Development Permit Number A-4-MAL-19-0202 pursuant to the staff recommendation.

Staff Recommendation for Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by an affirmative vote by a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the public access and recreation policies of the Coastal Act and the policies of the certified Local Coastal Program for the City of Malibu. Approval of the permit complies with the California

Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts on the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the applicant to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. **Plans Conforming to Geotechnical and Coastal Engineer's Recommendations.**

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in the submitted coastal engineering and geology, geotechnical, and/or soils reports, which are listed in Appendix A (Substantive File Documents). These recommendations, including recommendations concerning foundations, construction, grading, and drainage, shall be incorporated into all final design and construction plans, which must be reviewed and approved by the consultant(s) prior to commencement of development.

The final plans approved by the consultant(s) shall be in substantial conformance with the plans approved by the Commission relative to foundation, construction, grading, drainage, and height of the structure. Any substantial changes in the

proposed development approved by the Commission that may be required by the consultant(s) shall require an amendment to this permit or a new Coastal Development Permit.

2. Waiver of Rights to Future Shoreline Protective Device.

By acceptance of this permit, the applicant acknowledges that the development authorized by this permit- including the single-family residence, attached garage, foundations, and deck- constitutes new development under the Coastal Act, and is therefore not entitled to a shoreline protective device under Section 30235 of the Coastal Act, as incorporated into the certified City of Malibu LCP, with the exception of the seawall authorized solely for protection of the onsite wastewater treatment system (OWTS). No future repair or maintenance, enhancement, reinforcement, or any other activity affecting the OWTS shoreline protective device which extends the seaward footprint of the subject shoreline protective device shall be undertaken. Thus, by acceptance of this permit, the applicant hereby waives, on behalf of itself and all successors and assigns, any rights to construct such devices to protect the residence, or to augment the OWTS shoreline protective device in a manner that would extend the seaward footprint of the shoreline protective device approved pursuant to this coastal development permit, that may exist under applicable law, including Public Resources Code Section 30235 or any analogous provision of the City of Malibu LCP.

Any future development on the subject site landward of the subject OWTS shoreline protective device, including changes to the foundation, relocation or upgrade of the OWTS, substantial remodel, redevelopment, or demolition and construction of a new structure, shall be subject to a requirement that a new coastal development permit be obtained for the shoreline protective device unless the City of Malibu or the Executive Director of the Coastal Commission (whichever has coastal development permit jurisdiction) determines that such activities are minor in nature or otherwise do not affect the need for a shoreline protective device.

3. Development Removal

A. By acceptance of this permit, the applicant further agrees, on behalf of itself and all successors and assigns, that they are required to remove all or a portion of the development authorized by the permit, and restore the site, if:

1. The City or any other government agency with legal jurisdiction has issued a final order, not overturned through any appeal or writ proceedings, determining that the structures are currently and permanently unsafe for occupancy or use due to damage or destruction from waves, flooding, erosion, landslide, sea level rise, elevated groundwater, or other hazards related to coastal processes, and that there are no feasible measures that could make the structures suitable for habitation or use without the use of shoreline protective devices;

2. Essential services to the site (e.g., utilities, roads) can no longer feasibly be maintained due to the coastal hazards listed above;

3. Removal is required pursuant to LCP policies for sea level rise adaptation planning; or

4. The development requires new and/or augmented shoreline protective devices that conflict with relevant LCP or Coastal Act policies.

In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. The landowner shall obtain a coastal development permit for removal of the approved development and recoverable debris unless the City of Malibu and/or Coastal Commission, as applicable based on permitting authority, provides a written determination that no coastal development permit is legally required.

B. By acceptance of this permit, the applicant further agrees that the development approval does not permit encroachment onto public trust lands, and any future encroachment must be removed unless the Coastal Commission determines that the encroachment is legally permissible pursuant to the Coastal Act and authorizes it to remain. Any future encroachment would also be subject to the State Lands Commission's (or other designated trustee agency's) leasing approval. In the event that the public trust boundary migrates landward such that (1) any portion of the approved development encroaches onto public trust lands, and/or (2) public trust land reaches the approved seawall[2], based on a Mean High Tide Line (MHTL) survey prepared in compliance with State Lands Commission survey standards (including, but not limited to, a MHTL survey prepared pursuant to **Special Condition 17**), the permittee or successor in interest shall submit a complete coastal development permit amendment application within 180 days of the subject MHTL survey date to seek authorization to retain, relocate, and/or remove the development, unless the Executive Director grants additional time for good cause. The permit amendment application shall include a complete evaluation of all feasible alternatives to modify the residential development to ensure that it is located entirely on private property and provides the required 10 foot setback from the MHTL. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission to evaluate the feasibility of each alternative for addressing shoreline protection, public access, and sensitive resource issues under the Coastal Act and the City of Malibu Local Coastal Program. Failure to submit a timely permit amendment application shall

[2] Since the approved seawall may stop the landward migration of the MHTL, this trigger is reached in the event that the MHTL reaches the approved seawall.

constitute a violation of the terms and conditions of this coastal development permit.

4. Coastal Hazard Risk.

By acceptance of this permit, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns:

A. Coastal Hazards: That the site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, groundwater inundation, and the interaction of same and as influenced by sea level rise;

B. Assume Risks: To assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such coastal hazards in connection with this permitted development;

C. Waive Liability: To unconditionally waive any claim of damage or liability against the City and Coastal Commission, and their officers, agents, and employees for injury or damage from such coastal hazards;

D. Indemnification: To indemnify and hold harmless the City and the Coastal Commission, and their officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such coastal hazards;

E. Shifting Property Boundaries and Permit Intent: The boundary between public land (tidelands) and private land may shift with rising seas, the structure(s) may eventually be located on public trust lands, the development approval does not permit encroachment onto public trust land; any future encroachment must be removed unless the Coastal Commission determines that the encroachment is legally permissible pursuant to the Coastal Act and authorizes it to remain (pursuant to **Special Condition 3**), and any future encroachment would also be subject to the State Lands Commission's (or other trustee agency's) leasing approval. The intent of this permit is to allow for the approved project to be constructed and used consistent with the terms and conditions of this permit for only as long as it remains reasonably safe for occupancy and use without additional substantive measures beyond ordinary repair and/or maintenance to protect it from coastal hazards, and for only as long as the approved project remains on private property;

F. Disclosure: All documents related to any future marketing and sale of the subject property, including but not limited to marketing materials, sales

contracts, deeds, and similar documents shall notify buyers of the terms and conditions of this Coastal Development Permit; and

G. Property Owner Responsible: That any adverse effects to property caused by the permitted project shall be fully the responsibility of the owner of the property on which the permitted project is located.

H. Essential Services: Sea level rise could render it difficult or impossible to provide services to the site (e.g., maintenance of roadways, utilities, sewage, drainage, or water systems), thereby constraining allowed uses of the site or rendering it uninhabitable.

I. Removal Trigger: The structures may be required to be removed or relocated and the site restored if it becomes unsafe or if removal is required pursuant to **Special Condition Three (3)**.

5. Future Development Restriction.

This permit is only for the development described in Coastal Development Permit No. A-4-MAL-19-0202. Pursuant to Title 14 California Code of Regulations section 13250(b)(6), the exemptions otherwise provided in Public Resources Code section 30610(a) and the analogous provision in the City of Malibu LCP shall not apply to any future development on any portion of the parcel. Accordingly, any future improvements to the property, including but not limited to the single family residence, garage (including conversion of the structure to habitable space), foundations, deck, seawall, driveway, new or replacement landscaping, hardscape, and grading other than as provided for in the approved plans, shall require an amendment to Coastal Development Permit No. A-4-MAL-19-0202 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government based on permitting authority.

6. Deed Restriction/Recordation of Notice of Terms of CDP.

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director for review and written approval documentation demonstrating that the landowner has executed and recorded a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property (hereinafter referred to as the “Standard and Special Conditions”); and (2) imposing all Standard and Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the applicant’s entire parcel or parcels. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the

subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

7. Lateral Public Access Easement Offer to Dedicate.

Prior to issuance of the Coastal Development Permit, in order to effectuate the property owner's offer to dedicate an easement for lateral public access and passive recreational use along the shoreline, the property owner shall execute and record a document, in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to a public agency or private association approved by the Executive Director, an easement for lateral public access and passive recreational use along the shoreline. The easement shall be located along the entire width of the property from the ambulatory mean high tide line landward to the dripline of the structure. The document shall be recorded free of prior liens and any other encumbrances which the Executive Director determines may affect the interest being conveyed. The offer shall run with the land in favor of the People of California, binding all successors and assigns, and this offer shall be irrevocable for a period of 21 years, such period running from the date of recording. The recording document shall include a formal legal description and graphic depiction, prepared by a licensed surveyor, of both the property owner's entire parcel and the easement area. The document shall provide that the offer of dedication shall not be used or construed to allow anyone, prior to acceptance of the offer, to interfere with any rights of public access acquired through use which may exist on the property.

8. View Corridor.

By acceptance of this permit, the applicant agrees to maintain a view corridor a minimum of six feet, eight inches wide extending the width of the property, which may be split to provide a contiguous view corridor of no less than three feet, four inches on each side of the approved structure. No portion of any structure shall extend into the view corridor above the elevation of the adjacent street. Any fencing across the view corridor shall be permanently maintained as visually permeable. Tinted or frosted glass, and louvered or slatted screen fences are not permitted. Any landscaping in this area shall include only low-growing species that will not obscure or block bluewater views.

9. Erosion Control, Drainage and Polluted Runoff Control Plans.

Prior to issuance of the Coastal Development Permit, the applicants shall submit for the review and approval of the Executive Director: a) *a Local Storm Water Pollution Prevention Plan (SWPPP)* to control erosion and contain polluted runoff during the construction phase of the project; and b) *a Stormwater Management Plan (SWMP)* for the management and treatment of post-construction storm water and polluted runoff. The plans shall be certified by a California Registered Civil Engineer or Licensed Architect and approved by the City’s Department of Public Works, and include the information and measures outlined below.

A. Local Storm Water Pollution Prevention Plan (SWPPP), for the construction phase of the project, shall include at a minimum the following:

1. Property limits, prior-to-grading contours, and details of terrain and area drainage

2. Locations of any buildings or structures on the property where the work is to be performed and the location of any building or structures of adjacent owners that are within 15 ft of the property or that may be affected by the proposed grading operations

3. Locations and cross sections of all proposed temporary and permanent cut-and-fill slopes, retaining structures, buttresses, etc., that will result in an alteration to existing site topography (identify benches, surface/subsurface drainage, etc.)

4. Area (square feet) and volume (cubic yards) of all grading (identify cut, fill, import, export volumes separately), and the locations where sediment will be stockpiled or disposed

5. Elevation of finished contours to be achieved by the grading, proposed drainage channels, and related construction.

6. Details for the protection of existing vegetation from damage from construction equipment, for example: (a) grading areas should be minimized to protect vegetation; (b) areas with sensitive or endangered species should be demarcated and fenced off; and (c) native trees that are located close to the construction site should be protected by wrapping trunks with protective materials, avoiding placing fill of any type against the base of trunks, and avoiding an increase in soil depth at the feeding zone or drip line of the retained trees.

7. Information on potential flow paths where erosion may occur during construction

8. Proposed erosion and sediment prevention and control best management practices (BMPs), both structural and non-structural, for implementation during construction, such as:

    i. Stabilize disturbed areas with vegetation, mulch, geotextiles, or similar method.

    ii. Trap sediment on site using fiber rolls, silt fencing, sediment basin, or similar method.

    iii. Ensure vehicles on site are parked on areas free from mud; monitor site entrance for mud tracked off-site.

iv. Prevent blowing dust from exposed soils.

9. Proposed BMPs to provide adequate sanitary and waste disposal facilities and prevent contamination of runoff by construction chemicals and materials, such as:

   i. Control the storage, application, and disposal of pesticides, petroleum and other construction and chemical materials.

   ii. Site washout areas more than fifty feet from a storm drain, open ditch, or surface water and ensure that runoff flows from such activities do not enter receiving water bodies.

   iii. Provide sanitary facilities for construction workers.

   iv. Provide adequate disposal facilities for solid waste produced during construction and recycle where possible.

B. *Storm Water Management Plan (SWMP)*, for the management of post construction storm water and polluted runoff shall at a minimum include the following:

1. Site design and source control BMPs that will be implemented to minimize or prevent post-construction polluted runoff (see 17.5.1 of the Malibu LIP)

2. Drainage improvements (e.g., locations of diversions/conveyances for upstream runoff)

3. Potential flow paths where erosion may occur after construction

4. Methods to accommodate onsite percolation, revegetation of disturbed portions of the site, address onsite and/or offsite impacts and construction of any necessary improvements

5. Storm drainage improvement measures to mitigate any offsite/downstream negative impacts due the proposed development, including, but not limited to:

   i. Mitigating increased runoff rate due to new impervious surfaces through on-site detention such that peak runoff rate after development does not exceed the peak runoff of the site before development for the 100 year clear flow storm event (note; Q/100 is calculated using the Caltrans Nomograph for converting to any frequency, from the Caltrans "Hydraulic Design and Procedures Manual"). The detention basin/facility is to be designed to provide attenuation and released in stages through orifices for 2-year, 10-year and 100-year flow rates, and the required storage volume of the

basin/facility is to be based upon 1-inch of rainfall over the proposed impervious surfaces plus 1/2-inch of rainfall over the permeable surfaces. All on-site drainage devices, including pipe, channel, and/or street & gutter, shall be sized to cumulatively convey a 100 year clear flow storm event to the detention facility, or;

ii. Demonstrating by submission of hydrology/hydraulic report by a California Registered Civil Engineer that determines entire downstream storm drain conveyance devices (from project site to the ocean outlet) are adequate for 25-year storm event, or;

iii. Constructing necessary off-site storm drain improvements to satisfy the above, or;

iv. Other measures accomplishing the goal of mitigating all offsite/downstream impacts

10. Construction Responsibilities.

A. *Prior to issuance of the Coastal Development Permit*, the applicant shall submit to the Executive Director a Construction Best Management Practices Plan, prepared by a qualified, licensed professional. The qualified, licensed professional shall certify in writing that the Construction Best Management Practices (BMPs) plan is in conformance with the following requirements:

1. No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.

2. No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers. No machinery shall be allowed in the intertidal zone at any time.

3. Any and all debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project.

4. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.

5. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day. All

construction debris shall be removed from the beach daily and at the completion of development.

6. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

7. Debris shall be disposed of at a permitted disposal site or recycled at a permitted recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

8. All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil. No stockpiling of dirt or construction materials shall occur on the beach.

9. All grading shall be properly covered and sandbags, ditches, or other Best Management Practices (BMPs) shall be used to prevent runoff and siltation

10. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.

11. The discharge of any hazardous materials into any receiving waters shall be prohibited.

12. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

13. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity. Measures to control erosion, runoff, and siltation shall be implemented at the end of each day's work

14. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

B. The final Construction Best Management Practices Plan shall be in conformance with the site/ development plans approved by the Coastal Commission. Any necessary changes to the Coastal Commission approved site/development plans required by a qualified, licensed professional shall be reported to the Executive Director. No changes to the Coastal Commission approved final site/development plans shall occur without an amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

11. On-site Wastewater Treatment System (OWTS).

Prior to the receipt of the Certificate of Occupancy for the residence, the applicant shall submit for the review and approval of the Executive Director verification that they have obtained a valid Standard Operating Permit from the City for the proposed OWTS. This permit shall comply with all of the operation, maintenance, and monitoring provisions applicable to OWTS's contained in Chapter 18 of the Malibu Local Implementation Plan (LIP).

12. Structural Appearance.

Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Executive Director, a color palette and material specifications for the outer surface of all structures authorized by the approval of Coastal Development Permit No. A-4-MAL-19-0202. The palette samples shall be presented in a format not to exceed 8½" x 11" x ½" in size. The palette shall include the colors proposed for the roof, trim, exterior surfaces, driveways, retaining walls, or other structures authorized by this permit. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) including shades of green, brown and gray with no white or light shades and no bright tones. All windows shall be comprised of non-glare glass.

The approved structures shall be colored with only the colors and window materials authorized pursuant to this special condition. Alternative colors or materials for future repainting or resurfacing or new windows may only be applied to the structures authorized by Coastal Development Permit No. A-4-MAL-19-0202 if such changes are specifically authorized by the Executive Director as complying with this special condition.

13. Lighting Restriction.

By acceptance of this permit, the applicant acknowledges and agrees that the only exterior, night lighting that is allowed on the site is the following:

A. The minimum necessary to light walkways used for entry and exit to the structures, including parking areas, on the site. This lighting shall be limited to fixtures that are directed downward and shall use bulbs that do not exceed 60 watts, or the equivalent, unless a higher wattage is authorized by the Executive Director.

B. Security lighting attached to the residence that is controlled by motion detectors and is limited to 60 watts, or the equivalent.

C. The minimum lighting necessary for safe vehicular use of the driveway. The lighting shall be limited to 60 watts, or the equivalent.

No light source will be directly visible from public viewing areas such as Pacific Coast Highway or the beach and ocean area, and no lighting around the perimeter of the site, the beach area or for aesthetic purposes shall be allowed.

14. Sign Restriction.

No signs shall be posted on the property subject to this permit which (a) explicitly or implicitly indicate that the portion of the beach located adjacent to the subject site is private or otherwise not open to the public, or (b) contains similar messages that attempt to prohibit public use of this portion of the beach.

15. Public Rights.

A. The Coastal Commission's approval of this permit shall not constitute a waiver of any public rights that may exist on the property. The permittee shall not use this permit as evidence of a waiver of any public rights that may exist on the property now or in the future.

B. This permit does not authorize the development to physically interfere with any public access rights that may exist at any future date.

16. City of Malibu Conditions.

The applicant shall comply with all of the City of Malibu conditions attached to the City's approval of CDP No. 15-042 as listed in Resolution No. 19-37, except as specifically modified by this approval and any subsequent amendments to the project description. Any deviations or conflicts shall be reviewed by the Executive Director to determine whether an amendment to the Coastal Development Permit is required. *Prior to issuance of the Coastal Development Permit*, the applicant shall submit evidence of such condition compliance for the review and approval of the Executive Director.

17. Mean High Tide Line (MHTL) Surveys and Monitoring

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director for review and written approval:

A. One printed copy and one digital copy of a new MHTL survey of the subject property subject to the criteria in Subpart C below.

B. An MHTL monitoring plan that includes surveying the MHTL on the subject property at least every 5 years following the initial MHTL survey required in

Subpart A above. Each survey shall be prepared subject to the criteria in Subpart C below. The MHTL monitoring plan shall specify that the landowner shall submit each 5-year MHTL survey no later than December 31st of each fifth year after the date of receipt, by the Executive Director, of the initial survey required by Subpart A. This means that after the initial MHTL survey, a new survey will be conducted and submitted every 5 years thereafter. The landowner shall implement the approved MHTL monitoring plan in accordance with this condition. Any proposed changes to the final approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Coastal Commission approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.

C. The surveys required in Subparts A and B above shall be subject to the following criteria. Such surveys of the subject property shall be based on field data collected within 12 months of the date submitted, that may include multiple surveys from more than one season in a given survey year, but must include at least one survey during winter months (December – March). Such surveys shall be at the landowner's expense and shall be conducted in consultation with the California State Lands Commission (CSLC) staff. Prior to submitting each survey, it must be approved by the CSLC as compliant with CSLC survey standards. Such surveys shall:

    1. Use either the published Mean High Water elevation from a National Oceanic and Atmospheric Agency published tide station closest to the project or a linear interpolation between two adjacent tide stations, depending on the most appropriate approach in light of tidal regime characteristics;

    2. Use the most current tidal epoch;

    3. Use local, published control benchmarks to determine elevations at the survey site. Control benchmarks are the monuments on the ground that have been precisely located and referenced to the local tide stations and vertical datum used to calculate the Mean High Tide elevation;

    4. Match elevation datum with tide datum;

    5. Reference all elevations and contour lines to the official U.S. vertical datum in effect at the time of the survey (currently NAVD88, but soon to be updated by the National Geodetic Survey]); and

    6. Note survey date, datum, and MHTL elevation.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description and Local Approval

The Malibu City Council approved the subject coastal development permit (CDP) for the construction of a new 2,536 square foot two-story single-family residence with an attached two-car garage with roof deck and associated retaining walls and hardscaping, excavation for and construction of a new onsite wastewater treatment system (OWTS), construction of a seawall to protect the OWTS, and removal of an existing timber bulkhead, on a 0.44-acre beachfront parcel located at 20222 Pacific Coast Highway in the Big Rock area in the eastern portion of the City of Malibu (**Exhibits 1-4**). The City's approval also included three variances: (1) to reduce the required amount of unenclosed parking to one space; (2) to reduce the required factor of safety for site stability; and (3) for construction on slopes steeper than 2.5 to 1 (horizontal:vertical, h:v). Additionally, the project includes an offer to dedicate a lateral public access easement. No grading and no new landscaping were proposed as part of the project. The subject parcel is zoned Multi-Family Beach Front (MFBF) by the Malibu Local Coastal Program (LCP).

The project site is located on the beach on the ocean side of Pacific Coast Highway (PCH) and does not offer vertical beach access. There is an existing public vertical accessway located approximately 1,750 feet to the west of the subject parcel, and another accessway approximately 1,700 feet east of the subject site, between 20000 and 19958 PCH. The property was previously developed with a single-family residence but it was demolished by the previous property owner in 1985 after storm damage. Remnants of the former timber bulkhead on the property remain and the applicant is proposing to remove that as part of the proposed project. Currently the public has the ability to walk along the beach directly behind the existing development. The project complies with the required 10-foot setback from the most landward surveyed mean high tide line (MHTL) as required by the LCP. The project site is vulnerable to coastal hazards and flooding and is located entirely within the southern boundary of the Big Rock Mesa Landslide (BRML), a large, active landslide complex, described in more detail in the Hazards and Shoreline Processes subsection of Section E of this report. The subject site is now a nearly vacant infill lot within the existing Big Rock beachfront residential community along PCH, and is bordered by residentially developed lots to the east and west, and is near the Moonshadows Restaurant to the west.

On November 5, 2018, the City of Malibu Planning Commission approved Coastal Development Permit (No. 15-042) for the project described above subject to 86 special conditions, Variance No. 15-021 to reduce the required amount of unenclosed parking to one space, Variance No. 15-022 to reduce the required geotechnical factor of safety related to the underlying landslide, Variance No. 18-042 for construction on slopes steeper than 2.5 to 1, and Offer-to-Dedicate No. 18-002 to dedicate a lateral access easement along the shoreline at the rear of the property.

Following approval by the Planning Commission, the City ran a local appeal period for ten calendar days following the date of the Malibu City Council's decision. One local appeal was filed during the local appeal period by Dorinne Graves. On August 26, 2019, the Malibu City Council heard the appeal filed by the appellant and approved staff's recommendation to deny the appeal and grant the CDP subject to conditions. On September 9, 2019, the Malibu City Council approved a coastal development permit (No. 15-042) for the project subject to 86 conditions of approval.

Commission staff received the notice of final local action of the Malibu City Council's approval (Coastal Development Permit No. 15-042; Resolution No. 19-37) on October 7, 2019 **(Exhibit 3)**. A 10 working day appeal period was set, extending to 5pm on October 21, 2019. A valid appeal was received from Dorinne and Dennis Graves on October 18, 2019. Commission staff notified the City, the applicant, and all interested parties that were listed on the appeal and requested that the City provide its administrative record for the permit. The administrative record was received on November 6, 2019. Pursuant to Section 30621(a) of the Coastal Act, a hearing on an appeal must be set no later than 49 working days after the date on which the appeal was filed with the Commission, which would have been January 2, 2020; however, pursuant to Section 30625(a), the applicant waived that time limit on October 28, 2019 in order to allow additional time to coordinate with Commission staff on the issues raised in the appeal.

B. Appeal Procedures

The Coastal Act provides that after certification of Local Coastal Programs, a local government's actions on Coastal Development Permits in certain areas and for certain types of development may be appealed to the Coastal Commission. Local governments must provide notice to the Commission of its coastal permit actions. During a period of 10 working days following Commission receipt of a notice of local permit action for an appealable development, an appeal of the action may be filed with the Commission.

Appeal Areas

Under Section 30603 of the Coastal Act, development approved by a local government may be appealed to the Commission if it is located within the appealable areas, such as those located between the sea and the first public road paralleling the sea, within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is greater, on state tidelands, or along or within 100 feet of any wetland, estuary, or stream. Finally, development that constitutes major public works or major energy facilities may also be appealed to the Commission.

In this case, the City's CDP approval is appealable to the Coastal Commission because the permitted development is located between the sea and the first public road paralleling the sea, which here is the Pacific Coast Highway.

Grounds for Appeal

The grounds for appeal of development approved by the local government and subject to appeal to the Commission shall be limited to an allegation that the development does not conform to the standards set forth in the certified Local Coastal Program or the public access policies set forth in the Coastal Act (Section 30603[b][1] of the Coastal Act).

Substantial Issue Determination

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue exists with respect to the grounds on which the appeal was filed. When Commission staff recommends that a substantial issue exists with respect to the grounds of the appeal, a substantial issue is deemed to exist unless three or more Commissioners wish to hear arguments and vote on substantial issue. If the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. Pursuant to Section 13117 of the Commission's regulations, the only persons qualified to testify before the Commission at the substantial issue stage of the appeal process are the applicant, persons who opposed the application before the local government (or their representatives), and the local government. Testimony from other persons must be submitted in writing. It takes a majority of Commissioners present to find that no substantial issue is raised by the appeal.

De Novo Permit Review

If a substantial issue is found to exist, the Commission will evaluate the project under a de novo permit review. The de novo permit may be considered by the Commission at the same time as the substantial issue hearing or at a later time. The applicable test for the Commission to consider in a de novo review of the project is whether the proposed development is in conformity with the certified Local Coastal Program and the public access and public recreation policies of the Coastal Act. If a de novo hearing is held, testimony may be taken from all interested persons.

In this case, if the Commission finds substantial issue, the Commission may proceed to the de novo hearing on the merits of the project. The staff recommendation on de novo review of this project is on Page 9 of this report.

C. Summary of Appeal Contentions

The appeal filed by Dorinne and Dennis Graves is included as **Exhibit 5.** The appellants live on the adjacent property at 20224 Pacific Coast Highway. The appeal contends that the approved project is not consistent with the provisions of the certified LCP that relate to (1) geologic hazards and (2) visual and scenic resources and neighborhood character. Specifically, the appellants assert that the project does not meet the factor of safety requirements in Local Implementation Plan (LIP) Section 9.4(D) and there has

not been adequate demonstration by the City that the project will not have significant adverse impacts on site stability and structural integrity from geologic, flood, or fire hazards as required by LIP Section 9.3(A). The appellants also contend that the City's findings for Variance No. 15-022, to reduce the required geotechnical factor of safety related to the underlying landslide, and Variance No. 18-042, for construction on slopes steeper than 2.5 to 1 (h:v), did not provide substantial evidence that there are special circumstances or exceptional characteristics applicable to the subject property, as required by LIP Section 13.26.5.A. The appellants further assert that the project does not meet the LCP's requirements for new development on ancient landslides, unstable slopes and other geologic hazard areas and express concern that the approved development and seawall will adversely impact site stability and endanger their home and the piles supporting their home. The appellants' final contention is that the proposal for a residence built to the maximum height allowable by the LCP is inconsistent with the neighborhood character and the City's findings that the proposed project will blend in with the surrounding development are false.

See **Exhibit 5** for the full text of the appeal.

D. Analysis of Substantial Issue

Geologic Hazards

The appellants contend that the project, as approved by the City, fails to conform with LCP policies and provisions relating to hazards. Specifically, the appellants raise issues with respect to consistency with LIP Sections 9.3 and 9.4 (cited below) that require new development minimize risks to life and property in areas of high geologic, flood, and fire hazard, and assure stability and structural integrity. The appellants also state that the City's variance findings to reduce the required geotechnical factor of safety related to the underlying landslide for construction on slopes steeper than 2.5 to 1 (h:v) did not provide substantial evidence that there are special circumstances or exceptional characteristics applicable to the subject property as required by LIP Section 13.26.5 (cited below). Although not all of the policies and provisions of the LCP listed below were specifically identified in the appeal, they are related to the allegations identified in the appeal and pertain to the subject development.

Coastal Act Section 30253, as incorporated into the certified LCP, states, in part:

> 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.

City of Malibu Land Use Plan Policy 4.2 states:

> All new development shall be sized, designed and sited to minimize risks to life and property from geologic, flood, and fire hazard.

City of Malibu Land Use Plan Policy 4.4 states:

> On ancient landslides, unstable slopes and other geologic hazard areas, new development shall only be permitted where an adequate factor of safety can be provided, consistent with the applicable provisions of Chapter 9 of the certified Local Implementation Plan.

City of Malibu Land Use Plan Policy 4.5 states:

> Applications for new development, where applicable, shall include a geologic/soils/geotechnical study that identifies any geologic hazards affecting the proposed project site, any necessary mitigation measures, and contains a statement that the project site is suitable for the proposed development and that the development will be safe from geologic hazard. Such reports shall be signed by a licensed Certified Engineering Geologist (CEG) or Geotechnical Engineer (GE) and subject to review and approval by the City Geologist.

City of Malibu Local Implementation Plan Section 9.3, Part A states:

> Written findings of fact, analysis and conclusions addressing geologic, flood, and fire hazards, structural integrity or other potential hazard must be included in support of all approvals, denials or conditional approvals of development located on a site or in an area where it is determined that the proposed project causes the potential to create adverse impacts upon site stability or structural integrity. Such findings shall address the specific project impacts relative to the applicable development standards identified in Section 9.4 of the Malibu LIP. The findings shall explain the basis for the conclusions and decisions of the City and shall be supported by substantial evidence in the record. Findings for approval or conditional approval shall conclude that the project as proposed, or as conditioned, conforms to the certified Local Coastal Program. A Coastal Development Permit for the proposed development shall only be granted if the City's decision making body is able to find that:
>
> 1. The project, as proposed, will neither be subject to nor increase instability of the site or structural integrity from geologic, flood, or fire hazards due to project design, location on the site or other reasons;
>
> 2. The project, as conditioned, will not have significant adverse impacts on site stability or structural integrity from geologic, flood, or fire hazards due to required project modifications, landscaping or other conditions;
>
> 3. The project, as proposed or as conditioned, is the least environmentally damaging alternative;

4. There are no alternatives to development that would avoid or substantially lessen impacts on site stability or structural integrity;

5. Development in a specific location on the site may have adverse impacts but will eliminate, minimize or otherwise contribute to conformance to sensitive resource protection policies contained in the certified Malibu LCP.

City of Malibu Local Implementation Plan Section 9.4, Part D, states, in part:

> New development proposed on landslides, steep slopes, unstable or weak soils or any other identified geologic hazard area, shall be permitted only where a factor of safety of 1.5 (static) and a factor of safety of 1.1 (pseudostatic) can be provided. Such analysis shall adhere to all provisions of the City of Malibu's "Guidelines for the preparation of engineering geologic and geotechnical engineering reports," dated February 2002…

City of Malibu Local Implementation Plan Section 13.26.5 states, in part:

> Following a public hearing, the Planning Commission shall record the decision in writing. The Commission may approve and/or modify an application for a variance in whole or in part, with or without conditions, only if it makes all of the following findings of fact supported by substantial evidence that:
>
> A. There are special circumstances or exceptional characteristics applicable to the subject property, including size, shape, topography, location, or surroundings such that strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under the identical zoning classification.
>
> B. The granting of such variance will not be detrimental to the public interest, safety, health or welfare, and will not be detrimental or injurious to the property or improvements in the same vicinity and zone(s) in which the property is located.
>
> C. The granting of the variance will not constitute a special privilege to the applicant or property owner.
>
> D. The granting of such variance will not be contrary to or in conflict with the general purposes and intent of this Chapter, nor to the goals, objectives and policies of the LCP.
>
> …
>
> G. The variance request is consistent with the purpose and intent of the zone(s) in which the site is located. A variance shall not be granted for a use or activity which is not otherwise expressly authorized by the zone regulation governing the parcel of property.

H. The subject site is physically suitable for the proposed variance.

Coastal Act Section 30253 and Malibu Land Use Plan (LUP) Policy 4.2 provide standards that require new development to minimize risks to life and property in areas of high geologic, flood, and fire hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.

The City included findings stating that the City Coastal Engineer reviewed and conditionally approved the project and that the project would incorporate foundations per the recommendation of the wave uprush analysis, that consideration had been given to design a structure that allows for littoral sand transport to take place without interference, that the seawall proposed would only protect the onsite wastewater treatment system (OWTS) and is sited as far landward as feasible, that the pile foundation of the home would not require a shoreline protection device, and that the project would result in a less than significant adverse impact upon public beach access, shoreline sand supply or other resources for those reasons.

Malibu LUP Policy 4.4 and LIP Section 9.4(D) requires that new development proposed on landslides, steep slopes, unstable or weak soils or any other identified geologic hazard area, shall be permitted only where a factor of safety of 1.5 (static) and a factor of safety of 1.1 (pseudostatic) can be provided. In order to comply with the above referenced policies and provisions, applications must include an appropriate geologic/soils/geotechnical study for new development. Using this information, the City is required to determine if the factor of safety for a proposed development on ancient landslides, unstable slopes and other geologic hazard areas, is consistent with the applicable provisions of Chapter 9 of the Malibu LIP, including the findings required by LIP Section 9.3(A), and the specific factor of safety requirements of LIP Section 9.4(D). If a variance is required, the City must make findings of fact supported by substantial evidence to support that variance, consistent with LIP Section 13.26.5, including to demonstrate that there are special circumstances or exceptional characteristics applicable to the subject property.

The project site is located entirely within the southern boundary of the Big Rock Mesa Landslide (BRML), a large, active landslide complex that reactivated in 1983 following heavy winter precipitation associated with the 1982-83 El Niño event. The applicant's geotechnical reports characterize the BRML as a deep-seated bedrock landslide, approximately one mile in length and half a mile in width that spills out onto the adjacent coastal platform. The landslide covers approximately 160 acres in land area and is approximately 350 feet thick at its deepest extent. The primary cause of the landslide reactivation was determined to be elevated groundwater levels associated with a series of winter storms. Groundwater flux, from precipitation, septic system discharge, irrigation, and, at the landslide toe, tidal action, remains the primary risk factor controlling further movement of the BRML. In an effort to minimize this hazard, the City has, since 1983, operated an extensive network of wells, dewatering pumps, and slope inclinometers in order to detect new movement and reduce the potential for reactivation of the landslide. By 1986, measured movement had dwindled to "small, discrete

deformations", and little further movement has been detected in recent decades, indicating that hazard mitigation efforts have been successful. Nonetheless, a previous study concluded that the BRML complex, including the project site, has a factor of safety against further sliding of less than 1.3 even with continuous dewatering mitigation in place (Bing Yen & Associates 1992).

The City's findings in this case state that the prevailing factor of safety for the subject site is between 1.26 and 1.28 due to the BRML and that it is not feasible to implement design measures for this individual project which could achieve the required factor of safety due to its location within the BRML and the size and depth of the landslide. The City granted a variance from the LCP's 1.5 factor of safety standard and found that there are special circumstances or exceptional characteristics applicable to the subject property and strict application of the factor of safety requirement would prevent the property from being developed with a residence like other properties in the same area—more than 200 habitable residences are currently situated within the BRML. The geotechnical information contained in the City's permit record provide a clear picture of the large magnitude of the landslide complex, including the fact that it spans numerous individual properties and that the primary slide plane extends to great depths beneath the ground surface, even at the seaward toe of the slide in the project vicinity. The record also clearly establishes that the 1.5 factor of safety (static) standard contained in the Malibu LCP is not currently met at the project site. The evidence available to the City was sufficient to allow a geologist, engineer, or other knowledgeable party to predict that it would be difficult, and possibly infeasible, to stabilize the site and meet the LCP standard. However, none of the geotechnical reports provided an assessment, by the project geologist or engineer, of the technical and economic feasibility of undertaking site-specific (or other) stabilization measures that would increase the factor of safety at the project site above 1.5. As a result of this gap in the analysis, the City's variance findings were incomplete and not adequately supported by substantial evidence.

Additionally, the geologic reports contained in the City's record did not fully evaluate the project site's potential vulnerability to seismically-induced landsliding. The reports provided to Commission staff included a brief discussion of available USGS/CGS seismic hazard maps, which are necessarily large scale, and are best used as indictors of when further site-specific analysis is advisable. The relevant hazard map for the project area indicates the project site is immediately adjacent to, but not within, a mapped hazard zone for seismically-induced landslides. However, the geologic reports also document that the property is located on an active landslide with a static factor of safety that is inadequate for new development. In combination, these lines of evidence indicate the need for a more detailed, site-specific assessment of the potential for seismic reactivation of the BRM Landslide and the hazard this may pose for the project site.

For these reasons, the City's action does not adequately demonstrate that the approved development would minimize risks to life and property and assure stability and structural integrity. Further, the City's action to grant relief from the minimum required factor of

safety provisions of the LCP was not adequately supported by substantial evidence in the record.

Visual and Scenic Resources and Neighborhood Character

The appellants assert that the City's findings that the proposed project will blend in with the surrounding development are false and that the proposal for a residence built to the maximum height allowable by the LCP is inconsistent with the neighborhood character. While the appellants did not reference specific provisions of the LCP for these assertions, the following are applicable for this discussion.

Coastal Act Section 30251, as incorporated into the certified LCP, states:

> 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 landforms, 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.

City of Malibu Land Use Plan Policy 6.7 states:

> The height of structures shall be limited to minimize impacts to visual resources. The maximum allowable height, except for beachfront lots, shall be 18 feet above existing or finished grade, whichever is lower. On beachfront lots, or where found appropriate through Site Plan Review, the maximum height shall be 24 feet (flat roofs) or 28 feet (pitched roofs) above existing or finished grade, whichever is lower. Chimneys and rooftop antennas may be permitted to extend above the permitted height of the structure.

City of Malibu Land Use Plan Policy 6.12 states, in part:

> All new structures shall be sited and designed to minimize impacts to visual resources by:
>
> a. Ensuring visual compatibility with the character of surrounding areas…

City of Malibu Local Implementation Plan Section 3.6 states, in part:

> E. Height.
>
> …
>
> 3. Beachfront lots. For new construction on a beachfront lot, no residence or structure, including satellite dish antenna, shall exceed 24 feet for flat roof

> including solid rooftop, parapet and deck walls, and 28 feet for pitched roof, as measured from the lowest recommended finish floor elevation on the ocean side, as defined by a licensed Civil Engineer, based upon a Comprehensive Wave Action Report, and 24 feet for a flat roof and 28 feet for pitched roof as measured from center line of the road on the land side. Building height shall be apportioned such that the portion of the building which height is measured from the centerline of the road shall not exceed half of the total length (front to rear) of the structure. Open railings for rooftop decks on structures with a flat roof may extend 25 feet in height.

Coastal Act Section 30251 states that 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. LUP Policy 6.12 states that new structures shall be sited and designed to minimize impacts to visual resources by ensuring visual compatibility with the character of surrounding areas. LUP Policy 6.7 and LIP Section 3.6 limit the height of beachfront residential structures to 24 feet for flat roof, and 28 feet for pitched roof. These heights are measured from the lowest recommended finish floor elevation for the ocean side of the structure, and from the center line of the road for the land side of the structure.

The City-approved residence is located on the ocean side of Pacific Coast Highway and complies with the maximum height limits required for by LUP Section 6.7 and LIP Section 3.6.E.3. The proposed residence will contain approximately 2,100 square feet of habitable space, which is similar to neighboring properties. The surrounding residences are older existing homes that were developed in the 1950’s and 1960’s, and if redeveloped today, would be subject to the LCP's 10-foot setback from the MHTL and design considerations related to wave uprush and sea level rise which requires the development to be sufficiently set back and elevated. The subject property will not be able to develop as far seaward as neighboring properties, resulting in a smaller development footprint and a more elevated and taller structure than those existing on neighboring properties immediately adjacent. There are, however, a significant number of two-story residential structures within a half-mile on either side of the subject property (some single-family and some duplex), taller than the predominately single-story residences immediately adjacent to and within a quarter-mile the proposed project. For these reasons, the Commission finds the approved structure would ensure visual compatibility with the character of the surrounding area.

Substantial Issue Factors Considered by Commission

Pursuant to Section 30603 and 30625 of the Coastal Act, the appropriate standard of review for an appeal is whether a substantial issue exists with respect to the grounds raised by the appellant relative to the locally-approved project’s conformity to the policies contained in the certified Local Coastal Program (LCP) or the public access policies of the Coastal Act. In this case, the appeal raises issues with regard to hazards, visual and scenic resources, and neighborhood character, which are relevant to policies in the City’s certified LCP.

The Coastal Act requires that the Commission shall hear an appeal unless no substantial issue exists with respect to the grounds on which the appeal was filed under Section 30603. (§30625(b)(2)). Section 13115(c) of the Commission's regulations provides that the Commission may consider various factors when determining if a local action raised a substantial issue, including but not limited to the following five factors:

1. The degree of factual and legal support for the local government's decision that the development is consistent or inconsistent with the certified LCP and with the public access policies of the Coastal Act;

2. The extent and scope of the development as approved or denied by the local government;

3. The significance of coastal resources affected by the decision;

4. The precedential value of the local government's decision for future interpretation of its LCP; and

5. Whether the appeal raises only local issues, or those of regional or statewide significance. The Commission may, but need not, assign a particular weight to a factor.

The Commission may, but need not, assign a particular weight to a factor. For the reasons discussed below, the Commission determines that the subject appeal raises a substantial issue with regard to the grounds on which the appeal has been filed.

The first factor in evaluating the issue of whether the appeal raises a substantial issue is the degree of factual and legal support for the local government's decision that the development is consistent with the subject provisions of the certified LCP. As explained above, City's action does sufficiently demonstrate that the approved project complies with the provisions of the City's LCP related to visual and scenic resources and neighborhood character. However, the City's action does not demonstrate that the approved development has been sited and designed to minimize the risks of geologic hazards. The City's findings did not adequately justify a reduction in factor of safety for the project and their record did not contain substantial evidence to support the conclusions made in their findings as described above. Therefore, the City has not provided an adequate degree of factual and legal support for its decision that the proposed development is consistent with the certified LCP related to geologic hazards, as explained in detail above. For these reasons, this factor weighs heavily in support of finding substantial issue.

The second factor in evaluating the issue of whether the appeal raises a substantial issue is the extent and scope of the development as proposed. As described above, the approved project involves construction of a new 2,536 square foot two-story single-family residence, including construction of a new onsite wastewater treatment system with a seawall. Although this lot is not particularly large and the development type is consistent with the surrounding area, the extent and scope of the approved development has implications for future development projects along the Malibu

coastline both currently and into the future, as substantial redevelopment increases the amount of development exposed to hazards. Given the approved 2,536 square foot two-story single-family residence is located on a small and constrained vacant infill lot that is vulnerable to hazards, the scope and extent of development approved here is significant enough to warrant finding substantial issue.

The third factor in evaluating the issue of whether the appeal raises a substantial issue is the significance of coastal resources affected by the decision. In this case, the project site is in a beachfront residential community along Pacific Coast Highway, immediately adjacent to the beach. Development in such a location subject to coastal hazards has the potential to adversely impact shoreline processes, sand supply, and public access, which are all significant coastal resources. The siting and design of new development relative to coastal hazards is a very important issue that has the potential to adversely impact significant coastal resources; therefore, this factor weighs in support of finding substantial issue.

The fourth factor in evaluating whether the appeal raises a substantial issue is the precedential value of the local government's decision for future interpretation of its LCP. In this case, the precedential value of the City's decision for future interpretation of its LCP is significant because there are several beachfront residential communities where new development and substantial redevelopment could raise similar resource issues. As described above, under the certified LCP, beachfront development is required to be sized, sited, and designed to minimize risks from hazards. If development of beachfront property (such as the subject project) is not required to be consistent with these LCP policies, the cumulative impacts of residential development along the Malibu coastline could result in an increased risk of hazards and degradation of coastal resources over time. Additionally, as evidenced by the City's action, the City failed to demonstrate sufficient geotechnical analysis in its record to support its decision to grant a variance to reduce the factor of safety for the project. The geologic reports contained in the City's record did not provide an assessment of the technical and economic feasibility of undertaking site-specific (or other) stabilization measures that would increase the factor of safety at the project site above 1.5, nor did they fully evaluate the project site's potential vulnerability to seismically-induced landsliding. This is an important precedent not just for the City, but also statewide. Thus, this factor supports finding substantial issue.

The final factor in evaluating the issue of whether the appeal raises a substantial issue is whether the appeal raises only local issues or those of regional or statewide significance. In this case, the appeal not only raises local issues, but also has implications for resources of regional or statewide significance. The subject development raises issues associated with designing development in areas of high geologic hazard and the technical and economic feasibility of undertaking site-specific stabilization measures to minimize risks to life and property and assure stability and structural integrity of project sites in such areas. These are important issues common to jurisdictions throughout the Coastal Zone. Therefore, this appeal does have regional and statewide significance. Thus, this factor supports finding substantial issue.

In conclusion, the Commission finds that the factors listed above demonstrate that a substantial issue exists in this case. For the reasons discussed in detail above, the appeal raises a substantial issue with respect to the consistency of the approved development with the policies and provisions of the City's certified LCP regarding hazards. In evaluating whether the subject appeal raises a substantial issue, the Commission has explicitly addressed several factors that play a part in identifying if the issues raised in an appeal are "significant." The Commission finds that there is not adequate factual and legal support for the City's position that the proposed project complies with LCP policies. The resources at issue have regional and statewide significance. Further, because the City has not ensured that the project conforms to the existing policies and provisions of the LCP and has not provided sufficient evidence to support its decision, the project will have adverse precedential value regarding interpretation of the City's LCP for future projects. Therefore, the Commission finds that a substantial issue exists with respect to the grounds raised by Dorinne and Dennis Graves in the subject appeal, relative to the approved project's conformity to the relevant policies and provisions of the City's certified LCP and the Commission takes de novo jurisdiction of the applicant's CDP application.

E. De Novo Coastal Development Permit Analysis

The standards of review for this CDP application are the City of Malibu certified LCP and the public access and recreation policies of the Coastal Act. All Substantial Issue Determination findings and previously cited policies above are incorporated herein by reference.

Appeal Background and Coordination

As described above, the City-approved project was appealed by Dorinne and Dennis Graves. Following the appeal, the applicant waived the 49-day appeal hearing requirement in order to coordinate with Commission staff to resolve the issues raised by the appeal. The waiver was received on November 28, 2019. With respect to the de novo CDP, the applicant has worked with Commission staff to provide additional information not included in the City's record in a manner that addresses the appellants' contentions and to revise the proposed project to address other issues raised by the development as originally approved by the City. The applicant provided a geotechnical letter by SubSurface Designs, Inc., dated June 12, 2020, to address the appeal contention related to geologic hazards discussed in the analysis of substantial issue above.

Additionally, although the appeal does not specifically address sea level rise or wave uprush at the project site, staff reviewed the City's record regarding these issues. The project approved by the City was designed based on a wave uprush study dated May 19, 2015, using outdated sea level rise projections. In order to address this information gap, the applicant had its consultant prepare an updated wave uprush study and coastal engineering report for the project site using updated sea level rise projections consistent with the Commission's 2018 Sea Level Rise Guidance. This report, by Pacific

Engineering Group, dated September 8, 2020, was provided to staff for consideration as part of the de novo CDP review.

The applicant has also submitted revised project plans that incorporate design changes to address the updated wave uprush and sea level rise study. As now proposed, the residence will have a slightly higher lowest finished floor elevation, other minor associated design changes, and revisions to the proposed OWTS and its associated seawall. Other than these changes, described in more detail below, the proposed residence considered in this de novo CDP review is the same size, height, and location as the residence that was approved originally by the Malibu City Council.

Hazards and Shoreline Processes

Coastal Act Section 30235, as incorporated into the certified LCP, states:

> 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 fishkills should be phased out or upgraded where feasible.

Coastal Act Section 30250, as incorporated into the certified LCP, states, in part:

> (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.

Coastal Act Section 30253, as incorporated into the certified LCP, states:

> 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.

City of Malibu Land Use Plan Policy 4.2 states:

All new development shall be sized, designed and sited to minimize risks to life and property from geologic, flood, and fire hazard.

City of Malibu Land Use Plan Policy 4.4 states:

On ancient landslides, unstable slopes and other geologic hazard areas, new development shall only be permitted where an adequate factor of safety can be provided, consistent with the applicable provisions of Chapter 9 of the certified Local Implementation Plan.

City of Malibu Land Use Plan Policy 4.5 states:

Applications for new development, where applicable, shall include a geologic/soils/geotechnical study that identifies any geologic hazards affecting the proposed project site, any necessary mitigation measures, and contains a statement that the project site is suitable for the proposed development and that the development will be safe from geologic hazard. Such reports shall be signed by a licensed Certified Engineering Geologist (CEG) or Geotechnical Engineer (GE) and subject to review and approval by the City Geologist.

City of Malibu Land Use Plan Policy 4.8 states:

Grading and/or development-related vegetation clearance shall be prohibited where the slope exceeds 40 percent (2.5:1), except that driveways and/or utilities may be located on such slopes, where there is no less environmentally damaging feasible alternative means of providing access to a building site, provided that the building site is determined to be the preferred alternative and consistent with all other policies of the LCP.

City of Malibu Land Use Plan Policy 4.10 states:

New development shall provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner in order to minimize hazards resulting from increased runoff, erosion and other hydrologic impacts to streams.

City of Malibu Land Use Plan Policy 4.16 states:

> All applications for new development on a beach, beachfront or blufftop property shall include a wave uprush and impact report and analysis prepared by a licensed civil engineer with expertise in coastal engineering which addresses and demonstrates the effects of said development in relation to the following:
>
> a. The profile of the beach;
> b. Surveyed locations of mean high tide lines acceptable to the State Lands Commission;
> c. The availability of public access to the beach;
> d. The area of the project site subject to design wave uprush;
> e. Foundation design requirements;
> f. The need for a shoreline protection structure over the life of the project;
> g. Alternatives for protection of the septic system;
> h. The long term effects of proposed development on sand supply;
> i. Future projections in sea level rise; and
> j. Project alternatives designed to avoid or minimize impacts to public access.

City of Malibu Land Use Plan Policy 4.22 states:

> Siting and design of new shoreline development and shoreline protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered. Development shall be set back a sufficient distance landward and elevated to a sufficient foundation height to eliminate or minimize to the maximum extent feasible hazards associated with anticipated sea level rise over the expected 100 year economic life of the structure.

City of Malibu Land Use Plan Policy 4.23 states:

> New development on a beach or oceanfront bluff shall be sited outside areas subject to hazards (beach or bluff erosion, inundation, wave uprush) at any time during the full projected 100-year economic life of the development. If complete avoidance of hazard areas is not feasible, all new beach or oceanfront bluff development shall be elevated above the base Flood Elevation (as defined by FEMA) and setback as far landward as possible. All development shall be setback a minimum of 10 feet landward of the most landward surveyed mean high tide line. Whichever setback method is most restrictive shall apply. Development plans shall consider hazards currently affecting the property as well as hazards that can be anticipated over the life of the structure.

City of Malibu Land Use Plan Policy 4.26 states:

> Development on or near sandy beach or bluffs, including the construction of a shoreline protection device, shall include measures to insure that:
>
> a. No stockpiling of dirt or construction materials shall occur on the beach;

b. All grading shall be properly covered and sandbags and/or ditches shall be used to prevent runoff and siltation;

c. Measures to control erosion shall be implemented at the end of each day's work;

d. No machinery shall be allowed in the intertidal zone at any time to the extent feasible;

e. All construction debris shall be removed from the beach. (Resolution No. 07-04)

City of Malibu Land Use Plan Policy 4.30 states:

> In existing developed areas where new beachfront development, excluding a shoreline protective device, is found to be infill (see definition) and is otherwise consistent with the policies of the LCP, a new residential structure shall not extend seaward of a stringline drawn between the nearest adjacent corners of the enclosed area of the nearest existing residential structures on either side of the subject lot. Similarly, a proposed new deck, patio, or other accessory structure shall not extend seaward of a stringline drawn between the nearest adjacent corners of the nearest deck, patio or accessory structure on either side. All infill development shall be setback a minimum of 10 feet landward from the most landward surveyed mean high tide line on the parcel. Whichever setback method is most restrictive shall apply. The stringline method shall apply only to infill development and where it will not result in development which would require a shoreline protection structure at any time during the life of the project.

City of Malibu Land Use Plan Policy 4.33 states:

> All new beachfront and blufftop development shall be sized, sited and designed to minimize risk from wave run-up, flooding and beach and bluff erosion hazards without requiring a shoreline protection structure at any time during the life of the development.

City of Malibu Land Use Plan Policy 4.37 states:

> Shoreline and bluff protection structures shall not be permitted to protect new development, except when necessary to protect a new septic system and there is no feasible alternative that would allow residential development on the parcel. Septic systems shall be located as far landward as feasible. Shoreline and bluff protection structures may be permitted to protect existing structures that were legally constructed prior to the effective date of the Coastal Act, or that were permitted prior to certification of the LCP provided that the CDP did not contain a waiver of the right to a future shoreline or bluff protection structure and only when it can be demonstrated that said existing structures are at risk from identified hazards, that the proposed protective device is the least environmentally damaging alternative and is designed to eliminate or mitigate adverse impacts to local shoreline sand supply. Alternatives analysis shall include the relocation of existing development landward as well as the removal of portions of existing development.

> "Existing development" for purposes of this policy shall consist only of a principle structure, e.g. residential dwelling, required garage, or second residential unit, and shall not include accessory or ancillary structures such as decks, patios, pools, tennis courts, cabanas, stairs, landscaping etc.

City of Malibu Land Use Plan Policy 4.42 states:

> As a condition of approval of development on a beach or shoreline which is subject to wave action, erosion, flooding, landslides, or other hazards associated with development on a beach or bluff, the property owner shall be required to execute and record a deed restriction which acknowledges and assumes said risks and waives any future claims of damage or liability against the permitting agency and agrees to indemnify the permitting agency against any liability, claims, damages or expenses arising from any injury or damage due to such hazards.

City of Malibu Land Use Plan Policy 4.43 states:

> As a condition of approval of a shoreline protection structure, or repairs or additions to a shoreline protection structure, the property owner shall be required to acknowledge, by the recordation of a deed restriction, that no future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protection structure which extends the seaward footprint of the subject structure shall be undertaken and that he/she expressly waives any right to such activities that may exist under Coastal Act Section 30235. The restrictions shall also acknowledge that the intended purpose of the subject structure is solely to protect existing structures located on the site, in their present condition and location, including the septic disposal system and that any future development on the subject site landward of the subject shoreline protection structure including changes to the foundation, major remodels, relocation or upgrade of the septic disposal system, or demolition and construction of a new structure shall be subject to a requirement that a new coastal development permit be obtained for the shoreline protection structure unless the City determines that such activities are minor in nature or otherwise do not affect the need for a shoreline protection structure.

City of Malibu Land Use Plan Policy 4.44 states:

> As a condition of approval of new development on a vacant beachfront or blufftop lot, or where demolition and rebuilding is proposed, where geologic or engineering evaluations conclude that the development can be sited and designed to not require a shoreline protection structure as part of the proposed development or at any time during the life of the development, the property owner shall be required to record a deed restriction against the property that ensures that no shoreline protection structure shall be proposed or constructed to protect the development approved and which expressly waives any future right to construct such devices that may exist pursuant to Public Resources Code Section 30235.

City of Malibu Local Implementation Plan Section 3.6, states, in part:

G. Beachfront Yards/Setbacks. Notwithstanding the above requirements, the following yard requirements apply to beachfront lots:

1. Front. 20 feet maximum or the average of the two immediate neighbors, whichever is less.

2. Side. 10% of lot width on each side, with a 3 feet minimum and 5 feet maximum, except as re- quired for view corridors under Section 6.5 (E)(2) of the Malibu LIP.

3. Rear. Setbacks for infill development are determined by the stringline rule. Separate setback standards apply to dwellings and decks, as indicated below. The stringline method shall apply only to infill development and where it will not result in development which would require a shoreline protection structure at any time during the life of the project, except when necessary to protect a new septic system and there is no feasible alternative that would allow residential development on the parcel. Septic systems shall be located as far landward as feasible.

a. Dwellings. For a dwelling, new construction shall not extend seaward of a stringline drawn from a point on the closest upcoast and downcoast dwelling. The stringline point shall be located on the nearest adjacent corner of the upcoast and downcoast dwelling.

b. Decks and patios. For a deck or patio, new construction shall not extend seaward of a stringline drawn from a point on the closest upcoast and downcoast deck or patio. The stringline point shall be located on the nearest adjacent corner of the upcoast and downcoast deck or patio.

c. All infill development shall be set back a minimum of 10 feet landward from the most land- ward surveyed mean high tide line on the parcel. The location of the mean high tide shall be determined in consultation with the State Lands Commission.

…

J. Site of Construction. Structures may be constructed on slopes greater than 3:1 but less than 2 1/2:1 subject to the provisions of Section 13.27 of the Malibu LIP (Site Plan Review).

City of Malibu Local Implementation Plan Section 10.4 states, in applicable part:

A. Siting and design of new shoreline development and shoreline protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered and its potential impact on beach erosion, shoreline retreat, and bluff erosion rates shall

be evaluated. Development shall be set back a sufficient distance landward and elevated to a sufficient finished floor height to eliminate or minimize extent feasible hazards associated with anticipated sea level rise over the expected 100 year economic life of the structure.

B. New development on a beach or oceanfront bluff shall be sited outside areas subject to hazards (beach or bluff erosion, inundation, wave run-up) at any time during the full protected 100 year economic life of the development. If complete avoidance of hazard areas is not feasible, all new beach or oceanfront bluff development shall be elevated above the base Flood Elevation (as defined by FEMA) and sited as far landward as possible to the maximum extent practicable. All development shall be setback a minimum of 10 feet landward of the most landward surveyed mean high tide line. Whichever setback method is most restrictive shall apply. Development plans shall consider hazards currently affecting the property as well as hazards that can be anticipated over the life of the structure.

…

G. In existing developed areas where new beachfront development, excluding a shoreline protective device, is found to be infill as defined in Section 2.1 of the LIP and is otherwise consistent with the policies of the LCP, a new residential structure shall not extend seaward of a stringline drawn between the nearest adjacent corners of the enclosed area of the nearest existing residential structures on either side of the subject lot. Similarly, a proposed new deck, patio or other accessory structure shall not extend seaward of a stringline drawn between the nearest adjacent corners of the nearest deck, patio or accessory structure on either side. All infill development shall be setback a minimum of 10 feet landward from the most landward surveyed mean high tide line on the parcel. Whichever setback method is most restrictive shall apply. The stringline method shall apply only to infill development as it is defined in Section 2.1 and where it will not result in development which would require a shoreline protective structure at any time during the life of the project.

H. All new beachfront development and bluff-top development shall be sized, sited and designed to minimize risks from wave run-up, flooding, and beach and bluff erosion hazards without requiring a shoreline protection structure.

…

L. No shoreline protection structure shall be permitted for the sole purpose of protecting an ancillary or accessory structure. Such accessory structure shall be removed if it is determined that the structure is in danger from erosion, flooding or wave run-up. Such structures shall be considered threatened if the bluff edge encroaches to within 10 feet of the structure as a result of erosion, landslide or other form of bluff collapse. Accessory structures, including but not limited to patios, stairs, recreational facilities, landscaping features, and similar design

elements shall be constructed and designed to be removed or relocated in the event of threat from erosion, bluff failure or wave hazard.

City of Malibu Local Implementation Plan Section 10.6 states:

A. As a condition of approval of development on a coastal bluff, beach or shoreline that is subject to wave action, erosion, flooding, landslides, or other hazards associated with development on a beach or bluff, the property owner shall be required to execute and record a deed restriction which acknowledges and assumes said risks and waives any future claims of damage or liability against the permitting agency and agrees to indemnify the permitting agency against any liability, claims, damages or expenses arising from any injury or damage due to such hazards.

B. As a condition of approval of a new shoreline protection structure, or repairs or additions to an existing shoreline protection structure, the property owner shall be required to acknowledge, by the recordation of a deed restriction, that no future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protection structure which extends the seaward footprint of the subject shoreline protection structure shall be undertaken and that he/she expressly waives any right to such activities that may exist under Coastal Act Section 30235.

    1. The restrictions also shall acknowledge that the intended purpose of the subject structure is solely to protect structures currently existing at the site, in their present condition and location, including the OWTS and that any future development on the subject site landward of the subject shoreline protection structure including changes to the foundation, major remodels, relocation or upgrade of the OWTS, or demolition and construction of a new structure shall be subject to a requirement that a new coastal development permit be obtained for the shoreline protection structure unless the City determines that such activities are minor in nature or otherwise do not affect the need for a shoreline protection structure. Public works projects completed pursuant to the document entitled Repair, Maintenance, and Utility Hookups, adopted by the Coastal Commission on September 5, 1978 are exempt from the above stated requirement.

C. As a condition of approval of new development on a vacant beachfront or bluff-top lot, or where demolition and rebuilding is proposed, where geologic or engineering evaluations conclude that the development can be sited and designed so as to not require a shoreline protection structure as part of the proposed development or at any time during the life of the development, the property owner shall be required to record a deed restriction against the property that ensures that no shoreline protection structure shall be proposed or constructed to protect the development approved and which expressly waives any future right to construct such devices that may exist pursuant to Public Resources Code Section 30235. (Ord. 303 § 3, 2007)

The certified City of Malibu LCP contains policies and provisions, as detailed above, including in LUP Chapter 4, and Coastal Act Sections 30235, 30250, and 30253, as incorporated in the LCP, that regulate new shoreline development. These policies and provisions mandate that new development shall minimize risks to life and property in area of high geologic, flood, and fire hazard and shall not require the construction of protective devices that would substantially alter natural landforms. For beachfront development such as the subject project, these risks include those from rising sea levels. When coastal hazards cannot be avoided, new development needs to include provisions to ensure that hazard risks are minimized for the life of the development without shoreline protection, including through future modification, relocation, or removal when they become threatened by natural hazards, including sea level rise. Shoreline protective devices shall not be permitted to protect new development, except when necessary to protect a new septic system and there is no feasible alternative that would allow residential development on the parcel and the system is located as far landward as feasible.

The project is located on the beach on the ocean side of Pacific Coast Highway (PCH) in the Big Rock area in the eastern portion of the City of Malibu. The project site is vulnerable to coastal hazards and flooding and is located entirely within the southern boundary of the Big Rock Mesa Landslide (BRML), a large, active landslide complex, described in more detail above. The property was previously developed with a single-family residence but it was demolished by the previous property owner in 1985 after storm damage. The Malibu coastline area, including the subject site is clearly susceptible to flooding and/or wave damage from storm waves, storm surges, and high tides.

Geologic Hazard and Factor of Safety

As discussed in detail in the Hazards and Shoreline Development subsection of Section D of this report (Analysis of Substantial Issue), the project site is located entirely within the southern boundary of the Big Rock Mesa Landslide (BRML), a large, active landslide complex that reactivated in 1983. The applicant's geotechnical reports characterize the BRML as a deep-seated bedrock landslide, approximately one mile in length and half a mile in width that spills out onto the adjacent coastal platform, and the primary cause of the landslide reactivation was determined to be elevated groundwater levels associated with a series of winter storms. The geotechnical information contained in the City's permit record clearly establishes that the 1.5 factor of safety (static) standard contained in the Malibu LCP, specifically LIP Policy 9.4 (D), is not currently met at the project site. The evidence available to the City was sufficient to allow a geologist, engineer, or other knowledgeable party to predict that it would be difficult, and possibly infeasible, to stabilize the site and meet the LCP standard. However, none of the geotechnical reports provided an assessment, by the project geologist or engineer, of the technical and economic feasibility of undertaking site-specific (or other) stabilization measures that would increase the factor of safety at the project site above 1.5. Additionally, the geologic reports contained in the City's record did not fully evaluate the project site's potential vulnerability to seismically-induced landsliding, and indicated

the need for a more detailed, site-specific assessment of the potential for seismic reactivation of the BRM Landslide and the hazard this may pose for the project site.

In response to this issue, the applicant submitted a geotechnical letter prepared by SubSurface Designs, Inc., dated June 12, 2020, to the Commission that includes a clear statement, that, due to the large regional extent of the BRML, it is not possible to construct site-specific stabilization measures to raise the factor of safety to 1.5 or above. Commission Staff Geologist, Joseph Street, and Commission Staff Senior Coastal Engineer, Lesley Ewing, have reviewed the available geotechnical evidence and agree with this conclusion. The June 12, 2020 geotechnical letter also provided additional discussion of the risk of seismically-induced landsliding at the site, noting that the BRML has been subject to strong ground-shaking during four major earthquakes since 1987, including the nearby Northridge Earthquake (M 6.7) in 1994, with no record of ground movement during or following these events. The City's program of on-going dewatering and monitoring of the BRML has reduced the risk of landslide reactivation and has proved sufficient during recent large earthquakes. However, the hazard of landslide reactivation during a large earthquake cannot be ruled out. Moreover, as discussed above, there are no feasible site-specific measures that could be taken to prevent the seismically-induced reactivation of this very large landslide feature.

Malibu LIP Policy 9.4 (D) restricts new development proposed on landslides, steep slopes, unstable or weak soils or any other identified geologic hazard area, and permits new development only where a factor of safety of 1.5 (static) and a factor of safety of 1.1 (pseudostatic) can be provided. The applicant proposes to construct a single family residence on the parcel and it is not feasible to meet the 1.5 factor of safety standard at the project site due to its location within the BRML. Application of Malibu LIP Policy 9.4 (D), by itself, would therefore require denial of the project, because it is not possible to construct site-specific stabilization measures to raise the factor of safety to 1.5. Additionally, Malibu LUP Policy 4.8, which prohibits grading and/or development-related vegetation clearance where the slope exceeds 2.5:1 (h:v), could be interpreted to prohibit portions of the proposed development at the site, including excavation to install the OWTS and installation of a seawall and piles on the steep slope. This is especially true in this case when considered in conjunction with Malibu LIP Section 3.6 (J), which could be interpreted to prohibit construction on slopes steeper than 2.5:1. Application of these two policies would therefore require denial of the project, because it proposes to construct new development on slopes greater than 2.5:1 and it is not feasible to construct anything without work on those slopes.

However, the Commission must also consider Section 30010, and the United States Supreme Court's decision in *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003. Section 30010 of the Coastal Act provides that the Coastal Act shall not be construed as authorizing the Commission to exercise its power to grant or deny a permit in a manner that will take private property for public use. Application of Section 30010 may overcome the presumption of denial in some instances. The subject of what sort of government action results in a "taking" was addressed by the Court in the *Lucas* case. In *Lucas*, the Court identified several factors that should be considered in determining whether a proposed government action would result in a taking. For instance, the Court

held that where a permit applicant has demonstrated that he or she has a sufficient real property interest in the property to allow the proposed project, and that project denial would deprive his or her property of all economically viable use, then denial of the project by a regulatory agency might result in a taking of the property for public use unless the proposed project would constitute a nuisance under State law. Other Supreme Court precedent establishes that another factor that should be considered is the extent to which a project denial would interfere with reasonable investment-backed expectations.

The Commission interprets Section 30010, together with the *Lucas* decision, to mean that if Commission denial of the project would deprive an applicant's property of all reasonable economic use, the Commission may be required to allow some development even if a Coastal Act policy would otherwise prohibit it, unless the proposed project would constitute a nuisance under state law. In other words, Malibu LIP Policy 9.4 (D) cannot be read to deny all economically beneficial or productive use of land because Malibu LIP Policy 9.4 (D) cannot be interpreted to require the Commission to act in an unconstitutional manner.

As described above, the subject parcel is designated in the City of Malibu Land Use Plan for residential use. Residential development previously existed on the subject site and residential development has been approved and constructed on adjacent sites in the immediate area. Based on the presence of existing and approved residential development in the area, the applicant had reason to believe that it had purchased a parcel on which it would be possible to build a residence.

The Commission finds that in this particular case, other allowable uses for the subject site, such as a beach park or preserve, are not feasible. There is currently no offer to purchase the property from any public park agency. The Commission thus concludes that in this particular case there is no viable alternative use for the site other than residential development. The Commission finds, therefore, that outright denial of all residential use on the project site would interfere with reasonable investment-backed expectations and deprive the property of all reasonable economic use.

Next the Commission turns to the question of nuisance. There is no evidence that construction of a residence on the project site would create a nuisance under California law. Other houses have been constructed in similar situations in similar areas in Malibu, apparently without the creation of nuisances. In addition, the City has reviewed and provided preliminary approval of the applicant's proposed septic system, ensuring that the system will not create public health problems. Furthermore, the use that is proposed is residential, rather than, for example, industrial, which might create noise or odors or otherwise create a public nuisance.

In conclusion, the Commission finds that, notwithstanding Malibu LIP Policy 9.4 (D), a residential project on the subject property must be allowed to permit the applicant a reasonable economic use of their property consistent with Section 30010 of the Coastal Act.

While the applicant is entitled under Section 30010 to an assurance that the Commission will not act in such a way as to "take" the property, this section does not authorize the Commission to avoid application of the policies of the Coastal Act, or Malibu LCP, including LUP Policy 4.8 and LIP Sections 3.6 (J) and 9.4 (D), altogether. Instead, the Commission is only directed to avoid construing these policies in a way that would effect a taking. Aside from this instruction, the Commission is still otherwise directed to enforce the requirements of the Act and LCP as applicable. Therefore, in this situation, the Commission must still assure compliance with the geologic hazard policies of the LCP to the extent this can be done without taking the property.

Obviously, the construction of residential development at the site cannot currently meet the 1.5 factor of safety (static) standards contained in Malibu LUP Policy 4.4 and LIP Section 9.4 (D) or the slope steepness standards of Malibu LUP Policy 4.8 and LIP Section 3.6 (J). However, the development can be sited and designed to minimize risks to life and property in areas of high geologic, flood, and fire hazard, and assure stability and structural integrity. In this case, siting and design alternatives have been considered in order to identify the alternative that can minimize those risks and assure stability and structural integrity. As previously stated, the applicant has submitted a geotechnical and engineering report and addenda prepared by SubSurface Designs, Inc., EPD Consultants, and Pacific Engineering Group, for the proposed project, which evaluated the safety and stability of the project site in relation to the proposed development. These reports included a number of coastal engineering recommendations on how to minimize adverse effects on coastal processes and to ensure the structural stability of the proposed development. The June 12, 2020 geotechnical letter also provided additional discussion of the methods proposed for safe installation of the concrete friction piles proposed to support the residence and concludes that those methods will prevent displacement or disturbance to the neighboring foundations and have been used successfully in the Malibu area in previous instances. Commission Staff Geologist, Joseph Street, and Commission Staff Senior Coastal Engineer, Lesley Ewing, have reviewed the available geotechnical evidence and agree with this conclusion.

The applicant provided a geologic/soils/geotechnical study consistent with Malibu LUP Policy 4.5 that identifies geologic hazards affecting the proposed project site, necessary mitigation measures, and contains a statement that the project site is suitable for the proposed development and that the development will be safe from geologic hazard. To ensure that all recommendations of the engineering consultants have been incorporated into the proposed development, **Special Condition One (1)** requires the applicant to comply with the recommendations contained in the submitted coastal engineering and geology, geotechnical, and/or soils reports and that final plans approved by the consultant(s) shall be in substantial conformance with the final plans approved by the Commission. Any substantial changes to the proposed development approved by the Commission which may be recommended by the consultant shall require an amendment to the permit, or a new Coastal Development Permit. As such, the Commission concludes that the proposed siting and design of the project will minimize risks to life and property in areas of high geologic, flood, and fire hazard, and assure stability and structural integrity to the extent feasible.

Sea Level Rise

Sea level has been rising for many years. As an example in the Santa Monica Bay area, the historic rate of sea level rise, based on tide gauge records, has been 1.8 mm/yr. or about 7 inches per century[3]. In the past century, average global temperature has increased by about 0.8°C (1.4°F), and average global sea level has increased by 7 to 8 in (17 to 21 cm) (IPCC 2013). Recent reports developed by the California Ocean Protection Council (OPC) project that by the year 2100, sea levels may rise by approximately 3.1 to 6.8 feet in the area near the project site under the higher-end scenarios, with the potential for rapid ice loss to result in an extreme scenario of 9.8 feet of sea level rise (Griggs et al., 2017; OPC 2018). Recent observations of sea level along parts of the California coast have shown some anomalous trends, however; there is a growing body of evidence that there has been an increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature.

The State of California has undertaken significant research to understand how much sea level rise to expect over this century and to anticipate the likely impacts of such sea level rise. In 2013, the Ocean Protection Council (OPC) adopted the National Research Council (NRC) report, “Sea level rise for the Coasts of California, Oregon, and Washington: Past Present and Future”, as best available science for the State of California, and recommended in its 2013 State Sea Level Rise Guidance that state agencies and others use these projections in their planning processes. The Coastal Commission also adopted the NRC report as best available science its 2015 Sea level rise Policy Guidance. Two subsequent OPC reports have updated the best available science, including the Rising Seas in California: An Update on Sea level rise Science, released in April 2017 by a working group of OPC’s Science Advisory team, and the State of California Sea Level-Rise Guidance: 2018 Update. The OPC’s most recent projections in its statewide sea level rise guidance are that in this area sea levels may rise between 3.05 and 6.15 feet by the year 2095 (the anticipated duration of the proposed project) under the higher emission scenarios, though there is a risk of more significant sea level rise depending on various uncertainties, including the dynamics of ice sheet loss. The projection is given in a range largely because climate models that predict future climate conditions include inherent uncertainties stemming from uncertainties about the climate system, which is an area of developing science. Additionally, researchers cannot know exactly how much greenhouse gases we will continue to emit over the coming decades—large-scale curtailment of greenhouse gas emissions would keep sea level rise towards the lower end of the projections, while “business as usual” emissions scenarios would result in the higher end of the projections. Because the world has continued along the “business as usual” scenario (and data suggests temperatures and sea level rise are tracking along the higher projections) as well as the inherit uncertainty regarding the exact rate of future sea level

[3] Lyles, S.D., L.E. Hickman and H.A. Debaugh (1988) *Sea Level Variations for the United States 1855 – 1986.* Rockville, MD: National Ocean Service.

rise, the Coastal Commission Sea Level Rise Guidance recommends that we avoid relying on the lower projections in planning and decision making processes. The OPC has also recommended that medium/high risk aversion be used to inform decision-making for less adaptive, more vulnerable projects or populations that will experience medium to high consequences as a result of underestimating sea level rise, such as residential development. In the case of the proposed project, this means looking at 6.15 feet of sea level rise over the 75-year anticipated duration of the project.

As our understanding of sea level rise continues to evolve, it is possible that sea level rise projections will continue to change as well (as evidenced by the recent updates to best available science). While uncertainty will remain with regard to exactly how much sea levels will rise and when, the direction of sea level change is clear and it is critical to continue to assess sea level rise vulnerabilities when planning for future development. Importantly, maintaining a precautionary approach that considers high or even extreme sea level rise rates and includes planning for future adaptation will help ensure that decisions are made that will result in a resilient coastal California.

On the California coast, the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore in many locations, which will result in increased flooding, erosion, and storm impacts to coastal areas. On a relatively flat beach, with a slope of 40:1, a simple geometric model of the coast indicates that every centimeter of sea level rise will result in a 40 cm landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a seawall, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than is inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea level will be an increase in wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to increased wave action, and those areas that are already exposed to wave action will be exposed more frequently, with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

In addition to increased flooding, erosion, and storm impacts, sea level rise may also lead to groundwater rise, which may result in earlier, more severe, or longer-term hazards, especially for buried infrastructure and areas with shallow water tables. Research indicates that sea level rise is likely to raise groundwater levels and push saltwater into fresh groundwater; however, the degree of impact will vary greatly depending on local conditions. Importantly, rising groundwater could constrain the types of adaptation strategies that can be protective; for example, while shoreline armoring may be effective to address overland flooding and inundation from sea level rise, it may

not protect against groundwater rise impacts, depending on the characteristics of the site.

Coastal Act Section 30235 acknowledges that shoreline armoring, including seawalls, revetments, cliff retaining walls, groins and other such structural or “hard” methods designed to forestall erosion also alters natural landforms and natural shoreline processes. Accordingly, Section 30235 only requires the approval of shoreline protective works when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion (and when designed to address impacts on local shoreline sand supply). The provision is so limited because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. Shoreline armoring or protection devices also directly interfere with public access to tidelands by impeding the ambulatory nature of the mean high tide line (the boundary between public and private lands) during high tide and severe storm events, and potentially throughout the entire winter season. The impact of a shoreline protective device on public access is most evident on a beach where wave run-up and the mean high tide line are frequently observed in an extreme landward position during storm events and the winter season. As an unarmored shoreline retreats landward due to the natural process of erosion, the boundary between public and private land also retreats landward. Construction of rock revetments and seawalls to protect private property fixes the inland limit of the shoreline and prevents any landward migration of the shoreline inland of the structure. The dry beach area will narrow and eventually the mean high tide line will intersect the structure on a regular basis. The intertidal zone (the distance between the high water mark and low water mark) will narrow and eventually these two will both intersect the structure. As the distance between the high water mark and low water mark becomes narrower, the seawall effectively eliminates lateral access opportunities along the beach as the entire area below the fixed high tideline is inundated. The ultimate result of a fixed tideline boundary (which would otherwise normally migrate and retreat landward, while maintaining a passable distance between the high water mark and low water mark over time) is a reduction or elimination of the area of sandy beach available for public access and recreation.

Interference by shoreline protective devices can result in a number of adverse effects on the dynamic shoreline system and the public's beach ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile that result from a reduced beach berm width, alter the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area in which the public can pass on their own property. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the nearshore sand bar. The lack of an effective bar can allow such high wave energy on the shoreline that material may be lost far offshore where it is no longer available to nourish the beach. This affects public access again through a loss of area between the mean high water line and the actual water. Third, shoreline protective devices such as revetments and bulkheads

cumulatively affect shoreline sand supply and public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually along a shoreline and they reach a public beach. In addition, if a seasonally-eroded beach condition occurs with greater frequency due to the placement of a shoreline protective device on the subject site, then the subject beach would also accrete at a slower rate. Fourth, if not sited landward in a location that ensures that the seawall is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy and more wave energy will be reflected off the face of the seawall or revetment rocks.

Application to this Project

In this case, the applicant had submitted to the City a Wave Uprush Study / Coastal Engineering Report dated May 19, 2015, prepared by Pacific Engineering Group, which looked at the proposed development in relation to coastal hazards using an estimated sea level rise projection of 9 inches. This sea level rise scenario was derived from the NOAA 2012 Global Sea level Rise Scenarios (2012). However, at that time, the Commission's 2015 Sea Level Rise Policy Guidance recommended the use of region-specific sea level rise projections contained in the National Research Council (NRC) 2012 science report as the best available science. The Commission's 2015 Sea Level Rise Policy Guidance states that the appropriate region-specific sea level rise projection for the year 2100 in the NRC 2012 Report (for areas South of Cape Mendocino) is 17 to 66 inches. So, the applicant's 2015 Wave Uprush Study / Coastal Engineering Report used a very low estimated sea level rise projection.

Further, the City's final action on the subject project was not until 4 years later (September 2019) during which time newer scientific studies established new sea level rise projections. In August 2018, the Commission's Sea Level Rise Guidance was updated to reflect new best available science with new sea level rise projections stemming from two reports from the California Ocean Protection Council (OPC), the State Sea Level Rise Guidance (OPC 2018) and Rising Seas in California (Griggs et al. 2017). The new best available science on sea level rise indicates that in the subject area, under the high emission scenarios, sea levels may rise between 3.05 ft (17% estimated probability) and 6.15 feet (<1% estimated probability) by the year 2095. More specifically, the updated Guidance states that because residential structures have moderate capacity to adapt to sea level rise and relatively high consequences if impacted by sea level rise, it is appropriate to use the 6.15 foot sea level rise scenario to inform decision-making, reflecting medium/high risk aversion. Although this guidance was adopted by both the Ocean Protection Council and the California Coastal Commission in 2018, more than a year before the City's final action on the subject permit in September 2019, these updated sea level rise projections were not reflected in the applicant's site-specific wave uprush study and coastal engineering report or the City's analysis of the project.

The U.S. Geologic Survey Coastal Storm Modeling System (CoSMoS), a regional sea level rise modeling tool, includes projected changes to the average mean high water

(MHW) shoreline. It also provides predictions of wave runup and flooding that may be used to get a sense of the potential effects from wave conditions. According to CoSMoS sea level rise models, the project site is susceptible to flooding with 6.6 ft. of sea level rise (the closest available projection to 6.15 ft., which is the maximum projection under a medium/high risk aversion scenario) and no storm scenario, which may occur before the anticipated end of the structure's expected life **(Exhibit 7)**. If the range of higher sea level rise projections for this site (3.05-6.15 ft) is combined with the 100-year storm scenario in CoSMoS, the potential inundation, shoreline retreat, and beach loss is extreme **(Exhibit 7)**.

In response to concerns raised by Commission staff related to the outdated sea level rise projections in the wave uprush study used to inform the design of the City-approved project, the applicant had its consultant prepare an updated wave uprush study and coastal engineering report for the project site using updated sea level rise projections consistent with the Commission's 2018 Sea Level Rise Guidance. This report, by Pacific Engineering Group, dated September 8, 2020, was provided to staff for consideration as part of the de novo CDP review, and satisfies Malibu LUP Policy 4.16. Based on the consultant's 2020 analysis, the report recommends that the minimum elevations for the proposed residence be 21 ft. NAVD88 for the bottom of the lowest horizontal structural member, 23 ft. NAVD88 for the bottom underside surface of the lowest floor or deck, and 24.75 ft. NAVD88 for both the minimum finished floor elevation and finish floor for decks. With these elevation recommendations and recommendations for engineering design, the report concludes that the residence will be relatively safe from hazards over the proposed 75-year project life and, with lesser amounts of sea level rise, the residence could be safe for up to 100 years.

The updated report also concludes that any proposed OWTS located on the subject site will be in the wave uprush zone and will require a shoreline protection device (including return walls to protect the seawall and OWTS from flanking wave action) for storm generated wave uprush, beach scour, and tsunami hazards, and recommends a minimum top of seawall elevation of 22.25 ft. NAVD88 and minimum bottom of seawall elevation of 0.0 ft. NAVD88. The report also notes that some adaptation to the OTWS (increasing the height of the seawall or connecting to a future municipal sewer system) could be used to extend project safety toward the end of the project life. The report also recommends a mean sea level of 8.0 feet NAVD88 as a trigger for adaptation.

Based on these conclusions, the applicant's architect revised the project plans to reflect the updated recommendations for minimum structure elevations and the top elevation of the proposed seawall (which is proposed solely for protection of the OWTS). Specifically, the applicant has modified the proposed project in two significant ways: (1) to increase the finished floor elevation on the ocean side of the house from 23.5 ft. to 24.75 ft. NAVD88 (and associated design changes to other heights of the ocean side portion of the structure discussed in more detail in the Visual Resources findings below) and (2) to increase the top of seawall elevation from approximately 21.5 ft to 22.25 ft. NAVD88, as well as other modifications to the OWTS design, as discussed below. The applicant submitted revised project plans incorporating these changes (received

October 20, 2021) for the proposed project to be considered in the subject de novo CDP review **(Exhibit 6)**.

In addition, hazards conditions associated with sea level rise have a level of uncertainty, as beaches are dynamic areas and our understanding of climate change and sea level rise is constantly evolving. Therefore, the proposed new development on a beachfront property may be threatened by sea level rise at some point in the future and require adaptation if the rate of erosion and wave uprush accelerates faster than projected or if there are changes in the frequency or effectiveness of beach nourishment activities or changes to sediment management in the area. Development which may require a protective device in the future cannot be allowed due to the adverse impact such devices have upon, among other things, public access, visual resources, and shoreline processes. To minimize the project's impact on shoreline processes and ensure new development along the shoreline is to be found consistent with the LCP, the most landward feasible location must be explored. Shoreline structures must also be located as far landward as feasible to protect public access along the beach. In this case, the proposed structure is sited as far landward as is feasible to minimize the risks from storm wave action and beach erosion, and will be safe from wave uprush for the estimated project life without a shoreline protection device (with the exception of the OWTS for which a seawall is proposed, as discussed further below) as is required pursuant to Section 30253 of the Coastal Act, which is incorporated as a policy in the City's LCP (Malibu LUP Policy 4.2), and pursuant to the other LCP policies cited above.

The applicant's updated Wave Uprush Study shows that under a projection of 6.15 ft. sea level rise by 2095 with no shoreline protection device, wave uprush would reach 12 feet landward of the PCH right-of-way line at 26.8 ft NAVD88 and the highest critical breaking storm wave elevation would crest at 23.06 ft NAVD88. The previous Wave Uprush Study from 2015 showed that under a projection of 9 inches of sea level rise (which is expected to occur by 2035 under the medium/high risk aversion scenario of the updated State Sea Level Rise Guidance) with no shoreline protection device, wave uprush would reach 1 ft. seaward from the PCH right-of-way line at 26.4 ft NAVD88 and the highest critical breaking storm wave elevation would crest at 19.3 ft NAVD88. The FEMA base flood elevation for the portion of the project area over 35-feet seaward of the PCH right-of-way line (VE zone) is 21 ft. NAVD88. The proposed residence will be constructed on a concrete friction pile foundation system that extends into bedrock and would not require a shoreline protective device for the residence itself.

The proposed project, which constitutes new beachfront development on an infill lot, is designed to be consistent with the standards of Malibu LIP Policy 3.6 (G), for beachfront yards/setbacks, and LUP Policy 4.30, including with respect to the stringline requirement and the requirement to be setback a minimum of 10 feet landward from the most landward surveyed mean high tide line on the parcel. In this case, the State Lands Commission determined that the 1928 MHTL is the most landward surveyed MHTL in this case and the proposed project is situated 10 ft. from the MHTL, consistent with the 10 foot minimum setback requirement of the LCP, including LUP Policies 4.23 and 4.30, and LIP Sections 3.6 (G)(3) and 10.4 (G). Additionally, the proposed residence includes a front yard setback of 9 ft, 3 in., and side yard setbacks of at least 3 ft., 4 in., consistent

with the standards in LIP Section 3.6(G). As revised based on the updated wave uprush study, the proposed residence takes into account anticipated future changes in sea level, consistent with LUP Policy 4.22 and LIP Section 10.4 (A). Since complete avoidance of hazard areas is not feasible on the site, the proposed residence is proposed to be elevated above the FEMA base flood elevation of 21 feet, consistent with LUP Policy 4.23 and LIP Section 10.4 (B). The proposed residence is sized, sited, and designed to minimize risk from wave run-up, flooding, and beach and bluff erosion hazards without requiring a shoreline protection structure at any time during the life of the development, consistent with LUP Policy 3.33 and LIP Section 10.4 (H). Pursuant to **Special Condition 2**, no shoreline protection structure shall be permitted for the sole purpose of protecting an ancillary or accessory structure, consistent with LIP Section 10.4(L), with the exception of the seawall proposed exclusively to protect the proposed OWTS.

The proposed OWTS and associated new shoreline protection device (a concrete-pile-supported timber bulkhead with return walls) were re-designed based on the recommendations of the coastal engineer, including the revised top and bottom elevations for bulkhead, following the updated wave uprush study. Additionally, further revisions were made to the OWTS design based on subsequent analysis by the applicant's consultants (EPD Consultants, and Pacific Engineering Group) in response to concerns raised by Commission staff related to future increase in groundwater elevations expected in association with future sea level rise. Following this analysis, they determined that the OWTS design life is approximately 30 years (design life of the building structure is 75 years), at which time a future replacement leach field may be needed that is approximately 3 feet higher than the current proposed leach field to maintain current regulatory clearance distances above future projected groundwater associated with sea level rise. The consultants determined that locating the leach filed at a higher elevation at this time would be contrary to best practices from a current design standpoint in relation to current groundwater hydrology, and they explained that removing and raising the leach field in the future would not require any structural modifications to the residence or seawall.

Malibu LUP Policy 4.37 also requires that shoreline protection devices shall not be permitted to protect new development, except when necessary to protect a new septic system and there is no feasible alternative that would allow residential development on the parcel and the septic system is located as far landward as feasible. The proposed OWTS to serve the residence is located as far landward as feasible; however, it would be located below the FEMA base flood elevation for the area (21 ft. NAVD88) and within the projected wave uprush zone and a seawall is necessary to protect the proposed OWTS. The OWTS was designed to minimize its footprint, thereby maintaining the minimum seaward extent practicable for the shoreline protection device needed to protect the OWTS. Through design revisions, the horizontal clearance distances between major components of the OWTS and both the shoreline protection device (seawall and return walls) and the public water pressure main have been reduced to the maximum extent practicable based on City and Los Angeles County standards. As such, the proposed project includes construction of a seawall to protect the OWTS, and

both the seawall and OWTS have been sited as far landward as feasible consistent with the requirements of the City's LCP.

In response to concerns raised by Commission staff related to potential adverse impacts to neighboring piles and foundations, including scour or other sand supply issues, from potential wave reflection from the proposed seawall for the OWTS, the applicant's coastal engineering consultant, Pacific Engineering Group, provided analysis regarding the issue. Their analysis, partially based on comparing the expected direction and forces of potential reflected waves with those of normal incident wave action, concluded that the proposed seawall and return walls will not have an adverse effect on coastal processes on the adjacent properties and will not adversely deflect, reflect, or re-direct wave action onto the adjacent properties. Commission Staff Senior Coastal Engineer, Lesley Ewing, reviewed the analysis and agrees with its conclusions.

New development on beachfront parcels must be designed in a manner that will not require the construction or use of a shoreline protective device that would alter the natural landforms or shoreline processes. Although the project has been designed to not require a shoreline protection device based on the hazard and sea level rise conditions included in the wave uprush study, with the exception of the seawall authorized solely for protection of the OWTS, it is important to state that new development such as the residence is not entitled to shoreline protection under the Coastal Act or LCP, and the Commission would not approve this project if it required a shoreline protection device now or at some point in the future. The shoreline is a dynamic environment and although the proposed residence has been designed to ensure structural stability relative to wave action and 6.15 feet sea level rise to the extent feasible, it is not possible to completely preclude the possibility that conditions on site will change and that the residence could be subject to greater wave action and tidal events in the future. In particular, the science of understanding and predicting sea level rise is rapidly changing, and the predictions of what will constitute the "worst case" sea level rise scenario have kept getting worse over the past decade or two. This trend and uncertainty support using a precautionary approach when approving shorefront development.

In order to be consistent with Coastal Act Sections 30235, 30250, and 30253, as well as the relevant Chapter 4 Policies of the City of Malibu's LUP, the applicant must waive any right to construct a shoreline protective device to protect the residence in the future, as outlined in **Special Condition 2.** This condition confirms that the applicant is not entitled to shoreline protection for the residential development approved by this permit, with the exception of the seawall authorized solely for protection of the OWTS, and to waive rights to future shoreline protection, or rights to augment the OWTS shoreline protective device in a manner that would extend the seaward footprint of the shoreline protective device approved pursuant to this coastal development permit.

Special Condition 3 requires the landowner to remove the development if (1) any government agency has ordered that the structure not be occupied due to coastal hazards, or requires the structures to be removed; (2) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (3) removal is required pursuant

to LCP policies for sea level rise adaptation planning; or (4) the development requires new shoreline protective devices that conflict with LCP or relevant Coastal Act policies. In this case, the applicant has defined the proposed project to be relatively safe from hazards over the proposed 75-year project life (approximately 2095) and, with lesser amounts of sea level rise, the residence could be safe for up to 100-years. Since Malibu LUP Policies 4.22 and 4.23 and LIP Section 10.4 require beachfront development to account for hazards associated with anticipated sea level rise over a 100-year structure life (which would be closer to 2121), **Special Condition 2** and **Special Condition 3** are also required to ensure the proposed development accounts for hazards that go beyond those designed for the anticipated hazards through 2095.

In addition, the public trust boundary may migrate landward in response to rising sea levels and it is important to ensure that the development remains on private land over time.The Commission finds **Special Condition 3** is required which specifies that in the event that the public trust boundary migrates landward such that (1) any portion of the approved development encroaches onto public trust lands, and/or (2) public trust land reaches the approved seawall[4], based on a Mean High Tide Line (MHTL) survey, the applicant shall submit a complete coastal development permit amendment application within 180 days of the subject MHTL survey date to seek authorization to retain, relocate, and/or remove the development. The Malibu shoreline has been widened beyond its historic position due to beach nourishment and the construction of sand retaining structures. With limited recent sediment augmentations, shoreline erosion has been observed throughout parts of the Malibu shoreline and can be expected to increase in the future with rising sea level. With time and no significant nourishment, the shoreline could move landward to a position under the residence or adjacent to the road. This can reduce the public beach area and limit public access. Imposing a condition requiring a current MHTL survey prior-to-issuance of the permit (since the most recent survey was from 2014), and periodic MHTL surveys every five years thereafter, will provide evidence that the development is located on, and remains on, private property, as required by **Special Condition 17**. Additionally, **Special Condition 15** clarifies that the Commission's approval of this permit does not constitute a waiver of any public rights that may exist on the property and prohibits the applicant from using the permit as evidence of a waiver of any public rights that may exist on the property now or in the future.

Moreover, the proposed development is located along a shoreline in the City of Malibu that has historically been subject to substantial damage as the result of storm and flood occurrences; therefore, ample evidence exists that all beachfront areas in the City of Malibu area are subject to an unusually high degree of risk due to storm waves and surges, high surf conditions, erosion, and flooding. The subject site, even after completion of the proposed project, will continue to be subject to the high degree of risk posed by the hazards of oceanfront development in the future. The Coastal Act and

[4] Since the approved seawall may stop the landward migration of the MHTL, this trigger is reached in the event that the MHTL reaches the approved seawall.

LCP recognize that development, even as designed and constructed to incorporate the recommendations of the applicant's coastal engineer, may still involve the taking of some risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use the subject property.

Thus, in this case, the Commission finds that due to the possibility of tsunami, storm waves, surges, and erosion, the applicant shall assume these risks as a condition of approval. Because the risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission and the City for damage to life or property which may occur as a result of the permitted development. The applicant's Assumption of Risk, Waiver of Liability and Indemnity, as required by **Special Condition 4**, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and that may adversely affect the stability or safety of the development it protects, and will effectuate the necessary assumptions of those risks by the applicant. This condition will also ensure that the applicant is aware of the potentially ambulatory nature of their seaward boundary, and that this boundary may move with sea level rise. It further ensures that future property owners will be made aware of the risks and limitations placed on the development by this permit, so that any future owners can properly assess risks before purchasing property. In general, disclosing risks to current and future property owners helps ensure that property owners will plan with these hazards in mind and will help set reasonable expectations for future development potential and investments. Similarly, requiring property owners to assume the risks of developing in hazardous locations will help avoid the need to spend public funds on disaster recovery for private development and will ensure future owners are aware of limits on the use of shoreline armoring that harms coastal resources. These conditions help carry out LCP policies related to minimizing risks to life and property in areas of high flood hazard, as well as the mandate to ensure that new development is located in areas able to accommodate it, including over time as conditions change (see Coastal Act Section 30250). Additionally, **Special Condition 6** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property, consistent with Malibu LUP Policies 4.42, 4.43, 4.44, and LIP Section 10.6.

The project will increase the amount of impervious coverage on-site, which may increase both the quantity and velocity of stormwater runoff. If not controlled and conveyed off-site in a non-erosive manner, this runoff will result in increased erosion, adversely affect site stability, and degrade downslope water quality. The applicant's geologic / geotechnical consultant has recommended that site drainage be collected and distributed in a non-erosive manner. In addition, the Malibu LCP Policy 4.10 requires that "new development shall provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner in order to minimize hazards resulting from increased runoff, erosion and other hydrologic impacts to streams". Therefore, to ensure that drainage is conveyed off site in a non-erosive manner, the Commission finds that it is necessary to require **Special Condition 9** to require the

applicant to prepare and implement drainage and polluted runoff management plans for the construction and post-construction phases of development that are prepared by the consulting engineer. Furthermore, to ensure that excess excavated material is moved off site so as not to contribute to unnecessary landform alteration and to minimize erosion and sedimentation from stockpiled excavated soil, and to ensure the project includes appropriate best management practices for construction on a beach consistent with Malibu LUP policy 4.26, the Commission finds it necessary to require the applicant to dispose of the material at an appropriate disposal site or to a site that has been approved to accept fill material, as specified in **Special Condition 10**.

In addition, in order to ensure that no additions or improvements are made to the property without due consideration of potential hazards, which would conflict with the requirement of Malibu LUP Policy 4.2 to minimize the risks associated with development, the Commission finds it necessary to require a future development restriction through **Special Condition 5.** This condition requires the applicant to obtain an amended or new coastal permit if additions or improvements to the site are proposed in the future.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with the hazards and shoreline development policies of the certified City of Malibu LCP.

Public Access and Recreation

Coastal Act Section 30210, as incorporated into the certified LCP, states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse..

Coastal Act Section 30211, as incorporated into the certified LCP, states:

> Development shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30212, as incorporated into the certified LCP, states, in part:

> (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Coastal Act Section 30221, as incorporated into the certified LCP, states:

> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

City of Malibu Land Use Plan Policy 2.64 states:

> An Offer to Dedicate (OTD) an easement for lateral public access shall be required for all new oceanfronting development causing or contributing to adverse public access impacts. Such easement shall extend from the mean high tide line landward to a point fixed at the most seaward extent of development i.e. intersection of sand with toe of revetment, vertical face of seawall, dripline of deck, or toe of bluff.

City of Malibu Local Implementation Plan Section 12.6.1 (Lateral Public Access) states, in part:

> A condition to require an offer to dedicate an easement or a grant of easement for lateral access as a condition of approval of a coastal development permit (or other authorization to proceed with development) pursuant to Section 12.4 of the Malibu LIP shall provide the public with the permanent right of lateral public access and passive recreational use along the shoreline (or public recreational area, bikeway, or bluff- top area, as applicable); provided that in some cases controls on the time, place and manner of uses, such as limiting access to pass and repass or restricting hours of use, may be justified by site characteristics including sensitive habitat values or fragile topographic features or by the need to protect the privacy of residential development.

City of Malibu Local Implementation Plan Section 12.6.7 states, in part:

> An access dedication (offer to dedicate or grant of easement) required pursuant to Section 12.4 of the Malibu LIP shall be described, in the condition of approval of the permit or other authorization for development in a manner that provides the public, the property owner, and the accepting agency with the maximum amount of certainty as to the location of the accessway. As part of the condition of approval, easements shall be described as follows: (I) for lateral access: along the entire width of the property from the mean high tide line landward to a point fixed at the most seaward extent of development (as applicable): the toe of the bluff, the intersection of sand with toe of revetment, the vertical face of seawall, or other appropriate boundary such as dripline of deck. On beachfront property containing dune ESHA the required easement for lateral public access shall be located along the entire width of the property from the mean high tide line landward to the ambulatory seawardmost limit of dune vegetation; (2) for blufftop access or trail access: extending inland from the bluff edge or along the alignment of a recreational trail; (3) for vertical access: extending from the road to the mean high tide line (or bluff edge).

City of Malibu Local Implementation Plan Section 12.9.D states:

> No signs shall be posted on a beachfront or on public beach unless authorized by a Coastal Development Permit. Signs which purport to identify the boundary between State tidelands and private property or which indicate that public access to State tidelands or public lateral or vertical access easement areas is restricted shall not be permitted.

Because the project is located between the first public road and the sea, the standard of review for the Commission's de novo review of this CDP application includes the policies and provisions of the City of Malibu certified LCP as well as the public access and recreation policies of the Coastal Act. Coastal Act Section 30210 and Coastal Act Section 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Section 30212(a) of the Coastal Act provides that adequate public access to the sea be provided in new development projects except in very limited circumstances, such as where it would be inconsistent with public safety, military security, or protection of sensitive resources. Section 30221 of the Coastal Act protects oceanfront land for recreational uses. The policies that limit use of shoreline protective devices (cited in the Hazards and Shoreline Processes subsection of Section E, above) also address public access because such protective devices may arrest the landward migration of the shoreline, and the corresponding migration of the publicly accessible intertidal zone, as described more below. Further, the public has rights in tidelands that currently lie seaward of the proposed development, but which may come to be located closer to, or even under, the proposed development at some point in the future. The Coastal Commission has a duty, under the public trust doctrine and the Coastal Act, to ensure that new development does not impair trust resources by, for example, impeding current or future public access. The beaches of Malibu are extensively used by visitors of both local and regional origin and most planning studies indicate that attendance at recreational sites will continue to significantly increase over the coming years.

The project site is located on the beach on the ocean side of Pacific Coast Highway (PCH) and does not offer public vertical beach access. There is an existing public vertical access way located approximately 1,750 feet to the west of the subject parcel, and another access way approximately 1,700 feet east of the subject site, between 20000 and 19958 PCH. Lateral public access along the beach directly behind the existing residential developments along PCH also exists at certain tide conditions. As part of the proposed project description, the applicant proposes to record an offer-to-dedicate an easement for lateral public access and passive recreational use along the shoreline, located along the entire width of the property from the ambulatory mean high tide line landward to the dripline of the structure, consistent with Malibu LUP Policy 2.64. In order to implement the applicant's proposed offer-to-dedicate, the Commission imposes **Special Condition 7**, which requires the property owner to execute and record a document irrevocably offering to dedicate an easement for lateral public access and passive recreational use along the shoreline to a public agency or private association approved by the Executive Director, consistent with Malibu LUP Policy 2.71 and LIP Sections 12.6.1 and 12.6.7.

As described above, new development on beachfront parcels should be designed in a manner that will not require the construction or use of shoreline protective devices. Construction of a shoreline protective device to protect the proposed development would arrest the landward migration of the shoreline, and the corresponding migration of the publicly accessible intertidal zone. This would make access to and along the sea difficult, if not impossible. Courts have also found that shoreline armoring can constitute trespass on public tidelands if the armoring blocks the migration of the tidelands and prevents the tidelands trustee from gaining property that should rightfully be theirs. *United States v. Milner* (9th Cir. 2009) 583 F.3d 1174, 1189-1190. As previously discussed in detail in the Hazards and Shoreline Processes De Novo CDP analysis above, shoreline armoring or protection devices also directly interfere with public access to tidelands by impeding the ambulatory nature of the mean high tide line (the boundary between public and private lands) during high tide and severe storm events, and potentially throughout the entire winter season. The impact of a shoreline protective device on public access is most evident on a beach where wave run-up and the mean high tide line are frequently observed in an extreme landward position during storm events and the winter season. In addition, the court found that an upland property owner may not unilaterally stop the migration of public trust lands with a fixed structure such as a revetment or seawall.

In past permit actions, the Commission has found that adverse impacts to shoreline processes from shoreline protective devices are greater the more frequently that they are subject to wave action. As such, the Malibu LCP requires (and the Commission has required in past permit actions) that all new development on a beach, including shoreline protection devices, be located as far landward as possible in order to reduce adverse impacts to the sand supply and public access/recreation resulting from the development. In this case, as described in the previous section regarding shoreline development and hazards, the proposed development, including the seawall that is necessary to protect the OWTS, have been sited as far landward as feasible.

Furthermore, the shoreline is a dynamic environment and, although the proposed residence has been designed and conditioned to ensure structural stability relative to wave action and forecasted sea level rise to the extent feasible, it is not possible to completely preclude the possibility that conditions on site will change and that the residence could be subject to greater wave action and tidal events in the future. Because it is not possible to ensure that the structure is constructed in a manner adequate to ensure structural stability relative to increased future wave action, sea level rise, and tidal events, **Special Condition 2** ensures that no future shoreline protective device will be constructed on site to protect the proposed residence, with the exception of the seawall authorized solely for protection of the OWTS, and **Special Condition 3** requires the landowner to remove the development if (1) any government agency has ordered that the structure not be occupied due to coastal hazards, or requires the structures to be removed; (2) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (3) removal is required pursuant to LCP policies for sea level rise adaptation planning; or (4) the development requires new shoreline protective devices that conflict with LCP or relevant Coastal Act policies.

Next, **Special Condition 15** clarifies that the Commission's approval of this permit does not constitute a waiver of any public rights that may exist on the property and prohibits the applicant from using the permit as evidence of a waiver of any public rights that may exist on the property now or in the future. **Special Condition 15** also clarifies that the permit does not authorize the development to physically interfere with any public access rights that may exist at any future date. This ensures that the permit and development may not be used as evidence that public agencies have waived any public rights on tidelands or other public rights-of-way. The permit also only authorizes the development for so long as it remains on private property; thus, if any portion of the development came to be located on public trust lands, the permittee would need to either remove that development or apply to the Commission for a CDP to retain it and to the State Lands Commission or other trustee agency for a lease or other appropriate instrument allowing the encroachment to remain. **Special Condition 3** specifies that in the event that the public trust boundary migrates landward such that (1) any portion of the approved development encroaches onto public trust lands, and/or (2) public trust land reaches the approved seawall[5], based on a Mean High Tide Line (MHTL) survey, the applicant shall submit a complete coastal development permit amendment application within 180 days of the subject MHTL survey date to seek authorization to retain, relocate, and/or remove the development. Imposing a condition requiring a current MHTL survey prior-to-issuance of the permit (since the most recent survey was from 2014), and periodic MHTL surveys every five years thereafter, will help provide evidence that the development is located on, and remains on, private property, as required by **Special Condition 17**.

Further, **Special Conditions 3, 4** and **15**, respectively, clarify that the permit only authorizes the development for as long as it remains on private property and ensures that the home does not physically impede public access to the shore, as that shoreline may exist in the future. These conditions are necessary in order to allow the public trust tidelands to migrate inland over time, and ensure that the home does not impede future public access to or along the shore, thus assuring continued public access and use of coastal areas, as required by the LCP and Coastal Act. Merely requiring the home to be designed to withstand coastal hazards does not address this issue, which is why these additional conditions are required for LCP and Coastal Act consistency.

Finally, the Commission notes that numerous unauthorized postings of signs illegally attempting to limit, or erroneously noticing restrictions on, public access have occurred on beachfront private properties in the Malibu area. These signs have an adverse effect on the ability of the public to access public trust lands. Therefore, consistent with Malibu LIP Section 12.9.D, **Special Condition 14** provides that no signs shall be posted on the property subject to this permit which either (a) explicitly or implicitly indicate that any portion of the beach located seaward of the subject site is private or (b) contain messages that attempt to prohibit public use of the public beach. **Special Condition 6**

[5] Since the approved seawall may stop the landward migration of the MHTL, this trigger is reached in the event that the MHTL reaches the approved seawall.

ensures that future owners will be made aware of the various conditions and limitations on the development so that they can appropriately take them into consideration when planning for possible purchase or planning later development.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with the public access and recreation policies of the certified City of Malibu LCP and the Coastal Act.

Visual Resources

Coastal Act Section 30251, as incorporated into the certified LCP, states:

> 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.

City of Malibu Land Use Plan Policy 6.5 states:

> New development shall be sited and designed to minimize adverse impacts on scenic areas visible from scenic roads or public viewing areas to the maximum feasible extent. If there is no feasible building site location on the proposed project site where development would not be visible, then the development shall be sited and designed to minimize impacts on scenic areas visible from scenic highways or public viewing areas, through measures including, but not limited to, siting development in the least visible portion of the site, breaking up the mass of new structures, designing structures to blend into the natural hillside setting, restricting the building maximum size, reducing maximum height standards, clustering development, minimizing grading, incorporating landscape elements, and where appropriate, berming.

City of Malibu Land Use Plan 6.7 states:

> The height of structures shall be limited to minimize impacts to visual resources. The maximum allowable height, except for beachfront lots, shall be 18 feet above existing or finished grade, whichever is lower. On beachfront lots, or where found appropriate through Site Plan Review, the maximum height shall be 24 feet (flat roofs) or 28 feet (pitched roofs) above existing or finished grade, whichever is lower. Chimneys and rooftop antennas may be permitted to extend above the permitted height of the structure.

City of Malibu Land Use Plan Policy 6.12 states, in part:

All new structures shall be sited and designed to minimize impacts to visual resources by:

a. Ensuring visual compatibility with the character of surrounding areas…

City of Malibu Land Use Plan 6.18 states, in part:

For parcels on the ocean side of and fronting Pacific Coast Highway, Malibu Road, Broad Beach Road, Birdview Avenue, or Cliffside Drive where it is not feasible to design a structure located below road grade, new development shall provide a view corridor on the project site, that meets the following criteria:

a. Buildings shall not occupy more than 80 percent maximum of the lineal frontage of the site.

b. The remaining 20 percent of lineal frontage shall be maintained as one contiguous view corridor, except on beachfront lots with a width of 50 feet or less. Lots with a lineal frontage of 50 feet or less shall provide 20% of the lot width as view corridor; however, the view corridor may be split to provide a contiguous view corridor of not less than 10% of the lot width on each side. On irregularly shaped lots, the Planning Manager shall determine which side yards shall constitute the view corridor in order to maximize public views.

c. No portion of any above ground structure shall extend into the view corridor.

d. Any fencing across the view corridor shall be visually permeable and any landscaping in this area shall include only low-growing species that will not obscure or block bluewater views.

City of Malibu Land Use Plan Policy 6.23 states:

Exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) shall be minimized, restricted to low intensity fixtures, shielded, and concealed to the maximum feasible extent so that no light source is directly visible from public viewing areas. Night lighting for sports courts or other private recreational facilities in scenic areas designated for residential use shall be prohibited.

City of Malibu Local Implementation Plan Section 3.6 states, in part:

E. Height.

…

3. Beachfront lots. For new construction on a beachfront lot, no residence or structure, including satellite dish antenna, shall exceed 24 feet for flat roof including solid rooftop, parapet and deck walls, and 28 feet for pitched roof, as measured from the lowest recommended finish floor elevation on the ocean

side, as defined by a licensed Civil Engineer, based upon a Comprehensive Wave Action Report, and 24 feet for a flat roof and 28 feet for pitched roof as measured from center line of the road on the land side. Building height shall be apportioned such that the portion of the building which height is measured from the centerline of the road shall not exceed half of the total length (front to rear) of the structure. Open railings for rooftop decks on structures with a flat roof may extend 25 feet in height.

City of Malibu Local Implementation Plan Section 6.5 (B) (5) states:

> New development in scenic areas visible from scenic roads or public viewing areas shall incorporate colors and exterior materials that are compatible with the surrounding landscape.
>
> a. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) including shades of green, brown and gray with no white or light shades and no bright tones.
>
> b. The use of highly reflective materials shall be prohibited except for solar energy panels or cells which shall be placed to minimize significant adverse impacts to public views to the maximum extent feasible.
>
> c. All windows shall be comprised of non-glare glass.

The Malibu LCP provides for the protection of scenic and visual resources, including views of the beach and ocean, views of mountains and canyons, and views of natural habitat areas. The LCP identifies Scenic Roads, which are those roads within the City that traverse or provide views of areas with outstanding scenic quality, or that contain striking views of natural vegetation, geology, and other unique natural features, including the beach and ocean. The LCP policies require that new development not be visible from scenic roads or public viewing areas. Where this is not feasible, new development must minimize impacts through siting and design measures. In addition, development is required to preserve bluewater ocean views by limiting the overall height and siting of structures where feasible to maintain ocean views over the structures. Where it is not feasible to maintain views over the structure through siting and design alternatives, view corridors must be provided in order to maintain an ocean view through the project site.

In this case, Pacific Coast Highway (PCH) lies adjacent to the subject beachfront lot and is recognized as a “scenic highway” in the Malibu LCP. Pacific Coast Highway is a major coastal access route, not only utilized by local residents, but also heavily used by tourists and visitors to access several public beaches located in the surrounding area which are only accessible from Pacific Coast Highway. Public views of the ocean and water from Pacific Coast Highway have been substantially reduced, or completely blocked, in many areas by the construction of single-family residences, privacy walls, fencing, landscaping, and other residential or commercial related development between Pacific Coast Highway and the ocean.

In this case, given the small size of the subject parcel, there is no feasible development site location on the proposed project site where development would not be visible from PCH or the beach. Malibu LUP Policy 6.18 and LIP Section 6.5(E)(2) states that for parcels on the ocean side of and fronting Pacific Coast Highway, where it is not feasible to design a structure located below road grade, new development shall provide a view corridor on the project site. Buildings shall not occupy more than 80 percent maximum of the lineal frontage of the site, and the remaining 20 percent of lineal frontage shall be maintained as a view corridor. Lots with a lineal frontage of 50 feet or less, which is the case for the subject lot, shall provide no less than 20% of the lot width as view corridor; however, the view corridor may be split to provide a contiguous view corridor of not less than 10% of the lot width on each side. Based on the lineal frontage of the subject beachfront lot, a view corridor of a minimum of six feet, eight inches wide, is required. Since the lineal frontage is less than 50 feet, the view corridor may be split to provide a contiguous view corridor of no less than three feet, four inches on each side of the approved structure. The proposed development includes an approximately 3-foot-, 4-inch-wide view corridor on the west side of the structure and an approximately 5-foot-wide view corridor on the east side, consistent with the view corridor requirement of the LCP. **Special Condition 8** is required to ensure the view corridor is maintained on the site in compliance with the LCP.

The proposed project is located on the ocean side of the Pacific Coast Highway and, as revised to meet the minimum lowest floor elevation as addressed in the updated wave uprush study (discussed in the Hazards and Shoreline Processes subsection of Section E above), still complies with the maximum structure height limits required by LUP Section 6.7 and LIP Section 3.6.E.3; which requires that structures shall not exceed 24 feet for flat roof (and 28 feet for pitched roof), as measured from the lowest recommended finish floor elevation on the ocean side of the structure, and as measured from the center line of the road on the land side of the structure for new beachfront development. Based on the updated wave uprush study, the lowest recommended finished floor elevation increased from the original requirement by 1.25 feet (from 23.5 feet to 24.75 feet NAVD88), and the lowest floor on the ocean side was revised to increase to that height. The project was revised to decrease the ceiling height of the master bedroom, located on the ocean side of the structure, by one foot. This change resulted in an increase in height on the ocean side of the proposed structure by approximately 3 inches, for a total height of approximately 46.25 feet NAVD88 at the top of the guard rail of the roof deck (which is 21.5 feet higher than the the lowest recommended finish floor elevation on the ocean side). This height does not exceed the 24-foot ocean side height limit since the lowest recommended finish floor elevation used to calculate the height limit on the ocean side increased from 22 feet NAVD88 (which was previously used as a conservative case based on an older FEMA Base Flood Elevation of 21 feet NAVD88, which has since increased to 23.5 feet NAVD88, plus 1 foot of structure) to 24.75 feet NAVD88 (based on the updated wave uprush study). No changes in height were required for the landward half of the structure and the heights of the proposed flat roof portion and pitched roof portion are 24 and 28 feet, respectively, as measured from center line of the road. Therefore, the Commission finds the proposed revised project complies with the height limits of 24 feet for flat roof including solid rooftop, parapet and deck walls as measured from the lowest recommended finish

floor elevation on the ocean side, as defined by a licensed Civil Engineer, based upon a Comprehensive Wave Action Report, and 24 feet for a flat roof and 28 feet for pitched roof as measured from center line of the road on the land side.

Coastal Act Section 30251, which is incorporated into the Malibu LCP, states that 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, and to be visually compatible with the character of surrounding areas. Malibu LUP Policy 6.12 states that new structures shall be sited and designed to minimize impacts to visual resources by ensuring visual compatibility with the character of surrounding areas. The subject project must be consistent with the current Malibu LCP, including the Beachfront Yards/Setbacks requirements of LIP Section 3.6(G) as discussed in the Hazards and Shoreline Processes analysis above, which requires the site to be developed in a manner that is sufficiently elevated as well as set back from the mean high tide line (MHTL). The proposed residence will contain approximately 2,100 square feet of habitable space, which is similar in size to neighboring properties. The other properties in the vicinity and immediately adjacent to the subject site are older homes that were developed in the 1950's and 1960's. Most of the residences immediately adjacent are single story in design. These residences are non-conforming to the current standards for elevation of the lowest floor and beach setback so they have a larger footprint and a lower profile but include a similar total square footage to the proposed structure. Staff would note that if these properties are redeveloped in the future they would also be subject to the LCP's 10-foot setback from the MHTL and design considerations related to wave uprush and sea level rise. The subject property is more constrained by the requirement to setback further, resulting in a smaller development area and a taller structure than those existing on neighboring properties that are immediately adjacent. There are, however, a significant number of two-story residential structures within a half-mile on either side of the subject property (some single-family and some duplex), taller than the predominately single-story residences immediately adjacent to and within a quarter-mile of the proposed project. For these reasons, the Commission finds the proposed structure would is visually compatible with the character of the surrounding area.

Section 6.5 (B) (5) of the Malibu LIP requires new development in scenic areas visible from scenic roads or public viewing areas to incorporate colors and exterior materials that are compatible with the surrounding landscape. The proposed project is located in a scenic area and will be visible from a scenic highway. Therefore, in order to ensure that the proposed project is consistent with the requirements of the Malibu LCP, including Malibu LUP Policy 6.12(a), the Commission requires the applicant to use colors compatible with the surrounding environment and non-glare glass, consistent with Section 6.5 (B) (5) of the Malibu LIP, as detailed by **Special Condition 12**.

In addition to impacts from structures and landscaping, the Commission has found that night lighting of areas in the Malibu / Santa Monica Mountains area creates a visual impact to nearby scenic beaches, scenic roads, parks, and trails. In addition, night lighting may alter or disrupt feeding, nesting, and roosting activities of native wildlife species. Policy 6.23 of the Malibu LCP specifically restricts exterior lighting to be

minimized and restricted to low intensity fixtures, shielded, and concealed to the maximum extent feasible so that no light source is directly visible from public viewing areas such as Pacific Coast Highway or the beach and ocean area in order to eliminate the adverse individual and cumulative visual impacts associated with the lighting of such areas visible from public areas. In order to mitigate any potential future visual and environmental impacts of the proposed project, and to be consistent with Malibu LCP Policy 6.23, the Commission finds it necessary to require that exterior lighting to be minimized and restricted to low intensity fixtures, shielded, and concealed to the maximum extent feasible so that no light source is directly visible from public viewing areas such as Pacific Coast Highway or the beach and ocean area, as specified in **Special Condition 13.**

In addition, future construction on the property has the potential to negatively affect the visual character of the area as seen both from the beach and from Pacific Coast Highway. In order to ensure that no additions or improvements are made to the property without due consideration of the visual impacts, the Commission finds it necessary to require a future development restriction, which requires the applicant to obtain an amended or new coastal permit if additions or improvements to the site are proposed in the future, as detailed in **Special Condition 5**. Finally, **Special Condition 6** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with the applicable policies of Chapter 6 (Scenic and Visual Resources) of the Malibu LUP, including Section 30251 of the Coastal Act, which is incorporated as part of the LUP, and applicable standards of Chapter 6 (Scenic, Visual, and Hillside Resource Protection Ordinance) of the Malibu LIP.

Water Quality and Marine Resources

Coastal Act Section 30230, as incorporated into the certified LCP, states:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231, as incorporated into the certified LCP, states:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of

> waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

City of Malibu Land Use Plan Policy 3.105 states:

> Beachfront development shall incorporate BMPs designed to minimize or prevent polluted runoff to the beach and ocean waters.

City of Malibu Land Use Plan Policy 3.110 states:

> New development shall include construction phase erosion control and polluted runoff control plans. These plans shall specify BMPs that will be implemented to minimize erosion and sedimentation, provide adequate sanitary and waste disposal facilities and prevent contamination of runoff by construction chemicals and materials.

City of Malibu Land Use Plan Policy 3.111 states:

> New development shall include post-development phase drainage and polluted runoff control plans. These plans shall specify site design, source control and treatment control BMPs that will be implemented to minimize post-construction polluted runoff, and shall include the monitoring and maintenance plans for these BMPs.

City of Malibu Land Use Plan Policy 3.138 states:

> Applications for new development relying on an OSTS shall include a soils analysis and or percolation test report. Soils analysis shall be conducted by a California Registered Geotechnical Engineer or a California Registered Civil Engineer in the environmental/geotechnical field and the results expressed in United States Department of Agriculture classification terminology. Percolation tests shall be conducted by a California Registered Geologist, a California registered Geotechnical Engineer, a California Registered Civil Engineer, or a California Registered Environmental Health Specialist. The OSTS shall be designed, sited, installed, operated, and maintained in full compliance with the building and plumbing codes and the requirements of the LA RWQCB.

City of Malibu Land Use Plan Policy 3.141 states:

> Applications for a coastal development permit for OSTS installation and expansion, where groundwater, nearby surface drainages and slope stability are likely to be adversely impacted as a result of the projected effluent input to the subsurface, shall include a study prepared by a California Certified Engineering Geologist or Registered Geotechnical Engineer that analyzes the cumulative impact of the proposed OSTS on groundwater level, quality of nearby surface drainages, and

slope stability. Where it is shown that the OSTS will negatively impact groundwater, nearby surface waters, or slope stability, the OSTS shall not be allowed.

City of Malibu Local Implementation Plan Section 10.4, Part C, states:

Development on or near sandy beach or bluffs, including the construction of a shoreline protection de- vice, shall include measures to insure that:

1. No stockpiling of dirt or construction materials shall occur on the beach;

2. All grading shall be properly covered and sandbags, ditches, or other Best Management Practices (BMPs) shall be used to prevent runoff and siltation;

3. Measures to control erosion, runoff, and siltation shall be implemented at the end of each day's work;

4. 4. No machinery shall be allowed in the intertidal zone at any time unless authorized in the Coastal Development Permit;

5. All construction debris shall be removed from the beach daily and at the completion of development.

Such measures shall be implemented as conditions of approval for a Coastal Development Permit.

Section 30230 of the Coastal Act as incorporated into the certified LCP requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. In addition, Section 30231 as incorporated into the certified LCP requires that the biological productivity and quality of coastal waters be maintained. Malibu LUP Policies 3.105, 3.110, and 3.111, require BMPs and plans for erosion control and runoff both during and following construction. Malibu LUP Policies 3.138 and 3.141 contain specific requirements for onsite wastewater treatment systems (OWTS or OSTS).

Construction activities related to the proposed development have the potential to negatively impact the surrounding marine environment. Introduction of waste or construction debris into the marine environment could create deleterious impacts to coastal waters and stemming from activities such as stockpiling of materials or cleaning of construction equipment on or adjacent to the beach. In order to ensure that marine resources are maintained, the Commission finds it necessary to require the applicant to include construction best management practices in the project. **Special Condition 10** requires that the project applicant comply with specific construction standards and best management practices, and includes the measures required by LIP Section 10.4(C) for development on or near sandy beach. **Special Condition 10** further requires that no construction materials, debris or waste shall be placed or stored where it may be subject to wave erosion and dispersion, that all debris resulting from construction activities shall be removed from the beach prior to the end of each work day; no

machinery or mechanized equipment shall be allowed in the intertidal zone; and all excavated beach sand shall be redeposited on the beach.

Further, the Commission finds that the conditions attached to the City's approval of the project include numerous provisions that pertain to other aspects of water quality and serve to ensure the project's consistency with the City's LCP. Thus, **Special Condition 16** requires the applicant to submit evidence of compliance with the City's conditions, except as specifically modified by this approval and any subsequent amendments to the project description. **Special Condition 16** provides that any deviations or conflicts shall be reviewed by the Executive Director to determine whether an amendment to the Coastal Development Permit is required.

The project site is a vacant beachfront parcel located between Pacific Coast Highway and the Pacific Ocean. The proposed development will result in an increase in impervious surfaces, which in turn decreases the infiltrative function and capacity of existing permeable land on the project site. The reduction in permeable surface area therefore leads to an increase in the volume and velocity of stormwater runoff that can be expected to leave the site. The cumulative effect of increased impervious surface is that the peak water discharge is increased and the peak occurs much sooner after precipitation events. Additionally, disturbance of the site from construction activities and runoff from impervious surfaces can result in increased erosion.

In addition, pollutants commonly found in runoff associated with new residential development include petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and household cleaners; soap and dirt from washing vehicles; dirt and vegetation from yard maintenance; litter and organic matter; fertilizers, herbicides, and pesticides from household gardening; nutrients from wastewater discharge, and animal waste; and bacteria and pathogens from wastewater discharge and animal waste. The discharge of these pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity, which both reduce the penetration of sunlight needed by aquatic vegetation which provides food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior; and human diseases such as hepatitis and dysentery. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

The LCP water quality policies cited above are designed to protect water quality and prevent pollution of surface, ground, and ocean waters. The Malibu LCP requires the preparation of a Storm Water Management Plan (SWMP) for all projects that require a coastal development permit. A SWMP illustrates how the project will use appropriate site design and source control best management practices (BMPs) to minimize or prevent adverse effects of the project on water quality. Therefore, pursuant to the

requirements of the Malibu LCP, including LIP Section 17.3.2, and to ensure the proposed project will maintain the biological productivity and the quality of coastal waters, the Commission finds it necessary to require the preparation of a SWMP for the subject site, that utilizes site design, source control and treatment control BMPs, as specified in **Special Condition 9**.

Furthermore, erosion control and storm water pollution prevention measures implemented during construction will, during construction, maintain the biological productivity and the quality of coastal waters. The Malibu LCP requires that a Local Storm Water Pollution Prevention Plan (SWPPP) be prepared for all development that requires a Coastal Development Permit and a grading or building permit, and it be applied to the construction phase of the project. The SWPPP includes measures and BMPs to prevent erosion, sedimentation and pollution of surface and ocean waters from construction and grading activities. In this case, while the proposed project does not involve grading, it does require removal of existing timber bulkhead, construction of a concrete friction pile foundation system that extends into bedrock, as well as retaining walls, a seawall, and excavation for the installation of the OWTS. Therefore, pursuant to the Malibu LCP, including the requirements of LIP Section 17.3.1, and to ensure the proposed development will maintain the biological productivity and the quality of coastal waters during the construction phase of the project, the Commission finds it necessary to require the applicant to submit a Local SWPPP for the subject site, consistent with the requirements specified in **Special Condition 9**.

Finally, the proposed development includes the construction of a new alternative on-site wastewater treatment system (OWTS) to serve the residence. The Malibu LCP includes a number of policies and standards relative to the design, siting, installation, operation and maintenance of OWTSs to ensure these systems do not adversely impact coastal waters. The proposed OWTS was previously reviewed and approved in concept by the City of Malibu Environmental Health Department, determining that the system meets the requirements of the plumbing code. The Commission has found that conformance with the provisions of the plumbing code is protective of resources. The OWTS design was revised to address the new wave uprush study.

In addition, in order to ensure the OWTS is maintained and monitored in the future to prevent system failures or inadequate system performance, the Malibu LCP includes policies and standards requiring the regular maintenance and monitoring of the OWTS. Therefore, the Commission finds that it is necessary to require the applicant to submit verification that they have obtained a monitoring, operation and maintenance permit from the City, as outlined in **Special Condition 11**.

The Commission finds that based on the above findings, the proposed project, as conditioned, will maintain marine resources and the biological productivity and the quality of coastal waters, and is consistent with the applicable policies of the certified Malibu LCP. The Commission has found in past permit actions that conformance with the provisions of the plumbing, health, and safety codes is protective of resources and serves to minimize any potential for wastewater discharge that could adversely impact coastal waters. Therefore, the Commission finds that the proposed project, as

conditioned to incorporate and maintain a drainage and polluted runoff control plan, is consistent with the applicable policies of Chapter 3 (Marine and Land Resources) of the Malibu LUP, including Section 30231 of the Coastal Act, which is incorporated as part of the LUP, and applicable standards of Chapter 17 (Water Quality Protection) and Chapter 18 (Onsite Wastewater Disposal System Standards) of the Malibu LIP.

Other Development Standards

City of Malibu Land Use Plan Policy 5.4 states:

> Off-street parking shall be provided for all new development in accordance with the ordinances contained in the LCP to assure there is adequate public access to coastal resources. A modification in the required parking standards through the variance process shall not be approved unless the City makes findings that the provision of fewer parking spaces will not result in adverse impacts to public access.

City of Malibu Local Implementation Plan Section 13.26.5 states, in part:

> Following a public hearing, the Planning Commission shall record the decision in writing. The Commission may approve and/or modify an application for a variance in whole or in part, with or without conditions, only if it makes all of the following findings of fact supported by substantial evidence that:
>
> A. There are special circumstances or exceptional characteristics applicable to the subject property, including size, shape, topography, location, or surroundings such that strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under the identical zoning classification.
>
> B. The granting of such variance will not be detrimental to the public interest, safety, health or welfare, and will not be detrimental or injurious to the property or improvements in the same vicinity and zone(s) in which the property is located.
>
> C. The granting of the variance will not constitute a special privilege to the applicant or property owner.
>
> D. The granting of such variance will not be contrary to or in conflict with the general purposes and intent of this Chapter, nor to the goals, objectives and policies of the LCP.
>
> …
>
> G. The variance request is consistent with the purpose and intent of the zone(s) in which the site is located. A variance shall not be granted for a use or activity which is not otherwise expressly authorized by the zone regulation governing the parcel of property.

H. The subject site is physically suitable for the proposed variance.

I. The variance complies with all requirements of state and local law.

J. A variance shall not be granted that would allow reduction or elimination of public parking for access to the beach, public trails or parklands. (Ord. 303 § 3, 2007)

The City of Malibu's LUP Policy 5.4 requires that, for new development, off-street parking shall be provided in accordance with the ordinances contained in the LCP and that a modification in the required parking standards through the variance process shall not be approved unless findings are made that the provision of fewer parking spaces will not result in adverse impacts to public access. LIP Section 3.14.3 requires that single-family residential units provide 2 enclosed and 2 unenclosed parking spaces for each unit. For the proposed project, a variance is required to reduce the required amount of unenclosed parking to one space.

The proposed project includes the construction of a garage with two enclosed parking spaces, and the provision of one unenclosed parking space parallel to Pacific Coast Highway in front of the residence. In this case, there are special circumstances and exceptional characteristics applicable to the subject property such that strict application of the zoning ordinance deprives the property of privileges enjoyed by other properties in the vicinity. Due to the narrow 34 feet of frontage of the lot, prohibition of parking cars within required view corridors, and the required setback from the mean high tide line, there is not ample space to park two cars parallel to PCH. A variance for the reduction of unenclosed parking will allow for the ability to construct a single-family residence similar in size to surrounding residences. The granting of the variance will relieve the project from providing one of two unenclosed parking spaces and allow for the construction of a single-family residence in an area that has been determined to be appropriate for such use, and will not be detrimental to the public interest, safety, health or welfare, and will not be detrimental or injurious to the property or improvements in the same vicinity in which the property is located.

The proposed project is for the construction of a single-family home in an area that is not directly adjacent to vertical public access routes. It is not anticipated that approval of the project will result in the reduction or elimination of public parking for access to the beach or parklands. The majority of properties along this stretch of PCH do not provide the required off-street parking. Instead, cars are parked partially within the right-of-way of PCH, so granting of the variance will not constitute a special privilege to the applicant, because the majority of structures on PCH have limited off-street parking. The analysis presented in this report and the record demonstrates that the project is in compliance with the general purposes and intent of LIP Chapter 13, as well as the goals objectives and policies of the LCP. The requested variance is for relief from a specific development standard and does not authorize a use not otherwise permitted within the MFBF zoning designation. The subject site is physically suitable for the proposed variance in that there is no alternate building site or configuration. The proposed project, as conditioned, will comply with all requirements of state and local law.

Therefore, with the variance to reduce unenclosed parking requirement from LUP Policy 5.4, according to the required variance findings in LIP Policy 13.26.5, the Commission finds that the proposed project, as conditioned, is consistent with the policies of the certified City of Malibu LCP.

California Environmental Quality Act

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The City prepared a categorical exemption pursuant to CEQA section 15303 – New Construction or Conversion of Small Structures, and found that the project is listed among classes of projects that have been determined not to have a significant adverse effect on the environment.

The Commission incorporates its findings on consistency with the County's certified LCP at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the applicable policies of the certified LCP. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. Special Conditions 1 through 17 are required to assure the project's consistency with Section 13096 of the California Code of Regulations. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment, and the project, as conditioned, will not have any significant impacts on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is consistent with the requirements of the certified LCP and conforms to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

Certified City of Malibu Local Coastal Plan; Coastal Commission Appeal No. A-4-MAL-19-0202 and associated file documents, including the administrative record for City of Malibu CDP 15-042; Letter titled “Supplemental III: Response to California Coastal Commission, 20222 Pacific Coast Highway, Malibu, California”, dated June 12, 2020, prepared by SubSurface Designs, Inc.; Response to CCC Malibu Appeal No. A-4-MAL-19-0202, dated June 27, 2020, by EPD Consultants; Wave Uprush Study/Coastal Engineering Report for 20222 Pacific Coast Highway, dated September 8, 2020, prepared by Pacific Engineering Group; Supplemental Report dated March 3, 2021, prepared by Pacific Engineering Group; Future Groundwater Elevations for OWTS Design Report, dated May 27, 2021, prepared by Pacific Engineering Group; Addendum II Engineering Report, dated May 27, 2021, prepared by EPD Consultants; Response Letter, dated July 8, 2021, prepared by Pacific Engineering Group; Addendum III Engineering Report, dated July 9, 2021, prepared by EPD Consultants; Clarification to Addendum II Engineering Report, dated August 16, 2021, prepared by EPD Consultants; California Coastal Commission Sea Level Rise Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits. Adopted August 12, 2015. Updated November 7, 2018; California Coastal Commission Residential Adaptation Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs. Revised March 2018; National Research Council (NRC). 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. Report by the Committee on Sea Level Rise in California, Oregon, and Washington. National Academies Press, Washington, DC. 250 pp. Griggs, G, Árvai, J, Cayan, D, DeConto, R, Fox, J, Fricker, HA, Kopp, RE, Tebaldi, C, Whiteman, EA (California Ocean Protection Council Science Advisory Team Working Group). Rising Seas in California: An Update on Sea-Level Rise Science. California Ocean Science Trust, April 2017; Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: Ocean Protection Council (OPC). 2013. State of California Sea-Level Rise Guidance Document. Ocean Protection Council (OPC). 2018. State of California Sea-Level Rise Guidance: 2018 Update.