

CHAPTER 10

EMERGENCY SERVICES

10.1 AFFECTED ENVIRONMENT

10.1.1 Introduction/Region of Influence

Emergency services discussed in this section include fire protection services and emergency medical services. The ROI for this resource includes East Cliff Drive and the beaches from 32nd Avenue to 41st Avenue, as well as properties adjacent to the drive.

10.1.2 Regulatory Considerations

Section 902.2.2.1 of the 1998 California Fire Code requires fire apparatus access roads to have a minimum unobstructed width of 20 feet.

10.1.3 Existing Emergency Services

Fire protection services are provided within the ROI by the Central Fire Protection District of Santa Cruz County (Miller 2001). District fire stations serving the ROI are Station 1, at 937 17th Avenue in Santa Cruz (approximately 1.1 miles from the western end of the project area), and Station 4, at 405 Capitola Avenue in Capitola (approximately 1.2 miles from the eastern end of the project area).

Emergency medical services are provided by American Medical Response Medic Unit 4, at 3914 Alameda Avenue in Capitola (approximately 0.8 mile from the eastern end of the project area) (Zenker 2001).

Emergency response personnel from these service providers use East Cliff Drive to access the homes and beaches along the drive. Most of the emergency calls for the project area and surrounding vicinity are for medical emergencies. No data on the number of emergency calls to this area were available from either provider. The response time goals to this area are six minutes for the Central Fire Protection District and nine minutes for American Medical Response (Miller 2001; Zenker 2001). East Cliff Drive currently is wide enough for emergency equipment, including a 25-ton water tender. Within the project area, there are four fire hydrants along East Cliff Drive, at 34th Avenue, 35th Avenue, 37th Avenue, and 41st Avenue.

10.2 ENVIRONMENTAL CONSEQUENCES

Impact Methodology

Potential impacts from the proposed projects described in Chapter 2 were assessed by consulting with representatives of the local emergency service providers, including providers of fire protection services and emergency medical services. The effects of the proposed alternatives were evaluated against the baseline conditions presented in Section 10.1. This section also relies on the erosion and slope stability impact analysis presented in Chapter 6, Geologic Resources. The effects of each alternative on the stability of the bluff beneath East Cliff Drive was the basis for evaluating the emergency services impacts resulting from potential long-term road closures. Although they would be similar, the erosion-related environmental effects occurring under the alternatives discussed below would occur sooner under those alternatives that are less effective in preventing or reducing erosion. As discussed in Chapter 2, the effectiveness against erosion decreases from Alternative 1 to Alternative 4, with the No Action Alternative being the least effective.

Thresholds of Significance

In this analysis, an alternative is considered to have a significant impact on emergency services if it would:

- Violate the California Fire Code;
- Substantially restrict emergency service provider access to structures or the beaches;
or
- Result in substantial delays for emergency service providers.

10.2.1 Full Bluff Armoring (Alternative 1)

Significant Impacts

Impact 10.1 Restricted Access – Roadway (Construction Related)

Closing segments of East Cliff Drive during the construction periods would limit access to structures, fire hydrants, and beaches along the drive, resulting in a significant adverse impact. Under this alternative, segments of East Cliff Drive would be closed at different times during the construction of projects 1, 2, and 3 to allow heavy equipment to access the bluff and to make improvements to the road. These closures would limit access to structures and fire hydrants adjacent to the closed segment. Limited access could delay emergency services and cause the providers to exceed their response time goals.

Mitigation 10.1

To minimize impacts related to restricted access for emergency services during periods of construction, the following measures shall be included in the construction plan:

- The restricted access impacts shall be addressed by the construction traffic mitigation measures described in Mitigation 9.1. Santa Cruz County Department of

Public Works and its Construction Contractor shall implement those mitigation measures to reduce the restricted access impacts to less than significant.

- A copy of the mitigation measures shall be provided to the Central Fire Protection District and to American Medical Response.

Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.2 Delayed Response (Construction Related)

Closing segments of East Cliff Drive during the construction periods could delay emergency service provider response to emergencies along or in the vicinity of East Cliff Drive. These closures could delay response by requiring emergency service providers to use a less direct route or by increasing traffic congestion such that emergency vehicles are forced to reduce their speeds. These delays could cause emergency service providers to exceed their response time goals. Santa Cruz County would minimize these effects by notifying the emergency service providers at least 48 hours in advance of any road closures and detour routes.

Mitigation 10.2

To minimize impacts related to restricted access for emergency services during periods of construction, the following measures shall be included in the construction plan:

- Restricted access impacts shall be addressed by the construction traffic mitigation measures described in Mitigation 9.1. Santa Cruz County Department of Public Works and its Construction Contractor shall implement those mitigation measures to reduce the restricted access impacts to less than significant.
- A copy of the mitigation measures shall be provided to the Central Fire Protection District and to American Medical Response.

Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Nonsignificant Impacts

Violation of the California Fire Code

As stated in Section 10.1, the California Fire Code requires a minimum road width of 20 feet (6 meters). While the planned width of the new East Cliff Drive is only 16 feet (5 meters), the use of rolled curbs between the road and the bicycle path would allow emergency vehicles to use the eight-foot-wide (two-meter-wide) path, thereby providing adequate road width for travel and turning along East Cliff Drive. This impact would be less than significant.

Restricted Access - Stairways

Assuming that project 1 under this alternative would begin at 33rd Avenue and end at 41st Avenue, the effects of removing the stairways would be less than significant. The new stairway at 33rd Avenue would be constructed before the stairway near 35th Avenue is removed, ensuring adequate emergency access to the beach at this end of the project area. Likewise, the stairway at

38th Avenue would remain in place throughout the construction period and would provide adequate access while the stairway near 41st Avenue is being removed, repaired, and reinstalled. Therefore, adequate emergency access to the beach would be provided throughout the construction period.

Beneficial Impacts

Preventing bluff erosion would protect East Cliff Drive, which in turn would aid emergency service providers in attaining their response time goals. Adding a stairway at 33rd Avenue would increase emergency access to the beach and could reduce emergency service providers' response times to that segment of the beach.

10.2.2 Partial Bluff Armoring with Full Improvements (Alternative 2)

Potential impacts on emergency services under Alternative 2 would be the same as those under Alternative 1. However, continued bluff top erosion could result in long-term road closures, adversely affecting emergency access to the area.

Significant Impacts

Impact 10.3 Restricted Access – Roadway (Construction-Related)

The significant impacts associated with restricting access under this alternative would be the same as those described under Alternative 1.

Mitigation 10.3

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.4 Delayed Response (Construction Related)

The significant delayed response time impacts under this alternative would be the same as those described under Alternative 1.

Mitigation 10.4

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.5 Restricted Access and Delayed Response

Under this alternative, East Cliff Drive could be closed or rerouted in response to future continued bluff top erosion. Closing the road or rerouting traffic would have a significant adverse impact by impeding emergency access and delaying response to emergency situations in the area. Over the long term, emergency access to the beach would be lost due to continued erosion; however, loss of beach access also would substantially reduce use of the beach and ocean in this area, substantially reducing the need for emergency access.

Mitigation 10.5

No mitigation has been identified to reduce this impact to a less than significant level.

Nonsignificant Impacts***Violation of the California Fire Code***

The nonsignificant California Fire Code impacts under this alternative would be the same as those described under Alternative 1.

Restricted Access - Stairways

The nonsignificant impacts associated with restricting access under this alternative would be the same as those described under Alternative 1.

Beneficial Impacts

Adding a stairway at 33rd Avenue would increase emergency access to the beach and could reduce emergency service providers' response times to that segment of the beach.

10.2.3 Partial Bluff Armoring with Limited Improvements (Alternative 3)

Potential impacts on emergency services under Alternative 3 would be the same as those under Alternative 1. However, continued bluff top erosion could result in long-term road closures, adversely affecting emergency access to the area.

Significant Impacts***Impact 10.6 Restricted Access – Roadway (Construction Related)***

The significant impacts associated with restricting access under this alternative would be the same as those described under Alternative 1.

Mitigation 10.6

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.7 Delayed Response (Construction Related)

The significant delayed response time impacts under this alternative would be the same as those described under Alternative 1.

Mitigation 10.7

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.8 Restricted Access and Delayed Response

The significant impacts associated with restricting access and delayed response times under this alternative would be the same as those described under Alternative 2.

Mitigation 10.8

No mitigation has been identified to reduce this impact to a less than significant level.

Nonsignificant Impacts***Violation of the California Fire Code***

The nonsignificant California Fire Code impacts under this alternative would be similar to those described under Alternative 1. Construction of a multiple-use path with a rolled curb would provide adequate access for emergency vehicles.

Restricted Access - Stairways

The nonsignificant impacts associated with restricting access under this alternative would be the same as those described under Alternative 1.

Beneficial Impacts

Adding a stairway at 33rd Avenue would increase emergency access to the beach and could reduce emergency service providers' response times to that segment of the beach.

10.2.4 Groins and Notch Infilling (Alternative 4)

The effects of continued bluff-top erosion on emergency services would be the same as those described under Alternative 3.

Significant Impacts***Impact 10.9 Restricted Access – Roadway (Construction Related)***

The significant impacts associated with restricting access under this alternative would be the same as those described under Alternative 1.

Mitigation 10.9

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.10 Delayed Response (Construction Related)

The significant delayed response time impacts under this alternative would be the same as those described under Alternative 1.

Mitigation 10.10

Proposed mitigation for this alternative would be similar to that described under Alternative 1. Implementing these mitigation measures would reduce this potential significant impact to a less than significant level.

Impact 10.11 Restricted Access and Delayed Response

The significant impacts associated with restricting access and delayed response times under this alternative would be the same as those described under Alternative 2.

Mitigation 10.11

No mitigation has been identified to reduce this impact to a less than significant level.

Nonsignificant Impacts***Violation of the California Fire Code and Restricted Access Stairways***

The nonsignificant California Fire Code impacts under this alternative would be the same as those described under Alternative 1. Construction of a multiple-use path with a rolled curb would provide adequate access for emergency vehicles.

Beneficial Impacts

Adding a stairway at 33rd Avenue would increase emergency access to the beach and could reduce emergency service providers' response times to that segment of the beach.

10.2.5 No Action Alternative

Because East Cliff Drive would not be redesigned under this alternative, there would be no impacts associated with the California Fire Code.

Restricted Access and Delayed Response

Under this alternative, East Cliff Drive eventually would be closed due to continued bluff erosion. Protected properties along the East Cliff Drive would protrude further from the receding bluff and could gradually become isolated from the bluff. The eventual closing of East Cliff Drive would impede emergency access to the area and delay emergency response times. However, the continued erosion of the bluffs would result in abandonment of properties along the drive and loss of beach access, substantially reducing the need for emergency access to the area.

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