

# **ARTICLE 5**

## **SPECIAL PROVISIONS**

### **10.5.000 OVERVIEW OF ARTICLE 5**

This Article establishes special provisions and standards for natural resource areas, historic landmarks, manufactured home and recreational vehicle parks and tree protection are also included in this Article. Review procedures from Article 1 are cross-referenced as they apply to the special provisions. The following list summarizes the topics covered in Article 5:

- Natural Resource Areas
- Tree Protection
- Historic Landmarks
- Manufactured Dwelling Parks
- Solar Access
- Recreational Vehicle Parks

These headings can assist the user in locating information. The table of contents contains a complete list of the materials included in this Article.

## **NATURAL RESOURCE AREAS**

### **10.05.005 INTENT**

The purpose of this ordinance is to comply with Section 4 of Title 13 of Metro's Urban Growth Management Functional Plan.

- A. To protect and improve the following functions and values that contributes to fish and wildlife habitat in urban streamside areas:
  - 1. Microclimate and shade;
  - 2. Stream-flow moderation and water storage;
  - 3. Bank stabilization, sediment and pollution control;
  - 4. Large wood recruitment and retention and channel dynamics; and
  - 5. Organic material sources.
  
- B. To protect and improve the following functions and values that contributes to upland wildlife habitat in new urban growth boundary expansion areas:
  - 1. Large habitat patches
  - 2. Interior habitat
  - 3. Connectivity and proximity to water; and
  - 4. Connectivity and proximity to other upland habitat areas
  
- C. To adopt habitat areas determined by Metro to implement the performance standards of Title 13 of the Urban Growth Management Functional Plan.
  
- D. To implement performance standards through Natural Resource Areas (NRA) as provided in this Section.
  
- E. To provide clear and objective standards and a discretionary review process, applicable to development in Natural Resource Areas, in accordance with Statewide Land Use Planning Goal 5.
  
- F. To allow and encourage habitat-friendly development, while minimizing the impact on fish and wildlife habitat functions.
  
- G. To provide mitigation standards for the replacement of ecological functions and values lost through development in Natural Resource Areas.

### **10.5.010 INFORMATION REQUIREMENTS**

An applicant who wishes to remove vegetation or do work within a Natural Resource Area (NRA) shall submit for a tree permit. It shall include the information required by this subsection. The information shall be submitted either prior to or concurrent with a land use application such as site development, conditional use permit, planned development application, preliminary subdivision or partition application. Where no land use permit is required, the tree permit shall be submitted and approved prior to any physical modification of the subject site.

- A. Applicants must verify the natural resource area on their property as described in Section 10.5.050.
- B. For the entire subject property (natural resource area and non-natural resource area), applicants must submit a scale map of the property that includes:
  - 1. Location of all natural resource areas on the property;
  - 2. Outline of any existing disturbance area, including the location of existing adjacent streets and paved areas, utilities, culverts, stormwater management facilities, or bridges;
  - 3. Location of any wetlands or water bodies on the property, including a delineation of the sensitive lands and vegetative corridors consistent with Clean Water Services Design and Construction Standards;
  - 4. Location of 100-year floodplain and floodway boundary as defined by Section 5.805 and determined by Section 5.815 of the Municipal Code; and
  - 5. Topography shown by contour lines of 2-foot intervals for slopes less than 15% and by 10-foot intervals for slopes 15% or greater. On properties that are two acres or larger, such a contour map is required only for the portion of the property to be developed.
- C. The nature of the work proposed, and/or the reasons for removal of vegetation. If applicable, this shall include detailed site plan of proposed development outlining total disturbance area, including, proposed building footprints, site property improvements, utilities and landscaping.
- D. The following additional information shall be provided about the natural resource area:
  - 1. For properties containing less than one acre of natural resource area, the location of all trees within the natural resource area that are greater than six inches diameter at breast height (DBH), shall be identified by size and species. For properties containing one acre or more of natural resource area, the applicant may approximate the number of trees and the diameter range, and provide a listing of the dominant species;
  - 2. For proposed disturbance areas containing less than one acre of natural resource area, all trees with a diameter of six inches or greater that will be removed shall be specifically identified as to diameter at breast height (DBH) and species. For proposed disturbance areas containing one acre or more of natural resource area an approximate of the number of trees, their diameters and the dominant species; and
  - 3. If grading will occur within the natural resource area, a grading plan showing the proposed alteration of the ground at 1-foot vertical contours in areas of slopes less than 5%, and 2-foot vertical contours in areas of slopes 6-15%, and at 5-foot vertical contours of slopes 15% or greater.

- E. A plan for mitigation or re-vegetation consistent with the applicable mitigation requirements of Section 10.5.035 or 10.5.040; and
- F. Evidence of submittal of appropriate applications to local, state and/or federal agencies as required.

**10.5.015 EXEMPT USES AND CONDITIONED ACTIVITIES.**

The following uses and activities are exempt from the requirements of this Section:

- A. Change of ownership.
- B. Where construction of a residence was completed before January 1, 2006, the owners or residents shall not be restricted from engaging in any development that was allowed prior to September 22, 2005; unless such development required obtaining a land use decision, or a building, erosion control, or grading permit.
- C. A building permit for a phased development project for which the applicant has previously met the application requirements, so long as the site for new construction was identified on the original permit and no new portion of the natural resource areas will be disturbed.
- D. Where a property has been subdivided under Section 10.5.035E of these NRA provisions, and the mitigation requirements of 10.5.035D have been completed for the subdivision, development on the individual lots may proceed without further review under this ordinance.
- E. Limited types of development, redevelopment, operations, and improvements, including the following:
  - 1. Maintenance, alteration, expansion, repair and replacement of existing structures, provided that;
    - a. The rebuilding of existing residential and non-residential structures damaged by fire or other natural hazards occurs within the same foundation lines (“building footprint”); and
    - b. The alteration, expansion, or replacement of a structure will not intrude more than 500 square feet into the natural resource areas, and so long as the new intrusion is no closer to the protected water feature than the pre-existing structure or improvement.
  - 2. Minor encroachments not to exceed 120 square feet of impervious surface such as accessory buildings, eave overhangs, exterior building improvements for access and exiting requirements or other similar features.
  - 3. Temporary and minor clearing not to exceed 200 square feet for the purpose of site investigations and pits for preparing soil profiles, provided that such areas are restored to their original condition when the investigation is complete.

4. Up to 10% of vegetative cover within the original mapped natural resource areas on a lot or parcel may be removed, provided that no more than 20,000 square feet is removed; and provided that if more than 10% has been removed at the time of a development application, the review process shall use the original mapped natural resource areas, subject to map verification, as the basis for determining the Maximum Disturbance Area in Subsection 10.5.035B and mitigation standards in Sections 10.5.035D and 10.5.040B, 10.5.040C, 10.5.040D.1.b and 10.5.040D.2.d.
  5. Maintenance of existing gardens, pastures, lawns and landscape perimeters, including the installation of new irrigation systems within existing gardens, pastures, lawns, and landscape perimeters.
  6. Removal of plants identified as nuisance or prohibited plants on the *Metro Native Plant List* and the planting or propagation of plants identified as native plants on the *Metro Native Plant List*. Handheld tools must be used to remove nuisance or prohibited plants, and after such removal all open soil areas greater than 25 square feet must be replanted.
  7. Maintenance, alteration, repair, and replacement of roads and utilities when no additional incursion into the natural resource areas is proposed.
  8. Maintenance and repair of existing streets, railroads, shipping terminals, and utilities within rights-of-way, easements, and access roads.
  9. Existing water-dependent uses that can only be carried out on, in, or adjacent to water because they require access to the water for waterborne transportation or recreation.
  10. Operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater pretreatment facilities.
  11. Projects with the sole purpose of restoring or enhancing wetlands, streams, or fish and wildlife habitat areas, provided that the project is part of an approved local, state, or federal restoration or enhancement plan.
  12. Low-impact outdoor recreation facilities for public use, outside of Water Quality Resource Areas, including, but not limited to, multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks that include benches and outdoor furniture, provided that the facility meets the following requirements:
    - a. It contains less than 500 square feet of new impervious surface; and,
    - b. Its trails shall be constructed using non-hazardous, pervious materials, with a maximum width of four feet.
- F. Emergency procedures or activities undertaken which are necessary to remove or abate hazards and nuisances or for the protection of public health, safety and welfare; provided

that such remedial or preventative action must take place within a timeframe too short to allow for compliance with the requirements of this ordinance. After the emergency, the person or agency undertaking the action shall fully restore any impacts to the natural resource areas resulting from the emergency action. Hazards that may be removed or abated include those required to maintain aircraft safety.

#### **10.5.020 PROHIBITIONS**

- A. The planting of any invasive non-native or noxious vegetation is prohibited within the NRA.
- B. Outside storage of materials is prohibited within the NRA, unless such storage began before the effective date of this ordinance; or, unless such storage is approved during development review under either Section 10.5.035 or 10.5.040.

#### **10.5.025 CRITERIA**

The request for vegetation removal shall be approved based on the criteria below:

- A. The permanent impact will be negligible or minor and mitigation meets the requirements of this section, section 10.5.035D. or that allowed by Section 10.5.040.
- B. The removal is necessary to prevent the spread of disease or insects declared to be a nuisance by a government agency or qualified arborist, or to correct or eliminate a natural hazard (as identified by the City or qualified arborist) to the property owner, surrounding properties, or community at large.
- C. The loss of value will be of temporary duration of two years or less until new vegetation can be established, or the mitigation plan provides satisfactory replacement of the lost vegetation and establishment of a new resource area of equal value to be completed within two planting seasons. Mitigation for lost vegetation is preferred on-site, or within the immediate vicinity of the subject site. Off-site mitigation may be approved if there is no reasonable alternative and a method of guaranteeing permanent use of the area off-site is found, such as dedication of the area to a public entity, easement or deed restriction.
- D. Timetables for the work shall be established which minimize the impact on wildlife.
- E. Notwithstanding the above criteria, intrusion into the natural resource area is allowed provided the requirements in Subsection 10.5.035 or 10.5.040 are met.

#### **10.5.030 CONSTRUCTION MANAGEMENT PLANS**

In order to ensure that trees and vegetation within NRAs are not damaged during construction, all applicants, even those not developing within an NRA, shall provide a construction management plan that includes the following information:

- A. Location of site access and egress that construction equipment will use;
- B. Equipment and material staging and stockpile areas;
- C. Erosion and sediment control measures; and

- D. Measures to protect trees and other vegetation located within the NRA, but outside of the disturbance area approved under the provisions of Section 10.5.035 or 10.5.040.

### **10.5.035 STANDARDS**

The following standards are to be met when the subject site contains natural resource areas. In order of preference, these natural resource areas are to be avoided when development as allowed by the underlying zone district can be achieved outside the area or through alternative site design allowed by a planned development; minimize intrusion into the area to the extent feasible; or mitigate impacts from intrusions where no feasible alternatives exists. The following standards shall apply to achieve these avoid, minimize or mitigate objectives. As an alternative, the applicant may submit for discretionary approval pursuant to Section 10.5.040:

- A. Methods for avoiding or minimizing disturbance in Natural Resource Areas. The following habitat-friendly development practices may be used to avoid or minimize development within NRAs by allowing flexible site design:
1. Building setback flexibility to avoid, or minimize, development within NRAs. The minimum building setback of the base zone may be reduced to any distance between the base zone minimum and zero, unless this reduction conflicts with applicable fire or life safety requirements.
  2. Flexible landscaping requirements to avoid, or minimize, development within NRAs.
    - a. Landscaping requirements, apart from those required for parking lots or street berms, may be met by preserving the NRA.
    - b. Facilities that infiltrate stormwater onsite, including the associated piping, may be placed within the NRA so long as the forest canopy and the areas within the driplines of the trees are not disturbed. Such facilities may include, but are not limited to, vegetated swales, rain gardens, vegetated filter strip, and vegetated infiltration basins. Only native vegetation may be planted in these facilities.
  3. Flexible Site Design (On-site Density Transfer) to avoid or minimize development within NRAs.
    - a. Residential. For residential development, up to 100% of the development that could be allowed on lands within a natural resource area can be transferred to other portions of the property outside the resources area.
    - b. In order to accommodate the transferred density, dimensional standards and lot sizes may be adjusted by no more than 20%.
    - c. Commercial and Industrial developments shall avoid natural resource areas unless no other practicable alternative is available.

- d. Mixed-Use Zones. Within mixed-use zones the density transfer credit can be factored using either (a) or (b) above, depending on the type of development proposed.
4. Site Capacity Incentives. The following site capacity standards provide flexibility in the design of land divisions in order to allow ways to better protect NRAs.
- a. Density bonus if NRA is protected. In the Multi-Family (RMH) Residential Zone District, a 25% density bonus over the based density may be allowed for any development of four (4) or more dwelling units if 75% or more of the NRA on a site is permanently preserved.
  - b. All area within a NRA, or any portion of it, may be subtracted from the calculations of net size for purposes of determining minimum density provided that such area is protected. This provision may only be applied to properties that were inside the Metro UGB on January 1, 2002.
  - c. Projects can be developed below minimum density allowed by the zone district if the natural resource area is protected. This provision may only be applied to properties that were inside the Metro UGB on January 1, 2002.
5. All natural resource areas that are preserved shall be permanently restricted from development and maintained for habitat functions, such as by making a public dedication or executing a restrictive covenant.
- B. Development within NRA. The following development standards apply to all development that occurs within the NRA except for exempt uses and conditioned activities addressed in Section 10.5.015 and utility facilities addressed in subsection 10.5.035(C). If all development occurs outside of an NRA on a property, these standards do not apply. These standards also do not apply to development that occurs pursuant to the standards established by the alternative discretionary development standards in Subsection 10.5.040.
1. Disturbance area limitations to minimize impact to NRA.
- a. *Single-family residential.* The maximum disturbance area (MDA) allowed within NRAs is determined by subtracting the area of the lot or parcel outside of Habitat Conservation Area (HCA) from the total disturbance area (TDA) calculated as described in Table 5-1 below.
 

(TDA – Area outside the HCA = MDA)

    - i. Moderate and Low HCAs are subject to the same disturbance area limitations.
    - ii. Calculation of maximum disturbance area. If a lot or parcel includes both High and Moderate/Low HCAs then:

- (1) If there is more High HCA than Moderate/Low HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were High, per Table 5 - 1 below; or
- (2) If there is more Moderate/Low HCA than High HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were Moderate/Low, per Table 5-1 below.

iii. Location of MDA. If a lot or parcel includes different types of HCAs, then:

- (1) The amount of development that may occur within the High HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High HCA ( $TDA - \text{non-High HCA} = MDA$ ). If the area of the lot or parcel outside the High HCA is greater than the total disturbance area, then development shall not occur within the High HCA:

(Area outside High HCA > TDA = no development in High HCA);

- (2) The amount of development that may occur within the Moderate HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High and Moderate HCA ( $TDA - (\text{Low HCA} + \text{non-HCA}) = MDA$ ). If the area of the lot or parcel outside the Moderate HCA is greater than the total disturbance area, then development shall not occur within the Moderate HCA:

(Area outside Moderate HCA > TDA = no development in Moderate HCA); and

- (3) The amount of development that may occur within the Low HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High, Moderate and Low HCA ( $TDA - \text{non-HCA} = MDA$ ). If the area of the lot or parcel outside the Low HCA is greater than the total disturbance area, then development shall not occur within the Low HCA:

(Area outside Low HCA > TDA = no development in Low HCA).

**Table 5-1  
Total Disturbance Area Limitations for Single Family Residential Zone Districts**

<b>HCA Type</b>	<b>Habitat Type</b>	<b>Total Disturbance Area (TDA)</b>
High	Class I	50% of the lot area, up to maximum of 5,000 square feet
Moderate/Low	Class II	65% of the lot area, up to maximum of 6,000 square feet
Moderate/Low	Uplands Class A and B for properties brought into the UGB after January 5, 2006	65% of the lot area, up to maximum of 6,000 square feet
No HCA or NRA	Uplands Class A and B within the UGB as of January 5, 2006	N/A

- b. *All other zones.* The maximum disturbance area (MDA) allowed by right within Natural Resource Areas in these zones is found in Tables 5-2 and 5-3 below; this MDA is subject to the mitigation requirements described in subsection 10.5.035 D.

**Table 5-2  
NRA Disturbance Area Limitations for Riparian Areas  
For All Zones Other Than SFR**

<b>Riparian Class and Zone District</b>	<b>Maximum Disturbance Area (MDA)</b>
Class I – RML, RMH, CC, CN, LI, GI	10% of NRA on site
Class I – CBD, RMH Class II – RML, RMH	15% of NRA on site
Class II - CC, CN, LI, GI	50% of NRA on site

**Table 5-3  
NRA Disturbance Area Limitations for Upland Areas  
For All Zones Other Than SFR**

<b>Upland Class and Zone District for property brought into UGB after January 5, 2006<sup>1</sup></b>	<b>Maximum Disturbance Area</b>
Class A: CC, CN, CH, LI, GI Class B: RML, RMH	15% of NRA on site
Class A: CBD Class B: CC, CN, LI, GI	50% of NRA on site

<sup>1</sup>There is no uplands classification for lands within the UGB as of January 5, 2006.

- c. Parks and Open Space
- i. Publicly owned property designated for open space or for habitat on the City’s Park, Recreation and Open Space Master Plan shall

be limited to vegetation removal for trail development. Any other vegetation removal shall be mitigated by replanting consistent with this Section.

ii. Parks intended for active recreational purposes as designated on the City's Park, Recreation and Open Space Master Plan shall not be considered in an NRA.

d. Development within an NRA in accordance with the provisions of this ordinance shall not result in a change of the NRA status of such developed areas on a property. In the case of a later development request seeking to develop within previously undisturbed NRAs on a property where a prior development request was subject to the provisions of this ordinance, the calculation of the MDA allowed on the property shall be based on the location of the NRA, notwithstanding the location of any authorized development within the NRA.

2. Protection of habitat during site development. During development of any site containing a NRA, the following standards apply:

- a. Work areas shall be marked to reduce potential damage to the NRA.
- b. Trees in NRAs shall not be used as anchors for stabilizing construction equipment.
- c. Native soils disturbed during development shall be conserved on the property.
- d. An erosion and sediment control plan is required and shall be prepared in compliance with requirements set forth by Clean Water Services Design and Construction Standards;
- e. Prior to construction, the NRA that is to remain undeveloped shall be flagged, fenced, or otherwise marked and shall remain undisturbed.
- f. All work on the property shall conform to the Construction Management Plan described in Section 10.5.030.

C. Utility facility standards. The following disturbance area limitations apply to new utilities, private connections to existing or new utility lines, and upgrade

- 1. The disturbance area for utility facility connections to utility facilities is no greater than 10 feet wide.
- 2. The disturbance area for the upgrade of existing utility facilities is no greater than 15 feet wide.
- 3. The disturbance area for new underground utility facilities is no greater than 25 feet wide and disturbs no more than 200 linear feet of Water Quality Resource Area, within any 1,000 linear foot stretch of Water Quality Resource Area; provided that this disturbance area shall be restored with the exception of necessary access points to the utility facility.

4. No fill or excavation is allowed within the ordinary high water mark of a stream, unless a permit is obtained from the US Army Corps of Engineers through the Standard Local Operating Procedures for Endangered Species (SLOPES) process.
5. Mitigation is required as described in Section 10.5.035 D below.

D. Mitigation requirements for disturbance in NRAs. In order to achieve the goal of reestablishing forested canopy that meets the ecological values and functions described in this Chapter, tree replacement and vegetation planting are required when development intrudes into a NRA according to the following standards, except for wetlands mitigation requirements imposed by state and federal law.

1. Required plants and plant densities. All trees, shrubs and ground cover must be native plants selected from the *Metro Native Plant List*. An applicant must meet Mitigation Option 1 or 2, whichever results in more tree plantings; except that where the disturbance area is one acre or more, the applicant shall comply with Mitigation Option 2:
  - a. *Mitigation Option 1*. In this option, the mitigation requirement is calculated based on the number and size of trees that are removed from the site. Trees that are removed from the site must be replaced as shown in Table 5-4. Conifers must be replaced with conifers. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

**Table 5-4: Tree Replacement**

<b>Size of tree to be removed (inches in diameter)</b>	<b>Number of trees and shrubs to be planted</b>
6 to 12	2 trees and 3 shrubs
13 to 18	3 trees and 6 shrubs
19 to 24	5 trees and 12 shrubs
25 to 30	7 trees and 18 shrubs
Over 30	10 trees and 30 shrubs

- b. *Mitigation Option 2*. In this option, the mitigation requirement is calculated based on the size of the disturbance area within a NRA. Native trees and shrubs are required to be planted at a rate of five (5) trees and twenty-five (25) shrubs per every 500 square feet of disturbance area. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.
2. Plant size. Replacement trees must be at least one-half inch in caliper, measured at 6 inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or

madrone which may be one gallon size. Shrubs must be in at least a 1-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.

3. Plant spacing. Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on center, or clustered in single species groups of no more than four (4) plants, with each cluster planted between 8 and 10 feet on-center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.
4. Plant diversity. Shrubs must consist of at least two B. different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same genus.
5. Location of mitigation area. All vegetation must be planted on the applicant's site within the NRA or in an area contiguous to the NRA; provided, however, that if the vegetation is planted outside of the NRA then the applicant shall preserve the contiguous area by executing a deed restriction, such as a restrictive covenant.
6. Invasive vegetation. Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.
7. Tree and shrub survival. A minimum of 80% of the trees and shrubs planted shall remain alive on the fifth anniversary of the date that the mitigation is completed.
8. Monitoring and reporting. Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind. For a period of five years, the property owner must submit an annual report to the Community Development Department documenting the survival of the trees and shrubs on the mitigation site.
9. To enhance survival of the mitigation plantings, the following practices are required:
  - a. Mulching. Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.
  - b. Irrigation. Water new plantings one inch per week between June 15 and October 15 for the three years following planting.
  - c. Weed control. Remove, or control, non-native or noxious vegetation throughout maintenance period.
10. To enhance survival of tree replacement and vegetation plantings, the following practices are recommended:
  - a. Planting season. Plant bare root trees between December 1<sup>st</sup> and February 28<sup>th</sup>, and potted plants between October 15<sup>th</sup> and April 30<sup>th</sup>.
  - b. Wildlife protection. Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and resulting damage to plants.

E. Standards for Partitions and Subdivisions. The purpose of this section is to allow for partitions in a manner that limits the total amount of allowable development within NRAs on the partitioned parcels; and to require that new subdivision plats delineate and show the Moderate and High NRAs as a separate unbuildable tract.

1. Standards for Partitions containing NRAs:

- a. When partitioning a property into parcels, an applicant shall verify the boundaries of the NRA on the property according to Subsection 10.5.050.
- b. Applicants who are partitioning, but are not simultaneously developing their property, do not need to comply with Section 10.5.030.
- c. When partitioning a property into parcels there shall be no more than a 30-percentage point difference in the percentage of NRA on the parcels; for example, a partition that produces two parcels, one that is 55% NRA and the other that is 35% NRA is permissible; whereas a partition that produces two parcels, one that is 75% NRA and the other that is 30% NRA is not permissible. However, an applicant may partition a property such that at least 90% of the original property's High NRA and 80% of its moderate NRA is on a separate unbuildable parcel, protected by a restrictive covenant or a public dedication.
- d. Subsequent development on any parcels containing NRAs shall comply with Section 10.5.030, and the development standards of either Section 10.5.035 or 10.5.040.

2. Standards for Subdivisions:

- a. Applicants who are subdividing, but not developing, must verify the location of the NRA boundary according to Subsection 10.5.050 of these provisions, and comply with this subsection 10.5.035 E; such applicants do not need to comply with Section 10.5.030. Applicants who are subdividing, but not developing, property may:
  - i. Complete the mitigation requirements of section 10.5.035 D and thereby exempt all subsequent development on lots containing NRA from further review under this ordinance; or
  - ii Not complete the mitigation requirements of section 10.5.035 D, thus requiring that any subsequent development within an NRA be subject to this ordinance.
- b. Applicants who are subdividing and developing properties must comply with Sections 10.5.030, 10.5.035, and 10.5.050.
- c. When a property containing any NRA is subdivided, this ordinance requires that new subdivision plats delineate and show 80% of the NRA as a separate unbuildable tract according to the following process:
- d. If the tract is adjacent to the backyard for residences, the minimum backyard requirement is reduced to 10 feet.

- e. The standards for land divisions in Moderate and High NRAs shall apply in addition to the requirements of the city/county land division ordinance and zoning ordinance.
- f. Prior to preliminary plat approval, the NRA shall be shown as a separate tract, which shall not be a part of any lot used for construction of a dwelling unit.
- g. Prior to final plat approval, ownership of the NRA tract shall be identified to distinguish it from lots intended for sale. The tract may be identified as any one of the following:
  - i. Private natural area held by the owner or homeowners association by a restrictive covenant; or
  - ii. For residential land divisions, private natural area subject to an easement conveying storm and surface water management rights to the city and preventing the owner of the tract from activities and uses inconsistent with the purpose of this ordinance; or
  - iii. At the owner's option, public natural area where the tract has been dedicated to the city or other governmental unit, or a private non-profit with the mission of land conservation.

**10.5.040 ALTERNATIVE DISCRETIONARY DEVELOPMENT STANDARDS**

Applicants may choose to use the alternative discretionary development standards provided in this section rather than the development standards provided in Subsection 10.5.035. There are four discretionary review processes provided in this section: Subsection (A) provides discretionary review for an applicant seeking only to partition a property; Subsection (B) provides discretionary review for an applicant who will comply with the development standards in Section 10.5.035, except that the applicant seeks to meet the mitigation requirements of that section on a different property from the property on which a NRA will be disturbed; Subsection (C) provides discretionary review for an applicant who will comply with the development standards in Section 10.5.035, except that the applicant seeks to meet the mitigation requirements of that section by proportionally varying the number and size of plants required to be planted; and Subsection (D) provides general discretionary review standards applicable to an applicant seeking some other type of discretionary approval of development that will disturb an NRA.

- A. Discretionary Review for Partitions. An applicant seeking to partition land in ways that do not accord with the standards established in Subsection 10.5.035(E)(1) may seek review under this subsection 10.5.040(A).
  - 1. The applicant shall verify the boundaries of the NRAs on the property according to Section 10.5.050.
  - 2. The applicant shall submit the following application materials:
    - a. A scale map of the entire property that includes:
      - i. Location of all NRA on the property;

- ii. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;
      - iii. Location of 100-year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and
      - iv. A delineation of the proposed partition.
    - b. A written and documented explanation of how and why the proposed partition satisfies the approval criteria in subsection 10.5.040(A)(3). Such written documentation shall include an alternatives analysis of different possible partition plans, based on the characteristics and zoning of the property.
  - 3. Approval Criteria. A partition shall be approved under this subsection 10.5.040(A) provided that the applicant demonstrates that it is not practicable to comply with the partition standards in Section 10.5.035(E)(1), and that the applicant's partition plan will result in the smallest practicable percentage point difference in the percentage of NRA on the parcels created by the partition (this will minimize the amount of allowable disturbance areas within NRAs on the parcels, assuming that the development standards in Section 10.5.035 were applied to future development on such parcels).
  - 4. Subsequent development on any parcels created by the partition and containing NRAs shall comply with all provisions of this Chapter, except that the map verification completed and approved as part of the partition may be used to satisfy the requirements of Subsection 10.5.050 for any such development.
- B. Discretionary Review to Approve Off-Site Mitigation. An applicant seeking discretionary approval only for off-site mitigation within the same subwatershed (*6<sup>th</sup> Field Hydrologic Unit Code*), but who will comply with all other provisions of Section 10.5.035, may seek review under this subsection 10.5.040(B). (An applicant who seeks to conduct the mitigation in a different subwatershed may apply for such approval under subsection 10.5.040(D)).
- 1. The applicant shall submit:
    - a. A calculation of the number of trees and shrubs the applicant is required to plant under Section 10.5.035(D); and
    - b. A map and accompanying narrative that details the following:
      - i. The number of trees and shrubs that can be planted on-site;
      - ii. The on-site location where those trees and shrubs can be planted;
      - iii. An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
      - iv. The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if

the mitigation is not within a NRA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.

2. Approval Criteria. Off-site mitigation shall be approved under this subsection 10.5.040(B) provided that the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation on a property within the same subwatershed (*6<sup>th</sup> Field Hydrologic Unit Code*) as the related disturbed NRA.
  3. Mitigation approved under this subsection 10.5.040(B) shall be subject to all of the requirements of subsection 10.5.035(D), except for the requirements of subsection 10.5.035(D)(5).
- C. Discretionary Review to Approve Mitigation That Varies the Number and Size of Trees and Shrubs. An applicant seeking discretionary approval only to proportionally vary the number and size of trees and shrubs required to be planted under subsection 10.5.035(D), for example to plant fewer larger trees and shrubs or to plant more smaller trees and shrubs, but who will comply with all other provisions of Section 10.5.035, may seek review under this subsection 10.5.040(C).
1. The applicant shall submit:
    - a. A calculation of the number of trees and shrubs the applicant would be required to plant under Subsection 10.5.035(D);
    - b. The numbers and sizes of trees and shrubs that the applicant proposes to plant;
    - c. An explanation of why the numbers and sizes of trees and shrubs that the applicant proposes to plant will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 10.5.035(D). Such explanation shall be prepared and signed by a knowledgeable and qualified natural resources professional or a certified landscape architect and shall include discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control; and
    - d. The applicant's mitigation site monitoring and reporting plan.
  2. Approval Criteria. A request to vary the numbers and sizes of trees and shrubs to be planted shall be approved if the applicant demonstrates that its planting will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 10.5.035(D). Such determination shall

take into consideration all of the information required to be submitted under subsection 10.5.040(C)(1).

3. Mitigation approved under this subsection 10.5.040(C) shall be subject to the requirements of subsections 10.5.035(D)(4) through 10.5.035(D)(9), and it is recommended that such mitigation also follow the practices recommended in subsection 10.5.035(D)(10).

C. Discretionary Review. An applicant seeking discretionary approval to undertake any development activity within a NRA that does not comply with subsection 10.5.035 and is not described in subsections 10.5.040(A), (B), or (C) may file an application under this Subsection 10.5.040(D).

1. Application Requirements. The applicant shall provide all items described in Section 10.5.015 and the following, except that for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within 300 feet of the location of the proposed disturbance area of the utility's project:

- a. Impact Evaluation and Alternatives Analysis. An impact evaluation and alternatives analysis is required to determine compliance with the approval criteria and to evaluate development alternatives for a particular property. The alternatives must be evaluated on the basis of their impact on the NRA, the ecological functions provided by the NRA on the property, and off-site impacts within the subwatershed (*6<sup>th</sup> Field Hydrologic Unit Code*) where the property is located. The impact evaluation shall include all of the following items:

- i. Identification of the ecological functions of riparian habitat found on the property as described in Table 5-5 of this section and the habitat connectivity ecological functions described in subsection 10.5.040(D)(1)(a)(ii)(3) and (4).

- ii. For upland habitat in areas to be added to the Metro urban growth boundary areas after October 1, 2005, identification of the impact the proposed development would have on the following ecological functions provided by upland wildlife habitat:

- (1) Habitat patch size;
- (2) Interior habitat;
- (3) Connectivity of the habitat to water; and
- (4) Connectivity of the habitat to other habitat areas.

- iii. Evaluation of alternative locations, design modifications, or alternative methods of development to determine which options reduce the significant detrimental impacts on the NRAs and the ecological functions provided on the property. At a minimum, the following approaches must be considered:

- (1) The techniques described in subsection 10.5.035(A);
  - (2) Multi-story construction;
  - (3) Minimizing building and development footprint;
  - (4) Maximizing the use of native landscaping materials; and
  - (5) Minimal excavation foundation systems (e.g., pier, post or piling foundation).
- iv. Determination of the alternative that best meets the applicable approval criteria and identification of significant detrimental impacts that is unavoidable.

**Table 5-5: Ecological functional values of riparian corridors.**

<b>Ecological Function</b>	<b>Landscape features providing functional values</b>
Microclimate and shade	Forest canopy or woody vegetation within <b>100 feet</b> of a stream; a wetland <sup>1</sup> ; or a flood area <sup>2</sup> .
Streamflow moderation and water storage	A wetland or other water body <sup>3</sup> with a hydrologic connection to a stream; or a flood area <sup>2</sup> .
Bank stabilization, sediment and pollution control	All sites within <b>50 feet</b> of a surface stream;  Forest canopy, woody vegetation, or low structure vegetation/open soils within <b>100 feet</b> of a stream or a wetland; or forest canopy, woody vegetation, or low structure vegetation/open soils within a flood area; and  Forest canopy, woody vegetation, or low structure vegetation/open soils within <b>100-200 feet</b> of a stream if the slope is greater than 25%.
Large wood and channel dynamics	Forest canopy within <b>150 feet</b> of a stream or wetland; or within a flood area; and  The channel migration zone is defined by the floodplain, but where there is no mapped floodplain a default of <b>50 feet</b> is established to allow for the channel migration zone.
Organic material sources	Forest canopy or woody vegetation within <b>100 feet</b> of a stream or wetland; or within a flood area.

<sup>1</sup> Refers to “hydrologically-connected wetlands,” which are located partially or wholly within ¼ mile of a surface stream or flood area.

<sup>2</sup> Developed floodplains are not identified as NRAs because they do not provide primary ecological functional value.

<sup>3</sup> “Other water body” could include lakes, ponds, reservoirs, or manmade water feature that is not a water quality facility or farm pond.

- b. Mitigation Plan. The purpose of a mitigation plan is to compensate for unavoidable significant detrimental impacts to ecological functions that result from the chosen development alternative as identified in the impact evaluation. However, when development occurs within delineated

wetlands, then the mitigation required under subsection 10.5.040(D)(2)(d) shall not require any additional mitigation than the mitigation required by state and federal law for the fill or removal of such wetlands.

- i. An applicant may choose to develop a mitigation plan consistent with the requirements of subsection 10.5.035(D). If an applicant so chooses, then the applicant shall submit a mitigation plan demonstrating such compliance.
- ii. If an applicant chooses to develop an alternative mitigation plan that would not comply with the requirements of subsection 10.5.035(D), including, for example, a proposal to create an alternative plant community type such as an oak savannah or a low-structure plant community, or where an applicant demonstrates that a portion of identified NRA on its property provides only impaired ecological functions, then the applicant shall submit a mitigation plan that includes all of the following:
  - (1) An explanation of how the proposed mitigation will adequately compensate for the impacts to ecological functions described in the impact evaluation required by subsection 10.5.040(D)(1)(a). The applicant may use the mitigation that would be required under subsection 10.5.035(D) as the baseline mitigation required to compensate for disturbance to a NRA that provides an average level of ecological functions. Such explanation shall include:
    - (a) If the applicant uses the mitigation that would be required under subsection 10.5.035(D) as the baseline mitigation required to compensate for disturbance to a NRA, then the applicant shall submit a calculation of the number of trees and shrubs the applicant would be required to plant under subsection 10.5.035(D);
    - (b) A site plan showing where the specific mitigation activities will occur and the numbers and sizes of trees and shrubs that the applicant proposes to plant; and
    - (c) A discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control.
  - (2) Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies.

- (3) A list of all responsible parties.
  - (4) The applicant's mitigation site monitoring and reporting plan.
  - (5) If the proposed mitigation will not be conducted on-site, the applicant shall submit a map and accompanying narrative that details the following:
    - (a) The number of trees and shrubs that can be planted on-site;
    - (b) The on-site location where those trees and shrubs can be planted;
    - (c) An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
    - (d) The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if the mitigation is not within a NRA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.
  - (6) If the mitigation area is off-site and not within the same subwatershed (*6<sup>th</sup> Field Hydrologic Unit Code*) as the related disturbed NRA, the applicant shall submit an explanation of why it is not practicable to conduct the mitigation within the same subwatershed and of why and how, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the subwatershed.
  - (7) An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting and a contingency plan. If the applicant is proposing any in-stream work in fish-bearing streams as part of the mitigation project, then the applicant shall submit documentation that such work will be done in accordance with the Oregon Department of Fish and Wildlife in-stream work timing schedule.
- c. The Impact Evaluation and Alternatives Analysis required by subsection 10.5.040(D)(1)(a) and the Mitigation Plan required by subsection 10.5.040(D)(1)(b) shall be prepared and signed by either (A) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist; or (B) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems,

storm water facilities, or other similar facilities. The application shall include a description of the qualifications and experience of all persons that contributed to the Impact Evaluation and Alternatives Analysis and to the Mitigation Plan, and, for each person that contributed, a description of the elements of such reports to which the person contributed.

2. Approval Criteria.

- a. All application requirements in subsection 10.5.040(D)(1) shall be met.
- b. Avoid. An applicant shall first avoid the intrusion of development into the NRA to the extent practicable. The development that is proposed must have less detrimental impact to NRAs than other practicable alternatives, including significantly different practicable alternatives that propose less development within NRAs. If there is more than one type of NRA on a property then the applicant shall first avoid the intrusion of development into the higher-valued NRA, to the extent practicable, and the development that is proposed must have less detrimental impact to the higher-valued NRAs than other practicable alternatives. To avoid development in NRAs, and to the extent practicable, applicants shall use the approaches described in subsection 10.5.040(D)(1)(a)(iii).
- c. Minimize. If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the NRA, then the development proposed by the applicant within the NRA shall minimize detrimental impacts to the extent practicable. If there is more than one type of NRA on a property then the development within higher-valued NRAs shall be considered more detrimental than development within lower-valued NRAs.
  - i. Development must minimize detrimental impacts to ecological functions and loss of habitat consistent with uses allowed by right under the base zone, to the extent practicable;
  - ii. To the extent practicable within the NRA, the proposed development shall be designed, located, and constructed to:
    - A. Minimize grading, removal of native vegetation, and disturbance and removal of native soils by using the approaches described in subsection 10.5.035(B)(2), reducing building footprints, and using minimal excavation foundation systems (e.g., pier, post or piling foundation);
    - B. Minimize adverse hydrological impacts on water resources such as by using the techniques described in Part (a) of Table 8-1 in Section 10.8.315, unless their use is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et. seq., or the Federal Safe Drinking Water Act, 42 U.S.C. §§300f et. seq., and including conditions or plans required by such permit;

- C. Minimize impacts on wildlife corridors and fish passage such as by using the techniques described in Part (b) of Table 8-1 of Section 10.8.315; and
  - D. Consider using the techniques described in Part (c) of Table 8-1 of Section 10.8.315 to further minimize the impacts of development in the NRA.
- d. Mitigate. If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the NRA, then development must mitigate for adverse impacts to the NRA. All proposed mitigation plans must meet the following standards.
- i. The mitigation plan shall demonstrate that it compensates for detrimental impacts to ecological functions provided by NRAs, after taking into consideration the applicant's efforts to minimize such detrimental impacts through the use of the techniques described in Table 8-1 in Section 10.8.315 and through any additional or innovative techniques. A mitigation plan that requires the amount of planting that would be required under subsection 10.5.035(D) based on the amount of proposed disturbance area within the NRA, and that otherwise complies with all of the mitigation requirements in subsection 10.5.035(D), shall be considered to have satisfied the requirements of this subsection 10.5.040(D)(2)(d).
  - ii. Mitigation shall occur on the site of the disturbance, to the extent practicable. Off-site mitigation shall be approved if the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation, as described in subsection 10.5.040(B)(1)(b)(iii). In addition, if the off-site mitigation area is not within the same subwatershed (*6<sup>th</sup> Field Hydrologic Unit Code*) as the related disturbed NRA, the applicant shall demonstrate that it is not practicable to complete the mitigation within the same subwatershed and that, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the subwatershed. Mitigation shall not be allowed outside of the Metro jurisdictional boundary.
  - iii. All re-vegetation plantings shall be with native plants listed on the *Metro Native Plan List*.
  - iv. All in-stream work in fish-bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife in-stream work-timing schedule.

- v. A mitigation maintenance plan shall be included and shall be sufficient to ensure the success of the planting, and compliance with the plan shall be a condition of development approval.
  
- e. **Municipal Water Utility Facilities Standards.** Except as provided within this subsection, in addition to all other requirements of subsection 10.5.040(D)(2), municipal potable water, storm water (drainage) and wastewater utility facilities may be built, expanded, repaired, maintained, reconfigured, rehabilitated, replaced or upsized if not exempted in Section 10.5.015. These facilities may include but are not limited to water treatment plants, wastewater treatment plants, raw water intakes, pump stations, transmission mains, conduits or service lines, terminal storage reservoirs, and outfall devices provided that:
  - i. Such projects shall not have to comply with the requirements of subsection 10.5.040(D)(2)(b), provided that, where practicable, the project does not encroach closer to a water feature than existing operations and development, or for new projects where there are no existing operations or development, that the project does not encroach closer to a water feature than practicable;
  
  - ii. Best management practices will be employed that accomplish the following:
    - (1) Account for watershed assessment information in project design;
    - (2) Minimize the trench area and tree removal within the NRA;
    - (3) Utilize and maintain erosion controls until other site stabilization measures are established, post-construction;
    - (4) Replant immediately after backfilling or as soon as effective;
    - (5) Preserve wetland soils and retain soil profiles;
    - (6) Minimize compactions and the duration of the work within the NRA;
    - (7) Complete in-water construction during appropriate seasons, or as approved within requisite Federal or State permits;
    - (8) Monitor water quality during the construction phases, if applicable; and
    - (9) Implement a full inspection and monitoring program during and after project completion, if applicable.

**10.5.045 Variances**

- A. The purpose of this Section is to ensure that compliance with the Natural Resource Area (NRA) provisions do not cause unreasonable hardship. To avoid such instances, the requirements for NRA may be varied. Variances are also allowed when strict application of this ordinance would deprive an owner of all economically viable use of land.

- B. This variance provision only applies to NRA as regulated by this chapter. All other variances for other provisions of this ordinance are subject to the requirements of Section 10.2.700 et. seq.
- C. This Section applies in addition to the standards governing proposals to vary the requirements of the base zone.
- D. Notice of variance applications shall be provided:
1. Upon receiving an application to vary the requirements of these NRA provisions, the notice shall be provided to all property owners within 300 feet of the subject property inside the urban growth boundary, and within 500 feet of the subject property outside the urban growth boundary, to Metro, to any neighborhood or community planning organization recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property. Notice shall be sent out 14 days prior to any decision.
  2. The variance request shall be reviewed and acted upon by the person or board or commission responsible for reviewing compliance with the overall NRA provisions.
  3. Within seven (7) days of a decision on the variance, notice of the decision shall be provided to Metro, to any neighborhood or community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property, and to any other person required to receive notice of such a decision under state law.
- E. Hardship Variance. Variances to avoid unreasonable hardship caused by the strict application of this ordinance are permitted subject to the criteria set forth in this section. To vary from the requirements of this ordinance, the applicant must demonstrate the following:
1. The variance is the minimum necessary to allow the proposed use or activity;
  2. Unless the proposed variance is from mitigation under Section 10.5.035(E) or mitigation under Section 10.5.040(B), (C), or (D)(1)(b) and (D)(2)(d), the proposed use will comply with those standards, as applicable; and
  3. The proposed use complies with the standards of the base zone.
- F. Buildable Lot Variance. A variance to avoid the loss of all economically viable use of a lot that is partially inside a NRA is permitted. Applicants must demonstrate the following:
1. Without the proposed variance, the applicant would be denied economically viable use of the subject property. To meet this criterion, the applicant must show that:
    - a. The proposed use cannot meet the standards in Section 10.5.045E (hardship variance); and

- b. No other application could result in permission for an economically viable use of the subject property. Evidence to meet this criterion shall include a list of uses allowed on the subject property.
  - 2. The proposed variance is the minimum necessary to allow for the requested use;
  - 3. The proposed variance will comply with Section 10.5.035(E), or 10.5.040(B), (C) or (D)(1)(b) and (D)(2)(d) (mitigation); and
  - 4. The proposed use complies with the standards of the base zone.
- G. Variance Conditions. Conditions may be imposed to limit any adverse impacts that may result from granting any variance.

**10.5.050 MAP ADMINISTRATION AND NRA VERIFICATION**

- A. Exempt development. Development that is outside of any NRA and no closer than 100 feet to the border of an NRA (including all impervious surfaces and landscaping), based on the NRA map, may proceed without having to comply with this section or any other portion of this ordinance except for Section 10.5.030, Construction Management Plan.
- B. Verification of the location of NRAs as described in this section shall not be considered a comprehensive plan or zoning amendment.
- C. Map verification is available to correct for mistakes in the location of NRAs on properties. Map verification shall not be used to dispute whether identified NRAs provide the ecological functions that they are assumed to provide based on the ecological criteria used to identify them. If an applicant believes that a properly identified NRA does not provide the ecological functions that it has been identified as providing, then the applicant may use the discretionary review process to decrease its mitigation responsibilities for disturbing such an area.
- D. Except for applicants seeking approval to undertake any exempt activities or conditioned uses described in Section 10.5.015, the map verification requirements described in this Section 10.5.050 shall be met at the time an applicant requests a building permit, grading permit, tree removal permit, land division approval, or some other land use decision. A property owner, or another person with the property owner's consent, may request to verify the location of NRAs on a real property lot or parcel pursuant to this Section 10.5.050 at other times, but whether the City processes such request shall be at the Community Development Director's sole discretion, based on staff availability, funding resources, and policy priorities. If a person receives verification separate from a simultaneous request for a building permit, grading permit, tree removal permit, land division approval, or some other land use decision, then the person may use the verification to satisfy the requirements of this section at any time up until five years after the date the verification was issued.
- E. Notwithstanding any other provisions of this Section 10.5.050, for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the

area within 300 feet of the location of the proposed disturbance area of the utility's project.

F. **Basic Verification Approaches.** The basic verification approaches described in subsections 10.5.050(F)(1) through (3) are available for applicants who believe either (A) that the NRA map is accurate; or (B) that there is a simple incongruity between the NRA map and the boundary lot lines of a property; or (C) that the property was developed prior to March 9, 2009.

1. **Applicant Believes NRA Map is Accurate.** An applicant who believes that the NRA map is accurate may comply with this subsection 10.5.050(F)(1). The applicant shall submit the following information regarding the real property lot or parcel:

- a. A detailed property description;
- b. A copy of the applicable NRA map;
- c. A summer 2005 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 NE Grand Avenue, Portland, Oregon 97232; 503-797-1742);
- d. The information required to be submitted under Section 10.5.035 or 10.5.040 if the applicant proposes development within any NRA under those provisions; and
- e. Any other information that the applicant wishes to provide to support the assertion that the NRA map is accurate.

2. **Obvious Misalignment Between Mapped Habitat and Property Lot Lines.** In some cases, the mapped vegetative cover layer in the GIS database might not align precisely with the tax lot layer that shows property lines, resulting in a NRA map that is also misaligned with tax lot lines. An applicant who believes that the NRA map is inaccurate based on such an obvious misalignment may comply with this subsection 10.5.050(F)(2). The applicant shall submit the following information regarding the real property lot or parcel:

- a. The information described in subsections 10.5.050(F)(1)(a) through (d); and
- b. A documented demonstration of the misalignment between the NRA map and the property's tax lot boundary lines. For example, an applicant could compare the boundary lot lines shown for roads within 500 feet of a property with the location of such roads as viewed on the aerial photograph of the area surrounding a property to provide evidence of the scale and amount of incongruity between the NRA maps and the property lot lines, and the amount of adjustment that would be appropriate to accurately depict habitat on the property.

3. **Property Developed Between Summer 2002 and January 5, 2006.** Where a property was developed between the summer of 2002 (when the aerial photo used to determine the regional habitat inventory was taken) and January 5, 2006, the

applicant shall submit the following information regarding the real property lot or parcel:

- a. The information described in subsections 10.5.050(F)(1)(a) through (d);
  - b. A summer 2002 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 NE Grand Avenue, Portland, Oregon 97232; 503-797-1742);
  - c. Any approved building permits or other development plans and drawings related to the development of the property that took place between summer 2002 and January 5, 2006; and
  - d. A clear explanation and documentation, such as supporting maps or drawings or an more recent aerial photograph, indicating the new development that has occurred and where previously identified habitat no longer exists because it is now part of a developed area.
4. Decision Process. The Community Development Director's map verification decision made pursuant to this subsection 10.5.050(F) may be an administrative decision. The Director's decision shall be based on consideration of the information submitted by the applicant, any information collected during a site visit to the lot or parcel, any information generated by prior map verifications that have occurred on adjacent properties, and any other objective factual information that has been provided to the Director.
- G. Detailed Verification Approach. All applicants who believe that the NRA map is inaccurate for a reason other than as described in subsections 10.5.050(F)(2) and (3) may file a verification request consistent with this subsection 10.5.050(G).
1. Application requirements. The applicant shall submit a report prepared and signed by either (A) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist; or (B) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. Such report shall include:
    - a. A description of the qualifications and experience of all persons that contributed to the report, and, for each person that contributed, a description of the elements of the analysis to which the person contributed;
    - b. The information described in subsections 10.5.050(F)(1)(a) through (e);
    - c. The information described in subsections 10.5.050(F)(2)(b) and 10.5.050(F)(3)(b) through (d), if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel;
    - d. Additional aerial photographs if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide;

- e. A map showing the topography of the property shown by contour lines of 2-foot intervals for slopes less than 15% and by 10-foot intervals for slopes 15% or greater; and
  - f. Any additional information necessary to address each of the verification criteria in subsection 10.5.050(G)(4), a description of where any NRAs are located on the property based on the application of the verification criteria in subsection 10.5.050(G)(4), and factual documentation to support the analysis.
2. Notice requirements. Upon receipt of a completed application pursuant to this subsection 10.5.050(G), the Community Development Director shall provide notice of the map verification application to Metro, to the owners of record of property on the most recent property tax assessment roll where such property is located within 300 feet of the subject property, to any neighborhood or community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property. The notice provided by the jurisdiction shall comply with the notice requirements of ORS 197.763. The Community Development Director shall accept written public comments regarding the matter during a public comment period.
  3. Decision process. The Community Development Director shall apply the verification criteria in subsection 10.5.050(G)(4) to confirm the location of any NRAs based on the NRA map, the information submitted by the applicant, any information received during the public comment period, and any additional information readily available, including information collected during a site visit to the lot or parcel. The applicant and all persons that submitted written comments shall be provided with a written explanation of the Community Development Director's decision.
  4. Verification Criteria. The verification of the location of NRAs shall be according to the four-step process described in this subsection 10.5.050(G)(4). A verification application shall not be considered complete and shall not be granted unless all the information required to be submitted with the verification application has been received.
    - a. Step 1. Verifying boundaries of inventoried riparian habitat. Locating habitat and determining its riparian habitat class is a four-step process:
      - i. Locate the Water Feature that is the basis for identifying riparian habitat.
        - (1) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
        - (2) Locate all flood areas within 100 feet of the property.

- (3) Locate all wetlands within 150 feet of the property based on the Local Wetland Inventory map (if completed) and on the Metro 2002 Wetland Inventory Map (available from the Metro Data Resource Center, 600 NE Grand Avenue, Portland, Oregon 97232). Identified wetlands shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.
  - ii. Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas and within 100 feet of flood areas.
    - (1) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map (available from the Metro Data Resource Center, 600 NE Grand Avenue, Portland, Oregon 97232).
    - (2) The vegetative cover status of a property may be adjusted only if (1) the property was developed prior to the time the regional program was approved (see subsection 10.5.050(F)(3) above), or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants shall submit an analysis of the vegetative cover on their property using summer 2002 aerial photographs and the definitions of the different vegetative cover types provided in Section 10.12.200 et. seq.
  - iii. Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25% (using the methodology as described in Chapter 3 of *CWS Design and Construction Standards*; and
  - iv. Identify the riparian habitat classes applicable to all areas on the property using Table 5-6 and the data identified in subsections 10.5.050(G)(4)(a)(i) through (iii).
- b. Step 2. Verifying boundaries of inventoried upland habitat in future urban growth boundary expansion areas. Upland habitat was identified based on the existence of contiguous patches of forest canopy, with limited canopy openings. The “forest canopy” designation is made based on analysis of aerial photographs, as part of determining the vegetative cover status of land within the region. Upland habitat shall be as identified on the NRA map unless corrected as provided in this subsection.

- i. Except as provided in subsection 10.5.050(G)(4)(a)(ii), vegetative cover status shall be as identified on the Metro Vegetative Cover Map used to inventory habitat at the time the area was brought within the urban growth boundary (available from the Metro Data Resource Center, 600 NE Grand Avenue, Portland, Oregon 97232).
- ii. The only allowed corrections to the vegetative cover status of a property are as follows:
  - A. To correct errors made when the vegetative status of an area was determined based on analysis of the aerial photographs used to inventory the habitat at the time the area was brought within the urban growth boundary. For example, an area may have been identified as “forest canopy” when it can be shown that such area has less than 60% canopy crown closure, and therefore should not have been identified as “forest canopy.” The perimeter of an area delineated as “forest canopy” on the Metro Vegetative Cover Map may be adjusted to more precisely indicate the dripline of the trees within the canopied area provided that no areas providing greater than 60% canopy crown closure are de-classified from the “forest canopy” designation. To assert such errors, applicants shall submit an analysis of the vegetative cover on their property using the aerial photographs that were used to inventory the habitat at the time the area was brought within the urban growth boundary and the definitions of the different vegetative cover types provided in Section 10.12.200 et. seq.; and
  - B. To remove tree orchards and Christmas tree farms from inventoried habitat; provided, however, that Christmas tree farms where the trees were planted prior to 1975 and have not been harvested for sale as Christmas trees shall not be removed from the habitat inventory.
- iii. If the vegetative cover status of any area identified as upland habitat is corrected pursuant to subsection 10.5.050(G)(4)(b)(ii)(1) to change the status of an area originally identified as “forest canopy,” then such area shall not be considered upland habitat unless it remains part of a forest canopy opening less than one acre in area completely surrounding by an area of contiguous forest canopy.

**Table 5-6  
Method for Locating Boundaries of Class I and II Riparian Areas**

Distance in feet from Water Feature	Development/Vegetation Status <sup>1</sup>			
	Developed areas not providing vegetative cover	Low structure vegetation or open soils	Woody vegetation (shrub and scattered forest canopy)	Forest Canopy (closed to open forest canopy)
<b>Surface Streams</b>				
0-50	Class II	Class I	Class I	Class I
50-100		Class II <sup>2</sup>	Class I	Class I
100-150		Class II <sup>2</sup> if slope>25%	Class II <sup>2</sup> if slope>25%	Class II <sup>2</sup>
150-200		Class II <sup>2</sup> if slope>25%	Class II <sup>2</sup> if slope>25%	Class II <sup>2</sup> if slope>25%
<b>Wetlands (Wetland feature itself is a Class I Riparian Area)</b>				
0-100		Class II <sup>2</sup>	Class I	Class I
100-150				Class II <sup>2</sup>
<b>Flood Areas (Undeveloped portion of flood area is a Class I Riparian Area)</b>				
0-100			Class II <sup>2</sup>	Class II <sup>2</sup>

<sup>1</sup>The vegetative cover type assigned to any particular area was based on two factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged. As an example of how the categories were assigned, in order to qualify as “forest canopy” the forested area had to be part of a larger patch of forest of at least one acre in size.

<sup>2</sup>Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map (on file in the Metro Council office), shall be treated as Class I riparian habitat areas in all cases, subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of concern as described in Metro’s Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

## TREE PROTECTION

### 10.5.100 PURPOSE

The trees of Forest Grove, a reminder of the City's namesake, offer historic, aesthetic, spiritual, social, environmental and monetary values to the community. This section of the Code establishes guidelines, a legal framework, and authority for the community forestry program. The intent of this section is to enhance the quality of life in Forest Grove by promoting good stewardship that will ensure the continued health of the community forest. The Development Code creates a protected status for trees as listed below:

- A. Street Trees: Any woody perennial plant permitted by the City to be planted in the public right-of-way. Typically a 1¾-inch or larger nursery stock tree.
- B. Natural Resource Vegetation: Trees and vegetation within sensitive lands or vegetative corridors as required by Clean Water Services *Design and Construction Standards*.
- C. Trees on Developable Land: Trees which have a diameter of six (6) inches or larger, or Oregon White Oaks with a diameter of three (3) inches or larger, measured at 4 ½ feet above natural grade, on land subject to or undergoing development review. Development review includes site review, design review, partition or subdivision review or building permit review.
- D. Trees on Approved Site Plan: Existing trees shown on site plans and designated for protection as part of the site plan approval.
- E. Register Trees: Trees placed on the register list (includes tree groves) as described in Section 9.800 of the Municipal Code. Register trees may include trees from any of the above categories as well as trees on private property.

Where any tree fits into more than one category, the most restrictive criteria apply.

### 10.5.105 DEFINITIONS

Section 10.12.210(T4) of this code includes a definitions section devoted to tree related terms.

### 10.5.110 CITY APPROVAL REQUIRED

- A. In no case can trees within the public right-of-way that are deemed by the City to be healthy and pose no risk of property damage or personal injury be removed or topped. In addition, unless approved by a tree permit or specifically exempted under subsection (C) below, it shall be unlawful within any one year to modify protected trees included in Section 10.5.100 as follows:
  - 1. Remove or prune as to remove over 20% of a tree's canopy,
  - 2. Top a tree, or
  - 3. Disturb over 10% of the critical root zone of any protected tree or vegetation except in accordance with the provisions of this Code.

## B. Permit Requirements

1. The applicant shall file an application for protected tree removal or pruning with the City. The application shall include information on the location and size of the parcel, the location, type, and size of the tree or trees proposed for removal or pruning, and the reasons for the request. Where specified by this code, a tree protection plan shall be provided in accordance with the provisions of Section 10.5.120. The application and reasons shall address appropriate criteria based on the categories in described in Section 10.5.100 (i.e., street trees, trees on developable land, etc.)
2. Where an application involves infested tree(s), the application shall contain an analysis of the tree(s) by an arborist.
3. The Director shall determine whether the request is valid under the terms of this Code within four working days of submittal of the application. If valid, the application shall be processed as a Type I permit within seven working days unless referred or appealed to the Community Forestry Commission (CFC).
4. Applications for the removal or pruning of trees pursuant to Section 10.5.125 shall be submitted as part of the land use permit application or grading permit, whichever is first. The application shall be reviewed and acted upon by the Community Forestry Commission prior to the issuance of any land use approval for new development or grading permit. Notice will be sent consistent with the Type II procedures with appeal to the City Council.

## C. Permit Exemption. The following activities do not require a permit:

1. Imminent Danger. If an imminent danger exists to the public or any property owner or occupant, the City may issue an emergency removal permit. The removal shall be in accordance with accepted arboricultural standards and be the minimum necessary to eliminate the danger.
2. Penalty for Incorrect Danger Assessment. If it is determined that imminent danger did not exist or that the hazardous condition had existed for over sixty (60) days and the owner delayed in applying for a permit, mitigation shall be required as established in Section 10.5.150 of this Code.
3. Maintenance. Regular maintenance which does not require removal of over 20% of the tree's canopy, tree topping, or disturbance of over 10% of the root system

## **10.5.115 TREE PROTECTION PLAN AND PROTECTION REQUIREMENTS**

A. Plan Requirements. Where required by this code, a tree protection plan shall be submitted and approved by the Director or, where specified, the Community Forestry Commission. The plan shall be prepared by an Arborist and shall include:

1. A scale drawing of the subject property;

2. Location, species, and diameter of each tree on site and within 15 feet of the site;
3. Location of the critical root zone;
4. Location of existing and proposed roads, water, sanitary and storm sewer, irrigation and other utility lines/facilities and easement;
5. Location of dry wells and soakage trenches;
6. Location of existing and proposed structures;
7. Existing topography and proposed grade change or cut and fill as a result of development;
8. Existing and proposed impervious surfaces;
9. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan;
10. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan; and
11. For Register Trees, an assessment of tree health or hazard condition, and recommendations for treatment of each applicable tree.

B. Protection Standards. The following construction practices shall apply:

1. Excavations and driveways shall not be placed within six feet of any tree or within the closest 80% of the critical root zones to the tree trunk whichever is the greater distance. During such excavation or construction this distance shall be protected and no temporary building, building material, vehicle or debris shall be kept within this area. Exceptions to this distance may be approved with a favorable report by a qualified arborist.
2. During the erection, repair, alteration, or removal of any building, structure or sign within the critical root zone of a register tree there shall be a sufficient fence to prevent injury to such tree before start and during construction. Special care shall be taken to avoid soil compaction within the critical root zone, including a prohibition of vehicle parking or driving and the prohibition of storage of equipment, construction supplies or construction debris.

**10.5.120 STREET TREES (TREES IN PUBLIC RIGHTS-OF-WAY)**

A. Standards and Requirements.

1. Street Trees Required. All development projects fronting on a public or private street more than 100 feet in length approved after the adoption of this title shall be required to plant street trees.

2. Street Tree Planting List. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director.
3. Tree Plan Required. New street trees shall conform to an existing tree plan unless a specific exception is granted. When a tree plan does not exist, the City shall determine tree species. In selection of tree species, the City shall consider the list of prohibited trees, the available planting area, above or below ground restrictions, the need for tree diversity, and the requests of adjacent property owners.
4. Size and Spacing of Street Trees. The specific spacing of street trees by size of tree shall be as follows:
  - a. Small or narrow-stature trees under twenty-five (25) feet tall and less than sixteen (16) feet wide branching at maturity shall be spaced no greater than twenty (20) feet apart;
  - b. Medium-sized trees twenty-five to forty (25-40) feet tall, sixteen to thirty-five (16-35) feet wide branching at maturity shall be spaced no greater than thirty (30) feet apart;
  - c. Large trees over forty (40) feet tall and more than thirty-five (35) feet wide branching at maturity shall be spaced no greater than forty (40) feet apart.
  - d. Except for signalized intersections, trees shall not be planted closer than twenty (20) feet from a street intersection, nor closer than two (2) feet from private driveways (measured at the back edge of the sidewalk), fire hydrants or utility poles to maintain visual clearance.
  - e. No new utility pole location shall be established closer than five (5) feet to any existing street tree.
  - f. Street trees shall not be planted closer than twenty (20) feet to light standards.
  - g. Where there are overhead power lines, the street tree species selected shall be of a type which, at full maturity, will not interfere with the lines.
  - h. Street trees shall not be planted within two (2) feet of any permanent hard surface paving or walkway:
    - i. Space between the tree and the hard surface may be covered by a nonpermanent hard surface such as grates, bricks on sand, paver blocks and cobblestones; and
    - ii. Sidewalk cuts in concrete for tree planting shall be at least four feet by four feet (4 X 4) to allow for air and water into the root area.
5. Pruning Requirements. Trees or shrubs within any public right-of-way, or on public

and private grounds and having branches projecting into the public street or sidewalk, shall be kept pruned by the owner or owners of property adjacent to or in front of which such trees, shrubs or plants are growing and shall meet the following:

- a. At least eight (8) feet of clearance above sidewalks, thirteen (13) feet above local streets, and fifteen (15) feet above collector and arterial street roadway surfaces shall be provided.
  - b. The branches of any tree, shrub, or other vegetation shall be pruned so as to maintain the clear vision area requirements as set forth in Section 10.8.150.
  - c. Newly planted trees may remain untrimmed, provided they do not interfere with street traffic or persons using the sidewalk.
6. **Cut And Fill Around Existing Trees.** Existing trees may be used as street trees if no cutting or filling takes place within the drip-line of the tree.
7. **Granting Of Adjustments.** Adjustments to the street tree requirements may be granted by the Director by means of a Type I or II procedure, using approval criteria in Article 2 for Adjustments.
8. **Street Tree Maintenance – Property Owner Responsibility**
- a. The adjacent property owner shall appropriately water the tree for two (2) years following planting, unless a City irrigation system, maintenance program, or separate maintenance contract is developed which specifically removes the property owner of this responsibility.
  - b. Pruning requirements. Trees or shrubs within any public right-of-way, or on public and private grounds and having branches projecting into the public street or sidewalk, shall be kept pruned according to city standards by the owner or owners of property adjacent to or in front of which such trees, shrubs or plants are growing.
  - c. Where tree roots create hazardous sidewalk conditions, the owner is responsible for pruning the roots or modifying the sidewalk to alleviate the hazardous condition.
9. **City Maintenance of Street Trees**
- a. The City may perform pruning on any street tree within the rights-of-way without a permit if total pruning results in removal of less than 20% of the crown or disturbance of less than 10% of the root system. Major pruning of a series of street trees may be combined in one permit.
  - b. If the owner or owners, lessees, occupants or person in charge of the property shall fail and neglect to trim such trees, shrubs or plants within ten (10) to forty-five (45) days after notice, the City shall trim such trees, shrubs or plants and shall bill the property owner for the cost of the work. Such

trimming by the City shall not relieve such owner, lessee, occupant or person in charge of responsibility for violation of the code.

10. Additional Requirements

- a. It shall be unlawful to attach anything to a tree, or to the support of protection devices of a tree, except that which is used for support or protection or approved by the City.
- b. It shall be illegal to remove protective devices from around a tree, or in any way damage a street tree.
- c. The applicant shall state when products of pruning or tree removal will be used for a financial return. The commercial harvesting of tree products (e.g. harvesting and selling of spring foliage) shall not be the primary purpose for pruning or cutting street trees.
- d. If removal is allowed, the stump shall be removed to a depth of six (6) inches below the surface of the ground or finish grade of the street, whichever is of greater depth.
- e. A tree of at least two (2) -inch or larger caliper size shall be planted within one (1) year of removal of the street tree.

B. Criteria for Pruning or Removal. The permit for major pruning or removal shall be granted if any of the following criteria are met:

1. The tree is dead or diseased. This criterion shall not be used as the sole reason for removal if the cost of curing the disease is less than one-fourth of the value of the tree. Criterion 1 is to determine if major pruning or removal is appropriate, and shall not be used to require treatment of the tree.
2. The tree has become a major nuisance by virtue of damage to personal property or improvements, either public or private, on the subject site or adjacent sites, and that the maintenance required to prevent damage to such improvements or property outweighs the value of the tree to the community.
3. The tree is unsafe to the occupants of the property, an adjacent property or the general public.
4. The removal has been approved as part of a development project, pursuant to the provisions of Section 10.5.135.
5. The removal is for a public purpose, and there is no alternative without significant cost or safety problems.
6. The removal is part of a street tree improvement program, such as improving the streetscape, or improving the age and species diversity within the City.

**10.5.125 TREES IN NATURAL RESOURCE AREAS**

Modification of any trees within Natural Resource Areas shall comply with Clean Water Service Design and Construction Standards and, where applicable, Section 10.5.050 et. seq.

**10.5.130 TREES ON DEVELOPABLE LAND, PRIOR TO AND DURING DEVELOPMENT**

A. Protected Trees Prior to Development

1. A permit shall be required for the removal or major pruning for trees six (6) - inches or greater in diameter or Oregon White Oaks three (3) – inches or greater in diameter, measured 4 ½ feet above natural grade, or other Protected Trees as defined in this code. A permit may cover a tree management plan which specified cutting, pruning, and thinning on a six (6)-month to two (2)-year basis.

B. Tree Removal Criteria. The permit for removal of tree(s) on developable land shall be granted if any of the following criteria have been met:

1. The tree is dead or diseased. Criterion 1 shall not be used as the sole reason for removal if the cost of curing the disease is less than one-fourth (1/4) of the value of the tree. Criterion 1 is to determine if major pruning or removal is appropriate, and shall not be used to require treatment of the tree.
2. Removal of the tree is necessary to accomplish a public purpose, such as the installation of public utilities or provision of public streets by a public agency. The applicant shall show evidence of alternative designs.
3. Removal of the tree is for thinning purposes following accepted arboricultural practices.

C. Review Standards during Development Review

1. Prior to the removal of any protected trees a tree permit is required. If there is a land use or other permit which may result in modification of the site the tree permit shall be reviewed concurrent with that other permit and follow the same process.
2. Permit Requirements. In conjunction with the development permit requested, the applicant shall include the location, size, and species of all trees subject to this code. Groves or trees that are to be protected do not have to be individually delineated, however, the approximate number of trees in each grove shall be indicated.
3. Protection Plan. For all trees proposed to be preserved, the applicant shall submit a protection plan consistent with the provisions of Section 10.5.120. Protected trees shall be identified on landscape plans.

4. Review Criteria. Protected Trees, as defined in Section 10.5.100 shall be preserved unless the applicant proves to the satisfaction of the reviewing body that removal is necessary as a result of:
- a. Need to remove trees that pose a safety hazard to pedestrians, property or vehicular traffic or threaten to cause disruption of public service; or which pose a safety hazard to persons or buildings.
  - b. Need to remove diseased trees or trees weakened by age, storm, fire or other injury.
  - c. Need to observe good arboricultural practices.
  - d. Need for access to the building site or immediately around the proposed structure for construction equipment.
  - e. Need for essential grade changes to implement safety standards common to standard engineering or architectural practices.
  - f. Surface water drainage and utility installations.
  - g. Locations of driveways, buildings or other permanent improvements so as to avoid unreasonable economic hardship.
  - h. Compliance with other ordinances or codes.
  - i. Need to install solar energy equipment.

For criteria d-g above, the applicant shall provide evidence of exploring alternate designs that would increase tree protection. Removal of register trees shall also comply with the criteria in Section 10.5.145.

5. Yard Setback Adjustment

- a. The Director may authorize adjustments from the setback requirements of this Code where it can be shown that, owing to special and unusual circumstance related to a specific property, a proposed development would result in the removal of trees designated in the Register. An adjustment to the side, front, and/or rear yard setback by up to 50% may be authorized if necessary to retain designated Register trees.
- b. The Director may grant only the minimum adjustment necessary to retain the designated Register trees. In granting the adjustment, the Director may attach conditions necessary to protect the interests of the surrounding property or neighborhood.

The adjustment to setbacks to protect Register trees shall be consolidated with the land use application and reviewed under the procedures specified for Adjustments in Section 10.2.100.

### **10.5.135 TREES IN APPROVED DEVELOPMENTS**

The following provisions apply to trees that were existing and retained as part of a development review procedure.

- A. Criteria. The permit for major pruning or removal shall be granted if any of the following criteria have been met.
1. The tree is dead or diseased. Criterion 1 shall not be used as the sole reason for removal if the cost of curing the disease is less than one-fourth (1/4) of the value of the tree. Criterion 1 is to determine if major pruning or removal is appropriate, and shall not be used to require treatment of the tree.
  2. The tree has lost its significance in terms of its original designation due to damage from natural or accidental causes, or if some other reason can be established that it is not longer of historic significance.
  3. The tree has become a major nuisance by virtue of damage to personal property or improvements, either public or private, on the subject site or adjacent sites, and that the maintenance required to prevent damage to such improvements or property outweighs the value of the tree to the development.
  4. The tree is unsafe to the occupants of the property, an adjacent property or the general public.
  5. The pruning, removal or replacement of the tree results in an improved development as measured by the original review criteria. Decisions under this provision may be referred to the original review body.

### **10.5.140 PROTECTION OF REGISTER TREES**

- A. Register Trees. Register Trees are those identified and adopted by Council ordinance, and are subject to this section in addition to any requirements set forth in this Article.
- B. When development is proposed within a significant grove or when Register trees are located within a site proposed for development, a tree protection plan pursuant to Section 10.5.110 shall be submitted for approval. If justification for removal is based upon the health of the tree, and a visual inspection by the City cannot establish that the tree is dead or seriously diseased, the applicant shall hire a certified arborist or pay a fee established by the City so that an arborist can be hired to inspect and evaluate the health of the tree.
- C. Criteria. The permit for major pruning or removal shall be granted if any of the following criteria have been met:
1. The tree is dead or diseased. Criterion 1 shall not be used as the sole reason for removal if the cost of curing the disease is less than one-fourth (1/4) of the value of the tree. Criterion 1 is to determine if major pruning or removal is appropriate, and shall not be used to require treatment of the tree.

2. The tree has lost its significance in terms of its original designation due to damage from natural or accidental causes, or if some other reason can be established that it is no longer of historic significance.
  3. The tree is unsafe to the occupants of the property, an adjacent property or the general public.
  4. The proposed removal is part of a development project; and
    - a. The removal is for a public purpose, and there is no alternative without significant cost or safety problems as determined by the CFC; or
    - b. Protecting register trees results in a density reduction of over 15%, or an increase in costs of 15%. If this is documented, the allowed tree removal shall be the minimum required to reduce the impact on density and/or costs to less than 15%.
- D. Issuance of Permit. All permits for removal shall be issued with the following conditions attached:
1. Any Register tree shall be removed or pruned following professional standards. These standards shall be provided to all applicants at the time the permit is issued.
  2. It is the responsibility of the applicant to ensure that all protected trees are removed or pruned in a manner that ensures safety to individuals and public and private property.
  3. Other conditions (such as one or more replacement trees) shall be attached in keeping with the purpose of this section.
- E. Relative Value. The relative significance and historic value of the tree (based on the *Manual of Tree and Landscape Appraisers*), as determined in the inventory or other study, shall be considered in evaluating the need for removal or mitigation requirement.
- F. Referral and Appeals. The Director may refer the review to the CFC. The Director may also request a recommendation from the Historic Landmarks Board if the permit request involves trees with historic significance. A decision of the Director may be appealed to the CFC. Appeals of the CFC decision shall go directly to the City Council within the time periods and procedures as set forth in Section 10.1.200 et. seq. of this Code.

#### **10.5.145 MITIGATION AND PENALTIES**

- A. Tree Replacement. Replacement trees shall be new trees, two (2) inches in caliper size or larger, meeting City requirements for tree type, placement, installation, and watering provisions. The owner (or the adjacent property owner in the case of street trees) shall be responsible for the continued health of the new tree including regular watering. Replacement shall be completed within one (1) year of tree removal.

B. Mitigation for Improper Tree Removal

1. Removal or destruction of a tree in violation of this Code on developed single-family zoned property (and which does not meet the criteria of developable land) is punishable by replacement of the tree and a fine. The fine shall not exceed the schedule for fines set forth in the Municipal Code or the value of the tree, whichever is less.
2. In all other cases, removal or destruction of a protected tree in violation of this Code is punishable by a fine which shall not exceed the replacement value of the tree as based on the *Guide for Plant Appraisal*. In lieu of a cash payment to the City, the City may accept mitigation of said value based on the following alternatives, either singularly or in combination:
  - a. One or more trees resulting in the same or higher value of the removed tree, except that the value shall be not less than the cost of tree replacement.
  - b. One or more trees of a species acceptable to the City in which the caliper size (cumulative square inches) of the replacement trees equal the diameter measurement at 4 ½ feet above natural grade of the removed trees.
3. Mitigation shall be completed within 180 days. The Director may extend the time for up to 60 days due to extenuating circumstances (such as hot weather).
4. Where it is determined that tree removal was performed illegally, all land use permit processing for the parcel shall be suspended until mitigation is complete.
5. Partial Compliance with Criteria. If the required criteria have only been partially met, then the reviewing body can require mitigation greater than Section 10.5.150(A) *Tree Replacement* but less than Section 10.5.150(B) *Improper Removal*.

## **HISTORIC LANDMARKS**

### **10.5.200 PURPOSE**

Pursuant to the State of Oregon’s enabling legislation (ORS Chapter 197) and in recognition of the public educational, economical, environmental and cultural value of the heritage and character of Forest Grove to the welfare of its citizens, the following sections create a comprehensive program to identify, designate and protect the history, culture, archaeology, architecture and landscape of Forest Grove.

### **10.5.205 HISTORIC LANDMARKS BOARD**

Section 9.105 et. seq. of the Forest Grove Municipal Code establishes a Historic Landmarks Board (HLB).

### **10.5.210 HISTORIC OR CULTURAL LANDMARK DESIGNATION**

The procedure and criteria to designate or remove landmarks from the *Forest Grove Register of Historic and Cultural Landmarks* is established by Section 9.150 et. seq. of the Municipal Code.

### **10.5.220 PROCEDURE FOR REVIEW OF PROPOSED WORK AFFECTING THE EXTERIOR OF LANDMARKS**

Prior to the commencement of work on the exterior of a landmark (including repairs, maintenance, alterations, improvements, reconstruction and/or expansion affecting the exterior appearance of the landmark), an application describing the proposed work shall be submitted to the Community Development Department for review. The application shall include plans and specifications describing proposed materials and methods in sufficient detail to illustrate the finished results.

- A. Exempt Activities. Replacement of deteriorated materials in kind, repainting, installation of gutters and leaders and installation of removable storm windows shall be considered allowable without assessment of visual impact.
- B. No Visual Change – Director Review. When the proposed work activities are not exempt under A. above, the Director shall review the application and plans. If review results in a determination that the work would not result in visual change, the Director shall provide the applicant with written approval for the work to proceed.
- C. Visual Change – HLB Review
  - 1. Where review of the application results in a determination that the work would result in visual change, the application shall be forwarded to the HLB for review and action subject to Type III procedures.
  - 2. Where the proposed work is of such a nature that a building permit is required, the Building Official shall withhold issuance of a building permit for the proposed work pending review and approval by the HLB. The Board may require additional

plans and application materials beyond those required for issuance of a building permit.

3. After reviewing plans and materials, the HLB shall approve, approve with conditions, or reject the proposal subject to Type III notice procedures and timelines.

D. Review Guidelines

In acting on an application submitted pursuant to this section for work affecting the exterior of a landmark, the Director or HLB shall approve the proposal if findings are made demonstrating compliance with the following guidelines:

1. Every reasonable effort shall be made to provide a compatible use for the property that requires minimal alteration of the structure, or to use the property for its originally intended purpose.
2. The distinguishing original qualities or character of the structure shall not be destroyed. The removal or alteration of historic material or distinctive architectural features shall be avoided when possible.
3. All structures shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes that may have taken place in the history and development of the structure shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship that characterize the structure shall be treated with sensibility.
6. Deteriorated architectural features shall be repaired if practicable; if not, they should be replaced in kind. Where replacement of features is proposed, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. Surface cleaning, if any, of structures shall be undertaken with the least damaging means. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological landmarks affected by, or adjacent to the landmark.
9. A design for alterations and additions to the structure shall not be discouraged when such alterations and additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size,

scale, color, material and character of the property, neighborhood, and environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were removed in the future, the essential form and integrity of the structure would not be impaired.
11. Attempts to improve or enhance the exterior appearance of a landmark by installing decorative features, such as shutters, shall be avoided unless it can be established that the feature existed on the landmark at its inception.

#### **10.5.225 PROCEDURE FOR REVIEW OF PROPOSED DEMOLITION OR RELOCATION OF LANDMARKS**

Prior to the demolition or relocation, in whole or in part, of any landmark, an application and plans shall be submitted to the Community Development Department for review and action by the HLB under Type III procedures.

- A. In considering a proposal for demolition or relocation of a landmark, the HLB shall have the authority to allow the demolition or relocation, or to allow partial demolition or relocation, or to delay approval of the demolition or relocation. If the HLB acts to approve the request, in whole or in part, issuance of a permit and the commencement of work shall be delayed until appeal periods have expired. The Board shall base its action on the following criteria, and shall delay approval of the demolition or relocation if it finds that:
  1. The landmark is of such architectural, historic, or scenic interest that its demolition or relocation would be detrimental to the public interest; or
  2. The landmark is of such interest or significance that it is or could be included in the *National Register of Historic Places* or is on the *Oregon State Inventory of Historic Places*; or
  3. The landmark has such unusual design, texture, or materials characteristics that it could not be reproduced or could be reproduced only with great difficulty or expense; or
  4. Retention of the landmark would aid substantially in the preservation of another designated landmark or in preservation of the character of the adjacent area.
- B. If the Board acts to delay approval of the proposal, the demolition or relocation may be delayed for up to a maximum of 180 days from the Board's initial consideration of the proposal. The decision of the HLB may be appealed to the City Council in accordance with the appeal procedures for a Type III decision.
- C. If, at the end of the extended delay period, the owner of the landmark or his authorized agent has not withdrawn the application for demolition or relocation, the application shall be deemed approved, and any City permits required for such demolition or relocation shall be issued.

## **MANUFACTURED DWELLING PARKS**

### **10.5.300 PURPOSE**

These provisions are intended to regulate the establishment of new manufactured dwelling parks and shall not apply to manufacture dwelling parks established before the adoption of these regulations. The purposes of these regulations are:

- A. To accommodate manufactured dwelling parks in the R-10, R-7, R-5, RML and RMH zoning districts subject to conditional use review and site development plan approval;
- B. To assist in providing opportunities for low and moderately priced single-family housing;
- C. To establish standards to assure a high-quality living environment within manufactured dwelling parks; and
- D. To provide standards to protect the character of existing developments adjacent to manufactured dwelling parks.

### **10.5.305 PROCEDURE**

Manufactured dwelling parks are reviewed through the Type III procedure as a conditional use.

### **10.5.310 PERMITTED USES**

The following uses are permitted within manufactured dwelling parks, provided they are designated on the approved site development plan:

- A. Manufactured dwellings with a minimum width of twelve (12) feet and a minimum floor area of 672 square feet;
- B. Parks, playgrounds, community centers, and non-commercial recreational facilities such as shuffleboard courts, swimming pools, tennis courts, game rooms, and libraries;
- C. Necessary public utilities; and
- D. Accessory uses and structures that is incidental and subordinate to the above uses, including storage facilities.

No sales lot for manufactured dwellings or other movable dwelling shall be permitted in any manufactured dwelling park. This provision shall not prohibit the sale of a manufactured dwelling on the space it is intended to occupy.

**10.5.315 AREA, DENSITY AND HEIGHT REQUIREMENTS**

- A. Minimum Area. The minimum area for a manufactured dwelling park shall be four (4) acres. The minimum width of the tract for portions used only for vehicular access shall be sixty (60) feet. For portions of the park containing manufactured dwelling spaces, the minimum dimension shall be 200 feet.
  
- B. Maximum Density. Density shall meet the minimum and maximum requirements of the base zone.
  
- C. Maximum Height. No building in a manufactured dwelling park shall exceed two stories or thirty-five (35) feet, whichever is less. A chimney, radio or television antenna, or device for the on-site collection or generation of energy from the sun or wind may extend to a height not to exceed fifty (50) feet from grade.
  
- D. Setbacks
  - 1. Front and Rear Yard. The combined depth of the front and rear yard shall not be less than twenty-five (25) feet, and no front or rear yard shall be less than ten (10) feet. Where a rear yard abuts a perimeter strip, the rear yard may be reduced to five (5) feet and the combined depth of the front and rear yards reduced to twenty (20) feet.
  
  - 2. Side Yard. The minimum width of side yards shall not be less than five (5) feet.
  
  - 3. Distance Between Dwellings. A distance of at least fifteen (15) feet shall separate neighboring manufactured dwellings.
  
  - 4. Distance Between Dwellings and Other Buildings. Manufactured dwellings shall be at least twenty (20) feet from any permitted structure other than another manufactured dwelling or an accessory structure on a manufactured dwelling space.
  
  - 5. Lot Lines. Lot lines for manufactured dwelling spaces are not required to be perpendicular to streets or radial to curves.

**10.5.320 SITE DEVELOPMENT STANDARDS**

- A. Required Open Space
  - 1. 20% of the area of the manufactured dwelling park shall be reserved as open space. Streets, access drives and parking lots shall not be considered open space. Open space shall be landscaped and maintained according to the approved Site Development Plans and the general landscaping standards of this Code.
  
  - 2. 10% of the area of the manufactured dwelling park shall be reserved and developed for common recreation space. Areas within required yards, perimeter setback areas, streets, access drives, and parking lots shall not count toward

meeting this requirement, but other portions of the required open space may count toward the common recreation space requirement.

B. Perimeter Requirements. If topographic or other barriers within the development do not provide adequate buffering between the manufactured dwelling park and adjacent development, the Planning Commission may impose one or more of the following requirements through conditional use permit review:

1. Where the manufactured dwelling park abuts a collector or an existing or planned residential area, the Planning Commission may require that a perimeter strip, no more than twenty-five (25) feet wide, be established along the abutting property line. All required building setbacks are measured from the nearest edge of the perimeter strip.
2. Where the manufactured dwelling park abuts an arterial street or an existing or planned non-residential area, the Planning Commission may require that a perimeter strip, no more than fifty (50) feet wide, be established along the abutting property line. All required building setbacks are measured from the nearest edge of the perimeter strip.
3. The Planning Commission may require that the perimeter strip be landscaped to buffer and screen the manufactured dwelling park from view from adjoining uses by either of the following techniques:
  - a. A six (6)-foot high earthen berm with 75% of the area planted with evergreen and deciduous trees, shrubs, and ground cover arranged to create an effective buffer and screen at the time the manufactured dwelling park is completed; or
  - b. A six (6)-foot high decorative masonry wall, or combination masonry wall and wooden fence, and a combination of evergreen and deciduous trees, shrubs, and ground cover arranged to create an effective buffer and screen at the time the manufactured dwelling park is completed.
4. All required landscaped areas shall comply with the general landscaping standards and vision clearance standards of this Code.

C. Utility Service

1. Water and Sewer. Water and sewer distribution and collection systems shall be installed in the manufactured dwelling park and connections shall be provided to each manufactured dwelling space.
2. Solid Waste. Solid waste shall be stored and collected in a manner consistent with established City regulations and policies that apply in neighborhoods of single family homes.
3. Telephone. Telephone connection boxes shall be provided for all manufactured dwelling spaces in the manufactured dwelling park.

4. Electricity and Gas. Electrical and natural gas (if available) distribution systems shall be installed in the manufactured dwelling park and connections provided to each manufactured dwelling space.
  5. Underground Installation. All electrical, natural gas, cable television, and telephone lines in the manufactured dwelling park shall be placed underground subject to the approval of the City Engineer.
- D. Mailboxes. Each manufactured dwelling space shall be provided with one mailbox of uniform style. The mailboxes shall be located in a central mail station designed as an integral part of the manufactured dwelling park; or in a decorative and functional stand containing from 2 to 8 mailboxes located near the dwellings being served.
- E. Patio. A patio of wood, concrete, flagstone or equivalent material having a minimum area of 160 square feet shall be installed on each manufactured dwelling space prior to occupancy of the manufactured dwelling.
- F. Accessory Structures. All accessory structures, including but not limited to carports, storage lockers, recreation and management buildings, and cabanas shall be designed consistent with the general design theme of the manufactured dwelling park.

#### **10.5.325 ACCESS AND STREET DESIGN**

##### **A. Pedestrian Access**

1. A system of walkways and pathways shall be installed to link all manufactured dwellings, recreation areas, parking lots, and common buildings. This system may consist of conventional sidewalks paralleling the streets, or an independent network of pathways. The system shall be linked with sidewalks along perimeter streets bordering the manufactured dwelling park.
2. The pedestrian access system shall be designed to minimize conflicts between pedestrians and vehicles. Where necessary, street crossing signs and signals shall be installed by the developer to ensure safe street crossings.
3. Pedestrian pathways may be designed to accommodate emergency vehicles, provided ordinary vehicular traffic is prohibited.
4. Pedestrian paths shall be at least four (4) feet wide and shall be paved with a durable, all-weather surface.

##### **B. Vehicular Access**

1. Where possible, vehicular access to manufactured dwelling parks shall be from abutting arterial or collector streets. When bounded by more than one arterial or collector street, only one access point from each street is permitted.
2. An entrance or exit to a manufactured dwelling park shall be at least 100 feet from any public street intersection.

3. Access points shall be designed to encourage smooth traffic flow with safe and controlled turning movements. Merging and turnout lanes and traffic dividers shall be required where existing or anticipated heavy traffic volumes indicate the need.
4. No manufactured dwelling space shall have direct vehicular access to a street bordering the manufactured home park. Each manufactured dwelling space shall have direct access to an internal access road.
5. Internal roads and driveways shall be designed to provide safe and convenient access to manufactured dwelling spaces and other facilities in the manufactured dwelling park and access for service and emergency vehicles. Internal roads shall not be designed to encourage through traffic to cut through the manufactured home park.
6. Clear vision areas shall be provided at all roadway and driveway intersections in accordance with the standards of this Code.

C. Roadway Design Standards

1. All interior roadways and drives shall be paved and maintained by the owner of the manufactured dwelling park in accordance with City standards.
2. All interior roadways shall have the following minimum curb-to-curb pavement widths:

<b>ROADWAY CLASS</b>	<b>PARKING</b>	<b>PAVEMENT WIDTH</b>
Class 1 (one-way)	None	16 feet
Serving less than 20 spaces	One Side	19 feet
	Both Sides	25 feet
Class 2 (two-way)	None	20 feet
Serving less than 50 spaces	One Side	27 feet
	Both Sides	34 feet
Class 3 (two-way)	None	22 feet
Serving more than 50 spaces	One Side	29 feet
	Both Sides	36 feet

3. All corners shall have a minimum radius of twenty (20) feet.
4. Curbs shall be installed on both sides of all interior roads. Curbs may be roll-type rather than vertical.
5. Storm drainage shall be managed through a system of underground drainage lines on all Class 3 roads. On Class 1 and 2 roads and cul-de-sacs, an inverted crown design may be used to conduct runoff water to catch basins.

6. Cul-de-sacs shall serve no more than twelve (12) manufactured dwelling sites and shall have a minimum turning radius of thirty-five (35) feet measured to the back of the curb.
7. All interior roads shall be adequately lighted.
8. Where this Section does not cover roadway construction standards, the design standards of the City Engineer shall apply.

### **10.5.330 PARKING AND LOADING SPACE**

#### **A. Off-Street Parking**

1. Resident: Two (2) parking spaces shall be provided for each manufactured dwelling either on the manufactured dwelling space or in an off-street parking bay within 100 feet of the dwelling being served.
2. Guest: Where on-street parking is prohibited on both sides of an interior roadway, guest parking shall be provided in off-street parking bays at the rate of one (1) parking space for every three (3) manufactured dwelling spaces along the roadway. Guest parking should be in close proximity to the manufactured dwellings being served.
3. Non-Residential: Off-street parking shall be provided for all non-residential uses within the manufactured dwelling park at the rate required by the parking regulations of the Code. These parking spaces shall be provided within 100 feet of the non-residential use.
4. Loading Space: Off-street loading bays and maneuvering areas shall be provided for all uses receiving delivery vehicles on a regular basis in accordance with the off-street loading requirements of the Code.
5. Paving and Design: Off-street parking and loading areas shall be paved and designed in accordance with the standards of the Code.

### **10.5.335 MANUFACTURED DWELLING INSTALLATION**

- A. Compliance with HUD Standards. Any manufactured dwelling placed within a manufactured dwelling park established under this Code shall have been manufactured after June 15, 1976 and bear the Oregon Department of Commerce “Insignia of Compliance” indicating conformance with construction standards promulgated by HUD. A manufactured dwelling built before June 15, 1976 may be permitted if the owner obtains certification from the Oregon Department of Commerce that the manufactured dwelling conforms to HUD construction standards.
- B. Removal of Wheels. Wheels shall be removed from the manufactured dwelling upon placement within a manufactured dwelling park. Hubs and axles may remain.
- C. Skirting and Tie-Downs. All manufactured dwellings shall be skirted. Manufactured dwellings shall be tied down in accordance with State standards.

## SOLAR ACCESS

### 10.5.400 PURPOSE

Solar energy can make a significant long-term contribution to the City's energy supply. The provisions of this section apply to the division of land in single family residential zones to ensure that land is divided with consideration of orientation for solar access.

### 10.5.405 APPLICABILITY

The solar design standard shall apply to applications for subdivisions in all residential zones, except to the extent the approval authority finds that exemptions or adjustments provided for in Section 10.5.420 are warranted.

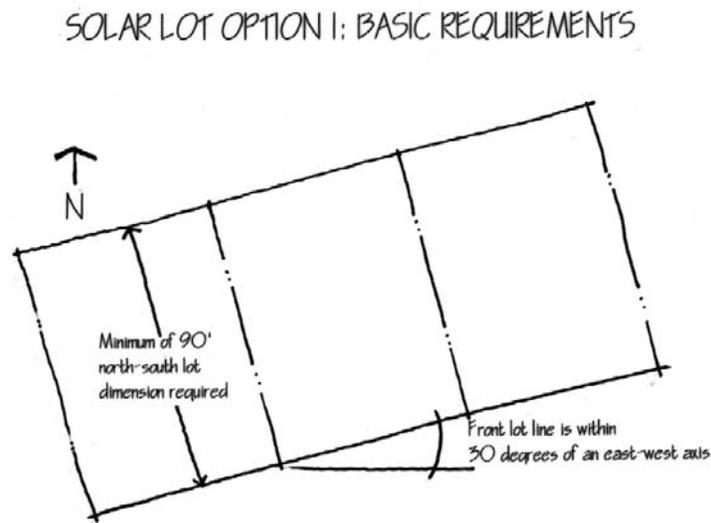
### 10.5.410 PROCEDURE

Compliance with the solar access provisions shall be determined through the Type II review of the tentative subdivision plat.

### 10.5.415 DESIGN STANDARD

At least 80% of the lots in a development subject to this section shall comply with one or more of the following options:

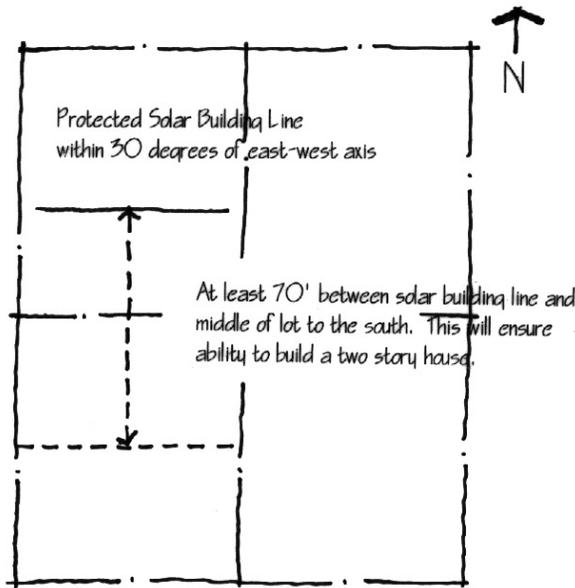
- A. Basic Requirement (See Solar Lot Option 1 below). A lot complies with this section if it:
1. Has a north-south dimension of 90 feet or more; and
  2. Has a front lot line that is oriented within thirty (30) degrees of a true east-west axis.



- B. Protected Solar Building Line Option (See Solar Lot Option 2 below). A lot complies with this section if a solar building line is used to protect solar access as follows:

1. A protected solar building line for the lot to the north is designated on the plat, or documents recorded with the plat; and
2. The protected solar building line for the lot to the north is oriented within thirty (30) degrees of a true east-west axis; and
3. There is at least seventy (70) feet between the protected solar building line on the lot to the north and the middle of the north-south dimension of the lot to the south, measured along a line perpendicular to the protected solar building line; and
4. There is at least forty-five (45) feet between the protected solar building line and the northern edge of the buildable area of the lot, or habitable structures are situated so that at least 80 percent of their south-facing wall will not be shaded by structures or non-exempt vegetation.

SOLAR LOT OPTION 2: PROTECTED SOLAR BUILDING LINE



C. Performance Option. A lot complies with this section if:

1. Habitable structures built on the lot will have their long axis oriented within thirty (30) degrees of a true east-west axis and at least 80% of their ground floor south wall protected from shade by structures and non-exempt trees; or
2. Habitable structures built on that lot will have at least 32% of their glazing and 500 square feet of their roof area which faces within thirty (30) degrees of south and protected from shade by structures and non-exempt trees.

## 10.5.420 EXEMPTIONS FROM DESIGN STANDARD

A development is exempt from Section 10.5.415 if the approval authority finds the applicant has shown that one or more of the following conditions apply to the site. A development is partially exempt from Section 10.5.415 to the extent the approval authority finds the applicant has shown that one or more of the following conditions apply to a corresponding portion of the site. If a partial exemption is granted for a given development, the remainder of the development shall comply with Section 10.5.415.

- A. Slopes. The site, or a portion of the site for which the exemption is sought, is sloped 20% or more in a direction greater than forty-five (45) degrees east or west of true south, based on a topographic survey by a licensed professional land surveyor.
  
- B. Off-Site Shade. The site, or a portion of the site for which the exemption is sought, is within the shadow pattern of off-site features, such as but not limited to structures, topography, or non-exempt vegetation, which will remain after development occurs on the site from which the shade is originating.
  - 1. Shade from an existing or approved off-site dwelling in a single family residential zone and from topographic features is assumed to remain after development of the site.
  - 2. Shade from an off-site structure in a zone other than a single family residential zone is assumed to be the shadow pattern of the existing or approved development thereon or the shadow pattern that would result from the largest structure allowed at the closest setback on adjoining land, whether or not that structure now exists.
  - 3. Shade from off-site vegetation is assumed to remain after development of the site if: the trees that cause it are situated in a required setback; or they are part of a developed area, public park, or legally reserved open space; or they are in or separated from the developable remainder of a parcel by an undevelopable area or feature; or they are part of landscaping required pursuant to local law.
  - 4. Shade from other off-site sources is assumed to be shade that exists or that will be cast by development for which applicable local permits have been approved on the date an application for the development is accepted as complete.
  
- C. On-Site Shade. The site, or a portion of the site for which the exemption is requested, is:
  - 1. Within the shadow pattern of on-site features such as, but not limited to structures and topography which will remain after the development occurs; or
  - 2. Contains non-exempt trees at least thirty (30) feet tall and more than six (6) inches in diameter measured four (4) feet above the ground which have a crown cover over at least 80% of the site or relevant portion. The applicant can show such crown cover exists using a scaled survey or an aerial photograph. If granted, the exemption shall be approved subject to the condition that the applicant preserves at least 50% of the trees that cause the shade that warrants the exemption. The applicant shall file a note on the plat or other documents binding the applicant to comply with this requirement. The city shall be made a part of any covenant or restriction created to enforce any provision of this ordinance. The covenant or restriction shall not be amended without written City approval.

## **RECREATIONAL VEHICLE PARKS**

### **10.5.500 INTENT**

The City is intending to promote tourism as part of economic development. Further, the community is in close proximity to recreational areas such as ocean beaches and state forests to the west and the northern Willamette valley wineries in the immediate vicinity of Forest Grove. The provisions of this section are to provide opportunities for the development of well-designed and complete recreational vehicle parks in the community that is compatible with surrounding uses and, where possible, on sites that avoid the more urbanized portions of the community. To that end, it is the intent of the City to locate these uses in commercial areas outside the Town Center and in or adjacent to residential areas located on the periphery of the community.

### **10.5.505 PROCEDURE**

Recreational vehicle parks require a conditional use permit pursuant to Section 10.2.200 et. seq.

### **10.5.510 LOCATIONAL CRITERIA**

Recreational vehicle parks may be located on sites within the Institutional or Community Commercial district.

### **10.5.515 DEVELOPMENT STANDARDS**

A. Parks shall serve recreational vehicles:

1. As defined by OAR 918-650-0005 (18) excluding:
  - a. “Park trailer” as defined by that section; and
  - b. “Recreational structures” as defined by ORS 446.003.
2. Intended to be used for recreational purposes; and
3. Length of stays shall be limited to 30 days or less for any one year period beginning from the date of the first overnight stay at that facility.
4. Length of stays can be waived by the Director if the Mayor or Governor declares an emergency affecting Forest Grove and temporary housing is needed to meet that emergency. Once the need has been met, the park shall only allow recreational vehicles consistent with this Code and any unit installed for purposes of the emergency shall be removed within 30 days after notification is made by the Director that the emergency has ended.

B. Recreational vehicle parks shall comply with:

1. OAR 918-530 except:
  - a. As modified by this Code; and

- b. No recreational vehicle shall be allowed to be mounted onto any foundation and no skirting is allowed;
    - c. No accessory structure, cabanas or ramadas shall be allowed in individual recreational vehicle spaces; and
  - 2. OAR 918-650 except as modified by this Code.
- C. Recreational vehicle parks shall be designed consistent with the following standards:
  - 1. Parks shall not exceed 18 recreational vehicle spaces per gross acre;
  - 2. Each space shall provide:
    - a. Vehicular parking area no less than 10 feet in width and 25 feet in length;
    - b. Area for the recreational vehicle shall be 55 percent of the space with a minimum width of 16 feet;
    - c. Open space at a rate of twenty-five (25) percent of the space and shall contain at least one shade tree;
    - d. Electrical, sewage and water connections for the recreational vehicle; and
    - e. Minimum size of 1,000 square feet.
  - 3. The park shall provide:
    - a. Perimeter landscaped buffers consistent with the following requirements:
      - i. Buffer widths shall be a minimum of 5 feet in the Community Commercial zone district or Institutional District adjacent to a commercial district. Buffer widths shall be 10 feet where adjacent to a residential district.
      - ii. Landscaping in the buffer areas shall consist of native vegetation and be equal to or exceed the standards in Section 10.8.425. Standards for a C-1 or C-3 buffer, depending on the buffer width, as shown in Tables 8-3 and 8-4 shall apply except as may be modified through the conditional use permit process.
      - iii. Buffer areas shall be left in open space and shall not include any recreational vehicle space, roads (with the exception of roads providing ingress or egress to the park), structures or parking areas.
    - b. Building for rest room, laundry and shower facilities. Sanitary facilities shall be flush toilets at the rate required by Table 2 in OAR 918-650-0050. Shower stalls shall be provided at the same rate as for toilets. Laundry facilities shall include both washer and dryer.
    - c. Two-way driveways shall be a minimum of 24 feet in width and one-way drives 20 feet in width. Minimum radius shall be 30 feet.
    - d. All driveways and vehicular parking areas shall be constructed of pervious materials and all recreational vehicle areas shall provide grass-crete or similar surface unless modified by the conditional use permit.

- e. Lighting shall not exceed 15 feet in height in or adjacent to residential districts and maximum of 18 feet in other districts and shall be properly shielded to avoid glare off-site.
- f. Trash areas shall be screened with a sight obscuring fence.
- g. Any perimeter fences adjacent to a residential district shall be of masonry materials.