

Tree Function

Large, healthy trees increase property values and make outdoor surroundings more pleasant. A deciduous shade tree that loses leaves in fall provides cooling relief from summer's heat while allowing the winter sun to warm a home. An ornamental tree displays beautiful flowers, leaves, bark, or fruit. Evergreens with dense, persistent foliage can provide a windbreak or a screen for privacy. A tree or shrub that produces fruit can provide food for the owner or wildlife. Street trees decrease the glare from pavement, reduce runoff, filter out pollutants, and add oxygen to the air we breathe. Street trees also improve the overall appearance and quality of life in a neighborhood.

Form and Size

A basic principle of modern architecture is "form follows function." Selecting the right form (shape) to complement the desired function (what you want the tree to do) can significantly reduce maintenance costs and increase the tree's value in the landscape. In addition, mature tree size determines the level of benefits received. Larger trees typically provide the greatest economic and environmental returns.

Depending on site restrictions, you can choose from hundreds of form and size combinations. A low, spreading tree may be planted under overhead utility lines. A narrow, columnar evergreen may provide a screen between two buildings. Large, vase-shaped trees can create an arbor over a driveway or city street.



these utility lines are buried deeper than you plan to dig. In some cases, utility lines are very close to the surface. Locating underground utilities before digging is often required by law.

Windbreaks

Plant evergreen trees on the west or north side of the house, approximately 15 metres 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 pruning 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 neighbours nor will they require severe pruning.



Protecting Esquimalt's Urban Forest

Tree selection and placement



Determining where to plant a tree is a decision that should not be taken lightly. 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 utilities.

Low Zones

TREES THAT GROW NO MORE THAN 20 FEET (6 METRES)

Trees with a mature height of less than 6 meters may be planted anywhere within this zone, including street tree planting under utility lines. Such trees are also recommended where soil volumes are too limited to support tall or medium zone trees.

Medium Zones

TREES THAT GROW NO TALLER THAN 40 FEET (12 METRES)

Medium-sized trees are often used to frame or soften the appearance of structures or create a park-like setting. Appropriate soil spaces are wide plant in areas or medians [4 to 8 feet (1 to 3 meters) wide], large planting squares [8 feet (3 meters) square or greater], and other open areas of similar size or larger.

Tall Zones

TREES THAT GROW 60 FEET (20 METRES) OR MORE IN HEIGHT

Plant large trees at least 35 feet (11 meters) away from the house for proper root development and to minimize damage to the building(s). These large-growing trees can be planted on streets without overhead restrictions if planting space is sufficient. Street planting sites should be greater than 8 feet (3 meters) and allow for a large root system, trunk diameter, and trunk flare.

Exposure

The amount of sunlight available will affect tree and shrub species selection for a particular location. Most woody plants require full sunlight for proper growth and flowering. Some do well in, or even prefer, light shade; however, few species perform well in dense

shade. Wind exposure is also a consideration. Wind can dry out soils, damage tree crowns, and uproot newly planted trees. Special maintenance, such as staking or more frequent watering, may be necessary to establish young trees on windy sites.

Drainage

Tree roots require oxygen to develop and thrive. Poor drainage limits oxygen availability to the roots and may ultimately kill the tree.

Hardiness

Hardiness is the plant's ability to survive in the extreme temperatures of the area you are planting the tree. Plants can be cold hardy, heat tolerant, or both.

Space Constraints

Many different factors can limit the planting space available to the tree: overhead or underground utilities, pavement, buildings, other trees, visibility. Make sure there is adequate room for the tree you select to grow to maturity, both above and below ground.

Pest Problems

Every plant has its particular pest problems, and the severity varies geographically. These pests may or may not be life threatening to the plant, but selecting trees resistant to pest problems specific to your area is the best choice.

Species Selection

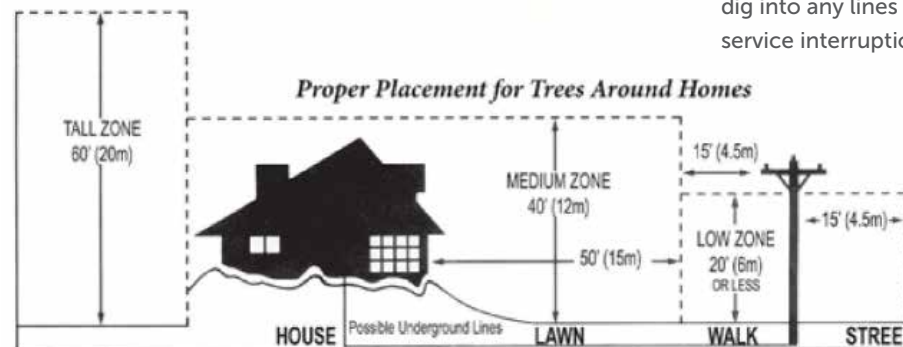
Personal preferences and site constraints play major roles in the selection process. Taking into consideration the factors listed above, you can help ensure the tree you plant grows and functions as desired. Remember, the beautiful, mature specimen trees you see in historic neighborhoods and in landscape photography would never have reached their full potential if planted in improperly matched sites.

Overhead Utility Lines

Overhead utility lines are easy to spot, yet often overlooked. Although these lines look harmless enough, they can be extremely dangerous. Planting tall-growing trees under or near these lines eventually requires your utility provider 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 that must be pruned away from power lines are under greater stress and are more susceptible to insects and disease.

Underground Lines

The greatest 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 BC 1. Never assume that



The illustration indicates approximate tree placement in relation to a home.