

**The Village of Germantown
Comprehensive Tree Plan
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Revised: N/A**



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The Village of Germantown Comprehensive Tree Plan

In the heart of the Village of Germantown lies a natural treasure—a vibrant urban forest that not only enhances the beauty of our community but also serves as a vital asset for our environment, economy, and quality of life. Recognizing the invaluable benefits that trees provide, from purifying our air and water to mitigating climate change and enhancing biodiversity, the Village is committed to fostering the sustainable management and stewardship of our urban forest for generations to come.

This comprehensive tree plan represents a collaborative effort between municipal leaders, community stakeholders, and environmental experts to establish a strategic framework for the preservation, enhancement, and responsible utilization of our tree resources. Grounded in sound science, best practices, and community engagement, this plan seeks to address the diverse needs and priorities of our residents while ensuring the long-term health, resilience, and sustainability of our urban forest ecosystem.

Through this plan, we aspire to achieve the following key objectives:

1. *Promote Biodiversity and Resilience:* By prioritizing the planting of native tree species and fostering a diverse urban forest canopy, we aim to enhance ecological resilience, support local wildlife habitat, and minimize the risk of pest outbreaks and disease epidemics.
2. *Enhance Public Health and Well-being:* Trees play a crucial role in improving air quality, reducing urban heat island effects, and providing opportunities for recreation and relaxation. By strategically planting and maintaining trees in our neighborhoods, parks, and public spaces, we can promote physical and mental well-being for all residents.
3. *Ensure Safety and Infrastructure Protection:* Proper tree management, including pruning, removal, and maintenance, is essential for mitigating potential hazards such as falling limbs, root damage to infrastructure, and obstruction of utility lines. Through proactive risk assessment and management strategies, we aim to safeguard public safety and protect valuable assets.
4. *Foster Community Engagement and Education:* Engaging residents, businesses, schools, and community organizations in tree planting, care, and advocacy efforts is critical for building a culture of environmental stewardship and resilience. By providing educational resources, volunteer opportunities, and outreach initiatives, we seek to empower individuals and groups to take an active role in caring for our urban forest.
5. *Ensure Equitable Access and Distribution:* Every neighborhood in the Village of Germantown deserves equitable access to the benefits of trees, regardless of socio-economic status or geographic location. Through strategic planning and resource allocation, we will prioritize tree planting and maintenance efforts in underserved areas to promote social equity and environmental justice.

As we embark on this journey to cultivate a greener, healthier, and more sustainable future for the Village of Germantown, we invite all residents, businesses, and stakeholders to join us in this collective endeavor. Together, we can harness the power of trees to enrich our community,

strengthen our resilience to environmental challenges, and leave a lasting legacy for future generations to enjoy.

The Comprehensive Tree Plan and the Village of Germantown Code of Ordinances. This Comprehensive Tree Plan was developed to meet the requirements set forth in the Village of Germantown code of ordinances, section 17.60. The plan is intended to supplement provisions 17.60 and meet the requirements outlined therein. This plan serves as a guide for Department of Public Works staff and residents. The plan sets expectations for how Village owned trees are managed.

Appendices:

Appendix A – Tree Planting Standards Checklist

Appendix B – Tree Pruning Standards Checklist

Appendix C – Tree Removal Standards Checklist

Appendix D - Required Forestry Budget

Appendix E – Non-Residential Development Street Tree Requirements

Appendix F - Permit

Urban and Rural Trees in the Right of Way. The Department of Public Works (DPW) maintains all trees within the right of way (ROW), also referred to as street trees. The right of way is a type of easement granted or reserved over the land for transportation purposes, such as roads, paths, transmission lines, pipelines, etc. Within the Village of Germantown, the right-of-way is most typically denoted for the purpose of roadway construction or maintenance. The land itself is owned directly by the Village and is not part of the adjacent property. DPW staff will maintain rural trees in the ROW and contract for tree maintenance in the ROW in more urban areas.



Image 1 – Right of way

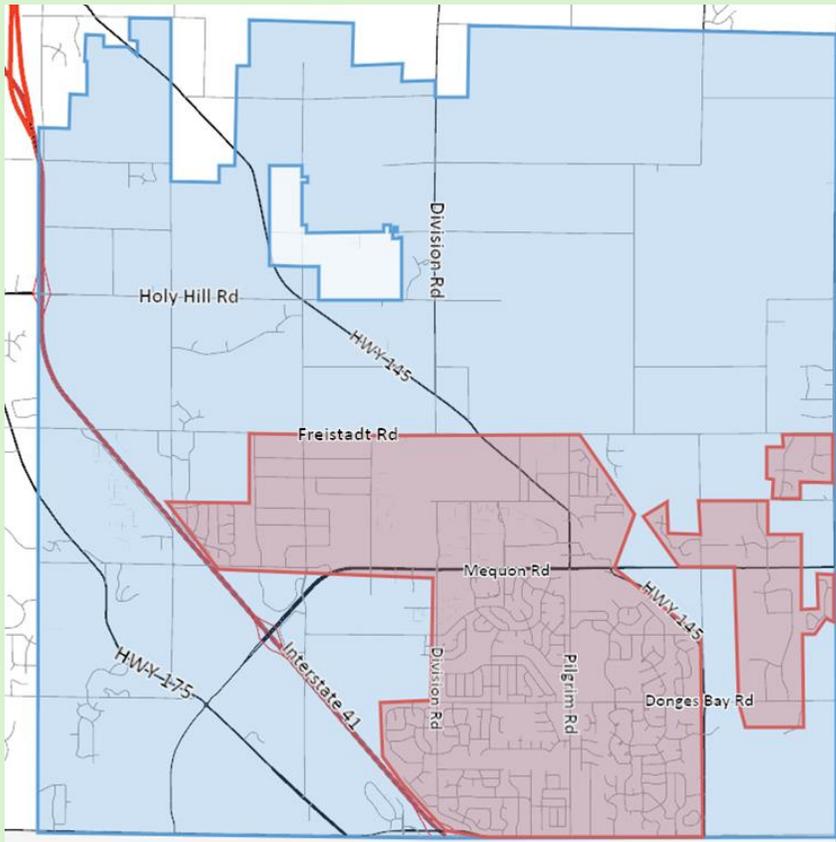


Image 2 – Urban (red) and Rural (blue) areas

Trees in Parks and on Village Owned Property. In addition to ROW trees, the DPW maintains all Village of Germantown Park trees, and trees on other property owned by the Village, such as properties with Village facilities. Park tree maintenance is conducted in a manner consistent with urban trees, discussed later in this plan.

Private Trees. The Village of Germantown does not plant or maintain trees on private property. Private trees are only subject to being maintained by DPW when the private tree affects the lives, health, safety and welfare of the public, public property or property owned or controlled by the Village.

1. The tree is determined to be a public nuisance in accordance with municipal code 17.60(5)a.
2. The tree is determined to be hazardous in accordance with municipal code 17.60(5)c.

Only when these provisions have been met will the Village of Germantown act upon, or compel action, upon private trees. Absent these criteria, private trees are considered a private matter. Issues between residents regarding private trees are also private.

The Village of Germantown is responsible for maintenance of right-of-way trees (street trees).

Tree Planting and Tree Replacement

Planting and Replacement Program Goals. The Village of Germantown seeks to grow the urban forest through a planting and replacement initiative. The goals of the planting program are to increase canopy cover, diversify tree species, enhance the public health and well-being, mitigate urban heat island effect, improve air quality, improve water quality, improve stormwater management, and provide greater biodiversity and habitat.

Planting Season. The time of year a tree is planted can greatly affect the tree’s establishment because newly planted trees require water to survive and grow. Planting during the spring and fall will help ensure tree establishment and survival.

The planting season in Germantown extends from April 1 – June 15 in the spring and September 15 – October 31 in the fall. Planting during this timeframe is recommended.

If a planting permit is issued outside of the ideal planting season, the Superintendent of Highway, Buildings and Grounds may defer planting until the next planting season to promote survivability. The Superintendent will also factor in the species and location when deciding on exceptions to the planting season.

Planting Cycle. The Village plans to fill vacant planting sites over a five-year period.

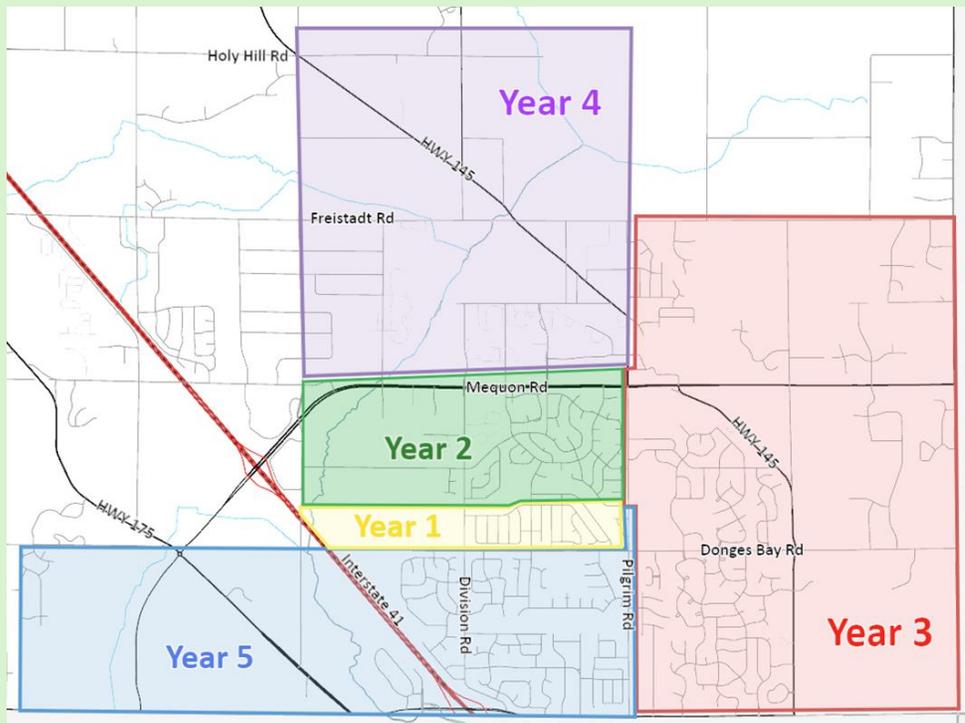


Image 3 - Five Year Vacant Planting Map

Species Diversity. Lessons learned from the Emerald Ash Borer (EAB) epidemic have resulted in a more tempered approach to urban tree species selection. In the past the “30-20-10” planting rule was used which stated you wouldn’t plant more than thirty percent from one family, no more than twenty percent from one genus and no more than 10 percent from one species. Municipalities that

followed this rule, or perhaps maintained even less tree diversity, may have lost as many as one in five trees because of EAB.

The Village of Germantown now adopts a “20-10-5” rule. This means that no more than twenty percent of trees will be planted from one family, no more than ten percent from one genus and no more than five percent from one species. This rule will be evaluated in future years as current research seems to indicate that even more species diversity may be required to ensure the most resilient urban forest.

It is also worth noting that diversity should address age, size and location and those factors should play a role in decisions that are made regarding new planting.

Geographic Information System (GIS). The Germantown GIS must be updated with the location, species and year planted for all trees. Similarly, if an identified tree plot is left vacant the GIS must be updated.

Condition Assessment: Over a 5-year cycle, the Village will conduct a condition assessment of all urban trees identified in GIS. The condition rating will be added as an attribute to the tree asset in GIS.

Approved Tree List. The following trees are approved for planting in the ROW and parks:

SMALL TREES

Scientific Name	Common Name	Cultivars
<i>Amelanchier arborea</i>	Downy Serviceberry	
<i>Amelanchier x grandiflora</i>	Apple Serviceberry	‘Autumn Brilliance’, ‘Robin Hill’
<i>Amelanchier laevis</i>	Allegheny Serviceberry	‘Cumulus’, ‘Lustre’
<i>Carpinus caroliniana</i>	American Hornbeam	‘Firespire’
<i>Cercis canadensis</i>	Eastern Redbud	
<i>Crataegus crusgalli inermis</i>	Thornless Cockspur Hawthorn	
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	
<i>Crataegus viridis</i>	Winter King Hawthorn	‘Winter King’
<i>Maackia amurensis</i>	Amur Maackia	‘Starburst’, ‘Summertime’, ‘JFS-Schichtell’
<i>Malus spp.</i>	Flowering Crabapple	‘Adirondack’, ‘Jewelcole’, ‘Bob White’, ‘Harvest Gold’, ‘Jackii’, ‘Prairiefire’, ‘Professor Sprenger’, ‘Red Bud’, ‘Royal Raindrops’, ‘Sugar Tyme’, ‘Lanzam’, ‘Hargozam’
<i>Ostrya virginiana</i>	Ironwood	

<i>Syringa pekinensis</i>	Peking Lilac	'China Snow'
<i>Syringa reticulata</i>	Japanese Tree Lilac	'Ivory Silk', 'Summer Snow', 'Snowcap', 'Ivory Pillar', 'Snowdance'
<i>Cornus mas</i>	Cornelian Cherry Dogwood	'Golden Glory'
<i>Prunus sargentii</i>	Sargent Cherry	'JFS-KW58'

MEDIUM TREES

Scientific Name	Common Name	Cultivars
<i>Aesculus glabra</i>	Ohio Buckeye	'Sunset'
<i>Cladrastis kentuckea</i>	American Yellowwood	
<i>Carpinus betulus</i>	Hornbeam	'JFS-KW1CB'; 'Fastigiata'
<i>Phellodendron amurense</i>	Amur Cork tree	
<i>Nyssa sylvatica</i>	Black Tupelo	
<i>Tilia spp.</i>	Linden	'Crimean'; 'Harvest Gold'; 'Sterling'; PNI 6051'

LARGE TREES

Scientific Name	Common Name	Cultivars
<i>Aesculus flava</i>	Yellow Buckeye	
<i>Carya cordiformis</i>	Bitternut Hickory	
<i>Celtis occidentalis</i>	Hackberry	'Prairie Pride', 'Chicagoland', 'Windy Village', 'JFS-KSU1'
<i>Cercidiphyllum japonicum</i>	Katsuratree	
<i>Corylus colurna</i>	Turkish Filbert	Autumn Gold'
<i>Eucommia ulmoides</i>	Hardy Rubber Tree	
<i>Gingko biloba</i>	Gingko (male only)	Autumn Gold', 'Magyar', 'Princeton Sentry'
<i>Gleditsia triacanthos inermis</i>	Thornless Honeylocust	Imperial', 'Shademaster', 'Skyline/Skycole', 'Sunburst', 'Street Keeper/Draves'
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	'Espresso', 'Prairie Titan', 'Decaf'
<i>Liriodendron tulipifera</i>	Tuliptree	
<i>Platanus x acerifolia</i>	London Planetree	'Exclamation'
<i>Quercus bicolor</i>	Swamp White Oak	

<i>Quercus x</i> 'Crimschmidt'	Crimson Spire Oak	
<i>Quercus macrocarpa</i>	Bur Oak	
<i>Quercus robur</i>	English Oak	'Skymaster', 'Regal Prince', 'JFS-KW1QX'
<i>Quercus rubra</i>	Red Oak	
<i>Quercus x macdanielii</i> 'Clemons'	Heritage Oak	
<i>Quercus muehlenbergii</i>	Chinkapin Oak	
<i>Quercus x schuettei</i>	Swamp x Bur Oak	
<i>Ulmus x</i>	Hybrid Elm	'Accolade', 'New Horizon', 'Regal', 'Triumph', 'Discovery', 'Frontier', 'Pioneer', 'Cathedral'
<i>Ulmus parvifolia</i>	Lacebark Elm	

EVERGREENS TREES

Do not plant on streets, evergreens obstruct visibility making them hazardous on street locations. Acceptable trees for parks and non-street tree locations.

Scientific Name	Common Name	Cultivars
<i>Abies concolor</i>	White Fir	
<i>Xanthocyparis nootkatensis</i>	Nootka Cypress	
<i>Juniperus chinensis</i>	Chinese Juniper	Iowa', 'Mounntbatten'
<i>Juniperus x</i>	Star Power Juniper	JN Select Blue'
<i>Picea glauca var. densata</i>	Black Hills Spruce	
<i>Picea omorika</i>	Serbian Spruce	
<i>Pinus bungeana</i>	Lacebark Pine	
<i>Pinus flexilis</i>	Limber Pine	Vanderwolf's Pyramid'
<i>Pinus strobus</i>	Eastern White Pine	Fastigiata'
<i>Pinus sylvestris</i>	Scotch Pine	
<i>Pseudotsuga menziesii</i>	Douglasfir	
<i>Thuja occidentalis</i>	Arborvitae	Smaragd', 'Hetz Wintergreen', 'Sunkist', 'Techny'

<i>Thuja plicata</i>	Western White Cedar	
<i>Tsuga canadensis</i>	Canadian Hemlock	
<i>Metasequoia glyptostroboides</i> *	Dawn Redwood*	‘Gold Rush’
<i>Taxodium distichum</i> *	Baldcypress*	‘Shawnee Brave’

The approved tree list is comprehensive, but subject to annual review with the update of this plan. The list provides the species of tree and its projected crown height when fully mature. Trees are placed in three categories:

Small (mature crown height under 30 feet)

Medium (mature crown height between 30 and 45 feet)

Large (mature crown height over 45 feet)

New Planting Locations. Street trees are a vital part of public infrastructure, reducing stormwater runoff, reducing heat, enhancing property values, and providing wildlife habitat. However, street trees share space with other public infrastructure, requiring careful selection of tree planting locations in the right-of-way. Because of this the following should take place:

Utility marking: The applicant shall call Diggers Hotline to identify the locations of underground utilities before identifying a new location or conducting any ground-disturbing activities.

Utility and Infrastructure Spacing: An appropriate amount of space must be allocated between a new tree planting location and existing infrastructure.

Spacing requirements: Mature tree size and planting site size define the minimum tree spacing requirements. Alternative designs may be approved by the Village Forester.

Large planting sites:

Improved sites greater than or equal to 6.0 feet wide without overhead high-voltage wires

Unimproved sites without overhead high-voltage wires

Medium planting sites:

Improved sites greater than or equal to 4.0 feet wide but less than 6.0 feet wide with or without overhead high-voltage wires

Improved sites greater than or equal to 6.0 feet wide with overhead high-voltage wires

Unimproved sites with overhead high-voltage wires

Small planting sites:

Improved sites greater than or equal to 3 feet wide but less than 4 feet wide with or without overhead high-voltage wires

Vacant Locations. As trees are removed there are various reasons that a planting site is left vacant. When identifying planting locations for a given year, priority will be given to currently vacant locations. An up-to-date record of vacant locations will be maintained in GIS.

Vacant locations may also evolve into ‘no plant’ locations. In that case, the location should be identified as “no plant” in GIS. Village staff will identify a replacement location for any location that has become unplantable.

New Planting Stock. *New public tree plantings will be from nursery grown bare root, containerized, or balled and burlapped tree stock.*

New Subdivisions and Developments. The standards developed in this plan pertain to new developments and subdivisions. This section supplements requirements in municipal code 17.43(5).

Trees should have appropriate spacing between other infrastructure in the right-of-way. The following table provides guidelines for developers:

Infrastructure	Feet
Water meter / vaults	10
Catch basins	10
Gas meters	10
Driveway aprons and crosswalks	10
Fire hydrants	10
Street lights	20
Electrical poles	20
Intersections / corners	45
Railroad tracks	100
Other trees	25-40 feet

Spacing between other trees in the right-of-way is variable depending on the mature height and width based on the species of the nearest tree(s). The desirable distance between trees is 30 feet. At a minimum, a residential lot in a new subdivision should have two right-of-way street trees.

Tree plantings for commercial and industrial development will be required per approved landscape plan, according to municipal code 17.43(5).

Non-Residential Developments. Non-residential developments must have an approved landscaping plan that meets tree standards for parking lots and street trees.

Planting Standards. Appendix A provides standards for planting a new tree, along with a checklist for staff to follow.

Watering. Watering is recommended for a 10-week period following planting. Village contracts will specify 3 supplemental waterings during the growing season spaced 4 weeks apart. The Village of

Germantown requests that adjacent property owners supplement the watering. Where there are no adjacent property owners, watering is solely the responsibility of the Village.

Safety. DPW will follow all necessary procedures related to tree maintenance and working in the ROW to ensure the safety of staff, pedestrians, and motorists. Protection measures that will be utilized during forestry operations, include, but are not limited to, signage, traffic control, and barricades.

Work areas will be inspected for hazards like uneven terrain, overhead wires, or nearby structures. Appropriate precautions will be taken to mitigate risks.

If a safety concern is observed, work must stop, and a crew leader or supervisor must be contacted to resolve the issue before continuing.

Tree Pruning and Maintenance of Urban Trees

Pruning Technique. Maintenance of urban trees will be conducted by contracted staff and under the supervision of a certified arborist.

Tree pruning and maintenance of urban street trees is conducted according to ANSI A300 - Standard for Tree Maintenance. The ANSI A300 standard document is a proprietary document that is available in the Department of Public Works and has been incorporated into contract documents.

Pruning Standards and Checklist. Appendix B provides standards for pruning along with a checklist for staff to follow.

Cycle and Budget. There are 3,153 deciduous urban trees identified in the Germantown Geographic Information System (GIS). According to experts, the Ideal pruning cycle for urban municipal trees is somewhere between 5-8 years. A regular maintenance cycle helps to prevent disease, potential damage, allows for proper shaping and thinning, and addresses encroachment in the ROW. Approximately 400-630 trees need to be pruned each year within the Village at a cost of \$80,000 - \$126,000 to meet the recommended maintenance cycle. This plan proposes an initial 9-year cycle to balance budgetary demands of a new program and the need for systematic maintenance. A 9-year pruning cycle would demand a consistent pruning budget of \$70,000. Future planning periods should consider shortening the pruning cycle to fall within the recommended range. As the urban forest grows the commitment to pruning will also grow.

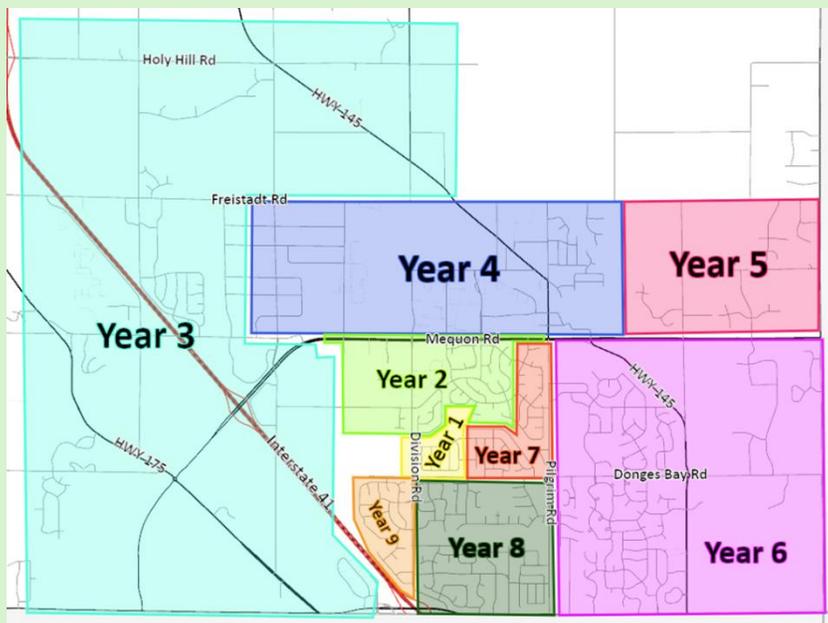


Image 4 - 9-year Cycle: 2024-2033

Treatment: Disease and Insect Control

Assessment and Monitoring. DPW and the Village Forester will complete a comprehensive inventory of all urban municipal trees in a 5-year cycle. The assessment of the tree will factor in all conditions including signs of disease or insect infestation. The condition assessment will flag trees that need an additional treatment feasibility analysis.

Treatment Feasibility Assessment and Integrated Pest Management (IPM). A tree flagged for a treatment feasibility analysis will be reviewed by the Superintendent of Highways, Buildings and Grounds and the Village Forester. Factors in the IPM strategies will include:

- Treatment options available (biological, mechanical, chemical controls)
- Thresholds for treatment based on severity
- The likelihood of successful treatment
- The cost of treatment over time
- The available budget for treatment
- The cost of removal and replacement

Using this multi-factored approach, DPW will determine how to properly care for the tree.

Enhanced Monitoring. When a tree has become diseased or infested and a treatment measure was applied, it will be placed on an enhanced annual monitoring cycle. The effectiveness of treatment will be noted with a new condition assessment. The effectiveness of the treatment will be evaluated, using the same criteria, for continued treatment (if applicable).

Documentation. Documentation of the tree's condition, disease condition, and treatments applied will be updated in GIS.

Tree Pruning and Maintenance of Rural Trees

Maintaining trees in rural areas is essential for safety, aesthetics, and ecosystem health. DPW will follow these guidelines when addressing maintenance of rural trees.

Rural Tree Inventory and Assessment. While a comprehensive inventory and assessment of all rural trees in the ROW is not practical, staff will identify problem trees and problem areas that need to be addressed. Initial assessment will include contributing factors such as the health of the tree, structural integrity, risk to those in the ROW and on private property, the volume of traffic in a hazard area, and proximity to infrastructure.

Maintenance Plan. Based on the assessment, develop a long-term maintenance plan outlining pruning schedules, tree inspections, and other necessary actions. Maintenance tasks will be prioritized based on urgency, budget constraints, and community needs, considering factors such as tree health, age, species, potential impact to the ROW or private property, and the volume of traffic near the problem area.

Maintenance of rural ROW trees will be conducted primarily by DPW staff, unless specialized equipment or personnel are needed based on complexity of the job, safety, or other factors.

Pruning Guidelines. Follow industry best practices and ANSI A300 standards for tree pruning to ensure safety, tree health, and aesthetic appeal.

Prune trees to remove dead, diseased, or damaged branches, improve structure and form, and reduce hazards such as low-hanging limbs or overhanging branches near roads and utilities.

Avoid excessive pruning, especially topping or lion-tailing, which can weaken trees and promote decay.

Pruning Standards and Checklist. Appendix B provides standards for pruning along with a checklist for staff to follow.

Qualified Personnel and Equipment. Ensure that pruning and maintenance activities are carried out by trained and/or certified arborists, or qualified tree care professionals. All pruning and maintenance activities shall be supervised by an ISA Certified Arborist.

Provide personnel with appropriate safety gear, tools, and equipment, including pruning saws, pole pruners, and safety harnesses.

Where appropriate, for urban trees, ROW tree maintenance will be outsourced to a contractor and supervised by an ISA Certified Arborist.

Timing of Pruning. Schedule pruning activities during the dormant season (late fall to early spring) to minimize stress and promote rapid wound closure.

Avoid pruning during periods of active growth or flowering, as it can increase the risk of disease transmission and excessive wounding.

Planned Tree Removal

Assessment and Evaluation. Prior to initiating tree removal, DPW will conduct a thorough assessment to determine the need for removal. Consideration will be made for factors such as tree health, structural stability, location, proximity to buildings, utilities, roads, cost, and potential risks to public safety. During the process we will evaluate alternatives to removal, such as pruning, treatment, cabling, or other mitigation measures, whenever feasible. The Village Forester will be consulted.

Complexity. Based on the complexity of removal, specifically the size of the tree, the proximity to infrastructure, the public, utilities, etc., DPW may choose to contract out for tree removal.

Safety Measures. DPW will prioritize the safety of personnel, property, and the public throughout the removal process. Staff, assisted by crew leaders, will establish a safe work zone with clear boundaries and signage to alert pedestrians and vehicles to potential hazards. Both DPW staff and/or contracted crews will use appropriate personal protective equipment (PPE), including helmets, gloves, eye protection, chainsaw chaps, and high-visibility clothing.

Removal Plan. Before the tree is removed an assessment of the personnel, equipment and coordination necessary for removal will be conducted. Once the plan has been established a briefing will be conducted at the shop to go over the removal plan and discuss safety. If, for any reason, safety issues cannot be resolved the operation cannot continue until all concerns are addressed. Crew leaders may involve management up to and including the Director of Public Works.

Mobilization. Once the removal plan has been briefed and no issues remain mobilization to the site is able to occur. Crews should ensure that equipment and tools used for tree removal are properly maintained, inspected, and operated by trained personnel. A pre-operation inspection is required for all equipment.

Tree Removal. The removal standards identified in Appendix C will always be followed. Complex removals will be conducted under the supervision of an ISA Certified Arborist.

Communication. DPW will keep residents informed through communications in person, on social media, the Village of Germantown website and, if warranted, local media. Communication with residents will precede the tree removal to the greatest degree possible. The communication to citizens will include the scope of the work and the anticipated schedule. The extent of the Village's communication regarding the removal will be tied to the scope of the tree removal work.

Example 1: Removal of a single ROW tree would result in direct communication with the adjacent property owner only.

Example 2: Removal of five diseased trees in a subdivision will result in direct communication with the adjacent property owner but may also include social media postings.

Example 3: A large-scale removal of trees may involve a variety of communication methods.

Documentation. Documentation of the removal will be captured in work orders (staff time, contractor cost, equipment time) and in GIS. Affected assets in GIS will be updated to reflect the new condition. If the asset was removed, then GIS should be updated to reflect a vacant site or no replant site.

Emergency Tree/Branch Removal

DPW will provide emergency response to deal with damaged trees in the ROW. The emergency response will be timely and ensure the safe removal of branches or trees within the right-of-way in the Village of Germantown to prevent hazards to residents, property, and infrastructure.

Initial Assessment. Upon receiving a report of a fallen tree or damaged and hazardous branches within the village right-of-way, DPW will assess the situation promptly. If during working hours the Superintendent of Highway, Parks, Buildings and Grounds, or his staff, will be notified of the hazard condition. After hours, the call may be taken by Germantown Police Department or the Germantown answering service and DPW will be contacted through normal after-hours emergency procedures. After assessing the situation, using information from the caller, a determination will be made about the immediacy of the need for the hazard to be mitigated.

Safety Measures. Of primary importance in the initial evaluation is determining the potential impact on safety. Priority remediation efforts will be given to issues that affect resident safety, traffic safety, or the safety of first responders. If any of these conditions exist DPW will treat the remediation efforts as an emergency response which will require a site investigation. If the traveling roadway is affected coordination with Germantown Police Department will also be initiated.

Site Investigation / Evaluation of Hazards.

The evaluation will determine the level of safety precautions that need to be in place, the personnel and equipment needed to address the hazard.

1. Establish a safe perimeter around the affected area to prevent access by pedestrians or vehicles. If necessary, coordinate with local law enforcement to divert traffic away from the area.
2. Assess the size and location of the fallen tree or branches.
3. Determine potential risks to nearby buildings, roads, utilities, and pedestrians.
4. Deploy trained personnel equipped with appropriate tools for tree removal (e.g., chainsaws, safety gear).
5. Coordinate with relevant departments, external contractors and utilities for additional support, if needed.

Tree/Branch Removal. The focus of an emergency response will be to mitigate priority hazards. Depending on the time of day, resources available and extent of the damage, the emergency response from DPW may just address specific hazard and future work at the same site may be scheduled later. Pruning standards identified in this plan will apply to the greatest extent possible.

Communication. DPW will keep residents informed through communications in person, on social media, the Village of Germantown website and, if warranted, local media. With that said, safety is the overriding factor and if time does not allow for communication, outreach will be conducted following the emergency operation.

Documentation. Documentation of the emergency response will be captured in work orders (staff time, contractor cost, equipment time) and in GIS. Affected assets in GIS will be updated to reflect

the new condition. If the asset was removed, then GIS should be updated to reflect a vacant site or no replant site.

Permits Required

Any planting, pruning, or other tree maintenance of a tree in the ROW must be permitted, as per Germantown Code 17.60(4). Permits may be obtained at the Germantown Village Hall in the Department of Public Works. Permits will be reviewed by the Superintendent of Highway, Buildings, and Grounds prior to approval. All standards identified in this plan and in the municipal code will be enforced through the permit. Permitted trees planted in the ROW are considered donations to the Village of Germantown and all future maintenance is the responsibility of the Village of Germantown, unless otherwise permitted. Receipt of an approved permit serves as acknowledgement of a permittee's understanding of all applicable standards and acts as an agreement to conduct their permitted work according to those standards.

Upon completion of permitted tree work the permittee will contact the Superintendent of Highway Buildings and Grounds. An inspection of permitted work by the Superintendent of Highway, Building and Grounds will ensure work was completed to standards. The Superintendent of Highway, Building and Grounds may require the permittee to perform additional work to properly conform to standards.

Permits are available at no fee. Non-compliance with a permit or failure to remedy unsatisfactory work will result in a penalty per municipal code 17.60(12).

Determinations made by staff related to permit denials may be reviewed by the Tree Board.

Adjacent Landowners Responsibility. No person shall remove, trim, cut roots, or disturb any ROW tree, park tree or other public tree without a permit.

Homeowners Associations (HOA). HOA's may annually apply for permits for pruning, planting, or other tree maintenance, in the ROW on behalf of their members who have properties adjacent to ROW trees. The Village of Germantown will not approve permit requests from an HOA that do not address ROW trees in the HOA holistically. Permitted work will be performed according to these standards, and subject to inspection, corrective action and penalties as described above under "Permits". The permitted work will be conducted at the cost of the HOA. Planted trees in the ROW become the property of the Village of Germantown. The permitted work of HOA's must be coordinated with the Superintendent of Highway, Buildings and Grounds.

The Tree Board

The tree board will be established and act in accordance with municipal code 17.60.

Members. The Tree Board will consist of three members:

- A Village Trustee
- The Village Forester, and
- A citizen from the Village of Germantown

Terms. The Village Trustee and citizen members will serve two-year staggered terms. Upon plan adoption the citizen member will serve an initial two-year term. The Village Trustee will serve an initial one-year term. Subsequent term(s) of the Village Trustee will be two-year terms.

Appointment. The Village President will nominate the Trustee member and the citizen member to serve two-year terms. The appointments will be confirmed by the Village Board.

The Village Forester will remain on the Tree Board to coincide with his/her ongoing appointment to the Village Forester position.

Advisory Role. Except as noted below, the Tree Board serves in an advisory capacity to the Public Works and Highway Committee. Contracts for tree maintenance and planting are ultimately approved by the Public Works and Highway Committee and/or the Village Board, depending on the value of the contract.

Scope of the Tree Board

Annual Operations and Maintenance Plan Review - The Department of Public Works will make an annual presentation to the Tree Board which will consist of the plan for the current year operation, the communication plan, and the 5-year plan. The Tree Board will make a recommendation to the Public Works and Highway Committee regarding the approval of the annual operations plan and 5-year plan.

Comprehensive Tree Plan Review – As the Comprehensive Tree plan is revised time-to-time, it will be brought to the Tree Board for review.

Appeals of Determinations and Orders - The Tree Board may convene, as required by municipal code 17.60 (9), to review an appeal of a determination or order made by staff. At such hearing the Tree Board may reverse, affirm, or modify the order of the determination appeal. The grounds for its decision shall be stated in writing. The Tree Board shall by letter notify the party appealing the order or determination of its decision within 10 days after the hearing has been concluded and file its written decision with the Village Clerk. The decision of the tree board is final and not subject to additional appeal.

Plan Review and Community Outreach

Comprehensive Tree Plan Review. This plan will be reviewed annually.

Community Outreach. Community outreach regarding the annual operations for tree planting and maintenance will be conducted in numerous ways.

1. Letters will be sent to property owners with adjacent ROW trees outlining the type of tree maintenance they can expect and the anticipated timing of the work. Outreach letters will precede any tree work by a minimum of three weeks.
2. Village of Germantown social media will announce all work.
3. The Village of Germantown website will announce all work as an alert and post the annual operations plan, the 5-year plan and the Comprehensive Tree Plan.

Continuous Monitoring and Feedback. DPW will Monitor the health and condition of pruned trees over time, observing growth patterns, pest infestations, and response to pruning treatments. The annual operations plan and the 5-year plan may need to be adjusted based on new conditions.

Feedback from residents will be tracked by DPW. Solicit feedback from residents and stakeholders regarding the effectiveness of maintenance efforts, responsiveness to concerns, and overall satisfaction with the rural tree management program.

Comprehensive Tree Plan – Appendix A

Tree Planting Standards Checklist

- Notify affected residents, property owners, and stakeholders in advance of planned tree planting activities.
- Provide clear and transparent communication about the reasons for planting, proposed timelines, and any mitigation measures or alternatives considered.
- Prepare planting holes of appropriate size and depth, typically two to three times the width of the root ball.
- Handle trees with care to avoid damage to roots, branches, or trunk.
- Remove packaging materials and gently loosen or remove any circling roots before planting.
- Position the tree in the center of the planting hole, ensuring that the root collar is level with or slightly above the surrounding soil surface.
- Backfill the hole with native soil, avoiding the use of excessive amendments or fertilizers.
- Create a shallow watering basin around the base of the tree to facilitate irrigation.
- Water newly planted trees thoroughly immediately after planting to settle the soil and promote root establishment.
- Provide regular watering during the first growing season, especially during periods of drought or high temperatures. Watering should be weekly in the initial 3 months of the planting.
- Apply a layer of organic mulch (e.g., wood chips, bark) around the base of the tree, leaving space around the trunk to prevent moisture buildup and potential decay.
- Mulch should be spread evenly to a depth of 2-4 inches to conserve soil moisture, regulate soil temperature, and suppress weed growth.
- Clean up the planting location so it is clear of excess materials, packaging, equipment, etc.
- Evaluate the need for staking based on the size, species, and site conditions of the newly planted tree.
- Use flexible, non-abrasive materials for staking to minimize damage to the trunk and branches.
- Install stakes at a slight angle away from the tree, securing them firmly but not tightly to allow for natural movement.
- Monitor the tree regularly and remove stakes and support systems once the tree has established sufficient root anchorage.
- Record the tree species, planting dates and condition assessment in GIS.
- Establish a monitoring schedule to track the growth and health of newly planted trees over time.
- Use collected data to evaluate the success of tree planting initiatives and inform future planning and management decisions.

Comprehensive Tree Plan – Appendix B

Tree Pruning Standards Checklist

- Notify affected residents, property owners, and stakeholders in advance of planned tree pruning activities.
- Provide clear and transparent communication about the reasons for pruning, proposed timelines, and any mitigation measures or alternatives considered.
- Use properly maintained and sanitized pruning tools to minimize the spread of disease pathogens.
- Inspect equipment before pruning activities are initiated.
- Ensure that pruning tools are sharp and properly adjusted to make clean, precise cuts.
- Assess potential hazards such as falling limbs, overhead wires, or pedestrian traffic before initiating pruning activities.
- Use appropriate personal protective equipment (PPE), including helmets, gloves, eye protection, and high-visibility clothing.
- Secure work areas with warning signs, cones, or barriers to alert pedestrians and vehicles to the presence of pruning crews.
- Conduct routine pruning during the dormant season (late fall to early spring) to minimize stress and promote rapid wound closure.
- Address immediate safety hazards or emergency situations promptly, regardless of the season.
- Use proper pruning techniques to minimize damage and promote healing. Follow the ANSI A300 Standard at all times.
- Make clean, smooth cuts just outside the branch collar to facilitate compartmentalization and minimize the risk of decay.
- Avoid leaving stubs or making flush cuts, as they can impair wound closure and lead to long-term health issues.
- Prioritize the removal of dead, diseased, or broken branches.
- Identify and correct structural defects such as co-dominant leaders, included bark, and narrow crotch angles.
- Maintain a balanced canopy by selectively thinning overcrowded or crossing branches.
- Avoid excessive pruning of healthy green foliage, as it can stress the tree and compromise its ability to photosynthesize.
- Clean-up after pruning as is appropriate for the location of the pruned tree. Urban street tree clean up may be more extensive than rural street tree clean-up activities.
- Maintain records of pruning activities, including the date, location, reasons for pruning, and specific pruning cuts made in GIS associated with that asset.
- Document any observed signs of pest infestations, diseases, or other tree health issues through an updated condition assessment in GIS.

Comprehensive Tree Plan – Appendix C

Tree Removal Standards Checklist

- Notify affected residents, property owners, and stakeholders in advance of planned tree removal activities per plan requirements. In emergency situations prioritize safety with secondary notifications, if advance notification is not possible.
- Provide clear and transparent communication about the reasons for removal, proposed timelines, and any mitigation measures or alternatives considered.
- Conduct a thorough assessment of the tree to determine the need for removal.
- Consider factors such as tree health, structural stability, location, and potential risks to nearby structures, utilities, and pedestrians.
- Evaluate alternatives to removal, such as pruning, cabling, or other mitigation measures, whenever feasible.
- Establish a safe work zone with clear boundaries and signage to alert pedestrians and vehicles to potential hazards.
- Use appropriate personal protective equipment (PPE), including helmets, gloves, eye protection, chainsaw chaps, and high-visibility clothing.
- Ensure that equipment and tools used for tree removal are properly maintained, inspected, and operated by trained personnel. Conduct a pre-operation check of all tools and equipment.
- Use specialized equipment such as chainsaws, ropes, and rigging gear as needed to safely remove trees in confined spaces or near structures.
- Employ safe and efficient tree removal techniques based on the size, species, and condition of the tree.
- Consider the use of directional felling, piecemeal dismantling, or crane-assisted removal methods to minimize risks and damage to surrounding property.
- Minimize impacts to the surrounding environment, including nearby vegetation, wildlife habitat, and soil integrity.
- Implement erosion control measures as needed to prevent soil erosion and sedimentation during removal activities.
- Dispose of tree debris and wood waste as appropriate, according to the location. Clean-up in urban areas may be more extensive than clean up in rural areas.
- Consider opportunities for composting, chipping, or repurposing tree materials to minimize waste and support sustainable resource management practices.
- Remove all debris, logs, and branches from the removal site promptly after completion of the work.
- Restore disturbed areas to their original condition or implement revegetation measures as needed to prevent soil erosion and promote site stabilization.
- Maintain accurate records of tree removal activities, including the date, location, reasons for removal, and methods used. The location should be updated in GIS to reflect the vacancy.
- Document any observed signs of pest infestations, diseases, or other tree health issues that may have contributed to the need for removal.⁴

Comprehensive Tree Plan – Appendix D - Budget

Required Forestry Annual Budget

Historical Forestry Budget

Forestry Consultant	\$15,000
Emerald Ash Borer Treatment	\$10,000
Tree Planting	\$35,000
Contracted forestry work / contracted pruning	\$40,000
Total	\$100,000

Necessary Budget* per Comprehensive Plan

Forestry Consultant	\$20,000
Emerald Ash Borer Treatment	\$10,000
Tree Planting	\$35,000
Tree Pruning	\$70,000
Contracted forestry work	\$20,000
Total	\$155,000

*This budget is presented in 2024 dollars and will need annual adjustments for inflation

Comprehensive Tree Plan – Appendix E

Non-Residential Development Street Tree Requirements

Quantity of Trees. Determining the quantity of street trees required adjacent to a development depends on the species size, the width of the right-of-way (ROW), and the length of ROW. The developers plan shall utilize the approve species listed in the Comprehensive Tree Plan and the spacing outlined below:

<u>Tree Size</u>	<u>Small</u>	<u>Medium</u>	<u>Large</u>
Spacing	25-30'	30-40'	50'
Minimum ROW Width	5'	5-8'	8+'

Additional spacing requirements are addressed below and may affect the quantity of trees adjacent to a development. The plan will be reviewed and approved by the Village Forester.

Geographic Information Systems. The Village requires all new street trees to be recorded in the Village geographical information system (GIS). Newly added street trees will be added to the Village GIS at a cost to the developer where the Village will bill for actual costs to update the system.

Variety. Developers are encouraged to present plans that include a variety of approved species. The variety of species is subject to approval of the Village Forester.

Specification for Planting Street Trees

- All plant material shall be true to name and type, and first-class representatives of their species or variety. They shall have normal, well-developed branches, be healthy, vigorous plants free from defects, plant disease, and all forms of infestation or objectionable disfigurements. Either bare root, containerized, or balled and bulapped trees are acceptable. All plant material shall conform to American Standard for Nursery Stock (**ANSI Z60.1 - 2004**).
- The street trees shall be centered between the back of the curb and the street side of the existing or future sidewalks (if no walk is planned, it will be centered in the right-of-way). Spacing of trees from various infrastructure and features of the right-of-way are addressed in the Comprehensive Tree Plan (above).
- If there is not sufficient space to plant street trees in the right of way developer may plant an equal number of trees on private property. This will be accounted for in the developer's landscape plan. Any trees planted on private property will be maintained by the developer or owner.
- All street trees planted shall be of minimum size of 2" in caliper for containerized and balled and burlapped trees and 1 ¾" for bare root trees.
- The size for the tree installation hole shall be a minimum of 36" in diameter. Trees shall

be planted with the root collar exposed at or slightly above the surface level. For balled trees, the hole shall be at least 18" larger than the largest diameter of the ball and no deeper than the ball. Remove twine, clip and fold back wire basket and trim burlap.

- Soil for backfilling around roots and/or root balls shall be the existing soil from the excavation. Where existing soil is rocky and poor quality, the local brown topsoil may be used. Soil shall be pulverized and screened. All material dug from the plant holes and not used shall be removed from the site and disposed of. Immediately after planting, soil around roots and balls shall be thoroughly watered.
- At the time of planting, trees shall be pruned only to remove dead, broken, or diseased branches or cross branches that rub. As much of the crown as possible shall be maintained to create food for the tree. Trees shall appear symmetrical in shape and appearance.
- Persons installing street trees shall take all necessary precautions to minimize the damage to existing lawns. Any damage to existing lawns shall be repaired by placing topsoil and seed in the damaged area. The final determination to be made by the Village Forester.
- Upon completion of planting, individual planting holes shall be outlined with a shoulder of soil, placed outside of the planting hole rim to form a saucer. Wood mulch material shall be placed to cover disturbed areas to a minimum depth of three (3) inches, but there will be an air gap 1" wide around the base of the trunk with no mulch to keep the root flare exposed.
- Street trees do not need to be staked, unless required by the Village Forester due to size or species. If staking is required, a minimum of two wood posts that have a minimum diameter of 2½" shall be used. The minimum length of the posts shall be the depth of the bore plus one-half the height of the tree. The posts shall be installed at least one foot outside the diameter of the tree planting hole. The tree shall be connected to the posts with a 2" x 1/16" strap of such design so as not to damage the tree. The straps shall be located midway between the base of the trunk and the point where branching occurs. The tree shall be planted as plumb as possible and the contractor shall maintain tree plumbness throughout the guarantee period. All stakes shall be removed within one year of planting.
- Street trees planted between June 15 and September 15 should be avoided. If it cannot be avoided trees shall be balled and burlapped. These trees shall also be on a maintenance watering schedule, if natural rainfall is not sufficient during this time period.
- All installations must be inspected by the Village Forester, or a representative. If, in the sole opinion of the Village Forester, additional remedies are needed to assure the stocking and maintenance of healthy tree specimens, additional remedies may be required.

- Street trees installed by a developer shall be guaranteed for one (1) year. Replacement trees after one shall be the responsibility of the Village.
- The Village Forester may add to or delete from the list of approved trees. This may include trees that have come under attack from insects or disease that should not be planted. This information may come from DNR Forest Health or UW Extension staff or alerts.

Note: Refer to the DNR guidelines for current planting specifications.

[Urban Tree Planting Resources || Wisconsin DNR](#)

Comprehensive Tree Plan – Appendix F – Permit Application

Application for Permit to Prune, Remove, Plant or Treat Tree(s) on Public Property within the Village of Germantown.

Property Owner/Homeowners Association: _____

Date: _____

Address: _____

Phone: _____

Permit is requested to _____ (prune / treat / remove / plant) a tree or trees.

Location of tree(s) _____

Type and approximate trunk diameter of tree(s): _____

If the permit is for pruning or removal, please state the reason for action. If the permit is to plant a tree, please identify the type and size of tree to be planted. If the permit is to spray, please state the chemical to be used and follow directions on the label.

Who will do the work? _____ (If someone other than the property owner, then a License must also be obtained) It is understood and agreed that if this application is granted, then the property owner will have the work done in a workmanlike manner, comply with any special instructions stated in the Comprehensive Tree Plan, remove from the street all debris and dirt and replace the paving and lawn and leave them compatible with the surrounding landscape. It is further agreed that the applicant will save the Village its officers, employees, and agents free and harmless from all damage to life, limb and property arising from the proposed work and as well as damage to nearby and abutting property. It is further agreed that the applicant will comply with all provisions of the ordinances of the Village of Germantown and with the laws of the State of Wisconsin.

Applicant's signature (if an individual): _____

Authorized agents signature and title (if an HOA): _____

Staff Notes:

Permit is approved _____ Permit is denied _____ Permit No: _____

DPW Staff Signature: _____