



Chapter 12.44: Water-Efficient Landscaping

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12.44.010 Purpose. The purpose of this chapter is to promote the values and benefits of landscaping while recognizing the need to utilize water and other resources as efficiently as possible, establish a structure for designing, installing and maintaining water-efficient landscapes in new projects and establish provisions for water management practices and water waste prevention for established landscapes. (Ord. 840 § 1 (part), 1992).

12.44.020 Applicability. This chapter shall apply to the following types of projects, except as provided in Section 12.44.030:

(1) All projects where the entire property is being developed or redeveloped with one or more new structures, other than accessory structures. For purposes of this chapter, new structures are defined as those which have completely new foundation, walls and roof.

(2) All projects where the remodel, renovation, or expansion of existing structures includes relandscaping or results in the loss of twenty-five percent (25%) or more of the remaining landscaped area due to damage or neglect. In such cases, only the newly landscaped areas and/or damaged areas and all areas directly contiguous to these areas shall be subject to this chapter.

(3) All landscaping projects, other than the construction of decks, patios, barbecues, play equipment and swimming pools, which require a planning approval or building permit. (Ord. 840 § 1 (part), 1992).

12.44.030 Exemptions from applicability. This chapter shall not apply to the following types of projects:

- (1) Properties with a historical site zoning designation;
- (2) Ecological restoration projects that do not require a permanent irrigation system;
- (3) Any project with a total landscaped area and/or existing landscaped area loss due to damage or neglect less than two thousand five hundred (2,500) square feet in area;
- (4) Any project with two (2) or less detached single family residential units. (Ord. 840 § 1 (part), 1992).

12.44.040 Procedure for review and approval of landscape plans. (a) A landscape plan shall be submitted to the city which includes all documentation listed in Section 12.44.050.

(b) Applicants must choose one of the following methods for submitting a landscape plan:

(1) Prior to submittal to the city, the landscape plan and all supporting documentation shall be reviewed by an independent licensed landscape architect to ensure that all components of the landscape plan adhere to this chapter. The licensed landscape architect shall sign the plans as verification that the landscape plans comply with this chapter.

(2) Applicants may submit a landscape plan to the city for review and at the time of submittal, inform the city that they wish to use the city's official landscape and irrigation specialist for the review and verification that the plans comply with this chapter. In this case, the applicant shall pay a fee to the city for all related reviews, inspections and verifications.

(c) Verification by either an independent licensed landscape architect or the city's official landscape and irrigation specialist shall be completed prior to building permit issuance.

(d) Prior to the final building inspection of the project, the irrigation and landscaping shall be installed and the licensed professional who reviewed the landscape plans shall visually verify that the above-ground installation was completed in compliance with the approved landscape plans and this chapter.

(e) Prior to final building inspection of the project, a deed restriction shall be filed with the San Mateo County recorder's office stating that the property is subject to the requirements of this chapter and that any relandscaping of the property by the present or future property owners shall adhere to this chapter. (Ord. 840 § 1 (part), 1992).

12.44.050 Landscape plan components. Landscape plans shall include the following information:

(a) Landscape Area. The landscape area is defined as the gross lot area less the building footprint, driveway, parking areas, decks, patio, porches, walkways and grasscrete areas.

(b) Description of Water Delivery Elements. The description of the water delivery elements shall include the following:

- (1) The location, type and size of equipment such as meters, controllers, main and lateral lines, moisture sensors, valves, sprinkler heads, backflow devices and quick-couplers;
- (2) Flowrate and static water pressure at the point of connection (POC);
- (3) Flowrate and precipitation rate in inches per hour at each valve station;
- (4) Projected water use to maintain adequate plant health and growth.

(c) Soil Care Before Planting. A soils test, conducted by a soil testing company, shall provide information on the soil type including horticultural suitability of the soil, the percentage of organic matter, a measure of pH, a measure of total soluble salts and soil infiltration rate which is either measured or derived from soil texture/infiltration rate tables. A range of infiltration rates shall be noted where appropriate. The soils test shall include recommendations for amending and preparing the soil for planting;

(d) Soil Care After Planting. A minimum of two inches (2") of mulch shall be used in non-turf areas after planting. Visqueen, sheet plastic or other non-porous materials shall not be placed under mulch.

(e) Turf. The following shall apply:

- (1) Turf area includes turf and water areas such as ponds, fountains, swimming pools and outdoor spas.
- (2) Trees which have a deep root system may be planted in turf areas, subject to having an irrigation system which allows for appropriate irrigation of the turf area and fosters the deep root system of the trees.
- (3) No turf shall be allowed in areas on slopes exceeding fifteen percent (15%) (6.6:1).
- (4) Turf areas shall be limited to twenty-five percent (25%) of landscape area or, for residential areas, five hundred (500) square feet per dwelling unit, whichever is greater.
- (5) Water-efficient turf species are required.

(f) Valves. The following shall apply:

- (1) Sprinkler head check valves shall be used to prevent low head drainage.
- (2) Separate valves shall be used for turf, shrub, flower display areas, and trees and segregated into hydrozones. Each valve shall be designated as a low, moderate, or high water use valve.

(g) Sprinkler Heads. The following shall apply:

(1) Sprinkler heads shall be spaced at a maximum of fifty percent (50%) of the diameter of throw for square spacing and sixty percent (60%) for triangular spacing. The spacing may be altered if warranted by specific conditions.

(2) Sprinkler heads shall have matched precipitation rates within each control valve circuit.

(3) Pop-up sprinklers in turf areas shall have at least a four inch (4") pop-up height.

(h) Controllers. The following shall apply:

(1) Be automatic and capable of dual programming, such that they may be set for separation of turf and non-turf areas;

(2) Have multiple cycle capability;

(3) Have percentage switches which should be able to be set for one season or one month and have switches that will easily increase or decrease the time programmed by a certain percentage. All stations should have their time increased/decreased with only one entry.

(i) Irrigation schedule and characteristics shall be described as follows:

(1) A schedule shall be developed which allows for plant material to be established. This shall have a maximum two (2) year time period. Once established, a revised schedule shall be developed for maintenance of the plant material. The schedule presently in effect shall be posted at the controller.

(2) The schedule shall include run times and frequency, an application rate which achieves optimum system efficiency, a minimum one-hour time interval between all applications, and provisions for irrigation only between the hours of ten p.m. and seven a.m. (10:00 p.m. and 7:00 a.m.).

(3) Drip, bubbler, or mini-spray irrigation shall be provided for trees and shrubs. Turf and ground cover may use drip or low volume spray as appropriate to the space and materials used.

(4) Backflow prevention units shall comply with all applicable health and safety standards.

(5) The irrigation system shall not deliver spray or run-off onto paved area or streets.

(j) Plant Selection.

(1) Plants having similar water use shall be grouped together in distinct hydrozones.

(2) A list of plant materials shall be submitted with low, moderate or high water use identified for each plant.

(3) Water-efficient plant materials are recommended.

(k) Water Features.

(1) All decorative pools, ponds, streams and fountains shall be equipped to recirculate water.

(2) Pool and spa covers shall be encouraged.

(l) Recycled Water. The installation of recycled water irrigation systems (dual distribution systems) for current and future use of recycled water and the use of recycled water for landscaping purposes shall be encouraged.

(m) Maintenance Schedule. A maintenance schedule shall be prepared which provides for checking, adjusting and repairing irrigation equipment, aerating and dethatching turf areas, replenishing mulch and fertilizing, pruning, weeding and removing litter.

(n) For projects which are subject to the water-efficient landscaping requirements and which are located on properties one-half (1/2) acre or larger in size, the following additional information shall be provided:

(1) A maximum applied water allowance shall be calculated for the property. The maximum applied water allowance is defined as the upper limit of annual applied water for the established landscaped area. The maximum applied water allowance shall be determined by the following formula:

$$(42.9) (0.8) (LA) (0.62) = \text{Maximum Applied Water Allowance, where:}$$

42.9	is the Reference Evapotranspiration (inches per year) in Menlo Park
0.8	is the ET Adjustment Factor
LA	is the Landscaped Area (square feet)
0.62	is the conversion factor (to gallons per square foot)

(2) A separate water meter shall be provided for the landscaped area in order to calculate and evaluate water usage.

(3) A water audit, conducted by a licensed landscape irrigation auditor, shall be completed and submitted to the city every five (5) years from the date of final verification of the landscaping installation by the licensed landscape architect.

(o) Model Homes.

(1) At least one model home in projects consisting of eight (8) or more homes shall be landscaped in accordance with this chapter.

(2) Signs shall be used to identify the model as an example of a water-efficient landscape.

(3) Information shall be provided which lists the special features of the model home landscape design. Information shall also be provided regarding design, installation and maintenance of water-efficient landscaping.

(p) Public Education. Information shall be provided about the efficient use of landscape water to all water users of all the water purveyors who serve the city, including those who would otherwise be exempted from the applicability of this chapter.

(Ord. 840 § 1 (part), 1992).