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1 **CHAPTER 21.07: DEVELOPMENT AND DESIGN STANDARDS**

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2 **21.07.010 GENERAL PROVISIONS**

3 **A. Purpose<sup>1</sup>**

4 The development and design standards set forth in this chapter shall apply to the  
5 physical layout and design of development in Anchorage. These provisions address  
6 the physical relationship between development and adjacent properties, public  
7 streets, neighborhoods, and the natural environment, in order to implement the  
8 comprehensive plan vision for a more attractive, efficient, and livable community. The  
9 specific purposes of this chapter include:

- 10 1. To encourage the proper use of the land by promoting an appropriate balance  
11 between the built environment and the preservation and protection of open  
12 space and natural resources;
- 13 2. To protect public and private investment through preservation of open spaces,  
14 protection of natural resources including existing trees, providing buffers  
15 between incompatible uses and along roadways, and encouraging the  
16 planting of new trees and vegetation as deemed appropriate;
- 17 3. To promote sound management of water quality and quantity through  
18 preservation of natural areas and by encouraging soil management and the  
19 use of native plant materials;
- 20 4. To provide appropriate standards to ensure a high quality appearance for  
21 Anchorage and promote good design while also allowing flexibility,  
22 individuality, creativity, and artistic expression;
- 23 5. To provide development and design standards that address and are tailored  
24 to Anchorage's northern climate;
- 25 6. To strengthen and protect the image, identity, and unique character of  
26 Anchorage and thereby to enhance its business economy;
- 27 7. To protect and enhance residential neighborhoods, commercial districts, and  
28 other areas by encouraging physical development that is of high quality and is  
29 compatible with the character, scale, and function of its surrounding area; and
- 30 8. To encourage developments that relate to adjoining public streets, open  
31 spaces, and neighborhoods with building orientation and physical connections  
32 that contribute to the surrounding network of streets and walkways.

33 **B. Alternative Compliance**

34 **1. Purpose**

35 Alternative compliance is a procedure that allows development to occur where  
36 the intent of the design-related provisions of this chapter is met through an  
37 alternative design. It is not a general waiver of regulations. Rather, the  
38 procedure permits a site-specific plan that is equal to or better than the strict  
39 application of a design standard.

---

<sup>1</sup> NOTE: Suggested new purpose statement.

- 1                   **2.     Applicability**  
2                   The alternative compliance procedure shall be available only for the following  
3                   sections of this chapter:
- 4                   **a.     Section 21.07.110, *Residential Building Standards*;**  
5                   **b.     Section 21.07.120, *Public/Institutional and Commercial Building***  
6                   ***Standards*; and**  
7                   **c.     Section 21.07.130, *Large Retail Establishments*.**
- 8                   **3.     Pre-Application Conference Required**  
9                   An applicant proposing to use alternative compliance under this section  
10                  21.07.010.B. shall request and attend a pre-application conference prior to  
11                  submitting the site plan for the development, to determine the preliminary  
12                  response from the Director. Based on that response, the site plan application  
13                  shall include sufficient explanation and justification, in both written and  
14                  graphic form, for the alternative compliance requested.
- 15                  **4.     Decision-Making Responsibility**  
16                  Final approval of any alternative compliance proposed under this section shall  
17                  be the responsibility of the decision-making body responsible for deciding  
18                  upon the application. By-right projects proposing alternative compliance shall  
19                  receive written approval of the alternative compliance from the Director.
- 20                  **5.     Criteria**  
21                  To grant a request for alternative compliance, the decision-making body shall  
22                  find that the following criteria are met:
- 23                  **a.     The proposed alternative achieves the intent of the subject design**  
24                  **standard to the same or better degree than the subject standard.**
- 25                  **b.     The proposed alternative achieves the goals and policies of**  
26                  **Anchorage 2020 to the same or better degree than the subject**  
27                  **standard.**
- 28                  **c.     The proposed alternative results in benefits to the community that are**  
29                  **equivalent to or better than compliance with the subject design**  
30                  **standard.**
- 31                  **6.     Effect of Approval**  
32                  Alternative compliance shall apply only to the specific site for which it is  
33                  requested and does not establish a precedent for assured approval of other  
34                  requests.

35   **21.07.020 NATURAL RESOURCE PROTECTION**

36                   **A.     Purpose**

37                   The Municipality contains many natural amenities, including stream corridors, river  
38                   corridors, natural drainages, wildlife habitat areas, water bodies, wetlands, significant  
39                   viewsheds, and hillsides, as well as significant amounts of native forest, tree cover,  
40                   and open space, all of which contribute to the Municipality's character, quality of life,

1 and property values. The regulations of this section are intended to ensure that the  
2 natural character of the Municipality is reflected in patterns of development and  
3 redevelopment, and significant natural features are incorporated into open space  
4 areas.

5 **B. Stream, Water Body, and Wetland Protection<sup>2</sup>**

6 **1. Purpose**

7 The following requirements are intended to promote, preserve, and enhance  
8 the important hydrologic, biological, ecological, aesthetic, recreational, and  
9 educational functions provided by stream and river corridors, associated  
10 riparian areas, water bodies, and wetlands.

11 **2. Applicability**

12 This subsection 21.02.020.B. shall apply to all new development, except for  
13 the following development or activities:

- 14 a. Agricultural activities, such as soil preparation, irrigation, planting,  
15 harvesting, grazing, and farm ponds;
- 16 b. Development on lots of record that were approved for single-family  
17 residential use prior to the effective date of this Title;
- 18 c. Maintenance and repair of existing public roads, utilities, and other  
19 public facilities within an existing right-of-way or easement;
- 20 d. Maintenance and repair of flood control structures and activities in  
21 response to a flood emergency; and
- 22 e. Wetland and wildlife habitat restoration, construction, and/or  
23 enhancement that improves or restores the wetland or stream corridor  
24 functions, provided that the proposed activity is approved by the  
25 appropriate agency such as the U.S. Army Corps of Engineers or the  
26 Alaska Department of Fish and Game.

27 **3. Relationship to Other Regulations**

- 28 a. This subsection 21.02.020.B. does not repeal or supersede any  
29 existing federal, state, or local laws, easements, covenants, or deed  
30 restrictions. When this section imposes a higher or more restrictive  
31 standard than found in another applicable ordinance, statute, or  
32 regulation, this section shall apply.
- 33 b. No person shall engage in any activity that will disturb, remove, drain,  
34 fill, dredge, clear, destroy, or alter any area, including vegetation,  
35 within a wetland that falls in the jurisdiction of the federal government  
36 and its agencies, except as may be expressly allowed under federal  
37 laws or regulations.

---

<sup>2</sup> NOTE: This section is based loosely on the existing Section 21.45.210, *Stream protection setback*. However, we have made major changes, including: a new purpose statement; a new applicability statement; consolidation of standards for wetlands and streams; and increases in the setback requirement from 25 to 50 feet.

- 1 c. The decision-making body shall not grant final approval to any  
2 development or activity, including subdivisions, in a wetland that falls  
3 within the federal government's jurisdiction until all necessary federal  
4 approvals and permits have been obtained.

5 4. **Buffer/Setback Requirements**

6 a. ***Streams or River Corridors***<sup>3</sup>

- 7 i. In the R-10 district, all buildings, accessory structures, and  
8 parking lots shall be set back at least 100 feet horizontally  
9 from the ordinary high-water mark of stream or river corridors  
10 or, if not readily discernible, from the defined bank of the  
11 stream or river. No disturbance is permitted in the 100-foot  
12 setback area.

- 13 ii. In the R-5, R-6, R-9, I-1, and I-2 zoning districts, all buildings,  
14 accessory structures, and parking lots shall be set back at  
15 least 50 feet horizontally from the ordinary high-water mark of  
16 stream or river corridors or, if not readily discernible, from the  
17 defined bank of the stream or river. No disturbance is  
18 permitted in the 50-foot setback area.

- 19 iii. For all zoning districts not listed in subsections i. and ii.  
20 above, all buildings, accessory structures, and parking lots  
21 shall be set back at least 25 feet horizontally from the high-  
22 water mark of stream or river corridors or, if not readily  
23 discernible, from the defined bank of the stream or river. No  
24 disturbance is permitted in the 25 foot setback area.

- 25 iv. Segments of streams or tributaries that are contained in  
26 culverts for a contiguous length of 100 feet or more are not  
27 regulated by this section.

- 28 v. For parcels where there are wetlands contiguous with a  
29 stream, setback requirements are listed in Table 2 of the  
30 Anchorage Wetlands Management Plan.

31 b. ***Wetlands***

- 32 i. To the maximum extent feasible, class A and B wetlands, as  
33 defined and delineated in the Anchorage Wetlands  
34 Management Plan, shall not be included as part of a platted  
35 development lot.

- 36 ii. All buildings, accessory structures, fills and other storage of  
37 materials, and parking lots shall be set back at least 10 feet  
38 horizontally from the delineated edge of a wetland unless  
39 approved by a U.S. Corps of Engineers wetlands permit.

---

<sup>3</sup> NOTE: Per discussions with staff, we have suggested a new citywide setback requirement of 50 feet, with the current 25 feet standard still applicable in some places (more urban areas). The existing 100-foot setback requirement in the R-10 district is retained.

- 1  
2  
3  
4
- c. **Water Bodies**  
In all districts, all buildings, accessory structures, and parking lots shall be set back at least 15 feet horizontally from the edge of water bodies. No disturbance is permitted in the 15-foot setback area.
- 5  
6  
7  
8  
9  
10
- d. **Credit for Other Requirements of this Title**  
Stream corridor, water body, and wetland setback areas shall be credited toward any relevant tree retention requirements, private open space requirements, or landscaping requirements, only if such setback areas serve the purposes of those requirements as set forth in this Title.
- 11
5. **Boundary Delineation**
- 12
- a. **Qualified Professional**  
13  
14  
15  
16  
17  
18  
19  
20  
In cases where stream channels, water bodies, or wetlands are not mapped and recorded in official plans or other documents, including the Anchorage Wetlands Management Plan, maintained by the Municipality, delineation of such features shall be performed by a qualified professional that has demonstrated experience necessary to conduct site analysis. Delineations shall be subject to the Director's approval. For purposes of this section, a "qualified professional" shall be ---.<sup>4</sup>
- 21
- b. **Stream and River Corridor Boundaries**  
22  
23  
24  
25  
26  
Stream and river corridors shall be delineated at the ordinary high-water mark or, if not readily discernible, the defined bank of the stream or river, as those terms are defined in Chapter 21.13. The municipal Watershed Management Section shall maintain the official record of all stream and river corridor boundaries.
- 27
- c. **Wetland Boundaries**
- 28
- i. **Mapped Wetlands**  
29  
30  
31  
32  
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34  
Boundary delineation of wetlands shall be established by reference to the Anchorage Wetlands Management Plan, which is available for reference in the municipal Planning Department and which is hereby adopted and incorporated into this Title by reference. Plats shall depict class A and B wetland boundaries.
- 35
- ii. **Unmapped Wetlands**  
36  
37  
38  
39  
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41  
42  
43  
The review of a development proposal may discover a potential wetland that has not been mapped or for which the boundaries have not been clearly established. In such instances, the applicant shall retain a qualified wetland expert to delineate the boundaries of the wetland according to professional standards. Any new wetland boundaries delineated herein shall be approved by the U.S. Corps of Engineers.

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<sup>4</sup> NOTE: Further discussion needed on definition of "qualified professional" for purposes of this section.



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3  
4  
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8
6. **Development Standards<sup>5</sup>**
- a. ***Prohibited Activities***
- i. No person shall engage in any activity that will disturb, remove, fill, drain, dredge, clear, destroy, or alter an area, including vegetation, within stream or river corridors, pond or lake edges, wetlands, or their associated buffer/setback areas, except as may be expressly allowed in this section or Title.
- 9  
10  
11  
12  
13  
14
- ii. Channel alteration, including culvertization other than for roadway and driveway crossings, is prohibited unless a variance is obtained under the provisions of Section 21.03.200, a flood hazard permit is obtained as per Section 21.03.100, and relevant state and federal permits are obtained.
- 15  
16  
17
- iii. No storage or processing of hazardous materials or other substances that would constitute a violation of Chapter 15.40 is permitted.
- 18  
19  
20  
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30
- b. ***Utilities***
- Utilities, including potable water wells, may be allowed in a buffer/setback area only if the decision-making body determines that there is no practical alternative. Any disturbance of the buffer area shall be reclaimed by regrading to original contours and revegetation with native species. Provisions for reclamation of the disturbed area shall be included in any development or improvements agreement for the project, with adequate collateral to guarantee the reclamation will be completed. Utility corridors in buffer/setback areas shall be located at the outside edge of the area and access roads for maintenance of utilities shall be located outside the buffer/setback area. Access for maintenance of utilities in buffer/setback areas should be at specific points rather than parallel to the utility corridor.
- 31  
32  
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40
- c. ***Recreation, Education, or Scientific Activities***
- Structures and improvements for recreational, educational, or scientific activities such as trails, fishing access, and wildlife management and viewing may be permitted in a buffer/setback area provided a management plan that establishes long-term protection and maintenance of the buffer/setback area is submitted to and approved. Such plans shall address, at a minimum, a schedule for regular evaluation of the impacts of allowed activities on the buffer/setback area, the proposed treatment of dead or diseased trees, and the extent to which pruning or thinning will be allowed.
- 41  
42  
43  
44  
45
7. **Preservation of Vegetation**
- All existing vegetation within the stream/river corridor, lake or pond edge, or wetland buffer/setback area shall be preserved, and where necessary to provide adequate screening or to repair damaged riparian areas, supplemented with additional native planting and landscaping. The removal

<sup>5</sup> NOTE: The current code splits the stream buffer area into a 15-foot section and a 10-foot section, and specifies allowed uses in each. This suggested new section takes a simpler approach and provides uniform standards for the entire buffer.

1 of dead or naturally fallen trees or vegetation, or trees or vegetation that the  
2 Municipality finds to be a threat to the public health, safety, or welfare shall be  
3 exempt from this requirement.

4 **8. Wetland Mitigation Requirements**

5 When a wetland or its buffer is altered in violation of law or without specific  
6 permission or approval by the decision-making body, the Director shall require  
7 restoration to the previous condition, to the maximum extent feasible,  
8 according to an approved wetland mitigation plan.

9 **9. Structures and Uses Otherwise Prohibited**

10 This section does not permit any structure, or any use of land or a structure,  
11 otherwise prohibited by this Title.

12 **10. Implementation of Anchorage Wetlands Management Plan<sup>6</sup>**

13 **a. Municipal Programs**

14 The following municipal programs and activities shall be undertaken  
15 in conformity with the Anchorage Wetlands Management Plan:

16 i. Municipal capital facility programming as expressed in the  
17 capital improvement plan.

18 ii. Municipal management and disposal of the state lands  
19 selected under AS 29.18.210--29.18.213.

20 **b. Municipal Zoning and Platting Actions**

21 Municipal zoning and platting actions taken under this Title shall be  
22 consistent with the Anchorage Wetlands Management Plan.

23 **i. "A" Wetlands**

24 Wetlands designated "A" in the Anchorage Wetlands  
25 Management Plan and in Table 2<sup>7</sup> shall be protected as  
26 indicated in that table and in Chapter 4 of the Anchorage  
27 Wetlands Management Plan.

28 **ii. "B" Wetlands**

29 New development plans in "B" wetlands shall obtain a COE  
30 permit; concurrent with or prior to necessary approval by  
31 platting board and or PZC. In order to maximize protection of  
32 wetlands designated "B," in addition to the criteria normally  
33 considered in subdivision and conditional use applications,  
34 the Platting Authority or the Planning and Zoning Commission  
35 must, prior to approval, make explicit findings that, or the  
36 applicant must certify with their Corps of Engineers permit  
37 that:

---

<sup>6</sup> NOTE: This is the current Section 21.05.115. We have made no substantive changes yet, though have reorganized the material and added new subheadings. Is this section necessary? We are not sure of its value, given the new uniform wetlands standards we suggest in the previous section. This section appears to make wetlands protection applicable only to public actions by the Municipality -- correct? The new "Stream and Wetlands Protection" section we drafted above is applicable to both public and private actions. Do the A, B, and C designations used here need to be maintained in the code? (Also, we have removed here the provision dealing with the existing reserve tract provisions in the current Section 21.80.100, since we received instructions to remove the reserve tract concept entirely from the new subdivision chapter.)

<sup>7</sup> NOTE: Where is this table? If it's in the plan, should it be carried forward into the code?

- 1 (A) The proposed design and placement of roadways,  
 2 utility lines, and structures will not interfere with the  
 3 natural drainage function indicated in the required  
 4 hydrologic studies or that such interference can be  
 5 adequately mitigated to maintain the natural drainage  
 6 function.
- 7 (B) The soils in the area proposed for development shall  
 8 adequately support roadways and structures, or that  
 9 properly designed roads and foundations will be  
 10 provided.
- 11 (C) Habitat areas identified in the required habitat studies  
 12 or in other municipal documents shall be adequately  
 13 protected.
- 14 Maintenance of open space in its natural state shall be  
 15 required where the Platting Authority or the Planning and  
 16 Zoning Commission determines that such maintenance is  
 17 necessary to protect the hydrologic and habitat values of  
 18 wetlands on the property being developed or on adjacent  
 19 property. Areas where open space is to be preserved in its  
 20 natural state shall be indicated on the plat or approved site  
 21 plan. The Platting Authority and Planning and Zoning  
 22 Commission may require such land development techniques  
 23 and such additional conditions as may be appropriate to carry  
 24 out the intent of the wetlands plan, taking into consideration  
 25 information required by subsections 21.15.110.C or  
 26 21.15.030.C.3 and such other wetlands studies as may be  
 27 relevant.
- 28 iii. *"C" Wetlands*  
 29 When approving plats or conditional use permits in wetlands  
 30 designated "C" under the plan, the Platting Authority or the  
 31 Planning and Zoning Commission shall, whenever  
 32 practicable, include the recommended construction mitigation  
 33 techniques and conditions and enforceable policies in Table  
 34 2.
- 35 c. ***Application of Plan to Approved Projects***  
 36 Conditional uses and preliminary plats approved prior to March 12,  
 37 1996, the date of adoption of the revised Anchorage Wetlands  
 38 Management Plan, shall not have additional conditions imposed upon  
 39 them as a result of requirements of the plan except as follows:
- 40 i. The "A" designation shall apply regardless of prior approvals.
- 41 ii. Approved plats or conditional uses in wetlands that are  
 42 returned to the Platting Authority or Planning and Zoning  
 43 Commission for major amendment may be examined for  
 44 conformity with plan goals and enforceable policies.
- 45 iii. A new Corps of Engineers permit is required.

1           **C.     Steep Slope Development<sup>8</sup>**

2                   **1.     Purpose**

3                   The purpose of these provisions is to:

- 4                   **a.**     Prevent soil erosion and landslides;
- 5                   **b.**     Provide safe circulation of vehicular and pedestrian traffic to and  
6                   within hillside areas and to provide access for emergency vehicles  
7                   necessary to serve the hillside areas.
- 8                   **c.**     Encourage only minimal grading that relates to the natural contour of  
9                   the land;
- 10                  **d.**     Preserve the most visually significant slope banks and ridge lines in  
11                  their natural state;
- 12                  **e.**     Preserve visually significant rock outcroppings, native plant materials,  
13                  natural hydrology, and other areas of visual significance;
- 14                  **f.**     Encourage variety in building types, grading techniques, lot sizes, site  
15                  design, density, arrangement, and spacing of buildings in  
16                  developments;
- 17                  **g.**     Encourage innovative architectural, landscaping, circulation, and site  
18                  design; and
- 19                  **h.**     Discourage mass grading of large pads and excessive terracing.

20                  **2.     Applicability<sup>9</sup>**

21                  This subsection 21.07.020.C. shall apply to any development or subdivision  
22                  proposal within the Municipality for properties with an average slope of 20  
23                  percent or greater, or where adverse conditions associated with slope  
24                  stability, erosion, or sedimentation are present as determined by the  
25                  Municipality.

---

<sup>8</sup> NOTE: This new section is intended to replace the existing Sections 21.80.360 (Hillside lots) and 21.80.370 (R-10 District). The existing standards are fairly vague and general.

<sup>9</sup> NOTE: This section suggests a common approach that has worked in many other communities with steep slopes, such as Reno; Estes Park, Colorado; Salt Lake County, Utah, etc. For Anchorage, a threshold figure of 20 percent is proposed for discussion purposes. Development is limited on steep slopes over 20 percent and banned on slopes of 30 percent or more. The approach in this draft is a more moderate one; other communities ban development on slopes of 20 percent or more, or limit density on slopes of 20 percent or more.

3. **Standards<sup>10</sup>**

All proposed development subject to this section shall comply with the following standards.

- a. One hundred percent of areas with slopes greater than 30 percent shall remain in private or public open space, except as expressly allowed by this Title.
- b. Cutting and grading to create benches or pads for buildings or structures shall be avoided to the maximum extent feasible.
- c. The original, natural grade of a lot shall not be raised or lowered more than four feet at any point for construction of any structure or improvement, except:
  - i. The site's original grade may be raised or lowered a maximum of six feet if retaining walls are used to reduce the steepness of man-made slopes, provided that the retaining walls comply with the requirements set forth in this section.
  - ii. As necessary to construct a driveway from the street to a garage or parking area, grade changes or retaining walls up to six feet may be allowed.
  - iii. For the purposes of this subsection 21.07.020.C.3.c., buildings set into a slope are not considered to lower the natural grade within their footprint.
  - iv. For the purposes of this subsection 21.07.020.C.3.c., basements are not considered to lower the natural grade within their footprint.
- d. Sharp angles shall be rounded off, in a natural manner, at the top and ends of cut and fill slopes (within approximately five feet of the sharp angle). Where this would damage tree root systems, the amount of

<sup>10</sup> NOTE: The following voluntary guidelines are proposed to supplement the mandatory code standards. We recommend placing all guidelines in a separate user's guide rather than in the code itself. "The following guidelines should be followed by all proposed development on sites where the average slope of the site exceeds 20 percent. Compliance with such guidelines may be considered in development review, but failure to comply with guidelines shall not be independent grounds for denial of development approval.

- a. Orient roads and building sites to minimize grading.
- b. Orientation of buildings should consider views from the site as well as the aesthetic impact of views of the site from surrounding properties.
- c. Hilltops, if graded, should be rounded to blend with natural slopes rather than leveled.
- d. Slopes providing a transition from graded areas into natural areas should be varied in percent grade both up-slope and across the slope, in the undulating pattern of surrounding natural slopes; so that the top or the toe (or both) of the cut or fill slope will vary from a straight line in plan view.
- e. Parking areas should be constructed on multiple levels and follow natural contours as necessary to minimize cut and fill.
- f. Roads should follow natural topography to the extent feasible, to minimize cut and fill. Necessary grading should be constant half-cut and half-fill along the length of the road (versus all cut or all fill at points) unless other arrangements would result in less severe alteration of natural terrain.
- g. Repetitive padding or terracing of a series of lots (stair-stepping up a slope) is discouraged. Creation of a single large pad or terrace (especially creating a single pad or terrace of an entire lot) should be an exception to typical design, to deal with circumstances that cannot be managed with other techniques. Typical design should utilize full split pads (separate level for a down-slope lower story), a split foundation (adapting a single story to a slope), setting the building into a cut in the hillside, or a combination of techniques."

- 1 rounding off may be reduced and shrubs used instead to hide the  
2 transition.
- 3 e. Except for driveways, cut and fill slopes shall be entirely contained  
4 within a lot (i.e., natural grade at the lot lines shall be maintained).
- 5 f. Retaining walls may be used to minimize cut and fill. Generally, a  
6 retaining wall shall be no higher than four feet, except that a wall  
7 varied in height to accommodate a variable slope shall have an  
8 average height no greater than four feet and a maximum height no  
9 greater than eight feet in any 100-foot length. A higher wall is  
10 permitted:
- 11 i. Where used internally at the split between one- and two-story  
12 portions of a building; and
- 13 ii. Where substantially hidden from public view at the rear of a  
14 building, where it may not exceed the eave height of the  
15 building.
- 16 g. A retaining wall shall not be stepped in height but shall be sloped  
17 from one height to another to match the terrain behind it.
- 18 h. Streets, roads, private access roads, and other vehicular routes shall  
19 not be allowed to cross slopes between 30 and 50 percent, except  
20 that a short run of no more than 100 feet or 10 percent of the  
21 road/street's entire length, whichever is less, may be allowed by the  
22 decision-maker upon finding that:
- 23 i. In no case shall any short run that crosses slopes between 30  
24 percent and 50 percent exceed 100 feet in length; and
- 25 ii. Such street or road will not have significant adverse safety,  
26 environmental, or visual impacts, or appropriate engineering  
27 or other measures will be taken by the developer to  
28 substantially mitigate any such adverse impact; and
- 29 iii. No alternate location for access is feasible or available.
- 30 i. No street, road, private access road, or other vehicular route shall  
31 cross slopes greater than 50 percent.
- 32 j. Streets, roads, private access roads, and other vehicular routes shall  
33 to the maximum extent feasible follow natural contour lines. See  
34 Figures 1 and 2 below.<sup>11</sup>

<sup>11</sup> NOTE: Draft illustrations are provided from another community. If this standard is retained, the illustrations will be updated in a style consistent with all new Anchorage Title 21 illustrations.

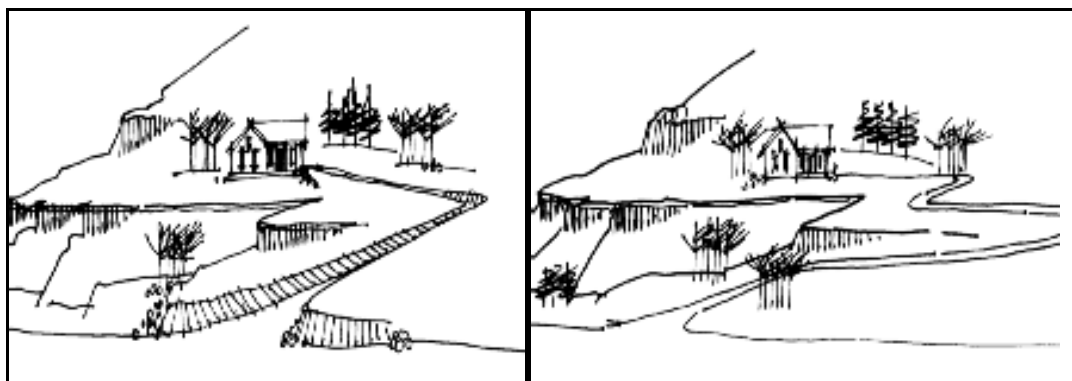


Figure 1. No.

Figure 2. Yes.

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- k. Grading for streets, roads, private access roads, and other vehicular routes shall be limited to the cartway portion of the right-of-way, plus up to an additional ten feet on either side of the cartway as needed, except that when developing access on slopes in excess of 25 percent, only the cartway right-of-way shall be graded plus the minimum area required for any necessary curb, gutter, or sidewalk improvements. The remainder of the access right-of-way shall be left undisturbed to the maximum extent feasible.
- l. Site design shall not change natural drainage patterns.
  - i. All final grading and drainage shall comply with Title 23 and the Municipality's Erosion-Sediment Control Handbook.
  - ii. To the maximum extent feasible, development shall preserve the natural surface drainage pattern unique to each site as a result of topography and vegetation. Grading shall ensure that drainage flows away from all structures, especially structures that are cut into hillsides. Natural drainage patterns may be modified on site only if the applicant shows that there will be no significant adverse environmental impacts on site or on adjacent properties. If natural drainage patterns are modified, appropriate stabilization techniques shall be employed.
  - iii. Development shall mitigate all negative or adverse drainage impacts on adjacent and surrounding sites.
  - iv. Standard erosion control methods shall be used during construction to protect water quality, control drainage, and reduce soil erosion. Sediment traps, small dams, or barriers of straw bales shall be located wherever there are grade changes to slow the velocity of runoff.

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**D. Avalanche Areas<sup>12</sup>****1. Purpose**

The purpose of this section is to prohibit or limit development within hazardous areas subject to avalanches.

**2. Applicability**

This subsection 21.07.020.D. shall apply to all development within the Municipality.

**3. High Hazard Avalanche Zones<sup>13</sup>**

Development is prohibited within High Hazard Avalanche Zones. In the event that there is no high hazard-free area on a site and a development application is subsequently denied, an applicant may appeal the denial to the Assembly. If an appeal of a project denial is granted by the Assembly, then the development application shall incorporate hazard mitigation according to the standards in 21.07.020.D.5. below.

**4. Moderate Hazard Avalanche Zone**

Development within a Moderate Hazard Avalanche Zone may only be permitted under the following circumstances:

a. If an entire property is located within the Moderate Hazard Avalanche Zone, development may be permitted only if the hazard can be adequately mitigated to ensure public safety pursuant to the standards in subsection 21.07.020.D.5.

b. In the event that development outside of the Moderate Hazard Avalanche Zone will result in significant environmental degradation, the Assembly may, in its discretion, approve such development with adequate mitigation measures to assure the safety of the occupants of the property.

**5. Mitigation Standards**

a. Development shall be restricted to the least hazardous area of a project site.

b. If structural avalanche defenses are required to protect people or structures, they shall be designed by a certified engineer to withstand avalanche impact forces.

c. Clear-cutting or other large-scale removal of vegetation, particularly within avalanche path starting zones, shall be prohibited.

d. Extractive operations are prohibited within avalanche hazard zones during the winter unless there is an approved program of avalanche control and defense measures.

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<sup>12</sup> NOTE: Proposed new section. Staff has not yet had a chance to review this draft section.

<sup>13</sup> NOTE: The terms "High Hazard Avalanche Zone" and "Moderate Hazard Avalanche Zone" will need to be coordinated with terminology already in use by the Municipality. We understand extensive mapping already has been done of avalanche zones in Anchorage, but these terms are new.



- 1 e. Utility lines or pipes crossing hazard zones shall be buried. Surface  
2 pipes, poles or towers for suspended transmission lines in hazard  
3 zones shall be protected by utilizing avalanche diversion methods or  
4 protection structures.
- 5 f. Roads intended for winter use shall avoid avalanche hazard areas. If  
6 the Director finds that it is not possible to construct a road that avoids  
7 high or moderate avalanche hazard areas, then the Director may  
8 approve a road subject to site-specific mitigation methods. Roads  
9 which must cross hazardous areas shall be designed to limit  
10 exposure and utilize avalanche control practices to reduce the danger  
11 along exposed road segments. Where the main access road to a  
12 proposed development is crossed by an avalanche path, a secondary  
13 access may be required.
- 14 g. Warning signs shall be placed along commonly traveled winter roads  
15 and trails which cross avalanche hazard zones.
- 16 h. Property owners who develop in avalanche areas or obtain driveway  
17 access through avalanche areas shall bear the costs of any  
18 avalanche control measures that may be required to mitigate the  
19 hazard.

20 **E. Wildlife Habitat Protection<sup>14</sup>**

- 21 **1. Intent and Purpose**  
22 Many areas within the Municipality provide important and critical wildlife  
23 habitat for a wide variety of animal and bird species. As a result of  
24 development activities, many habitat areas have been significantly impaired,  
25 altered, fragmented, and in some cases destroyed. In combination with the  
26 tree retention standards and stream corridor, water body, and wetlands  
27 protection standards set forth above, the following requirements have been  
28 developed to promote, preserve, and retain valuable wildlife habitats and to  
29 protect them from adverse effects and potentially irreversible impacts.  
30 Maintaining habitats also minimizes wildlife and human conflicts.
- 31 **2. Applicability**  
32 The requirements of this subsection 21.07.020.E. shall apply to development  
33 within the Municipality that contains wildlife habitats designated as "critical  
34 habitat," as shown on the Anchorage Coastal Resource Atlas, as amended.
- 35 **3. Development Limitations in Areas of Critical Habitat**  
36 All development subject to this section shall, to the maximum extent feasible,  
37 incorporate the following principles in siting buildings, structures, roads, trails,  
38 utilities, and other similar facilities:
- 39 a. Maintain buffers between areas dominated by human activities and  
40 core areas of wildlife habitat, with more intense human activities, such

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<sup>14</sup> NOTE: This is a set of new, relatively simple performance standards to ensure that the presence of wildlife habitat is considered as part of the development review process. Many additional tools may be available outside the zoning ordinance to protect all types of sensitive environmental features, such as wildlife habitat. For example, allowing tax incentives for conservation easements often is a useful strategy to complement land-use regulations.

- 1 as automobile and pedestrian traffic, relegated to more distant zones  
2 away from the core habitat areas.<sup>15</sup>
- 3 **b.** Provide for wildlife movement across areas dominated by human  
4 activities by:
- 5 **i.** Maintaining natural vegetation connectivity between open  
6 space parcels on adjacent and nearby parcels;
- 7 **ii.** Locating roads and recreational trails away from natural travel  
8 corridors used by wildlife such as riparian areas;
- 9 **iii.** Minimizing fencing types and placement that inhibit the  
10 movement of wildlife species; and
- 11 **iv.** Minimizing the visual contrast between human-dominated  
12 areas, including individual lots, and less disturbed terrain in  
13 surrounding areas (e.g., by retaining or planting native  
14 vegetation and trees around a house or accessory structure).
- 15 **c.** Mimic features of the local natural landscape in developed areas by:
- 16 **i.** Retaining as much pre-development habitat as possible,  
17 including large areas of high plant diversity and natural  
18 vegetated areas that have not yet been fragmented by roads  
19 or residential development;
- 20 **ii.** Minimizing disturbance to trees, the understory, and other  
21 natural landscape features during construction;
- 22 **iii.** Designing house lots in a fashion consistent with local natural  
23 habitats, for example, by preserving and landscaping with  
24 natural, native vegetation; and
- 25 **iv.** Enhancing the habitat value of degraded pre-development  
26 landscapes with selective plantings.
- 27 **4. Referral Requirements and Planning Commission's Action**
- 28 **a.** Development applications and site plans subject to this subsection  
29 shall be referred to the Alaska Department of Fish and Game,  
30 Division of Wildlife, and to the U.S Fish and Wildlife Service for  
31 review, comment, and recommendations. The Alaska Department of  
32 Fish and Game, Division of Wildlife, and U.S. Fish and Wildlife  
33 Service's comments and recommendations shall be incorporated into  
34 the staff report or in some other manner transmitted in writing to the

<sup>15</sup> NOTE: *Core wildlife habitat areas* typically include habitat for threatened or endangered species, species that are particularly sensitive to human activity, habitat that is regionally unique, and areas that support large numbers of native species. Consideration should also be given to habitat that is rare locally or may have educational value, such as wetlands, riparian areas, large meadows, or woodlots. A *spatial buffer* would prohibit any human activities within the core area, especially roads and motorized traffic and ideally non-motorized traffic and hikers. A *visual buffer* might take the form of a row of trees or shrubs along a road or hiking trail. A *temporal buffer* involves the limitation or exclusion of human activity in or near sensitive areas during critical times of the year, such as the nesting period in birds, or the immediate post-natal period in mammals.

- 1 Director (for minor developments) or to the approving authority prior  
2 to final action.
- 3 **b.** The approving authority shall give special consideration to wildlife  
4 habitats that are determined by the Alaska Department of Fish and  
5 Game, Division of Wildlife, and the U.S. Fish and Wildlife Service in  
6 its review to be of critical value, and may require project modifications  
7 or special conditions recommended to mitigate impacts on critical  
8 wildlife habitat.
- 9 **c.** The approving authority may deny a development proposal if it finds  
10 that the proposed development will have significant adverse impacts  
11 on critical wildlife habitat that cannot be adequately mitigated.
- 12 **d.** If the Director finds that a development application subject to his or  
13 her approval may have significant adverse impacts on critical wildlife  
14 habitat that cannot be adequately mitigated, the Director shall refer  
15 the application to the Planning Commission for final action.
- 16 **e.** For purposes of this subsection, “significant adverse impact on critical  
17 wildlife habitat” means elimination, reduction, and/or fragmentation of  
18 wildlife habitat to the point that viability of a local population of an  
19 individual species is threatened in the Municipality and the diversity of  
20 wildlife species occurring in the Municipality is reduced.

21 **F. Wildfire Hazard Areas<sup>16</sup>**

22 All development located within the Urban-Wildland Overlay Zone (see Section 21.04.---  
23 -), shall comply with the standards and requirements of the Urban-Wildland Interface  
24 Code, which is set forth in Chapter --- of the Anchorage Municipal Code.

25 **G. Tree Retention<sup>17</sup>**

26 **1. Purpose**

27 In addition to enhancing the image of the Municipality and protecting property  
28 values, tree retention provides numerous environmental benefits, including  
29 soil retention, erosion control, anadromous fish habitat protection, absorption  
30 of carbon dioxide, production of oxygen, air and water quality improvement,  
31 sheltering from wind and rain, particulate settling and dust control, noise  
32 buffering, glare reduction, and visual buffering of development. Retention of  
33 existing trees is especially important in Anchorage’s northern climate because

<sup>16</sup> NOTE: As discussed with staff in January 2004, the Anchorage Fire Department has prepared a Draft Urban-Wildland Interface Code. It was prepared in 2001 but still is considered current. Because the draft ordinance is quite detailed and covers issues outside the scope of Title 21 (such as building construction requirements), the agreed-upon approach is to work with the Municipal Attorney to adopt the Urban-Wildland ordinance in a separate part of the Anchorage Municipal Code, and to simply reference it here in Title 21.

<sup>17</sup> NOTE: This section takes a simplified approach to tree protection that has worked elsewhere – a percent canopy retention requirement that is easy to determine from readily available aerial photos. This section and Section 21.07.030 (*Landscaping, Buffering, Screening, and Fences*) cover related issues and should be read together. In general, applicants should read Section 21.07.020 first to answer the question “How much of my parcel must I leave undeveloped to protect existing trees?” Areas that are left undeveloped for tree protection may remain private property and do not need to be made open to the public. After determining which areas of the lot must be kept undeveloped for this purpose, the applicant should read Sec. 21.07.030, *Landscaping, Buffering, and Screening*, to answer the question “What areas do I need to landscape, either to enhance the appearance of the property, or to screen views of certain areas of the property, to provide a buffer from adjacent land uses?” Tree retention areas also can be used to meet other requirements such as open space, landscaping, etc.

1 it takes longer for trees to grow to maturity. By specifying the quantity and  
2 location of trees that shall be maintained on development sites and lots, the  
3 provisions of this subsection 21.07.020.G. are intended to promote and  
4 protect these benefits, as well as implement the Comprehensive Plan and  
5 comply with state and federal water quality regulations. The provisions of this  
6 section enhance property values and protect the health, safety, and welfare of  
7 all persons living or working within the Municipality.

8 **2. Applicability**

9 **a. General Requirement<sup>18</sup>**

10 As a part of the development review and approval process, all  
11 development in the Municipality, except those areas and activities  
12 listed in subsection b. below, shall be required to prepare a tree  
13 retention plan that identifies a percentage of existing trees to be  
14 retained, per Table 21.07-1 of this section. The plan may be  
15 combined with the landscaping plan required in 21.07.080,  
16 *Landscaping, Screening, and Fences*, and shall contain sufficient  
17 detail to enable the Municipality to verify compliance with this  
18 subsection 21.07.020.G. The tree retention area requirements shall  
19 apply to all new development and redevelopment on lots that do not  
20 already have, or are not part of a tree retention plan, but do not apply  
21 to existing development. In new residential development, the tree  
22 retention requirements shall be applied to the development as a  
23 whole at the time of subdivision plat review and approval, not to each  
24 individual lot.

25 **b. Exceptions**

26 The tree retention requirements shall not apply to the following areas  
27 or activities:

- 28 i. Property already occupied by a single-family detached,  
29 single-family attached, duplex, or townhouse dwelling, unless  
30 nonresidential uses are proposed for such property, except  
31 that any construction, paving, or other activity on the property  
32 that may damage trees on the public right-of-way is subject to  
33 the restrictions of subsection 21.07.020.G.6.c., *Protection of*  
34 *Tree Retention Areas During Construction*.
- 35 ii. Tracts of land for which this Title imposes no yard  
36 requirements and permits 100 percent coverage of the lot by  
37 buildings.
- 38 iii. Where utility easements cross tree retention areas, public  
39 utility companies and government agencies conducting  
40 operations for the purpose of assuring uninterrupted utility  
41 and governmental services and unobstructed passage on  
42 public streets.
- 43 iv. Property in use for tree farming or other agricultural activities  
44 (as defined in Chapter 21.13), provided the best management

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<sup>18</sup> NOTE: As drafted, tree retention requirements do NOT apply to existing single-family lots.

practices established by the Alaska Department of Natural Resources are observed.

- v. Public rights-of-way.
- vi. The removal of dead, diseased, or naturally fallen trees or vegetation, or trees or vegetation that the Director finds to be a threat to the public health, safety, or welfare.

**3. Relationship to Landscaping and Screening**

The tree retention requirements of this subsection 21.07.020.G. shall generally be in addition to the requirements in Section 21.07.080, *Landscaping, Screening, and Fences*, except that if an area designated for tree retention is located in an area where landscaping is required by Section 21.07.080, and preservation of existing trees would serve the same purpose as required landscaping (for example, where tree preservation near the primary building would serve to break up its visual mass to the same degree that foundation plantings would do so), then additional landscaping shall not be required in such areas.

**4. Minimum Retention Areas<sup>19</sup>**

All activities subject to this section shall preserve at least the minimum amounts of tree retention area shown in Table 21.07-1.

TABLE 21.07-1: MINIMUM REQUIRED TREE RETENTION	
Zoning Districts	Minimum Required Tree Retention (% of existing tree canopy)
R-5, R-6, R-9, R-10	40%
R-1, R-2	30%
R-3, R-4, RMX	30%
C-2A, C-2B, C-2C, GC, NMU, CCMU, RCMU	15%
PLI	15%
I-1, 1-2	10%

**5. Location of Required Tree Retention Areas**

**a. Tree Retention Areas**

Priority areas for preservation of existing trees are listed below, in order of priority. All tree retention plans should preserve existing trees in the highest priority category possible. During the development review and approval process, the Municipality may suggest or incorporate modifications that would enable existing trees in higher-priority areas to be preserved, based on identification of trees and other natural resources in the Anchorage Coastal Zone Management Plan, the Anchorage Wetlands Management Plan, the Anchorage Parks Plan, or other adopted maps and plans.

<sup>19</sup> NOTE: The left-hand column could be structured by general type (as is shown) or by zone district name. If a "rural" designation is kept, we need direction on which areas are considered rural.

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- i. ***Priority 1: Sensitive Environmental Areas and Features***  
Sensitive environmental areas and features, including areas with large numbers of mature trees, areas containing multiple signature trees, areas with locally rare or unusual species, wetland areas, stream corridors, the margins of existing lakes or ponds, natural drainages, wildlife habitat areas, steep slopes, or geological hazard areas.
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- ii. ***Priority 2: Buffering and Screening Areas***  
Areas where perimeter landscaping or buffering is required pursuant to Section 21.07.080, *Landscaping, Screening, and Fences*, and where there are stands of existing trees on the adjacent property. In Class B districts, this category shall also include street frontage areas that do not contain access driveways.
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- iii. ***Priority 3: Other Areas***  
Other areas.
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- b. ***Utility Easements***  
Tree retention areas shall not be co-located with utility easements.
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- c. ***Visibility Clearance***  
No existing trees shall be required to be protected in a location that would interfere with protected intersection or driveway visibility clearance areas as defined in subsection 21.06.020.B.2.j., *Sight Distance Triangles*.
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- d. ***Final Approval of Designated Areas***  
The location of all required tree retention areas shall be subject to negotiation with the Director during the development review and approval process. In the event the applicant and Director cannot agree on the location of required tree retention areas, and the applicant chooses to continue with the development review and approval process, the Director shall issue a recommendation that the application be denied or approved with conditions ensuring that tree retention areas are located in areas most consistent with subsection a. above, as determined by the Director. The final grading plan or site plan approval for the property shall include the tree retention areas.
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6. **Tree Retention Standards**
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- a. ***Use and Treatment of Tree Retention Areas***  
No primary or accessory structure, and no parking or loading area, driveway, paved area, leach fields, or utility easement, may be located in areas designated to meet minimum tree retention requirements. Grading shall not be permitted in tree retention areas. All areas designated to meet the minimum tree retention requirements shall be designated on the preliminary subdivision plat or site plan, as applicable. Natural areas intended to meet minimum tree retention requirements shall be kept in their natural condition to the maximum extent feasible. Any permitted man-made features located in or near tree retention areas (such as retention and detention ponds or

1 drainage facilities) shall be designed to resemble similar natural areas  
2 as much as possible.

3 **b. *Early Tree Removal Prohibited*<sup>20</sup>**

4 Periodic thinning of existing trees is permitted prior to approval of a  
5 grading plan or site plan; however, the removal of any signature tree,  
6 or the clearing or damage of trees (per subsection c. below) from any  
7 contiguous area of 500 square feet or more is prohibited unless  
8 authorized by an approved grading permit or site plan. Any property  
9 from which trees are removed in violation of this subsection shall be  
10 ineligible for approval of an application for a grading permit, site plan,  
11 building permit, or other development approval for a period of three  
12 years after such unauthorized tree removal.

13 **c. *Protection of Tree Retention Areas During Construction*<sup>21</sup>**

14 During construction, the following limitations shall be observed in  
15 order to protect the tree retention areas:

16 **i. *Damage Prohibited***

17 Within the tree retention areas, no person shall:

18 **(A)** Cut, carve, or otherwise damage or remove any tree  
19 except in accordance with the provisions of this  
20 chapter;

21 **(B)** Attach any wire, nails, advertising posters, or other  
22 contrivance harmful to any tree;

23 **(C)** Allow any gaseous, liquid, or solid substance that is  
24 harmful to trees (such as concrete washout, fuel,  
25 lubricants, herbicides, or paint) to come in contact  
26 with them; or

27 **(D)** Set a fire or permit any fire to burn when such fire or  
28 the heat thereof will injure any portion of any tree.

29 **ii. *Fence Required***

30 All tree retention areas shall be fenced with a sturdy and  
31 visible fence before grading, excavation, filling, construction,  
32 or demolition operations begin. Fencing shall encompass the  
33 critical root area of all trees preserved. Fencing around  
34 signature trees shall extend as far as practical, preferably at  
35 least one foot distance from the tree for each inch of caliper,  
36 but in no case closer than six feet to the trunk. The applicant  
37 and staff should consider existing site conditions in  
38 determining the exact location of any tree protection fencing.

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<sup>20</sup> NOTE: We propose “sterilizing” the site for a certain period (e.g., three years) as a strong indication of the Municipality’s determination to prohibit clear-cutting. An alternative approach would be to impose strict restoration standards on sites that clear-cut in violation of the ordinance. However, any restoration approach would have to be tough to act as an effective deterrent.

<sup>21</sup> NOTE: This section is fairly detailed, but should prove effective. We recommend being very specific as to what construction activities are prohibited. An alternative approach would be to adopt a much simpler standard, as is done in the draft Girdwood regulations, which says simply: “The trees designated to be retained shall be protected during construction by the use of fencing or other firm barriers placed at the drip line. Grading is not permitted within 10 feet of the trunk of any tree to be retained.”

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- iii. ***Compaction Prohibited***  
All building materials, vehicles, construction equipment, dirt, debris, or other objects likely to cause soil compaction or above-ground damage shall be kept outside fencing protecting tree retention areas. Where a limited amount of encroachment is unavoidable and is approved by the Municipality, the critical root zone of affected trees shall first be mulched with a four-inch layer of processed tree bark or wood chips.
  - iv. ***Grade Change Prohibited***  
There shall be no raising or lowering of the ground level within tree retention areas. Stripping of topsoil in tree retention areas shall not be permitted. Where necessary, the use of moderate fill is permitted only with prior installation of an aeration system approved by the Municipality.
  - v. ***Ditches Prohibited***  
No person shall excavate any ditch or trench within a tree retention area. Where such encroachment is unavoidable and is approved by the Municipality, ditches or trenches shall be so located as to minimize root damage.
- d. ***Assurances***  
If the Municipality determines that there is significant risk that trees required to be preserved may be damaged or removed during construction, a bond or other performance guarantee to cover the cost of replacing damaged or removed trees may be required by the Municipality.
7. **Ownership, Access, and Maintenance**
- a. ***Location***  
Required tree retention areas shall be located on the same platted lot as the development for which they have been required. In the alternative, tree retention areas may be located on another part of the overall development site in an area that is dedicated for park or open space, so long as an easement permanently restricting the tree retention area from future development is recorded.
  - b. ***Private Ownership or Dedication***  
Required tree retention areas may remain in private ownership, and the property owner shall retain the right to exclude the public from such areas. If the property owner desires to dedicate the required tree retention areas to the Municipality or to a third party for use as a public park or open space, the required tree retention area shall be designed to meet the requirements of the Municipality or the third party for the type of park or public open space intended, and availability of such tree retention area for public use shall be indicated on the plat or site plan submitted for approval. No purported dedication of open space to the Municipality shall be effective without the express written approval of the Municipality to such dedication.



1                    **c.        *Maintenance***

2                    All required tree retention areas shall be maintained in healthy  
3                    condition and free of trash and debris by the property owner or a  
4                    property owners association.

5                    **8.        *Adjustments***

6                    Where the preservation of the amounts of tree cover required by Table 21.07-  
7                    1 would effectively prohibit the development of the property for a purpose that  
8                    is otherwise authorized by this Title, the Director may adjust the required  
9                    percentage of tree preservation to allow for such development, but for each  
10                    tree over three inches DBH removed as a result of such adjustment the site  
11                    plan shall include an additional two trees (beyond the requirements of Section  
12                    21.07.080, *Landscaping, Screening, and Fences*) that will be at least three  
13                    inches DBH at maturity.

14                    **21.07.030 OPEN SPACE<sup>22</sup>**

15                    **A.        *Purpose***

16                    This Section 21.07.030 is intended to ensure that open space and natural areas  
17                    throughout the Municipality are considered and protected during the development  
18                    review process. Open space serves numerous purposes, including preservation of  
19                    natural areas and resources, preservation of scenic views, greater resident access to  
20                    open areas and recreation, public health benefits, and enhancement of the quality of  
21                    new development in the Municipality.

22                    **B.        *Public Open Space Dedication and Fees In-Lieu<sup>23</sup>***

23                    **1.        *Purpose***

24                    This subsection 21.07.030.B. is intended to provide land or fees in-lieu of land  
25                    for park, trail, and open space demand generated by new residential  
26                    subdivisions. In general, these lands shall be suitable for the development of  
27                    active play areas, passive open areas, trails, or in some instances to preserve  
28                    unique landforms or natural areas. Where no suitable land is available, based  
29                    on subsection 21.07.030.B.4. below, *Characteristics of Land to be Dedicated*,  
30                    fees in-lieu of land or the equivalent monetary value may be substituted at the  
31                    Municipality's discretion.

32                    **2.        *Applicability***

33                    An applicant for any development that includes ten or more residential units  
34                    shall be required to dedicate a portion of land per individual unit, or pay a fee  
35                    in lieu thereof pursuant to this subsection 21.07.030.B.

36                    **3.        *Amount of Park Land to be Dedicated***

37                    At least ten acres per 1,000 projected residents.<sup>24</sup>

<sup>22</sup> NOTE: This section contains standards and requirements for two types of open space: 1) residential subdivisions of at least ten lots are required to dedicate land or provide a fee in-lieu; 2) all development is required to provide private, common open space.

<sup>23</sup> NOTE: This is a suggested new section that proposes public land dedication requirements for residential subdivisions of at least ten single-family lots. (Non-residential developments are not required to dedicate land but are required to set-aside land for common open space in the following section.) This section contains suggested standards for amounts of land to be dedicated as well as standards for the type of land that may be dedicated. As drafted, the land to be dedicated could be used either for active or passive recreation or remain open space.

**4. Characteristics of Park Land to be Dedicated**

Except as otherwise required by the Platting Authority at the time of preliminary plat approval, all dedications of land under this section shall meet the following criteria. These criteria should be considered general guidelines to ensure that the dedication of land is suitable for open space or park development.

**a. Locational Criteria**

To the maximum extent feasible, where significant natural and scenic resource assets exist on a property, the subdivider, developer, or owner shall give priority to their preservation through public land dedication. In reviewing the proposed location of public land dedication areas, the Director shall use all applicable plans, maps, and reports to determine whether significant resources exist on a proposed site that should be protected, with priority being given to the following areas (which are not listed in a particular order):

- i. Wetlands;
- ii. Flood Hazard Overlay District;
- iii. Lakes, rivers, stream/riparian corridors, and drainageways;
- iv. Wildlife habitat and migration corridors; and
- v. Areas with average slopes over 20 percent.

**b. Unity**

The dedicated park land shall form a single parcel of land, except where the Platting Authority determines that two or more parcels would be in the best interest of the public, given the type and distribution of open spaces needed to adequately serve the proposed development. In such cases, the Platting Authority may require that such parcels be connected by a dedicated strip of land at least 30 feet in width.

**c. Usability**

At least 50 percent of the total land dedicated, if intended primarily for active recreational use, shall be located outside the Flood Hazard Overlay District, alluvial soils, lakes, or other water bodies, and areas with slopes greater than 15 percent, and at least 75 percent of the total land dedicated shall be located outside of wetlands. Lakes, ponds, creeks, or other water bodies, and wetlands may be dedicated only if sufficient abutting land is dedicated as a public recreation area or park or if such area constitutes a necessary part of the drainage control system. Land dedicated only for greenways need not follow the requirements of this subsection.

<sup>24</sup> NOTE: The actual amounts to include in this section require further discussion. The number in the text is a relatively common national standard. It is calculated based on standard averages of projected residents per housing unit. Staff notes: "The draft "Anchorage Bowl Parks, Natural Resource and Recreation Facilities Plan" (page 7) has a standard for neighborhood use areas that is 1.5 to 2.5 acres per 1,000 residents. The distance of these parks from home is ¼ - ½ mile in urban areas and 1 – 2 miles in rural areas. Using the neighborhood use area standard, the Title 21 standard could possibly be 2 acres per 1,000 population." However, we believe that the suggested 2 acres per 1,000 residents is too low.

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- d. Location**  
The dedicated park land shall be located so as to reasonably serve the recreation and open space needs of residents of the subdivision and to comply with the Comprehensive Plan. The dedicated park land may be located outside of the residential development in order to comply with the currently approved long-range recreational plans, to add property to existing park land, or to combine land dedication efforts with those of other developments.
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- e. Access**  
Public access to the dedicated land shall be provided either by adjoining public street frontage or by a dedicated public easement, at least 30 feet wide, which connects the dedicated land to a public street or right-of-way, unless the land being dedicated is a sensitive environmental area to which access should be restricted for preservation purposes. Gradients adjacent to existing and proposed streets shall allow for reasonable access to the dedicated land. Where the dedicated land is located adjacent to a street, the subdivider shall remain responsible for the installation of utilities, sidewalks, and other improvements required along that street segment. Public access to greenway dedications only shall be at least 20 feet wide.
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- f. Topography**  
The average slope of the portion of dedicated land deemed usable for active recreation shall not exceed the average slope of the entire subdivision to be developed. In no case shall a slope on the usable portion of dedicated land exceed 15 percent.
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- g. Areas Not Eligible**  
Lands within the following areas shall not be accepted for public/open space dedication:
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- i. Private yards;
  - ii. Public or private streets or rights of way;
  - iii. Open parking areas and driveways for dwellings; and
  - iv. Land covered by structures not intended solely for recreational uses.
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- 5. Procedure for Dedication of Park Land**  
The dedication of such land shall be reviewed and approved as part of the preliminary plat. The subdivider shall designate on the preliminary subdivision plat the area or areas of land to be dedicated pursuant to this section. Where wetlands have been certified to exist on the property, the preliminary subdivision plat shall also identify the boundaries of such wetlands.
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43  
44
- 6. Submission of Deed and Survey**  
Unless otherwise stipulated in a subdivision agreement, the conveyance of dedicated land to the Municipality shall be by warranty deed, and the title shall

1 be free and clear of all liens and encumbrances, including real property taxes  
2 prorated to the time of conveyance. The deed shall be submitted no later  
3 than two years after the approval of a phase's preliminary plat, or by the time  
4 that 50 percent of the Certificates of Occupancy for that phase have been  
5 issued, whichever is earlier. The Platting Authority may grant an extension of  
6 time after the initial two years after subdivision plat or master plan approval  
7 has elapsed.

8 **7. Payments of Fees In-lieu of Land Dedication<sup>25</sup>**

9 **a. General**

10 The payment of fees, in lieu of the dedication of land described above  
11 under subsections 21.07.030.B.1. through 6. above, may occur at the  
12 request of the Municipality or the subdivider. The payment of fees in  
13 lieu of land dedication also may be required by the Platting Authority  
14 at the time of preliminary plat approval upon finding that all or part of  
15 the land required to be dedicated under this section is not suitable for  
16 public recreation and open space purposes, or upon finding that the  
17 recreational needs of the proposed development can be met by other  
18 park, greenway, or recreational facilities planned or constructed by  
19 the Municipality within reasonable proximity to the development, or  
20 upon finding that existing park land is adequate to serve the  
21 development.<sup>26</sup>

22 **b. Procedure for Approval**

23 The payment of such fees in lieu of land dedication shall be reviewed  
24 and approved as part of the preliminary plat. Any subdivider wishing  
25 to make such payment shall attach to the application for preliminary  
26 plat approval a letter requesting the payment of fees in lieu of land  
27 dedication. Upon receipt of the preliminary subdivision plat, the  
28 Director shall submit a copy thereof, along with the letter, to the  
29 Platting Authority. In the event of a dispute between an applicant who  
30 wants to make payment in lieu, and a recommendation by the Platting  
31 Authority that facilities should be provided, the Planning and Zoning  
32 Commission shall make the final determination.

33 **c. Time of Payment**

34 The fees in lieu of dedication shall be paid prior to recording any lot(s)  
35 in the subdivision to which the fees relate.

36 **d. Amount of Payment**

37 **i.** Where payment to the Municipality is to be made in lieu of  
38 dedication of land as permitted by this section, the  
39 subdivider/developer shall provide to the Municipality, at the  
40 subdivider/developer's cost/expense, a current written  
41 appraisal of the fair market value of the unimproved land that  
42 otherwise would be conveyed. Each appraisal shall be  
43 performed by an Alaska-licensed real estate appraiser.

<sup>25</sup> NOTE: These provisions are intended to address situations when dedication of land is impractical, infeasible, or when additional revenue could be used for purchase of recreational lands better suited to the Municipality's goals.

<sup>26</sup> NOTE: We think the term "reasonable proximity" is sufficient and preserves flexibility. However, some staff have questioned whether the term should be made more definite, perhaps by referring the distance standards for parks used in the draft parks plan.

- 1                   ii.      The Platting Authority may waive the requirement of an  
2                        appraisal where the subdivider/developer provides to the  
3                        Municipality documentation evidencing the fair market value  
4                        of the subject property, which in the opinion of the Platting  
5                        Authority reasonably estimates the land's fair market value.
- 6                   iii.      The appraisal or documentation of the land's fair market  
7                        value, along with other evidence that, in the Municipality's  
8                        opinion, aids in the determination of fair market value, may be  
9                        used in the determination of the amount of any payment in  
10                      lieu of land dedication permitted by this section.
- 11                  iv.      Nothing in this section shall limit or preclude the Platting  
12                      Authority from requiring a written appraisal.
- 13                  e.      ***Disagreements As To Amount***  
14                      In the case of disagreement between the Municipality and the  
15                      applicant regarding the fair market value of the property, such  
16                      determination shall be made by a special appraisal committee  
17                      consisting of one professional appraiser appointed by the Director,  
18                      one professional appraiser appointed by the applicant, and one  
19                      professional appraiser appointed by the first two committee  
20                      appointees. This committee shall view the land and hear the  
21                      contentions of both the Municipality and the applicant. The findings of  
22                      the committee shall be by a majority vote and shall be certified to the  
23                      Platting Authority in writing within 30 days of the date the third  
24                      member is appointed to the committee. The costs of the appraiser  
25                      appointed by the applicant shall be borne entirely by the applicant;  
26                      the Municipality shall bear all other costs associated with the  
27                      committee.
- 28                  f.      ***Use of Funds***  
29                      All monies received by the Municipality pursuant to this section shall  
30                      be used only for the acquisition or development of parks, open space  
31                      sites, and related facilities.

32                  C.      **Private Common Open Space**<sup>27</sup>

- 33                  1.      **Purpose**  
34                      Private common open space is private open land area set aside for the  
35                      exclusive use and enjoyment of a development's residents, employees, or  
36                      users. Goals and requirements for common open space complement this  
37                      Title's requirements for dedicated open space and parks, and serve similar  
38                      purposes.
- 39                  2.      **Applicability**<sup>28</sup>  
40                      All development in the Municipality shall be required to set aside a portion of  
41                      land as private common open space according to the following requirements:

<sup>27</sup> NOTE: New section.

<sup>28</sup> NOTE: These percentages are typical and are proposed for discussion purposes.

- 1 a. Residential development containing five or more units: 30 percent of  
2 total land area.
- 3 b. Commercial/Mixed-Use development: 15 percent of total land area.
- 4 c. Industrial development: 10 percent of total land area.
- 5 **3. Standards**
- 6 a. ***Locational Criteria***
- 7 To the maximum extent feasible, where significant natural and scenic  
8 resource assets exist on a property, the subdivider, developer, or  
9 owner shall give priority to their preservation as private common open  
10 space. In reviewing the proposed location of private common open  
11 space areas, the Director shall use all applicable plans, maps, and  
12 reports to determine whether significant resources exist on a  
13 proposed site that should be protected, with priority being given to the  
14 following areas (which are not listed in a particular order):
- 15 i. Wetlands;
- 16 ii. Flood Hazard Overlay District;
- 17 iii. Lakes, rivers, and stream/riparian corridors;
- 18 iv. Wildlife migration corridors;
- 19 v. Areas with average slopes over 20 percent; and
- 20 vi. Tree retention areas.
- 21 b. ***Areas Not Credited***
- 22 Lands within the following areas shall not be counted towards  
23 required private common open space set-aside areas:
- 24 i. Private yards;
- 25 ii. Public or private streets or rights of way;
- 26 iii. Open parking areas and driveways for dwellings; and
- 27 iv. Land covered by structures not intended solely for  
28 recreational uses.
- 29 c. ***Use of Common Open Space Areas***
- 30 Common open space areas shall not be disturbed, developed, or  
31 improved with any structures or buildings, except for the limited  
32 purposes allowed below:
- 33 i. Facilities for active recreation (equipment for such uses shall  
34 be indicated on the site and/or subdivision plan provided by  
35 the developer);

- 1 ii. Common open space areas may include passive recreational  
2 and educational purposes approved by the Director, including  
3 but not limited to walking, biking, picnicking, fishing,  
4 preservation of natural areas and scenic resources, parks,  
5 environmental education, and wildlife habitat protection.
- 6 iii. Clearing of underbrush and debris and the provision of walks,  
7 fountains, fences, and other similar features are allowed.
- 8 d. **Design Criteria**  
9 Land set aside for private common open space shall meet the  
10 following design criteria, as relevant:
- 11 i. Common open space areas shall be distributed throughout  
12 the development and located so as to be readily accessible  
13 and useable by residents, unless the lands are sensitive  
14 natural resources and access should be restricted. A portion  
15 of the open space should provide focal points for the  
16 neighborhood.
- 17 ii. The lands shall be compact and contiguous unless the land  
18 shall be used as a continuation of an existing trail, or specific  
19 topographic features require a different configuration. An  
20 example of such topographic features would be the provision  
21 of a trail or private open area along a riparian corridor.
- 22 iii. Where private common open space areas, trails, parks, or  
23 other public spaces exist adjacent to the tract to be  
24 subdivided or developed, the private common open space  
25 shall, to the maximum extent feasible, be located to adjoin,  
26 extend, and enlarge the presently existing trail, park, or other  
27 open area land.
- 28 e. **Ownership**  
29 All private common open space areas shall be owned jointly or in  
30 common by the owners of the development.
- 31 f. **Fee In Lieu Prohibited**  
32 The payment of fees, in lieu of the set-aside of land for private  
33 common open space uses, is prohibited.

34 **21.07.040 DRAINAGE, STORMWATER RUNOFF, EROSION CONTROL<sup>29</sup>**

35 **A. Purpose<sup>30</sup>**

36 This section is intended to:

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<sup>29</sup> NOTE: As indicated in the Annotated Outline, this section consolidates several related topics from various places in the current code. However, based on our discussion with staff in January 2004, we have not yet made any major substantive changes to this material. Our understanding is that staff currently is conducting pilot projects to determine new drainage and stormwater standards for the Municipality, and that those new standards will be incorporated in a new version of the technical manuals, which are referenced in this section. The Municipality should advise as to any additional substantive changes that are necessary to this material.

<sup>30</sup> NOTE: New purpose statement.

- 1                   1.       Protect water quality for present and future residents of the Municipality by  
2                   limiting the amount of pollutants in stormwater runoff; and
- 3                   2.       Regulate land-disturbing activity in order to control accelerated erosion and  
4                   sedimentation and accordingly to prevent water pollution from sedimentation,  
5                   to prevent accelerated erosion and sedimentation of lakes and natural  
6                   watercourses; and to prevent damage to public and private property by  
7                   sedimentation during and after construction;
- 8                   **B.       Storm Drainage<sup>31</sup>**
- 9                   Prior to the issuance of a building or land use permit, including a fill, excavation, and  
10                  grading permit, all applicants shall provide a site drainage plan for the area affected  
11                  by the application, including an appropriate drainage outfall for collection and  
12                  treatment of surface water and roof drainage. The drainage plan shall also indicate  
13                  effects if any, on adjacent properties and on the area's overall surface and subsurface  
14                  hydrology. The drainage plan may be coordinated with the site plan.
- 15                  **C.       Stormwater Runoff Restrictions and System Plan Review<sup>32</sup>**
- 16                  1.       **Applicability**  
17                  Any person who constructs, alters, installs, modifies, or operates a  
18                  stormwater treatment or disposal system shall comply with the Stormwater  
19                  Treatment Plan Review Guidance Manual established by the Director of  
20                  Public Works and, if necessary, gather data to confirm stormwater conditions.
- 21                  2.       **Plan Review Guidance Manual**  
22                  The Director of Public Works shall develop, implement, and maintain the  
23                  Stormwater Treatment Plan Review Guidance Manual, which will be used to  
24                  develop, review, and approve stormwater runoff system plans for projects that  
25                  discharge stormwater into or onto land, surface water, or groundwater within  
26                  the Municipality. This subsection 21.07.040.B. regulates stormwater  
27                  discharge and shall be read in conjunction with other provisions of law,  
28                  including but not limited to, Chapters 15.40, 15.50, 15.65, 23.15, and Section  
29                  21.08.050 of this Title, *Improvements*. Developments in subdivisions and on  
30                  individual lots shall conform to other provisions of law.
- 31                  3.       **Types of Approvals**  
32                  The Department of Public Works may, in its discretion, issue a project-wide  
33                  approval to a person who plans to conduct an operation with the same runoff  
34                  characteristics at various discharge locations. The Department of Public  
35                  Works may, in its discretion, require the submission of site-specific plans,  
36                  including a schedule and description of all planned discharge activities, for  
37                  approval. The Department of Public Works may, in its discretion, restrict that  
38                  approval to certain proposed discharge activities.

<sup>31</sup> NOTE: This section carries forward the existing section 21.45, 230, *Storm drainage*. Is this provision applicable to all development? Are there any exemptions from this requirement?

<sup>32</sup> NOTE: This carries forward the substance of the existing Section 21.67.010, *Stormwater runoff restrictions and system plan review*. We have reorganized the section and added subheadings to improve clarity. As noted above, we have not yet made any substantive changes.



1                   **4.     Expiration of Approval**

2                   If construction, alteration, installation, modification, or operation has not  
3                   begun within two years after issuance of plan approval, the approval is void,  
4                   and plans shall be resubmitted to the Department of Public Works for review  
5                   and approval.

6                   **D.     Erosion and Sedimentation Control<sup>33</sup>**

7                   All grading, excavating, and removal or destruction of natural topsoil, trees, or other  
8                   natural vegetation shall conform to an erosion and sedimentation control plan  
9                   prepared by the subdivider and approved by the Department of Public Works before  
10                  the work may commence. The plan shall conform to the guidelines and policies in the  
11                  report, *Soil Erosion and Sediment Control* (Municipality of Anchorage, 1978), or any  
12                  other guidelines and policies on this subject approved by the Department of Public  
13                  Works, and to the following:

- 14                  1.     The smallest practical area of land shall be exposed at any one time during  
15                  development.
- 16                  2.     When land is exposed during development, the exposure shall be kept to the  
17                  shortest practical period of time.
- 18                  3.     Sediment and other pollutants, including but not limited to oil, grease,  
19                  nutrients, bacteria and heavy metals generated by development activity, shall  
20                  be removed from runoff waters from land undergoing development by means  
21                  of appropriate water quality control measures before the runoff waters are  
22                  permitted to be discharged into wetlands, streams or lakes. Examples of  
23                  water quality control measures that may be appropriate are debris basins,  
24                  desilting basins or silt traps, oil/water separators, retention/detention basins  
25                  and infiltration devices. This applies to groundwater where applicable.
- 26                  4.     Provisions shall be made to effectively accommodate the increased runoff  
27                  and pollutant loads caused by changed soil and surface conditions during and  
28                  after development. Such provisions shall include both stormwater and water  
29                  quality control measures.
- 30                  5.     Ground cover shall be replaced as soon as practical in the development.
- 31                  6.     The development plan shall be fitted to the topography and soil conditions so  
32                  as to create the least erosion potential.
- 33                  7.     Wherever feasible, natural vegetation shall be retained and protected.
- 34                  8.     All slopes resulting from cut and fill operations shall not exceed a maximum  
35                  slope of 50 percent. A lesser slope may be deemed necessary by the  
36                  municipal engineer due to soil conditions. If slopes of greater than 50 percent  
37                  are desired, such slopes shall be supported by a retaining structure approved  
38                  by the public works department.

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<sup>33</sup> NOTE: Existing Section 21.85.180, *Erosion and sedimentation control*. No changes yet, pending further feedback fromn the Municipality.

- 1                   9.       The proposed construction shall not adversely affect spawning of  
2                    anadromous fish, or significantly reduce upstream fish passage through the  
3                    creation of excessive in-stream velocities.

#### 4   **21.07.050 UTILITY DISTRIBUTION FACILITIES<sup>34</sup>**

##### 5                   **A.       Underground Placement Required for New or Relocated Lines**

- 6                   1.       Except as provided in subsection 21.07.050.A.2. below, all newly installed or  
7                    relocated utility distribution lines shall be placed underground.
- 8                   2.       Utility distribution lines owned or operated by utilities that are parties to a joint  
9                    trench agreement shall be placed underground in a joint trench.
- 10                  3.       Nothing in this section restricts the maintenance, repair, or reinforcement of  
11                  existing overhead utility distribution lines.

##### 12                  **B.       Exceptions**

- 13                  1.       Except where an assessment district has been formed to convert overhead  
14                  utility distribution lines as provided in Chapter 19.60, utility distribution lines  
15                  need not be placed underground in the Class B improvement area defined in  
16                  subsection 21.08.050.B., or in the I-2 zoning district. However, in the  
17                  following areas newly installed or relocated utility distribution lines shall be  
18                  placed underground: Lower Hillside, between and including Abbott Road,  
19                  Rabbit Creek Road, Hillside Drive and the New Seward Highway.
- 20                  2.       Except where an assessment district has been formed to convert overhead  
21                  utility distribution lines as provided in Chapter 19.60, CATV utility distribution  
22                  lines need not be placed underground where there are other overhead utility  
23                  distribution lines; provided that, when all of the other overhead distribution  
24                  lines are placed underground, the CATV utility distribution line shall be placed  
25                  underground in a joint trench with the other utility distribution lines.
- 26                  3.       A new utility distribution line may be placed overhead when necessary  
27                  immediately to restore service interrupted by accident or damage by flood,  
28                  fire, earthquake or weather; provided that the utility distribution line shall be  
29                  replaced by a utility distribution line conforming to this chapter within 12  
30                  months of its placement.
- 31                  4.       A utility distribution line or service connection may be placed on the surface of  
32                  frozen ground, provided that it is placed underground within 12 months  
33                  thereafter.
- 34                  5.       New facilities may be added to existing overhead utility distribution facilities  
35                  located outside target areas.
- 36                  6.       A temporary utility distribution line may be placed overhead in connection with  
37                  new construction if the utility's tariff approved by the state public utilities  
38                  commission expressly provides for removal of that line by a date certain, not  
39                  to exceed 12 months thereafter.

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<sup>34</sup> NOTE: Existing 21.90.020. Some sections rewritten for clarity.

1           **C.     Variances**

2           1.     The Planning and Zoning Commission may grant a variance from subsection  
3           1. above when the Commission finds any of the following:

4           a.     Placing a utility distribution line underground would cause an  
5           excessive adverse environmental impact;

6           b.     Placing a utility distribution line underground would threaten public  
7           health and safety, because the placement cannot be shown to meet  
8           acceptable technical standards for safety; or

9           c.     Placing a utility distribution line underground in an environmentally  
10          sound and safe manner would cost more than three times the cost of  
11          placing the line overhead, where the applicant demonstrates the  
12          relative cost to the satisfaction of the commission.

13          2.     The Director may grant a variance from subsection 1. above when he or she  
14          finds that the utility distribution line is being placed overhead temporarily for  
15          one of the reasons listed in this subsection:

16          a.     The line is being placed to provide service when weather conditions  
17          do not allow excavation for underground placement;

18          b.     A permanent location for underground placement is not available  
19          because of construction in progress; or

20          c.     The line is being placed to provide service to a temporary use or  
21          structure.

22          3.     The Planning and Zoning Commission may adopt regulations in accordance  
23          with Chapter 3.40, delegating authority to grant variances under subsection a.  
24          above to the Director.

25          4.     A variance issued under this subsection shall expire within two years of its  
26          issuance.

27           **D.     Nonconforming Overhead Lines<sup>35</sup>**

28           Existing overhead utility distribution lines located where this Title requires new or  
29           relocated utility distribution lines to be placed underground are nonconforming utility  
30           distribution lines and are subject to the provisions of this subsection. A utility  
31           distribution line is not a nonconforming structure or use under Chapter 21.11,  
32           *Nonconformities*, solely because it is a nonconforming overhead line under this  
33           section.

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<sup>35</sup> NOTE: Carried forward from existing 21.90.050. Further discussion needed. Is this policy still in place -- the standard nonconformity provisions do not apply?

1           **E.       Designation of Target Areas<sup>36</sup>**

2           **1.**       The Director shall submit to the Assembly a ten-year program designating  
3           target areas for the underground placement of nonconforming utility  
4           distribution lines. The ten-year program shall be resubmitted for Assembly  
5           review every five years. The Director shall consult with the utilities and public  
6           agencies affected by the program. The ten-year program and its revisions  
7           shall become effective when adopted by the Assembly. In reviewing the ten-  
8           year program and its revisions, the Assembly shall consider the following  
9           factors:

10           **a.**       Whether undergrounding will avoid or eliminate an unusually heavy  
11           concentration of overhead distribution facilities.

12           **b.**       Whether the street or general area is extensively used by the general  
13           public and carries a heavy volume of pedestrian or vehicular traffic.

14           **c.**       Whether the appearance of grounds and structures adjacent to the  
15           roadway is such that the removal of the overhead facilities will  
16           substantially improve the general appearance of the area.

17           **d.**       Whether the street or area affects a public recreation area or an area  
18           of scenic interest.

19           **e.**       Whether there is a significant opportunity to achieve economies due  
20           to the anticipated relocation or replacement of overhead lines or the  
21           widening or realignment of streets within a given area.

22           **f.**       Whether the targeted areas are of sufficient size to allow the utility  
23           companies significant discretion in choosing those facilities that will  
24           be converted under subsection c. below.

25           **g.**       Whether the area under consideration is within a zone where new  
26           and relocated distribution lines are required to be placed  
27           underground.

28           **h.**       Whether the installation of underground distribution lines is  
29           economically, technically and environmentally feasible.

30           **2.**       The Director shall prepare a two-year implementation plan that designates  
31           overhead utility distribution facilities within the target areas to be placed  
32           underground that two-year period. The Director shall consult with the utilities  
33           and public agencies affected by any implementation plan. Each two-year  
34           implementation plan shall be effective when approved by the Assembly. In  
35           reviewing a two-year implementation plan and its revisions, the Assembly  
36           shall consider the factors stated in subsection i. above.

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<sup>36</sup> NOTE: Here, we removed the provisions specifying target areas for 1995, which were obsolete. Representatives from the utility companies we spoke with criticized these provisions as unrealistic.

1           **F.       Conformance with Ten-Year Plan**

- 2           1.       A utility owning or operating nonconforming utility distribution lines shall place  
3           those lines underground in accordance with the ten-year plan approved under  
4           subsection b. above; provided that a utility need not expend, except by  
5           special agreement, during any fiscal year of the utility, more than four percent  
6           of its gross revenues derived from service connections within the Municipality,  
7           excluding toll revenues and revenues from sales of electric power for resale,  
8           during its preceding fiscal year to comply with this subsection.
- 9           2.       New service connections shall be placed underground in target areas  
10           designated under subsection b. above; provided that service connections may  
11           be delayed from October through May, if placed underground within one year  
12           of installation.

13           **G.       Lines in Municipal Right-of-Way**

- 14           1.       The Department of Public Works shall furnish to a utility owning or operating  
15           utility distribution lines all planning documents for municipal road construction  
16           that will require the relocation of those utility distribution lines.
- 17           2.       Once a utility installing a utility distribution line underground in material  
18           compliance with a right-of-way permit issued by the Department of Public  
19           Works, and in accordance with this chapter, the Municipality shall reimburse  
20           the cost of any subsequent relocation of the utility distribution line required by  
21           municipal road construction.
- 22           3.       If municipal road construction requires the relocation of a nonconforming  
23           utility distribution line, the Municipality, as part of the road construction project  
24           cost, shall reimburse the cost of the relocation. Reimbursable costs under  
25           this subsection include engineering and design, inspection, construction and  
26           general overhead costs, but exclude utility plant betterment costs. Plant  
27           betterment costs are the costs of providing utility distribution line capacity or  
28           quality beyond what current industry standards require for the capacity or  
29           level of service existing before the relocation.

30           **H.       Conversion of Service Connections**

31           A utility that places a nonconforming utility distribution line underground as required by  
32           subsection c. above shall bear the cost of placing underground any related service  
33           connections or other utility facilities on a customer's premises, in accordance with the  
34           utility's applicable tariff or rules or regulations of operation.

35   **21.07.060 TRANSPORTATION AND CONNECTIVITY**

36           **A.       Purpose**

37           The purpose of this Section 21.07.060 is to support the creation of a highly connected  
38           transportation system within the Municipality in order to provide choices for drivers,  
39           bicyclists, and pedestrians; increase effectiveness of municipal service delivery;  
40           promote walking and bicycling; connect neighborhoods to each other and to local  
41           destinations such as employment, schools, parks, and shopping centers; reduce  
42           vehicle miles of travel and travel times; improve air quality; reduce emergency

1 response times; mitigate the traffic impacts of new development, and free up arterial  
2 capacity to better serve regional long-distance travel needs.

3 **B. Applicability**

4 The standards of this Section 21.07.060 shall apply to all development in the  
5 Municipality.

6 **C. Traffic Impact Mitigation**

7 **1. Traffic Impact Analysis Required**

8 The transportation system for new development shall be capable of  
9 supporting the proposed development in addition to the existing uses in the  
10 area. Evaluation of system capacity shall be undertaken through a Traffic  
11 Impact Analysis (TIA), which should consider the following factors without  
12 limitation: street capacity and level of service; vehicle access and loading; on-  
13 street parking impacts; the availability of transit service and connections to  
14 transit; impacts on adjacent neighborhoods; and traffic safety including  
15 pedestrian safety. At a minimum, a Traffic Impact Analysis (TIA) shall be  
16 required with applications for development review and approval when:

- 17 **a.** Trip generation during any peak hour is expected to exceed 250 trips  
18 per day or more than 100 trips during any one-hour peak period,  
19 based on traffic generation estimates of the Institute of Transportation  
20 Engineers' Trip Generation Manual (or any successor publication);
- 21 **b.** A TIA is required by the Planning & Zoning Commission or Assembly  
22 as a condition of any land use application approved pursuant to the  
23 requirements of this Title;
- 24 **c.** The Director shall, unless the Traffic Engineer deems it unnecessary  
25 through a waiver, also require a TIA for:
- 26 **i.** Any project that proposes access to a street with Level of  
27 Service "D" or below;
- 28 **ii.** Any application for a rezoning, conditional use, or major site  
29 plan review;
- 30 **iii.** Any case where the previous TIA for the property is more  
31 than two years old;
- 32 **iv.** Any case where increased land use intensity will result in  
33 increased traffic generation; and
- 34 **v.** Any case in which the Traffic Engineer determines that a TIA  
35 should be required because of other traffic concerns than  
36 may be affected by the proposed development.

37 **2. TIA and Development Review Process**

- 38 **a.** A scoping meeting between the developer and the Traffic Engineer  
39 shall be required prior to the start of the TIA in order to determine its  
40 parameters.

1                   b.       When access points are not defined or a site plan is not available at  
2                               the time the TIA is prepared, additional studies may be required when  
3                               a site plan becomes available or the access points are defined.

4                   **3.       Traffic Mitigation Measures**

5                               The applicant shall, as part of the Traffic Impact Analysis, recommend  
6                               measures to minimize and/or mitigate the anticipated impacts and determine  
7                               the adequacy of the development's planned access points. Mitigation  
8                               measures shall be acceptable to the Traffic Engineer and may include,  
9                               without limitation: an access management plan; transportation demand  
10                              management measures; street improvements on or off the site; placement of  
11                              pedestrian, bicycle or transit facilities on or off the site; or other capital  
12                              improvement projects such as traffic calming infrastructure or capacity  
13                              improvements.

14                   **D.       Streets and On-Site Vehicular Circulation**

15                   **1.       Street Standards**

16                              All streets shall meet the standards and requirements set forth in subsections  
17                              21.08.030.D.1., *Street Grades*, 21.08.030.D.2., *Street Alignment*, and  
18                              21.08.030.D.3. *Street Intersections*.

19                   **2.       Parking Lots**

20                              In addition to complying with the standards in this subsection 21.07.060.D.,  
21                              parking areas shall comply with the standards set forth in subsection  
22                              21.07.090.G.4., *Vehicular Access and Circulation*.

23                   **3.       Street Connectivity**

24                              **a.       Purpose**

25                                      Street and block patterns should include a clear hierarchy of well-  
26                                      connected streets that distribute traffic over multiple streets and avoid  
27                                      traffic congestion on principal routes. Within each residential  
28                                      development, the access and circulation system and a grid of street  
29                                      blocks should accommodate the safe, efficient, and convenient  
30                                      movement of vehicles, bicycles, and pedestrians through the  
31                                      development, and provide ample opportunities for linking adjacent  
32                                      neighborhoods, properties, and land uses. Local neighborhood street  
33                                      systems are intended to provide multiple direct connections to and  
34                                      between local destinations such as parks, schools, and shopping.  
35                                      These connections should knit separate developments together,  
36                                      rather than forming barriers between them.

37                              **b.       Vehicular Access to Public Streets**

38                                      Any development of more than 100 residential units or additions to  
39                                      existing developments such that the total number of units exceeds  
40                                      100 shall be required to provide vehicular access to at least four  
41                                      public streets unless such provision is deemed impractical by the  
42                                      Director, Traffic Engineer, and Municipal Engineer due to topography,  
43                                      natural features, or the configuration of adjacent developments.

44                              **c.       Connections to Vacant Land**

45                                      Where new development is adjacent to land likely to be developed or  
46                                      redeveloped in the future, all streets, bicycle paths, and access ways

1 in the development's proposed street system shall continue through  
2 to the boundary lines of the area, as determined by the Director,  
3 Traffic Engineer, and the Municipal Engineer, to provide for the  
4 orderly subdivision of such adjacent land or the transportation and  
5 access needs of the community. In addition, all redevelopment and  
6 street improvement projects shall take advantage of opportunities for  
7 retrofitting existing streets to provide increased vehicular and  
8 pedestrian connectivity.

9 **d. Vehicular Interconnections to Similar or Compatible Adjacent**  
10 **Uses**

11 Every proposed public or private street system shall be designed to  
12 provide vehicular interconnections to all similar or compatible  
13 adjacent uses (existing and future) when such interconnections would  
14 facilitate internal and external traffic movements in the area. Such  
15 connections shall be provided during the initial phase of the project  
16 approximately every 1,250 to 1,500 linear feet for each direction  
17 (north, south, east, west) in which the subject property abuts similar  
18 or compatible uses. If the common property boundary in any  
19 direction is less than 1,250 linear feet, the subject property will be  
20 required to provide an interconnection if it is determined by the  
21 Director and Traffic Engineer that the interconnection in that direction  
22 can best be accomplished through the subject property. When the  
23 Director and Traffic Engineer deem a vehicular connection  
24 impractical, they can increase the length requirement and/or require  
25 pedestrian connections. The Director and Traffic Engineer may delay  
26 the interconnection if such interconnection requires state approval or  
27 will result in significant hardship to the property owner.

28 **e. Cul-de-Sacs and Dead-End Streets Discouraged**

29 The design of street systems shall use through-streets. Permanent  
30 cul-de-sacs and dead-end streets shall only be used when  
31 topography, the presence of natural features, and/or vehicular safety  
32 factors make a vehicular connection impractical. Where cul-de-sacs  
33 or dead-end streets are unavoidable, site and/or subdivision plans  
34 shall incorporate provisions for future vehicular connections to  
35 adjacent, undeveloped properties, and to existing adjacent  
36 development where existing connections are poor.

37 **f. Cross Access to Adjacent Properties**

38 All non-residential development shall be designed to allow for cross-  
39 access to adjacent properties to encourage shared parking and  
40 shared access points on public or private streets. When cross-access  
41 is deemed impractical by the Traffic Engineer or Municipal Engineer  
42 on the basis of topography, the presence of natural features, or  
43 vehicular safety factors, this requirement may be waived provided that  
44 appropriate bicycle and pedestrian connections are provided between  
45 adjacent developments or land uses. A cross access easement must  
46 be recorded prior to issuance of a Certificate of Occupancy for the  
47 development.



1                   g.       **Neighborhood Protection from Cut-through Traffic**

2                   Street connections shall connect neighborhoods to each other and to  
3                   local destinations such as schools, parks, greenbelt trail systems and  
4                   shopping centers, while minimizing neighborhood cut-through vehicle  
5                   traffic movements that are non-local in nature. Configuration of local  
6                   and internal streets and traffic calming measures shall be used to  
7                   discourage use of the local street system for cut-through collector or  
8                   arterial vehicle traffic.

9                   E.       **Standards for Pedestrian Facilities**

10                   1.       **Sidewalks**

11                   a.       All sidewalks shall be designed to comply with the standards of the  
12                   Design Criteria Manual and M.A.S.S.

13                   b.       Sidewalks shall be installed on both sides of all arterials, collector  
14                   streets, and local streets (including loop streets and cul-de-sacs), and  
15                   within and along the frontage of all new development or  
16                   redevelopment. This requirement shall not apply to local streets in  
17                   districts in which the minimum lot size is 40,000 square feet or  
18                   greater.

19                   c.       To the extent feasible, pedestrian crossings shall be made safer for  
20                   pedestrians whenever possible by shortening crosswalk distance with  
21                   curb extensions, reducing sidewalk curb radii, and eliminating free  
22                   right-turn lanes. Signals that allow longer crossing times in  
23                   commercial and mixed-use districts, mid-block crossings in high-  
24                   pedestrian use areas (if well-marked and traffic speeds are low), and  
25                   raised crosswalks and medians shall be provided as appropriate.

26                   2.       **On-site Pedestrian Walkways**

27                   a.       **Continuous Pedestrian Access**

28                   Pedestrian walkways shall form an on-site circulation system that  
29                   minimizes conflict between pedestrians and traffic at all points of  
30                   pedestrian access to on-site parking and building entrances.

31                   b.       **On-site Pedestrian Connections**

32                   Site plans shall orient to pedestrian site access points and  
33                   connections to surrounding street and trails networks, to destinations  
34                   such as schools or shopping within one-quarter mile of the site, and  
35                   to pedestrian linkage points on adjacent parcels, including building  
36                   entrances, transit stops, walkway easements, and signalized street  
37                   crossings. On-site pedestrian walkways shall connect (a) building  
38                   entrances to one another and (b) from building entrances to public  
39                   sidewalk connections and existing or planned transit stops. If  
40                   buildings are not placed directly on the public sidewalk, then  
41                   pedestrian walkways shall link the principal pedestrian site access to  
42                   building entrances. All developments that contain more than one  
43                   building shall provide walkways between the principal entrances of  
44                   the buildings.

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- c. **Through-Block Connections**  
Within residential and/or non-residential developments, pedestrian ways, crosswalks, or multi-purpose trails no less than five feet in width shall be constructed near the center and entirely through any block that is 900 feet or more in length where necessary to provide adequate pedestrian circulation or access to schools, churches, retail stores, personal service establishments, recreational areas, or transportation facilities.
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- d. **Cul-de-sacs and Dead-end Streets**  
Where residential developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining subdivisions via a sidewalk or multi-use path, except where deemed impractical by the Director.
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3. **Trails**  
While not encouraged to substitute for a good system of on-street facilities, multi-use trails may be used to enhance pedestrian and bicycle travel where the existing circulation system does not serve these needs well, or where other open spaces provide corridors free of obstacles. However, all trails shall connect to the street system in a safe and convenient manner, and shall meet the following requirements in addition to the standards contained in the Areawide Trails Plan, Design Criteria Manual, and M.A.S.S.:
- 23  
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- a. All trail connections shall be well-signed with destination and directional signing.
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- b. All trails shall connect origin and destination points such as residential areas, schools, shopping centers, parks, etc.
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- c. All trails shall be built in locations that are visible and easily accessible, for the personal safety of users.
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- d. Trails shall be designed in such a manner that motor vehicle crossings can be eliminated or significantly minimized.
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4. **Use and Maintenance of Sidewalks, Walkways, and Trails**
- a. **Restrictions on Use**  
Sidewalks, walkways, and trails are intended to provide pedestrian access. Vehicle parking, required snow storage for vehicle areas, garbage containers, merchandise storage or display, utility boxes and poles, signs, trees, and other obstructions shall not encroach into the required minimum clear width of any required sidewalk, trail, walkway, or other pedestrian way. Pedestrian amenities including bollards and garbage containers for pedestrians are exempt from this requirement.
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- b. **Maintenance and Snow Removal**  
Sidewalks, trails, and walkways required by this Title shall be maintained in usable condition throughout the year, including snow removal as appropriate.

1           **F.       Standards for Bicycle Facilities**

2                   **1.       Bicycle Lanes Encouraged**

3                   Locations for bicycle lanes are identified in the Areawide Trails Plan and  
4                   information about the design standards are included in the Design Criteria  
5                   Manual. Bicycle lanes are encouraged in the design of all arterial, collector,  
6                   and local streets where low traffic speeds and volumes allow bicyclists and  
7                   motorists to safely share the road.

8   **21.07.070 NEIGHBORHOOD PROTECTION STANDARDS<sup>37</sup>**

9           **A.       Purpose and Relationship to Other Requirements**

10                   This section provides a transition between non-residential and residential uses,  
11                   through discretionary approval criteria that may be applied in combination with other  
12                   development standards in this Chapter 21.07 in order to provide significantly more  
13                   protection for neighborhoods from the impacts of adjacent development. This section  
14                   makes available a menu of additional tools to use in discretionary approvals to protect  
15                   residential neighborhoods from potential adverse impacts of adjacent non-residential  
16                   uses, including limitations on hours of operation, noise, and lighting.

17           **B.       General Conditions**

18                   As a condition of the approval of any conditional use permit, site plan review, or  
19                   variance of any nonresidential use located in or within 300 feet of any residential  
20                   district, the decision-making body shall be authorized to impose conditions that are  
21                   necessary to reduce or minimize any potential adverse impacts on residential  
22                   property. Such conditions may include but are not limited to the following:

- 23                   1.       Hours of operation and deliveries;
- 24                   2.       Location on a site of activities that generate potential adverse impacts on  
25                   adjacent uses, such as noise and glare;
- 26                   3.       Placement of trash receptacles, compactors, or recycling;
- 27                   4.       Location and screening of loading and delivery areas;
- 28                   5.       Lighting location, design, intensity, and hours of illumination;
- 29                   6.       Placement and illumination of outdoor vending machines, telephones, or  
30                   similar outdoor services and activities;
- 31                   7.       Additional landscaping and screening to mitigate adverse impacts;
- 32                   8.       Height restrictions to preserve light and privacy and views of significant  
33                   features from public property and rights of way;
- 34                   9.       Preservation of natural lighting and solar access;

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<sup>37</sup> NOTE: A suggested new section emphasizing the types of conditions that may be placed on development approvals to minimize impacts on adjacent neighborhoods. This authorization, in combination with the wide variety of new development standards in this chapter, provide significantly more protection for neighborhoods than exists in the current code.

1                   10.     Ventilation and control of odors and fumes; and

2                   11.     Paving to control dust.

3                   **C.     Height and Setbacks<sup>38</sup>**

4                   Any non-residential structure that is located in a commercial or industrial zoning  
5                   district and within 100 feet of a property boundary with a residential zoning district  
6                   shall be set back from the residential boundary a minimum distance equal to the  
7                   height of the non-residential structure.

8                   **21.07.080 LANDSCAPING, SCREENING, AND FENCES<sup>39</sup>**

9                   **A.     Purpose**

10                   This section is intended to ensure that new landscaping and the retention of existing  
11                   vegetation is an integral part of all development and that it contributes added high  
12                   quality to development, retains and increases property values, and improves the  
13                   environmental and aesthetic character of the community. Specific purposes include  
14                   to:

15                   1.     Improve the general appearance of Anchorage, its aesthetic appeal, and the  
16                   image of its street corridors and urban districts;

17                   2.     Unify and improve the visual character of individual development, and  
18                   enhance and define public and private spaces;

19                   3.     Buffer land uses from neighboring land uses that differ significantly in scale,  
20                   intensity, or type;

21                   4.     Promote the use of existing vegetation and retention of Anchorage's urban  
22                   forest;

23                   5.     Reduce runoff and erosion, mitigate noise and control dust, and preserve air  
24                   and water quality;

25                   6.     Screen certain unsightly or obtrusive building, lighting, parking, storage, and  
26                   utility features from view;

27                   7.     Ensure that installed landscaping is compatible with the climate and natural  
28                   setting of the Anchorage area;

29                   8.     Ensure that the location, size, and types of landscaping are designed to  
30                   provide desired effects even in during harsh urban and winter conditions;

31                   9.     Provide flexible requirements that encourage and allow for creativity in  
32                   landscape design.

<sup>38</sup> NOTE: This provision should be relocated to Chapter 21.06, Dimensional Standards, when the first full draft of the new Title 21 is prepared.

<sup>39</sup> NOTE: This is a substantially new landscaping section, based on a draft prepared by Clarion Associates and subsequent edits suggested by staff based on the recommendations of the 1998 draft Landscape Ordinance project, other 1995-2003 audits, and staff experience with landscaping in Anchorage.

1           **B.     Applicability**

2           All development, except on a residentially zoned lot whose existing principal use is  
3           one single-family or one two-family dwelling, shall comply with the landscaping and  
4           screening standards of this Section 21.07.080. Additional landscaping may be  
5           required by other standards set forth in this Title.

6           **C.     Relationship to Other Requirements**

7                   **a.     Use-Specific Standards**

8                   Any use required to provide landscaping or screening pursuant to the  
9                   use-specific standards of Sections 21.05.030 through 21.05.060 shall  
10                  provide such use-specific landscaping or screening. In the event of a  
11                  conflict between the use-specific requirements and the requirements  
12                  of this Section 21.07.080, the use-specific provisions shall govern.

13                  **b.     Tree Retention Requirements**

14                  The landscaping and screening requirements of this Section  
15                  21.07.080 shall be in addition to the requirements of Section  
16                  21.07.020, *Natural Resource Protection*. However, if an area  
17                  designated for tree retention is located in an area where landscaping  
18                  or screening would be required, and where the preservation of  
19                  existing vegetation would serve the same purpose as required  
20                  landscaping, then the applicant may receive a credit against required  
21                  landscaping or screening that would serve the same purpose.

22           **D.     Landscaping<sup>40</sup>**

23                   **1.     General Description of Landscaping Requirements**

24                   Two types of landscaping may be required for a development, depending on  
25                   the use and zoning district of the property and adjacent properties, and the  
26                   portion of the property involved. The two types of landscaping are: (1)  
27                   perimeter buffer landscaping, and (2) interior site enhancement landscaping.  
28                   Each type of required landscaping shall meet the minimum standards of  
29                   subsection 21.07.080.G, *General Landscaping Requirements and Standards*,  
30                   and shall be shown on a landscaping plan that meets the requirements of  
31                   subsection 21.07.080.H, *Landscaping Plan*, unless exempted by the terms of  
32                   those sections. The type and amount of planting material required to meet  
33                   both the perimeter buffer requirements and the interior site requirements is  
34                   determined by adding up “landscape units,” which are described in subsection  
35                   21.07.080.D.2. below. The perimeter buffer and interior site landscaping  
36                   requirements are set forth in subsections 21.07.080.D.3. and 4. below.

37                   **2.     Landscape Units Awarded**

38                   To provide for flexibility, allow design creativity, and encourage use of larger  
39                   trees and retention of natural vegetation, the required amount of planting  
40                   material for perimeter buffer and interior site landscaping is based on a  
41                   “landscape units” point system. The number of units awarded to each plant is  
42                   as follows:

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<sup>40</sup> NOTE: Staff has drafted this system, based on the 1998 draft landscaping ordinance and their experience with local landscaping conditions in Anchorage.

TABLE 21.07-2: LANDSCAPE UNITS AWARDED	
New Landscape Material	Landscaping Units
Evergreen Tree, > 10 ft high	10
Evergreen Tree, 8-10 ft high	8
Evergreen Tree, 6-8 ft high	6
Deciduous Tree, > 2.5" caliper	7
Deciduous Tree, 1.5"-2.5" caliper	4
Shrubs, 36" high	1
Shrubs, 24" high	0.8
Shrubs, 18" high	0.5
Perennials/ground cover	1 per 400 sq ft
Lawn Grass	1 per 800 sq ft
Earthen Berm, minimum 18" high	0.05 per linear foot
Installed Hardscape Material	Landscaping Units
Screening Wall or Decorative Fence	0.25 per linear foot
Landscape Lighting, Landscape Sculpture, and/or Landscape Boulder	As determined by UDC, per 21.07.080.E.1.d
Retained Existing Vegetation [1]	Landscaping Units
Evergreen Tree, greater than 10 ft high	12
Evergreen Tree, 6-10 ft high	10
Deciduous Tree, > 8" caliper	12
Deciduous Tree, 4-8" caliper	10
Deciduous Tree, 2.5-4" caliper	8
Deciduous Tree, 1.5-2.5" caliper	6
Retained Existing Vegetation Mass [1]	Bonus Landscaping Units Awarded
300+ square feet with a minimum of 3 deciduous trees (2" caliper or greater), 3 evergreen trees (minimum 6 feet high) or any combination thereof	10%
500+ square feet with a minimum of 5 deciduous trees (2" caliper or greater), 5 evergreen trees (minimum 6 feet high) or any combination thereof	15%
800+ square feet with a minimum of 8 deciduous trees (2" caliper or greater), 8 evergreen trees (minimum 6 feet high) or any combination thereof	20%
<b>NOTES:</b>	
[1] Points awarded for retained vegetation in perimeter buffers may only be applied in the buffer area along the same lot line or street frontage where the vegetation is found.	

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3. **Perimeter Buffer Landscaping**  
 a. **Purpose**

Perimeter buffer landscaping serves to separate land uses of significantly different characteristics or intensities and minimize the effects of one land use on another. It reduces unwanted views, noise

1 and operational effects, and other impacts of a land use on streets,  
2 public lands, or adjacent properties. Perimeter buffer landscaping  
3 can also mark the interface between public streets and individual  
4 property, soften the visual impacts of development on public streets,  
5 and help to frame Anchorage's streetscapes with trees and  
6 vegetation. Buffer landscaping consisting of natural vegetation is  
7 desired or encouraged.

8 **b. Levels of Perimeter Buffer Landscaping<sup>41</sup>**

9 There are three levels of perimeter buffer landscaping:

10 **i. Level 1 Buffer Landscaping**

11 Used to soften the visual impact of development or parking  
12 areas along streets. Provides a low-level buffer between  
13 uses of varying intensity.

14 **ii. Level 2 Buffer Landscaping**

15 A more substantial buffer than Level 1. Provides greater  
16 protection for streets from potentially obtrusive development  
17 or large parking lots, and also serves to buffer land uses of  
18 significantly different character and intensity.

19 **iii. Level 3 Buffer Landscaping**

20 Required along freeways to protect major visual entrances to  
21 the urbanizing areas of the Municipality. Also employed as  
22 the highest level buffer to separate the most incompatible  
23 land uses of contrasting character and density, mitigating the  
24 impacts of higher density uses on more sensitive zoning  
25 districts.

26 **c. Relationship to Other Requirements**

27 **i.** Landscaping provided to meet interior site enhancement  
28 landscaping requirements in this chapter may be counted  
29 towards meeting perimeter buffer landscaping requirements,  
30 except that landscaping provided to meet parking lot interior  
31 landscaping requirements may not be counted.

32 **ii.** Parking lots shall comply with all requirements, including the  
33 parking lot perimeter landscaping requirements, of subsection  
34 21.07.090.G., *Parking Lot Design Standards*, and shall not be  
35 required to comply with this subsection 21.07.080.D.3.

36 **d. Applicability of Perimeter Buffer Landscaping**

37 Perimeter buffer landscaping shall be provided abutting street rights-  
38 of-way and parcels abutting development sites, except for at  
39 approved points of pedestrian or vehicle access, in accordance with  
40 Table 21.07-3 as follows:

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<sup>41</sup> NOTE: Level 1 buffer replaces existing street frontage categories and provides a low-level buffer between certain uses. Level 2 is intermediate. Levels 1 and 2 were proposed in the 1998 ordinance. Level 3 buffer is a new proposal and is the most intensive type of landscape buffer.

**TABLE 21.07-3: APPLICABILITY OF PERIMETER BUFFER LANDSCAPING**

District of Proposed Development [1]	Required Level of Buffer (Level 1, 2 or 3) Adjacent to the Following Zoning Districts or Streets:								
	R-5 to R-10, TA, W	R-1, R-2, R-3	R-4, RMX	C-2 (A,B,C), RCMU	NMU, CCMU	GC, I-1	OL	Freeway [2]	Collector, Arterial, Expressway
R-5 - R-10, TA								3	1
PLI	2	1	1					3	2
R-1, R-2	1						1	3	1
R-3	2	1					1	3	1
R-4, RMX	3	2					2	3	1
C-2 (A, B, C)								3	
NMU, CCMU	2	1	1				2	3	
RCMU		2	1		1		2	3	
GC, MC	2	2	2	1	1		2	3	1
I-1, AF	2	2	2	1	1		2	3	1
MI, I-2, AD	3	3	3	2	2	1	3	3	1
Non-residential use in R zone	2	1	1					3	1

**NOTES:**  
 [1] Refer to Chapter 21.05 for any additional, use-specific landscaping requirements.  
 [2] Level 3 buffer landscaping shall apply to any lot adjacent to the right-of-way of a freeway designated in the OS&HP on sections built to freeway design standards with full grade separations of intersecting streets, or to streets functioning as frontage roads for such freeways, with the exception of any lot or conglomerate of lots in common use or ownership whose area, less the buffer area required in this table, is less than the minimum lot area required in its use district, or whose depth, excluding all required setbacks, is less than 100 feet.

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**e. Specifications for Perimeter Buffer Landscaping**

In any area where perimeter buffer landscaping is required according to Table 21.07-3, the planting requirements in Table 21.07-4 shall apply. If existing vegetation meets the standards in Table 21.07-4 for the buffer landscaping level that is specified, then the required buffer landscaping area shall be retained in its naturally vegetated condition. If existing vegetation does not meet the standards for the buffer landscaping level, then existing vegetation shall be retained and additional landscaping shall be installed to comply with Table 21.07-4. The amount of landscaping required in Table 21.07-4 is measured per linear foot of property line or street frontage. Access driveways shall not be subtracted from the linear frontage in calculations of the amount of landscaping required. If there are driveways along the frontage or property line, required landscaping shall be condensed into the remaining buffer area.



**TABLE 21.07-4: SPECIFICATIONS FOR PERIMETER BUFFER LANDSCAPING**

Requirement	Buffer Level 1	Buffer Level 2	Buffer Level 3 [2]
Planting Area Width (minimum average)	10 ft	15 ft	30 ft.
Planting Area Width (minimum at any point)	8 ft	12 ft	25 ft
Total Landscape Units Required per linear foot of property line or street frontage	1 unit per linear foot	1.5 units per linear foot	2.5 units per linear foot
Minimum number of landscape units that shall be trees	0.50 units per linear foot	1.0 units per linear foot	2.0 units per linear foot
Minimum number of landscape units that shall be evergreen trees	none	0.3 units per linear foot [1]	1.0 units per linear foot [1]
Minimum number of landscape units that shall be shrubs	0.10 units per linear foot	0.10 units per linear foot	0.10 units per linear foot
<b>Additional Standards:</b>			
[1] Because of low sun angles at Anchorage’s latitude, in order to minimize solar shadowing of abutting residential lots in the spring and fall, the director may waive the requirement that a minimum number of trees shall be evergreen, along north lot lines that abut residential or mixed-use districts, where the lot line runs within 30 degrees of east-west.			
[2] No new signs of any kind shall be permitted within the 30-foot-wide planting area of Buffer Level 3. <sup>42</sup>			

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**4. Interior Site Enhancement Landscaping**

**a. Purpose**

Internal site enhancement landscaping serves to enhance the appearance and function of the building and site and reinforce its continuity with the surrounding properties. It also provides orientation to entrances, year-round color and interest, and improves pedestrian comfort in outdoor areas and parking lots. Interior site enhancement landscaping in parking lots breaks up the visual impact of large paved surfaces. Site enhancement landscaping materials and design should integrate with the overall site and building design, neighborhood context, and Alaska’s unique natural setting. Internal site enhancement landscaping consists of general site landscaping and parking lot interior landscaping.

**b. Relationship to Other Requirements**

Parking lots shall comply with the parking lot interior landscaping requirements of subsection 21.07.090.G., *Parking Lot Design Standards*, and shall not be required to comply with this subsection 21.07.080.D.4.

**c. General Site Landscaping**

All areas not devoted to buildings, structures, drives, walks, off-street parking facilities, and not otherwise devoted to landscaping required

<sup>42</sup> NOTE: Clarion has eliminated a proposed exception here for small real estate signs; sign regulations should not be content-based.

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by this chapter, shall be planted to standards for general site landscaping, or remain in existing native vegetation. General site landscaping requirements include trees, shrubs, wildflowers, groundcovers, or turf around all buildings and yard spaces, in compliance with Area Type 1 landscaping standards in Table 21.07-5 below. Trees shall be provided to soften the effects of large structures and to define the edges of outdoor spaces. Except in loading dock areas, buildings shall be separated from any onsite parking lot or vehicle driveway by a walkway and/or by foundation planting areas that conform to general site landscaping requirements.

**TABLE 21.07-5: INTERIOR SITE LANDSCAPING REQUIREMENTS<sup>43</sup>**

Requirements	Area Type 1	Area Type 2
Minimum Planting Area Width (minimum)	10 feet	10 feet
Total Landscape Units Required	0.02 units per square foot of planting area.	0.1 units per square foot of planting area.
Minimum number of landscape units that shall be trees	0.01 units per square foot of planting area.	0.5 units per square foot of planting area.
Minimum number of landscape units that shall be shrubs	0.003 units per square foot of planting area.	No requirement.

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**E. Screening<sup>44</sup>**

**1. Purpose and Description**

Screening consists of landscaping, the retention of natural vegetation, or the use of physical structures to block views of specific activities or specific parts of a property or structure. Applicants are encouraged to locate the types of features listed in this section where they are not visible from defined viewpoints, so that screening is unnecessary.

**2. Applicability**

All townhouse residential, multi-family residential, public/institutional, commercial, and industrial uses shall be required to provide screening as specified in this subsection 21.07.080.E. to block the views of the specified features from any adjacent street or public open space or any adjacent property or public areas of a site. Public areas of a site include public parking areas, sales areas, outside eating areas, or other areas to which customers, clients, and guests are given regular access.

**3. Refuse Collection**

In order to improve the image of Anchorage’s streets and neighborhoods, to reduce the visual impacts of multi-family and nonresidential development, and

<sup>43</sup> NOTE: Based on the proposed text, it is unclear where the “Area Type 2” requirements apply, other than in larger parking lots as specified in the next section.

<sup>44</sup> NOTE: The material in this section is new. The existing screening provisions were better suited to buffering purposes, and the current code does not include effective techniques to block the view of specific areas such as refuse collection areas, rather than a site in general.