Interpretation No.: SPZ-01 (Site Disturbance and Impervious Surface in the Salamander Protection Zone)
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Originally Issued: 06/01/89 (Pete Parkinson, Decks in the Salamander Protection District)

Question
How are the limitations on site disturbance and impervious surfaces applied in the Salamander Protection Zone?

Applicable Ordinance Section(s)
and/or General Plan/LUP Policy(ies)
§16.32.090(c)B

INTERPRETATION:

1) Site disturbance includes grading, construction, emplacement of structures, installation and maintenance of septic systems, site preparation, stockpiling of materials, “brushing” or clearing, driveways, walkways, slabs and decks. At any one time, prior to revegetation, i.e., during construction, no more than 25 percent of the lot may be disturbed. After construction is completed, the site must be revegetated to help control erosion and no more than 15 percent of the lot can be disturbed.

2) Impervious surface may not exceed 10 percent of the lot area and includes all areas covered by buildings; paved driveways, walkways, and patios; and decks on or so close to the ground as to preclude revegetation in those areas. However, if a deck is located on the second story, for example, and is uncovered and cantilevered and water can pass through the decking, then the area below that deck can be revegetated and the deck won’t interfere with the continued plant growth. Thus, those types of decks are not included in total impervious surface calculations or in site disturbance calculations.

Reason

The intent of the Salamander Protection Zone regulations is to protect the populations and habitat of the Santa Cruz Long-Toed Salamander (Ambystoma macrodactylum croceum). This species is listed with both the Federal and State governments as endangered. Since the species utilizes different habitats at different periods of its life, its habitats are critical habitats. The policies listed in Subsection 16.32.090c (B)1 are aimed at directly protecting all known habitats and migration routes other than breeding areas, as well as indirectly protecting...
the breeding areas. The specific intent of the regulations in 16.32.090c (B)1 is to protect as much of the habitat as is possible from disturbance, while recognizing that carefully regulated development can coexist with the salamanders in salamander protection areas. The most significant factors in this coexistence are 1) the amount of site disturbance and 2) the amount of impervious surface.

There are two phases of site disturbance. The first is that area on which construction activities occur. This includes the area from which natural vegetation is removed, the footprint of all structures and driveways, the area of installation of a septic tank and leachfield, and all other area used for construction activities and material storage. The second phase of site disturbance includes any areas not re-vegetated with native plants after construction, the area of the footprint of all structures as defined in the impervious surface definition and driveways, and any other areas of impervious surface. Subsection 16.32.090c (B)1 sets limits on site disturbance both before re-vegetation (during construction) and after re-vegetation. Before revegetation, site disturbance is limited to no more than 25 percent of the lot area. After re-vegetation (after construction) site disturbance is limited to no more than 15 percent of the lot area. These figures recognize that construction activities will necessarily take up more space than the completed development.

An impervious surface is anything that stops water from entering the ground. Subsection 16.32.090c (B)1 limits impervious surface to no more than 10 percent of the lot area for those lots lying within the drainage basins the salamanders inhabit (some lots zoned as salamander habitat are partly outside of the drainage basins). The objective of this limitation is to reduce erosion and siltation impacts that occur when areas are un-vegetated and when rainfall runoff is directed off of an impervious surface to the ground. This typically occurs as sheetflow runoff such as off a paved road or driveway) or as concentrated runoff (such as from roof gutters through downspouts). Decks at ground level and/or solid decks (i.e., decks with no or extremely small gaps between deck boards) are considered to be impervious surfaces for the purposes of 16.32.090c (B)1 because they add to the runoff and therefore to erosion and/or they block sunlight and thus inhibit re-vegetation. However, decks that have a minimum gap of ¼ - ½ inch between boards and are sufficiently elevated above the ground surface, such as second story decks, act as pervious surfaces allowing the rainfall to reach the ground in a dispersed rather than concentrated manner, with little or no erosion or siltation effects. Sufficiently elevated decks also allow for revegetation under them. Thus, these types of decks are not considered impervious surfaces. It is important to note that the smaller the gap between boards, the more easily the gap can become clogged with an accumulation of leaves, needles, seeds, dirt, etc., that can inhibit the free flow of water to the ground below.

Please refer to the diagrams on the next two pages.

Alvin James, Planning Director
Decks and Calculation of Impervious Surface and Site Disturbance

Cantilevered Deck

Portion of cantilevered deck at second floor not included in calculation of total impervious surface or in calculation of total site disturbance.

Landscaping or natural vegetation can grow under cantilevered deck.

Non-Cantilevered Deck

Area of non-cantilevered deck or ground level deck included in calculation of total site disturbance.

Vegetation can’t grow here (little sunlight).
Site Disturbance and Impervious Surface During and After Construction

During construction, no more than 25% of the lot may be disturbed.

Access, work, and storage areas may not exceed 25% of the lot area during construction.

Proposed House

After construction, no more than 15% of the lot may be disturbed (i.e., total area of structure footprint plus any other area not in native vegetation) and no more than 10% of lot area may consist of impervious surface.

New House

Site disturbance may not exceed 15% of lot area after construction and re-vegetation.

Total impervious surface (area of buildings, driveways, and non-cantilevered and/or solid decks) may not exceed 10% of lot area after construction and re-vegetation.