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STAFF REPORT: REGULAR CALENDAR

Application No:	1-18-1052
Applicant:	Josephine & John Brown
Agent:	LACO Associates
Location:	83 Crab Street, King Salmon, Humboldt County (APNs: 305-231-010; 305-231-011)
Project Description:	Construct an 864-square-foot, two-story addition on an existing 528-square-foot one-story single-family residence.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The proposed project involves the construction of an 864-square-foot, two-story addition on an existing 528-square-foot one-story single-family home.

The subject site is located within the densely developed King Salmon subdivision, located on the shores of Humboldt Bay a few miles south of Eureka. The subdivision is located directly across from the bay entrance channel, consists of former tidelands that were partially filled during the mid-1900s and subdivided into approximately 200 small lots. The community originally was envisioned as a fishing enclave for summer or vacation cabins. The tidelands were filled in a manner that created interior tidal channels within the subdivision. The subject parcel adjoins one of the interior channels.

The major Coastal Act issue raised by this application is whether the proposed development would be constructed in a manner that would protect it from flood hazards consistent with Section 30253 of the Coastal Act.

The project has been designed to locate the habitable portions of the addition on the second floor at an elevation higher than the project inundation level associated with the 100-year wave uprush, taking into account projected sea level rise over the economic life of the development.

Staff recommends Special Condition No. 1 to require final plans and construction to conform to the proposed hazard mitigation measures including but not limited to: (1) locating the habitable portions of the structure on the second floor at an elevation above the maximum flood elevation and above a ground floor storage, bathroom, and laundry space; (2) constructing first floor walls composed of reinforced concrete columns and break-away walls to accommodate flood waters without collapsing the structure; and (3) elevating and attaching to the concrete portions of the first floor walls all mechanical and utility installations and cabinets for the storage of hazardous materials (e.g. paints and solvents).

Staff believes that the project, as conditioned, includes all feasible mitigation measures necessary to find the project consistent with the Coastal Act's policies requiring minimization of flood hazards risks and the protection of visual resources, nearby environmentally sensitive habitat areas, water quality, and public access.

Commission staff therefore recommends **approval** of coastal development permit application 1-18-1052, as conditioned. The motion to adopt the staff recommendation is found on [page 4](#).

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EXHIBITS

[Exhibit 1 – Regional Location Map](#)

[Exhibit 2 – Site Vicinity Map](#)

[Exhibit 3 – Project Description \(Revised\)](#)

[Exhibit 4 – Plans & Elevations](#)

[Exhibit 5 – Site Photos](#)

[Exhibit 6 – Wave Uprush & SLR study](#)

[Exhibit 7 – Revised Runoff Control & Debris Disposal Plan \(Excerpt\)](#)

[Exhibit 8 – Geologic Soils Report \(Excerpt\)](#)

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

*I move that the Commission **approve** Coastal Development Permit 1-18-1052 pursuant to the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. 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 affirmative vote of 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 policies of Chapter 3 of the Coastal Act. 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 of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following 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 permittee 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 permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Final House Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and written approval of the Executive Director, full-size scaled Final House plans in substantial compliance with those submitted to the Commission on March 7, 2019.
 - A. The residential design, including the first floor elevations, shall be consistent with draft plans submitted to the Commission on March 7, 2019.
 - B. The plans shall incorporate the following proposed hazard mitigation measures:
 - (i) Installation of the finished floor elevation of the second story at least 9 feet (2.74 meters) above the ground elevation of the parcel and at an elevation at least 19.5 feet (5.94 meters) NAVD 88 which is 5.6 feet (1.7 meters) above the estimated combined 100-year sea level rise and wave uprush scenario;
 - (ii) Storage cabinets for hazardous materials (e.g., paint, solvents) shall be attached to the concrete portions of the first floor walls of the addition at as high an elevation as feasible;
 - (iii) All mechanical and utility installations shall be attached to the concrete portions of the first floor walls of the addition at as high an elevation as feasible;
 - (iv) The first floor walls of the addition shall be a combination of Engineered Concrete Masonry Unit (CMU) columns engineered to withstand the force of flood waters and engineered ‘breakaway walls’ designed substantially similar to those described in the “FEMA Technical Bulletin Number 9: Design and Construction Guidance for Breakaway Walls, dated August 2008”; and
 - (v) Use of the lower (ground) floor of the addition shall be limited to storage space, laundry facilities, a bathroom, hallways and unfinished space as proposed.
 - C. The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
2. **Restrictions on Use of Lower Floor.** Use of the lower (ground) floor of the addition shall be limited to storage space, laundry facilities, a bathroom, and unfinished space as proposed. No use of the lower (ground) floor for other purposes shall occur without an amendment to CDP 1-18-1052 from the Commission.
3. **Minimization of Geologic Hazards.**
 - A. All recommendations of the geologic soils report titled “R-2 Geologic Soils Report, Assessor’s Parcel numbers 305-231-010 and 305-231-011,” prepared by Gary L. Manhart, CEG 2651 and dated April 5, 2018 shall be adhered to including

recommendations for site preparation, structural fills, compaction standards, seismic design parameters, foundation design, pavement subgrade preparation, drainage, and all other recommendations. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design, construction, grading, and drainage plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic hazard report.

- B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- 4. Assumption of Risk.** By acceptance of this permit, the applicant acknowledges and agrees: (a) that the site may be subject to hazards from earthquakes, liquefaction, erosion, flooding, extreme high tides, storm surges, and tsunami wave run up; (b) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (c) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (d) to indemnify and hold harmless the Commission, its 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 hazards.
- 5. Future Development Restriction.** This permit is only for the development described in coastal development permit (CDP) 1-18-1052. Pursuant to Title 14 California Code of Regulations (CCR) Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code (PRC) Section 30610(a) shall not apply to the development governed by the CDP 1-18-1052. Accordingly, any future improvements to the development authorized by this permit shall require an amendment to CDP 1-18-1052 from the Commission or shall require an additional CDP from the Commission or from the applicable local government according to a certified Land Use Plan or Local Coastal Plan. In addition thereto, an amendment to CDP 1-18-1052 from the Commission or an additional CDP from the Commission shall be required for any repair or maintenance identified as requiring a permit in PRC Section 30610(d) and Title 14 CCR Sections 13252(a)-(b).
- 6. Deed Restriction.** **PRIOR TO ISSUANCE OF THIS 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. Final Post-Construction Runoff Treatment Plan

A. PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit a run-off treatment plan to the Executive Director for review and approval.

(i) The runoff control plan shall demonstrate that:

- (a) Runoff from the project shall not increase sedimentation into coastal waters; and
- (b) Runoff from the roof of the addition shall be collected and conveyed into vegetated areas for biofiltration and/or dispersal into the ground through a French drain to avoid sedimentation either on or off the site, and provide for bio-filtration treatment of pollutants entrained in runoff.

(ii) The plan shall include, at a minimum, the following components:

- (a) A narrative report describing all permanent runoff control measures to be installed;
- (b) A site plan showing finished grades (at 1-foot contour intervals) and the location of all permanent runoff control measures, including, but not limited to roof downspouts and drainage lines to convey runoff from the roof of the addition to the vegetated areas where biofiltration to remove pollutants from the runoff will occur and/or to the French drain where dispersal of the runoff into the ground will occur;
- (c) A schedule for installation and removal of the runoff control measures;
- (d) Downspouts and other drainage features shall be designed to direct roof runoff from the addition away from the tidal channel to the yard area at the front of the property for discharge into a grassy swale for biofiltration and/or dispersal into the ground through a French drain; and
- (e) A biofiltration area planting plan showing the vegetation to be planted for any biofiltration area to be used, indicating the species to be planted, the number of plant specimens to be planted, and the specific locations where the plant specimens will be planted.

B. The applicant shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that legally no amendment is required.

8. Debris Disposal Plan.

A. All recommendations of the proposed "5.0 Debris Disposal Plan" portion of the Runoff Control and Debris Disposal Plan contained in the revised technical memorandum dated January 3, 2019, and prepared by Vanessa S. Davis, Assistant Geologist for LACO shall

be adhered to including recommendations in the event that construction debris is required to be stored on-site for longer than 24 hours it will be covered in the staging area and bermed with fiber rolls to prevent potential runoff. Any vegetative debris shall be disposed of at a green waste area.

- B. The permittee shall undertake development in accordance with the submitted debris disposal plan. Any proposed changes to the submitted plan shall be reported to the Executive Director. No changes to the submitted plan shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

9. Construction Runoff Control Plan.

- A. All recommendations of the proposed “3.0 Runoff Control” portion of the Runoff Control and Debris Disposal Plan contained in the revised technical memorandum dated January 3, 2019, and prepared by Vanessa S. Davis, Assistant Geologist for LACO shall be adhered to including: (1) recommendations to schedule construction activities during the dry season (April 15th- October 15th); (2) use of erosion control or soil stabilization measures, use of sediment controls including certain additional Best Management Practices (BMPs) from the California Stormwater BMP Handbook including (a) EC-1, Scheduling, (b) SE-1, Silt Fence, (c) SE-5, Fiber Rolls, (d) SE-7, Street Sweeping/Vacuuming, (e) WM-5, Waste Management; and (3) spill prevention controls, including but not limited to BMP WM-4, Spill Prevention and Control.
- B. The permittee shall undertake development in accordance with the submitted plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

10. Landscaping Restrictions. The permittee shall comply with the following landscaping-related restrictions:

- A. Only native and/or non-invasive plant species shall be planted as part of the project landscaping. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California, shall be employed or allowed to naturalize or persist on the site (see <http://www.cal-ipc.org/paf/>). No plant species listed as a “noxious weed” by the governments of the State of California or the United States shall be planted within the property (see http://www.cdfa.ca.gov/plant/ipc/encycloweedia/encycloweedia_hp.htm, <http://www.invasivespeciesinfo.gov/plants/main.shtml>, and <http://plants.usda.gov/java/noxious>); and
- B. Rodenticides containing any anticoagulant compounds, including, but not limited to, Bromadiolone, or Diphacinone shall not be used.

11. Lighting Limitation. All exterior lighting attached to the authorized structure shall be low-wattage and downcast shielded such that no glare will be directed beyond the bounds of the property or into nearby coastal waters.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. PROJECT DESCRIPTION & ENVIRONMENTAL SETTING

The applicant proposes to construct an 864-square-foot two-story addition (with a 432-square-foot total footprint) to an existing 528-square-foot single-family residence. The first floor area of the addition will be limited to a non-habitable (unconditioned) space which will include a storage area, laundry, and an expanded bathroom. The habitable space on the second floor is a 301-square-foot bedroom. The project plans are attached as Exhibit 4.

The design of the house addition incorporates certain measures to reduce and/or minimize flood risks. The habitable portions of the addition on the second story will be at a finished floor elevation of 18.5 feet above sea level, which is above the estimated maximum flood elevation during the life of the structure taking into account wave uprush and sea level rise. The first floor walls would be constructed of a combination of reinforced concrete columns that can withstand flood flows and breakaway walls designed to literally break away during a flood to allow flood waters to pass through the lower floor of the structure. Finally, all mechanical and utility installations as well as cabinets housing hazardous materials would be attached to the walls and elevated above the floor.

The project site is located on two parcels totaling 0.12 acres in size, with an existing 528 square-foot single-family residence, 100-square-foot detached shed, 410-square-foot deck, and 310-square-foot dock on the south side of Crab Street (APNs: 305-231-010 and 305-231-011) in the King Salmon area of Humboldt County, south of Eureka (Exhibit #). The topography is relatively flat and the elevation of the site is at approximately 10 to 11 feet above mean sea level. The property is served by local utilities, with water supplied by the Humboldt Bay Municipal Water District (HBMWD) and wastewater services is supplied by Humboldt Community Services District (HCSD).

The subdivision of King Salmon is located on the shores of Humboldt Bay, south of Eureka, directly across from the entrance channel of Humboldt Bay (Exhibit 2). For the most part, King Salmon consists of former tidelands that were partially-filled during the mid-1900s and later divided, mostly into 25-foot-wide lots that were originally used for resort cabins. The tidelands were filled in a manner that left interior tidal channels within the subdivision. Most of the lots within the subdivision adjoin tidal and/or a shoreline area of the channel – the subject lot abuts one of these channels and has access via deck and dock (Exhibits 5 and 7). King Salmon is protected from wave action from Humboldt Bay by a rock jetty and dune area to the west that also supports public access and recreational uses.

Most of the lots in King Salmon are planned and zoned for either Residential Single Family (RS) or Commercial Recreation (CR) uses under the Humboldt County LCP. The subject lot has a land use designation of Residential Low Density (RL), and combing zone of Residential Single Family and Flood Hazard Areas (RS-5/F). Most of the lots in the surrounding area have been

developed with single-family homes of varying sizes and heights displaying a variety of architectural styles.

The King Salmon community is accessed by King Salmon Avenue and Buhne Drive, which flanks the northwest and western sides of the subdivision, and separates the developed area from a dune area that borders the waters of Humboldt Bay. The dune and bay shoreline area is accessible to the public, and there is ample public parking along Buhne Drive. The subject property is approximately 476 feet from the intersection of Buhne Drive and Crab Street, and inland from the dune and public shoreline area (Exhibit #).

B. OTHER AGENCY APPROVALS

The proposed project does not require any other agency approvals except for a building permit from Humboldt County.

C. STANDARD OF REVIEW

The proposed project is located in the Commission's retained jurisdiction. Humboldt County has a certified local coastal program (LCP), but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

D. LOCATING AND PLANNING NEW DEVELOPMENT

Section 30250(a) of the coastal Act states that new development shall be located within or near existing developed areas able to accommodate it or in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. The intent of this policy is to channel development toward more urbanized areas where services are provided and potential impacts to resources are minimized.

The subject property is located in the King Salmon subdivision, which is a densely-developed community that is planned and zoned for single-family residential use and some commercial development. The community contains over one hundred developed residences and commercial businesses. The majority of the lots on Crab Street, where the subject lot is located, are developed with residential structures.

The subject property is served by community water and sewer systems provided by the Humboldt Community Services District. Thus, there are adequate services to accommodate the proposed addition to the existing residence. Although the subject site is located in a flood hazard area, as discussed in Finding IV-F, below, the development has been conditioned to minimize flood hazards consistent with the requirements of Section 30253 of the Coastal Act. Furthermore, as discussed in the below findings, the project has been conditioned to protect visual resources, nearby environmentally sensitive habitat areas, and water quality.

Therefore, the Commission finds that as conditioned, the proposed development is consistent with Coastal Act Section 30250(a), in that it is located in a developed area, has adequate water and sewer capability to accommodate it, and will not cause significant adverse effects, either individually or cumulatively, to coastal resources.

E. HAZARDS

Section 30253 states, in applicable 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...*

Flood Hazards

The risk of flooding is a significant natural hazard affecting development of the subject property. The entire King Salmon subdivision lies within the FEMA-mapped 100-year flood zone and is subject to flooding from extreme high tides and tsunamis.

The project site is between 10 and 11 feet (3.04 – 3.35 meters) above sea level (NAVD88)¹ and the finished floor elevation of the new second story will be 9.0 feet (2.7 meters) above ground surface, resulting in a first floor elevation of approximately 19.5 feet (5.94 meters) above sea level. The Commission has approved several residential developments within this subdivision since the Coastal Act became effective, including several just in the past few years (see CDP 1-11-043 (Needham); CDP 1-12-010 (Kinori); CDP 1-13-004 (Frink); CDP 1-13-005 (Frink); and CDP 1-14-0160 (Sloper).

Coastal Act Section 30253 requires that development minimize risks to life and property in areas of high flood hazard. In other regions of the California Coast, some Local Coastal Programs (LCPs) such as the San Mateo County and Newport Beach LCPs further restrict or prohibit development in flood hazard areas. In this case, however, the development is located on historic tidelands within the Commission's retained jurisdiction and the Coastal Act is the standard of review. Therefore, the subject development is not subject to additional LCP requirements more restrictive or numerically specific than the requirement of Section 30253 that new development minimize risks to life and property in areas of high flood hazard.

Extreme high tide events in conjunction with future sea-level rise will increase the vulnerability of the subject site and the entire King Salmon community.

As is true globally and along California's coast, sea levels in the project area have been rising over time. Increased SLR can lead to greater temporary flooding of King Salmon and other areas due to increased tidal elevations and elevated coastal water levels during extreme tidal events such as king tides, strong winds, and storm surges; as well as eventual permanent inundation of low-lying areas. Importantly, climate change may lead to increased extreme storm events (in terms of intensity and/or rate of occurrence) and therefore increased events of flooding through extreme precipitation and storm water runoff events.

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 April

¹ The North American Vertical Datum of 1988 (NAVD88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-United States leveling observations.
<https://www.ngs.noaa.gov/datums/vertical/north-american-vertical-datum-1988.shtml>

2017, a working group of the Ocean Protection Council's (OPC) Science Advisory Team released *Rising Seas in California: An Update on Sea-Level Rise Science*. This report synthesizes recent evolving research on sea level rise science, notably including a discussion of probabilistic sea level rise projections as well as the potential for rapid ice loss leading to extreme sea level rise. This science synthesis was integrated into the OPC State of California Sea-Level Rise Guidance 2018 Update. This Guidance document provides high-level, statewide recommendations for state agencies and other stakeholders to follow when analyzing sea level rise. Notably, it provides a set of projections that OPC recommends using when assessing potential sea level rise vulnerabilities for various projects. Taken together, the *Rising Seas* science report and updated State Guidance account for the current best available science on sea level rise for the State of California, and these projections accordingly have been incorporated into the Coastal Commission's Sea Level Rise Policy Guidance (2018 Science Update).

The OPC Guidance provides sea level rise projections for twelve California tide gauges, and recommends using the projections from the tide gauge closest to the project site. In this case, the North Spit tide gauge in Humboldt Bay is the closest gauge. The Humboldt Bay region is experiencing the greatest rate of relative sea level rise in the State due to active subsidence as the result of both seismic activity and compaction of former tidelands. Relative sea level rise (RSLR), combines rates of both vertical ground movement and regional sea level rise. Humboldt Bay's average rate of relative sea level rise currently is 0.18 inches/year (18 inches per century), which is greater than anywhere else in California (Patton 2017).

The proposed development involves an addition to an existing single-family residence built prior to the Coastal Act that is already vulnerable to flooding risks. The Commission must evaluate the conformance of the proposed addition for consistency with the requirements of Section 30253 that development minimize risks to life and property in areas of high flood risk, but the property owner has the right to retain the existing legal development on the site despite its vulnerability to flood risk.

The proposed development will enlarge the size of the existing small residence from 528 square feet to a total of 1,392 square feet and increase the number of bedrooms from one to two, but will not increase the density of residential use at risk to flood hazards. The addition does not add additional residential units and the home will remain a single-family residence. Any future proposal to add a residential unit would require an additional coastal development permit or permit amendment, and the Commission would review any such increase in density for conformance with the requirements of Section 30253 that development minimize risks to life and property in areas of high flood risk.

To evaluate the consistency of the currently proposed addition with Section 30253, the Commission must consider whether the development as proposed minimizes flood risks. The primary way to minimize flood risks from tidal waters is to site the habitable portions of proposed structures above maximum flood elevations. The maximum flood risk that would affect the proposed development at the site would occur under a combined event of projected maximum relative sea level rise over the life of the structure, high tide, a 100-year storm surge, and a 100-year wave event. To evaluate this risk, the applicant submitted a wave uprush and sea level rise study for the subject property. The study assumes the proposed addition would have an

economic life of 100 years. The study provided a wave uprush analysis and evaluation of maximum flood levels associated with a combined event of projected relative sea level rise over the next 100 years until 2115, a 100-year wave event and a 100-year storm surge all occurring at high tide.

Wave uprush is the maximum vertical extent of wave run-up on a structure above the design still water level. To establish the design still water levels upon which to model the 100-year wave event, the study superimposed the highest observed astronomical tidal water level with the highest observed storm surge and both the maximum and minimum 100-year mean relative sea level rise estimates based on observations and predictions for the North Spit gage. The study then assessed maximum fetch lengths within Humboldt Bay upon which the wind could potentially interact to generate the largest wind-waves at King Salmon. The study assumed that for the purpose of assessing wave uprush, that the design storm and sea level rise scenario most likely to affect the subject property would result from storm generated wind waves with a southwesterly wind direction and associated fetch component operating within the confines of South Humboldt Bay.

While the northwestern shoreline of King Salmon is somewhat influenced by ocean waves propagating through the Bay's entrance channel, these ocean generated waves are substantially attenuated by the relatively narrow bay entrance and associated shoreline armoring in conjunction with extensive shoals that range between approximately -9.8 to -16.4 feet (-3 to -5 meters) NAVD 88 throughout most of Entrance Bay. Additionally, existing rock groins at King Salmon Beach [approximately 11.5 feet (3.5 meters) NAVD 88], a small dune field [ranging from 14.8 to 19.7 feet (4.5 to 6 meters NAVD 88)], and a concrete sea wall [approximately 13.1 feet (4 meters) NAVD 88] provide substantial protection from deep water wave propagation and associated shoreline impacts under current conditions. Considering the range of design still water levels incorporated into the analysis, any additional inundation considered for the subject property associated with wave uprush was assumed to be driven by locally generated wind-waves interacting with a shallow, inundated landscape under 100-year sea levels and maximum storm surge.

Following guidance provided by the U.S. Army Corps of Engineers Shore Protection Manual Volume I (USACE 1984), maximum observed wind speeds were converted to wind stress and incorporated with fetch lengths and water depths derived from the Humboldt Bay DEM to generate maximum wave height and period estimates for King Salmon. For this analysis, it was assumed that maximum observed wind speeds aligned with maximum fetch lengths. Wave uprush for the subject parcel was then calculated according to Holmes (2001), assuming that a non-breaking wave interacting with the vertical walls of the proposed development in conjunction with the maximum design still water level would generate the maximum 100-year inundation level. The analysis also included a projected range of sea level rise that would affect the site over the economic life of the project based on the best available science (OPC 2018).

As previously stated, the project site is between 10 and 11 feet (3.04 – 3.35 meters) above sea level (NAVD88) and the finished floor elevation of the new second story is 9.0 feet (2.7 meters) above ground surface, resulting in an elevation of approximately 19.5 feet (5.94 meters) above sea level. The finished floor elevation of the habitable floor will be approximately 5.6 feet (1.7

meters) above the highest predicted inundation levels considered in the 100-year Wave Uprush and Sea Level Rise Study (PWA 2015).

Siting all habitable portions of the proposed residence on the upper floor of the proposed residence will minimize risks to residents in the event of a flood. Residents would be less likely to be occupying the non-habitable spaces in the event of a sudden flood and would therefore be less at risk of immediate danger. In addition, in the aftermath of a flood, residents may be able to continue to shelter in the upper floor even if the lower floor becomes unusable. The ground level of the new addition is planned for use as storage space, laundry, and an expanded bathroom, and is proposed to be used only for non-habitable uses. These proposed uses of the lower floor can be considered to be non-habitable uses. Zoning ordinances often exclude these kinds of uses under definitions of habitable spaces or rooms. For example, Section 313-153 of Humboldt County's certified coastal zoning code defines "habitable room" as follows:

Any room in a main or accessory building except a bathroom, water closet, hall storage space, utility room, foyer, communicating hall, pantry, laundry, or unfinished attic, basement or cellar.

The Commission finds that limiting the use of the lower floor to the proposed specific uses and confining habitable spaces to the upper floor would minimize risks to personal safety during flood events. However, portions of the lower floor, including the large unconditioned space, storage areas, and the undefined space between the stairway and the laundry and bathroom would be feasible to physically convert to a bedroom, living room, or other habitable rooms.

To ensure that future residents of the new house do not convert the lower floor spaces of the addition to bedrooms, dens, or other habitable spaces that would create greater safety risks or risks of greater property damage, the Commission attaches Special Condition No. 2. The special condition limits use of the lower floor to the proposed uses unless the owner obtains a permit amendment from the Commission to allow other uses.

The Commission also notes that Section 30610(a) of the Coastal Act exempts certain improvements to existing single-family residential structures from coastal development permit requirements. Pursuant to this exemption, once a house has been constructed, certain improvements that the applicant might propose in the future are normally exempt from the need for a permit or permit amendment. Depending on the specific improvements proposed, building additions and remodeling of the residence could increase flood hazard risks. Section 30610(a) requires the Commission to specify by regulation those classes of development which involve a risk of adverse environmental effects and require that a permit be obtained for such improvements. Pursuant to Section 30610(a) of the Coastal Act, the Commission adopted Section 13250 of Title 14 of the California Code of Regulations (CCR). Section 13250(b)(6) specifically authorizes the Commission to require a permit for improvements to existing single-family residences that could involve a risk of adverse environmental effect by indicating in the development permit issued for the original structure that any future improvements would require a development permit. As noted above, improvements to the lower floor of the approved addition that involve adding habitable uses could increase the danger of harm to residents and property damage from flooding in a manner inconsistent with the requirements of Section 30253 of the

Coastal Act that risks of flood hazard of development be minimized. Therefore, pursuant to Section 13250 (b)(6) of Title 14 of the CCR, the Commission attaches Special Condition No. 5 which requires that all future improvements to the development authorized by this permit that might otherwise be exempt from CDP requirements requires an amendment or new CDP. This condition will allow future development to be reviewed by the Commission to ensure that future improvements to the development will not increase flood hazard risks. Special Condition No. 6 also requires that the applicants record and execute a deed restriction approved by the Executive Director against the property that imposes the special conditions of this permit as covenants, conditions, and restrictions on the use and enjoyment of the property. Special Condition No. 6 will also help assure that future owners are aware of these CDP requirements applicable to all future development.

The applicant has incorporated additional design components into the proposed residence to minimize risks of flooding from the combined effects of sea level rise, high tides, storm surge, and extreme wave effects.

First floor walls will be composed of both reinforced concrete columns and breakaway walls in others. These walls will extend from the finished garage slab elevation up to the bottom of the framing for the first floor of living space. The reinforced concrete columns are designed to withstand the hydrodynamic force of tidal surge and waves without collapsing. The breakaway-wall portions of the first floor walls are intended to collapse under wave loads. The combination of the two wall types is designed to allow waves and water moving at high velocity to pass through the addition without causing collapse, displacement, or other structural damage to the elevated building or the supporting foundations system. Special Condition 1-B requires that these proposed flood risk minimization measures be incorporated into final house plans to be submitted for the Executive Director's review and approval.

Furthermore, to minimize the chances that hazardous materials enter the water during high tide storm and flooding events, the applicant is proposing elevated storage cabinets within the first floor to contain storage for all paints and cleaners, as well as all mechanical and utility installations. Similarly, the applicant proposes that all mechanical and utility installations such as electrical panels, on-demand hot water heaters, and force air furnaces be attached to the first floor walls. Again, Special Condition 1-B requires that these proposed flood risk minimization measures be incorporated into final house plans to be submitted for the Executive Director's review and approval.

In addition to the risk of flood hazards associated with extreme high tides and future sea level rise, the subject property, along with many others around Humboldt Bay, is shown on emergency planning maps published in 2009 by the California Emergency Management Agency, California Geologic Survey, and University of Southern California as being within the zone of potential inundation by a tsunami. If the region were to suffer a major earthquake along the Cascadia Subduction Zone, a local tsunami could hit the Humboldt Bay shoreline within minutes. Maximum tsunami inundation levels, which are believed to be at least 30 feet above mean sea level at this location. The average ground elevation of the site is 10-11 feet above Mean Sea Level. Thus, the site could be affected by a tsunami surge rising 20 feet above ground level, and

it is not possible to site the addition out of the tsunami inundation area where it would avoid potential damage from all tsunamis.

Although it is not feasible to site the addition out of harm's way of all tsunamis, risks to life can be minimized through the use of tsunami warning and evacuation procedures. The National Weather Service, in combination with other agencies, has developed a community tsunami readiness program and tsunami warning and evacuation procedures have been established for the King Salmon community. A tsunami siren has been installed, there is a clearly marked tsunami evacuation route and a sheltering location has been established on higher ground on the adjoining PG&E power plant site. Evacuation drills have also been conducted.

Therefore, the Commission finds that there are no further feasible mitigation measures available to minimize the flood risk from tsunami wave run-up at the site.

The Commission further finds that if the applicant and future landowners receive notification of the flood risks associated with the property, then the applicant and future landowners of the property can decide whether to implement development on the site despite the risks. Therefore, the Commission attaches Special Condition Nos. 4 and 6. Special Condition No. 4 requires the landowner to assume the risks of flooding hazards to the property and to waive any claim of liability on the part of the Commission. Given that the applicant has chosen to implement the project despite flooding risks, the applicant must assume the risks. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards. To ensure that all future owners of the property are aware of the flood hazard present at the site, the Commission's immunity from liability and the indemnity afforded the Commission.

To ensure that all future owners of the property are aware of the flood hazard present at the site, the Commission's immunity from liability, and the indemnity afforded the Commission, Special Condition No. 6 requires recordation of a deed restriction that imposes the special conditions of the permit as covenants, conditions, and restrictions on the use of the property.

Geologic Hazards

A geologic soils report of the site was performed by Gary L. Manhart, CEG No. 2651, dated April 5, 2018 (Exhibit 8). The geologic soils report evaluated potential geologic hazards that might affect the site, and the report indicates that site may be affected by the following hazards: seismic ground shaking, liquefaction, flooding, tsunami, and high groundwater.

The geologic soils report found that the residential addition is feasible from geotechnical standpoint, and the site is generally suitable for the application of a standard code foundation. Seismic risks can be reduced, but may not be entirely mitigated, by the application of current codes and seismic design practices.

The engineering geologic soils report concludes that the project site may be suitable for the proposed residential addition. The report includes a number of recommendations to reduce the

potential consequences of the liquefaction hazard. The recommendations address site grading, soil compaction, structural fills, foundation design, seismic design criteria, pavement design, landscaping, and site drainage. The recommendations are found in Section 6.0 of the report.

The principal recommendations concern foundation design. The report recommends that a concrete slab-on-grade foundation with thickened edge be used, and that the floors be a minimum thickness of 4 inches, reinforced, and underlain by at least 4 inches of clean (less than 5% fines) 0.75-inch gravel (termed “slab base rock”) to act as a capillary moisture break. The gravel should be overlain by a vapor retarder (15 mil Stego wrap or equivalent) to reduce the possibility of moisture migration through the concrete floor. Joints between membrane sheets and utility pipe openings should be lapped and taped. Care should be taken during slab construction to protect the plastic membrane against punctures. All foundation elements must be embedded into the suitable load bearing material to meet the minimum California Building Code (CBC) requirements.

To ensure that the proposed addition is developed consistent with the foundation and other recommendations of the engineering geologic soils report to mitigate potential geologic hazards affecting the site, the Commission attaches Special Condition No. 3, which requires that the final construction plans for the development adhere to the design recommendations specified in the geotechnical report. In addition, the condition requires the applicant submit evidence that an appropriate licensed professional has reviewed and approved all final design, construction, grading, and drainage plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic report.

As previously discussed, Special Condition No. 4 requires the landowner to assume the risks of extraordinary erosion and geologic hazards of the property and waive any claim of liability on the part of the Commission. Given that the applicants have chosen to implement the project despite these risks, the applicants must assume the risks. In this way, the applicants are notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicants to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards.

As discussed above, the project as conditioned will not eliminate all risk to life and property from hazards. However, all feasible mitigation measures necessary to minimize the flood and geologic risks have been incorporated into the project as conditioned. Therefore, the Commission finds that the proposed project, as conditioned, will minimize risk to life and property from hazards, consistent with Section 30253 of the Coastal Act.

F. VISUAL RESOURCES

Section 30251 of the Coastal Act requires that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. The Section requires, in applicable part, that permitted development 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.

The project site is located in a densely developed neighborhood. No public views of Humboldt Bay or the shoreline are afforded through the property, which is a developed lot located along the inland side of Buhne Drive and bordered on its other three sides by other residential development and Cod Street. Expansive and unobstructed public views of Humboldt Bay and coastal dunes are available for motorists and pedestrians from Buhne Drive seaward of the subject site. In addition, public parking is available along Buhne Drive for access to the dunes and shoreline and viewing the Bay. Thus, the proposed development will not have a significant adverse impact on views to or along the shoreline as seen from publicly-accessible vantage points.

As the site is relatively flat and does not require significant grading that would change the basic topography of the site, the proposed project minimizes the alteration of natural landforms.

As the proposed new structure would be visible from Crab Street, the Commission must consider whether the proposed development would be compatible with the character of the surrounding area. The character of the King Salmon area is largely defined by its bay-shore setting and predominantly single-family residential and commercial composition. The community consists of a diversity of architectural styles and sizes of structures ranging from small, old cabins and manufactured homes to larger two- and even a few three-story homes. The proposed two-story addition will be a maximum of 21.3 feet tall and would be of similar size, scale, and architectural style to some of the other newer development in this neighborhood of diverse structures. Thus, the proposed design of the addition will be visually compatible with the residential and commercial character of the surrounding area.

Although the development pattern is very compact in the King Salmon area, the overall nighttime character of the area in terms of outside illumination is largely suburban in nature, with very little exterior lighting evident. As a result, with the exception of nominally shielded street lighting along Buhne Drive and security lighting within the parking areas of commercial properties in the community, King Salmon has fewer glares from external nighttime lighting than many communities of similar size and density. Accordingly, to protect the character of the area as well as prevent the cumulative impacts of glare to the visual resources of the area, the Commission attaches Special Condition No. 11, which requires that all exterior lighting associated with the proposed development be low-wattage and downcast shielded such that no glare is directed beyond the bounds of the property or into nearby coastal waters.

In summary, the proposed project as conditioned is consistent with Section 30251, as the development will not adversely affect views to or along the coast, result in major landform alteration, or be incompatible with the character of the surrounding area.

G. Water Quality Protection

Section 30230 of the Coastal Act states, in applicable part, as follows:

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.

Section 30231 of the Coastal Act states as follows:

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.

Stormwater runoff from the development that is not absorbed into the ground ultimately drains to Humboldt Bay. Stormwater runoff from residential development can adversely affect the biological productivity of coastal waters by degrading water quality. Recognizing this potential impact, Section 30231 requires the protection of coastal waters to ensure biological productivity, and to protect public health and water quality. New development must not adversely affect these values and should help to restore them when possible.

The site is relatively flat, and no grading is proposed due to the site's low relief. The applicant has proposed a construction runoff control plan (Exhibit 7). To manage sediment discharge to receiving waters and to protect water quality, runoff during construction will be controlled through the use of certain Best Management Practices (BMPs). These measures are described below:

- Construction activities shall be scheduled during the dry season (April 15th – October 15th) where practicable. The purpose is to reduce the amount and duration of soil exposure by wind, rain, runoff, and vehicle tracking; and to perform construction activities and control practices in accordance with the planned schedule. Construction sequencing shall be scheduled to minimize land disturbance for the project during rainy and dry seasons.
- Erosion Control (EC), also referred to as soil stabilization, comprises source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. EC BMPs protect the soil surface by covering and/or binding soil particles. Preservation of existing vegetation provides erosion and sediment control benefits. Existing vegetation shall be preserved at the site where no construction activity is planned. Temporary fencing may be used to delineate the construction activity perimeter and to prevent excessive disturbance of the existing vegetation. Also, straw mulch will be used into disturbed soil to prevent soil particles from being dislodged.
- Sediment Controls (SC) are structural measures that are intended to complement and enhance the EC measures and reduce sediment discharges from construction areas by intercepting and filtering out soil particles that have been detached and transported by the force of water or wind. The standard BMPs proposed include the following BMPs from the California Stormwater BMP Handbook:

- (EC-1) Scheduling;
- (SE-1) Silt Fence;
- (SE-5) Fiber Rolls;
- (SE-7) Street Sweeping/Vacuuming; and
- (WM-5) Solid Waste management.

In addition, the applicant has proposed the use of BMP WM-4 from the California Stormwater BMP Handbook, which is designed to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The proposed BMPs will effectively prevent sediment and pollution discharges to receiving waters. Special Condition No. 9 requires that the permittee implement the submitted construction runoff control plan.

Additionally, the applicant has proposed a debris disposal plan (Exhibit 7). Any demolition debris shall be loaded to a transfer vehicle located on Crab Street before being disposed of at the appropriate facility – either Recology Humboldt County (949 Hawthorne Street, Eureka, CA) or Eel River Resource Recovery (965 Riverwalk Drive, Fortuna, CA). If construction debris is required to be stored onsite for any longer than one day, it will be covered in the staging area and girded with fiber rolls to prevent potential runoff. Remaining debris shall be piled and stored in the staging area (see Exhibit 7). Any hazardous materials shall be disposed of at the Recology hazardous waste department.

Special Condition No. 8 requires the permittee to implement the submitted debris disposal plan, demonstrating all demolition and construction debris will be disposed of at an authorized disposal facility to prevent discharge of such material into Humboldt Bay or other coastal waters.

Stormwater runoff from the development that is not absorbed into the ground ultimately drains to Humboldt Bay. Stormwater runoff from residential development can adversely affect the biological productivity of coastal waters by degrading water quality. Recognizing this potential impact, Section 30231 requires the protection of coastal waters to ensure biological productivity, and to protect public health and water quality. New development must not adversely affect these values and should help to restore them when possible. Therefore, Special Condition No. 7 requires the applicant to submit a final post-construction runoff treatment plan to ensure that flows from the proposed residence will be directed away from the Bay and to the front yard area of the parcel either to a grassy swale for biofiltration and/or to a French drain to disperse the runoff into the ground.

Thus, as conditioned, the Commission finds that the proposed project will maintain the biological productivity and quality of coastal waters appropriate to maintain optimum populations of marine organisms, and protect human health as mandated by the requirements of Sections 30230 and 30231 of the Coastal Act.

H. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Section 30240(b) of the Coastal Act requires that environmentally sensitive habitat areas (ESHAs) be protected against any significant disruption of habitat values potentially resulting from adjacent development. Section 30240(b) of the Coastal Act states, in applicable part, the following:

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

The subject property, which is currently developed, does not contain any known environmentally sensitive habitat. However, coastal dune habitat exists west of Buhne Drive, approximately 750 feet west of the subject property. Coastal dune habitats in the North Coast region in general often support populations of rare, threatened, and endangered plant species, including beach layia (*Layia carnosa*), Humboldt Bay wallflower (*Erysimum menziesii* ssp. *eurekaense*), pink sand verbena (*Abronia umbellata* var. *breviflora*), dark-eyed gilia (*Gilia millefoliata*), and other rare species. Both the Commission and the County in past permitting actions for projects in the region have considered these rare plant habitat areas to be ESHA under the Coastal Act and certified LCP. Additionally, the Commission has considered coastal dune habitat in and of itself in the absence of rare species to be ESHA, since the habitat in general is both rare and especially valuable because of its special nature and role in an ecosystem and could be easily disturbed or degraded by human activities and developments.

In addition, substantial acreage of diked freshwater wetlands is located east of the project site off of King Salmon Avenue.

The Commission finds that the coastal dunes and diked freshwater wetlands located in the vicinity of the proposed development do constitute ESHA, and the ESHA could be adversely affected if nonnative, invasive plant species were introduced in landscaping at the subject site. If any of the proposed landscaping were to include introduced invasive exotic plant species, the weedy landscaping plants could colonize (e.g., via wind or wildlife dispersal) the nearby dune or wetland ESHA over time and displace native vegetation, thereby disrupting the functions and values of the ESHA. The Commission attaches Special Condition No. 10 to ensure that only native and/or non-invasive plant species are planted on the subject property. As conditioned, the proposed project will ensure that the ESHA near the site is not significantly degraded by any future landscaping that would contain invasive exotic species.

In addition, the Commission notes that certain rodenticides, particularly those utilizing blood anticoagulant compounds such as Brodifacoum, Bromadiolone and Diphacinone, have been found to pose significant primary and secondary risks to non-target wildlife present in urban and urban/wildland interface areas. As these target species are preyed upon by raptors or other environmentally sensitive predators and scavengers, the pest control compounds can bio-accumulate in the animals that have consumed the rodents to concentrations toxic to the ingesting non-target species. To avoid this potential cumulative impact to environmentally

sensitive wildlife species, Special Condition No. 10 also contains a prohibition on the use of such anticoagulant-based rodenticides.

With the mitigation measures discussed above, which are designed to minimize any potential impacts to the adjacent ESHA, the project as conditioned will not significantly degrade adjacent ESHA and will be compatible with the continuance of the habitat area. Therefore, the Commission finds that the project as conditioned is consistent with Section 30240(b) of the Coastal Act.

I. PUBLIC ACCESS

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects, except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or where adequate access exists nearby. Section 30211 of the Coastal Act requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission is also limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential access.

The proposed project will not adversely affect public access. The subject property does have shoreline frontage because it fronts onto a canal that is a tributary to Humboldt Bay. However, the limited shoreline area is directly behind the existing house within a densely-developed neighborhood and there is no public trail leading from Crab Street to or along the shoreline of the parcel. As previously discussed, the entire bay front of the King Salmon Subdivision along the west side of Buhne Drive is open and available for public access use. Additionally, public parking is available along Buhne Drive for access to the dunes and shoreline. Therefore, the Commission finds that the proposed project does not have any significant adverse effect on public access, and the project as proposed without new public access is consistent with the above-cited Coastal Act public access policies.

J. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13906 of the Commission's administrative regulations requires Coastal Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is 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 significantly lessen any significant effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the

policies of the Coastal Act. The 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 specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.