Chapter 16.10

GEOLOGIC HAZARDS

Sections:

16.10.010 Purpose.

The purposes of this chapter are:

(A) Policy Implementation. To implement the policies of the ~~National Flood Insurance Program of the Federal Insurance Administration,~~ the State of California Alquist-Priolo Earthquake Fault Zoning Act, the Santa Cruz County General Plan, and the Land Use Plan of the Local Coastal Program;~~ and~~

(B) Public Health and Safety. To minimize injury, loss of life, and damage to public and private property caused by the natural physical hazards of earthquakes, floods, landslides, and coastal processes; ~~and~~

(C) Development Standards. To set forth standards for development and building activities that will reduce public costs by preventing inappropriate land uses and development in areas where natural dynamic processes present a potential threat to the public health, safety, welfare, and property; and

(D) Notice of Hazards. To ~~assure~~ensure that potential buyers are notified of property located in an area of ~~special flood~~geologic and coastal hazard, and to ~~assure~~ensure that those who occupy areas of ~~special flood~~geologic and coastal hazard assume responsibility for their actions.

16.10.020 Scope.

This chapter sets forth regulations and review procedures for development and construction activities including grading, septic systems installation, development permits, changes of use as specified in SCCC 16.10.040(~~19~~N)(~~h~~6), building permits, minor land divisions, and subdivisions throughout the County~~ and particularly within mapped geologic hazards areas and areas of special flood hazard (SFHAs)~~. These regulations and procedures shall be administered through a system of geologic hazard assessment, technical review, development and building permits.

16.10.022 Statutory authorization.

The State of California has in Government Code Sections 65302, 65560, and 65800 conferred upon local government units the authority to adopt regulations designed to promote public health, safety, and general welfare of its citizenry through the adoption of the ~~following~~ geologic hazard ~~and floodplain management~~ regulations of this chapter.

~~**16.10.025 Basis for establishing the areas of special flood hazard.**~~

~~The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the flood insurance study (FIS) dated April 15, 1986, and accompanying flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), dated April 15, 1986, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter. This FIS and attendant mapping is the minimum area of applicability of the flood regulations contained in this chapter, and may be supplemented by studies for other areas. The FIS, FIRMs, and FBFMs are on file at the County Government Center, Planning Department. [Ord. 4518-C § 2, 1999].~~

16.10.030 Amendment procedure.

Any revision to this chapter which applies to the Coastal Zone shall be reviewed by the Executive Director of the California Coastal Commission to determine whether it constitutes an amendment to the Local Coastal Program. When an ordinance revision constitutes an amendment to the Local Coastal Program, such revision shall be processed pursuant to the hearing and notification provisions of ~~Chapter~~SCCC 13.03 ~~SCCC~~ and shall be subject to approval by the California Coastal Commission.

16.10.035 Conflict with existing regulations.

This chapter is not intended to repeal, nullify, or impair any existing easements, covenants, or deed restrictions. If this chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

~~**16.10.036 Warning and disclaimer of liability.**~~

~~The degree of flood protection required by this chapter is considered reasonable for regulatory purposes based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by artificial or natural causes. This chapter does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of Santa Cruz County, any officer or employee thereof, the State of California, or the Federal Insurance Administration, Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder. [Ord. 4518-C § 2, 1999].~~

16.10.037 Severability.

This chapter and the various parts hereof are hereby declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

16.10.040 Definitions.

For the purposes of this chapter, the following definitions apply:

~~(1) "Accessory use" means any use which is clearly incidental and secondary to the main use and does not change the character of the main use.~~

(~~2~~A) "Active fault" means a ~~geologic feature (~~fault ~~or landslide) which shows evidence of movement,~~that has had surface displacement~~, or activity~~ within Holocene time (about the last 11,000 years).

(B) "Active landslide" means a landslide that is presently moving or has recently moved as indicated by distinct topographic slide features such as sharp, barren scarps, cracks, or tipped (jackstrawed) trees.

(~~3~~C) "Addition" means improvement to an existing structure that increases ~~the~~its area, measured in square feet. The use of breeze ways, corridors, or other non-integral connections between structures shall not cause separate buildings or structures to be considered additions to an existing structure.

(4D) "Adjacent/contiguous parcel" means a parcel touching the subject parcel and not separated from the subject parcel by a road, street or other property.

~~(5) "Area of special flood hazard" means an area having special flood hazard as identified by the Federal Insurance Administration, through the Federal Emergency Management Agency, and shown on an FHBM or FIRM map as Zone A, AO, A1—A30, AE, A99, V1—V30, VE or V. Also known as special flood hazard area (SFHA).~~

~~(6) "Base flood" means a flood which has a one percent chance of being equaled or exceeded in any given year. For flood insurance purposes "100-year flood" and "base flood" have the same meaning.~~

~~(7) "Basement" means, for the purposes of this chapter, any area of the building having its floor subgrade (below ground level) on all sides.~~

(~~8~~E) "Beach erosion" means temporary or permanent reduction, transport or removal of beach sand by littoral drift, tidal actions, storms or tsunamis.

~~(9) "Certified engineering geologist" means a registered geologist who is licensed by the State of California to practice the subspecialty of engineering geology.~~

(~~10~~F) "Coastal bluff" means a bank or cliff along the coast subject to coastal erosion processes, including historic wave erosion. "Coastal bluff" refers to the top edge, face, and base of the subject bluff.

(G) "Bluff line or edge" means the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge. The termini of the bluff line, or edge along the seaward face of the bluff, shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the inland facing portion of the bluff. Five hundred feet shall be the minimum length of bluff line or edge to be used in making these determinations.

(~~11~~H) "Coastal dependent uses" means any development or use which would not function or operate unless sited on or adjacent to the ocean.

(~~12~~I) "Coastal erosion processes" means natural forces that cause the breakdown and transportation of earth or rock materials on or along beaches and bluffs. These forces include, but are not limited to, landsliding, surface runoff, wave action and tsunamis.

(~~13~~J) "Coastal hazard areas" means areas which are subject to physical hazards as a result of coastal processes such as landsliding, erosion of a coastal bluff, and inundation or erosion of a beach by wave action.

~~(14) "Coastal high hazard area" means areas subject to high velocity waters, including tidal and coastal inundation. These areas and base flood elevations are identified on a Flood Insurance Rate Map (FIRM) as Zones V1—30, VE or V.~~

(~~15~~K) "County geologist" means a County employee who is ~~registered as~~ a California licensed ~~p~~Professional ~~g~~Geologist ~~licensed with the State of California~~California Board for Professional Engineers, Land Surveyors and Geologists ~~(R.G.) and~~who has been authorized by the Planning Director to assist in the administration of this chapter, or a California licensed ~~registered p~~Professional ~~g~~Geologist

~~licensed with the California Board for Professional Engineers, Land Surveyors and Geologists~~ under contract by the County who has been authorized by the Planning Director to assist in the administration of this chapter.

(~~16~~L) "County geologic advisor" means an individual who is a California licensed ~~p~~Professional ~~g~~Geologist ~~licensed with the California Board for Professional Engineers, Land Surveyors and Geologists~~~~who is registered as a geologist with the State of California (R.G.),~~ who may be employed by the County to provide geologic services.

(~~17~~M) "Critical structures and facilities" means structures and facilities which are subject to specified seismic safety standards because of their immediate and vital public need or because of the severe hazard presented by their structural failure. These structures include hospitals and medical facilities, fire and police stations, disaster relief and emergency operating centers, large dams and public utilities, public transportation and communications facilities, buildings with involuntary occupancy such as schools, jails, and convalescent homes, and high occupancy structures such as theaters, churches, office buildings, factories, and stores.

~~(18) "Cumulative improvement" means, for the purposes of calculating "substantial improvement" as defined in subsection (65) of this section, two or more instances of repair, reconstruction, alteration, addition, or improvement to a structure, over the course of five consecutive years. If the value of such activities, when added together, equals or exceeds 50 percent of the market value of the structure, the activity as a whole shall be considered to be a "substantial improvement."~~

(~~19~~N) Development/Development Activities. For the purposes of this chapter, ~~and this chapter only,~~ any project that includes activity in any of the following categories is considered to be development or development activity. This chapter does not supersede SCCC 13.20.040 for purposes of determining whether a certain activity or project is considered development that requires a coastal development permit; some activities and projects will require coastal development permits although they do not fall under the following specific definition:

(~~a~~1) The construction or placement of any habitable structure, including a manufactured home and including a non-residential structure occupied by property owners, employees and/or the public;

(~~b~~2) Modification, reconstruction or replacement of ~~65~~50 percent of the major structural components—consisting of the foundation, floor framing, exterior wall framing, and roof framing—of an existing habitable structure within any consecutive five-year period, or modification, reconstruction or replacement of 50 percent of the major structural components of an existing critical structure or facility, as defined by this chapter, within any consecutive five-year period, whether the work is done at one time or as the sum of multiple projects. For the purpose of this ~~section~~chapter, the following are not considered major structural components: exterior siding; nonstructural door and window replacement; roofing material; decks; chimneys; and interior elements including but not limited to interior walls and sheetrock, insulation, kitchen and bathroom fixtures, mechanical, electrical and plumbing fixtures. The extent of alterations to major structural components will be calculated in accordance with administrative guidelines adopted by resolution of the Board of Supervisors;

(~~c~~3) The addition of habitable square footage to any structure, where the addition increases the habitable square footage by more than 50 percent or 500 square feet, whichever is greater, over the existing habitable space within a consecutive five-year period. This allows a total increase of up to 50 percent of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions over a consecutive five-year period;

(~~d~~4) An addition of any size to a structure that is located on or adjacent to ~~on~~ a coastal bluff, on a dune, or in the coastal hazard area, that extends the existing structure in a seaward direction;

(~~e~~5) A division of land or the creation of one or more new building sites, except where a land division is accomplished by the acquisition of such land by a public agency for public recreational use;

(~~f~~6) Any change of use from nonhabitable to habitable, according to the definition of "habitable" found in this section, or a change of use from any noncritical structure to a critical structure;

(~~g~~7) Any repair, alteration, reconstruction, replacement or addition affecting any structure that meets either of the following criteria:

(~~i~~a) Posted "Limited Entry" or "Unsafe to Occupy" due to geologic hazards, or

(~~ii~~b) Located on a site associated with slope stability concerns, such as sites affected by existing or potential debris flows;

(c) Defined as a critical structure or facility;

(~~h~~8) Grading activities of any scale in the 100-year floodplain or the coastal hazard area, and any grading activity which requires a permit pursuant to ~~Chapter~~SCCC 16.20~~ SCCC~~;

(~~i~~9) Construction of roads, utilities, or other facilities;

(~~j~~10) Retaining walls which require a building permit, retaining walls that function as a part of a landslide repair whether or not a building permit is required, shoreline and coastal bluff protection structures, sea walls, rip-rap erosion protection or retaining structures, and gabion baskets;

(~~k~~11) Installation of a septic system;

(~~l~~12) Any human-made change to developed or undeveloped real estate in the special flood hazard area, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials. This is in addition to any activity listed in ~~subsections~~paragraphs ~~(19)(a)~~(1) through (~~k~~11) of this subsection; or

(~~m~~13) Any other project that is defined as development under SCCC 13.20.040, and that will increase the number of people exposed to geologic hazards, or that is located within a mapped geologic hazard area, or that may create or exacerbate an existing geologic hazard, ~~shall~~may be determined by the Planning Director to constitute development for the purposes of geologic review.

(~~20~~O) "Development envelope" means a designation on a site plan, ~~or~~ parcel map or grading plan indicating where buildings, access roads and septic systems, and other development are to be located.

(~~21~~P) "Fault zones" ~~means~~ are areas delineated by the State Geologist, pursuant to the Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 et seq.) which encompasses the traces of active faults; as well as a zone or zones of fracture designated in the General Plan or Local Coastal Program Land Use constraints maps, or other maps and source materials authorized by the Planning Director.

(Q) "Fault trace" is that line formed by the intersection of a fault and the earth' surface and is the representation of a fault as depicted on a map, including maps of earthquake fault zones.

(~~22~~R) "Fill" means the deposition of earth or any other substance or material by artificial means for any purpose, or the condition resulting from a fill taking place.

~~(23) "Flood boundary floodway map" means the map adopted by the Board of Supervisors and used for land use planning and permit review on which the Federal Insurance Administration has delineated the areas of special flood hazard.~~

~~(24) "Flood control structure" means any structure or material, including but not limited to a berm, levee, dam or retaining wall, placed in areas where flooding occurs, and constructed for the purpose of protecting a structure, road, utility or transmission line.~~

(~~25~~S) "Flood insurance rate map (FIRM)" means the map adopted by the Board of Supervisors and used for insurance purposes on which the Federal Insurance Administration has delineated the special flood hazard areas, base flood elevations and the risk premium zones applicable to the community. The FIRM became effective on April 15, 1986, for insurance purposes.

~~(26) "Flood insurance study" means the official report on file with the Planning Department provided by the Federal Emergency Management Agency entitled, "The Flood Insurance Study, Santa Cruz County, California" that includes flood profiles, the FIRM, the flood boundary floodway map, and the water surface elevation of the base flood.~~

~~(27) "Floodplain" means any land area susceptible to being inundated by water from any source. The 100-year floodplain is used for planning purposes by Federal agencies and the County. For many larger and more densely populated drainages, the 100-year floodplain is designated on flood boundary and floodway maps prepared by the Federal Insurance Administration. See also "area of special flood hazard."~~

~~(28) "Floodplain Administrator" means the Planning Director, or single staff member that is designated by the Director, to manage the administration and implementation of the National Flood Insurance Program regulations and the flood control provisions of this chapter.~~

~~(29) "Floodproofing" means any combination of structural and nonstructural additions, changes or adjustments to nonresidential structures which reduce or eliminate flood damage to real estate or improved property.~~

~~(30) "Floodway" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to carry and discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot at any point. Also referred to as the regulatory floodway.~~

(~~31~~T) "Geologic hazard" means a threat to life, property, or public safety caused by geologic or hydrologic processes such as flooding, wave inundation, landsliding, erosion, surface fault ground rupture~~faulting~~, ground cracking, and secondary seismic effects including liquefaction, landsliding, tsunami and ground shaking.

(~~32~~U) "Geologic hazards assessment" means a summary of the possible geologic hazards present at a site conducted by the ~~staff~~ County ~~geologist~~Geologist or a California licensed ~~p~~Professional ~~g~~Geologist.

(~~33~~V) "Geologic report, full" means a complete geologic investigation conducted by a~~n~~ ~~certified engineering~~ professional geologist hired by the applicant, ~~and~~ completed in accordance with the County geologic report guidelines, and accepted by the County.

(W) "Geotechnical investigation / report" means a report prepared by a Professional Engineer, hired by the applicant, completed in accordance with the requirements of this chapter~~.~~ and County soils (geotechnical) report guidelines, and accepted by the County. This term is synonymous with the term "soils investigation~~.~~" or "soils report."

(~~34~~X) "Grading" means excavating or filling land, or a combination thereof.

(~~35~~Y) "Habitable" means, for the purposes of this chapter, any structure or portion of a structure, whether or not enclosed, that is usable for living purposes, which includes working, sleeping, eating, recreation, or any combination thereof. The purpose and use of the space, as described above, defines the habitable nature of the space. The term "habitable" also includes any space that is heated or cooled, humidified or dehumidified for the provision of human comfort, and/or is insulated and/or finished in plasterboard, and/or contains plumbing other than hose bibs.

(~~36~~Z) "Hardship" means, for the purposes of administering SCCC 16.10.100, the exceptional hardship that would result from failure to grant the requested exception. The specific hardship must be exceptional, unusual, and peculiar to the property involved. Economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, personal preferences, or the disapproval of neighbors also cannot qualify as exceptional hardship, as these problems can be resolved through means other than granting an exception, even if those alternative means are more expensive, require a property owner to build elsewhere, or put the parcel to a different use than originally intended or proposed.

(~~37~~AA) "High and very high liquefaction potential areas" means areas that are prone to liquefaction caused by ground shaking during a major earthquake. These areas are designated on maps which are on file with the Planning Department, and other areas may be identified by a geotechnical report that describes the site conditions.

~~(38) "Historic structure" means any structure that is: (a) listed individually in the National Register of Historic Places, or preliminarily determined by the Secretary of the Interior to meet the requirements for such listing; (b) certified as or preliminarily determined by the Department of the Interior to be contributing to the historical significance of a registered historical district or a district preliminarily determined to qualify as a historic district by the Secretary of the Interior; (c) individually listed on the State Register of Historic Places which has been approved by the Secretary of the Interior; or (d) individually listed in the inventory of historic structures in a community with a historic preservation program that has been certified either by an approved State program or directly by the Secretary of the Interior.~~

(~~39~~BB) "Hydrologic investigation" means a report prepared by a ~~certified engineering~~professional geologist or civil engineer with expertise in hydrology which analyzes surface hydrology and/or groundwater conditions.

(~~40~~CC) "Littoral drift" means the movement of beach sand parallel to the coast due to wave action and currents.

(~~41~~DD) "Liquefaction" means the process whereby saturated, loose, granular materials are transformed by ground shaking during a major earthquake from a stable state into a fluid-like state.

~~(42) "Lowest floor" means, for flood purposes, the lowest floor of the lowest enclosed area of a structure, including any basement.~~

~~(a) An unfinished or flood resistant enclosure, below the lowest floor, that is usable solely for parking of vehicles, building access or storage in an area other than a basement area, for the purposes of this chapter, is not considered a building's lowest floor, provided it conforms to applicable nonelevation design requirements, including, but not limited to:~~

~~(i) The wet floodproofing standards in SCCC 16.10.070(F)(3)(h)(i);~~

~~(ii) The anchoring and construction materials and methods in SCCC 16.10.070(F)(3)(b);~~

~~(iii) The standards for septic systems and water supply in SCCC 16.10.070(F)(5) and (6).~~

~~(b) For residential structures, all fully enclosed subgrade areas are prohibited as they are considered to be basements. This prohibits garages and storage areas that are below grade on all sides.~~

~~(43) "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.~~

~~(44) "Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.~~

~~(45) "Mean sea level" means the National Geodetic Vertical Datum (NGVD) of 1929, or other measurement, to which base flood elevations shown on a community's flood insurance rate map are referenced.~~

(~~46~~EE) "Multiple-residential structure" means a single structure containing four or more individual residential units.

(~~47~~FF) "Natural disaster" means any situation in which the force or forces of nature causing destruction are beyond the control of people.

~~(48) "New construction" means, for the purposes of SCCC 16.10.070(F), (G), and (H), structures for which the start of construction commenced on or after April 15, 1986, including any subsequent improvements to such structures.~~

(~~49~~GG) "Nonessential public structures" means public structures which are not integral in providing such vital public services as fire and police protection, sewer, water, power and telephone services.

~~(50) "Obstruction" includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across, or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, snare or collect debris carried by the flow of water, or is likely to be carried downstream.~~

~~(51) "One-hundred-year flood" means a flood that statistically could occur once in 100 years on the average, although it could occur in any year. For flood insurance purposes, "100-year flood" and "base flood" have the same meaning. See "base flood."~~

(~~52~~HH) "Planning Director" means the Planning Director of the County of Santa Cruz or ~~his or her~~their ~~authorized employee~~designee.

(II) "Professional Engineer" means an engineer who is licensed by the State of California to practice engineering.

(JJ) "Professional Geologist" means a geologist who is licensed by the State of California to practice geology.

(~~53~~KK) "Public facilities" means any structure owned and/or operated by the government directly or by a private corporation under a government franchise for the use or benefit of the community.

(~~54~~LL) "Recent" means a geologic feature (fault or landslide) which shows evidence of movement or activity within Holocene time (about the last 11,000 years).

(MM) "Shoreline or coastal bluff armoring" means any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate.

~~(55) "Registered geologist" means a geologist who is licensed by the State of California to practice geology.~~

~~(56) "Registered geotechnical (soils) engineer" means a civil engineer licensed in the State of California, experienced in the practice of soils and foundation engineering.~~

~~(57) Regulatory Floodway. See "floodway."~~

~~(58) "Recreational vehicle" means a vehicle which is built on a single chassis; is 400 square feet or less when measured at the largest horizontal projection; designed to be self-propelled or permanently towable by a light-duty truck; and designed primarily not for uses as a permanent dwelling but a temporary living quarters for recreation, camping, travel, or seasonal use.~~

(NN) "Shoreline Protection Exception Area" means the coastal bluffs and beaches between Soquel Point and the Capitola city limit and any other area geographic area that may be designated in an adopted Shoreline Management Plan, and describes locations where shoreline and coastal bluff protection structures are acceptable.

(~~59~~OO) "Shoreline and coastal bluff protection structure" means any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate with the intention of preventing erosion of shoreline and coastal bluff materials.

(~~60~~PP) "Soils investigation / report" means a report prepared by a ~~registered soils engineer~~Professional Engineer, hired by the applicant, ~~and~~ completed in accordance with the County soils report guidelines, and accepted by the County. This term is synonymous with the term "geotechnical investigation."

(~~61~~QQ) Special Flood Hazard Area (SFHA). ~~See "area of special flood hazard."~~ The land in a flood plain subject to a 1 percent or greater annual chance of flooding in any given year. Special flood hazard areas are in general shown on a FIRM as Zones A, AO, A1-A30, AE, A99, AH, V1-V30, VE and V, but can also be determined by the Floodplain Administrator to occur where not shown on the FIRM. Also known as the flood hazard area, FHA, area of special flood hazard, or area of the 1% annual chance flood.

~~(62) "Start of construction" means the date the first building permit was issued, provided actual construction, repair, reconstruction, alteration, addition, rehabilitation, placement, or other improvement was begun within the terms of the permit. "Actual construction" means either the first placement of a structure on the site, such as pouring a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds which are not occupied as dwelling units or are not part of the main structure. For the purposes of the phrase "substantial improvement," "actual construction" means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.~~

(~~63~~RR) "Structure" means anything constructed or erected which requires a location on the ground, including, but not limited to, a building, manufactured home, gas or liquid storage tank, or facility such as a road, retaining wall, pipe, flume, conduit, siphon, aqueduct, telephone line, electrical power transmission or distribution line.

~~(64) "Substantial damage" means damage of any origin, sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure as it existed before the damage occurred.~~

~~(65) "Substantial improvement" means any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in subsection (18) of this section, the cost of which equals or exceeds 50 percent of the market value of the structure either immediately prior to the issuance of the building permit. This term includes structures that have incurred "substantial damage" regardless of the actual repair work proposed or performed. This term does not~~

~~include any project or portion of a project to upgrade an existing habitable structure to comply with current State or local health, sanitary, or safety code specifications which are the minimum necessary to assure safe living conditions, any alteration of an historic structure; provided, that the alteration will not preclude the structure's continued designation as an historic structure. (See also "cumulative improvement.")~~

(~~66~~SS) "Subsurface geologic investigation" means a geologic report prepared by ~~a certified~~a ~~engineering~~ professional geologist that provides information on subsurface materials through trenching, test pits, ~~and~~ borings or other methods acceptable to the County Geologist.

~~(67) V Zone. See "coastal high hazard area."~~

~~(68) "Violation" means the failure of a structure or other development to be fully compliant with this chapter. A structure or other development without the elevation certificate, other certifications or required permits, or other evidence of compliance required in this chapter is presumed to be in violation until such time as the required documentation has been provided.~~

~~(69) "Watercourse" means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. "Watercourse" includes specifically designated areas in which substantial flood damage may occur.~~

16.10.050 Requirements for geologic and geotechnical assessment.

(A) All development is required to comply with the provisions of this chapter.~~, specifically including, but not limited to, the placement of manufactured homes in the areas designated as SFHAs in the flood insurance study.~~

(B) Hazard Assessment Required. A geologic hazards assessment shall be required for all development activities, and foundation replacements or upgrades, in the following designated areas: fault zones, sites with suspected instability, ~~100-year floodplains and floodways,~~ and coastal hazard areas, except~~:~~ as specified in subsections ~~(C)~~ (D) ~~and (E)~~of this section, where a full geologic report will be prepared according to the County guidelines for engineering geologic reports.~~, or where t~~The County Geologist may waive the requirement for a hazard assessment based upon a determination ~~finds~~ that there is adequate information on file. A geologic hazards assessment shall also be required for development located in other areas of geologic hazard, as identified by the County Geologist or designee, using available technical resources, from environmental review, or from other field review.

(C) Geotechnical (Soils) Report Required. A geotechnical report shall be required when determined to be necessary by County civil engineering staff, the County geologist, or the California Building Code (CBC).

(D) Geologic Report Required. A full geologic report shall be required for the following:

(1) For all proposed land divisions and critical structures and facilities in the areas defined as earthquake fault zones on the State Alquist-Priolo Earthquake Fault Zoning Act maps;

(2) Whenever a significant potential hazard is identified by a geologic hazards assessment;

(3) For all new reservoirs to serve major water supplies;

(4) Prior to the construction of any critical structure or facility in designated fault zones; and

(5) When a property has been identified as "Unsafe to Occupy" due to adverse geologic conditions, no discretionary approval or building permit (except approvals and permits that are necessary solely to mitigate the geologic hazard) shall be issued prior to the review and approval of geologic reports and the completion of mitigation measures, as necessary.

(6) For all new water tanks in excess of 10,000 gallons either as a single tank or multiple tanks on a site, which are located in an area of geologic hazards as identified by the County Geologist;

(~~D~~E) Potential Liquefaction Area. A site-specific ~~geotechnical~~soil investigation (with input from a Professional Geologist, when required by County civil engineering staff or the County Geologist) ~~by a certified engineering geologist and/or soil engineer~~ shall be required for all development applications for more than four residential units, ~~and for structures greater than one story~~ in areas of high or very high liquefaction potential, or when required by the California Building Code. Development applications for four units or less, one story structures and nonresidential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment. When a significant hazard may exist, a site-specific soils investigation shall be required.

(~~E~~F) Additional Report Requirements. Additional information (including but not limited to full geologic, subsurface geologic, hydrologic, geotechnical or other engineering investigations and reports) shall be required when a hazard or foundation constraint requiring further investigation is identified.

16.10.060 Assessment and report preparation and review.

(A) Timing of Geologic Review. Any required geologic, soil, or other technical report shall be completed, reviewed and accepted pursuant to the provisions of this section before any public hearing is scheduled for consideration of approval of a proposed project, and before any discretionary ~~or~~ development application or building permit is approved or issued. The County Geologist may agree to defer the date for completion, review, or acceptance of any technical report where the technical information is (1) unlikely to significantly affect the size or location of the project, and (2) the project is not in the area of the Coastal Zone where decisions are appealable to the Coastal Commission. In no event shall such be deferred until after the approval or issuance of a building permit.

(1) An application for a geologic hazards assessment shall include a plot plan showing the property boundaries and location of proposed development activities. Any other information deemed necessary by the County Geologist (including but not limited to topographic map, building elevations or grading plans) shall be submitted upon request.

(2) An application for a geologic hazards assessment or a technical report review constitutes a grant of permission for the Planning Director, or agents, to enter the property for the purposes of responding to the application.

(B) ~~Report~~ Geologic Hazards Assessment Preparation. The geologic hazards assessment shall be prepared by County staff. Alternately, the assessment may be conducted by a private ~~p~~Professional ~~g~~Geologist at the applicant's choice and expense. Such privately prepared assessments shall, however, be subject to review and ~~approval~~acceptance as specified in this section. Application for review and acceptance of a geologic hazards assessment is not an application for a development permit.

(C) Report Acceptance. All geologic, geotechnical/soils, engineering, and hydrologic reports or investigations submitted to the County as a part of any development application ~~shall~~must be found by the County to conform to State and County report guidelines and requirements. The Planning Director may

require an inspection in the field of all exploratory trenches, test pits, and borings excavated for a technical report.

(D) Geologic Hazard Assessment and Report Expiration. A geologic hazards assessment and all recommendations and requirements given therein shall remain valid for three years from the date of completion~~, unless a shorter period is specified in the report by the preparer~~. ~~A full~~ Geotechnical and geologic report~~s~~ shall ~~be~~remain valid and all recommendations therein shall remain in effect for three years from the date of completion of the report unless a shorter period is specified in the report by the preparer. ~~The~~An exception to the three-year period of validity is where a change in site conditions, development proposal, technical information or County policy significantly affects the technical data, analysis, conclusions or requirements of the assessment or report; in which case the Planning Director may require a new or revised assessment or report.

(E) Change or Cancellation of Professional In Responsible Charge. When the professional in responsible charge of a report accepted by the County is changed or is no longer involved in the project, notice shall be given by the professional and the property owner to the County within 7 days of such change or cancellation.

16.10.070 ~~Permit conditions~~Incorporation of technical recommendations into project.
The recommendations of the geologic hazards assessment, full geologic report, and/or the recommendations of other technical reports (if ~~evaluated~~reviewed and ~~authorized~~accepted by the Planning Director), shall be incorporated into the project plans or included as permit conditions of any permit or approvals subsequently issued for the development. In addition, the requirements described below for specific geologic hazards shall become standard conditions for development, building and land division permits and approvals. No development, building and land division permits or approvals shall be issued, and no final maps or parcel maps shall be recorded, unless such activity is in compliance with the requirements of this section.

(A) General. If a project is not subject to geologic review because the structure is nonhabitable and is not otherwise considered to be development under this chapter, a declaration of restrictions for the nonhabitable structure shall be recorded on the property deed that includes an acknowledgment that any change of use to a habitable use, or physical conversion to habitable space, shall be subject to the provisions of this chapter.

(B) Notice and Acknowledgement of Hazards. The developer and/or subdivider of a parcel or parcels in an area of geologic hazards shall be required, as a condition of development approval and building permit approval, to record a Notice of Geologic/Coastal Hazards, Acceptance of Risk, Liability Release, and Indemnification with the County Recorder. The Notice shall be in a form approved by the County of Santa Cruz, and shall include a description of the hazards on the parcel, and the level of geologic and/or geotechnical investigation conducted, and shall include acknowledgements and agreements, as applicable to the specific project.

(~~B~~C) Fault Zones.

(1) Location. Development shall be located away from potentially hazardous areas as identified by the geologic hazards assessment or full geologic report.

(2) Setbacks. Habitable structures shall be set back a minimum of 50 feet from the edge of the area of fault induced offset and distortion of active and potentially active fault traces. This setback may be reduced to a minimum of 25 feet from the edge of this zone, based upon paleoseismic studies that include observation trenches. Reductions of the required setback may

only occur when both the consulting ~~engineering~~Professional ~~g~~Geologist preparing the study and the County Geologist observe the trench and concur that the reduction is appropriate. Critical structures and facilities shall be set back a minimum of 100 feet from the edge of the area of fault induced offset and distortion of active and potentially active fault traces.

~~(3) Notice of Hazards. The developer and/or subdivider of a parcel or parcels in an area of geologic hazards shall be required, as a condition of development approval and building permit approval, to record a declaration of geologic hazards with the County Recorder. The declaration shall include a description of the hazards on the parcel, and the level of geologic and/or geotechnical investigation conducted.~~

(43) Other Conditions. Other permit conditions, including but not limited to project redesign, elimination of building sites, and the delineation of development envelopes, building setbacks and foundation requirements, shall be required as deemed necessary by the Planning Director.

(~~C~~D) Groundshaking.

(1) New Dams. Dams shall be constructed according to high seismic design standards of the Dam Safety Act and as specified by structural engineering studies.

(2) Public Facilities and Critical Structures and Facilities. All new public facilities and critical structures shall be designed to withstand the expected groundshaking during the design earthquake on the San Andreas fault or San Gregorio fault.

(3) Other Conditions. Other permit conditions including but not limited to structural and foundation requirements shall be required as deemed necessary by the Planning Director.

(~~D~~E) Liquefaction Potential.

(1) Permit Conditions. Permit conditions including, but not limited to, project redesign, elimination of building sites, delineation of development envelopes and drainage and foundation requirements shall be required as deemed necessary by the Planning Director.

~~(2) Notice of Hazards. The developer and/or subdivider of a parcel or parcels in an area of geologic hazards shall be required, as a condition of development approval and building permit approval, to record a declaration of geologic hazardswith the County Recorder. The declaration shall include a description of the hazards on the parcel, and the level of geologic and/or geotechnical investigation conducted.~~

(~~E~~F) Slope Stability.

(1) Location. All development activities shall be located away from potentially unstable areas as identified through the geologic hazards assessment, full engineering geologic report, soils (geotechnical) report or other environmental or technical assessment.

(2) Creation of New Parcels. Allow the creation of new parcels in areas with potential slope instability as identified through a geologic hazards assessment, full geologic report, soils (geotechnical) report or other environmental or technical assessment only under the following circumstances:

(a) New building sites, roadways, and driveways shall not be permitted on or across slopes exceeding 30 percent grade.

(b) A full engineering geologic report and any other appropriate technical report shall demonstrate that each proposed parcel contains at least one building site and access which are not subject to significant slope instability hazards, and that public utilities and facilities such as sewer, gas, electrical and water systems can be located and constructed to minimize potential for landslide damage and not cause a health or safety hazard.

(c) New building sites shall not be permitted which would require the construction of engineered protective structures such as retaining walls, diversion walls, debris walls or slough walls, or foundations designed to mitigate potential slope instability problems such as debris flows, slumps or other types of landslides.

(3) Drainage. Drainage plans designed to direct runoff away from unstable areas (as identified from the geologic hazards assessment or other technical report) shall be required. New drainage improvements shall not adversely affect slope stability and not increase the danger that any other property or public improvements will be impacted by potentially unstable slopes or landsliding. Drainage plans shall be completed by a Professional Engineer and reviewed by both the Professional Geologist (if required by the County Geologist) and other Professional Engineers as part of the design team. Such plans shall be reviewed and ~~approved~~accepted by the County Geologist.

(4) Leach Fields. Septic leach fields shall not be permitted in areas subject to landsliding as identified through the geologic hazards assessment, environmental assessment, or full geologic report.

(5) Road and Driveway Reconstruction. Where washouts or landslides have occurred on public or private roads and driveways, road and driveway reconstruction shall meet the conditions of appropriate geologic, soils (geotechnical) and/or engineering reports and shall have adequate geologic, soils, and other engineering supervision and permits as required by the County Code.

(6) New Road and Driveway Construction. New roads and driveways shall be located away from potentially unstable areas as identified through the geologic hazards assessment, full engineering geologic report, soils(geotechnical) report or other environmental or technical assessment.

~~(6) Notice of Hazards. The developer and/or subdivider of a parcel or parcels in an area of geologic hazards shall be required to record a declaration of geologic hazards with the County Recorder. The declaration shall include a description of the hazards on the parcel, and the level of geologic and/or geotechnical investigation conducted.~~

(7) Other Conditions. Other permit conditions including but not limited to project redesign, building site elimination and the development of building and septic system envelopes, building setbacks and foundation and drainage requirements shall be required as deemed necessary by the Planning Director.

(~~F~~G) Floodplains. The provisions of SCCC 16.13 Flood Hazards shall apply to all development, as defined in that chapter, that is wholly within, partially within, or in contact with any flood hazard area, or other areas as identified by the Floodplain Administrator, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, replacement, repair, relocation or demolition of any building or structure; placement, installation, or replacement of manufactured homes; installation or replacement of tanks;

placement of temporary structures and temporary storage; installation of swimming pools; and miscellaneous and utility structures.

~~(1) Critical and Public Facilities. Critical facilities and nonessential public structures and additions shall be located outside of the 100-year floodplain unless such facilities are necessary to serve existing uses, there is no other feasible location and construction of these structures will not increase hazards to life or property within or adjacent to the floodplain.~~

~~(2) Creation of New Parcels. Allow the creation of new parcels including those created by minor land division or subdivision in the 100-year floodplain only under the following circumstances:~~

~~(a) A full hydrologic report and any other appropriate technical report must demonstrate that each proposed parcel contains at least one building site, including a septic system and leach field site, which is not subject to flood hazard, and that public utilities and facilities such as sewer, gas, electrical and water systems can be located and constructed to minimize flood damage and not cause a health hazard.~~

~~(b) A declaration indicating the limits and elevations of the 100-year floodplain certified by a registered professional engineer or surveyor must be recorded with the County Recorder.~~

~~(c) Adequate drainage to reduce exposure to flood hazards must be provided.~~

~~(d) Preliminary land division proposals shall identify all flood hazard areas and the elevation of the base flood.~~

~~(3) Development Criteria and Design Requirements. All development within the 100-year floodplain shall meet the following criteria. Any addition, repair, reconstruction, rehabilitation, alteration, or improvement of structures for which building permits were issued prior to April 15, 1986, when subject to the definition of "cumulative improvement," does not meet the definition of "substantial improvement" (pursuant to SCCC 16.10.040(18) and (65)), is exempt from this section.~~

~~(a) Location of proposed structures outside of the 100-year floodplain when a buildable portion of the property exists outside the floodplain;~~

~~(b) Anchoring of foundations and the structures attached to them by a method adequate to prevent flotation, collapse and lateral movement of the structures due to the forces that may occur during the base flood, including hydrostatic and hydrodynamic loads and the effects of buoyancy.~~

~~A project involving a manufactured home shall achieve this by one of the following methods:~~

~~(i) By providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and uplift forces of nine pounds per square foot; or~~

~~(ii) By the anchoring of the unit's system, designed to be in compliance with the Department of Housing and Development Mobile Home Construction and Safety Standards;~~

~~(c) Shall be constructed with materials and utility equipment resistant to flood damage and using construction methods and practices that minimize flood damage;~~

~~(d) Shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding;~~

~~(e) In flood zones A-O and A-H, provide drainage paths adequate to guide water away from structures and reduce exposure to flood hazards;~~

~~(f) For residential structures, including manufactured homes, the lowest floor, including the basement, and the top of the highest horizontal structural member (joist or beam) which provides support directly to the lowest floor, and all elements that function as a part of the structure, such as furnace, hot water heater, etc., shall be elevated at least one foot above the 100-year flood level. Foundations shall be designed to minimize flood water displacement and flow damage. Where a piling or caisson foundation system is used the space below the lowest floor shall be free of obstruction or be enclosed with wood-constructed lattice work or screens designed to collapse or be carried away under the stress of flood waters without jeopardizing the structural support of the building. Compliance with the elevation requirement shall be certified by a registered professional engineer, architect, or surveyor and submitted to the Planning Director prior to a subfloor building inspection. Failure to submit elevation certification may be cause to issue a stop work notice for a project. The Planning Director will maintain records of compliance with elevation requirements;~~

~~(g) Nonresidential structures shall be floodproofed if elevation above the 100-year flood level in accordance with subsection (F)(3)(f) of this section is not feasible. Floodproofed structures shall:~~

~~(i) Be floodproofed so that below an elevation one foot higher than the 100-year flood level, the structure is watertight with walls substantially impermeable to the passage of water based on structural designs, specifications and plans developed or reviewed by a registered professional engineer or architect;~~

~~(ii) Be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and~~

~~(iii) Be certified by a registered professional engineer or architect that floodproofing standards and requirements have been complied with; the certification shall be submitted to the Planning Director and shall indicate the elevation to which floodproofing was achieved prior to a final building inspection. The Planning Director shall maintain records of compliance with floodproofing requirements;~~

~~(h) In flood zone AO, residential structures shall have the lowest floor at or above the highest adjacent grade, at least as high as the depth number given on the FIRM, and nonresidential structures, where elevation is not feasible, shall have the lowest floor completely floodproofed at or above the highest adjacent grade, at least as high as the depth number given on the FIRM;~~

~~(i) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or shall provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of flood waters. Nonresidential structures that are floodproofed in compliance with subsection (F)(3)(g) of this section are an exception to this requirement.~~

~~(4) Recreational Vehicles. RVs that are placed on a site that is within the A, A1—A30, AH, AO or AE zones as designated in the FIS, and that are not fully licensed and highway ready, shall meet the criteria given in subsections (F)(3)(b) and (3)(f) of this section, unless they are on the site for less than 180 consecutive days. For the purposes of this chapter, "highway ready" means on wheels or jacking system, attached to the site by quick-disconnect type utilities and security devices, and having no attached additions.~~

~~(5) Septic Systems. New septic systems and leach fields shall not be located within the 100-year floodplain. The capacity of existing septic systems in the floodplain shall not be increased.~~

~~(6) Water Supplies and Sanitary Sewage Systems. All new and replacement water supplies and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.~~

~~(7) Placement of Fill. Allow the placement of fill within the 100-year floodplain in the minimum amount necessary, not to exceed 50 cubic yards. Fill shall only be allowed if it can be demonstrated that the fill will not have cumulative adverse impacts.~~

~~(8) Flood Control Structures. Flood control structures shall be permitted only to protect existing development (including agricultural operations) where no other alternative is feasible or where such protection is needed for public safety. Such structures shall not adversely affect sand supply, increase erosion or cause flooding on adjacent properties or restrict stream flows below minimums necessary to maintain fish and wildlife habitats or be placed further than necessary from the development requiring protection.~~

~~(9) Notice of Hazards. The developer and/or subdivider of a parcel or parcels in an area of geologic or flood hazards shall be required, as a condition of development approval and building permit approval, to record a declaration of geologic hazards with the County Recorder. The declaration shall include a description of the hazards on the parcel or parcels and the level of prior hydrologic or geologic investigation conducted.~~

~~(10) Other Conditions. Other permit conditions, including but not limited to project redesign, building site elimination, development of building and septic envelopes, and foundation requirements shall be required as deemed necessary by the Planning Director. When base flood elevation data are not provided in the flood insurance study, the Planning Director shall obtain, review, and reasonably utilize the best base flood data available from Federal, State or other sources, as a basis for elevating residential structures and floodproofing nonresidential structures, to at least one foot above the base flood level. Residential structures shall be elevated no less than two feet above natural grade when base flood data do not exist. Nonresidential structures may elevate or flood proof to meet this standard.~~

~~(11) Alteration or Relocation of Watercourse. Adjacent communities, the California Department of Water Resources and the Federal Emergency Management Agency shall be notified prior to any alteration or relocation of a major watercourse. The flood carrying capacity of any altered or relocated watercourses must be maintained.~~

~~(12) Permit Requirements. All other required State and Federal permits must be obtained.~~

~~(G) Permit Conditions – Floodways. Located within areas of special flood hazard as established in SCCC 16.10.025, and within some areas not mapped as part of the flood insurance study, are areas designated as floodways (see also SCCC 16.10.040(30)). The floodway is an extremely hazardous area due to the quantity and velocity of flood waters, the amount of debris which may be transported, and the high potential for erosion during periods of large stream flows. In the floodway the following provisions apply:~~

~~(1) Development and Building within Floodway Prohibited. All development activity, except for the reconstruction, repair, alteration or improvement of an existing structure, is prohibited within the floodway unless exempted by State or Federal laws. Any encroachment which would cause any increase in the base flood level is prohibited.~~

~~(2) Sites Where Floodway Not Established. Where the Flood Insurance Study or other technical report has identified a flood hazard area but has not designated a floodway, the applicant must demonstrate, through hydrologic analysis, that the project will not adversely affect the carrying capacity of the area. For the purposes of this chapter, "adversely affects" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development in the watershed, will increase the water surface elevation of the base flood more than one foot at any point. The hydrologic analysis must identify the boundaries of the floodway, and the project must comply with the provisions of subsection (G)(1) of this section.~~

~~(3) Setback from Floodway. Where neither a base flood elevation nor a floodway has been identified by the flood insurance study or by a site-specific hydrologic study, a minimum setback of 20 feet from the top edge of the banks of a drainage course shall be maintained, and all activity that takes up flood storage area within this setback shall be prohibited. This floodway setback may be reduced by the Planning Director only if a full hydrologic analysis identifies the boundaries of the floodway, demonstrates that a smaller setback will not increase the susceptibility of the proposed activity to flood-related hazards, and there is no alternative location outside of the 20-foot setback. (See also Chapter 16.30 SCCC, Riparian Corridor and Wetlands Protection, for vegetation-related setbacks from streams.)~~

~~(4) Location of Septic Systems. New septic systems and leach fields shall not be located in the floodway. The capacity of existing systems in the floodway shall not be increased.~~

~~(5) Alteration of Structures in Floodway. Reconstruction, repair, alteration or improvement of a structure in a floodway shall not cause any increase in the base flood elevation. Substantial improvements, regardless of cause, shall only be permitted in accordance with subsection (F) of this section. Repair, reconstruction, alteration, or replacement of a damaged structure which does not exceed the ground floor square area of the structure before the damage occurred shall not be considered an increase in the base flood elevation.~~

~~(6) Permit Requirements. All other required local, State and Federal permits must be obtained.~~

(H) Coastal Bluffs and Beaches.

(1) Criteria in Areas Subject to Coastal Bluff Erosion. Projects in areas subject to coastal bluff erosion shall meet the following criteria:

(a) ~~For all development and for nonhabitable structures, demonstration of the stability of the site, in its current, pre-development application condition, for a minimum of 100 years as determined by either a geologic hazards assessment or a full geologic report.~~ All development activities, including those which are cantilevered, and non-habitable structures for which a building permit is required, shall be set back a minimum of 25 feet from the top edge of the bluff as the required geologic setback. A geologic setback greater than 25 feet may be required based on conditions on and adjoining the site. The geologic setback shall be sufficient to provide a stable site for the subject structure over the expected design life of the structure, as determined through geologic, geotechnical, hydrologic, or other engineering reports. The standard for a new or redeveloped residential or commercial structure is an expected design life of 75 years and for a critical structure or facility the expected design life is 100 years.

(b) ~~For all development, including that which is cantilevered, and for nonhabitable structures, a minimum setback shall be established at least 25 feet from the top edge of the coastal bluff, or alternatively, the distance necessary to provide a stable building site~~

~~over a 100-year lifetime of the structure, whichever is greater.~~ The determination of the minimum geologic setback shall be based on the existing site conditions and for proposed new, reconstruction, or redevelopment projects the determination shall not take into consideration the effect of any proposed protection measures, such as shoreline or coastal bluff armoring structures, retaining walls, or deep piers, unless the site is included within a designated Shoreline Protection Exception Area or is otherwise addressed by an adopted Shoreline Management Plan.

(c) ~~The determination of the minimum setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed protection measures, such as shoreline protection structures, retaining walls, or deep piers.~~ Within the Urban and Rural Services Lines, the calculation of the 75 or 100-year geologic setback, or reduced geologic setback requested under an exception procedure, will take into consideration the effect of legally established shoreline or coastal bluff armoring. However, armoring installed under an emergency coastal permit will not be factored into the setback calculation unless a regular Coastal Development Permit is issued, and all conditions of the permit are met. In addition, technical reports prepared for sites within the Urban and Rural Services Lines will also include analysis based upon an alternative calculation of the 75 or 100-year setback that neglects any effect of an existing shoreline or coastal bluff armoring, in order to provide information and a measure of the effects of the existing protection measure on the site conditions~~-~~.

(d) Outside the Urban and Rural Services Lines the calculation of the 75 or 100-year geologic/coastal hazards setback shall not take into consideration the effect of any existing or proposed shoreline or coastal bluff armoring.

(e) Foundation replacement and/or foundation upgrades involving 50% or more of the existing foundation ~~that meet the definition of development per SCCC 16.10.040(19) and pursuant to SCCC 16.10.040(18)~~ shall meet the 25-foot minimum or the 75 or 100-year geologic setback requirements.~~setback described in subsection (H)(1) of this section, except that a~~An exception to the setback requirement may be granted for existing structures that are wholly or partially within the setback if the property owner agrees to record a Notice of Geologic/Coastal Hazard prior to issuance of the building permit, and if the Planning Director determines that:

(i) The ~~area of the~~ structure ~~that is within the setback does not exceed 25 percent of the total area of the structure~~ will be relocated to maximize the setback from the coastal bluff or shoreline; or

(ii) The structure cannot be relocated to meet the setback because of inadequate parcel size.

(~~e~~f) Additions, including second story and cantilevered additions, which extend the existing structure in a seaward direction, shall comply with the minimum 25-foot and 75 or 100-year setback, unless an exception to the 75- or 100-year geologic setback is approved.

~~(f) The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required, as a condition of development approval and building permit approval, to record a declaration of geologic hazards with the County Recorder.~~

~~The declaration shall include a description of the hazards on the parcel and the level of geologic and/or geotechnical investigation conducted~~

(g) ~~Approval~~Acceptance of drainage and landscape plans for the site by the County Geologist. Drainage plans shall be prepared by a Professional Engineer, and reviewed by both the project Professional Geologist and other Professional Engineer when part of the design team to ensure consistency between other technical reports and project design.

(h) Service transmission lines and utility facilities are prohibited unless they are necessary to serve existing ~~residences~~development or public facilities.

(i) New swimming pools, spas and similar in-ground and above-ground water recreation or fishpond types of features shall be located landward of the applicable geologic/coastal hazard setback. Any new water-containing features of this nature shall have double-wall construction with leak detection systems and drains to facilities and locations approved by the County.

(j) Accessory structures must include a condition of approval that requires the property owner and all successors in interest to remove the structure if the County Geologist, the Building Official or a Professional Engineer determines that the accessory structure is at risk of failure due to erosion, landslide or other form of bluff collapse or geologic/coastal hazard. In the event that portions of the development fall to the bluffs or ocean before they are removed/relocated, the landowner will remove all recoverable debris associated with the development from the bluffs and ocean and lawfully dispose of the material in an approved disposal site.

(~~i~~k) All other required local, State and Federal permits shall be obtained.

(l) Beginning upon adoption of the 2020 Public Safety Element update and its certification by the California Coastal Commission and extending in perpetuity, within the Urban and Rural Services Lines but outside of designated Shoreline Protection Exception Area(s), for structures on coastal bluffs and beaches the following limitations shall not be exceeded more than once.

(i) Modification, reconstruction or replacement of 50 percent or more of the major structural components - consisting of the foundation, floor framing, exterior wall framing, and roof framing - of an existing habitable structure, or modification, reconstruction or replacement of 50 percent of the major structural components of an existing critical structure or facility, as defined by this chapter.

(ii) The addition of habitable square footage to any structure, where the addition increases the habitable square footage by more than 50 percent over the existing habitable space. This allows a total increase of up to 50 percent of the original habitable space of a structure.

(2) Exemption.

(a) Any project which does not specifically require a building permit pursuant to ~~subsection (B) of this section~~ Section 12.10.315 (exempted work) of the County Code is exempt from subsection (~~H~~G)(1) of this section, with the exception of: nonhabitable accessory structures that are located within the minimum 25-foot setback from the coastal

bluff where there is space on the parcel to accommodate the structure outside of the setback, above-ground pools, water tanks, projects (including landscaping) which would unfavorably alter drainage patterns, and projects involving grading.

For the purposes of this section, "the unfavorable alteration of drainage" is defined as a change that would significantly increase or concentrate runoff over the bluff edge or significantly increase infiltration into the bluff~~.~~, and "~~G~~grading" is defined as any earthwork other than minor leveling, of the scale typically accomplished by hand, necessary to create beneficial drainage patterns or to install an allowed structure, that does not excavate into the face or base of the bluff.

Examples of projects which may qualify for this exemption include: decks which do not require a building permit and do not unfavorably alter drainage, play structures, showers (where runoff is controlled), benches, statues, landscape boulders, benches, and gazebos which do not require a building permit.

(b) If a structure that is constructed pursuant to this exemption subsequently becomes unstable due to erosion or slope instability, the threat to the exempted structure shall not qualify the parcel for a coastal bluff retaining structure or shoreline protection structure. If the exempted structure itself becomes a hazard it shall either be removed or relocated, rather than protected in place at the direction of the County.

(3) Shoreline and coastal bluff protection structures shall be governed by the following:

(a) New Shoreline and coastal bluff protection structures shall only be allowed within the Urban and Rural Services Line on parcels where both adjacent parcels are already similarly protected, or where necessary to protect existing structures from a significant threat, or on vacant parcels which, through lack of protection threaten adjacent developed lots, or to protect public ~~works~~roads and infrastructure, critical facilities, public beaches, and coastal dependent uses. Developments on and along beaches and coastal lagoons shall not be protected by new shoreline protection structures. New shoreline or coastal bluff armoring is not allowed outside the Urban and Rural Services Lines.

(b) ~~Note:~~ New shoreline and coastal bluff protection structures shall not be allowed where the existing structure proposed for protection was granted an exemption pursuant to subsection (~~H~~G)(2) of this section.

~~(b) Seawalls, specifically, shall only be considered where there is a significant threat to an existing structure and both adjacent parcels are already similarly protected.~~

(c) For sites located outside of a designated Shoreline Protection Exception Area, and unless authorized by an adopted Shoreline Management Plan, ~~A~~application for shoreline and coastal bluff protective structures shall include thorough analysis by a Professional Engineer or Professional Geologist of all reasonable alternatives to such structures, including but not limited to the following: ~~relocation or partial removal of the threatened structure, protection of only the upper bluff area or the area immediately adjacent to the threatened structure, beach nourishment, and vertical walls. Structural protection measures on the bluff and beach shall only be permitted where nonstructural measures, such as relocating the structure or changing the design, are infeasible from an engineering standpoint or are not economically viable.~~

(i) Relocation or partial removal of the threatened structure;

(ii) Protection of the upper bluff and blufftop (including through planting appropriate native or non-invasive vegetation and removing invasive plant species, and better drainage controls) or the area immediately adjacent to the threatened structure;

(iii) Natural or "green" infrastructure (like vegetated beaches, dune systems, and wetlands);

(iv) Engineered shoreline or coastal bluff armoring (such as beach nourishment, revetments, or vertical walls);

(v) Other engineered systems to buffer coastal areas;

(vi) Combinations or hybrids of the above; and

(vii) Consistency with an approved shoreline management plan, if applicable.

(d) Shoreline and coastal bluff protection measures may be approved within existing developed areas designated as Shoreline Protection Exception Areas, including projects that replace or modify existing measures in order to reduce and mitigate for impacts on coastal resources. Any new or replacement/redeveloped ~~S~~shoreline and coastal bluff protection structures shall be placed as close as possible to the ~~development~~ coastal bluff or structure requiring protection and must be designed to minimize adverse impacts. Design considerations include but are not limited to the following:

(i) Minimize the footprint of the armoring on the beach;

(ii) Provide for public recreational access;

(iii) Provide for future access for maintenance of the armoring;

(iv) Strive for a continuous lateral pedestrian access as physically feasible;

(v) Minimize visual intrusion by using materials that blend with the color or natural materials in the area, contouring to match nearby landforms as much as possible, and using vegetation for screening;

(vi) Meet approved engineering standards and applicable County Code provisions for the site as determined through the coastal development, building, and grading permit process;

(vii) The design must be based on detailed technical studies to accurately define geologic, hydrologic and oceanographic conditions affecting the site;

(viii) Eliminate or mitigate adverse impacts on local shoreline sand supply; and

(ix) All armoring structures shall incorporate permanent survey monuments for future use in establishing a survey monument network along the coast for use

in monitoring seaward encroachment or slumping of armoring and erosion trends.

(e) Unless the existing armoring is being appropriately maintained by a Geologic Hazard Abatement District Plan of Control, or other joint maintenance agreement, for development activities protected by existing shoreline and coastal bluff armoring, the coastal permit application shall include:

(i) Re-assessment of the need for the armoring;

(ii) A report on the need for any repair or maintenance of the device (see paragraph (k) below);

(iii) Evaluation of the stability and condition of the armoring and recommendations for maintenance, repair, or modification, and potential for removal based on changed conditions;

(iv) A report on changed geologic and hydrologic site conditions including but not limited to changes relative to sea level rise;

(v) Assessment of impacts to sand supply and public access and recreational resources;

(vi) Recommendation to avoid or mitigate impacts to sand supply and public access and recreational resources; and

(vii) If approved, such development associated with existing shoreline or coastal bluff armoring shall meet all the other applicable requirements of this policy, including with respect to the impact mitigation requirements, which may include payment of in lieu fees.

(f) For development activities involving a new structure or modification or addition to an existing structure protected by existing riprap, require that the applicant submit a report at the time of filing an application for a coastal development permit for development activities, including an evaluation of the stability and condition of the armoring and recommendations for maintenance, repair, or modification, and potential for removal based on changed conditions. The report shall include a Recovery Plan for the maintenance and repair and potential removal of all or a portion of the existing rip rap revetment, to recover migrated rip rap and to provide for least disturbance of the beach and shoreline while also functioning as necessary to protect the structures on and adjacent to the parcel. The Recovery Plan must incorporate Best Management Practices for maintenance and repair to address potential impacts to sensitive species and environmental resources, as well as Best Management Practices for construction during maintenance and repair activities.

(g) Shoreline or coastal bluff armoring should be the least environmentally damaging feasible alternative to serve coastal-dependent uses or to protect a structure or a public beach in danger from erosion:

(i) Unless located within a Shoreline Protection Exception Area or as consistent with an approved Shoreline Management Plan, hard armoring (such as

seawalls and revetments, etc.) shall only be allowed within the Urban and Rural Services Line if soft alternatives (such as managed retreat/relocation, beach nourishment, vegetative planting, and drainage control, etc.) are not feasible, or are not the least environmentally damaging feasible alternative;

(ii) Permit shoreline or coastal bluff armoring only if non-structural measures are infeasible from an engineering standpoint or not economically viable;

(iii) Hard armoring by new shoreline and coastal bluff protection measures is not allowed on sites located outside of the Urban and Rural Services Line.; and

(iv) An approved Shoreline Management Plan or projects within a designated Shoreline Protection Exception Area, may authorize hard armoring for identified sections of the coast.

(h) No shoreline or coastal bluff armoring shall be allowed for the sole purpose of protecting an accessory structure.

(~~e~~i) All Shoreline and coastal bluff armoring ~~protection structures~~ shall be sited and designed to eliminate or mitigate adverse impacts on coastal resource. All unavoidable coastal resource impacts shall be appropriately mitigated. Any approved new, replacement, reconstructed or redeveloped shoreline protection structure must not result in unmitigated impacts to coastal resources including:~~not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, adversely impact recreational resources, increase erosion on adjacent property, create a significant visual intrusion, or cause harmful impacts to wildlife or fish habitat, archaeologic or paleontologic resources. Shoreline protection structures shall minimize visual impact by employing materials that blend with the color of natural materials in the area.~~

(i) Reduced or restricted public beach access;

(ii) Adverse effects on shoreline processes and sand supply;

(iii) Increased erosion or flooding on adjacent properties; and

(iv) Adverse impacts on coastal visual or recreational resources, or harmful impacts on wildlife and fish habitats or archaeological or paleontological resources.

~~(f) All protection structures shall meet approved engineering standards as determined through environmental review.~~

(j) Mitigation Programs. Require mitigation of unavoidable adverse impacts on coastal resources, including payment of in lieu fees where on-site and/or in-kind options are not possible.

(~~g~~k) All shoreline and coastal bluff armoring ~~protection structures~~ shall include a permanent, County approved, monitoring, ~~and~~ maintenance, and repair program. The program shall include, but is not limited to the following elements:

(i) Monitoring by a professional engineer or geologist familiar and experienced with coastal structures and processes;

(ii) Report to the County upon completion of construction of the armoring and every five years or less thereafter, as determined by either the County Geologist or a qualified professional, for as long as the armoring remains authorized. Reports shall be reviewed and accepted by the County;

(iii) The report shall detail the condition of the structure and list any recommended maintenance and repair work;

(iv) The monitoring plan and periodic report shall address impacts to shoreline processes and beach width, public access, and availability of public trust lands for public use;

(v) The monitoring, maintenance and repair program shall be recorded on the title/deed of the property;

(vi) The program shall allow for County removal or repair of shoreline or coastal bluff armoring, at the owner's expense, if its condition creates a public nuisance or if necessary to protect the public health and safety;

(vii) The program shall include any other monitoring, maintenance, and repair activities the County determines necessary to avoid or mitigate impacts to coastal resources; and

(viii) The initial term of the monitoring, maintenance, and repair program shall be 20 years. Extension beyond 20 years will require an application to amend the conditions of approval of the Coastal Development Permit to extend the monitoring, maintenance, and repair program at which time the program shall be updated if necessary, to address changed shoreline conditions, and may include additional and/or renewed requirements for mitigation of then-existing impacts of the project on coastal resources for the requested term of extension.

(~~h~~l) Applications for shoreline or coastal bluff armoring~~protection structures~~ shall include a construction and staging plan that minimizes disturbance to the beach, specifies the access and staging areas, and includes a construction schedule that limits presence on the beach, as much as possible, to periods of low visitor demand. The plan for repair projects shall include recovery of rock and other material that has been dislodged onto the beach.

(~~i~~m) All other required local, State and Federal permits shall be obtained.

(n) Within a designated Shoreline Protection Exception Area new shoreline and coastal bluff protection structures shall be allowed on all parcels to protect existing structures, or on vacant parcels which, through lack of protection, threaten adjacent developed lots, or to protect public roads and infrastructure, public beaches, and coastal dependent uses subject to the following criteria:

(i) Compliance with all applicable provisions of this chapter; and

(ii) New protection structures shall follow the pattern in terms of engineering design, aesthetics, and public access established by the County projects to armor East Cliff Drive at Pleasure Point and the Hook. New protection structures may integrate existing protection materials or structures if approved by the County.

(o) For purposes of determining what repair and maintenance activities require a coastal development permit, use the following criteria found in Title 14, Section 13252, of the California Code of Regulations.

Any method of repair or maintenance of a seawall revetment, bluff retaining wall, breakwater, groin, culvert, outfall, or similar shoreline work that involves:

(i) Repair or maintenance involving substantial alteration of the foundation of the protective work including pilings and other surface or subsurface structures;

(ii) The placement, whether temporary or permanent, of rip-rap, artificial berms of sand or other beach materials, or any other forms of solid materials, on a beach or in coastal waters, streams, wetlands, estuaries and lakes or on a shoreline protective work except for agricultural dikes within enclosed bays or estuaries;

(iii) The replacement of 20 percent or more of the materials of an existing structure with materials of a different kind; or

(iv) The presence, whether temporary or permanent, of mechanized construction equipment or construction materials on any sand area, bluff, or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams.

(p) For purposes of this section the replacement of 50 percent or more of an existing shoreline or coastal bluff protection structure constitutes a new structure.

(4) ~~Alteration of Damaged Structures. Reconstruction, repair, rebuilding, replacement, alteration, improvement, or addition to damaged structures located on a coastal bluff shall proceed according to the following chart:~~ Modification, Reconstruction, or Replacement of Damaged Structures on Coastal Bluffs. If structures located on or at the top of a coastal bluff are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, and where the loss involves 50 percent or more of Major Structural Components, allow repair (development activities) if all applicable regulations can be met, including the minimum 25-foot and the applicable 75 or 100-year geologic/coastal setbacks, or alternate setback authorized by an approved setback exception.

For structures involuntarily damaged by other than coastal hazards (fire, for example), where the loss involves 50 percent or more of the Major Structural Components, allow repair in kind, but encourage relocation to increase the setback if feasible.

Allow other than in-kind reconstruction or replacement of involuntarily damaged structures in accordance with all applicable LCP policies and regulations.

Exemption: Public beach facilities and replacements consistent with Coastal Act Policy 30610(g).

(5) Reconstruction or Replacement of Damaged Structures due to Storm Wave Inundation. If structures located in areas subject to storm wave inundation are damaged as a result of any cause and the loss meets or exceeds 50 percent of the value of the structure before the damage occurred (substantial damage), allow such repair (substantial improvement) only if all applicable regulations in SCCC 16.13 Floodplain Management Regulations and all applicable LCP policies can be met.

Exceptions: Public beach facilities and replacements

~~Extent of Damage~~	~~50% or More of the Value of Structure~~		~~Less Than 50% of the Value of Structure~~	
~~Cause of Damage (horizontal axis)~~	~~Coastal Hazards and Slope Instability~~	~~All Other Causes (fire, etc.)~~	~~Coastal Hazards and Slope Instability~~	~~All Other Causes (fire, etc.)~~
~~Location of Existing Structure (vertical axis)~~				
~~Existing structure meets setback (less than 10% extends into setback).~~	~~Meet all regulations.~~	~~Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.~~	~~Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.~~	~~Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.~~
~~Existing structure does not meet setback but could by relocating.~~	~~Meet all regulations, including setback for existing structure.~~	~~To repair or replace in kind, meet all regulations except setback. Otherwise meet all regulations, including prescribed minimum setback.~~	~~Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations, including prescribed minimum setback.~~	~~Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations, including prescribed minimum setback.~~
~~Existing structure does not meet setback and cannot meet setback by relocating.~~	~~If hazard can be mitigated to provide stability for a period of 100 years, repair or replace in kind. Meet all regulations except setback. Cannot be rebuilt, even in~~	~~May repair or replace in kind. To repair or replace in kind, meet all regulations except setback. Hazards shall be mitigated to a level that provides stability for a period of 100 years, if feasible. Projects in excess of "in-kind" shall~~	~~May repair or replace in kind. Hazards shall be mitigated to a level that provides stability for a period of 100 years, if feasible. Projects in excess of "in-kind" shall meet all regulations.~~	~~May repair or replace in kind. To repair or replace in kind, meet all regulations except setback. Hazards shall be mitigated to a level that provides stability for a period of 100 years, if feasible. Projects in excess of "in-kind" shall~~

Extent of Damage	50% or More of the Value of Structure		Less Than 50% of the Value of Structure	
Cause of Damage (horizontal axis)	Coastal Hazards and Slope Instability	All Other Causes (fire, etc.)	Coastal Hazards and Slope Instability	All Other Causes (fire, etc.)
Location of Existing Structure (vertical axis)				
	kind, if hazard cannot be mitigated to a level that provides stability for a period of 100 years.	meet all regulations, including prescribed minimum setback.		meet all regulations including prescribed minimum setback.

Public beach facilities are exempt from the provisions of this chart.

(56) Coastal High Hazard Area Development Criteria. All development, specifically including the placement of and construction on manufactured homes, shall meet the following criteria. For structures that had a building permit issued prior to April 15, 1986, any addition, repair, reconstruction, rehabilitation, alteration, or improvement, which, when subject to the definition of "cumulative improvement," does not meet the definition of "substantial improvement" (pursuant to SCCC 16.10.040(18) and (65)), is exempt from this section. The provisions of SCCC 16.13 Flood Hazards shall apply to all development, as defined in that chapter, that is wholly within, partially within, or in contact with any coastal high hazard area, or other areas as identified by the Floodplain Administrator, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, replacement, repair, relocation or demolition of any building or structure; placement, installation, or replacement of manufactured homes; installation or replacement of tanks; placement of temporary structures and temporary storage; installation of swimming pools; and miscellaneous and utility structures.

(a) Demonstration that the potential hazards on the site can be mitigated, over the 100-year lifetime of the structure, as determined by the geologic hazards assessment or full geologic report and any other appropriate technical reports. Mitigations can include but are not limited to building setbacks, elevation of the proposed structure and foundation design;

(b) Location of the proposed structure landward of the reach of mean high tide and outside of the area of storm wave inundation where a buildable portion of the property is outside of the area of storm wave inundation;

(c) Elevation of all structures (including manufactured homes) on pilings and columns so that the bottom of the lowest portion of the lowest structural member of the lower floor (excluding the pilings or columns) and elements that function as part of the structure, such as furnace, hot water heater, etc., are elevated to or above the base flood level;

(d) Anchoring of the pile or column foundation and structure attached thereto to prevent flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval);

(e) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (H)(5)(c) and (d) of this section prior to permit issuance;

(f) The space below the lowest floor shall either be free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work or insect screening intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this section, a breakaway wall shall be of nonmasonry construction and have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which do not meet the above material and strength criteria may be permitted only if a registered professional engineer or architect certifies that the designs proposed will permit the breakaway wall to collapse under a water load less than that which would occur during the base flood and that the elevated portion of the building or supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components. Such enclosed space shall be useable solely for vehicle parking, building access or storage, and shall not be a finished area or habitable area;

(g) The use of fill for structural support of buildings is prohibited;

(h) The alteration of sand dunes which would increase potential flood damage is prohibited;

(i) Compliance with the provisions of subsections (H)(5)(c) and (d) of this section shall be certified by a registered professional engineer or architect and submitted to the Planning Director when the foundation work has been completed. Failure to submit elevation and structural certification may be cause to issue a stop-work notice for a project. The Planning Director shall maintain records of compliance with the elevation requirements;

(j) Recreational vehicles that are placed on a site that is within the V, V1—V30, or VE zones as designated in the FIS, and that are not fully licensed and highway ready, must meet all the provisions of subsection (H)(5) of this section unless they are on the site for less than 180 consecutive days. For the purposes of this chapter, "highway ready" means on wheels or jacking system, attached to the site by quick-disconnect utilities and security devices, and having no attached additions;

(k) Determination by the Planning Director on the basis of the geologic hazards assessment or geologic report that the mitigation of the hazards on the site is not dependent on shoreline protection structures except on lots where both adjacent parcels are already similarly protected;

~~(l) The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required, as a condition of development approval and building permit approval, to record a declaration of geologic hazards with the County Recorder. The declaration shall include a description of the hazards on the parcel, and the level of geologic and/or geotechnical investigation conducted;~~

~~(m) All other required State and Federal permits must be obtained.~~

(~~6~~7) New and Expanded Critical Structures and Facilities. Construction of critical structures and facilities, including the expansion of existing critical structures and facilities, and nonessential public structures shall be located outside areas subject to coastal hazards; unless such facilities are necessary to serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life and property within or adjacent to coastal inundation areas.

(~~7~~8) Creation of New Parcels and Location of New Building Sites. New parcels or building sites created by minor land divisions, subdivisions or development approvals or permits, and multi-residential structures in coastal hazard areas shall conform to the following criteria:

(a) Demonstration by a full geologic report that each proposed building site on the parcel is not subject to any potential hazards and that each site meets the minimum setback given in subsection (~~H~~G)(1) of this section;

(b) Determination by the Planning Director based on the geologic report that the long-term stability and safety of the development does not depend on or require shoreline or coastal bluff armoring~~protection structures~~;

(c) The proposed development does not reduce or restrict public access and the proposed development does not require the construction of public facilities, structures, or utility transmission lines in coastal hazard areas or within the 25-foot or 75 or 100-year stability (whichever is greater) setback; and

(d) The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required, as a condition of development approval and building permit approval, to record on the property title/deed a ~~declaration~~Notice of ~~g~~Geologic/Coastal ~~h~~Hazards. Acceptance of Risk, Liability Release, and Indemnification with the County Recorder. The ~~declaration~~Notice shall include a description of the hazards on the parcel and the level of geologic and/or geotechnical investigation conducted~~.~~, and additional acknowledgements and agreements as applicable to the specific project.

(9) Removal Conditions/Development Duration. Development/development activities on private property located in areas subject to coastal hazards shall be conditioned to indicate that it may be required that improvements be removed and the affected area restored if:

(a) the Building Official and/or the County Geologist has issued a final Notice and Order that the structure has become permanently unsafe to occupy due to bluff failure, erosion of the bluff, or coastal hazards;

(b) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads);

(c) removal is required pursuant to implementation of an adopted Shoreline Management Plan; or

(d) as provided by conditions of approval for a permit that has been accepted and implemented by an owner of the property.

Such condition shall be recorded on a deed restriction against the subject property.

(10) Abatement of Unsafe Site or Structure. If coastal hazards result in an unsafe site or unsafe structure, dangerous conditions shall be abated in accordance with County regulations and Notice and Orders of the Chief Building Official. If all or any portion of improvements are deemed uninhabitable, the improvements shall be removed and the affected area restored, unless an alternative response is approved by the County of Santa Cruz, and by the California Coastal Commission if the project is within the Coastal Commission's primary jurisdiction. Alternative responses to coastal hazards may include (1) pursuit of a Coastal Development Permit consistent with SCCC 13.20 (Coastal Zone Regulations) and SCCC 16.10 (Geologic Hazards); and/or (2) pursuit of an alternative consistent with an adopted shoreline management plan or plan of control of a Geologic Hazard Abatement District.

(11) If the mean high tide line or the blufftop edge migrates to within 15 feet of a principal, habitable structure to a point where the site or structure is deemed potentially unsafe by County regulations and/or the County Geologist, Civil Engineer, or Chief Building Official, the property owner shall retain a Professional Engineer with experience in coastal processes and hazard response to prepare a geotechnical investigation and Coastal Hazards Report (with input from a Professional Geologist, when required by civil engineering staff or the County Geologist) that addresses whether all or any portions of the residence and related development are threatened by coastal hazards, and that identifies actions that should be taken to ensure safe use and occupancy, which may include removal or relocation of all or portions of the threatened development and improvements, or other alternate responses. The property owner shall undertake activities to pursue an appropriate response in accordance with adopted and applicable County of Santa Cruz and California Coastal Commission regulations. The geotechnical investigation and Coastal Hazards Report shall be submitted to the Executive Director of the California Coastal Commission, and to the Planning Director, Chief Building Official and County Geologist of Santa Cruz County. If the residence or any portion of the residence is proposed to be removed, the Applicant shall submit a Removal and Restoration Plan.

(12) If an appropriate government agency so orders, or as a result of the above-referenced geotechnical investigation and Coastal Hazards Report, it is determined that any portion of the approved development must be removed due to coastal hazards, a Removal and Restoration Plan shall be submitted to the County for review and approval. No removal activities shall commence until the Removal and Restoration Plan and all other required plans and permits are approved. The Plan shall specify that in the event that portions of the development fall to the bluffs or ocean before they are removed/relocated, the landowner will remove all recoverable debris associated with the development from the bluffs and ocean and lawfully dispose of the material in an approved disposal site. If it is determined that separate grading and coastal development permits are required in order to authorize the activities, the application shall be submitted as soon as immediately feasible, including all necessary supporting information to ensure it is complete. The Removal and Restoration Plan shall clearly describe the manner in which such development is to be removed and the affected area restored so as to best protect coastal resources, and shall be implemented immediately upon County approval, or County approval of required permit applications, as may be required.

(13) Repetitive loss properties shall be subject to the requirements of SCCC 16.10.070(H)(5) regarding damage due to flooding, storm wave impacts, and inundation. Repetitive loss means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

(~~8~~14) Other Conditions. Other permit conditions including, but not limited to, project redesign, building site elimination, delineation of building and septic system envelopes, building elevation, foundation requirements and drainage plans shall be required as deemed necessary by the Planning Director, or other decision making body.

16.10.080 Project density limitations.

The following requirements shall apply to density calculations for new building sites created through minor land division, subdivision, or other development approval or permit:

(A) Fault Zones.

(1) Exclusion from Density Calculations. The portion of a property within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace shall be excluded from density calculations.

(2) Creation of New Parcels and/or New Building Sites. The following standards shall apply to the creation of new parcels and/or building sites within State Alquist-Priolo earthquake fault zones and County seismic review zones:

(a) All new structures shall meet setbacks as specified in SCCC 16.10.070(B)(2).

(b) Outside of the urban services line and the rural services line, a 20-gross-acre minimum parcel size shall be required, and a 10-gross-acre minimum parcel size shall be required for parcels within the portions of the County seismic review zones that are not also part of a State Alquist-Priolo earthquake fault zone, and are outside the Coastal Zone, if at least 25 percent of the perimeter of the original parcel to be divided is bounded by parcels of one acre or less in size.

(B) Landslides and Steep Slopes. The portion of a property with slopes over 30 percent in urban areas and 50 percent in rural areas, and the portion of a property within recent or active landslides, shall be excluded from density calculations. Landslide areas determined by a geologic report to be stable and suitable for development shall be granted full density credit.

(C) ~~Floodways~~Special Flood Hazard Area. The portion of a parcel within the special flood hazard area~~100-year floodway~~ shall be excluded from any density calculations.

~~(D) Floodplains. The portion of a property within the 100-year floodplain shall be excluded from density calculations.~~

(E) Coastal Hazards. The portions of a property subject to coastal inundation, as determined by a geologic hazards assessment, geologic report, or adopted flood insurance rate map (FIRM), as well as bluff faces, sandy beach areas, and areas subject to the public trust, shall be excluded from density calculations.

16.10.090 Project denial.

A development permit or the location of a proposed development shall be denied if the Planning Director determines that geologic hazards cannot be adequately mitigated or the project would conflict with National Flood Insurance Program regulations. Development proposals shall be approved only if the project density reflects consideration of the degree of hazard on the site, as determined from the technical information as reviewed and ~~approved~~accepted by the Planning Director or the decision making body.

16.10.100 Exceptions.

(A) Request for Exception. A request for an exception to the provisions of this chapter including but not limited to an exception to the applicable geologic setback requirement, or the permit conditions, may be considered by the Planning Director, or decision making body, if the exception is necessary to mitigate a threat to public health, safety and welfare or if the exception is necessary to avoid an unconstitutional taking of private property without just compensation pursuant to Policy 6.4.10.

(B) Reason for Request. A request for an exception shall state in writing the reason why the exception is requested, the proposed substitute provisions, when the exception would apply, ~~and~~or the threat to public health, safety, or welfare that would be mitigated.

(C) Required Findings. In granting an exception, the Planning Director or decision making body shall make the following findings:

(1) That hardship, as defined in SCCC 16.10.040(~~36~~27), exists; ~~and~~

(2) The project is necessary to mitigate a threat to public health, safety, or welfare or to avoid an unconstitutional taking of private property without just compensation pursuant to Policy 6.4.10; ~~and~~

(3) The request is for the smallest amount of variance from the provisions of this chapter as possible; and

(4) ~~Adequate m~~Measures will be taken to ensure consistency with the purposes of this chapter and the County General Plan to the maximum extent feasible.

(5) Any approval of a geologic setback less than the applicable 75- or 100-year standard expected design life is acknowledged and accepted by the property owner and properly characterized and reflected within the Notice of Geologic Hazards to be recorded on the title to the subject property.

~~(D) Exceptions for Projects in the Special Flood Hazard Area. For projects in the SFHAs the following additional procedures and provisions also apply:~~

~~(1) Nature of Exception. The exception criteria set forth in this section are based on the general principle of zoning law that exceptions pertain to a piece of property and are not personal in nature. An exception may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.~~

~~The interest in protecting citizens from flooding is compelling, and the cost of insuring a structure built below flood level so onerous that exceptions from the flood elevation or other health and safety requirements in the flood ordinance shall be granted in rare circumstances and only where no other alternative is available.~~

~~(2) Criteria for Exceptions.~~

~~(a) In considering requests for exceptions, technical evaluations, all other relevant information and standards specified in other sections of this chapter shall be considered, including the following:~~

~~(i) Danger that materials may be swept onto other lands to the injury of others;~~

~~(ii) Danger of life and property due to flooding or erosion damage;~~

~~(iii) Susceptibility of the proposed structure and its contents to flood damage and the effect of such damage on the existing individual owner and future owners of the property;~~

~~(iv) Importance of the services provided by the proposed structure to the community;~~

~~(v) Necessity to the structure of a waterfront location, where applicable;~~

~~(vi) Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;~~

~~(vii) Compatibility of the proposed use with existing and anticipated development;~~

~~(viii) Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;~~

~~(ix) Safety of access to the property in time of flood for ordinary and emergency vehicles;~~

~~(x) Expected heights, velocity, duration, rate of rise, and sediment transport of the floodwater expected at the site; and~~

~~(xi) Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water system, and streets and bridges.~~

~~(b) Any applicant to whom an exception is granted shall be given written notice of the terms and conditions, if any, of the exception, and said notice shall also include the following:~~

~~(i) That the issuance of an exception to construct a structure below the base flood level will result in substantially increased premium rates for flood insurance up to amounts as high as $25.00 for $100.00 of insurance coverage; and~~

~~(ii) That such construction below the base flood level increases risks to life and property; and~~

~~(iii) That a copy of the written notice shall be recorded on the deed so that it appears in the chain of title of the affected parcel of land.~~

~~(c) The Floodplain Administrator will maintain a record of all exception actions, including justification for their issuance, and report such exceptions issued in its biennial report submitted to the Federal Insurance Administration of the Federal Emergency Management Agency.~~

~~(3) Conditions for Exception.~~

~~(a) Exceptions may be issued for new construction, substantial improvement, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level,~~

~~providing that the procedures of SCCC 16.10.050, 16.10.070, and 16.10.080 have been considered. As the lot size increases beyond one-half acre, the justification required for issuing the exception increases.~~

~~(b) Exceptions shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result from the project.~~

~~(c) Exceptions shall only be issued upon a determination that the exception is the "minimum necessary" considering the flood hazard to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of exceptions to an elevation requirement, exceptions need not be granted for permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which will both provide relief and preserve the integrity of the regulatory requirements.~~

~~(d) Exceptions shall only be issued upon:~~

~~(i) Showing of good and sufficient cause;~~

~~(ii) Determination that failure to grant the exception would result in a "hardship" (as defined in SCCC 16.10.040) to the applicant; and~~

~~(iii) Determination that the granting of an exception will not result in increased flood heights, additional threats to public safety, or extraordinary public expense; create a nuisance, cause fraud or victimization of the public, or conflict with existing local laws or ordinances.~~

~~(e) Exceptions may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use (a functionally dependent use is one that would not function or operate unless sited on or adjacent to flood prone location in question); provided, that the provisions of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood, does not result in additional threats to public health or safety, and does not create a public nuisance.~~

~~(f) Exceptions may be issued for the repair or rehabilitation of historic structures (as defined in SCCC 16.10.040) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and that the exception is the minimum necessary to preserve the historic character and design of the structure.~~

~~(g) Upon consideration of the factors in subsection (D)(2)(a) of this section and the purposes of this chapter, conditions may be attached to the granting of exceptions as necessary to further the purposes of this chapter.~~

16.10.105 Notice of geologic hazards in cases of dangerous conditions.

(A) Whenever a site inspection, geologic hazards assessment or full geologic report identifies the presence of a geologic hazard that causes a site, building, structure, or portions thereof to be rendered unsafe or dangerous, then pursuant to the Uniform Code for the Abatement of Structural and Geologic Hazards as amended by SCCC 12.10.~~070(L)~~425, the Planning Director may issue a notice of geologic hazard and order thereon, and may record a notice of geologic hazard with the County Recorder.

(B) The Planning Director may initiate abatement procedures pursuant to the Uniform Code for the Abatement of Structural and Geologic Hazards as amended by SCCC 12.10.~~070(L)~~425.

16.10.110 Appeals.

Except as otherwise provided herein, appeals taken pursuant to the provisions of this chapter shall be made in conformance with the procedures of ~~Chapter~~SCCC 18.10~~ SCCC~~, including appeal of the requirement for geologic hazard assessment or technical report. All appeals taken concerning the decision to issue and record a notice of geologic hazard pursuant to the provisions of SCCC 16.10.105 shall be governed by the procedures commencing with Section 501 of the Uniform Code for the Abatement of Structural and Geologic Hazards as amended by SCCC 12.10.425~~070(A)(10) through (14)~~.

16.10.120 Violations.

(A) Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with all the provisions of this chapter and other applicable regulations. Nothing herein shall prevent the taking of lawful action as necessary to prevent or remedy any violation.

(B) Actions Constituting Violation. In the event of a violation of this chapter or of the provisions of permit conditions as specified in this chapter, or if the permit has been exercised in a manner which creates a nuisance or is otherwise detrimental to the public health, safety and welfare, the permittee shall be given notice of such violation, and a reasonable time shall be specified for its correction.

16.10.130 Fees.

Fees for the geologic hazards assessment, other field reviews, applications for exceptions, and the review of technical reports shall be set by resolution by the Board of Supervisors.