

## Benzonía Village

### Ordinance. No. 2020-03

#### ENVIRONMENTAL PROVISIONS AND TREE PROTECTION ORDINANCE

Purpose: An ordinance to amend in part the Ordinance. Entitled "Village of Benzonía Zoning Ordinance, Adopted October 2, 1997 Amended", and to repeal and replace Article XVI 'Environmental Provisions'.

Benzonía Village HEREBY ORDAINS

#### Article XVI: ENVIRONMENTAL PROVISIONS AND TREE PROTECTION ORDINANCE

##### SECTION 1. REGULATIONS

**Section 1.1 Requirements.** All uses allowable in zoning districts of this Ordinance shall comply with the standards set forth in this section regulating the development of environmentally sensitive areas. These requirements shall be considered in addition to use restrictions or other applicable regulations for each zoning district, and shall be considered as a separate portion of the zoning application.

- A. These Environmental Provisions shall specifically address the following:
  - 1. Environmentally Sensitive Areas
  - 2. Tree Protections, Removals and Replacement (Private and Public)
  - 3. Steep Slopes
  - 4. Grading and Stormwater
  
- B. Other Overlay Zones may affect zoning districts in the Village. It is the applicants responsibility to determine if these or any other federal, state, or local regulations apply to their particular property. Other overlay zones in the Village include:
  - 1. Steep Slope Overlay
  - 2. US-31 Corridor Overlay
  
- C. In an area where an overlay zone is established, the property is placed simultaneously in each applicable zone. Where there is any conflict between the provisions or requirements of any Overlay District zone(s) and those of any underlying district, the more restrictive provisions apply.

##### SECTION 2. INTENT

**Section 2.1 Environmentally Sensitive Areas.** It is the intent of these regulations to identify and protect those areas of the Village that are considered to be environmentally sensitive to development, due to soil types, drainage, vegetation, wildlife habitats, floodplain, slope erosion or other factors, and that are subject to being seriously endangered, damaged, or destroyed if allowed to develop in a manner inconsistent with their conservation and preservation. Since the welfare and well-being of the citizens of the Village are directly linked and related to the natural environment of the area, it is recognized by this Article that in order to maintain sensitive areas in their natural condition for the benefit of mankind, it is necessary to protect such areas from degradation.

**Section 2.2 Tree Protection, Removals and Replacement.** In addition, the Village recognizes that trees yield a considerable number of benefits to a community. These benefits justify the costs of creating, promoting and maintaining forest in more urban areas – particularly in areas where water quality is important. The environmental benefits include reduced stormwater runoff, shade and cooling, air and water pollutant mitigation, carbon storage and biodiversity. The economic benefits include improved walkability, increased patronage of businesses, increased property values and decreased energy spending. The societal benefits include improved mental and physical health, improved quality of life, environmental justice and enhanced community character.

All of these benefits directly align with many of the goals and objectives identified in the Village Master Plan 2020. Furthermore the Village recognizes:

- A. The Village is a relatively small area, comprised of only 715 acres. Any parcel that removes significant trees without providing replacements will be highly visible, and cause more noticeable negative environmental, social and economic impacts to neighboring/adjacent parcels in a small Village atmosphere such as Benzonia.
- B. Woodlands and trees provide for public safety through the prevention of erosion, siltation, and flooding. They also help control stormwater by reducing runoff quantity and filtering pollutants to protect and improve water quality, which is tremendously important to our communities near Crystal Lake, Betsie River and Lake Michigan.
- C. Woodland growth protects public health through the absorption of air pollutants and contamination, through the reduction of excessive noise and mental and physical damage related to noise pollution, and through its cooling effect in the summer months, and insulating effects in the winter.
- D. Trees and woodland growth are an essential component of the general welfare of the Village of Benzonia by maintaining play areas for children, natural beauty, recreation and an irreplaceable heritage for existing and future Village residents.
- E. When protected, woodlands (including trees and other forms of vegetation) of the Village will provide economic support of local property values when allowed to remain uncleared and/or harvested and for their natural beauty, wilderness character, or geological, ecological, or historical significance. Protecting woodlands and requiring replanting for certain tree removals will promote an increased quality of life for Village residents.

**Section 2.3 Steep Slopes.** It is the intent to provide additional regulations for the development of structures, drives, access roads or other similar type development, redevelopment and the removal of vegetation on slopes in the Village in excess of fifteen (15) percent. Refer to the Steep Slope Overlay Ordinance.

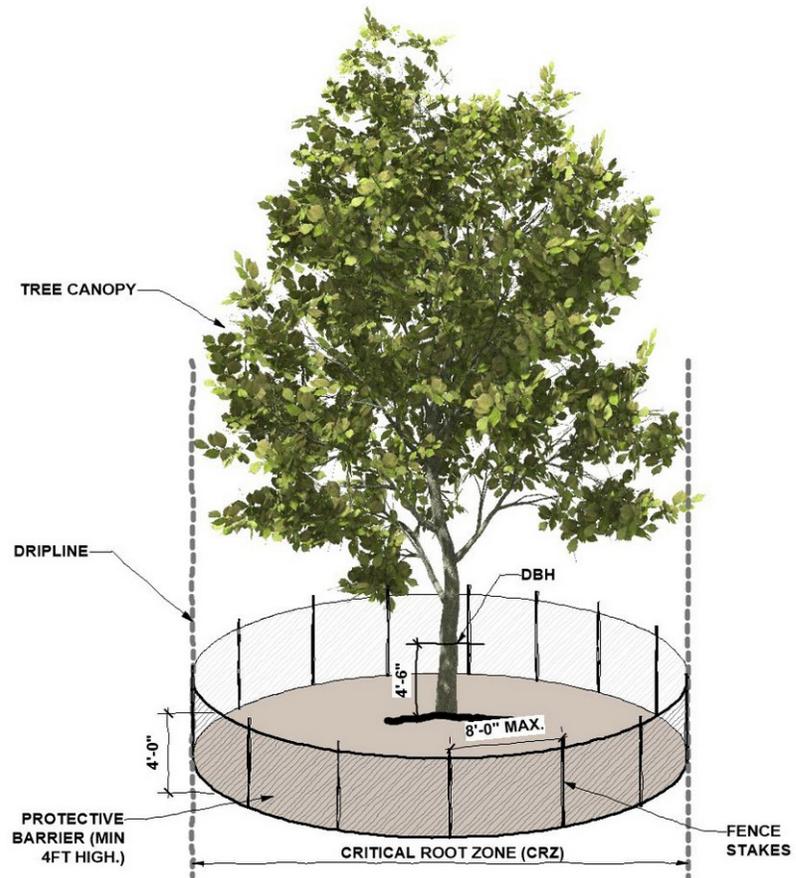
**Section 2.4 Grading, Filling and Stormwater.** It is the intent to provide additional regulations so that the changing of existing grades and landforms as a result of development projects does not adversely affect neighboring properties and does not degrade the water quality of the Village and surrounding waters.

### **SECTION 3. ADDITIONAL DEFINITIONS**

**Section 3.1.** This section contains many commonly used terms found within this Article of the Ordinance. In addition to the definitions listed herein, all definitions from the Village Zoning Ordinance shall also apply, Additional definitions will include the following:

- A. **American Standard for Nursery Stock:** (ANSI Z60.1) is published by the American Horticulture Industry Association, d/b/a AmericanHort an ANSI-accredited Standards Developing Organization. Those who reference the standards are cautioned to obtain the latest revisions.
- B. **Buffer Yard:** A required setback area from a road or property line that is designed for the exclusive purpose of buffering nonresidential uses from residential uses and public roads by means of landscaping and the use of other buffering materials.
- C. **Buildable Area:** That area of a lot exclusive of areas designated for roads, road rights-of-way, utility easements, setbacks, areas having significant natural features such as flowing streams or designated wetlands, approved conservation areas, or areas with slopes exceeding 40% (except with planning commission approval).

- D. **Building Envelope:** shall mean the building footprint plus that reasonable area up to twenty-five (25) feet from the building footprint of any principal structure and the applicable area for accessory structures as defined in Article 2, Section 2.1 of the Zoning Ordinance, and area for the required septic fields, refer to Figure 2.
- E. **Caliper:** Refers to the diameter of a tree. In nursery/landscape practice, caliper is measured at six (6) inches above ground level for trees four (4) inches or less and at twelve (12) inches above ground level for all trees greater than four (4) inches in caliper.
- F. **Certified Arborist:** International Society of Arboriculture (ISA) Certified Arborists have met a minimum practical experience level, have been tested and certified to know science-based practices in the field of arboriculture, and maintain certification through continuing education. ISA Certified Arborist credentials apply to individuals, not businesses.
- G. **Clear-Cutting:** The removal of a significant amount of trees and vegetation from an area such that the activity substantially affects the overall character of the lot.
- H. **Coniferous Trees:** Trees that are typically evergreen and bear cones.
- I. **Critical Root Zone: (CRZ),** sometimes also called the Root Protection Zone (RPZ), is defined as a circle on the ground corresponding to the drip line of the tree, refer to Figure 1.
- J. **Dead Tree:** means any tree that has no visible growth (within the appropriate growing season for all deciduous trees), no visible buds, twigs that do not exhibit flexibility, and twigs that do not appear green at the cambium layer when outer bark has been physically removed.
- K. **Deciduous Trees:** Trees, including ornamental/understory and canopy, that shed their leaves.
- L. **Diameter Breast Height (DBH):** means the diameter, in inches, of a tree measured at four and one-half (4½) feet above the existing grade. On multi-stem trees, the largest diameter stem shall be measured, refer to Figure 1.



**Figure 1: Tree Protection Fence At Drip line**

- M. **Drip line:** means the imaginary vertical line, which extends downward from the outermost tips of the tree branches to the ground. The area inside this imaginary line is referred to as the critical root zone or (CRZ). The tree's roots usually extend well past this line,, refer to Figure 1
- N. **Driveway Zone:** shall mean an area leading from the street to either the garage in the case of a residence, or the main building in the case of a non-residential parcel, and up to 5ft from either edge. The Driveway Zone may also include an area up to 900 square feet located directly in front of the garage or main building. The Driveway Zone shall not apply to circular driveways for residential property or parking lots for non-residential parking lots, refer to Figure 2.
- O. **Forest (or Woodland):** means.
1. "Forest" means a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater.
  2. "Forest" includes: (i) areas that have at least 100 trees per acre with at least 50% of those having a two-inch or greater diameter at 4.5 feet above the ground and larger, and (ii) forest areas that have been cut but not cleared.
  3. "Forest" does not include orchards. Greenbelt: **A strip of land of definite width and location reserved for the planting and/or maintenance of shrubs and/or trees to serve as an obscuring screen or buffer strip in carrying out the requirements of this Ordinance.**
- P. **Forester, Professional:** Foresters are professionals who, through forestry education and practical experience, have acquired expertise in the practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization and conservation of forests to meet specified goals and objectives while maintaining the productivity of the forest.
- A professional forester qualified to submit a written plan for forest operations, forest management, timber harvesting or other tree removal in the Village of Benzonia shall subscribe to the Michigan Stewardship Ethic of the Forest Stewardship Program of the Michigan DNR and shall meet at least one of the following certifications:
1. "Registered Foresters" are recognized by the State of Michigan.
  2. "Certified Foresters" are certified by the Society of American Foresters.
  3. "ACF Foresters" are members of the Association of Consulting Foresters.
  4. "Forest Stewardship Plan Writers" write Forest Stewardship Plans.
  5. "Technical Service Providers" write plans for the Environmental Quality Incentives Program.
  6. "Qualified Foresters", certified by MDARD, write plans for the Qualified Forest Program.
- Q. **Heritage (Landmark) Tree:** means any tree, provided it is not a removable tree, that meets the size and species requirements in the table below, or any other tree not listed in the table below that is 24 inches DBH or greater.

SCIENTIFIC NAME	COMMON NAME	DBH (inches) or greater
<i>Abies, spp.</i>	Fir	18
<i>Acer, spp.</i>	Maple (Red and Sugar)	18
<i>Betula spp.</i>	Birch	18
<i>Carya, spp.</i>	Hickory	18
<i>Castanea dentata</i>	American Chestnut	8
<i>Cornus florida</i>	Flowering Dogwood	8

<i>Fagus grandifolia</i>	American Beech (non diseased)	18
<i>Fraxinus spp.</i>	Ash	18
<i>Gleditsia triacanthos</i>	Honey Locust	18
<i>Juglans nigra</i>	Black Walnut	18
<i>Juglans cinerea</i>	White Walnut	18
<i>Larix laricina</i>	Larch/Tamarack (Eastern)	12
<i>Picea spp.</i>	Spruce	18
<i>Pinus spp.</i>	Pine	18
<i>Prunus species</i>	Wild Cherry	18
<i>Pseudotsuga menziesii</i>	Douglas Fir	18
<i>Quercus species</i>	Oak	18
<i>Thuja occidentalis</i>	Arborvitae	18
<i>Tilia americana</i>	American Basswood (Linden)	18
<i>Tsuga canadensis</i>	Eastern Hemlock	12
<i>Ulmus americana</i>	American Elm	18

**TABLE 1.0 – HERITAGE TREES: SPECIES AND SIZE FOR FULL REPLACEMENT VALUE**

Trees exempted from Heritage Tree status because of *some* of their less desirable characteristics, that must still be replaced on a 1:1 basis due to the value of their other important environment benefits (water and air quality, erosion control, aesthetics, etc.) are included in the following table below.

SCIENTIFIC NAME	COMMON NAME	DBH (inches) or greater
<i>Acer saccharinum</i>	Silver Maple	18
<i>Populus spp.</i>	Poplar Species	18

**TABLE 2.0 – TREES EXEMPT FROM HERITAGE TREE STATUS (STILL REQUIRE A REPLACEMENT TREE)**

- R. **Impervious Surface:** Any surface which prevents absorption of stormwater into the ground. Impervious surfaces are mainly constructed surfaces - rooftops, sidewalks, roads, and parking lots - covered by impenetrable materials such as asphalt, concrete, brick, and gravel or other surfaces which require accumulated water to be directed to a pervious surface. Impervious surfaces repel water and prevent precipitation and melt water from infiltrating soils.
- S. **Invasive Species:** Shall mean non-native or non-indigenous species that adversely affect the habitats they invade economically, environmentally, or ecologically.
- T. **Large tree:** means any tree larger than 40 feet in height at maturity.
- U. **Medium tree:** means any tree between 25 feet and 40 feet in height at maturity.
- V. **Open Space:** Any unoccupied area of land or water which will remain perpetually in an undeveloped state by means of a conservation easement, plat dedication, restrictive covenant, or other legal means

that runs with the land, and set aside, dedicated, designated, or reserved for public or private use. Pervious facilities such as trails, pathways and farm fields are considered open space.

- W. **Park tree:** means any tree located in public parks having individual names, and all publicly owned land, or to which the public has free access as a park.
- X. **Private tree:** means any tree located on land that is owned by an individual or group having a vested or financial interest in the subject property.
- Y. **Protective Barrier:** means a physical obstruction that encloses the protected area of a tree and limits vehicular, material, and equipment access over the trees critical root zone (CRZ), refer to Figure 1.
- Z. **Protected Tree:** shall mean any tree six (6) inches DBH or greater, including trees 18” DBH or greater exempted from Heritage Tree Status, and provided they are not classified as removable trees.
- AA. **Public Tree:** means any tree located on land that is publicly owned property including park lands and all street right-of-ways.
- AB. **Regulated Tree:** shall mean any tree six (6) inches DBH or greater, including heritage trees, and public trees, and provided they are not classified as removable trees.
- AC. **Removable Tree:** shall mean those trees designated by resolution of the Planning Commission as being appropriate for removal due to their nuisance characteristics. Such trees shall be listed by common and botanical name. These trees may be removed without permit or replacement, provided they do not comprise the dominant species within a woodland or vegetated area (i.e. result in clear cutting or removal of more than 40% of trees), and do not contribute to the overall vigor of the woodland or have significant value for watershed or erosion control. Such list shall be maintained by the Village and shall initially include the following tree species. Additional trees may be added to this list by Planning Commission resolution:

SCIENTIFIC NAME	COMMON NAME
<i>Acer negundo</i>	Box Elder
<i>Acer plantinoides</i>	Norway Maple
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Elaeagnus umbellata</i>	Autumn Olive
<i>Fraxinus, spp.</i>	Ash – Diseased Only
<i>Morus alba</i>	White Mulberry
<i>Robinia pseudoacacia</i>	Black Locust
<i>Ulmus pumila</i>	Siberian/Chinese Elm

**TABLE 3.0 – REMOVABLE TREES (TREE REPLACEMENT NOT REQUIRED)**

- AD. **Street tree:** means any trees planted or located within a public street or road right-of-way.
- AE. **Small tree:** means any tree less than 25 feet in height at maturity.
- AF. **Topping:** means the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the trees. Topping, also

known as heading, stubbing, dehorning, tipping, and rounding over, is no longer an acceptable pruning practice.

AG. **Transplant:** means the digging up of a tree and the planting of that tree in another place on the same property or off-site property.

AH. **Tree:** means a woody perennial plant, typically having a single stem or trunk which at maturity is 13 feet or more in height and which has a definite crown of foliage.

AI. **Tree Fund:** means the fund established by the Village to collect payments under certain conditions of this Ordinance, as noted herein. The Village Tree Fund shall be used for tree planting and maintenance, pest management, tree education, tree replacement as needed, or other preservation efforts to benefit the overall welfare of the Village as recommended by the Planning Commission.

AJ. **Tree Survey:** Shall mean a drawing and listing prepared and sealed or signed by a registered land surveyor, landscape architect, or civil engineer and/or verified by a registered arborist, forester, or landscape architect containing all of the following information:

1. The shape and dimensions of the property and the location of any existing and proposed structure or improvement;
2. The identification (common and botanical name), size, locations shown on the plan.
3. A signed and sealed drawing shall not be required for a property containing 20 or fewer trees, provided the applicant can provide a sketch and a list showing all the locations, sizes and species to meet the further requirements of this ordinance.

AK. **Sidewalk:** A paved, surfaced, or leveled area, paralleling and usually separated from the road, used as a pedestrian walkway.

AL. **Slope:** The ratio of vertical rise or fall to horizontal distance of terrain measured perpendicular to the contour lines at horizontal intervals of ten (10) feet.

AM. **Undeveloped:** shall mean a parcel of land which is substantially unimproved with buildings or structures on the effective date of this Ordinance.

## SECTION 4. ENVIRONMENTALLY SENSITIVE AREAS

**4.1 Protection of Environmentally Sensitive Areas.** The protection of areas of environmental concern, such as wetlands, steep slope areas, and densely vegetated forests must be considered in conjunction with development and must conform with the following regulations of state, county and township or other agencies as applicable:

- A. Wetlands are defined by degree of soil wetness, generally including those soils classified by the Michigan Natural Resources & Environmental Protection Act, PA 451 of 1994, Part 303, Section 324.30301 et seq (formerly, the Goemere-Anderson Wetlands Act , PA 203 of 1979) as being able to support aquatic vegetation regardless of whether it has standing water or not. No activity shall be permitted on a site with regulated wetlands, unless a wetlands permit has been obtained by the applicant from The Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- B. Sensitive Riverine Areas are defined as areas on each side of streams that could be subject to flooding or erosion and alterations of land may require a soil erosion and sedimentation control permit under Part 91, Section 324.9101 et seq of the Michigan Natural Resources & Environmental Protection Act, Public Act 451 of 1994, (formerly, PA 346 of 1972).

- C. Flood Plain Areas are low areas adjacent to inland lakes and streams subject to flooding according to the one hundred (100) year flood hazard boundary map as administered by the Federal Emergency Management Agency (FEMA) or an Intermediate Regional Flood map prepared by the Army Corps of Engineers. A structure proposed within a floodplain is not permitted to be erected until a permit from EGLE is obtained pursuant to Part 31 of the Michigan Natural Resource & Environmental Protection Act, Public Act 451 of 1994.
- D. Steep Slopes. When the proposed building site has slopes in excess of fifteen (15) percent, questionable soils stability or evidence of erosion, the Zoning Administrator shall require the applicant provide documentation that the proposed development complies with the Steep Slope Overlay.
- E. Forested Areas. The purpose of this section is to establish a process for conserving woodland and forest resources of the Village to protect natural resources, habitat quality, maintain watershed protections and preserve visual quality. Functional forest or woodland systems are desired and the goal is to provide for the following features during the maintenance, development or redevelopment of property in the Village:
  - 1. Natural stands or groups of trees are given priority over individual specimens;
  - 2. Activities that fragment the woodland into small units are minimized;
  - 3. Meaningful standards for tree canopy retention and reforestation are set;
  - 4. Provisions are made to allow for natural regeneration of woodland/forest species;
  - 5. Components of forests and woodlands other than trees are taken into consideration.

## **SECTION 5. TREE PROTECTION, REMOVAL AND REPLACEMENT**

### **Section 5.1 Activities that require a Tree Permit.**

- A. All regulated trees that are removed, except those removed under conditions of Section 5.2, shall be replaced in accordance with the regulations in Section 5.8 Tree Replacement Requirements.
- B. Any clear-cutting activity on any property in the Village of Benzonia requires a tree permit, or a “no tree” affidavit.
- C. On any property in the Village of Benzonia undergoing new construction or redevelopment, which is not subject to exemption, a tree permit is required for any person to clear-cut, remove, cause to be removed, transplant, destroy any regulated tree.
- D. Any trees to be removed in the public right-of-way, which is not subject to exemption, a tree permit is required for any person to clear-cut, remove, cause to be removed, transplant, destroy any regulated tree.
- E. Any development activity that clears more than 20,000 square feet of forested vegetation must also provide a site plan for permit approval by the Planning Commission. The plan shall be reviewed for approval per Section 4.1.E and in conjunction with any other relevant Overlay Zoning present on the parcel in question. If applicable, the site plan from the land use permit or forest management exemption will be adequate.

### **Section 5.2 Activities Not Requiring A Tree Permit.**

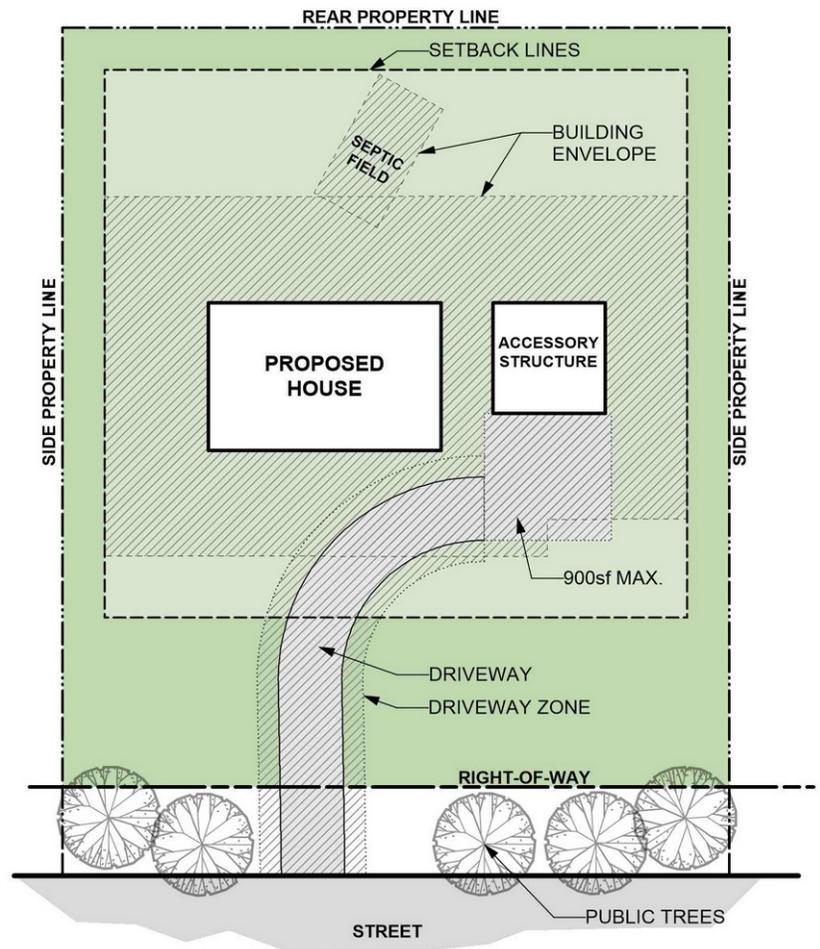
- A. Removal of any tree less than six (6) DBH.
- B. Removal of trees on existing residential lots on which there are established single or two-family dwellings, provided that any tree removals do not also require the Forest Management Exemption (see Item 5.2.I. This exemption does not apply to trees within the public right of way.

- C. New residential development for one single or two-family dwelling that disturbs less than 10,000 square feet of the affected parcel, provided that no more than 40% of the existing trees that are six (6) inches or more in diameter measured at a height of 4.5ft (DBH) on the site are removed. This exemption does not apply to trees within the public right of way.
- D. The removal of any street tree, park tree or parts thereof, under the direction of the Village Council, when such removal shall be necessary or advisable in the discretion of the Village Council for the construction or maintenance of any sidewalk sewer, public utility, electric utility or public improvement.
- E. The trimming of trees necessitated by the installation, repair or maintenance work performed in a public utility easement or approved private easement for public utilities which grants such permission. Removal of trees for public utilities shall comply with the appropriate section.
- F. The trimming and pruning of trees as part of normal maintenance if performed in accordance with accepted forestry or agricultural standards and techniques.
  - 1. Topping. No person, utility or other party may top any street tree, park tree or any other tree located at a public place; or any tree located in an Environmentally Sensitive Area per Section 4 of this Ordinance. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this subsection by the Village Council.
- G. Emergencies. Actions made necessary by an emergency, such as tornado, windstorm, flood, freeze, dangerous and infectious insect infections or disease, or other disaster, in order to prevent injury or damage to persons or property or restore order.
- H. Dead or damaged trees. Removal or trimming of dead, diseased or damaged trees, where the damage resulted from an accident or nonhuman cause, and provided that the removal or trimming is accomplished through the use of standard forestry practices and techniques.
- I. Forest Management. A homeowner may be granted an exemption from a permit for the purpose of tree management, timber harvesting or other forest management needs. In order to qualify for the exception the owner shall adhere to the following:
  - 1. A "Forest Management Plan" shall be prepared by a professional forester, as defined in Section 3.1., and recognized as such by the Benzie County Conservation District Forester.
  - 2. The plan prepared by a professional forester shall be submitted to and approved by the Zoning Administrator (ZA). After consultation with the ZA, tree cutting may occur without a permit.
  - 3. The tree management activity shall be for the purpose of reducing the density of trees so as to promote and maintain the health and viability of the remaining trees. No more than 40% of the existing trees that are six (6) inches or more in diameter measured at a height of 4.5ft (DBH) shall be removed every 10 years.
  - 4. The management plan shall include the following:
    - a. consist of a map (or a recent and clear aerial photograph) and a narrative;
    - b. must address the most suitable and practical areas for forest conservation;
    - c. provide the means by which cut trees shall be removed from the property without damaging remaining trees;
    - d. forest stand data indicating species, location, and size of trees and dominant species;
    - e. address soil and erosion control methods during tree removal process; and

- f. provide a post removal soil stabilization plan, address replanting or re-establishment of vegetative cover.
  - g. The map or aerial photograph should show the following:
    - (i.) intermittent and perennial streams, any other water bodies, and steep slopes over 15%;
    - (ii.) show areas that have soils with any structural limitations, hydric soils, or soils with a soil K value greater than 0.35 on slopes of 15% or more (IE. erosion prone);
    - (iii.) location of 100-year floodplains; and
    - (iv.) any other information required by the Village to assist in its review.
5. After submission of the above documents and a consultation with the ZA the 'Forest Management Exemption' may be approved on the tree removal permit application. The Village shall not levy any fee for review of this exemption.
  6. A 'Forest Management Exemption' will only be considered for the same parcel once every 10 years. Unless the owner proves the proposed activities are not in the same location as previously exempted forest management work on the same parcel and the total number of trees removed is still no more than 40% of the original existing trees.
  7. If during the forest management activity, an area of disturbance or vegetation cleared that causes and opening in the forest floor of 2000 square feet or more, the owner is subject to tree replacement per Section 5.8. The ZA or designee may inspect the property for excessive soil disturbance at any time and issue a 'stop work' order in the plan is not being adhered to as submitted.

**Section 5.3 Residential Developments.** In addition to other requirements of this chapter, there shall be compliance with the following requirements in all new residential developments:

- A. Generally. All new residential developments that disturb over 10,000sf shall require a tree removal permit, and be in compliance with the following requirements.
  1. Building envelopes. The developer shall designate building envelopes for all proposed structures. Refer to Figure 2.
    - a. Platted subdivisions or planned unit developments (PUD). The building envelope for platted lots and site condominiums shall be the buildable area remaining on a lot after satisfying Village Zoning Ordinance setback requirements. (For example, lots to be sold without a structure).



**Figure 2: Building Envelope**

- b. For all other residential developments not qualifying for an exemption, the developer shall designate building envelopes for the building areas, plus reasonable area beyond the buildings up to 25 feet, so long as the area is not in any required setback, refer to Figure 2.
  - c. Indicate the driveway zone, driveway zone shall be 15ft maximum plus 5ft on either side, for 25ft maximum width. A 900sf maximum garage apron may also be included in the driveway zone, refer to Figure 2.
2. Activities in the Building Envelope and Driveway Zone. Tree replacement shall not be required for construction of structures or improvements or other activities within a building envelope or driveway zone. An approved tree removal permit is still required to show compliance.
- B. This does not apply to areas within the Steep Slope Overlay Zones, or any areas that are in excess of fifteen (15) percent grade. Requirements in the Steep Slope Overlay Zones shall take priority.
1. Activities outside building envelope. Subject to the exceptions enumerated in Section 5.2, construction or activities beyond the building envelope shall require tree replacement if applicable. The Planning Commission may waive the requirement for the tree replacement for extraordinary circumstances that prove that tree removal is necessary and there is no reasonable alternative in connection with drainage improvements or driveways.

**Section 5.4 Non Residential Developments.** Generally. All new commercial, institutional, or multi-family residential developments shall require a tree removal permit, unless exempted under Section 5.2, and be in compliance with the following requirements.

- A. If development on non-residential property requires the removal of any regulated tree, they shall be replaced per Section 5.7. Building envelopes are not applicable.
- B. For nonresidential developments which require land clearing, such clearing shall be limited to designated drainage retention/detention basins and utility areas, and areas necessary for the construction of buildings, structures or other site improvements. An objective in determining the layout and design of buildings and parking shall be the preservation of protected trees, with a priority given for preservation of the largest trees deemed to have a reasonable likelihood of survival.
- C. The owner/developer shall make all attempts to design and construct new developments in order to preserve and leave standing and undamaged a minimum of 40% of the total number of trees having six inches or greater diameter breast height which exist within the platted area prior to development.
  - 1. If the new development is designed in a way to preserve at least 40% of the existing trees as noted above, then the tree replacement requirement for any other removed trees on the site may be cut in half.
  - 2. If less than 40% of the existing trees are preserved, than all regulated trees that are removed shall be replaced at the full replacement value.

**Section 5.5 Protective Barrier.**

- A. Protective Barrier is required for all trees to remain on site and shall, at minimum, be comprised of orange vinyl snow fence not less than 4ft in height, with stakes no less than 8ft apart, and placed at the perimeter of the drip line of all trees to be protected from construction activity. The barrier must remain in place until construction is complete. Refer to Figure 1.

1. Stop-Work Order. A stop-work order may be issued if protective barrier is removed or becomes damaged during construction and will remain in effect until the protective barrier is replaced to the satisfaction of the ZA.
- B. If the applicant can prove that no construction activities will take place within the vicinity (at least 50ft away from the CRZ) of trees to remain on the site, then a protective barrier will not be required in that location.
1. The ZA may inspect the site at any time during construction and if any disturbance in the CRZ of trees to remain is found (including parking equipment in the CRZ) a stop work order shall be issued until protective barrier is installed.
- C. If any protected tree is damaged or does not remain compliant with the protective barrier requirements in this ordinance at any time during construction and before the notice of completion of work per Section 5.7.E, the damaged tree shall be replaced per Section 5.8. The damaged tree may or may not be removed per the ZA.

**Section 5.6 Application For A Tree Removal Permit.**

- A. Time of application. Application for a tree removal permit shall be submitted to the ZA BEFORE removing or transplanting trees on sites to which this chapter applies. The application shall be submitted together with a tree location survey and all other documentation as required elsewhere under this article, prior to or concurrent with the submission of a site plan or application for a land use or special land use permit, whichever may be required.
1. Where a site plan is required, the tree location survey along with accompanying documentation shall be part of the review process. Site plan approval for a land use or special land use permit shall precede issuance of a tree permit.
  2. When a site plan is not required, the ZA shall review the application and other documentation as required after receiving the application in an acceptable form.
- B. Application and fee.
1. A person seeking removal of any regulated tree shall submit an application to the ZA on an approved form, along with a nonrefundable application/permit fee as determined by the Village. A performance guarantee must also be submitted, if required.
  2. A land use permit, special land use permit or any other land development permit may not be approved without the approval of a tree removal permit.
  3. Persons requesting approval of removal, maintenance or replacement for street trees or trees in the public right-of-way ONLY, shall submit an application. The Village shall not levy any fee for an approved application for work ONLY in the public right-of-way.
- C. Contents of the application.
1. In addition to or in conjunction with information required for a land use permit, special land use permit or any other land development permit an application for a tree removal permit shall submit copies (confirm number with the ZA) of the following information to the ZA:
    - a. Detailed description and statement of the purpose of the proposed activity.

- b. Tree survey. Tree survey for all areas for which a tree removal permit is required. Tree survey shall identify the size (DBH) and species of each tree to be removed. The tree survey shall be in a form acceptable to the department and shall bear the following information and details:
- (i) Minimum scale of one inch equals 50 feet. The scale shall be the same as the site plans.
  - (ii) The shape and dimensions of the lot or parcel, together with the existing and proposed locations of the structures and improvements, including existing and proposed utilities.
  - (iii) Locations and dimensions of all setbacks and existing or proposed easements.
  - (iv) Locations of all existing trees six (6) inches DBH or more including trees within the adjoining street right-of-way, trees within 25 feet of the property lines and all trees to be affected by the development such as trees located within areas of right-of-way improvements or off-site utility work. Trees having six (6) inches or greater DBH, that are proposed to remain, to be transplanted or to be removed from the areas for which a tree removal permit is required, shall be so designated and identified by common and botanical name on the drawing.
  - (v) If large groupings of trees are proposed to remain and be protected per Section 5.5, they do not need to be listed individually if the locations and tree protection methods are clearly located on the site plan. This will be at the determination of the ZA.
  - (vi) Tree location surveys are to be performed by actual field survey. If the project is to disturb over 10,000sf the survey must be performed by a registered land surveyor and verified on site by a registered landscape architect, certified arborist, professional forester or engineer. Professionals must verify the contents by seal or signature, whichever applies.
  - (vii) If existing trees are to be relocated the proposed location for such trees, together with a statement as to how such trees are to be protected and/or stored during land clearance and construction and how they are to be maintained after construction.
  - (viii) The number of trees to be removed which are six inches DBH or more.
  - (ix) A tree survey may be waived by the ZA for any of the following:
    - (a) The requirement for a tree location survey may be waived by the ZA for areas 50 feet or more outside the construction zone. If waived, a statement indicating predominant species and estimated number and size of trees in this area will be required. The area to remain undisturbed shall require a protective barrier per Section 5.5.
    - (b) For tracts of land ten acres or larger, a tree location survey shall be submitted, however an aerial photograph or copy thereof, of suitable quality where one inch equals 100 feet minimum may be used in place of a site plan.
    - (c) An on-site examination may be made by the ZA in lieu of the tree location survey under any of the following conditions:
      - Where a permit is required to remove or relocate trees on occupied single-family lots.
      - Where a permit is required to remove fewer than five (5) trees.
- c. Tree identification. A statement that all trees being retained will be identified by some method, such as painting, flagging, etc., and, where protective barriers are necessary, that they will be erected before work starts.
- d. Tree protection. A statement describing how trees intended to remain will be protected during development, refer to Section 5.5, Protective Barrier.
- e. Tree Replacement Plan. A site plan (may be accomplished by a landscape plan) showing the replacement of trees (total number and caliper inches, and species) per requirements of Section 5.8.
- f. Cost of replacement. A cost estimate for the proposed tree replacement program with an explanation including the number, size and species. Indicate a unit cost per each size and species. This will be used to establish the performance guarantee.

- g. Topographical survey, grade changes and soil survey information shall be provided as a part of the tree permit application only if they are required as a part of the land use, special land use, or other land development application for any other requirement as a part of the Zoning Ordinance.

### **Section 5.7 Issuance And Validity.**

#### A. Tree Removal Permit Review Procedures

1. A tree removal permit shall be reviewed and issued in conjunction with a land use permit, special land use permit or any other land development permit by the Village if applicable in accordance with the review procedures already in effect for the review and approval of such permits.

2. Applications that involve subdivision review or any form of site plan review before the Planning Commission, shall be reviewed by the Planning Commission in accordance with the applicable review procedures.

3. The filing of an application shall be deemed to extend permission to the ZA to inspect the subject site, if necessary, for purpose of evaluating the application.

#### B. Fees. Fee and performance guarantee, when paid. The tree removal permit shall not be issued unless and until the permit fee and performance guarantee have been paid.

#### C. Tree permits shall be issued for only the following reasons:

1. Trees pose a safety hazard to pedestrian or vehicular traffic or threaten to cause disruption to public utility service.

2. Trees pose a safety hazard to buildings or structures.

3. Trees completely prevent access to a lot or parcel.

4. Trees unreasonably prevent development of a lot or parcel or the physical use thereof. ***It is the intent of this provision that a permit shall not be granted for the removal of any tree where a reasonable alternative design solution exists consistent with the permitted use of the property under the Village's zoning ordinance.***

5. Diseased trees or trees so weakened by age, storm, fire or other injury so as to pose a danger to persons, property, improvements, or other trees.

6. Where a heritage tree is proposed for removal and there is no reasonable alternative that would allow preservation of the tree while still meeting other Village requirements.

#### D. Permit validity. A tree removal permit issued by the Village shall be null and void if the work covered under the permit has not commenced within one (1) year from the date of issue. A tree removal permit is not transferable to a subsequent owner or occupant of the property without written permission from the Village.

1. Tree removal authorized by the approval of a final site plan or by approved subdivision construction plans shall remain valid concurrent with the approved plans.

#### E. Completion of Work. Notice of commencement and completion of the work or other activity authorized by the tree permit shall be made by signed affidavit to the ZA as stated on the permit issued.

#### F. "NO TREE" AFFIDAVIT.

1. Where proposed activity requires a site plan and is located on site with no trees of six (6) DBH or greater, the developer/owner shall, at the time application submittal for a land use, special land use or other land development permit, include a "no tree" affidavit.
2. Where "no tree" affidavit is submitted, the Village shall conduct an inspection of the site. If the inspection substantiates the developer/owner's claims, the developer/owner shall be relieved of the necessity of providing the information listed in Section 5.6 of this section as it pertains to this chapter.
3. If, during the inspection by the Village, the site is found to have tree specimens with a DBH of less than six (6) inches, but which are of value because of quantities such as health, habitat, size, species, or other positive attributes, the Village may require the developer to request a tree removal permit.
4. The Village shall not levy any fee for an approved "No Tree Affidavit".

**Section 5.8 Tree Replacement Requirements.**

- A. As a condition of being granted a tree removal permit, unless otherwise exempted in this Chapter, the applicant shall be required to replace, on-site, the heritage and/or protected tree(s) removed. Each tree removed is subject to the following conditions:
  1. Required replacement plan and calculations. A site plan including the replacement plan and calculations shall be submitted to the ZA indicating the location, species, and size in inches at DBH of the heritage and/or protected tree(s) being removed, and the location, species, and size in caliper inches of the tree(s) that will replace the heritage and/or protected tree(s). The calculations may be shown on the site plan or provided as a part of the application form.
  2. Minimum size of replacement trees. A replacement tree shall be at least two (2) caliper inches, or six (6) feet in height for an evergreen tree. Evergreen trees used to fulfill replacement requirements shall be at the equivalent rate of 3 feet in height for each one (1) inch caliper required. For example, a 6ft evergreen tree is equal to 2 caliper inches OR a 9ft evergreen tree is equal to 3 caliper inches.
  3. Heritage Tree replacement rate. A Heritage Tree shall be replaced at a minimum of twenty-five (25%) percent of the total DBH to be removed.
    - a. **Heritage Tree Replacement Formula: (Total of DBH for all heritage trees removed x 25% = Total number of caliper inches that must be replaced)**
    - b. *For example, a single heritage tree is removed with a DBH of twenty-four (24") inches – it shall be replaced with trees, whose accumulative total diameter, measured in calipers, equals at least six (6") inches. Replacement trees could be 3 – 2" caliper trees OR 2 – 3" caliper trees.*
  4. Protected tree replacement rate, non-Heritage Tree. A non-heritage protected tree shall be replaced at a 1 to 1 basis with the minimum caliper size for replacements at two (2) inches.
    - a. **Protected Tree Replacement Formula: (Total Number Of Protected Trees Removed x 2 = Number Of Caliper Inches That Must Be Replaced)**
    - b. *For example, if the following trees are removed: a six (6) inch, a nine (9) inch tree and a seventeen (17) inch tree are being removed, the total number of trees being removed is 3. Multiply that by 2 for a total of six (6) caliper inches must be replaced, regardless of the total number of caliper inches removed. This may be accomplished by planting three (3) 2" caliper trees or any variation as long as it meets the requirements.*

5. Diversity of species. Diversity of species shall be maintained unless it can be demonstrated that this is not practical due to site-specific conditions. Replacement trees should be native species to Northwest Michigan and shall not be selected from the "List of Invasive or Nuisance Trees Species" adopted by resolution of the Planning Commission. When feasible, using at least 40% evergreen trees is encouraged to maintain winter interest.
  6. American Standards for Nursery Stock. A replacement tree shall satisfy the latest edition of the American Standards for Nursery Stock, including being:
    - a. Nursery grown.
    - b. State Department of Agriculture inspected.
    - c. No. 1 grade, with a straight unscarred trunk and a well-developed uniform crown.
    - d. Planted, watered and mulched in accordance with standard planting practices.
  7. Location. The center of a tree shall not be planted closer than four (4) feet to any property line unless the adjacent property owner waives this requirement in writing and such waiver is on file with the Village Clerk. No tree shall be planted within a utility easement unless such tree is planted in accordance with Utility Safety Guidelines by the associated utility company.
  8. Deadline for planting. Prior to issuance of a final certificate of occupancy for a building or construction project, or final inspection for a land alteration project, all required replacement trees shall be planted and properly supported in accordance with approved plans and the provisions of this Article. Replacement trees in all other instances shall be planted and properly staked no later than twelve (12) months after the date of issuance of the tree removal permit. For a tree(s) not planted by the deadline, pro-rated funds from the performance guarantee, at a rate established by resolution of the Planning Commission, shall be transferred to the Village Tree Fund and forfeited by the applicant.
  9. Minimum warranty. A replacement tree including labor shall be warranted for a minimum of one (1) year from the date of planting.
  10. Transplanted tree. A transplanted tree may be counted as a replacement tree, provided such tree meets the minimum size, quality, species and guarantee requirements of a replacement tree and also must be warranted for a minimum of one (1) year from the date of planting.
- B. Performance Guarantee.
1. A performance guarantee covering the cost of the tree(s), installation, and warranty shall be provided to the Village at the time the tree removal permit is issued and such funds shall be placed in escrow by the Village, to be refunded no more than fifteen (15) days after the one-year warranty on the tree(s) expires and the tree(s) has been inspected and found to be healthy. If the tree(s) is dead, dying, diseased, damaged or otherwise unhealthy, the performance guarantee shall remain in escrow until a new tree(s) is planted, the one-year warranty on the new tree expires and the tree has been inspected and found to be healthy. If the second replacement tree is found to be unhealthy, pro-rated funds from the performance guarantee, at a rate established by resolution of the Planning Commission, shall be transferred to the Village Tree Fund and forfeited by the applicant.
  2. A performance guarantee may also be required for the amount of the cost of any other additional site work and/or landscaping required (refer to buffer requirements in this ordinance and any applicable Overlay Zoning Ordinances). The amount required for other required site landscaping shall be, at minimum, ten (10) percent of the estimated costs of the proposed site work.
- C. Village Tree Fund. Where the applicant determines that it is not feasible or desirable to replace the tree(s) on-site, the applicant may elect to pay into the Village Tree Fund a non-refundable amount of money, as established by resolution of the Village Council, for each tree removed. Payment shall be

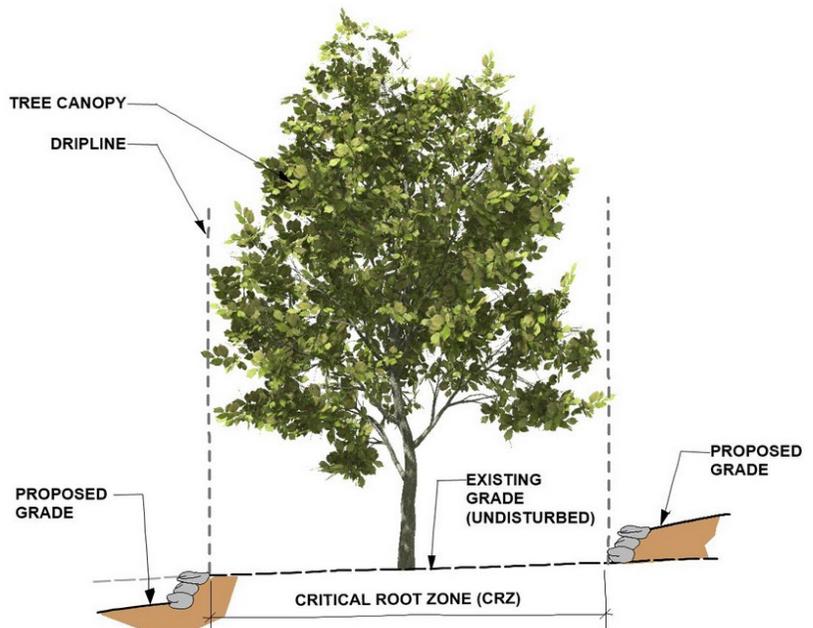
received by the Village prior to issuance of the tree removal permit and a performance guarantee shall not be required.

- D. Certificate of Occupancy. All tree replacement and other landscaping required by this Ordinance as well as any applicable Overlay Zoning Ordinances shall be planted prior to obtaining a Certificate of Occupancy, or within nine (9) months of the issuance of a Certificate of Occupancy if, in the opinion of the ZA, planting is limited due to seasonal weather prior to occupancy. Any performance guarantee related to tree installation and required site landscaping is to be released only after the requirements of this Section and any applicable Overlay Zoning Ordinances are completed.
- E. Installation and Maintenance:
  - 1. All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound professional grade manner and according to accepted good planting and grading procedures.
  - 2. The owner of the property required to be landscaped by this Ordinance shall maintain such landscaping in a reasonably healthy condition, free from refuse and debris. All unhealthy and dead material shall be replaced within six (6) months of damage or death OR the next appropriate planting period, whichever comes first. All landscaped areas shall be provided with a readily available and acceptable water supply within 100ft of the required plantings.

## SECTION 6. PUBLIC TREES

### Section 6.1 Protection and Removal of Street Trees or Plantings in the Right-of-Way.

- A. Should a property owner wish to have a regulated tree adjacent to his or her property in the public right-of-way (r.o.w.) removed, he or she shall submit a request, in writing, to the Zoning Administrator (ZA) for approval by the Village Council. Unless the regulated tree is clearly dead, dying, and/or is a hazard to life or property (as determined by the ZA), the property owner making the request shall provide a statement from a certified arborist/professional forester summarizing the conditions of tree with a risk assessment and reasons for removal, at the cost of the property owner. Following the condition and risk assessment by the certified arborist/professional forester, if the regulated tree is found to be dead, diseased, or dying the Village shall remove the regulated tree at the Village's cost and the property owner shall not be required to provide a replacement per Section 5.8. Following the condition and risk assessment by the certified arborist/forester, if the regulated tree is not found to be dead, diseased, or dying, the tree shall remain.
- B. Only in extenuating circumstances, as determined by the Village Council, shall a healthy regulated tree in the public r.o.w. be removed or caused to be removed. Such extenuating



**Figure 3: Proper Grading Technique – No Disturbance to the CRZ**

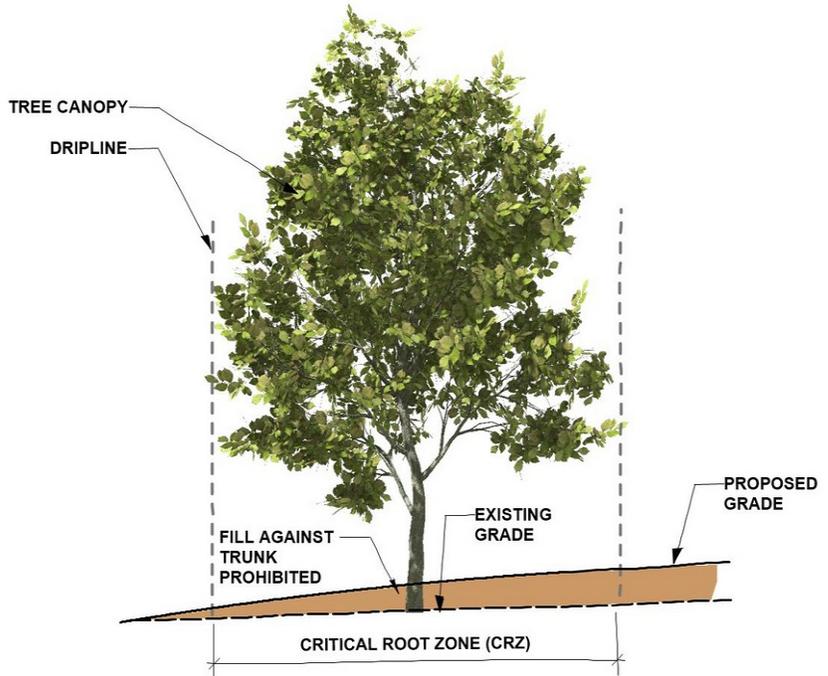
circumstances shall include but are not limited to catastrophic event, repair, replacement, or maintenance of underground utilities, or an act of God.

C. Tree Replacement in the Right-Of-Way

1. Any regulated tree removed at the request of the property owner in the public right-of-way or damaged by improper pruning or trimming per Section 5.2 shall be replaced per Section 5.8 and per the species and location requirements of this Section.

2. Furthermore, any regulated tree that is damaged by other means in such a way that causes irreparable damage such that the tree may cease to live (either immediately or in the future by result of the damage) shall be replaced per section 5.8. Other means of damage may include:

- a. Mechanical damage to significant portion of the roots or trunk that caused tears, cuts or punctures in the bark.
- b. Improper grading (raising or lowering the grade around a tree) that causes significant root decline and vigor. Raising or lowering of the grade shall be done outside the drip line of the tree. (Refer to Figure 3)
- c. Improper back fill techniques that cover the tree trunk with soil. (Refer to Figure 4) Trees in the right-of-way shall not have fill placed against the tree trunk. A proper tree well and drainage system shall be used for any disturbance inside the CRZ, the system shall be recommended by a certified arborist and shall be approved by the ZA before disturbance in order to be exempt from replacement.



**Figure 4: Improper Grading Technique – Back fill placed directly against tree trunk**

3. Any required replacement trees shall be provided by the party determined to be responsible for the damage. For example the property owner, construction company, utility company, etc.

**Section 6.2 Installation of Street Trees or Plantings in the Right-of-Way.** All trees planted in the public street or sidewalk area and all tree planting required by this code shall be located and planted under the supervision of the ZA or designee, who shall supervise such planting and locating. In the performance of such work, consideration shall be given to the following factors; provided, that setbacks permit and considerations of safety do not interfere. These factors are determined to be of primary importance in maintaining the Village character.

- A. Trees that must be removed shall be replaced, except in unusual circumstances.
- B. Wherever feasible, new trees shall be planted near old and dying ones in anticipation of their removal.

- C. Unnatural regularity of spacing and arrangement shall be avoided; staggered, or irregular locations or a simulated forest arrangement being preferred.
  - 1. Unless a streetscape or corridor plan indicating the placement of new trees has been complete for the street in questions and such plan has been approved by the Village. In this case, the location must be confirmed and coordinated with the appropriate street or corridor plan.
- D. Species selected may vary, depending on location; however, native species are preferred, non-native species will be allowed only in limited circumstances..
  - 1. Unless a streetscape or corridor plan indicating the species of street trees has been complete for the street in questions and such plan has been approved by the Village. In this case the species must be confirmed and coordinated with the appropriate street or corridor plan.
- E. The coordinating of tree planting on public ways with landscaping on private property so as at achieve the above purposes is deemed desirable.

**Section 6.3 Street Trees Types.** The following list constitutes the official street tree species for the Village. This list is subject to change, a current list to be on file with the Village or Zoning Administrator. It is the intent to provide large shade trees when possible to maintain the existing character of the Village. Other species may be allowed if approved, in writing, by Planning Commission or Zoning Administrator.

- A. A. Small Trees. *Scientific name* and (Common Name)
  - 1. *Amelanchier spp.* (Serviceberry, tree form preferred)
  - 2. *Crataegus spp.* (Hawthorn)
  - 3. *Malus spp.* (Crabapple, flowering, fruitless varieties preferred)
- B. B. Large Trees.
  - 1. *Acer rubrum* (Red Maple)
  - 2. *Acer saccharum* (Sugar Maple)
  - 3. *Gleditsia triacanthos* (Honeylocust, thornless varieties)
  - 4. *Pinus strobus* (White Pine)
  - 5. *Quercus rubra* (Red Oak, varieties)
  - 6. *Quesrcus robur* (English Oak, varieties)
  - 7. *Tilia americana* (American Linden, varieties)
  - 8. *Tilia cordata* (Littleleaf Linden, varieties)
  - 9. *Ulmus hybrids* (American Elm, Dutch Elem resistant varieties)
- C. Prohibited Street Trees.
  - 1. *Acer plantinoides* (Norway Maple)
  - 2. *Pyrus spp.* (Flowering pear, all varieties)
  - 3. Any species included in Table 2.0 and Table 3.0.

**Section 6.4 Street Tree Location.** In General, trees shall be planted in a zone at least 2.5ft from the edge of the roadway and up to the edge of right-of-way.

- A. A. Distance from street corners and fire hydrants. No tree shall be planted closer than 35 feet of any street corner, measured from the point of nearest intersecting curbs or curb lines. No tree shall be planted closer than ten feet from any fire hydrant. Tree placement shall take into consideration the Visibility from Intersections, per the Zoning Ordinance, Section 3.13.

- B. Distance from curb and sidewalk. Trees planted in the area between the curb or curb lines and sidewalks shall have the location and species approved on a site plan for review and approval by the Planning Commission, or for projects including 2 or less trees, a written approval by the Zoning Administrator.
- C. Distance from utilities. No trees, other than those species listed as small trees in Section 6.3.A, may be planted under or within ten lateral feet of any overhead utility wire, or over or within five lateral feet of any underground water line, sewer line, transmission line, or other utility. Confirm all plantings by utility lines, wires or other equipment, with the appropriate utility company's guidelines.
- D. Tree Size. The minimum size for installed street trees shall be two (2) inches in caliper DBH. All trees planted must be of the tree form variety, have a single stem with branching limbs.

**Section 6.5 Pruning and Maintenance.**

- A. Every owner of any tree overhanging any street right-of-way (r.o.w.) within the Village shall prune the branches so that such branches shall not obstruct the light from any street lamp or obstruct the view of any street intersection and so that there shall be a clear space of eight (8) feet above the surface of the street or sidewalk. Said owners shall remove all dead, diseased, or dangerous trees, or broken or decayed limbs that constitute a menace to the safety of the public.
- B. The Village shall have the right to prune any tree or shrub on private property when it interferes with the proper spread of light along the street from a street light, or interferes with the visibility of any traffic control device or sign. The duty is imposed upon a property owner to notify the Village when any tree, shrub or plant in a public street adjacent to his property is injuring or damaging any public sidewalk, interfering with street lights, site lines or any other situations that may be deemed unsafe.
- C. Tree maintenance, and/or removal of either downed trees or trees less than 6" DBH in the public r.o.w. that are not constituting a menace to public safety may be maintained and/or removed at the expense of the abutting property owner. Selected tree removal of non-regulated trees (trees less than 6" DBH) and proper pruning in order to maintain views to the front of structures may be completed at the expense of the abutting property owner without replacement, provided at least 1 tree remains per every 25ft of street frontage, with written approval from the ZA.

**SECTION 7. STEEP SLOPES**

**Section 7.1 Protection of Steep Slopes.** With any development activity (proposed building site, land clearing activity, tree removal project or any other site disturbance) on parcels with slopes that are in excess of fifteen (15) percent the Steep Slope Protection Overlay applies,

**Section 7.2 Retaining Wall Permit.** No retaining wall shall be erected without first having consulted with a Building Official from the Benzie County Building Safety and Code Enforcement Department. A retaining wall permit shall be submitted with the Village Land Use permit application if applicable.

**SECTION 8. GRADING AND STORMWATER**

**Section 8.1 Alterations To Grade.**

- A. Excavation, filling or any combination thereof, or any leveling to a smooth, horizontal or sloping surface shall be permitted, subject to the following limitations:
  - 1. The natural grade of any site shall not be altered in such a way that the finished grade has an adverse effect on neighboring properties. Adverse effects shall be determined by the Zoning Administrator, or if the Zoning Administrator elects to do so, the decision may be referred to the

Planning Commission for a determination. In evaluating whether negative effects are present, the impact of storm water runoff and drainage, the visual impact of the grading change and other potential adverse effect may be considered. The elevation of a property shall be the same as neighboring properties or consistent with the natural slope of the area, unless there are practical difficulties or unusual circumstances that warrant a change elevation.

- B. Final grades shall be harmonious with the surrounding grades. No final grade shall create an area that will fill with water, except areas that are approved storm water management facilities.

**Section 8.1 Stormwater Management.** All plans for redevelopment or new construction must include provisions for proper management of storm water. When any land in the Village is developed or altered in any way which affects stormwater runoff, the owner shall detain such stormwater from runoff onto adjacent properties, including roads and other rights-of-way, in such a manner which shall result in the maximum amount of stormwater runoff not exceeding that which existed prior to the development or improvement of the property, and in accord with the requirements of the Michigan Natural Resources & Environmental Protection Act, PA 451 of 1994, Part 91, Section 324.9101 et.seq. formerly the Soil Erosion/Sedimentation Control Act, PA 347 of 1972, as amended. In addition, all development shall conform to the Benzie County Soil Erosion, Sedimentation and Stormwater Control Ordinance and any general rules or administrative guidelines.

- A. Approved Runoff and On-Site Detention. Unless permitted to discharge into a Village storm sewer or approved detention or retention pond in accordance with Village Ordinances, all lots shall retain storm water runoff on-site or detain it so as to allow discharge at a rate that is equal to or less than what left the site prior to redevelopment or new construction.
  - 1. No land uses shall be permitted which will reduce the level of service currently being provided by existing storm water management infrastructure or existing drainage patterns.
  - 2. Direct discharging of untreated storm water to a water body is prohibited.
  - 3. Because the melting of snow will create storm water, snow may be pushed into and stored in a detention or retention pond, subject to approval by the Village.
- B. Special attention shall be given to proper site drainage so that runoff of stormwater will not adversely affect neighboring properties or the water quality of adjacent lakes and streams. No storm water runoff, which is a result of development site design, or other man made features, shall be allowed to be directed to neighboring parcels, or shall be allowed to result in water standing on the surface, unless the standing water is a part of a properly managed and maintained storm water retention system, sediment pond; or the standing water is in a naturally occurring wetland or water body.
  - 1. Stormwater detention and retention ponds shall be integrated landscape features rather than single-purpose flood control and stormwater management ponds.
  - 2. Stormwater detention and retention ponds located anywhere in the Village shall be planted with appropriate trees, shrubs and grasses. Refer to the US-31 Corridor Overlay Ordinance Section 8, for appropriate landscape materials.
- C. As an alternative, if documented by a consulting engineer AND the soils are of a type which will allow for efficient drainage, the use of dry wells, infiltration trenches, swales, bio-retention or other best management practices for controlling urban runoff quality may be permitted and are highly encouraged. Methods used may include attached or detached accessory stormwater control features as follows:
  - 1. Swales: both biofiltration (bioswales) and vegetated/rock swales subject to engineering review documentation of the soils to assure that site drainage requirements can be met and document no standing water for more than 24 hours.

2. Rain Gardens (bioretention) may be permitted subject to engineering documentation as noted in item 1. above.
  3. Rain Barrels or Cisterns are permitted in all districts and require a land use permit.
    - a. Underground cisterns or rain barrels are subject to engineering review and constructed in accordance with the State Building Code.
    - b. Above ground rain barrel or cistern systems in excess of 250 gallons must conform to the setbacks for accessory buildings and structures and are subject to engineering review. These systems must be constructed in accordance with the State Building Code. These above ground rain barrels or cistern systems shall be fully enclosed to avoid attracting mosquitoes or becoming a hazard.
  4. Vegetated roof systems may be permitted in accordance with the State Building Code.
  5. Other methods of onsite stormwater control may be submitted to the Zoning Administrator and, at their discretion, may be approved, approved subject to engineering review, approved subject to Planning Commission review, approved subject to Benzie County review, or denied.
- D. Single-family standalone residences are exempt from having to receive permitting and design approval for placement of rain gardens, bioswales, rain barrels or other stormwater management practice, but all stormwater structures must meet applicable setbacks and other general standards.
- E. The final grade surface of ground areas remaining after the construction of a building or structure, and any earth changes made in connection with use of land shall be designed and landscaped such that surface water flows away from the building or structure and is collected or managed in a manner which avoids any increase in surface water discharge onto adjacent properties or public roads, the erosion of or filling of any road ditch, the blockage of any natural or public watercourse, the creation of standing water over a private sewage disposal drainage field, and any unnecessary impoundment of surface water.

## **SECTION 9. ENFORCEMENT AND SANCTIONS.**

**Section 9.1.** The rules and regulations of this article shall apply to all public and privately owned land in the Village, and shall be in addition to requirements imposed by other Village ordinances.

**Section 9.2.** The Zoning Administrator shall be charged with the duty of enforcing the rules and regulations of this article, with rulings by the Planning Commission or Village Council as noted herein.

- A. The Village shall have the right to enter property to investigate the unpermitted removal of trees on private property and/or the public right-of-way.. The penalty for removal of tree(s) without a required permit shall be a civil infraction plus a \$500.00 fine, per tree.
- B. A person who violates any provision of this Ordinance or the terms or conditions of a permit is responsible for municipal civil infraction; and shall be subject to payment of not less than \$500.00, plus costs and other sanctions, for each infraction. Commencing thirty (30) days after receiving notice of violation, unless said violation is abated, each day the violation continues shall constitute a separate violation of this ordinance.
- C. Violations of the ordinance shall be enforced by the Zoning Administrator who is authorized to issue municipal civil infractions notices and citations pursuant to the authority of and as provided in applicable state law.

**SECTION 11. SEVERABILITY**

The provisions of this ordinance are hereby declared to be severable. If any clause, sentence, word, section or provision is hereafter declared void or unenforceable for any reason by a court of competent jurisdiction, it shall not affect the remainder of such ordinance which shall continue in full force and effect.

**SECTION 12. REPEAL**

All ordinance or parts of ordinances in conflict herewith are hereby repealed.

**SECTION 13. EFFECTIVE DATE**

This Ordinance shall become effective upon the publication in accordance with law.

At a regular meeting of the Village Council for Benzonia Village held on the 6<sup>th</sup> day of July, 2020, Trustee French, moved for the adoption of the foregoing ordinance and Trustee Cook supported the motion.

Voting For, Roll Call: Misner, French, Heyn, Cook, Bair, Flynn

Voting Against: None

Excused - Rankin

The Village President declared the ordinance adopted.

Timothy Flynn,

Village President.

**CERTIFICATION**

The foregoing is a true copy of Ordinance No. 2020-03, which was enacted by the Village Council for the Benzonia Village at a regular meeting held on July 6, 2020.

Rhonda Nye,

Village Clerk