

the County Sheriff and the Chief Building Official. Notice shall be given at least 30 days before the operation is commenced and shall be subject to a public hearing. Radioactive and hazardous material shall be transported, stored and used only in conformance with all applicable federal, state and local laws.

#### 5.6.9 Electromagnetic Interference

Electromagnetic interference from any operations of any use in any district shall not adversely affect the operation of any equipment located off the parcel on which such interference originates.

#### 5.6.10 Odors

The release of materials odorous by nature, or capable of being odorous, either by bacterial decomposition or chemical reaction, which renders it perceptible from beyond the zoning property, shall be prohibited with the exception of commercial agricultural uses.

#### 5.6.11 Toxic Substances

The storage, handling or transport of toxic substances shall comply with the State of New Mexico Office of Emergency Management (OEM) rules and regulations, as applicable relative to the prevention of water pollution

#### 5.6.12 Water Pollution

All uses shall comply with the State of New Mexico and the United States Environmental Protection Agency (EPA) rules and regulations as applicable regarding the prevention of water pollution.

#### 5.6.13 Fire and Explosion Hazards

Materials that present potential fire and explosive hazards shall be transported, stored and used only in conformance with applicable federal, state and local laws and the Doña Ana County Fire Chief (CFC).

#### 5.6.14 Outdoor Storage

All outdoor storage for fuel, raw materials and products shall be enclosed by a solid fence, wall and/or plant materials adequate to conceal such facilities from adjacent properties and public right-of-way, per Section 5.7. These restrictions do not apply to commercial agricultural or single-family residential uses.

#### 5.6.14 Drainage

No use shall adversely affect the natural drainage pattern on its own or any other property.

## **5.7 Landscaping, Buffering, and Fencing**

Doña Ana County is located within the Chihuahuan Desert ecoregion with a diversity of plants and wildlife adapted to its range of climate; this guides requirements for landscapes, buffers, and fences.

#### 5.7.1 Applicability

- a. New Development: All commercial, industrial, public, and multi-family properties, to include all exterior roadway frontages of single family developments. Specifically, this

is the area between the roadway edge and property line or exterior walls, whichever is furthest from the roadway.

- b. Expansions of Existing Development: All commercial, industrial, public, multi-family properties. If the existing landscape area is less than the required landscape area, additional landscaping shall be provided according to this section.
- c. Exceptions:
  - i. The following properties: single-family residential, community garden, and farming and ranching;
  - ii. Existing development not being expanded; and,
  - iii. Existing landscaping, if developed in compliance with zoning requirements in effect prior to the enactment of this chapter.

#### 5.7.2 Landscape Plan Requirements

A Landscape Plan shall be submitted with an application for building permits, site plans, and subdivisions, including:

- a. Required clearances, proposed irrigation, plantings, ground cover, any required buffers, and other landscape treatments including water harvesting and hardscape. The plan shall include a graphic scale, a written scale, and a north arrow.
- b. Proposed irrigation shall indicate the water source with static pressure, type and size of system, and equipment. Irrigation shall be noted as permanent or temporary.
  - i. Permanent System: Plan shall indicate an underground system of adequate sizing to properly irrigate landscape. This shall include a reduced pressure backflow preventer with a locking enclosure and insulation or heating, valves, piping, drip emitters, heads, and a multi-program controller.
  - ii. Temporary System: Plan shall indicate a method to establish seeding and low water-use plants. This shall include an underground or on-grade system, a water truck, or a time-release water supplement. Temporary systems shall be removed within 2 years of the landscape completion date.

#### 5.7.3 Plant Preservation Credit

- a. General Requirements:
  - i. Possess a live plant cover, including a full canopy and roots, not overly pruned to compromise vigor or the typical form for their species, and determined as such by CDD or county extension agent;
  - ii. Provide a plan for temporary, protective fencing beyond their root zone(s) and temporary irrigation to protect plants during construction, prior to landscape installation;
  - iii. Can meet up to 50% of landscape requirements;
  - iv. Invasive species as listed in New Mexico Department of Agriculture or other USDA lists, may not be used towards any plant preservation credits, and;
  - v. Credit shall be issued for trees and plants preserved upon substantial completion of project and landscaping.

- b. Natural Condition.
  - i. Consists of areas in their natural condition including post-developed sites, which have returned to their pre-developed condition, with no less than 50 percent native plants.
  - ii. An area of natural condition meets the landscape area requirement at a ratio of 1 to 1.
- c. Preserved Plants.
  - i. An established tree or other plant existing on a property, except invasive species.
  - ii. Existing trees meet the tree quantity requirement at a ratio of 1 tree per 3 inches caliper to a maximum of 9 inches caliper per existing tree. Existing canopy area meets the live plant cover requirement at a ratio of 1 to 1.
  - iii. Other existing plants meet the shrub and other plant quantity requirement at a ratio of 1 plant per square foot of live plant cover to a maximum of 10 square feet per existing plant. Existing live plant cover meets the live plant cover requirement at a ratio of 1 to 1.

#### 5.7.4 Landscaping, Required Areas

- a. The landscaped area shall be void of any impermeable obstruction to planting, except where hardscape and other features are proposed.
- b. Required landscape areas shall be landscaped in accordance with this section and divided into two parts:
  - i. Inside the Property Line. The minimum landscape area is calculated by using the entire property square footage, multiplied by 15%, less plant preservation credit.
  - ii. Within the Public Right-of-Way. The entire square footage of the planter shall be landscaped per Table 6.11.
- c. Provided Landscape Area: Any plantable area not left as natural cover, excluding features such as golf courses, parks, recreational areas, community gardens, and un-landscaped areas covered in mulch. Due to variations in site design, the provided landscape area could be larger than required. The same standards shall apply to the entire area.

#### 5.7.5 Landscaping, Required Treatments

- a. All proposed landscaping shall provide active landscape features.
- b. General Landscape Type. Landscaping shall consist of living trees and other plants, ground cover, and irrigation.
  - i. For exceptions to general landscape requirements, see Sections 5.7.6 through 5.7.7.
  - ii. For plant substitutions allowing design flexibility, see Table 5.20.

- c. Minimum Live Plant Cover: Live trees and other plants combined shall cover a minimum of 25% of the provided landscape area at maturity, see area column of Table 5.21.
- d. Trees: A minimum of 1 live tree shall be provided for every 1,000 sq. ft. of landscape area at a minimum size combination of 15 gallon and/or 5 foot height with a 2 foot canopy width.
- e. Other Plants: A minimum of 20 live plants shall be provided for every 1,000 square feet of landscape area, at a minimum size of 5 gallon.
- f. Ponding Areas shall meet requirements of Section 6.5 and Section 5.7.
- g. Low water-use trees and other plants shall be used in a minimum of 50% of provided live plant cover, per Table 5.21.
- h. High water-use plants shall not be counted towards any required landscaping per Table 5.21.
- i. Artificial or other non-living plants including synthetic lawns and turf, shall not be counted for any required landscaping.
- j. Prohibited or not-recommended plants shall not be counted towards any required landscaping, per Table 5.22. Prohibited plants shall not be added to any provided landscape area.
- k. Ground Cover: Any combination of mulch, seeding, or turf, but shall not include asphalt, concrete, or bare soil. Ground cover is required in all areas of provided landscaping not covered by plants.
  - i. Inorganic Mulch: Mulches shall be a minimum depth of 2 inches. On slopes 5:1 or greater, mulches shall be sized 2 inches in diameter or larger, at a depth allowing no visible bare soil or weed fabric.
  - ii. Organic Mulch: Mulches shall be a minimum depth of 3 inches. On slopes 5:1 or greater, organic mulch is not permitted.
  - iii. Seeding: A technique which disperses seeds and results in germination of live plants, including grasses and wildflowers. Multiple applications of seeding shall provide a minimum of 25 percent cover within 2 years of the landscape completion date. On slopes 3:1 or greater, seeding is not permitted.
  - iv. Turf: A surface layer of soil, grass, and its roots bound into a mat. On slopes 6:1 or greater, turf is not permitted.
- l. Plastic is prohibited under any mulch, between plants, or as a covering to bare soil
- m. Required Clearances. Landscape features and plantings at maturity shall not interfere with critical distances to infrastructure and other site features:
  - i. Clear Sight Triangle: Trees and other plants within a clear sight triangle per Section 6.2.4 shall be free of foliage from 30 inches to 8 feet in height above the roadway.
  - ii. Overhead Utilities or Lines: Trees shall not be located underneath utilities or lines, except species known to mature under 12 feet in height.

- iii. Underground Utilities or Lines: Trees shall not be located within 3 feet of any underground utilities.
- iv. Fireplugs or Fire Hydrants: Trees shall not be located within 8 feet of fireplugs or hydrants. Other plants shall be located so mature canopies are a minimum of 5 feet from fireplugs or hydrants.
- v. Street Light Poles or Fixtures: Trees shall be located so mature canopies do not contact poles or fixtures, and trunks shall be a minimum of 10 feet from poles or fixtures. Other plants shall be located so mature canopies are a minimum of 3 feet from poles or fixtures.
- vi. Drainage Structures, Underground and Above-Ground Utility Boxes, Poles, and Vaults: Trees and other plants shall be located so mature canopies are a minimum of 3 feet from the structure.
- vii. Planting Area Sizing, Trees: An unpaved area with a minimum of 36 square feet and no dimension less than 4 feet shall be provided for each tree. Tree trunks require a minimum of 6 feet clearance from buildings, fences, walls, and parkways.
- viii. Planting Area Sizing, Other Plants: An unpaved area sized to accommodate plantings at maturity. Mature canopy of other plants shall not extend beyond planting area.
- ix. Overhead Structures and Canopies: Provided landscape area shall not be located beneath the structure. Trees shall be located so mature canopies do not contact the structure.

#### 5.7.6 Landscape, Public Right-of-Way

- a. Trees in parkways shall have a size combination of no less than 24 inch box, 1-1/2 inch caliper, and/or 6 foot height with a 2 foot canopy width at installation time. Trees shall not be spaced closer than their mature canopy widths, using even or uneven groupings and spacing.
- b. Turf, regardless of irrigation method, is prohibited in this area.
- c. Live Plant Cover: a minimum of 50% of provided landscape area.

#### 5.7.7 Landscape, Vehicular Use Areas

These requirements shall apply to parking lots, driveways, and loading areas containing greater than 10 spaces in a use zone and 25 spaces in a transect zone:

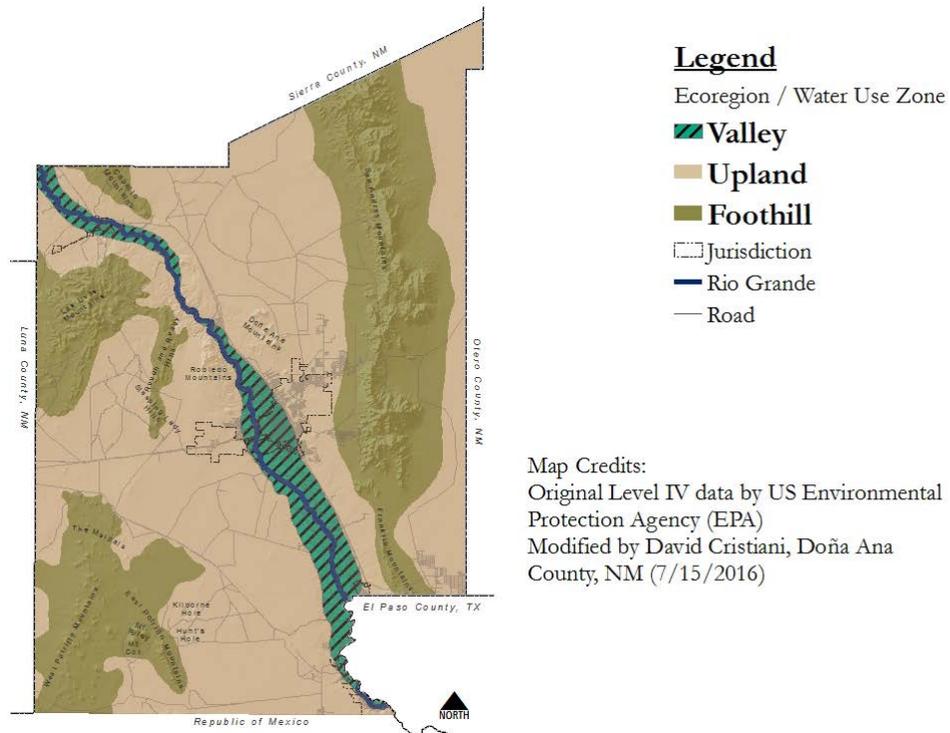
- a. A minimum of 1 live tree per 5 parking spaces, evenly distributed.
- b. All paved surfaces shall drain into landscape areas unless subsurface conditions do not support infiltration.
- c. Trees shall have a size combination of no less than 24 inch box, 1-1/2 inch caliper, and/or 6 foot height with a 2 foot canopy width at installation time.
- d. Turf, regardless of irrigation method, is prohibited in this area.

5.7.8 Plant List.

The emphasis is on plants best suited for the arid conditions and temperature range in the Chihuahuan Desert.

- a. Recommended tree and plant species for landscaping are provided in Table 5.21. **Bold type** signifies a native plant in Doña Ana County.
- b. Plant List Headings:
  - i. Common name: locally-used name;
  - ii. Botanical name: scientific name;
  - iii. Height: average mature canopy height;
  - iv. Width: average mature canopy width, diameter, or spread;
  - v. Area: average area of mature canopy width;
  - vi. Edible: a plant with fruit or foliage used for food; and,
  - vii. Water Use Zone: A typical water requirement for landscaping once established in an ecoregion per Figure 5-1. Asterisks indicate the applicable region (\* valley, \*\* foothills, \*\*\* valley and foothills).

**Figure 5-1. Ecoregion – Water Use Zones**



**Table 5.20 Plant Substitutions**

Required Type and Size		Equivalent		
quantity	plant	15 gallon	5 gallon	1 gallon
1	Tree: 24 inch box, 1-1/2 inch caliper, and/or a 6 foot height with a 2 foot canopy	2	6	n/a
1	Tree or Other Plant: 15 gallon and/or a 5 foot height with a 2 foot canopy	n/a	3	9
1	Tree or Other Plant: 5 gallon	1/3	n/a	3

**Table 5.21 Plant List****Trees (and skyline accents)**

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Mimosa or Silk Tree	Albizzia julibrissin	25	30	450		medium
Mexican Blue Palm	Brahea armata	20	12	75		***low, medium
Pecan	Carya illinoensis	60	40	*800	yes	*medium, high
Atlas Cedar	Cedrus atlantica	50	25	325		medium
Deodar Cedar	Cedrus deodora	60	30	*450		***medium, high
Cedar of Lebanon	Cedrus libani	50	25	325		medium
Netleaf or Canyon Hackberry	Celtis reticulata	20	20	200		***low, medium
Texas Redbud	Cercis canadensis var. texensis	20	25	325		medium
<b>Mexican Redbud</b>	<b>Cercis canadensis</b>	<b>15</b>	<b>20</b>	<b>200</b>		<b>***low, medium</b>
Mediterranean Fan Palm	Chamaerops humilis	12	10	50		***low, medium
<b>Desert Willow</b>	<b>Chilopsis linearis</b>	<b>30</b>	<b>30</b>	<b>450</b>		<b>***low, medium</b>
<b>Arizona Cypress</b>	<b>Cupressus arizonica</b>	<b>50</b>	<b>25</b>	<b>325</b>		<b>***low, medium</b>
Italian Cypress	Cupressus sempervirens	60	10	50		medium
Loquat	Eriobotrya japonica	12+	15	125		medium

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Texas Ash	Fraxinus texensis	18	15	125		medium
<b>Arizona Walnut</b>	<b>Juglans major</b>	<b>40</b>	<b>40</b>	<b>800</b>	yes	***low, medium
<b>Alligator Juniper</b>	<b>Juniperus deppeana</b>	<b>25</b>	<b>20</b>	<b>200</b>		***low, medium
<b>Oneseed Juniper</b>	<b>Juniperus monosperma</b>	<b>15</b>	<b>15</b>	<b>125</b>		low
Rocky Mountain Juniper	Juniperus scopulorum	20	15	125		***low, medium
Goldenrain Tree	Koelreuteria paniculata	20	20	200		***low, medium
Pink Crepe Myrtle (tree form)	Lagerstroemia indica 'Muskogee'	15	12	75		medium
White Crepe Myrtle (tree form)	Lagerstroemia indica 'Natchez'	15	12	75		medium
Crepe Myrtle (tree)	Lagerstroemia indica	12+	12	*75		*medium, high
Goldenball Leadtree	Leucanea retusa	15+	15	125		low
Southern Magnolia	Magnolia grandiflora	20+	25	*325		*medium, high
Apple	Malus cultivars	15+	15	125	yes	medium
Mexican Piñon	Pinus cembroides	25	20	200	yes	**low, medium
<b>Piñon</b>	<b>Pinus edulis</b>	<b>20</b>	<b>15</b>	<b>125</b>	<b>yes</b>	<b>**low, medium</b>
Afghan Pine	Pinus eldarica	60	30	450		***low, medium
Italian Stone Pine	Pinus pinea	70	35	600	yes	***low, medium
Chinese Pistache	Pistacia chinensis	35	25	325		***low, medium
Texas Pistachio	Pistacia texana	12	15	125		low
Pistachio	Pistacia vera	20	15	125	yes	***low, medium
Mexican Sycamore	Platanus mexicana	50	50	*1250		*medium, high
California Sycamore	Platanus racemosa	50	50	*1250		*medium, high
<b>Arizona Sycamore</b>	<b>Platanus wrightii</b>	<b>50</b>	<b>50</b>	<b>*1250</b>		<b>*medium, high</b>
<b>Cottonwood</b>	<b>Populus deltoides var. wislizenii</b>	<b>50</b>	<b>50</b>	<b>*1250</b>		<b>*medium, high</b>

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Western Cottonwood</b>	<b>Populus fremontii</b>	<b>60</b>	<b>50</b>	<b>*1250</b>		<b>*medium, high</b>
<b>Honey Mesquite</b>	<b>Prosopis glandulosa</b>	<b>30</b>	<b>30</b>	<b>450</b>	yes	<b>low</b>
<b>Tornillo or Screwbean Mesquite</b>	<b>Prosopis pubescens</b>	<b>20</b>	<b>20</b>	<b>200</b>		<b>***low, medium</b>
<b>Velvet Mesquite</b>	<b>Prosopis velutina</b>	<b>30</b>	<b>30</b>	<b>450</b>	yes	<b>***low, medium</b>
Almond, Apricot, Cherry, Nectarine, Peach	Prunus cultivars	12+	15	125	yes	medium
Bradford Pear	Pyrus calleryana	20	15	0		high
Pear	Pyrus cultivars	12+	15	125	yes	medium
<b>Arizona White Oak</b>	<b>Quercus arizonica</b>	<b>25</b>	<b>30</b>	<b>450</b>		<b>**low, medium</b>
Texas Red Oak	Quercus buckleyi	25	20	200		medium
Canby or Sierra Oak	Quercus canbyi	30	25	325		**low, medium
Escarpment Live Oak or Encino	Quercus fusiformis	25+	30	450		medium
Gambel Oak or Roble	Quercus gambelii	30	20	200	yes	medium
Chisos Red Oak	Quercus gravesii	30	25	325		**low, medium
<b>Gray Oak</b>	<b>Quercus grisea</b>	<b>25</b>	<b>30</b>	<b>450</b>		<b>**low, medium</b>
Holly Oak	Quercus ilex	25	25	325		**low, medium
Valley Oak	Quercus lobata	40+	40	800		medium
Bur Oak	Quercus macrocarpa	35	35	625		medium
<b>Chinquapin Oak</b>	<b>Quercus muehlenbergii</b>	<b>35</b>	<b>35</b>	<b>625</b>		<b>**low, medium</b>
Monterrey or Mexican White Oak	Quercus polymorpha	30	25	325		medium
English Oak or Roble	Quercus robur	40	40	800		medium
Columnar English Oak	Quercus robur 'Fastigiata'	50	15	125		medium
Cork Oak	Quercus suber	25	25	325		**low, medium
<b>Desert or Shrub Live Oak</b>	<b>Quercus turbinella</b>	<b>15</b>	<b>20</b>	<b>200</b>		<b>**low, medium</b>

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
'Heritage' Live Oak	<i>Quercus virginiana</i> 'Heritage'	35	35	625		medium
Mexican Sabal	<i>Sabal mexicana</i>	20	10	50		medium
Gooding Willow	<i>Salix goodingii</i>	25	20	*200		*medium, high
<b>Soapberry</b>	<b><i>Sapindus saponaria</i> var. <i>drummondii</i></b>	<b>20</b>	<b>20</b>	<b>200</b>		<b>***low, medium</b>
<b>Mexican Elder</b>	<b><i>Sambucus mexicana</i></b>	<b>12</b>	<b>15</b>	<b>125</b>		<b>medium</b>
Pagoda Tree	<i>Sophora japonica</i>	20	20	200		***low, medium
Bald Cypress	<i>Taxodium species</i>	60	35	*625		*medium, high
Windmill Palm	<i>Trachycarpus species</i>	20	8	35		medium
California or Desert Fan Palm	<i>Washingtonia filifera</i>	20	12	144		***low, medium
Palma China	<i>Yucca decipiens</i>	15	8	35		low
<b>Soaptree or Palmilla</b>	<b><i>Yucca elata</i></b>	<b>15</b>	<b>8</b>	<b>35</b>		<b>low</b>
<b>Faxon or Palm Yucca</b>	<b><i>Yucca faxoniana</i></b>	<b>15</b>	<b>8</b>	<b>35</b>		<b>low</b>
Linear-leaf Yucca	<i>Yucca linearifolia</i>	10+	5	25		**low, medium
Blue Yucca	<i>Yucca rigida</i>	12	6	20		low
<b>Beaked Yucca or Isote</b>	<b><i>Yucca rostrata</i></b>	<b>15</b>	<b>8</b>	<b>35</b>		<b>low</b>
<b>Mountain Yucca</b>	<b><i>Yucca schottii</i></b>	<b>10</b>	<b>6</b>	<b>20</b>		<b>low</b>
<b>Thompson Yucca</b>	<b><i>Yucca thompsoniana</i></b>	<b>6</b>	<b>6</b>	<b>20</b>		<b>low</b>
<b>Torrey Yucca</b>	<b><i>Yucca torreyi</i></b>	<b>15</b>	<b>6</b>	<b>20</b>		<b>low</b>

#### Shrubs (and dwarf trees, vines)

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Glossy Abelia	<i>Abelia grandiflora</i>	6	6	36		medium
<b>Acacia</b>	<b><i>Acacia species</i></b>	<b>8+</b>	<b>8</b>	<b>64</b>		<b>low</b>
Pineapple Guava	<i>Acca sellowiana</i>	12+	12	144		medium
<b>Beebrush or Oreganillo</b>	<b><i>Aloysia wrightii</i></b>	<b>5</b>	<b>5</b>	<b>25</b>		<b>low</b>

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Coral Vine	Antigonon leptopus	8+	6	36		low
<b>Sand Sage</b>	<b>Artemisia filifolia</b>	<b>4</b>	<b>4</b>	<b>16</b>		<b>low</b>
<b>Fourwing Saltbush</b>	<b>Atriplex canescens</b>	<b>6</b>	<b>8</b>	<b>64</b>		<b>low</b>
<b>Seepwillow</b>	<b>Baccharis salicina</b>	<b>8</b>	<b>8</b>	<b>*64</b>		<b>*medium, high</b>
Anacacho Orchid Tree	Bauhinia lunarioides	10+	12	144		low
<b>Algerita</b>	<b>Berberis hemaetocarpa</b>	<b>8</b>	<b>8</b>	<b>64</b>		<b>**low, medium</b>
<b>Agarita</b>	<b>Berberis trifoliolata</b>	<b>6</b>	<b>6</b>	<b>36</b>		<b>low</b>
Cross Vine	Bignonia capreolata	6+	6	36		low
Wooly Butterfly Bush	Buddleia marrubifolia	5	5	25		low
Red Bird of Paradise	Caesalpinia pulcherrima	6	8	64		low
Fairy Duster	Calliandra species	2+	3	9		low
Western Redbud	Cercis occidentalis	10+	12	144		***low, medium
<b>Hairy Mountain Mahogany</b>	<b>Cercocarpus breviflorus</b>	<b>15</b>	<b>12</b>	<b>75</b>		<b>**low, medium</b>
Mountain Mahogany	Cercocarpus species	6+	8	35		**low, medium
Rockrose	Cistus species	6	6	36		**low, medium
Cotoneaster	Cotoneaster species	3+	8	64		medium
Silver Dalea	Dalea bicolor	6+	6	36		**low, medium
<b>Black Dalea</b>	<b>Dalea frutescens</b>	<b>2</b>	<b>4</b>	<b>16</b>		<b>low</b>
Mountain Dalea	Dalea versicolor	4	5	25		low
Texas Persimmon	Diospyros texana	10+	12	144		**low, medium
Silverberry	Eleagnus pungens	8+	10	100		medium
<b>Joint Fir or Canutillo</b>	<b>Ephedra species</b>	<b>3+</b>	<b>5</b>	<b>25</b>		<b>low</b>
<b>Turpentine Bush</b>	<b>Ericameria laricifolia</b>	<b>3</b>	<b>4</b>	<b>16</b>		<b>low</b>
<b>Chamisa</b>	<b>Ericameria nauseosa</b>	<b>6</b>	<b>6</b>	<b>36</b>		<b>low</b>
Euonymus	Euonymus	5	5	25		medium
Kidneywood	Eysenhardtia species	10+	12	144		low

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Apache Plume</b>	<b>Fallugia paradoxa</b>	<b>5+</b>	<b>6</b>	<b>36</b>		<b>low</b>
<b>Desert Olive</b>	<b>Forestiera neomexicana</b>	<b>10+</b>	<b>12</b>	<b>144</b>		<b>low</b>
Fragrant Ash	Fraxinus cuspidata	18	15	125		low
<b>Silktassel Bush</b>	<b>Garrya species</b>	<b>6</b>	<b>6</b>	<b>36</b>		<b>**low, medium</b>
Carolina Jessamine	Gelsemium sempervirens	8+	6	36		medium
Algerian Ivy	Hedera canariensis	6+	8	64		medium
English Ivy	Hedera helix	10+	8	***64		***medium, high
Burford Holly	Ilex cornuta ‘Burfordi’	6+	6	36		medium
Jasmine	Jasminum species	3	5	25		medium
Juniper	Juniperus species	3+	6-12	36-144		low
<b>Winterfat</b>	<b>Krascheninnikovia lanata</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>low</b>
Crepe Myrtle (petite or shrub form)	Lagerstroemia species	5	5	*25		*medium, high
<b>Creosote Bush</b>	<b>Larrea tridentata</b>	<b>6</b>	<b>6</b>	<b>36</b>		<b>low</b>
Lavender	Lavendula species	3	4	16		medium
<b>Texas Sage or Ranger</b>	<b>Leucophyllum species</b>	<b>6+</b>	<b>7</b>	<b>49</b>		<b>low</b>
Privet	Ligustrum species	6+	6	36		medium
Coral Honeysuckle	Lonicera sempervirens	6+	6	36		medium
<b>Wolfberry</b>	<b>Lycium species</b>	<b>6+</b>	<b>6</b>	<b>36</b>		<b>***low, medium</b>
Heavenly Bamboo	Nandina domestica	6	5	25		medium
<b>Mariola</b>	<b>Parthenium incanum</b>	<b>2</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Woodbine, Virginia or Hacienda Creeper</b>	<b>Parthenocissus species</b>	<b>8+</b>	<b>6</b>	<b>36</b>		<b>medium</b>
Photinia	Photinia species	10+	12	75		medium
<b>Rosemary Mint</b>	<b>Poliomintha incana</b>	<b>4</b>	<b>4</b>	<b>16</b>		<b>low</b>
Lavender Spice	Poliomintha maderensis	2+	3	9		**low, medium

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Broom Dalea</b>	<b>Psoralea scoparius</b>	4	5	25		low
Pomegranate	Punica granatum	15	15	125	yes	medium
<b>Cliffrose</b>	<b>Purshia species</b>	8	6	36		low
Firethorn or Pyracantha	Pyracantha species	3+	5	25		**low, medium
<b>Coffeeberry</b>	<b>Rhamnus californica var. ursina</b>	6+	6	36		**low, medium
Indian Hawthorn	Rhaphiolepis indica	4	4	16		medium
‘Blueberry Muffin’ Hawthorn	Rhaphiolepis umbellata ‘Blueberry Muffin’	3	4	16		medium
‘Majestic Beauty’ Indian Hawthorn	Rhaphiolepis x ‘Montic’	15	15	125		medium
<b>Prairie Flame Sumac</b>	<b>Rhus lanceolata</b>	12	12	75		low
<b>Littleleaf Sumac</b>	<b>Rhus microphylla</b>	8	10	100		low
Sugarbush	Rhus ovata	8	10	100	yes	low
<b>Threeleaf Sumac</b>	<b>Rhus trilobata</b>	6	8	64	yes	low
<b>Evergreen Sumac</b>	<b>Rhus virens</b>	10	10	100		low
Lady Banks’ Rose	Rosa banksiae	10	15	225		***low, medium
Rosemary	Rosmarinus officianalis	4+	5	25	yes	**low, medium
‘Tuscan Blue’ Rosemary	Rosmarinus officianalis ‘Tuscan Blue’	4	3	9	yes	**low, medium
<b>Coyote Willow</b>	<b>Salix exigua</b>	8+	10	*50		*medium, high
Chaparral Sage	Salvia clevelandii	4	4	16		**low, medium
Autumn Sage	Salvia greggii	2	2	5	yes	medium
Rose Sage	Salvia pachyphylla	2	2	5		low
<b>Texas Mountain Laurel or Mescal Bean</b>	<b>Sophora secundiflora</b>	12	10	50		low
Spanish Broom	Spartium junceum	8+	10	100		medium
Persian Lilac	Syringa persica	6+	6	36		medium
Esperanza, Orange Jubilee	Tecoma spp.	8+	8	64		***low, medium

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Yellow Bells	<i>Tecoma stans</i> var. <i>angustata</i>	6+	6	36		low
Bush Germander	<i>Teucrium fruticans</i>	4+	4	16		**low, medium
Asiatic Jasmine	<i>Trachelospermum asiaticum</i>	2	5	25		medium
Star Jasmine	<i>Trachelospermum jasminoides</i>	8+	6	36		medium
<b>Mexican Buckeye</b>	<b><i>Ungnadia speciosa</i></b>	<b>12+</b>	<b>12</b>	<b>75</b>		<b>**low, medium</b>
<b>Arizona Rosewood</b>	<b><i>Vauquelinia californica</i></b>	<b>12+</b>	<b>12</b>	<b>75</b>		<b>low</b>
<b>Chisos Rosewood</b>	<b><i>Vauquelinia corymbosa</i> var. <i>angustifolia</i></b>	<b>12+</b>	<b>12</b>	<b>75</b>		<b>low</b>
Nuevo Leon Rosewood	<i>Vauquelinia corymbosa</i> var. <i>heterodon</i>	15	15	125		low
<b>Canyon Grape</b>	<b><i>Vitis arizonica</i></b>	<b>10+</b>	<b>8</b>	<b>64</b>		<b>medium</b>
Grape	<i>Vitis</i> species	10+	8	64		medium
Wisteria	<i>Wisteria</i> species	10+	8	64		medium

**Accents (and succulents)**

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Century Plant	<i>Agave americana</i>	6+	6	36		low
Squid Agave	<i>Agave bracteosa</i>	2	2	4		medium
Sharkskin Agave	<i>Agave fernandi-regis</i>	2	2	4		low
<b>Big Bend Agave</b>	<b><i>Agave havardiana</i></b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Lechuguilla</b>	<b><i>Agave lechuguilla</i></b>	<b>1</b>	<b>2</b>	<b>4</b>		<b>low</b>
Center-stripe Agave	<i>Agave lophantha</i>	2	3	9		**low, medium
<b>Mescal</b>	<b><i>Agave neomexicana</i></b>	<b>1</b>	<b>2</b>	<b>4</b>		<b>low</b>
Ocahui	<i>Agave ocahui</i>	2	2	4		low
<b>Palmer's Agave</b>	<b><i>Agave palmeri</i></b>	<b>3</b>	<b>4</b>	<b>16</b>		<b>low</b>
<b>Parry's Agave</b>	<b><i>Agave parryi</i></b>	<b>1.5</b>	<b>2.5</b>	<b>6</b>		<b>low</b>

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Pulque	Agave salmiana or A. ferox	4	4	16		low
Rough Agave	Agave scabra	4	4	16		low
Queen Victoria Agave	Agave victoria-reginae	1	1.5	3		low
Maguey	Agave weberi	5	5	25		low
<b>Agave or Century Plant</b>	<b>Agave species</b>	<b>1+</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
<b>Tree Cholla</b>	<b>Cylindropuntia imbricata</b>	<b>6+</b>	<b>5</b>	<b>25</b>		<b>***low, medium</b>
<b>Christmas Cholla</b>	<b>Cylindropuntia leptocaulis</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Cane Cholla</b>	<b>Cylindropuntia spinosior</b>	<b>6+</b>	<b>5</b>	<b>25</b>		<b>low</b>
<b>Cholla</b>	<b>Cylindropuntia species</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Desert Candle</b>	<b>Dasyliion leiophyllum</b>	<b>6+</b>	<b>6</b>	<b>36</b>		<b>low</b>
Texas Sotol	Dasyliion texanum	4	4	16		**low, medium
<b>Desert Spoon or Blue/Gray Sotol</b>	<b>Dasyliion wheeleri</b>	<b>6+</b>	<b>6</b>	<b>36</b>		<b>low</b>
<b>Blue Barrel or Eagle Claws</b>	<b>Echinocactus horzonthalonius</b>	<b>.5</b>	<b>.5</b>	<b>1</b>		<b>low</b>
<b>Haystack or Strawberry Hedgehog</b>	<b>Echinocereus stramineus</b>	<b>4</b>	<b>4</b>	<b>16</b>		<b>low</b>
<b>Hedgehog, Claret Cup</b>	<b>Echinocereus species</b>	<b>1+</b>	<b>a2</b>	<b>4</b>		<b>low</b>
<b>Fishhook Barrel or Bisnaga</b>	<b>Ferocactus wislizenii</b>	<b>2+</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Red or Yellow Hesperaloe</b>	<b>Hesperaloe parviflora</b>	<b>3+</b>	<b>4</b>	<b>16</b>		<b>**low, medium</b>
Giant Hesperaloe	Hesperaloe funifera	5+	6	36		**low, medium
Mazari Palm	Nannorrhops richtiana	4+	4	16		low
<b>Beargrass</b>	<b>Nolina greenei</b>	<b>4+</b>	<b>5</b>	<b>25</b>		<b>**low, medium</b>
<b>Sacahuista</b>	<b>Nolina texana</b>	<b>3</b>	<b>4</b>	<b>16</b>		<b>**low, medium</b>
Blue Nolina	Nolina nelsonii	10+	8	64		**low, medium
<b>Beargrass</b>	<b>Nolina microcarpa</b>	<b>5</b>	<b>6</b>	<b>36</b>		<b>**low, medium</b>
Tree Beargrass	Nolina matapensis	9	7	49		low

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Desert or Engelmann Prickly Pear</b>	<b>Opuntia engelmannii</b>	4+	7	49		low
<b>Blackspine Prickly Pear</b>	<b>Opuntia macrocentra</b>	3	3	9		low
<b>Purple or Santa Rita Prickly Pear</b>	<b>Opuntia violacae</b>	4	5	25		low
<b>Prickly Pear or Nopal</b>	<b>Opuntia species</b>	4	4	16		low
Needle Palm	Rhaphidophyllum hystrix	4+	4	***16		***medium, high
Dwarf Palmetto	Sabal minor	3+	4	***16		***medium, high
<b>Banana Yucca or Datil</b>	<b>Yucca baccata</b>	2+	4	16		low
<b>Thornber's Yucca</b>	<b>Yucca baccata var. thornberi or Y. arizonica</b>	4+	6	36		low
Mound Lily	Yucca gloriosa	6+	5	25		medium
Pale Yucca	Yucca pallida	2+	2	4		**low, medium
Pendulous Yucca	Yucca pendula or Y. recurvifolia	4+	3	9		medium
Twistleaf Yucca	Yucca rupicola	2+	2	4		**low, medium
Yucca	Yucca species	2+	3	9		**low, medium

**Groundcover Plants (and wildflowers, bulbs, ornamental grasses, turf, annuals)**

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Sunset Hyssop</b>	<b>Agastache rupestris</b>	2	2	4		**low, medium
<b>Agastache</b>	<b>Agastache species</b>	2	2	4		**low, medium
<b>Golden Columbine</b>	<b>Aquilegia chrysantha</b>	1.5	2	***4		***medium, high
<b>Purple Threeawn</b>	<b>Aristida purpurea</b>	2	2	4		low
<b>Prairie Sage</b>	<b>Artemisia ludoviciana</b>	1	2	4		**low, medium
Thompson Broom	Baccharis x Stam	2	5	25		**low, medium
<b>Desert Bahia</b>	<b>Bahia absinthifolia</b>	1+	1	1		low

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Desert Marigold</b>	<b>Baileya multiradiata</b>	<b>1+</b>	<b>1</b>	<b>1</b>		<b>low</b>
<b>Chocolate Flower</b>	<b>Berlandiera lyrata</b>	<b>1+</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Grama Grass</b>	<b>Bouteloua species</b>	<b>1+</b>	<b>1.5</b>	<b>5</b>		<b>**low, medium</b>
Buffalo Grass	Bouteloua cultivars	n/a	n/a	n/a		**low, medium
<b>Scarlet Bouvardia</b>	<b>Bouvardia ternifolia</b>	<b>1+</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
Bulbine	Bulbine frutescens	1+	2	4		low
<b>Damianita</b>	<b>Chrysactinia mexicana</b>	<b>1</b>	<b>1.5</b>	<b>3</b>		<b>low</b>
Bush Morning Glory	Convolvulus cneorum	2	3	9		**low, medium
Crinum Lily	Crinum species	1	1	*1		*medium, high
Bermuda Grass	Cynodon cultivars	n/a	n/a	n/a		*medium, high
Lemon Dalea	Dalea capitata	.5	3	9		**low, medium
Trailing Indigo Bush	Dalea greggii	.5	4	16		**low, medium
Iceplant	Delosperma species	.5	2	4		low
Silver Ponyfoot	Dichondra argentea	.5	3	9		**low, medium
<b>California Fuchsia or Hummingbird Trumpet</b>	<b>Epilobium species or Zauschneria species</b>	<b>.5+</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Wild Buckwheat</b>	<b>Eriogonum wrightii</b>	<b>1.5+</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Mexican Gold Poppy</b>	<b>Eschscholtzia mexicana</b>	<b>.5</b>	<b>1</b>	<b>1</b>		<b>low</b>
Gopher Plant	Euphorbia rigida	1	2.5	7		**low, medium
Turf-type Tall Fescue	Festuca cultivars	n/a	n/a	n/a		high
<b>Blanketflower</b>	<b>Gaillardia species</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>***low, medium</b>
<b>Verbena</b>	<b>Glandularia species</b>	<b>1</b>	<b>2</b>	<b>4</b>		<b>low</b>
Firecracker Bush	Hamelia patens	2	2	4		medium
Iris	Iris species	2	1.5	3		medium
<b>Arizona Poppy or Caltrop</b>	<b>Kallistroemia species</b>	<b>.5+</b>	<b>2</b>	<b>4</b>		<b>low</b>
Bush Lantana	Lantana camara	2+	3	9		**low, medium

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
Lantana	Lantana species	1+	3	9		**low, medium
Red Iceplant	Malephora crocea	1	3	9		low
Yellow Iceplant	Malephora lutea	1	3	9		low
Turk's Cap	Malvaviscus drummondii	3	3	9		medium
Manfreda, Mangave	Manfreda species	1	1	1		medium
<b>Blackfoot Daisy</b>	<b>Melampodium leucanthum</b>	<b>1</b>	<b>1.5</b>	<b>3</b>		<b>low</b>
<b>Desert Four O'clock</b>	<b>Mirabilis multiflora</b>	<b>1+</b>	<b>3</b>	<b>9</b>		<b>low</b>
Gulf Muhly	Muhlenbergia capillaris	2+	3	9		medium
Bamboo Muhly	Muhlenbergia dumosa	3+	3	9		**low, medium
<b>Bull Muhly</b>	<b>Muhlenbergia emersleyi</b>	<b>3+</b>	<b>3</b>	<b>9</b>		<b>**low, medium</b>
<b>Deergrass</b>	<b>Muhlenbergia rigens</b>	<b>3+</b>	<b>4</b>	<b>16</b>		<b>medium</b>
<b>Bush Muhly</b>	<b>Muhlenbergia porteri</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Muhly Grass</b>	<b>Muhlenbergia species</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>**low, medium</b>
Catmint	Nepeta species	1+	2	4		**low, medium
Evening Primrose	Oenothera species	1	1.5	3		**low, medium
Barbary Ragwort	Othonna cheirifolia	1	1.5	3		low
<b>Bush Penstemon</b>	<b>Penstemon ambiguus</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>low</b>
Mexican Blue Penstemon	Penstemon amphorellae	2	2	4		low
<b>Sacramento Penstemon</b>	<b>Penstemon alamosensis</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>low</b>
Rock Penstemon	Penstemon baccharifolius	2	2	4		low
<b>Firecracker Penstemon</b>	<b>Penstemon eatonii</b>	<b>2</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Fendler's Penstemon</b>	<b>Penstemon fendleri</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
<b>Cardinal Penstemon</b>	<b>Penstemon cardinalis</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>low</b>
Parry's Penstemon	Penstemon parryi	2	2	4		low

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Giant Wild Snapdragon</b>	<b>Penstemon palmeri</b>	4	3	9		low
Coral Penstemon	Penstemon superbus	2+	2	4		low
<b>Penstemon or Beardtongue</b>	<b>Penstemon species</b>	<b>2+</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
Jerusalem Sage	Phlomis fruticosa	1	2	4		**low, medium
<b>Mexican Hat</b>	<b>Ratibida columnaris</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
Oxblood Lily	Rhodophiala bifida	1	1	1		medium
Mexican Blue Sage	Salvia chamaedryoides	1	2	4		**low, medium
Lipstick Sage	Salvia darcy	3	2	4		**low, medium
Mealy Cup Sage	Salvia farinacea	2	2	4		**low, medium
<b>Crimson Sage</b>	<b>Salvia henryi</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>low</b>
Santolina or Lavender Cotton	Santolina species	2	3	9		low
<b>Little Bluestem</b>	<b>Schizachryium scoparium</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>**low, medium</b>
Skullcap	Scutellaria species	1.5	1.5	3		medium
<b>Globemallow</b>	<b>Sphaeralcea species</b>	<b>2</b>	<b>1.5</b>	<b>3</b>		<b>***low, medium</b>
<b>Alkali Sacaton</b>	<b>Sporobulus airoides</b>	<b>2</b>	<b>3</b>	<b>9</b>		<b>low</b>
<b>Giant Sacaton</b>	<b>Sporobulus wrightii</b>	<b>5+</b>	<b>7</b>	<b>49</b>		<b>***low, medium</b>
<b>Sacaton, Dropseed</b>	<b>Sporobulus species</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>low</b>
<b>Mountain Marigold</b>	<b>Tagetes lemmonii</b>	<b>3</b>	<b>3</b>	<b>9</b>		<b>**low, medium</b>
Angelita Daisy	Tetraneris acaulis	1+	1	1		low
Greek Germander	Teucrium aronium	.5	2	4		low
Trailing Germander	Teucrium chamaedrys	1	2	4		**low, medium
<b>Shrubby Dogweed</b>	<b>Thymophylla acerosa</b>	<b>.5</b>	<b>1</b>	<b>1</b>		<b>low</b>
<b>Showy Dogweed</b>	<b>Thymophylla pentachaeta</b>	<b>.5</b>	<b>1</b>	<b>1</b>		<b>low</b>
<b>Dahlberg Daisy</b>	<b>Thymophylla tenuiloba</b>	<b>.5</b>	<b>1</b>	<b>1</b>		<b>low</b>

Common Name	Botanical Name	Height (ft.)	Width (ft.)	Area (sq. ft.)	Edible	Water Use Zone
<b>Skeletonleaf Goldeneye</b>	<b>Viguiera stenoloba</b>	<b>2</b>	<b>3</b>	<b>9</b>		<b>low</b>
Creeping Myrtle	Vinca major	1.5	3	9		medium
Rain Lily	Zephyranthes species	1	1	1		**low, medium
<b>Desert Zinnia</b>	<b>Zinnia acerosa</b>	<b>1</b>	<b>1.5</b>	<b>3</b>		<b>low</b>
<b>Prairie Zinnia</b>	<b>Zinnia grandiflora</b>	<b>.5</b>	<b>1</b>	<b>1</b>		<b>low</b>

5.7.9 Plants, Prohibited or Not Recommended, see Table 5.22.

**Table 5.22 Plant List, Prohibited or Not Recommended**

Common Name	Botanical Name	Prohibited	Not Recommended
Tree of Heaven	Ailanthus altissima	invasive, water seeking roots	
Giant Cane	Arundo donax	invasive and aggressive, water seeking	
Desert Broom (female)	Baccharis sarothroides		invasive d
Yellow Bird of Paradise	Caesalpinia gilliesii		invasive into natural areas
Chitalpa	Chitalpa X tashkentensis		Bacterial Leaf Scorch disease, short life span
Russian Olive	Eleagnus angustifolia	invasive, short lifespan	
Lehmann Lovegrass	Eragrostis lehmanniana	invasive and aggressive, dominates cleared land, fire hazard	
Raywood Ash	Fraxinus oxycarpa 'Raywood'		attracts insects, stressed outside of lawns and heavily irrigated areas, damaging surface roots
Arizona Ash and cultivars such as 'Modesto'	Fraxinus velutina		riparian native, stressed outside of lawns and heavily irrigated areas, damaging surface roots
Honeylocust	Gleditsia triacanthos		stressed outside of lawns and heavily irrigated areas
Fountain Grass	Pennisetum sactaceum	invasive and aggressive	

Common Name	Botanical Name	Prohibited	Not Recommended
Cottonwood, Poplar	Populus spp.	within the right-of-way, within 50 ft. of structure or site improvement, water seeking roots, damaging surface roots	heavy water use with age, surface roots, weak branching/wood
Bradford Pear and cultivars	Pyrus calleryana		stressed outside of lawns and heavily irrigated areas
Willow	Salix spp.	within the right-of-way, within 50 ft. of structure or site improvement, water seeking roots, damaging surface roots	heavy water use with age, surface roots, weak branching/wood, multiple disease and insect issues
Salt Cedar	Tamarix spp.	invasive and aggressive, water seeking roots	
Goathead or Puncture Vine	Tribulus terrestris	invasive and aggressive, reseeding, hazardous	
Siberian Elm	Ulmus pumila	invasive, water seeking roots, weak branching, damaging surface roots, short lifespan	
Chaste Tree	Vitex agnus-castus		invasive reseeding into ponding and natural areas

5.7.10 Landscape, Installation

Landscaping shall be installed per the approved plan prior to the issuance of a Certificate of Occupancy by Building Services. Modifications to approved plans shall be submitted to CDD and be in compliance with this chapter.

5.7.11 Landscape, Maintenance

The landscape shall be maintained in a live, weed-free, and litter-free condition. All landscaping shall be maintained to not interfere with required clearances nor constitute a traffic hazard per Section 6.2.4. The following requirements apply to the public right-of-way:

- a. Dead plants shall be removed and replaced in compliance with this Chapter, within 60 days after notification from the Zoning Administrator.
- b. Tree maintenance:
  - i. Right to Remove: The County may order or cause to be removed, all or part of any tree in an unsafe condition, interfering with infrastructure, or infected with insects, disease, or other pests.
  - ii. Tree Topping Prohibited: It is unlawful to top any tree or otherwise remove and/or disfigure the normal canopy of any tree. Trees severely damaged by storms or other causes, under utility wires or other obstructions, or where pruning is impractical are exempt.

- iii. Palm and Yucca Foliage Removal Prohibited: Removal of dead foliage skirts on trunk below live crown is not permitted. Pruning for safety issues, insect swarms, or dead flower and fruit stalks are exempt.
- iv. Overhanging Trees: A tree overhanging a right-of-way shall be pruned to not obstruct street light illumination or the view in any intersection and clear sight triangle per Section 6.2.4.
- c. Other plant maintenance requirements:
  - i. All plants shall have natural forms retained during pruning or trimming, and to not obstruct the view in any intersection and clear sight triangle per Section 6.2.4.
  - ii. Shaping and heading back of plants is not permitted.
  - iii. Skinning and heading back of accent plant foliage is not permitted.
- d. Irrigation maintenance requirements:
  - i. Leaks shall be repaired.
  - ii. Drip Emitters and Heads: Maintenance is required to optimize water flow to plants.
  - iii. Controller settings including seasonal adjustments are required for proper timing and application of irrigation.

#### 5.7.12 Buffer, General

Buffering mitigates incompatibility between adjacent land uses, as required in Table 5.23. The buffer shall be included in the Landscape Plan in Section 5.7.2.

#### 5.7.13 Buffer, Location

Buffers shall be placed immediately inside the property line, with the following exceptions:

- a. The Zoning Administrator may approve an alternate location for one of the following reasons:
  - i. The site is impractical due to terrain, visibility, or public safety; or
  - ii. The buffer is set back to avoid overshadowing or impinging on solar access and light for a neighboring property; or
  - iii. To remain clear of an easement.
- b. The alternate location shall not be approved unless the DRC or the Zoning Administrator determines the following:
  - i. Alternate location buffer of a residential land use can be accomplished at least as well as with the required location; and
  - ii. Complies with the buffering requirements of Table 5.23.

#### 5.7.14 Buffer, Construction

Buffers shall consist of any combination of the following:

- a. Berms can be of appropriate earth or soil, or in combination with a retaining wall, and cannot exceed 1 foot of rise for every 5 feet of linear distance (5:1 slope).
- b. Walls can be solid using opaque materials and fences can be open, using screening materials.
- c. Vegetation shall meet landscaping requirements of this Chapter. Mature tree canopies shall not overhang the property line. Tree trunks shall be no less than 6 feet from the property line. Mature shrub and other plant canopies shall be no less than 2 feet from the property line.

#### 5.7.15 Buffer Types

One of the following buffer types may be required based on the degree of separation necessary between land uses:

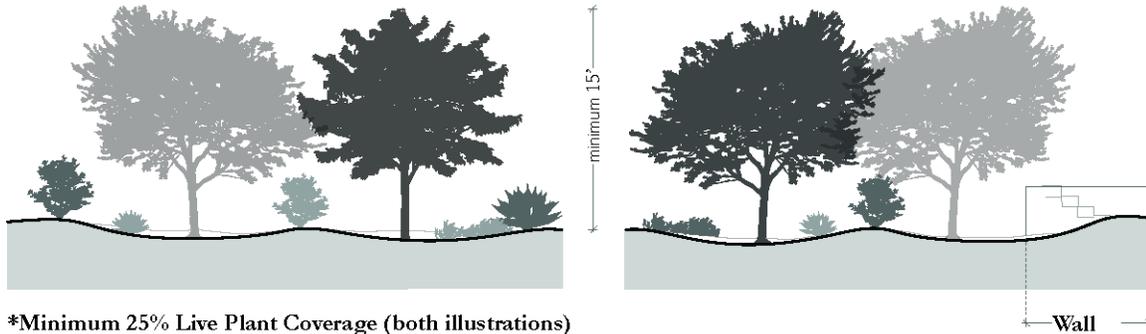
- a. Buffer, Solid Wall Required: A solid wall or fence 6-8 feet high shall be constructed between the following uses and residential land uses: parking for 10 or more vehicles; loading zones; outdoor storage of vehicles and equipment; outdoor work yards; outdoor seating or entertainment space; other similar uses as determined by the Zoning Administrator.
  - i. The height of the wall shall be reduced or set back at a driveway or alley so as not to impinge on any clear sight triangle.
  - ii. If the wall plus retaining wall have an effective height of over 8 feet on the adjacent property, the Zoning Administrator shall determine the acceptable height.
- b. Buffer, Landscaping Required: Landscape buffer assemblies of the classes in Section 5.7.16 shall be required as specified in Table 5.23.

#### 5.7.16 Buffer, Landscape Buffer Classes

- a. Buffer Class 1: Open Screen. Shall have a width of 12 feet, composed of intermittent visual obstructions from the ground to a height of 15 feet. Live plant cover: A minimum of 25% of provided buffer area. See Figure 5-2.

**Figure 5-2 Buffer Class 1: Open Screen Illustration**

Suggested planting patterns:



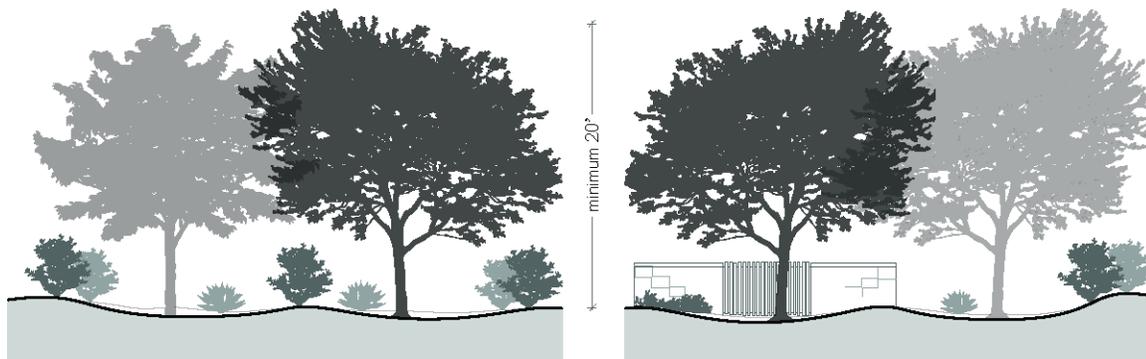
**\*Minimum 25% Live Plant Coverage (both illustrations)**

\* Based on specific area calculations

- b. Buffer Class 2: Semi-Opaque Screen. Shall have a width of 12 feet, composed of a screen that is opaque from the ground to a height of 3 feet, with intermittent visual obstructions to a height of 20 feet. Live plant cover: A minimum of 50% of provided buffer area. See Figure 5-3.

**Figure 5-3 Buffer Class 2: Semi-Opaque Screen Illustration**

Suggested planting patterns:



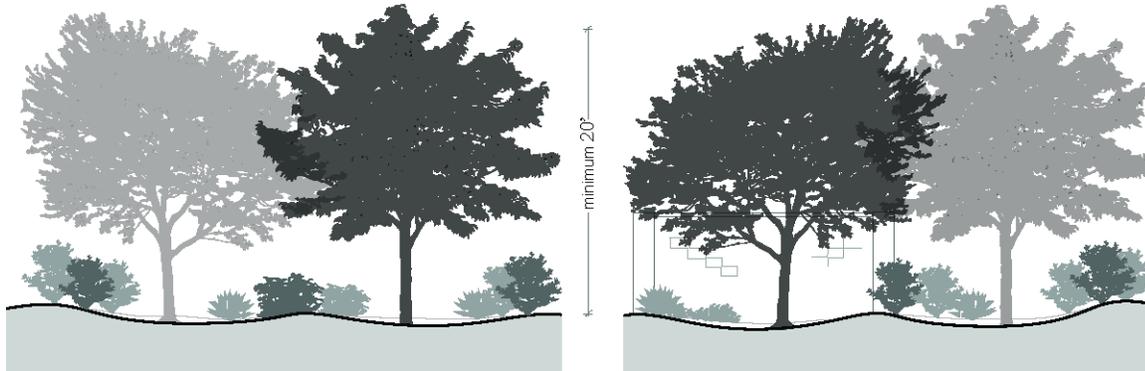
**\*Minimum 50% Live Plant Coverage (both illustrations)**

\* Based on specific area calculations

- c. Buffer Class 3: Opaque Screen. Shall have a width of 20 feet, composed of a screen that is opaque from the ground to a height of 6 feet with intermittent visual openings to a height of 20 feet. Live plant cover: A minimum of 75% of provided buffer area. See Figure 5-4.

**Figure 5-4 Buffer Class 3: Opaque Screen Illustration**

Suggested planting patterns:



**\*Minimum 75% Live Plant Coverage (both illustrations)**

\* Based on specific area calculations

**Table 5.23 Buffer Class Requirements**

Adjacent Zone	New Use																	
	N	R	R5/R5L	T2	T3/L	T4/M	T5/H	D1/D1L	D2/D2L	D3	DM	MU	C1	C2	C3	I1	I2	I3
N																		
R					2	3	3			1	1	1	2	2	3	3	3	3
R5/R5L					2	3	3			1	1	1	2	2	3	3	3	3
T2					1	2	3			1	1	1	2	2	3	3	3	3
T3/L		2	2	1	1	2	2	1	1	1	1	1	1	1	2	3	3	3
T4/M		3	3	2	2	1	2	2	2	2	2	1	1	1	1	2	2	3
T5/H		3	3	3	2	2	1	3	3	3	3	2	2	2	1	1	1	1
D1/D1L					1	2	3			1	1	1	2	2	3	3	3	3
D2/D2L					1	2	3			1	1	1	2	2	3	3	3	3
D3		1	1	1	1	2	3	1	1	1	1	1	1	2	3	3	3	3
DM		1	1	1	1	2	3	1	1	1	1	1	1	2	3	3	3	3
MU		1	1	1	1	1	2	1	1	1	1	1	1	1	2	3	3	3
C1		2	2	2	1	1	2	2	2	1	1	1	1	1	1	2	3	3
C2		2	2	2	1	1	2	2	2	2	2	1	1	1	1	2	3	3
C3		3	3	3	2	1	1	3	3	3	3	2	1	1	1	1	2	3
I1		3	3	3	3	2	1	3	3	3	3	3	2	2	1	1	1	2
I2		3	3	3	3	2	1	3	3	3	3	3	3	3	2	1	1	1
I3		3	3	3	3	3	1	3	3	3	3	3	3	3	3	2	1	1

**Legend:** Number indicates the buffer class required per Section 5.7.19

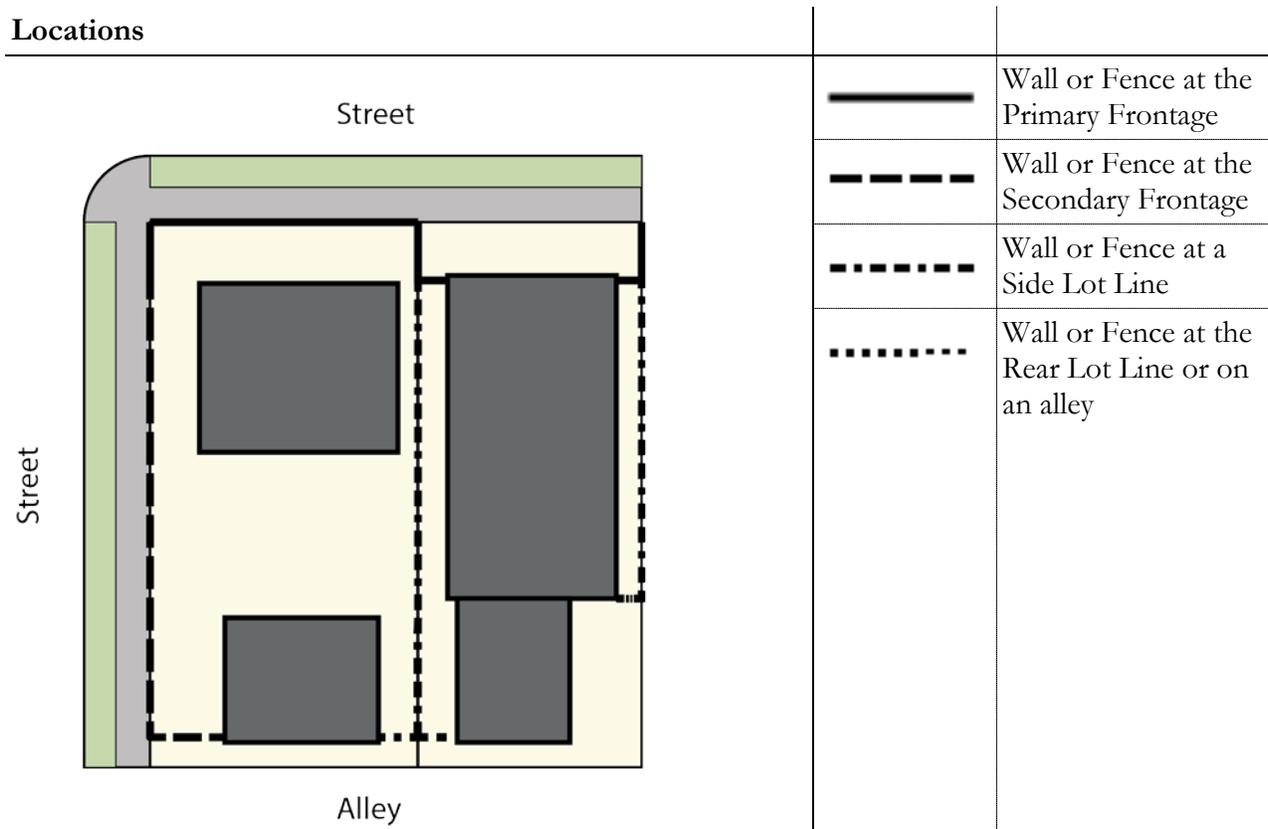
5.7.17 Walls or Fences, Location

Walls and Fencing shall be located on the property as follows and per Figure 5-5:

- a. Wall or fence locations are described by the following:
  - i. “at the primary frontage” shall be one located between the line of the primary façade and the primary frontage property line.
  - ii. “at the secondary frontage” shall be one located between the secondary façade and the secondary frontage line and along the rear property line between the secondary frontage and any accessory building.
  - iii. “at the frontage” is a fence at the primary frontage or a fence at the secondary frontage.

- iv. “at the side lot line” shall be one near the side property line and includes any returns to the elevation of a building on the property.
- v. “at the rear lot line” or “at the rear lane” shall be one that extends along the rear of the property but is not a fence at the secondary frontage.
- b. No fence shall extend beyond a property line and no fence shall impinge in a clear sight triangle.
- c. Fences between properties shall be built up to but not over the property line.
- d. Fences at rear lanes/alleys shall not extend into the setback for accessory buildings.
- e. Where an alley or service lane exists, the lots abutting the alley may erect a solid wall or fence.

**Figure 5-5 Wall or Fence Locations**



5.7.18 Wall or Fence, Height. Wall and fence heights shall have minimum and maximum heights per Table 5.24 and shall be measured:

- a. To the highest point of the wall, the top rail of a fence or to the top of a standard picket.
- b. A primary or secondary frontage is measured from sidewalk grade where sidewalks are present or the adjacent grade of the right-of-way.

- c. Between properties from the adjacent yard’s grade.
- d. Along a rear lane from the grade of the rear lane.

**Table 5.24 Wall or Fence Height (feet)**

Wall or Fence Location	N	T2	R5/R5L	L/T3	M/T4	H/T5	D1/D1L	D2/D2L
Primary Frontage		L	L	3-3.5	3-4	3-4	3-3.5	3-4
Secondary Frontage		L	L	3-5	3-5	3-5	3-5	3-5
Side Lot Line		L	L	5-6	5-6	5-6	5-6	5-6
Rear Lot Line		L	1	5-6	5-6	5-6	5-6	5-6
Wall or Fence Location	DM	MU	C1	C2	C3	I1	I2	I3
Primary Frontage	3-5	3-5	4-5	4-5	4-5	4-8	4-8	4-8
Secondary Frontage	3-5	3-5	3-5	3-5	3-5	4-8	4-8	4-8
Side Lot Line	5-6	5-6	5-6	5-6	5-6	5-8	5-8	5-8
Rear Lot Line	5-6	5-6	5-6	5-6	5-6	5-8	5-8	5-8

**Legend**  
As required for livestock L

5.7.19 Wall or Fence, Type

Major wall and fence types are described in Table 5.26. They are permitted in land uses per Table 5.25.

**Table 5.25 Wall or Fence Type, Zones**

Wall or Fence Location	N	T2	R5/R5L	L/T3	M/T4	H/T5	D1/D1L	D2/D2L	D3	DM	MU	C1	C2	C3	I1	I2	I3
Wall: Masonry or Cast-in-Place		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Fence: Wood or Metal (slats, verticals)		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Fence: Wood or Metal (rails)		P	P	P			P										
Fence: Wood Pole	P	P	P	P			P										
Fence: Wire	P	P	P	P			P										
Fence: Open Concrete Block		P	P	P			P										

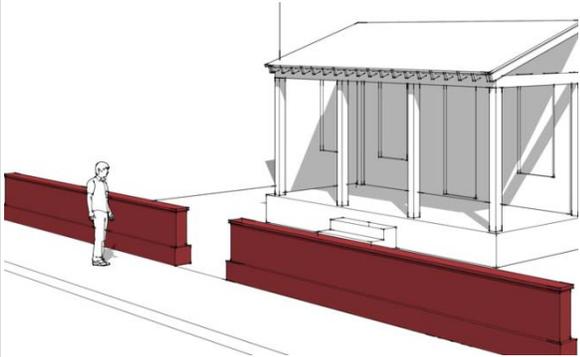
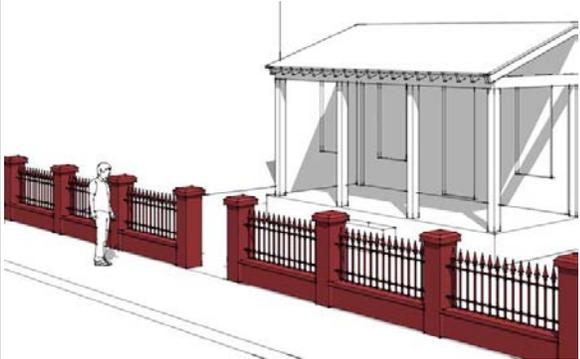
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5.7.20 Wall and Fence Design

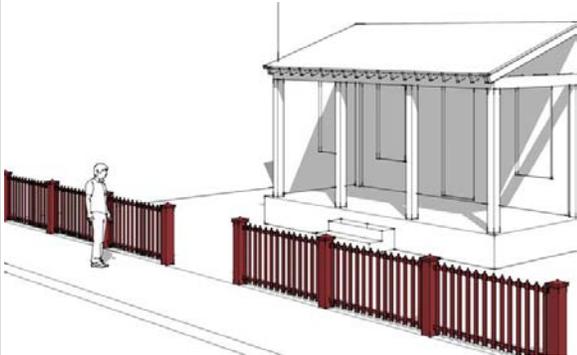
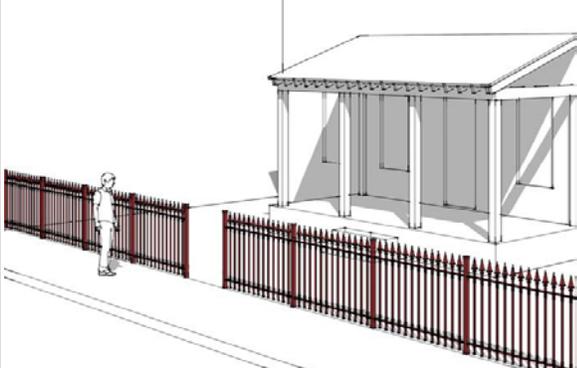
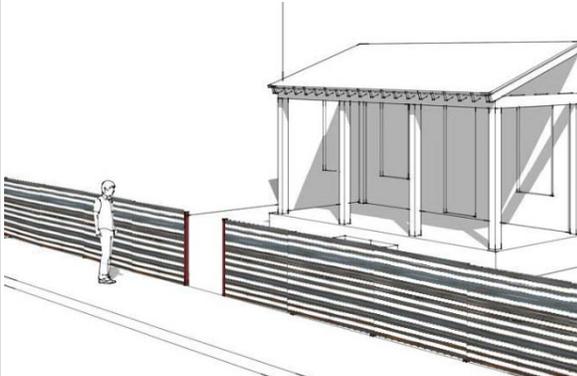
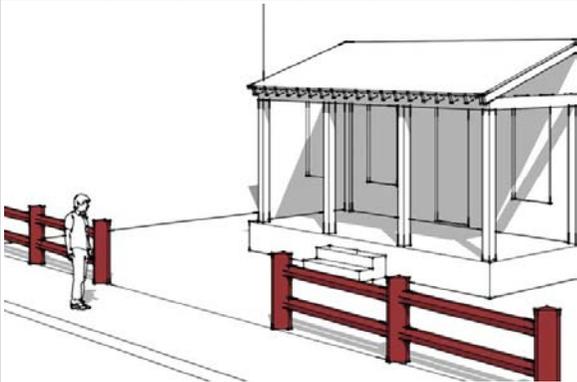
The general design of walls and fences is shown in Table 5.26. Wall and fence design shall meet the following requirements:

- a. Walls: Reinforcement including rebar shall be incorporated into all walls including pilasters of the size and spacing per building codes.
- b. Fencing: Supporting members and posts of a fence shall be on the inside of fence (toward the property interior), the smooth or flat faces on the outside. If two faces are used, each face shall be of the same type and finish.
- c. Wood frontage fences shall be painted or stained.
- d. Chain link fencing is permitted only at rear property lines, alleys, and side property lines. Chain link fencing shall be painted in dark colors.
- e. Chain link fencing shall not be permitted on any street frontage.
- f. Barbed wire fencing shall not be permitted on any lot except on agricultural properties and in industrial zones.

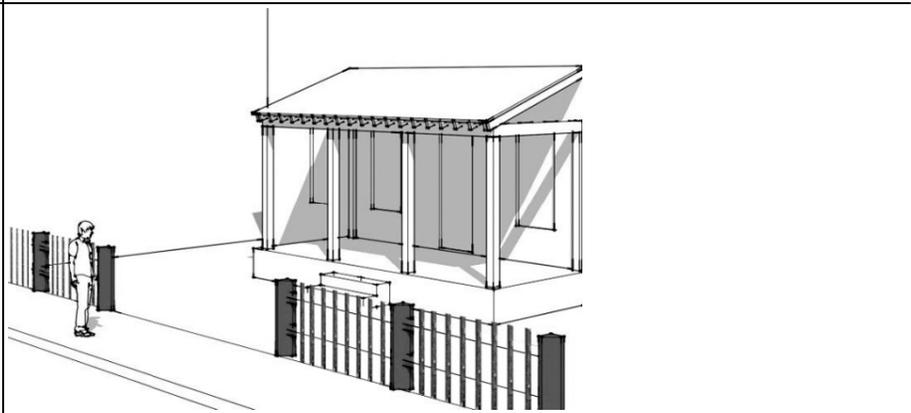
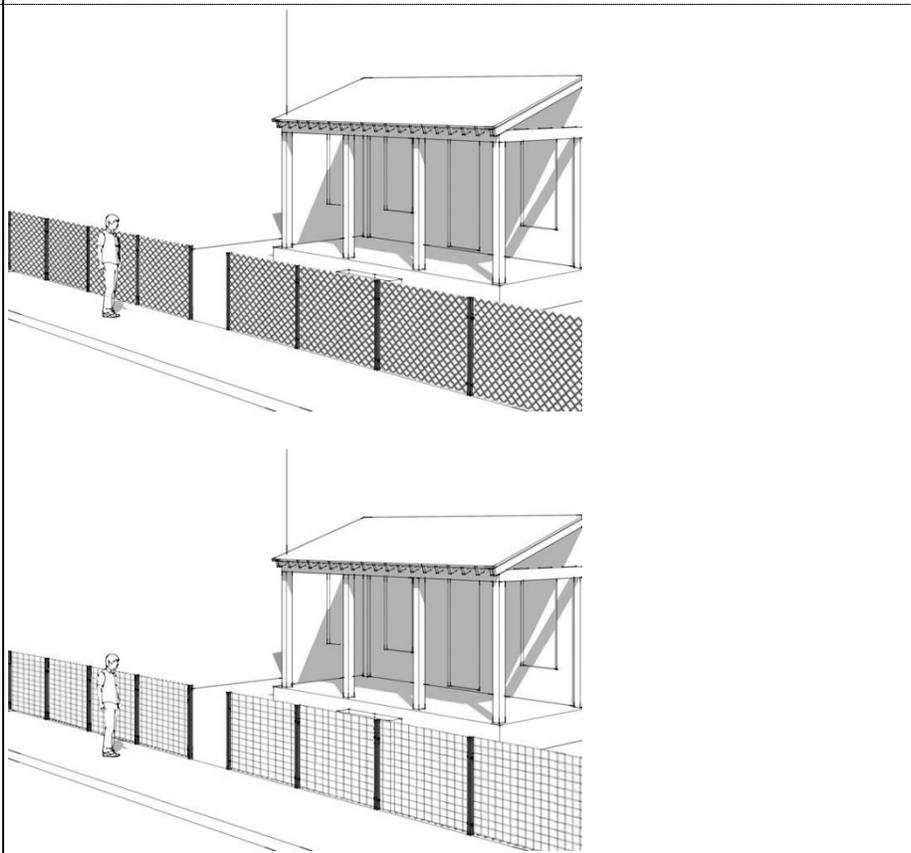
**Table 5.26. Wall or Fence Types, Illustrated**

Wall or Fence type	General Design
<p>1. Wall: Solid (masonry or cast-in-place)</p>	
<p>2a. Fence: Vertical Picket (wood or metal, with CMU, rock or adobe pilasters)</p>	

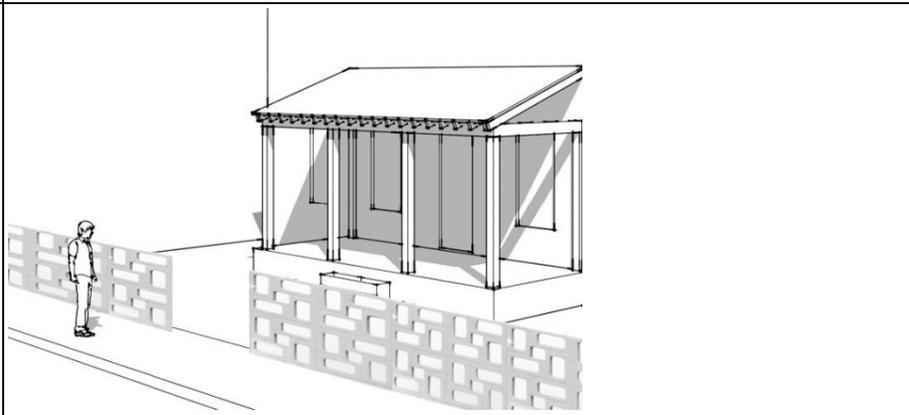
**Table 5.26. Wall or Fence Types, Illustrated**

Wall or Fence type	General Design
<p>2b. Fence: Vertical Picket (wood or metal, with wood or metal pilasters)</p>	
<p>2c. Fence: Vertical Picket (wood or metal)</p>	
<p>2d. Fence: Slat (metal or wood)</p>	
<p>3. Fence: Ranch or Rail (wood or metal sections)</p>	

**Table 5.26. Wall or Fence Types, Illustrated**

Wall or Fence type	General Design
<p>4. Fence: Pole (wood latilla/coyote or ocotillo)</p>	 <p>An architectural line drawing showing a building with a flat roof and a small porch. In the foreground, a fence made of vertical wooden poles is installed. A small human figure stands next to the fence to provide scale. The fence runs along the side of the building.</p>
<p>5. Fence: Wire (metal, chain link or welded-wire mesh)</p>	 <p>Two architectural line drawings showing a building with a flat roof and a small porch. In the foreground, two different styles of wire fences are shown. The top drawing features a chain-link fence, and the bottom drawing features a welded-wire mesh fence. A small human figure stands next to each fence to provide scale. The fences run along the side of the building.</p>

**Table 5.26. Wall or Fence Types, Illustrated**

Wall or Fence type	General Design
<p>6. Fence: Open Face (decorative CMU, cast-in-place concrete or metal)</p>	

## 5.8 Signs

5.8.1 The regulation of permanent monuments, signs and markers within required buffers include the following:

- a. Provide property owners and occupants an opportunity for effective identification and identification of place, goods sold or produced, or services rendered;
- b. Reflect the character of the natural and built environments;
- c. Maintain or improve the aesthetic character of their context, relate to any buffer walls and fencing, compliment architecture and landscaping, provide safe and non-obtrusive lighting, and not distract motorists or demand excessive attention; and
- d. Protect pedestrians and motorists from injury and property damage wholly or partially caused by cluttered, distracting, poorly constructed or poorly maintained signs.

5.8.2 Permit Required

- a. A sign permit shall be required before the erection, re-erection, construction, alteration, placement or installation of all signs regulated by this chapter, except according to Section 5.8.7. Additional electrical and building permits may also be required and shall meet all requirements of those permits. The following actions shall also require a valid sign permit:
  - i. Expansion to the face area or height of an existing sign.
  - ii. Change in location of an existing sign.
  - iii. Change in the dimensions of an existing sign.

5.8.3 Non-conforming Signs

- a. Non-conforming signs may not be altered, changed in shape or size, raised, or replaced unless such action brings the sign into closer conformity with this chapter.