PLANNING DEPARTMENT

GOVERNMENTAL CENTER

COUNTY OF SANTA CRUZ

701 OCEAN STREET SANTA CRUZ, CALIFORNIA 95060
FAX (408) 454-2131 (408) 454-2580

February 22, 1999

Agenda: March 9, 1999

Board of Supervisors
County of Santa Cruz
701 Ocean Street
Santa Cruz, California 95060

SUBJECT: **ADOPTION OF AN ORDINANCE AMENDING CHAPTER 16.10 OF THE COUNTY CODE AND VARIOUS SECTIONS OF THE GENERAL PLAN/LCP REGARDING GEOLOGIC HAZARDS REGULATIONS BY INCORPORATING MODIFICATIONS ADOPTED BY THE CALIFORNIA COASTAL COMMISSION**

Members of the Board:

On October 27, 1998, your Board adopted Ordinance No. 45 18 (Attachment 6) and Resolution 425-98 (Attachment 7), which amended regulations regarding geologic hazards, and directed staff to submit the amendments as part of Round Two to the California Coastal Commission for certification.

At its meeting on February 3, 1999, the California Coastal Commission voted to approve your Board's amendments with several minor changes. The purpose of this letter is to present these modifications to your Board for consideration. Staff support the adoption of these amendments.

DISCUSSION

The modifications that were approved by the Coastal Commission are listed below, along with a brief description of the concern that prompted the modification and a discussion of any expected effect of the modification. The four modifications are listed below and include the number by which they are referenced in the Coastal Commission staff report (Attachment 8). Language added by the Coastal Commission is given in italics. County Counsel has advised staff that, due to the minor nature of the proposed modifications, a public hearing is not required to adopt this ordinance.

PROPOSED MODIFICATIONS

1. Coastal Commission staff was concerned that the revision to the definition of "development" in Chapter 16.10 and in the General Plan glossary, which specifically lists the types of projects that are subject to geologic review, might give the impression that projects that are not subject to geologic review were also not subject to coastal zone regulations. The Commission has added language to

clarify that the definition of "development" does not supercede any portion of the coastal regulations:

"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 definition does not supercede the definition of development in Chapter 13.20.040 for the purposes of determining whether a certain activity or project requires a coastalpermit; some activities or projects will still require coastal permits although they do not fall under this following specific definition.*

Coastal Commission staff was also concerned that the revised definition might inadvertently exempt a small project or non-habitable project from geologic review, where the project would create or exacerbate a geologic hazard or expose increased numbers of people to geologic hazard in some manner that is not anticipated by the definition. They have proposed an additional category of "development" to address this unanticipated situation, should it arise:

(15) Any otherproject that is defined as development under Section 13.20.040 and that will increase the number of people exposed to geologic hazard, or that may create or exacerbate an existing geologic hazard, shall be determined by the Planning Director to constitute "development" for the purposes of geologic review.

Though this is a very conservative approach, it does not conflict with the intent and purpose of the revisions as approved by your Board last year. This language has been added to Chapter 16.10 and the GP/LCP glossary.

2. Coastal Commission staff discovered a potential drawback to the revision in 16.10 that allows limited projects to be undertaken within the coastal bluff setback. The General Plan/LCP allows for the construction of shoreline protection structures and coastal bluff retaining structures where an existing structure is threatened. The Commission's concern is that even though the set of projects that Chapter 16.10 exempts from review inside the setback is very small, and involves such as structures as landscape boulders, fences, non habitable structures less than 120 square feet, etc., such a project could be used as the justification to construct a shoreline or coastal bluff retaining structure in the future, where a protection structure would not otherwise be allowed. The Coastal Commission has therefore inserted language that specifies that projects constructed within the setback cannot be used as justification for shoreline protection and coastal bluff retaining structures in the future:

16.1 0.070(h)2 (ii): *If a structure that is constructedpursuant 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 be either removed or relocated rather than protected in place.*

16.1 0.070(h)3(i): *Note: New shoreline protection structures shall not be allowed where the existing structure proposed for protection was granted an exemption pursuant to Section 16.10.070(h)2.*

These clarifications will prevent an unintended consequence, and they are consistent with the purpose and intent of the revisions as approved by your Board last October.

3. Revisions to 16.10 included a provision to allow the requirement for technical reports to be deferred, for some projects, until submission of a building permit application. Coastal Commission staff rely upon the technical reports for their analysis, especially in the case where a County action is appealed to the Coastal Commission. The Coastal Commission has therefore added language to allow deferral of technical reports only when the project is outside the appealable portion of the Coastal Zone:

16.10.060(a): . ..The County Geologist may agree to defer the date of 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) theproject 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.

This change will have a very limited effect, in that a few applicants will not have the option of deferring technical reports. This is a minor effect on the functioning of Chapter 16.10.

4. Coastal Commission staff believe that Chapter 16.10 should specify the elements of the construction and staging plans that are required for projects that involve work on the beach. They have therefore included the following language:

16.I0.070(h)3(viii): Applications for shoreline protection structures shall include a construction and staging plan that minimizes disturbance to the beach, specifies 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.

The Planning Department already requires such plans to contain these provisions, and therefore the modification will have no effect on the review and permit process.

ENVIRONMENTAL REVIEW

Your Board adopted a Negative Declaration for Ordinance No. 45 18 under the provisions of CEQA. As the proposed modifications are minor in nature, the Negative Declaration does not require modification and no additional environmental review is needed.

RECOMMENDATION

The modifications requested by the Coastal Commission involve clarification, improved language that prevents certain unintended consequences, and other changes that will have only a minor effect on the functioning of the geologic review process. None of the modifications conflict with the intent of the revisions that were approved by your Board last October, and staff recommends their adoption.

It is, therefore, RECOMMENDED that your Board take the following actions:

1. Adopt the attached Resolution amending the County of Santa Cruz Local Coastal Plan Implementation Program (Attachment 1); and

2. Adopt the attached modified ordinance amending various sections of the County Code (Attachment 2); and

3. Direct Planning staff to submit this resolution and ordinance amendment to the California Coastal Commission for certification.

Sincerely,

Alvin D. James
Planning Director

RECOMMENDED:

for SUSAN A. MAURIELLO
County Administrative Officer

Attachments:

1. Board of Supervisors Resolution
2. Proposed Ordinance
3. Proposed General Plan/LCP sections
4. "Strikeout" Version of Ordinance
5. "Strikeout" Version of General Plan/LCP sections
6. Copy of Ordinance No. 45 18
7. Copy of Resolution No. 425-98
8. Coastal Commission Staff Report dated January 13, 1999

cc: California Coastal Commission

BEFORE THE BOARD OF SUPERVISORS
OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOLUTION NO. _____

On the motion of Supervisor
duly seconded by Supervisor
the following is adopted:

WHEREAS, the County of Santa Cruz has adopted a Local Coastal Program, including implementing ordinances, which Program has been certified by the California Coastal Commission in accordance with the California Coastal Act (Public Resource Code Section 30000 et seq; and

WHEREAS, on October 27, 1998, the Board of Supervisors adopted Ordinance No. 45 18 amending Section 13.10.700-D and Chapter 16.10 of the County Code and Resolution 425-98 amending various sections of the General Plan/Local Coastal Program Land Use Plan regarding geologic hazards regulations and submitted said revisions to the Coastal Commission for certification;

WHEREAS, on February 3, 1999, the Coastal Commission considered Ordinance No. 45 18 and the General Plan/LCP revisions and certified them as conforming with the County's Local Coastal Program subject to certain modifications; and

WHEREAS, the Board of Supervisors has considered the recommended modifications and found them to be acceptable; and

WHEREAS, in compliance with CEQA and State and County Environmental Review guidelines, amendments to Sections 13.10.700-D and Chapter 16.10 of the County Code and various sections of the Genera1 Plan/Local Coastal Program Land Use Plan have been issued a Negative Declaration, which has been considered by the Planning Commission and the Board of Supervisors, and the recommended modifications do not require additional environmental review; and

WHEREAS, the California Coastal Commission has certified the Implementation Program of the County's Local Coastal Program; and

WHEREAS, Ordinance No. 45 18, as modified and renumbered 45 18-C is consistent with the County Genera1 Plan, and all components of the County Local Coastal Program Land Use Plan; and

WHEREAS, Ordinance No. 45 18, as modified and renumbered 45 18-C is consistent with the California Coastal Act and shall be carried out in accordance with Section 30510(a) of the Act:

NOW, THEREFORE, BE IT RESOLVED AND ORDERED, that the Board of Supervisors hereby adopts revisions to the General Plan/Local Coastal Program regarding geologic hazards regulations, as specified in Exhibit A, and approves Ordinance No. 45 1 S-C amending the Santa Cruz County Local Coastal Program, to become effective on the 3 1st day after final passage or certification by the Coastal Commission, whichever occurs later, and to then supercede Ordinance No. 45 18:

AN ORDINANCE AMENDING SANTA CRUZ COUNTY CODE INCLUDING LOCAL COASTAL PROGRAM IMPLEMENTING ORDINANCES: SECTION 13.10.700-D AND CHAPTER 16.10 REGARDING GEOLOGIC HAZARDS REGULATIONS

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz, State of California, this _____ day of _____, 1999 by the following vote:

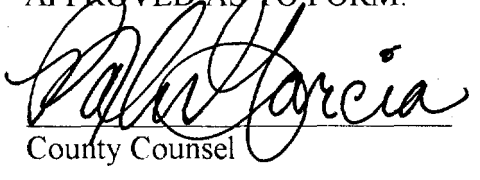
AYES: SUPERVISORS
NOES: SUPERVISORS
ABSENT: SUPERVISORS
ABSTAIN: SUPERVISORS

_____
Chairperson, Board of Supervisors

ATTEST:

_____
Clerk of the Board

APPROVED AS TO FORM:



County Counsel

DISTRIBUTION: County Counsel
Planning Department

GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENTS

6.1.11 Setbacks from Faults

(LCP) Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (SO) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting engineering 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 one hundred (100) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace.

6.2.10 Site Development to Minimize Hazards

(LCP) Require all developments to be sited and designed to avoid or minimize hazards as determined by the geologic hazards assessment or geologic and engineering investigations.

6.2.11 Geologic Hazards Assessment in Coastal Hazard Areas

(LCP) Require a geologic hazards assessment or full geologic report for all development activities within coastal hazard areas, including all development activity within 100-feet of a coastal bluff. Other technical reports may be required if significant potential hazards are identified by the hazards assessment.

6.2.12 Setbacks from Coastal Bluffs

(LCP) 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. A setback greater than 25 feet may be required based on conditions on and adjoining the site. The setback shall be sufficient to provide a stable building site over the 100-year lifetime of the structure, as determined through geologic and/or soil engineering reports. The determination of the minimum 100 year setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed shoreline or coastal bluff protection measures.

6.2.13 Exception for Foundation Replacement and/or Upgrade

(LCP) Foundation replacement and/or foundation upgrades that meet the definition of development activity shall meet the 25-foot minimum and 100-year stability setback requirements. An exception to those requirements may be granted for existing structures that are located partly or wholly within the setback if the Planning Director determines that:

1) the area of the structure that is within the setback does not exceed 25% of the area of the structure, OR

2) the structure cannot be relocated to meet the setback due to inadequate parcel size.

6.2.14 Additions to Existing Structures

(LCP) Additions, including second story and cantilevered additions, shall comply with the setback requirements of 6.2.12.

6.2.15 New Development on Existing Lots of Record

(LCP) Allow development activities in areas subject to storm wave inundation or beach or bluff erosion on existing lots of record, within existing developed neighborhoods, under the following circumstances:

(a) A technical report (including a geologic hazards assessment, engineering geology report and/or soil engineering report) demonstrates that the potential hazard can be mitigated over the 100-year lifetime of the structure. Mitigations can include, but are not limited to, building setbacks, elevation of the structure, and foundation design;

(b) Mitigation of the potential hazard is not dependent on shoreline or coastal bluff protection structures, except on lots where both adjacent parcels are already similarly protected; and

(c) The owner records a Declaration of Geologic Hazards on the property deed that describes the potential hazard and the level of geologic and/or geotechnical investigation conducted.

6.2.16 Structural Shoreline Protection Measures

(LCP) Limit structural shoreline protection measures to structures which protect existing structures from a significant threat, vacant lots which through lack of protection threaten

adjacent developed lots, public works, public beaches, or coastal dependent uses.

Require any application for shoreline protection measures to include a thorough analysis of all reasonable alternatives, including but not limited to, relocation or partial removal of the threatened structure, protection of the upper bluff or area immediately adjacent to the threatened structure, engineered shoreline protection such as beach nourishment, revetments, or vertical walls. Permit structural protection measures only if non-structural measures (e.g. building relocation or change in design) are infeasible from an engineering standpoint or not economically viable.

The protection structure must not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, increase erosion on adjacent properties, or cause harmful impacts on wildlife and fish habitats or archaeological or paleontological resources.

The protection structure must be placed as close as possible to the development requiring protection and must be designed to minimize adverse impacts to recreation and to minimize visual intrusion.

Shoreline protection structures shall be designed to meet approved engineering standards for the site as determined through the environmental review process.

Detailed technical studies shall be required to accurately define oceanographic conditions affecting the site. All shoreline protective 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 revetments or erosion trends.

No approval shall be given for shoreline protective structures that do not include permanent monitoring and maintenance programs. Such programs shall include a report to the County every five years or less, as determined by a qualified professional, after construction of the structure, detailing the condition of the structure and listing any recommended maintenance work. Maintenance programs shall be recorded and shall allow for County removal or repair of a shoreline protective structure, at the owner's expense, if its condition creates a public nuisance or if necessary to protect the public health and safety.

6.2.18 Public Services in Coastal Hazard Areas

(LCP) Prohibit utility facilities and service transmission systems in coastal hazard areas unless they are necessary to serve existing residences.

6.2.18.1 Density Calculations

(LCP) Exclude areas subject to coastal inundation, as defined by geologic hazards assessment or full geologic report, from use for density calculations.

6.2.20 Reconstruction of Damaged Structures on Coastal Bluffs

(LCP) Permit reconstruction of structures on or at the top of a coastal bluff which are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, or are damaged by non-coastal related hazards (fire, etc), and where the loss is less than 50 percent of the value, in accordance with the recommendations of the hazards assessment. Encourage relocation to a new footprint provided that the new location is landward of the previous site at the best possible site not affecting resources (e.g. the most landward location, or landward of the area necessary to ensure a stable building site for the minimum 100-year lifetime, or not necessitating a future shoreline protective structure).

When 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 is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met, including minimum setbacks. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged by other than coastal hazards, where the loss is greater than 50% of the value, allow in-kind reconstruction, subject to all regulations except for the minimum setback. Allow other than in-kind reconstruction only if the minimum setback is met.

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

6.2.21 Reconstruction of Damaged Structures due to Storm Wave Inundation

(LCP) Permit reconstruction of individual structures located in areas subject to storm wave inundation, which are damaged as a result of coastal hazards, and loss is less than 50 percent of the value, in accordance with recommendations from the geologic hazards assessment and other technical reports, as well as with policy 6.2.16.

When structures located in areas subject to storm wave inundation are damaged as a result of coastal hazards and the loss is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged greater than 50 percent of the value by other than coastal hazards, allow in- kind reconstruction which meets all regulations except for the coastal bluff setback. Allow other than in-kind reconstruction only if the minimum setback is met.

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

6.4.5 New Parcels in 100-Year Floodplains

(LCP) Allow the creation of new parcels, including those created by minor land division or subdivision, in 100-year floodplains 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 one-hundred 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.

6.4.9 Septic Systems, Leach fields, and Fill Placement

(LCP) Septic systems and leach fields to serve previously undeveloped parcels shall not be located within the floodway or the 100 year floodplain. The capacity of existing systems in the floodway or floodplain shall not be increased. Septic systems shall be designed to avoid impairment or contamination. 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 on or off site. No fill is allowed in the floodway.

Amend the Glossary of the General Plan/Local Coastal Program Land Use Plan as follows:

Density Credit

(LCP) The number of dwelling units allowed to be built on a particular property determined by applying the designated general Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property.

The following areas which are not developable land shall be granted density credit for development density.

Outside the USL and RSL

a) Land with slopes between 30 and 50 percent.

Inside the USL and RSL

a) Land with slopes less than 30 percent in the required buffer setback from the top of the arroyo or riparian corridor, up to a maximum of 50 percent of the total area of the property which is outside the riparian corridor.

Countywide Credits

The following credits are subject to special site and/or development criteria and shall be granted full density credit:

a) Rare and endangered plant and animal habitats.
b) Archaeological sites.
c) Critical tire hazard areas.
d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
e) Landslide areas determined by a geological study to be stable and suitable for development.
f) Historic sites.

Development Activity

(LCP) Any project that includes activity in any of the following categories is considered to be development activity:

(1) The construction or placement of any habitable structure, including a manufactured home;

(2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50 percent of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows and doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;

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

(5) Installation of a new foundation for a habitable structure;

(6) The repair, replacement, or upgrade of more than 50% of an existing foundation of a habitable structure, or an addition to an existing foundation that is more than 50% of the original foundation area. This allows repair, upgrading or addition of up to 50% , measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(7) 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;

(8) Any change of use from a non-habitable structure to a habitable structure, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;

(9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards;

(10) 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 16.20) elsewhere;

(11) Construction of roads, utilities, or other facilities,

(12) Retaining walls which require a building permit, retaining walls that function as a part of a landslide repair whether or not they require a building permit, seawalls, rip-rap erosion protection or retaining structures, and gabion baskets;

(13) Installation of a septic system.

(14) In the Special Flood Hazard Area, any human made change to developed or undeveloped real estate, 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 items 1-13.

(15) Any other project that is defined as development under Section 13.20.040, and that will increase the number of people exposed to geologic hazard, or that may create or exacerbate an existing geologic hazard, shall be determined by the Planning Director to constitute development for the purposes of geologic review.

Geologic Hazards Assessment
(LCP) A summary of the possible geologic hazards present at the site conducted by the staff geologist.

Geologic Report, Full
(LCP) A complete geologic investigation conducted by a Certified Engineering geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

Figure 2–2 (page 2 of 2)
Special Land Division and Density Requirements (1)

Type of Constraint	Land Division Requirements (Minimum average area required PER PARCEL) (2)	Density Requirements (Minimum averaga site area required PEP RESIDENTIAL UNIT (3)
'COASTAL HAZARD AREAS - bluffs and beaches (Section 6.2)	New parcels must provide building sites outside areas of coastal hazards	Density consistent with General Plan designation
CRITICAL FiRE HAZARD AREAS (Section 6.5):		
Euiiding site in Critical fire Hazard Area		
-with through road or secondary access	- Parcel size consistent with the lowest density in the range allowable by the applicable General Plan Designation	- The lowest density in the range allowable by the applicable General Plan Designation
-with dead end road	- No division allowed	- 1 unit per parcel
Mitigable Critical Fire Hazard Areas if ail mitigations approved	Parcal size consistent with General Plan land use designation	Density consistent with General Plan Land Use designation
100 YEAR FLOODPLAIN (Section 6.4)	Permitted only under special conditions	Density consistent with General Plan designation excluding ~~floodway area~~ flood hazare rea
SEISMIC REVIEW ZONES - taut! zones (Section 6.1)	20 net develcpable acres outside USL Consistent with General Plan designation inside USL	Density consistent with the General Plan designation and Geciogic Report

notes polities which only apply inside the Coastal Zone.

(1) This table summarizes special land division and density requirements of General Plan and LCP Rescurces and Constraints policies. More specific requirements are found in the General Plan and LCP Land Use Plan sections notec.

(2) These acreages are expressed as minimums. Tne maximum number of parcels resulting from any land division shall nct exceed the total number cf allowed units on one parcal based on this hbie and the Eurai Residential Density Determination Matrix.

(3) These acreages are expressed as minimums. Tne maximum number cf dwelling units cn an existing parcal shall nct exceed the total number of potential parcals and/or units as determined by this table and the Rural Residential Density Determination Matrix.

ORDINANCE NO. 45 18-C

ORDINANCE AMENDING SECTION 13.10.700-D AND CHAPTER 16.10 OF THE COUNTY CODE RELATING TO GEOLOGIC HAZARDS

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION I

Section 13.10.700-D, definition of Density Credit, is hereby amended to read as follows:

Density Credit. The number of dwelling units allowed to be built on a particular property determined by applying the designated General Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable Land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property. The following areas which are not developable land shall be granted density credit for development density.

Outside the USL and RSL:

a) land with slopes between 30 and 50 percent.

Inside the USL and RSL:

a) Land with slopes less than 30 percent in the required buffer set back from the top of the arroyo or riparian corridor, up to maximum of 50 percent of the total area of the property which is outside the riparian corridor.

Countywide Credits

The following areas are subject to special site and/or development criteria and shall be granted full density credit:

a) Rare and endangered plant and animal habitats.
b) Archaeological sites.
c) Critical fire hazard areas.
d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
e) Landslide areas determined by a geological study to be stable and suitable for development.
f) Historic sites.

SECTION II

Chapter 16.10 is hereby amended to read as follows:

GEOLOGIC HAZARDS

Sections:

16.10.010 PURPOSE. The purposes of this chapter are:

(a) Policy Imnlementation. 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 that potential buyers are notified of property located in an area of special flood hazard, and to assure that those who occupy areas of special flood hazard assume responsibility for their actions, (Ord. 3340, 11/23/82; 3598, 11/6/84)

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 Section 16.10.040(s)8, 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. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3635, 3/26/85)

16.10.022 STATUTORY AUTHORIZATION. The State of California has in Government Code Sections 65302, 65560, 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.

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.

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 13.03 of the County Code and shall be subject to approval by the California Coastal Commission. (Ord. 3340, 11/23/82; 3598, 11/6/84)

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 the ordinance 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 ordinance 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 ordinance 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 ordinance or any administrative decision lawfully made hereunder.

16.10.037 SEVERABILITY. This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance 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:

(a) Accessory Use. Any use which is clearly incidental and secondary to the main use and does not change the character of the main use.

(b) Active geologic feature (fault or landslide) which shows evidence of movement, surface displacement, or activity within Holocene time (about the last 11,000 years).

(c) Addition. Improvement to an existing structure that increases the 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.

(d) Adjacent / contiguous parcel. A parcel touching the subject parcel and not separated from the subject parcel by a road, street or other property.

(e) Areas of special flood hazard. 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, Al-A30, AE, A99, V1-V30, VE or V. Also known as Special Flood Hazard Area (SFHA).

(f) Base Flood. A flood which has a one percent chance of being equaled or exceeded in any given year. For flood insurance purposes one-hundred year flood and base flood have the same meaning.

(g) Basement. For the purposes of this Chapter, any area of the building having its floor subgrade (below ground level) on all sides.

(h) Beach erosion. Temporary or permanent reduction, transport or removal of beach sand by littoral drift, tidal actions, storms or tsunamis.

(i) Certified Engineering Geologist. A Registered Geologist who is licensed by the State of California to practice the sub-specialty of Engineering Geology.

(j) Coastal Bluff. A bank or cliff along the coast subject to coastal erosion processes. Coastal bluff refers to the top edge, face, and base of the subject bluff.

(k) Coastal dependent uses. Any development or use which would not function or operate unless sited on or adjacent to the ocean

(l) Coastal erosion processes. Natural forces that cause the breakdown and transportation of earth or rock materials on or along beaches and bluffs. These forces include landsliding, surface runoff, wave action and tsunamis.

(m) Coastal hazard areas. 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.

(n) Coastal High Hazard Area. 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 Vl-30, VE or V.

(o) County geologist. A County employee who is registered as a geologist with the State of California (R.G.) and has been authorized by the Planning Director to assist in the administration of this chapter, or a registered geologist under contract by the County who has been authorized by the Planning Director to assist in the administration of this chapter. (Ord. 4090, 12/4/90)

(p) County geologic advisor. An individual who is registered as a geologist with the State of California (R.G.), who may be employed by the County to provide geologic services.

(q) Critical structures and facilities, 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.

(r) Cumulative improvement. For the purposes of calculating "substantial improvement" as defined in section 16.10.040(3m), 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".

(s) 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 supercede Chapter 13.20.040 for purposes of determining whether a certain activity or project requires a coastal permit; some activities and projects will require coastal permits although they do not fall under this following specific definition.

(1) The construction or placement of any habitable structure, including a manufactured home;

(2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50% of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows or doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is done at one time or as the sum of multiple projects during the life of the structure;

(3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;

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

(5) Installation of a new foundation for a habitable structure;

(6) The repair, replacement, or upgrade of an existing foundation of a habitable structure that affects more than 50% of the foundation (measured in linear feet for perimeter foundations, square feet for slab foundations, or 50% of the total number of piers), or an addition to an existing foundation that adds more than 50% of the original foundation area. This allow repair, upgrade, or addition up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(7) 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 use;

(8) Any change of use from non-habitable use to habitable use, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;

(9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards;

(10) 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 16.20;

(11) Construction of roads, utilities, or other facilities,

(12) 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, sea walls, rip-rap erosion protection or retaining structures, and gabion baskets;

(13) Installation of a septic system;

(14) 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 items 1-13.

(15) Any other project that is defined as development under Section 13.20.040, and that will increase the number of people exposed to geologic hazards or that may create or exacerbate an existing geologic hazard, shall be determined by the Planning Director to constitute development for the purposes of geologic review.

(t) Development envelope. A designation on a site plan or parcel map indicating where buildings, access roads and septic systems are to be located.

(u) Fault zones. A zone or zones of fracture designated on the General Plan or Local Coastal Program Land Use Constraints Maps, or other maps and source materials authorized by the Planning Director.

(v) Fill. The deposit of earth or any other substance or material by artificial means for any purpose, or the condition resulting from a till taking place.

(w) Flood Boundary Floodway Map. 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.

(x) Flood control structure. 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.

(y) Flood Insurance Rate Map (FIRM). 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.

(z) Flood Insurance Study. 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.

(2a) Floodplain. Any land area susceptible to being inundated by water from any source. The one-hundred 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".

(2b) Floodplain Administrator. 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 ordinance.

(2c) Floodproofing. Any combination of structural and non-structural additions, changes or adjustments to non-residential structures which reduce or eliminate flood damage to real estate or improved property.

(2d) Floodway. The channel of a river or other watercourse and the adjacent land area that must be reserved in order to carry and discharge the one-hundred year flood without cumulatively increasing the water surface elevation more that one foot at any point. Also referred to as the Regulatory Floodway.

(2e) Geologic hazard. A threat to life, property, or public safety caused by geologic or hydrologic processes such as flooding, wave inundation, landsliding, erosion, faulting, ground cracking, and secondary seismic effects including , liquefaction, landsliding, tsunami and ground shaking.

(2f) Geologic hazards assessment. A summary of the possible geologic hazards present at a site conducted by the staff geologist.

(2g) Geologic report. full. A complete geologic investigation conducted by a Certified Engineering Geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

(2h) Grading. Excavating or filling land, or a combination thereof.

(2i) Habitable. For the purposes of this Chapter, any structure or portion of a structure, whether or not enclosed, that is usable for living purposes, which include 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 include 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.

(2j) Hardship. For the purposes of administering Section 16.10.100, means 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.

(2k) High and very high liquefaction potential areas. Areas that are prone to liquefaction caused by ground shaking during a major earthquake. These areas are designated on maps which are on tile with the Planning Department.

(21) Historic Structure. Any structure that is 1. 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; 2. 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; 3. Individually listed on the State Register of Historic Places which has been approved by the Secretary of the Interior; or, 4. 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.

(2m) Hydrologic investigation. A report prepared by a Certified Engineering geologist or civil engineer with expertise in hydrology which analyzes surface hydrology and/or groundwater conditions.

(2n) Littoral drift. The movement of beach sand parallel to the coast due to wave action and currents.

(20) Liquefaction. 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.

(2p) Lowest Floor. For flood purposes, the lowest floor of the lowest enclosed area of a structure, including any basement.

(1) 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 non-elevation design requirements, including, but not limited to:

(i) the wet floodproofing standards in Section 16.1 0.070(f)(3)(ix)

(ii) the anchoring and construction materials and methods in Section 16.10.070(f)(3)(ii)

(iii) The standards for septic systems and water supply in Section 16.10.070 (f)(5) and (f)(6).

(2) 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.

(2q) Manufactured home. 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.

(2r) Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.

(2s) Mean Sea Level. 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.

(2t) Multiple-residential structure. A single structure containing four or more individual residential units.

(2u) Natural disaster. Any situation in which the force or forces of nature causing destruction are beyond the control of people.

(2v) New Construction. For the purposes of Sections 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.

(2w) Non-essential public structures. Public structures which are not integral in providing such vital public services as fire and police protection, sewer, water, power and telephone services.

(2x) 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.

(2y) One-hundred year flood. A flood that statistically could occur once in 100 years on the average, although it could occur in any year. For flood insurance purposes one-hundred year flood and base flood have the same meaning. See Base Flood.

(2z) Planning Director. The Planning Director of the County of Santa Cruz or his or her authorized employee.

(3a) Public facilities. 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.

(3b) Recent, A geologic feature (fault or landslide) which shows evidence of movement or activity within Holocene time (about the last 11,000 years.)

(3c) Registered geologist. A geologist who is licensed by the State of California to practice geology.

(3d) Registered Geotechnical (Soils) Engineer. A civil engineer licensed in the State of California, experienced in the practice of soils and foundation engineering.

(3e) Regulatory Floodway. See Floodway.

(3f) 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 use as a permanent dwelling but a temporary living quarters for recreation, camping, travel, or seasonal use.

(3g) Shoreline protection structure. Any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate..

(3h) Soils investigation. A report prepared by a registered soils engineer, hired by the applicant, and completed in accordance with the County Soils Report Guidelines. This term is synonymous with the term geotechnical investigation.

(3i) Special Flood Hazard Area (SFHA). See Area of Special Flood Hazard.

(3j) Start of Construction. 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.

(3k) Structure. 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.

(3l) Substantial Damage. 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.

(3m) Substantial Improvement. Any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in Section 16.10.040(r), 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) (Ord. 4080, 9/11/90)

(3n) Sub-surface geologic investigation. A geologic report prepared by a Certified Engineering geologist that provides information on sub-surface materials through trenching, test pits and borings. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3892, 3/15/88; 3997, 6/6/89)

(30) V-Zone. See "Coastal High Hazard Area"

(3p) Violation. 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.

(3q) Watercourse. 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 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 in the following designated areas: fault zones, one-hundred year floodplains and floodways, and coastal hazard areas, except: as specified in subsections (c) (d) and (e), where a full geologic report will be prepared according to the County Guidelines for Engineering Geologic Reports, or where the County Geologist 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) Geologic Report Required.

A full geologic report shall be required:

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.

(d) Potential Liquefaction Area. A site specific investigation 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 Development applications for four units or less, one story structures and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment. When a significant hazard may exist, a site specific investigation shall be required.

(e) 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.. (Ord. 3340, 1 1/23/82; 3598, 11/6/84)

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 and before any discretionary or development application 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 Preparation. The geologic hazards assessment shall be prepared by County staff. Alternately, the assessment may be conducted by a private Certified Engineering Geologist at the applicant's choice and expense. Such privately prepared assessments shall, however, be subject to review and approval as specified in this section.

(c) Report Acceptance. All geologic, geotechnical, engineering, and hydrologic reports or investigations submitted to the County as a part of any development application shall be found to conform to County report guidelines. . The Planning Director may require an inspection in the field of all exploratory trenches, test pits, and borings excavated for a technical report.

(d) 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 geologic report shall be valid and all recommendations therein shall remain in effect for three years from the date of completion of the report . The 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. (Ord. 3340, 11/23/82; 3598, ll/6/84)

16.10.070 PERMIT CONDITIONS

The recommendations of the geologic hazards assessment full geologic report, and/or the recommendations of other technical reports (if evaluated and authorized by the Planning Director), shall be 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 non-habitable and is not otherwise considered to be development under this Chapter, a Declaration of Restrictions for the non-habitable structure shall be recorded 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) Fault Zones,

I. Location: Development shall be located away from potentially hazardous areas as identified by the geologic hazards assessment or full geologic report, and

2. Setbacks: Habitable structures shall be set back a minimum of fifty 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 twenty five 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 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 one-hundred 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.

4. 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) 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) 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 , 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.

(e) Slope Stability

1. Location: All development activities shall be located away from potentially unstable areas as identified through the geologic hazards assessment, full geologic report, soils 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 report or other environmental or technical assessment only under the following circumstances:

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

(ii) A full 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 landslide damage and not cause a health hazard.

(iii) 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 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. Such plans shall be reviewed and approved 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 Reconstruction: Where washouts or landslides have occurred on public or private roads, road reconstruction shall meet the conditions of appropriate geologic, soils and/or engineering reports and shall have adequate engineering supervision.

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) Floodplains

1. Critical and Public Facilities: Critical facilities and nonessential public structures and additions shall be located outside of the one-hundred 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 on 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 one-hundred year floodplain only under the following circumstances:

(i) 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.

(ii) A declaration indicating the limits and elevations of the one-hundred year floodplain certified by a registered professional engineer or surveyor must be recorded with the County Recorder. (Ord. 3635, 3/26/85)

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

(iv) 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 Section 16.10.040(r) and (3m)), is exempt from this section.

(i) location of proposed structures outside of the one-hundred year floodplain when a buildable portion of the property exists outside the floodplain;

(ii) 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:

(A) by providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and up lift forces of 9 pounds per square foot; or,

(B) 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.

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

(iv) 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;

(v) In flood zones A-O and A-H, provide drainage paths adequate to guide water away from structures and reduce exposure to flood hazards. (Ord 4071, 7/17/90)

(vi) 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 one-hundred 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.

(vii) Non-residential structures shall be floodproofed if elevation above the one-hundred year flood level in accordance with section 16.1 0.070(f)3(vi) is not feasible. Floodproofed structures shall:

(A) be floodproofed so that below an elevation one foot higher than the one-hundred 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;

(B) be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,

(C) 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.

(viii) 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 non-residential 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.

(ix) 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 that 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. Non-residential structures that are floodproofed in compliance with Section 16.10.070(f)(3)(vii)are an exception to this requirement.

4. Recreational Vehicles: R.V's 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 16.10.070(f)(3)(ii) and (3)(vi), unless they are on the site for less than 180 consecutive days. For the purposes of this ordinance, "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 one-hundred 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 one-hundred 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 non-residential structures, to at least one foot above the base flood level. Residential structures shall be elevated no less than two (2) feet above natural grade when base flood data do not exist. Non-residential 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 16.10.025, and within some areas not mapped as part of the Flood Insurance Study, are areas designated as floodways (see also 16.10.040 2d). 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 Section (g)1, above.

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, Riparian 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 Section 16.10.070(f), above. 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:

(i) for all development and for non-habitable 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.

(ii) for all development, including that which is cantilevered, and for non-habitable 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.;

(iii) 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.

(iv) foundation replacement and/or foundation upgrades that meet the definition of development per 16.10.040(s) and pursuant to 16.10.040(r), shall meet the setback described in Section 16.10.070(h)(1), except that an exception to the setback requirement may be granted for existing structures that are wholly or partially within the setback, if the Planning Director determines that:

a) the area of the structure that is within the setback does not exceed 25% of the total area of the structure, OR

b) the structure cannot be relocated to meet the setback because of inadequate parcel size.

(v) additions, including second story and cantilevered additions, shall comply with the minimum 25 foot and 100 year setback.

(vi) 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.

(vii) approval of drainage and landscape plans for the site by the County Geologist

(viii) service transmission lines and utility facilities are prohibited unless they are necessary to serve existing residences.

(ix) All other required local, state and federal permits shall be obtained.

2. Exemption:

(i) Any project which does not specifically require a building permit pursuant to Chapter 12.10.070(b) is exempt from Section 16.10.070 (h)1, with the exception of non-habitable 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, 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 run-off is controlled), benches, statues, landscape boulders, benches, and gazebos which do not require a building permit.

(ii) 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.

3. Shoreline protection structures shall be governed by the following:

(i) shoreline protection structures shall only be allowed 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, public beaches, and coastal dependent uses.

Note: New shoreline protection structures shall not be allowed where the existing structure proposed for protection was granted an exemption pursuant to Section 16.10.070(h)2.

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

(iii) application for shoreline protective structures shall include thorough analysis of all reasonable alternatives to such structures, including but not limited to 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 non- structural measures, such as relocating the structure or changing the design, are infeasible from an engineering standpoint or are not economically viable.

(iv) shoreline protection structures shall be placed as close as possible to the development or structure requiring protection.

(v) shoreline protection structures shall 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.

(vi) all protection structures shall meet approved engineering standards as determined through environmental review.

(vii) all shoreline protection structures shall include a permanent, County approved, monitoring and maintenance program.

(viii) Applications for shoreline 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.

(ix) All other required local, state and federal permits shall be obtained.

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:

Extent of Damage	**50% or more of the value of structure**		**Less than 50% of the value of structure**	
Cause of Damage (horiz. axis)	Coastal Hazards & Slope Instability	All Other Causes (fire, etc)	Coastal Hazards & 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 kind, if hazard cannot be mitigated to a level that provides stability for a period of 100 years.	To repair or replace in kind, meet all regulations except setback. Otherwise meet all regulations, including prescribed minimum setback.	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. 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.

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

5. Coastal High Hazard Area Develonment 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 Sections 16.10.040(r) and (3m)), is exempt from this section.

(i) 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;

(ii) 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;

(iii) elevation of all structures (including manufactured homes) on pilings and columns so that the bottom of the lowest portion of the lowest 1 structural member of the lowest 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.

(iv) 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);

(v) 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 paragraphs (iii) and (iv) of this section prior to permit issuance;

(vi) the space below the lowest floor shall either be free of obstruction or constructed with non-supporting 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 non-masonry construction and have a design safe loading resistance of not less than ten (10) and no more than twenty (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.

(vii) the use of fill for structural support of buildings is prohibited. (Ord. 4071, 7/17/90).

(viii) the alteration of sand dunes which would increase potential flood damage is prohibited.

(ix) compliance with the provisions of paragraphs (iii) and (iv) above 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.

(x) 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 16.10.070(h)(5) unless they are on the site for less than 180 consecutive days. For the purposes of this ordinance, "highway ready" means on wheels or jacking system, attached to the site by quick disconnect utilities and security devices, and having no attached additions.

(xi) 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.

(xii) 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.

(xiii) All other required state and federal permits must be obtained. (Ord. 4071, 7/17/90)

6. New 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. 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:

(i) 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 16.10.070(h) 1.

(ii) 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 protection structures;

(iii) 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 100 year stability (whichever is greater) setback;

(iv) 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.

8. 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. (Ord. 2088, 1/28/75; 2185, 9/23/75; 2258, 3/16/76; 2580, 8/8/78; 2631, 2/6/78; 3437, 8/23/83; 3598, 11/6/84; 3808, 4/15/86; 3892, 3/15/88; 3997, 6/6/89)

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:

16.10.100 EXCEPTIONS.

(a) Request for Exception: A request for an exception to the provisions of this chapter or the permit conditions may be considered by the Planning Director if the exception is necessary to mitigate a threat to public health, safety and welfare.

(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 the threat to public health, safety, or welfare that would be mitigated.

(c) Required Findings: In granting an exception, the Planning Director shall make the following findings:

1. that hardship, as defined in 16.10.040(2j), exists; and

2. the project is necessary to mitigate a threat to public health, safety, or welfare;

3. the request is for the smallest amount of variance from the provisions of this Chapter as possible; and,

4. adequate measures will be taken to ensure consistency with the purposes of this chapter and the County General Plan. (Ord. 3340, 1 1/23/82; 3598, 1 1/6/84)

(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 of the ordinance 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 ordinance 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. 275

(i) 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:

a. Danger that materials may be swept onto other lands to the injury of others;

b. Danger of life and property due to flooding or erosion damage;

c. 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;

d. Importance of the services provided by the proposed structure to the community;

e. Necessity to the structure of a waterfront location, where applicable;

f. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

g. Compatibility of the proposed use with existing and anticipated development;

h. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

i. Safety of access to the property in time of flood for ordinary and emergency vehicles;

j. Expected heights, velocity, duration, rate of rise, and sediment transport of the floodwater expected at the site; and

k. 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.

(ii) Any applicant to whom a 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:

a. That the issuance of a 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 for $100 of insurance coverage; and

b. That such construction below the base flood level increases risks to life and property.

c. 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.

(iii) 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.

(i) 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 Sections 16.10.050, 16.10.070, and 16.10.080 of this ordinance have been considered. As the lot size increases beyond one-half acre, the justification required for issuing the exception increases.

(ii) 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..

(iii) 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.

(iv) Exceptions shall only be issued upon:

a. Showing of good and sufficient cause;

b. Determination that failure to grant the exception would result in a "hardship" (as defined in 16.10.040 of this ordinance) to the applicant; and

c. 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.

(v) 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.

(vi) Exceptions may be issued for the repair or rehabilitation of historic structures (as defined in 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.

(vii) Upon consideration of the factors in Section 16.10.100(d)2i 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 Ml geologic report s 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 subsection (1) of Section 12.10.070 of this Code, 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 Section 12.10.070(l) of the County Code. (Ord. 4336, 1 1/29/94; 4392A, 4/2/96)

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 18.10, 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 Section 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 paragraphs 10 through 14 of subsection (al) of Section 12.10.070 of this Code. (Ord. 2088, 1/28/75; 2281, 4/20/76; 3598, 1 1/6/84; 3808, 4/15/86; 4336, 1 1/29/94; 4392A, 4/2/96)

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. (Ord. 3340, 1 1/23/82; 3598, 1 1/6/84; 4392A, 4/2/96)

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. (Ord. 3340, 1 1/23/82; 3598, ll/6/84; 3808)

SECTION III

This Ordinance shall take effect on the 31st day after final passage, or upon certification by the California Coastal Commission, whichever is later, and upon becoming effective shall supercede Ordinance No. 45 18.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz this _____ day of _____, 1999, by the following vote:

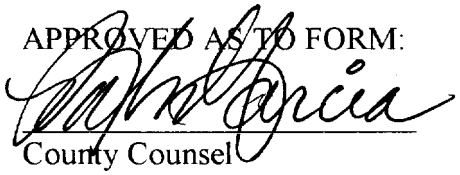
AYES: SUPERVISORS
NOES: SUPERVISORS
ABSENT: SUPERVISORS
ABSTAIN: SUPERVISORS

_____
Chairperson, Board of Supervisors

ATTEST:

_____
Clerk of the Board

APPROVED AS TO FORM:



County Counsel

6.1.11 Setbacks from Faults

(LCP) Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (50) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting engineering 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 one hundred (100) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace.

6.2.10 Site Development to Minimize Hazards

(LCP) Require all developments to be sited and designed to avoid or minimize hazards as determined by the geologic hazards assessment or geologic and engineering investigations.

6.2.11 Geologic Hazards Assessment in Coastal Hazard Areas

(LCP) Require a geologic hazards assessment or full geologic report for all development activities within coastal hazard areas, including all development activity within 100-feet of a coastal bluff. Other technical reports may be required if significant potential hazards are identified by the hazards assessment.

6.2.12 Setbacks from Coastal Bluffs

(LCP) 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. A setback greater than 25 feet may be required based on conditions on and adjoining the site. The setback shall be sufficient to provide a stable building site over the 100-year lifetime of the structure, as determined through geologic and/or soil engineering reports. The determination of the minimum 100 year setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed shoreline or coastal bluff protection measures.

6.2.13 Exception for Foundation Replacement and/or Upgrade

(LCP) Foundation replacement and/or foundation upgrades that meet the definition of development activity shall meet the 25-foot minimum and 100-year stability setback requirements. An exception to those requirements may be granted for existing structures that are located partly or wholly within the setback if the Planning Director determines that:

1) the area of the structure that is within the setback does not exceed 25% of the area of the structure, OR

2) the structure cannot be relocated to meet the setback due to inadequate parcel size.

6.2.14 Additions to Existing Structures

(LCP) Additions, including second story and cantilevered additions, shall comply with the setback requirements of 6.2.12.

6.2.15 New Development on Existing Lots of Record

(LCP) Allow development activities in areas subject to storm wave inundation or beach or bluff erosion on existing lots of record, within existing developed neighborhoods, under the following circumstances:

(a) A technical report (including a geologic hazards assessment, engineering geology report and/or soil engineering report) demonstrates that the potential hazard can be mitigated over the 100-year lifetime of the structure. Mitigations can include, but are not limited to, building setbacks, elevation of the structure, and foundation design;

(b) Mitigation of the potential hazard is not dependent on shoreline or coastal bluff protection structures, except on lots where both adjacent parcels are already similarly protected; and

(c) The owner records a Declaration of Geologic Hazards on the property deed that describes the potential hazard and the level of geologic and/or geotechnical investigation conducted.

6.2.16 Structural Shoreline Protection Measures

(LCP) Limit structural shoreline protection measures to structures which protect existing structures from a significant threat, vacant lots which through lack of protection threaten

adjacent developed lots, public works, public beaches, or coastal dependent uses.

Require any application for shoreline protection measures to include a thorough analysis of all reasonable alternatives, including but not limited to, relocation or partial removal of the threatened structure, protection of the upper bluff or area immediately adjacent to the threatened structure, engineered shoreline protection such as beach nourishment, revetments, or vertical walls. Permit structural protection measures only if non-structural measures (e.g. building relocation or change in design) are infeasible from an engineering standpoint or not economically viable.

The protection structure must not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, increase erosion on adjacent properties, or cause harmful impacts on wildlife and fish habitats or archaeological or paleontological resources.

The protection structure must be placed as close as possible to the development requiring protection and must be designed to minimize adverse impacts to recreation and to minimize visual intrusion.

Shoreline protection structures shall be designed to meet approved engineering standards for the site as determined through the environmental review process.

Detailed technical studies shall be required to accurately define oceanographic conditions affecting the site. All shoreline protective 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 revetments or erosion trends.

No approval shall be given for shoreline protective structures that do not include permanent monitoring and maintenance programs. Such programs shall include a report to the County every five years or less, as determined by a qualified professional, after construction of the structure, detailing the condition of the structure and listing any recommended maintenance work. Maintenance programs shall be recorded and shall allow for County removal or repair of a shoreline protective structure, at the owner's expense, if its condition creates a public nuisance or if necessary to protect the public health and safety.

6.2.18 Public Services in Coastal Hazard Areas

(LCP) Prohibit utility facilities and service transmission systems in coastal hazard areas unless they are necessary to serve existing residences.

6.2.18.1 Density Calculations

(LCP) Exclude areas subject to coastal inundation, as defined by geologic hazards assessment or full geologic report, from use for density calculations.

6.2.20 Reconstruction of Damaged Structures on Coastal Bluffs

(LCP) Permit reconstruction of structures on or at the top of a coastal bluff which are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, or are damaged by non-coastal related hazards (fire, etc), and where the loss is less than 50 percent of the value, in accordance with the recommendations of the hazards assessment. Encourage relocation to a new footprint provided that the new location is landward of the previous site at the best possible site not affecting resources (e.g. the most landward location, or landward of the area necessary to ensure a stable building site for the minimum 100-year lifetime, or not necessitating a future shoreline protective structure).

When 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 is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met, including minimum setbacks. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged by other than coastal hazards, where the loss is greater than 50% of the value, allow in-kind reconstruction, subject to all regulations except for the minimum setback. Allow other than in-kind reconstruction only if the minimum setback is met.

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

6.2.2 1 Reconstruction of Damaged Structures due to Storm Wave Inundation

(LCP) Permit reconstruction of individual structures located in areas subject to storm wave inundation, which are damaged as a result of coastal hazards, and loss is less than 50 percent of the value, in accordance with recommendations from the geologic hazards assessment and other technical reports, as well as with policy 6.2.16.

When structures located in areas subject to storm wave inundation are damaged as a result of coastal hazards and the loss is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

Figure 2–2 (page 2 of 2)
Special Land Division and Density Requirements (1)

Type of Constraint	Land Division Requirements (Minimum average area required PER PARCEL) (2)	Density Requirements (Minimum average site area required PER RESIDENTIAL UNIT (3)
'COASTAL HAZARD AREAS - bluffs and beaches (Section 6.2)	New parcels must provide building sites outside areas of coastal hazards	Density consistent with General Plan designation
CRITICAL FIRE HAZARD AREAS (Section 6.5):		
Euiiding site in Critical Fire Hazard Area		
- with thmugh mad or secondary accass	- Parcel size consistent with the lowest density in the range allowable by the applicable General Plan Designation	- The lowest density in the range allowable by the applicable General Plan Designation
-with dead end road	- No division allowed	- 1 unit per parcel
Mitigable Critical Fire Hazard Areas if all mitigations approved	Parcel size consistent with General Plan land use designation	Density consistent with General Plan Land Use designation
100 YEAR FLOODPLAIN (Section 6.4)	Permitted only under special conditions	Density consistent with General Plan designation excluding ~~floodway area~~ flood hazard area
SEISMIC REVIEW ZONES - fault zones (Section 6.1)	20 net developable acres outside USL Consistent with General Plan designation inside USL	Density consistent with the General Plan designation and Geologic Report

notes policies which only apply inside the Coastal Zone.

(1) This table summarizes special land division and density requirements of General Plan and LCP Resources and Constraints policies. More specific requirements are found in the General Plan and LCP Land Use Plan sections noted.

(2) These acreages are expressed as minimums. The maximum number of parcels resulting from any land division shall not exceed the total number of allowed units on one parcel based on this table and the Rural Residential Density Determination Matrix.

(3) These acreages are expressed as minimums. The maximum number of dwelling units on an existing parcel shall not exceed the total number of potential parcels and/or units as determined by this table and the Rural Residential Density Determination Matrix.

STRIKEOVER VERSION 285

ORDINANCE NO. 45 18-C

ORDINANCE AMENDING SECTION 13.10.700-D AND CHAPTER 16.10 OF THE COUNTY CODE RELATING TO GEOLOGIC HAZARDS

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION I

Section 13.10.700-D, definition of Density Credit, is hereby amended to read as follows:

Density Credit. The number of dwelling units allowed to be built on a particular property determined by applying the designated General Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable Land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property. The following areas which are not developable land shall be granted density credit for development density.

Outside the USL and RSL:

a) land with slopes between 30 and 50 percent.

Inside the USL and RSL:

a) Land with slopes less than 30 percent in the required buffer set back from the top of the arroyo or riparian corridor, up to maximum of 50 percent of the total area of the property which is outside the riparian corridor.

Countywide Credits

The following areas are subject to special site and/or development criteria and shall be granted full density credit:

a) Rare and endangered plant and animal habitats.
b) Archaeological sites.
c) Critical fire hazard areas.
d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
e) Landslide areas determined by a geological study to be stable and suitable for development.
f) Historic sites.

SECTION II

Chapter 16.10 is hereby amended to read as follows:

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 Safetv. 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 that potential buyers are notified of property located in an area of special flood hazard, and to assure that those who occupy areas of special flood hazard assume responsibility for their actions. (Ord. 3340, 1 1/23/82; 3598, 11/6/84)

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 Section 16.10.040(s)8, 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. (Ord. 3340, 1 l/23/82; 3598, ll/6/84; 3635, 3/26/85)

16.10.022 STATUTORY AUTHORIZATION. The State of California has in Government Code Sections 65302, 65560, 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.

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 Studv (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.

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 13.03 of the County Code and shall be subject to approval by the California Coastal Commission. (Ord. 3340, 1 1/23/82; 3598, ll/6/84)

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 the ordinance 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 ordinance 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 ordinance 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 ordinance or any administrative decision lawfully made hereunder.

16.10.03 7 SEVERABILITY. This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance 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:

(a) Accessory Use. Any use which is clearly incidental and secondary to the main use and does not change the character of the main use.

(b) Active. A geologic feature (fault or landslide) which shows evidence of movement, surface displacement, or activity within Holocene time (about the last 11,000 years).

(c) Addition. Improvement to an existing structure that increases the 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.

(d) Adjacent / contiguous parcel, A parcel touching the subject parcel and not separated from the subject parcel by a road, street or other property.

(e) Areas of special flood hazard. 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, Al-A30, AE, A99, Vl-V30, VE or V. Also known as Special Flood Hazard Area (SFHA).

(f) Base Flood. A flood which has a one percent chance of being equaled or exceeded in any given year. . For flood insurance purposes one-hundred year flood and base flood have the same meaning.

(g) Basement. For the purposes of this Chapter, any area of the building having its floor subgrade (below ground level) on all sides.

(h) Beach erosion. Temporary or permanent reduction, transport or removal of beach sand by littoral drift, tidal actions, storms or tsunamis.

(i) Certified Engineering Geologist. A Registered Geologist who is licensed by the State of California to practice the sub-specialty of Engineering Geology.

(j) Coastal Bluff. A bank or cliff along the coast subject to coastal erosion processes. Coastal bluff refers to the top edge, face, and base of the subject bluff.

(k) Coastal dependent uses. Any development or use which would not function or operate unless sited on or adjacent to the ocean .

(l) Coastal erosion processes. Natural forces that cause the breakdown and transportation of earth or rock materials on or along beaches and bluffs. These forces include landsliding, surface runoff, wave action and tsunamis.

(m) Coastal hazard areas. 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.

(n) Coastal High Hazard Area. 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 Vl-30, VE or V.

(o) County geologist. A County employee who is registered as a geologist with the State of California (R.G.) and has been authorized by the Planning Director to assist in the administration of this chapter, or a registered geologist under contract by the County who has been authorized by the Planning Director to assist in the administration of this chapter. (Ord. 4090, 12/4/90)

(P) County geologic advisor. A n individual who is registered as a geologist with the State of California (R.G.), who may be employed by the County to provide geologic services.

(q) Critical structures and facilities. 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.

(r) Cumulative improvement. For the purposes of calculating "substantial improvement" as defined in section 16.1 0.040(3m), 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".

(s) 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 supercede Chapter 13.20.040 for purposes of determining whether a certain activity or project requires a coastal permit, some activities and projects will require coastal permits although they do not fall under this following specific definition

(1) The construction or placement of any habitable structure, including a manufactured home;

(2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50% of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows or doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is done at one time or as the sum of multiple projects during the life of the structure;

(3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;

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

(5) Installation of a new foundation for a habitable structure;

(6) The repair, replacement, or upgrade of an existing foundation of a habitable structure that affects more than 50% of the foundation (measured in linear feet for perimeter foundations, square feet for slab foundations, or 50% of the total number of piers), or an addition to an existing foundation that adds more than 50% of the original foundation area. This allow repair, upgrade, or addition up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(7) 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 use;

(8) Any change of use from non-habitable use to habitable use, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;

(9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards;

(10) 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 16.20;

(11) Construction of roads, utilities, or other facilities,

(12) 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, sea walls, rip-rap erosion protection or retaining structures, and gabion baskets;

(13) Installation of a septic system;

(14) 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 items 1-13.

(15) Any other project that is defined as development under Section 13.20.040, and that will increase the number of people exposed to geologic hazards or that may create or exacerbate an existing geologic hazard, shall be determined by the Planning Director to constitute development for the purposes of geologic review.

(t) Development envelope. A designation on a site plan or parcel map indicating where buildings, access roads and septic systems are to be located.

(u) Fault zones. A zone or zones of fracture designated on the General Plan or Local Coastal Program Land Use Constraints Maps, or other maps and source materials authorized by the Planning Director.

(v) Fill. The deposit of earth or any other substance or material by artificial means for any purpose, or the condition resulting from a fill taking place.

(w) Flood Boundary Floodway Map. 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.

(x) Flood control structure. 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.

(y) Flood Insurance Rate Map (FIRM). 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.

(z) Flood Insurance Study. 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

(2a) Floodplain. Any land area susceptible to being inundated by water from any source. The one-hundred 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".

(2b) Floodplain Administrator. 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 ordinance.

(2c) Floodproofing. Any combination of structural and non-structural additions, changes or adjustments to non-residential structures which reduce or eliminate flood damage to real estate or improved property.

(2d) Floodway. The channel of a river or other watercourse and the adjacent land area that must be reserved in order to carry and discharge the one-hundred year flood without cumulatively increasing the water surface elevation more that one foot at any point. Also referred to as the Regulatory Floodway.

(2e) Geologic hazard. A threat to life, property, or public safety caused by geologic or hydrologic processes such as flooding, wave inundation, landsliding, erosion, faulting, ground cracking, and secondary seismic effects including , liquefaction, landsliding, tsunami and ground shaking.

(29 Geologic hazards assessment. A summary of the possible geologic hazards present at a site conducted by the staff geologist.

(2g) Geologic report full. A complete geologic investigation conducted by a Certified Engineering Geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

(2h) Grading. Excavating or filling land, or a combination thereof,

(2i) Habitable. For the purposes of this Chapter, any structure or portion of a structure, whether or not enclosed, that is usable for living purposes, which include 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 include 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.

(2j) Hardship. For the purposes of administering Section 16.10.100, means 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.

(2k) High and very high liquefaction potential areas. 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.

(21) Historic Structure. Any structure that is 1. 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; 2. 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; 3. Individually listed on the State Register of Historic Places

which has been approved by the Secretary of the Interior; or, 4. 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.

(2m) Hydrologic investigation. A report prepared by a Certified Engineering geologist or civil engineer with expertise in hydrology which analyzes surface hydrology and/or groundwater conditions.

(2n) Littoral drift. The movement of beach sand parallel to the coast due to wave action and currents.

(2o) Liquefaction. 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.

(2P) Lowest Floor. For flood purposes, the lowest floor of the lowest enclosed area of a structure, including any basement.

(1) 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 non-elevation design requirements, including, but not limited to:

(i) the wet floodproofing standards in Section 16.1 0.070(f)(3)(ix)

(ii) the anchoring and construction materials and methods in Section 16.10.070(f)(3)(ii)

(iii) The standards for septic systems and water supply in Section 16.10.070 (f)(5) and (f)(6).

(2) 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.

(2q) Manufactured home. 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.

(2r) Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.

(2s) Mean Sea Level. 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.

(2t) Multiple-residential structure. A single structure containing four or more individual residential units.

(2u) Natural disaster. Any situation in which the force or forces of nature causing destruction are beyond the control of people.

(2v) New Construction. For the purposes of Sections 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.

(2w) Non-essential public structures. Public structures which are not integral in providing such vital public services as fire and police protection, sewer, water, power and telephone services.

(2x) 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.

(2y) One-hundred year flood. A flood that statistically could occur once in 100 years on the average, although it could occur in any year.' For flood insurance purposes one-hundred year flood and base flood have the same meaning. See Base Flood.

(2z) Planning Director. The Planning Director of the County of Santa Cruz or his or her authorized employee.

(3a) Public facilities. 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.

(3b) Recent geologic feature (fault or landslide) which shows evidence of movement or activity within Holocene time (about the last 11,000 years.)

(3c) Registered geologist. A geologist who is licensed by the State of California to practice geology.

(3d) Registered Geotechnical (Soils) Engineer. A civil engineer licensed in the State of California, experienced in the practice of soils and foundation engineering.

(3e) Regulatory Floodway. See Floodway.

(3f) 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 use as a permanent dwelling but a temporary living quarters for recreation, camping, travel, or seasonal use.

(3g) Shoreline protection structure. Any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate..

(3h) Soils investigation. A report prepared by a registered soils engineer, hired by the applicant, and completed in accordance with the County Soils Report Guidelines. This term is synonymous with the term geotechnical investigation.

(3i) Special Flood Hazard Area (SFHA). See Area of Special Flood Hazard.

(3j) Start of Construction. 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.

(3k) Structure. 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.

(3l) Substantial Damage. 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.

(3m) Substantial Improvement. Any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in Section 16.10.040(r), 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) (Ord. 4080, 9/11/90)

(3n) Sub-surface geologic investigation. A geologic report prepared by a Certified Engineering geologist that provides information on sub-surface materials through trenching, test pits and borings. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3892, 3/15/88; 3997, 6/6/89)

(3o) V-Zone. See "Coastal High Hazard Area"

(3p) Violation. 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.

(3q) Watercourse. 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 REOUIREMENTS FOR GEOLOGIC 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 in the following designated areas: fault zones, one-hundred year floodplains and floodways, and coastal hazard areas, except: as specified in subsections (c) (d) and (e), where a full geologic report will be prepared according to the County Guidelines for Engineering Geologic Reports, or where the County Geologist 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) Geologic Report Required. .

A full geologic report shall be required:

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.

(d) Potential Liquefaction Area. A site specific investigation 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 Development applications for four units or less, one story structures and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment. When a significant hazard may exist, a site specific investigation shall be required.

(e) 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.. (Ord. 3340, 1 1/23/82; 3598, ll/6/84)

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 and before any discretionary or development application 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. ~~but i~~ 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 Preparation. The geologic hazards assessment shall be prepared by County staff. Alternately, the assessment may be conducted by a private Certified Engineering Geologist at the applicant's choice and expense. Such privately prepared assessments shall, however, be subject to review and approval as specified in this section.

(c) Report Acceptance. All geologic, geotechnical, engineering, and hydrologic reports or investigations submitted to the County as a part of any development application shall be found to conform to County report guidelines. The Planning Director may require an inspection in the field of all exploratory trenches, test pits, and borings excavated for a technical report.

(d) 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 Ml geologic report shall be valid and all recommendations therein shall remain in effect for three years from the date of completion of the report . The 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. (Ord. 3340, 1 1/23/82; 3598, ll/6/84)

16.10.070 PERMIT CONDITIONS

The recommendations of the geologic hazards assessment full geologic report, and/or the recommendations of other technical reports (if evaluated and authorized by the Planning Director), shall be 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 non-habitable and is not otherwise considered to be development under this Chapter, a Declaration of Restrictions for the non-habitable structure shall be recorded 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) Fault Zones.

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

2. Setbacks: Habitable structures shall be set back a minimum of fifty 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 twenty five 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 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 one-hundred 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.

4. 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) 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) 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: 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.

(e) Slope Stability

1. Location: All development activities shall be located away from potentially unstable areas as identified through the geologic hazards assessment, full geologic report, soils 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 report or other environmental or technical assessment only under the following circumstances:

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

   (ii) A full 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 landslide damage and not cause a health hazard.

   (iii) 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 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. Such plans shall be reviewed and approved 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 Reconstruction: Where washouts or landslides have occurred on public or private roads, road reconstruction shall meet the conditions of appropriate geologic, soils and/or engineering reports and shall have adequate engineering supervision.

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) Floodplains

1. Critical and Public Facilities: Critical facilities and nonessential public structures and additions shall be located outside of the one-hundred 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 on 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 one-hundred year floodplain only under the following circumstances:

   (i) 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.

   (ii) A declaration indicating the limits and elevations of the one-hundred year floodplain certified by a registered professional engineer or surveyor must be recorded with the County Recorder. (Ord. 3635, 3/26/85)

   (iii) Adequate drainage to reduce exposure to flood hazards must be provided

   (iv) 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 Section 16.10.040(r) and (3m)), is exempt from this section.

   (i) location of proposed structures outside of the one-hundred year floodplain when a buildable portion of the property exists outside the floodplain;

   (ii) 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:

(A) by providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and up lift forces of 9 pounds per square foot; or,

(B) 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.

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

(iv) 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;

(v) In flood zones A-O and A-H, provide drainage paths adequate to guide water away from structures and reduce exposure to flood hazards. (Ord. 4071, 7/17/90)

(vi) 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 one-hundred 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.

(vii) Non-residential structures shall be floodproofed if elevation above the one-hundred year flood level in accordance with section 16.1 0.070(f)3(vi) is not feasible. Floodproofed structures shall:

(A) be floodproofed so that below an elevation one foot higher than the one-hundred 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;

(B) be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,

(C) 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.

(viii) 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 non-residential 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.

(ix) 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 that 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. Non-residential structures that are floodproofed in compliance with Section 16.10.070(f)(3)(vii) are an exception to this requirement.

4. Recreational Vehicles: R.V's that are placed on a site that is within the A, Al-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 16.1 0.070(f)(3)(ii) and (3)(vi), unless they are on the site for less than 180 consecutive days. For the purposes of this ordinance, "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 one-hundred 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 one-hundred 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 non-residential structures, to at least one foot above the base flood level. Residential structures shall be elevated no less than two (2) feet above natural grade when base flood data do not exist. Non-residential 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 16.10.025, and within some areas not mapped as part of the Flood Insurance Study, are areas designated as floodways (see also 16.10.040 2d). 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 Section (g) 1, above.

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, Riparian 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 septic 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 Section 16.10.070(f), above. 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:

(i) for all development and for non-habitable 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.

(ii) for all development, including that which is cantilevered, and for non-habitable 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.;

(iii) 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.

(iv) foundation replacement and/or foundation upgrades that meet the definition of development per 16.10.040(s) and pursuant to 16.10.040(r), shall meet the setback described in Section 16.10.070(h)(l), except that an exception to the setback requirement may be granted for existing structures that are wholly or partially within the setback, if the Planning Director determines that:

a) the area of the structure that is within the setback does not exceed 25% of the total area of the structure, OR

b) the structure cannot be relocated to meet the setback because of inadequate parcel size.

(v) additions, including second story and cantilevered additions, shall comply with the minimum 25 foot and 100 year setback.

(vi) 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.

(vii) approval of drainage and landscape plans for the site by the County Geologist.

(viii) service transmission lines and utility facilities are prohibited unless they are necessary to serve existing residences.

(ix) All other required local, state and federal permits shall be obtained.

2. Exemption:

(i) Any project which does not specifically require a building permit pursuant to Chapter 12.10.070(b) is exempt from Section 16.10.070 (h)1, with the exception of non-habitable 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. 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 run-off is controlled), benches, statues, landscape boulders, benches, and gazebos which do not require a building permit.

(ii) 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.

3. Shoreline protection structures shall be governed by the following:

(i) shoreline protection structures shall only be allowed 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 protectionthreaten adjacent developed lots, or to protect public works, public beaches, and coastal dependent uses.

Note: New shoreline protection structures shall not be allowed where the existing structure proposed for protection was granted an exemption pursuant to Section 16.10.070(h)2.

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

(iii) application for shoreline protective structures shall include thorough analysis of all reasonable alternatives to such structures, including but not limited to 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 non-structural measures, such as relocating the structure or changing the design, are infeasible from an engineering standpoint or are not economically viable.

(iv) shoreline protection structures shall be placed as close as possible to the development or structure requiring protection.

(v) shoreline protection structures shall 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.

(vi) all protection structures shall meet approved engineering standards as determined through environmental review.

(vii) all shoreline protection structures shall include a permanent, County approved, monitoring and maintenance program.

(viii) Applications for shoreline 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.

(ix) All other required local, state and federal permits shall be obtained.

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:

Extent of Damage	**50% or more of the value of structure**		**Less than 50% of the value of structure**	
Cause of Damage (horiz. axis)	Coastal Hazards & Slope Instability	All Other Causes (fire, etc)	Coastal Hazards & 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 kind, if hazard cannot be mitigated to a level that provides stability for a period of 100 years.	To repair or replace in kind, meet all regulations except setback. Otherwise meet all regulations, including prescribed minimum setback.	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. 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.

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

5. 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 Sections 16.10.040(r) and (3m)), is exempt from this section.

(i) 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;

(ii) 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;

(iii) elevation of all structures (including manufactured homes) on pilings and columns so that the bottom of the lowest portion of the lowest 1 structural member of the lowest 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.

(iv) 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);

(v) 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 paragraphs (iii) and (iv) of this section prior to permit issuance;

(vi) the space below the lowest floor shall either be free of obstruction or constructed with non-supporting 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 non-masonry construction and have a design safe loading resistance of not less than ten (10) and no more than twenty (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.

(vii) the use of till for structural support of buildings is prohibited. (Ord. 4071, 7/17/90).

(viii) the alteration of sand dunes which would increase potential flood damage is prohibited.

(ix) compliance with the provisions of paragraphs (iii) and (iv) above 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.

(x) 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 16.10.070(h)(5) unless they are on the site for less than 180 consecutive days. For the purposes of this ordinance, "highway ready" means on wheels or jacking system, attached to the site by quick disconnect utilities and security devices, and having no attached additions.

(xi) 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.

(xii) 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.

(xiii) All other required state and federal permits must be obtained. (Ord. 4071, 7/17/90)

6. New 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. 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:

(i) 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 16.10.070(h)1.

(ii) 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 protection structures;

(iii) 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 100 year stability (whichever is greater) setback;

(iv) 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.

8. 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. (Ord. 2088, 1/28/75; 2185, 9/23/75; 2258, 3/16/76; 2580, 8/8/78; 263 1, 2/6/78; 3437, 8/23/83; 3598, 1 1/6/84; 3808, 4/15/86; 3892, 3/15/88; 3997, 6/6/89)

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:

(i) All new structures shall meet setbacks as specified in Section 16.10.070(b)2.

(ii) Outside of the Urban Services Line and the Rural Services line, a twenty gross acre minimum parcel size shall be required.

(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. The portion of a parcel within the one-hundred year floodway shall be excluded from any density calculations.

(d) Floodplains. The portion of a property within the one-hundred 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) , shall be excluded from density calculations. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3808)

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 by the Planning Director. (Ord. 3340, 11/23/82)

16.10.100 EXCEPTIONS.

(a) Request for Exception. A request for an exception to the provisions of this chapter or the permit conditions may be considered by the Planning Director if the exception is necessary to mitigate a threat to public health, safety and welfare.

(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 the threat to public health, safety, or welfare that would be mitigated.

(c) Required Findings: In granting an exception, the Planning Director shall make the following findings:

1. that hardship, as defined in 16.10.040(2j), exists; and

2. the project is necessary to mitigate a threat to public health, safety, or welfare;

3. the request is for the smallest amount of variance from the provisions of this Chapter as possible; and,

4. adequate measures will be taken to ensure consistency with the purposes of this chapter and the County General Plan. (Ord. 3340, 1 1/23/82; 3598, 1 1/6/84)

(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 of the ordinance 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 ordinance 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.

(i) 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:

a. Danger that materials may be swept onto other lands to the injury of others;

b. Danger of life and property due to flooding or erosion damage;

c. 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;

d. Importance of the services provided by the proposed structure to the community;

e. Necessity to the structure of a waterfront location, where applicable;

f. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

g. Compatibility of the proposed use with existing and anticipated development;

h. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

i. Safety of access to the property in time of flood for ordinary and emergency vehicles;

j. Expected heights, velocity, duration, rate of rise, and sediment transport of the floodwater expected at the site; and

k. 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.

(ii) Any applicant to whom a 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:

a. That the issuance of a 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 for $100 of insurance coverage; and

b. That such construction below the base flood level increases risks to life and property.

c. 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.

(iii) 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.

(i) 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 Sections 16.10.050, 16.10.070, and 16.10.080 of this ordinance have been considered. As the lot size increases beyond one-half acre, the justification required for issuing the exception increases.

(ii) 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..

(iii) 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.

(iv) Exceptions shall only be issued upon:

a. Showing of good and sufficient cause;

b. Determination that failure to grant the exception would result in a "hardship" (as defined in 16.10.040 of this ordinance) to the applicant; and

c. 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.

(v) 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.

(vi) Exceptions may be issued for the repair or rehabilitation of historic structures (as defined in 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.

(vii) Upon consideration of the factors in Section 16.10.100(d)2i 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 s 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 subsection (1) of Section 12.10.070 of this Code, 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 Section 12.10.070(l) of the County Code. (Ord. 4336, 1 1/29/94; 4392A, 4/2/96)

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 18.10, 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 Section 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 paragraphs 10 through 14 of subsection (al) of Section 12.10.070 of this Code. (Ord. 2088, 1/28/75; 2281, 4/20/76; 3598, 1 1/6/84; 3808, 4/15/86; 4336, 1 1/29/94; 4392A, 4/2/96)

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, (Ord. 3340, 1 1/23/82; 3598, 1 1/6/84; 4392A, 4/2/96)

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. (Ord. 3340, 1 1/23/82; 3598, ll/6/84; 3808)

SECTION III

This Ordinance shall take effect on the 31st day after final passage, or upon certification by the California Coastal Commission, whichever is later, and upon becoming effective shall supercede Ordinance No. 45 18.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz this _____ day of _____, 1999, by the following vote:

AYES: SUPERVISORS
NOES: SUPERVISORS
ABSENT: SUPERVISORS
ABSTAIN: SUPERVISORS

_____
Chairperson, Board of Supervisors

ATTEST:

_____
Clerk of the Board

APPROVED AS TO FORM:

_____
County Counsel

GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENTS

6.1.11 Setbacks from Faults

(LCP) Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (50) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting engineering 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 one hundred (100) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace.

6.2.10 Site Development to Minimize Hazards

(LCP) Require all developments to be sited and designed to avoid or minimize hazards as determined by the geologic hazards assessment or geologic and engineering investigations.

6.2.11 Geologic Hazards Assessment in Coastal Hazard Areas

(LCP) Require a geologic hazards assessment or full geologic report for all development activities within coastal hazard areas, including all development activity within 100-feet of a coastal bluff. Other technical reports may be required if significant potential hazards are identified by the hazards assessment.

6.2.12 Setbacks from Coastal Bluffs

(LCP) 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. A setback greater than 25 feet may be required based on conditions on and adjoining the site. The setback shall be sufficient to provide a stable building site over the 100-year lifetime of the structure, as determined through geologic and/or soil engineering reports. The determination of the minimum 100 year setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed shoreline or coastal bluff protection measures.

6.2.13 Exception for Foundation Replacement and/or Upgrade

(LCP) Foundation replacement and/or foundation upgrades that meet the definition of development activity shall meet the 25-foot minimum and 100-year stability setback requirements. An exception to those requirements may be granted for existing structures that are located partly or wholly within the setback if the Planning Director determines that:

1) the area of the structure that is within the setback does not exceed 25% of the area of the structure, OR

2) the structure cannot be relocated to meet the setback due to inadequate parcel size.

6.2.14 Additions to Existing Structures

(LCP) Additions, including second story and cantilevered additions, shall comply with the setback requirements of 6.2.12.

6.2.15 New Development on Existing Lots of Record

(LCP) Allow development activities in areas subject to storm wave inundation or beach or bluff erosion on existing lots of record, within existing developed neighborhoods, under the following circumstances:

(a) A technical report (including a geologic hazards assessment, engineering geology report and/or soil engineering report) demonstrates that the potential hazard can be mitigated over the 100-year lifetime of the structure. Mitigations can include, but are not limited to, building setbacks, elevation of the structure, and foundation design;

(b) Mitigation of the potential hazard is not dependent on shoreline or coastal bluff protection structures, except on lots where both adjacent parcels are already similarly protected; and

(c) The owner records a Declaration of Geologic Hazards on the property deed that describes the potential hazard and the level of geologic and/or geotechnical investigation conducted.

6.2.16 Structural Shoreline Protection Measures

(LCP) Limit structural shoreline protection measures to structures which protect existing structures from a significant threat, vacant lots which through lack of protection threaten

adjacent developed lots, public works, public beaches, or coastal dependent uses.

Require any application for shoreline protection measures to include a thorough analysis of all reasonable alternatives, including but not limited to, relocation or partial removal of the threatened structure, protection of the upper bluff or area immediately adjacent to the threatened structure, engineered shoreline protection such as beach nourishment, revetments, or vertical walls. Permit structural protection measures only if non-structural measures (e.g. building relocation or change in design) are infeasible from an engineering standpoint or not economically viable.

The protection structure must not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, increase erosion on adjacent properties, or cause harmful impacts on wildlife and fish habitats or archaeological or paleontological resources.

The protection structure must be placed as close as possible to the development requiring protection and must be designed to minimize adverse impacts to recreation and to minimize visual intrusion.

Shoreline protection structures shall be designed to meet approved engineering standards for the site as determined through the environmental review process.

Detailed technical studies shall be required to accurately define oceanographic conditions affecting the site. All shoreline protective 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 revetments or erosion trends.

No approval shall be given for shoreline protective structures that do not include permanent monitoring and maintenance programs. Such programs shall include a report to the County every five years or less, as determined by a qualified professional, after construction of the structure, detailing the condition of the structure and listing any recommended maintenance work. Maintenance programs shall be recorded and shall allow for County removal or repair of a shoreline protective structure, at the owner's expense, if its condition creates a public nuisance or if necessary to protect the public health and safety.

6.2.18 Public Services in Coastal Hazard Areas

(LCP) Prohibit utility facilities and service transmission systems in coastal hazard areas unless they are necessary to serve existing residences.

6.2.18.1 Density Calculations

(LCP) Exclude areas subject to coastal inundation, as defined by geologic hazards assessment or full geologic report, from use for density calculations.

6.2.20 Reconstruction of Damaged Structures on Coastal Bluffs

(LCP) Permit reconstruction of structures on or at the top of a coastal bluff which are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, or are damaged by non-coastal related hazards (fire, etc), and where the loss is less than 50 percent of the value, in accordance with the recommendations of the hazards assessment. Encourage relocation to a new footprint provided that the new location is landward of the previous site at the best possible site not affecting resources (e.g. the most landward location, or landward of the area necessary to ensure a stable building site for the minimum 100-year lifetime, or not necessitating a future shoreline protective structure).

When 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 is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met, including minimum setbacks. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged by other than coastal hazards, where the loss is greater than 50% of the value, allow in-kind reconstruction, subject to all regulations except for the minimum setback. Allow other than in-kind reconstruction only if the minimum setback is met.

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

6.2.21 Reconstruction of Damaged Structures due to Storm Wave Inundation

(LCP) Permit reconstruction of individual structures located in areas subject to storm wave inundation, which are damaged as a result of coastal hazards, and loss is less than 50 percent of the value, in accordance with recommendations from the geologic hazards assessment and other technical reports, as well as with policy 6.2.16.

When structures located in areas subject to storm wave inundation are damaged as a result of coastal hazards and the loss is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged greater than 50 percent of the value by other than coastal hazards, allow in- kind reconstruction which meets all regulations except for the coastal bluff setback. Allow other than in-kind reconstruction only if the minimum setback is met.

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

6.4.5 New Parcels in 100-Year Floodplains

(LCP) Allow the creation of new parcels, including those created by minor land division or subdivision, in 100-year floodplains 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 one-hundred 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.

6.4.9 Septic Systems, Leach fields, and Fill Placement

(LCP) Septic systems and leach fields to serve previously undeveloped parcels shall not be located within the floodway or the 100 year floodplain. The capacity of existing systems in the floodway or floodplain shall not be increased. Septic systems shall be designed to avoid impairment or contamination, 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 till will not have cumulative adverse impacts on or off site. No fill is allowed in the floodway.

Amend the Glossary of the General Plan/Local Coastal Program Land Use Plan as follows:

Density Credit

(LCP) The number of dwelling units allowed to be built on a particular property determined by applying the designated general Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property.

The following areas which are not developable land shall be granted density credit for development density:

Outside the USL and RSL

a) Land with slopes between 30 and 50 percent.

Inside the USL and RSL

a) Land with slopes less than 30 percent in the required buffer setback from the top of the arroyo or riparian corridor, up to a maximum of 50 percent of the total area of the property which is outside the riparian corridor.

Countywide Credits

The following credits are subject to special site and/or development criteria and shall be granted full density credit:

a) Rare and endangered plant and animal habitats.
b) Archaeological sites.
c) Critical fire hazard areas.
d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
e) Landslide areas determined by a geological study to be stable and suitable for development.
f) Historic sites.

Development Activity

(LCP) Any project that includes activity in any of the following categories is considered to be development activity:

(1) The construction or placement of any habitable structure, including a manufactured home;

(2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50 percent of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows and doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;

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

(5) Installation of a new foundation for a habitable structure;

(6) The repair, replacement, or upgrade of more than 50% of an existing foundation of a habitable structure, or an addition to an existing foundation that is more than 50% of the original foundation area. This allows repair, upgrading or addition of up to 50% , measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(7) 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;

(8) Any change of use from a non-habitable structure to a habitable structure, according to the definition of “habitable” found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;

(9) Any alteration of any structure posted “Unsafe to Occupy” due to geologic hazards;

(10) 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 16.20) elsewhere;

(11) Construction of roads, utilities, or other facilities,

(12) Retaining walls which require a building permit, retaining walls that function as a part of a landslide repair whether or not they require a building permit, seawalls, rip-rap erosion protection or retaining structures, and gabion baskets;

(13) Installation of a septic system.

(14) In the Special Flood Hazard Area, any human made change to developed or undeveloped real estate, 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 items 1-13.

(15) Any other project that is defined as development under Section 13.20.040, and that will increase the number of people exposed to geologic hazard, or that may create or exacerbate an existing geologic hazard, shall be determined by the Planning Director to constitute "development" for the purposes of geologic review.

Geologic Hazards Assessment
(LCP) A summary of the possible geologic hazards present at the site conducted by the staff geologist.

Geologic Report, Full
(LCP) A complete geologic investigation conducted by a Certified Engineering geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

ORDINANCE 4518

ORDINANCE AMENDING SECTION 13.10.700-D AND CHAPTER 16.10 OF THE COUNTY CODE RELATING TO GEOLOGIC HAZARDS

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION I

Section 13.10.700-D, definition of Density Credit, is hereby amended to read as follows:

Density Credit. The number of dwelling units allowed to be built on a particular property determined by applying the designated General Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable Land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property. The following areas which are not developable land shall be granted density credit for development density.

Outside the USL and RSL:

a) land with slopes between 30 and 50 percent

Inside the USL and RSL:

a) Land with slopes less than 30 percent in the required buffer set back from the top of the arroyo or riparian corridor,-up to maximum of 50 percent of the total area of the property which is outside the riparian corridor.

Countywide Credits

The following areas are subject to special site and/or development criteria and shall be granted full density credit:

a) Rare and endangered plant and animal habitats,
b) Archaeological sites.
c) Critical fire hazard areas.
d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
e) Landslide areas determined by a geological study to be stable and suitable for development.
f) Historic sites.

SECTION II

Chapter 16.10 is hereby amended to read as follows:

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 Safetv. 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 that potential buyers are notified of property located in an area of special flood hazard, and to assure that those who occupy areas of special flood 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 Section 16.10.040(s)8, 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, 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.

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 Studv (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.

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 13.03 of the County Code 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 330 required by the ordinance 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 ordinance 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 ordinance shall not create liability on the part of Santa Ct-uz 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 ordinance or any administrative decision lawfully made hereunder,

16 10.037 SEVERABILITY. This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance 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:

(a) Accessory Use. Any use which is clearly incidental and secondary to the main use and does not change the character of the main use.

(b) Active geologic feature (fault or landslide) which shows evidence of movement, surface displacement, or activity within Holocene time (about the last 11,000 years).

(c) Addition. Improvement to an existing structure that increases the 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.

(d) Adjacent / contiguous parcel. A parcel touching the subject parcel and not separated from the subject parcel by a road, street or other property.

(e) Areas of special flood hazard. 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, Al-,430, AE, A99, V1-V30, VE or V. Also known as Special Flood Hazard Area (SFHA).

(f) Base Flood. A tlood which has a one percent chance of being equaled or exceeded in any given year. For flood insurance purposes one-hundred year flood and base flood have the same meaning.

(g) Basement. For the purposes of this Chapter, any area of the building having its floor subgrade (below ground level) on all sides.

(h) Beach erosion. Temporary or permanent reduction, transport or removal of beach sand by littoral drift, tidal actions, storms or tsunamis.

(i) Certified Engineering Geoloeist. A Registered Geologist who is licensed by the State of California to practice the sub-specialty of Engineering Geology

(j) Coastal Bluff A bank or cliff along the coast subject to coastal erosion processes. Coastal bluff refers to the top edge, face, and base of the subject bluff.

(k) Coastal dependent uses. Any development or use which would not function or operate unless sited on or adjacent to the ocean.

(l) Coastal erosion processes. Natural forces that cause the breakdown and transportation of earth or rock materials on or along beaches and bluffs. These forces include landsliding, surface runoff, wave action and tsunamis.

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

(n) Coastal High Hazard Area. 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 Vl-30, VE or V.

(o) County geologist. A County employee who is registered as a geologist with the State of California (R.G.) and has been authorized by the Planning Director to assist in the administration of this chapter, or a registered geologist under contract by the County who has been authorized by the Planning Director to assist in the administration of this chapter.

(P) County geologic advisor. An individual who is registered as a geologist with the State of California (R.G.), who may be employed by the County to provide geologic services.

(q) Critical structures and facilities. 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, tire 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, end convalescent homes, and high occupancy structures such as theaters, churches, office buildings, factories, and stores.

(r) Cumulative improvement. For the purposes of calculating "substantial improvement" as defined in section 16.1 0.040(mmm), two or more instances cf 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". 332

(s) Development/ development activities. For the purposes of this Chapter, any project that includes activity in any of the following categories is considered to be development or development activity:

(1) The construction or placement of any habitable structure, including a manufactured home;

(2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50% of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows or doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is done at one time or as the sum of multiple projects during the life of the structure;

(3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;

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

(5) Installation of a new foundation for a habitable structure;

(6) The repair, replacement, or upgrade of an existing foundation of a habitable structure that affects more than 50% of the foundation (measured in linear feet for perimeter foundations, square feet for slab foundations, or 50% of the total number of piers), or an addition to an existing foundation that adds more than 50% of the original foundation area. This allow repair, upgrade, or addition up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;

(7) 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 use;

(8) Any change of use from non-habitable use to habitable use, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;

(9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards;

(10) 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 16.20;

(11) Construction of roads, utilities, or other facilities,

(12) 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, sea walls, rip-rap erosion protection or retaining structures, and gabion baskets;

(13) Installation of a septic system;

(14) 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 items 1-13.

(t) Development envelope, A designation on a site plan or parcel map indicating where buildings, access roads and septic systems are to be located.

(u) Fault zones. A zone or zones of fracture designated on the General Plan or Local Coastal Program Land Use Constraints Maps, or other maps and source materials authorized by the Planning Director.

(v) Fill. The deposit of earth or any other substance or material by artificial means for any purpose, or the condition resulting from a fill taking place.

(w) Flood Boundary Floodway Map. 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.

(x) Flood control structure. 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.

(y) Flood Insurance Rate Mao (FIRM). 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, 1956 for insurance purposes. 34

(z) Flood Insurance Study. The official report on file with the Planning Department provided by the Federal Emergency Management Agency entitled, "The Flood Insurance Studv Santa Cruz County. California" that includes flood profiles, the FIRM, the Flood Boundary Floodway Map, and the water surface elevation of the base flood,

(aa) Floodplain. Any land area susceptible to being inundated by water from any source. The one-hundred 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".

(bb) Floodplain Administrator. 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 ordinance.

(cc) Floodproofing. Any combination of structural and non-structural additions, changes or adjustments to non-residential structures which reduce or eliminate flood damage to real estate or improved property.

(dd) Floodway. The channel of a river or other watercourse and the adjacent land area that must be reserved in order to carry and discharge the one-hundred year flood without cumulatively increasing the water surface elevation more that one foot at any point, Also referred to as the Regulatory Floodway.

(ee) Geologic hazard. A threat to life, property, or public safety caused by geologic or hydrologic processes such as flooding, wave inundation, landsliding, erosion, faulting, ground cracking, and secondary seismic effects including, liquefaction, landsliding, 'tsunami and ground shaking.

(ff) Geologic hazards assessment. A summary of the possible geologic hazards present at a site conducted by the staff geologist.

(gg) Geologic report. full. A complete geologic investigation conducted by a Certified Engineering Geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

(hh) Grading. Excavating or filling land, or a combination thereof.

(ii) Habitable. For the purposes of this Chapter, any structure or portion of a structure, whether or not enclosed, that is usable for living purposes, which include 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 include 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. 335

(jj) Hardship. For the purposes of administering Section 16.10.100, means 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.

(kk) High and very high liquefaction potential areas. 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.

(ll) Historic Structure. Any structure that is 1. 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; 2. 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; 3. Individually listed on the State Register of Historic Places which has been approved by the Secretary of the Interior; or, 4. 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.

(mm) Hydrologic investigation. A report prepared by a Certified Engineering geologist or civil engineer with expertise in hydrology which analyzes surface hydrology and/or groundwater conditions.

(nn) Littoral drift. The movement of beach sand parallel to the coast due to wave action and currents.

(oo) Liquefaction. 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.

(pp) Lowest Floor. For flood purposes, the lowest floor of the lowest enclosed area of a structure, including any basement.

(1) 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 non-elevation design requirements, including, but not limited to: 336

(i) the wet floodproofing standards in Section 16.10.070(f)(3)(ix)

(ii) the anchoring and construction materials and methods in Section 16.10.070(f)(3)(ii)

(iii) The standards for septic systems and water supply in Section 16. 10.070 (f)(5) and (f)(6).

(2) 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.

(qq) Manufactured home. 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 1 SO consecutive days.

(rr) Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.

(ss) Mean Sea Level. 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.

(tt) Multiple-residential structure. A single structure containing four or more individual residential units.

(uu) Natural disaster. Any situation in which the force or forces of nature causing destruction are beyond the control of people.

(vv) New Construction. For the purposes of Sections 16.10.070(f), (g), and (h), structures for which the start of construction commenced on or after April 15, 1956, including any subsequent improvements to such structures.

(ww) Non-essential public structures. Public structures which are not integral in providing such vital public services as fire and police protection, sewer, water, power and telephone services.

(xx) 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.

(yy) One-hundred year flood. A flood that statistically could occur once in 100 years on the average, although it could occur in any year. For flood insurance purposes one-hundred year flood and base flood have the same meaning. See Base Flood.

(zz) Planning Director. The Planning Director of the County of Santa Cruz or his or her authorized employee.

(aaa) Public facilities. 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.

(bbb) Recent geologic feature (fault or landslide) which shows evidence of movement or activity within Holocene time (about the last 1 1,000 years.)

(ccc) Registered geologist. A geologist who is licensed by the State of California to practice geology.

(ddd) Registered Geotechnical (Soils) Engineer. A civil engineer licensed in the State of California, experienced in the practice of soils and foundation engineering.

(eee) Regulatory Floodway. See Floodway.

(fff) 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 use as a permanent dwelling but a temporary living quarters for recreation, camping, travel, or seasonal use.

(ggg) Shorelineprotection structure. Any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate.

(hhh) Soils investigation. A report prepared by a registered soils engineer, hired by the applicant, and completed in accordance with the County Soils Report Guidelines. This term is synonymous with the term geotechnical investigation.

(iii) Special Flood Hazard Area (SFHA). See Area of Special Flood Hazard.

(jjj) Start of Construction. 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.

(kkk) Structure. 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.

(lll) Substantial Damage. 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 esisted before the damage occurred.

(mmm) Substantial Improvement. Any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in Section 16.10.040(r), 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)

(nnn) Sub-surface geologic investigation. A geologic report prepared by a Certified Engineering geologist that provides information on sub-surface materials through trenching, test pits and borings.

(ooo) V-Zone. See "Coastal High Hazard Area"

(ppp) Violation 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.

(qqq) Watercourse. 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 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 ail development activities in the following designated areas: fault zones, one-hundred year floodplains and floodways, and coastal hazard areas, except: as specified in subsections (c) (d) and (e), where a full geologic report will be prepared according to the County Guidelines for Engineering Geologic Reports, or where the County Geologist 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 identitied by the County Geologist or designee, using available technical resources, from environmental review, or from other field review.

(c) Geologic Report Required. A full geologic report shall be required:

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 identitied 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.

(d) Potential Liquefaction Area. A site specific investigation 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. Development applications for four units or less. one story structures and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment. When a significant hazard may exist, a site specific investigation shall be required.

(e) 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 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 and before any discretionary or development application 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 unlikely to significantly affect the size or location of the project, but 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 Preparation. The geologic hazards assessment shall be prepared by County staff. Alternately, the assessment may be conducted by a private Certified Engineering Geologist at the applicant's choice and expense. Such privately prepared assessments shall. however, be subject to review and approval as specified in this section.

(c) Report Acceptance. All geologic, geotechnical, engineering, and hydrologic reports or investigations submitted to the County as a part of any development application shall be found to conform to County report guidelines. The Planning Director may require an

inspection in the field of all exploratory trenches, test pits, and borings excavated for a technical report. 341

(d) 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 geologic report shall be valid and all recommendations therein shall remain in effect for three years from the date of completion of the report. The 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.

16.10.070 PERMIT CONDITIONS

The recommendations of the geologic hazards assessment, full geologic report, and/or the recommendations of other technical reports (if evaluated and authorized by the Planning Director), shall be 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 non-habitable and is not otherwise considered to be development under this Chapter, a Declaration of Restrictions for the non-habitable structure shall be recorded 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) Fault Zones.

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

2 Setbacks: Habitable structures shall be set back a minimum of fifty 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 twenty five 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 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 one-hundred 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.

4. 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) 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) 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 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.

(e) Slope Stability'

1. Location: All development activities shall be located away from potentially unstable areas as identified through the geologic hazards assessment, full geologic report, soils 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 report or other environmental or technical assessment only under the following circumstances:

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

   (ii) A full 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 landslide damage and not cause a health hazard.

   (iii) new building sites shall not be permitted which would require the construction of engineered protective structures such as retaining walls, diversion walls, debris wails or slough walls 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. Such plans shall be reviewed and approved 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 Reconstruction: Where washouts or landslides have occurred on public or private roads, road reconstruction shall meet the conditions of appropriate geologic, soils and/or engineering reports and shall have adequate engineering supervision.

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) Floodplains

1. Critical and Public Facilities: Critical facilities and nonessential public structures and additions shall be located outside of the one-hundred 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 on 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 one-hundred yea: floodplain only under the following circumstances:

(i) 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.

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

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

(iv) 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 Section 16.10.040(r) and (mmm)). is exempt from this section.

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.

(vii) Non-residential structures shall be floodproofed if elevation above the one-hundred year flood level in accordance with section 16.10.070(f)3(vi) is not feasible. Floodproofed structures shall:

(A) be floodproofed so that below an elevation one foot higher than the one-hundred 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;

(B) be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,

(C) be certified by a registered professional engineer or architect that floodprooting 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.

(viii) 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 non-residential structures, where elevation is not feasible, shall have the lowest floor completely floodproofed at or above the highestadjacent grade, at least as high as the depth number given on the FIRM.

(ix) 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 tlood 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 that 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.

Non-residential structures that are ftoodproofed in compliance with Section 16.1 0.070(f)(3)(vii)are an exception to this requirement.

4. Recreational Vehicles: R.V's that are placed on a site that is within the A, Al - 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 16.10.070(f)(3)(ii) and (3)(vi), unless they are on the site for less than 1 80 consecutive days. For the purposes of this ordinance, "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: Septic systems and leach fields shall not be located within the one-hundred year floodplain. Repair of existing systems that are located in the 100 year floodplain may be allowed with the approval of the County Health Officer.

6. Water Supplies and Sanitary Sewage Svstems: 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 one-hundred 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 non-residential structures, to at least one foot above the base flood level. Residential structures shall be elevated no less than two (2) feet above natural grade when base flood data do not exist. Non-residential 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 - Floodwavs

Located within areas of Special Flood Hazard as established in 16.10.025, and within some areas not mapped as part of the Flood Insurance Study, are areas designated as floodways (see also 16.10.040dd). 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 f-lows. 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 Section (g) 1, above.

3. Setback from Floodwav: 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, Riparian Protection, for vegetation related setbacks from streams.)

4. Location of Septic Svstems. New septic systems and leach fields shall not be located in the floodway. Repair of existing systems that are located in the floodway may be allowed with the approval of the County Health Officer.

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 Section 16.10.070(f), above. 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:

(i) for all development and for non-habitable 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.

(ii) for all development, including that which is cantilevered, and for non-habitable 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.

(iii) 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 wails, or deep piers.

(i) location of proposed structures outside of the one-hundred year floodplain when a buildable portion of the property exists outside the floodplain;

(ii) 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 t.he following methods:

(A) by providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and up lift forces of 9 pounds per square foot; or,

(B) 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.

(iii) shall be constructed with materials and utility equipment resistant to flood damage and using construction methods and practices that minimize tlood damage;

(iv) 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;

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

(vi) 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 one-hundred 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

(iv) foundation replacement and/or foundation upgrades that meet the definition of development per 16.10.040(s) and pursuant to 16.10.040(r), shall meet the setback described in Section 16.1 0.070(h)(**1).** except that an exception to the setback requirement may be granted for existing structures that are wholly or partially within the setback, if the Planning Director determines that:

a) the area of the structure that is within the setback does not exceed 25% of the total area of the structure, OR

b) the structure cannot be relocated to meet the setback because of inadequate parcel size.

(v) additions, including second story and cantilevered additions, shall comply with the minimum 25 foot and 100 year setback.

(vi) 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.

(vii) approval of drainage and landscape plans for the sire by the County Geologist.

(viii) service transmission lines and utility facilities are prohibited unless they are necessary to serve existing residences.

(ix) All other required local, state and federal permits shall be obtained.

2. Exemption: Any project which does not specifically require a building permit pursuant to Chapter 12.10.070(b) is exempt from Section 16.10.070 (h)1, with the exception of non-habitable accessory structures that are located within the minimun 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. 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, thar 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 run-off is controlled), benches, statues, landscape boulders, benches, and gazebos which do not require a building permit.

3. Shoreline protection structures shall be governed by the following:

(i) shoreline protection structures shall only be allowed 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, public beaches, and coastal dependent uses.

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

(iii) application for shoreline protective structures shall include thorough analysis of all reasonable alternatives to such structures, including but not limited to 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 non-structural measures, such as relocating the structure or changing the design, are infeasible from an engineering standpoint or are not economically viable.

(iv) shoreline protection structures shall be placed as close as possible to the development or structure requiring protection.

(v) shoreline protection structures shall 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.

(vi) all protection structures shall meet approved engineering standards as determined through environmental review.

(vii) all shoreline protection structures shall include a permanent, County approved. monitoring and maintenance program.

(viii) All other required local, state and federal permits shall be obtained.

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:

Extent of Damage	**50% or more of the value of structure**		**Less than 50% of the value of structure**	
Cause of Damage (horiz. axis)	Coastal Hazards & Slope Instability	All Other Causes (fire. etc)	Coastal Hazards A Slope Instability	All Other Causes (fire. etc)
Location of Existing Structure (vertical axis)				
Esisting Structure **Meets Setback** (less than 10% extends into setback)	Meet all regulations.	Esempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.	Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulntions.	Exempt from regulntions if repaired/replaced in kind. Otherwise meet all regulations.
Esisting Structure **Does Not** Meet Setback but Could by relocating.	Meet all regulations. including setback for existing stnicturc.	To repair or replncc in kind. meet all regulations except setback. Otherwise meet all regulations. including prcscribcd minimum setback.	Exempt from regulntions 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 kind. if hazard cannot bc mitigated to a level that provides stability for a period of 100 vears.	To repair or replace in kind. meet all regulations except setback. Otherwise meet all regulations. including prcscribcd minimum setback,	May repair or rcplncc in kind. Hazards shall be mitigated to a level that provides stability for a period of 100 years. if fcnsible. Prqjccts in excess of "in-kind" shall meet all regulations.	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.

Public beach facilities are exempt from the provisions of this chart

5. 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 Sections 16 10.040(r) and (mmm)), is exempt from this section.

(i) 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;

(ii) 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;

(iii) 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 lowest 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.

(iv) 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);

(v) 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 paragraphs (iii) and (iv) of this section prior to permit issuance;

(vi) the space below the lowest floor shall either be free of obstruction or constructed with non-supporting 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 non-masonry construction and have a design safe loading resistance of not less than ten

(10) and no more than twenty (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.

(vii) the use of till for structural support of buildings is prohibited

(viii) the alteration of sand dunes which would increase potential flood damage is prohibited.

(ix) compliance with the provisions of paragraphs (iii) and (iv) above 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.

(x) Rxreational 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 16.10.070(h)(5) unless they are on the site for less than I SO consecutive days. For the purposes of this ordinance, "highway ready" means on wheels or jacking system, attached to the site by quick disconnect utilities and security devices, and having no attached additions.

(xi) 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 bcrh adjacent parcels are already similarly protected.

(xii) 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.

(xiii) All other required state and federal permits must be obtained.

6. New Critical Structures and Facilities:. Construction of critical structures and facilities, including the expansion of esistin; 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. 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:

(i) 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 16.10.070(h) l.

(ii) 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 protection structures;

(iii) 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 100 year stability (whichever is greater) setback;

(iv) 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.

8. 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.

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-:

(i) All new structures shall meet setbacks as specified in Section 16.1 0.070(b)2.

(ii) Outside of the Urban Services Line and the Rural Services line, a twenty gross acre minimum parcel size shall be required.

(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. The portion of a parcel within the one-hundred year floodway shall be excluded from any density calculations.

(d) Floodplains. The portion of a property within the one-hundred 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) , 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 by the Planning Director.

16.10.100 EXCEPTIONS.

(a) Request for Exception: A request for an exception to the provisions of this chapter or the permit conditions may be considered by the Planning Director if the exception is necessary to mitigate a threat to public health, safety and welfare.

(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 the threat to public health, safety, or welfare that would be mitigated.

(c) Required Findings: In granting an exception, the Planning Director shall make the following findings:

1. that hardship, as defined in 16.10.040(jj), exists; and

2. the project is necessary to mitigate a threat to public health, safety, or welfare;

3. the request is for the smallest amount of variance from the provisions of this Chapter as possible; and,

4. adequate measures will be taken to ensure consistency with the purposes of this chapter and the County General Plan.

(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 of the ordinance 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 ordinance 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 Exception.

(i) 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: 358

a. Danger that materials may be swept onto other lands to the injury of others;

b. Danger of life and property due to flooding or erosion damage;

c. 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;

d. Importance of the services provided by the proposed structure to the community;

e. Necessity to the structure of a waterfront location, where applicable;

f. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

g. Compatibility of the proposed use with existing and anticipated development;

h. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

i. Safety of access to the property in time of flood for ordinary and emergency vehicles;

j. Expected heights, velocity, duration, rate of rise, and sediment transport of the floodwater expected at the site; and

k 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.

(ii) Any applicant to whom a 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:

a. That the issuance of a 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 for $ 100 of insurance coverage; and

b. That such construction below the base flood level increases risks to life and property.

c. 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.

(iii) 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 Federai Insurance Administration of the Federal Emergency Management Agency.

3. Conditions for Exception.

(i) 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 Sections 16.10.050, 16.10.070, and 16.10.080 of this ordinance have been considered. As the lot size increases beyond one-half acre, the justification required for issuing the exception increases.

(ii) Esceptions 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..

(iii) 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 cf 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.

(iv) Esceptions shall only be issued upon:

a. Showing of good and sufficient cause;

16.10.1 10 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 18. 10, 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 Section 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 paragraphs 10 through 14 of subsection (a) of Section 12.10.070 of this Code.

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.

SECTION III

This Ordinance shall take effect on the 3 1"' day after final passage, or upon certification by the California Coastal Commission. whichever is later.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz this 27th day of October, 1998, by the following vote:

AYES: SUPERVISORS Symons, Wormhoudt, Belgard, Almquist and Beautz
NOES: SUPERVISORS None
ABSENT: SUPERVISORS None
ABSTAIN: SUPERVISORS None

Janet K. Beautz, Chairperson

ATTEST:
Clerk of the Board

APPROVED AS TO FORM:
County Counsel

BEFORE THE BOARD OF SUPERVISORS
OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOLUTION NO. 425-98

On the motion of Supervisor Wormhoudt
duly seconded by Supervisor Almquist
the following is adopted:

RESOLUTION ADOPTING AMENDMENTS TO CHAPTERS 13.10 AND 16.10 OF THE COUNTY CODE AND VARIOUS SECTIONS OF THE GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN REGARDING GEOLOGIC HAZARDS REGULATIONS

WHEREAS, the Board of Supervisors directed that an ordinance amendment be developed to revise geologic hazards regulations within Volume II of the Santa Cruz County Code; and

WHEREAS, amendments to the General Plan/Local Coastal Program Land Use Plan are also necessary to bring consistency between the two documents; and

WHEREAS, the proposed amendments will bring the County's flood regulations into compliance with the requirements of the Federal Emergency Management Agency; and

WHEREAS, in compliance with CEQA and State and County Environmental Review Guidelines, these amendments have been issued a Negative Declaration; and

WHEREAS, the Planning Commission has held a duly noticed public hearing and has considered the proposed amendment, the staff report, and all testimony and evidence received at the public hearing; and

WHEREAS, Chapters 13.10 and 16.10 of the County Code contain implementing ordinances for the Local Coastal Program (LCP); and

WHEREAS, the proposed amendments are consistent with the California Coastal Act, the LCP, and the County General Plan; and

WHEREAS, the California Coastal Commission has certified the Implementation of the County's Local Coastal Program.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED, that the Board of Supervisors hereby certifies the Negative Declaration under CEQA and approves the following amendments to the Santa Cruz County Code and the Santa Cruz County General Plan Local Coastal Program Land Use Plan to become effective upon certification by the Coastal Commission:

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AN ORDINANCE AMENDING CHAPTERS 13.10 AND 16.10 OF THE COUNTY CODE AND AMENDMENTS TO VARIOUS SECTIONS OF THE GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN REGARDING GEOLOGIC HAZARDS

BE IT FURTHER RESOLVED AND ORDERED that the Board of Supervisors hereby directs the amendments be submitted to the State of California Coastal Commission as part of the nest 1998 "rounds" package.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz, State of California, this 27th day of October, 1998 by the following vote:

AYES: SUPERVISORS Symons, Wormhoudt, Belgard, Almquist and Beautz
NOES: SUPERVISORS None
ABSENT: SUPERVISORS None
ABSTAIN: SUPERVISORS None

Janet K. Beautz, Chairperson

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

COUNTY COUNSEL

DISTRIBUTION: County Counsel
Planning Department

b. Determination that failure to grant the exception would result in a "hardship" (as defined in 16.10.040 of this ordinance) to the applicant; and

c. 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.

(v) 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.

(vi) Exceptions may be issued for the repair or rehabilitation of historic structures (as defined in 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.

(vii) Upon consideration of the factors in Section 16.10.100(d)ii 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 subsection (1) of Section 12.10.070 of this Code, the Planning Director may issue a Notice of Geologic Hazard and Order thereon, and tnay 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 Section 12.10.070(l) of the County Code.

STATE OF CALIFORNIA – THE RESOURCES AGENCY
GRAY DAVIS, Governor

CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

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W13a

January 13, 1999
Revision: February 1, 1999
Adopted: February 3, 1999

TO: Commissioners and Interested Persons

FROM: Tami Grove, Deputy Director
Charles Lester, District Manager
Rick Hyman, Coastal Program Analyst

SUBJECT: **SANTA CRUZ COUNTY: LOCAL COASTAL PROGRAM MAJOR AMENDMENT NO. 2-98.** For public hearing and Commission action at its meeting of February 3, 1999, to be held at Hotel del Coronado.

SUMMARY OF STAFF REPORT

Description Of Amendment Request

Santa Cruz County is proposing the following changes to its certified Local Coastal Program:

A. Urban-like Development in Rural Areas

Amend the Land Use Plan portion of its Local Coastal Program to: recognize existing urban-like development in rural areas as conforming (new Policy 2.3.7)

B. Geologic Hazards

a. Amend the Land Use Plan (LUP) portion; and
b. Amend the Implementation portion (IP) of its Local Coastal Program to:

1. Revise **definition of "development"** subject to geologic evaluation, bluff setbacks, beach/bluff erosion, and storm wave inundation (a. LUP policies 6.2.11 formerly 6.2.10; 6.2.12 formerly 6.2.11; 6.215; Glossary; b. IP Sections 16.10.040s, formerly 16.10.040p; 16.10.050; 16.10.070a; 16.10.070h, formerly g; 16.10.070(h)2)
2. Allow foundation repairs and some minor projects within **bluff setback zone (a.** LUP 6.2.13 new policy; 6.2.12 formerly 6.2.11; IP Section 16.10.070h)
3. Allow geologic and soil **report review to occur after the discretionary approval,** but before the building permit (IP Section 16.10.060A)
4. Refine **shoreline structure criteria** (IP new Section 16.1 0.070(h)3: deleted section 16.10.070(h)5)

5. Change setback for **fault** zones from 50 feet from the fault to as close as 25 feet from the edge of the zone of distortion with proper studies (21. LUP policy 6.1 .11; b. IP Section 16.1 0.070(b)2; 16.1 0.080(a)2)
6. Clarify provisions to allow **reconstruction of structures on coastal bluffs** or **due** to storm wave inundation where damage has exceeded 50% (a. LUP policies 6.2.20, 6.2.21; b. IP new Section and table 16.10.070h4)
7. Add criteria requiring **land** divisions **in floodplains** to show septic system is not inside floodplain (LUP policy 6.4.5; IP Section 16.10.070f2)
8. **Do** not allow **septic systems and leach fields in floodplains** on existing,developed lots to be expanded (LUP policy 6.4.9)
9. Add and clarify purposes and authorizations for "Geologic Hazards" chapter of *County* Code (IP new Sections 16.10.022, 16.10.025; revised Sections 16.10.010, 16.10.020)
10. Add conflict, liability disclaimer, and severability sections (IP Sections 16.10.035, 16.10.036, 16.10.037)
11. Delete special exemptions for 1989 Loma Preita earthquake (IP Section 16.10.040s, formerly 16.10.040p; 16.10.075 to be deleted; 16.10.095 to be deleted)
12. Change geologic assessment and report procedures (IP Section 16.10.060)
13. Subject some additional work on existing structures to Federal floodplain requirements (IP Section16.10.070(f)3)
14. Clarify basements are to be elevated above 100 year flood level (IP Section 16.1 0.070(f)3vi, formerly(f)4)
15. Allow unlimited amount of storage, parking, and non-habitable space below 100 year flood plains in coastal high hazard areas to be enclosed (IP Section 16.10.070h(5)vi)
16. Require water and sewage systems to minimize or eliminate infiltration of flood waters into the system (IP new Section 16.10.070(f)6)
17. Prohibit new septic systems in floodways (IP new Section 16.1 0.070(g)4)
18. Require project denial if National Flood Insurance Program regulations are not met (IP Section 16.10.090)
19. Add very limited exceptions to flood criteria pursuant to federal guidelines (IP, new section 16.10.100D)
20. Add violation provision (IP Section 16.10.120A)
21. Reorganize and make other non-substantive editorial, procedural and definitional changes (a. LUP policies 6.2.8 deleted as redundant; 6.2.14 formerly 6.2.10; 6.2.12 deleted as separate policy; 6.2.14 formerly 6.2.13; 6.2.16; 6.2.18; new 6.2.18.1; Glossary; b. IP throughout entire Chapter 16.10)

This amendment was filed on December 11, 1998. These two items are part of a slightly larger package; the other component regarding replacement housing'has been deemed "minor" and addressed in a companion staff report approved by the Commission on January 13, 1999. The standard of review of the land use plan amendments is that they must be consistent with the Coastal Act. The standard of review of the implementation amendments is that they must be consistent with and adequate to carry out the policies of the certified coastal land use plan.

Summary Of Staff Recommendation

Staff recommends that the Commission **approve** the proposed amendment (part A), addressing urban-like development in rural areas, as submitted by the County . This amendment can be considered "clean up" as it is similar to a previously approved amendment and will have no practical effect in the coastal zone (see findings on pages 9 and 10).

Staff recommends that the Commission **approve, only if modified** the second part of the amendment. This is an overhaul of the Geologic Hazards chapter of the zoning ordinance and concurrent revision of some Land Use Plan policies involving hazards. The impetus for the amendment is a FEMA mandate, but additional changes are proposed to address local concerns. By and large these amendments are non-controversial, of not much substance, and improvements over existing language and format. However, staff has identified four topics of concern, shown below and described in detail in the findings beginning on page IO. Each of these issues is easily addressed by modifications that County staff has already agreed to, summarized below and shown in full on pages 7 through 9:

ISSUE	SUBMITTAL	MODIFICATION
Definition of development subject to geologic rules	Would no longer include all non-habitable structures	1. Include other potentially hazardous projects.
Bluff setback	Has exemptions for minor projects	2. Ensure that these do not justify shoreline protection in future
Hazard assessment	May defer	3. Don't defer for appealable coastal projects
Shoreline structure criteria	Has good criteria, but lacking in staging area plans	4. Add criteria for staging area plans.

The following is a summary of recommended actions:

AMENDMENT PART	RESOLUTION	MODIFICATIONS	FINDINGS
A: Urban-like development in rural	A. Approve	N/A	Pages 9-l 0
B. Geologic			
a. Land Use Plan	B. & C. Deny, then approve with modifications	l a	Pages 1 O-21
b. Implementation	D. & E. Deny, then approve with modifications	l b , 2 , 3, 4	Pages 1 O-2 1

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Summary Of Issues And Comments

At the County hearings, the proposed geologic amendments elicited no comments. The only two comments on the "urban-like" amendment wanted it to go further to address rebuilds of non-conforming structures (the subject of Amendment # 3-98)

Additional Information

For further information about this report or the amendment process, please contact Rick Hyman or Charles Lester, Coastal Commission, 725 Front Street, Suite 300, Santa Cruz, CA 95060; Tel. (831) 427-4863.

TABLE OF CONTENTS

ADOPTED

I. STAFF RECOMMENDATION: MOTIONS AND RESOLUTIONS

MOTIONS AND RESOLUTIONS

The Commission needs to make five separate motions in order to act on this proposal:

A. APPROVAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 Part A AS SUBMITTED

MOTION :

"I move that the Commission certify Major Amendment # 2-98 part A to the County of Santa Cruz Land Use Plan as submitted by the County."

Staff recommends a **"YES"** vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

ADOPTED

RESOLUTION:

The Commission hereby **approves** Major Amendment # 2-98 part A to the land use plan of the County of Santa Cruz as submitted for the specific reasons discussed in the recommended findings on the grounds that, as submitted, it meets the requirements of Chapter 3 of the Coastal Act. There are no feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendment would have on the environment.

B. DENIAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 PART B AS SUBMITTED

MOTION :

"I move fhaf fhe Commission certify Major Amendmenf # 2-98 part B fo the County of Santa Cruz Land Use Plan as submitted by fhe County."

Staff recommends a "NO" vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

RESOLUTION:

The Commission hereby **rejects** Major Amendment # 2-98 *part B* to the land use plan of the County of Santa Cruz as submitted for the specific reasons discussed in the recommended findings on the grounds that, as submitted, it does not meet the requirements of Chapter 3 of the Coastal Act. There are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendment would have on the environment,

C. APPROVAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 PART B, IF MODIFIED

MOTION :

"I move thaf the Commission certify Major Amendment # 2-98 part B fo fhe County of Sanfa Cruz Land Use Plan, if modified according to Suggesfed Modification 1a."

Staff recommends a **"YES"** vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

ADOPTED

RESOLUTION:

The Commission hereby **certifies** Major Amendment #2-98 part B to the land use plan of the County of Santa Cruz, if modified according to Suggested Modification la, for the specific reasons discussed in the recommended findings on the grounds that, as submitted, the amendment and the land use plan as thereby amended meet the requirements of the Coastal Act. The amendment is consistent with applicable decisions of the Commission that guide local government actions pursuant to Section 30625(c) and approval will not have significant adverse environmental effects for which feasible mitigation measures have not been employed consistent with the California Environmental Quality Act.

D. DENIAL OF IMPLEMENTATION PLAN MAJOR AMENDMENT #2-98 PART B AS SUBMITTED

MOTION:

*"I move that the Commission **reject** Major Amendment #2-98 **pat-t** B to the Santa Cruz County Local Coastal Program Implementation Plan* as *submitted by the County."*

Staff recommends a "YES" vote which would result in **denial** of this amendment as submitted. Only an affirmative (yes) vote on the motion by a majority of the Commissioners present can result in rejection of the amendment (otherwise the amendment is approved as submitted).

RESOLUTION:

The Commission hereby **rejects** Major Amendment #2-98 part B to the implementation plan of the Santa Cruz County local coastal program, as submitted, for the specific reasons discussed in the following findings, on the grounds that the amendment is not consistent with and not adequate to carry out the certified land use plan.

E. APPROVAL OF IMPLEMENTATION PLAN MAJOR AMENDMENT #2-98 PART B IF MODIFIED

MOTION :

*"I move that the Commission **approve** Major Amendment #2-98 part B to the Santa Cruz County Local Coastal Program Implemenfafion Plan, if if is modified according fo Suggested Modifications 1 b-4."*

ADOPTED

Staff recommends a "YES" vote which would result in **approval** of this amendment if modified. An affirmative vote by a majority of the Commissioners present is needed to pass the motion.

RESOLUTION:

The Commission hereby **approves** Major Amendment #2-98 part B to the Implementation Plan of the Santa Cruz County Local Coastal Program, for the specific reasons discussed in the following findings, on the grounds that, as modified by Suggested Modifications 1 b through 4, the amendment conforms with and is adequate to carry out the certified land use plan. Approval of the amendment will not cause significant adverse environmental effects for which feasible mitigation measures have not been employed consistent with the California Environmental Quality Act.

II. SUGGESTED MODIFICATIONS

ADOPTED

The Commission hereby suggests the following changes to the proposed Local Coastal Program amendments which are necessary to make the requisite findings. If the local government accepts each the suggested modifications within six months of Commission action, by formal resolution of the Board of Supervisors, the corresponding amendment portion will become effective upon Commission concurrence with the Executive Director finding that this has been properly accomplished.

1. a. Land Use Plan Glossary and b. IP Section 16.10.040 Definitions

a. Revise new definition of "Development Activity" in the Glossary by adding the following underlined provision:

(15) Any other project that will increase the number of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, may be determined by the Planning Director to constitute "development" for the purposes of geologic review.

and delete "development activities" from the tab/e under the definifion of "development:"

D e v e l o p m e n t ˙/ v (LCP)
What is Development?..

b. Revise definition of "development/development activities" in Section 16.10.040s by adding the following introductory language and additional provision:

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For the purposes of this Chapter, an3 this chapter only, any project that includes activity in any of the following categories is considered to be development or development activity. This definition does not supersede the definition in Section 13.20.040 for purposes of determining whether a certain activity or project needs a ooastal permit; some such activities or projects will still require coastal permits although they do not fall under this following specific definition:. . .

(15) Any other project that is defined as development under Section 13.20.040 and that will increase the nu'mber of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, may be determined by the Planning Director to constitute "development" for the purposes of geologic review.

2. IP Section 16.10.070(h): Bluff Setback Exemptions

Revise Section 16.10.070(h)2 "Exemption" by renumbering fhe proposed text as "9(i) and adding fhe underlined subsection (ii):

(i.) Any project...
(ii) If a structure that is constructed oursuant to this exemption becomes unstable in the future due to erosion or slope instability,, the threat to the structure shall not qualify the parcel for a coastal bluff. retaining structure-or a shoreline protection structure. If the structure become hazardous it must be removed or relocated rather than be protected in place.

And revise Section 16.10.070(h)3(i). by adding the underlined wording at ifs end:

Note: Shoreline protection structures shall not be allowed where the existing structure to be protected did not meet the provisions of Section 16.1 0.070(h)1 when it was constructed because it was exempted from those provisions by Section 16.1 0.070(h)2.

3. IP Section 16.10.060: Assessment and Report Preparation and Review

Revise pat-f (a) of this section by adding the following underlined provision:

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 and before any discretionary or development application 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 appealable to the Coastal Commission. ~~but in~~ In no event shall such be deferred until after the approval or issuance of a building permit.

ADOPTED

4. IP Section 16.10.070(h)3: Shoreline Structures

Revise by inserting the following additional underlined subsection:

(viii) Applications for shoreline protection structures shall include a construction and staging plan that minimizes disturbances to the beach, specifies the access and staging areas, includes a construction schedule that minimizes the time that equipment is present on the beach and that limits presence on the beach 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.

III. RECOMMENDED FINDINGS

The Commission finds and declares for the following two parts of Santa Cruz County Major Amendment # l-98:

A. RECOGNIZE EXISTING URBAN-LIKE DEVELOPMENT IN RURAL AREAS AS CONFORMING

This proposed amendment to the coastal land use plan, the *1994 Genera/ Plan and Local Coastal Program for the County of Santa Cruz,* would recognize existing legal parcels outside of the urban services line that are less than one acre is size **as** conforming with the *Genera/ Plan.* The zoning of these parcels would be maintained in the R-l-5 to R-l-l zone districts and the standards of these zone districts would apply.

The most relevant governing sections of the Coastal Act state:

> 30241: The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:
>
> (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses....
>
> **30250(a.)**: New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous

> with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed

To address these policies the County is divided into urban areas and rural areas via an urban services line. For outside of the urban services line the *Genera/ P/an* shows residential designations of "Suburban Residential," "Rural Residential," and "Mountain Residential" with permitted densities ranging from 1 to 40 acres per dwelling unit. There are many parcels within these areas that are smaller than one acre. And many of these are in a zoning designation that allows parcels that are less than one acre (e.g., R-l-5 [5,000 sq. ft.] to R-I-l[acre].)

There have been three potential problems with this situation. One was that landowners could subdivide their land according to the zoning which would result in smaller parcels than the *Genera/ P/an* designation. This was addressed in the original certification by placing a minimum parcel size of 1 acre in the rural areas, no matter what the zoning says. New subdivisions are tightly regulated by a rural density matrix formula.

The second potential problem was that the zoning appeared on its face to be inconsistent with the land use plan designations, which would be a violation of state general plan law. To remedy this concern the County changed its zoning ordinance to specifically say that existing legal parcels in such zoning districts would be recognized as "conforming." (LCP Minor Amendment # l-97)

The final potential problem was that even with this zoning change, it would appear that the lots would be non-conforming with regard to *Genera/ Plan* policies. From a practical perspective there may be more "hoops" to go through and more time and expense to do something on property that is "non-conforming." Therefore, the County is now proposing this amendment to affirm that these lots are "conforming."

This amendment simply adds specific *Genera/ Plan* language to conform to zoning provisions. This amendment does not change what could get built beyond what the previous amendment already corrected. A possible concern with this amendment is that the new "conforming" language could be interpreted as superseding the one-acre minimum standard. However, a review of the zoning maps in the coastal zone reveals that there are no parcels which could be so affected. Thus, this amendment can be approved as being consistent with the cited Coastal Act sections because it will not result in any change in intensity of use over what is already permitted.

ADOPTED

B. GEOLOGIC HAZARDS

This proposed amendment would make numerous changes to the geologic hazard provisions of the local coastal program. Most of these by themselves would be considered "minor" amendments, as they do not change the kind, location, or density of use (see latter sections of this finding). Many are being made to conform to FEMA model floodplain ordinance; in fact, FEMA (Federal Emergency Management Agency) has dictated these changes.

The proposed amendment includes changes both to the coastal land use plan (1994 *General Plan and Local Coastal Program for the County of Santa Cruz*) and the coastal implementation program, which is portions of the *County Code.* The standard of review of the land use plan amendments is the Coastal Act ; especially the following sections:

> **Section 30106.** "Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of-water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).
>
> As used in this section, "structure" includes, but is not ljmited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.
>
> **Section 30235:** Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

ADOPTED

Section 30253: New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction, of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30610.

Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:. . .

(g) (1) The replacement of any structure, other than **a** public works facility, destroyed by a disaster. The replacement structure shall conform to applicable existing zoning requirements, shall be for the same use as the destroyed structure, shall not exceed either the floor area, height, or bulk of the destroyed structure by more than 10 percent, and shall be sited in the same location on the affected property as the destroyed structure.

(2) As used in this subdivision:

(A) "Disaster" means any situation in which the force or forces which destroyed the structure to be replaced were beyond the control of its owner.

(B) "Bulk" means total interior cubic volume as measured from the exterior surface of the structure.

(C) "Structure" includes landscaping and any erosion control structure or device which is similar to that which existed prior to the occurrence of the disaster.

The standard of review of the Implementation amendments is the certified land use plan, especially sections 6.1 "Seismic Hazards," 6.2 "Slope Stability", and 6.4 "Flood Hazards." Some of these policies are discussed below.

ADOPTED

The components of this amendment have been grouped into the following topics. The first four components of the amendment raise conformance issues as will be discussed.

1. Definition of Development:

Effect of Amendment:

a. The proposed land use plan amendment retains the definition of "development" which corresponds to Coastal Act Section 30106 cited above. However, it then adds a separate definition of "development activity" which is less encompassing. Developments such as non habitable structures (e.g., not used for living purposes, such as storage sheds or stables), small habitable additions, remodels and repair projects that modify less than 50% of the total length of the exterior walls, less than 50% foundation modifications, will not fall under the definition of "development activity."

The amendment then goes on to substitute "development activity" for "development" in pertinent geologic policies (6.2.10 to be renumbered 6.2.11; 6.2.11 to be renumbered 6.2.12, and 6.2.15). This means that these policies will no longer to apply to those categories of "development" that are not defined as "development activities." Under renumbered policy 6.2.11 geologic assessments are only required for "development activities" in hazard areas, not other "development." Then, only "development activities," not other development, will have to comply with the 25 foot coastal bluff setback policy (renumbered 6.2.12). The policy (6.2.15) allowing development on lots of record in storm wave inundation or beach or bluff erosion areas under certain circumstances will only apply to "development activities." This appears to mean that other development will be allowed in these areas, without having to follow specified hazard criteria.

b. The implementation plan amendment includes an identical definitional change (Section 16.10.040s, formerly 16.10.040p). It basically states that only "development activities" are subject to the provisions of the "Geologic Hazards" chapter of the County Code. The implementation amendment does not substitute "development activity" for "development" as the land use plan amendment does; rather, it says that they are synonymous; i.e., throughout the chapter wherever "development" is used, it really means "development activity" only. This provision is broader than the land use plan change, which is limited to the three noted policies. For example, the proposed land use plan amendment does not change the requirements for project reviews in fault zones, liquefaction areas, and unstable slopes to apply to all "developments," while the proposed implementation amendment does.

Background: In order to understand the implications of this amendment, one must examine how the County coastal permit process operates. Under the Coastal Act, there is a definition of "development." All development needs a coastal permit, unless specifically exempted or excluded. All Coastal Act policies then apply to all permits to

the extent that they are applicable. Thus, for example in this case, a project susceptible to a hazard would be analyzed for consistency with the hazard policies, one that was not would not have to be. The Coastal Act also provides for local governments issuing coastal permit authority upon certification of local coastal programs. One of the tests of certification is adequacy to carry out the land use plan, which in turn must be consistent with the Coastal Act.

Santa Cruz County has definitions of "development" in both the land use plan (Glossary) and the *County* Code (Section 13.20.040) which are identical to the definition in the Coastal Act. The County requires coastal permits for all such development, which is otherwise not specifically exempted or excluded. Coastal permits are required to be consistent with land use policies and must follow certain certified sections of the *County* Code including the "Geologic Hazards" chapter. This amendment refines the definition of development that would be considered under this chapter. Thus, for example, a non-habitable structure such as a fence, storage shed, gazebo, or stable, may be defined as "development" and would need a coastal permit. However, it would not have to comply with some of the geologic hazard provisions in the land use plan nor most of those in the zoning ordinance.

The purpose of this amendment is to use County staff time more effectively to concentrate on projects where there may be impacts. The County has determined that the effect of the proposed change is that small projects may be approved without geologic assessment because no more people will be exposed to a geologic hazard, the development will not encroach closer to the identified hazard, and the hazard will not be more likely to occur as a result of the project.

Analysis: This more limited definition of "development activity" is built into the Geologic Hazards chapter of the *County* Code, which, in part, is used by County planners to evaluate coastal permits. Therefore, if developments are exempt from this chapter there is no way to ascertain whether they in fact do or do not put people or structures at greater risk. The proposed amendment is a de facto determination that they will not. However, the Coastal Commission knows from experience that even the most minor projects, at times, do have geologic hazard implications. For example, someone could install a fence at the edge of the bluff, which could continue eroding. The fence could be undermined, breaking off after a storm and hitting someone on the beach below or otherwise causing public access damage. This potential adverse impact may not be identified and mitigated because of the provisions of the proposed amendment. The applicant could even rebuild the fence without further review. Similarly, a hazardous condition could affect some of these small structures in a way that then requires extraordinary repairs that could have adverse impacts. They may even require seawalls, where no seawall would normally be allowed, as discussed in the following finding.

ADOPTED

To its credit the County has included some measures to minimize these potential effects, but they do not completely eliminate the expressed concerns. One is the inclusion of a provision to require a Declaration of Restrictions to be recorded for non-habitable structures to acknowledge that any conversion to an habitable used shall be subject to the provisions of the Geologic Chapter (proposed new Code Section 16.10.070a). Unfortunately, this provision does not completely address the problematic scenarios suggested above, as they can occur whether the structure is habitable, non-habitable, or non-habitable but illegally being used in a habitable manner.

Second, the *County Code* has a proposed new section 16.10.070h2 which appears to say that even non-habitable structures not meeting the revised definition of development activity sometimes must be located more than 25 feet from the bluff (i.e., swimming pools, water tanks, unfavorable alteration of drainage patterns, grading, and all other projects where there is space to accommodate them outside the setback area). This is done by referring to these as "projects" not "development." Unfortunately, the previous sections in the Code referred to above give a contrary impression because they imply such projects are exempt (and they would be exempt from geologic assessment) without ever reaching this latter subsection. And again, there may be projects which still fall under this narrowed exception that deserve geologic review. This narrowed exception is discussed in the "Bluff Setback" section below.

Conformance Conclusions:

a. Under-the Coastal Act all defined development must comply with the cited policies. The certified 1994 *General Plan and Local Coastal Program for the Counfy of Santa Cruz* has a set of geologic provisions which have been found consistent with the Coastal Act policies. Under the proposed land use plan amendment certain classes of development become exempt from having to follow certain provisions. This analysis shows that there is not complete assurance that the intent of the Coastal Act policies can still be carried out. Therefore, the proposed land use plan amendment must be denied as being inconsistent with the Coastal Act.

b. Under the proposed implementation plan amendment, certain classes of development would no longer have to comply with the provisions of the Geologic Hazards chapter. Thus, there would no longer be a mechanism to ensure compliance with the land use plan's geologic policies. Since the Commission is denying changes to these policies which reduce their scope, the commensurate implementation policies can not be approved. Furthermore, as noted, other 7994 *General Plan* and Local *Coasfal Program for the County of Sanfa Cruz* provisions retain a broader applicability than the proposed implementation amendments (policy 6.1.1 requires a review of geologic hazards for all discretionary development projects in designated fault zones, as does policy 6.1.4 for liquefaction hazards) and these are not even being proposed for amendment. Therefore, the proposed amendment to implementation must be denied as being inadequate to carry out the certified land use plan.

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ADOPTED

Remedies: There are a various approaches to address the noted deficiency in the proposed amendment. One approach would be not to have **a** separate definition of "development activity" from "development" to apply only to the hazards provisions. Rather, the one broader definition is retained, but case by case exemptions either from the requirements to prepare a geologic report and/or to follow all the geologic requirements are specified to be allowed. This would reduce the confusion inherent in having separate definitions of "development" and "development activity."

Another approach is to ensure that all "development" which requires a coastal permit within a hazard area is at least considered under geologic review. This would involve broadening the new definition of "development activity" to incorporate its intent; namely, that any other project that will increase the number of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, be considered "development" for the purposes of geologic review. This approach adds slightly more verbiage, but it retains the language and format of the amendment, requiring fewer modifications of the proposal. Under this approach it is also necessary to be explicit that this separate "development activity" definition does not supersede the general definition of "development" used elsewhere for purposes of coastal permit review. In conclusion:

a. For the land use plan, the definition of development activity could be broadened in the manner just described. If so modified, according to Modificationla on page 7, then the land use plan as amended will remain consistent with the Coastal Act and the amendment can be approved.

b. In turn, if the proposed Implementation amendment is so modified, according to Modification1 b on page 7, it can be approved as being consistent with the land use plan as amended and modified.

2. Bluff Setbacks

Effect of Amendmenf

a. The proposed amendments to the *1994 General Plan and Local Coastal Program for the County of Santa Cruz* add a new policy 6.2.13 to allow foundation repairs within the bluff setback zone. The bluff setback zone is defined as a minimum 25 feet from the edge of the bluff (policy 6.2.12 formerly 6.2.11). "This policy creates a means for existing dwellings located within the setback to repair/replace/ upgrade their foundations, consistent with protection of public health and safety and the retention of existing housing stock," according to the County staff report.

ADOPTED

As noted above, a revision to the setback policy (6.2.12 formerly 6.2.11) is proposed so it applies to "development activities," not all "development." But wording is also proposed to encompass "non-habitable structures for which a building permit is required."

b. The proposed amendment to the implementation plan adds a new Code Section 16.10.070h1(iv)with similar foundation repair language. Code Section 16.10.070h1(ii) has a similar setback provision to the revised policy 6.1.12. A proposed new Code Section 16.10.070h2 appears to further limit those projects that can be within the setback. Some non-habitable structures that do not require a building permit are still not allowed in the setback area: those that could be located beyond the setback, unfavorably alter drainage patterns, or involve grading. The text goes on to give examples of what remains exempted (i.e., allowed in the 25 foot setback): "decks which do not require a building permit (i.e., are less than 18 inches high) and do not unfavorably alter drainage, play structures, showers (where run-off is controlled), benches, landscape boulders, statues, and gazebos which do not require a building permit."

Analysis: The County has attempted to allow only a very limited class of projects within the bluff setback area. The proviso that among these, only those that can not be located elsewhere on the property can be within the setback, helps ensure that the intent of the general setback policies is not compromised. Generally, the Commission concurs that the very limited exemptions are appropriate. However, the problem with this proposal is that these structures, once installed, could be considered "existing development." As erosion continues, the applicant then could apply for a seawall to protect these ancillary facilities which are now existing "development." Under the local coastal program (policy 6.2.16) and pursuant to the Coastal Act, existing development is generally allowed to be protected, if threatened. Whereas someone's house may be setback a sufficient distance to not warrant protection, these seaward structures could make the property eligible for protection. Savvy landowners whose existing house is setback beyond a threatened area but who are desirous of a seawall will first take advantage of this exemption to place gazebos, decks, etc. within the setback area. They will then apply for a seawall to protect this existing development, thwarting the intent of the cited land use plan policy.

Conformance Conclusions:

a. The narrow exceptions to the blufftop setback policy proposed in the land use plan can be found consistent with the cited Coastal Act sections and are thus approved.

b. Zoning regulations are typically more detailed than land use plan policies and include more procedural provisions. As noted there can be unintended consequences from these proposed exceptions. The result could be a conflict with land use plan policy

ADOPTED

6.2.16. Therefore, the proposed amendment to the zoning ordinance is inadequate to carry out the certified land use plan and is denied.

Remedy: The zoning provision can be easily modified to ensure that exempted structures do not trigger the need for protective structures and are considered temporary, in that they can be removed or relocated. By adding such wording as shown in Modification 2 on page 8, the amended implementation plan, **as** modified, remains consistent with the land use plan as amended.

3. Deference of Geological Report

Effect of Amendment: Another component of the proposed amendment, involving Code Section 16.10.060A, changes the timing of geology, soil, or other technical report preparation. The current certified provisions state that the reports must be prepared prior to any public hearing or action on a discretionary permit, which would include a coastal permit. The proposed amendment allows the County Geologist to defer report preparation to any time prior to a building permit being issued if it is unlikely that the report could result in a significant change of the size or location of the project. The intent of this provision is to save the applicant the cost of technical geologic investigation prior to having a determination of whether the proposed project will be allowed for other reasons.

Analysis: There are three problems with this approach. First, it leaves the judgment as to what effect the technical report may have on the project to the County Geologist. While the County Geologist is no doubt well-qualified to make such predictions, the purpose of these reports is for outside consultants to provide more information and expertise than the County Geologist may have. Therefore, the Geologist may not have all the information necessary to make such a decision. Second, under the Coastal Act procedures, local government actions must be taken before there is any formal permit review by the Coastal Commission, such as through the appeal process. However, Coastal Commission staff often reviews proposed projects at an earlier stage, such as to offer comments under the California Environmental Quality Act or to the local government. In this latter case, future appeals can often be prevented. In order to perform such evaluations, Coastal Commission staff often needs to see the technical reports, which under the proposed amendment might not longer be prepared at this stage. Third, if there is an appeal, the Coastal Commission must make a decision based largely on the County record. If there is no report in the County file, it may prove difficult to render a decision. The Commission would almost automatically have to find "substantial issue" and then continue the matter until the technical information was available. This scenario would result in the inefficiencies and delays that the amendment is supposed to prevent.

Conformance Conclusion: For all of these reasons, the proposed amendment is not adequate to carry out the land use plan and must be denied.

Remedies: If this proposed amendment was simply deleted, then there would be no issue. However, the intent of the amendment is worthy, and in many circumstances (including always outside of the coastal zone) it would not cause Coastal Commission concerns. To address the noted coastal zone concerns, this provision could be worded so as not be to applicable to projects appealable to the Coastal Commission. With such a modification, as shown by Modification 3 on page 8, the proposed amendment can be approved as adequate to carry out the land use plan.

4. Shoreline Structure Criteria

Analysis: This component of the proposed amendment to the zoning ordinance relocates criteria for shoreline structures from section16.10.070(h)5 to a new Section 16.10.070(h)3 and rewords them. Generally, the new language better conforms to land use plan policy 6.2.16. However, as this is the implementation chapter, it should not just repeat policy language, it should contain procedures and details clear enough to adequately implement the policy. Missing are details on staging plans. Construction activities could have adverse impacts on beach access, for example, that would be inconsistent with land use plan policies. Therefore, this amendment component is denied as being inadequate to carry out the land use plan. policy.

Remedy: Details about criteria for construction staging plans could be added to this section. If so modified, according to Modification 4, then the amended section is approved as being adequate to carry out the land use plan, as amended.

5. Fault Setback

a. The proposed amendment to General *Plan* policy 6.1 .1 1 changes the setback for fault zones from 50 feet from the fault to as close as 25 feet from the edge of the zone of distortion with proper studies (a. LUP policy 6.1 .1 1; b. IP Section 16.10.070(b)2; 16.1 0.080(a)2). This amendment reflects current geologic and geotechnical practice according to the County staff report. Therefore, it is approved as being consistent with Coastal Act sections 30253(1) & (2).

b.. The proposed amendment to Code Sections 16.10.070(b)2 and 16.10.080(a)2) contain similar language and are, therefore, approved as consistent with the amended land use plan.

6. Reconstruction Where Damage Exceeds 50%

ADOPTED

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a. These proposed amendment components to 1994 General Plan and Local Coasfal Program for the Counfy of Santa Cruz policies 6.2.20 and 6.2.21 clarify provisions to allow reconstruction of structures on coastal bluffs or due to storm wave inundation where damage has exceeded 50%. All applicable regulations, including minimum setbacks have to be met; otherwise, only in-kind reconstruction is allowed and only if the hazard can be fully mitigated. This applies whether or not the damage is due to the hazard. Since Coastal Act Section 3061 Og allows reconstruction no matter what extent the damage and what the disaster, this provision is approved as consistent with the Coastal Act.

b. The proposed amendments to the implementation plan contain a new section and table 16.10.070h4 with similar language. They are approved as being consistent with and adequate to carry out the cited land use plan policies as amended.

7. Land Divisions In Floodplains

a. This proposed component of the amendment to the 1994 General *Plan and Local Coasfal Program for the County of Santa Cruz* adds and clarifies criteria for allowing land divisions in floodplains (Policy 6.4.5). Under the current policy each building site must be located out of the floodplain. The major change is a clarification that building sites include septic systems. Thus, under the proposed amendment the application must show that there are no septic systems inside floodplain in order to be approved. This provision must be read in conjunction with a previous amendment (#1-98) that does not allow any density credit in a floodplain. Thus, new parcels lines may be within floodplains, but not new development, nor density credit for new development. As such, the proposed amendment is approved as consistent with Section 30253 of the Coastal Act.

b. The proposed amendment to renumbered Section 16.10.070f2 of the *Counfy Code* contains identical language to the land use plan amendment. It is thus approved as consistent with and adequate to carry out the land use plan as amended.

8. Septic Systems in Floodplains

This proposed component of the amendment to the 1994 *General P/an and Local Coasfal Program for the Counfy of Sanfa Cruz* makes two changes. From Attachment page 7 and the "Minute Order," the following will be the final text of policy 6.4.9:

> Septic systems and leach fields to serve previously undeveloped parcels shall not be located within the floodway or the 100 year floodplain. The capacity of existing septic systems in the 100 year floodplain or floodway

shall not be increased. Septic systems shall be designed to avoid impairment or contamination. 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 on or off site. No fill is allowed in the floodway.

First, policy 6.4.9 is reworded to state that septic systems to serve undeveloped parcels are not to be located in the floodway, nor in the rest of the floodplain if there is a suitable location outside of the floodplain. Under the current policy language, one can not install a septic system in the floodplain to serve new development. Thus, the proposed policy changes would in the future appear to allow a new system to be installed (1) if there is no suitable location outside of the floodplain and (2) to serve new development if the parcel is developed. This would have the effect, for example, of allowing someone to install a new system if there was one structure on a parcel and an applicant wanted to build a new house and convert the structure to a shed or guest house. However, the intention is clearly the opposite, as demonstrated by County rules. Under County Code Section 16.1 0.070(f)5 septic systems and leach fields shall not be located within the one-hundred year floodplain. Also, Code Section 7.3.8.130G says that leach fields for new systems can not be installed within the 100-year floodplain. This revision is being proposed to conform to federal and state regulations, and to reflect current practices. Any proposed system would still have to meet the various technical requirements of the zoning ordinance to ensure protection of human health and biotic resources. This proposal, although shown as a local coastal program amendment should have minimal effect in the coastal zone. Almost all parcels entirely within the floodplain within the County's coastal zone are on sewers.

Second, this proposed amendment's intent is to prohibit expanding an existing system in the floodplain. This would have the effect, for example, of not allowing someone to add on to their house in a manner that required more sewage treatment capacity (e.g., adding a new bedroom), unless they could install a new system (which as indicated above would be difficult), could utilize an existing system outside of the floodplain, or utilize some alternative means of treatment.

These amendments represent means to protect human health from development in the floodplain. They are thus approved as being consistent with Coastal Act Section 30253(l).

9. Other Substantive and Procedural Changes

The proposed amendment to the implementation plan also would:

ADOPTED

- Add and clarify purposes and authorizations for "Geologic Hazards" chapter of County Code (IP new Sections 16.10.022, 16.10.025; revised Sections 16.10.010, 16.10.020)
- Add conflict, liability disclaimer, and severability sections (IP Sections 16.10.035, 16.10.036, 16.10.037))
- Delete special exemptions for 1989 Loma Prieta earthquake (IP Section 16.10.040s, formerly 16.10.040p; 16.10.075 to be deleted; 16.10.095 to be deleted)
- Change geologic assessment and report procedures (IP Section 16.10.060)
- Subject some additional work on existing structures to Federal floodplain requirements (IP Section16.10.070(f)3)
- Clarify basements are to be elevated above 100 year flood level (IP Section 16.10.070(f)3vi, formerly(f)4))
- Allow unlimited amount of storage, parking, and non-habitable-space below 100 year flood plains in coastal high hazard areas to be enclosed (IP Section 16.10.070h(5)vi)
- Require water and sewage systems to minimize or eliminate infiltration of flood waters into the system (IP new Section 16.10.070(f)6)
- Prohibit new septic systems in floodways (IP new Section 16.10.070(g)4)
- Require project denial if National Flood Insurance Program regulations are not met (IP Section 16.10.090)
- Add very limited exceptions to flood criteria pursuant to federal guidelines (IP, new section 16.10.100D)
- Add violation provisions (IP Section 16.10.120A)

Many of these provisions are to render the ordinance more in line with the Federal model ordinance and federal regulations. These provisions are all approved as being consistent with related land use plan provisions (specifically, policies in sections 6.1 "Seismic Hazards," 6.2 "Slope Stability", and 6.4 "Flood Hazards.")

10. Other Editorial Matters

a. The remaining proposed amendments to the *1994 General Plan* and *Local Coastal Program* for *the County* of *Santa Cruz* are editorial in nature. For example, the revision deleting policy 6.2.8 removes a redundant policy. Therefore, these are all approved as consistent with the relevant cited Coastal Act policies.

b. The remaining proposed amendments to the implementation plan also reorganize and make other non-substantive editorial changes, procedural changes, and add and revise other definitions. By themselves these amendments alone would be considered "minor." However, they are an integral part of this one amendment part which has major components as well. These revisions are located throughout Chapter 16.10. In some cases the wording change reflects more closely the corresponding land use plan language. These are approved as being consistent with and adequate to carry out the land use plan, as amended with the suggested modifications.

ADOPTED

C. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The County gave both these amendments "Negative Declarations" under CEQA, finding no adverse impacts. The Commission concurs, for the reasons discussed in these findings, and provided the four suggested modifications are made. As such, there are no additional feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendments, as modified would have on the environment.

SANTA CRUZ COUNTY: LOCAL COASTAL PROGRAM MAJOR AMENDMENT NO. 2-98

ATTACHMENT

FULL TEXT OF PROPOSED AMENDMENTS

APPROVED

#A - Urban like

#B - Geologic DENIED, then APPROVED if modified

PORTIONS WHICH ARE NEW ARE SHADED or UNDERLINED

DELETIONS ARE SHOWN BY STRIKE-OUTS