11.2. Requirements for plants used for landscaping.

When plants are used for landscaping under this section, the following requirements shall apply:

A. **Location and spacing.** Plants shall be staggered or clustered as necessary to meet the requirements of this section 11, including screening requirements, and to meet the needs of the particular species of plants for root space, water, light, and circulation.

B. **Minimum sizes at planting.** Plants shall be of the following minimum sizes at the time of planting:

**TABLE INSET:**

<table>
<thead>
<tr>
<th>Plant</th>
<th>Height</th>
<th>Caliper (Measured at 6 inches above the ground)</th>
<th>Canopy Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy trees</td>
<td>8 feet</td>
<td>2.5 inches except for Pecan (Carya illinoensis); Southern Magnolia (Magnolia grandiflora); Water Oak (Quercus nigra); Shurmard Oak (Quercus shumardii); Southern Red Oak (Quercus falcata); Bur Oak(Quercus macrocarpa); Willow Oak (Quercus phellos); and, Live Oak (Quercus virginiana), which may be 2 inches.</td>
<td>3 feet</td>
</tr>
<tr>
<td>Understory trees</td>
<td>5 feet</td>
<td>2 inches (May include cumulative calipers for multi-trunk understory trees)</td>
<td>N/A</td>
</tr>
<tr>
<td>Shrubs</td>
<td>30 inches</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

C. **Height at maturity.** As they grow, plants shall have an expected height according to type and species, and at each age, shall be maintained at expected heights. Plants shall be trimmed and maintained at natural shapes. At maturity, the following heights shall apply unless otherwise provided for in this section:

**TABLE INSET:**

<table>
<thead>
<tr>
<th>Plant</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy trees</td>
<td>In excess of or equal to 30 feet</td>
</tr>
<tr>
<td>Understory trees</td>
<td>Under 30 feet</td>
</tr>
<tr>
<td>Shrubs</td>
<td>Minimum of 4 feet (When used for required screening)</td>
</tr>
</tbody>
</table>

D. **Artificial plants and trees.** Artificial plants and trees shall not satisfy the requirements of this section.
E. The installation of indigenous plants and plants which encourage water conservation is encouraged.

F. *Outdoor pedestrian amenities.* The installation of fountains, public spaces, exterior furniture, bicycle racks and other outdoor pedestrian amenities, located within or adjacent to landscaping, which emulate traditional design and complement the principal building or structure, is encouraged.


11.3. Requirements for fences, walls and berms used for landscaping.

When fences, walls or berms are used for landscaping, such as for screening under this section, the following requirements shall apply:

A. *Fences and walls.*

1. The posts and grade beams of landscaping fences and walls used for landscaping shall be designed and constructed using materials and methods anticipated lasting at least 20 years without major repair.

2. Fences and walls made of wood shall have a cap rail along the entire length of the fence, and have a cap rail that is of a style, color and makeup that otherwise blends with or complements the wooden fence or wall.

3. All wood fences and walls used to meet landscaping requirements shall have either a grade beam or rot board, as appropriate, along the entire length of the base of the wooden section of the fence. The grade beam or rot board shall be at least four inches high, and may be partly below grade.

4. All masonry fencing used to meet landscaping requirements shall be constructed of the primary building material of the principal building, and shall be complementary in design to the principal building.

5. Where applicable, all masonry fencing shall comply with the provisions of section 7A.2.E, Designated Architectural Overlay Zoning Districts.

6. Use of chain link fencing materials shall not satisfy the requirements of this section for fences, walls or screening.

B. *Berms.*

1. Berms shall be constructed with soft, natural forms, and with smooth transitions, at a slope of no greater than one unit rise to four units run, unless stabilized by an anchored, durable retaining wall.
2. Berms shall be planted with trees, shrubs, vines, grasses, or other ground cover. Part of a berm may be devoted to a non-living screen such as a fence or wall.

(Ord. No. O-01-29, § 3, 7-26-2001)

11.4. Transitional buffer yards.

A. Required. Transitional buffer yards shall be required as set forth herein whenever:

1. A proposed nonresidential use adjoins a residential use in a residential district or adjoins undeveloped property in a residential district;

2. A proposed residential use adjoins a nonresidential use;

3. A proposed nonresidential use adjoins a nonresidential use of a different intensity;

4. A proposed residential use adjoins a residential use of a different density in a residential district; or,

5. A nonresidential use is adjacent to a collector or major thoroughfare as determined under the city's major thoroughfare plan.

B. Exceptions.

1. Section 11.4 shall not apply to transitional buffer yards between individual uses within the same integrated business development.

2. Section 11.4 shall not apply to public schools.

3. In instances where a transitional buffer yard and type A or type B screening are required under section 11.4, and preexisting buffer yard or screening which does not meet the literal buffer yard width or screening specifications required under section 11.4 is in place on the site, the preexisting buffer yards or screens may be accepted, or accepted with modifications, if it is determined by the director of planning to substantially meet the purposes of buffer yards and screening as set forth in section 11.1 hereof.

4. While buffer yards are not required between nonresidential uses of similar intensities, sufficient areas shall be provided between such uses to allow the installation of required landscaping for screening purposes.
C. **Screening.** Screening within a transitional buffer yard shall be either type A screening or type B screening as set forth below:

1. **Type A screening.** Screening composed of one of the following:
   a. Masonry wall fencing a minimum eight feet in height and one canopy tree per 30 linear feet of buffer yard. Such fencing shall be located along property lines unless physical constraints exist that would prohibit such placement as determined by the director of planning.
   b. Opaque or near opaque live vegetative screening year-round from the ground to a height of at least eight feet at installation with intermittent screening providing a minimum of 25 percent screening during the growing season to a height of at least 20 feet at maturity. A wood fence, a minimum of eight (8) feet in height shall also be located along property lines unless physical constraints exist that would prohibit such placement as determined by the director of planning.

2. **Type B screening.** Screening composed of a minimum of two of the following:
   a. One canopy tree per 30 linear feet of buffer yard.
   b. One under story tree per 20 linear feet of buffer yard.
   c. One shrub spaced a minimum of every 30 inches or less on center along the length of the buffer yard, or a combination of berming and shrubs which includes the minimum planting of one shrub per five linear feet of buffer yard.

D. **Standards.** Unless already provided, the following minimum standards for transitional buffer yard depths and associated screening shall be required for the applicable adjoining uses:

<table>
<thead>
<tr>
<th>TABLE INSET:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjoining Uses</td>
</tr>
<tr>
<td>For a nonresidential use adjoining a residential use located in a residential district OR adjoining undeveloped property located in a residential district, OR for a proposed residential use adjoining a nonresidential use:</td>
</tr>
</tbody>
</table>
When the nonresidential use does not exceed one-story, is residential in architectural character and does not have a driveway on the side adjoining the residential use, wood fencing may be installed in lieu of masonry fencing to satisfy Type A screening wall requirements.

<table>
<thead>
<tr>
<th>For a nonresidential use adjacent to a collector or major thoroughfare:</th>
<th>Twenty feet</th>
<th>Type B screening</th>
</tr>
</thead>
</table>
| For a residential use adjoining a residential use OR adjoining undeveloped property located in a residential district of a different density: | Depth option (a): Ten feet; or Depth option (b): Twenty feet | Type A screening if Depth option (a) is installed; Type B screening if Depth option (b) is installed
Exception: (1) Type B screening with a minimum depth of 20 feet shall be installed when the adjacent residential use in a residential district is separated from the proposed residential use by a public or private street. |

2. Anytime a nonresidential use of high intensity is adjacent to a nonresidential district or nonresidential use of medium intensity or a nonresidential district or nonresidential use of low intensity, the following standards shall apply:

   a. **Minimum buffer yard depth:** Minimum of ten feet, unless adjacent to a major thoroughfare, then the minimum depth shall be 20 feet.

   b. **Required screening:** For a buffer yard that is less than 20 feet, Type A screening shall be installed;

   For a buffer yard of 20 feet or more, Type B screening may be installed.

3. Anytime a nonresidential use of medium intensity is adjacent to a nonresidential district or nonresidential use of low intensity, the following standards shall apply:

   a. **Minimum buffer yard depth:** Ten feet, unless adjacent to a major thoroughfare, then the minimum depth shall be 20 feet.

   b. **Required screening:** Type B screening.
4. Anytime a residential use of any density in a residential district is adjacent to an existing residential use of a different density in a residential district, the following standards shall apply:

   a. *Minimum buffer yard depth:* Minimum of ten feet, unless adjacent to a major thoroughfare, then the minimum depth shall be 20 feet.

   b. *Required screening:* For a buffer yard that is less than 20 feet, Type A screening shall be installed;

   For a buffer yard 20 feet or more, Type B screening may be installed.

E. *Uses and structures permitted within transitional buffer yards.*

1. The following uses and structures shall be permitted in transitional buffer yards as set forth below:

   a. *Utility lines.* Utility lines, such as a publicly owned or federal, state or locally approved privately owned utility conduit transporting a utility service commodity, including water lines, sewer lines, storm sewer lines, and natural gas lines. Such utility lines shall cross the transitional buffer yard rather than run along its length whenever feasible.

   b. *Drainage conduit.* Culverts, ditches and similar conduit type drainage improvements shall be permitted in a transitional buffer yard when necessary for proper drainage. Such drainage improvements shall cross the transitional buffer yard rather than run along its length whenever feasible.

   c. *Pedestrian and bicycle paths.* Pedestrian and bicycle paths shall be permitted within transitional buffer yards.

   d. *Signs.* Signs shall be permitted within transitional buffer yards provided they are completely screened from view from any point on adjacent residential district properties and provided that such signs otherwise comply with all the other provisions of the zoning ordinance.

2. Transitional buffer yards shall not be used for parking, loading, storage, or any activity that is either part of or accessory to the proposed use.


11.5. *Off-street parking areas.*

A. *Screening from adjacent properties.*
1. Off-street parking areas shall be screened from public view by:
   
a. A solid evergreen hedge consisting of a double row of shrubs planted in a triangular pattern and spaced at a minimum of 30 inches or less; or

b. A berm, which reaches a minimum of four feet in height including plantings at maturity.

2. Exceptions:
   
a. Screening from adjacent properties shall not be required for off-street parking areas where adequate screening exists within the subject tract.

b. Off-street parking areas located to the rear of a principal building located within an I, Industrial District, shall be screened from public rights-of-way only and not from adjacent properties, and may be screened with a masonry wall, a minimum of four feet in height. However, where such areas are required by state or federal regulations to be secured by specified fencing, such fencing shall suffice for required screening. In the event such specified fencing is chain link fencing, the installation of vinyl slats or other opaque material, where possible, shall be incorporated into such fencing.

3. Landscape plan. Screening must be a part of a landscape plan approved by the city.

B. Landscaping.

1. The following landscaping requirements shall apply:

   a. Perimeter. No less than one canopy tree shall be planted along the perimeter of parking areas for each 30 feet of continuous landscaped parking areas perimeter except for that portion of the parking area which abuts buildings or structures located on the same parcel and except for that portion of the side or rear property line that abuts property that already meets the criteria set forth in this subsection.

   b. Islands and diamonds.

      i. Total planting island and diamond area requirements shall be calculated by the following formula:

      Total number of parking spaces x 20 square feet = total area required.

      ii. Each planting island shall be landscaped having no less than one canopy tree planted therein with appropriate vegetative ground cover and having no horizontal dimension of less than nine feet.
iii. Each planting diamond shall be landscaped having no less than one under story tree planted therein with appropriate vegetative ground cover and having no less than 36 square feet in area. Planting diamonds shall be located within off-street parking areas, between parking spaces.

iv. Planting islands and diamonds shall be evenly distributed throughout the parking area, and no parking space shall be located more than 40 feet from a planting island or a planting diamond.

2. Exceptions:

a. Landscaping shall not be required in off-street parking areas located within an I, Industrial District where such parking is located to the rear of a principal building, not within view of public roadways, and dedicated for business vehicles and/or employee parking.

3. For condominium or multifamily developments, the following additional standards shall apply:

a. Landscaping in and around parking areas in condominium or multifamily developments shall be located to minimize the expansive appearance of parking lots, provide shaded parking areas, and mitigate any negative acoustic impacts of motor vehicles. A landscaping island, containing a minimum of one canopy tree, is required to be located to separate at least every 12 parking spaces in a row.

b. Every carport section in condominium or multifamily developments shall be separated from an adjoining carport section by at least one eight-foot wide landscaped area, containing a minimum of one canopy tree.

C. Damage prevention. Parking spaces shall be blocked or curbed to prevent vehicles from damaging planting islands, landscaped yards, fences or screens.
