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THE CITY OF LAGUNA BEACH
RECOMMENDATIONS FOR LANDSCAPE DESIGN

Developed by the City of Laguna Beach

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Laguna's reputation as one of Southern California's most picturesque communities depends in part on the distinctiveness and diversity of its physical setting - its open space lands and uncluttered hillsides, its natural watercourses, its rocky coastline. Laguna landscapes have their own histories and make their own contribution to the City's unique character. For this reason, landscaping is an integral part of any proposal for development that requires Design Review Board approval.

In evaluating a landscape plan, the Design Review Board considers the use of drought-tolerant and fire-retardant materials and how sensitive the plant is to the site and the surrounding neighborhood. The Board examines proposed plans to determine if plant materials frame rather than block views, if new development is adequately screened to reduce visual impact, if privacy is provided to both owner and neighbor and if the plants blend with the existing landscape, whether it be natural and/or cultivated. The Design Review Board also encourages the preservation of existing trees and other forms of natural vegetation.

There are a number of official City documents that address specific landscape requirements in different neighborhoods, or zones throughout the community. For more specific information, it may be helpful to consult the following documents that are available for review at City Hall:

- Laguna Beach Municipal Code Title 25 - Zoning
(including parking requirements, specific zones, and significant watercourses)
- Laguna Canyon Annexation Area Specific Plan
- Downtown Specific Plan
- Arch Beach Heights Specific Plan
- South Laguna Community Design Guidelines
- Canyon Point Subdivision Guidelines
- Diamond/Crestview Specific Plan
- Design Guidelines for Hillside Development
- Seismic and Public Safety Element
- Open Space Element
- Land Use Element

In addition to consulting these documents, all plans submitted for Design Review Board approval must provide specific information. Submittal requirements are listed on the City's Information Guide for Landscaping Design available from the Department of Community Development.

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I. INTRODUCTION

The information contained in this document is intended to assist the landscape designer in the preparation of landscape plans. There are many issues associated with new landscaping in Laguna Beach such as water conservation, fire hazard reduction, view preservation, aesthetics, erosion from excessive watering and reduction of yard waste. This document briefly explains these issues and provides recommendations which should prove helpful in mitigating potential landscape problems.

The conservation of limited water resources is of major concern to the City of Laguna Beach. It is more important than ever that landscape architects, designers, water companies, municipalities, and citizens implement proactive policies and techniques which can slow the growth in water demand.

The City encourages the practice of appropriate horticulture combining creative landscaping, efficient irrigation and use of grasscycling techniques and compost or mulch in a formula that saves water. Importantly, the benefits include a reduction of erosion from irrigation runoff which may reduce the potential for slope failure and property losses. Using plants that require minimal water amounts will not only benefit property owners by saving money on water bills, but will also benefit the community by conserving limited water resources. In addition, installation of backyard composting systems (and utilization of the resulting mulch for groundcover) promotes additional water retention in landscape materials and reuse of valuable organic resources.

Working to meet the Laguna Beach County Water District's and the City of Laguna

Beach's long-range water use goals, the Community Development Department has developed this informational guide for landscape design. The City's Design Review Board refers to the information contained herein in reviewing plans.

The landscaping recommendations are not exhaustive, nor are they intended to restrict innovative and creative landscape design. Designers are strongly encouraged to consider these guidelines whether in proposals submitted for plan review or in other plans for projects in the City.

II. APPLICABILITY

This guide is recommended for use when planning new and rehabilitated landscaped areas because of its emphasis on water conservation and planting approaches which are compatible with the environmental and scenic qualities of Laguna Beach. In particular, these recommendations will be used by the Design Review Board when evaluating landscape submittals.

III. PLANNING YOUR PLANTING

Plant Selection

The design and installation of water-efficient landscapes is more than simply installing individual drought-tolerant plants. Companion planting for drought tolerance, or grouping plants in the water conserving landscape means considering the life span, growth habit, root type, root depth, and aesthetic functions of each plant. Plants from the same growing conditions, of the same genus, or of complementary form, color and texture often create a sense of harmony in the landscape.

Every region has its own plant associations and within Laguna Beach there are many unique natural plant environments. These native plants have been successful in their locations and have evolved to make a pleasing landscape. The existing native vegetation typifies the most suitable climatic and horticultural adaptation to an area's water availability.

The list of recommended plants included in this document suggests which plants will help to implement the goals of water conservation. These plants generally respond well to local coastal environments, however, they need to be selected according to specific site conditions.

Planting Recommendations

Compatibility with surrounding landscaping, achieving water-efficiency and reducing yard waste are primary goals of the City. These goals may be achieved by conforming to any or all of the following guidelines:

1. Reinforcing the existing planting in the area by using a range of subtropical, coastally adapted plant material, including reestablishment of native plants.
2. Repeating the existing planting in the neighborhood and the community, where possible.
3. Planting informal landscaping schemes. This may be achieved by using plants with a diversity of forms, textures, colors and sizes and by using plants with varying heights and textures along walls and fences to soften hard planes and to create interest and variety.
4. Giving priority to low-water

requiring plants.

5. Using California native plants especially in naturalized areas such as those adjoining wildlands or public open spaces. Care should be taken to select native plants that are also fire-retardant.

6. Using hybrid forms of native plants selected for disease-resistance and garden-tolerance in ornamental garden conditions.

7. Limiting use of high-water-requiring plants. Whenever these plants are used they should be grouped together and irrigated separately.

8. Minimizing use of lawn/turf areas for the following reasons:

a. Turf lawns are among the highest water consuming landscaped areas.

b. Narrow lawn spaces are difficult and expensive to irrigate due to excessive overspray.

c. Planting trees in lawn areas may be unhealthy for both the trees and the lawn as roots surface as shade increases.

9. Designing efficient yard composting systems.

Lawns/Turf

Low-water-use ground covers or various forms of intermittent paving are encouraged. A utility turf need not be formed from turfgrass; certain native grasses can form informal meadows or low growing soil-stabilizers. Some hybridized turfs use less water than other turfs.

Turf on bluff tops and on slopes exceeding a ratio of 3 to 1 is not appropriate because it is difficult to

maintain and irrigation may contribute to slope failure.

Other alternatives to lawn/turf include the following:

1. The use of low-growing shrubs and herbaceous plants rather than lawn will retard runoff, decrease erosion and increase on-site water retention.
2. The use of organic mulch on top of bare or exposed soil will reduce compaction and runoff, increase the soil's water holding capacity, moderate soil temperatures and discourage weeds. A well-designed area for yard composting promotes a steady supply of high quality mulch.
3. Use of porous paving materials can improve the percolation of rainwater into the groundwater table. Mortarless pavers, gravel or shredded bark paving will also permit infiltration or runoff water into the groundwater table. Porous paving reduces the need for supplemental irrigation and may eliminate the need for costly subsurface drainage systems.
4. Grasscycling techniques, in which grass is mowed more often and the clippings are left on the lawn reduces watering and fertilizing requirements.

Optimum Planting Season

1. The optimum season for planting in California is the cool season, fall through spring. Most woody plants (trees and shrubs) should be planted as early in fall as possible to insure good root establishment. Fall planting allows plants to become established before summer heat stress.

Winter rains, moderate temperatures, natural soil moisture, and the growth cycle of the plant all account for fall planting success. Simply providing

irrigation during warm season planting is no substitute for these cool season factors.

IV. HILLSIDES AND DRAINAGE

Natural hillsides should remain unaltered wherever possible. On level sites it may be appropriate to retain water on the property and allow infiltration into the soil and groundwater table. On-site cisterns for water retention and water reuse are one way of conserving water.

Where new urban development occurs adjacent to undeveloped, natural open space, landscape planting should provide a gradual transition from new ornamental material to native types. Hard, defined plant "edges" should be avoided. Hybridized California natives and other drought-tolerant, fire-retardant plants can make a good transition to ornamental planting.

V. VIEW PRESERVATION

In Laguna Beach, consideration of views extends beyond private property interests to encompass community or public views, particularly those from public roadways, State scenic highways and community open space lands.

The Design Review Board examines landscape plantings to determine the potential for view impacts when vegetation matures. Generally, where view preservation is an issue, tree selection will need to take into account ultimate height, width, density and placement. Suggested trees for view areas have been identified on the list of "Recommended Landscaping Materials" included in this document.

Views to and over a site by travelers on streets and Scenic Highways should be

respected and accounted for in the selection and placement of trees and large shrubs.

Landscaping can be used to accentuate, preserve and frame scenic views from neighborhoods to hillsides, parks and the ocean.

Existing trees and shrubs are an important part of the scenic character of a site and preserving them may be appropriate.

Well-maintained landscapes (inclusive of trimming) enhance and preserve public and private views.

VI. SOILS

Soils vary widely in their capacity to hold water and nutrients. The analysis of soil structure and uniformity, for example, will indicate how much water should be applied and how much runoff is likely to occur. A horticultural soils analysis of the areas to be landscaped is recommended before plant materials are installed.

VII. IRRIGATION

All requirements of the unified plumbing code must be met when designing irrigation systems. One of the most critical of these requirements is the need for a back-flow prevention valve between any source of potable water and the irrigation system connection. This valve will prevent any irrigation water mixed with, for example, a liquid fertilizer from entering the drinking water supply.

Low-volume (low gallonage) irrigation heads with matched precipitation rates (the same volume of output per square foot), drip emitters and bubblers all reduce water use. Low-volume irrigation

systems are particularly important on slopes.

Drip and bubbler devices work well in narrow landscaped areas.

Grouping plants which have similar water requirements helps avoid over watering some plants to accommodate others. Separate valves should be installed for turf and nonturf areas. In addition, nonturf areas should have valves and circuits separated according to plant water needs.

Sprinkler head spacing should be designed for head-to-head coverage. The system should minimize runoff and overspray into nonlandscaped areas. Pop-up sprinklers in turf areas may need to be at least three inches high to optimize coverage and avoid flooding.

A check valve may be necessary to prevent low head drainage. A significant amount of water is held in the pipes, lines and tubes of an irrigation system; without a check valve it will all drain out at the lowest point of the system.

Multiple cycles can be used to permit several short duration waterings that will allow water to soak into the soil rather than run off.

Irrigation systems work best when equipped with a multi-program controller capable of numerous cycles and a calendar program which can be changed seasonally.

Electric controllers should be set to schedule sprinklers between 3:00 a.m. and 8:00 a.m. Early-morning irrigation can reduce evaporation losses.

VIII. PLANT MATERIALS FOR HIGH-FIRE-RISK AREAS

Carefully selected landscaping materials can dramatically reduce the risk of fires throughout the community, especially in hillside areas. The key to landscaping in fire-prone areas is selective replacement of highly flammable native plants with lower-growing, less flammable

plants of equal root depth and root strength.

The Laguna Beach Fire Department has established a fuel modification program to reduce the fire hazard in undeveloped, hillside lands. The program is outlined in the Seismic and Public Safety Element of the City's General Plan. Projects in the hazardous fire zone will need to be reviewed by the Fire Chief for site-specific fuel modification.

In addition, particular types of planting, located in areas away from the structure can be effective lines of defense against fire:

Proper pruning of foliage and removal of plant litter in areas directly adjacent to structures will offer protection from intense flames and sparks carried by strong winds common during a wildfire. Fleshy succulents which store water in their tissue provide maximum fire protection.

In areas farther away from the structure, selected native and introduced plants of similar low growing, slow burning characteristics can be planted to retard the flow of fire.

Periodic removal of invasive grasses and crowded plants will enhance the fire retardation.

Reducing the foliage mass of the native vegetation in the area farthest away from the house is the most effective fire prevention measure. Many people erroneously feel that native brush should always be removed in the interest of fire safety. Recent research indicates, however, that many native plants, when kept thinned, have a lower susceptibility to fire than some common landscaping plants. Maintaining a minimum of one tree every 20 to 30 feet will reduce the threat of soil erosion. Correct maintenance of this zone requires the removal of undergrowth and major pruning every two years.

A healthy plant free of dead branches and leaves is the best protection against fire. Regular maintenance and pruning with a goal of reducing fuel quantities is the most important part of any fire prevention program.

IX. LIST OF RECOMMENDED LANDSCAPING MATERIALS

The landscaping materials listed on the following pages are well suited to the microclimatic conditions found in Laguna Beach. Your local nursery, the garden section at your library, local garden clubs and horticultural societies can provide additional information about soil requirements, sun or shade tolerance, and sources of plants.

Here are explanations of some of the identified plant characteristics:

Drought-Tolerant

These plants generally may survive on natural precipitation or with minimal amounts of supplemental irrigation. Regular, deep watering is necessary, however, to establish plants during the first year and sometimes even during the

second. The plants best suited for drought-tolerant landscapes are natives of California, Australia or the Mediterranean. Whether flowers, ground covers, shrubs or trees, these plants need only three months of rain and manage with less water the rest of the year.

Fire-Retardant Plants

No plant will completely stop a fire from advancing, but the plants listed will certainly resist burning far better than most and thereby may slow a fire's progress. If winds carry sparks from a fire, even protective fire-retardant plantings can be breached.

Native

A key principal of low water-using landscape design in California is the selection of plants that have become well adapted to the mild, semi-wet winters and hot, dry summers experienced in most parts of the State.

The list of recommended landscaping materials identifies those plants which are native to California and which therefore are most likely to succeed in Laguna Beach.

Riparian

Plants identified on the list as riparian occur or thrive best where seasonal water occurs. These species need moist soil conditions and generally require a substantial amount of watering. In addition, they are well-suited to restorative planting of natural watercourses.

If you own property that is traversed by a significant watercourse (as identified on the City's map of significant water courses maintained by the Community Development Department) and plan to install landscaping in the watercourse

area, these plant species are recommended.

It should be noted, however, that landscaping in significant watercourse setback areas is only allowed when such landscaping will enhance or restore the native riparian vegetation or the aesthetic character of the watercourse.

Ocean Exposure

These plants are known to do well in the coastal zone where wind, poor soil conditions and salt-water spray occur.

The plants listed need varying degrees of protection when used along the coast. It is best to check with your local nursery to determine the degree of exposure for each plant.

Slope Stabilizing

Plants with this characteristic are appropriate for slopes and hillside areas because of their tendency to reduce soil erosion. In addition to identifying plants that do well on slopes, the City has a publication entitled "Design Guidelines for Hillside Development." This document also provides recommendations for landscaping on hillside slopes.

View Preserving

Trees identified as view preserving generally do not grow in excess of thirty feet in height. Other trees, however, may be considered if their crowns rise above view corridors. Some Eucalyptus trees, for example, offer opportunities for views but often grow above thirty feet.

The location of the tree is also important when attempting to preserve views.

X. REFERENCES

For additional information, the following publications are available:

Books

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Denver: American Water Works Association.

New Western Garden Book. (1979).
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Texas: Agora Communications.

Government Publications

A Homeowner's Guide to Fire and Watershed Management at the Chaparral/Urban Interface. U.S. Forest Service,
Department of Agriculture.

Green Belts for Brush Fire Protection and Soil Erosion Control in Hillside Residential Areas.
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Wildlife Protection for the High Fire Hazard Area of Santa Barbara. City of Santa Barbara.

Xeriscape: A New Word for Saving Water.
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