

## **CHAPTER 13: LANDSCAPING REGULATIONS**

### **Sec. 13.100 Purpose**

The purpose of the landscaping regulations are to provide standards that will protect the health, safety, and general welfare of the public, preserve property values, and improve the appearance of the community by preserving natural resources and maintaining ecological balance. These regulations will establish procedures for the design, installation, and maintenance of the community's public and private landscapes through water efficient landscaping with the least degradation or disruption to the ground, water, and air. These regulations will preserve Sunset Valley's unique character and enhance development and redevelopment by quality landscape design that:

- (1) Reinforces the identity of the community, enhancing Sunset Valley's nature based values;
- (2) Provides tree canopies within parking areas to reduce heat island effects;
- (3) Anchors development within the landscape;
- (4) Is environmentally sensitive by preserving and replenishing existing native plant communities, using water conservation techniques, and enhancing valuable habitat.

### **Sec. 13.101 Application**

- (a) The provisions of this Chapter shall apply to the following, except as otherwise provided below:
  - (1) The owners of all land located within the corporate limits of the City of Sunset Valley. Such landscaping requirements shall become applicable as to each individual lot at such time as an application for a site plan or watershed development permit on such lot is made.
  - (2) A common development which includes more than one lot shall be treated as one lot for the purposes of satisfying the landscaping requirements of this Chapter. Split ownership, planning in phases, construction in stages and/or multiple building permits for a project shall not prevent it from being a common development as referred to above. Each phase of a phased project shall comply with the requirements of this Chapter.
  - (3) A development or redevelopment of more than two legal lots by the same developer.
- (b) Requirements for Single Family Residences

Section 13.400 of this code applies to building permits for single family residences where only one such structure is constructed per lot.
- (c) This Chapter shall not apply to the following:
  - (1) Building permits for the substantial restoration within a period of twelve (12) months of a building which has been damaged less than 50 per cent by fire, explosion, flood, tornado, riot, act of the public enemy, or accident of any kind.
  - (2) Building permits for remodeling as long as the exterior walls of the building remain in the same location.

**Sec. 13.102    Procedures**

- (a)    **Landscape Site Plan Information Requirements:** When an application is made for a building permit on any land where the landscaping requirements of this Chapter are applicable, such building permit application, including site plans, shall be accompanied by a landscape site plan containing the information listed in subsections (1) through (15) below. In the event that a preliminary or final building site plan is amended or finalized, an amended or finalized landscape site plan containing the information listed in subsections (1) through (15) below shall be submitted simultaneously with the amended or finalized building site plan.
- (1)    The date, scale, north arrow, title and name of owner.
  - (2)    The location of existing boundary lines and dimensions of the tract.
  - (3)    The approximate center line of existing water courses; the approximate location of significant drainage features; and the location and size of existing and proposed streets and alleys, existing and proposed utility easements on or adjacent to the lot, and existing and proposed sidewalks adjacent to the street.
  - (4)    The location, size, species, type (tree, shrub, groundcover, or grass), spacing, and quantity of proposed landscaping in proposed landscaped areas; and the location and size of proposed landscaped areas.
  - (5)    The location and species of all existing trees having trunks four inches (4") or larger diameter at breast height (DBH) and the approximate size of their crowns.
  - (6)    An inventory and location of the site's existing plant communities including common plant names and approximate number of plants.
  - (7)    An indication of whether understory vegetation is present under the tree canopy of all existing trees, and the identity of all dominant species constituting such understory vegetation.
  - (8)    Information necessary for verifying whether the required minimum percent of landscaped area has been met under Section 13.200 and whether a particular area qualifies for 125% credit under Section 13.203 hereof.
  - (9)    Plans and details illustrating of how the applicant plans to protect the existing trees and understory vegetation, which are proposed to be retained, from damage during construction, including but not limited to: a showing of critical root zones, required work space, location of fences during construction, and permeable paving areas, if applicable. Protection during construction shall be provided by fencing and lumber wraps on the trunks and lower branches of trees. No storage of materials or vehicular traffic is to be permitted in this area in order to prevent compaction of soil. Tree removal requests, protection plans, and replacement plans are required in accordance with Chapter 16 of this code.
  - (10)    The proposed irrigation system as required by Section 13.200(n) below.
  - (11)    Plans and specifications including the location, material used, and height of any walls or fences.

- (12) All plans necessary to show compliance with the applicable provisions of the sign provisions of this Code (Chapter 14) which are in effect at the time of submission of the landscape site plan.
  - (13) The certification of a landscape architect, registered in the State of Texas, or a certified landscape professional that the plans satisfy the requirements of this Chapter. Provided, however, that for a common development or project which is greater than one acre in size, such plans and certification shall be made by a landscape architect only.
  - (14) Information necessary for verifying how landscape buffering is to be accomplished under Section 13.301.
  - (15) The City Council approved plan shall specifically note in chart form elements which have been granted alternative compliance.
- (b) **Plan Approvals:** Landscaping site plans approved by the City Council during the final site plan and landscape site plan review process shall not require further approval if the site plan approved contains all information listed in Section 13.102(a) above, unless the accompanying final site plan is later amended, in which case a landscape site plan, amended as necessary, shall be provided for the City Council's review and approval. Minor amendments may be considered and approved administratively if they do not require a variance to this code and do not affect the final approved buffering requirements in each category.
  - (c) **Review and Inspection Fee:** A review and inspection fee in an amount to be set by the City Council from time to time shall be collected at the time of submittal of the landscape plan. Fees shall cover plan review, installation monitoring, initial inspection for Certificate of Occupancy, and a final inspection within one year or the next growing season.
  - (d) **Inspection/Fiscal Posting:** Fiscal posting is required prior to the issuance of the site development permit. All landscape installation must be completed prior to the landscape inspection. The City or its designated agent shall inspect each site to insure compliance with this Chapter. Prior to final landscape inspection, a sealed letter of concurrence shall be provided to the City from a State of Texas registered landscape architect or certified landscaping professional, which letter shall verify that the project has been implemented in accordance with the City approved plans. Calculation will be based on the criteria established in the landscape site plan application.

**Sec. 13.103 Inspections**

The City or its designated agent may inspect each site annually to insure continued compliance with the approved landscape plan. Sites found to be out of compliance may be subject to fines as described in Chapter 17 of this code.

**Sec. 13.200 Street Yard Landscape**

- (a) **Landscape Minimum:** At least 25% of the area of the street yard shall be landscaped area.
- (b) **Tree Requirements:** For areas within the street yard, trees of not less than one and one-half inches (1 ½ ") in caliper and six (6) feet in height (either existing or planted) shall be required as per the ratios found in Table 13.1. . A minimum of five different species must be planted if more than 50 caliper inches of trees are required. A minimum of seventy-five percent (75%) of all required trees shall be large canopy trees. All provisions of Chapter 16 apply regarding replacement tree plantings.

**Table 13.1. Street Yard Tree Requirements**

Total Street Yard Area	Required Trees
Less than 10,000 square feet	2 trees per 1000 square feet or fraction thereof.
Over 10,000 square feet	20 trees, plus 2 trees per 2,500 square feet or fraction thereof over 10,000 square feet
Quantity of trees required shall be rounded up.	

- (c) **Shrub Requirement:** A maximum of 20% of the 25% required landscaped street yard area shall consist of shrub plantings and should be more or less evenly distributed throughout the street yard so as to not create a geometric alignment. Hedgerows and straight lines of plantings are discouraged.
- (d) **Plant Selection:** All required vegetation shall be plants included in the Sunset Valley Recommended Plant List. Should an approved plant not be available at time of installation, a plant within the same category in the Sunset Valley Recommended Plant List may be substituted with the approval of the City Landscape Architect or other designated City Agent.

(e) **Landscaping Credits:**

The following may receive credits toward landscaping and buffering requirements:

- (1) **Existing Preserved Tree Credit:** An existing surveyed or planted tree which is at least four inches (4") shall be considered as two trees for purposes of satisfying requirements of this subsection. Up to one third of the required trees may be *Juniperus virginiana* or *Juniperus ashei*, the native eastern and western cedars, respectively; and/or *Prosopis glandulosus*, the native mesquite. Trees that are excluded from protection per Chapter 16 of this code cannot be considered for credit.
- (2) **Drip Line Credit:** The impervious cover within the area encompassed by the drip line of any existing tree in a required landscaped area may not exceed fifty (50) percent of such area. Each square foot of permeable surface below the drip line of the existing preserved tree shall count as 125% square feet of landscape credit. Trees for which extra credit is being applied shall be inspected prior to, during and at time of Final Inspection for healthiness and probability of survival. Credit shall be subject to the following limitations:
  - i. Overlapping drip line cannot be counted twice.
  - ii. No credit will be given where damaging grade changes within the drip line of a tree has occurred.
  - iii. No storage of materials or vehicular traffic is to be permitted in this area in order to prevent compaction of soil.
  - iv. The total credit for the tree drip line cannot exceed the total footage within the drip line. The total credit must be equal or less than 100% of the area within the drip line

- (3) **Pedestrian Amenities:** For each square foot of publicly accessible special pedestrian facilities and features such as plazas, covered walkways, fountains, lakes and decorative water ponds, seating areas and outdoor recreation facilities; such areas will reduce the amount of required landscaped area of the site by an equivalent square footage up to only 10% of the required landscaped street yard.
- (4) **Berm Credit:** Landscape areas incorporating berms a minimum of three feet in height will be given 5% additional credit toward reducing square footage requirements for landscaped areas. Berms must have no greater than 3:1 slope.

**Proposed Trees Credits:** Newly planted trees of at least four (4) caliper inches and at least twelve feet (12') tall shall be considered as 1½ trees for purposes of satisfying the requirements of this Chapter. All newly planted trees shall be planted in a permeable area whose minimum dimension is no less than fifteen feet (15') wide measured from the back of the curb

- (5) (f) In no case shall the actual landscaped area of a lot be less than eighty percent (80%) of the required minimum area of the street yard.

**Section 13.201: Turf Limitations**

- (a) **General:** Traditional grass areas are not required in Sunset Valley. The City invites innovative and environmentally appropriate alternatives to turf grass monocultures. Such areas may be established in native diverse species which have low water requirements. A major portion of water demand used for landscape purposes is required for the irrigation of turf areas. Portions of landscaped areas that have been customarily designed as lawns should be designed instead as:
  - (1) Natural plant communities;
  - (2) Redeveloped native areas including native grasses;
  - (3) Traditional mixes of trees, shrubs and groundcovers.

Properly managed non-grass landscape developments of site specific plantings will typically be able to survive on a reduced water requirement and survive drought conditions better than turf areas.

- (b) **Maximum Allowable Turf Areas:** No more than 25% of the required landscape area shall be planted in turf grass. Grasses must be drought-tolerant species and when possible allowed to seed to encourage to natural reseeding. Right of way adjacent to development will not be included in this calculation.
- (c) **Turf Selection:** Turf selection shall be made from those grasses found on the Sunset Valley Recommended Plant List.

**Section 13.202. Vegetative Buffer Requirement**

- (a) **Vegetative Buffer Requirement:** There shall be a vegetative buffer zone of twenty-five (25) feet next to the right-of-way lines of all streets and roadways.
  - (1) No improvements, including parking areas, water quality ponds, and fences, shall be allowed in the vegetative buffer zone. Driveways will only be allowed within the vegetative buffer when perpendicular (center line of driveway) to the Right of Way thus allowing access from a public street to a parking facility.

- (2) Except for clearing necessary to provide utilities access and site line visibility to the site, no clearing of vegetation shall be permitted within the vegetative buffer zone. Indiscriminate clearing regulations are found within section 16.502 of this code.
- (3) In cases where the buffer area has previously been substantially disturbed, it shall be restored to provide a varied landscape buffer utilizing trees, shrubs, and grasses in accordance with the other provisions of this Chapter.

### **Section 13.203 Landscaping in Parking Areas.**

- (a) Vehicular use areas, parking areas, service areas, parking lots and their parked vehicles shall be required one point of landscape buffering (refer to section 13.301) for each linear foot of required landscaping along the property line. If non-residential vehicular use areas, parking area, service area, or parking lot are adjacent to residential property, compatibility and buffering standards shall apply. These standards are separate and apart from the Landscaping Regulations and found in Chapter 2 Section 2.505.
- (b) A minimum total area of 120 square feet of landscaped islands, peninsulas and medians is required for each 12 parking spaces anywhere on the site, including the street yard. Concrete curbs shall not be counted in the required landscape areas.
- (c) The number, size, and shape of islands, peninsulas, and medians in both street yards and non-street yards shall be at the discretion of the owner; however, no parking space shall be located further than 50 feet from a permeable landscaped island, peninsula, or median. This distance should be measured from the back of curb of the landscaped island, median or peninsula and should encompass the entire parking space. All islands, peninsulas and medians required in the areas stated above shall be more or less evenly distributed throughout such parking areas, respectively; however, the distribution and location of landscaped islands, peninsulas, and medians may be adjusted to accommodate existing trees or other natural features so long as the total area requirement for landscaped islands, peninsulas, and medians for the respective parking areas above is satisfied.
- (d) Only landscaped islands, peninsulas, and medians in the street yard shall count toward fulfilling the requirements of Section 13.200(a) above, as applicable.
- (e) Each parking aisle shall be terminated with an end island whose minimum dimension is fifteen (15') wide from the inside of the curb.
- (f) Each parking island is required to have at least one tree.
- (g) Special Provisions for Large Parking Lots.

- (1) The above paragraph 13.203(c) does not apply if this subsection 13.203(g) is required. For parking lots with more than three (3) parking modules, a 15 foot minimum width median (measured from back of curb) will be required for every third parking module. Trees within the median must be located so that one (1) tree shall be located within 25 feet of each parking space adjacent to the median. This distance should be measured as the distance from the center of the tree to the edge of each parking space. No additional islands shall be required to satisfy Section 13.200 except for end islands for each parking module.
- (2) A pedestrian walkway shall be provided within the boundaries of each fifteen foot wide (minimum) median. The walkway shall provide pedestrian access connecting the parking lot and the commercial establishment's entry(ies). The walkway shall meet all accessibility requirements.

#### **Sec. 13.204 Preservation of Natural Character**

- (a) **Preservation of Natural Character:** The natural landscape character (especially native trees, grasses and geology) shall be preserved or restored to the extent reasonable and feasible. In determining whether there is compliance with this subsection the City Council designate shall consider topographical constraints on design, drainage, access and egress, utilities, and other factors reasonably related to the health, safety and welfare of the public which necessitated disturbance of the existing natural landscape character; economic usefulness of the property without disturbance of its natural character; the nature and quality of the landscaping installed to replace it; and such other factors as may be relevant and proper. Indiscriminate clearing or stripping of the natural vegetation on a lot is prohibited as per Chapter 16 of this Code.
- (b) When existing natural plant communities occur on a parcel of land to be developed, at least twenty (20) percent of the required landscape area shall be in the form of preserved native plant communities.

#### **Sec. 13.205 Water-efficient Landscape Design**

- (a) **Xeriscape Principles:** It is the intent of this Chapter to assist the City in achieving water conservation through proper plant selection, installation and maintenance practices. The following Xeriscape principles serve as the primary means of achieving water conservation:
  - (1) Appropriate planning and design;
  - (2) Limiting turf areas to locations where it provides functional benefits;
  - (3) Efficient, low water use irrigation systems;
  - (4) The use of soil amendments to improve water holding capacity of the soil;
  - (5) The use of mulches to maintain soil moisture and reduce evaporation;
  - (6) Zoning of plant materials according to their microclimate needs and water requirements;
  - (7) The use of drought-tolerant plants from the Sunset Valley Recommended Plant List; and,
  - (8) Appropriate and timely maintenance.

- (b) **Site Development Standards:** Creative site development concepts shall be used in order to promote resource conservation. These standards include
- (1) The preservation of existing native plant communities.
  - (2) The re-establishment of native plant communities.
  - (3) Limiting the amount of turf areas.
  - (4) Landscaped areas shall be configured to maximize the interconnectivity within the site to natural areas and landscaped areas adjacent to development. Small isolated islands of landscaping should be avoided except as required for screening along roadways and within parking lots.
  - (5) Landscape design shall enhance natural features, drainage ways and environmental resources.
  - (6) All landscape improvements shall be designed for mature landscapes and shall provide appropriate visibility for cars and pedestrians. Landscape design shall consider the view of store fronts and signage for vehicular access.
  - (7) The use of shade trees to reduce transpiration rates of lower story plant materials.
  - (8) Incorporate elements of gateway, path and destination into the design of landscapes. Gateways are entries that provide transitions from one space to another. Pathways are routes that lead to a destination. Destinations are focal points. The use of pervious paving materials is encouraged.
  - (9) Plants having similar water use shall be grouped in distinct hydro zones, shown on the landscaping plan.
  - (10) High hydro zones shall be separated from low and very low hydro zones by moderate hydro zones whenever possible.
  - (11) Planting strips less than 10 feet wide shall be planted with low or very low water use plants.
  - (12) Decorative water features must use recirculated water and are subject to drought restrictions.
  - (13) Plants shall be selected to blend with native vegetation for projects that interface between urban areas and natural open spaces. Plants with low fuel volume and/or low flammability shall be emphasized.

#### **Sec. 13.206 Water-efficient Irrigation Design**

- (a) **Irrigation:** All required landscaping shall be irrigated by one of the following methods:
- (1) An underground sprinkling automatic irrigation system - either conventional spray, bubblers, drip emitters, drip tubing, porous pipe or other similar system.
  - (2) A hose attachment within 100 feet of all street yard required landscaped areas and plant materials where there is no road or parking pavement between the hose attachment and landscaped areas and the site plan area is no larger than 1.0 acre.

- (3) Landscape areas planted with native grasses and wildflowers may use a temporary and above ground irrigation system in accordance with the design criteria outlined herein and shall be required to provide irrigation only for the first two growing seasons. The irrigation schedule is to be determined at time of planting and approved by the City or its designated agents.
  - (4) Hand watering may be considered for low and very low hydro zones.
  - (5) Use of non-treated water for irrigation is encouraged if a permanent suitable supply is available. Section 13.600 details credits and approved methods for Innovative Water Management.
  - (6) Irrigation shall not be required for natural areas or existing trees which are not disturbed or affected by the proposed development.
- (b) The irrigation methods used shall:
- (1) Provide a moisture level in an amount and frequency adequate to sustain growth of the plant materials on a permanent basis;
  - (2) Be in place and operational at the time of the final landscape inspection.
  - (3) Be maintained and kept operational at all times to provide for efficient water distribution;
  - (4) Be described in the landscape plans by a detail and drawing, indicating the nature and location of the irrigation methods which will be used. The description should be specific enough to show that adequate irrigation will be provided to all required landscape areas and plant materials and that there is no disturbance to the critical root zones of existing trees.
  - (5) Turf zones and non-turf areas shall be on separate valves.
  - (6) Drip emitters and sprinklers shall be placed on separate valves.
  - (7) Bubblers for trees shall be placed on a separate valve. Bubblers shall not exceed 1.5 gallons per minute (gpm) for each device.
  - (8) Each valve shall irrigate a landscape with similar site, slope, and soil conditions and plant material with similar watering needs.
  - (9) Special attention shall be given to avoid runoff from slopes and to avoid overspray.
- (c) **Irrigation System Requirements:** Automatic irrigation systems shall comply with the following guidelines. These guidelines (1-8) shall be noted on the Site Plan and shall be implemented as part of the landscape inspection.
- (1) Adjustable flow controls shall be required on circuit remote control valves. Pressure regulation component(s) shall be required where static pressure exceeds manufacturer's recommended operating range.
  - (2) Valves and circuits shall be separated based on water use, so that turf areas can be watered separately from shrub and groundcover areas.

- (3) Sprinkler heads shall have matched precipitation rates within each control valve circuit.
- (4) Serviceable check valves shall be required where elevation differential may cause low head drainage adjacent to paving areas.
- (5) Sprinkler head spacing shall be designed for head-to-head coverage or heads shall be spaced as per manufacturer's recommendations and adjusted for prevailing winds. The system shall be designed for minimum run-off and minimum overspray onto non-irrigated areas (i.e. paving and structures).
- (6) All automatic irrigation systems shall be equipped with a controller capable of dual or multiple programming. Controllers shall have multiple cycle start capacity and a flexible calendar program, including the capability of being set to water once a week. All automatic irrigation systems shall be equipped with a rain and freeze sensor shut-off device.
- (7) System must be designed to be able to water all zones within a maximum 15 hour period per week.
- (8) Irrigation construction plans shall include a water budget that conforms with allowable landscaping water budget in section 13.207(a). A laminated copy of the water budget shall be permanently installed inside the irrigation controller door. Water budgets shall include:
  - i. Estimated monthly water use (in gallons per application) and the area (in square feet) irrigated.
  - ii. Precipitation rates for each valve circuit.
  - iii. Monthly irrigation schedule for the plant establishment period (first three months) and recommended yearly watering schedule, including seasonal adjustments.
  - iv. Location of emergency irrigation system shut-off valve.

**Sec. 13.207 Landscape Water Conservation Standards**

**(a) Dedicated Landscape Water Meter and Backflow Device**

- (1) Separate water meters shall be required for all new landscaping or renovated landscaped areas that have a construction area of new landscaping larger than 5,000 square feet.
- (2) All irrigation systems must have a backflow device as required by the Texas Commission on Environmental Quality.

**(b) Landscape Water Budget:** The landscape water budget for new landscape shall be no more than seventy (70) percent of reference evapotranspiration per square foot of landscaped area, including turf grass. The landscape water budget shall be calculated using the equation below:

- (1) Landscape Water Budget =  $(0.7)(ET_o)(0.00083)(LA)$ 
  - i. Water Budget = annual upper limit of irrigation water allowed. (CCF/year)
  - ii. 0.7=ET adjustment factor
  - iii.  $ET_o$ =Reference evapotranspiration

- iv. Conversion factor to CCF
  - v. LA=Landscape area (square feet)
- (2) New landscapes that are irrigated with non-potable water are allowed a total of 100 percent of evapotranspiration rate per square foot. Acceptable alternatives for non-potable water can be found in Section 13.600, Credit for Innovative Water Management.
  - (3) The annual water use shall not exceed the annual water budget.

### **Section 13.300 Buffering Requirements**

- (a) **Required Buffers:** Buffering is a site specific requirements that shall be evaluated based on viewer distance and angle of view from the areas or features that require buffering. Buffer design should also consider the amount of view obstruction required and the type and mixture of design elements. Compatibility and buffering are required wherever a property other than residential abuts adjacent residential property. The buffer shall comply with the requirements outlined in the Sec. 2.505 Regulations for Adjoining Districts.
- (b) **Non-Residential Property Adjacent to Residential Property:** Wherever a vehicular use area, parking area, service area, utility appurtenances or parking lot serving a non-residential property abuts adjacent residential property, the requirement outlined in Sec. 2.505 shall apply.
  - (1) Effective buffering of residential districts from all other districts, except, Park, Greenspace/Preservation, and Conservation Areas shall include a minimum one hundred feet (100 ft.) landscape setback.
  - (2) The landscaping requirements of this Chapter cannot be met within the landscape setback required pursuant to Sec. 2.505.
- (c) **Buffering of Water Quality and Utility Improvements:** Landscape buffering requirements outlined under the requirements of Sec 13.300 shall also apply to detention ponds, sedimentation ponds and filtration and utility appurtenances..
- (d) **Non-Residential Property Adjacent to Non-Residential Property:** Landscape buffering of non-residential property adjacent to non-residential property is a site specific requirement that shall be evaluated by the City or its designated agent based on viewer distance and angle of view from the areas or site features requiring buffering. Such areas or site features requiring landscape buffering include, but are not limited to, vehicular use areas, parking lots and their parked cars, and , service areas,. Buffer design shall also consider the amount of view obstruction required and the type and mixture of design elements used in the buffer.

### **Section 13.301 Buffering Standards**

- (a) **Buffering Standards:** To be considered effective, a combination of buffering elements shall be used to provide a partial view obstruction of those items to be buffered (pavement, parked cars, etc.).
  - (1) Landscape buffers shall contain at least two (2) of the following elements:

- i. Trees
  - ii. Shrubs
  - iii. Berms
- (2) Plants and trees used as buffering elements shall be planted in a permeable landscape area at least fifteen feet (15') wide, measured from back of curb, pavement, or face of building to the property line. All plantings shall conform to the provisions of this Chapter.
  - (3) To determine the quantity of elements to be included in a buffer, the following point system should be used. This system assigns a point value to each landscape element listed above. The values for these elements are found in Table 13.2.
  - (4) For each linear foot of buffer area required, one (1) point of buffering element as listed above should be provided within the buffer area. The buffer area does not have to be planted at the same density throughout. However, the elements should be combined so that no more than 1/4 of the buffer area is absent of elements and no less than two (2) elements are used for more than 50 percent of the buffer length.
  - (5) All required landscaping must be accomplished within the boundaries of the site being developed. Landscaping accomplished in any dedicated right-of-way shall not be included in meeting the landscaping or buffering requirements imposed by this Chapter. Landscaping areas preserved or planted for the purpose of preserving or creating drainage ways, detention ponds, or sedimentation ponds shall not be included in satisfying the landscaping requirements provided by this Chapter, except that the top one-third (1/3) of the depth of such landscaped drainage way, detention pond, or sedimentation pond may be included in satisfying landscaping requirements.
  - (6) Fifty percent (50%) of proposed landscaped plantings must be conspicuous, e.g., blooming material.

Table 13.2 Buffering Point System

Buffering Point System						
Trees						
Plant Classification	1-1 ½ Caliper		2-2 ½ Caliper		3-3 ½ Caliper	
Trees	Recommended Plant	Other	Recommended Plant	Other	Recommended Plant	Other
Large Tree	3 pts.	1 pt.	6 pts.	2 pts.	9 pts.	3 pts.
Small Tree	3 pts.	1 pt.	6 pts.	2 pts.	9 pts.	3 pts.
Shrubs						
Plant Classification	1 Gallon			5 Gallon		
Shrubs	Recommended Plant	Other	Recommended Plant	Other	Recommended Plant	Other
Large Shrub	1 pt	1/3 pt.	3 pts.	1 pt.		
Medium Shrub	1 pt	1/3 pt.	3 pts.	1 pt.		
Small Shrub	½ pt.	1/6 pt.	2 pts.	2/3 pt.		
Walls and Berms						
Decorative Wall (3 ft minimum height)				3 pts. Per linear foot		
Berm per linear foot (3 foot minimum height at no greater than 3:1 side slope)				1 pt. per linear foot		

**Section 13.400 Minimum Requirements for Single Family Residential Development**

- (a) **Minimum Requirements:** Each newly built residential home where only one primary residence is constructed shall meet these minimum standards:
- (1) All disturbed areas and bare ground must be revegetated with approved grass and/or wildflower seed. Sod shall be used in areas with greater than 5% slope. Mulch and erosion control blanket may be used for temporary stabilization of the area.
  - (2) Grass and seed selection must be from the Sunset Valley Recommended Plant List.
  - (3) If a lot has fewer than 5 existing, mature trees, two minimum 1 ½” caliper trees chosen from the large tree replacement list found in 16.402 must be planted.
  - (4) All planting and seeding must occur before issuance of a certificate of occupancy.
  - (5) Revegetated areas must be established before environmental controls can be removed.
  - (6) A dedicated irrigation meter and backflow device shall be required.

**Section 13.500 Landscape Material Requirements**

- (a) **Shrubs, Vines and Ground Cover.** Shrubs, vines and ground cover planted pursuant to this Chapter should be good, healthy nursery stock normally grown for or found growing in the Travis County area. Plant materials which are native or naturalized and have low water requirements are highly recommended. Shrubs must be, at a minimum, a one (1) gallon container size.
- (b) **Plant quality standards.** Plants installed pursuant to this Chapter shall conform to or exceed the minimum standard as provided in the most current edition of American Standards for Nursery Stock (ASNS) recommended for general use and adoption by the American Association of Nurserymen. Another accepted standard may be used if it equals or exceeds the quality of the ASNS.
- (c) **Plant ball sizes.** Ball sizes on all transplanted plant materials shall conform to or exceed the minimum standards as noted in the most current edition of ASNS.
- (d) **Turf grass.** Traditional grass areas are not required in Sunset Valley. The City invites innovative and environmentally appropriate alternatives to turf grass monocultures. Such areas may be established in native diverse species which have low water requirements. Grass areas using grass not listed on the Sunset Valley Recommended Plant List are not credited as landscaped area. In shaded turf areas (areas that receive less than six hours of sunlight per day), a shade-tolerant, low water use grass may be used. Areas may be sodded, plugged, sprigged or seeded except that solid sod shall be used in swales or other areas subject to erosion.
- (e) **Synthetic Lawns or Plants.** Synthetic or artificial lawns or plants shall not be used in lieu of plant requirements in this Chapter. These products do not provide ecological services and may increase the heat island effect.
- (f) **Architectural Planters.** The use of architectural planters shall not be permitted in fulfillment of landscape requirements, but may be used in addition to landscaping requirements.
- (g) **Drainage.** Drainage ways shall be designed and maintained so as to maximize the use of native vegetation on the bottoms and sides.
- (h) **Species:** No more than 35% of the trees or shrubs shall be from the same species within a specified genus. No more than 25% of planted trees, shrubs and groundcover shall be from the same genus.
- (i) **Weed Control Fabric.** All weed control fabric must be pervious and allow water to flow freely into the ground.

**Sec. 13.501 Installation and Maintenance**

- (a) **General Minimum Requirements:** The following standards shall be considered the minimum requirements for the installation of all landscaping within Sunset Valley.
  - (1) **Installation requirements:** All landscape materials shall be installed according to ASNS standards. This requirement will be monitored by the City or its designated agent.
  - (2) **Anti-transpirants – General:** In order to reduce the transpiration rate of plant material during the installation process, anti-transpirants may be used. Anti-transpirants reduce the amount of water loss through the leaves of plant material during installation, thereby reducing the amount of water required for the survival of the plants. Anti-transpirants may be used on all permitted landscape installation projects.

- (3) It shall be the responsibility of each private property owner to remove any dead, diseased or dangerous trees or shrubs, or parts thereof, which overhang or interfere with traffic control devices, public sidewalks, rights-of-way or property owned by the City. The City shall have the authority to order the removal of any such trees or shrubs.

**(b) Watering:**

- (1) All watering of planted areas shall be managed so as to:
    - i. Maintain healthy flora.
    - ii. Make plant material more drought tolerant.
    - iii. Avoid excessive turf growth.
    - iv. Minimize fungus growth.
    - v. Stimulate deep root growth.
    - vi. Minimize leaching of fertilizer.
    - vii. Minimize cold damage.
    - viii. Minimize runoff.
  - (2) **Watering of Turf Areas:** All watering of turf areas shall be accomplished on an as needed basis. Buffalo grass may not require watering even when wilting. Nothing in this Chapter shall be construed so as to preclude the withholding of water from turf beyond the stage of turf wilt.
  - (3) **Promoting Deep Root Growth of Trees and Shrubs:** Watering of plants and trees should always be in a sufficient amount to thoroughly soak the root ball of the plant and the surrounding area, thereby promoting deep root growth and tolerance.
  - (4) **Operation of Automatic Irrigation Systems:** Whenever possible, automatic irrigation systems should be operated between the hours of midnight and 6:00 A.M. or as designated by the City of Sunset Valley. Irrigating during these hours reduces fungus growth and loss of water due to evaporation.
  - (5) **Maintenance of Irrigation Systems:** Irrigation systems shall be constantly maintained to eliminate waste of water due to loss of heads, broken pipes or misadjusted nozzles and to adjust controller programs to reflect weather changes.
  - (6) All watering schedules must comply with applicable Sunset Valley water restrictions during droughts.
- (c) **Maintenance and Replacement of Dead Material:** The owner of the building, or the manager or agent of the owner, shall be responsible for the appearance of landscaping at all times and landscaping shall be kept free of refuse and debris. Ongoing maintenance shall include the replacement of dead plant material if that material was used to meet the requirements of this Chapter. Should a tree die or be removed from which credit has been obtained pursuant to the terms of Section 13.200, a smaller tree with a minimum caliper of 2" that will have a mature crown similar to the tree removed must be substituted within six months and the planting area or pervious cover provided for the larger tree retained.
- (d) The required 2-4" mulch layer shall be maintained on all landscape projects

### **Sec. 13.502 Replacement Requirements**

- (a) **Replacement Requirements:** Vegetation which is required to be planted or preserved by this Chapter shall be replaced with equivalent vegetation. Preserved trees for which credit was awarded which subsequently die shall be replaced by the requisite number of living trees according to the standards established in Section 13.200.

### **Section 13.600 Credit for Innovative Water Management**

- (a) **Water Budget Credit:** Projects that use alternative non-potable water sources or smart irrigation controllers will be able to use 100% of their water budget.
- (b) **Rainwater Harvesting:** Rainwater from rooftops can be collected onsite and used for irrigation. For this application the Rainwater Harvesting Tank will also be exempted from impervious cover calculations when used for irrigation of landscaped areas.
  - (1) Tank must be sized to collect 4 inches of rainfall per square foot of rooftop.
  - (2) Projects that include rainwater harvesting will also receive a reduction of 5% of the required landscape area when used for irrigation of landscaped areas.
  - (3) Rainwater Harvesting Tanks for this application shall not be used to meet water quality treatment requirements of site per chapter 4 of this code.
- (c) **Rain Gardens:** Rain Gardens that are lined with impervious liner and complies with rain garden design specifications in the Pollution Reduction Manual will be exempted from the water budget calculations.
  - (1) Rain garden must be equal in size to 10% of the total requirement of the street yard landscape area.
- (d) **Disconnected Downspouts from Rooftops**
  - (1) These downspouts must be directed into landscaping beds.
  - (2) Disconnected Downspouts used in conjunction with lined rain gardens will receive an additional 5% reduction of the required landscape area.
- (e) **Evapotranspiration and Smart Irrigation Controllers**
  - (1) The use of evapotranspiration systems or smart irrigation controllers that regulate water use may be considered for additional water budget credit.

### **Section 13.700 Variances and Alternative Compliance**

- (a) Except in regards to Buffering Standards found in Section 2.505, the City Council may authorize a variance from these regulations when, in its opinion, undue hardship will result from requiring strict compliance. In granting a variance, the Council shall prescribe only conditions that it deems necessary or desirable in the public interest. In making the findings herein below required, the council shall take into account the nature of the proposed use of the land involved, existing uses of land in the vicinity, the number of persons who will reside or work in the proposed subdivision, and the probable effect of such variance upon traffic conditions and upon the public health, safety, convenience and welfare in the vicinity. No variance shall be granted unless the Council finds:

- (1) That there are special circumstances or conditions affecting the land involved such that the strict application of the provisions of this Chapter would deprive the applicant of the reasonable use of his land; and
  - (2) That the variance is necessary for the preservation and enjoyment of a substantial property right of the applicant; and
  - (3) That the granting of the variance will not be detrimental to the public health, safety or welfare, or injurious to other property in the area.
- (b) **Alternative Compliance.** Notwithstanding all of the foregoing provisions of this Chapter, a landscape site plan which is an alternative to strict compliance with the various landscaping requirements of this Chapter may be approved by the City Council, if the Council finds that such plan is as good or better than a plan in strict compliance with the various landscaping requirements of this Chapter in accomplishing the purposes of this Chapter. Consideration should be given to preservation of heritage and ancestral trees which are not necessarily in required landscape areas. In no event, however, will landscaping or buffering within a dedicated right-of-way constitute alternative compliance with the requirements imposed by this Chapter, nor shall such landscaping or buffering be deemed to satisfy any requirement of this Chapter.
- (1) Alternative proposals should be clearly identified on the landscape plans and the site plan application should include a letter outlining the alternative proposal. Review of the alternative proposal will be in conjunction with the site plan review.
  - (2) To establish some guideline equivalents for the major landscape requirements listed in Section 13.200, a list of alternative equivalent ratings are found below. These ratings assign relative values to the landscape elements of a design and should be used when formulating alternative proposals. Each basic requirement which cannot be achieved is assigned a negative point value and may be compensated for with positive equivalents shown in the compensation list. An example using this concept is provided below:

These ratings are intended to provide guidance for proposing alternatives to strict compliance for unusual site specific conditions. However, other proposed equivalents may be accepted based on extremely unusual conditions, if approved by the City Council.

**ALTERNATIVE COMPLIANCE EQUIVALENT RATINGS**

Deficiencies

The following information should be used to formulate alternative proposals when a site design cannot conform to the basic landscape requirements as described in Section 13.200. Approved alternative compliance proposals must be from the Sunset Valley Recommended Plant List.

Landscape Area as a Percent of Street Yard	Negative Points
<20 percent	-20
20 percent	-15
21 percent	-10
22 percent	-8
23 percent	-6
24 percent	-4
25 percent	0
Landscape Area for Each 12 Parking Spaces	Negative Points
<60 square feet	-15
61-89square feet	-10
90-119 square feet	-5
>120 square feet	0
Landscape Islands, Medians or Peninsula Placement	Negative Points
within 100 feet of each space	-10
within 75 feet of each space	-5
within 50 feet of each space	0
Trees Installed in Parking Landscape Areas	Negative Points
within 100 feet of each space	-10
within 75 feet of each space	-5
within 50 feet of each space	0

## ALTERNATIVE COMPLIANCE EQUIVALENT RATINGS

### Deficiency Compensation

<b>Trees</b> All must be from Sunset Valley Recommended Plant list.	<b>Positive Points</b>	
Percentage of Installed Street Yard Trees	2" caliper	3" or greater caliper
10%	+1	+1
20%	+2	+4
30%	+3	+6
40%	+4	+8
50% or greater	+5	+10
<b>Buffer Increased above Minimum</b>	<b>Positive Points</b>	
10%	+1	
20%	+2	
30%	+3	
40%	+4.	
50%	+5.	
<b>Special Landscape Features</b>	<b>Positive Points</b>	
Covered walkways not attached to buildings, arbors, gazebos or shaded seating areas for public benefit	+5	
Sidewalks, trails or pedestrian paths outside the public right of way	+5	
Sculpture, public art or water features that support aquatic plant and/or animal life	+5	
Herb or antique rose display gardens	+5	
Rain Garden or Wet Pond	+5	
<b>Native Plant Credit:</b>	<b>Positive Points</b>	
All native plant materials	+5	
<b>Water Conservation Credit</b>		
Approved rain water storage and irrigation distribution system	+5	
The installation of an automatic conventional spray type irrigation system for all landscape areas in compliance with Section 13.206.	+3	
The installation of an automatic water saving drip system for all landscaped areas and in compliance with Section 13.206	+4	
ET/Smart Controller	+5	