

**APPENDIX 10 - Proper Planting Practice - Provide Adequate Growing Space for
Future Growth of Canopy**

Proper Planting Practice

Provide Adequate Growing Space For Future Growth Of Canopy



Photo 1 & 2 Trees planted too close for instant greening effect will lead to poor health and structure of trees in the long run

Photo 3 & 4 Trees planted with adequate spacing will develop better form and structure

The Importance of Adequate Growing Space

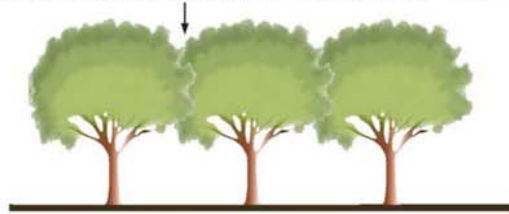
Adequate growing space is required for roots to anchor and obtain water, oxygen, and nutrients; and also for the crown to develop proper structure. In general landscape planting, trees planted too close will result in poor health and structure¹.

When allocating space for trees, the mature form, height and crown spread of the trees as well as the purpose of the planting should be taken into consideration.

In a spacious location, trees are best to be planted to allow the full width of the mature canopy. However, trees are very often used to achieve certain purposes such as to screen a view or achieve a desirable shade etc. Flexibility should therefore be allowed for some overlapping of tree canopies to an extent that is appropriate for the situation.

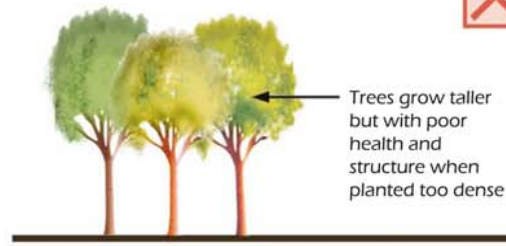
Adequate Spacing

Provided that the extent of overlapping will not adversely affect the tree structure, partial overlapping of canopies is acceptable/appropriate



Adequate growing space should be provided for future growth of canopy

Narrow Spacing



Trees grow taller but with poor health and structure when planted too dense

Inadequate growing space should be avoided for future growth of canopy

Narrow spacing may lead to:

- significant crown competition
- poor structure as trees cannot develop to full form or well developed taper
- susceptibility to wind or sun damage if one or more trees in the same stand die
- more disease and insect problems
- more long term stress related problem

¹ Trees, however, may be planted closely together in forestry plantation to achieve the desired vegetation coverage quickly during the early afforestation stage, or in specially designed urban landscape setting to establish the initial greening effect. This type of planting should be supported with a proper maintenance plan for thinning/removal of overcrowded trees for the long term benefit of tree health and structure.

References:

- Gilman, Edward F., *Trees for Urban and Suburban Landscapes*, Delmar Publishers, U.S., 1997
 Urban, James, *Up By Roots*, International Society of Arboriculture, U.S., 2008
 Whitcomb, Carl E., *Establishment and Maintenance of Landscape Plants II*, Lacebark Inc.