

to complement the trees. Medium-sized trees are also recommended for planting anywhere the above and below ground growing space will allow for reaching a mature height of 30' - 40' (10M - 12M). Appropriate soil spaces are: wide planting areas or medians [4' (1M) - 8' (3M) wide], large planting squares [8' (3M) square or greater] and other open areas of similar size or larger.

Low Zone

Trees that grow no taller than 20 feet (6M).

This zone extends 15 feet (4.5M) on either side of the wires. Trees with a mature height of less than 20 feet (6M) may be planted anywhere within this zone including street tree plantings under utility lines. They are also recommended when the growing space is limited. These trees are also appropriate for narrow planting areas [less than 4' (1M) wide], planting squares or circles surrounded by concrete, large raised planting containers or other locations where underground space for roots will not support tall or medium zone trees.

Some Further Suggestions

Windbreaks

Plant evergreen trees on the west or north side of the house, approximately 50 feet (15M) or more from the house.

Temperature

Plant deciduous (autumn leaf-dropping) trees on the south and/or west side of the house to cool in the summer and allow sun to enter the house in the winter.

Planning before planting will help you to be sure that the right tree is planted in the right place. Proper tree selection and placement will enhance your property value and prevent costly maintenance trimming and damage to your home. Good landscaping utilizes shrubs and low-growing trees that are compatible with utility lines. Low-growing trees will not reach utility lines. They will not, therefore, create public safety hazards, cause service interruptions to you or your neighbors nor will they require severe pruning.

For further information on planting and helpful tips on tree selection be sure to pick up the International Society of Arboriculture publications entitled *New Tree Planting and Tree Sel-*

ection available from your tree care professional or at your local garden center. If you have any more questions, please contact your tree care professional, utility company, local nursery, or county extension office.

This brochure is one in a series published by the International Society of Arboriculture as part of its Consumer Information Program. You may have additional interest in the following titles currently in the series:

- Avoiding Tree Damage During Construction
- Avoiding Tree and Utility Conflicts
- Benefits of Trees
- Buying High-Quality Trees
- Insect and Disease Problems
- Mature Tree Care
- New Tree Planting
- Plant Health Care
- Proper Mulching Techniques
- Pruning Young Trees
- Pruning Mature Trees
- Recognizing Tree Hazards
- Treatment of Trees Damaged by Construction
- Tree Selection
- Tree Values
- Trees and Turf
- Why Hire an Arborist?
- Why Topping Hurts Trees



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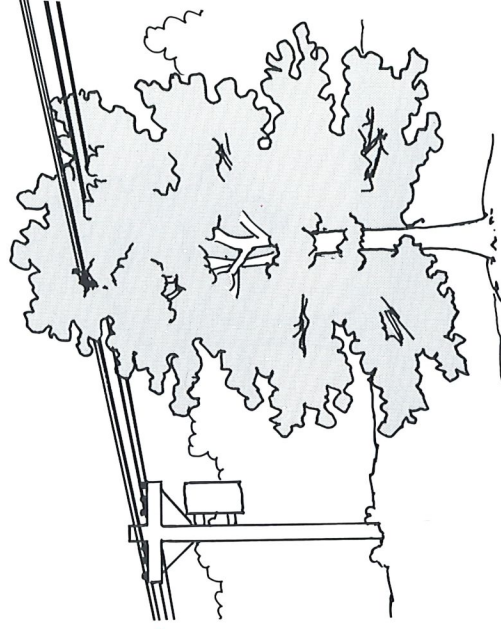
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Avoiding Tree & Utility Conflicts



Determining where to plant a tree is a decision that should not be taken lightly. Many factors should be considered prior to planting. When planning what type of tree to plant, remember to look up and look down to determine where the tree will be located in relation to overhead and underground utility lines.

Often, we take our utility services for granted because they have become a part of our daily lives. For us to enjoy the convenience of reliable, uninterrupted service, distribution systems are required to bring utilities into our homes. These services arrive at our homes through overhead or underground lines. Overhead lines can be either electric, telephone, or cable television. Underground lines include these three plus water, sewer, and natural gas. The location of these lines should have a direct impact on your tree and planting site selection. The



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ultimate, mature height of a tree to be planted must be within the available overhead growing space. Just as importantly, the soil area must be large enough to accommodate the particular rooting habits and ultimate trunk diameter of the tree. Proper tree and site selection will provide trouble-free beauty and pleasure for years to come.

Overhead Lines

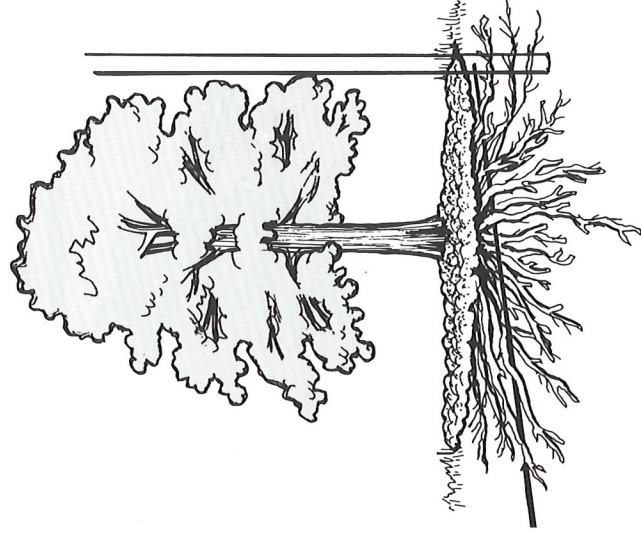
Overhead utility lines are the easiest to see and probably the ones we take most for granted. Although these lines look harmless enough, they can be extremely dangerous. Planting tall growing trees under and near these lines will ultimately require your utility to prune them to maintain safe clearance from the wires. This pruning may result in the tree having an unnatural appearance. Periodic pruning can also lead to a shortened life span for the tree. Trees which must be pruned away from power lines are under greater stress and more susceptible to insects and disease. Small, immature trees planted today can become problem trees in the future. Tall growing trees near overhead lines can cause service interruptions when trees contact wires. Children or adults climbing in these trees can be

severely injured or even killed if they come in contact with the wires. Proper selection and placement of trees in and around overhead utilities can eliminate potential public safety hazards, reduce expenses for utilities and their rate payers and improve the appearance of landscapes.

Underground Lines

Trees are much more than just what you see overhead. Many times the root area is larger than the branch spread above ground. Much of the utility service provided today is buried below ground. Tree roots and underground lines often co-exist without problems. However, trees planted near underground lines could have their roots damaged if the lines need to be dug up for repairs. Consult your tree care professional or garden center staff for assistance in choosing the tree which will have the right type of root system for the location you have chosen.

The biggest danger to underground lines occurs during planting. Before you plant, make sure that you are aware of the location of any underground utilities. To be certain that you do not accidentally dig into any lines and risk serious injury or a costly service interruption, call your utility company or utility protection service first. Never assume that these utility lines are buried deeper than you plan to dig. In some cases utility lines are very close to the surface.



Proper Places for Trees Around Homes

The illustration below indicates approximately where trees should be planted in relation to utility lines. Your garden center staff or tree care professional will gladly help you select the right tree.

Tall Zone

Trees that grow 60 feet (20M) or more in height.

Larger types of trees can be used here; however, you should consider your neighbor's view or their existing plantings of flower beds and/or trees. Plant large trees at least 35 feet (11M) away from the house for proper root development and to minimize damage to the house or building. These large growing trees are also recommended for streets without overhead restrictions. Street planting sites must also have very wide planting areas or medians [greater than 8' (3M)] which allow for a large root system, trunk diameter and root flare. Large trees are also recommended for parks, meadows or other open areas where their large size, both above and below ground, will not be restricted, cause damage or become a liability.

Medium Zone

Trees that grow no taller than 40 feet (12M).

These trees are used to decorate or frame your house or provide a park-like setting. Select your trees first, then plant shrubs

