

City of Lakeway

DESIGN MANUAL



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Introduction

The City of Lakeway Design Manual provides design and construction standards that were previously published in the City of Lakeway's Code of Ordinances.

Division 1 outlines standards pertaining to the erection, construction, enlargement, alteration, major repair, re-roofing, re-siding, moving, improving, converting, using or occupying of any residential building or structure within the City of Lakeway. Division 1 starts on page 2.

Division 2 outlines design and construction standards for subdivision and site development plans and related construction documents within the City of Lakeway and its extraterritorial jurisdiction (ETJ), when applicable. Division 2 starts on page 30.

Division 3 outlines standards related to nonresidential/multifamily requirements within the City of Lakeway. Division 3 starts on page 49.

These standards should be utilized in conjunction with City of Lakeway's building, zoning and subdivision ordinances which are accessible through the following link: <https://z2.franklinlegal.net/franklin/Z2Browser2.html?showset=lakewayset>

Applications along with many checklists designed as tools in the permitting process may be found through the following link: <https://www.lakeway-tx.gov/1165/Applications-Fees>

Division

1

Residential Construction



1

Residential Landscaping

Generally

These landscaping requirements are intended to enhance the natural aesthetic beauty of the Lakeway area, to ensure safe sight views along roadways, and to assist slope stabilization and prevent erosion, rapid runoff and sedimentation.

Plan requirements

- (1) A landscape plan for new residences must be submitted prior to requesting a certificate of occupancy (CO) inspection. The plans must demonstrate compliance with the landscape requirements contained herein.
- (2) Plans shall show planting areas and the number, size, type, location, and spacing of vegetative materials.
- (3) The landscape plan must show all setbacks and PUEs, and must include a note to indicate that drainage will not adversely impact adjoining lots.
- (4) No landscape plan shall be approved unless it shows all improvements reasonably necessary to prevent erosion from occurring during development and after its completion. No permanent certificate of occupancy shall be issued unless the improvements and landscaping shown on the site plan have been installed, constructed or created.
- (5) If a tree removal permit has been issued, a copy of such approved permit shall be included with the submittal of the landscape plan.
- (6) Prior to the completion of a project or the issuance of a certificate of occupancy, all disturbed areas on the lot or adjacent lots must be stabilized with sod. Restoration shall be acceptable when the grass has grown at least 1.5 inches high with 95% coverage, provided no bare spots larger than 9 square feet exist.

Maintenance and irrigation

- (1) The property owner or lessee shall be responsible for maintenance of the landscaped areas including the right-of-way in front of the property. This maintenance includes ensuring that drainage ditches and culverts are functioning properly and are free from obstruction.
- (2) Plants and grass shall present a healthy, neat and orderly appearance and be free of debris, refuse and disease. Deceased plantings shall be replaced no later than one month after dying.
- (3) Should the landscaping be irrigated by an automatic underground irrigation system, a permit must be obtained from the water service provider.

Site specific regulations

- (1) No structure shall be erected and no vegetation shall be maintained in the area of a corner lot between the side lines of the intersecting streets and a straight line joining points on such side lines with 10 feet of distance from their point of intersection which materially obstructs safe visibility for vehicular traffic. Planting of vegetation which, when mature, will obstruct visibility and endanger safe vehicular and pedestrian traffic shall not be permitted.
- (2) Plantings that will form a hedge when mature are not permitted within the street-side setbacks (unless required for parking areas or pond screening).
- (3) Retaining walls shall not exceed 1 foot above the material being retained.
- (4) Artificial turf may be approved by the Code Official or authorized designee provided it is not visible from the right-of-way or if the property is zoned GUI.

Site specific regulations *(continued)*

- (5) No trees, shrubs, retaining walls, driveway markers, or other vertical construction shall be constructed or erected nearer than 8 feet from the pavement edge of a street without curb and gutter. Shrubs, retaining walls, driveway markers and other vertical construction are permitted up to the back of curb of a street with curb and gutter provided they are no higher than 36 inches. In no case may light supports, posts, and pillars be located within the city's rights-of-way.
- (6) Surface water is not permitted to drain laterally across a property line. Drainage from a residential lot shall be directed to within 5 feet of a property corner before it crosses the property line to the downstream lot. All drainage must be directed to dedicated drainage easements. Surface water may not drain onto a public street. Approved subdivision drainage plans do not take the place of or preclude the city from requiring individual residential drainage plans conforming to the city's requirements.

Landscaping in rights-of-way

- (1) Landscaping in the city right-of-way, other than grass or natural ground cover, must be approved by the Code Official or authorized designee through a landscape permit.
- (2) No vegetation except lawn grass is permitted within 8 feet of the hard surface of a city street. Shrubs, bushes, etc., when mature, will not encroach closer than 8 feet to the hard surface of a street. Gravel, stones, and rocks are not permitted in the rights-of-way without specific approval of the Code Official. **Exception:** When shrubs, rocks, retaining walls, or driveway masonry have been constructed or installed prior to the adoption of these restrictions, the Code Official may waive the restrictions against said landscaping if the landscaping structures do not pose a traffic hazard to citizens.

Landscaping in rights-of-way (*continued*)

- (3) Vegetation proposed for county or state rights-of-way must receive additional approvals.
- (4) While vegetation should be irrigated to the hard surface of adjacent roadways, no irrigation lines shall be installed within 7 feet of the hard surface of streets without curb and gutter and within 3 inches of the back of curb of streets with curb and gutter.
- (5) In addition to the penalty provisions of this article, the city may remove from the street rights-of-way any of the structures, growth and material prohibited by this article, and in so doing, the city, its officers, agents and employees shall not be liable to the owners thereof. Any expense incurred by the city for such removals will be charged to the property owner.
- (6) Trees may not be planted in a street right-of-way.

Street yard requirements

- (1) In determining landscaping requirements, the street (front) yard shall extend from a line beginning 12 feet behind the front corners of each building fronting or facing a public or private street and thereafter extend to the side property lines and shall then run to the hard surface of the street.
- (2) A corner lot shall be considered as having two property lines fronting or facing a street and consequently will have two street yards.
- (3) Ground cover of lawn grass, or other approved material as referenced in this manual, shall cover all other areas to the hard surface of the street unless specifically prohibited by the city, county or state for a particular right-of-way.

Street yard requirements *(continued)*

- (4) A minimum 5-foot deep landscaping area shall abut the front and at least 12 feet down the sides of a building fronting a street except for the building entrance walkway (foundation plantings).



Golf course yard requirements

- (1) In determining landscaping requirements, the golf course yard shall extend from a line beginning 12 feet behind the corners of each building fronting or facing golf course property and extend to the side property lines and run to the property line abutting the golf course.
- (2) Properties abutting a golf course shall landscape the golf course yard in the same manner required for landscaping in the street yard unless the buildings on the property are not visible from the golf course.

Recommended trees and spacing chart

- (a) The following tree species shall not be planted in the city due to their high susceptibility to oak wilt:
- (1) Live oak (*Quercus virginiana*, *Quercus fusiformis*);
 - (2) Texas red oak or Spanish oak (*Quercus texana*, *Quercus buckleyi*);
 - (3) Shumard oak (*Quercus shumardii*);
 - (4) Southern red oak (*Quercus falcata*);
 - (5) Blackjack oak (*Quercus marilandica*); and
 - (6) Other members of the red or black oak group.
- (b) The following oak species are usually oak wilt resistant and may be planted:
- (1) Monterey or Mexican white oak (*Quercus polymorpha*);
 - (2) Lacey oak (*Quercus laceyi*, *Quercus glaucooides*);
 - (3) Bur oak (*Quercus macrocarpa*);
 - (4) Chinkapin oak (*Quercus muhlenbergii*);
 - (5) Durand oak (*Quercus durandii*); and
 - (6) Other members of the white oak group.
- (c) A high diversity of trees and shrubs from different plant families is encouraged.



Recommended trees and spacing chart *(continued)*

(d) With proper care, the following trees have historically thrived in the city:

<u>Large</u>	<u>Medium</u>	<u>Small</u>
Bur Oak	Texas Redbud	Crape Myrtle
Chinquapin Oak	Mexican Redbud	Yaupon Holly
Monterrey Oak	Ornamental Pear	Possumhaw Holly
Cedar Elm	Mexican Plum	Texas Mountain Laurel
Big Tooth Maple	Ornamental Crabapple	Texas Persimmon
Texas Black Walnut	Chinese Pistach	Caroline Laurel Cherry
Montezuma Cypress	Golden Raintree	Golden Lead Ball Tree
	Desert Willow	Eve's Necklace
	Honey Mesquite	Purple Leaf Plum



Tree survey

All new residential construction requires a tree survey. Tree surveys must be certified by and have been performed by a registered professional licensed surveyor within one year of submittal to the city. The survey shall show all existing hardwood trees 6 inches in diameter and larger as measured 4.5 feet off natural ground. Each tree shall be tagged, and a tree list shall show type and size. The tree survey shall show a calculated tree dripline drawn for each tree at 1-foot radius per inch of diameter.

Protected trees

- (a) A “protected tree” is any hardwood tree that has a trunk 16 inches in diameter as measured 4.5 feet above natural ground level. At the discretion of the city, certain native, rare, and unusual trees and plant species may also be designated as “protected” regardless of size.
- (b) The following species are not protected trees:
 - (1) *Ailanthus altissima* (Tree of Heaven).
 - (2) *Alibizzia julibrissen* (Mimosa).
 - (3) *Madura pomifera* (Bois d’Arc; female only).
 - (4) *Melia azeoarach* (Chinaberry).
 - (5) *Salix nigra* (Black Willow).
 - (6) *Celtis occidentals laevigata* (Hackberry).
 - (7) Ashe Juniper.
- (c) For multi-trunk trees, the calculated size of the tree shall be equal to the caliper of the largest trunk between ground level and 4.5 feet high plus half the sum of all remaining trunk diameters larger than 3 inches.
- (d) Unless otherwise specified by this article, a person must not, directly or indirectly, cut down, destroy, move, remove, or effectively destroy through damaging any protected tree situated on property regulated by this article without first obtaining a tree removal permit.

Tree removal permit

- (a) A permit application must be filed in writing with the BDS department before a protected tree may be removed and the following information must be provided:
- (1) Identify the owner of the property, the person doing the work, and addresses and telephone numbers of each.
 - (2) Identify and describe the work to be done by the permit.
 - (3) Identify the site by lot and section number and street address.
- (b) A tree removal permit shall not be required under the following circumstances:
- (1) The tree is dying, dead, or diseased to the point that restoration is not practical.
 - (2) Public safety. A tree removal permit shall not be required if a tree endangers the public health, welfare or safety, and immediate removal is required as determined in writing by an official of the city.
 - (3) Utility service disruption. A tree removal permit shall not be required if a tree has disrupted a public utility service due to a tornado, storm, flood or other act of God. Removal shall be limited to the portion of the tree reasonably necessary to establish or maintain reliable utility service.
 - (4) Landscape nurseries. All licensed plant or tree nurseries shall be exempt from the tree protection and replacement requirements and from the tree removal permit requirements only in relation to those trees planted and growing on the premises of said licensee which are so planted and growing for the sale or intended sale to the general public in the ordinary course of said licensee's business. This may also apply to a nursery established and so designated by a developer of a large project within the city, where trees are intended for landscaping future phases of such larger project.

Tree removal permit (*continued*)

- (c) In the event that a tree removal permit is granted, the applicant shall replace the protected trees being removed with A sufficient number of trees shall be planted to equal, in caliper, the diameter of the tree removed.
- (d) The first 9 inches of replacement trees shall be single-trunked, 3 inches diameter or larger trees when measured 4.5 feet from the ground. The balance of the replacement trees shall be a minimum of 1 inch diameter measured 4.5 feet from the ground. Container-grown trees are preferred to balled and burlap field-grown trees.
- (e) The total caliper required for replacement may be reduced by 1 inch for every 4 inches of existing trees on site. To be counted against the replacement total, existing trees must be a minimum of 3 inches caliper measured 4.5 feet from the ground.
- (f) Replacement trees do not count towards standard landscaping requirements. However, remaining trees may be counted both towards the replacement caliper total and towards the standard landscaping requirements.
- (g) Replacement trees shall be located on the subject site whenever possible. However, if this is not feasible, the Code Official has the authority to allow the planting to take place on another property.
- (h) Except when otherwise approved, replacement trees shall not be planted in the following locations:
 - (1) Where the mature canopy of the tree will interfere with overhead utility lines.
 - (2) Where the mature root zone of the tree will interfere with underground public utility lines.
 - (3) Within 10 feet of a fire hydrant.
 - (4) Within the public right-of-way.

Tree removal permit (*continued*)

- (i) A request for a tree removal permit must be submitted and approved prior to the removal of any protected tree in the city unless the tree is exempt under a provision of this article.
- (j) All requests for tree removal permits must be accompanied by a tree removal application and a graphic exhibit.
- (k) Upon receipt of the permit application, the Code Official may take one of the following actions:
 - (1) Deferral of decision. The Code Official may defer the approval of a tree removal permit to the City Building Commission for any reason. All decisions made by the City Building Commission shall be final.
 - (2) Approval. A tree removal permit may be issued if it is determined that:
 - (A) The tree constitutes a hazard to life or property which cannot be reasonably mitigated without removing the tree;
 - (B) The tree is dying, dead, or diseased to the point that restoration is not practical; or
 - (C) All reasonable efforts have been made to avoid removing the tree for the development and removal cannot be avoided.
 - (3) Refusal. A tree removal permit shall not be issued if it is determined that:
 - (A) Removal of the tree is not reasonably required in order to conduct anticipated activities; or
 - (B) A reasonable accommodation can be made to preserve the tree.
- (l) Any decision made by the Code Official may be appealed to the City Building Commission. All decisions made by the City Building Commission shall be final.

Tree removal permit (*continued*)

- (m) Tree removal permits issued in connection with a building permit, site development permit or subdivision improvement permit shall be valid for the period of the primary permit's validity. Permit(s) for tree removal not issued in connection with a building permit, site development permit or subdivision improvement permit shall become void 18 months after the issue date on the permit.

- (n) Protected trees not approved for removal shall be protected in accordance with the following tree protection notes and other applicable regulations of this article. These notes shall be included in each set of construction drawings for both residential and nonresidential construction.
 - (1) All trees not located within the limits of construction and outside of disturbed areas shall be preserved.
 - (2) All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
 - (3) Protective fences shall be erected according to City of Austin Standards for Tree Protection as adopted by the city.
 - (4) Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or grading), and shall be maintained throughout all phases of the construction project.
 - (5) Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil buildup within tree driplines.
 - (6) Protective fences shall surround the trees or group of trees and will be located at the outermost limit of branches (dripline), or, for natural areas, protective fences shall follow the limit of construction line, in order to prevent the following:
 - (A) Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
 - (B) Root zone disturbance due to grade changes;
 - (C) Wounds to exposed roots, trunk or limbs by mechanical equipment;
 - (D) Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.

Tree removal permit (*continued*)

- (7) Exceptions to installing fences at tree driplines may be permitted in the following cases:
 - (A) Where there is to be an approved grade change, impermeable paving surface tree well, or other such site development, erect the fence approximately 2 to 4 feet behind the area in question;
 - (B) Where permeable paving is to be installed within a tree's dripline, erect the fence at the outer limits of the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimize root damage);
 - (C) Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building.
- (8) Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 feet (or to the limits of lower branching) in addition to the reduced fencing provided.
- (9) Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
- (10) Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality topsoil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.
- (11) No landscape topsoil dressing greater than 4 inches shall be permitted within the dripline of trees. No soil is permitted on the root flare of any tree.
- (12) Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
- (13) All oak tree cuts, intentional or unintentional, shall be painted immediately (within 10 minutes). Tree paint must be kept on site at all times.
- (14) Deviations from the above notes may be considered ordinance violations if there is substantial noncompliance or if a tree sustains damage as a result.
- (15) All branches that hang over the fence shall be pruned to a minimum height of 13.5 feet or higher if required for equipment clearance.

2

Residential Fences

General standards

- (1) Fence structures, with the exception of retaining walls, may not encroach in any street fronting or golf course setbacks. Setbacks are measured from the property lines only.
- (2) A building permit is required for the following:
 - (A) Any new fence or screening structure construction.
 - (B) Any fence or screening structure repair that alters the location, design, or specifications of the existing fence or screening structure.
- (3) No fences of any type shall be placed on any lot which by reason of high walls, excessive height, etc., will unreasonably obscure the view from a dwelling located or reasonably likely to be located upon an abutting lot. (For this purpose, “abutting lot” includes a lot separated only by a street from an adjacent lot.)
- (4) Wood fences are prohibited on lots abutting a golf course where the wood fence would be visible from the golf course.
- (5) All fences shall be constructed so that all fence runs are finished on both sides of the fence. Stringers shall have pickets on both sides. Fence posts that are placed on the inside of a fence that encloses a yard do not have to be matched on the outside of the fence.



General standards *(continued)*

- (6) Masonry supporting structures shall be constructed of rock, brick or stucco and shall be a minimum of 14 inches by 14 inches and shall be at least as high as the approved fence height but will not exceed the approved fence height by more than 6 inches.
- (7) Masonry supporting structures shall be placed on steel reinforced concrete footings. Such footing shall be placed into virgin soil or a solid bearing and shall be at least 2 inches larger on all sides of the masonry structure and a minimum of 8 inches in depth.
- (8) All fences, including wood, wrought-iron, and ornamental fencing, shall be continuous flat-topped without spikes or sharp points.
- (9) Fences located over dedicated utility/drainage easements may have to be removed should access to such easements be required by any authorized utility company or be required to provide adequate drainage from areas of higher elevation. Replacement of fences shall be at the owner's expense.
- (9) No fence of any type, including invisible fences installed to prohibit animals from leaving private property, shall encroach into the street or golf course setbacks except for required safety railing and guardrails.
- (10) Lattice materials may be used for privacy screening (such as the screening of a hot tub, patio or porch) provided they extend no more than 12 feet in length, are no more than 8 feet in height. Lattice fences must use panels with a minimum thickness of 3/8 inches. Each lattice panel shall be framed.
- (11) Plans for masonry walls, or any portion thereof, 4 feet or greater in height shall be signed and sealed by a registered professional engineer or architect. Masonry walls are measured from the base of the footing to the top of the wall. Dry stack walls are measured from the grade under the lowest layer to the top of the wall.



General standards (*continued*)

- (12) All fences shall be maintained in good condition.

Swimming Pool Enclosures

- (1) Barrier design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools; refer to the adopted International Swimming Pool and Spa Code for specific requirements.

Yard fences

- (1) Yard fences are those which enclose a yard to provide security and/or to provide privacy.
- (2) Yard fences shall be constructed of wood, wrought iron, masonry or pre-cast concrete.
- (3) Yard fences up to 6 feet in height may be approved administratively. Yard fences up to 8 feet in height may be approved by the Code Official or authorized designee.
- (4) At least one end of a yard fence shall terminate at the residential unit with which it is associated.
- (5) Yard fences should be located on property lines whenever possible. Yard fences shall not encroach in the street side or golf course setbacks.

Exception: The Code Official or authorized designee may approve a waiver for encroachment of a yard fence into a setback when such fence is extended to connect with a subdivision perimeter fence (see nonresidential fencing for definition of subdivision fencing).

Yard fences (*continued*)

- (6) Yard fences constructed of wood shall have masonry supporting structures, or supporting structures of an architecturally superior design as approved by the Code Official, spaced at least every 12 feet along those portions of the fence facing the street or lake beginning with one column at the fence end on the side setback.

Exception: For duplexes constructed prior to 1995 and located within R-4, duplex zoned districts, masonry supporting structures shall be located:

- (i) Along fence runs facing a street at the point one property line meets another; and
- (ii) At the corners of those fences facing two streets.



Safety railings

- (1) Exterior wood, rock, or concrete walkways, driveways, retaining walls, pool aprons, or other accessible areas which exceed 30 inches but less than 6 feet above grade shall have safety railings or plants substantial in size and density to serve the same purpose. Continuing steps or walkways with slopes exceeding 15 % shall be provided with safety railing. Safety railing installed within the floodplain must be metal and may have to be removed during flooding situations. This type of safety railing is a rail or obstruction no more than 42 inches high with at least one horizontal member located approximately 36 inches above grade. Safety railing will not take the place of required handrails or guardrails.
- (2) Exterior wood, rock, or concrete walkways, driveways, retaining walls, pool aprons, or other accessible areas which exceed 6 feet above grade shall have safety railings which meet the requirements of a guardrail. This type of safety railing shall be a minimum of 36 inches in height, with vertical pickets spaced less than 4 inches, and meet all other code requirements.

Safety railings *(continued)*

- (3) Stormwater detention and water quality ponds holding a water level of 23 inches or more shall be protected with a fence for public safety. This fence shall be a minimum of 48 inches in height with vertical pickets spaced less than 4 inches apart and shall be constructed of solid wood, masonry, stone or wrought iron. All fences shall have at least one gate for maintenance access and shall be equipped to accommodate a locking device that will remain locked at all times.

Guard rails

- (1) Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guardrails not less than 36 inches in height.
- (2) Required guardrails shall be constructed of wrought iron, wood (finished and identical on both sides), steel, or a pre-cast concrete railing system. Materials not approved for guardrails include welded fabric, hog or chicken wire, or similar products. Guardrails shall be constructed in accordance with current code requirements.
- (3) Guardrails do not meet the requirement for pool enclosures; refer to the adopted International Swimming Pool and Spa Code for specific requirements.

Equipment screening

Air-conditioning compressors, heat pumps, fuel storage tanks, freestanding electrical equipment, rain collection barrels and equipment, and other similar equipment shall be screened from view and shall not be located within any building setback area or public utility easement.

3

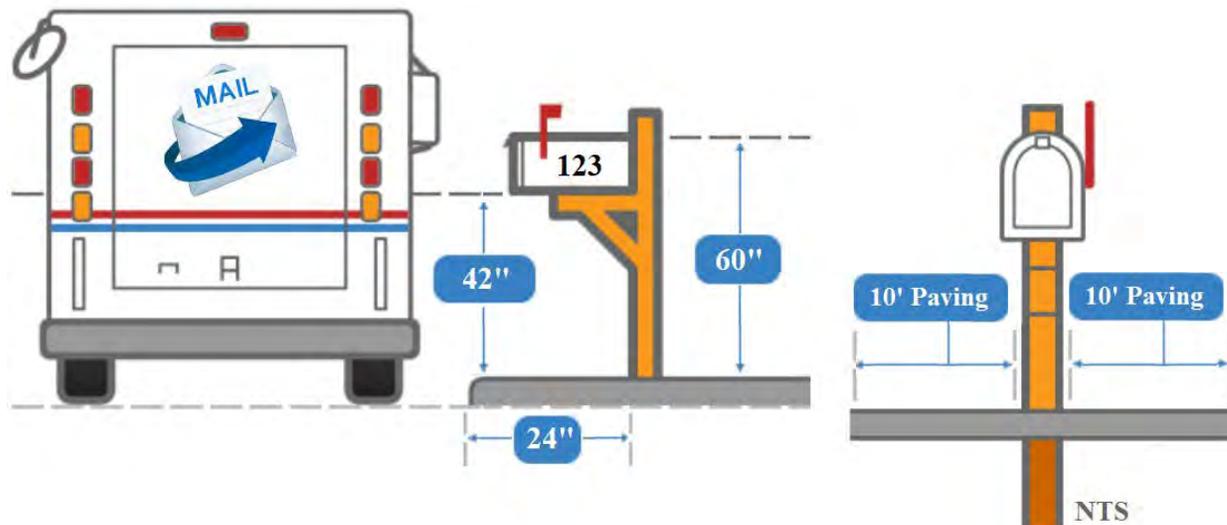
Mailboxes

General requirements

Each improved lot in an area without a centralized cluster-type mailbox collection system must have no more than one mailbox structure located in the street right-of-way. Masonry mailboxes, while popular, are not required by the city. No other structures, including planters or flower boxes, may be attached to the mailboxes.

Location

All mailbox structures must be located a minimum of 2 feet off the hard surface of the street. The area in front of each mailbox must be paved 10 feet on each side of the box but will not encroach in front of the adjoining properties. This will provide easy access for the mail carrier (up to the property line) and will preclude damage to grass or other ground coverings. The bottom of the mailbox shall be located 42 inches above the street or road surface.



Mailboxes *(continued)*

Masonry Structure Details

Mailbox supporting structures made of masonry or stucco materials shall not be larger than 2 feet by 2 feet in cross section, including all bands, rowlocks and trim, nor taller than 5 feet above street pavement.

Address number

- (1) Each mailbox is required to have the address number clearly posted on both sides of the box/structure or on the front if at the end of a cul-de-sac. Address numbers shall not be less than 3 inches in height and shall be in colors that contrast with the color of the mailbox and supporting structure to ensure their visibility. Mailbox lighting is not permitted except for small lights encased in the structure which downlight the numbers.
- (2) Existing mailboxes without identifying addresses shall install identification as required above.

Liability

City approval of any such mailbox structure shall be based solely upon a determination that such structure conforms to the criteria set forth herein, and shall not constitute a representation to any person, by implication or otherwise, that such structure poses no risk of injury to third persons. The city assumes no responsibility or liability for damage to the structure or for damage to property or injury to person.

4

Gazebos, Playhouses, Playscapes

Definitions and Use

- (1) **Gazebo.** A freestanding, roofed, open-sided, accessory structure placed on a lot for the purpose of providing personal leisure space for the residents of the property. A gazebo will not be used for storage or as a greenhouse. The interior of a gazebo will contain only chairs, tables, hot tubs, etc., or the like. A permit must be obtained prior to erecting a gazebo.
- (2) **Playhouse.** A small, detached structure erected solely for use by children. A playhouse may not be used as a storage shed, greenhouse, workshop or any other use except as defined above. A permit must be obtained prior to erecting a playhouse.
- (3) **Playscape.** A recreational framework structure (not enclosed) erected for use by children, including trampolines.

Location

- (1) **Gazebos.** On the same lot as the main or primary building. May not be located within any building setback, public utility easement or drainage easement and must be located at least 10 feet from any property line.
- (2) **Playhouses.** On the same lot as the main or primary building. May not be located within any building setback, public utility easement or drainage easement, must be located at least 10 feet from any property line, and may not be located on the street side of the main building.
- (3) **Playscapes and Trampolines.** On the same lot as the main or primary building. May not be located within any building setback, public utility easement or drainage easement, must be located at least 10 feet from any property line, and may not be located on the street side of the main building.

Maximum Height

No portion of a gazebo, playhouse or playscape may extend more than 12 feet above the natural grade under the structure.

Gazebos, Playhouses and Playscapes *(continued)*

Maintenance Requirements

All gazebo structures, playhouses and playscapes will be well maintained and will not be allowed to deteriorate into a run-down condition.

Application requirements

A permit is not required for a playscape. Permits are required for gazebo and playhouse structures.

- (1) **Gazebos.** Applicants shall submit the following information as part of the permit application:
 - (A) A photograph, picture, or design of the gazebo, including all dimensions;
 - (B) Site plan showing exact location on the lot;
 - (C) Specifications on materials, electric, plumbing, etc.;
 - (D) Any accessory walkways or sidewalks and the details of their construction.

- (2) **Playhouses.** Applicants shall submit the following information as part of the permit application:
 - (A) A photograph, picture, or design of the playhouse, including all dimensions;
 - (B) Site plan showing exact location on the lot;
 - (C) Specifications on materials, door and window sizes and locations, interior built-ins;
 - (D) Any accessory walkways or sidewalks and the details of their construction.

5

Driveways and Parking

Generally

This section regulates the construction of temporary or permanent driveways, parking areas and parking aprons affording access by vehicles to properties abutting any public or private street in the city.

The following driveway entrance standards are required for construction of residential driveways in the city. Approval must be obtained for driveway entrance installation. Application is made and approval is obtained through the BDS office. Additional approvals may be required from the county or the state department of transportation. Plans shall show planting areas and the number, size, type, location, and spacing of vegetative materials.

Location

No driveway shall be constructed within 150 feet of the right-of-way of a signalized intersection or within 20 feet of any other intersection. A minimum tangent length of 10 feet must be provided between a driveway curb radius and a curb inlet radius.

Width and radii

Minimum driveway pavement width for single-family residences shall be 12 feet with a maximum of 30 feet and with 15 feet most desirable. The distance from the face of the garage door to the property line shall not be less than 30 feet to provide adequate garage access.

Driveway pavement radii shall be a minimum of 5 feet into streets for residential properties.

Common drives

- (1) Common driveways are encouraged and may be required provided a permanent access easement has been granted to each property owner to use the portion of driveway on the other lot.
- (2) Common driveways shall be a minimum of 24 feet wide with a maximum of 30 feet.
- (3) Common drives serving three or more residences shall provide a turnaround for fire apparatus acceptable to the fire chief.

Turnaround areas

All driveways shall be designed and constructed with a turnaround or back-around area. This area shall be a minimum of 12 feet x 12 feet and be located so that persons backing a vehicle out from the garage/carport can back into the area. This is a safety requirement to preclude drivers from backing onto streets.

Construction standards

Elevated residential driveways (2 feet or more) shall be veneered with rock, brick or stucco to maintain architectural consistency with the house.

Number of driveways

Only 1 driveway is permitted per residence. Circular driveways with 2 points of access must have the approval of the Code Official.

Grades

In the construction of an access driveway or parking apron, an allowance shall be made for a street shoulder width of at least 4 feet as a continuation of the street crown contour. For up-slope driveways where this is not practical, drainage grates will be installed across the width of the driveway and/or parking apron, preferably over the centerline of the culvert, of sufficient size to collect and drain water runoff into the drainage ditch along such properties. Driveways located 8 inches or more above grade must have curbs. Driveways located 30 inches or more above grade shall have safety railing. Driveways will be designed with the lowest grade possible, necessitating, in some cases, switchback-type designs. The maximum driveway grade for the portion of driveways constructed on public rights-of-way shall be 10% measured from the edge of the shoulder. Maximum grade shall not exceed 15% from the property line to the garage.

Sight distance problems

If sight distance problems are anticipated at the location of the proposed driveways, only one driveway will be permitted at a site, to be determined by the City Engineer, the Code Official or authorized designee, that provides the safest access to the public right-of-way. Where alternate access is possible, access at hazardous locations may be prohibited.

Standards for driveways off uncurbed streets

- (1) Storm drainage standards. Driveway installations requiring conveyance for storm drainage along roadside ditches shall be designed so as to provide adequate passage of the 100-year local storm. Drainage ditches shall be kept clean and in proper functioning order by the property owner.
- (2) Curbs and headers. Where culverts are used, pavement or rip-rap around culvert openings is required. Curbs shall be installed above culverts at the sides of driveways.
- (3) Culvert pipe length. The length of culvert pipe, where used, shall be sufficient to allow for driveway base width. The minimum pipe diameter allowed is 18 inches or design 2 pipe.

Standards for driveways off uncurbed streets (*continued*)

- (4) Dip-type driveway installations. Properly designed and installed dip-type driveway installations function better to pass roadside drainage without scour damage to driveway or road shoulders or surface and are preferred where terrain will allow economical installation. Installation of dip-type driveways will be inspected by the City Engineer or the city building inspector for conformance with standard designs as applicable.
- (5) Culvert pipe driveway installations. Installation of culvert pipe driveway entrances to property adjacent to accepted city roads shall be under the supervision of the City Engineer, the Code Official, or the city building inspector. The property owner, builder or subdivision developer shall install the driveway as directed by the City Engineer, Code Official, or building inspector. The ends of all culverts shall have a concrete and/or masonry headwall. Height of the culvert headwall shall not be less than 4 inches or more than 8 inches above the top of the driveway. The street end of the culvert headwall or curb shall be at least 4 feet from the edge of the street pavement. For those commercial or multifamily properties abutting a state highway, culverts will have a design #2 pipe with 6:1 sloped end sections. Property owners are responsible for keeping culverts and drainage ditches clear and properly functioning.
- (6) Variances from drainage design standards. In subdivisions with roads constructed prior to January 1, 1980, where it is apparent that the existing roadside drainage system is inadequate to convey the required storm runoff and it is also apparent that normal roadside ditch maintenance will not allow improvement of the drainage system to convey the required storm runoff, the City Engineer may reduce the design requirements for pipe culverts or driveway dips to meet the available conveyance capacity.

Permitting requirements

- (1) Applications for a driveway, parking area or parking apron permit shall include detailed plans and specifications covering the work proposed and shall show all property lines and street lines. For new construction, such information may be included on plans and specifications presented with the application for a building permit.

Permitting requirements *(continued)*

- (2) No existing pavement in a street shall be cut or overlaid by an abutting access driveway or parking apron. Also, driveways and other structures will not encroach upon the right-of-way in front of adjoining properties.
- (3) A stabilized driveway, including proper size culvert and road base, is required when vehicular access to the property is needed during construction.

Damage to street

Damage to any street resulting from the construction of a parking apron or access driveway shall be repaired by the contractor to at least the same condition as it was before the construction was performed. A certificate of occupancy will not be issued until such repairs are completed to the satisfaction of the City.

Off-street parking requirements

Single-family residential. Two covered spaces and two uncovered spaces per each dwelling unit.

Structures in city right-of-way

No person, firm or corporation shall construct, erect or maintain any post, pillar, wall, fence or reflector or deposit any rocks, trash, dirt spoil, cuttings, or other material on the right-of-way of any street in the city.

Division 2

Site Development



6

Traffic Impact Analysis

Requirements

Before any application for zoning, subdivision, subdivision improvements or site development is accepted for review by the city, the applicant must submit data on the project. This data must include a completed Traffic Impact Analysis (TIA) Determination Worksheet which will be used to determine if a TIA is required. If a TIA is required, the TIA must include a detailed description of the area street network, a description of proposed land uses, the anticipated stages of construction, the anticipated completion date of the various phases of land development, and the trigger points requiring implementation of all described improvements. In addition, the TIA must conform to accepted industry standards and include the following:

- (1) Trip generation rates for both the a.m. and p.m. peak periods using the Institute of Transportation Engineers, Trip Generation Manual for all of the land uses specified in the preliminary plan;
- (2) Trip distribution;
- (3) Adequacy determination for existing and proposed street cross sections by phase of development;
- (4) Intersection level of service analysis for each phase of development driveway sizes, locations, and adequacy;
- (5) Identification of and timing for transportation improvements, if any, needed to maintain the same or higher level of service than exists prior to development during each phase of land development.

The TIA shall establish the baseline traffic conditions and peak hour operations prior to development of the subdivision or site. This baseline shall establish the existing level of service that is to be maintained or bettered as the owners develop the subdivision or site over time. The TIA shall address streets and street intersections, and driveways on commercial sites.

Requirements *(continued)*

The TIA shall identify needed improvements and determine the costs of those improvements. The costs shall include right-of-way acquisition, utility relocation, design and construction. Using **peak hour trips** (PHT's), the TIA shall determine the landowners' pro rata participation in the cost of needed improvements. Pro rata participation shall be based on the percentages of site traffic (PHT's) versus the total traffic, using a given improvement. Cost per PHT shall be determined by dividing the total pro rata costs of all improvements by the number of total PHT's generated by the subdivision development. All opinions of construction costs shall be approved by city staff prior to acceptance of the TIA.

The TIA shall identify at what point in time specific improvements are required to maintain an acceptable traffic level of service within the city. The TIA shall specify trigger points, using PHT's and level of service analysis, to determine when specific improvements would need to be constructed.

The TIA shall be accompanied by a letter from the county and/or the Texas Department of Transportation (TxDOT) which outlines any agreements between the developer and the county and/or TxDOT for planned improvements to county and/or state roads abutting subdivisions or sites and the trigger for such improvements.

The TIA shall be certified by a registered engineer with a specialty in the field of transportation engineering.

Upon completion of the TIA, the applicant shall submit a digital copy, one bound copy and a physical CD or thumb drive of the report in pdf format to the Code Official for review. In addition, a copy shall be sent to the county and the Texas Department of Transportation whenever roadways under their jurisdiction may be affected, i.e., driveways, intersections, roadway geometric recommendations, etc.

The TIA shall be reviewed by the city staff and review comments shall be provided to the applicant for their response. Response by the applicant shall be in the form of a letter, technical memorandum, or other appropriate document.

Requirements *(continued)*

The applicant shall submit final copies of the TIA to city staff containing all modifications, as well as a cost estimate for recommended improvements and pro rata participation, prior to final approval of the application for which the TIA was conducted.

The city shall determine when a letter of credit shall be posted or cash deposit made based on the following considerations:

- (1) The trigger points identified in the TIA;
- (2) The proposed phasing of the development and the number of PHT's generated by each phase; and
- (3) The need for improvements to be constructed prior to the generation of additional traffic.

The developer, in lieu of posting a letter of credit or making a cash deposit, may determine to fund and/or construct certain street and intersection improvements identified in the TIA, if acceptable to the city. If the landowners determine to either fund in advance or fund more than their pro rata share, the city shall credit the developer's future PHT fiscal posting. For those contributions and improvements beyond the developer's pro rata participation, the city may either credit the developer's future PHT fiscal posting or reimburse the developer out of city funds or funds allocated from other area landowners' PHT contributions for those specific improvements.

The application for which a TIA is being conducted shall not be approved until the city has received all required payments or is otherwise satisfied with the financial arrangements related to required roadway improvements.

During the course of providing for improvements, the city shall cooperate with the developer in the use of its governmental powers to assist in the timely and cost-effective implementation of improvements. Assistance shall not mean financial aid in actual easement acquisition, construction or engineering costs. Specifically, the city agrees to:

- (1) Assist in the acquisition of necessary right-of-way and easements;
- (2) Assist in the relocation of utilities;
- (3) Assist in obtaining approvals from the county;

Requirements *(continued)*

- (4) Assist in obtaining approvals from the TxDOT;
- (5) Assist in securing financial participation for major street improvements from the county, TxDOT or the Capital Area Metropolitan Planning Organization (CAMPO). The TIA shall identify needed improvements.

It is recognized that the scope of the developer's preliminary plans may change from time to time. The monitoring reports may also demonstrate changes in the area street conditions and travel patterns within and around the city. Periodic updates to the TIA may be submitted by the developer to address these issues and identify changes to the level of service at study intersections and streets. These updates shall address modifications to the magnitude and timing of improvements recommended by the original TIA. Any TIA amendments must be acceptable to the city. Any proposed revision to an approved preliminary plan shall require an update to the TIA.

7

Streets

Street layout

- (1) The subdivider shall provide adequate streets for the proposed subdivision. The arrangement, character, extent, width, grade, and location of each street shall be considered in its relation to existing and planned streets, topographical conditions and public safety and convenience. Each street shall also be considered in its appropriate relationship to the proposed uses of land to be served by such street.
- (2) The subdivider shall provide additional subdivision access to and from public streets as deemed necessary by the city for reasons of public health and safety.

Relation to adjoining street system

- (1) The city shall require the developer to dedicate additional right-of-way as determined by the city and the county and to construct or improve that portion of existing streets, including all underground utilities, bordering, abutting, or within a proposed subdivision.
- (2) Where necessary to the neighborhood pattern, existing streets in adjoining areas shall be continued and shall be constructed in accordance with the dimensional requirements and construction standards of this chapter.
- (3) The city may require the developer to construct or improve portions of existing streets which do not border or abut a proposed subdivision but are clearly affected by it based on the findings of an applicable traffic impact analysis.

Projection of streets

- (1) Where adjoining areas are not subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such unsubdivided areas.

Projection of streets (*continued*)

- (2) Where adjoining areas are subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such previously subdivided areas.

Street intersections

Street intersections shall be as nearly at right angles as practicable, giving due regard to terrain and topography. A minimum 10 foot by 10 foot visibility easement triangle shall be provided at the intersection of all street rights-of-way.

Cul-de-sacs

- (1) Dead-end streets shall be provided with a cul-de-sac or other city and fire department approved configuration, such as a hammerhead. Streets that are stubbed out for a future extension shall provide a temporary turnaround as approved by the city.
- (2) In general, cul-de-sacs are preferred, shall not exceed 1,200 feet in length, and shall have a circular turnaround based on the following standards:
 - (A) For single-family areas, a paved turnaround of at least 100 feet in diameter and a right-of-way of 130 feet diameter.
 - (B) For nonresidential and multifamily areas, a paved turnaround of at least 120 feet in diameter and a right-of-way of 150 feet in diameter.
- (3) If a cul-de-sac of greater than 1,200 feet is approved to be constructed in a single-family area due to environmental and topographical constraints, the cul-de-sac shall be classified and constructed as a residential collector and shall have a paved circular turnaround of at least 120 feet in diameter and a right-of-way of 150 feet in diameter. No cul-de-sac shall exceed 3,000 feet.

Eyebrows

- (1) “Eyebrow” corners may only be allowed on a looped local residential street.
- (2) The minimum centerline radius for the eyebrow shall be 72 feet.
- (3) From the point of intersection of the centerlines of the street sections leading into the turn, the radius to the right-of-way shall be 55 feet and the radius to the edge of pavement shall be 35 feet.
- (4) The return radius of the eyebrow shall be 55 feet.
- (5) The interior angle of the eyebrow shall be between 80 and 100 degrees.

Private streets

- (1) All private streets shall conform to the same standards as set out herein for public streets. Private streets shall not be included to meet minimum lot sizes.
- (2) All private streets shall also be considered as drainage and public utility easements. Public access easements may be required by the city.
- (3) Speed limits for private streets shall be set according to the American Association of State Highway and Transportation Officials (AASHTO) standards.
- (4) Gated communities are not permitted.

Public streets

- (1) Guidelines for geometric design shall follow the current American Association of State Highway and Transportation Officials (AASHTO) “Geometric Design of Highways and Streets” unless otherwise specified by the City Engineer.
- (2) Reinforced concrete curb and gutter is required on all newly constructed streets along lines and grades approved by the city.
- (3) Unless otherwise specified by the city or the emergency services district, the maximum allowable grade for a local street shall be 15% and the maximum allowable grade for collector streets shall be 10%.
- (4) The city reserves the right to require additional right-of-way, pavement width, median width, turn lanes and/or sidewalks beyond those listed within this chapter. Streets shall be classified and have pavement widths and rights-of-way as follows:
 - (A) State highway. For the purposes of the city, a state highway shall be defined as those highways that have been and may in the future be so designated by the Texas Department of Transportation. This classification of street carries most of the trips entering and leaving the urban area, as well as most of the through movements bypassing the city.
 - (i) The minimum right-of-way and paving section shall meet the requirements of the Texas Department of Transportation, unless otherwise specified by the city.
 - (B) Regional arterial. For the purposes of the city, a regional arterial shall be defined as those high volume streets providing a link to different local urban areas. This classification of street is typically owned and maintained by the Texas Department of Transportation.
 - (i) The minimum right-of-way and paving section shall meet the requirements of the Texas Department of Transportation, unless otherwise specified by the city.

Public streets (*continued*)

- (C) Collector. A collector shall be defined as a street that provides primary access between local streets, other collectors and/or commercial developments. On-street parking is not permitted. Single-family residential driveway connections are not permitted.
 - (i) Collector, 2-Lane Undivided (C2U). A minimum right-of-way width of 60 feet with two lanes of pavement totaling a minimum width of 30 feet face-to-face of a standard 6 inch curb and 1.5 foot gutter.
 - (ii) Collector, 2-Lane Divided (C2D). A minimum right-of-way width of 80 feet with two lanes of pavement and a minimum 16 foot median (one lane on each side of the median). Each side shall have a minimum pavement width of 15 feet face-to-face of a standard 6 inch curb and 1.5 foot gutter.
 - (iii) Collector, 4-Lane Divided (C4D). A minimum right-of-way width of 100 feet with four lanes of pavement and a minimum 16 foot median (two lanes on each side of the median). Each side shall have a minimum pavement width of 24 feet face-to-face of a standard 6 inch curb and 1.5 foot gutter.
- (D) Local. A local street shall be defined as a low-volume, low-speed street that provides residential access to a collector without being continuous through several districts. It requires a minimum right-of-way width of 50 feet with two lanes of pavement totaling a minimum width of 27 feet face-to-face of a standard 6 inch curb and 1.5 foot gutter.

Street names

- (1) Names of new streets must be acceptable to the city and shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of or in alignment with existing streets, in which case names of existing streets shall be used.

Street names *(continued)*

- (2) All proposed street names shall be approved by Austin 911 Addressing prior to city approval.
- (3) Streets in the city shall not be named after individuals.

Street signs

Street signs, traffic-control signs, and pavement markings shall be furnished and installed at the subdivider's expense within and/or abutting the subdivision. Such signs shall be of a type approved by the city and shall be installed in accordance with the standards of the city and the current Manual on Uniform Traffic Control Devices (MUTCD).

Local street construction standards

All dedicated streets within a new subdivision shall consist of a base with an asphalt surface or reinforced concrete pavement. Streets shall be constructed in accordance with the City of Austin's standard specifications and details unless otherwise specified by this chapter or by the City Engineer.

- (1) Alternative surfaces. Alternative street pavement strips at intersections (crosswalks) and selected utility facility locations may be submitted for consideration to the city. Alternative pavement strips may consist of hand-laid paving blocks specifically designed for moderate- to high-speed traffic loadings and shall be segregated from adjoining pavement surfaces through the installation of a reinforced concrete ribbon.

Collector street construction standards

Design standards for collector streets shall be in accordance with the minimum requirements as shown in a pavement design and geotechnical report, based on borings taken along the streets and approved by the city. The geotechnical report shall be prepared by a licensed professional engineer registered in the state utilizing the street classifications in this chapter.

Sidewalks

- (1) Sidewalks 6 feet wide shall be installed along both sides of all collectors.
- (2) In order to facilitate pedestrian access from the streets to schools, parks, playgrounds, open space corridors or other nearby streets, the city may require that sidewalks a minimum of 4 feet wide be installed along one or both sides of all local streets.
- (3) Sidewalks shall not immediately abut streets and shall be separated from the street surfaces by a minimum of 4 feet unless otherwise approved by the City Engineer.

Recreational lanes

Recreational lanes may be required for particular subdivisions. The addition of recreational lanes to a subdivision may increase the amount of right-of-way required on certain streets in order to accommodate the lanes.

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Driveways in Right-of-Way

Approval required

Approval must be obtained for all driveway entrance installations. Application is made and approval is obtained through the building and development services department.

Grades

- (1) Driveways shall be designed with the lowest grade possible, necessitating, in some cases, switchback-type designs.
- (2) In the construction of an access driveway or parking apron, an allowance shall be made for a street shoulder width of at least 4 feet as a continuation of the street crown contour. For up-slope driveways where this is not practical, drainage grates shall be installed across the width of the driveway and/or parking apron, preferably over the centerline of the culvert. These grates must be of sufficient size to collect and drain water runoff into the drainage ditch along such properties.
- (3) The maximum driveway grade for the portion of driveways constructed on public rights-of-way shall not exceed 10%.

Sight distance considerations

A minimum 10 foot by 10 foot visibility easement shall be provided at the driveway intersection of all street rights-of-way (measured from the right-of-way to the edge of driveway). If sight distance problems are anticipated at the location of the proposed driveways, only one driveway shall be permitted at a site to be determined by the City Engineer, the City Building Commission or the Code Official that provides the safest access to the public right-of-way. Where alternate access is possible, access at hazardous locations may be prohibited.

Construction standards

The portion of driveways within the public right-of-way shall be constructed using reinforced Portland concrete pavement a minimum of 6 inches thick, containing a minimum of 5 sacks of cement per cubic yard and shall attain a maximum comprehensive strength of 3,500 pounds per square inch in 28 days.

Standards for driveways off uncurbed streets

- (1) Storm drainage standards. Driveway installations requiring conveyance for storm drainage along roadside ditches shall be designed so as to provide adequate passage of the 100-year storm. Drainage ditches and culvert pipes shall be kept clean and in proper working order by the property owner.
- (2) Culvert pipes. Culverts within public right-of-way shall be a minimum of 18 inches in diameter and be made of reinforced concrete. Sloped-end treatments or headwalls are required at each end of the culvert. The back of the sloped-end treatment or headwall shall be a minimum of 5 feet from the edge of the driveway.
- (3) Dip-type driveway installations. Dip-type driveways may be permitted by the City Engineer provided that they are properly designed and installed to bypass the 100-year storm without encroaching into adjacent paved surfaces or negatively impacting upstream or downstream properties.

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Utilities

Generally

- (1) All subdivisions and new development shall be provided with underground utility services.
- (2) Where possible, all utility lines that pass under a street shall be installed before the street is paved. When it is necessary that utility lines pass under the street pavement, they shall be installed underground to a point at least 2 feet from the edge of the right-of-way.
- (3) The city shall require the developer to construct or improve the utility service lines bordering, abutting, or within a proposed development including related off-site improvements, if such service is to be used for the subdivision or site development.
- (4) All proposed utility work shall have the approval of the city prior to any work beginning. A site development permit, subdivision improvement permit, utility development permit or utility maintenance permit shall be required.
 - (A) All utility crossings of streets shall be bored. No pavement cuts shall be permitted in city streets, unless special permission has been granted by the Code Official due to special circumstances.
 - (B) Utility lines crossing driveways (residential or commercial) shall be bored unless otherwise approved by the property owner and by the city.

Water main installations

Water mains shall be installed in accordance with the current ordinances and regulations adopted by the applicable water service provider, the applicable emergency services district, and the city.

Wastewater facilities

- (1) All subdivisions shall be provided with a city-approved sewage disposal system.
- (2) Provisions for perpetual maintenance of such systems shall be required.
- (3) Private sewage facilities.
 - (A) Where private sewage facilities are to be installed, the developer shall conform to the standards of either the Lower Colorado River Authority or the county health department.
 - (B) Residential developments utilizing on-site wastewater disposal systems shall have at least 1 acre per unit.
- (4) Organized sewage disposal systems. Where an organized sewage disposal system is to be installed, the plans for such system must be approved by the City Engineer and the service provider, and as required by the Texas Department of State Health Services and/or the Texas Commission on Environmental Quality, as applicable, prior to acceptance of the plat by the city. Said organized sewage disposal system shall meet current TCEQ criteria.

Dry utility lines

- (1) No additional power poles or overhead wiring shall be allowed within the city limits or ETJ without specific approval of the Code Official.
- (2) The installation of new underground dry utility lines shall include the addition of 2 two-inch conduits for future use.

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Public Utility Easements

- (1) Notwithstanding or affecting previously dedicated easements, new public utility easements (P.U.E.) shall be dedicated on all new or amended lots parallel to all property lines, as follows:
 - (a) Property lines abutting street rights-of-way: 10 feet.
 - (b) Residential interior property lines: 5 feet.
 - (c) Nonresidential or multifamily interior property lines: 10 feet.
- (2) Detention and water quality facilities are not permitted in public utility easements.
- (3) Parking lots are allowed in public utility easements.
- (4) Signs complying with the city's sign ordinance are allowed in public utility easements as long as all utility lines have been located in the easement and the location of the sign will not interfere with the maintenance of any of these lines. Signs in the public utility easement may have to be removed at the owner's expense if necessary for utility maintenance.
- (5) Public utility easements along interior residential lot lines of platted lots shall also be considered as drainage easements.

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Slope Maps

- (1) All site development and subdivision improvement plans shall include a slope map depicting slopes of 0–15%, 15–25%, 25–35%, and over 35%. Slopes may be calculated based on contour intervals not to exceed 2 feet.
- (2) Information from the slope map shall be used to calculate the net site area according to section 28.10.010 of this chapter. The net site area can then be used to determine the percentage of impervious cover of proposed improvements.

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Retaining Walls

- (1) Slopes 2:1 and greater must be structurally stabilized by means approved by the city.
- (2) Retaining walls over 4 feet in height shall be detailed in the site development plan and subdivision improvement plan set. Deferred submittals for retaining walls over 4 feet are not allowed.
- (3) Exposed concrete of retaining walls facing adjacent roadways and neighboring properties shall be veneered with rock, brick or other material acceptable to the city.
- (4) Terraced or stair-stepped retaining walls shall have a minimum horizontal separation of 10 feet between walls.
- (5) Retaining walls at a slope of 1:1 or steeper shall provide safety railing as detailed in this manual.
- (6) Retaining walls shall not exceed 1 foot above the material being retained.

Division

3

Nonresidential/Multifamily Development



13

Nonresidential/Multifamily Driveways

Location

- (1) No driveway shall be constructed within 150 feet of the right-of-way of a signalized intersection. A minimum tangent length of 10 feet must be provided between a driveway curb radius and a curb inlet radius.
- (2) A minimum spacing between driveways of 140 feet is required. A minimum spacing of 200 feet is required on RR 620 unless approved otherwise by the Texas Department of Transportation (TxDOT).
- (3) A minimum of 70 feet from driveway edge to side of property measured at the front line is required unless a joint use drive will be utilized through a joint use access easement.
- (4) Nonresidential and multifamily driveways are not permitted to access local residential streets.
- (5) All proposed driveways directly accessing RR 620 shall be reviewed by TxDOT and must have a TxDOT permit before plan approval. All proposed driveways directly accessing a county road shall be reviewed by the county and must have a county permit before receiving plan approval.
- (6) The city may require a lot to provide two points of access.

Width

- (1) Two-way driveway pavement width within the public right-of-way shall be a minimum of 30 feet and a maximum of 45 feet.
- (2) One-way driveway pavement width within the public right-of-way shall be a minimum of 20 feet.

Curb return radii

- (1) Curb return radii for all driveways shall be a minimum of 25 feet.
- (2) Curb return radii for all driveways onto RR 620, SH 71, Highlands Boulevard, or Lohman's Crossing Road shall be a minimum of 30 feet.

Throat lengths

- (1) Throat lengths for all driveways shall be a minimum of 20 feet measured from the right-of-way/property line.
- (2) Throat lengths for all driveways onto RR 620, SH 71, Highlands Boulevard, or Lohman's Crossing Road shall be a minimum of 50 feet measured from the right-of-way/property line.

Common drives

- (1) Common or joint use driveways are encouraged and may be required by the city. A permanent access easement shall be granted to each property owner to use the portion of the driveway on the other lot.
- (2) For those properties with less than 200 feet of adjacent right-of-way to RR 620, a common driveway shall be constructed along the common property lines of two lots.

Number of driveways

For driveway access to any public or private road or street, a maximum of two driveways shall be permitted.

Alignment

Driveways shall either line up with or be offset from opposing driveways 80 feet from driveway edge to driveway edge. Driveways accessing a street with a median or continuous center turning lane have no off-set requirements.

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Nonresidential/Multifamily Drive Aisles

Grades

Maximum grade shall not exceed 15% inside the property line.

Construction standards

- (1) Nonresidential drive aisles inside the property line shall be constructed of a compacted flexible base with either a hot-mix asphalt or reinforced concrete surface. Alternative decorative pavement may be submitted to the city for consideration. Alternative decorative pavement may consist of stamped and/or stained concrete or hand-laid paving blocks specifically designed for moderate- to high-speed traffic loadings and shall be segregated from adjoining pavement surfaces through the installation of a reinforced concrete ribbon.
- (2) Condominium and multifamily drive aisles shall be reinforced Portland concrete, unless otherwise approved by the zoning and planning commission. Alternative decorative surfaces, as described above, may be permitted by the Code Official.

Width

- (1) Two-way driveway pavement width inside the property line shall be a minimum of 26 feet.
- (2) One-way driveway pavement width shall be a minimum of 15 feet unless the drive is designated as a fire access lane requiring a greater width as determined by the appropriate emergency services district.

Connecting drive aisles

Connecting drive aisles between adjacent properties are encouraged and in some cases may be required by the city as a condition of approval.

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Nonresidential/Multifamily Parking

Refer to Chapter 28 in the Lakeway Code of Ordinances for parking requirements pertaining to general requirements, construction standards, off-street parking requirements.

Accessible spaces/Texas Accessibility Standards (TAS)

- (1) Unless otherwise required by TAS, accessible spaces shall be a minimum of 9 feet wide by 18.5 feet in depth.
- (2) An accessible space shall have a 5 foot walkway beside it, unless it is designated as a van accessible space, in which case it shall have an 8 foot walkway beside it.
- (3) Accessible spaces do not count towards parking total requirements based on use as specified in this chapter.
- (4) The number of required accessible spaces shall be determined by the following table.

Total Parking Spaces in Lot	Min. Number of Accessible Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4

Number of accessible spaces Table *(continued)*

Total Parking Spaces in Lot	Min. Number of Accessible Spaces
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	Two percent of total
1,001 and over	20 plus one for each 100 over 1,000

- (5) One in every eight accessible spaces shall be designated as a van accessible space. Each parking area shall have at least one van accessible space.
- (6) All other applicable TAS requirements shall be met.

Off-street loading spaces

- (1) Every building, use or structure instituted, erected, enlarged, altered or renovated after the effective date of this chapter shall be provided with off-street loading spaces in accordance with the provisions of this section for the purposes of loading and unloading of materials, goods or merchandise and for delivery and shipping in order that vehicles for these services may use this space without encroaching on or interfering with the public use of streets, driveways, drive aisles, stacking lanes or sidewalks.

Off street loading spaces (*continued*)

- (2) Such off-street loading spaces shall be an area at grade level and on the same lot or parcel of land as the building, use or structure that requires them and shall not be less than 12 feet wide, 35 feet long, and 15 feet high. If off-street loading spaces are in a parallel alignment, additional length may be required by the Code Official and/or City Engineer to ensure accessibility.
- (3) Off-street loading spaces shall not be used to meet the requirements of off-street parking facilities nor shall the off-street parking facilities be used to meet the requirements of the off-street loading facilities.
- (4) For each nonresidential use, the number of loading spaces required shall be determined by the following table:

Gross Floor Area (ft ²)	Min. Number of Loading Spaces
5,001 to 25,000	1
25,001 to 50,000	2
50,001 to 100,000	3
More than 100,000	3 plus 1 per each additional 100,000 ft ²

Compact spaces

- (1) Compact spaces shall be a minimum of 8 feet wide by 18.5 feet in depth.
- (2) Compact parking spaces are allowed only after the minimum standard parking requirements are met.

Parking lot layout

- (1) Off-street parking dimensions shall be as follows:

Type of Parking	Angle of Parking	Width	Depth	Maneuvering Aisle
Standard	45	9'	20'	26'
Standard	60	9'	20'	20' (one way)
Standard	90	9'	18.5'	26'
Standard	Parallel	10'	22'	26'
Accessible	90	9'	18.5'	26'
Loading	90	12'	35'	26'
Compact	90	8'	18.5'	26'

- (2) Parking lots shall have a minimum 15 foot radius on all interior corners.
- (3) Parking rows shall not exceed 12 parking spaces in a row without being interrupted by a landscape island.
- (4) Connecting drive aisles and/or sidewalks between adjacent properties are encouraged and in some cases may be required by the city as a condition of approval.

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Nonresidential Landscaping

Generally

- (1) These landscaping requirements are intended to enhance the natural aesthetic beauty of the Lakeway area, to ensure safe sight views along roadways, and to assist slope stabilization and prevent erosion, rapid runoff and sedimentation.
- (2) Any nonresidential or multifamily site that has any portion of the site redeveloped, as defined in section 22.02.001, shall install landscaping as required by this section in the redeveloped areas.

Plan requirements

- (1) A landscape plan and underground irrigation plan shall be submitted with the application for a site development permit. The plans must demonstrate compliance with the landscape requirements contained herein.
- (2) Plans shall show all dimensions, types of materials, width of buffer zones, screening, planting areas, size and spacing of vegetative materials, and plans for providing water to plants. The plans shall demonstrate that materials used will abate objectionable noise, light, glare, visual clutter, dust, or erosion and adequately accomplish the purpose for which they were intended.
- (3) No site plan shall be approved unless it shows all improvements reasonably necessary to prevent erosion from occurring after completion of development. No certificate of acceptance shall be issued unless the improvements and landscaping shown on the site plan have been installed, constructed or created and comply with this chapter. Restoration shall be acceptable when the grass has grown at least 1.5 inches high with 95% coverage, provided no bare spots larger than 9 square feet exist.

Maintenance and irrigation

- (1) The property owner shall be responsible for maintenance of the landscaped areas, including the right-of-way from the property line to the hard surface of the street.
- (2) Plants and grass shall present a healthy, neat and orderly appearance and be free of debris, refuse and disease. Deceased plantings shall be replaced no later than one month after dying and shall be replaced on an inch per inch basis.
- (3) The landscaping shall be irrigated by an automatic underground irrigation system designed and certified by a licensed irrigator in accordance with state law.

Site specific regulations

- (1) No structure shall be erected and no vegetation exceeding 30 inches in height shall be maintained in the area of a corner lot between the side lines of the intersecting streets and a straight line joining points on such side lines 10 feet distance from their point of intersection. Planting of vegetation which, when mature, shall obstruct visibility and endanger safe vehicular and pedestrian traffic shall not be permitted.
- (2) No retaining walls, corner posts, light supports, boulders or rocks larger than 6 inches, pillars or driveway markers, etc., shall be constructed or erected nearer than 8 feet from the pavement edge. In no case shall any vertical construction, including shrubs, rocks, driveway markers, etc. be permitted within 4 feet of the pavement edge (mailboxes not included).

Landscaping in public utility easements

- (1) Landscaping within public utility easements is permitted. However, any plantings over dedicated utility easements may have to be removed and/or replaced at the property owner's expense should such easements be required by any authorized utility company or be required to provide adequate drainage from areas of higher elevation. Trees shall not be planted where the mature canopy of the tree will interfere with overhead utility lines.

Landscaping in rights-of-way

- (1) No person, firm or corporation shall construct, erect or maintain any post, pillar, wall, fence or reflector, or plant or maintain any hedge, tree, shrub, or other growth (except grass and ground cover), or deposit any rocks, trash, dirt spoil, cuttings, or other material on the right-of-way of any street in the city, without first obtaining the written approval of the Code Official or authorized designee.
- (2) Exception: At the property owner's risk, shrubs may be planted no closer than 4 feet to the hard surface of the street to preclude damage to landscaping. Shrubs must be maintained so that they do not exceed 2 feet in height. Plantings/grading shall not interfere with drainage or utilities. This applies to vegetation only. Landscape rocks must remain a minimum of 8 feet off the hard surface of the street unless otherwise approved by the City Building Commission.
- (3) All landscaping within the city's rights-of-way requires the prior written approval of the Code Official. No vegetation except lawn grass is permitted within 8 feet of the hard surface of a city street. Shrubs, bushes, etc., when mature, shall not encroach closer than 8 feet to the hard surface of a street. Gravel, stones, and rocks are not permitted in the city's rights-of-way without specific approval of the Code Official.
- (4) Vegetation proposed for county or state rights-of-way must receive approvals from the appropriate authority.
- (5) Vegetation shall be irrigated to the hard surface of adjacent roadways.
- (6) In addition to the penalty provisions of this chapter, the city may remove, from the street rights-of-way, any of the structures, growth, and material prohibited by this chapter and in so doing, the city, its officers, agents, and employees shall not be liable to the owners thereof. Any expense incurred by the city for such removals will be charged to the property owner.

Nonresidential and multifamily landscaping requirements

- (1) Ground cover of lawn grass or other material approved by the city shall be provided to the hard surface of the street unless specifically prohibited by city, county or state for a particular right-of-way. All areas disturbed by construction shall be revegetated.
- (2) A minimum 5 foot deep landscaping area shall abut the front and at least 12 feet down the sides of a building except for the building entrance.
- (3) Minimum landscape quantity requirements:
 - (A) 1.25 trees required per 1,000 ft² of site impervious cover; and
 - (B) 3 shrubs required per 1,000 ft² of site impervious cover.

In calculating required landscaping, quantity totals from 0.5 and greater shall be rounded up to the next number. Quantity totals 0.49 and less may be rounded down. A “landscape calculation” table, “tree list,” and “shrub list” shall be included on the landscape plan within the construction plan set.



Parking lot and pond screening requirements

- (1) Off-street parking areas, water quality ponds and detention ponds, including outfall and diversion improvements, shall be screened from adjacent properties and roadways by dense vegetation. Such landscaping shall consist of massed evergreen shrubs of such species and size as will produce a screen at least 3 feet in height within two growing seasons, so as to continually restrict a clear view beyond the vegetation.
- (2) Planting areas shall be a minimum of 5 feet deep.
- (3) Ponds that are primarily constructed of earthen material may be exempted from the strict application of the screening requirements at the discretion of the Code Official depending on the location of the pond and the aesthetic impact it will have on neighboring property owners.
- (4) Landscaping for interior parking lot areas shall consist of at least 1 landscaped island every 12 parking spaces and 1 landscaped island at each end of a parking space row.
 - (A) Each landscaped island shall have a minimum of 1 tree located in the center of the island along with plantings.
 - (B) Landscaped islands shall have a minimum width of 9 feet and a minimum depth of 18 feet.

Landscape buffer zones

- (1) Nonresidential or multifamily lots whose side or rear lot lines are adjacent to a residential use shall be screened from such residential use by landscaped buffer zones reserved for landscaping only. No other improvements may be placed within a landscape buffer zone without prior approval of the Code Official.

Landscape buffer zones (*continued*)

- (2) The width of the landscaped buffer zone shall be a minimum of 25 feet.
- (3) A solid and continuous landscape screen shall be planted and maintained within the full width of the buffer zone in order to restrict a clear view beyond such buffer zone. Plantings shall consist of massed evergreen trees and shrubs of such species and size to produce a screen at least 6 feet in height within 2 growing seasons. In cases where the elevation of the planting location is less than the elevation of the edge of adjacent area, the required height of the screen shall be increased in an amount equal to such difference in elevation.
- (4) Landscape buffer zones shall be maintained by the property owner and kept clean of all debris and rubbish. Plantings shall be replaced within one month should they die. All landscape buffer zones shall be irrigated with an approved underground irrigation system unless otherwise approved by the Code Official.
- (5) A minimum 8 foot masonry screening wall, or other such screening as approved by the city, may be submitted as an alternative to massed evergreen shrubs and trees. The required full width of landscape buffer zone shall still be provided. Compliance with all city building codes is required when a screening wall is used.
- (6) All of the requirements and specifications for landscaping, as noted in this section, shall apply to landscaping installed within the landscape buffer zone.

Specifications

- (1) Lawn grass shall be as required for permanent erosion control and must also comply with the requirements of this chapter.
- (2) Shrubs and vines shall be good, healthy nursery stock. Shrubs used to satisfy landscape requirements must be a minimum of 5 gallon container size.

Specifications *(continued)*

- (3) Trees used to satisfy landscape requirements must be a minimum of 3 inches in diameter at planting, measured 4.5 feet above finished grade.
- (4) Turf and landscape areas shall have a minimum of 3 inches of topsoil.
- (5) A minimum of 3 inches of organic mulch shall be added to landscape areas. after planting. Nonporous material such as sheet plastic shall not be placed under the mulch.
- (6) Recommended trees
 - (a) The following tree species shall not be planted in the city due to their high susceptibility to oak wilt:
 - (1) Live oak (*Quercus virginiana*, *Quercus fusiformis*);
 - (2) Texas red oak or Spanish oak (*Quercus texana*, *Quercus buckleyi*);
 - (3) Shumard oak (*Quercus shumardii*);
 - (4) Southern red oak (*Quercus falcata*);
 - (5) Blackjack oak (*Quercus marilandica*); and
 - (6) Other members of the red or black oak group.
 - (b) The following oak species are usually oak wilt resistant and may be planted:
 - (1) Monterey or Mexican white oak (*Quercus polymorpha*);
 - (2) Lacey oak (*Quercus laceyi*, *Quercus glaucoides*);
 - (3) Bur oak (*Quercus macrocarpa*);
 - (4) Chinkapin oak (*Quercus muhlenbergii*);
 - (5) Durand oak (*Quercus durandii*); and
 - (6) Other members of the white oak group.

Credit for existing trees

Any existing hardwood tree remaining on the lot may be counted toward the required number of trees as long as the tree is a minimum of 6 inches in diameter, measured 4.5 feet above finished grade. A tree credit of 1 inch will be given for every inch of existing trees that remain on site.

Tree regulations

- (1) All hardwood trees 6 inches in diameter and greater shall be identified with individual tree number tags and a survey included in all site development and subdivision improvement plan sets. Trees are to be represented on plans by a concentric circle centered on the trunk location, with a critical root zone (CRZ) diameter equal in feet to twice the number of inches of the tree's trunk diameter. No disturbance is permitted within the critical root zone unless otherwise approved by the city.

For multi-trunk trees, the calculated size of the tree shall be equal to the caliper of the largest trunk between ground level and 4.5 feet height plus 1/2 the sum of all remaining trunk diameters larger than 3 inches.

- (2) A protected tree is any single hardwood tree or calculated multi-trunk tree that has a trunk 16 inches in diameter as measured 4.5 feet above natural ground level. The following species are not considered to be protected trees:
 - (A) *Ailanthus altissima* (Tree of Heaven).
 - (B) *Alibizzia julibrissen* (Mimosa).
 - (C) *Maclura pomifera* (female only) (Bois d'Arc).
 - (D) *Melia azeoarach* (Chinaberry).
 - (E) *Salix nigra* (Black Willow).
 - (F) *Celtis occidentalis laevigata* (Hackberry).
 - (G) Ashe Juniper.

Tree regulations *(continued)*

(3) Tree removal permits.

(A) Unless otherwise specified by this chapter, a person must not, directly or indirectly, cut down, destroy, move, remove, or effectively destroy through damaging, any protected tree situated on property regulated by this chapter without first obtaining a tree removal permit.

(B) A tree removal permit shall not be required under the following circumstances:

(i) Dead tree. A tree removal permit shall not be required if the tree is dead as agreed upon by a official of the city.

(ii) Public safety. A tree removal permit shall not be required if a tree endangers the public health, welfare or safety, and immediate removal is required as determined in writing by an official of the city.

(iii) Utility service disruption. A tree removal permit shall not be required if a tree has disrupted a public utility service due to a tornado, storm, flood or other act of God. Removal shall be limited to the portion of the tree reasonably necessary to establish or maintain reliable utility service.

Tree regulations *(continued)*

(4) Tree replacement.

- (A) Protected tree inches approved for removal shall be mitigated at a 1:1 ratio.
- (B) Replacement trees shall be a minimum of 3 inch caliper measured 4.5 feet from the ground.
- (C) Replacement trees shall be located on the subject site. If the city agrees that it is not feasible, the Code Official has the authority to allow the planting to take place on another property having the approval of its owner.
- (D) Except when otherwise approved by the city, replacement trees shall not be planted in the following locations:
 - (i) Where the mature canopy of the tree will interfere with overhead utility lines;
 - (ii) Where the mature root zone of the tree will interfere with underground public utility lines;
 - (iii) Within 10 feet of a fire hydrant;
 - (iv) Within the public right-of-way.

(5) Tree removal permit procedures.

- (A) A request for a tree removal permit must be submitted and approved prior to the removal of any protected tree in the city unless the tree is exempt under a provision of this chapter.
- (B) All requests for tree removal permits must be accompanied by a tree removal application, a letter explaining the reason for the request, and an exhibit showing the location of the tree(s) in reference to the proposed site improvements.

Tree regulations (*continued*)

- (5) Tree removal permit procedures.
- (C) The city may take one of the following actions regarding the application:
 - (i) Deferral of decision. The Code Official may defer the approval of a tree removal permit to the City Building Commission for any reason.
 - (ii) Approval. A tree removal permit may be issued if it is determined that:
 - a. The tree constitutes a hazard to life or property, which cannot be reasonably mitigated without removing the tree;
 - b. The tree is dying, dead, or diseased to the point that restoration is not practical; or
 - c. All reasonable efforts have been made to avoid removing the tree for the development and removal cannot be avoided.
 - (iii) Refusal. A tree removal permit shall not be issued if it is determined that:
 - a. Removal of the tree is not reasonably required in order to conduct anticipated activities; or
 - b. A reasonable accommodation can be made to preserve the tree.
 - (D) A decision made by the Code Official may be appealed to the Board of Adjustment.
 - (E) Tree removal permits issued in conjunction with a building permit, site development permit, subdivision improvement permit, or small project permit shall be valid for the period of that permit's validity. Permit(s) for tree removal not issued in connection with a building permit, site development permit, subdivision improvement permit, or small project permit shall become void 180 days after the issue date on the permit.
- (6) Tree protection. Trees not approved for removal within the limits of construction shall be provided with tree protection approved by the city.

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Nonresidential Fences

Material and equipment screening

Areas used for the storage of materials or equipment in nonresidential areas shall be screened from view from the street and all adjoining properties through the use of wood, masonry or pre-cast concrete yard fences.

Noise Abatement

Masonry or pre-cast concrete yard fences may be required in nonresidential areas to abate noise.

Utility equipment screening

Utility equipment screening. Nonresidential electric transformers, air-conditioning/ mechanical units, propane tanks and any other related equipment must be adequately screened from streets, driveways and adjacent properties by a suitable screening wall, fence, or other such screening approved by the city.

Safety railings

- (1) Safety railing shall be constructed along a drop-off or overhang to prevent a person from falling off or over the edge.
- (2) Exterior wood, rock, or concrete walkways, driveways, retaining walls, pool aprons, or other accessible areas which exceed 30 inches but less than 6 feet above grade shall have safety railings or plants substantial in size and density to serve the same purpose. Continuing steps or walkways with slopes exceeding 15% shall be provided with safety railing. Safety railing installed within the floodplain must be metal and may have to be removed during flooding situations. This type of safety railing is a rail or obstruction no more than 42 inches high with one horizontal member located approximately 36 inches above grade. Safety railing will not take the place of required handrails or guardrails.

Safety Railing *(continued)*

- (3) Exterior wood, rock, or concrete walkways, driveways, retaining walls, pool aprons, or other accessible areas which exceed 6 feet above grade shall have safety railings a minimum of 42 inches in height with vertical pickets spaced less than 4 inches, and meet all other code requirements.
- (4) Stormwater detention and water quality ponds holding a water level of 23 inches or more shall be protected with a fence for public safety. This fence shall be a minimum of 48 inches in height with vertical pickets spaced less than 4 inches apart and shall be constructed of solid wood, masonry, stone or wrought iron. All fences shall have at least one gate for maintenance access and shall be equipped to accommodate a locking device that will remain locked at all times.

Subdivision Fencing

- (1) Subdivision perimeter fencing is fencing that is installed with the development of a subdivision with the intent to provide a uniform border around the perimeter of the subdivision.
- (2) Subdivision perimeter fencing up to 6 feet in height may be approved administratively. Subdivision perimeter fencing up to 8 feet in height may be approved by the City Building Commission as a waiver.
- (3) For those fenced developments or projects which have keyed or coded access through a gate, the developer or owner shall provide keys or codes to the city police department and a key switch for the appropriate Fire Department.