SIERRA CLUB
LOMA PRIETA CHAPTER

SUSTAINABLE LAND USE COMMITTEE

MODEL GREEN / OPEN SPACE GUIDELINES FOR HIGH DENSITY HOUSING & MIXED-USE DEVELOPMENTS

The higher the density of development, the more important trees, green landscape buffering between buildings and sidewalks, and attractive and useable open space becomes to improve the health and quality of life of the residents, and to reduce the heat island effect from too much hardscape unshaded by trees. The overall objective should be to ensure that high density developments provide adequate open space (including trees and planting) to meet the health and quality of life needs of the residents and the city. **The following guidelines should be considered as part of a city's Zoning code or Objective Design Standards.**

These Guidelines are Open Space / Tree and Vegetation Recommendations for Housing or Mixed-Use Projects with a density of 40 units or more per acre:

I. Housing or Mixed-Use projects with a **density of 40 units or more per acre** should provide green/open space per dwelling unit as follows.

A. On sites devoid of existing important natural resources [3], the developer should provide a minimum of 300[1] sq. ft. of green/open space per dwelling unit with 50% of total site open space to include green landscaping with new or existing trees, shrubs or vegetative ground cover.

B. On sites that include important natural resources [3] or relatively undisturbed existing "urban forest" [4], the developer should provide a minimum of 300 [1] sq. ft. of green/open space per dwelling unit with 50% of total site open space to include green landscaping that includes the integration of the existing natural ecosystem[6] including trees and vegetation into the footprint of the development, and protects, preserves, restores, and/or improves these resources.

C. Publicly adjacent front and side property line setbacks should be wide enough to be landscaped with tall crowning trees and shrubbery visually accessible to residents and public passers-by, subject to fire safety requirements.[5] Street trees may fulfill this requirement on sites with minimal setbacks. Tree heights when mature should extend vertically to the roofline, or a minimum of three story high.

Exception: Multi-use developments with commercial or retail uses at the street level may have reduced street level setbacks if storefronts immediately adjacent to the sidewalk are desired by the city to encourage retail / pedestrian interaction. At reduced setbacks, street trees may substitute for on-site trees to provide shade and a buffer between the sidewalk and passing traffic.

D. Interior side property line setbacks should be wide enough to be landscaped with tall crowning trees and shrubs that act as green buffers between adjacent structures, subject to fire safety requirements.[4] Buffer tree heights when mature should extend vertically to the roofline, or a minimum of three stories high.

E. <u>All building facades with operable windows that face an adjacent high source of pollution</u> such as a busy roadway or highway should have a highway vegetation barrier (HVB)[2] between the building and the source of pollution. The HVB may be included in the overall amount of open space required per unit on the entire site.

II. Open space requirements may be met by:

A. <u>Privately-owned-Publicly-accessible (POPA) green/open space(s)</u> that include parks, trails, courtyards, paseos and open space areas which are publicly accessible to residents, visitors, and the public. Such spaces may have limited hours of availability.

B. <u>Common green/open space(s)</u> such as communal courtyards or recreational areas with access limited only for tenants of a residential or mixed-use development. Examples include at-grade green/open space or plazas, podium level courtyards, rooftop terraces, community gardens and similar areas that can provide communal amenities.

C. <u>Private green/open space(s)</u> such as balconies, patios, or other similar spaces for the exclusive use of an individual unit.

III. Open Space and Building Height:

A. <u>To meet requirements for at-grade common open space</u> where setbacks are physically restricted by lot size or configuration , allow higher building heights, but not more density (units per acre) to reduce building footprint and maintain required setbacks.

<u>FOOTNOTES</u>:

[1] "**Minimum Square Footage"** to be determined by each city.

[2] "**Highway Vegetative Barrier**" is a natural or strategically designed and maintained area of vegetation, such as trees, shrubs, and bushes, planted on public or private lands where buildings are located alongside highways or heavily used roadways to mitigate air pollution and protect nearby communities from traffic-related emissions. Effective vegetative barriers are dense, layered, and tall enough to block, filter, and reduce pollutant airflow, while also providing additional environmental benefits like stormwater management, noise, and glare reduction, habitat creation, and urban heat island effects mitigation. Vegetative barriers can consist of vegetation alone, but may include solid structures like fencing or noise barriers to optimize air pollution and sound mitigation.

[3] "**Important Natural Resources"** include, but are not limited to, urban forests, tree shelter belts, significant pollinator-friendly plant areas, streams and creeks, salt and freshwater wetlands, and other fragile and diminishing Bay Area natural resources and ecosystems that are defined by the city.

[4] **"Urban Forest"** is an area of a relatively undisturbed stand of existing trees with tree heights of 16 feet or greater or trees that have an opportunity to grow to this height, and provide a tree canopy cover.

[5] **"Fire Safety"**: Large trees immediately adjacent to and close to buildings may be considered a potential fire hazard and should be reviewed and approved by the local Fire Department.

[6] **"Natural Ecosystems**": Ecosystems are complex webs of life that consist of many different animal and plant species and important soil, including the microorganisms and fungi, water, and air elements that combine to create a unique natural environment with each element playing a vital role in the ecological health of the environment. Examples of natural urban ecosystems are existing natural remnant urban forests, tree buffers and barriers, and their understory plant communities. Complex ecosystems cannot be mimicked by just planting street trees or artificial landscaping on a public or private site. The action of planting trees alone is not enough to create a complex ecosystem.