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STAFF REPORT: REGULAR CALENDAR

Application No.: 1-15-0530

Applicant: Patricia and Harold Wells

Location: 1724 Stagecoach Road, near the intersection of Patricks Point Drive and Stagecoach Road, approximately 2 miles north of the City of Trinidad, Humboldt County (APN 517-011-01).

Project Description: Construct an approximately 800-square-foot, single-story (~17-foot-high), 2-bedroom caretaker's residence with approximately 550 square feet of attached porch/decking, an associated on-site sewage disposal system, 2,500-gallon water storage tank, and 250-gallon propane tank.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

Commission staff recommends approval of CDP Application 1-15-0530 with special conditions.

The applicant proposes to construct an approximately 800-square-foot, single-story (~17-foot-high), 2-bedroom caretaker's residence with approximately 550 square feet of attached

1-15-0530 (Wells)

porch/decking, an associated on-site sewage disposal system, 2,500-gallon water storage tank, and 250-gallon propane tank.

The primary Coastal Act issue associated with this project is the minimization of geologic hazards. The existing approximately 8-acre lot is located on an approximately 200-foot-high coastal bluff between the first public road (Stagecoach Road) and the sea approximately 2 miles north of the City of Trinidad.

The lot is developed with an existing ~2,200-square-foot single family residence, on-site individual sewage disposal system, and ~1,440-square-foot detached garage (all originally developed in the 1950s), a ~1,152-square-foot workshop, a pump house, three 2,000-2,500-gallon water tanks, and various tool sheds. The lot also contains an extensive botanical garden that covers over 2 acres, where both informal and formal tours are provided, some of which benefit several local garden clubs. The stated purpose of the proposed caretaker's residence is to house a person employed to maintain and care for the gardens on the property.

The proposed new residence would be setback approximately 200 feet from the bluff edge. The Commission's geologist reviewed the slope stability and bluff setback recommendations prepared by the applicant's geotechnical consultant and believes that the development as proposed will be setback an adequate distance from the bluff edge to ensure safety from bluff retreat and erosion for the development's presumed economic life. Staff is recommending various special conditions to mitigate geologic hazard risks, including conditions prohibiting the future construction of bluff or shoreline protective devices to protect the development and restrictions on future improvements to the authorized development (see Special Conditions 1-5).

The motion to adopt the staff recommendation of approval with special conditions is on page 4.

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APPENDICES

[Appendix A – Substantive File Documents](#)

EXHIBITS

- [Exhibit 1](#) – Regional Location Map
- [Exhibit 2](#) – Vicinity Maps
- [Exhibit 3](#) – Site Plan & Elevations
- [Exhibit 4](#) – Bluff Edge Location Map
- [Exhibit 5](#) – Site Photos
- [Exhibit 6](#) – Geologic Report (excerpts)
- [Exhibit 7](#) – Archaeology Letter

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve coastal development permit 1-15-0530 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 amount 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. Conformance of Final Design and Construction Plans to the Geologic Reports

- a. All final design and construction plans, including site preparation, foundation design, and drainage plans, shall be consistent with the recommendations contained in the geologic reports for the site prepared by SHN Consulting Engineers and Geologists, Inc. dated May 2014 (Geologic/Soils Investigation) and March 2015 (Disposal Field Suitability Investigation). All authorized development shall be located in the locations proposed in the permit application, which are approximately 200 feet back from the bluff edge consistent with the Bluff Edge Development Setback recommendation provided by SHN in a letter to Commission staff dated December 11, 2015.
- b. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the Executive Director's review and approval, evidence that a licensed professional (Certified Engineering Geologist or Geotechnical Engineer) has reviewed and approved all final site preparation, foundation design, and drainage plans and the minimum bluff edge setback plot plan, and has certified that each of those plans is consistent with all of the recommendations specified in the above-referenced geologic reports and plot plans approved by the California Coastal Commission for the project site.
- c. 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.

2. No Future Bluff or Shoreline Protective Device

- a. By acceptance of this permit, the applicants agree, on behalf of themselves and all successors and assigns, that no bluff or shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to coastal development permit (CDP) 1-15-0530, including, but not limited to, the caretaker residence, the associated on-site sewage disposal system, water storage tank, and propane tank in the event that the authorized development is threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, ground subsidence or other natural hazards in the future. By acceptance of this permit, the applicants hereby waive, on behalf of themselves and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.
- b. By acceptance of this permit, the applicants further agree, on behalf of themselves and all successors and assigns, that the landowner(s) shall remove the development authorized by this permit, including, but not limited to, the caretaker residence, the

associated on-site sewage disposal system, water storage tank, and propane tank or other development authorized under this CDP, if any government agency has ordered that the structure is not to be occupied due to any of the hazards identified above. 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. Such removal shall require a CDP.

- c. In the event the edge of the bluff recedes to within 10 feet of the authorized development but no government agency has ordered that the structures not be occupied, a geotechnical investigation shall be prepared by a licensed geologist or civil engineer with coastal experience retained by the landowner(s), that addresses whether any portions of the structures are threatened by waves, erosion, storm conditions, bluff failure, or other natural hazards. The report shall identify all those immediate or potential future measures that could stabilize the structures without shore or bluff protection, including, but not limited to, removal or relocation of the structures. The report shall be submitted to the Executive Director and the appropriate local government officials. If the geotechnical report concludes that the structures are unsafe for occupancy, the permittee shall, within ninety (90) days of submitting the report, apply for a CDP amendment to remedy the hazard, which shall include removal of the threatened portion of the structure.

3. Assumption of Risk, Waiver of Liability, and Indemnity Agreement. By acceptance of this permit, the applicants acknowledge and agree (a) that the site may be subject to hazards from earthquakes, erosion, landslides, bluff failure, and other geologic hazards; (b) to assume the risks to the applicants 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.

4. Deed Restriction Recordation of Permit Conditions. PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and approval documentation demonstrating that the applicants have executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (a) 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; and (b) imposing the 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 entire parcel or parcels governed by this permit. 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.

5. **Future Development Restriction.** This permit is only for the development described in coastal development permit (CDP) 1-15-0530. 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 1-15-0530. Accordingly, any future improvements to this structure authorized by this permit shall require an amendment to CDP 1-15-0530 from the Commission or shall require an additional CDP from the Commission or from the applicable certified local government. In addition thereto, an amendment to CDP 1-15-0530 from the Commission or an additional CDP from the Commission or from the applicable certified local government 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. **Lighting Limitations.** All exterior lighting attached to the authorized structures shall be low-wattage and downcast shielded such that no glare will be directed beyond the bounds of the property.
7. **Protection of Archaeological Resources.**
 - a. If an area of cultural deposits is discovered during the course of the project, all construction shall cease and shall not recommence except as provided in subsection (b) hereof; and a qualified cultural resource specialist shall analyze the significance of the find.
 - b. A permittee seeking to recommence construction following discovery of the cultural deposits shall submit a supplementary archaeological plan for the review and approval of the Executive Director.
 - (i) If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after this determination is made by the Executive Director.
 - (ii) If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.
8. **Construction Responsibilities.** The permittee shall adhere to appropriate construction-related best management practices (BMPs) to protect water quality, including, but not limited to, the following:
 - a. No construction materials, debris, or waste shall be placed or stored where it may be subject to entering coastal waters;
 - b. Any and all debris resulting from construction activities shall be removed from the project site and disposed of properly;

- c. During the course of the project work, all trash shall be properly contained, removed from the work site on a regular basis, and properly disposed of to avoid contamination of habitat during demolition and construction activities;
- d. All on-site stockpiles of construction debris and soil or other earthen materials shall be covered and contained whenever there is a potential for rain to prevent polluted water runoff from the site; and
- e. BMPs shall be used to prevent the entry of polluted stormwater runoff into coastal waters during construction and post-construction, including the use of appropriate BMPs for erosion and runoff control and post-construction BMPs for roof runoff controls, vegetated buffer strips, and bioretention as detailed in the current California Storm Water Quality Best Management Handbooks (<http://www.cabmphandbooks.com>).

- 9. Humboldt County Approval.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit for the review and approval of the Executive Director, a copy of a permit issued by Humboldt County Division of Environmental Health for the onsite sewage disposal system, or evidence that no permit is required. The applicant shall inform the Executive Director of any changes to the project required by the County. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. PROJECT DESCRIPTION

The applicant proposes to construct an approximately 800-square-foot, single-story (~17-foot-high), 2-bedroom caretaker's residence with approximately 550 square feet of attached porch/decking, an associated on-site sewage disposal system, 2,500-gallon water storage tank, and 250-gallon propane tank (Exhibits 3 and 5).

B. ENVIRONMENTAL SETTING

The project site is located approximately two miles north of Trinidad at 1724 Stagecoach Road, near its intersection with Patricks Point Drive (Exhibits 1-2). The subject property is locally designated and zoned as Commercial Recreation, although the site is in an unincorporated area outside the urban limit line within a primarily rural residential stretch of coastline. Views of the ocean from Stagecoach Road and Patricks Point Drive in this vicinity are limited due to the abundance of coniferous trees (redwood, Sitka spruce, grand fir, and others) and other forest vegetation lining the roadway and extending across the properties on either side of the roads. The abundance and density of vegetation also screens many of the existing homes and other structures on both sides of the two roads from public view. There are no wetlands or other environmentally sensitive areas on the bluff-top portion of the property.

The approximately 8-acre subject lot is located on an approximately 200-foot-high coastal bluff between the first public road (Stagecoach Road) and the sea. The lot is developed with an existing ~2,200-square-foot single family residence, on-site individual sewage disposal system, and ~1,440-square-foot detached garage (all originally developed in the 1950s), a ~1,152-square-foot workshop, a pump house, three 2,000-2,500-gallon water tanks, and various tool sheds. In addition, the lot also is developed with an extensive botanical garden that covers over 2 acres, where both informal and formal tours are provided, some of which benefit several local garden clubs. The caretaker's residence would be constructed near the garden along the northern side of the property, approximately 270 feet off of Patricks Point Drive and 225 feet back from the bluff edge, inland from the existing garage (Exhibit 3). The stated purpose of the proposed caretaker's residence is to house a person employed to maintain and care for the gardens on the property.

C. STANDARD OF REVIEW

Although Humboldt County has a certified local coastal program (LCP), the property is located in a non-certified area (area of deferred certification, or ADC) that includes all of the privately owned lands, other than lands owned by the Trinidad Coastal Land Trust, located west of Scenic Drive, west of Stagecoach Road, and west of Patrick's Point Drive (where they are the first public roads paralleling the sea), and along the route of the 6th Avenue Trail in the Westhaven area. In denying certification for this area of the Trinidad Area Plan (LUP) in 1982, the Commission suggested that the plan's policies regarding the protection of the public's right of access where acquired through use (i.e. potential prescriptive rights) be modified to conform to the natural resource, hazard, and public access policies of the Coastal Act. The County did not accept the suggested modifications, and the geographic area became an ADC. As a consequence, the Commission retains CDP jurisdiction over the site, and the standard of review for issuance of a CDP is whether the development is consistent with the Chapter 3 policies of the Coastal Act.

D. OTHER AGENCY APPROVALS

The County approved a Conditional Use Permit (CUP 14-011) for the proposed development on December 18, 2014.

E. LOCATING AND PLANNING NEW DEVELOPMENT

Section 30250 of the Coastal Act states in applicable part (emphasis added):

(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.

...

Section 30250(a) of the Coastal Act states in part 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 site is located in a rural residential area with no community services. The proposed caretaker residence will be served by an on-site individual sewage disposal system, the design of which has been reviewed and preliminarily approved by the County Division of Environmental Health. The use permit approved for the project approved by the County requires the applicant to secure a permit from Environmental Health Division prior to installation of the on-site septic system and associated facilities. The Commission imposes **Special Condition 9** to require submittal of the County permit prior to commencement of construction.

The domestic water source for the property is McNeil Creek, which is located approximately 500 feet to the south of the property. A 48-inch-diameter corrugated pipe buried upright in the creek bed upstream from the property (east of Highway 101) distributes water by gravity flow to the subject lot as well as six other individual properties, all of which have deeded water rights to the creek. The Applicants and one other commercial property on the system each are deeded 5,000 gallons per day (gpd), and the other deeded allotments are to private residences, which receive between 500 gpd and 1,500 gpd. The subject property is deeded a total of 5,000 gpd out of a total combined volume of deeded water of 15,150 gpd. The County requires that new residences must have a water service providing at least 360 gallons per day. The water supplied to the new residence will be apportioned from the Applicants' deeded allotment. Streamflow rate measured downstream of the water system intake at the Stagecoach Road culvert outlet is approximately 13,000 to 14,400 gpd during the late dry season, which the applicants' consultant judges to be sufficient to supply the additional demand that will be placed on the water system by the proposed new residence. Drawing water from the creek for the proposed development will not lead to downstream impacts, as there are no or few other water users drawing water from the creek downstream of this water system intake, and the creek does not support fish habitat.

As described in the findings below, the proposed project, as conditioned, will not have significant adverse impacts on coastal resources. Therefore, the Commission finds that the proposed development is consistent with Coastal Act Section 30250(a) to the extent that it has adequate water and septic capability to accommodate it and it will not cause significant adverse effects, either individually or cumulatively, on coastal resources.

F. GEOLOGIC HAZARDS

Section 30253 of the Coastal Act states, in applicable part:

New development shall do all of the following:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

- (2) *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.*

...

All proposed new development will be located inland of the existing structures, and, according to geologic investigations completed for the project, the new caretaker residence will be located a minimum of 225 feet back from the bluff edge at an elevation of approximately 200 feet above mean sea level (Exhibits 3-4). The applicant's consultant completed a geotechnical analysis for the development, which analyzed historical bluff retreat rates and also modeled the slope stability of the site. The resulting report (excerpts provided in Exhibit 6) estimates an average annual bluff retreat rate of 0.4-feet per year since 1948. Incorporating this information into the quantitative assessment of slope stability resulted in a recommended bluff edge development setback of 40 feet. This recommended setback distance includes a bluff retreat projection of 0.4-feet per year times 75 years plus an additional 10 feet to account for the uncertainty in the historic retreat rate and modeling analyses as recommended by the Commission's geologist.¹ The Commission's geologist, Dr. Mark Johnsson, reviewed and concurred with the geologist's analyses and recommendations.

Thus, the geotechnical analysis indicates that the proposed structure will not be subject to geologic instability during its projected lifespan. The geologic assessment also looked at seismic, surface fault rupture, liquefaction, and other potential geologic hazards and determined these hazard risks to be low. The geologic report includes recommendations for grading and earthwork, surface drainage, seismic parameters, foundations, and utility trenches.

The Commission finds that the setback from the bluff proposed by the applicant is sufficient to protect the new development from bluff retreat hazards over its expected economic life. Adherence to this setback requirement, as well as the foundation design and other recommendations determined to be necessary by the geology investigations, is required by **Special Condition 1**, which requires that prior to permit issuance, a geotechnical engineer shall approve all final site preparation, foundation design, and drainage plans, and bluff edge setback plot plan. The Commission finds that only as conditioned to ensure that the mitigation measures are properly incorporated into the development can the project be found consistent with Section 30253 of the Coastal Act.

Notwithstanding the relative degree of insulation of the proposed project improvements in their proposed locations from geologic hazards, the applicant is proposing to construct development that would be located on a high uplifted marine terrace bluff top that is actively eroding. Consequently, the development will be located in an area of high geologic hazard. However, new development can only be found consistent with Section 30253 of the Coastal Act if the risks to life and property from the geologic hazards are

¹ Johnsson, M.J. 2005. *Establishing development setbacks from coastal bluffs*. In Magoon, O.T., Converse, H., Baird, B., Jines, B., and Miller-Henson, M., eds., *California and the World Ocean '02: Revisiting and revising California's Ocean Agenda*: Reston, Virginia, American Society of Civil Engineers, p. 396-416.

minimized and if a protective device, such as a cliff retaining wall or seawall, will not be needed in the future to protect the development from erosion hazards. Although a comprehensive geotechnical evaluation is a necessary and useful tool that the Commission relies on to determine if proposed development is permissible at all on any given bluff top site, the Commission finds that a geotechnical evaluation alone is not a guarantee that a development will be safe from bluff retreat. It has been the experience of the Commission that in some instances, even when a thorough professional geotechnical analysis of a site has concluded that a proposed development will be safe from bluff retreat hazards, unexpected bluff retreat episodes that threaten development during the life of the structure sometimes still do occur. Site-specific geotechnical evaluations cannot always accurately account for the spatial and temporal variability associated with coastal processes and therefore cannot always absolutely predict bluff erosion rates. Geologic hazards are episodic, and bluffs that may seem stable now may not be so in the future.

The Commission finds that the subject lot is an inherently hazardous piece of property, that the bluff is actively eroding, and that the proposed new development will be subject to geologic hazard at some point that potentially could engender the need for a bluff protective device, inconsistent with Section 30253 of the Coastal Act. The proposed development could not be approved as being consistent with Section 30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a seawall to protect it. Based upon the geologic report prepared for the site and the evaluation of the project by the Commission's staff geologist, the risks of geologic hazard are minimized if development is sited and designed according to the setback and construction recommendations and conditions of this permit. However, given that all hazard risks cannot be eliminated and the geologic report cannot guarantee that shoreline protection will never be needed to protect the caretaker's residence, the Commission finds that the proposed development is consistent with the Coastal Act only if it is conditioned to provide that shoreline protection will not be constructed in the future.

The Commission thus finds that due to the inherently hazardous nature of this lot, the fact that no geology report can conclude with absolute certainty that a geologic hazard does not exist, the fact that the approved development and its maintenance may cause future unforeseen problems, and because Section 30253 prohibits new development from engendering the need for shoreline protection that would substantially alter natural landforms along bluffs, it is necessary to attach Special Condition 2. **Special Condition 2** prohibits the construction of shoreline protective devices on the parcel, requires that the landowner provide a geotechnical investigation and remove the approved development if bluff retreat reaches the point where this development is threatened, and requires that the landowners accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion of the site. These requirements are necessary for compliance with Coastal Act Section 30253.

In addition, **Special Condition 3** 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 applicant has chosen to implement the project despite the risks identified in the geologic report, 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. Furthermore, the Commission imposes **Special Condition 4** to require the applicant to record a deed restriction to impose the special conditions of this CDP as covenants, conditions, and restrictions on the use and enjoyment of the property. This special condition is required, in part, to effectively put future property owners on notice regarding the risks of development on the property, the prohibition against construction of shoreline protective devices to protect the approved development, the Commission's immunity from liability, and the indemnity afforded the Commission.

As noted above, some risks of an unforeseen natural disaster, such as an unexpected landslide or massive slope failure, could result in destruction or partial destruction of the caretaker's residence or other development approved by the Commission. In addition, the development itself and its maintenance may cause future problems that were not anticipated. When such a catastrophic event takes place, public funds are often sought for the clean-up of structural debris that winds up on the beach or on an adjacent property. As a precaution, in case such an unexpected event occurs on the subject property, **Special Condition 2** also requires the landowner to accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site, and agree to remove the residence should the bluff retreat reach the point where a government agency has ordered that the structure not be inhabited.

Thus, the Commission finds that as conditioned, the proposed development minimizes risks to life and property and will not 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 the bluff.

The Commission notes that Section 30610(a) of the Coastal Act exempts certain additions to existing single-family residential structures from CDP requirements. Pursuant to this exemption, once a house has been constructed, certain additions and accessory buildings that the applicant might propose in the future are normally exempt from the need for a permit or permit amendment. Depending on its nature, extent, and location, such an addition or accessory structure could contribute to geologic hazards at the site (e.g., installing a sizable accessory structure for additional parking, storage, or other uses normally associated with a single family home in a manner that does not provide for the recommended setback from the bluff edge). Accordingly, 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), 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 additions 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 CDP.

As noted above, certain additions or improvements to the approved structure could involve a risk of creating geologic hazards at the site. Therefore, pursuant to Section 13250 (b)(6) of Title 14 of the CCR, the Commission attaches **Special Condition 5**, which requires that any future improvements to the caretaker's residence and the other development authorized by CDP 1-15-0530 shall require an amendment to the permit from the Commission or shall require an additional CDP from the Commission or from Humboldt County. This condition will allow future improvements to the permitted development to be reviewed by the Commission to ensure that the future improvements will not be sited or designed in a manner that would result in a geologic hazard. As previously discussed, **Special Condition 4** also requires that the applicants record and execute a deed restriction 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 4 also will assure that future owners are aware of these CDP requirements applicable to all future development.

The Commission thus finds that the proposed development as conditioned is consistent with Section 30253 of the Coastal Act regarding geologic hazards, because the development as conditioned (1) minimizes risks to life and property, (2) will not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area, and (3) require the construction of protective devices that would substantially alter natural landforms along the bluff. The Commission finds only as conditioned is the proposed development consistent with Section 30253 of the Coastal Act.

G. VISUAL RESOURCES

Section 30251 of the Coastal Act states, in applicable part:

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...

Although not certified for this area, the County's Trinidad Area Plan designates the property as being within a "Coastal Scenic Area." The LCP requires that development in CSAs shall *be subordinate to the character of the designated area, and to the scenic use and enjoyment of public recreational lands within these areas.*

As discussed above, the project setting and the larger area around Stagecoach Road and Patricks Point Drive is largely forested with an abundance of coniferous trees (redwood, Sitka spruce, grand fir, and others) and other forest vegetation lining the roadways and extending across the properties on either side of the roads. There are no views of the ocean through the property available to the public.

The proposed new maximum 17-foot-tall residence will be setback approximately 270 feet from the public roadway and largely screened from public view by existing vegetation. The building

site is located on level ground, and no grading or major vegetation removal is proposed. No reflective siding or roofing materials are proposed. The County approved a Special Permit for Design Review for the proposed new structure on December 18, 2014 with findings that the proposed project is compatible with the neighborhood and will not be of greater height or bulk than nearby development.

Although the development pattern is largely hidden from public view due to dense vegetative growth surrounding the site, there is potential for the nighttime character of the area to be impacted by outside illumination, given that this is an area with relatively minimal exterior lighting. Accordingly, to prevent the cumulative impacts of light pollution on the visual resources of the area, the Commission attaches **Special Condition 6**, 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 adjoining coastal waters or environmentally sensitive areas.

The Commission thus finds that the project as conditioned is consistent with Section 30251, as it will (a) ensure that permitted development is sited and designed to protect views to and along the ocean and scenic coastal areas; (b) minimize the alteration of natural land forms; and (c) be visually compatible with the character of the surrounding area.

H. ARCHAEOLOGICAL RESOURCES

Section 30244 of the Coastal Act states:

Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Yurok, a Native American tribe, is known to have settled along the Humboldt County coast within the general vicinity of the subject property. The Yurok had settlements extending from Little River State Beach near McKinleyville to areas within Del Norte County, including over 50 named villages clustered along the Klamath River and coastal lagoons and creeks.

During the processing of the conditional use permit application, the County referred the project to the Yurok Tribe Heritage Preservation Officer. In response, the Tribe conducted a survey of the property on October 23, 2014. In a letter dated October 27, 2014 (Exhibit 7), the Tribe noted that no cultural resources were observed within the project area. Nevertheless, in its approval of the use permit for the proposed caretaker residence, the County included an “inadvertent discovery” information note on the permit stating that if an area of cultural deposits is discovered during the course of the project, all construction must cease and a qualified cultural resource specialist must analyze the significance of the find. To ensure protection of any archaeological resources that may be discovered at the site during construction of the proposed project, the Commission similarly attaches **Special Condition 7**. This condition requires that if an area of cultural deposits is discovered during the course of the project, all construction must cease. To recommence construction following discovery of cultural deposits, the permittee is required to submit a supplementary archaeological plan for the review and approval of the Executive

Director, who determines whether the changes are de minimis in nature and scope, or whether an amendment to this permit is required.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30244, as the development includes reasonable mitigation measures to ensure that construction activities will not result in significant adverse impacts to archaeological resources.

I. PROTECTION OF COASTAL WATERS

Section 30231 of the Coastal Act addresses the protection of coastal water quality and marine resources in conjunction with development and other land use activities. Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with the surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The subject parcel includes intertidal areas, coastal bluffs, and gently sloping portions of an uplifted coastal terrace planned and zoned for low-density rural residential development. All proposed development will be located at an elevation of approximately 200 feet above mean sea level on the uplifted coastal terrace approximately 200 feet back from the bluff edge and over 800 feet from the mean high tide line.

According to the applicant's geologist (SHN May 2014), the terrace generally slopes westerly-southwesterly to the coastal bluff. However, given the project site's (a) substantial distance back from the bluff edge (over 200 feet back), (b) substantial distance back from high tide line (over 800 feet back), and (c) elevation above the ocean (over 200 feet above mean sea level) combined with the fact that the project involves no significant grading or major vegetation removal, there is very little chance that sediment-laden runoff originating from the development site will flow over the bluff edge and into coastal waters. According to the applicant's geologist:

New impervious surfaces to be created as part of this project include the roof of the proposed 800 ft² caretaker's unit and the wood deck. No flexible asphalt or concrete paving will be constructed. Roof runoff will be captured by rain gutters and delivered to the ground surface through downspouts. Discharge from the downspouts will be dissipated by sheetflow and allowed to percolate and infiltrate into the ground surface in the vegetated areas surrounding the new structure. No surface runoff will discharge from the site during site preparation, construction, or following completion of the structure due to the heavily vegetated ground surface and well-drained soils. The wood deck will allow runoff to pass through the gapped portions of the deck boards where water will infiltrate into the ground surface beneath the deck.

A condition of approval of the County use permit for the proposed development requires that the applicant use dust control during excavation to minimize dust problems on adjacent properties, revegetate all disturbed areas prior to winter rain, and take all precautions necessary to avoid the encroachment of dirt and debris on adjacent properties. The Commission attaches **Special Condition 8** to require the use of best management practices during construction to minimize the potential for dust and debris to impact off site areas, including coastal waters.

Therefore the Commission finds that the proposed development as conditioned is consistent with Section 30231 of the Coastal Act, because the project as conditioned will protect water quality and the biological productivity of coastal waters.

J. 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 subject lot is a bluff-top parcel with an existing single family residence located between the property and the steep, craggily bluff face. The closest public access point to the property is a vertical public trail along Martin Creek to "Secret Beach" located approximately one mile south of the site. There is no evidence of public use of the subject property for public access, no evidence of trails on the property, and no indication from the public that the site has been used for public access purposes in the past. The proposed development will not significantly and adversely increase the demand for public access to the shoreline, as it involves development on an existing developed single family residential lot. For all of these reasons, the Commission finds that the proposed project, which does not include provision of public access, is consistent with the public access policies of the Coastal Act.

K. LOCAL COASTAL PROGRAM CERTIFICATION

Section 30604(a) of the Coastal Act states in part that prior to certification of a local coastal program (LCP), a CDP shall be issued only if the issuing agency finds that the proposed development is in conformity with the provisions of Chapter 3 of the Coastal Act, and the permitted development will not prejudice the ability of the local government to prepare a LCP that is in conformity with the provisions of Chapter 3.

As described above, the area that includes the subject site along with all of the bluff-top lots located west of Stagecoach Road and west of Patricks Point Drive between Trinidad State Beach

and Patricks Point State Park, as well as several lots in the Westhaven area south of Trinidad, is located in a non-certified area (Area of Deferred Certification or ADC) that lacks a certified LCP. The County considers the site designation to be Commercial Recreation (CR). The County use permit for the project includes findings stating that *“While the [garden tour] use of the site is not currently for-profit, it has the characteristics of a visitor serving and recreational use. The potential exists for it to accommodate small gatherings, weddings, or other small reception uses, which may be pursued in the future. In order to continue to operate the use and to entertain the possibility of future expansion of the public use of this site, a caretaker’s home is necessary to house a person to maintain and care for the extensive gardens on the parcel.”*

In denying certification for this area of the Trinidad Area Plan in 1982, the Commission suggested that the plan’s policies regarding the protection of the public’s right of access where acquired through use (i.e. potential prescriptive rights) be modified to conform to the natural resource, hazard, and public access policies of the Coastal Act. As discussed in the findings above, the development does not affect wetlands or environmentally sensitive habitat, the geologic hazards affecting the site have been evaluated and special conditions have been attached to the permit to protect against bluff retreat hazards, and there is no evidence of potential prescriptive rights of access on the subject lot. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act, and approval of the project will not prejudice the ability of Humboldt County to prepare an LCP for this area that is in conformity with the provisions of Chapter 3.

L. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Humboldt County served as the lead agency for the project for CEQA purposes. The County Zoning Administrator determined the project to be categorically exempt from environmental review pursuant to Section 15303, Class 3 – New Construction/Conversion Small Structures of the CEQA Guidelines.

Section 13906 of the Commission’s administrative regulation requires Coastal Commission approval of coastal development permit applications to be supported by a finding showing 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 approval of a proposed development if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development 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. No public comments regarding potential significant adverse environmental effects of the project were received by the County as the lead agency during CEQA review of the project, nor were any public comments received by the Coastal Commission 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

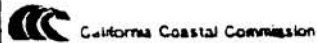
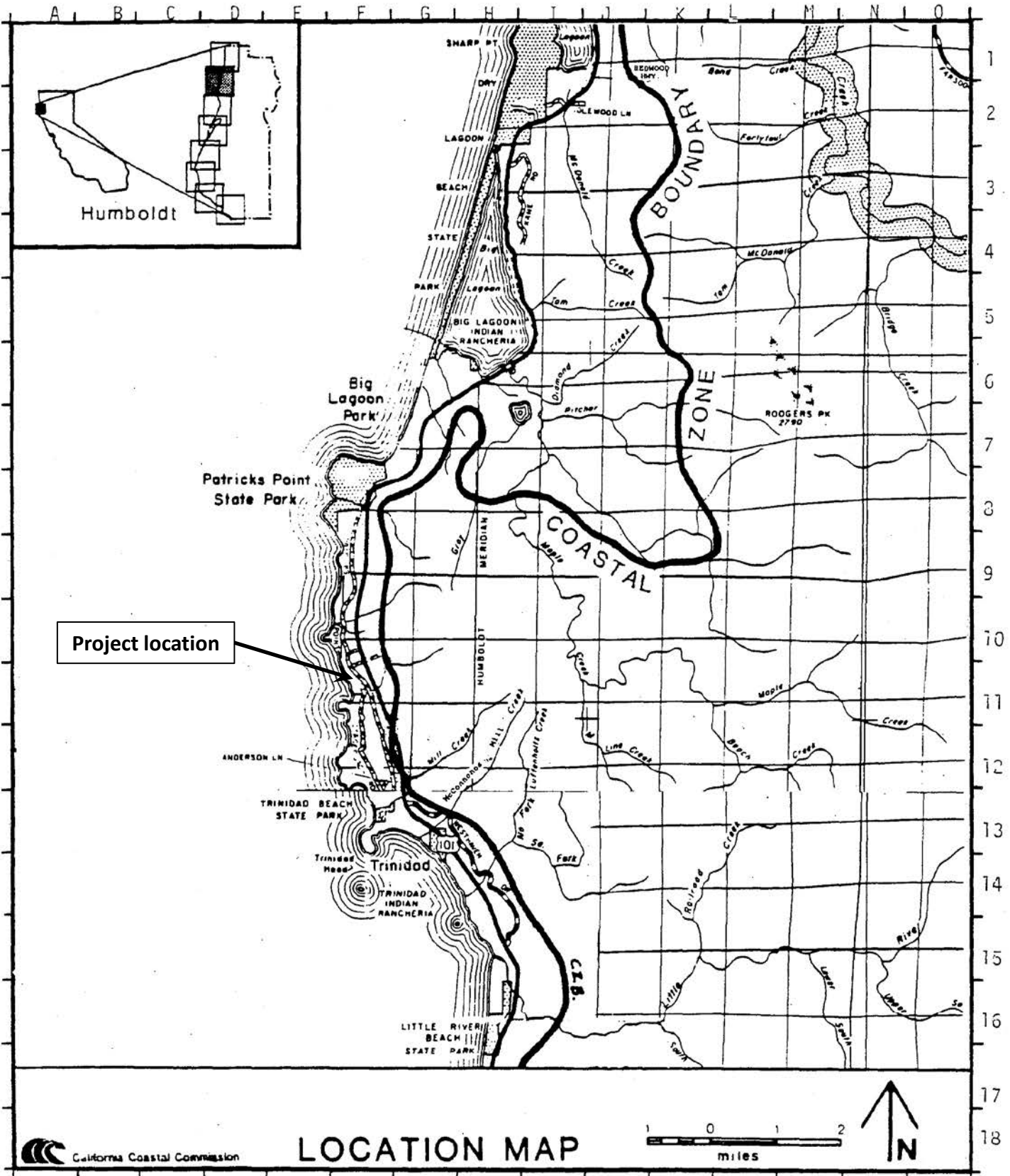
environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

1-15-0530 (Wells)

**APPENDIX A
SUBSTANTIVE FILE DOCUMENTS**

Application file for CDP Application No. 1-15-0530

County of Humboldt Local Coastal Program

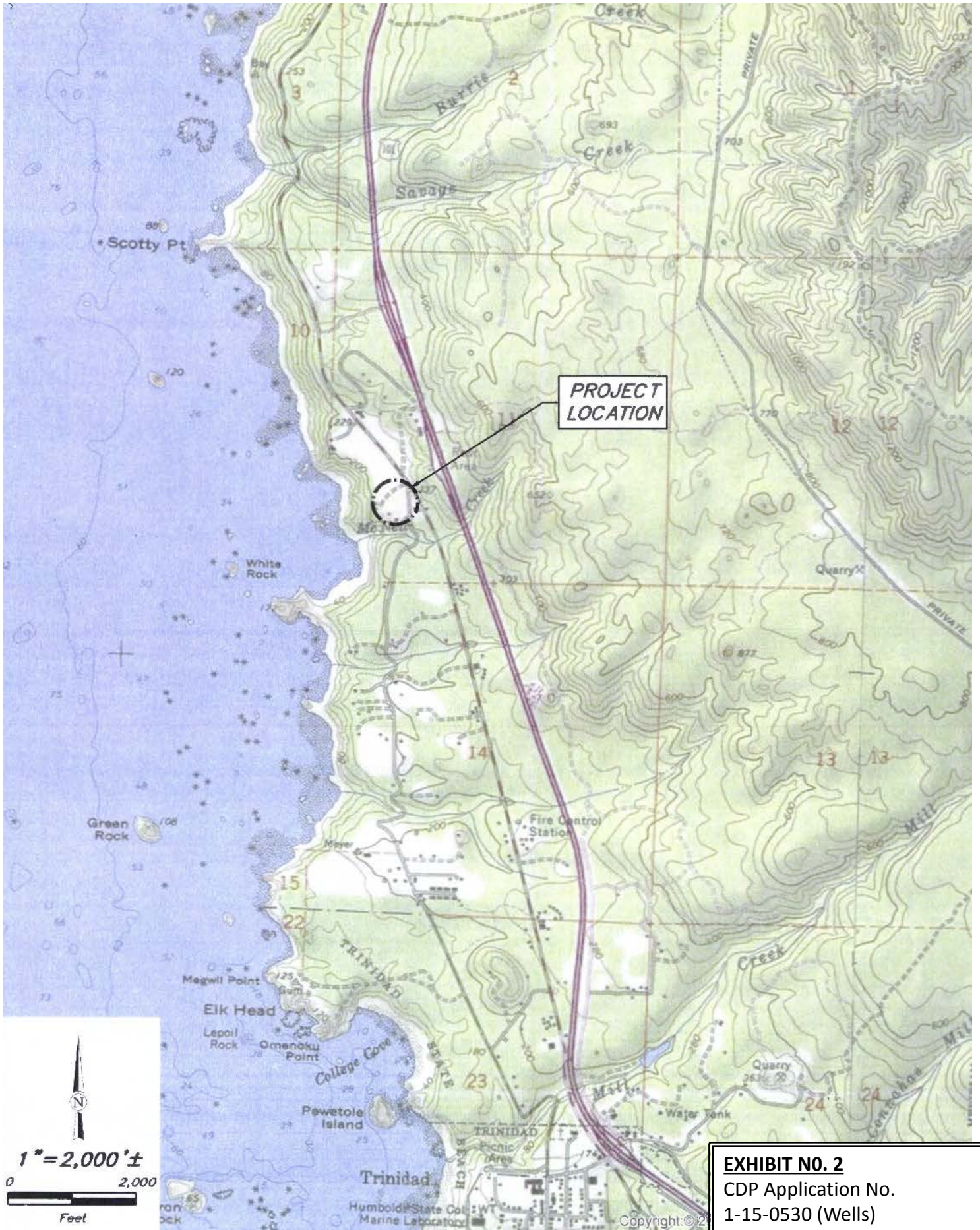


LOCATION MAP



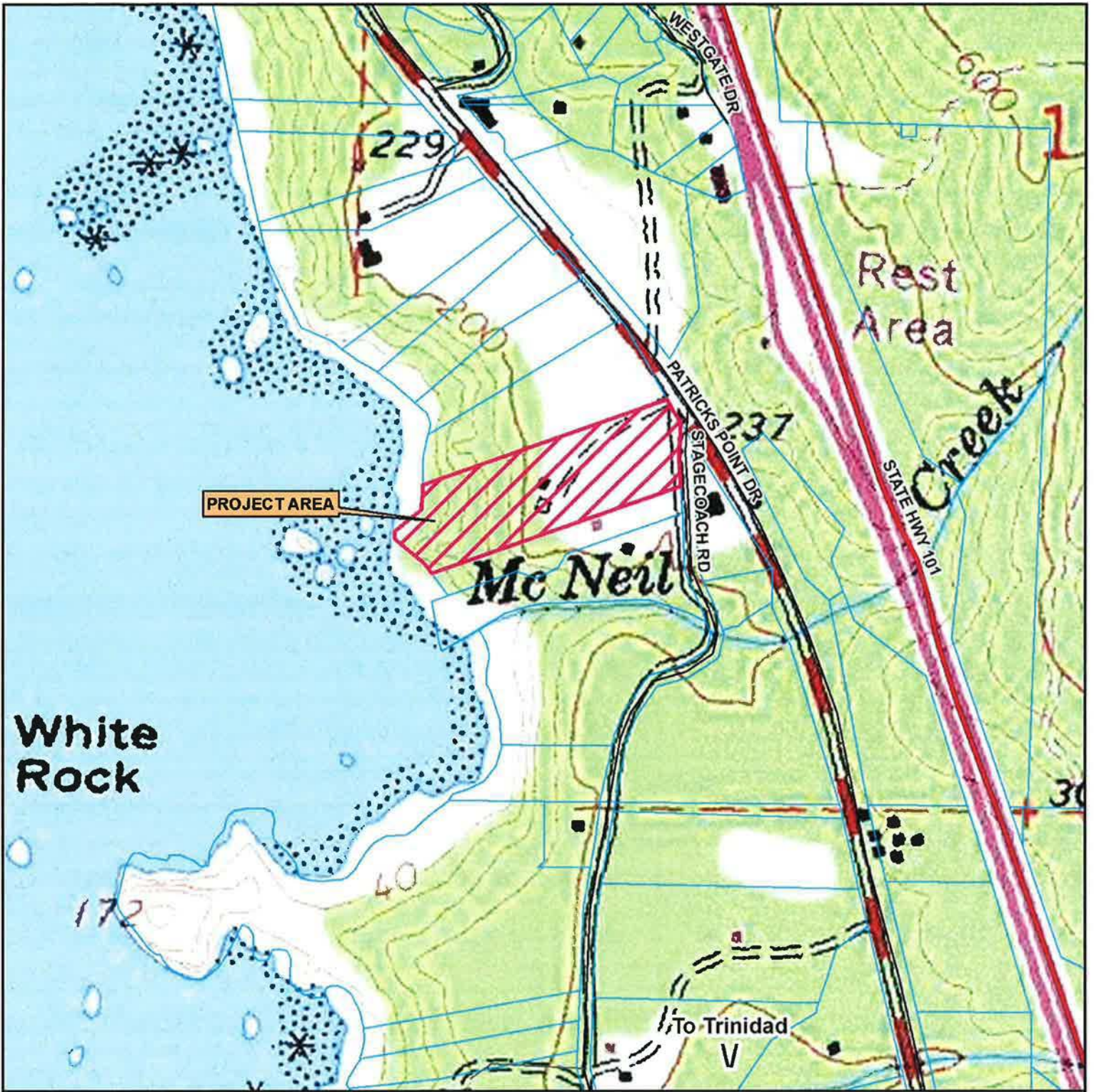
County of Humboldt

EXHIBIT NO. 1
 CDP Application No.
 1-15-0530 (Wells)
REGIONAL LOCATION MAP



**PROJECT
LOCATION**

EXHIBIT NO. 2
CDP Application No.
1-15-0530 (Wells)
VICINITY MAPS
Page 1 of 2



TOPO MAP

**PROPOSED WELLS
CONDITIONAL USE PERMIT &
SPECIAL PERMIT
TRINIDAD AREA**

CUP-14-011/SP-14-032

APN: 517-011-001

T08N R01W S11 HB&M (Trinidad)

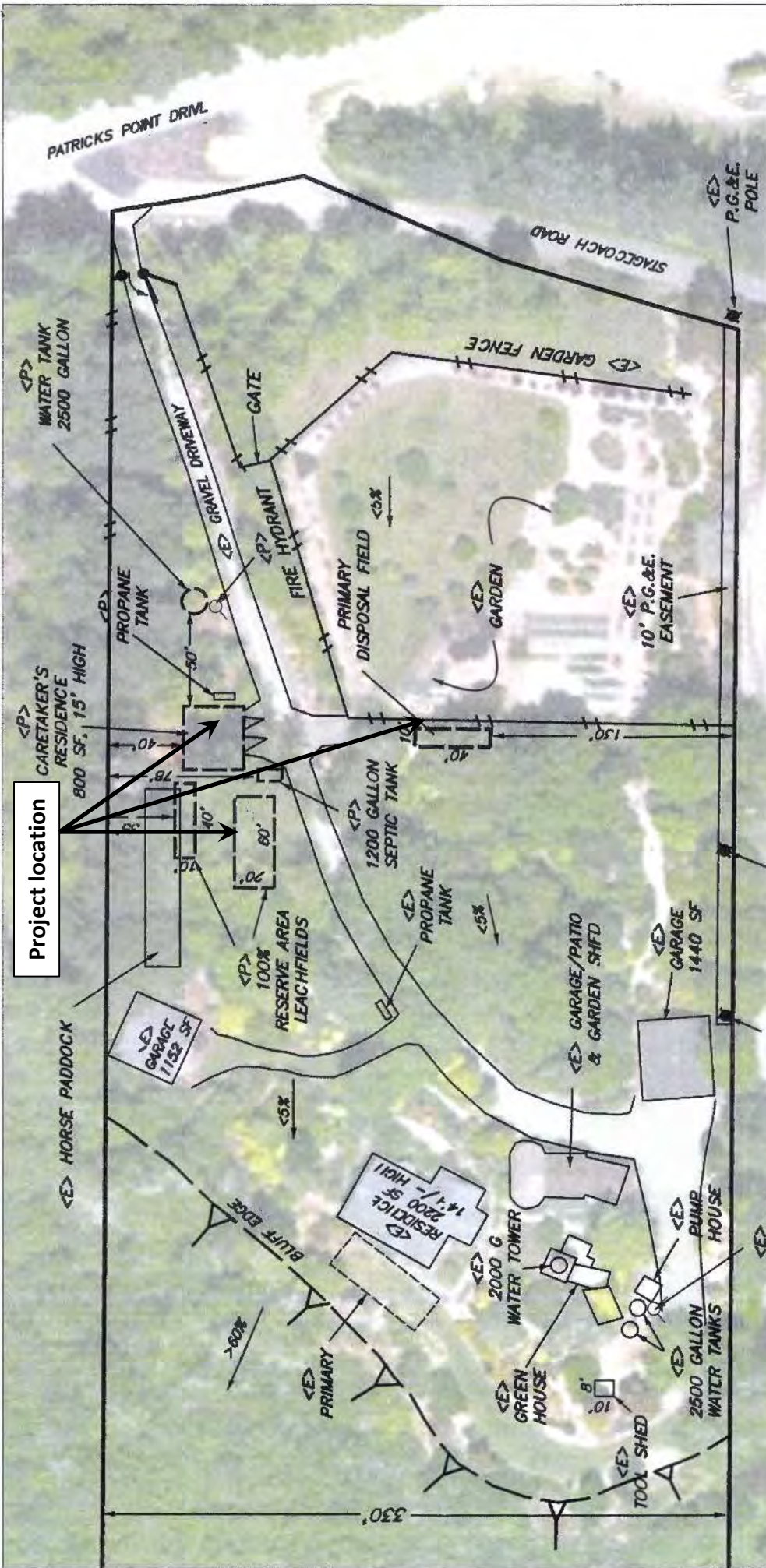
Project Area = 



This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

**EXHIBIT NO. 2
VICINITY MAPS**

Page 2 of 2



EXPLANATION

- <E> FOR EXISTING
- <P> FOR PROPOSED
- <5% PERCENT SLOPE
- DRAWING TO SCALE
- NO PROPOSED GRADING
- NO TREES TO BE REMOVED
- FIRE HYDRANT 50 FT FROM EXISTING AND PROPOSED RESIDENCE

APN 517-011-001
 Howard & Patricia Wells
 1724 Stagecoach Rd.
 Trinidad, CA 95570
 (707) 677-0485

IMAGE SOURCE: BING (2010); PARCEL BOUNDARY:
 HUMBOLDT COUNTY WEB GIS DATABASE

<p>Consulting Engineers & Geologists, Inc.</p>	<p>Patricia Wells Bluff Stability Analysis Trinidad, California</p>	<p>Site Plan SHN 014081</p>
<p>December 2015</p>	<p>Figure2_SitePlan</p>	<p>Figure 2</p>

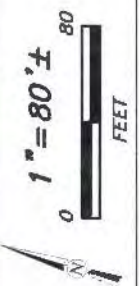
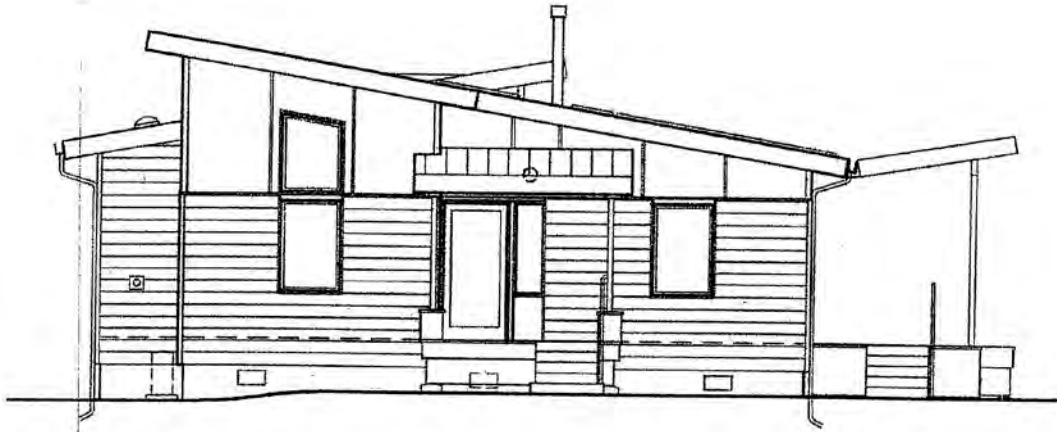
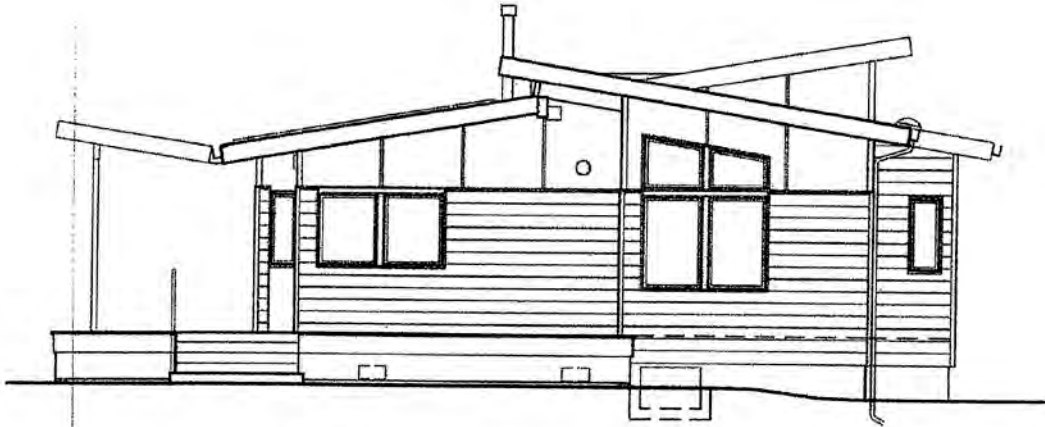


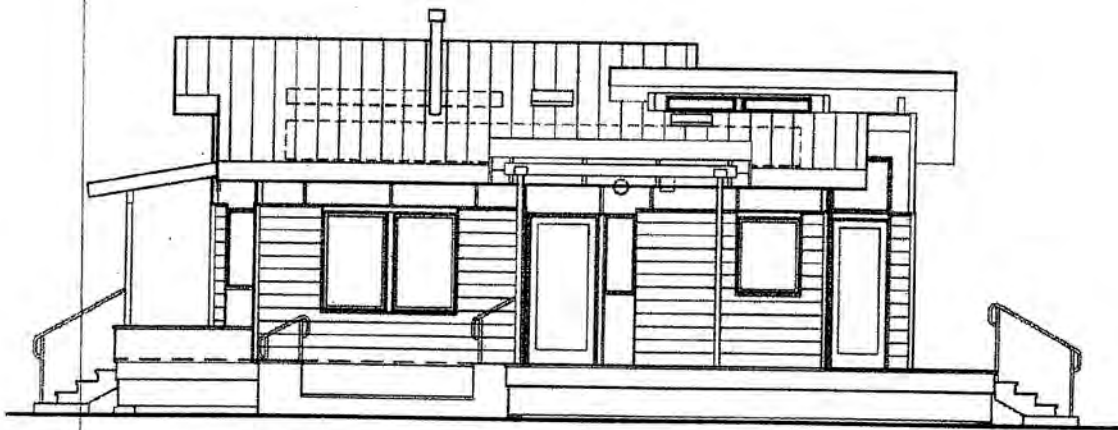
EXHIBIT NO. 3
 CDP Application No.
 1-15-0530 (Wells)
PLANS & ELEVATIONS
 Page 1 of 3



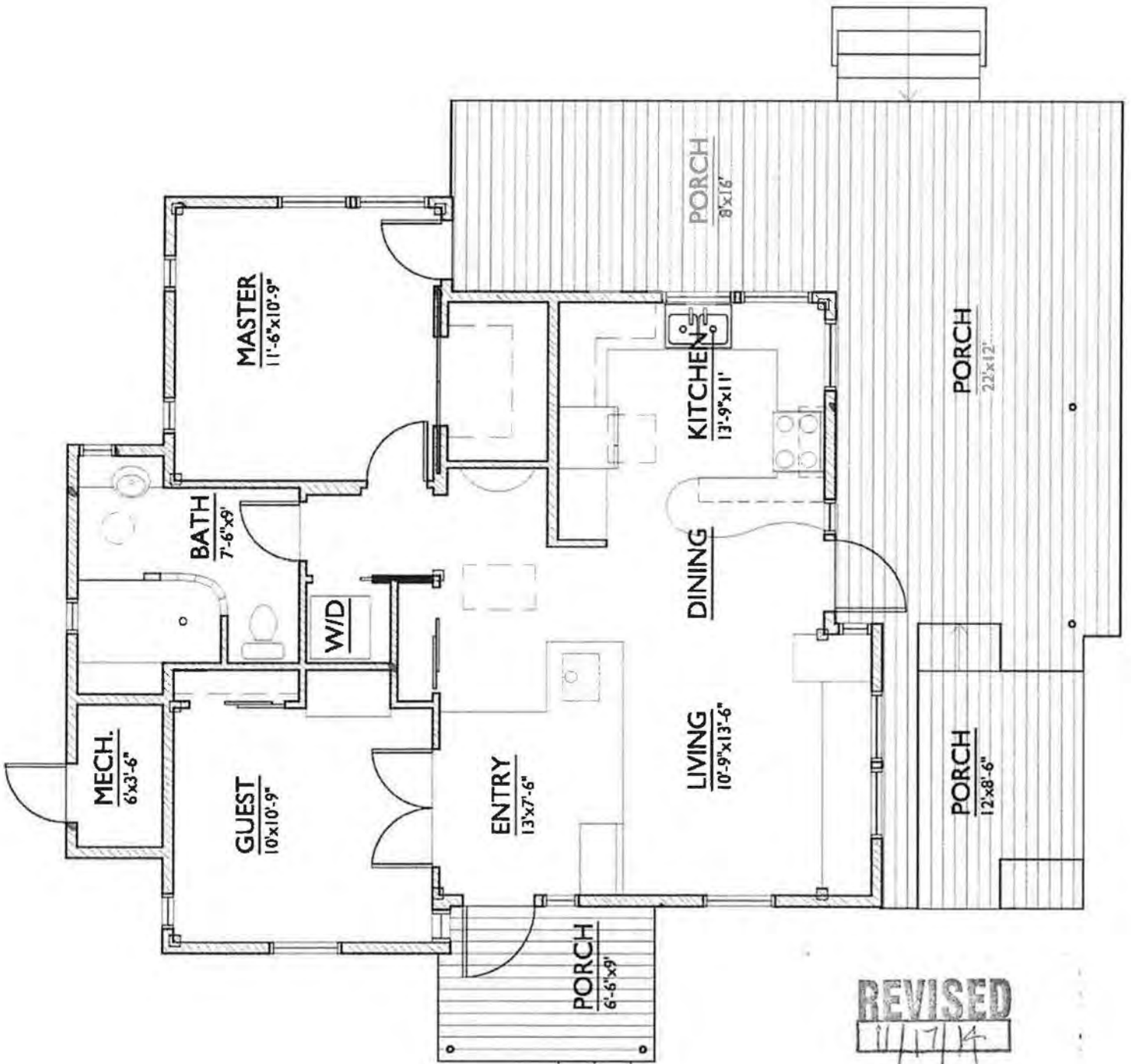
FRONT ELEVATION

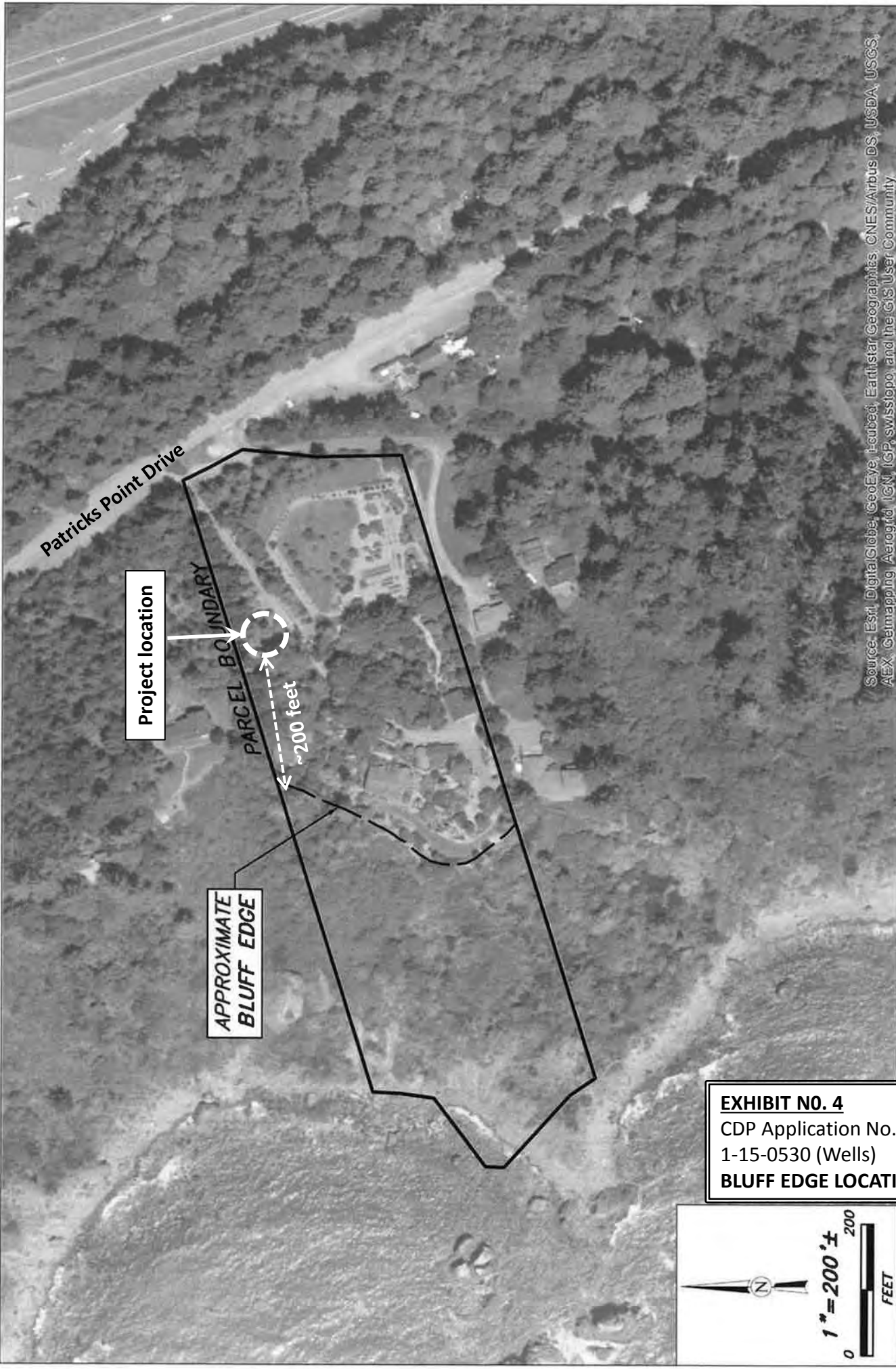


BACK ELEVATION



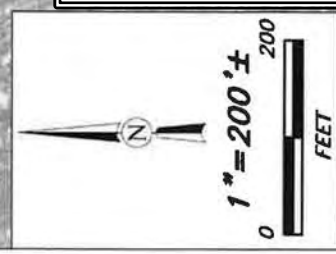
RIGHT SIDE ELEVATION






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Geomatics, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

EXHIBIT NO. 4
 CDP Application No.
 1-15-0530 (Wells)
BLUFF EDGE LOCATION MAP



	Patricia Wells Bluff Stability Analysis Trinidad, California	2014 Bluff Edge Location SHN 014081	December 2015 Figure 3 Figure 3 Figure 3
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Location of proposed caretaker residence (no major vegetation removal is needed or proposed).



View eastward of existing driveway towards public roadway from site of proposed caretaker residence.



EXHIBIT NO. 5
CDP Application No.
1-15-0530 (Wells)
SITE PHOTOS

2) Geologic Hazards:

The building footprint of the proposed caretaker's unit at the project site is located approximately 200 feet from the nearest point along the coastal bluff edge. To evaluate whether the proposed new development on the site will be located an adequate distance from the bluff edge for its 75-year economic lifespan, SHN determined a building setback in conformance with the methods outlined in *Establishing Development Setbacks From Coastal Bluffs* prepared by CCC Staff Geologist Mark Johnsson (2003). This method incorporates two independent calculations:

- 1) a determination of historical bluff retreat rates that is intended to provide an estimate of long-term retreat during the economic lifespan of the structure, and
- 2) a quantitative slope stability analysis that is intended to determine what portion of the bluff top is "stable" under its current configuration.

The results of these two analyses are then summed to derive the bluff setback for the proposed development.

Historical Bluff Retreat Rates. Time-series stereo-pair aerial photographs, LiDAR data, and Esri-provided imagery accessed through the ArcGIS platform collected between 1948 and 2014 were reviewed to determine past and current coastal bluff edge locations, defined as the line of intersection between the relatively steeply sloping bluff face and the flat or more gently sloping bluff top. The position of the bluff edge at the project site was determined for each stereo-pair photograph by using a stereoscope with magnifying lenses. The stereo-pair photographs were then scanned and orthorectified using ArcGIS in order to provide a consistent horizontal scale while minimizing the variability in scale inherent to aerial photographs due to parallax. Existing stable landmarks landward of the coastal bluff, such as, road edges, road intersections, and buildings, were used to plot each scanned photograph in GIS accurately. The position of the bluff edge for each photo year was then compared to the current position of the bluff edge plotted on the 2014 Esri imagery (Figures 3 through 8). The distance of the bluff edge relative to the landward landmarks for each orthorectified photograph was then measured on the images to determine the amount of retreat that has occurred since 1948, if any.

Based upon our review, we interpret that the coastal bluff edge visible in the 1948 photographs (the earliest period of record and taken prior to site development) is generally in the same position as it is currently. The 1958 photographs contain the current residence and, therefore, allow a direct comparison to the 2014 imagery. The 1958 photograph also reveals little to no bluff edge retreat. Due to the scale and resolution of the aerial photographs, we conservatively allow for the possibility of up to 25± feet of bluff edge retreat, which yields a long-term retreat rate of less than 0.4 feet per year since 1948.

Quantitative Slope Stability Analysis. Slope stability modeling or "quantitative slope stability analysis" is intended to test various failure geometries relative to the geologic parameters that are input to the computer based on site conditions. Use of the computer to run these models allows rapid analysis of a large number of possible failure surfaces, and determination of relative factors of safety (FOS). An FOS is a numerical value derived from a comparison of slope driving and resisting forces. Forces that "drive" landslides include the weight of earth materials, the effects of

groundwater, and external dynamic forces (such as, earthquakes). Forces that “resist” landslides include the cohesion, angle of internal friction, and shear strength of the earth materials. A factor of safety of 1.0 implies that the driving and resisting forces are equal, and that the slope is subject to imminent failure. Industry-standard suggests that a factor of safety of 1.5 is desirable for new development. The methodology described by Johnsson (2003) suggests using factors of safety of 1.5 under static (non-seismic) conditions, and 1.1 under dynamic (seismic) conditions.

Please refer to Attachment 2, Figures 1 through 3 for the following discussion. The quantitative slope stability analysis to evaluate the stability of the coastal bluff at the current project site was performed using the computer program *Slide 6.0* published by Rocscience, Inc. The surface profile used in the analysis was generated from LiDAR data publically available from the California Coastal Conservancy. The line of section used for this analysis approximately parallels the northern parcel boundary and projects through the southern edge of the building footprint of the proposed caretaker’s unit. The analysis was performed to determine the factor of safety under both static and seismic conditions. The effect of seismic loading on slope stability was examined assuming a horizontal seismic coefficient of 0.15 g applied in the direction of failure.

A three-layer model was used to represent the subsurface conditions encountered at the site. Layer 1 consists of an estimated 10- to 20-foot thick veneer of weathered rock (slope colluvium) that covers the bluff face and is associated with lower strength values than the in situ Franciscan Complex bedrock (mélange) that underlies the project area and site vicinity. Layer 2 consists of moderately consolidated and granular Quaternary age marine terrace sediments that are estimated to be on the order of 30 to 40 feet thick, based on bluff face exposures in the local area. Layer 3 consists of Cretaceous age Franciscan Complex bedrock composed of mélange. The stratigraphic contact between the marine terrace sediments and bedrock was assumed to be gently dipping seaward as is common with bedrock abrasion platforms in coastal environments.

In the model, two distributed loads of 500 pounds per square foot (psf) were added to the bluff top near the terrace edge to represent the existing residence and the proposed caretaker’s unit (Attachment 2, Figure 1). The water table surface was modeled as gently sloping toward the bluff face and daylighting near the toe of the bluff face at the contact of the slope colluvium with the underlying mélange. Circular failure surfaces were sought through a search routine to analyze the factor of safety along postulated critical failure surfaces using the Bishop Simplified and Spencer methods. Shear strength parameters and saturated unit weights were assigned from our experience with similar materials in the local area derived from previous laboratory index property tests and strength tests. Estimated bedrock strength used in the slope stability analysis was based on the lower limit of soft rock from Table 9 of NAVFAC DM 7.01. A summary of the soil and bedrock unit weights and strength parameters are provided in Table 1 and in the Attachment 2 figures.

Layer	Material Type	Estimate Thickness (feet)	Saturated Unit Weight (pcf) ¹	Cohesion, Undrained (psf) ²	Friction Angle, Undrained (degrees)
1	Slope Colluvium	10-20	115	200	25
2	Marine Terrace	30-40	125	100	33
3	Franciscan mélange	>100	160	6,500	0

1. pcf: pounds per cubic foot
 2. psf: pounds per square foot

Graphical representations of the slope stability analysis are included in Attachment 2, Figures 2 and 3. The graphical results of the circular failure searches depict all hypothetical failure surfaces with a FOS of less than 1.5 for the static condition (Figure 2), and FOS less than 1.1 for the seismic condition (Figure 3). In conclusion, the circular failure plane analyses result in failures surfaces that are limited to the slope colluvium mantling the bluff face and do not intercept the low gradient slopes landward of the bluff edge. The slope stability model predicts localized, shallow translational-rotational failures that daylight immediately downslope of the bluff edge, which is consistent with geomorphic conditions observed at the site.

Recommended Bluff Edge Development Setback. Based on the current and historical bluff edge locations, and our slope stability modeling, we have determined that a 40-foot building setback from the bluff edge is adequate for this site. The setback is based on a historical bluff retreat rate of 0.4 feet per year multiplied by a 75-year economic life span for the proposed structure and includes an additional 10-foot buffer to account for the uncertainty in the historic retreat rate and modeling analyses (as recommended in the 2003 CCC guidelines). Therefore, the proposed caretaker's unit, as currently sited, will not be subject to geologic instability during the economic lifespan of the structure.

If you have any questions, please call me at 707-441-8855.

Sincerely,

SHN Engineers & Geologists

Giovanni A. Vadurro, CEG
 Engineering Geologist

GAV:lms



- Attachments: 1. Coastal Commission Staff Review Letter
 2. Slope Stability Modeling Results

c. w/ Attach.: Patricia and Harold Wells

EXHIBIT NO. 6
GEOLOGIC REPORT (excerpt)
 Page 3 of 3



YUROK TRIBE

Heritage Preservation Office

HC 67, Box 196, Highway 96 • Hoopa, CA 95546

Phone: (530) 625-4130 • Fax: (530) 625-4841

October 27th, 2014

Howard and Patricia Wells
1724 Stagecoach Road
Trinidad Calif 95570

RE: Caretakers Residence

This letter is written in response to a letter from the Humboldt County Planning and Building Department to the Yurok Tribe Heritage Preservation Office regarding the potential for Yurok Cultural resources located on your property (parcel # 517-0110001-000)(CUP 14-011 and SP 14-032).

The above property was the subject of a pedestrian survey on October 23rd, 2014. You (Pat) were present and gave a brief history of the parcel. The parcel has undergone extensive landscaping, during which you stated that no areas of dark soil (other than topsoil) were on the property, and that you have not observed any concentrations of sea shells. The project area was then walked examining exposed soils for cultural resources. Several boot scrapes were made in areas of thick duff. No cultural resources were observed within the project area.

Due to the Project Area/Area of Potential Effects having no visible evidence of Yurok cultural resources, the Yurok Tribe Heritage Preservation Office has no objection to your project proceeding as planned. Should there be major changes (expansion) to the existing plan the Yurok Tribe would like to reserve the right to comment on those changes.

The Yurok Tribe thanks you for making the effort to protect Yurok cultural resources.

Respectfully,

Robert McConnell

EXHIBIT NO. 7

CDP Application No.

1-15-0530 (Wells)

ARCHAEOLOGY LETTER