

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
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September 7, 2016

Summer Burlison, Project Planner
County of San Mateo – Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063-1665

RE: Revised Site-Specific Tsunami Study – Relocation El Granada Fire Station 41 (PLN2016-000346)

Dear Ms. Burlison:

Thank you for forwarding the Project Referral Form PLN2016-00346 (dated August 24, 2016). We received the referral on August 26, 2016 for our review and comment. The Coastside Fire Protection (CFPD) has submitted applications for a Coastal Development (CDP), Design Review, Use Permit, and Variance & Grading Permit to construct a new 12,340-square-foot fire station on a 2.5-acre vacant parcel in El Granada, San Mateo County. CFPD is also requesting a minor subdivision of the existing parcel along the C-1/S-3/DR and EG/DR/CD zoning boundary line to create a separate parcel for the C-1/S-3/DR portion of the existing parcel. The proposed project includes 10,310 cubic yards of grading (10,150 cubic yards of cut and 160 cubic yards of fill). This proposed new fire station would replace the existing Station 41 located at 531 Obispo Road.

We appreciate that we had the opportunity, previously, to review the proposed project as part of your pre-application File Number PRE2015-00029 and provide you with our comments in letters dated July 23, 2015, January 29, 2016, and June 2, 2016 (see enclosures). Please consider and or address these prior comments in your analysis of the proposed new fire station, where appropriate.

The proposed subdivision would result in two parcels (one 0.32 acre and the second 2.27 acres). The larger parcel would be zoned as EG; and contains the site for the proposed new structure as well as riparian habitat. We suggest that the applicant be required to maintain and protect the existing habitat (including the required buffer) and open space character of this portion of the parcel in perpetuity. Project Plan Sheet L-1, Landscape Site Plan includes a list of the plant species that would be planted on the site (the list includes *Acer campestre* which is a non-native species). We recommend that all plantings be native species appropriately acclimated for site conditions.

The proposed plans do not show design elements to address tsunami hazards. The intent of the County's Local Coastal Program (LCP) (e.g., Section 6326.2) is to limit the types of development allowed in tsunami inundation hazard areas as designated per LCP Policy 9.2. The County must ensure that the proposed new fire station is sited and designed to avoid and reduce risks. We recommend, even if the County determines that LCP Section 6326.2 does not apply to the proposed project site, that the County consider the results of the CalEMA analysis in designing the structure to withstand tsunamis since flooding may result in a high demand for fire/emergency services. The applicant should plan for and demonstrate that they can re-locate equipment and personnel so that threats to this facility will not mean that all fire and emergency services are lost in the event of a tsunami, i.e., the broader fire protection system will be accessible and capable of handling the void created in this area, should this re-located station not survive a tsunami. We recommend

Summer Burlison
PLN2016-00346 (Paul Cole, Coastside County Fire)
September 7, 2016

that the County require the Applicant develop appropriate design criteria for review and approval to ensure the structure is safe from coastal high hazards, including potential sea level rise, for the life of the development.

Please feel free to contact me via e-mail at renee.ananda@coastal.ca.gov or call me at 415-904-5292 if you have questions regarding our comments.

Sincerely,



Renee Ananda, Coastal Program Analyst
Coastal Commission
North Central Coast District

Enclosures

Cc: Paul Cole, Coastside Fire Protection District
Kerry Burke

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July 23, 2015

Paul Cole
Coastside County Water District
1191 Main Street
Half Moon Bay, CA 94019

RE: Fire Station 41 (El Granada) Replacement Project

Dear Mr. Cole:

The Coastside Fire Protection District (CFPD) proposes to construct a 10,000-sq.-ft., single-story, fire station with 18 parking spaces on a vacant, 2.5-acre (108,900 square feet) parcel located at Obispo Road and Avenue Alhambra in El Granada. The proposed new fire station would replace the existing Station 41 located at 531 Obispo Road. We received a Notice of Preparation of a Draft Environmental Impact Report (EIR)/Initial Study dated June 30, 2015 in our North Central Coast District office on July 1, 2015. CFPD is the Lead Agency for preparation of an EIR as required by the California Environmental Quality Act (CEQA). Thank you for the opportunity to provide comments on the scope and content of the EIR for the proposed project.

As you may know, we already provided preliminary comments on the proposed project in response to the San Mateo County Planning Department's pre-application project referral (PRE2015-00029). As we indicated in those comments, the proposed project raises concerns with respect to consistency with the County's Local Coastal Program's (LCP) visual resources, biological resources (sensitive habitat and species), and land use policies. I have attached a copy of our June 30, 2015 comment letter for your reference, as these preliminary comments were submitted to the County prior to our receipt of the distributed NOP/IS.

Permitted Use and Future Land Use

The discussion in the Land Use and Planning section (Section X.b) of the Initial Study does not fully address the proposed project's consistency with the County's certified LCP and indicates that this issue, including mitigation measures, will not be discussed further in the DEIR. The proposed project is located in the County's Coastal Zone within the El Granada Gateway District (EG) zone; therefore new development must adhere to applicable regulations contained in Chapter 12.6 of the certified LCP zoning regulations. The proposed new fire station is not included in the list of permitted uses allowed in the EG district as provided in Section 6229.3 of the LCP. Section 6500(b) allows for the issuance of a use permit for the location of, among other things, public service uses or public buildings in any district when found to be necessary for the public health, safety, convenience, or welfare. Under this section, thus, the relocation of and construction of a larger, newer fire house may be an allowable use. However, Section 6500(f) also requires that approved uses shall be consistent with all the policies and standards of

Paul Cole
NOP/IS
Fire Station 41 (El Granada) Replacement Project
July 23, 2015

the LCP, and the proposed relocation and new fire station is not consistent with the allowed uses provided in the LCP.

The NOP/IS indicates that CFPD is considering splitting the parcel location for the new fire station into two separate parcels. Thus the project would include both a subdivision and a request for a new larger relocated fire station. The undeveloped, westernmost portion of the parcel (designated under the General Plan as Neighborhood Business District/Design Review/Coastal Development) would be created as a separate parcel. This potential land division is development, as defined in LCP Policy 1.2 (definition of development) and will require a coastal development permit. The land division is currently being considered by the CFPD; therefore we suggest that this potential project, at a minimum, be analyzed in the DEIR's discussion of cumulative impacts.

Hazards

Section IX.j of the IS indicates that no further discussion or analysis will be included in the EIR to assess the potential impacts of seiche, tsunami, or mudflow. The Hazards Component of the County's LCP defines hazardous areas to include land that is subject to dangers from tsunamis and flooding, among other things. The project site is located within a Tsunami Inundation Hazard Area as shown on the Natural Hazards Map in the Natural Hazards Chapter of the San Mateo County General Plan and the California Geological Survey (CGS) tsunami inundation maps. The IS does not sufficiently analyze the proposed project for its conformity with the LCP tsunami hazard policies. The intent of Section 6326.2, so that risks to human life and properties are minimized, is to prohibit certain types of development within tsunami hazard areas and require allowable development to meet certain criteria. The LCP also requires that development within coastal high hazard areas subject to high velocity waters from tsunamis meet the requirements of Section 6825.3 which include that the structure be in compliance with applicable construction standards and building regulations. CFPD must demonstrate that the proposed project is consistent with the building standards outlined in Section 6825.3.

Re-alignment of Highway 1 is a permitted use under Section 6229.3 in the EG district. Based upon recent CDP action, Caltrans is currently required to consider future re-alignment of Highway 1 in close proximity to the proposed project area as an option to address sea level rise and ongoing erosion problems along the coast, particularly at Surfer's Beach located westerly of the proposed project site. For that reason, looking ahead it would be prudent to locate a new firehouse facility where it can remain in place for the long-term. A facility proposed at the current project site may potentially conflict with Caltrans' future plans to re-locate Highway 1 further inland. We respectfully suggest that Coastside Fire Protection District consider alternative locations for the new fire station that will not conflict with a future need to re-align Highway 1 due to sea-level rise and or erosion of the coast in proximity to the project area. The DEIR must analyze the potential cumulative effect of placing a new station at the proposed location.

The new fire station is publicly-owned and would be occupied by humans. As we understand fire station operations, firefighters would basically live at the station while on duty. Fire stations typically have sleeping quarters, living room, dining areas and kitchens, etc. and are designed for human occupancy. LCP Section 6326.2(a) requires that publicly-owned buildings intended for

human occupancy, other than park and recreational facilities, shall not be permitted within all areas defined as Tsunami Inundation Hazard Areas. The proposed replacement fire station would be staffed by a three-person company; with each staff person working 2.5 shifts per week; thus the fire station would be occupied by humans every day of the week. The proposed project is therefore not consistent with the permitted-use requirement provided in Section 6326.2(a). Additionally, the IS includes the statement that "because the CFPD staff would likely be involved in evacuation of the public, this impact is less than significant." We believe the contrary, that as a public, emergency services provider it is more advantageous and practical to locate a replacement station outside of (away from) the tsunami inundation area. The alternatives analysis in the EIR must factor in each site's vulnerability to potential impacts from tsunami inundation.

Development Criteria and Standards

Section 6229.4 provides development criteria and standards for the EG zoning district. All new development must meet the criteria and standards therein that include a 3.5-acre minimal parcel size, 16-foot maximum building height, and a maximum of 10% coverage of the parcel. The proposed fire station would be: 1) constructed on a 2.5-acre parcel, 2) 30 feet in height, and 3) 10,000 square feet which would exceed the required 10% maximum parcel coverage, inconsistent with the LCP requirements.

Public Access/Recreation and Transportation

As noted in the IS, there is a coastal access trail located along the south side of Highway 1 extending southward to the City of Half Moon Bay. Surfer's Beach, a public, coastal destination is also located to the west of the proposed project. The IS indicates that the EIR analysis will include an assessment of potential impacts from the proposed project on pedestrians and bicyclists. We recommend that the analysis must consider impacts both during and after construction; and any mitigation measures that may be required to avoid or reduce impacts.

The IS indicates the proposed project would generate fewer than 20 peak hour trips; therefore it would not result in substantial increases in congestion and delays in the roadway system. The discussion states that there would be less potential conflicts with the existing neighborhood commercial traffic on Avenue Portola, however does not address the proposed project's potential impact on access to the coastline. LCP Policy 2.51 requires that road capacity for visitors to the coast be protected and that the efficiency and effectiveness of existing roadways be maximized during recreation peak periods. The EIR must analyze/discuss the proposed project's potential traffic impacts on coastal access, individually and cumulatively. Specifically describe and analyze the proposed project's contribution to traffic congestion on Highway 1 during recreation peak periods; along with mitigation measures to avoid or minimize such impacts.

Biological

There is a drainage area with riparian habitat located in the central portion of the undeveloped parcel. This drainage and habitat are located to the west of the area where the fire station is proposed for construction and is referred to as "drainage 2" in the August 7, 2014 *Riparian Setback Analysis* prepared by TRA Environmental Sciences. The result of the TRA analysis is that this meets the definition of a perennial stream and therefore a 50-foot buffer is required by LCP Policy 7.7. However in The *Preliminary Environmentally Sensitive Habitat Areas*

Paul Cole
NOP/IS
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Assessment at the Proposed Coastside Fire District Project in El Granada, San Mateo County, California prepared by WRA, identifies the same drainage as being intermittent and therefore recommends a 30-foot setback. The analysis in the EIR must clarify whether the stream is perennial or intermittent in order to determine the appropriate buffer required by the LCP. The EIR analysis must include a detailed biological evaluation of the resources on the parcel that includes a delineation of wetlands. Please refer to the attached letter for additional comments with respect to sensitive habitats and biological resources.

Visual

The proposed project site is an undeveloped 108,900 square-foot (2.5-acre parcel) located to the east of State Highway 1 within the Cabrillo Highway/Highway 1 County Scenic Corridor. The proposed project includes grading of the site comprising excavation of 4,300 cubic yards of material and placement of 2,300 cubic yards of fill. The EIR must analyze the proposed fire station's consistency with LCP visual resource policies that include 8.5 (Location of Development), 8.6 (Streams, Wetlands, and Estuaries), 8.9 (Trees), 8.13 (Special Design Guidelines for Coastal Communities), and 8.32 (Regulation of Scenic Corridors in Urban Areas) for the protection of visual resources. LCP Policy 8.6, in particular, prohibits structural development which will adversely affect the visual quality of perennial streams and associated riparian habitat, except for those permitted by Sensitive Habitats Component Policies. The EIR must analyze the proposed project's potential to result in visual impacts on the riparian area/perennial stream located within and in proximity to the parcel. Please see the attached letter that includes comments on the proposed project's potential to result in impacts on visual and scenic resources.

In summary, the proposed location presents inconsistencies with the requirements of the certified LCP. The proposed project also raises concerns as it may potentially conflict with the need in the future to re-locate Highway 1 further inland in order to protect coastal access in this area. We encourage the Coastside Fire Protection District to adaptively plan for the relocation and consider a site that has no potential to conflict with the above referenced policies of the LCP.

Please feel free to contact me via e-mail at rananda@coastal.ca.gov or call me at 415-904-5292 if you have questions regarding our comments.

Sincerely,



Renée Ananda, Coastal Program Analyst
California Coastal Commission
North Central Coast District

CC: Summer Burlison, San Mateo County Planning and Building Department

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January 29, 2016

Summer Burlison, Project Planner
County of San Mateo – Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063-1665

RE: Site Specific Tsunami Study – Relocation El Granada Fire Station 41 (PRE2015-00029)

Dear Ms. Burlison:

Thank you for forwarding the November 24, 2015 letter report *Site Specific Tsunami Study, Relocation of El Granada Fire Station 41*, prepared by Moffatt & Nichol, for our review. The stated purpose of the site study, as indicated in the Scope of Work (dated September 3, 2015), was to assess the implication of California Emergency Management Agency's (CalEMA) 2009 Tsunami Inundation Map on the proposed re-location of the fire station. The intent was to prepare a site-specific tsunami inundation assessment in order to address the use of the site with respect to local land use policies. Please see our comments below.

Commission staff notes that the definition of tsunami on page 13 is misstated. An individual wave has a period that is on the order of minutes, while the series of waves occurs over hours. The characterization of tsunamis as events that are "minutes" long seems to be carried into the final section for the probability of a wave occurring at or above mean high water, rather than some part of the tsunami occurring when the water level is at, or above, mean high water.

On page 20 of the report, the CalEMA mapped area is identified as showing "an estimated minimum return period of about 1,000 years." This is not correct; the CalEMA mapped area covers all return-period tsunamis, up to about a 1,000-year return-period. The 1,000-year return period primarily applies to the inland-most extent of the inundation zone – not the entire zone. The use of minimum return period suggests that the area will not be inundated for at least 1,000 years. We suggest that this be corrected. This will ensure that this incorrect information is not referenced or cited for other uses in the future.

The Science Application for Risk Reduction (SAFRR) study was done, for a single, plausible large tsunami event. The SAFRR project was undertaken as an opportunity to combine many of the aspects of tsunami preparedness into one effort and it has helped move forward our understanding of tsunamis. The event identification was really only the initial step in providing the groundwork for a detailed examination of the likely damages, responses and consequences from the agreed-upon plausible event. The SAFRR scenario found that about 92,000 people throughout the state now live in the identified inundation zone for the plausible event. This is significantly fewer people than live within the CalEMA identified evacuation zones (267,000 live within the evacuation zones mapped by CalEMA); however, the SAFRR project shows that tsunamis remain a serious concern for the state.

Summer Burlison
PRE2015-00029 (Paul Cole, Coastside Fire)
January 29, 2015


The Moffatt & Nichol site specific study report, based on the SAFRR study/mapping scenario, demonstrates that the site proposed for re-location of the fire station is outside of the tsunami inundation area. The inundation extent of the SAFRR scenario reaches elevations of around 15 to 22 ft. (NAVD88); while the new station would be at 32 feet elevation. Contrary to the SAFRR mapping scenario, Moffatt & Nichol note that the CalEMA map indicates that the proposed development would be entirely **within** the tsunami hazard area. CalEMA shows that the inundation extent reaches elevations of approximately 37 to 42 feet (NAVD88) in the relocation area.

While Commission staff recognizes the importance of re-locating the existing fire station, it is still necessary to demonstrate that the proposed project is consistent with Local Coastal Program (LCP) policies with respect to tsunami hazards. In past application of these policies, the Commission has required residential projects that clearly fall within the tsunami inundation area delineated on the County's Natural Hazards Map and the CalEMA map be designed consistent with LCP Section 6326.2 (b) which includes that the residential portion of the project be located 1-2 feet above the highest projected level of inundation. Commission staff recognizes that while the entirety of the site is located in the CalEMA tsunami inundation area, there is a question to whether this project site is entirely within the tsunami inundation area delineated on the Natural Hazards Maps. As such, staff finds that it is reasonable for the County to conduct a more site-specific evaluation to determine the tsunami hazards on the site; and that the results of the Moffatt & Nichol study can be useful in consideration of the fire station re-location.

If the County concludes as part of its evaluation that the parcel is located outside the tsunami hazard inundation area based on the results from the site specific study, and therefore, the requirements of LCP Section 6326.2 do not apply, Commission staff recommends that the County still consider the implications of the CalEMA study for siting and design of the fire station. Specifically, the applicant should examine project alternatives that include locating the residential portion of the structure above the maximum probable inundation per the CalEMA maps and designing the proposed structure consistent with the design standards for coastal high hazard areas outlined in LCP Section 6825.3. Access into and out of the fire station is particularly important, especially since fires might be a secondary hazard if a tsunami were to occur, therefore the applicant should also examine whether the fire station and the fire-safety equipment are likely to be isolated during a tsunami, or whether the station could be evacuated through egress to higher ground.

Please feel free to contact me via e-mail at rananda@coastal.ca.gov or call me at 415-904-5292 if you have questions regarding our comments.

Sincerely,



Renée Ananda, Coastal Program Analyst
Coastal Commission - North Central Coast District

Cc: Paul Cole, Coastside Fire Protection District
Kerry Burke

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June 2, 2016

Summer Burlison, Project Planner
County of San Mateo – Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063-1665

RE: Revised Site-Specific Tsunami Study – Relocation El-Granada Fire Station 41 (PRE2015-00029)

Dear Ms. Burlison:

Thank you for forwarding Moffat & Nichol's revised, site-specific, tsunami study, dated March 10, 2016, for our review and comment. This letter serves to respond to Moffat & Nichol's question regarding the intent of Section 6326.2 of the County's Local Coastal Program (LCP). Specifically, they ask if the intent of the language is to show events with return periods as large as the CalEMA maps. The intent of this regulation is to limit the types of development allowed in tsunami inundation hazard areas as designated per LCP Policy 9.2; and when development is allowed, ensure it is sited and designed to avoid and reduce risks. For residential structures and resort developments located within the LCP-designated tsunami inundation hazard areas, the CalEMA maps align with/fit within the criteria of Section 6326.2 (b) that requires applicants/project proponents examine probable maximum and projected maximum wave heights.

As indicated in our letter dated January 29, 2016, there was a question as to whether the proposed project site is located within the LCP-designated tsunami inundation area delineated on the County's Natural Hazards Map. The County should consider the various results of the site-specific study in relation to the methodology used to designate tsunami hazard inundation areas on the County's Natural Hazards Map to determine if it is appropriate to apply LCP Section 6326.2 to the proposed project. We still continue to recommend, even if LCP Section 6326.2 does not apply, that the County consider the results of the CalEMA analysis in designing the structure to withstand tsunamis since flooding may result in a high demand for fire/emergency services. The applicant should plan for and demonstrate that they can re-locate equipment and personnel so that threats to this facility will not mean that all fire and emergency services are lost in the event of a tsunami, i.e., the broader fire protection system will be accessible and capable of handling the void created in this area, should this re-located station not survive a tsunami.

Finding #9 concurs with Commission staff's previous recommendation that a detailed study be conducted in order to develop appropriate design criteria to ensure the structure is safe from coastal high hazards, including potential sea level rise, for the life of the development. Please forward the results of such a study. You may contact me via e-mail at rananda@coastal.ca.gov or call me at 415-904-5292 if you have additional questions.

Sincerely,

A handwritten signature in cursive script that reads "Renée Ananda".

Renée Ananda, Coastal Program Analyst
Coastal Commission - North Central Coast District

Cc: Paul Cole, Coastside Fire Protection District
Kerry Burke

