

PROPOSED AMENDMENTS TO THE MCMINNVILLE ZONING ORDINANCE –

This will be a new chapter for the Zoning Ordinance

17.49.00

Final Staff Review Draft

NATURAL HAZARD OVERLAY SUBDISTRICTS

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17.49.00 Natural Hazard Subdistricts Generally

Natural Hazard Subdistricts (NH Subdistricts) implement the Natural Hazard Policies of the McMinnville Comprehensive Plan and are intended to protect life and property from inventoried natural hazard areas pursuant to Statewide Planning Goal 7 – Natural Hazards.

- A. NH Subdistricts are based on adopted natural hazard inventories – which include maps showing significant resource sites and supporting reports documenting the criteria and methods used to determine local resource site significance.
- B. NH Subdistricts implement McMinnville Comprehensive Plan Chapter XI Natural Features policies related to Natural Hazards.
- C. NH Subdistrict boundaries appear on the official City Zoning Map.
- D. NH Subdistrict standards apply in addition to standards of the underlying base zone. In cases of conflict, the more restrictive NH Subdistrict standards control.
- E. NH Subdistricts may overlap with Natural Resource Subdistricts. Generally, the review authority shall seek to harmonize subdistrict standards that appear to conflict. However, where standards cannot be read together to achieve a consistent outcome:
 1. The more restrictive standards apply, except that
 2. NH-P and NH-M Subdistrict fuel reduction standards shall prevail in cases of unavoidable conflict with the significant tree and vegetation protection standards of Chapter 17.47 Natural Resource Subdistricts.

17.49.10 Definitions

The following definitions apply within the NH-P and NH-M Subdistricts.

- A. Landmark and Significant Trees. Please see definitions in Chapter 17.58 Trees.
- B. Native Plants. “Native plant species” are those listed on the Portland Plant List, which is incorporated by reference into this chapter.
- C. Fire Resistant Plants. Fire-resistant plants burn at a relatively low intensity, slow rates of spread and with short flame lengths.¹ In addition to listed species, fire-resistant tree and plant species may be determined based on the professional opinions of licensed landscape architects, certified arborists or foresters. Fire-resistant vegetation has the following characteristics:
 1. Growth with little or no accumulation of dead vegetation (either on the ground or standing upright).
 2. Non-resinous plants.
 3. Low volume of total vegetation (for example, a grass area as opposed to a forest or shrub-covered land).
 4. Plants with high live fuel moisture (plants that contain a large amount of water in comparison to their dry weight).
 5. Drought-tolerant plants (deeply rooted plants with thick, heavy leaves).
 6. Stands without ladder fuels (plants without small, fine branches and limbs between the ground and the canopy of overtopping shrubs and trees).
 7. Plants requiring little maintenance (slow-growing plants that, when maintained, require little care).
 8. Plants with woody stems and branches that require prolonged heating to ignite.

¹ A handbook entitled *Fire-resistant Landscape Plants for the Willamette Valley* (OSU Extension Service, 2015) provides a list of fire-resistant shrubs and plants applicable to the McMinnville area.

This list may be modified based on the professional opinions of licensed landscape architects, certified arborists or foresters.

- D. Fuel Reduction Area. An area where vegetation or material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations. Establishment of a fuel reduction area does not include stripping the ground of all native vegetation.
- E. Highly Flammable Trees and Plants. Plant species that have characteristics which make them more volatile by encouraging easy ignition and the spread of fire through their foliage due to low moisture content, dense dry leaves, needles, grass-like leaves, or volatile resins and oils. Highly flammable trees and plants generally include coniferous and resinous trees and shrubs.² In addition to listed species, highly flammable tree and plant species may be determined based on the professional opinions of licensed landscape architects, certified arborists or foresters.
- F. The McMinnville Natural Hazards Map. A map that identifies earthquake, steep slope, landslide, wildfire and flood hazard areas within the McMinnville Urban Growth Boundary. This generalized, composite map is based on the McMinnville Natural Hazards Inventory (Winterbrook Planning, 2021).

17.49.20 Purpose and Intent of the Natural Hazard Subdistricts

The purpose and intent of this chapter are to comply with the McMinnville Comprehensive Plan, minimize the cumulative risks associated with inventoried natural hazards, while allowing reasonable economic use of land within the McMinnville Urban Growth Boundary.

- A. Comprehensive Plan. This chapter is designed to implement the Natural Hazard Policies found in Chapter XI Natural Features of the McMinnville Comprehensive Plan.
- B. Reasonable Economic Use. This chapter is intended to allow reasonable economic use of property while establishing standards to avoid or mitigate cumulative risks related to earthquake liquefaction and shaking hazards, steep slope and landslide hazards, wildfire hazards and flood hazards.
- C. Disclaimer. The degree of Natural Hazard protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger hazard events can and will occur on rare occasions. Landslide risks may be increased by man-made or natural causes.
 - 1. Areas impacted by other natural hazards may differ from those shown on the McMinnville Natural Hazards Map.
 - 2. This Chapter does not imply that land outside the natural hazard areas or that uses permitted within such areas will be free from earthquake, steep slope, landslide,

² Highly flammable trees and plants include at least the following:

- A. Trees (including but not limited to): Acacia (*Acacia* sp.); Arborvitae (*Thuja* sp.); Cedar (*Cedrus* sp.); Cedar/Cypress (*Chamaecyparis* sp.); Cypress (*Cupressus* sp.); Douglas fir (*Pseudotsuga menziesi*); Fir (*Abies* sp.); Hemlock (*Tsuga* sp.); Juniper (*Juniperus* sp.); Pine (*Pinus* sp.); Sequoia (*Sequoia* sp.); Spruce (*Picea* sp.); and Yew (*Taxus* sp.).
- B. Shrubs (including but not limited to): Blackberry (*Rubus armeniacus*); Juniper (*Juniperus* sp.); Laurel sumac (*Malosma laurina*); Oregon grape (*Mahonia aquifolium*); Rosemary (*Rosmarinus* sp.); Scotch broom (*Cytisus scoparius*); and Wild Lilac (*Ceanothus* sp.).
- C. Grasses and Ground Cover (including but not limited to): Dry annual grasses; Large bark mulch; and Pampas grass (*Cortaderia selloana*).

wildfire or flooding hazards. Nor does it imply that land outside of mapped hazard areas will be free from damage in a hazard event.

3. This Chapter shall not create liability on the part of the City of McMinnville, any officer or employee thereof, or the Federal Insurance Administration, for any hazard damages that result from reliance on this chapter, or any administrative decision lawfully made based on the provisions of this chapter.
4. Compliance with the minimum standards established by this chapter is not intended to relieve any private party from liability for the design or construction of development which causes damage or injury by aggravating an existing and known hazard.

17.49.30 Applicability and General Provisions

The Natural Hazards Subdistricts apply to mapped Natural Hazards existing throughout the McMinnville UGB. However, the cumulative severity of natural hazards varies by location. The provisions of this chapter apply to public and private development proposed within three areas – based on the cumulative hazards ranking found in the McMinnville Natural Hazards Inventory:

- A. The Entire UGB Area. The following standards apply to public facilities, planned developments, land divisions, and new construction within the McMinnville UGB:
 1. Oregon Structural Specialty Code Seismic Standards. All land within the McMinnville UGB is subject to moderate to severe earthquake shaking and liquefaction hazards. Oregon Structural Specialty Code and Residential Specialty Code seismic requirements shall apply to new construction in all City Zones.
 2. City Erosion Control Standards. City of McMinnville Storm Drainage Design and Construction Standards, including Erosion Control Standards, shall apply to development in all City Zones. For development on sites where the prevailing slope is 10 percent or more, the erosion control plan shall be prepared by an engineer registered in the State of Oregon. The City Engineer may require special erosion control standards for development:
 - a. On slopes of 15% or greater;
 - b. Within the Floodplain Zone; and
 - c. Within the NH-M and NH-P Subdistricts; and
- B. The Natural Hazard - Mitigation (NH-M) Subdistrict. The NH-M Subdistrict includes land with cumulative earthquake, landslide and/or wildfire hazard risk that can be mitigated on-site based on the recommendations of required studies. The NH-M Subdistrict therefore requires geological site assessments, geotechnical studies and/or wildfire impact studies that include recommendations to mitigate earthquake, landslide and/or wildfire risks on development sites.
- C. The Natural Hazard – Protection (NH-P) Subdistrict. The NH-P Subdistrict generally applies to the 100-year floodplain and areas with high cumulative earthquake, landslide, wildfire and/or flooding risks (1) that are more difficult to or cannot be effectively mitigated on-site, and/or (2) where the location and density of development may be limited. Where development is permitted, it shall occur consistent with the recommendations of geological, geotechnical and/or wildfire impact studies. The Floodplain (F-P) Zone includes additional standards to avoid and/or mitigate flood hazards.
- D. Determination of Site-Specific Natural Hazards and Mitigation Standards. The presence and severity of natural hazard types (earthquake liquefaction, earthquake shaking, slide

hazards and wildfire hazards) on specific properties is determined by referencing the McMinnville Natural Hazard Inventory GIS database.

1. Specific mitigation standards in this chapter depend on the presence (or absence) of specific natural hazards on a development site.
 2. For example, if a dwelling is proposed within a moderate-to-severe wildfire hazard area, the fuel reduction area standards required to mitigate wildfire hazards will apply.
- E. Overlap with Natural Resource Subdistricts. Natural Hazard Subdistricts may overlap with Natural Resource Subdistricts, especially near riparian corridors and tree groves. Generally, the review authority shall seek to harmonize subdistrict standards that appear to conflict. However, where standards cannot be read together to achieve a consistent outcome:
1. The more restrictive standards apply, except that,
 2. NH-P and NH-M Subdistrict fuel reduction area standards shall prevail in cases of unavoidable conflict with the significant tree and vegetation standards of this chapter.
- F. Significant and Landmark Trees. Significant and landmark trees stabilize landslide prone areas and reduce erosion.
1. Significant and landmark trees as defined in Chapter 17.58 Trees shall not be removed from land within Natural Hazard Subdistricts, except as provided in this chapter and Chapter 17.48 Trees.
 2. Removal of significant and landmark trees within NH-M and NH-P Subdistricts may be permitted when authorized as part of a land use application subject to the provisions of this chapter.

17.74.40 Permitted and Conditional Uses

The underlying zoning district determines permitted and conditional uses, subject to additional development limitations and standards required in the NH-M or NH-P Subdistricts.

- A. Conforming Uses. Existing development within the NH-M or NH-P Subdistrict shall be considered conforming with respect to the development standards of the Subdistrict and may be expanded without meeting the substantive or procedural requirements of Chapter 17.63 Nonconforming Uses.
- B. Exempt Uses. When performed under the direction of the City, and in compliance with the provisions of the City of McMinnville Construction Standards on file in the Engineering Division, the following shall be exempt from the provisions of this chapter:
 1. Farming activities permitted in the underlying zone.
 2. Public emergencies, including emergency repairs to public facilities.
 3. Stream restoration and enhancement programs outside of wildfire hazard areas.
 4. Invasive vegetation (not including significant or landmark trees) removal.
 5. Additions of up to 50% of the habitable floor area of building(s) constructed before the effective date of this ordinance, subject to applicable building safety code standards, including applicable seismic and wildfire safety standards.
 6. Routine maintenance or replacement of existing public facilities projects.

17.74.50 Review Procedures.

The natural hazard mitigation and protection standards in this chapter usually are applied in conjunction with a development application. Where a use is proposed within, or partially within,

the NH-P or NH-M Subdistrict, the following procedures shall apply pursuant to Chapter 17.72 (Applications and Review Process).

1. Permitted Uses. Where a use is permitted outright in the applicable base zone (for example, residential, commercial, industrial or public uses), compliance with the standards of this chapter is determined by the Planning Director, based on required natural hazard studies, as part of the site plan review process (if applicable), and prior to issuance of a building or construction permits.
2. Land Divisions. When land divisions are proposed pursuant to Chapter 17.53 Land Division Standards, compliance with the standards of this chapter is determined by the Planning Director, based on required natural hazard studies.
3. Planned Developments. When planned developments are proposed pursuant to Chapter 17.51 (Planned Development Overlay), compliance with the standards of this chapter is determined by the Planning Commission, based on required natural hazard studies.
4. Density Transfer. The Planning Commission shall review density transfer from land within the NH-P Subdistrict to buildable land under the same ownership, pursuant to Section 17.49.170 Density Transfer.
5. Conditional Uses and Variances.
 - a. Where a conditional use is proposed, compliance with the standards of this chapter is determined by the Planning Commission, based on required natural hazard studies, prior to issuance of building or construction permits.
 - b. Where a variance is requested, compliance with the variance criteria in this chapter is determined by the Planning Commission, based in part on required natural hazard studies, prior to issuance of building or construction permits.
6. Public Facilities. Construction of public facilities within natural hazard areas must follow the recommendations of required natural hazard studies.

17.49.60 Natural Hazard Subdistrict Application Requirements

Development applications for all properties within the MH-M or MH-P Subdistricts shall accurately indicate the site-specific locations of specific types of natural hazard areas based on City GIS maps in relation to proposed development. City planning staff will assist the applicant by providing GIS maps showing city information sources listed below. Development applications within or partially within natural hazard subdistricts shall include:

- A. A site plan showing the proposed development on the site, drawn to a standard scale and including an illustrated scale for use in reductions.
- B. Topography showing 2-foot contour intervals and slopes of:
 1. 15 to 24.9 percent; and
 2. 25 percent and greater.
- C. The location of existing and proposed infrastructure necessary to serve the proposed development. Such infrastructure includes streets, driveways, water, sanitary sewer, and storm drainage.
- D. The potential hazard impact area showing land uses and tree cover within 200 feet of the subject property.
- E. A title block, north arrow, and bar scale.
- F. Date(s) of field check(s).

- G. A grading plan, if grading is to occur, showing existing and finished contours on the site, at two-foot contour intervals.
- H. Information sources, such as soil survey maps and applicable McMinnville Natural Hazard and Natural Resource inventory maps.
- I. Relevant City maps applicable to the site and impact area including the Zoning Map, natural hazard and natural resource subdistrict maps.
- J. Aerial photos, including their date and scale.
- K. Depending on the type of natural hazard or natural resource identified on a proposed development site, the applicant shall be responsible for:
 - 1. Showing the precise location of each type of inventoried natural hazard or natural resource present on the development site;
 - 2. Submitting required flooding, seismic, geological and/or wildfire hazard mitigation studies as prescribed in Section 17.49.060; and
 - 3. Demonstrating compliance with recommended mitigation measures pursuant to required hazard studies.
- L. The location and size of significant and landmark trees within 25 feet of any proposed disturbance area. If development is proposed within a wildfire area, the location and size of significant and landmark trees must be shown within 50 feet of the outer limits of above-ground construction.
- M. Land within the 100-year floodplain, the RC-P riparian corridor, or within significant tree groves identified on the McMinnville Natural Resources Inventory Map.
- N. Any other submittal requirements identified for development in areas with specific types of natural hazards, as specified in this chapter.

17.49.70 Required Natural Hazard Mitigation Reports

Depending on the natural hazards present on a particular property, the applicant for land development shall be responsible for preparing one or more of the following studies within the NH-M and NH-P Subdistricts.

- A. Geological Site Assessment is an overview of existing geological conditions that includes recommendations for mitigation measures. The Site Assessment shall be completed and stamped by either a Certified Engineering Geologist or by a Licensed Civil Engineer, licensed in the Specialty of Geotechnical Engineering. At a minimum, the Geological Site Assessment shall include the following elements:
 - 1. Relevant landslide and earthquake hazard information from the McMinnville Natural Hazards Inventory;
 - 2. A field investigation of the site and vicinity including a description of geologic hazards that may be present on the site;
 - 3. An analysis of the geological suitability of the site for proposed development;
 - 4. A description of any unusual or extreme geologic processes at work on the site, such as rapid erosion, landslide hazard, flood hazard, rockfall, subsidence, debris run-out, or other features;
 - 5. A description of any geologic hazards that may affect the proposed land use, including but not limited to slope stability, debris flow, flooding, topography, erosion hazard, shallow groundwater, springs, expansive soils, subsidence, fault rupture, landslide hazard, rockfall, debris run-out, or any other geologic hazard discovered by the investigation;

6. Identification of any areas of the site that should be avoided for human-occupied structures;
 7. An analysis of the feasibility of developing the site for the proposed land use(s);
 8. Identification of any mitigation measures needed to address any anticipated geologic problems; and
 9. Recommendations regarding the need for follow-up studies, such as engineering geotechnical reports, additional subsurface exploration, or more extensive soil reports.
- B. Geotechnical (Soils Engineering) Report is prepared and stamped by a Licensed Civil Engineer, licensed in the Specialty of Geotechnical Engineering by the Oregon State Board of Engineering Examiners. The Geotechnical Report usually makes specific recommendations to avoid or mitigate geological hazards. At a minimum, the Geotechnical Report shall include the following elements:
1. Data regarding the nature, distribution and strength of existing soils on the site.
 2. Analysis, conclusions and recommendations for grading procedures.
 3. Design standards for corrective measures, including buttress fill, when necessary.
 4. A professional opinion on the adequacy of the development site for the intended use considering the proposed grading in relation to soils engineering factors, such as slope stability.
 5. The location of proposed development and public facilities; and
 6. Relevant information from the McMinnville Natural Hazards Inventory.
- C. Wildfire Hazard Assessment and Mitigation Plan is prepared, in consultation with the McMinnville Fire Department, by a certified arborist or professional forester with experience in wildfire management. This plan must address wildfire mitigation standards in this chapter and may recommend additional fire safety standards. At a minimum, in addition to site plan requirements, the plan shall include:
1. The location and dimensions of all existing and proposed structures, parking areas and driveways on the property.
 2. The location, dimension, and grade of fire apparatus access roads and driveways serving all structures on the property.
 3. The location and dimensions of all structures on adjoining properties located within 30 feet of a shared property line.
 4. The location of all existing and proposed fire hydrants.
 5. Site contours showing two foot intervals detailing elevation and slope.
 6. A tree and vegetation management plan showing:
 - a. The location, species and size of existing significant trees and landmark trees, including those to be removed and those to be retained, and whether they qualify as “fire-resistant” or “highly flammable” as defined in this chapter.
 - b. The location, species and size of shrubs, including those to be removed and those to be retained, and whether they qualify as “fire-resistant” or “highly flammable” as defined in this chapter.
 - c. Areas where trees will be removed to reduce overlapping tree canopies including a description of the tree species and diameter at breast height (DBH).
 - d. New trees, shrubs and bushes to be planted including the species, location and size at maturity, and whether they qualify as “fire-resistant” or “highly flammable” as defined in this chapter.

7. The location of and information addressing required fuel reduction area standards as described in Section 17.49.130.
8. A schedule and timetable for vegetation removal and thinning to meet fuel reduction area standards.

17.49.80 Decision Options and Conditions

The Approval Authority may approve, approve with conditions, or deny an application based on the provisions of this chapter. The Approval Authority may require conditions necessary to comply with the intent and provisions of this chapter.

- A. Conditions. The required reports shall include design standards and recommendations necessary for the geologist or geotechnical engineer to provide reasonable assurance that the standards of this section can be met with appropriate mitigation measures. These measures, along with staff recommendations, shall be incorporated as conditions into the final decision approving the proposed development.
- B. Assurances and Penalties. Assurances and penalties for failure to comply with mitigation, engineering, erosion and water quality plans required under this section shall be as stated in Chapter 17.03 General Provisions.

17.49.90 Land Divisions

No land division or property line adjustment shall be approved that would result in an unbuildable lot or parcel (*i.e.*, a lot or parcel where a permitted or conditional use could not be allowed because it would be unable meet the standards of this chapter).

Natural Hazards – Mitigation (NH-M) Subdistrict

17.49.100 Natural Hazards – Mitigation (NH-M) Subdistrict

The NH-M is intended to mitigate natural hazard impacts based on objective development standards for each applicable hazard type (earthquakes, steep slopes, landslides and wildfires) and the recommendations of required site-specific hazard studies.

17.49.110 Earthquake Mitigation Standards

Buildings and on-site construction projects must meet the seismic standards of the applicable Oregon Structural Specialty Code and Residential Specialty Code seismic requirements per Section 17.49.30.A.

17.49.120 Steep Slope and Landside Mitigation Standards

The following plans and development standards apply to steeply sloped land (15% or greater) and to mapped landslide hazard areas on any proposed development site, as determined by the McMinnville Natural Hazards Inventory.

- A. Required Plans.
 1. If slopes of 15% or greater exist on the development site, the applicant shall submit an Erosion Control Plan per Section 17.49.30.A.
 2. If moderate to high landslide hazard areas exist on the development site, the applicant shall submit a Geological Site Assessment per Section 17.49.60.A.

3. The City may contract with an independent geologist or geotechnical engineer to review the Geological Site Assessment.
- B. Development Standards. The applicant’s site and building plans shall be consistent with the recommendations of the required Geological Site Assessment, including any changes and conditions required by the review authority after considering the recommendations of the independent peer reviewer.
1. If the Geological Site Assessment recommends a Geotechnical Engineering Study, building and construction plans shall be consistent with the recommendations of this study.
 2. Generally, development should avoid slopes of 25% and greater, except where consistent with the recommendations of the Geological Site Assessment.
 3. Removal of landmark trees shall be prohibited – except where the review authority determines that there is no reasonable alternative available to achieve project objectives.
 4. Removal of significant trees shall be the minimum necessary to meet project objectives or to comply with an approved wildfire mitigation plan.

17.49.130 Wildfire Assessment and Mitigation Standards

This section supplements base zone development regulations to mitigate potential impacts of wildfire on land with moderate to severe wildfire areas shown on the McMinnville Natural Hazards Inventory Map.

- A. Purpose. These standards balance the need to protect riparian corridors, and landmark and significant trees, while reducing fuel loads and facilitating firefighter access to structures in the event of a wildfire.
1. The following studies and development standards apply to moderate, high and severe wildfire hazard areas on any proposed development site, as determined by the McMinnville Natural Hazards Inventory.
 2. In limited situations, removal or major pruning of significant trees may be required to meet the standards of this section. Removal of landmark trees shall only be considered as a last resort.
- B. Required Wildfire Mitigation Plan. If moderate to severe wildfire hazards exist on or adjacent to a development site, or when a development site abuts a significant tree grove, the applicant shall prepare a Wildfire Mitigation Plan as prescribed by Section 17.49.060.C. The plan shall apply for the following land use applications:
1. When a new habitable building, or an addition to an existing habitable building is proposed.
 2. Applications for Planned Developments and/or Land Divisions.
- C. Fuel Reduction Area. To reduce fire spread both from and to structures on the property, and to adjoining properties, the establishment and maintenance of a fuel reduction area shall be required.
1. The general fuel reduction area shall be measured 30 feet from the exterior walls of habitable structures on development sites with slopes of 10% or less.
 2. In steeply sloped areas, an additional 10 feet of fuel reduction area shall be added for each 10% increase in slope. Thus, a 40-foot fuel reduction area would be required for a site with an average slope of 11-20%, and a 50-foot fuel reduction area would be required for a lot with a site with an average slope of 21-30%.



D. Vegetation and combustibile materials within the fuel reduction area shall meet the following standards:

1. All standing dead and dying vegetation shall be removed from the property, except when considered ecologically beneficial (e.g., a snag located in a riparian corridor).
2. Newly planted vegetation within 30 feet of any building or deck shall not include highly flammable species. The setback shall be increased by ten feet for each ten

- percent increase in the average slope of the property (measured from the proposed building or buildings) over ten percent.
3. Within five feet of a new building, addition, or deck, existing highly flammable vegetation shall be removed. However,
 - a. Land divisions and planned developments shall be designed to save landmark trees and minimize impacts on significant trees; and
 - b. The placement and design of new buildings on an existing lot shall avoid landmark trees if possible and minimize impacts on significant trees.
 4. Within five feet of a new building, addition, or deck, combustible man-made and natural materials are prohibited, including but not limited to bark mulch, stored wood, and accumulation of dry leaves and needles. Exception: Combustible materials may be permitted within five feet of a structure by the Planning Director in consultation with the Fire Marshall, if the portion of the structure adjoining the combustible material is constructed with ignition resistant building materials sufficient to reduce the spread of fire.
 5. Tree crowns or limbs shall not extend into the vertical plane of a chimney outlet
 6. Highly flammable significant and landmark trees shall be maintained to provide at least a 10-foot clearance from new structures (and any subsequent additions thereto) measured as follows:
 - a. Horizontally from a chimney outlet;
 - b. From above the roof of a new building, or addition; and
 - c. From the furthest extension of a new building, or addition or deck.
 - d. If pruning a tree to meet the above requirements would compromise the health and survival of an existing tree(s), the standards a-c above may be modified by the Planning Director in consultation with the Fire Marshall, but at a minimum the trees shall be pruned to maintain at least eight feet of ground clearance.
 7. Canopy spacing of the outermost limbs of highly flammable trees shall be separated by at least 10 feet at mature size within the fuel reduction area.
 - a. Groups of trees that form a continuous canopy may be considered as one tree canopy.
 - b. Canopy spacing requirements do not apply landmark trees, as defined in Chapter 14.78 Trees, or to fire-resistant trees.
 8. Fire-resistant trees (i.e., trees that are not highly flammable) shall be maintained to provide clearance from structures as follows:
 - a. 10 feet horizontal clearance from a chimney outlet.
 - b. At no time shall tree crowns or limbs extend into the vertical plane of a chimney outlet.
 - c. Tree limbs shall be pruned to ensure they do not touch any part of a structure including but not limited to roofs, eaves, and decks.
 9. Existing highly flammable trees shall be pruned to provide a ground clearance of a minimum eight feet above the ground, or one-third of the tree height, whichever is less.
 10. Existing highly flammable shrubs shall be maintained to provide a clearance from new structures and other flammable vegetation as follows:
 - a. Five feet clearance from the furthest extension of a new building, addition or deck.

- b. Separation from other highly flammable shrubs within the fuel reduction area shall be a minimum of two times the shrub's height at maturity.
- 11. Newly planted highly flammable shrubs shall be:
 - a. A minimum of 30 feet from the furthest extension of any building addition or deck.
 - b. Separated from other listed flammable shrubs by a minimum of two times the shrub's height at maturity.
 - c. Located outside of the drip line of a highly flammable tree.
- 12. Where either the tree or vegetation is highly flammable: the vertical clearance between the top of understory vegetation (within the drip line of a tree) and the lowest tree limbs, shall be at least three times the height of vegetation.
- 13. Existing vegetation may be allowed to be retained consistent with an approved Wildfire Mitigation Plan, or upon written approval of the Planning Director in consultation with the Fire Marshall:
 - a. To maintain slope stability;
 - b. To preserve or enhance riparian functions and values;
 - c. To protect or ensure the health of landmark or significant trees; or
 - d. For aesthetic purposes.
- E. Fuel reduction in areas steep slope / slide hazard areas, or significant riparian corridors, shall be included in the erosion control measures outlined in Section 17.49.060.
- F. The Fuel Reduction Area may be reduced or waived when approved by the Planning Director in consultation with the Fire Marshall, based on a finding that fire risk has been reasonably reduced such as in cases where ignition resistant materials and construction methods, or vegetation type and separation, function to enhance the structure's protection from exterior wildfire exposure.

17.49.140 Reserved for Future Use

Natural Hazard – Protection (NH-P) Subdistrict

17.49.150 Natural Hazards – Protection (NH-P) Protection Subdistrict

The NH-P is intended to avoid, and where avoidance is not feasible, to mitigate natural hazard impacts to life and property from each applicable natural hazard type (earthquakes, steep slopes, landslides and wildfires).

- A. Use Limitations and Development Standards. The NH-P Subdistrict includes use limitations and development standards to reduce composite risks to life and property associated with earthquakes, steep slopes, landslides, wildfires and flooding within its boundaries.
- B. Mitigation Based on Required Studies. To mitigate for unavoidable impacts, proposed development must follow the recommendations of required site-specific hazard studies.

17.49.160 Use Limitations

The underlying zoning district determines permitted and conditional uses within the NH-P Subdistrict, subject to additional development limitations and standards required by the NH-P

Subdistrict. Residential density transfer may be permitted as prescribed in Section 17.49.170. The following use limitations apply to land within the NH-P Subdistrict.

- A. Creation of New Lots. Creation of new lots on land within the NH-P Subdistrict shall be prohibited, except when based on site-specific natural hazard impact studies and approved through the Chapter 17.48 Planned Development Overlay.
- B. Residential Zones. In residential zones, one dwelling unit shall be permitted for each lot-of-record, provided that:
 - 1. There is inadequate space to place a residence with a footprint of 2,000 square feet or less on the lot outside of the NH-P Subdistrict and the RC-P Subdistricts.
 - 2. The recommendations of required natural hazard impact studies are followed.
 - 3. Landmark trees are protected except where there is no reasonable alternative to allow a home with a 2,000 square foot footprint (or less) on a lot-of-record.
 - 4. Impacts on significant trees shall be minimized, recognizing that tree removal may be required to meet Section 17.49.130 Wildfire Assessment and Mitigation requirements and fuel reduction requirements.
- C. Large-Format Commercial Development. Large format commercial development as defined in Chapter 17.56 shall not be permitted within the NH-P Subdistrict.
- D. Commercial and Industrial Zones. In commercial and industrial zones, existing habitable structures and surface parking areas may be expanded by up to 50% within the NH-P Subdistrict, provided that:
 - 1. There is inadequate space to expand the structure by 50% outside of the NH-P Subdistrict.
 - 2. The proposed expansion is located outside mapped high risk landslide and wildfire areas and is designed to minimize the building footprint and loss of significant and landmark trees on land within the NH-P Subdistricts.
 - 3. Outdoor storage areas are prohibited within the NH-P Subdistrict.
 - 4. The recommendations of required natural hazard impact studies are followed.
- E. Floodplain Zone. Public uses are permitted within the F-P Zone, provided that:
 - 1. Impacts on significant and landmark trees are minimized.
 - 2. Scenic views are considered, enhanced and maintained.
 - 3. The recommendations of required natural hazard studies are followed.
- F. Significant Tree Groves. Significant Tree Groves within the NH-P overlay shown on the McMinnville Tree Grove Inventory shall be protected, except where limited tree thinning and pruning are required to meet fuel reduction standards pursuant to an approved Wildfire Mitigation Plan.

17.49.170 Residential Density Transfer

Residential density transfer from land within the NH-P Subdistrict to contiguous property under the same ownership that is outside both the floodplain and any applicable Natural Resource or Natural Hazard Subdistrict is encouraged. Density transfer may occur through the land division process or the planned development process, as indicated below.

- A. Maximum Density Permitted. The maximum density allowed in the transfer area shall be the maximum density allowed in the next higher residential zoning district. For example, density transfer from the NH-P land with an underlying R1 zone to land outside the Natural Hazards Overlay (NH-P and NH-M) shall be capped at the density allowed in the R2 zone.

- B. If Density Transfer is Not Feasible. In situations where density transfer is not feasible, a maximum of one dwelling unit per 2.5 acres may be allowed on land zoned for residential use within the NH-P Subdistrict, consistent with the recommendations of a geotechnical engineering study and any conditions required by the review authority.
- C. Planned Development Option. As an alternative to Subsections A and B above, the property owner / developer may apply for a Planned Development pursuant to Chapter 17.51 (Planned Development Overlay) to allow density transfer from land within the NH-P Subdistrict to land within the NH-M Subdistrict, provided that:
 - 1. The density receiving area is completely outside the floodplain, significant tree groves and riparian corridors; and
 - 2. The recommendations of required natural hazard studies are followed.

17.49.180 Earthquake Mitigation Standards

Buildings and on-site construction projects must meet the seismic standards of the applicable Oregon Structural Specialty Code and Residential Specialty Code seismic requirements per Section 17.49.30.A.

17.49.190 Steep Slope and Landside Mitigation Standards

The following plans and development standards apply to when development is authorized pursuant to Section 17.49.160 on steeply sloped land (15% or greater) and to mapped landslide hazard areas on any proposed development site, as determined by the McMinnville Natural Hazards Inventory.

A. Required Plans.

- 1. If slopes of 15% or greater exist on the development site, the applicant shall submit an Erosion Control Plan per Section 17.49.30.A.
- 2. If moderate to high landslide hazard areas existing on the development site, the applicant shall submit a Geological Site Assessment per Section 17.49.60.A.
- 3. The City may contract with an independent geologist or geotechnical engineer to review the Geological Site Assessment.

B. Development Standards. Where development is authorized pursuant to Section 17.49.160 (Use Limitations), the applicant's site and building plans shall be consistent with the recommendations of the required Geological Site Assessment, including any changes and conditions required by the review authority after considering the recommendations of the independent peer reviewer.

- 1. If the Geological Site Assessment recommends a Geotechnical Engineering Study, building and construction plans shall be consistent with the recommendations of this study.
- 2. Generally, development should avoid slopes of 25% and greater, except where consistent with the recommendations of the Geological Site Assessment.
- 3. Removal of landmark trees shall be prohibited – except where the review authority determines that there is no reasonable alternative available to achieve project objectives.
- 4. Removal of significant trees shall be the minimum necessary to meet project objectives or to comply with an approved wildfire mitigation plan.

17.49.200 Wildfire Assessment and Mitigation Standards

Where development is permitted pursuant to Section 17.49.160 (Use Limitations), proposed development within mapped moderate to severe wildfire areas within the NH-P Subdistrict shall be subject to the Wildfire Assessment and Mitigation Standards of Section 17.49.130.