

Downtown Specific Plan Downtowncode

# Appendix A

## Parking Lot Shading Requirements

### Parking lot areas subject to the 50% shading requirement are as follows:

1. Parking stalls;
2. All vehicular back up areas.

### Parking areas not subject to the shading requirement include:

1. Truck loading areas in front of overhead doors;
2. Truck maneuvering and parking areas separate from other vehicle parking areas;
3. Driveways;
4. Surfaced areas not accessible for vehicle parking, driving or maneuvering;

### Shading requirements shall be calculated as follows:

1. Shade shall be calculated according to the percentage of shade coverage of the canopy, determined by the location of the tree within the parking lot. Refer to the parking lot shading diagram.
2. The shade percentage figures are based on the canopy spread of the tree 15 years from planting. The tree is assumed to be planted from 15 gallon containers.
3. Overlapping shade is not calculated twice. Therefore, spacing trees closer than their designated spread will not provide more shade value.

### Example of Shade Calculation

Tree	Interior Planter - 100%	South, East and West - 50%	Corner and North - 25%
Celtis sinensis	3 x (962) = 2,886	NA	NA
Lagerstroemia indica	NA	5 x (157) = 785	NA
Magnolia grandiflora	NA	2 x (481) = 962	2 x (240) = 480
Pyrus calleryana	NA	2 x (354) = 708	2 x (177) = 531
Calculated Total	2,886+	2,455 +	1,011 = 6,352

Required Total  
Area of Paving: 12,422 square feet

Area required to be shaded: 12,422 x 50% = 6211 square feet    6,352 > 6,211  
Shade provided exceeds amount required. Thus, shading requirements are satisfied.

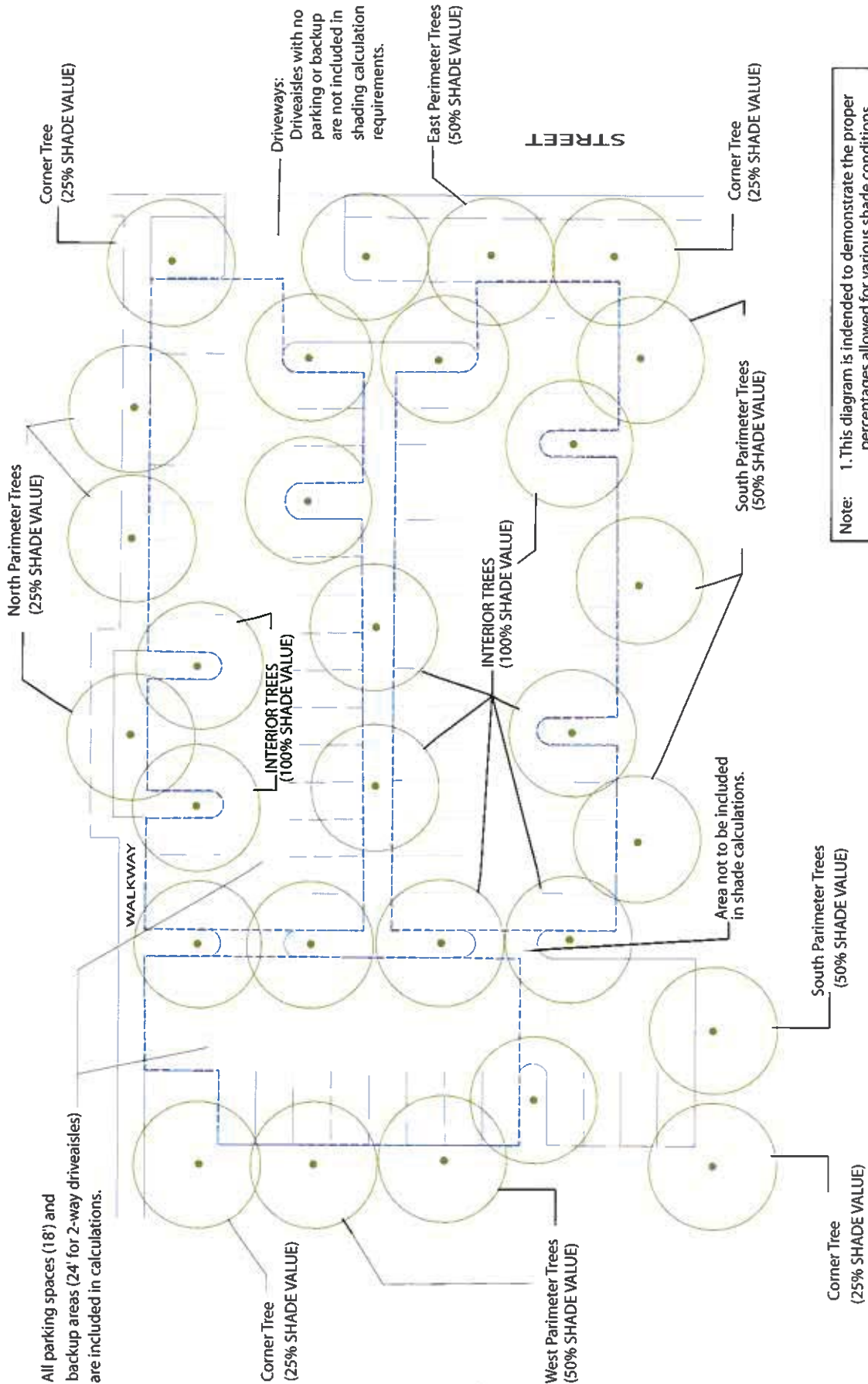
## Appendix A

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### Tree Sizes, Shade Percentages and Square Footages for Calculating Shade Coverage

<b>Tree</b>	<b>Interior Planter - 100%</b>	<b>South, East and West - 50%</b>	<b>Corner and North - 25%</b>
Large Trees 30' - 35'	962 sq. ft.	481 sq. ft.	240 sq. ft.
Medium to Large Trees 25' - 30'	707 sq. ft.	354 sq. ft.	177 sq. ft.
Medium to Small Trees 20' - 25'	491 sq. ft.	246 sq. ft.	123 sq. ft.
Small Trees 15' - 20'	314 sq. ft.	157 sq. ft.	79 sq. ft.

### Parking Lot Shade Diagram



Note:

1. This diagram is intended to demonstrate the proper percentages allowed for various shade conditions.
2. This diagram is not an example of the required 50% total shade coverage.
3. Shade overlap is not counted twice

