

CHAPTER 5

ALTERNATIVES ANALYSIS

5.1 INTRODUCTION

CEQA Guidelines §15126.6(a) requires an EIR to “describe a reasonable range of alternatives to a project, or to the location of a project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project”. The CEQA Guidelines provide direction for the discussion of alternatives to the proposed project. This section also requires:

- A setting forth of alternatives that “...shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project”. [§15126.6(f)]
- Discussion of the "No Project" alternative, and “...If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives”. [§15126.6(e)(2)]
- Discussion and analysis of alternative locations “...that would avoid or substantially lessen any of the significant effects of the project”; only these need to be considered for inclusion in the EIR. [§15126.6(f)(2)(A)]

Given the CEQA mandates listed above, this section (1) describes the range of reasonable alternatives to the project; (2) examines and evaluates resource issue areas where significant adverse environmental effects have been identified and compares the impacts of the alternatives to those of the proposed project; and, (3) identifies the Environmentally Superior Alternative.

5.2 PROJECT ALTERNATIVES

In defining feasibility of alternatives, the CEQA Guidelines state:

“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site”.

Through the scoping process, if an alternative was found to be infeasible, as defined above, then it was dropped from further consideration. In addition, CEQA states that alternatives should “...attain most of the basic objectives of the project...”

5.2.1 Significant Impacts Resulting from the Proposed Project

Generally, the alternatives analysis considers alternatives that would avoid or reduce, to the maximum extent feasible, the identified unavoidable impacts. However it was determined that the proposed project would not result in any unavoidable impacts. Therefore the considered alternatives focused on avoiding or reducing the significant impacts which require the most intensive mitigation measures. They include:

1. **Biological Resources.** Impacts to sensitive wildlife and potential for pollutant discharge into the beach area and Pacific Ocean during construction.
2. **Geology and Soils.** Exposure to geologic hazards including liquefaction, expansive soils, and beach scour, and the creation of potential hazards including short-term slope instability and erosion during storm events.

No significant aesthetic resource impacts were identified; however, the Cayucos Land Use Committee and the adjacent neighbors identified concerns with the modern design of the structure, including the cantilevered main floor, flat roofs, basement, and side wall visible from Studio Drive. Therefore, some design options are considered in the feasible range of alternatives identified below.

5.3 ALTERNATIVES ANALYSIS

Potential alternatives to the proposed project are limited due to the small project area, project land use category, and project objectives to construct a single-family residence. Criteria used to develop potential alternatives included the potential of the project to avoid impacts to sensitive resources and the human environment, whether or not it could generally meet the project objectives, and costs. Specific consideration was given to potential alternatives that appeared to avoid or minimize impacts to natural resources and the human environment.

Identified alternatives include the No Project (No Action) Alternative, Design Alternative A – Reduced Project, Pilings, Design Alternative B – Reduced Project, Traditional Design, and Design Alternative C – Vegetation and Articulation.

5.4 ALTERNATIVES IMPACTS ANALYSIS

5.4.1 No Project Alternative

The No Project Alternative would include none of the components of the proposed project. If a project is not built at this time, a residential project may be proposed in the future.

Aesthetics

Under the No Project Alternative, no physical improvements would occur. This alternative would not result in adverse impacts.

Air Quality and Climate Change

The No Project Alternative would not include any construction activities or long-term trip generation and, therefore, would not result in any adverse effects to air quality. This alternative would not result in greenhouse gas emissions or require the use of energy as nothing would be constructed.

Biological Resources

Biological resources would not be impacted by the No Project Alternative. The site would continue to support iceplant, and public trespass would likely continue to occur as visitors traverse downslope from Studio Drive. The site would continue to provide marginal habitat for coastal birds and wildlife.

Cultural Resources

No evidence of cultural resources was documented on the project site. Because this alternative would not include any ground disturbance, the No Project alternative would not result in any unanticipated impacts to cultural resources.

Geology and Soils

This alternative would not result in the construction of a residence or any other structure on the project site. The development of any other structure in this location would be affected by existing geologic and coastal conditions related to the underlying soil and Pacific Ocean, and would require engineered mitigation, similar to the proposed project. The existing overdrain would continue to discharge stormwater from Studio Drive onto the beach.

Hazards and Hazardous Materials

This alternative would not require the use of hazardous materials, and no structure would be exposed to any potentially hazardous conditions including fire. No significant impacts would result.

Water and Hydrology

The No Project Alternative would not include the increased impervious surface associated with the proposed project; however, it would also not include improvements to the existing County of San Luis Obispo stormwater system, including installation of a pollutant filter and energy dissipation features.

Land Use

The No Project Alternative would not change land use designations or types and, therefore, would not conflict with any applicable policies. No impact to land use would result.

Transportation and Circulation

The No Project Alternative would not result in short- or long-term trip generation, and would not result in any significant impacts.

5.4.2 Design Alternative A – Reduced Project, Pilings

The project site is located on the beachside of Studio Drive, and would be exposed to coastal hazards including sea level rise, wave-up, and storm surge. Independently, these conditions would not adversely affect the proposed structure; under extreme conditions, ocean water may reach the 22.2-foot elevation, and may overtop the existing rock outcrop and splash against the basement wall.

An alternative to this would be to eliminate the basement and construct the residence on steel-reinforced concrete pilings. This would allow ocean water to flow under the structure entirely before receding back. Under this alternative, the main floor and mezzanine, including the cantilevered portion, would remain.

This alternative consists of an approximately 1,857-square-foot residence including:

- 1,097 square feet of main floor living space
- 338-square-foot mezzanine

- 242-square-foot garage and 200-square-foot carport
- 180-square-foot covered deck
- ~~Solar panels installed on the south-facing slopes of the roof~~

The residence would consist of one main floor supported on pilings. The maximum width of the structure would be 18 feet, and the maximum length would be 95 feet. A paved driveway would provide access from Studio Drive. The maximum height of the residence would be 15 feet above the centerline elevation of Studio Drive. It is expected that retaining walls would be necessary adjacent to Studio Drive, and along a portion of the southern and northern sides of the residence, with continuous footings extending into the underlying bedrock materials.

Aesthetics

From a visual resources perspective, this alternative may appear to be less massive than the proposed project because the basement would be eliminated and the pilings would provide differentiation in the style as seen from Studio Drive and the beach area. The pilings would be similar in design to the structure to the south.

Air Quality and Climate Change

This alternative would require less construction; however, it would still include the majority of the earthwork described previously for the proposed project. Impacts and mitigation measures would be similar to the proposed project.

Biological Resources

This alternative would result in similar impacts to biological resources, primarily due to the location of the project. Mitigation identified for the proposed project would apply to this alternative.

Cultural Resources

No significant impacts to cultural resources would occur if this alternative is implemented, similar to the proposed project.

Geology and Soils

This alternative addresses potential coastal hazards, including sea level rise, wave runup, and coastal flooding. Under extreme conditions, waves would overtop the rock outcrop and travel under the residence and between the pilings, approaching the 22-foot elevation below Studio Drive. Site-specific engineering would be required for this alternative, similar to the proposed project, including slope stabilization, use of steel-reinforced concrete, removal and replacement of suitable fill, and stormwater drainage improvements. Implementation of this alternative would result in significant but mitigable impacts, similar to the proposed project.

Hazards and Hazardous Materials

This alternative is located within the same project area and, therefore, potential impacts would be less than significant, similar to the proposed project.

Water and Hydrology

Implementation of this alternative would result in similar water and hydrology impacts as the proposed project, and would require best management practices and short- and long-term management of stormwater runoff to protect surface waters.

Land Use

This alternative would be consistent with land use plans and policies and would not result in any significant land use impacts, similar to the proposed project. As noted under Aesthetics, the overall size of the structure would be less than the project due to elimination of the basement, which would reduce the massing, and would provide additional visual articulation consistent with planning area standards.

Transportation and Circulation

This alternative would result in the same number of traffic trips and would not result in any significant impacts, similar to the proposed project.

5.4.3 Design Alternative B – Reduced Project, Traditional Design

This design alternative incorporates a more traditional design, as opposed to the modern structure proposed by the applicant. It does not include the extended cantilevered main floor, or a substantial reduction in the extension, and could provides sloped roofs. This alternative is considered a reduced design option, and consists of an approximately 2,572-square-foot residence including:

- 772 square feet of main floor living space
- 1,040-square-foot basement
- 338-square-foot mezzanine
- 242-square-foot garage and 200-square-foot carport
- 180-square-foot covered deck
- ~~Solar panels installed on the south-facing slopes of the roof~~

The residence would consist of one main floor and a basement. The footprint of the house would be 1,040 square feet. The maximum width of the structure would be 18 feet, and the maximum length would be 70 feet. A paved driveway would provide access from Studio Drive. The maximum height of the residence would be 15 feet above the centerline elevation of Studio Drive. The basement would be located below the elevation of Studio Drive.

The exterior walls of the structure would be concrete and would retain soils along the southern, eastern, and northern sides of the residence. Retaining walls will also be constructed adjacent to Studio Drive with continuous footings extending into the underlying bedrock materials.

Aesthetics

Allowing for a less modern design may appear more consistent with the older homes along Studio Drive. Similar to the proposed project, this design style would be consistent with required standards and would not result in any significant impacts.

Air Quality and Climate Change

This alternative would result in similar impacts as the proposed project, and identified mitigation measures would be required.

Biological Resources

This alternative would result in similar impacts to biological resources, primarily due to the location of the project. Mitigation identified for the proposed project would apply to this alternative.

Cultural Resources

No significant impacts to cultural resources would occur if this alternative is implemented, similar to the proposed project.

Geology and Soils

This alternative would be affected by similar geologic and coastal hazards identified for the proposed project. Site-specific engineering would be required to address identified hazards and conditions over the next 100 years. It is anticipated that the mitigation would be similar, but tailored specific to the structure design and foundation.

Hazards and Hazardous Materials

This alternative is located within the same project area and, therefore, potential impacts would be less than significant, similar to the proposed project.

Water and Hydrology

Implementation of this alternative would result in similar water and hydrology impacts as the proposed project, and would require best management practices and short- and long-term management of stormwater runoff to protect surface waters.

Land Use

This alternative would be consistent with land use plans and policies and would not result in any significant land use impacts, similar to the proposed project. As noted under Aesthetics, the project would be more similar to the older residences along Studio Drive (as opposed to the newer developments) and would provide additional visual articulation consistent with planning area standards.

Transportation and Circulation

This alternative would result in the same number of traffic trips and would not result in any significant impacts, similar to the proposed project.

5.4.4 Design Alternative C – Vegetation and Articulation

As noted above, no significant aesthetic resource impacts were identified; however, a reasonable alternative to the project includes additional features to articulate the design and blend it into the beach landscape. This includes incorporation of native, low-growing shrubs and vegetation along the northern and western aspects, and the use of native (or simulated native) rocks along the driveway retaining wall. This alternative would consist of the same size, footprint, width, and height, as the proposed project.

Aesthetics

Incorporating low-growing, native vegetation along the northern and western aspects of the structure would provide some screening of the lower walls, consistent with design standards identified for the Studio Drive neighborhood. Use of materials, including natural rock, within the retaining walls would also provide some additional visual articulation, consistent with the coastal environment. Similar to the proposed project, this design style would be consistent with required standards and would not result in any significant impacts.

Air Quality and Climate Change

This alternative would result in similar impacts as the proposed project, and identified mitigation measures would be required.

Biological Resources

This alternative would result in similar impacts to biological resources, primarily due to the location of the project. Mitigation identified for the proposed project would apply to this alternative.

Cultural Resources

No significant impacts to cultural resources would occur if this alternative is implemented, similar to the proposed project.

Geology and Soils

This alternative would be affected by similar geologic and coastal hazards identified for the proposed project. Site-specific engineering would be required to address identified hazards and conditions over the next 100 years. Incorporation of vegetation and natural rock along the perimeter of the structure would be consistent with Low Impact Development (LID) strategies by slowing down stormwater runoff and diffusing wave runup during extreme conditions. The use of vegetation may also limit beach scour during these extreme events.

Hazards and Hazardous Materials

This alternative is located within the same project area and, therefore, potential impacts would be less than significant, similar to the proposed project.

Water and Hydrology

Aside from additional water demand for the establishment of native vegetation, implementation of this alternative would result in similar water and hydrology impacts as the proposed project, and would require best management practices and short- and long-term management of stormwater runoff to protect surface waters.

Land Use

This alternative would be consistent with land use plans and policies and would not result in any significant land use impacts, similar to the proposed project. As noted under Aesthetics, the project design would incorporate additional visual articulation consistent with planning area standards.

Transportation and Circulation

This alternative would result in the same number of traffic trips and would not result in any significant impacts, similar to the proposed project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the alternatives section of an EIR to describe a reasonable range of alternatives to the project that avoid or substantially lessen any of the significant effects identified in the EIR analysis while still attaining most of the basic project objectives. The alternative that most effectively reduces impacts while meeting project objectives should be considered the “environmentally superior alternative.” In the event that the No Project Alternative is considered the environmentally superior alternative, the EIR should identify an environmentally superior alternative among the other alternatives.

In this EIR, the No Project Alternative results in the fewest environmental impacts, although it does not meet any of the project objectives, including the primary objective to build a single-family residence.

As proposed, and with incorporation of recommended mitigation measures, the proposed project would not result in any significant, unavoidable environmental effects, and would meet project objectives. All proposed alternatives would meet the project objectives, and would not result in any significant, adverse, and unavoidable (Class I) impacts upon implementation of mitigation measures similar to those identified for the proposed project.

The proposed Reduced Project and Design Alternatives (A, B, and C) provide some variation in size and project design in response to public comment, and include alternatives to the proposed basement, cantilevered living space, and exterior design elements. Design Alternative A – Reduced Project, Pilings, would marginally reduce the intensity of identified geology and soils impacts, primarily related to coastal hazards, and would still require substantial engineered design and incorporation of design-specific mitigation measures. Design Alternative B – Reduced Project, Traditional Design does not include the cantilevered portion of the residence, which may be more consistent with Small Scale Neighborhood Standards. Alternatives A, B, and C (Vegetation and Articulation) may reduce the perceived mass of the structure as seen from Studio Drive and the beach area, and may be more consistent with County Plans and Policies related to visual resources.

Based strictly on an analysis of the relative environmental impacts, the proposed project, with adoption and incorporation of recommended mitigation measures, is considered the Environmentally Superior Alternative. The decision-making body will consider the whole of the record when considering the approved project including, but not limited to, public comment and testimony related to the size and design of the residence. The decision-making body may select the project as proposed, an Alternative, or a specified combination of particular elements identified in the Alternatives, as the approved project. In all scenarios, the Mitigation and Monitoring Program (MMRP) would be applied to the approved project.