

AGENDA ITEM SUMMARY

Meeting: 2/15/2018

Recommending Department: Planning

DOC ID: 8667

LSR No: N/A

Ordinance -- Public Hearing and Adopting an Ordinance Amending Section 52-35A. Landscaping and Tree Preservation of Comprehensive Zoning Ordinance No. 1144 Regarding Minimum Landscaping and Tree Preservation Requirements (Postponed from the July 20, 2017, August 10, 2017, September 7, 2017, October 12, 2017, November 9, 2017, December 14, 2017 and February 1, 2018 City Council Meetings)

Administrative Comments

1. The Planning and Zoning Commission Hearing Date and Recommendation: July 17, 2017 – Postpone to August 7, 2017. August 7, 2017 – Postpone to August 21, 2017. August 21, 2017 – Postpone to September 5, 2017. September 5, 2017 – Postpone to September 18, 2017. September 18, 2017 – Postpone to October 2, 2017. October 2, 2017 – Postpone to October 16, 2017. October 16, 2017 – Postpone to December 4, 2017. December 4, 2017 – Postpone to January 15, 2018. January 15, 2018 – Favorable 6-3 (Commissioners Patrick, Spurlock and McPhail, nay).
2. This item was discussed at the July 6, 2017 Planning and Development Committee meeting, and at the January 17 and January 31, 2018 City Council work sessions.
3. In early 2017, the City Council directed staff to update the landscaping ordinance. The update was to focus on three items:
 - a. Providing for healthy growing conditions for new landscaping trees;
 - b. Providing ways to reduce the amount of clear-cutting of existing trees with new development; and
 - c. Providing tree mitigation options.
4. This ordinance consolidates the requirements for new landscaping for new development, so that the City has one set of general landscaping standards.
5. Additionally, this ordinance establishes a new requirement for tree mitigation that encourages tree preservation.
6. Staff initially advertised this amendment for a July 20, 2017 City Council date. However, staff postponed work on the ordinance until after the State Legislature completed its work in the special legislative session.
7. An initial draft ordinance was presented to the Planning and Zoning Commission on October 2, 2017. The Commission reviewed multiple drafts of the ordinance and suggested several changes that were incorporated into the final ordinance.
8. On February 6, 2018, staff made two minor changes to the draft ordinance:
 - a. Staff added the ability for an applicant to appeal the decision of the Planning and Zoning Commission to the City Council within ten (10 business days of the denial; and

- b. Staff clarified the Implementation Date.
- 9. Staff believes the proposed ordinance meets the goals set forth by the City Council, and represents consensus and compromise on the key issues.
- 10. This item supports Strategic Objective 3.5 – Effectively plan and manage land use.

Recommendation

The ordinance be adopted per the recommendation of the Planning and Zoning Commission.

ADDITIONAL COMMENTS:

Contract Required:

Review Completed By: Christina N. Weber

Previous Action:

Council Action:

ATTACHMENTS:

- A. Proposed Ordinance (PDF)

CURRENT YEAR FINANCIAL IMPACT:

NONE

REVISION INFORMATION:

Prepared: 6/27/2017 11:48 AM by Linda Velazquez
Last Updated: 2/16/2018 10:48 AM by Jennifer Phillips

ORDINANCE NO. ORD-2017-9960

AN ORDINANCE AMENDING COMPREHENSIVE ZONING ORDINANCE NO. 1144 OF THE CITY OF IRVING, TEXAS, BY AMENDING SECTION 52-35A LANDSCAPING AND TREE PRESERVATION, REGARDING MINIMUM LANDSCAPING AND TREE PRESERVATION REQUIREMENTS; AND PROVIDING FOR PENALTY AND SEVERABILITY, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the *2000 Parks and Open Space Master Plan Update* recommended developers participate in a mitigation program where Trees that cannot be preserved during construction are replaced by developers on-site, off-site, or through payment into a Tree fund based on Tree size and number of Trees removed; and

WHEREAS, the City of Irving established a Tree ordinance and a Tree board in 2009 to promote the protection of healthy Trees and provide guidelines for preservation of Trees during construction, development, and redevelopment of parks and public property or rights-of-way; and

WHEREAS, the City finds that Trees are among the most valuable natural elements of the urban environment by providing, beauty, shade and cooling, habitat, water quality improvements, flood control, soil stabilization, and temperature regulation, among other benefits; and

WHEREAS, the *Imagine Irving 2017 Comprehensive Plan* recommends that the City develop an urban forestry program to identify, map and diversify the City's Tree canopy on public and private property across the City; and

WHEREAS, the Vision in the *Imagine Irving 2017 Comprehensive Plan* states that active corridors will also see green infrastructure such as Street Trees and planted landscape elements to provide shade, storm-water filtration, and other environmental services;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS:

SECTION. 1. That Section 52-35a of the Comprehensive Zoning Ordinance No. 1144 of the City of Irving, Texas, is hereby amended in its entirety to read as follows:

Sec. 52-35a. – Landscape Standards and Tree Conservation Regulations.

- A. *Purpose.* The purpose of this ordinance is to protect the urban forest, ensure the preservation of existing Trees and maintain a pleasant visual environment throughout the City of Irving by promoting and protecting the health, safety, and welfare of the public. The city council further declares that this article is adopted for the following specific purposes:
1. To enhance the beautification of the city.
 2. Protect and increase the value of residential and commercial properties within the city.
 3. To encourage the protection of healthy quality Trees.

4. Maintain and enhance a positive image, which will encourage further development in the city.
5. To recognize and conserve the urban forest as part of the city's green infrastructure.

B. *Definitions.*

For the purposes of this chapter the definitions below means the following:

ANSI A300. The American National Standard for Tree Care Operations, including all parts, as amended.

Area of Lot. The net area of the lot and shall not include portions of Streets and alleys.

Building Official. The city manager designee to this position or his or her designated representative.

Caliper. Nursery Trees are measured by their caliper. The caliper of a Tree is measured by the thickness of the trunk at a uniform measuring point at 12" above the ground, so a 2" caliper Tree means that the trunk is 2 inches across. Caliper is different than DBH and is used when you buy the Tree and the other measures its diameter at maturity. Caliper will be used when determining the size of newly planted Trees. All Trees on approved landscape plans will use a caliper measurement.

Certified Arborist. An arborist certified by the International Society of Arboriculture.

Commercial Property. For the purposes of this Section 52-35a, "Commercial" shall mean any multifamily, religious, educational, or other nonresidential use.

Corner Lot. A lot situated at the junction of two (2) or more Streets.

Critically Alter, Critical Alteration. Uprooting or severing the main trunk of a Tree, or any act which causes or may reasonably be expected to cause a Tree to die. This includes, but is not limited to: damage inflicted upon the root system of a Tree; a change in the natural grade above the root system of a Tree, storage of materials, or the compaction of soil above the root system of a Tree; an application of herbicidal chemical or the misapplication of beneficial chemicals; excessive pruning; placement of non-permeable pavement over the root system of a Tree; or trenching within the primary root zone. Additionally, a Tree may be considered critically altered if more than 25% of the primary root zone is altered or disturbed at natural grade, or more than 25% of the canopy is removed.

Critical Root Zone (CRZ). The area of undisturbed natural soil around a Tree defined by a circle with a radius equal to the distance from the trunk to the outermost portion of the drip line. If CRZ is compromised by site conditions, such as but not limited to, roads, sidewalks, existing buildings, utility easements, etc., the CRZ will be determined by the Director.

Cut/Fill. Areas where the natural ground level has been excavated (cut) or raised (fill).

Diameter at Breast Height (DBH). DBH is measured four and one-half (4.5') feet from natural ground level and is used to measure Trees at maturity. As Trees mature they develop large swelling at the base called the trunk flare. This extends quite a way up the

trunk in a large Tree. Arborists use DBH (diameter at breast height, or 4.5 feet above the ground) to get above the trunk flare and determine a more accurate measurement of the size of the trunk. DBH should be used when measuring any Tree that naturally occurs or has been planted. All Trees on approved Tree surveys will be measured at DBH.

Director. The person or persons designated by the City Manager to administer this ordinance, or the persons' designee.

Drip Line. A circular line, which follows the outermost portion of the canopy and extending to the ground.

Front Yard. An open, unoccupied space on a lot or tract facing a Street and extending across the front of a lot or tract between the side property lines.

Interior Parkway. The greenbelt area from the front or side property lines adjacent to a dedicated thoroughfare, public Street or private Street easement extending into the lot or tract.

Landscape Architect. A landscape architect licensed as such by the State of Texas.

Landscape Area. Any area which is pervious and capable of supporting living organic ornamental or native plant material. Concrete or asphalt parking shall not be considered as landscape area.

Lot Depth. The mean horizontal distance between the front and rear lot lines.

Occupied Residential Property. A single-family, two-family, tri-plex, or townhouse property in a residential district is considered to be occupied unless any of the following occur:

- a. An application has been made with the Planning and Community Development Department for a subdivision plat for three or more residential lots;
- b. An application has been made with the Planning and Community Development Department for a zoning change or development plan to allow:
 - i. Three or more single family residential lots;
 - ii. Multifamily or transit oriented development districts or uses; or
 - iii. A nonresidential district or nonresidential use;
- c. An application for a demolition permit for a single family or duplex structure has been made to the Inspections Department;
- d. No residential structure exists on the property.

Primary Natural Area. An ecologically sensitive area within and including 50 feet of a 100-year floodplain, or 25 feet of a designated wetland.

Redevelop. The act of removing or demolishing more than fifty-one percent (51%) of the existing improvements on a property for the purpose of constructing new improvements, or more than fifty-one percent (51%) of the appraised market value of all improvements on a property as determined by the Dallas Central Appraisal District on the most recent certified tax roll.

Required Yard. The front, side, and rear yard areas as required under the City of Irving Zoning Ordinance No. 1144 and the zoning district requirements applicable to a specific lot or tract. The required yard varies among zoning districts.

Residential. For the purposes of this Section 52-35a, "Residential" shall mean any single family, two-family, three-family or four-family housing structure where the residents are primarily permanent in nature.

Street. Any public Street, private Street, or approved private Street easement.

Tree:

- a. A woody single or multi-trunk stem, when at maturity will obtain a minimum four-inch (4") trunk when measured four feet (4') from the base grade; or
- b. A Tree listed in the "Trees of North Texas" by Robert Vines.

Tree, Class 1. Any Class 2 or Class 3 Trees located in a Primary Natural Area.

Tree, Class 2. A Tree that is not otherwise classified.

Tree, Class 3. Arizona Ash, Black Willow, Honey Locust, Mimosa, Mulberry, Sweetgum, Ornamentals, Pine, Siberian Elm, and Silver Maple.

Tree, Historic. Any Tree planted and related to the history of the community, or having historical value, as designated by City Council.

Tree List. A list of Trees adopted by the City Council that are appropriate for new landscaping which shall identify small, medium, and large Trees.

Tree, Protected. A Tree of any species that has a minimum diameter of six inches (6") that is not classified as unprotected. The diameter of a multi-trunk Tree shall be determined by adding the total diameter of the largest trunk to one-half (1/2) diameter of each additional trunk.

Tree, Large. A Tree listed on the City maintained Tree List as approved by City Council as a Large Tree.

Tree, Medium. A Tree listed on the City maintained Tree List as approved by City Council as a Medium Tree.

Tree, Small. A Tree listed on the City maintained Tree List as approved by City Council as a Small Tree.

Tree, Specimen. Means a healthy Tree whose age, size, unique type, or natural character are of special importance to the city, and meets the following species and size requirements:

- a. Post oaks with a minimum diameter of 12 inches, or
- b. Trees of the following species having a minimum diameter of 24 inches: American Elm, Cedar Elm, Eastern Red Cedar, Osage Orange, all other oak, pecan, and walnut species.

Tree, Street. Trees on land lying between property lines planted at recommended intervals with consideration of the visibility triangle on either side of all Streets, avenues, rights-of-way or entrances to the City.

Tree Survey. A survey that takes measurements and data on the types of trees on a property. Data includes where on the property the trees are located, the size of trees, age of trees, and general health of the trees.

Tree Topping. The practice of removing whole tops of Trees or large branches and/or trunks from the tops of Trees, leaving stubs or lateral branches that are too small to assume the role of a terminal leader.

Undeveloped Land. Any lot or tract of land lacking improvements.

Unprotected Tree means the following:

- a. Callery Pear (all cultivars);
- b. Chinaberry;
- c. Mesquite;
- d. Chinese Tallow;
- e. Cottonwood;
- f. Hackberry & Sugarberry Species;
- g. Ilex Species (except for Yaupon Holly and Possumhaw Holly);
- h. Palm (all plants in Palmae);
- i. Tree-of-heaven or Ailanthus; or
- j. Any other Tree listed on the Texas A&M invasive plant list, as amended.

Xeriscape. A type of landscaping for residential applications that conserves water and protects the environment by using site appropriate plants (such as native or others adapted to the immediate area), an efficient watering system, proper planning and design, soil analysis, practical use of turf, the use of mulches (which may include the use of solid waste compost) and proper maintenance.

C. Soil and Planting Area Requirements.

- (1) **No Artificial or Synthetic Plant Material.** No artificial or synthetic plant materials may be used to satisfy the requirements of this ordinance.
- (2) **Soil and planting area requirements.** In general, planting areas dedicated to the growth of roots may include open space areas, covered soil areas, root paths, and drainage.
 - a. Planting area requirements. Planting area requirements shall meet the following requirements:
 - i. For each small Tree installation, a minimum of 24 inches of soil depth and 25 square feet of open soil area (total of 50 cubic feet).

- ii. For each medium and large Tree installation, a minimum of 36 inches of soil depth and 200 square feet of open soil area (total of 600 cubic feet)
 - iii. Trees may share open soil area.
 - iv. Large Trees and medium Trees must be planted a minimum of four feet (4') from pavement
 - v. The planting area must have native soil, prepared soil, or structural soil, and may include permeable pavement, sidewalks support systems, and soil cells.
 - vi. If ten (10) or more new or replacement Trees are required, no one species of Tree may constitute more than 30 percent (30%) of the total number of new and replacement Trees.
- b. Waivers. The Director may waive the minimum open soil and planting area requirements in the preceding section if a Landscape Architect certifies that:
- i. The proposed alternative soil depth and dimensions are sufficient to support the healthy and vigorous growth of the plant material affected;
 - ii. The depth to impermeable subsurface prohibits minimum soil depth requirements; or
 - iii. That the proposed structural soil or suspended pavement system are sufficient to support healthy and vigorous growth of the plant material.

D. Distance from overhead electric distribution lines.

Large and Medium Trees shall be planted a minimum of 30 feet (30') from the closest point of an overhead electric distribution line.

E. Visibility at intersections.

- (1) Vision at all intersections of Streets Trees, alleys, and driveways that intersect at or near right angles shall be maintained in accordance with the adopted criteria of the Traffic and Transportation Department. All Trees and landscaping shall also comply with any sight easement restrictions established on the property.
- (2) Horizontal visibility shall be maintained to Streets which do not intersect at right angles and non-tangent Streets sections. In such cases, the Traffic and Transportation Department shall have the authority to modify the adopted criteria in accordance with accepted engineering principles to provide a safe pedestrian and traffic environment.

F. Minimum Landscaping Standards.

The following minimum landscaping standards shall apply to all property within the corporate limits of the City of Irving which is zoned for any nonresidential use. Additionally, any nonresidential use such as, but not limited to, religious institutions, schools, government buildings and uses, and public utility uses within a residential zoning district shall also be subject to the following standards.

- (1) Any other property-specific zoning ordinance, Overlay District zoning, Site Plan District zoning, or Planned Unit Development (PUD) Development Plan which

specifically addresses landscaping shall be exempt from the following standards for new landscaping.

- (2) All property subject to this subsection 52-35a(F) shall provide the following minimum landscaping at the time of its development; however nothing in this section shall prevent the planning and zoning commission from recommending or the city council from requiring additional landscaping as part of any zoning case where the nature and character of surrounding property dictate a need in order to protect such property and to provide protection for the general health, safety, and welfare of the community in general:

- a. Materials required. Landscaping shall consist of a combination of two (2) or more of the following types of planting materials including, but not limited to, grass, Trees, shrubs, ground cover, and/or other forms of plant material. All Trees and shrubs shall be from the City-maintained list of approved Trees and shrubs. Grass, ground cover, and other landscaping materials are encouraged to be of a type or species that is native to the area and has a low to moderate water requirement. In no case shall manmade landscape plant material be substituted for the required landscape vegetation. Landscaping within the right-of-way shall not be counted toward satisfying any of the criteria in this subsection.
- b. Interior parkway requirements: A landscaped interior parkway area shall be provided adjacent to all Streets. The interior parkway shall provide an average depth of ten (10) feet, with a minimum depth of five (5) feet at any given point. For purposes of determining whether an average of ten (10) feet has been provided, the applicant shall provide a calculation showing the total landscaped area with less than ten (10) feet of depth, and the total landscaped area with more than ten (10) feet of depth. If the area of the landscaped area with more than ten (10) feet of depth is equal to or exceeds the area of the landscaped area with less than ten (10) feet of depth, then the average requirement has been satisfied.
 - i. One (1) Large or Medium Tree Trees shall be provided for each four hundred (400) square feet, or portion thereof, of area within the interior parkway. Trees shall be distributed throughout the interior parkway, and not clustered in only one (1) area. Trees may be evenly spaced within the interior parkway, however, it is preferred that they be arranged in a design that provides variation in setback such as staggering, variable amounts of separation between Trees, clustering in focused landscaped areas, and other patterns to provide visual interest.
 - ii. The interior parkway may be crossed by perpendicular or angled entry or exit driveways, but may not be utilized for on-site circulation, driveways, or fire lanes.
 - iii. The interior parkway may include a sidewalk not exceeding five feet (5') in width if placement of the sidewalk within the right-of-way is not feasible, as determined by the Director. If a sidewalk is placed within the required interior parkway, the depth of the required interior parkway shall be increased by the same amount as the width of the sidewalk; i.e., placing a four feet (4') wide sidewalk within the interior parkway will require an average fourteen feet (14') deep interior parkway along that portion of the Street frontage. A sidewalk

greater than five feet (5') in width may be provided as part of the development of a public or private park if the sidewalk is part of an improved bicycle, jogging, or other recreational trail, or if it provides direct access to a park facility for mobility impaired patrons.

- iv. The area of driveways or sidewalks shall not be excluded from the calculation of the total area of the interior parkway for purposes of determining the number of Trees required in the interior parkway.
- v. Trees required within the interior parkway shall comply with the requirements of Section 52-35a(E) *Visibility at Intersections*.
- c. Front yard landscaping requirements. In addition to the ten foot (10') deep average interior parkway, landscaping shall also be provided in the required front, rear, and side yard areas adjacent to any Street in the following percentages based on the underlying zoning district:
 - i. All residential zoning districts being developed with a nonresidential use: Forty percent (40%).
 - ii. A-G district: Ten percent (10%).
 - iii. SP-1 and SP-2 districts: As determined by the site plan.
 - iv. PUD zoning districts: As determined by the development plan.
 - v. All other nonresidential zoning districts: Fifty percent (50%).
- d. Credit for interior parkway landscaping. The landscaped area within the ten foot (10') deep average interior parkway may be credited toward meeting the minimum front and side yard landscaping requirements.
- e. Tree requirement for front and side yard areas. In addition to the Trees required in the interior parkway, Trees shall also be provided within the required front and side yard areas adjacent to any Street at a ratio of one (1) Tree for each one thousand two hundred (1,200) square feet, or portion thereof, of required front and side yard areas outside the interior parkway. At least fifty percent (50%) of the Trees shall be Medium or Large Trees.
- f. Parking lots adjacent to a Street. In addition to the other requirements listed herein, surface parking lots adjacent to any Street shall contain the following:

Parking Spaces	Trees	Location
< 11 spaces	1 Tree	Interior Parkway
11-100 spaces	1 Tree/20 spaces	Within and/or around the perimeter of the parking lot; at least 25% within the interior of the parking lot
>100 spaces	1 Tree/15 spaces	Within and/or around the perimeter of the parking lot; at least 25% within the interior of the parking lot

- i. Trees may be of any type in the Tree List Trees; however; all Trees must be a minimum four inch (4") caliper at time of planting.
 - ii. Trees shall be planted and maintained in accordance with Section 53-35a(C) of this ordinance.
 - iii. Trees may be evenly spaced throughout the parking lot, or clustered in landscaped island areas, along major drives and fire lanes, or otherwise distributed within the parking area.
 - iv. For purposes of this section, "adjacent to any Street" shall mean any parking lot which is placed between any main building on the site and any abutting Street regardless of the setback of the parking lot from the Street.
- g. Conflict with utilities. When the location of a local utility prohibits planting Large Trees, two Small Trees may be planted for each Large Tree.
- h. Parking lots not adjacent to a Street. In addition to the other requirements listed herein, surface parking lots not adjacent to any Street or Street easement shall contain the following:
- i. Surface parking lots not adjacent to a Street shall be landscaped with one (1) Tree per each seventy-five (75) parking spaces. Trees shall be distributed throughout the parking lot.
 - ii. Additional Trees shall also be provided along any lot line adjacent to the parking lot at a spacing of one (1) Tree per each sixty (60) linear feet of distance along the adjacent lot line. For purposes of this section, "adjacent to the parking lot" shall refer to any lot line which is less than one hundred feet (100') from the nearest point of the parking lot, and for which there are no buildings, structures, or other site improvements other than signs, fencing, landscaping, or open space between the parking spaces and the lot line.

Location	Tree Requirement	Planting
Surface parking lot not adjacent to Street	1 Tree per 75 parking spaces	
Lot line less than 100' from parking lot	1 Tree per 60 linear feet	

- i. Screening of parking spaces adjacent to a Street. Surface parking spaces adjacent to any Street shall be required to be screened from the Street by a minimum two and one-half feet (2½') tall hedge of evergreen shrubs at time of planting, spaced no greater than three feet (3') on center, or a minimum two and one-half foot (2½') tall grass berm, or a combination of the two. Such landscaping or berms shall not conflict with any sight easements or section 52-44 of Ordinance No. 1144. Parking spaces shall be so designed and shrubs shall be planted such to preclude vehicle overhang onto the shrubs or their planting area. For purposes of this section, "adjacent to any Street " shall refer to parking spaces which are less than one hundred feet (100') from the nearest Street right-of-way or Street, and for which there are no buildings, structures,

fences, or other site improvements other than landscaping, signs, or open space between the parking spaces and the Street right-of-way or Street.

- j. Partial lot development. The requirements of this subsection 52-35a(F) are required only for that portion of a site which is being developed, not necessarily the entire site. When the total lot/parcel/tract is not being developed, then the portion of the site that is subject to these landscape requirements shall be determined by the Building Official based on the portion of the site that is being developed or improved.
- k. Landscape area protection. All required or proposed landscape areas shall be protected from vehicular traffic through the use of six-inch monolithic concrete curbs, adequately anchored wheel stops, or other permanent barriers. Landscape areas within parking lots should be designed to allow some run-off to flow into the landscape area to help reduce the total amount of run-off.

G. Property zoned for residential uses.

The following minimum landscaping standards shall apply to all land within the corporate limits of the City of Irving which is zoned for any residential use, and not regulated by section 52-59 "Multifamily development regulations" or any other property-specific zoning ordinance, Site Plan District zoning, Zoning Overlay District, or PUD Development Plan which specifically addresses landscaping.

- (1) Front and side yard areas adjacent to any Street on property subject to this subsection 52-35a(G) shall be maintained with grass, ground cover, other natural vegetation, or a variety of rock, stone, gravel, artificial turf, and other unpaved materials in a Xeriscape landscape plan.
- (2) Impervious surfaces may not cover front and side yard areas adjacent to any Street, except for sidewalks and similar flatwork required for landscaping and other permitted uses in front yards, and to the extent that the impervious surface is necessary to provide the minimum area needed for a driveway or circular drive constructed in accordance with all other city ordinances and subject to all necessary permits, or to comply with a site plan approved by the city council. It is an affirmative defense to this subsection that the impervious surface existed on August 3, 2006.
- (3) Nothing in subsection 52-35a(G) shall prevent the planning and zoning commission from recommending or the city council from requiring additional landscaping as part of any zoning case where the nature and character of surrounding or adjacent property dictate a need in order to protect such property and to provide protection for the general health, safety, and welfare of the community in general.

H. Landscaping and Tree manual.

A landscape and Tree manual may be maintained by the City as a technical guide for conserving, protecting, maintaining, and establishing the landscape and urban forest for the city.

I. Landscaping in the right-of-way.

A property owner may elect to landscape the right-of-way adjacent to the property; if the landscaping requirements established by TxDOT and/or the City of Irving are followed. Landscape plans for right-of-way shall require approval of either or both agencies before

implementation, and may be denied for any reason. Landscaping in the right-of-way shall not count toward any landscaping required in this ordinance.

J. *Maintenance standards.*

All new landscaping required by this section 52-35a for nonresidential development shall be maintained as follows:

- (1) **Irrigation.** All new required landscaping shall be provided with either a fully automatic or manual underground irrigation system, a hose attachment or hose bib within fifty feet (50') of all landscaped areas, or the installation of a quick coupler system with a valve one hundred feet (100') on center.
- (2) **Maintenance and replacement.** All required landscaping shall be kept in a healthy, growing state. Any dead plants shall be promptly removed and replaced with plants of similar species which meet the requirements of this ordinance for new Trees or plants.
- (3) **Temporary landscaping.** If a developer cannot establish permanent turf on a site due to seasonal considerations, the developer shall be required to stabilize the landscape areas to prevent erosion by planting temporary grass or turf (such as rye, fescue, etc.) until permanent turf is installed. No final letter of compliance or certificate of occupancy shall be issued for a development until either the permanent, required landscaping or temporary landscaping acceptable to the planning and inspections department has been installed. Temporary landscaping shall be replaced by permanent landscaping within 180 days.
- (4) **Tree Topping Prohibited.** The severe cutting back of limbs to stubs larger than three inches in diameter within the Tree's crown, to such a degree so as to remove the normal canopy and disfigure the Tree, shall be prohibited. Trees severely damaged by storms or other causes, or certain Trees under utility wires or other obstructions where other pruning practices are impractical, may be exempted from this ordinance at the determination of the Director.

K. *City/Franchise for Existing Rights-of-Way and Public Easements.*

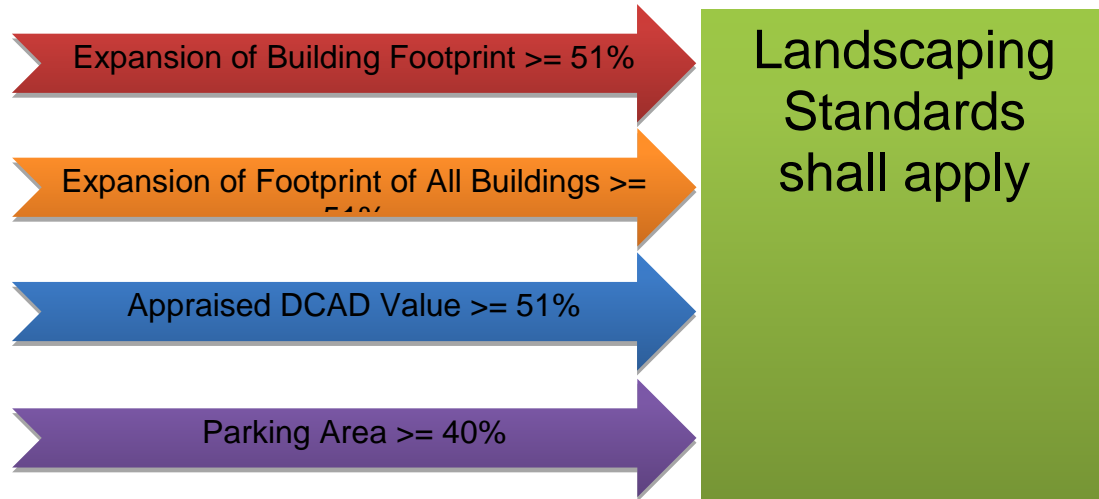
With the exception of Franchise Utilities, all construction and maintenance activity within public rights-of-way or easements shall be subject to the requirements for Tree protection and replacement specified in this ordinance.

- (1) **Pruning.** The owners of all Trees adjacent to public rights-of-way shall be required to maintain a minimum clearance of 14 feet (14') above the traveled pavement or curb of a Street. Said owners shall also remove all dead, diseased or dangerous Trees, or broken or decayed limbs, which shall constitute a danger to public safety. The City shall have right to prune Trees overhanging within the public right-of-way which interfere with the proper spread of light along the Street from a Street light or interferes with visibility of any traffic control device or sign or as necessary to preserve the public safety.
- (2) **Stump Removals:** All stumps of Trees in the public right-of-way shall be removed below the surface of the ground so the top of the stump shall not project above the surface of the ground.

L. *Expansion or improvement of existing development through redevelopment.*

If an existing building is being expanded or enlarged such that the expansion or enlargement constitutes at least fifty-one percent (51%) of the total footprint of the building, or, in the

instance of multiple buildings on a site, at least fifty-one percent (51%) percent of the total footprint of all buildings on the site, or if the expansion or enlargement exceeds fifty-one percent (51%) of the appraised value of all improvements as established by the Dallas Central Appraisal District on the most recent certified tax roll, then the landscaping standards established by this ordinance shall also apply to the entire site. If the parking area for an existing building is being expanded by at least forty percent (40%) of the existing number of spaces, the landscaping standards established by this ordinance shall also apply to the entire site.



M. *Landscaping plan.*

All landscaping and open space required by this ordinance shall be drawn to scale on a landscaping plan and submitted to the Building Official for approval at the time of application for a building permit. The landscaping plan shall include the following:

- (1) A depiction of the interior parkway and the required front and side yard setbacks;
- (2) Show in detail the precise location of each landscape element, the description of each landscape element, the height, size, and species of each preserved or proposed Tree or shrub, and the height and size of any proposed planter or seasonal color area;
- (3) All proposed buildings and structures;
- (4) All proposed parking areas;
- (5) All areas to remain pervious;
- (6) All proposed landscape area protection features;
- (7) All proposed screening elements.
- (8) A table which calculates the area of landscaping required and proposed in each portion of the site, the number of Trees required and proposed in each portion of the site, the number and calipers of all preserved Trees and any Tree credits claimed, the percentage of the front and side yard area remaining pervious, and the condition of the Tree (if any Trees are claimed to be diseased or dead); and
- (9) Notes indicating the proposed method of irrigation.

N. *Administrative Amendments.*

The Director may approve in writing minor variations from the specific requirements of this section in specific instances as long as they meet the spirit and intent of the landscaping requirements. Criteria for approval of minor variations include, but are not limited to:

- (1) Whether the minimum number of Trees required or more are provided in the proposed variation, although not necessarily in the exact locations specified by the requirements;
- (2) Whether the proposed variation is an enhancement beyond the minimum requirements;
- (3) Whether the property has unusual site constraints that make strict compliance unreasonable or impractical, and the proposed landscaping maximizes the landscaping possibilities for the site;
- (4) Whether the variation will allow the preservation of existing Trees which might otherwise be removed; and
- (5) Whether the variation is necessary to avoid planting Large Trees that could conflict with local utilities.

O. Tree conservation requirements

- (1) **Applicability.** This section applies to all property in the City except for:
 - a. Any Occupied Residential Property as defined herein;
 - b. Any Commercial Property as defined herein that is two (2) acres or less in size;
 - c. Lots in a Zoning District or Overlay District with Tree preservation or Tree conservation regulations that specifically vary from those in this article.
- (2) **Tree protection.** No person shall intentionally damage, remove, or otherwise cause or allow harm to any protected Tree prior to issuance of a Tree removal permit. Such damage, removal or harm shall include, but not be limited to:
 - a. The cutting down of a Tree;
 - b. A compaction of soil above the root system of a Tree;
 - c. A change in the natural grade or drainage above the root system of a Tree;
 - d. An injury to a Tree from a wound, fire, or other causes which results in or permits infections or pest infestations;
 - e. An application of herbicidal or other lethal chemicals; and
 - f. Placement of non-permeable pavement over the root system of a Tree.
- (3) **Tree Removal Permit Required.** A Tree removal permit shall be obtained from the Building Official before any person, directly or indirectly, shall cut, remove or destroy any Protected Tree(s) situated on property regulated by this ordinance, except as specified herein.
 - a. New Development/Construction. In the event, it becomes necessary to remove a Tree for development or construction, a Tree Removal Permit shall be required. A permit may be issued after Final Plat approval by Planning and Zoning Commission and/or City Council.
 - i. All areas within the public rights-of-way, utility easements or drainage easements, as shown on an approved Final Plat, and areas designated as cut/fill

- on the related drainage plan approved by the City Engineer, shall be subject to the requirements of this Ordinance.
- ii. Municipal/Public Property. Property owned by the City of Irving, State of Texas, a political subdivision of the State of Texas, or any public school, public school district, or nonprofit charter school shall be subject to requirements of this Ordinance.
- b. Tree removal permit application. Applications for Tree removal permits shall be submitted to the Building Official on forms provided by the City of Irving.
- i. No fee shall be charged for a Tree removal permit application.
 - ii. Such applications shall be in a form prescribed by the Building Official and may be required to provide:
 - 1. The name, address and telephone number of the owner of the property involved;
 - 2. The name, address, and telephone number of the person applying for the permit;
 - 3. The address or other location of the Trees proposed to be removed, if a Tree survey is not provided;
 - 4. A detailed description of the Trees proposed to be removed;
 - 5. A written justification for the proposed removal;
 - 6. If ten (10) or more Trees are to be removed, a Tree survey of the property drawn to scale showing:
 - a. The location of the Tree or Trees proposed to be removed;
 - b. All other Trees six inches (6") in DBH or larger on the site;
 - c. Other physical features of or proposed improvements to the site; and
 - d. The location of all adjacent rights-of-way or easements.
 - iii. Submission of a Tree Removal Permit Application to the City shall authorize the Director to conduct field inspections of the site as necessary to meet the provisions of this Article.
 - iv. After reviewing the Tree Removal Permit Application and accompanying documents, the Building Official will approve as submitted, approve with conditions, or disapprove the applications.
- c. Exemptions. The following exemptions to this subsection are hereby established:
- i. Ground cover, grass, shrubs, Trees smaller than six (6) inches in DBH of any species, and other natural vegetation may be mowed, trimmed, removed, or otherwise maintained at any time without the need for any City of Irving permit.
 - ii. During the period of any emergency, such as tornado, storm, flood, or other act of God, the requirements of this section may be waived as may be deemed necessary by the city council.

- iii. Utility companies franchised by the City of Irving may remove Trees which endanger public health, safety, and welfare by interfering with utility service, except that where Trees are on properties developed for single-family uses, disposal of such Trees shall be at the option of the property owner.
 - iv. All plant or Tree nurseries shall be exempt from the terms of this section only in relation to those Trees planted and growing on the premises of such nurseries which are so planted and growing for the sale or intended sale to the general public in the ordinary course of business.
 - v. Any Tree which has fallen over as a result of storm, accident, or any other non-deliberate circumstances.
 - vi. Any Tree that endangers the public health, safety, or welfare and immediate removal is required due to structural integrity concerns or poses an imminent or immediate threat to persons or property.
- d. **Permit Expiration.** Permits for Tree removal shall become void one hundred eighty (180) days after the issue date on the permit.
- (4) **Tree protection during construction.** Trees which are to be preserved on a site during construction shall be protected during the construction period as follows:
- a. The developer shall clearly mark all Trees to be preserved.
 - b. The developer shall erect a barrier two-thirds of the distance from the center of the trunk to the edge of the dripline.
 - c. The developer shall not allow the storage of equipment, materials, or debris or fill to be placed within the canopy of any Tree to be preserved.
 - d. The developer shall not allow the cleaning of equipment or material under the canopy of any Tree or group of Trees to be preserved.
 - e. The developer shall not allow the disposal of any waste material such as, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., under the canopy of any Tree or group of Trees to be preserved. The developer shall not allow any liquid waste to drain under the canopy of any Trees to be preserved.
 - f. The developer shall not attach any wires, ropes, lights, or any other such attachment other than those of a protective nature to any Tree to be preserved.
 - g. **Bark Protection Requirements:** Where a protected Tree remains in the immediate area of intended construction, the Tree shall be protected by enclosing the entire circumference of the Tree with approved padding material and 2" x 4" lumber encircled with wire or any other method approved by the Building Official. The intent is to protect the bark of the Tree against incidental contact or damage by large construction equipment.
 - h. **Boring Requirements:** Boring of utilities shall be required in those circumstances where it is not possible to trench around the critical root zone of the protected Tree. When required, the length of the bore shall be the width of the critical root zone at a minimum depth approved on site by the Building Official.

- i. The Building Official shall require written certification that all Tree protection procedures have been properly followed prior to and during construction from a Certified Arborist, a degreed urban forester or a Landscape Architect.

P. *Tree Replacement.*

In the event that it is necessary to remove a Protected Tree(s) as allowed in this ordinance, the applicant shall be required to replace the Tree(s) being removed with healthy Trees or pay a mitigation fee as explained hereafter. Any replacement Tree shall be a minimum of four inch (4") caliper. In the event a Protected Tree needs mitigation, the total mitigation shall be calculated from the DBH Tree.

- (1) Trees shall be classified for replacement and mitigation purposes as follows:

- a. Historic Trees: 3.0:1
- b. Specimen Trees: 1.5:1
- c. Class 1: 1.0:1
- d. Class 2: 0.7:1
- e. Class 3: 0.4:1

- (2) New Trees required in order to satisfy the landscaping provisions of this ordinance shall be counted towards the Total Mitigation DBH.

- (3) Once each Tree on the site is classified, site mitigation shall be calculated as follows:

- a. The **Calculated DBH** of each Tree shall be the DBH of the Tree multiplied by the appropriate classification ratio as described above. **The Total Calculated DBH** shall be the sum of all these Trees.
- b. A credit of fifty percent (50%) shall be given to the Total Calculated DBH. The **Preliminary Mitigation DBH** is 50% of the **Total Calculated DBH**.
- c. Tree preservation credit.
 - i. A three inch (3") credit against mitigation for each one inch (1") Calculated DBH shall be authorized for the preservation of any Tree that is a minimum of six inch (6") DBH and is listed as a Historic Tree, Specimen Tree, or Class 1 Tree.
 - ii. A one and a half inch (1.5") credit against mitigation for each one inch (1") Calculated DBH shall be authorized for the preservation of any Tree that is a minimum of six inch (6") DBH and is listed as a Class 2 or 3 Tree.
- d. Total Mitigation DBH shall be reduced by the Tree Preservation Credit and the classified caliper inches of new Trees required to satisfy landscaping requirements, as shown below:

Preliminary Mitigation DBH (50% of the Total Calculated DBH).
- Tree Preservation Credit (see above).
- New Trees per Landscaping Requirements (Calculated Caliper inches).
= Total Mitigation DBH.

- (4) A replacement Tree must be a Tree from the Tree List, or be approved by the Director.

- (5) In order to ensure biodiversity and protect against Tree diseases, if ten (10) or more new and/or replacement Trees are planted, no one species of Tree may constitute more than 30 percent (30%) of the total number of new and replacement Trees.
- (6) If a Certified Arborist, degreed urban forester, or Landscape Architect certifies that a Tree indicated on the Tree Survey is diseased or dead, and the Building Official confirms such certification of condition, then no Tree replacement or mitigation is required.
- (7) If the Building Official approves the planting of replacement Trees more than 30 days after the removal of protected Trees, the developer shall provide the Building Official with an affidavit that all replacement Trees will be planted within six (6) months. Developers shall plant all the replacement Trees identified on the Mitigation Plan. Documentation of the date of replacement Trees on the mitigation plan shall be provided to the Building Official upon their request. Additionally:
 - a. The Building Official has the authority to reject any Trees not meeting these standards.
 - b. Two (2) 6-month extensions may be approved by the Building Official due to limitations that would make planting of Trees impractical. Two (2) additional 6-month extensions may be approved by the Building Official if the development is being developed in a phased manner.
 - c. The property owner shall be required to maintain the replacement Trees in good condition for a minimum of two years. If a replacement Tree dies or is damaged within the initial two- year period, the property owner shall replace it with a Tree approved by the Building Official.

Q. Alternative methods of compliance with Tree replacement requirements.

In order to satisfy the Total Mitigation DBH, the developer may utilize any combination of alternative methods of compliance listed below. These alternative methods may also be used in combination with or in lieu of Tree replacement, so long as the Total Mitigation DBH is satisfied by one or all methods.

- (1) Tree Donation. The developer may donate the replacement Tree(s) to the city's park and recreation department, with the approval of the Director of Parks and Recreation.
 - (2) Off-site Tree Replacement. In order to plant the replacement Trees on another property in the City, the responsible property must obtain the written approval of the following:

 - a. The property owner where the replacement Trees will be planted and the responsible party, to transfer responsibility for the replacement Tree under this article to the receiving party.
 - b. A site plan indicating the address of the property where the replacement Tree will be planted, and a site plan indicating the location of the replacement Tree.
 - c. The agreement may be structured to allow a non-profit association dedicated to Tree advocacy or conservation of land to plant, manage, and monitor replacement Tree.
 - (3) Conservation Easement. The Developer may request to grant a conservation easement by plat to the City that includes protected Trees with a combined diameter equal to or exceeding the diameter for which mitigation is being requested.
-

- a. Detailed baseline document prepared by a Certified Arborist, degreed urban forester, or Landscape Architect describing the properties physical and biological condition, the general age of any Tree stands, locations of easements and construction, and the conservation values protected by the easement shall be required.
 - b. The City may decline the request for a conservation easement for any reason.
- (4) Transplanted Trees. Established and healthy Protected Trees on a Tree removal property may be transplanted within the city. The transplanting process must conform to operational and safety standards stated in ANSI A300, as amended, and with ISA Best Management Practices for Tree Planting, as amended.

- a. A protected Tree that meets the requirements of this section is not considered removed, or seriously injured, if the transplanted Tree is planted and maintained in a healthy growing condition.
- b. Building Official approval is required before beginning the transplantation for credit as a landscape Tree, or for Tree replacement.
- c. The following information is required to obtain the Building Official's approval in this section:

- i. An initial assessment report must be provided to the Building Official by a Certified Arborist, degreed urban forester, or Landscape Architect describing the transplanting practice from beginning to end, including post planting care practices.
- ii. A Tree survey or landscape plan prepared by a Certified Arborist, degreed urban forester, or Landscape Architect which identifies the original and final location of the protected Tree.
- iii. Company names, contact information, and credentials of contractor performing work.
- iv. Other information required by the Building Official.
- v. The Building Official may require a Certified Arborist, degreed urban forester, or Landscape Architect to provide written certification that all Tree transplant procedures have been properly followed.

- d. Credit for transplanted Trees.

HEALTHY PROTECTED TREES	TRANSPLANTED TREE CREDIT
< 6 inches in DBH	1 inch credit per 1 inch DBH
6 to 12 inches in DBH	2 inch credit per 1 inch DBH
12 to 24 inches in DBH	3 inch credit per 1 inch DBH
24 inches or more DBH	5 inch credit per 1 inch DBH

(5) Payment in Lieu of Replacement.

- a. For Protected Trees, mitigation will be made in the amount of one hundred ninety-five dollars (\$195.00) per one inch (1") inch DBH. This amount is calculated by the using the formula for appraising the value of a Tree from the most recent edition of

the *Guide for Plant Appraisal* published by the Council of Tree and Landscape Appraisers, and represents the average cost per inch of purchasing a Tree and keeping it alive for one year.

- b. Subsequent removal (except for the exemptions noted in Section 52-35a (O)(5)(c)), damage, or critical alteration of any Tree used for credit as identified above shall require mitigation replacement in accordance with this ordinance.
- c. If any Preserved and/or Replacement Tree(s) dies within two (2) years of initial planting or issuance of Certificate of Occupancy and is brought to the attention of the City, the current property owner shall be subject to the same replacement fee as for a Preserved Tree.

R. *Ordinance Enforcement.*

- (1) Developer's Agreement. No developer's agreement with the city shall be approved that does not require that all construction activities shall meet the requirements of the Tree preservation ordinance. This term is incorporated by reference into any developer's agreement with the city executed on or after the effective date of this subsection.
- (2) Building Permit. No building permit shall be issued unless the applicant signs an application or permit request which states that all construction activities shall meet the requirements of the Tree preservation ordinance and guidelines.
- (3) Acceptance of Improvements. No acceptance of public improvements shall be authorized until all fines for violation of this ordinance have been paid to the City or otherwise disposed of through the Municipal Court. No acceptance of public improvements shall be authorized until all replacement Trees have been planted, or appropriate payments have been made to the Tree Mitigation Fund; however, the acceptance of public improvements may be authorized before all Trees have been replaced upon approval of the Director.
- (4) Certificate of Occupancy. No Certificate of Occupancy shall be issued until all fines for violations of this ordinance have been paid to the City or otherwise disposed of through the Municipal Court. No Certificate of Occupancy shall be issued until all replacement Trees have been planted or appropriate payments have been made to the Tree Mitigation Fund; however, that a Certificate of Occupancy may be granted before all Trees have been replaced upon approval of the Director.

S. *Appeals.*

Appeals to the requirements established by this ordinance shall be to the Planning and Zoning Commission through the submittal of an application to the Department of Planning and Community Development on forms provided by the City of Irving. The application shall include a detailed alternative landscape proposal and justification for the need for the alternative plan. Public notice of appeals shall be provided in the same manner as for zoning cases. A nonrefundable filing fee in accordance with the most recent schedule of fees adopted by the City Council shall be required at the time of application. If an appeal to the requirements of this ordinance is denied by the Planning and Zoning Commission, the applicant may file an appeal of that decision to the Irving City Council within ten (10) business days of the denial. The appeal must be received within ten (10) business days and the Department of Planning and Community Development shall put the appeal on the next available regularly scheduled agenda after proper notice is sent. Public notice of the appeal to

City Council shall be provided in the same manner as for the appeal to the Planning and Zoning Commission.

T. *Use of funds.*

Expenditures from the Tree fund shall be used solely for the purpose of purchasing and installing Trees and associated irrigation on public rights-of-way, public park land or any other city-owned property, maintenance of the Trees; and for administering the Tree fund.

U. *Violations.*

In addition to any criminal penalty for violation of this Code, the city council may authorize the city attorney to petition the appropriate court for civil penalties and/or injunctive relief under state law for violation of the requirements under this chapter or other applicable law.

The unlawful injury, destruction or removal of each protected Tree shall be considered a separate incident, and each incident subjects the violator to the penalty set forth herein per Tree.

- (1) Violations and Assessments. Violations of this ordinance and non-payment of fines levied will be attached to property involved through standard legal methods. Any person, firm, corporation, agent, city, state, or federal organization or employee thereof who violates a procedural requirement or who fails to comply with conditions established with a permit issued by the Director pursuant to this ordinance shall be guilty of a misdemeanor and upon conviction shall be fined five hundred dollars (\$500.00) per violation. Each procedural violation or failure to comply each day shall be considered a separate incident, and each incident subjects the violator to the penalty set forth herein.

V. *Savings Clause.*

It is hereby declared to be the intention of the city council of the City of Irving that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs, or sections of this ordinance, since the same would have been enacted by the city council without the incorporation in this ordinance of any such unconstitutional or invalid phrase, clause, sentence, paragraph or section.

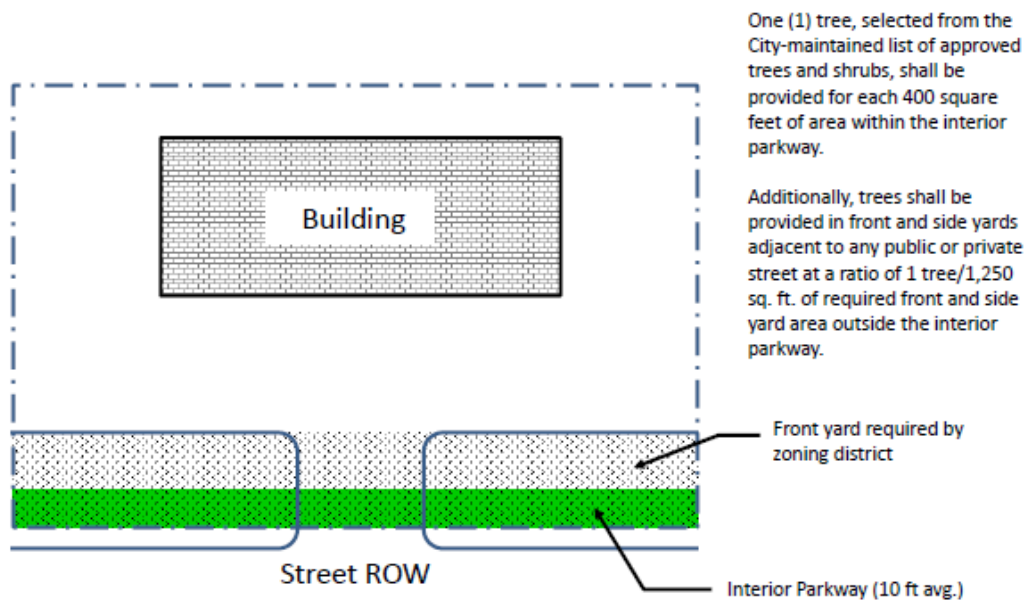
W. *Miscellaneous Requirements.*

- (1) **Implementation Date:** This ordinance shall take effect on April 1, 2018. Any zoning cases and/or landscape variance requests submitted prior to April 1, 2018 shall be vested in the prior ordinance, unless the applicant chooses for this ordinance to be effective to their project.
- (2) **Builder/Contractor Requirements (New Construction Only).** A builder or contractor who has purchased land or lots for construction with intent to sell is subject to all requirements specified herein.

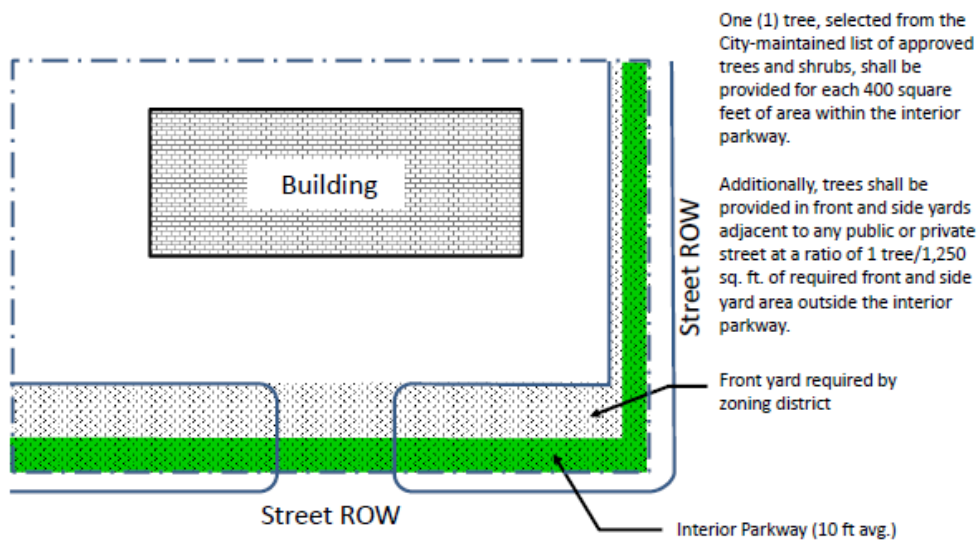
X. *Illustrations.*

Photos, drawings, and other illustrations included in this section 52-35a are for informational

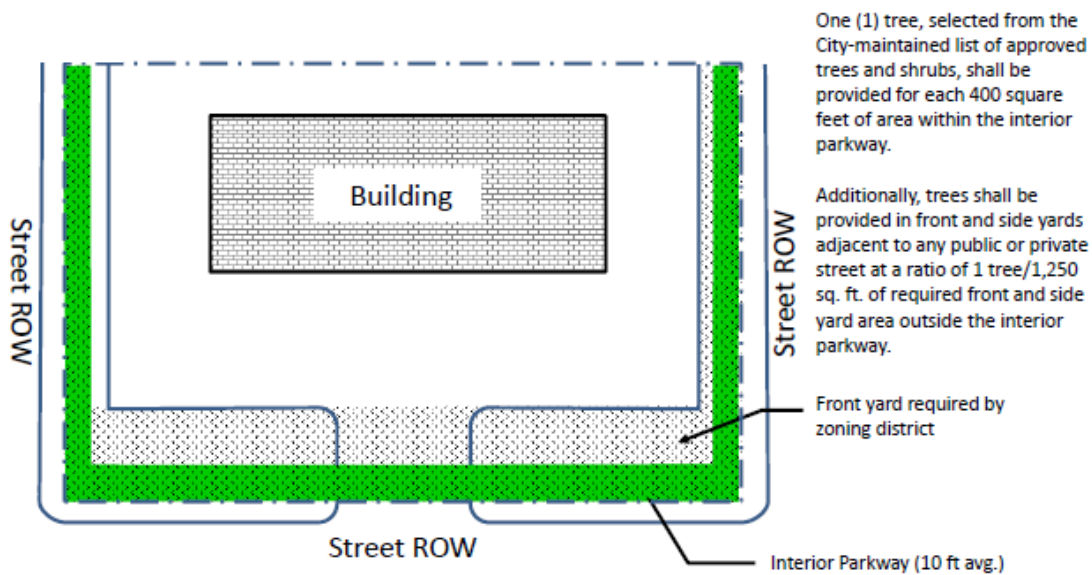
purposes only and are intended to provide examples of the types of standards envisioned by these regulations. Such illustrations are not all-encompassing, and should there be a conflict between a photo or an illustration and the text of this section 52-35a, the text shall control.



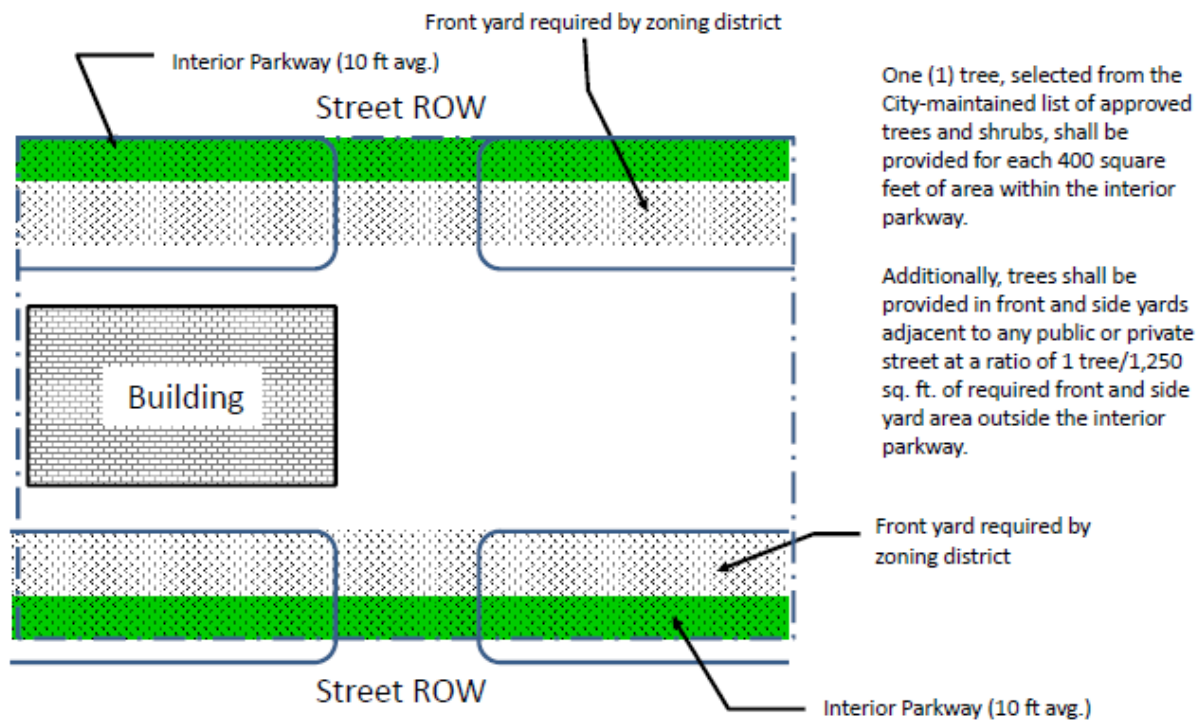
Lot with one street frontage



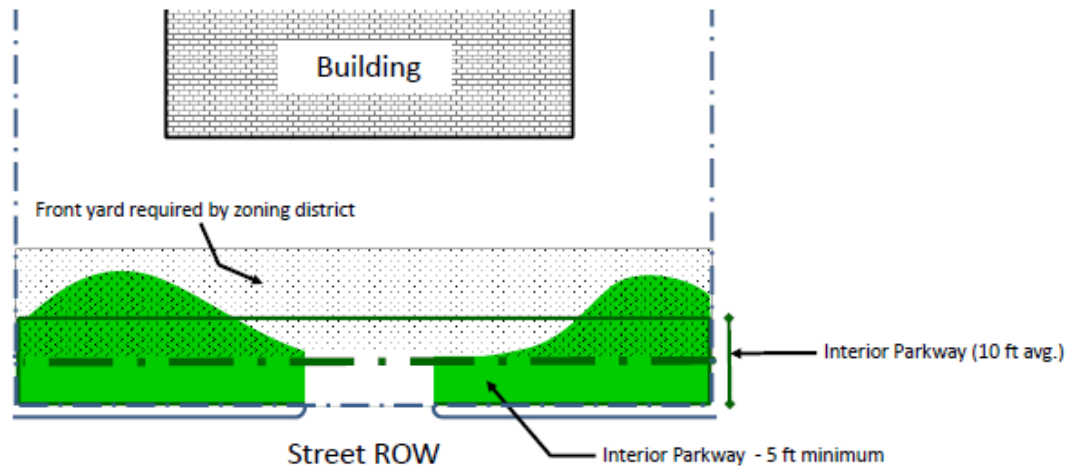
Corner Lot – Two Street Frontages



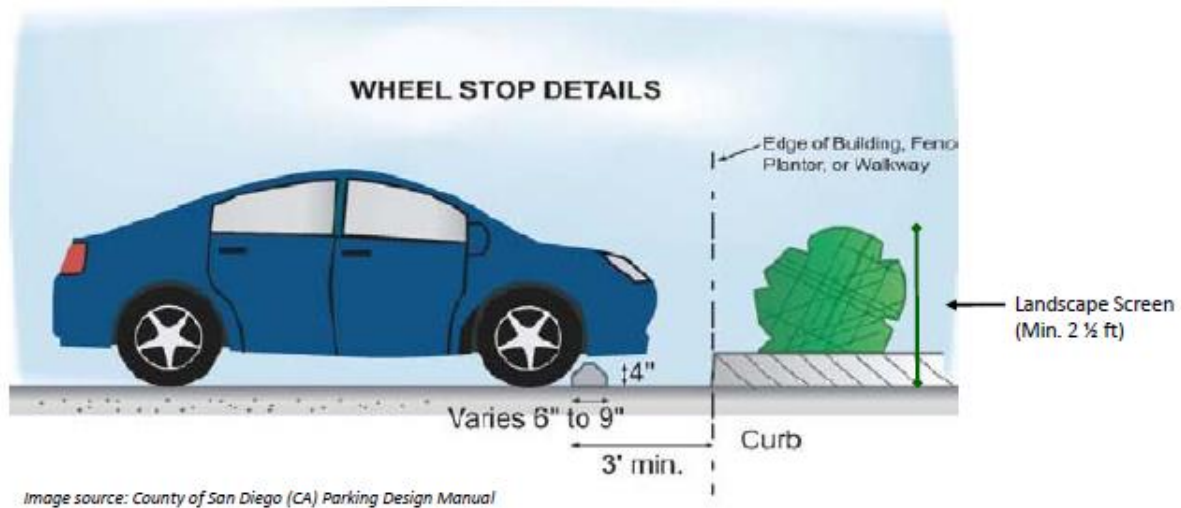
Corner Lot – Three Street Frontages



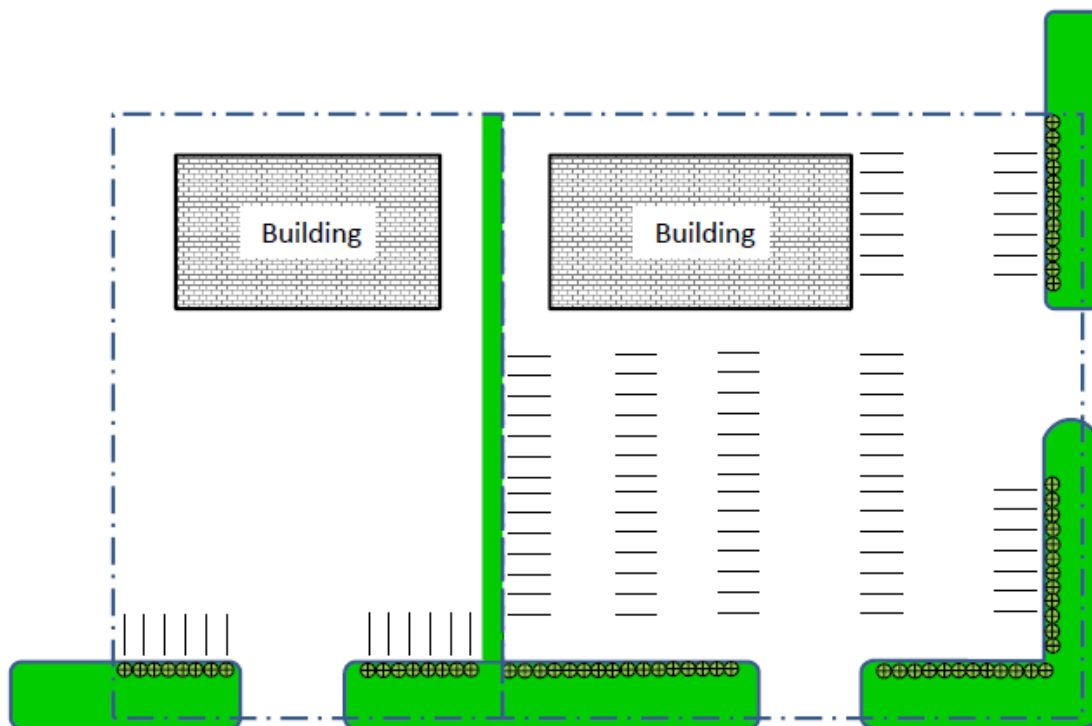
Through Lot with One Street Frontage



10-ft Average Width of Interior Parkway (with 5-ft minimum)



Screening of Parking Adjacent to Street



Screening of Parking Adjacent to Street

TREE CLASSIFICATIONS					
Unprotected Tree	Historic Tree	Specimen Tree (24"+)	Class 1 Tree	Class 2 Tree	Class 3 Tree
Any other Tree listed on the Texas A&M invasive plant list, as amended	Any Tree designated as such by the City Council		Any Class 2 or Class 3 Tree located in a Primary Natural Area	A Tree that is not otherwise classified	
Callery Pear		Post Oak (12"+)			Arizona Ash
Chinaberry		American Elm			Black Willow
Chinese Tallow		Cedar Elm			Honey Locust
Cottonwood		Eastern Red Cedar			Mimosa
Hackberry		Osage Orange			Mulberry
Ilex (except Yaupon Holly and Possumhaw Holly)		Oaks (other)			Sweetgum
Mesquite		Pecan			Ornamentals
Palm		Walnut			Pine
Sugarberry					Siberian Elm
Tree-of-heaven (Ailanthus)					Silver Maple

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS, on
February 15, 2018.

RICHARD H. STOPFER
MAYOR

ATTEST:

Shanae Jennings
City Secretary

APPROVED AS TO FORM:

Kuruvilla Oommen
City Attorney

AN ORDINANCE AMENDING COMPREHENSIVE ZONING ORDINANCE NO. 1144 OF THE CITY OF IRVING, TEXAS, BY AMENDING SECTION 52-35A LANDSCAPING AND TREE PRESERVATION, REGARDING MINIMUM LANDSCAPING AND TREE PRESERVATION REQUIREMENTS; AND PROVIDING FOR PENALTY AND SEVERABILITY, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the *2000 Parks and Open Space Master Plan Update* recommended developers participate in a mitigation program where Trees that cannot be preserved during construction are replaced by developers on-site, off-site, or through payment into a Tree fund based on Tree size and number of Trees removed; and

WHEREAS, the City of Irving established a Tree ordinance and a Tree board in 2009 to promote the protection of healthy Trees and provide guidelines for preservation of Trees during construction, development, and redevelopment of parks and public property or rights-of-way; and

WHEREAS, the City finds that Trees are among the most valuable natural elements of the urban environment by providing, beauty, shade and cooling, habitat, water quality improvements, flood control, soil stabilization, and temperature regulation, among other benefits; and

WHEREAS, the *Imagine Irving 2017 Comprehensive Plan* recommends that the City develop an urban forestry program to identify, map and diversify the City's Tree canopy on public and private property across the City; and

WHEREAS, the Vision in the *Imagine Irving 2017 Comprehensive Plan* states that active corridors will also see green infrastructure such as Street Trees and planted landscape elements to provide shade, storm-water filtration, and other environmental services;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS:

SECTION. 1. That Section 52-35a of the Comprehensive Zoning Ordinance No. 1144 of the City of Irving, Texas, is hereby amended in its entirety to read as follows:

Sec. 52-35a. – Landscape Standards and Tree Conservation Regulations.

A. *Purpose.* The purpose of this ordinance is to protect the urban forest, ensure the preservation of existing Trees and maintain a pleasant visual environment throughout the City of Irving by promoting and protecting the health, safety, and welfare of the public. The city council further declares that this article is adopted for the following specific purposes:

1. To enhance the beautification of the city.
2. Protect and increase the value of residential and commercial properties within the city.
3. To encourage the protection of healthy quality Trees.
4. Maintain and enhance a positive image, which will encourage further development in the city.
5. To recognize and conserve the urban forest as part of the city's green infrastructure.

B. *Definitions.*

For the purposes of this chapter the definitions below means the following:

ANSI A300. The American National Standard for Tree Care Operations, including all parts, as amended.

Area of Lot. The net area of the lot and shall not include portions of Streets and alleys.

Building Official. The city manager designee to this position or his or her designated representative.

Caliper. Nursery Trees are measured by their caliper. The caliper of a Tree is measured by the thickness of the trunk at a uniform measuring point at 12" above the ground, so a 2" caliper Tree means that the trunk is 2 inches across. Caliper is different than DBH and is used when you buy the Tree and the other measures its diameter at maturity. Caliper will be used when determining the size of newly planted Trees. All Trees on approved landscape plans will use a caliper measurement.

Certified Arborist. An arborist certified by the International Society of Arboriculture.

Commercial Property. For the purposes of this Section 52-35a, "Commercial" shall mean any multifamily, religious, educational, or other nonresidential use.

Corner Lot. A lot situated at the junction of two (2) or more Streets.

Critically Alter, Critical Alteration. Uprooting or severing the main trunk of a Tree, or any act which causes or may reasonably be expected to cause a Tree to die. This includes, but is not limited to: damage inflicted upon the root system of a Tree; a change in the natural grade above the root system of a Tree, storage of materials, or the compaction of soil above the root system of a Tree; an application of herbicidal chemical or the misapplication of beneficial chemicals; excessive pruning; placement of non-permeable pavement over the root system or a Tree; or trenching within the primary root zone. Additionally, a Tree may be considered critically altered if more than 25% of the primary root zone is altered or disturbed at natural grade, or more than 25% of the canopy is removed.

Critical Root Zone (CRZ). The area of undisturbed natural soil around a Tree defined by a circle with a radius equal to the distance from the trunk to the outermost portion of the drip line. If CRZ is compromised by site conditions, such as but not limited to, roads, sidewalks, existing buildings, utility easements, etc., the CRZ will be determined by the Director.

Cut/Fill. Areas where the natural ground level has been excavated (cut) or raised (fill).

Diameter at Breast Height (DBH). DBH is measured four and one-half (4.5') feet from natural ground level and is used to measure Trees at maturity. As Trees mature they develop large swelling at the base called the trunk flare. This extends quite a way up the trunk in a large Tree. Arborists use DBH (diameter at breast height, or 4.5 feet above the ground) to get above the trunk flare and determine a more accurate measurement of the size of the trunk. DBH should be used when measuring any Tree that naturally occurs or has been planted. All Trees on approved Tree surveys will be measured at DBH.

Director. The person or persons designated by the City Manager to administer this ordinance, or the persons' designee.

Drip Line. A circular line, which follows the outermost portion of the canopy and extending to the ground.

Front Yard. An open, unoccupied space on a lot or tract facing a Street and extending across the front of a lot or tract between the side property lines.

Interior Parkway. The greenbelt area from the front or side property lines adjacent to a dedicated thoroughfare, public Street or private Street easement extending into the lot or tract.

Landscape Architect. A landscape architect licensed as such by the State of Texas.

Landscape Area. Any area which is pervious and capable of supporting living organic ornamental or native plant material. Concrete or asphalt parking shall not be considered as landscape area.

Lot Depth. The mean horizontal distance between the front and rear lot lines.

Occupied Residential Property. A single-family, two-family, tri-plex, or townhouse property in a residential district is considered to be occupied unless any of the following occur:

- a. An application has been made with the Planning and Community Development Department for a subdivision plat for three or more residential lots;
- b. An application has been made with the Planning and Community Development Department for a zoning change or development plan to allow:
 - i. Three or more single family residential lots;
 - ii. Multifamily or transit oriented development districts or uses; or
 - iii. A nonresidential district or nonresidential use;
- c. An application for a demolition permit for a single family or duplex structure has been made to the Inspections Department;
- d. No residential structure exists on the property.

Primary Natural Area. An ecologically sensitive area within and including 50 feet of a 100-year floodplain, or 25 feet of a designated wetland.

Redevelop. The act of removing or demolishing more than fifty-one percent (51%) of the existing improvements on a property for the purpose of constructing new improvements, or more than fifty-one percent (51%) of the appraised market value of all improvements on a property as determined by the Dallas Central Appraisal District on the most recent certified tax roll.

Required Yard. The front, side, and rear yard areas as required under the City of Irving Zoning Ordinance No. 1144 and the zoning district requirements applicable to a specific lot or tract. The required yard varies among zoning districts.

Residential. For the purposes of this Section 52-35a, "Residential" shall mean any single family, two-family, three-family or four-family housing structure where the residents are primarily permanent in nature.

Street. Any public Street, private Street, or approved private Street easement.

Tree:

- a. A woody single or multi-trunk stem, when at maturity will obtain a minimum four-inch (4") trunk when measured four feet (4') from the base grade; or
- b. A Tree listed in the "Trees of North Texas" by Robert Vines.

Tree, Class 1. Any Class 2 or Class 3 Trees located in a Primary Natural Area.

Tree, Class 2. A Tree that is not otherwise classified.

Tree, Class 3. Arizona Ash, Black Willow, Honey Locust, Mimosa, Mulberry, Sweetgum, Ornamentals, Pine, Siberian Elm, and Silver Maple.

Tree, Historic. Any Tree planted and related to the history of the community, or having historical value, as designated by City Council.

Tree List. A list of Trees adopted by the City Council that are appropriate for new landscaping which shall identify small, medium, and large Trees.

Tree, Protected. A Tree of any species that has a minimum diameter of six inches (6") that is not classified as unprotected. The diameter of a multi-trunk Tree shall be determined by adding the total diameter of the largest trunk to one-half (1/2) diameter of each additional trunk.

Tree, Large. A Tree listed on the City maintained Tree List as approved by City Council as a Large Tree.

Tree, Medium. A Tree listed on the City maintained Tree List as approved by City Council as a Medium Tree.

Tree, Small. A Tree listed on the City maintained Tree List as approved by City Council as a Small Tree.

Tree, Specimen. Means a healthy Tree whose age, size, unique type, or natural character are of special importance to the city, and meets the following species and size requirements:

- a. Post oaks with a minimum diameter of 12 inches, or
- b. Trees of the following species having a minimum diameter of 24 inches: American Elm, Cedar Elm, Eastern Red Cedar, Osage Orange, all other oak, pecan, and walnut species.

Tree, Street. Trees on land lying between property lines planted at recommended intervals with consideration of the visibility triangle on either side of all Streets, avenues, rights-of-way or entrances to the City.

Tree Survey. A survey that takes measurements and data on the types of trees on a property. Data includes where on the property the trees are located, the size of trees, age of trees, and general health of the trees.

Tree Topping. The practice of removing whole tops of Trees or large branches and/or trunks from the tops of Trees, leaving stubs or lateral branches that are too small to assume the role of a terminal leader.

Undeveloped Land. Any lot or tract of land lacking improvements.

Unprotected Tree means the following:

- a. Callery Pear (all cultivars);
- b. Chinaberry;
- c. Mesquite;
- d. Chinese Tallow;

- e. Cottonwood;
- f. Hackberry & Sugarberry Species;
- g. Ilex Species (except for Yaupon Holly and Possumhaw Holly);
- h. Palm (all plants in Palmae);
- i. Tree-of-heaven or Ailanthus; or
- j. Any other Tree listed on the Texas A&M invasive plant list, as amended.

Xeriscape. A type of landscaping for residential applications that conserves water and protects the environment by using site appropriate plants (such as native or others adapted to the immediate area), an efficient watering system, proper planning and design, soil analysis, practical use of turf, the use of mulches (which may include the use of solid waste compost) and proper maintenance.

C. *Soil and Planting Area Requirements.*

- (1) **No Artificial or Synthetic Plant Material.** No artificial or synthetic plant materials may be used to satisfy the requirements of this ordinance.
- (2) **Soil and planting area requirements.** In general, planting areas dedicated to the growth of roots may include open space areas, covered soil areas, root paths, and drainage.
 - a. Planting area requirements. Planting area requirements shall meet the following requirements:
 - i. For each small Tree installation, a minimum of 24 inches of soil depth and 25 square feet of open soil area (total of 50 cubic feet).
 - ii. For each medium and large Tree installation, a minimum of 36 inches of soil depth and 200 square feet of open soil area (total of 600 cubic feet)
 - iii. Trees may share open soil area.
 - iv. Large Trees and medium Trees must be planted a minimum of four feet (4') from pavement
 - v. The planting area must have native soil, prepared soil, or structural soil, and may include permeable pavement, sidewalks support systems, and soil cells.
 - vi. If ten (10) or more new or replacement Trees are required, no one species of Tree may constitute more than 30 percent (30%) of the total number of new and replacement Trees.
 - b. Waivers. The Director may waive the minimum open soil and planting area requirements in the preceding section if a Landscape Architect certifies that:
 - i. The proposed alternative soil depth and dimensions are sufficient to support the healthy and vigorous growth of the plant material affected;
 - ii. The depth to impermeable subsurface prohibits minimum soil depth requirements; or
 - iii. That the proposed structural soil or suspended pavement system are sufficient to support healthy and vigorous growth of the plant material.

D. *Distance from overhead electric distribution lines.*

Large and Medium Trees shall be planted a minimum of 30 feet (30') from the closest point of

an overhead electric distribution line.

E. *Visibility at intersections.*

- (1) Vision at all intersections of Streets Trees, alleys, and driveways that intersect at or near right angles shall be maintained in accordance with the adopted criteria of the Traffic and Transportation Department. All Trees and landscaping shall also comply with any sight easement restrictions established on the property.
- (2) Horizontal visibility shall be maintained to Streets which do not intersect at right angles and non-tangent Streets sections. In such cases, the Traffic and Transportation Department shall have the authority to modify the adopted criteria in accordance with accepted engineering principles to provide a safe pedestrian and traffic environment.

F. *Minimum Landscaping Standards.*

The following minimum landscaping standards shall apply to all property within the corporate limits of the City of Irving which is zoned for any nonresidential use. Additionally, any nonresidential use such as, but not limited to, religious institutions, schools, government buildings and uses, and public utility uses within a residential zoning district shall also be subject to the following standards.

- (1) Any other property-specific zoning ordinance, Overlay District zoning, Site Plan District zoning, or Planned Unit Development (PUD) Development Plan which specifically addresses landscaping shall be exempt from the following standards for new landscaping.
- (2) All property subject to this subsection 52-35a(F) shall provide the following minimum landscaping at the time of its development; however nothing in this section shall prevent the planning and zoning commission from recommending or the city council from requiring additional landscaping as part of any zoning case where the nature and character of surrounding property dictate a need in order to protect such property and to provide protection for the general health, safety, and welfare of the community in general:
 - a. Materials required. Landscaping shall consist of a combination of two (2) or more of the following types of planting materials including, but not limited to, grass, Trees, shrubs, ground cover, and/or other forms of plant material. All Trees and shrubs shall be from the City-maintained list of approved Trees and shrubs. Grass, ground cover, and other landscaping materials are encouraged to be of a type or species that is native to the area and has a low to moderate water requirement. In no case shall manmade landscape plant material be substituted for the required landscape vegetation. Landscaping within the right-of-way shall not be counted toward satisfying any of the criteria in this subsection.
 - b. Interior parkway requirements: A landscaped interior parkway area shall be provided adjacent to all Streets. The interior parkway shall provide an average depth of ten (10) feet, with a minimum depth of five (5) feet at any given point. For purposes of determining whether an average of ten (10) feet has been provided, the applicant shall provide a calculation showing the total landscaped area with less than ten (10) feet of depth, and the total landscaped area with more than ten (10) feet of depth. If the area of the landscaped area with more than ten (10) feet of depth is equal to or exceeds the area of the landscaped area with less than ten (10) feet of depth, then the average requirement has been satisfied.

- i. One (1) Large or Medium Tree Trees shall be provided for each four hundred (400) square feet, or portion thereof, of area within the interior parkway. Trees shall be distributed throughout the interior parkway, and not clustered in only one (1) area. Trees may be evenly spaced within the interior parkway, however, it is preferred that they be arranged in a design that provides variation in setback such as staggering, variable amounts of separation between Trees, clustering in focused landscaped areas, and other patterns to provide visual interest.
 - ii. The interior parkway may be crossed by perpendicular or angled entry or exit driveways, but may not be utilized for on-site circulation, driveways, or fire lanes.
 - iii. The interior parkway may include a sidewalk not exceeding five feet (5') in width if placement of the sidewalk within the right-of-way is not feasible, as determined by the Director. If a sidewalk is placed within the required interior parkway, the depth of the required interior parkway shall be increased by the same amount as the width of the sidewalk; i.e., placing a four feet (4') wide sidewalk within the interior parkway will require an average fourteen feet (14') deep interior parkway along that portion of the Street frontage. A sidewalk greater than five feet (5') in width may be provided as part of the development of a public or private park if the sidewalk is part of an improved bicycle, jogging, or other recreational trail, or if it provides direct access to a park facility for mobility impaired patrons.
 - iv. The area of driveways or sidewalks shall not be excluded from the calculation of the total area of the interior parkway for purposes of determining the number of Trees required in the interior parkway.
 - v. Trees required within the interior parkway shall comply with the requirements of Section 52-35a(E) *Visibility at Intersections*.
- c. Front yard landscaping requirements. In addition to the ten foot (10') deep average interior parkway, landscaping shall also be provided in the required front, rear, and side yard areas adjacent to any Street in the following percentages based on the underlying zoning district:
 - i. All residential zoning districts being developed with a nonresidential use: Forty percent (40%).
 - ii. A-G district: Ten percent (10%).
 - iii. SP-1 and SP-2 districts: As determined by the site plan.
 - iv. PUD zoning districts: As determined by the development plan.
 - v. All other nonresidential zoning districts: Fifty percent (50%).
- d. Credit for interior parkway landscaping. The landscaped area within the ten foot (10') deep average interior parkway may be credited toward meeting the minimum front and side yard landscaping requirements.
- e. Tree requirement for front and side yard areas. In addition to the Trees required in the interior parkway, Trees shall also be provided within the required front and side yard areas adjacent to any Street at a ratio of one (1) Tree for each one thousand two hundred (1,200) square feet, or portion thereof, of required front and side yard areas

outside the interior parkway. At least fifty percent (50%) of the Trees shall be Medium or Large Trees.

- f. Parking lots adjacent to a Street. In addition to the other requirements listed herein, surface parking lots adjacent to any Street shall contain the following:

Parking Spaces	Trees	Location
< 11 spaces	1 Tree	Interior Parkway
11-100 spaces	1 Tree/20 spaces	Within and/or around the perimeter of the parking lot; at least 25% within the interior of the parking lot
>100 spaces	1 Tree/15 spaces	Within and/or around the perimeter of the parking lot; at least 25% within the interior of the parking lot

- i. Trees may be of any type in the Tree List Trees; however; all Trees must be a minimum four inch (4") caliper at time of planting.
 - ii. Trees shall be planted and maintained in accordance with Section 53-35a(C) of this ordinance.
 - iii. Trees may be evenly spaced throughout the parking lot, or clustered in landscaped island areas, along major drives and fire lanes, or otherwise distributed within the parking area.
 - iv. For purposes of this section, "adjacent to any Street" shall mean any parking lot which is placed between any main building on the site and any abutting Street regardless of the setback of the parking lot from the Street.
- g. Conflict with utilities. When the location of a local utility prohibits planting Large Trees, two Small Trees may be planted for each Large Tree.
- h. Parking lots not adjacent to a Street. In addition to the other requirements listed herein, surface parking lots not adjacent to any Street or Street easement shall contain the following:
- i. Surface parking lots not adjacent to a Street shall be landscaped with one (1) Tree per each seventy-five (75) parking spaces. Trees shall be distributed throughout the parking lot.
 - ii. Additional Trees shall also be provided along any lot line adjacent to the parking lot at a spacing of one (1) Tree per each sixty (60) linear feet of distance along the adjacent lot line. For purposes of this section, "adjacent to the parking lot" shall refer to any lot line which is less than one hundred feet (100') from the nearest point of the parking lot, and for which there are no buildings, structures, or other site improvements other than signs, fencing, landscaping, or open space between the parking spaces and the lot line.

Location	Tree Planting Requirement
Surface parking lot not adjacent to Street	1 Tree per 75 parking spaces
Lot line less than 100' from parking lot	1 Tree per 60 linear feet

- i. Screening of parking spaces adjacent to a Street. Surface parking spaces adjacent to any Street shall be required to be screened from the Street by a minimum two and one-half feet (2½') tall hedge of evergreen shrubs at time of planting, spaced no greater than three feet (3') on center, or a minimum two and one-half foot (2½') tall grass berm, or a combination of the two. Such landscaping or berms shall not conflict with any sight easements or section 52-44 of Ordinance No. 1144. Parking spaces shall be so designed and shrubs shall be planted such to preclude vehicle overhang onto the shrubs or their planting area. For purposes of this section, "adjacent to any Street " shall refer to parking spaces which are less than one hundred feet (100') from the nearest Street right-of-way or Street, and for which there are no buildings, structures, fences, or other site improvements other than landscaping, signs, or open space between the parking spaces and the Street right-of-way or Street.
- j. Partial lot development. The requirements of this subsection 52-35a(F) are required only for that portion of a site which is being developed, not necessarily the entire site. When the total lot/parcel/tract is not being developed, then the portion of the site that is subject to these landscape requirements shall be determined by the Building Official based on the portion of the site that is being developed or improved.
- k. Landscape area protection. All required or proposed landscape areas shall be protected from vehicular traffic through the use of six-inch monolithic concrete curbs, adequately anchored wheel stops or landscape timbers, or other permanent barriers. Landscape areas within parking lots should be designed to allow some run-off to flow into the landscape area to help reduce the total amount of run-off.

G. *Property zoned for residential uses.*

The following minimum landscaping standards shall apply to all land within the corporate limits of the City of Irving which is zoned for any residential use, and not regulated by section 52-59 "Multifamily development regulations" or any other property-specific zoning ordinance, Site Plan District zoning, Zoning Overlay District, or PUD Development Plan which specifically addresses landscaping.

- (1) Front and side yard areas adjacent to any Street on property subject to this subsection 52-35a(G) shall be maintained with grass, ground cover, other natural vegetation, or a variety of rock, stone, gravel, and other unpaved materials in a Xeriscape landscape plan.
- (2) Impervious surfaces may not cover front and side yard areas adjacent to any Street, except for sidewalks and similar flatwork required for landscaping and other permitted uses in front yards, and to the extent that the impervious surface is necessary to provide the minimum area needed for a driveway or circular drive constructed in accordance with all other city ordinances and subject to all necessary permits, or to comply with a site plan approved by the city council. It is an affirmative defense to this subsection that the impervious surface existed on August 3, 2006.
- (3) Nothing in subsection 52-35a(G) shall prevent the planning and zoning commission from recommending or the city council from requiring additional landscaping as part of any zoning case where the nature and character of surrounding or adjacent property dictate a need in order to protect such property and to provide protection for the general health, safety, and welfare of the community in general.

H. *Landscaping and Tree manual.*

A landscape and Tree manual may be maintained by the City as a technical guide for conserving, protecting, maintaining, and establishing the landscape and urban forest for the city.

I. *Landscaping in the right-of-way.*

A property owner may elect to landscape the right-of-way adjacent to the property; if the landscaping requirements established by TxDOT and/or the City of Irving are followed. Landscape plans for right-of-way shall require approval of either or both agencies before implementation, and may be denied for any reason. Landscaping in the right-of-way shall not count toward any landscaping required in this ordinance.

J. *Maintenance standards.*

All new landscaping required by this section 52-35a for nonresidential development shall be maintained as follows:

- (1) **Irrigation.** All new required landscaping shall be provided with either a fully automatic or manual underground irrigation system, a hose attachment or hose bib within fifty feet (50') of all landscaped areas, or the installation of a quick coupler system with a valve one hundred feet (100') on center.
- (2) **Maintenance and replacement.** All required landscaping shall be kept in a healthy, growing state. Any dead plants shall be promptly removed and replaced with plants of similar species which meet the requirements of this ordinance for new Trees or plants.
- (3) **Temporary landscaping.** If a developer cannot establish permanent turf on a site due to seasonal considerations, the developer shall be required to stabilize the landscape areas to prevent erosion by planting temporary grass or turf (such as rye, fescue, etc.) until permanent turf is installed. No final letter of compliance or certificate of occupancy shall be issued for a development until either the permanent, required landscaping or temporary landscaping acceptable to the planning and inspections department has been installed. Temporary landscaping shall be replaced by permanent landscaping within 180 days.
- (4) **Tree Topping Prohibited.** The severe cutting back of limbs to stubs larger than three inches in diameter within the Tree's crown, to such a degree so as to remove the normal canopy and disfigure the Tree, shall be prohibited. Trees severely damaged by storms or other causes, or certain Trees under utility wires or other obstructions where other pruning practices are impractical, may be exempted from this ordinance at the determination of the Director.

K. *City/Franchise for Existing Rights-of-Way and Public Easements.*

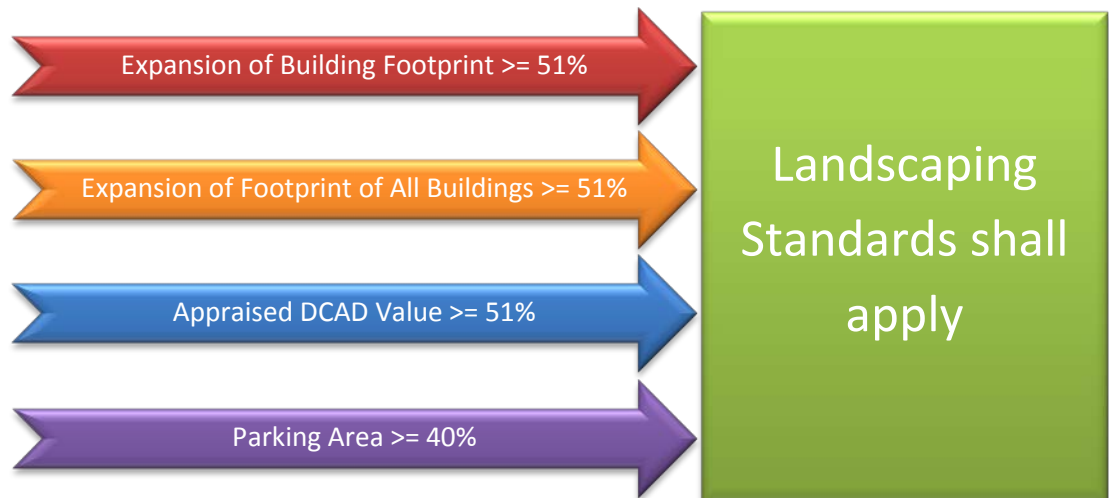
With the exception of Franchise Utilities, all construction and maintenance activity within public rights-of-way or easements shall be subject to the requirements for Tree protection and replacement specified in this ordinance.

- (1) **Pruning.** The owners of all Trees adjacent to public rights-of-way shall be required to maintain a minimum clearance of 14 feet (14') above the traveled pavement or curb of a Street. Said owners shall also remove all dead, diseased or dangerous Trees, or broken or decayed limbs, which shall constitute a danger to public safety. The City shall have right to prune Trees overhanging within the public right-of-way which interfere with the proper spread of light along the Street from a Street light or interferes with visibility of any traffic control device or sign or as necessary to preserve the public safety.

- (2) **Stump Removals:** All stumps of Trees in the public right-of-way shall be removed below the surface of the ground so the top of the stump shall not project above the surface of the ground.

L. *Expansion or improvement of existing development through redevelopment.*

If an existing building is being expanded or enlarged such that the expansion or enlargement constitutes at least fifty-one percent (51%) of the total footprint of the building, or, in the instance of multiple buildings on a site, at least fifty-one percent (51%) percent of the total footprint of all buildings on the site, or if the expansion or enlargement exceeds fifty-one percent (51%) of the appraised value of all improvements as established by the Dallas Central Appraisal District on the most recent certified tax roll, then the landscaping standards established by this ordinance shall also apply to the entire site. If the parking area for an existing building is being expanded by at least forty percent (40%) of the existing number of spaces, the landscaping standards established by this ordinance shall also apply to the entire site.



M. *Landscaping plan.*

All landscaping and open space required by this ordinance shall be drawn to scale on a landscaping plan and submitted to the Building Official for approval at the time of application for a building permit. The landscaping plan shall include the following:

- (1) A depiction of the interior parkway and the required front and side yard setbacks;
- (2) Show in detail the precise location of each landscape element, the description of each landscape element, the height, size, and species of each preserved or proposed Tree or shrub, and the height and size of any proposed planter or seasonal color area;
- (3) All proposed buildings and structures;
- (4) All proposed parking areas;
- (5) All areas to remain pervious;
- (6) All proposed landscape area protection features;
- (7) All proposed screening elements.

(8) A table which calculates the area of landscaping required and proposed in each portion of the site, the number of Trees required and proposed in each portion of the site, the number and calipers of all preserved Trees and any Tree credits claimed, the percentage of the front and side yard area remaining pervious, and the condition of the Tree (if any Trees are claimed to be diseased or dead); and

(9) Notes indicating the proposed method of irrigation.

N. *Administrative Amendments.*

The Director may approve in writing minor variations from the specific requirements of this section in specific instances as long as they meet the spirit and intent of the landscaping requirements. Criteria for approval of minor variations include, but are not limited to:

- (1) Whether the minimum number of Trees required or more are provided in the proposed variation, although not necessarily in the exact locations specified by the requirements;
- (2) Whether the proposed variation is an enhancement beyond the minimum requirements;
- (3) Whether the property has unusual site constraints that make strict compliance unreasonable or impractical, and the proposed landscaping maximizes the landscaping possibilities for the site;
- (4) Whether the variation will allow the preservation of existing Trees which might otherwise be removed; and
- (5) Whether the variation is necessary to avoid planting Large Trees that could conflict with local utilities.

O. *Tree conservation requirements*

(1) **Applicability.** This section applies to all property in the City except for:

- a. Any Occupied Residential Property as defined herein;
- b. Any Commercial Property as defined herein that is two (2) acres or less in size;
- c. Lots in a Zoning District or Overlay District with Tree preservation or Tree conservation regulations that specifically vary from those in this article.

(2) **Tree protection.** No person shall intentionally damage, remove, or otherwise cause or allow harm to any protected Tree prior to issuance of a Tree removal permit. Such damage, removal or harm shall include, but not be limited to:

- a. The cutting down of a Tree;
- b. A compaction of soil above the root system of a Tree;
- c. A change in the natural grade or drainage above the root system of a Tree;
- d. An injury to a Tree from a wound, fire, or other causes which results in or permits infections or pest infestations;
- e. An application of herbicidal or other lethal chemicals; and
- f. Placement of non-permeable pavement over the root system of a Tree.

(3) **Tree Removal Permit Required.** A Tree removal permit shall be obtained from the Building Official before any person, directly or indirectly, shall cut, remove or destroy any Protected Tree(s) situated on property regulated by this ordinance, except as specified herein.

- a. New Development/Construction. In the event, it becomes necessary to remove a Tree for development or construction, a Tree Removal Permit shall be required. A permit may be issued after Final Plat approval by Planning and Zoning Commission and/or City Council.
 - i. All areas within the public rights-of-way, utility easements or drainage easements, as shown on an approved Final Plat, and areas designated as cut/fill on the related drainage plan approved by the City Engineer, shall be subject to the requirements of this Ordinance.
 - ii. Municipal/Public Property. Property owned by the City of Irving, State of Texas, a political subdivision of the State of Texas, or any public school, public school district, or nonprofit charter school shall be subject to requirements of this Ordinance.
- b. Tree removal permit application. Applications for Tree removal permits shall be submitted to the Building Official on forms provided by the City of Irving.
 - i. No fee shall be charged for a Tree removal permit application.
 - ii. Such applications shall be in a form prescribed by the Building Official and may be required to provide:
 - 1. The name, address and telephone number of the owner of the property involved;
 - 2. The name, address, and telephone number of the person applying for the permit;
 - 3. The address or other location of the Trees proposed to be removed, if a Tree survey is not provided;
 - 4. A detailed description of the Trees proposed to be removed;
 - 5. A written justification for the proposed removal;
 - 6. If ten (10) or more Trees are to be removed, a Tree survey of the property drawn to scale and prepared by a Certified Arborist, a degreed urban forester or a Landscape Architect showing:
 - a. The location of the Tree or Trees proposed to be removed;
 - b. All other Trees six inches (6") in DBH or larger on the site;
 - c. Other physical features of or proposed improvements to the site; and
 - d. The location of all adjacent rights-of-way or easements.
 - iii. Submission of a Tree Removal Permit Application to the City shall authorize the Director to conduct field inspections of the site as necessary to meet the provisions of this Article.
 - iv. After reviewing the Tree Removal Permit Application and accompanying documents, the Building Official will approve as submitted, approve with conditions, or disapprove the applications.
- c. Exemptions. The following exemptions to this subsection are hereby established:

- i. Ground cover, grass, shrubs, Trees smaller than six (6) inches in DBH of any species, and other natural vegetation may be mowed, trimmed, removed, or otherwise maintained at any time without the need for any City of Irving permit.
 - ii. During the period of any emergency, such as tornado, storm, flood, or other act of God, the requirements of this section may be waived as may be deemed necessary by the city council.
 - iii. Utility companies franchised by the City of Irving may remove Trees which endanger public health, safety, and welfare by interfering with utility service, except that where Trees are on properties developed for single-family uses, disposal of such Trees shall be at the option of the property owner.
 - iv. All plant or Tree nurseries shall be exempt from the terms of this section only in relation to those Trees planted and growing on the premises of such nurseries which are so planted and growing for the sale or intended sale to the general public in the ordinary course of business.
 - v. Any Tree which has fallen over as a result of storm, accident, or any other non-deliberate circumstances.
 - vi. Any Tree that endangers the public health, safety, or welfare and immediate removal is required due to structural integrity concerns or poses an imminent or immediate threat to persons or property.
- d. Permit Expiration. Permits for Tree removal shall become void one hundred eighty (180) days after the issue date on the permit.
- (4) **Tree protection during construction.** Trees which are to be preserved on a site during construction shall be protected during the construction period as follows:
- a. The developer shall clearly mark all Trees to be preserved.
 - b. The developer shall erect a barrier two-thirds of the distance from the center of the trunk to the edge of the dripline.
 - c. The developer shall not allow the storage of equipment, materials, or debris or fill to be placed within the canopy of any Tree to be preserved.
 - d. The developer shall not allow the cleaning of equipment or material under the canopy of any Tree or group of Trees to be preserved.
 - e. The developer shall not allow the disposal of any waste material such as, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., under the canopy of any Tree or group of Trees to be preserved. The developer shall not allow any liquid waste to drain under the canopy of any Trees to be preserved.
 - f. The developer shall not attach any wires, ropes, lights, or any other such attachment other than those of a protective nature to any Tree to be preserved.
 - g. **Bark Protection Requirements:** Where a protected Tree remains in the immediate area of intended construction, the Tree shall be protected by enclosing the entire circumference of the Tree with approved padding material and 2" x 4" lumber encircled with wire or any other method approved by the Building Official. The intent is to protect the bark of the Tree against incidental contact or damage by large construction equipment.

- h. Boring Requirements: Boring of utilities shall be required in those circumstances where it is not possible to trench around the critical root zone of the protected Tree. When required, the length of the bore shall be the width of the critical root zone at a minimum depth approved on site by the Building Official.
- i. The Building Official shall require written certification that all Tree protection procedures have been properly followed prior to and during construction from a Certified Arborist, a degreed urban forester or a Landscape Architect.

P. *Tree Replacement.*

In the event that it is necessary to remove a Protected Tree(s) as allowed in this ordinance, the applicant shall be required to replace the Tree(s) being removed with healthy Trees or pay a mitigation fee as explained hereafter. Any replacement Tree shall be a minimum of four inch (4") caliper. In the event a Protected Tree needs mitigation, the total mitigation shall be calculated from the DBH Tree.

(1) Trees shall be classified for replacement and mitigation purposes as follows:

- a. Historic Trees: 3.0:1
- b. Specimen Trees: 1.5:1
- c. Class 1: 1.0:1
- d. Class 2: 0.7:1
- e. Class 3: 0.4:1

(2) New Trees required in order to satisfy the landscaping provisions of this ordinance shall be counted towards the Total Mitigation DBH.

(3) Once each Tree on the site is classified, site mitigation shall be calculated as follows:

- a. The **Calculated DBH** of each Tree shall be the DBH of the Tree multiplied by the appropriate classification ratio as described above. **The Total Calculated DBH** shall be the sum of all these Trees.
- b. A credit of fifty percent (50%) shall be given to the Total Calculated DBH. The **Preliminary Mitigation DBH** is 50% of the **Total Calculated DBH**.
- c. Tree preservation credit.
 - i. A three inch (3") credit against mitigation for each one inch (1") Calculated DBH shall be authorized for the preservation of any Tree that is a minimum of six inch (6") DBH and is listed as a Historic Tree, Specimen Tree, or Class 1 Tree.
 - ii. A one and a half inch (1.5") credit against mitigation for each one inch (1") Calculated DBH shall be authorized for the preservation of any Tree that is a minimum of six inch (6") DBH and is listed as a Class 2 or 3 Tree.
- d. Total Mitigation DBH shall be reduced by the Tree Preservation Credit and the classified caliper inches of new Trees required to satisfy landscaping requirements, as shown below:

$$\begin{aligned}
 & \text{Preliminary Mitigation DBH (50\% of the Total Calculated DBH).} \\
 & - \text{Tree Preservation Credit (see above).} \\
 & - \text{New Trees per Landscaping Requirements (Calculated Caliper inches).} \\
 & = \text{Total Mitigation DBH.}
 \end{aligned}$$

(4) A replacement Tree must be a Tree from the Tree List, or be approved by the Director.

- (5) In order to ensure biodiversity and protect against Tree diseases, if ten (10) or more new and/or replacement Trees are planted, no one species of Tree may constitute more than 30 percent (30%) of the total number of new and replacement Trees.
- (6) If a Certified Arborist, degreed urban forester, or Landscape Architect certifies that a Tree indicated on the Tree Survey is diseased or dead, and the Building Official confirms such certification of condition, then no Tree replacement or mitigation is required.
- (7) If the Building Official approves the planting of replacement Trees more than 30 days after the removal of protected Trees, the developer shall provide the Building Official with an affidavit that all replacement Trees will be planted within six (6) months. Developers shall plant all the replacement Trees identified on the Mitigation Plan. Documentation of the date of replacement Trees on the mitigation plan shall be provided to the Building Official upon their request. Additionally:
 - a. The Building Official has the authority to reject any Trees not meeting these standards.
 - b. Two (2) 6-month extensions may be approved by the Building Official due to limitations that would make planting of Trees impractical. Two (2) additional 6-month extensions may be approved by the Building Official if the development is being developed in a phased manner.
 - c. The property owner shall be required to maintain the replacement Trees in good condition for a minimum of two years. If a replacement Tree dies or is damaged within the initial two- year period, the property owner shall replace it with a Tree approved by the Building Official.

Q. Alternative methods of compliance with Tree replacement requirements.

In order to satisfy the Total Mitigation DBH, the developer may utilize any combination of alternative methods of compliance listed below. These alternative methods may also be used in combination with or in lieu of Tree replacement, so long as the Total Mitigation DBH is satisfied by one or all methods.

- (1) Tree Donation. The developer may donate the replacement Tree(s) to the city's park and recreation department, with the approval of the Director of Parks and Recreation.
- (2) Off-site Tree Replacement. In order to plant the replacement Trees on another property in the City, the responsible property must obtain the written approval of the following:
 - a. The property owner where the replacement Trees will be planted and the responsible party, to transfer responsibility for the replacement Tree under this article to the receiving party.
 - b. A site plan indicating the address of the property where the replacement Tree will be planted, and a site plan indicating the location of the replacement Tree.
 - c. The agreement may be structured to allow a non-profit association dedicated to Tree advocacy or conservation of land to plant, manage, and monitor replacement Tree.
- (3) Conservation Easement. The Developer may request to grant a conservation easement by plat to the City that includes protected Trees with a combined diameter equal to or exceeding the diameter for which mitigation is being requested.
 - a. Detailed baseline document prepared by a Certified Arborist, degreed urban forester, or Landscape Architect describing the properties physical and biological condition, the general age of any Tree stands, locations of easements and construction, and the

conservation values protected by the easement shall be required.

b. The City may decline the request for a conservation easement for any reason.

(4) Transplanted Trees. Established and healthy Protected Trees on a Tree removal property may be transplanted within the city. The transplanting process must conform to operational and safety standards stated in ANSI A300, as amended, and with ISA Best Management Practices for Tree Planting, as amended.

a. A protected Tree that meets the requirements of this section is not considered removed, or seriously injured, if the transplanted Tree is planted and maintained in a healthy growing condition.

b. Building Official approval is required before beginning the transplantation for credit as a landscape Tree, or for Tree replacement.

c. The following information is required to obtain the Building Official's approval in this section:

i. An initial assessment report must be provided to the Building Official by a Certified Arborist, degreed urban forester, or Landscape Architect describing the transplanting practice from beginning to end, including post planting care practices.

ii. A Tree survey or landscape plan prepared by a Certified Arborist, degreed urban forester, or Landscape Architect which identifies the original and final location of the protected Tree.

iii. Company names, contact information, and credentials of contractor performing work.

iv. Other information required by the Building Official.

v. The Building Official may require a Certified Arborist, degreed urban forester, or Landscape Architect to provide written certification that all Tree transplant procedures have been properly followed.

d. Credit for transplanted Trees.

HEALTHY PROTECTED TREES	TRANSPLANTED TREE CREDIT
< 6 inches in DBH	1 inch credit per 1 inch DBH
6 to 12 inches in DBH	2 inch credit per 1 inch DBH
12 to 24 inches in DBH	3 inch credit per 1 inch DBH
24 inches or more DBH	5 inch credit per 1 inch DBH

(5) Payment in Lieu of Replacement.

a. For Protected Trees, mitigation will be made in the amount of one hundred ninety-five dollars (\$195.00) per one inch (1") inch DBH. This amount is calculated by the using the formula for appraising the value of a Tree from the most recent edition of the *Guide for Plant Appraisal* published by the Council of Tree and Landscape Appraisers, and represents the average cost per inch of purchasing a Tree and keeping it alive for one year.

b. Subsequent removal (except for the exemptions noted in Section 52-35a (O)(5)(c)), damage, or critical alteration of any Tree used for credit as identified above shall

require mitigation replacement in accordance with this ordinance.

- c. If any Preserved and/or Replacement Tree(s) dies within two (2) years of initial planting or issuance of Certificate of Occupancy and is brought to the attention of the City, the current property owner shall be subject to the same replacement fee as for a Preserved Tree.

R. *Ordinance Enforcement.*

- (1) Developer's Agreement. No developer's agreement with the city shall be approved that does not require that all construction activities shall meet the requirements of the Tree preservation ordinance. This term is incorporated by reference into any developer's agreement with the city executed on or after the effective date of this subsection.
- (2) Building Permit. No building permit shall be issued unless the applicant signs an application or permit request which states that all construction activities shall meet the requirements of the Tree preservation ordinance and guidelines.
- (3) Acceptance of Improvements. No acceptance of public improvements shall be authorized until all fines for violation of this ordinance have been paid to the City or otherwise disposed of through the Municipal Court. No acceptance of public improvements shall be authorized until all replacement Trees have been planted, or appropriate payments have been made to the Reforestation Fund; however, the acceptance of public improvements may be authorized before all Trees have been replaced upon approval of the Director.
- (4) Certificate of Occupancy. No Certificate of Occupancy shall be issued until all fines for violations of this ordinance have been paid to the City or otherwise disposed of through the Municipal Court. No Certificate of Occupancy shall be issued until all replacement Trees have been planted or appropriate payments have been made to the Reforestation Fund; however, that a Certificate of Occupancy may be granted before all Trees have been replaced upon approval of the Director.

S. *Appeals.*

Appeals to the requirements established by this ordinance shall be to the Planning and Zoning Commission through the submittal of an application to the Department of Planning and Community Development on forms provided by the City of Irving. The application shall include a detailed alternative landscape proposal and justification for the need for the alternative plan. Public notice of appeals shall be provided in the same manner as for zoning cases. A nonrefundable filing fee in accordance with the most recent schedule of fees adopted by the City Council shall be required at the time of application. If an appeal to the requirements of this ordinance is denied by the Planning and Zoning Commission, the applicant may file an appeal of that decision to the Irving City Council within ten (10) business days of the denial. The appeal must be received within ten (10) business days and the Department of Planning and Community Development shall put the appeal on the next available regularly scheduled agenda after proper notice is sent. Public notice of the appeal to City Council shall be provided in the same manner as for the appeal to the Planning and Zoning Commission.

T. *Use of funds.*

Expenditures from the Tree fund shall be used solely for the purpose of purchasing and installing Trees and associated irrigation on public rights-of-way, public park land or any other city-owned property, maintenance of the Trees; and for administering the Tree fund.

U. *Violations.*

In addition to any criminal penalty for violation of this Code, the city council may authorize the city attorney to petition the appropriate court for civil penalties and/or injunctive relief under state law for violation of the requirements under this chapter or other applicable law.

The unlawful injury, destruction or removal of each protected Tree shall be considered a separate incident, and each incident subjects the violator to the penalty set forth herein per Tree.

- (1) Violations and Assessments. Violations of this ordinance and non-payment of fines levied will be attached to property involved through standard legal methods. Any person, firm, corporation, agent, city, state, or federal organization or employee thereof who violates a procedural requirement or who fails to comply with conditions established with a permit issued by the Director pursuant to this ordinance shall be guilty of a misdemeanor and upon conviction shall be fined five hundred dollars (\$500.00) per violation. Each procedural violation or failure to comply each day shall be considered a separate incident, and each incident subjects the violator to the penalty set forth herein.

V. *Savings Clause.*

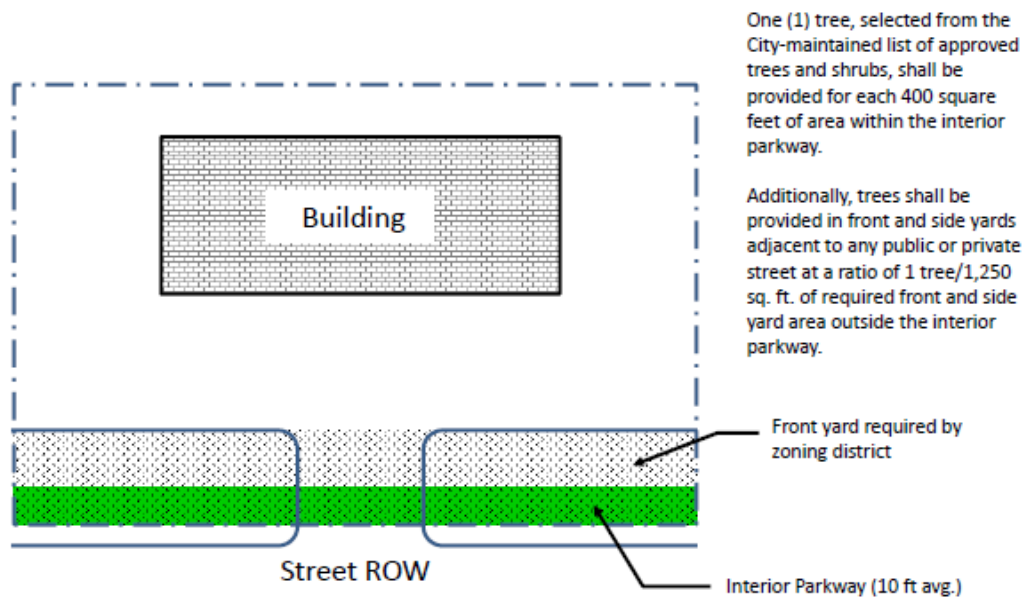
It is hereby declared to be the intention of the city council of the City of Irving that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs, or sections of this ordinance, since the same would have been enacted by the city council without the incorporation in this ordinance of any such unconstitutional or invalid phrase, clause, sentence, paragraph or section.

W. *Miscellaneous Requirements.*

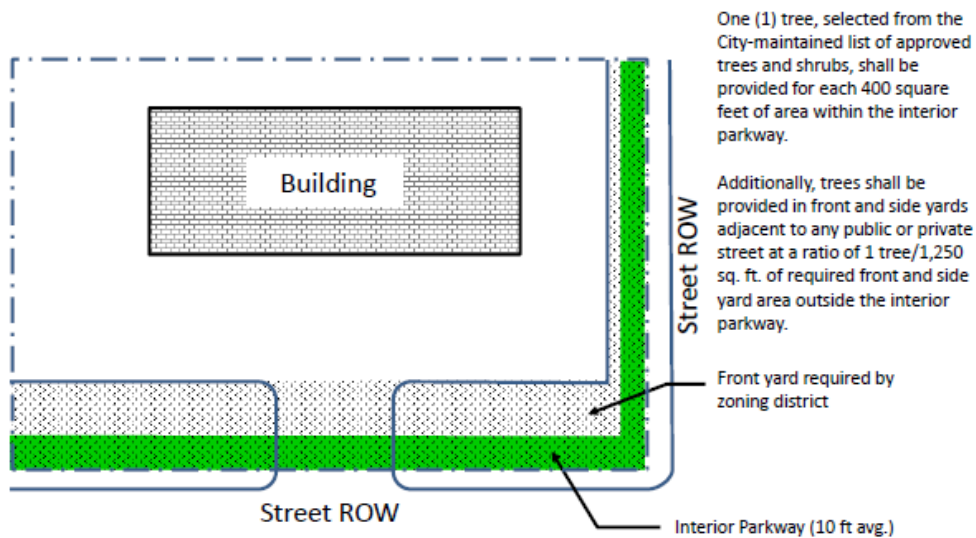
- (1) **Implementation Date:** This ordinance shall take effect on April 1, 2018. Any zoning cases and/or landscape variance requests submitted prior to April 1, 2018 shall be vested in the prior ordinance, unless the applicant chooses for this ordinance to be effective to their project.
- (2) **Builder/Contractor Requirements (New Construction Only).** A builder or contractor who has purchased land or lots for construction with intent to sell is subject to all requirements specified herein.

X. *Illustrations.*

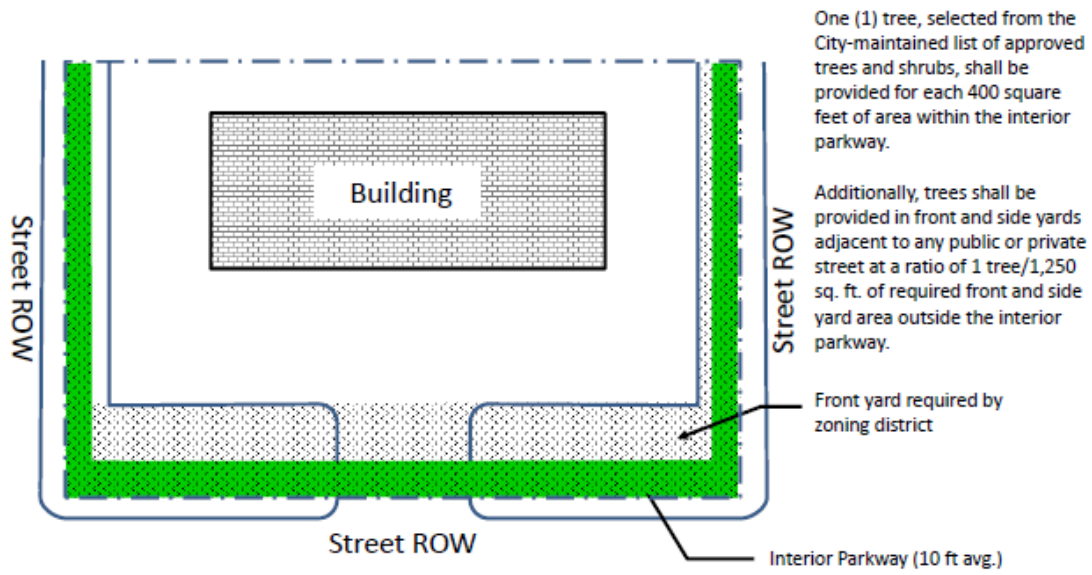
Photos, drawings, and other illustrations included in this section 52-35a are for informational purposes only and are intended to provide examples of the types of standards envisioned by these regulations. Such illustrations are not all-encompassing, and should there be a conflict between a photo or an illustration and the text of this section 52-35a, the text shall control.



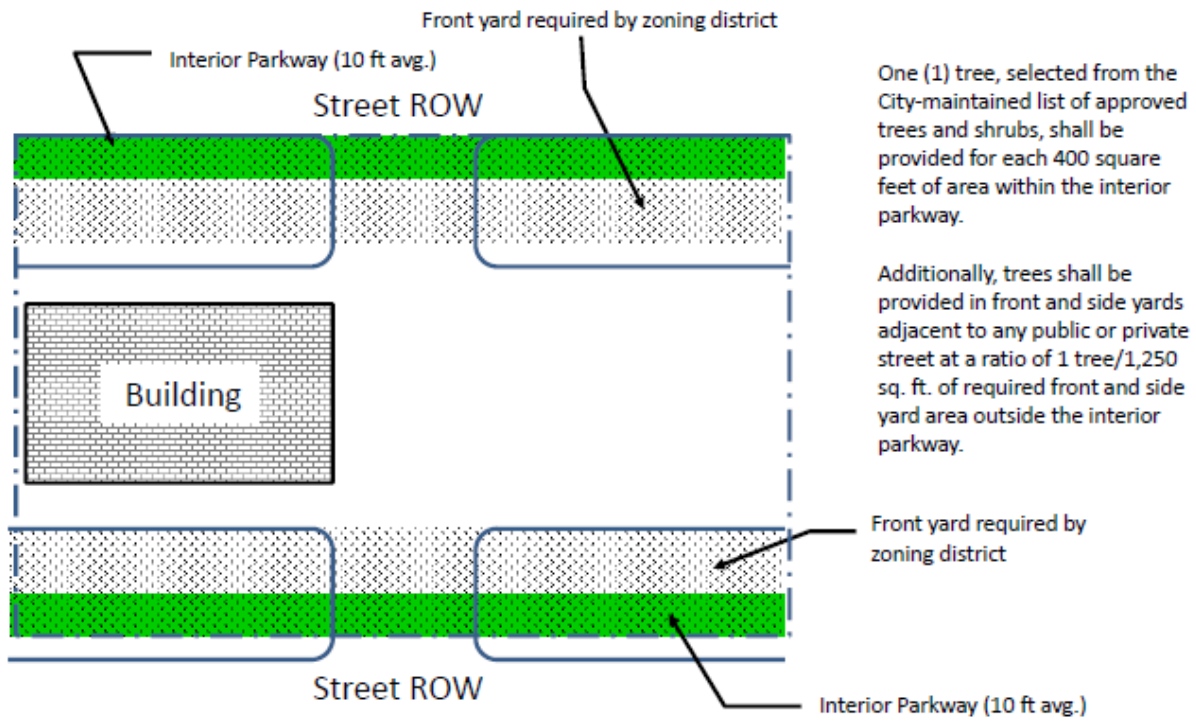
Lot with one street frontage



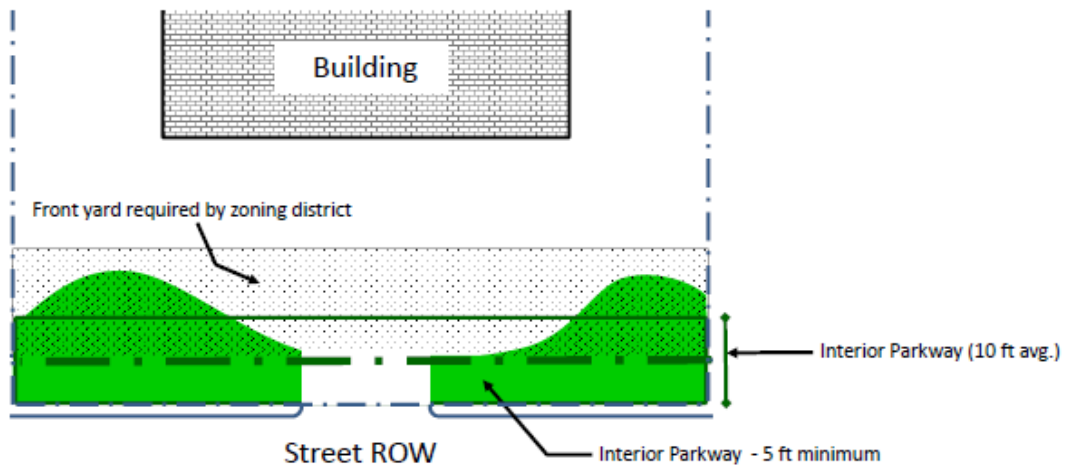
Corner Lot – Two Street Frontages



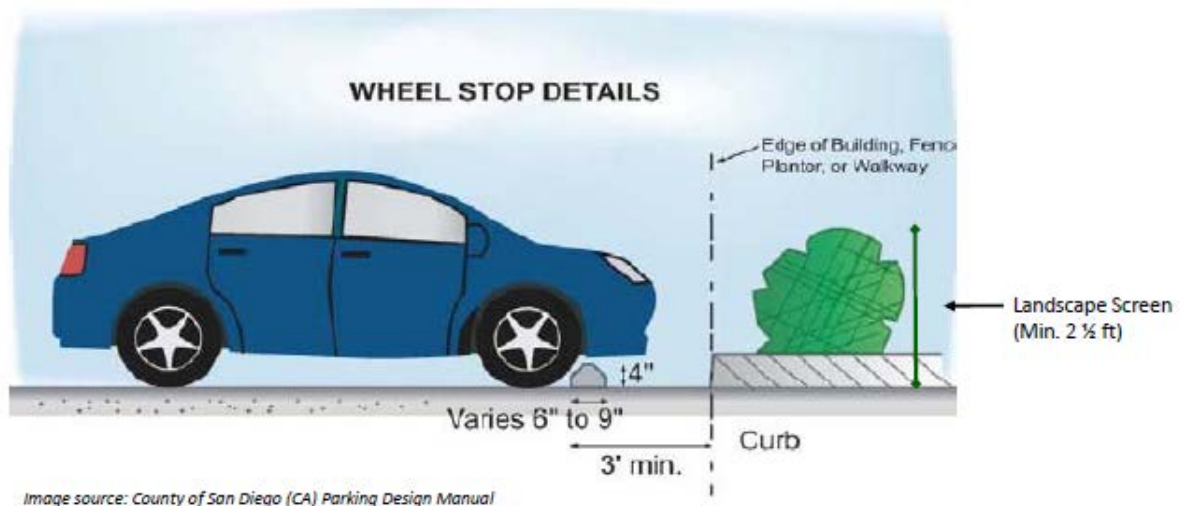
Corner Lot – Three Street Frontages



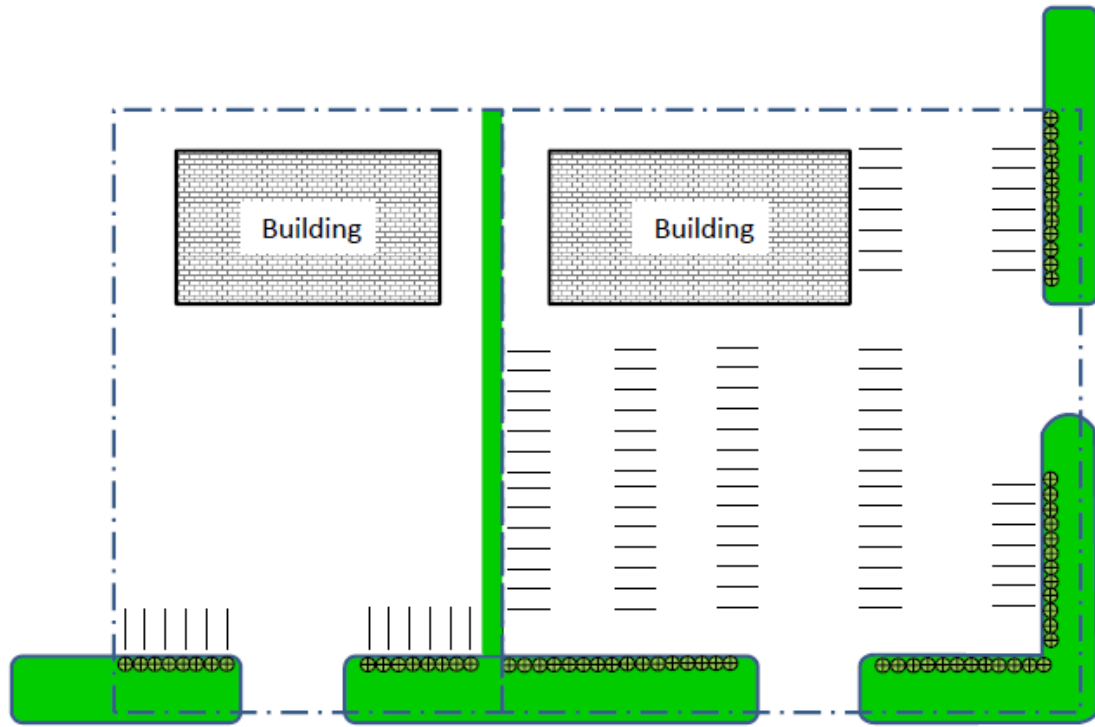
Through Lot with One Street Frontage



10-ft Average Width of Interior Parkway (with 5-ft minimum)



Screening of Parking Adjacent to Street



Screening of Parking Adjacent to Street

TREE CLASSIFICATIONS					
Unprotected Tree	Historic Tree	Specimen Tree (24"+)	Class 1 Tree	Class 2 Tree	Class 3 Tree
Any other Tree listed on the Texas A&M invasive plant list, as amended	Any Tree designated as such by the City Council		Any Class 2 or Class 3 Tree located in a Primary Natural Area	A Tree that is not otherwise classified	
Callery Pear		Post Oak (12"+)			Arizona Ash
Chinaberry		American Elm			Black Willow
Chinese Tallow		Cedar Elm			Honey Locust
Cottonwood		Eastern Red Cedar			Mimosa
Hackberry		Osage Orange			Mulberry
Ilex (except Yaupon Holly and Possumhaw Holly)		Oaks (other)			Sweetgum
Mesquite		Pecan			Ornamentals
Palm		Walnut			Pine
Sugarberry					Siberian Elm
Tree-of-heaven (Ailanthus)					Silver Maple