

VILLAGE OF BELLEVUE
ARBORICULTURAL SPECIFICATIONS MANUAL

ADOPTED 5/13/2009

REVISION ADOPTED BY VILLAGE BOARD 10/24/2018



Village of Bellevue, 2828 Allouez Avenue, Green Bay, WI 54311



Table of Contents

INTRODUCTION 3

PUBLIC TREE PLANTING PROGRAMS & POLICIES..... 4

TREE PLANTING STANDARDS..... 5

MAINTENANCE OF NEWLY PLANTED TREES..... 8

PRUNING STANDARDS 9

TREE REMOVAL POLICY 11

TREE REMOVAL STANDARDS..... 13

TREE PROTECTION POLICY 14

MISCELLANEOUS STANDARDS..... 16

DIGGER’S HOTLINE AND LOCAL UTILITIES 16

APPENDIX A – PLANTING LISTS..... 17

APPENDIX B – STREET TREE PLANTING PLAN.....19

Introduction

Authority: Pursuant to authority granted under Chapter 427 of the Village of Bellevue Municipal Code and the review and assistance of the Tree Board, the following serves as the Arboricultural Specifications and Standards of Practice for the Village of Bellevue, Wisconsin, hereinafter referred to as the Arboricultural Specifications Manual.

Policy: The policy of the Village of Bellevue is to regulate the planting, transplanting, maintenance, removal and protection of public trees and shrubs in the Village in order to alleviate hazardous conditions which may result in injury to persons using the streets, sidewalks or other public property within the Village. It is also policy to promote and enhance the beauty and general welfare of the Village by protecting trees and shrubs from undesirable treatments, maintenance practices, planting and removal.

Function: The general responsibility of the Parks, Recreation and Forestry Department is to maintain trees and shrubs located on all public properties, including but not limited to right of way, medians, parks and other public facilities and places. This involves all phases of arboricultural work from planting through removal. These specifications are to serve as a standard for the planting, transplanting, maintenance, removal and protection of all public trees and will apply whether work is performed by Village employees, contractors or private individuals. In abiding by and enforcing these specifications, the Village of Bellevue makes every effort to maintain a safe and aesthetically pleasing community. Exceptions to these specifications must be approved by the Village Forester. The Arboricultural Specifications Manual shall be adhered to at all times, but may be amended at any time when experience, new research, or laws indicate that improved methods or circumstances make it advisable, and only then with the advice and assistance of the Tree Board.

Public Tree Planting Programs & Policies

The Village has adopted the follow programs and policies regarding public tree planting.

1. **Planting Along Established Streets:** When, in the opinion of the tree board, with approval from the Village Board, the street right-of-way or terrace of any established street can be improved by planned tree planting, existing trees have been removed due to the moving or construction of buildings or roadways or when the number of trees in any street right-of-way or terrace has become so few as a result of normal removal or other cause, the Village may plant or cause to be planted such trees in the street right-of-way or terraces as it deems necessary. The cost of replanting in the street right-of-way or terrace shall be assessed against owners of adjacent property in the same manner as other special assessments.
2. **Planting of Trees When Streets are Reconstructed:** When streets are fully reconstructed, new trees shall be planted if, in the opinion of the Tree Board, there is adequate land in the right of way, terrace or boulevard to reasonably support tree growth. The cost of these new trees shall be assessed against owners of adjacent property in the same manner as other special assessments. The number and location of each tree, species and size of stock are to be determined by the Village Forester.
3. **Planting of Replacement Trees:** When trees are removed for the widening of any established street, for death or illness of the tree or the abatement of a nuisance, replacement trees shall be planted if, in the opinion of the Tree Board, there is adequate land in the right of way or boulevard to reasonably support tree growth. The cost of replacing these trees will be at the expense of the Village. The number and location of each tree, species and size of stock are to be determined by the Village Forester. Trees destroyed by vandalism, vehicles, lawn equipment, etc. will be replaced at a cost to the person causing the damage if known.
4. **New Subdivisions Tree Planting:** The Village shall require street trees for all new subdivisions in the Village. A linear curb fee shall be charged per a developer agreement, collected and placed in an escrow account for trees. The fee shall be determined each year and approved by resolution. After an occupancy permit has been issued and a lawn has been established for any lot in a development, trees shall be selected and planted in the right of way by the Village at the next practical planting cycle. The number and location of each tree, species and size of stock are to be determined by the Village Forester.
5. **Neighborhood Tree Planting Program:** The Village of Bellevue provides a neighborhood tree planting program for residents who wish to have trees planted in the right of way or terrace area adjacent to their property. The planting program will be offered in the fall and runs concurrent with other fall plantings. The resident pays for the wholesale cost of the tree, including planting.
6. **Public Tree Planting:** Should any owner of adjacent property desire to plant a tree on any public property, written permission shall be obtained from the Village Forester in which the number, species, location and size of the tree shall be designated. The cost of such planting shall be borne by the adjacent property owner.
7. **Planting Along Unimproved Streets:** Trees shall not be planted in the right of way or terrace on unimproved streets or where no curb and gutter exist.

Tree Planting Standards

1. **Tree Size:** All trees planted along the right of way or terraces and within public spaces must be of sufficient size to absorb the abuse and conditions common to trees planted in an urban environment. The minimum allowable size for trees are 1 ¾ inch caliper, however larger sizes may be required to ensure survival for specific situations. Tree caliper shall be measured six inches above the ground to the nearest ¼ inch.
2. **Condition:** Unless otherwise specified, all trees shall conform to the American Nursery and Landscape Association's American Standard for Nursery Stock, (Z60.1-current edition). Each tree chosen for planting shall be high-quality, healthy tree with evidence of vigorous growth during the previous year. All trees shall have a comparatively straight, single trunk, well developed leaders and crown, and the roots shall not only be characteristic of the species, cultivar or variety, but also exhibit evidence of proper nursery pruning practices. Ornamental trees may be multiple-stemmed in all areas except street right-of-ways. At the time of planting, all trees must have a full healthy crown, be free of mechanical injuries and display no other objectionable features that will affect the future form, health and beauty of the tree.
3. **Location:** All street trees shall be planted in a minimum of 9' of open space, of which cannot include the sidewalk reserve area. Trees must be planted a minimum of 5' from the curb and a minimum of 4' from the sidewalk or sidewalk reserve area. Trees planted in open space 10' or greater shall be planted midway between the curb and sidewalk or the sidewalk reserve area, unless in the opinion of the Village Forester, there is sufficient reason to plant the trees off-center. To allow for maintenance, minimize infrastructure conflicts and promote safety, trees shall be planted using the following guidelines:
 - a. Outside of the vision triangle, as defined in the Village Municipal Code Chapter 500-410(A).
 - b. 15' from a street light, fire hydrant, or power/utility pole
 - c. 10' from a driveway, utility valve or utility T, or sewer lateral
 - d. 6' from a water lateral
 - e. 5' from back of curb
 - f. 4' from sidewalk or sidewalk reserve area
 - g. Only low growing trees will be permitted in areas of power lines.
 - h. Trees shall only be planted on urbanized streets

Whenever possible, trees should not be planted within 10' of a water, sanitary or storm sewer main.

Exceptions to these guidelines may be made by the Village Forester when circumstances warrant, and public safety is not threatened.

These guidelines are also indicated in Appendix B of this manual.

4. **Spacing:** Future maintenance problems can be minimized by careful and thoughtful placement of trees. Spacing of trees is a function of local site conditions, the species used and their mature height spread and form. A safe minimum spacing between trees is a distance equal to the width of the species at maturity. The general guidelines for tree spacing are as follows:
 - a. 40' center-to-center for small trees
 - b. 50' center-to-center for medium trees
 - c. 60' center-to-center for large trees

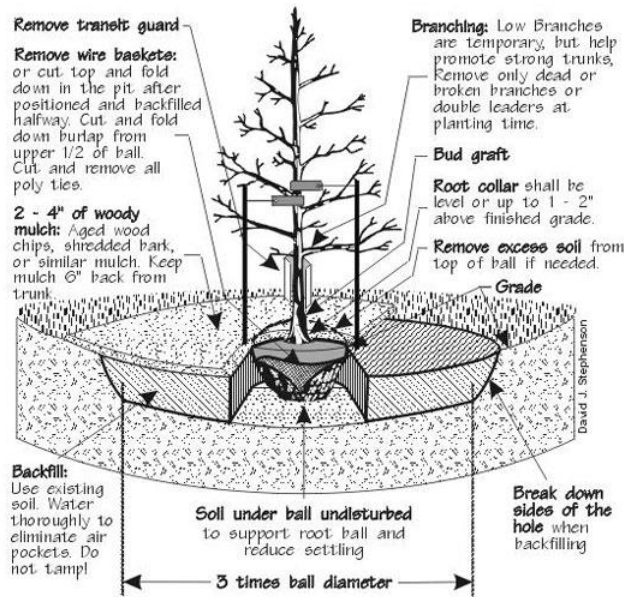
These guidelines are also indicated in Appendix B of this manual and in the Village Municipal Code Chapter 500-1706(A)(3).

5. **Recommended Trees Varieties:** Appendix A contains a list of tree species approved for planting in the Village based upon their mature size. The Tree Board shall review each year the trees listed in the list to determine whether any species, cultivars, or varieties should be added or removed from the list. Only small-growing trees shall be planted under overhead secondary or primary utility distribution lines. Trees planted to the side of the utility lines shall be carefully selected for mature habit to minimize future conflicts. Tree species selected must be planted in accordance with the following guidelines:
 No more than 10% in any one species,
 No more than 20% in any one genus,
 And no more than 30% from any one family.

6. **Undesirable/Banned Street Trees:** Appendix A includes species or their varieties that are either undesirable or banned for planting on Village property, except in special locations, where because of characteristics of adaptability or landscape effect, they can be used advantageously. Their lack of suitability is based upon objectionable growth habits, fruit, form, susceptibility to serious diseases, propensity to incur storm damage and other limitations. The limitations listed for each tree or species are more serious problems encountered locally.

7. **Planting Methods:** Proper planting methods (figure 1) are critical to ensuring a high level of transplanting success by encouraging proper root growth and reducing transplant shock.

Proper Tree Planting Diagram



Stake only if you have to. Use 3"-wide webbing straps and secure to stakes with heavy gauge wire. The wire should be able to stick straight out from the stake and hold the webbing strap up, preventing it from sliding down the tree. Do not stake tightly - trees gain strength from movement. Remove all stakes after one year.

Use of tree wrap is not recommended, as it causes a number of problems for the tree.

Wisconsin Dept. of Natural Resources
 Urban and Community Forestry
 1089

Figure 1

8. **Installation Time Periods:** Street tree plantings may take place during one or two time periods per season.
 - a. Spring: Mid-April through May
 - b. Fall: Mid-October through November. Some tree species can only be transplanted in the spring season for optimal establishment, so these species shall only be planted once per year.

9. **Warranty:** A 2-year guarantee shall be placed on any new tree planted by a contractor or developer. Death or damage to trees caused by sources other than poor planting or quality of tree shall nullify any warranty by the contractor or developer. The Director of Parks, Recreation and Forestry, or his/her designee shall determine the cause of death.

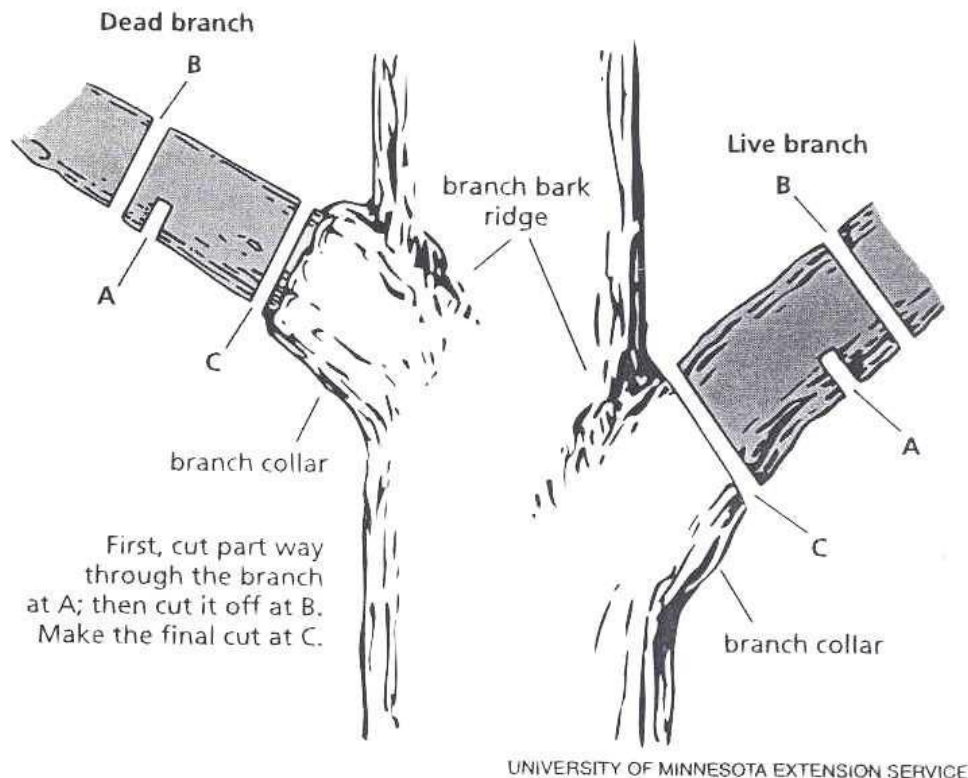
Maintenance of Newly Planted Trees

1. **General:** Newly planted trees, shrubs and other plants require special maintenance for one or two growing seasons following planting. All maintenance practices shall follow approved arboricultural standards.
2. **Watering:** Since up to 95% of the tree's roots were cut when the tree was dug in the nursery, regular watering is imperative to aid in the development of a strong new root system. Trees need to equivalent of about one inch of rain every week. When the soil is dry four inches below the soil surface, it is time to water. The Village and/or Contractor will water the trees at the time of planting. Residents are asked to help water the street trees planted in the right of way adjacent to their house during the first two growing seasons. Village staff will water all park and green space plantings, but only provide supplemental watering for plantings in residential areas.
3. **Mulching:** A layer of mulch around the newly planted tree is beneficial. It helps reduce competition from grass and weeds, retains soil moisture, improves soil fertility and structure and protects the trunk from damage caused by mowers and string trimmers. A 2-4" layer of mulch shall be placed at an even depth around the tree. Mulch shall be pulled 6" away from the trunk so as not to be touching the trunk as this promotes fungal diseases and encourages rodents to girdle the bark at the base of the tree. Mulch should be a woody material, seasoned or composted prior to placement. The use of stone or other inorganic material is discouraged and generally not recommended.
4. **Pruning:** No pruning should occur at the time of planting except to remove dead or broken branches. Unnecessary pruning at this time may reduce the amount of store energy the plant holds and may stress the tree. A pruning schedule may be started two years after planting.
5. **Fertilization:** Since excessive fertilization can "burn" roots and stimulates crown growth faster than the roots can supply water, it is best to wait until the third year after planting to begin applications. Adequate quantities of the essential nutrient elements should be available after new root growth starts. Provision of good drainage and adequate soil moisture are far more important following planting than fertilization.
6. **Staking:** Staking should only occur if necessary. Use 3" wide webbing straps and secure to stakes with heavy gauge wire. The wire should be able to stick straight out from the stake and hold the webbing strap up, preventing it from sliding down the tree. Do not stake tightly – trees gain strength from movement. Stakes shall be removed one year after planting.
7. **Wrapping:** Tree wrapping should not be used. However, plastic tree guards will be put on at the time of planting and will remain on the tree until the bark thickens enough to prevent damage or mortality from trunk injuries.

Pruning Standards

1. **General:** All pruning shall follow the America National Standards Institute's Standard Practices for Tree Care Operations-Pruning (ANSI A 300 (Part 1) current edition) for crown cleaning, crown thinning, crown raising, and structure development. Pruning shall improve the appearance of the trees and maintain the crown shape and symmetry typical of the species at its given size and age. Permission from the Village Forester is required before any pruning is done on any public tree.
2. **Pruning Cuts:** All final cuts shall be "collar cuts" made sufficiently close to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub, so that closure can readily begin under normal conditions, the face of the "collar cut" or wound area shall be circular in form. "Flush" cuts to the main stem behind the branch collar and that leave oval exposed wounds shall not be made. Cuts shall be clean and made such that all wound sides are even edged and do not leave "dog ear" ridges on one side or another. All limbs removed shall be cut in such a manner so as to prevent any ripping or tearing of the wood or bark on the parent or remaining stem. Large limbs shall be cut using the tree-cut pruning method as shown in Figure 2. Limbs shall be brought to the ground as to prevent any damage to property, publicly or privately owned.

Figure 2



3. **Crown Cleaning:** Crown cleaning should remove all dead, dying, diseased, crowded, weakly attached and low-vigor branches. Interior crowding and crossed or rubbing branches should be pruned where practical so as not to leave large holes in the general form of the tree. Sucker growth, trunk suckers, or water sprouts, especially where they are

present below the bottom half of the tree, should also be removed as part of the crown cleaning. Suckers and sprouts that add to the shape of the tree above 14 feet may remain in mature trees that may not have an optimum crown or shape.

4. **Crown Thinning:** Crown thinning should selectively remove and or prune branches back to large laterals light penetration and air movement through the crown. After crown thinning, trees and branches shall have foliage and mechanical stress evenly distributed along a branch and throughout the crown. Not more than 25% of foliage on mature trees shall be removed.
5. **Crown Raising:** Crown raising should remove lower branches where practical (dependent on tree size) to obtain an eventual full foliage height clearance of 14 feet on street side of tree. Work shall maintain the crown shape and symmetry typical of the species being pruned, and should balance the tree evenly. Raising should also allow an eventual clearance over the pedestrian walk (or resident side of tree) of 10 feet. Pruning may include heading cuts on lower limbs or thinning cuts to lighten lower branch loads to achieve clearance of complete branch removal from the tree trunk is not practical.
6. **Clearance Pruning:** Clearance of houses and buildings should be such that branches are a minimum of 15 feet from rooftops. Trees and other vegetation shall be pruned to maintain a clear line of sight when approaching all traffic control devices and intersections.
7. **Topping:** It is an unacceptable practice to top any public tree in the Village and it is not recommended for any private tree. Topping is the indiscriminate cutting back of tree branches to stubs or lateral branches that are not large enough to assume the terminal role of growth. Topping will make a tree more hazardous in the long-term by encouraging excessive growth and extensive decay.
8. **Pruning Tools:** Proper tools such as hand pruners, pole saws, hand saws and chain saws shall be used for each cut. The cutting edges of each tool shall be positioned to obtain a proper cut so it will not cut, rip or harm adjacent bark areas. At no time shall any person working in trees for pruning purposes, wear spurs or any other footwear that might injure the tree being pruned.
9. **Site Prep/Clean-up:** Vehicle and pedestrian warning devices shall be properly placed prior to any tree work. Pruned limbs and branches temporarily placed in the right of way shall be placed in such a manner as to eliminate any obstruction to vehicles and pedestrians. Site cleanup shall include the removal of small twigs, chips, leaves, and limbs from the street, curb, right of way, sidewalk and private property with the appropriate tools for the task. The site shall be returned to the same state it existed in prior to the pruning work. No materials or tree waste may be allowed to lie on the right of way overnight.
10. **Pruning of Oak and Elm:** In an effort to minimize the effects of Oak Wilt and Dutch Elm disease, it is prohibited to prune Oak or Elm tree varieties from April 1st to November 1st.
11. **Wound Dressing:** Under normal circumstances, wound dressings or pruning paints shall not be applied to pruning cuts. The exception to using wound dressings is when corrective or emergency pruning needs to be done on oaks (*Quercus* spp.) and American elms (*Ulmus Americana*) during the growing season. Application of wound dressing is recommended to prevent the introduction of pathogens such as Dutch elm disease and oak wilt which can transmitted by insects attracted to the sap of fresh wounds.

Tree Removal Policy

It is the policy of the Village of Bellevue to base tree removals on safety related criteria and liability. The Village Forester or his/her designee is the only staff member who may authorize the planting or removal of a public tree.

- a. *Acceptable Reasons for Public Tree removal:* A tree may be removed when the Village Forester concludes that any of the following conditions may exist:
 - i. Any tree, shrub, or plant determined to be a public nuisance as defined in Bellevue municipal code 427—8 (A)
 - ii. Any dead or dying tree;
 - iii. Public trees that must be removed due to street reconstruction.
 - iv. Any otherwise healthy tree, which harbors insects or diseases, which could reasonably be expected to seriously insure or harm any other tree;
 - v. Any tree which, by reason of location or condition, constitutes a potential danger to the health, safety or welfare of the general public. In the category of dangerous or hazardous trees are those with observable, critical structural defects that could cause the tree to fail during period of stress, i.e. wind, ice, etc. Included are extensive rot or cavity formations, weak forks, or crotches, and/or other characteristics that would impose an immediate liability to the Village.
 - vi. The tree will be made hazardous by publicly funded construction and the project cannot be reasonably re-routed away from the tree. Any of the following conditions would result in a hazardous tree: 1/3 or more of the root system is removed or damaged by construction; or work is performed with 4' of the buttress, and 4 roots greater than 4" in diameter are removed.
- b. *Unacceptable Reasons for Public Tree removal:* NOT included in the definition of a tree as a public nuisance or immediate hazard are the following:
 - i. Species of trees currently classified as undesirable and thereby prohibited from being planted on Village owned property, as listed in Appendix A, with the following exceptions:
 1. Any individual tree listed in the prohibited species table that is declared a public nuisance by the Village that meets the specification for removal as previously identified.
 2. Any individual or species of tree listed in the prohibited species table that is designated by the Village as being part of a scheduled replacement program designed to upgrade Village public tree diversity or limit potential infestations or diseases.
 - ii. Individual trees, regardless of species or kind, that poses either an imminent or potential hazard for which corrective action can be taken.
 - iii. Trees that constitute an inconvenience to the public by virtue of leaf, twig or fruit drop; that act as source of allergies; that cause root blockage in sanitary or storm sewers; that inhibit or prevent the growing of turf beneath the canopy; that are subject to non-fatal disease or insect problems.
 - iv. Trees that constitute an inconvenience to the public by virtue of their location, except those public trees that pose serious obstruction problems in terms of egress or access to private property or new construction projects. The removal of a public tree for purposes of accommodating private facilities will not be sanctioned unless the following conditions have been satisfied:
 1. There are not other reasonable design alternatives;
 2. Transplanting the tree is feasible based on currently acceptable practices.

3. The cost of removal has been determined by the Village Forester.
4. The Village is compensated for the cost for removal of the tree(s) and replacement of the tree(s) by the adjacent property owner before removal is authorized by the Village.

Tree Removal Standards

1. **Safety Standards:** All safety standards shall be in accordance, but not limited to, ANSI (Z133.1-Current Edition). Proper personal protective equipment shall be worn at all times while performing tree work.
2. **Site Preparations:** The following items must be performed prior to any tree removal:
 - a. Verify tree location and description before starting removal;
 - b. Vehicle and pedestrian traffic must be adequately warned and controlled prior to and during tree removal;
 - c. If both lanes of traffic are to be closed in the removal operations, the Public Works Director, Police, Fire and Rescue Services must be notified prior to work commencing;
 - d. Location of overhead utility lines, homeowner obstructions, etc. must be identified to avoid conflicts and damage.
3. **Removal Procedure:** The tree shall be removed using the safest and most efficient arboricultural methods. All precautions shall be made to prevent damage to public or private property. Any limb that cannot be controlled by hand while being cut shall have a rope or ropes attached for controlled lowering using appropriate equipment. No equipment shall be left at the work site overnight. Climbing spikes or spurs may only be used during the removal of the tree.
4. **Clean Up:** Pruned limbs and branches temporarily placed in the right of way area shall be placed in such a manner as to eliminate any obstruction to vehicles and pedestrians.

Site cleanup shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right of way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the removal. Under no circumstances shall any materials be allowed to lie on the right of way overnight.

As removals may occur during or after snow events, some debris may not be immediately accessible for clean up. In these instances, debris in these areas after the snow melts shall be re-cleaned and raked.

Wood chips, if left for the resident shall be dropped only on private property and not on the right of way or in the street. Logs left at the homeowner's request must be on the resident's property and not the right of way. Removal waste can also be delivered to the Village's Public Works Compost facility.

5. **Stump Removal:** The stumps of all removed trees shall be ground to a depth of at least eight inches (8") below the surrounding ground level. The excess stump chips shall be removed, the hole filled with clean topsoil and the site graded and seeded. Watering of newly established grass will then be the responsibility of the adjacent property owner. All associated costs with stump removal shall be borne by whoever bears the cost of tree removal.

Tree Protection Policy

1. **Bridging, Tunneling, Drilling, etc.:** The protection of trees shall involve bridging, tunneling, drilling or boring underneath the existing trees. The surface area directly adjacent to the tree shall not be disturbed under the following guidelines:
 - a. 3" DBH trees or less - two feet on either side of tree with a minimum three foot depth;
 - b. 3" to 8" DBH trees - four feet on either side of tree with a minimum three foot depth;
 - c. 8" DBH trees and over - five feet on either side of tree with a four foot minimum depth;
2. **Depositing Material Near Trees:** No person shall place or maintain upon the ground in a public street or right-of-way of the Village any soil, stone, cement, lumber, or other substance or material which shall impede the free passage of water and air to any tree or shrub without leaving an open space of ground outside of said tree or the base of said shrub of an area not less than 16 square feet. Before depositing any such materials near to trees or shrubs, the person so depositing said material shall place such guards around the trees and shrubs as shall effectually prevent injury to them.
3. **Moving Of Buildings:** The contractor shall notify the Village Forester at least 48 hours in advance of moving any buildings. If any pruning is necessary as the building is being moved, the pruning will be coordinated by the Village Forester and costs absorbed by the contractor.
4. **Root Care:** Exposed tree roots shall be covered with backfill as soon as possible following curb and gutter removal. Root foundations must remain adequate to withstand heavy windstorms.
5. **Sidewalk, Driveway, And Curb And Gutter Removal:**
 - a. Caution should be used during removal to avoid any unnecessary damage to the tree or its root system.
 - b. Roots requiring removal shall not be cut by means of mechanical root cutting machines. If root removal is essential, roots shall be manually cut with sharp hand implements.
 - c. Root systems on the sidewalk or driveway side of the tree shall be cut no deeper than 9 inches below the finished grade of the new walk and not more than 5 inches from the edge of the new walk or driveway.
 - d. Root systems on the curb side shall be cut not more than 12 inches behind the back of the new curb and not more than 18 inches in depth when constructing new curb and gutter.
6. **Tree Replacement:** The Village Forester may remove and replace, at the contractor's expense, any tree(s) which has been determined to be excessively damaged.
7. **Trunks And Lines:**
 - a. At least 48 hours before start of construction, the contractor shall call the Village Forester to discuss problems with overhanging branches that might be damaged despite his/her exercising care in construction.
 - b. Tree trunks shall be enclosed with wood slats, rubber tires, or snow fence wired in place where contractor's operation may scar the trunk or compact the root zone of the tree. The contractor shall exercise care to assure tree trunks, limbs, and roots are not damaged by its operation.

- c. Damage to branches of the trees due to the contractor's negligence will be repaired by the Village and billed to the contractor.

Miscellaneous Standards

1. **Fertilization:** The Village does not, in general, fertilize right of way trees. A resident who wishes to fertilize the right of way tree(s) adjacent to their property shall request written permission from the Village Forester. All fertilization shall adhere to the American National Standards Institute's Standard Practices for Tree Care Operations – Fertilization (ANSI A 300 Part 2-Current Edition).
2. **Cabling and Bracing:** All cabling and bracing practices shall follow the American National Standards Institutes Standard Practices for Tree Care Operations – Support Systems, Cabling, Bracing, and Guying (ANSI A 300 Part 3 – Current Edition).
3. **Spraying:** The Village, in general, limits the use of pesticides on its public trees. Applications may be done for the control of specific diseases or insects with the proper timing and materials to obtain the desired level of control. Suitable precautions shall be taken to protect and warn the public that spraying is being done. All application practices shall conform to the appropriate State and Federal regulations. A resident who wishes to apply pesticides to the right of way tree(s) adjacent to their property shall request written permission from the Village. The Village Forester has the authority to approve or deny a pesticide application request. Residents applying for permission to apply pesticides must submit the following information: type of pesticide, timing (weeks(s) to be applied), quantity to be used, application method, and reason for pesticide use. If the application is done by a commercial contractor or is a restricted use pesticide (RUP), proof of a valid Wisconsin Department of Agriculture Trade and Consumer Protection Commercial Applicator License Number is also needed.

Digger's Hotline and Local Utilities

Digger's Hotline (800-242-8511) and all appropriate local utility companies must be notified prior to any underground excavation, including but not limited to: tree planting, stump removal and root repair. Three business days are customarily required as sufficient notice for the processing of locates. Proper marking of excavation sites prior to calling ensures that no resident, employee or utility are at risk from damage to unmarked utilities. Work within 18" of any underground utility requires hand digging to expose the facility and prevent unnecessary damage to utilities. Private utilities (i.e. irrigation, pet fences, private lighting etc.) located within the public right-of-way shall be marked by the adjacent property owner at their expense.

Appendix A – Planting Lists

Acceptable Small Trees (30' Max Height) – Acceptable trees for right-of-way with overhead utility lines.

*Due to an overabundance of maple species in the Village's current street and park tree inventory, maple trees are not a desirable tree to be planted in Village right-of-ways. They are not banned, however in most cases alternatives should be planted.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Cultivars</u>
<i>Acer ginnala</i>	Amur Maple (Tree Form)*	
<i>Acer tataricum</i>	Tartarian Maple*	
<i>Amalancheir canadensis</i>	Serviceberry	'Autumn Brilliance'
<i>Carpinus caroliniana</i>	American Hornbeam	
<i>Corylus colurna</i>	Turkish Hazel/Filbert	
<i>Crateagus crusgalli</i>	Cockspur Thornless	
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	
<i>Crataegus viridis</i>	Winter King Hawthorn	'Winter King'
<i>Inermis</i>	Hawthorn	
<i>Maackia amurensis</i>	Amur Maackia	
<i>Magnolia x loebneri</i>	Magnolia	'Loebner'
<i>Magnolia acuminate x denydata</i>	Magnolia	'Butterflies'
<i>Magnolia stellate</i>	Magnolia	'Star'
<i>Malus spp.</i>	White Flowers/Red Fruit Crab	'Adirondack', 'Guinzam' (Guinevere), 'Jewelcole' (Red Jewel), 'Kinarzam' (King Arthur), 'Sutyzam' (Sugar Tyme)
<i>Malus baccata</i>	Siberian Crabapple	'Jackii'
<i>Malus sargentii</i>	Sargent Crabapple	'Select A' (Firebird), 'Tina'
<i>Malus x zumi</i>	Redbud Crabapple	'Calocarpa'
<i>Malus spp.</i>	White Flowers/ Yellow Fruit Crab	'Bob White', 'Cinzam' (Cinderella), 'Excazam' (Excalibur), 'Lanzam' (Lancelot), 'Ormiston Roy'

<i>Malus spp.</i>	Pink or Red Flower/Red or Purple Fruit	'Camzam' (Camelot), 'Canterzam' (Canterbury), 'Cardinal', 'JFS-KW5' (Royal Raindrops), 'Orange Crush', 'Parsi' (Pink Princess), 'Prairiefire', 'Prairie Maid', 'Purple Prince'
<i>Malus sargentii</i>	Sargent Crabapple	'Candymint'
	Weeping to semi-weeping form	'Coral Cascade', 'Louisa', 'Luwick', 'Manbeck Weeper' (Anne E.), 'Molazam' (Molten Lava)
<i>Prunus sargentii</i>	Sargent Cherry	
<i>Prunus</i>	Accolade Cherry	'Accolade'
<i>Ostrya virginiana</i>	Ironwood	
<i>Prunus cerasifera</i>	Newport Plum	
<i>Prunus nigra</i>	Princess Kay Plum	'Princess Kay'
<i>Prunus virginiana</i>	Canada Red Chokecherry	"Canada Red"
<i>Syringa pekinensis</i>	Peking Lilac	
<i>Syringa reticulata</i>	Japanese Tree Lilac	'Ivory Silk', 'Summer Snow'

Acceptable Medium Trees (30' – 45' Max Height) for right-of-way planting

*Due to an overabundance of maple species in the Village's current street and park tree inventory, maple trees are not a desirable tree to be planted in Village right-of-ways. They are not banned, however in most cases alternatives should be planted.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Cultivars</u>
<i>Acer truncatum x platanoides</i>	Shantung Hybrid Maple*	'Norwegian Sunset', 'Pacific Sunset'
<i>Corylus colurna</i>	Turkish Filbert	
<i>Maclura pomifera</i>	White Shield Osage Orange	'White Shield'
<i>Phellodendron amurense</i>	Amur Cork Tree	

<i>Populus grandidentata</i>	Big Tooth Aspen	
<i>Pyrus calleryana</i>	Callery Pear	'Autumn Blaze', 'Bradford', 'Cleveland Select'

Acceptable Large Trees (50' Min Height) for right-of-way planting

*Due to an overabundance of maple species in the Village's current street and park tree inventory, maple trees are not a desirable tree to be planted in Village right-of-ways. They are not banned, however in most cases alternatives should be planted.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Cultivars</u>
<i>Acer x freemanii</i>	Freeman Maple*	'Autumn Blaze', 'Celebration', 'Marmo'
<i>Acer miyabei</i>	Miyabe Maple*	'State Street'
<i>Acer platanoides</i>	Norway Maple*	'Cleveland', 'Columnar', 'Crimson King', 'Crimson Sentry', 'Crystal', 'Deborah', 'Emerald Lustre', 'Emerald Queen', 'Globosum', 'Royal Red', 'Schwedleri', 'Superform'
<i>Acer saccharum</i>	Super Maple*	'Green Mountain', 'Fairview', 'Goldspire'
<i>Aesculus glabra</i>	Ohio Buckeye	
<i>Aesculus hippocastanum</i>	Horsechestnut	'Baumannii', 'Ruby Red'
<i>Betula nigra</i>	River Birch	'Heritage'
<i>Celtis occidentalis</i>	Hackberry	'Prairie Pride'
<i>Cercidiphyllum japonicum</i>	Katsuratree	
<i>Eucommia ulmoides</i>	Hardy Rubber Tree	
<i>Ginkgo biloba</i>	Ginkgo (Male)	'Autumn Gold', 'Fairmount', 'Magyar', 'Saratoga', 'Shangri-La'
<i>Gleditsia triacanthos</i>	Thornless Honeylocust	'Christie', 'Harve' 'Imperial', 'Moraine', 'Shademaster', 'Skyline', 'Sunburst', 'True Shade'
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	'Espresso', 'J.C. McDaniel'

<i>Liriodendron tulipifera</i>	Tuliptree	
<i>Phellodendron amurense</i>	Corktree	'Macho'
<i>Phellodendron lavalleyi</i>	Lavalle Corktree	'Longnecker'
<i>Phellodendron sachalinense</i>	Sakhalin Corktree	'His Majesty'
<i>Quercus alba</i>	White Oak	
<i>Quercus bicolor</i>	Swamp White Oak	
<i>Quercus x bimundorum</i>	Crimson Spire Oak	'Crimschmidt'
<i>Quercus macrocarpa</i>	Bur Oak	
<i>Quercus x macdenielli</i>	Heritage Oak	'Clemon's'
<i>Quercus muehlenbergii</i>	Chinkapin Oak	
<i>Quercus robur</i>	English Oak	'Skymaster'
<i>Quercus Rosehill</i>	Rosehill Oak	
<i>Quercus x schuettei</i>	Swamp Bur Oak	
<i>Quercus x warei</i>	Regal Prince Oak	'Long'
<i>Quercus rubra</i>	Northern Red Oak	
<i>Taxodium distichum</i>	Baldcypress	
<i>Tilia</i>	Linden	'Harvest Gold', 'Redmond'
<i>Tilia Americana</i>	American Linden	'Redmond'
<i>Tilia cordata</i>	Littleleaf Linden	'Fairview', 'Greenspire', 'Prestige'
<i>Tilia x eucholra</i>	Crimean Linden	
<i>Tilia x flavescens</i>	Glenleven Linden	'Glenleven'
<i>Tilia tomentosa</i>	Silver Linden	
<i>Ulmus x (elm hybrids)</i>	Hybrid Elm	'Morton (Accolade)', 'Homestead', 'Pioneer', 'Regal' 'Frontier', 'Morton Glossy' (Triumph), 'Morton Plainsman' (Vanguard), 'Morton Red Trip'

		(Danada Charm), 'Morton Stalwart' (Commendation), 'New Horizon', 'Patriot'
<i>Ulmus japonica</i>	Discovery Japanese Elm	'Discovery'
<i>Ulmus parvifolia</i>	Lacebark Elm	
<i>Ulmus wilsoniana</i>	Prospector Elm	'Prospector'

Banned/Undesirable Street Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Reason</u>
	All Evergreen Species	Obstruct Visibility
<i>Fraxinus</i>	All True Ash Species	Susceptible to Emerald Ash Borer
<i>Acer negundo</i>	Boxelder	Weak wooded, attracts boxelder bugs
<i>Acer rubrum</i>	Red Maple	Intolerant of alkaline soils
<i>Acer saccharinum</i>	Silver Maple	Weak wooded, heaves pavement, heavy seed crop
<i>Salix spp.</i>	All Willow Species	Weak wooded, diseased foliage
<i>Populus deltoids</i>	Poplar, Cottonwood	Weak wooded, heaves pavement, heavy seed crop
<i>Robinia pseudoacacia</i>	Black Locust	Weak wooded, thorns, spread from root suckers
<i>Betula papyrifera</i>	Paper Birch	Susceptible to insect and disease, intolerant of disturbed sites
<i>Betula pendula</i>	European White Birch	Susceptible to insect & disease, intolerant of disturbed sites
<i>Ginko Biloba</i>	Ginko- Any Female Type	
<i>Malus sylvestris</i>	Common Apple	Fruit
<i>Prunus serotina</i>	Black Cherry	Fruit

<i>Prunus domestica</i>	Garden Plum	Fruit
<i>Pyrus communis</i>	Common Pear	Fruit
<i>Quercus palustris</i>	Southern Pin Oak	Intolerant of alkaline soils
<i>Sorbus americana</i>	American Mountain Ash	Susceptible to disease & fungal rot, heavy fruit set
<i>Sorbus aucuparia</i>	European Mountain Ash	Susceptible to disease & fungal rot, heavy fruit set

Appendix B – Street Tree Planting Plan

General:

- This plan shall cover all future plantings
- The Village of Bellevue will be ultimately responsible for pruning and maintenance of all trees in the right-of-way.
- A 2-year guarantee will be placed on any tree planted by a contractor or developer. Death or damage to trees caused by sources other than poor planting or quality of tree shall nullify any warranty by the contractor or developer. The Director of Parks, Recreation and Forestry or his/her designee shall determine the cause of death.
- The Village of Bellevue shall pay for any trees that will be planted in boulevards. Boulevards will need to have a minimum of 8 ft of green space to plant a tree.
- All trees must come from a reputable nursery or plantation.
- Planting guidelines:
 - All street trees shall be planted in a minimum of 9' of open space, of which cannot include the sidewalk reserve area. Trees must be planted a minimum of 5' from the curb and a minimum of 4' from the sidewalk or sidewalk reserve area. Trees planted in open space 10' or greater shall be planted midway between the curb and sidewalk (or the sidewalk reserve area), unless in the opinion of the Village Forester, there is sufficient reason to plant the trees off-center.
 - Trees shall only be planted on urbanized streets.
 - The number of trees allowed on a lot will be determined by using the criteria of keeping small and medium categorized trees approximately 50 ft apart, and large trees 60 ft apart. This guideline is also referenced in Bellevue Municipal Code 500-1706(A)(3)
 - Trees shall be planted a minimum of:
 - Outside of the vision triangle, as defined in the Village municipal code chapter 500-410(A)
 - 15' from a street light, fire hydrant, or power/utility pole
 - 10' from a driveway, utility valve or utility T, or sewer lateral
 - 6' from a water lateral
 - 5' from back of curb
 - 4' from sidewalk or sidewalk reserve area
 - Whenever possible, trees should not be planted within 10' of a water, sanitary or storm sewer main.
 - Only low growing trees will be permitted in areas of power lines.
 - Trees that are planted must be a minimum of 1.5"-2.5" in diameter and can either be bare root or Balled and Burlaped.
 - It is recommended that owners or developers plant a variety of trees to protect from disease. Only trees on an approved list by the Director of Parks, Recreation and Forestry shall be allowed.
 - The Director of Parks, Recreation and Forestry will have the final decision on the number of trees permitted in a right-of-way.
- Developers or current residents shall be able to select from a list of approved trees, provided by the Bellevue Parks, Recreation and Forestry Department. Approved trees shall be categorized in small, medium or large. This list will be selected by the Parks, Recreation and Forestry Director and will change periodically to coincide with tree availability from nurseries and current research on trees.

Current Residents:

- Current residents have an option of purchasing a tree through the Resident Street Tree Program, which is administered by the Parks, Recreation and Forestry Department. These

street trees will be offered to residents at the lowest expense offered to the Village through the annual tree purchases.

- Trees will be obtained from a reputable nursery and planted by a contractor.
- Plantings must follow all of the stated general guidelines.
- All current residents opting to plant trees in the right-of-way on their own must first complete a Street Tree Planting Permit, gain approval from the Director of Parks, Recreation and Forestry, must follow all stated forestry planting guidelines, and is contact Diggers Hotline.

New Residential Development:

- Residential development means any plat or CSM (Certified Survey Map) approved where the lots are zoned R-1, R-2, R-1-2A, or any combination thereof.
- Multi-Family (R-3) developments will be reviewed on a case by case basis to determine whether street trees will be required.
- The Village will begin planting trees in a development once a parcel has an established lawn. Trees will be planted in the next upcoming Village planting cycle.
- Undeveloped lots will not be planted until they are built upon and a lawn is established. Once built on, trees will be planted during the next appropriate planting season.
- A per lot fee will be charged within the developers agreement to cover the cost of planting of trees in the Village right-of-way.
- The Village will plant or coordinate with a contractor (i.e. nursery, landscaper, etc.) to plant trees.
- Developers approved by the Director of Parks, Recreation and Forestry may have the tree fees waived at the time of the developers agreement, provided that the developer provides for a restrictive covenant requiring trees to be planted by the developer. Tree planting by a developer will meet all criteria established by the Village Arboricultural Specifications Manual and any requirements stated in the Village Municipal Code regarding the planting of street trees. Developers will be approved by the Director of Parks, Recreation and Forestry based on work history and experience in planting trees, and quality of trees used.