APPENDIX F: SHORELINE PROTECTION STRUCTURE GUIDELINES

The construction, reconstruction, expansion, alteration, and/or replacement of a shoreline protective device, including seawalls, revetments, breakwaters, groins, bluff retention devices, deep piers/caissons and other shoreline protection structures for coastal erosion control and hazards protection shall be allowed only if all of the following criteria of the California Coastal Commission and County of Sonoma are met:

(1) The structure would serve or protect only an existing (i.e., in existence prior to the Coastal Act on January 1, 1977) principally permitted use, public road, or public beach.

(2) The siting and design of the proposed structure takes into account projected future changes in sea level based on the most up-to-date science and agency guidance.

(3) The design of the proposed structure would not significantly alter the natural landform on which it is placed, and would not impact local sand supply.

(4) The proposed structure would not have any of the following environmental effects:
   a. Impede lateral beach access.
   b. Reduce public access to the coastal environment.
   c. Significant impacts on cultural and paleontological resources.
   d. Significant impacts on wetlands, marine habitats and other significant resources or habitat areas.
   e. Adversely affect adjacent or other sections of the shoreline.
   f. Create a hazard in the area in which it is built.

(5) A certified engineering geologist report is prepared which:
   a. Demonstrates that the primary structure is in imminent risk from coastal erosion.
   b. Contains at a minimum an alternatives analysis which includes the alternatives of: 1) no action; 2) relocating or demolishing the primary structure subject to the hazards; 3) removal of the portion of the development that is subject to the hazard; or 4) other non-structural alternatives such as sand replenishment or managed retreat; and concludes that a non-structural alternative is not feasible and that the device is the least environmentally damaging feasible alternative.
c. Provides evidence that the proposed protection structure is designed and can be constructed and maintained to withstand the specific range of coastal conditions which can be expected to occur, including sea level rise.

d. Includes measures which ensure that the protection structure can and will be maintained through its design life.

(6) A deed restriction or other legally binding document is recorded on the property which requires the following:

a. Owner is to be responsible, including financially, for monitoring and maintaining the shoreline protection structure.

b. Owner is to be responsible, including financially, for removing the shoreline protection structure if it fails or has an adverse effect on other properties which cannot be mitigated; the use it protects is abandoned; or the County, State Lands Commission, or Coastal Commission determines the structure should be removed.

(7) The owner posts a cash bond with the County in an amount equal to the total cost plus inflation of removing the shoreline protection structure to guarantee that the money is available for that purpose.

(8) The shoreline protective device shall be regularly monitored by an engineer or engineering geologist familiar and experienced with coastal structures and processes. Monitoring reports to the County and the Coastal Commission shall be required every five years from the date of coastal permit issuance until the coastal permit expiration, which shall evaluate whether or not the shoreline protective device is still required to protect the existing structure it was designed to protect.

(9) Shoreline protective devices shall be required to mitigate impacts to shoreline sand supply, public access and recreation, and any other relevant coastal resource impacts in 20-year increments, starting with the building permit completion certification date. Permittees shall apply for a coastal permit amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify the shoreline protective device to lessen its impacts on coastal resources.