

**TABLE OF CONTENTS**

1

2

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

4     **21.07.010 General Provisions ..... 1**

5         A. Purpose ..... 1

6         B. Alternative Compliance..... 1

7     **21.07.020 Natural Resource Protection ..... 2**

8         A. Purpose ..... 2

9         B. Stream, Water Body, and Wetland Protection..... 3

10        C. Steep Slope Development..... 9

11        D. Avalanche Areas ..... 13

12        E. Wildlife Habitat Protection ..... 14

13        F. Wildfire Hazard Areas..... 16

14        G. Tree Retention..... 16

15     **21.07.030 Open Space ..... 22**

16         A. Purpose ..... 22

17         B. Public Open Space Dedication and Fees In-Lieu ..... 22

18         C. Private Common Open Space..... 26

19     **21.07.040 Drainage, Stormwater Runoff, Erosion Control..... 28**

20         A. Purpose ..... 28

21         B. Storm Drainage ..... 29

22         C. Stormwater Runoff Restrictions and System Plan Review ..... 29

23         D. Erosion and Sedimentation Control..... 30

24     **21.07.050 Utility Distribution Facilities ..... 31**

25         A. Underground Placement Required for New or Relocated Lines ..... 31

26         B. Exceptions ..... 31

27         C. Variances..... 32

28         D. Nonconforming Overhead Lines..... 32

29         E. Designation of Target Areas..... 33

30         F. Conformance with Ten-Year Plan ..... 34

31         G. Lines in Municipal Right-of-Way..... 34

32         H. Conversion of Service Connections ..... 34

33     **21.07.060 Transportation and Connectivity..... 34**

34         A. Purpose ..... 34

35         B. Applicability..... 35

36         C. Traffic Impact Mitigation ..... 35

37         D. Streets and On-Site Vehicular Circulation..... 36

38         E. Standards for Pedestrian Facilities..... 38

39         F. Standards for Bicycle Facilities ..... 40

40     **21.07.070 Neighborhood Protection Standards ..... 40**

41         A. Purpose and Relationship to Other Requirements..... 40

42         B. General Conditions..... 40

43         C. Height and Setbacks ..... 41

44     **21.07.080 Landscaping, Screening, and Fences..... 41**

45         A. Purpose ..... 41

46         B. Applicability..... 42

47         C. Relationship to Other Requirements ..... 42

48         D. Landscaping ..... 42

49         E. Screening..... 47

50         F. Fences..... 50

51         G. General Landscaping Requirements and Standards ..... 51

52         H. Landscaping Plan ..... 55

53     **21.07.090 Off-Street Parking and Loading..... 55**

54         A. Applicability..... 55

1	B. Parking Lot Layout and Design Plan (10 or More Spaces).....	56
2	C. Off-Street Parking Requirements .....	57
3	D. Parking Alternatives.....	67
4	E. Off-Street Loading Requirements.....	70
5	F. Computation of Parking and Loading Requirements .....	73
6	G. Parking Lot Design Standards.....	75
7	H. Vehicle Stacking Spaces.....	89
8	I. Accessible Parking Requirements.....	90
9	J. Modification of Parking Requirements.....	93
10	<b>21.07.100 Northern Climate Design.....</b>	<b>93</b>
11	A. Purpose .....	93
12	B. Cross-References.....	93
13	<b>21.07.110 Residential Building Standards.....</b>	<b>94</b>
14	A. Purpose .....	94
15	B. Applicability.....	94
16	C. Alternative Compliance.....	94
17	D. Standards for Single-Family and Two-Family Residential .....	95
18	E. Standards for Townhouse Residential .....	96
19	F. Standards for Multi-Family Residential.....	97
20	G. Snow Storage .....	101
21	<b>21.07.120 Public/ Institutional and Commercial Building Standards.....</b>	<b>101</b>
22	A. Purpose .....	101
23	B. Applicability.....	101
24	C. Alternative Compliance.....	101
25	D. Building Orientation .....	101
26	E. Building Massing and Facade .....	102
27	F. Northern Climate Wind Mitigation.....	104
28	G. Weather Protection for Pedestrians .....	105
29	H. Snow Storage .....	106
30	<b>21.07.130 Large Retail Establishments.....</b>	<b>106</b>
31	A. Purpose .....	106
32	B. Applicability.....	106
33	C. Relationship to Other Standards .....	106
34	D. Adaptability for Reuse or Compartmentalization.....	106
35	E. Building Scale and Character of Large Retail Establishments.....	107
36	F. Site Design and Relationship to Surrounding Community .....	113
37	<b>21.07.140 Exterior Lighting .....</b>	<b>118</b>
38	A. Purpose .....	118
39	B. Applicability.....	118
40	C. Exempt Lighting.....	119
41	D. Nonconformities.....	120
42	E. Lighting Zones Established .....	120
43	F. Standards for Safety, Personal Security, and Convenience.....	120
44	G. Control of Glare and Light Trespass .....	121
45	H. Timing Controls .....	123
46	I. Standards for Specific Types of Lighting.....	123
47	<b>21.07.150 Operational Standards .....</b>	<b>125</b>
48	A. Purpose .....	125
49	B. Applicability.....	125
50	C. Standards .....	125
51	<b>21.07.160 Mixed-Use Districts.....</b>	<b>127</b>
52	A. Purpose .....	127
53	B. Types of Mixed-Use Districts.....	127

1 C. Development Standards for Mixed-Use Districts ..... 129  
2 **21.07.170 Downtown Districts**..... **140**  
3 A. Development Standards for Downtown Districts..... 140  
4

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  
33  
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  
40  
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.

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.

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.

iii. No storage or processing of hazardous materials or other substances that would constitute a violation of Chapter 15.40 is permitted.

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.

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.

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.

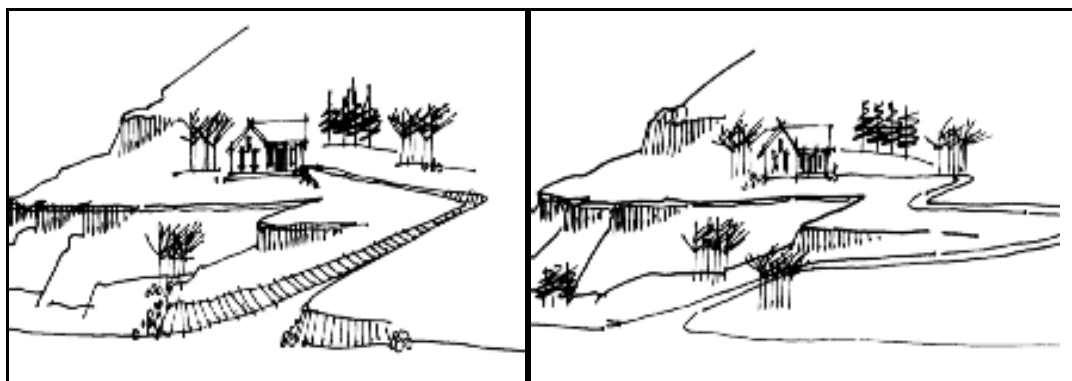


Figure 1. No.

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

<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.
- 42  
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 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 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.
- 25  
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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.

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<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.

1 by this chapter, shall be planted to standards for general site  
 2 landscaping, or remain in existing native vegetation. General site  
 3 landscaping requirements include trees, shrubs, wildflowers,  
 4 groundcovers, or turf around all buildings and yard spaces, in  
 5 compliance with Area Type 1 landscaping standards in Table 21.07-5  
 6 below. Trees shall be provided to soften the effects of large  
 7 structures and to define the edges of outdoor spaces. Except in  
 8 loading dock areas, buildings shall be separated from any onsite  
 9 parking lot or vehicle driveway by a walkway and/or by foundation  
 10 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.

- 11
- 12 **E. Screening<sup>44</sup>**
- 13 **1. Purpose and Description**
- 14 Screening consists of landscaping, the retention of natural vegetation, or the
- 15 use of physical structures to block views of specific activities or specific parts
- 16 of a property or structure. Applicants are encouraged to locate the types of
- 17 features listed in this section where they are not visible from defined
- 18 viewpoints, so that screening is unnecessary.
- 19 **2. Applicability**
- 20 All townhouse residential, multi-family residential, public/institutional,
- 21 commercial, and industrial uses shall be required to provide screening as
- 22 specified in this subsection 21.07.080.E. to block the views of the specified
- 23 features from any adjacent street or public open space or any adjacent
- 24 property or public areas of a site. Public areas of a site include public parking
- 25 areas, sales areas, outside eating areas, or other areas to which customers,
- 26 clients, and guests are given regular access.
- 27 **3. Refuse Collection**
- 28 In order to improve the image of Anchorage’s streets and neighborhoods, to
- 29 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.

1 to avoid problems with blown trash, snow, and pests, all refuse collection  
2 receptacles shall adhere to the standards that follow. For purposes of this  
3 section, the term “refuse collection receptacles” includes dumpsters, garbage  
4 cans, debris piles, or grease containers, but does not include trash or  
5 recycling receptacles for pedestrians or for temporary construction sites

6 **a. Location**

7 Outdoor refuse collection receptacles shall not be located in a  
8 required setback, except along rear alleys, and shall be set back from  
9 the front plane of the principal structure. Refuse collection  
10 receptacles shall not be located within any area used to meet the  
11 minimum parking and loading area requirements of this chapter, or be  
12 located in a manner that obstructs or interferes with any designated  
13 vehicular or pedestrian circulation routes onsite. Dumpsters shall be  
14 located at least 20 feet from residentially zoned property.

15 **b. Screening Enclosure**

16 Each refuse collection receptacle shall be screened from view on all  
17 sides by a durable sight-obscuring enclosure consisting of a fence or  
18 wall of between six feet and eight feet in height. The enclosure shall  
19 include a roof. The access to this enclosure shall be screened with  
20 an opaque gate of at least five feet in height. The walls, roof, and  
21 gate shall be compatible in architectural design and materials with the  
22 principal building(s), except that the roof shall have a minimum 4:12  
23 slope. The enclosure shall be maintained in working order, and  
24 remain closed except during trash deposits and pick-ups.

25 **c. Amortization of Nonconforming Refuse Collection Receptacles<sup>45</sup>**

26 Any lawful permanent dumpster erected prior to the adoption of this  
27 chapter that does not comply with the location or screening  
28 requirements of this section shall be removed or altered to comply  
29 with the requirements of this section within [two] years from the  
30 effective date of this Title.

31 **4. Service and Off-Street Loading Areas**

32 Service and off-street loading areas create visual and noise impacts on  
33 surrounding uses and neighborhoods. These standards visually screen on-  
34 site service and off-street loading areas from public rights-of-way and  
35 adjacent uses.

36 **a.** To the maximum extent feasible, service and off-street loading areas  
37 shall not be visible from abutting streets and shall be oriented toward  
38 on-site service corridors.

39 **b.** No service and off-street loading areas shall be located within 20 feet  
40 of any public street, public sidewalks, or internal pedestrian walkway.

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<sup>45</sup> NOTE: The proliferation of unscreened dumpsters has been identified in the Diagnosis and in discussions with city leaders as a major concern. The general idea of an amortization provision for dumpsters has been discussed and endorsed in concept by the Assembly, though the specific time frame requires further discussion. Note that the provision does not amortize the dumpsters themselves necessarily, just their screening and location.

1 c. Service and off-street loading areas shall be incorporated into the  
2 overall design of the building and landscaping so that the visual and  
3 acoustic impacts of these functions are fully contained and out of view  
4 from adjacent properties and public streets. Non-enclosed service  
5 and off-street loading areas shall be permanently defined and  
6 screened with durable, sight-obscuring walls and/or fences of  
7 between six feet and eight feet in height. Screening materials shall  
8 be the same as, or of equal quality to, the materials used for the  
9 primary building and landscaping.

10 d. Except for customer parking, loading docks and off-street parking  
11 areas associated with new uses established on the properties  
12 abutting Level 3 perimeter buffer landscaping areas shall be located  
13 to the rear of those properties. If site development does not allow for  
14 these facilities in the rear, they shall then be effectively screened from  
15 the highways.<sup>46</sup>

16 **5. Rooftop Mechanical Equipment**  
17 Rooftop mechanical equipment, including HVAC equipment and utility  
18 equipment that serves the structure, shall be screened. Screening shall be  
19 accomplished through the use of parapet walls or a sight-obscuring enclosure  
20 around the equipment constructed of one of the primary materials used on the  
21 primary facades of the structure, and that is an integral part of the building's  
22 architectural design. The parapet or screen shall completely surround the  
23 rooftop mechanical equipment to an elevation equal to or greater than the  
24 highest portion of the rooftop mechanical equipment being screened. Any  
25 parapet wall shall have an elevation of no more than four feet. In the event  
26 such parapet wall does not fully screen all rooftop equipment then the rooftop  
27 equipment shall be enclosed by a screen constructed of one of the primary  
28 materials used on the primary façade of the building so as to achieve  
29 complete screening from the property line.

30 **6. Wall-Mounted Mechanical Equipment and Meters**  
31 Wall-mounted mechanical equipment, including air conditioning or HVAC  
32 equipment and groups of multiple utility meters, that extends six inches or  
33 more from the outer building wall shall be screened from view from streets;  
34 from residential, public, and institutional properties; and from public areas of  
35 the site or adjacent sites; through the use of (a) sight-obscuring enclosures  
36 constructed of one of the primary materials used on the primary façade of the  
37 structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least  
38 80 percent of the equipment from view. Wall-mounted mechanical equipment  
39 that extends six inches or less from the outer building wall shall be designed  
40 to blend in with the color and architectural design of the subject building.

41 **7. Ground-Mounted Mechanical Equipment and Utility Fixtures**  
42 [RESERVED]<sup>47</sup>

<sup>46</sup> NOTE: Staff has requested this last provision; however, we are still unsure of its intent.

<sup>47</sup> NOTE: Staff notes that above-ground utility boxes and ground-mounted mechanical equipment are a serious problem in Anchorage. They propose standards locating such facilities away from sidewalks, walkways, and trails to the maximum extent feasible, and prohibiting them on sidewalks, walkways, or trails. Also proposed is a requirement that all above-ground utility boxes be screened from view by a decorative screening fence or wall that is compatible with the architecture and landscaping of a development site or streetscape. This is a potentially major new issue not yet discussed; further discussion is needed as to what

- 1                   **8. Outdoor Merchandise Display Areas<sup>48</sup>**  
2                   Screening shall be required of outdoor merchandise display areas as set forth  
3                   in Section 21.05.---. [x-ref to use-specific standards for outdoor merchandise  
4                   display areas].
- 5                   **9. Outdoor Storage Areas<sup>49</sup>**  
6                   Screening shall be required of outdoor storage areas as set forth in section  
7                   21.05.---. [x-ref to use-specific standards for outdoor storage areas].
- 8                   **F. Fences<sup>50</sup>**
- 9                   **1. Applicability**  
10                   The provisions of this subsection 21.07.080.F shall apply to all construction,  
11                   substantial reconstruction, or replacement of fences, retaining walls not  
12                   required for support of a principal or accessory structure, or any other linear  
13                   barrier intended to delineate different portions of a lot or to separate lots from  
14                   each other.
- 15                   **2. Location**  
16                   A fence may be constructed within property boundaries, or at the lot line,  
17                   subject to the limitations in this section. No fence shall be installed so as to  
18                   block or divert a natural drainage flow onto or off of any other property.
- 19                   **3. Maximum Height**  
20                   Fences shall not exceed the maximum heights set forth below. Such  
21                   maximum heights shall be measured from the top of any retaining wall, or if  
22                   no retaining wall has been constructed, then from natural grade. No fence  
23                   shall exceed eight feet in height.
- 24                   **a.** In the R-1, R-2, R-3, R-4, and RMX districts, front yard fences shall  
25                   not exceed four feet in height.
- 26                   **b.** In the R-5, R-6, R-9, and R-10 zone districts, front yard fences shall  
27                   not exceed six feet in height if the fencing material is sight-obscuring.  
28                   Examples of non-sight obscuring fencing include chain-link and split  
29                   rail fencing.
- 30                   **c.** In the C-2A, C-2B, C-2C, GC, NMU, CCMU, RCMU, and MC districts,  
31                   front yard fences and walls shall not exceed three feet in height and  
32                   shall not exceed eighty feet in side or rear yards.
- 33                   **d.** Enclosures provided as a part of a permitted tennis court, ball field, or  
34                   other recreational facility shall be exempt from the height restrictions  
35                   of this section.

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specific standards might be appropriate. We believe the proposed new standards are both too broad and also go beyond the screening purpose of this section.

<sup>48</sup> NOTE: Staff intends to define this use as both an accessory and primary use type in the new Title 21, and so proposes to address its screening requirements in Ch. 21.05.

<sup>49</sup> NOTE: Staff intends to define this use as both an accessory and primary use type in the new Title 21, and so proposes to address its screening requirements in Ch. 21.05.

<sup>50</sup> NOTE: Much of this material is new, but it incorporates the standards in Section 21.45.110 (Fences) of the current code.

1                   4.     **Through Lots**

2                   In the case of a through lot, as defined in Chapter 21.13, which abuts a street  
3                   of collector or greater classification, a fence may be constructed within the  
4                   secondary front setback up to a maximum of eight feet in height, provided that  
5                   vehicular access to the street is prohibited. A fence higher than four feet, or  
6                   six feet in zoning districts R-5, R-6, R-9, and R-10, shall not be constructed  
7                   within a front setback if access to the street is required due to a plat note, by a  
8                   conditional use permit, or under other provisions of law.

9                   5.     **Finished Appearance Outward**

10                  Whenever any fence will be visible from adjacent streets, and whenever a  
11                  fence is installed as part of required buffering landscaping and is visible from  
12                  adjacent properties, it shall be installed so that the more finished side (i.e., the  
13                  side with fewer or no visible structural framing or bracing elements) faces  
14                  outward from the lot on which it is installed.

15                  6.     **Prohibited Materials**

16                  Fences or walls made of debris, junk, or waste materials are prohibited in all  
17                  zoning districts, unless such materials have been recycled and reprocessed  
18                  into building materials marketed to the general public and resembling new  
19                  building materials.

20                  **G.     General Landscaping Requirements and Standards<sup>51</sup>**

21                  All required areas for landscaping or screening shall comply with the following  
22                  standards:

23                  1.     **Plant Materials**

24                   a.     **General**

25                   Given the short growing season, difficulty in establishing vegetation,  
26                   and the size and character of individual trees, the retention of existing  
27                   vegetation typically produces a far more beneficial effect in  
28                   Anchorage than installed landscaping. All plant materials for required  
29                   landscaping and screening shall emphasize the use of existing  
30                   natural vegetation and installed native species that reflect  
31                   Anchorage's natural setting. Plant species selected shall be suitable  
32                   for the local climate and the site. Trees, shrubs, and groundcover  
33                   plants near streets, driveways, and parking lots shall be salt-resistant,  
34                   tolerant to urban conditions such as pollution, and should be drought-  
35                   tolerant to ensure a low-maintenance landscape and increase  
36                   survival rates.

37                   b.     **Plant Types and Plant Quality<sup>52</sup>**

38                   All plant materials for required landscaping and screening shall be  
39                   selected from the Anchorage Master Tree and Shrub List, and shall  
40                   be A-Grade or Number-One Grade; free of defects; and of normal  
41                   health, height, leaf density, and spread as defined by the American  
42                   Standard for Nursery Stock, ANSI Z60.1, latest available edition,  
43                   American Association of Nurserymen. Plants shall be nursery-grown

<sup>51</sup> NOTE: Most of the material in this section is new.

<sup>52</sup> NOTE: Staff should update the master plant list concurrent with the code rewrite. An update was begun several years ago. It will need to identify which plants are drought tolerant, and should identify which provide winter color.

1 and adapted to the local area. No artificial plants or vegetation shall  
2 be used to meet any of the standards of this section.

3 **c. Retained Existing Vegetation**

4 At least 50 percent of existing, healthy, natural vegetation that is  
5 located in areas where landscaping or screening is required, and that  
6 meets the standards for required landscaping or screening in such  
7 areas, shall be retained and integrated into any required landscaped  
8 area. To the maximum extent feasible, trees shall be preserved as  
9 stands and not as isolated specimens.

10 **d. Winter Color and Interest**

11 The use of plants with year-round color and texture to offset the  
12 reduced daylight and whites, browns, and grays of the seven months  
13 outside of the growing season is encouraged. Where landscape  
14 areas are provided, plant material shall consist of a mixture of  
15 evergreen and deciduous trees and shrubs. The use of permanent  
16 hardscape features such as landscape lighting, landscape boulders,  
17 or landscape structures that provide color and interest year-round  
18 may be counted toward up to 10 percent of the total landscaping units  
19 required for landscaping, as determined by the UDC through a non-  
20 public hearing review.

21 **e. Minimum Species Diversity<sup>53</sup>**

22 To prevent uniform insect or disease susceptibility of extensive plant  
23 monocultures on a development site or in the adjacent area, minimum  
24 species diversity is required for installed plant material, as follows:

TABLE 21.07-7: MINIMUM SPECIES DIVERSITY	
Number of Trees on Site	Maximum Percentage of Any One Species
5-30	60%
31-60	40%
61 or more	30%

25  
26 **f. Minimum Plant Sizes**

27 All plant materials for required landscaping and screening shall meet  
28 the minimum sizes as depicted in Table 21.07-7, with the addition that  
29 evergreen trees shall have a minimum 5:3 height-to-spread ratio.

30 **2. Planting Location<sup>54</sup>**

31 Tree planting shall take into consideration the growth habits of each species  
32 and shall allow adequate space for healthy growing conditions.

33 **a. Adequate Distance from Curb**

34 All plant materials shall be planted a minimum of 3 feet from any  
35 back-of-curb, walkway, parking area, or structure. Plant materials

<sup>53</sup> NOTE: From 1998 draft ordinance. For public discussion.

<sup>54</sup> NOTE: From 1998 draft ordinance. For public discussion.

1 shall be planted a minimum of 4 feet back of wheel stops, where  
2 provided.

3 **b. Clustering**  
4 Clustering of trees is encouraged for visual effect and improved  
5 survivability. Tree plantings may be clustered in focus areas within  
6 buffer landscaping areas or along street frontages to draw attention to  
7 natural amenities or entryways, except for within buffer level 3  
8 planting areas.

9 **c. Wind Protection and Sunlight Access**  
10 Location of trees and landscaping areas to increase the hospitability  
11 of outdoor climates and extend the warm outdoor season is  
12 encouraged. Planting clusters or shelterbelts can shelter proposed  
13 building entrances, parking areas, or outdoor pedestrian spaces  
14 against prevailing winter winds and precipitation, and airborne dust  
15 during early spring after breakup. The alignment of the planting  
16 islands should respond to prevailing winter winds for maximum wind  
17 reduction benefits. Coniferous trees should be located in careful  
18 consideration of maintaining sun exposure for windows, sidewalks,  
19 and outdoor spaces during fall and spring.

20 **d. Planting Locations to Avoid**  
21 **i. Utility Easements<sup>55</sup>**  
22 Landscaping areas shall be exclusive of utility easements.  
23 **ii. Visibility Clearance Areas.**  
24 All landscaping, buffering and screening materials shall  
25 comply with the visibility clearance requirements of Chapter  
26 21.06.

27 **3. Planting Beds and Areas**  
28 **a. Raised Planting Beds**  
29 Raised planting beds are encouraged to increase the durability and  
30 effectiveness of landscaping and to protect the applicant's  
31 landscaping investment. Raised planting beds surrounded by a  
32 minimum 18-inch high wall may be reduced in width by two feet from  
33 the minimum required planting area width.

34 **b. Berms**  
35 Berms may be incorporated into any required landscaping or  
36 screening area. No installed berm shall have a slope of greater than  
37 3:1.

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<sup>55</sup> NOTE: Anchorage has a serious problem with overlapping landscaping and utility easements in Anchorage, in part because utility easements tend to be on site and not in public ROW. Staff proposes a strong standard to garner public discussion. As another alternative for consideration, Clarion proposes the following language: "Whenever the provisions of this Section 21.07.030 would require the installation of trees or shrubs over or on utility easements, where branches or roots might interfere with utility lines or pipes, the required location for such trees and shrubs shall be modified to require installation at the closest location that would avoid potential conflicts with utilities and would enable the trees and shrubs to serve the same landscaping purpose. The utility is not responsible for replacement of disturbed landscaping within the utility easements. The utility must provide written notice to the affected property owner at least one week prior to disturbance of the landscaping, except in emergencies involving life or safety."

- 1                   c.       **Groundcover Areas**  
2                   Organic mulches, ground covers, or grass shall be planted so as to  
3                   cover at least 80 percent of all required landscaping areas not  
4                   occupied by required trees or shrubs within three years.
- 5                   d.       **Retention Ponds**  
6                   Retention ponds shall be physically, functionally, and visually  
7                   integrated into adjacent landscape uses through the use of  
8                   topography, building and parking lot placement, plantings, permanent  
9                   water features, recreational or open space amenities, or other  
10                  methods.
- 11                 4.       **Installation of Landscaping<sup>56</sup>**  
12                 All required landscaping and screening shall be installed by the developer. All  
13                 landscaping shall be installed before a final certificate of occupancy or  
14                 certificate of completion is issued. If a certificate of occupancy or completion  
15                 is requested between September and May, then the certificate shall be  
16                 conditioned upon the landscaping being installed before the following June  
17                 30. A letter of credit, escrow, performance bond, or other surety approved by  
18                 the MOA attorney for proper installation of the landscaping and equal in value  
19                 to 125 percent of the value of the landscaping, as determined by the project  
20                 landscape architecture firm, shall remain in place with the Director for 24  
21                 months after installation to ensure survival and proper maintenance of the  
22                 landscaping in accordance with this section. Any landscape element that dies  
23                 or is otherwise removed or is seriously damaged shall be removed within 30  
24                 days of the beginning of the growing season and replaced based on the  
25                 requirements of this section. The bond shall be subject to forfeit if inspection  
26                 has not been requested within 18 months. If the owner or other responsible  
27                 party fails to fulfill this obligation during the first 18 months after installation of  
28                 the landscaping, the Municipality shall either perform the work and seek  
29                 reimbursement from the responsible party's or owner's surety, or demand  
30                 performance by the surety. An initial inspection fee shall be charged as part  
31                 of the permitting process.<sup>57</sup>
- 32                 5.       **Inspection**  
33                 The Municipality may periodically inspect the condition of required  
34                 landscaping and screening, and if required plant materials are diseased,  
35                 damaged, or missing, they shall be replaced by the property owner.
- 36                 6.       **Use of Landscaped Areas**  
37                 No structure, parking or loading area, driveway, or paved area may be located  
38                 in areas required for landscaping pursuant to this Title.
- 39                 7.       **Maintenance and Replacement**  
40                 a.       **Maintenance**  
41                 Trees, shrubs, and other vegetation, irrigation systems, fences, walls,  
42                 and other landscaping, screening, and fencing elements shall be  
43                 considered as elements of a development in the same manner as

<sup>56</sup> NOTE: This provision has been revised to replace the 18-month installation period with a requirement that landscaping be installed early in the next growing season. An alternative approach would be to provide that no final certificate of occupancy may be issued until required landscaping has been installed.

<sup>57</sup> NOTE: This broad maintenance requirement may be moved to the general landscaping or enforcement sections with a cross-reference here.

1 other requirements of this Title. The property owner shall be  
 2 responsible for regularly maintaining all landscaping elements in good  
 3 condition. All landscaping shall be maintained free from disease,  
 4 weeds, and litter to the extent reasonably feasible. All landscaping,  
 5 screening, and fencing materials and structures shall be repaired and  
 6 replaced periodically to maintain them in a structurally sound and  
 7 aesthetically pleasing condition. Any deteriorated, damaged, or  
 8 decayed fence materials shall be promptly repaired, and any fence or  
 9 wall post or section that leans more than 20 degrees from vertical  
 10 shall be promptly repaired to correct that condition.

11 **b. Irrigation**

12 Hose bibs, quick coupler irrigation, or other approved watering  
 13 sources are required within 100 feet of from all plantings.

14 **H. Landscaping Plan<sup>58</sup>**

15 All landscaping and screening required under this Section 21.07.080 shall be reflected  
 16 on a landscaping plan reviewed and approved by the Director. Such plan may be  
 17 combined with any land clearance, vegetation protection, erosion control, or snow  
 18 removal plan required for compliance with other sections of this Title. Where a  
 19 landscaping plan is required under this Title, the plan shall include the information  
 20 specified in the Title 21 User's Guide.

21 **21.07.090 OFF-STREET PARKING AND LOADING<sup>59</sup>**

22 **A. Applicability**

23 **1. Generally**

24 **a.** The off-street parking and loading standards of this Section 21.07.090  
 25 shall apply to all parking lots and parking structures accessory to any  
 26 new building constructed and to any new use established in every  
 27 district.

28 **b.** Except for the off-street loading requirements of subsection  
 29 21.07.090.E., all other requirements of this section shall apply to  
 30 Girdwood unless specifically preempted in Chapter 21.09.

31 **c.** The off-street parking requirements set forth in subsection  
 32 21.07.090.C shall not apply in the C-2 Central Business Districts.  
 33 However, all other standards of this Section 21.07.090 shall apply to  
 34 the C-2 Central Business Districts.

35 **d.** The requirements of this Section 21.07.090 shall apply to all  
 36 temporary parking lots and parking lots that are the principal use on a  
 37 site.

<sup>58</sup> NOTE: List of submittal requirements from the current code removed, for placement in the user's guide.

<sup>59</sup> NOTE: This section contains a comprehensive rewrite of the Anchorage parking standards. This draft section was prepared as part of a separate project overseen by the Anchorage Traffic Department. Key new features include a complete new table of off-street parking ratios, a new emphasis on alternative parking arrangements, and a new set of parking lot design standards.

**2. Expansions and Enlargements<sup>60</sup>**

The off-street parking and loading standards of this section shall apply when an existing structure or use is expanded or enlarged. Additional off-street parking and loading spaces shall be required to serve the enlarged or expanded area, provided that in all cases the number of off-street parking and loading spaces provided for the entire use (pre-existing plus expansion) must equal 100 percent of the minimum ratio established in this section.

**3. Regulation of Parking Space Use<sup>61</sup>**

The providers of required off-street parking spaces and the Municipality of Anchorage may reasonably control the users thereof by means that may include, but are not limited to, restricting all parking to the users of the facility; parking lot attendants control gates; tow-away areas; areas for exclusive use by employees, tenants or staff; areas restricted for use by customers or visitors; and imposing reasonable time limitations on users other than tenants, employees, or staff. Direct charges may be made to users who exceed maximum time limits. The Traffic Engineer may review all methods of control and may disapprove of any restriction that adversely affects the purpose of this section. The Municipality may enforce any approved restrictions through any of the code enforcement provisions set forth in Chapter 21.12, *Enforcement*.

**4. Local Improvement Assessments and Parking**

Any property against which local improvement assessments have been levied for the construction of public off-street parking shall be exempted from providing and maintaining one space for each 100 square feet of property so assessed.

**B. Parking Lot Layout and Design Plan (10 or More Spaces)****1. Applicability**

For all proposed parking lots with 10 or more spaces, the applicant shall submit a parking lot layout and design plan for review and approval by the Traffic Engineer.<sup>62</sup> The plan shall contain sufficient detail to enable the Traffic Engineer to verify compliance with this Section 21.07.090. Subject to approval of the Traffic Engineer, the parking layout and design plan may be combined with other plans required under this Title, such as the landscaping plan required in 21.07.080, *Landscaping, Screening, and Fences*.

**2. Minimum Plan Requirements**

**a.** The parking lot layout and design plan shall be prepared by a design professional such as a certified land use planner, landscape architect, or architect registered in the State of Alaska. Such plans shall not be prepared by land surveyors unless they are an otherwise qualified design professional.

<sup>60</sup> NOTE: The existing section 21.45.080.A.5 regarding the procedure to reduce parking requirements for additions, enlargements, and changes in occupancy has been moved to the last part of this parking section -- *Modifications*. See discussion there regarding current procedures and suggested alternatives.

<sup>61</sup> NOTE: This is existing section 21.45.080.W.5 with revisions highlighted. As discussed in the diagnosis, this section has been moved out of the design portion so that it will clarify that control of use is generally applicable to both new and existing parking areas. Other issues that might be addressed in this section are derelict/inoperable vehicle storage and use of surplus parking for other uses.

<sup>62</sup> NOTE: The size trigger for parking lot plans is subject to further discussion. Some jurisdictions require for all; others require only for larger lots.

- 1                   b.     The Building Official and Traffic Engineer shall establish the minimum  
 2                   submittal requirements for such plans that will enable staff to  
 3                   adequately review and ensure compliance with the standards and  
 4                   requirements of this Section 21.07.090. Such submittal requirements  
 5                   shall include but not be limited to elements such as placement and  
 6                   dimensions of spaces, landscaping, pedestrian and vehicle  
 7                   circulation, snow storage, lighting, loading and trash collection areas,  
 8                   and drainage.
- 9                   c.     All parking layout and design plans and site plans are subject to  
 10                  review and approval by the Traffic Engineer to ensure that provisions  
 11                  have been made for minimum interference with street traffic flow and  
 12                  safe interior vehicular and pedestrian circulation, transit, and parking.

13                  **C.     Off-Street Parking Requirements<sup>63</sup>**

14                  1.     **Schedule A<sup>64</sup>**

15                  Unless otherwise expressly stated in this Title, off-street parking spaces shall  
 16                  be provided in accordance with Table 21.07-8, *Off-Street Parking Schedule A*.

TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)				
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
<b>RESIDENTIAL USES</b>				
Household Living	Dwelling, mixed use	See Schedule C.		
	Dwelling, multiple-family	<ul style="list-style-type: none"> <li>• 1.25 per efficiency unit;</li> <li>• 1.5 per one-bedroom unit</li> <li>• 1.5 per two-bedroom unit 800 sf or less</li> <li>• 1.75 per two-bedroom unit over 800 sf</li> <li>• 1.75 per three-bedroom unit 900 sf or less</li> <li>• 2.5 per three-bedroom unit over 900 sf</li> </ul> (Kept original requirements.)  All multiple-family dwellings shall provide 0.25 guest spaces per unit. (new)	<b>X</b>	

<sup>63</sup> NOTE: This section contains existing information regarding parking requirements put into table format. Existing requirements have been reviewed, compared to other standards around the nation, and modified as necessary. Additional requirements have been added for uses that were not previously addressed in the existing code. The Institute for Traffic Engineers will release a new edition of their Parking Manual in early 2004, and we recommend reviewing their new standards at that time.

<sup>64</sup> NOTE: Staff feedback indicates that drive-through uses will be considered “accessory uses.” Table 21.07-1 Schedule A currently only lists principal uses, based on the revised principal use table contained in revised Chapter 21.05 *Use Regulations*. If a principal use may have a drive-through as an accessory use, that has been noted along with a reference to vehicle stacking requirements.

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
	Dwelling, single-family detached	<ul style="list-style-type: none"> <li>• 2 per du up to 1,800 square feet;</li> <li>• 3 per du over 1,800 square feet, including any unfinished area which may be converted to living area (Kept original requirements.)</li> </ul>		
	All other Household Living uses	2 per du		
Group Living	Correctional community residential center	1 per 2,000 sf gfa	X	
	Dormitory	1 per 1,000 sf gfa	X	
	Quasi-institutional house	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa plus requirement for principal use (Used same requirement as for adult care)	X	
	Residential care (7+ client capacity)	1 per four beds plus 1 per 300 sf of office area plus requirement for dwelling, if located in a dwelling (Original was based on numbers of clients and employees)	X	
	Roominghouse	1.5 per two guestrooms (Increase from original 1 per two guestrooms)		
	All other Group Living uses	1 per two beds plus 1 per 100 sf of assembly area		
	<b>PUBLIC/INSTITUTIONAL USES</b>			
Adult Care	Adult care, 1-6 adults	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa (plus requirement for principal use, if approved as accessory use)		
	Adult care, 7+ adults	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of adults, per 800 sf gfa	X	
Child Care	Child care, 1-6 children	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of children, per 800 sf gfa (plus requirement for principal use if approved as accessory use)		
	Child care, 7+ children	1 per 400 sf gfa, and 1 additional space, reserved for pickup and delivery of children, per 800 sf gfa	X	

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading	See
			Subsection 21.07.020.D	Stacking Subsection 21.07.020.G
Community Service	Community assembly	1 per 80 sf of principal assembly area plus 1 per 300 sf of office area	X	
	Community center <sup>65</sup>	1 per 80 sf of principal assembly area plus 1 per 300 sf of office area	X	
	Family self-sufficiency service	1 per 300 sf gfa		
	Homeless and transient shelter	1 per 300 sf gfa		
	Neighborhood recreation center <sup>66</sup>	1 per 300 sf gfa		
Cultural Facility <sup>67</sup>	Aquarium	1 per 500 sf gfa	X	
	Botanical gardens	1 per 5,000 sf of gross land area	X	
	Library	1 per 400 sf gfa	X	
	Museum or cultural center	1 per 400 sf gfa	X	
	Planetarium	1 per 400 sf gfa	X	
	Zoo	1 per 2,000 sf gross land area	X	
	All other uses	1 per 300 sf gfa	X	
Educational Facility	Boarding school	See Schedule C.	X	
	College and university	1 per 300 sf of enclosed floor space	X	
	Computer-aided learning center	1 per 300 sf of enclosed floor space	X	
	Elementary school	1 per 50 sf of floor area in the multipurpose room	X	
	High school or middle school	1 per six seats in the main auditorium or assembly room, based on maximum capacity	X	
	All other Educational Facility uses	1 per 300 sf of enclosed floor space	X	
Government Facility	Correctional institution	See Schedule C.	X	
	Governmental office	1 per 300 sf gfa	X	
	Governmental service	1 per 600 sf gfa	X	
	Police/fire station	See Schedule C.		

<sup>65</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

<sup>66</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

<sup>67</sup> NOTE: Requirements noted in the literature vary widely for most of these cultural facility uses, especially for library, museum, and planetarium uses. For example, library parking requirements were found to vary from 1 per 250 to 1 per 1000 sf gfa. Staff should review based on use in Anchorage.

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
Health Care Facility	Health care facility or nursing home, all uses other than hospitals	1 per four beds, based upon maximum capacity. If the facility is used exclusively for the housing of the elderly, disabled, or handicapped, the Zoning Board of Examiners and Appeals may allow a portion of the area reserved for off-street parking to be landscaped if the board finds that the landscaping is suitable and is in the best interests of the residents of the neighborhood.	X	
	Health service establishment	1 per 250 sf gfa	X	
	Hospital	1 per two beds, based on maximum capacity, plus 1 per 300 sf of office and administrative area, plus required parking for supplemental uses (This is an increase from the original, which did not include parking for office area)	X	
Park and Open Area	Cemetery	See Schedule C.		
	Community garden	1 per 5,000 sf of lot area		
	Nursery, public	See Schedule C.		
	Park, public	See Schedule C. Playfields (soccer, baseball, etc.) shall have minimum of 20 spaces per field.		
Transportation Facility	Airport	See Schedule B.	X	
	Airstrip, private	See Schedule B.	X	
	Bus transit center	See Schedule C.	X	
	Heliport	See Schedule B.	X	
	Railroad freight terminal	See Schedule C.	X	
	Railroad passenger terminal	See Schedule C.		
	Taxicab dispatching office	See Schedule C.		
Utility Facility	All uses	1 per 1,000 sf gfa		
Communication Structures	All uses	None		

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
<b>COMMERCIAL USES</b>				
Agricultural Uses	Farming, animal husbandry	See Schedule C.		
	Farming, horticultural	See Schedule C.		
Animal Sales, Service & Care	Animal control shelter	1 per 400 sf gfa		
	Animal grooming service	1 per 400 sf gfa		
	Kennel	1 per 600 sf gfa		
	Paddock or stable	1 per 5 stalls		
	Pet shop	1 per 300 sf gfa		
	Veterinary clinic	1 per 600 sf gfa		
Assembly	Civic/convention center	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.	X	
	Club/lodge/meeting hall	1 per 300 sf gfa	X	
	Entertainment event, major	See Schedule C.	X	
Entertainment, Indoor	Amusement establishment	Indoor entertainment facility: 1 per 300 sf gfa		
	• Bowling Alley	• 4 per bowling lane (Kept original requirement.)		
	Fitness and recreational sports center	1 per 4 persons based on the maximum allowable occupancy		
	Movie theater	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.		
	Nightclub, licensed or unlicensed	1 per three seats. If no fixed seating, then based on maximum capacity under provisions of International Building Code.	X	
	Theater company or dinner theater	1 per four seats of principal room. If no fixed seating, then based on maximum capacity under provisions of International Building Code.		

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading	See
			Subsection 21.07.020.D	Stacking Subsection 21.07.020.G
Entertainment / Recreation, Outdoor	General outdoor recreation, commercial	1 per 5,000 sf of land area, or 1 per 3 persons capacity (maximum), whichever is greater; playfields (soccer, baseball, etc.) shall have minimum of 20 spaces per field	X	
	Golf course	4 per green		
	Golf driving range	1 per tee		
	Motorized sports facility	1 per 2 spectator seats in a structure such as a grandstand, stadium; or 1 per 2,000 sf of site area; whichever is greater	X	
	Shooting range, outdoor	2 per target area, or 1 per 5 seats, whichever is greater		
	Skiing facility	See Schedule C.	X	
Financial Institutions	Financial institution	1 per 300 sf gfa (plus vehicle stacking spaces if drive-through is provided)		X
Food and Beverage Service	Bar or tavern	1 per 200 sf gfa (Original was based on number of seats.)	X	
	Brew pub	1 per 200 sf gfa (Original was based on number of seats.)	X	
	Food and beverage kiosk	1 per establishment, plus vehicle stacking spaces		X
	Restaurant	1 per 100 sf gfa (plus vehicle stacking spaces if drive-through is provided) (Original was based on number of seats.)	X	X
Office	Office, business or professional	1 per 300 sf gfa	X	
	Broadcasting and recording facility	1 per 300 sf gfa		
Retail (Personal Service)	All other uses	1 per 300 sf gfa	X	
	Dry-cleaning, drop-off site	2 per service window, plus vehicle stacking spaces if drive-through is provided		
	Funeral services	1 per 150 sf gfa in main assembly areas	X	
Retail (Repair and Rental)	All uses	1 per 300 sf gfa	X	
Retail (Sales)	Auction house	1 per 300 sf gfa	X	
	Business service establishment	1 per 300 sf gfa	X	

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
	Convenience store	1 per 300 sf gfa	X	
	Farmers market	1 per 250 sf, with a minimum of 6		
	Fuel sales with convenience store	1 per 200 sf gfa, plus vehicle stacking spaces for fuel sales (plus vehicle stacking spaces if drive-through carwash is provided)	X	X
	Meat and seafood processing, storage, and sales <sup>68</sup>	1 per 400 sf gfa	X	
	General retail, large	1 per 300 sf gfa	X	
	General retail, medium	1 per 200 sf gfa (Increased from original 1 per 300 sf gfa for general retail)	X	
	General retail, small	1 per 200 sf gfa (Increased from original 1 per 300 sf gfa for general retail)	X	
	Liquor store	1 per 300 sf gfa	X	
	Lumber yard/building materials store	1 per 300 sf gfa	X	
	Nursery, commercial	See Schedule B.	X	
	Pawnshop	1 per 300 sf gfa	X	
	Plumbing and heating equipment dealer	1 per 300 sf gfa	X	
	Shopping centers	See Schedule B.	X	
Vehicles and Equipment	Aircraft and marine vessel sales	See Schedule B.	X	
	Gasoline service station	4 per bay (provided that all vehicles in custody of operator of business for purpose of service, repair, or storage shall be stored on premises or on a separate off-street parking lot or building) (plus additional vehicle stacking spaces if drive-through carwash is provided)		X
	Heavy equipment, sales and rental	See Schedule B.	X	
	Impound yard	1 per 500 sf gfa, plus 1 per 5,000 sf of outdoor storage area		
	Vehicle parts and supplies	1 per 400 sf gfa	X	
	Vehicle – large and small, sales and rental	See Schedule B.	X	

<sup>68</sup> NOTE: Requirements noted in the literature vary widely for this use; staff should review based on use in Anchorage.

**TABLE 21.07-8: OFF-STREET PARKING SCHEDULE A**  
 (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)

Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.020.D	See Stacking Subsection 21.07.020.G
	Vehicle service and repair, major and minor	4 per bay (provided that all vehicles in custody of operator of business for purpose of service, repair or storage shall be stored on premises or on a separate off-street parking lot or building)		
	Vehicle storage yard	1 per 50 vehicles stored, based on maximum capacity <sup>69</sup> , plus 1 per 300 sf gfa of office area, plus vehicle stacking spaces for security gate		X
Visitor Accommodations	Camper park	1.1 spaces for each recreational vehicle space		
	Extended-stay lodgings	1.5 per guestroom or 1 bedroom unit; 1.75 per 2 bedroom unit; 2 per 3 bedroom or more unit	X	
	Hostel	1 per 600 sf gfa		
	Hotel	1 per guestroom, plus 1 per 90 sf gfa of meeting or lounge area, plus any supplemental uses	X	
	Inn	1 per guestroom, plus 1 per 90 sf gfa of meeting or lounge area		
	Motel	1 per guestroom, plus 1 per 90 sf gfa of meeting or lounge area, plus any supplemental uses	X	
	Recreational and vacation camp	1 per 2 beds, or 1 per cabin, sleeping unit, or tent site, whichever is greater		
<b>INDUSTRIAL USES</b>				
Industrial Service	All uses	See Schedule B.	X	
Manufacturing and Production	All uses	See Schedule B.	X	
Marine Facility	All uses	See Schedule B.	X	
Warehouse and Freight Movement	All other uses	See Schedule B.	X	
	Self-storage facility	1 per 50 units, plus 1 per 300 sf of office area, plus vehicle stacking spaces for security gate. Aisles suitable for temporary loading and unloading may be counted as required parking stalls in accordance with Table 21.07-4 as determined by the traffic engineer.	X	X
Waste and Salvage	All uses	See Schedule C.	X	

<sup>69</sup> NOTE: Highlighted text has been added to text from the recent ordinance for clarification.

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**2. Schedule B<sup>70</sup>**

Uses subject to Off-Street Parking Schedule “B” shall provide the following minimum number of off-street parking spaces, in Table 21.07-9, *Off-Street Parking Schedule B*.

Unless otherwise approved, lots containing more than one activity shall provide parking and loading in an amount equal to the total of the requirements for all activities.

TABLE 21.07-9: OFF-STREET PARKING SCHEDULE B	
Activity	Number of Spaces Required
Offices or administrative area	1 per 300 square feet
Indoor sales area	1 per 250 square feet
Outdoor sales or display area (3,000 square feet or less)	1 per 750 square feet
Outdoor sales or display area (over 3,000 square feet)	1 per 2,000 square feet
Indoor storage/warehousing/vehicle service/manufacturing area	
1–3,000 square feet	1 per 300 square feet
3,001–5,000 square feet	1 per 650 square feet
5,001–10,000 square feet	1 per 750 square feet
10,001–50,000 square feet	1 per 1,250 square feet
50,001 square feet+	1 per 1,500 square feet

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**3. Schedule C<sup>71</sup>**

Uses that reference “Schedule C” have widely varying parking and loading demand characteristics, making it impossible to specify a single off-street parking or loading standard. Upon receiving a development application for a use subject to Schedule C standards, the Building Official and the Traffic Engineer shall apply the off-street parking and loading standard specified for the listed use that is deemed most similar to the proposed use or establish minimum off-street parking requirements on the basis of a parking and loading study prepared by the applicant. Such a study shall include estimates of parking demand based on recommendations of the Institute of Transportation Engineers (ITE), or other acceptable estimates as approved by the Traffic Engineer, and should include other reliable data collected from uses or combinations of uses that are the same as or comparable with the proposed use. Comparability will be determined by density, scale, bulk, area, type of activity, and location. The study shall document the source of data used to develop the recommendations.

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<sup>70</sup> Note: This is a new section to address multiple activities on one site.

<sup>71</sup> NOTE: This is a new section to provide for uses whose parking requirements may vary widely.

4. **Maximum Number of Spaces Permitted**

a. **General Maximum Requirement**

For any use categorized as a Commercial or Industrial use in Table 21.05-1, *Table of Allowed Uses*, off-street vehicle parking spaces shall not be provided in an amount that is more than 125 percent of the minimum requirements established in Table 21.07-8, *Off-Street Parking Schedule A*. The maximum number of allowable parking spaces may be adjusted by the Traffic Engineer and the Administrative Official if the applicant provides written information documenting that the proposed commercial or industrial use would not be economically viable without such adjustment.

b. **Exceptions**

i. If application of the maximum parking standard would result in less than six parking spaces, the development shall be allowed six parking spaces.

ii. For the purpose of calculating parking requirements, the following types of parking spaces shall not count against the maximum parking requirement, but shall count toward the minimum requirement:

(A) Accessible parking

(B) Vanpool and carpool parking

(C) Structured parking, underground parking, and parking within, above, or beneath the building(s) it serves.

iii. For the purpose of calculating parking requirements, the following types of parking spaces shall not count against either the minimum or maximum requirements:

(A) Fleet vehicle parking

iv. Exceptions to the maximum parking requirement may be allowed in situations that meet the following criteria:

(A) The proposed development has unique or unusual characteristics such as high sales volume per floor area or low parking turnover, which create a parking demand that exceeds the maximum ratio and which typically does not apply to comparable uses; and,

(B) The parking demand cannot be accommodated by on-street parking, shared parking with nearby uses, or by increasing the supply of spaces that are exempt from the maximum ratio; and,

(C) The request is the minimum necessary variation from the standards; and,

1 (D) If located in a mixed-use district, the uses in the  
2 proposed development and the site design are highly  
3 supportive of the mixed-use concept and support  
4 high levels of existing or planned transit and  
5 pedestrian activity.

6 **D. Parking Alternatives<sup>72</sup>**

7 The Traffic Engineer and Administrative Official may approve alternatives to providing  
8 the number of off-street parking spaces required by subsection 21.07.090.C., in  
9 accordance with the following standards.

10 **1. Shared Parking<sup>73</sup>**

11 The Traffic Engineer and Administrative Official may approve shared parking  
12 facilities for developments or uses with different operating hours or different  
13 peak business periods if the shared parking complies with all of the following  
14 standards:

15 **a. Location**

16 Shared parking spaces shall be located within 600 feet of an  
17 entrance, unless approved by the Traffic Engineer.

18 **b. Zoning Classification<sup>74</sup>**

19 Shared parking areas shall be located on a site with the same or a  
20 more intensive zoning classification than required for the primary uses  
21 served.

22 **c. Shared Parking Study**

23 Those proposing to use shared parking as a means of satisfying off-  
24 street parking requirements shall submit a shared parking analysis to  
25 staff that clearly demonstrates the feasibility of shared parking. The  
26 study shall be provided in a form established by the Traffic Engineer  
27 and shall be made available to the public. It shall address, at a  
28 minimum, the size and type of the proposed development, location of  
29 required parking, the composition of tenants, the anticipated rate of  
30 parking turnover, and the anticipated peak parking and traffic loads  
31 for all uses that will be sharing off-street parking spaces. The  
32 applicant shall also demonstrate that any parking reduction requested  
33 as part of the shared parking study will not result in the spillover of  
34 parking onto other properties.

35 **d. Agreement for Shared Parking**

36 The parties involved in the joint use of off-street parking facilities shall  
37 submit a written agreement in a form to be recorded for such joint  
38 use, approved by the Traffic Engineer and Administrative Official as to  
39 form and content. An agreement for shared parking facilities shall be  
40 for the life of the occupancy of the building, and shall provide for the  
41 maintenance of jointly used parking facilities. The Traffic Engineer  
42 and Administrative Official may impose such conditions of approval as

<sup>72</sup> NOTE: This section contains revised shared/joint parking regulations and new sections on off-site parking and other alternative parking topics.

<sup>73</sup> NOTE: This is existing Section 21.45.080.W.3 "Joint Use" with revisions highlighted.

<sup>74</sup> NOTE: The intent of this requirement is to ensure that shared parking is not sited on more sensitive sites (e.g., residential areas).

1 may be necessary to ensure the adequacy of parking in areas  
2 affected by such an agreement. Recordation of the agreement shall  
3 take place before issuance of a building permit for any use to be  
4 served by the shared parking area. A shared parking agreement may  
5 be revoked only if all required off-street parking spaces will be  
6 provided in accordance with the requirements of subsection  
7 21.07.090.C.

8 **2. Off-Site Parking<sup>75</sup>**

9 The Traffic Engineer and Administrative Official may approve the location of  
10 required off-site parking spaces on a separate lot from the lot on which the  
11 principal use is located if the off-site parking complies with all of the following  
12 standards:

13 **a. Ineligible Activities**

14 Required parking spaces for residential uses must be located on the  
15 site of the use or within a tract owned in common by all the owners of  
16 the properties that will use the tract. Required parking spaces for  
17 persons with disabilities may not be located off-site.

18 **b. Location**

19 No off-site parking space may be located more than 600 feet from an  
20 entrance (measured along the shortest legal pedestrian route) unless  
21 approved by the Traffic Engineer. Off-site parking spaces shall be  
22 connected to the use by acceptable pedestrian facilities. Off-site  
23 parking spaces may not be separated from the use served by a street  
24 right-of-way with a width of more than 80 feet, unless a grade-  
25 separated pedestrian walkway, a traffic signal, a shuttle bus, or other  
26 traffic control is provided or other traffic control or remote parking  
27 shuttle bus service is provided.

28 **c. Zoning Classification**

29 Off-site parking areas shall have the same or a more intensive zoning  
30 classification applicable to the primary use served.

31 **d. Agreement for Off-Site Parking**

32 In the event that an off-site parking area is not under the same  
33 ownership as the principal use served, a written agreement between  
34 the record owners shall be required. The agreement shall guarantee  
35 the use of the off-site parking area in perpetuity. An attested copy of  
36 the agreement between the owners of record shall be submitted to  
37 the Municipality for recordation in a form established by the Municipal  
38 Attorney. Recordation of the agreement shall take place before  
39 issuance of a building permit or certificate of occupancy for any use to  
40 be served by the off-site parking area. An off-site parking agreement  
41 may be revoked only if all required off-street parking spaces will be  
42 provided in accordance with the requirements of this chapter. No use  
43 shall be continued if the parking is removed unless substitute parking  
44 facilities are provided, and the Traffic Engineer and Administrative  
45 Official shall be notified at least 60 days prior to the termination of a  
46 lease for off-site parking.

<sup>75</sup> NOTE: This section is new.

- 1                   3.     **On-street Parking**  
2                   On-street parking spaces in the right-of-way along the property line, between  
3                   the two side lot lines of the site, may be counted to satisfy the minimum off-  
4                   street parking requirements, if approved by the Traffic Engineer. In mixed-  
5                   use districts, on-street parking meeting the above criteria shall be counted  
6                   towards off-street parking requirements.
- 7                   4.     **District Parking**  
8                   Minimum required off-street parking spaces may be waived for properties  
9                   within the boundaries of a public parking or local improvement district that  
10                  provides district-wide parking facilities.
- 11                  5.     **Stacked, Tandem, and Valet Parking**  
12                  Stacked, tandem, or valet parking for nonresidential uses is allowed if an  
13                  attendant is present to move vehicles. In addition, a guarantee acceptable to  
14                  the Municipality shall be filed with the Municipality ensuring that a valet  
15                  parking attendant shall always be on duty when the parking lot is in operation.
- 16                  6.     **Structured Parking**  
17                  a.     ***Maximum Parking Waiver***  
18                  Where 75 percent or more of the parking accessory to a use is in  
19                  structured parking, there shall be no maximum cap on the number of  
20                  parking spaces.
- 21                  b.     ***Credit for Nearby Public Structured Parking***  
22                  In the MU and C-2 districts, spaces available in public parking  
23                  structures located within 1,000 feet of the subject use may be  
24                  counted toward the total amount of required off-street parking.
- 25                  c.     ***Floor Area Bonus for Automated and Underground Parking in***  
26                  ***the C-2 and Mixed-use Districts***  
27                  A floor area bonus shall be granted for underground parking  
28                  structures and automated parking structures in the C-2 (A, B, and C)  
29                  and mixed-use districts. The bonus shall be granted at a ratio of  
30                  three square feet of additional bonus area for each square foot of  
31                  structured parking that is underground or within an automated parking  
32                  structure.
- 33                  7.     **Sites in Mixed-use Districts**  
34                  In the mixed-use districts, the total requirement for off-street parking facilities  
35                  shall be the sum of the requirements for the various uses computed  
36                  separately, subject to the modifications set forth below.
- 37                  a.     All uses within MU districts shall be eligible for a five percent parking  
38                  reduction to reflect the reduced automobile use associated with  
39                  mixed-use developments.
- 40                  b.     A 10 percent parking reduction for multifamily residential dwellings  
41                  may be allowed if the proposed use is located within 300 feet of a  
42                  transit stop with midday service headways of 30 minutes or less in  
43                  each direction.

- 1 c. For non-residential uses, the minimum parking requirement may be  
 2 reduced 10 percent if the use incorporates a transit stop that meets  
 3 minimum design standards established by the Municipality to ensure  
 4 ready access to users and is compatible with the design and  
 5 materials of the non-residential use of which it is associated.
- 6 d. The total number of parking spaces required of a use or uses in a MU  
 7 District may be further reduced by the Traffic Engineer and  
 8 Administrative Official if the applicant prepares a parking evaluation  
 9 that demonstrates a reduction is appropriate based on the expected  
 10 parking needs of the development, availability of mass transit, and  
 11 similar factors. The parking evaluation shall be prepared in a form  
 12 and manner prescribed by the Traffic Engineer.
- 13 **8. Other Eligible Alternatives**  
 14 The Traffic Engineer may approve any other alternative to providing off-street  
 15 parking spaces on the site of the subject development if the applicant  
 16 demonstrates to the satisfaction of the Traffic Engineer that the proposed plan  
 17 will protect surrounding neighborhoods, maintain traffic circulation patterns,  
 18 and promote quality urban design to at least the same extent as would strict  
 19 compliance with otherwise applicable off-street parking standards.
- 20 **E. Off-Street Loading Requirements<sup>76</sup>**
- 21 No building or structure used for any commercial, business, industrial, or  
 22 public/institutional use shall be erected, nor shall any such existing building or  
 23 structure be altered so as to increase its gross floor area by 25 percent, without prior  
 24 provision for off-street loading space in conformance with the following minimum  
 25 requirements:
- 26 **1. Types of Loading Berths**  
 27 Required off-street loading space shall be provided in berths that conform to  
 28 the following minimum specifications:
- 29 a. Type A berths shall be at least 60 feet long by ten feet wide by 14 feet  
 30 six inches high, inside dimensions.
- 31 b. Type B berths shall be at least 30 feet long by ten feet wide by 14 feet  
 32 six inches high, inside dimensions.
- 33 c. Type C berths shall be located in the rear of a lot and utilize part of an  
 34 adjacent alley. The building setback shall be a minimum of five feet  
 35 from the property line along the alley for the entire width of the lot.
- 36 **2. Number of Spaces**  
 37 The following numbers and types of berths shall be provided for the specified  
 38 uses in Table 21.07-10, *Off-Street Loading Berths*; provided, however, that, in  
 39 any MU district, one type C berth may be substituted for one type B berth.  
 40 The uses specified in this subsection shall include all structures designed,  
 41 intended, or arranged for such use.

<sup>76</sup> NOTE: This is the existing section 21.45.090. It has been moved into this combined section on parking and loading.

<b>TABLE 21.07-10: OFF-STREET LOADING BERTHS</b>			
<b>Use</b>	<b>Aggregate Gross Floor Area (square feet)</b>	<b>Berths Required</b>	<b>Type</b>
<b>Residential Uses</b>			
Multiple-family dwellings	25,000--150,000	1	B
	150,000--400,000	2	B
	Each additional 250,000 or fraction thereof	1 additional	B
<b>Public/Institutional Uses</b>			
Cultural facilities <sup>77</sup>	7,000--24,000	1	B
	24,000--50,000	2	B
	50,000--100,000	3	B
	Over 100,000, each additional 50,000 or major fraction thereof	1 additional	B
Educational facilities	Over 14,000	1	B
Health care facilities	10,000--100,000	1	B
	Over 100,000	2	B
Railroad freight terminals and other transportation facilities	12,000--36,000	1	A
	36,000--60,000	2	A
	60,000--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A
<b>Commercial Uses</b>			
Assembly uses	25,000--150,000	1	B
	150,000--400,000	2	B
	Each additional 250,000 or fraction thereof	1 additional	B
All commercial establishments not otherwise specified	7,000--24,000	1	B
	24,000--50,000	2	B
	50,000--100,000	3	B

<sup>77</sup> NOTE: This category has been added to this table and the requirements for general commercial uses have been used as a starting point.

**TABLE 21.07-10: OFF-STREET LOADING BERTHS**

Use	Aggregate Gross Floor Area (square feet)	Berths Required	Type
	Over 100,000, each additional 50,000 or major fraction thereof	1 additional	B
Visitor accommodations and office uses	25,000--40,000	1	B
	40,000--100,000	2	B
	Each additional 100,000 or major fraction thereof	1 additional	B
<b>Industrial Uses</b>			
All industrial uses	12,000--36,000	1	A
	36,000--60,000	2	A
	60,000--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A

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3. **Uses Not Specifically Mentioned**  
 In the case of a use not specifically mentioned in this section, the requirements for off-street loading facilities shall be the same as the use mentioned in this section which, in the opinion of the Traffic Engineer, is most similar to the use not specifically mentioned.
4. **Concurrent Different Uses**  
 When any proposed structure will be used concurrently for different purposes, final determination of loading requirements shall be made by the Traffic Engineer, but in no event shall the loading requirements be less than the total requirements for each use based upon its aggregate gross floor area.
5. **Location of Off-Street Loading Facilities**  
 Off-street loading facilities required under this Title shall be in all cases on the same lot or parcel of land as the structure they are intended to serve. The required off-street loading space shall not be part of the area used to satisfy the off-street parking requirements unless approved by the Traffic Engineer. The placement of proposed off-street loading facilities adjacent to residential areas or in an area with a residential zoning classification shall be considered for noise and glare impacts. Mitigation techniques, including appropriate siting and site design measures, may be required by the Traffic Engineer.
6. **Manner of Using Loading Areas**  
 No space for loading or unloading of vehicles shall be so located that a vehicle using such loading space projects into any public street. Loading

1 space shall be provided with access to an alley, or, if no alley adjoins the lot,  
2 with access to a street. Any required front, side, or rear yard may be used for  
3 loading unless otherwise prohibited by this Title. Design and location of  
4 entrances and exits for required off-street loading areas shall be subject to the  
5 approval of the Traffic Engineer. Service and off-street loading areas shall  
6 comply with the screening requirements for such areas set forth in subsection  
7 21.07.080.E.4.

8 **7. Location**

9 To the maximum extent feasible, loading areas shall be located to the rear of  
10 a site and/or away from adjacent residential areas.

11 **8. Signs**

12 The owners of the property shall provide, locate, and maintain loading signs  
13 as specified by the Traffic Engineer. Such signs shall not be counted against  
14 allowed advertising sign area.

15 **F. Computation of Parking and Loading Requirements**

16 **1. Fractions**

17 When measurements of the number of required spaces result in a fractional  
18 number, any fraction shall be rounded up to the next higher whole number.

19 **2. Multiple Uses<sup>78</sup>**

20 Lots containing more than one use shall provide parking and loading in an  
21 amount equal to the total of the requirements for all uses.

22 **3. Area Measurements**

23 Unless otherwise specified, all square footage-based parking and loading  
24 standards shall be computed on the basis of gross floor area of the use in  
25 question. Structured parking within a building shall not be counted in such  
26 measurement.

27 **4. Computation of Off-Street Parking**

28 Required off-street loading space shall not be included as off-street parking  
29 space in computation of required off-street parking space.

30 **5. Snow Storage**

31 Any parking space or area that is used or intended for snow storage shall not  
32 be counted towards meeting any parking requirement.

33 **6. Parking for Unlisted Uses**

34 Parking requirements for uses not specifically listed in subsection  
35 21.07.090.C. shall be determined by the Traffic Engineer based on the  
36 requirements for the closest comparable use, as well as on the particular  
37 parking demand and trip generation characteristics of the proposed use. The  
38 Traffic Engineer may alternately require the submittal of a parking demand  
39 study that justifies estimates of parking demand based on the  
40 recommendations of the Institute of Transportation Engineers, and includes  
41 relevant data collected from uses or combinations of uses that are the same

<sup>78</sup> NOTE: If any accessory uses have their own, additional parking requirements, those requirements are set forth in the accessory use regulations in Chapter 21.05.

1 or comparable to the proposed use in terms of density, scale, bulk, area, type  
 2 of activity, and location.

3 **7. Dimensions of Parking Spaces<sup>79</sup>**

4 The parking configuration stated in the following table shall apply to all  
 5 required off-street parking.

TABLE 21.07-11: PARKING ANGLE DIMENSIONS						
A	B	C	D	E	F	G
Parking Angle	Stall Width	Stall to Curb	Aisle Width 1-way	Aisle Width 2-way	Curb Length	Overhang
0°	9.0	9.0	12.0	24	23.0	0
	9.5	9.5	12.0	24	23.0	
	10.0	10.0	12.0	24	23.0	
20°	9.0	15.0	12.0	24	26.3	0.7
	9.5	15.5	12.0	24	27.8	
	10.0	15.9	12.0	24	29.2	
30°	9.0	17.3	12.0	24	18.0	1.0
	9.5	17.8	12.0	24	19.0	
	10.0	18.2	12.0	24	20.0	
40°	9.0	19.1	12.0	24	14.0	1.3
	9.5	19.5	12.0	24	14.8	
	10.0	19.9	12.0	24	15.6	
45°	9.0	19.8	12.0	24	12.7	1.4
	9.5	20.1	12.0	24	13.4	
	10.0	20.5	12.0	24	14.1	
50°	9.0	20.4	12.0	24	11.7	1.5
	9.5	20.7	12.0	24	12.4	
	10.0	21.0	12.0	24	13.1	
60°	9.0	21.0	18.0	24	10.4	1.7
	9.5	21.2	18.0	24	11.0	
	10.0	21.5	18.0	24	11.5	
70°	9.0	21.0	19.0	24	9.6	1.9
	9.5	21.2	18.5	24	10.1	
	10.0	21.2	18.0	24	10.6	

<sup>79</sup> NOTE: There were comments that Anchorage has a significant percentage of trucks and larger vehicles and that this should be considered. National research about SUV parking indicates that parking spaces 8 feet, 6 inches wide and 18 feet long will accommodate the average SUV but door maneuvers are “less comfortable,” there is a smaller margin of error for the driver, and sight distance (which is already inadequate for smaller vehicles) is more restricted. The City of Detroit recently chose to require minimum stall dimensions of 9 feet wide and 20 feet long to accommodate larger American vehicles throughout the city. Anchorage’s primary stall dimensions start at a width of 9 feet and therefore may be adequate for larger vehicles. Per staff direction, we have eliminated the existing provisions for compact spaces. However, we heard conflicting advice on this issue from different staff departments, and we note that always requiring larger spaces will increase the overall size of parking lots, which may be contrary to other 2020 Plan goals.

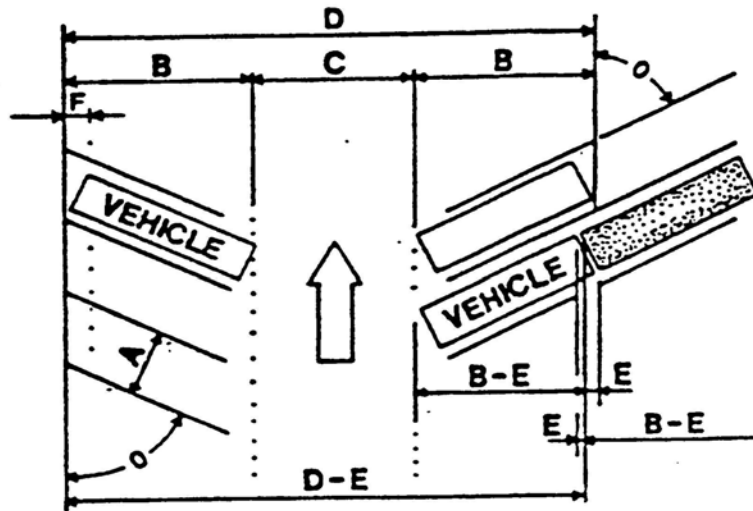
TABLE 21.07-11: PARKING ANGLE DIMENSIONS						
A	B	C	D	E	F	G
Parking Angle	Stall Width	Stall to Curb	Aisle Width 1-way	Aisle Width 2-way	Curb Length	Overhang
80°	9.0	20.3	22.0	24	9.1	2.0
	9.5	20.4	21.0	24	9.6	
	10.0	20.5	22.0	24	10.2	
90°	9.0	20.0	23.0	24	9.0	2.0
	9.5	20.0	22.0	24	9.5	
	10.0	20.0	22.0	24	10.0	

NOTE: All dimensions are to the nearest tenth of a foot.

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**8. Calculation of Parking Space Dimensions**

The spatial relationships described in Table 21.07-11 shall be calculated in the manner depicted in the following diagram<sup>80</sup>:



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**9. Recreational Vehicle Spaces**

Parking spaces for recreational vehicles, if provided, shall be a maximum of 10 feet by 40 feet.

**G. Parking Lot Design Standards**

Parking lots and spaces provided in accordance with the requirements of this section shall meet the following standards:

<sup>80</sup> NOTE: The illustration from the current regulations (Section 21.45.080.W.9.) is inserted here for now. This illustration will be updated for the final product.

1                   1.     **Location of Parking Lots**

2                   Parking lots shall be located on the proposed development site in accordance  
3                   with the following standards for each use type specified, except when  
4                   alternate configuration is approved by the Traffic Engineer and the Building  
5                   Official.

6                   a.     **Commercial Greenfield and Large Retail Developments<sup>81</sup>**

7                   i.     *Relationship to Buildings*

8                   In order to reduce the scale of the paved surfaces, to create a  
9                   unified streetscape, and to shorten the walking distance  
10                  between the parked vehicle and the building, off-street  
11                  parking for all commercial and large retail developments shall  
12                  be located according to one of the following options.

13                  (A)    No more than 70 percent of the off-street surface  
14                  parking spaces provided for all uses contained in the  
15                  development's primary building(s) shall be located  
16                  between the front façade of the primary building(s)  
17                  and the primary abutting street (i.e., the remaining  
18                  spaces must be located to the rear or side of the  
19                  primary building), or

20                  (B)    More than 70 percent of the off-street parking spaces  
21                  provided for all uses contained in the development's  
22                  primary building(s) may be located between the front  
23                  façade of the primary building(s) and the primary  
24                  abutting street, provided the size of the perimeter  
25                  buffer and buffer landscaping required by Section  
26                  \_\_\_\_\_ is increased by 50 percent. (For example, if  
27                  the required perimeter landscape buffer is 30 feet  
28                  and 75% of the parking is between the front façade  
29                  and the street, then the buffer would be increased to  
30                  45 feet and additional landscaping required.) For  
31                  purposes of this section, the "primary building" shall  
32                  be defined as the building with the most business  
33                  activity or [ADD ILLUSTRATION]

34                  ii.    *Parking in Setbacks and Buffers*

35                  No parking shall be permitted in any required perimeter  
36                  landscape buffer or setback area, except as provided in  
37                  subsection 21.06.020.B.2.h.iv, *Temporary Features*.

38                  iii.   *Relationship to Residential Areas*

39                  To the maximum extent feasible, parking lots should be  
40                  located away from any adjoining residential uses while still  
41                  remaining in compliance with the standards and requirements  
42                  of this section.

43                  b.     **Infill Commercial Development**

44                  i.     *Relationship to Street Frontage*

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<sup>81</sup> NOTE: Need to define terms used in this section such as "commercial greenfield", "large retail", and "infill."

- 1 No more than 70 percent of a site's frontage on the primary  
2 adjacent public street shall be occupied by a parking lot,  
3 perimeter parking lot buffer, or driveways. At least 30 percent  
4 must be occupied by a wall of the primary building. [ADD  
5 ILLUSTRATION]
- 6 c. **Multi-Family Greenfield Development**
- 7 i. *Relationship to Street Frontage*  
8 No more than 50 percent of a site's frontage on the primary  
9 adjacent public street shall be occupied by a parking lot,  
10 perimeter parking lot buffer, parking structure, garages, or  
11 carports. [ADD ILLUSTRATION]
- 12 ii. *Commercial Greenfield Standards Apply*  
13 Multi-family greenfield developments shall comply with all  
14 standards applicable to commercial greenfield developments  
15 as set forth above.
- 16 d. **Multi-Family Infill Development**
- 17 i. *Relationship to Street Frontage*  
18 No more than 70 percent of a site's frontage on the primary  
19 adjacent public street shall be occupied by a parking lot,  
20 perimeter parking lot buffer, or driveways. At least 30 percent  
21 must be occupied by a wall of the primary building(s).
- 22 ii. *Parking Underneath Buildings*  
23 Parking may be allowed on the ground level underneath a  
24 building provided the parking area is fully screened by a wall  
25 or façade or other architectural treatment consistent with the  
26 rest of the building in terms of style, detail, and materials.
- 27 e. **Central Business, Mixed-Use Districts, R-3, and R-4 Districts**
- 28 i. *Relationship to Street Frontage*  
29 In the Central Business District and mixed-use districts, no  
30 more than 50 percent of the street frontage may be occupied  
31 by accessory parking or driveways. This limit shall not apply  
32 to off-street parking as a principal use.
- 33 ii. *Structured Parking*<sup>82</sup>  
34 No ground floor structured parking shall be allowed adjacent  
35 to any public street. All ground floor structured parking must  
36 be screened by usable ground-floor commercial, institutional,  
37 or residential space of a minimum depth of 25 feet from the  
38 property line.
- 39 2. **Location of Parking Spaces**<sup>83</sup>
- 40 a. **General**  
41 Except as provided in this section, all required parking spaces shall  
42 be on the same lot as the main building served, or on an abutting lot

<sup>82</sup> NOTE: This duplicates a standard in the current draft of 21.05, Use Regulations. We recommend the standard should be carried forward as part of the parking regulations rather than the use regulations.

<sup>83</sup> NOTE: Subsection 2.a. "General" is carried over from existing section 21.45.080.W.1. The other subsections are new.

1 provided that the zoning district in which the lot is located allows for  
2 off-street parking as a permitted principal use or as a conditional use.  
3 Such abutting lot shall be under the same ownership as that of the  
4 building to be served, and there shall be a parking agreement,  
5 approved by the Municipality and recorded, which provides for  
6 parking requirements in perpetuity.

7 **b. *Mixed Use***

8 Any off-street or structured parking in the mixed-use districts may be  
9 on the same lot as the building served, abutting or contiguous lots, or  
10 any lot within 300 feet.

11 **c. *Recreational Vehicle Spaces***

12 All lots with 100 or more spaces associated with a retail commercial  
13 use shall provide one designated parking space for large recreational  
14 vehicles per 100 regular spaces. The recreational vehicle spaces  
15 shall be depicted on the parking lot layout plan.

16 **d. *Carpool and Vanpool Spaces***

17 All non-residential lots with 100 or more spaces or that serve uses  
18 with 50 or more employees on a single shift shall designate at least  
19 two percent of the long-term employee or student parking spaces for  
20 carpool/vanpool parking. These designated spaces shall be located  
21 closer to the building entrances than other employee or student  
22 parking, with the exception of disabled-accessible and short-term  
23 visitor parking. These spaces shall be clearly marked "Reserved –  
24 Carpool/Vanpool Only" and include hours of use, per the Manual of  
25 Uniform Traffic Control Devices.

26 **3. *Pedestrian Access and Circulation***

27 **a. *Purpose***

28 These standards are intended to provide safe, efficient, and  
29 convenient pedestrian access and circulation patterns within parking  
30 lots. By creating a safe, continuous network of pedestrian walkways  
31 within and between parking lots and developments and adjoining  
32 streets and developments, pedestrians will feel more inclined to walk  
33 (rather than drive) between stores and other destinations. A  
34 pedestrian network that offers clear circulation paths from the parking  
35 areas to building entries also creates a safer, more inviting pedestrian  
36 environment.

37 **b. *Pedestrian Circulation Plan Required***

38 Applicants shall submit a pedestrian circulation plan for all parking  
39 areas that demonstrates compliance with the following standards.

40 **c. *Pedestrian Connections***

41 In addition to any pedestrian connections required under this chapter,  
42 clearly defined on-site pedestrian walkways shall:

- 43 **i.** Connect each primary entrance of any multi-family or non-  
44 residential building with all parking areas or parking structures  
45 that serve such primary building(s).



- 1                    **d.      *Relationship to Adjacent Properties and Parking Lots***  
2                    The plan shall show existing parking and circulation patterns on  
3                    adjacent properties and potential connections.
- 4                    **e.      *Parking Area Entries/Driveways***  
5                    Entries and driveways providing access to parking areas shall  
6                    conform to the Municipality of Anchorage Driveway Design Standards  
7                    currently adopted by the Traffic Department. A copy of those  
8                    standards can be obtained from the Traffic Department.
- 9                    **f.      *Passenger Drop-Off Areas***  
10                   All institutional, recreational, and commercial uses such as  
11                   schools/daycare, stadiums, and theaters that have high-volume peak  
12                   traffic volumes shall be provided an on-site area for drop-offs and  
13                   pick-ups that meets the following requirements:
- 14                   **i.      *Plan***  
15                   The vehicle access and circulation plan shall show the  
16                   location and design of the proposed passenger drop-off area.  
17                   The plan shall also include information regarding projected  
18                   usage, hours of operation, peak loading/unloading time, plans  
19                   for directing traffic, safety measures, and other information  
20                   deemed necessary by the Traffic Engineer to designing a  
21                   safe and well-functioning drop-off area.
- 22                   **ii.     *Schools***  
23                   Drop-off and pick-up areas shall be required for schools  
24                   (public or private). Drop-off and pick-up areas may be  
25                   adjacent to a primary driveway access or aisle, but shall be  
26                   located far enough off the roadway so that they do not cause  
27                   traffic to stop. Additionally, access to drop-off areas shall not  
28                   be impeded by location of parking lot access drives. Length  
29                   and design of the drop-off and pick-up areas shall be  
30                   approved by the Traffic Engineer.
- 31                   **g.      *Parking and Maneuvering***  
32                   All parking spaces and vehicle maneuvering areas required by this  
33                   section, except those that serve single-family and duplex residences,  
34                   shall be located entirely on private property unless specifically  
35                   provided otherwise by this section.
- 36                   **h.      *Alleys***  
37                   The usable portion of an alley may be credited as aisle space subject  
38                   to safety approval by the Traffic Engineer.
- 39                   **i.      *Parking Lot Connections***  
40                   Required parking areas serving a site, whether located on that same  
41                   lot or on an adjacent lot, may be connected by means of a common  
42                   access driveway within or between the interior of such lots.

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- j. ***Ingress and Egress Points***
    - i. Ingress and egress to parking facilities shall be designed to maintain adequate sight distance and safety and as prescribed in municipal driveway standards.
    - 5  
6 ii. Adequate ingress to and egress from each parking space shall be provided without backing more than 25 feet.
  - 7  
8 k. ***Parking Space Obstructions***

9 No wall, post, guardrail, or other obstruction that would restrict vehicle  
10 door opening shall be permitted within five feet of the centerline of a parking space.
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5. **Snow Storage and Handling**  
Snow storage areas shall be indicated clearly on all parking lot plans. In addition, all parking areas shall meet the following standards.
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- a. ***Snow Storage Area***
    - i. ***All Sites Outside Central Business Districts***

24 In addition to the area set aside to meet the off-street parking  
25 requirements of this chapter, a portion of the site equal to a  
26 minimum of 20 percent of the area devoted to uncovered  
27 surface parking and driveways shall be set aside for snow storage. No parking credit shall be given for snow storage areas. Landscaped areas that are designed for snow storage and meet the standards of this section may be credited towards this minimum area requirement.

28 Example: If the amount of parking required on a site plus  
29 driveways amounts to 4,000 square feet, then the  
30 development would be required to set aside 800 square feet  
31 additional for snow storage.
    - 32  
33 ii. ***Exemptions and Alternatives***
      - (A) Minimum snow storage area requirements may be waived for properties within the boundaries of a public parking, local improvement, or snow management district that provides district-wide snow removal services.
      - 34  
35 (B) Vehicle driveway and parking areas that are heated  
36 surfaces for melting snow shall be exempt from snow storage area requirements.
  - 37  
38 b. ***Location and Design of Snow Storage Areas***<sup>85</sup>
    - 39 i. Snow storage may be allowed in landscaped areas, but only  
40 if such portions of the landscaped area used for storage are  
41 planted with grasses or flowers, not trees or shrubs.  
42 Additionally, snow storage is permitted only in landscaped  
43 perimeter buffer areas if such buffer is wider than 20 feet. Snow storage areas must be in the first ten feet of such

<sup>85</sup> NOTE: Should the height of snow piles be regulated? Further discussion needed.

- 1 perimeter buffers adjacent to the parking lot and shall avoid  
2 any areas planted with trees or shrubs. **Add illustration.**  
3 Landscaped areas used for snow storage shall be covered in  
4 winter with permeable fabric to facilitate removal of sand and  
5 other materials after snowmelt. Landscaped areas that meet  
6 the above requirements may qualify for credit toward the  
7 minimum snow storage area required by this section. In any  
8 area containing a drainage outlet or inlet, snow storage  
9 locations shall comply with the municipal Design Criteria  
10 Manual sections regarding snow disposal sites and drainage.
- 11 ii. Snow storage is prohibited in the following locations:
- 12 (A) On any landscaped island unless the island is a  
13 minimum of 15 feet wide.
- 14 (B) In any area designated for pedestrian use or  
15 circulation such as a sidewalk or parking lot walkway.
- 16 (C) In any location where sight distance triangles would  
17 be adversely impacted.
- 18 iii. Snow storage is discouraged between the primary building  
19 entry and the primary street that it faces. However, in any  
20 case no more than 50 percent of the primary street frontage  
21 on any site may be designated or used for snow storage.
- 22 **6. Refuse and Trash Collection Areas**
- 23 a. All refuse and trash collection areas shall be delineated on the site  
24 parking plan.
- 25 b. All refuse and trash collection areas shall be screened in accordance  
26 with 21.07.080.E.3., *Refuse Collection*.
- 27 c. Refuse and trash collection areas shall not be located within any area  
28 used to meet the minimum parking specifications of this section or on  
29 or near any pedestrian use areas such as sidewalks or walkways.
- 30 d. Refuse and trash collection receptacles shall not be located in a  
31 manner that obstructs or interferes with any designated vehicular or  
32 pedestrian circulation routes within a parking lot.
- 33 **7. Maximum Grade**
- 34 The maximum grade for any parking space or interior drive lanes shall be five  
35 percent.
- 36 **8. Paving**
- 37 All parking lots shall be paved with impermeable materials such as a concrete  
38 or asphalt compound to standards prescribed by the Traffic Engineer except  
39 in circumstances in which the Traffic Engineer approves a permeable surface  
40 (such as gravel) may be preferred because of the need to avoid sheet runoff  
41 into sensitive environmental areas such as wetlands on a site.

9. Landscaping<sup>86</sup>

a. *Perimeter Landscaping*

All parking lots containing more than five parking spaces shall be screened as specified below:

i. *Adjacent to Public Streets, Non-Retail Uses, and Mixed-Use*  
Perimeter parking lot landscaping shall be required for all lots having more than five spaces where the lot is adjacent to a public street. Perimeter landscaping shall also be installed where the parking lot is adjacent to a non-retail use such as a residential area, institutional use (e.g., hospital), or office. This perimeter landscaping requirement may be waived as part of a joint circulation plan in a mixed-use development area such as a town center or \_\_\_\_\_.<sup>87</sup>

ii. *Greenfield Commercial, Public/Institutional, and Multi-Family Sites*

The perimeter landscaping requirement for these uses in greenfield areas may be satisfied by complying with one of the following options:

(A) A perimeter landscaped area greater than 30 feet wide as measured from the property line to the edge of the parking lot with no ornamental metal fencing, masonry wall, or wheel stops in the parking lot required; or

(B) A perimeter landscaped area 15 feet wide with ornamental fencing or masonry wall and a maximum two-foot vehicle overhang area or no parking spaces adjacent to the landscaping. This option shall be available only if less than 70 percent of the parking spaces are located between the primary buildings on the site and the primary streets; or

(C) A perimeter landscaped area less than ten feet wide but at least five feet wide with ornamental fencing or masonry walls and wheel stops or curbing in the parking lot that prevent any vehicle overhang into the landscaped areas. This option shall be available only if less than 70 percent of the parking spaces are located between the primary buildings on the site and the primary streets.

iii. *Infill Sites*

(A) A perimeter landscaped area ten to 20 feet wide with ornamental fencing or masonry wall and a maximum

<sup>86</sup> NOTE: Most of this section is new. The existing sections 21.45.080.W.6. (Landscaping) and W.10. (Landscaping for parking lots with 15 or more spaces) are replaced by this expanded section. Subsection 9.d. below (Parking Structure Landscaping) is carried over from existing Section 21.45.080.W.11 (Landscaping for Parking Structures).

<sup>87</sup> NOTE: Need to coordinate this requirement with general site landscaping and buffering regulations.

- 1 two-foot vehicle overhang area or no parking spaces  
2 adjacent to the landscaping; or
- 3 (B) A perimeter landscaped area less than ten feet wide  
4 but at least five feet wide with ornamental fencing or  
5 masonry walls and wheel stops or curbing in the  
6 parking lot that prevent any vehicle overhang into the  
7 landscaped areas. This option shall be available only  
8 if less than 50 percent of the parking spaces are  
9 located between the primary buildings on the site and  
10 the primary streets.
- 11 iv. *Central Business Zone Districts*
- 12 (A) A perimeter landscaped area less than ten feet wide  
13 but at least three feet wide with ornamental fencing or  
14 masonry walls and wheel stops or curbing in the  
15 parking lot that prevent any vehicle overhang into the  
16 landscaped areas; or
- 17 (B) An ornamental fence or masonry wall without  
18 landscaping, provided that a planting strip exists  
19 between the sidewalk and the adjacent public streets  
20 and the planting strip is planted with trees to the  
21 minimum specifications of this section. This option  
22 shall not be available to parking lots that are a  
23 principal or temporary use on the site.
- 24 v. *Site-Perimeter Landscaping*  
25 Perimeter parking lot landscaping may be satisfied by site-  
26 perimeter landscaping as required in subsection  
27 21.07.080.D.3., *Perimeter Buffer Landscaping*, where the  
28 location requirements for site-perimeter landscaping overlap  
29 with these perimeter parking lot requirements.
- 30 vi. *Perimeter Landscaped Areas Wider than 20 Feet*  
31 For any landscaped areas wider than 20 feet, the required  
32 trees and shrubs shall be located within ten feet of the  
33 property line and adjacent public right-of-way or sidewalk.
- 34 vii. *Greenfield Sites*  
35 For all greenfield sites, sidewalks and street trees must be  
36 installed around the perimeter of all parking lots adjacent to a  
37 public street.
- 38 viii. *Berms*  
39 Berms may be used as part of perimeter landscaping areas,  
40 but shall not exceed three feet in height.
- 41 ix. *Stocking/Material Requirements*  
42 All perimeter landscaped areas shall be stocked with  
43 vegetation as follows at a minimum:
- 44 (A) *Trees*

- 1 All perimeter landscaped areas shall be planted  
2 according to one of the following options:
- 3 (1) Two inch caliper tree on center every 15  
4 linear feet of perimeter buffer; or
- 5 (2) Three inch caliper tree on center every 20  
6 linear feet of perimeter buffer; or
- 7 (3) Three and one-half inch caliper tree on  
8 center every 30 linear feet of perimeter  
9 buffer.
- 10 No low-branching tree species shall be planted within  
11 ten feet of a pedestrian walkway.
- 12 (B) Six shrubs, five gallon container size, for every tree.  
13 Shrubs shall be planted in masses.
- 14 (C) Remainder of buffer area must be planted with a  
15 vegetative cover outside the drip line of any trees.
- 16 **b. Interior Lot Landscaping<sup>88</sup>**
- 17 **i. Intent**
- 18 It is the intent of these standards to require that a minimum  
19 percentage of the interior of all parking areas, except for very  
20 small lots, be devoted to landscaping. Landscaping should  
21 be massed rather than spread throughout the interior of a lot  
22 to create a more significant visual impact, to increase the rate  
23 of survival of the landscaping, and to facilitate snow removal.
- 24 **ii. General**
- 25 Parking lots shall meet the following interior landscaping  
26 requirements based on the number of spaces in the lot,  
27 unless otherwise provided in this section:
- 28 (A) *More than 40 spaces*  
29 An area equal to at least ten percent of the surface of  
30 the parking area including appurtenant driveways  
31 shall be devoted to landscaping.
- 32 (B) *20 to 40 spaces*  
33 An area equal to at least five percent of the surface of  
34 the parking area including appurtenant driveways  
35 shall be devoted to landscaping,
- 36 (C) *Less than 20 spaces*  
37 No interior landscaping required.
- 38 **iii. Greenfield and Infill Development Sites**

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<sup>88</sup> NOTE: Need to discuss issue of bringing non-conforming lots into conformity with these new standards.

1 In addition the minimum percent landscaping requirements,  
 2 these sites shall comply with or address the following  
 3 standards and guidelines<sup>89</sup>: *[Add illustrations of these*  
 4 *standards—show preferred layout.]*

5 (A) *Minimum Planting Area Size*

6 The minimum size of any interior planting area shall  
 7 be ten feet wide and 225 square feet. However, if the  
 8 landscaped area is to be used for snow storage, it  
 9 shall be a minimum of 15 feet in width.

10 (B) *Delineation*

11 All interior landscaped areas shall be clearly  
 12 delineated and marked to be visible during snow  
 13 removal operations and edged by a curb at least six  
 14 inches in height. Rolled curbs are not allowed as  
 15 landscape area edging.

16 (C) *Minimum Stocking Requirements*

17 Landscaped areas shall be planted with a minimum  
 18 of one tree and six shrubs per 100 square feet. The  
 19 minimum tree caliper shall be two inches and the  
 20 minimum shrub container size shall be five gallons.

21 (D) *Landscape Massing*

22 Trees and shrubs should be massed within planting  
 23 areas to protect them from damage and to facilitate  
 24 snow removal/storage.

25 (E) *Preferred Locations*

26 The preferred locations for planting areas within  
 27 parking lots are along major drives and entryways,  
 28 dividing more than two double-loaded parking bays,  
 29 and outlining pedestrian walkways within the parking  
 30 areas.<sup>90</sup>

31 iv. *Central Business Zone Districts*

32 (A) No interior landscaping shall be required for parking  
 33 lots within the Central Business Zone Districts.  
 34 However, if such interior landscaping is provided, it  
 35 shall comply with the standards set forth above.

36 v. *Berms*

37 Berms may be used as part of interior landscaping areas, but  
 38 shall not exceed three feet in height.

39 c. *Parking Structure Landscaping*

<sup>89</sup> NOTE: Need to discuss the issue of bringing existing non-conforming uses up to these standards over time.

<sup>90</sup> NOTE: Rather than require that lots be broken up into parking blocks with a specified maximum number of spaces, we have indicated preferred locations. The parking block concept works well in climates with less snow, but we feel may significantly inhibit snow removal.

- 1 i. Visual enhancement landscaping shall be planted around the  
2 perimeter of the parking structure, except:
- 3 (A) At vehicular and pedestrian ingress and egress  
4 points; and
- 5 (B) Where the structure abuts an alley right-of-way.
- 6 ii. All areas not devoted to buildings, structures, drives, walks,  
7 off-street parking facilities or other authorized installations  
8 shall be planted with visual enhancement landscaping.
- 9 d. **Compliance with General Landscaping Requirements**  
10 All parking area landscaping shall comply with the general  
11 requirements for landscaping set forth in subsection 21.07.080.G.
- 12 10. **Parking Area Screening**<sup>91</sup>  
13 In order to reduce the visual impacts of parking areas on residential  
14 properties, including obtrusive glare from vehicle headlights, any portion of an  
15 off-street parking area where a vehicle parking space faces an adjacent  
16 residentially zoned property shall be screened from the adjacent residential  
17 property by a solid decorative wall or fence with a height of four to six feet.  
18 Required perimeter buffer landscaping shall be located outside of the fence or  
19 wall. The wall shall be durable or protected from vehicles and shall be kept in  
20 good repair as effective opaque screening.
- 21 11. **Shopping Cart Caches**  
22 All parking lots for uses that provide shopping carts for utilization by  
23 customers shall provide shopping cart return areas. At least one area shall  
24 be provided for every 20 parking spaces, and such returns shall be well  
25 distributed throughout the site. The shopping cart return areas shall be  
26 designed and constructed to prevent shopping carts from being blown and  
27 scattered during high winds. Shopping cart return areas shall not be located  
28 adjacent to handicapped parking areas or in such a manner to obstruct or  
29 interfere with pedestrian use areas.
- 30 12. **Bicycle Racks**  
31 All parking lots with more than 40 spaces shall provide at least one bicycle  
32 rack with a minimum of four parking slots. Such racks shall be conveniently  
33 located near the primary entry of the primary building on the site, but shall not  
34 obstruct pedestrian use areas.<sup>92</sup>
- 35 13. **Lighting of Off-Street Parking and Loading Areas**<sup>93</sup>  
36 All lighting for parking and loading areas shall comply with the requirements of  
37 this section.
- 38 a. **Shielding**

<sup>91</sup> NOTE: This standard has been suggested by staff members, who note that the requirement is useful in Alaska's winters, when it is dark (ie, headlight glare) and when deciduous buffer landscaping is less effective. It has been a typical case comment. This section was moved into the parking section from the landscaping section.

<sup>92</sup> NOTE: Should move to general standards. Discuss issue of motorcycle parking.

<sup>93</sup> NOTE: This section is new.

1 Any light or lamp that emits more than 900 lumens (13 watt compact  
2 fluorescent or 60 watt incandescent) shall be shielded with a full cut-  
3 off style fixture mounted in a horizontal position.

4 **b. Light Source**

5 All fixtures shall utilize one of the following bulb types: Metal halide,  
6 induction lamp, compact fluorescent, incandescent (including  
7 tungsten-halogen), or high-pressure sodium with a color rendering  
8 index above 70.

9 **c. Pole Height**

10 To preserve the pedestrian scale and residential environment, the  
11 maximum height of any parking lot lighting in residential, RMX,  
12 CCMU, or NMU districts shall be 20 feet. The maximum height  
13 serving any other type of use in any district shall be 25 feet, except  
14 that in lots larger than five acres, the maximum height shall be 35 feet  
15 if the pole is located at least 100 feet from any residential use.

16 **d. Maximum Number of Fixtures**

17 There shall be no more than two light fixtures on any pole.

18 **e. Maximum Lighting Level Uniformity (Maximum:Minimum)**

19 i. Residential: 15:1

20 ii. Nonresidential: 10:1

21 **f. Maximum Initial Horizontal Illumination**

22 i. Residential: Five foot-candles for parking lots.

23 ii. Nonresidential: Ten foot-candles for parking lots.

24 **g. Maximum Initial Lamp Lumens**

25 i. Residential: 3,500 lumens (50 watt) for five or less parking  
26 spaces. 8,500 lumens (70 watts) for six or more spaces.

27 ii. Nonresidential: 21,500 lumens (250 watt. 24,000 lumens  
28 (400 watt) for 5 acre or larger parking lots

29 **h. Spillover**

30 No parking lot lighting shall result in spillover lighting on adjacent  
31 property that exceeds one-tenth foot-candle line of sight, measured at  
32 the property line.

33 **i. Hours of Operation**

34 All parking lot lighting fixtures, except for the minimum necessary for  
35 security, shall be extinguished by 10:00 p.m. or within one hour after  
36 the close of the facility, and remain off until dusk or one hour prior to  
37 the commencement of business, whichever is later. No more than a  
38 maximum of one foot-candle may be maintained for parking security  
39 purposes.

**H. Vehicle Stacking Spaces<sup>94</sup>**

The vehicle stacking standards of this section shall apply unless otherwise expressly approved by the Traffic Engineer:

**1. General**

Uses of land and structures requiring a drive-through shall provide sufficient queuing space within the site to avoid vehicles waiting within the public right-of-way. Such uses shall demonstrate to the Traffic Engineer that sufficient in-line waiting spaces are provided as part of the parking plan to avoid encroachment into the public rights-of-way.

**2. Minimum Number of Spaces**

Off-street stacking spaces shall be provided as follows:

TABLE 21.07-12: VEHICLE STACKING AREAS		
Activity Type	Minimum Stacking Spaces	Measured From
Bank teller lane	4	Teller or window
Automated teller machine drive-through	3	Teller machine
Restaurant drive-through	6	Order box
Restaurant drive-through	4	Order box to pick-up window
Car wash stall, automatic	6	Entrance
Car wash stall, self-service	3	Entrance
Coffee/Espresso carts	4	Pick-up Window
Gasoline pump island	2	Pump island
Security gate entrance for self storage or vehicle storage facility	[1]	Security gate
Other	Determined by Traffic Engineer.	
Note [1]: The required on-site queue lane shall measure no less than 50 feet in length and 24 feet in width. The width of the self-storage facility gate is excluded from this requirement.		

**3. Design and Layout**

Required stacking spaces are subject to the following design and layout standards.

**a. Size**

Stacking spaces shall be a minimum of eight feet by 20 feet in size, except as noted above in Table 21.07-12, *Vehicle Stacking Areas*, for self-storage and vehicle storage facilities.

**b. Location**

Stacking spaces may not impede on- or off-site traffic movements or movements into or out of off-street parking spaces.

<sup>94</sup> NOTE: Item 1 is carried over from existing Section 21.45.080.W.4.j. Items 2 and 3 are new.

c. **Design**

Stacking spaces shall be separated from other internal driveways by raised medians if deemed necessary by the traffic engineer for traffic movement and safety.

I. **Accessible Parking Requirements<sup>95</sup>**

A portion of the total number of required off-street parking spaces in each off-street parking area shall be specifically designated, located, and reserved for the use by persons with physical disabilities.

1. **Residential Uses<sup>96</sup>**

For residential uses, accessible parking shall be provided at the rate of one space per each dwelling unit that is designed for occupancy by the physically disabled.

2. **Non-Residential Uses**

Accessible parking requirements for commercial, industrial, public, and institutional uses are as follows:

TABLE 21.07-13: ACCESSIBLE PARKING REQUIREMENTS			
Total Vehicle Spaces in Parking Lot	Minimum Car Accessible Spaces	Minimum Van Accessible Spaces	Total Accessible Parking Spaces, Required Minimum
1--25	0	1	1
26--50	1	1	2
51--75	2	1	3
76--100	3	1	4
101--150	4	1	5
151--200	5	1	6
200--300	6	1	7
301--400	7	1	8
401--500	8	1	9
501--549	9	1	10
550--599	10	1	11
600--649	11	1	12
650--699	12	1	13
700--749	13	1	14
750--799	14	1	15
800--849	14	2	16
850--899	15	2	17
900--949	16	2	18
950--999	17	2	19
1,000--1,099	18	2	20
1,100--1,199	19	2	21
1,200--1,299	20	2	22
1,300--1,399	21	2	23

<sup>95</sup> NOTE: Most of the material in this section is pulled forward from the existing section 21.45.080.W.8; a general statement and residential requirements have been added. Titles have been added to clarify topics in this section.

<sup>96</sup> NOTE: Residential uses are not mentioned in the current code; this new section addresses this.

TABLE 21.07-13: ACCESSIBLE PARKING REQUIREMENTS			
Total Vehicle Spaces in Parking Lot	Minimum Car Accessible Spaces	Minimum Van Accessible Spaces	Total Accessible Parking Spaces, Required Minimum
1,400--1,499	21	3	24
1,500--1,599	22	3	25
1,600--1,699	23	3	26
1,700--1,799	24	3	27
1,800--1,899	25	3	28
1,900--1,999	26	3	29
2,000--2,099	27	3	30
2,100--2,199	28	3	31
2,200--2,299	28	4	32
2,300--2,399	29	4	33
2,400--2,499	30	4	34
2,500--2,599	31	4	35
2,600+	Total accessible spaces minus total van spaces	1 per each 8 accessible spaces	20 plus 1 for each 100 over 1,000 total vehicle spaces

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**3. Dimensions**

Accessible vehicle spaces shall be at least eight feet wide with an access aisle at least five feet wide abutting the space. One in every eight accessible vehicle spaces shall have an abutting aisle eight feet in width for vans. Accessible vehicle space access aisles shall be part of an accessible route to the building or facility entrance as specified in subsection 4. below, *Accessible Routes*. Two accessible vehicle spaces may share a common access aisle. Parked vehicle overhangs shall not reduce the clear width of an accessible route. Accessible vehicle spaces and access aisles shall be level with surface slopes not exceeding two percent in all directions.

**4. Accessible Routes<sup>97</sup>**

**a. Location**

At least one accessible route to the building or facility entrance shall be provided from accessible parking and accessible passenger loading zones.

**b. Width**

The minimum clear width of an accessible route shall be 36 inches.

**c. Surface Textures**

Ground surfaces along accessible routes shall be stable, firm, and slip-resistant.

**d. Changes in Levels**

<sup>97</sup> NOTE: The existing code contains a reference to the ADA text regarding accessible routes. This section contains relevant information from that section of the ADA text for ease of reference for the user.

- 1 Changes in level up to 1/4 inch may be vertical and without edge  
2 treatment. Changes in level between 1/4 inch and 1/2 inch shall be  
3 beveled with a slope no greater than one to two. Changes in level  
4 greater than 1/2 inch shall be accomplished by means of a ramp.
- 5 **e. Gratings**  
6 If gratings are located in walking surfaces on an accessible route,  
7 then they shall have spaces no greater than 1/2 inch wide in one  
8 direction. If gratings have elongated openings, then they shall be  
9 placed so that the long dimension is perpendicular to the dominant  
10 direction of travel.
- 11 **f. Ramps**  
12 ADA ramps cannot protrude into the ADA access aisle. Ramp details  
13 shall be included on the plans.
- 14 **5. Location**  
15 Accessible vehicle spaces serving a particular building shall be located on the  
16 shortest accessible route of travel from adjacent parking to an accessible  
17 entrance. The accessible route of travel shall not pass behind parking  
18 spaces. In parking facilities that do not serve a particular building, accessible  
19 vehicle spaces shall be located on the shortest accessible route of travel to an  
20 accessible pedestrian entrance of the parking facility. In buildings with  
21 multiple accessible entrances with adjacent parking, accessible vehicle  
22 spaces shall be dispersed and located closest to the accessible entrances.
- 23 **6. Signs**  
24 Accessible vehicle spaces shall be designated as reserved by a sign showing  
25 the symbol of accessibility. Van-accessible spaces shall have an additional  
26 sign reading "Van-Accessible" mounted below the symbol of accessibility.
- 27 **a.** Eight-foot van accessible aisles require a no-parking sign.
- 28 **b.** Signs shall be located so that they do not obstruct the ramps or other  
29 pedestrian access.
- 30 **c.** A handicapped sign detail shall be included in the plan submittal per  
31 Municipality sign specifications.
- 32 **7. Implementation of ADA**  
33 Regulations may be promulgated under Section 21.03.040, *Amendments to*  
34 *Text of Title 21*, to implement the requirements of Americans with Disabilities  
35 Act of 1991 as it may be amended or interpreted by federal regulation.
- 36 **8. Standards for Parking as Principal Use<sup>98</sup>**  
37 Where a parking structure or lot is a permitted principal or conditional use and  
38 is not providing required parking for another principal use, accessible parking  
39 spaces in accordance with this section shall be provided.

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<sup>98</sup> NOTE: This subsection is carried over from existing Section 21.45.080.Y.

**J. Modification of Parking Requirements<sup>99</sup>**

The number of required parking spaces shall be that specified in this title unless modified pursuant to Section 21.03.190, *Minor Modifications*, or Section 21.03.200, *Variances*.

**21.07.100 NORTHERN CLIMATE DESIGN<sup>100</sup>****A. Purpose**

New development should be designed with architectural and design elements that specifically address and/or enhance life in Anchorage's northern climate, with its distinct geography, extreme light angles, length of days, cold temperatures, wind, snow, and ice. This section is intended to reinforce the importance of northern climate issues in this Title, and provides cross-references to guidelines and standards located throughout this Title that encourage or require northern climate design.

**B. Cross-References<sup>101</sup>**

Guidelines and standards to encourage or require northern climate design are located throughout this Title and include the following:

**1. Development and Design Standards, Chapter 21.07**

- a. Off-Street Parking and Loading:
  - i. Snow storage (subsection 21.07.090.G.5).
- b. Public/Institutional and Commercial Building Standards:
  - i. Building Orientation (subsection 21.07.120.C.)
  - ii. Building Massing and Façade (subsection 21.07.120.D)
  - iii. Northern Climate Wind Mitigation (subsection 21.07.120.E.)
  - iv. Weather Protection for Pedestrians (subsection 21.07.120.F.)
- c. Exterior Lighting (Section 21.07.140).

<sup>99</sup> NOTE: This is a new proposed section that replaces existing sections related to modifications to parking requirements. As recommended in the interim report, this is a streamlined option that simply references the minor modifications procedure in Chapter 21.03. As part of edits to Module 1, we will ensure that the Traffic Engineer is given the authority to make such modifications. *Also need to address in this section:* Need to discuss requiring conformity with landscaping and lighting provisions within 5-10 years for nonconforming lots.

<sup>100</sup> NOTE: Northern climate design issues are woven throughout many parts of Title 21. Examples include the subdivision design standards to ensure solar access, the building design standards regarding roof form and building orientation, and the snow storage provisions in the parking standards. Rather than consolidate such unrelated provisions into one section, we have decided to separate those sections out into the code in the places where they make the most sense. We have inserted this brief section here, however, to emphasize the importance of northern climate design in the Anchorage development process.

<sup>101</sup> NOTE: This is simply a sample of how this section could be organized. We have included only a few cross-references for illustrative purposes; if this approach is followed in the final code, the list of course would be longer.

2. **Subdivision Standards, Chapter 21.08**<sup>102</sup>

- a. Standards to require east-west street orientation (Section ---).
- b. Provisions authorizing zero north-lot-line development (Section ---).

**21.07.110 RESIDENTIAL BUILDING STANDARDS**<sup>103</sup>

**A. Purpose**

The standards of this Section 21.07.110 are intended to promote high-quality residential development and construction; protect property values; encourage visual variety and architectural compatibility; and promote an integrated character for Anchorage's neighborhoods. Specifically, the standards:

- 1. Promote new residential developments that are distinctive, have character, and relate and connect to established neighborhoods;
- 2. Provide variety and visual interest in the exterior design of residential buildings;
- 3. Provide for a variety of lot sizes and housing types for a range of households and age groups;
- 4. Enhance the residential streetscape and diminish the prominence of garages and parking areas;
- 5. Enhance public safety by preventing garages from obscuring main entrances or blocking views of the street from inside residences;
- 6. Locate active living spaces, entrances, and windows to improve the physical and visual connection from residences to the street, and foster opportunities for casual surveillance of the street and outwardly expressed proprietorship of the neighborhood; and
- 7. Improve the compatibility of attached and multifamily residential development with the residential character of surrounding neighborhoods.

**B. Applicability**

This section applies to all residential development in the R-1, R-2, R-3, R-4, and RMX districts. This section does not apply in Girdwood.

**C. Alternative Compliance**

The alternative compliance procedure set forth in subsection 21.07.010.B. may be used to propose alternative means of complying with the intent of this section.

<sup>102</sup> NOTE: Some standards to promote northern climate design, such as east-west street orientation, are proposed in the solar access memo but are not yet folded into the draft of Chapter 21.08. Further discussion is necessary on this topic. Incentives may be possible to encourage such design, rather than regulations.

<sup>103</sup> NOTE: This section incorporates a number of proposed new residential building standards, many of which have been suggested by staff.

1           **D.       Standards for Single-Family and Two-Family Residential**

2                   **1.       Purpose**

3                   This subsection 21.07.110.D. is intended to promote building design that  
4                   contributes to a sense of neighborhood and to the overall streetscape by  
5                   carefully relating buildings, yards, and garages in relation to public streets and  
6                   adjacent properties. The standards support visual variety, avoid monotony in  
7                   home designs and layouts, and protect property values of both the subject  
8                   property and surrounding development.

9                   **2.       Design Standards**

10                   **a.       *Mix of Housing Models***

11                   Any development of 50 or more units shall have at least five different  
12                   types of housing models. Any development of between five and 50  
13                   units shall have at least three different types of housing models.  
14                   Each housing model shall have at least two of the following  
15                   differentiations:

- 16                           i.       Different floor plans;
- 17                           ii.       Different placement of the building footprint on the lot;
- 18                           iii.       Different garage placement; or
- 19                           iv.       Different roof lines.

20                   **b.       *Orientation of Dwellings to the Street***

21                   Each residence shall have at least one primary pedestrian doorway  
22                   for access to the dwelling located on the elevation of the dwelling  
23                   facing the front lot line of the property, on or within 8 feet of the most  
24                   forward plane of the house, and clearly visible from the street or  
25                   public area adjacent to the front lot line. On corner lots, such  
26                   pedestrian doorway may be located facing any adjacent street.  
27                   Unless prohibited by terrain or other site constraints, the orientation of  
28                   new lots shall repeat the predominant relationship of buildings to  
29                   buildings and buildings to street along the same block face or the  
30                   facing block face.

31                   **c.       *Garages***

- 32                           i.       Garage doors facing the street shall comprise no more than  
33                                       50 percent of the total length of a dwelling's façade.
- 34                           ii.       Garage doors that face the street and comprise more than 40  
35                                       percent of the façade shall be recessed a minimum of four  
36                                       feet behind either:
  - 37   **(A)**     The front wall plane of the house; or
  - 38   **(B)**     The front wall plane of a porch that extends  
39   horizontally across at least 25 percent of the house.
- 40                           iii.       The minimum front building setback may be reduced by five  
41                                       feet when there is a detached garage located behind the

1 principal dwelling structure in the rear of the lot, or a rear  
2 garage attached to the principal dwelling if the front wall of  
3 the garage is located at least 20 feet behind the façade of the  
4 house.

5 **d. Paved Driveways**

6 For new homes constructed on lots of less than one acre, or in  
7 subdivisions where the majority of lots are less than one acre, all  
8 residential driveways that are less than 150 feet in length shall be  
9 paved with concrete, asphalt, or an asphaltic all-weather surface (not  
10 including gravel) to standards prescribed by the Traffic Engineer for  
11 their entire length. For such residential driveways exceeding 150 feet  
12 in length, at least the 100 feet of driveway closest to the public street  
13 shall be paved with such materials.

14 **E. Standards for Townhouse Residential**

15 **1. Purpose**

16 The purpose of these standards is to provide a distinctive architectural  
17 character in new townhouse residential development that avoids featureless  
18 design and repetition of facades.

19 **2. Building Articulation and Architectural Variety**

20 **a.** No more than six townhouse units may be attached in a single row or  
21 building cluster.

22 **b.** Within each townhouse row or cluster, individual units shall be  
23 differentiated through two or more of the following methods:

24 **i.** Use of distinct color variation between individual units;

25 **ii.** Use of distinct variations in materials between individual  
26 units;

27 **iii.** Use of distinct variations in architectural style or features,  
28 such as a porch or similar feature, between individual units;

29 **iv.** Use of distinct variations in roof form;

30 **v.** Variation in garage orientations; or

31 **vi.** A variation in the plane of the façade to provide a minimum  
32 three-foot variation between individual units.

33 **3. Garages**

34 **a.** Garages that protrude towards the street in front of the façade of the  
35 primary structure shall not be permitted. Garage doors on all front-  
36 loading (street-oriented) garages shall be either:

37 **i.** Recessed a minimum of four feet behind the façade of the  
38 dwelling portion of the structure (including side-loading  
39 garages), or a front porch that is at minimum of five feet wide  
40 by eight feet long; or



- 1 c. In multi-building developments, the buildings are encouraged to be  
2 arranged to enclose and frame common areas. Common areas and  
3 courtyards should be convenient to a majority of units.
- 4 d. When more than one multi-family structure is constructed:
- 5 i. No side, end, or rear wall of a multi-family structure shall be  
6 located within 20 feet of a side, end, or rear wall of any other  
7 multi-family structure;
- 8 ii. No side, end, or rear wall of a multi-family structure shall be  
9 located within 30 feet of the front wall of any other multi-family  
10 structure;
- 11 iii. No front wall of a multi-family structure shall be located within  
12 40 feet of the front wall of any other multi-family structure.
- 13 **4. Building Mass and Articulation**
- 14 a. The maximum length of any multi-family building shall be 160 feet.
- 15 b. Each façade greater than 50 feet in length, measured horizontally,  
16 shall incorporate wall plane projections or recesses having a depth of  
17 at least 10 percent of the length of the façade, and extending at least  
18 20 percent of the length of the façade. No uninterrupted length of any  
19 façade shall exceed 50 horizontal feet.
- 20 c. Blocky, uniform facades are prohibited. The facades of all multi-  
21 family buildings shall be articulated through the incorporation of two  
22 or more of the following:
- 23 i. Balconies;
- 24 ii. Bay or box windows;
- 25 iii. Porches;
- 26 iv. Dormers;
- 27 v. Variations in materials;
- 28 vi. Variations in roof forms.
- 29 d. Buildings located within 20 feet of the public right-of-way shall have a  
30 first floor raised at least one foot off the ground to maintain privacy.
- 31 e. The height of each multi-family building taller than 35 feet shall be  
32 stepped down from its highest roofline at least one full story on any  
33 end of the building located within 50 feet of a street-right-of-way or an  
34 adjacent area with single-family or two-family residential  
35 development.

- 1 f. On multi-family buildings of eight units or less, the massing and use of  
2 exterior materials should be arranged to give each building the  
3 appearance of a large single-family home.
- 4 **5. Roof Form**
- 5 **a. Roof Design**
- 6 i. The incorporation of a variety of roof forms is strongly  
7 encouraged. Upper-level residential floors may be  
8 incorporated into the roof form to reduce the apparent height  
9 and mass of buildings.
- 10 ii. Multi-family residential buildings shall be designed to avoid  
11 any continuous roofline longer than 50 feet. Rooflines longer  
12 than 50 feet shall include at least one vertical elevation  
13 change of at least two feet.
- 14 iii. Roofs shall have a visually prominent or projecting cornice  
15 line.
- 16 **b. Roof Pitch**
- 17 All roofs with a pitch of less than 2:12 shall be screened by a parapet  
18 wall at least two feet in height.
- 19 **c. Roof Design for Snow**
- 20 Generally, roofs should not incline toward main pedestrian paths or  
21 entries. However, where roofs do incline toward such areas,  
22 protective features such as arcades, loggias, and dormers shall be  
23 used to protect pedestrians from falling snow.
- 24 **6. Façades and Detail Elements**
- 25 **a. Facade Materials**
- 26 i. A minimum of 35 percent of the facade, and 20 percent of  
27 other elevations, of each multi-family residential structure  
28 (excluding areas occupied by windows and doors) shall be  
29 constructed or faced in brick or stone materials (excluding  
30 cinder block).
- 31 ii. Where lap siding is used on any elevation of a multi-family  
32 residential structure, it shall have a maximum nine-inch  
33 exposed board face.
- 34 iii. Highly reflective opaque materials, natural cinder block, and  
35 metals are not permitted as primary exterior finishes.
- 36 iv. Siding material shall be continued down to within nine inches  
37 of finished grade on any elevation.
- 38 **b. Windows**
- 39 All elevations on multi-family buildings shall contain windows.  
40 Primary facades and street-facing elevations shall contain at least 10  
41 percent windows.

- 1                   c.     **Four-sided Design**  
2                   A multi-family building's architectural features and treatments shall  
3                   not be restricted to a single elevation. All sides of a building open to  
4                   view by the public, whether viewed from public or private property,  
5                   shall display a similar level of quality and architectural interest.
- 6                   7.     **Entrances and Porches**  
7                   a.     Entrances should be prominent and visible from the street and from  
8                   parking areas.
- 9                   b.     The front entry of any structure with no porch shall be emphasized by  
10                  the use of at least two of the following:
- 11                  i.     An elevation at least one foot above the grade of the nearest  
12                  sidewalk;
- 13                  ii.    Double doors;
- 14                  iii.   A roofed structure such as a portico, awning, or marquee; or
- 15                  iv.   The inclusion of side-lights (glazed openings to the side of the  
16                  door), and transom-lights (glazed opening above the door) in  
17                  the entry design.
- 18                  8.     **Accessory Elements**  
19                  a.     **Storage**  
20                  A multi-family project shall provide covered, enclosed, and secure  
21                  storage areas for bicycles and other belongings that typically cannot  
22                  be accommodated within individual dwelling units. Storage and other  
23                  accessory buildings shall be designed with materials and/or  
24                  architectural elements that are related to the principal building(s).
- 25                  b.     **Garages**  
26                  i.     **Attached or Detached Garages**  
27                  To the maximum extent feasible, garage entries and carports  
28                  shall not be located between a principal multi-family building  
29                  and a required street frontage, but shall instead be  
30                  internalized in building groups so that they are not visible  
31                  from adjacent streets.
- 32                  ii.    **Size**  
33                  Garages and carports shall be limited to six spaces per  
34                  structure to avoid a continuous row of garages. No more  
35                  than six garage doors may appear on any multi-family  
36                  building elevation containing front doors, and the plane of  
37                  each garage door shall be offset at least two feet from the  
38                  plane of the garage door adjacent to it.
- 39                  iii.   **Design**  
40                  Detached garages and carports shall be integrated in design  
41                  with the principal building architecture, and shall incorporate  
42                  similar and compatible forms, scale, materials, color, and  
43                  details. Detached garages shall have pitched roofs with

1 minimum 4:12 slope. Side- or rear-facing garages shall have  
2 windows or other architectural details that mimic the features  
3 of the living portion of the structures on the side of the garage  
4 facing a street.

5 **iv. Parking Structures**

6 Underground parking structures are strongly encouraged for  
7 multi-family developments.<sup>105</sup>

8 **G. Snow Storage**

9 Snow storage areas shall be indicated clearly on all site plans. Location and design of  
10 snow storage areas in parking lots shall comply with the provisions of subsection  
11 21.07.090G.5.b., *Location and Design of Snow Storage Areas*.

12 **21.07.120 PUBLIC/ INSTITUTIONAL AND COMMERCIAL BUILDING STANDARDS<sup>106</sup>**

13 **A. Purpose**

14 This section is intended to promote high-quality building design in non-residential  
15 areas, encourage visual variety in such areas, ensure building layout and design  
16 suitable for Anchorage's northern climate, foster a more human scale and attractive  
17 streetfronts, project a positive image to encourage economic development in  
18 Anchorage, and protect property values of both the subject property and surrounding  
19 development.

20 **B. Applicability**

21 Development of any structure that will contain a use categorized in Table 21.05-1,  
22 *Table of Allowed Uses*, as a public/institutional or commercial use shall comply with  
23 the standards of this Section 21.07.120.

24 **C. Alternative Compliance**

25 The alternative compliance procedure set forth in subsection 21.07.010.B. may be  
26 used to propose alternative means of complying with the intent of this section.

27 **D. Building Orientation**

28 **1. Orientation to Surrounding Streets, Walkways, and Parking**

29 **a.** If the proposed development consists of only one building, such  
30 building shall be oriented toward the primary abutting street.

31 **b.** If the proposed development consists of more than one building, all  
32 primary and pad site buildings shall be arranged and grouped so that  
33 their primary orientation complements adjacent, existing development  
34 and:

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<sup>105</sup> NOTE: Staff has proposed density bonuses as incentives for developing underground parking garages. Further discussion needed. The idea is a good one, but some research would be necessary to determine the appropriate level of bonus that might be necessary in Anchorage to offset the additional cost of providing such parking.

<sup>106</sup> NOTE: Suggested new standards. Again, the approach is quite simple and is designed to be both easy to administer and politically palatable, yet also substantive enough to get at some of the key design issues in Anchorage. Many of these standards were originally considered as part of the draft Retail Design Standards Manual. However, material from that draft manual has been heavily edited and supplemented based on staff suggestions.

- 1                                    i.        Frames the corner of an adjacent intersection;
- 2                                    ii.       Frames and encloses a pedestrian and/or vehicle access
- 3    corridor within the development site; or
- 4                                    iii.       Frames and encloses on at least three sides parking areas,
- 5    public spaces, or other site amenities.
- 6                                    c.        Building functions that do not directly serve the public, such as
- 7    loading bays, and blank walls, should not be placed directly along the
- 8    street. Garages that face streets shall be recessed behind the façade
- 9    of primary buildings.

10                                    2.        **Solar Orientation**  
11    Where not in conflict with subsection 1 above, primary public entrance areas,  
12    outdoor community spaces and plazas, gallerias and atriums, and other public  
13    spaces and pedestrian areas shall be located and oriented for solar exposure  
14    during times of public use.

15                                    E.        **Building Massing and Facade**

16                                    1.        **Building Mass**  
17    A single, large, dominant building mass shall be avoided. Buildings  
18    containing 20,000 square feet or more and over one story in height shall be  
19    designed to appear more as an aggregation of smaller "building blocks"  
20    through variations in height, texture, color, and façade depth.

21                                    2.        **Wall Articulation**  
22    Primary structures having single walls exceeding 50 feet in length shall  
23    incorporate two or more of the following features at least every 50 feet in  
24    length:

- 25                                    a.        Changes in color, graphical patterning, changes in texture, or
- 26    changes in material;
- 27                                    b.        Projections, recesses, and reveals, expressing structural bays or
- 28    other aspects of the architecture with a minimum change of plane of
- 29    12 inches;
- 30                                    c.        Windows and fenestration;
- 31                                    d.        Gable projections;
- 32                                    e.        Horizontal/vertical breaks; or
- 33                                    f.        Other similar techniques.

34                                    3.        **Entrances**  
35    Each primary structure shall have a clearly defined main pedestrian entrance  
36    featuring at least three of the following elements:

- 37                                    a.        Canopies or porticos,



1                   **9. Reflective Materials**  
2                   Façade building materials shall not create excessive glare. Shiny, reflective  
3                   metal surfaces are discouraged in order to avoid glare in northern climate low  
4                   sunlight conditions. If highly reflective building materials are proposed, such  
5                   as aluminum, unpainted metal, or reflective glass, the potential for glare in  
6                   low-sun angles from such materials shall be evaluated to determine whether  
7                   or not the glare would create a significant adverse impact on the adjacent  
8                   property owners, inhabitants, passing motorists, outdoor activities or  
9                   enjoyment of scenic views. Mirrored glass with a reflectance greater than 20  
10                  percent shall not cover more than 10 percent of any exterior façade of a  
11                  primary or accessory structure.

12                  **10. Multiple Buildings in Commercial Centers**  
13                  In order to achieve unity between all buildings in a commercial development  
14                  consisting of more than one building, all buildings in such a development,  
15                  including pad site buildings, shall employ a consistent architectural style or  
16                  theme, be constructed of similar exterior materials, and feature similar colors.

17                  **F. Northern Climate Wind Mitigation<sup>107</sup>**

18                  **1. Purpose**  
19                  This section is intended to mitigate the impacts of wind and improve  
20                  microclimates in street sidewalk environments, public open spaces, and major  
21                  entrance areas during the cold season.

22                  **2. Tall Buildings**  
23                  In Anchorage's cold climate, avoiding high wind speed is essential to  
24                  pedestrian comfort in outdoor spaces and to the vitality of downtown and  
25                  mixed-use centers. However, faster winds at the top of tall buildings flow  
26                  down the face of the building, becoming turbulent and increasing in speed at  
27                  the ground level, decreasing comfort in the winter, spring and fall. Wind  
28                  effects shall be minimized on and around tall buildings in city centers by use  
29                  of the following techniques:

30                  **a. Aerodynamic Profile**  
31                  The tower portion of tall buildings with more than six stories should  
32                  have rounded aerodynamic profiles and turn their narrow face or be  
33                  angled diagonal to prevailing winter winds. Wider buildings with long  
34                  sides to the wind which increase the downwash effect shall be  
35                  avoided.

36                  **b. Stepped Terraced Form**  
37                  Terrace taller buildings down to the street in stair-step fashion.  
38                  Buildings significantly taller (more than twice as tall) than their  
39                  neighbors or that are taller than 6 stories shall be designed with  
40                  horizontal projections and stepped, setback facades starting between  
41                  20 to 35 feet (4 stories maximum) above the street. The setback from  
42                  the street wall to the tower portion of a tall building shall be at least 20  
43                  feet.

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<sup>107</sup> NOTE: This section drafted by staff. In addition to wind concerns, prevention of unnecessary sun shadowing is also important. Solar shading studies and possible incentives to shift the mass, height, or setbacks of major buildings to maximize solar access are discussed in the separate solar access working paper. Solar access standards or incentives are not yet incorporated in a significant way into the current draft of Ch. 21.07, though some solar-related provisions are interspersed throughout the chapter.

- 1                   c.     **Protective Wall Projections**
- 2                   Use projections such as awnings, balconies, and marquees to protect
- 3                   the public spaces and building entrances below from wind down
- 4                   drafts.
  
- 5                   d.     **Gradual Height Transitions – Guideline**
- 6                   Buildings should be relatively low in height, or similar in height to
- 7                   adjacent buildings. Abrupt changes in building height from one
- 8                   building to the next significantly impact winter wind velocity in streets
- 9                   and spaces. Gradual height transitions allow more of the cold wind to
- 10                  pass over the tops of buildings. Where building heights increase in
- 11                  the direction of prevailing wind flow, buildings taller than their upwind
- 12                  neighbors should be less than twice the average height of the nearest
- 13                  upwind buildings. Height transitions from one building to another
- 14                  should not exceed 100%.
  
- 15                 e.     **Wind Study**
- 16                 A wind testing study may be provided as an alternative to compliance
- 17                 with subsections a. through d. above. The wind study should
- 18                 demonstrate that the proposed development will not accelerate wind
- 19                 velocity at the ground level. The review authority may require wind
- 20                 testing of medium and high profile development proposals greater
- 21                 than six stories in height, to evaluate the wind impact of these
- 22                 proposals, and to determine the appropriate design measures to
- 23                 reduce or mitigate any undesirable wind conditions.

24                 **G.     Weather Protection for Pedestrians**

- 25                 1.     **General**
- 26                 Sheltering roofs or building projections for protection from rain, wind, snow
- 27                 and ice shall be provided in areas of pedestrian activity around
- 28                 public/institutional and commercial buildings, including sheltered
- 29                 entranceways at major entrances and pedestrian-oriented facades along
- 30                 public sidewalks or walkways.
  
- 31                 2.     **Primary Facades and Entrances**
- 32                 Buildings shall incorporate canopies, awnings, or similar sheltering structure
- 33                 across 60 percent of any ground-floor façade abutting a street sidewalk or
- 34                 pedestrian walkway. The minimum depth of any canopy or awning shall be
- 35                 eight feet to minimize snow, ice, and drip lines along pedestrian walkways.
- 36                 The canopy or awning shall be at least eight feet and no more than 14 feet
- 37                 above the sidewalk or walkway elevation.
  
- 38                 3.     **Protective Roof Design**
- 39                 Buildings shall avoid roof designs, canopy structures, or other design features
- 40                 that would allow accumulated snow, ice, or rain to fall or slide onto sidewalks
- 41                 or walkways. Roofs shall be designed to protect doorways, exterior stairs,
- 42                 balconies, garage entrances, bicycle parking, and pedestrian sidewalks and
- 43                 walkways from snow and ice fall. Where sloping roofs incline toward such
- 44                 areas, protective features such as arcades, loggias, and dormers shall be
- 45                 used to protect pedestrians from falling snow. Such devices need not be
- 46                 continuous if foundation planting beds are located to set the walkway away
- 47                 from the building facades.

1           **H.     Snow Storage**

2                   Snow storage areas shall be indicated clearly on all site plans. Location and design of  
3                   snow storage areas in parking lots shall comply with the provisions of subsection  
4                   21.07.090.G.5.b., *Location and Design of Snow Storage Areas*.

5   **21.07.130 LARGE RETAIL ESTABLISHMENTS<sup>108</sup>**

6           **A.     Purpose**

7                   Large retail establishments depend on high visibility from major public streets, a large  
8                   physical scale, and a great volume of use by many residents and visitors. As a  
9                   consequence, their design determines much of the character, function, and image of  
10                  this community and its streetscapes and commercial areas. The purpose of this  
11                  section is to encourage major retail developments, such as corporate chains with  
12                  standardized marketing strategies, to contribute to Anchorage as a unique place and  
13                  to physically integrate with the community in a positive way. The standards of this  
14                  section augment existing basic standards for development found elsewhere in this  
15                  chapter with more specific interpretations that apply to large retail establishments.  
16                  These standards promote: a basic level of architectural variety and interest; a  
17                  compatible appearance and scale; pedestrian and parking lot access; orientation of  
18                  buildings and entrances in relation to surrounding streets; provisions for adaptive  
19                  reuse of prominent vacant buildings; and mitigation of negative impacts of large scale  
20                  retail developments. The standards are by no means intended to limit creativity;  
21                  rather, to serve as a tool for design professionals engaged in a site-specific design.

22          **B.     Applicability**

23                  The standards of this Section 21.07.130 shall apply to any large retail establishment,  
24                  and to any additional principal or secondary buildings and site development within the  
25                  same site or site master plan area.

26          **C.     Relationship to Other Standards**

27                  The provisions of this section shall apply in addition to the generally applicable  
28                  standards found elsewhere in this chapter and Title. Where there is a conflict with  
29                  generally applicable standards in this chapter, the standards of this section shall  
30                  apply. Where there is a conflict with district-specific standards in Chapter 21.044 of  
31                  this Title, the district-specific standards shall apply.

32          **D.     Adaptability for Reuse or Compartmentalization**

33                  The building design shall include specific elements for adaptation for multi-tenant re-  
34                  use. Such elements may include but are not limited to compartmentalized  
35                  construction, including plumbing, electrical service, heating, ventilation, and air  
36                  conditioning. The building design shall also allow for: the interior subdivision of the  
37                  structure into separate tenancies; facades that readily adapt to multiple entrances and  
38                  adapt to entrances on all but one side of the building; parking lot schemes that are  
39                  shared by establishments or landscaping schemes that compliment the multiple  
40                  entrance design; and other elements of design which facilitate the multi-tenant re-use  
41                  of the building and site.

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<sup>108</sup> NOTE: This section drafted by staff, based on work done with another consultant on the Retail Design Standards Manual.

1           **E.       Building Scale and Character of Large Retail Establishments**

2                   **1.   Façade Articulation and Features**

3                           **a.       *Intent***

4                                   Façade articulations and detail elements should be employed to  
5                                   reduce the apparent bulk, industrial look and uniform appearances of  
6                                   large retail buildings, provide visual interest and variety, and respect  
7                                   and reinforce the human scale.

8                           **b.       *Façade Articulation and Variation***

9                                   Horizontal facades longer than 100 feet in length, measured  
10                                  horizontally, shall be articulated into smaller units of building mass  
11                                  and incorporate wall plane offsets having a depth of at least 5 percent  
12                                  of the length of the façade and extending at least 20 percent of the  
13                                  façade. In addition to building mass offsets, any building in a large  
14                                  retail establishment shall include variation in architectural detail along  
15                                  the horizontal length of façade by using at least three of the  
16                                  architectural detail features listed below. At least two of the elements  
17                                  shall repeat at intervals:

- 18                                   i.       Windows;
- 19                                   ii.      Changes in materials;
- 20                                   iii.     Changes in color;
- 21                                   iv.     Changes in texture;
- 22                                   v.      Expressions of architectural bay such as pilasters, reveals,  
23                                   and offsets.

24                           **c.       *Base, Middle, and Top***

25                                   In order for buildings to display the greatest amount of visual interest  
26                                   and appear less industrial whether they function as single or multiple-  
27                                   story buildings, building facades shall consist of distinguishable base,  
28                                   middle, and top sections.

29                                   i.       *Base*

30   Base level or ground floor facades shall provide the greatest  
31   collection of architectural detail features to create visual  
32   interest at the pedestrian level. Methods shall include, in  
33   addition to the minimum required elements in subsection b  
34   above, two or more architectural detail features such as the  
35   following, without limitation:

- 36   **(A)**    Masonry cladding;
- 37   **(B)**    Windows;
- 38   **(C)**    Architectural bays;
- 39   **(D)**    Changes in color or materials;

- 1 (E) Ornamental details and/or artwork;
- 2 (F) Overhangs, canopies, or arcades.
- 3 Additional requirements for principal ground level facades  
4 appear in subsection 4., *Ground Level Expression*.
- 5 ii. *Middle*  
6 The middle shall be distinguishable from the base section,  
7 and include one or more architectural detail feature such as  
8 the following, without limitation:
- 9 (A) Windows;
- 10 (B) Signage;
- 11 (C) Changes in color or materials.
- 12 iii. *Top*  
13 The topmost portion of a building shall be made visually  
14 prominent using the features required in subsection 2, *Roof*  
15 *Form and Articulation*.
- 16 d. **Secondary Façades**  
17 All building facades, including on the sides and rear, which are visible  
18 from adjoining properties or public streets shall include articulation  
19 and detail features in conformance with subsections b and c above,  
20 similar to the principal or front façade.
- 21 **2. Roof Form and Articulation**
- 22 a. **Intent**  
23 To pronounce and vary roof lines and heights to present a distinctive  
24 profile, add interest to and reduce the massive scale of large retail  
25 buildings, and complement the character of adjoining neighborhoods.
- 26 b. **Prominent Roof Form**  
27 The topmost portion of any building in a large retail establishment  
28 shall be made visually prominent and be architecturally treated  
29 through a method such as the following without limitation:
- 30 i. A change in materials and color;
- 31 ii. Projecting cornice line;
- 32 iii. Overhanging roof or eaves, extending no less than three feet  
33 past the supporting walls, supported by brackets;
- 34 iv. Sloping rooflines with an average slope no less than one foot  
35 of vertical rise for every three feet of horizontal run and  
36 greater than one foot of vertical rise for every foot of  
37 horizontal run.

1                   c.       ***Roofline Variation***

2                   The roof design of principal buildings shall provide variations in roof  
3                   lines and height using one or more of the following features:

- 4                   i.       Multiple variations of a minimum of two feet in the height of  
5                   parapets. Variation to parapet height may include pilasters  
6                   and projecting raised entrance features;
- 7                   ii.       Three or more roof slope planes.

8                   **3. Prominent Entrances**

9                   a.       ***Intent***

10                  To emphasize major entrances into large retail buildings, and to  
11                  ensure that entryway design provides orientation and an attractive  
12                  appearance to the building.

13                  b.       ***Visual Prominence***

14                  In order to provide clearly defined and highly visible entrances,  
15                  principal building(s) and secondary buildings on a site shall have  
16                  customer entrances featuring no less than three of the following:

- 17                  i.       Canopies, arcades or porticos that, while satisfying weather  
18                  protection requirements of subsection [x-ref], also lend visual  
19                  prominence to the entrance;
- 20                  ii.       Overhangs, recesses or projections;
- 21                  iii.       Raised corniced parapets over the door;
- 22                  iv.       Peaked roof forms;
- 23                  v.       Tower features integrated with the building design that extend  
24                  above the building roof line;
- 25                  vi.       Arches;
- 26                  vii.       Outdoor Patios;
- 27                  viii.       Display Windows;
- 28                  ix.       Integral planters or wing walls;
- 29                  x.       Entrance atriums with visual connections to outside.

30                  c.       ***Transparency and Light***

31                  The principal customer entrance to any building shall feature at least  
32                  two elements from the following:

- 33                  i.       Clerestory Windows;
- 34                  ii.       Windows Flanking Main Entrance Door;



1                   c.       **Transparency**

2                   A minimum of 60 percent of any ground floor facade between two feet  
3                   and ten feet above grade fronting on a public street or containing a  
4                   principal customer entrance shall be comprised of windows for  
5                   window shopping, with views into interior areas for merchandise  
6                   display, shopping and/or other customer services. A minimum of 25  
7                   percent of ground floor facades that face parking lots shall also be  
8                   comprised of windows.

9                   d.       **Window Bays and Mullions**

10                  Windows at the ground level shall be divided into increments by  
11                  mullions and architectural bays.

12                  5.   **Weather Protection**

13                  a.       **Intent**

14                  To provide guidance specific to large retail establishments for  
15                  sheltering pedestrians from elements of Anchorage’s northern climate  
16                  such as snow, rain, cold and wind, and for providing indoor-outdoor  
17                  transitions to avoid separating people from the outdoor environment.

18                  b.       **Generally Applicable Standards**

19                  Large retail establishments shall adhere to weather protection  
20                  standards found in section [x-ref] and section [x-ref]. Where there is  
21                  conflict, this subsection shall apply.

22                  c.       **Façade Walkway Canopies**

23                  Facades that face onsite walkways or abutting public streets or  
24                  parking lots or have a principal customer entrance shall have ground  
25                  level protective canopies or similar permanent sheltering structure  
26                  along no less than 60 percent of their horizontal length. The canopy  
27                  shall have a depth of eight feet or more to avoid snow, ice and rain  
28                  drip lines along façade walkways.

29                  d.       **Entrance Canopies**

30                  Canopies, arcades, or similar permanent sheltering roof structures  
31                  shall provide weather protection along façades of buildings to  
32                  pedestrians at customer entrances, taxi and drop off zones, valet  
33                  parking, and bicycle parking.

34                  6.   **Building Materials and Colors**

35                  a.       **Intent**

36                  Exterior building materials and colors contribute significantly to the  
37                  visual impact of large retail buildings on the community. The purpose  
38                  of this subsection is to ensure that building materials and colors  
39                  create buildings that are aesthetically pleasing, compatible with the  
40                  surrounding neighborhood, and responsive to the northern climate.

41                  b.       **Predominant Exterior Materials**

42                  Exterior building siding, cladding of structural members, and trim  
43                  materials shall include high quality materials durable in a northern  
44                  climate, such as:

- 
- 1 i. Brick or brick veneer cladding;
- 2 ii. Wood;
- 3 iii. Stone or stone veneer cladding;
- 4 iv. Timbers as post members or colonnades;
- 5 v. Textured concrete masonry units that are tinted to fit into the
- 6 overall building design.
- 7 c. ***Prohibited Exterior Materials***
- 8 Exterior building materials shall not include the following:
- 9 i. Plywood without board and batten;
- 10 ii. Unstained or untreated wood;
- 11 iii. T-111 siding.
- 12 d. ***Predominant Façade Colors***
- 13 In order to ensure that large retail buildings contribute positively to
- 14 Anchorage's northern climate urban setting, and reduce the visual
- 15 monotony of white, gray, and dirty brown winter urban landscapes,
- 16 the building façade colors shall be warm or neutral, subtle and low
- 17 reflectance colors. Warm colors are encouraged, while the use of
- 18 brilliant or high intensity colors, metallic colors, black or fluorescent
- 19 colors is prohibited.
- 20 e. ***Building Trim and Accent Colors***
- 21 Building trim and accent areas may feature brighter colors, including
- 22 primary colors. Neon tubing shall not be an acceptable
- 23 building/roofline outline feature.
- 24 f. ***Changes in Material or Color that Meet Façade Articulation***
- 25 ***Requirements***
- 26 In order to meet the requirements for façade articulation and roof
- 27 forms in subsections 1 and 2, changes in color or materials shall be
- 28 as integral parts of the building fabric rather than superficially applied
- 29 uniform paint or trim striping.
- 30 **7. Signage Integration and Creativity**
- 31 a. ***Intent***
- 32 To ensure that signage is a part of the overall design approach to a
- 33 project and not a separate design element, and to encourage creative
- 34 design of signage that reflects the establishment and the character of
- 35 the local community and its' setting.
- 36 b. ***Integration of Signage with Building and Site Design***
- 37 The location, dimensions, and design of signs shall be compatible
- 38 and integrated with the architectural character, proportions, and

1 details of the building and site plans of large retail establishments.  
2 Signage may be used as elements of human scale ground floor  
3 facades and visually prominent building entrances.

4 **c. *Sign Creativity and Unique Expression***

5 Signs are encouraged to be highly graphic in form, expressive and  
6 individualized to convey the product or service.

7 **d. *Local Identity***

8 Signs shall combine the business identity with local Anchorage  
9 identity by one or more of the following:

10 i. Relate to Anchorage's people, cultures, natural setting,  
11 climatic conditions through graphics;

12 ii. Take advantage of the extreme seasonal conditions by using  
13 natural light angles and shadows, snow, ice, colors or other  
14 element of the natural setting as part of the overall sign  
15 design.

16 **F. Site Design and Relationship to Surrounding Community**

17 **1. Multiple Entrances**

18 **a. *Intent***

19 To provide multiple entrances to reduce walking distances, facilitate  
20 pedestrian access, and improve the relationship of the large retail  
21 stores to the surrounding community. Store entrances mitigate long  
22 unbroken walls and neglected areas along adjacent uses and public  
23 streets.

24 **b. *Multiple Entrances***

25 The principal building(s) shall have customer entrances on at least  
26 two sides of the building that face an abutting street of collector class  
27 or greater, with at least one of the required entrances facing the street  
28 to which the building is closest. A corner entrance facing both streets  
29 may meet this requirement. In such a case, for purposes of design  
30 requirements in this section for facades with customer entrances, the  
31 entrance shall be considered to be on both facades.

32 **c. *Exceptions***

33 Movie theaters are exempt from the requirement for multiple customer  
34 entrances.

35 **2. Location of Parking Lots**

36 **a. *Intent***

37 Large parking areas should be divided into smaller lots and  
38 distributed around large retail buildings in order to provide safe and  
39 convenient access, shorten the distance between the principal  
40 building and public streets, and break up the massive scale of large  
41 paved surfaces. If the large retail buildings are located closer to

1 streets, then the scale is reduced, pedestrian traffic is encouraged,  
2 and architectural details of the building take on added importance.

3 **b. *Distributed Parking Lots***

4 Parking lots shall be distributed around principal retail buildings. No  
5 more than 50 percent of vehicle parking lot spaces shall be located in  
6 the front parking area between the front façade of any principal  
7 building of the large retail establishment and abutting streets.

8 **3. Pedestrian Connections**

9 **a. *Intent***

10 Provide pedestrian paths between customer entrances on-site and to  
11 surrounding public streets and properties in order to open large retail  
12 centers to the neighborhood and project a more inviting image, and  
13 allow for pedestrian safety, access, and convenience within the  
14 center grounds.

15 **b. *Network of Walkways***

16 The site plan shall identify pedestrian travel patterns to and through  
17 the site, as well as off-site pedestrian destinations on abutting  
18 properties and across abutting streets. Continuous internal  
19 pedestrian walkways, no less than eight feet in width, shall be  
20 provided from the public sidewalk or abutting streets to the principal  
21 customer entrance of each building on the site. Walkways shall  
22 connect focal points of pedestrian activity such as, but not limited to,  
23 transit stops, street crossings, building and store entryways.

24 **c. *Orientation of Buildings to the Pedestrian Network***

25 Principal and secondary buildings onsite shall be located to the  
26 maximum extent feasible on or near street sidewalks or onsite  
27 pedestrian walkway routes. All customer entrances of buildings within  
28 a large retail establishment site shall open to the pedestrian network  
29 of street sidewalks and onsite walkways.

30 **d. *Building Façade Walkways***

31 Walkways shall be provided along the full length of every building  
32 façade featuring a customer entrance, or abutting a customer parking  
33 lot. For principal buildings, such walkways shall be at least eight feet  
34 wide, and be located at least eight feet from the building to provide  
35 planting beds for foundation landscaping, except where weather  
36 protection features such as arcades are part of the façade.

37 **e. *Connections to Neighboring Properties***

38 Pedestrian walkways shall be provided to adjacent developments  
39 from principal building(s) that do not front on a public street, and to  
40 adjacent neighborhoods where trail or street connections are  
41 available.

42 **4. Common Spaces and Focal Points**

43 **a. *Intent***

1 To offer attractive and inviting pedestrian scale features, spaces, and  
2 amenities that enhance the retail establishment's connection to the  
3 community and outdoors.

4 **b. Central Location**

5 The large retail establishment shall provide one or more pedestrian  
6 common spaces such as plazas, patios, courtyards, or atriums with  
7 indoor-outdoor connections, at or near the principal customer building  
8 entrance. The common space(s) shall be visible and central to  
9 pedestrian circulation onsite.

10 **c. Pedestrian Amenities and Focal Points**

11 Common spaces shall anchor pedestrian pathways between main  
12 building entrances and public streets with special design features and  
13 pedestrian amenities, such as towers, pedestrian light fixtures, sitting  
14 walls, seating, canopies, bollards, art such as sculptures, fountains,  
15 clocks or murals, and other architectural elements that define  
16 pedestrian circulation paths and spaces.

17 **d. Use of Common Spaces**

18 Common spaces are intended to serve as places for pedestrians.  
19 Except as provided in subsection c above, structures are not  
20 permitted in these areas, nor can such areas be used for:  
21 freestanding signs, refuse collection other than for pedestrian use,  
22 any type of storage including parking lot snow storage, outdoor  
23 merchandising that encroaches into the minimum dimensions of the  
24 common space(s), and any loading or vehicle parking or access  
25 during business hours.

26 **e. Orientation**

27 Common spaces shall, to the maximum extent feasible, face the  
28 primary street frontage, provide views of the Chugach Mountains or  
29 other major landmark, or be oriented to receive solar access on  
30 December 21.

31 **f. Dimensions**

32 The common space(s) shall total no less than 1% of the total gross  
33 floor area of the principal building(s). The length to width ratio shall  
34 not exceed 2:1, and the shortest dimension shall be no less than 15  
35 feet.

36 **5. Landscaping**

37 **a. Intent**

38 To break up and soften the massive scale of large retail  
39 establishments, including large blank building walls, service and  
40 loading areas, and large paved parking surfaces.

41 **b. Foundation Landscaping**

42 Foundation landscaping in planting beds at least 8 feet wide shall be  
43 used to soften the visual impacts of large building facades along the  
44 sections of walls that are visible from adjacent streets or customer  
45 parking lots, and are not occupied by entrances, loading docks or

1 other openings, or by weather protection structures such as arcades  
2 that meet the requirements of subsection [x-ref to weather protection].

3 **c. *Abutting Residential***

4 Large retail establishments shall have Level 3 landscaping along  
5 abutting residentially zoned properties. The buffer shall not conflict  
6 with pedestrian connections provided for in this section.

7 **6. Outdoor Sales, Display and Storage**

8 **a. *Intent Statement***

9 Screen service areas of large retail establishments from adjacent  
10 properties, public streets, and customer entrances, and to mitigate  
11 visual and noise impacts. Large and small vehicle sales and rental  
12 establishments are exempt from this section.

13 **b. *Permanent Outdoor Display, Sales and Storage of Merchandise***

14 Merchandise may be stored or displayed for sale on the front or side  
15 of the principal building in accordance with this subsection. Auction  
16 houses, farmers markets, nurseries, and lumberyards are exempt  
17 from this subsection. The size of permanent outdoor storage, display  
18 and sales areas shall be limited to 10 percent of the footprint of the  
19 principal building, or 15,000 square feet, whichever is less.  
20 Permanent outdoor storage, display and sales areas shall be  
21 contiguous to the building and shall not be permitted within 100 feet  
22 of residential property. Outdoor storage display and sales of  
23 plumbing fixtures and large household appliances, such as without  
24 limitation hot tubs, dishwashers and refrigerators, is prohibited.

25 **i. *Screening.***

26 The permanent display, storage and sales area of large retail  
27 establishments shall be enclosed by a minimum eight-foot  
28 wall of like appearance to the building or a base of like  
29 appearance to the building topped by wrought iron or tubular  
30 steel fencing, with a minimum total height of eight feet. No  
31 merchandise other than trees shall be visible above the wall.  
32 Materials, colors, and design of screening shall be compatible  
33 in appearance and quality with the predominant materials of  
34 the principal building.

35 **ii. *Screening for Home Improvement Stores.***

36 The permanent storage, display, and sales area shall be  
37 enclosed by a dark colored chain link fence covered with  
38 windscreen or wall of like material to the building with a  
39 minimum height of eight feet. Windscreen shall be  
40 maintained in good repair and free of tears. Merchandise  
41 may be stacked up to 25 feet high or level with the top of the  
42 adjacent building side wall, whichever is lower, but may not  
43 be stacked above the height of the screening wall. The  
44 roofline on the front facade shall have architectural features,  
45 such as gables or parapets, compatible with that of the  
46 principal building, to obscure merchandise stored in the area.

1                                   iii.     *Seasonal Outdoor Display and Sales.*  
2                                   Only Christmas trees, bedding plants, trees, shrubs, potting  
3                                   soil, and bagged yard products may be displayed for sale  
4                                   seasonally. In addition, the seasonal outdoor sales area shall  
5                                   be limited to 10 percent of the footprint of the building or  
6                                   12,000 square feet, whichever is less.

7                                   iv.     *Rear Storage.*  
8                                   Bulk merchandise may be stored behind the building. The  
9                                   sides and back of the storage area shall be screened with a  
10                                  chain link fence covered with windscreen. Windscreen shall  
11                                  be maintained in good repair and free of tears. The rear  
12                                  storage area shall not be accessible to customers.  
13                                  Merchandise shall be stacked no higher than 25 feet or level  
14                                  with the top of the adjacent side wall of the building,  
15                                  whichever is lower, and may not be stacked above the height  
16                                  of the chain link fence.

17                                   **7. Master Site Plan and Secondary Buildings**

18                                   a.     ***Intent Statement.***

19                                   To integrate the location, orientation, and appearance of all structures  
20                                   and improvements within a large retail establishment as a unified,  
21                                   coherent and accessible site development.

22                                   b.     ***Master Site Plan***

23                                   Large retail establishments on sites that include more than one  
24                                   building, or that include multiple pad lots or platted lots for separate  
25                                   commercial establishments, shall, at the time of plat review or major  
26                                   site plan review, be required to establish a master site plan for the  
27                                   location, design and orientation of principal and secondary buildings  
28                                   on site.

29                                   c.     ***Applicability of Large Retail Establishment Regulations***

30                                   Building and site design standards for large retail establishments in  
31                                   this section, unless stated to apply specifically to principal buildings,  
32                                   apply to both principal and secondary buildings on any commercial  
33                                   tract within a large retail establishment site or site master plan area.

34                                   d.     ***Secondary Building Orientation to Public Streets***

35                                   Peripheral secondary buildings located at the edge of the site next to  
36                                   a public street or street corner shall provide at least one customer  
37                                   entrance facing each abutting public street. A corner entrance facing  
38                                   both streets may meet this requirement. In such a case, for purposes  
39                                   of design requirements in this section for facades with customer  
40                                   entrances, the entrance shall be considered to be on both facades.

41                                   e.     ***Integration of Secondary Buildings with Principal Building and***  
42                                   ***Site Design***

43                                   Building colors and materials, architectural features, detail elements,  
44                                   and roof forms of secondary buildings on the site shall be compatible

and integrated with the colors, building materials and architectural character and design of the principal building(s) on the site.

### 21.07.140 EXTERIOR LIGHTING<sup>109</sup>

#### A. Purpose<sup>110</sup>

Exterior lighting, as a part of the urban infrastructure, is an urban design tool that helps to determine the safety, livability, and ambiance of Anchorage as northern climate community. The purpose of this section is to foster outdoor lighting for municipal, residential, commercial, industrial, and public/institutional developments that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Specific purposes are to require outdoor lighting that:

1. Provides safety and personal security as well as convenience and utility in areas of public use or traverse, for municipal, commercial, industrial, multifamily residential, and institutional uses where there is outdoor public activity during hours of darkness;
2. Controls glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort.
3. Controls trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;
4. Results in cost and energy savings to establishments by being carefully aimed and directed at the surface area or activity to be illuminated, using only the amount of light necessary;
5. Fits the needs and tolerances of the surrounding district, to provide adequate illumination levels in commercial districts while protecting residential areas and places of sleep from excessive light; and
6. Controls light pollution to minimize the negative effects of misdirected light and recapture views to the winter night sky.

#### B. Applicability

##### 1. Outdoor Site Lighting

All outdoor lighting shall comply with the standards of this section, unless exempted in subsection 2. below.<sup>111</sup> In addition, in certain cases applicants for interior or exterior modifications or expansions of existing structures and

<sup>109</sup> NOTE: This section drafted by staff. Parking lot lighting is exempt from the requirements of this section and instead has to comply with separate lighting requirements in the parking section.

<sup>110</sup> NOTE: Intro paragraph is based in part on IESNA RP 33-99, as well as northern city design considerations. Bulleted specific purpose statements follow the format of other Chapter 7 sections in identifying specific issue areas of concern. Primary issues in Anchorage appear to be: safety and visual acuity, glare and misdirected light, and excessive illumination for some uses.

<sup>111</sup> NOTE: Low-intensity lighting for single-family and other residential uses is exempted in subsection C which follows. The lighting standards would only limit very bright or glaring lights in residential areas. It is intended to protect neighborhoods, homeowners, or residents in cases of unusually intense or glaring lights on neighboring properties.

1 uses may be required to comply with the following standards pursuant to  
2 subsection 21.10.010.H, *Expansion, Alteration, or Major Repair*.

3 **2. Off-Street Parking and Loading Areas**

4 Lighting in off-street parking and loading areas shall be exempt from the  
5 requirements of this Section 21.07.130 and instead shall comply with the  
6 lighting requirements set forth in subsection 21.07.090.G.13, *Lighting of Off-*  
7 *Street Parking and Loading Areas*.

8 **3. Public Street and Right-of-Way Lighting**

9 Public street and right-of-way lighting shall be exempt from the requirements  
10 of this section.

11 **4. Attention-Getting Devices**

12 Signs and other attention getting devices as defined in Section [x-ref],  
13 including any lighting of a specific architectural feature, name, or logo  
14 designed to act as advertising devices calling attention to the building owner  
15 or tenant, are subject to the sign illumination standards of section [x-ref].

16 **C. Exempt Lighting**

17 The following luminaires and lighting systems are exempt from the requirements of  
18 this section:

- 19 **1.** Single-Family Residential: Soffit or wall-mounted luminaires with a light output  
20 of less than 1000 lumens and permanently attached to residential dwellings,  
21 not to exceed the height of the eave;<sup>112</sup> (homeowners may use luminaries with  
22 a higher light output, but will then have to comply with section G. below.)
- 23 **2.** Temporary decorative seasonal lighting provided that individual lamps have a  
24 light output of 200 lumens or less;<sup>113</sup>
- 25 **3.** Temporary lighting for emergency or nighttime work and construction;
- 26 **4.** Temporary lighting for theatrical, television, and performance areas, or for  
27 special public events;
- 28 **5.** Lighting for a special district, street, or building that, according to an adopted  
29 municipal plan or ordinance, is determined to require special lighting  
30 aesthetics as part of its physical character; and
- 31 **6.** Lighting required and regulated by the Federal Aviation Administration.

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<sup>112</sup> NOTE: This exemption is for single-family and other residential development with low impact lighting. The lumens figure provided is approximately the output of a 75 watt incandescent bulb. The provision would exempt a 60 watt incandescent bulb, for example. It is intended as a starting point for discussion on the most appropriate wattage or brightness level to be exempted.

<sup>113</sup> NOTE: This exemption allows for holiday season and "City of Lights" style decorative wintertime illumination. The lumens figure provided exempts typical hanging decorative lights consisting of 10 watt or even 15 watt incandescent bulbs.

**D. Nonconformities<sup>114</sup>**

In order to (1) amortize existing nonconforming lighting that may otherwise linger for years or decades, and (2) maximize fairness between both pre-existing and new establishments, there shall be a grace period for all outdoor lighting. Outdoor lighting shall be required to conform to the standards of this section within five years from the effective date of this Title. Project applications received prior to such conformance date may choose to conform or to postpone conformance until the five-year deadline.

**E. Lighting Zones Established**

Using Table 1 as a guide, the municipality shall determine and maintain three lighting zones to ensure that lighting standards fit the needs and tolerances of Anchorage's broad range of urban and rural, commercial and residential, and low versus high intensity use areas. Lighting zones are intended to allow for relatively higher illumination intensities in commercial districts, while protecting the more light-sensitive neighborhoods and residential areas from excessive or misdirected light.

The lighting zone of a site or project shall determine the standards for lighting as specified in this section. An increase of one LZ number may be granted to a specific site or project upon special approval through the variance process.

TABLE 21.07-14: LIGHTING ZONE CHARACTERISTICS			
Lighting Zone	Ambient Light Level	Representative Locations	Zoning Districts
LZ-1	Relatively Low	Rural areas, low-density urban areas, natural open spaces.	W, R-1, R-2, R-5, R-6, R-9, R-10, OL, TA, AF, PLI [1], Girdwood [2].
LZ-2	Medium	Medium to high density residential neighborhoods.	R-3, R-4, RMX, NMU, PLI [1].
LZ-3	Relatively High	Medium to high intensity commercial and industrial districts.	C-2A, C-2B, C-2C, GC, I-1, AD RCMU, CCMU, MC, MI, I-2, PLI [1].
<b>Additional Standards:</b> [1] In the PLI District, lighting standards for development shall be that of the Lighting Zone that most closely matches the character of the setting surrounding the project site. [2] <i>Girdwood</i> : LZ-1 the default lighting zone for Girdwood zoning districts, except where stated otherwise in section 21.09.[x-ref].			

**F. Standards for Safety, Personal Security, and Convenience.<sup>115</sup>**

**1. Illumination Levels and Locations**

Sufficient lighting shall be provided in pedestrian use areas and in high-risk locations. Key locations and high-risk uses such as parking lots, transit stops, ATMs, and convenience stores shall be illuminated to facilitate nighttime use. Lighting should be designed to avoid excessive brightness or glare which reduces visibility and visual acuity, or the fish-bowl effect which allows users

<sup>114</sup> NOTE: Staff recommends amortizing lighting. A grace period for all old and new lighting is suggested as a starting point for community discussion. The issue of concern is that a lighting fixture can last for decades. There are numerous examples of old and fading mercury vapor parking lot lighting still in use around the community, as well as barnyard style non cut-off lights from the 1970s.

<sup>115</sup> NOTE: Public safety and convenience are community priorities in Anchorage. This section establishes the need for adequate lighting which avoids disability glare. It is intended to be further developed pending community review and discussion.

1 to be observed but makes it difficult for them to observe their surroundings.  
 2 Parking lot lighting shall adhere to minimums required in subsection I.1 below.  
 3 Pedestrian walkways leading to primary building entries, exterior stairways,  
 4 and other pedestrian paths that are used after daylight hours shall be  
 5 illuminated at least to minimum IESNA standards of Table 2 in DG-5-94, using  
 6 a uniformity ratio not greater than 10:1 maximum to minimum, to avoid  
 7 extreme contrasts between lighting levels.<sup>116</sup> Dedicated pedestrian lighting,  
 8 building façade lighting, lit interior spaces with retail windows along sidewalks,  
 9 and other pedestrian-oriented lighting sources are preferred.

10 **2. Color Rendition<sup>117</sup>**

11 White light sources improve nighttime vision and reduce reaction time to  
 12 possible danger by providing superior color recognition, object identification,  
 13 and peripheral vision detection. Nighttime environments become more  
 14 visible, comfortable, and inviting at lower light levels with less disability glare.  
 15 All fixtures for area lighting shall use white light sources that have a color  
 16 rendering index (CRI) of 65 or greater, such as one of the following, without  
 17 limitation: metal halide, induction, compact fluorescent, incandescent  
 18 (including tungsten-halogen), or high-pressure sodium with a color rendering  
 19 index of 65 or greater.

20 **3. Maintenance, Repair and Replacement<sup>118</sup>**

21 Poorly maintained luminaires may not provide adequate illuminances for  
 22 safety and security. Lighting installations shall be maintained such that they  
 23 continually provide acceptable illuminance levels and glare control required in  
 24 this section. Damaged lighting fixtures and luminaires shall be promptly  
 25 repaired or replaced. All light emitted by a fixture shall meet or exceed the  
 26 specification given. All luminaires shall be permanently installed so as to  
 27 maintain required shielding. Any structural part of the fixture providing this  
 28 shielding must be permanently fixed.

29 **G. Control of Glare and Light Trespass<sup>119</sup>**

30 **1. Shielding and Glare**

31 **a. Generally Applicable Standard**

32 For outdoor area lighting on any residential, commercial, industrial,  
 33 recreational, municipal, or institutional site, cutoff-type luminaires shall  
 34 be used and shall be equipped with (or be capable of being retrofitted  
 35 with) devices for redirecting light such as shields, visors, or hoods.  
 36 Such lighting shall be so aimed, located, designed, fitted, and  
 37 maintained. Directional luminaires such as floodlights, spotlights, and  
 38 sign lights shall be so installed and aimed that they illuminate only the  
 39 specific task and do not shine directly onto neighboring properties,  
 40 roadways, or distribute excessive light skyward.

<sup>116</sup> NOTE: Uniformity ratio recommended by IESNA RP-33-99 as a starting point for public discussion.

<sup>117</sup> NOTE: NEMA recommends basing standards on a performance standard such as CRI, rather than just a list of product types. This better accommodates new technology such as LED or induction lamps. Need to define "area lighting" to carefully exempt aesthetic hardscape, façade or landscape lighting.

<sup>118</sup> NOTE: IESNA RP 33-99 recommends ordinance provisions for maintenance, repair, and replacement. This would address safety and maintenance issues that exist in Anchorage.

<sup>119</sup> NOTE: Suggested new section for glare control applicable to all lighting. This approach eliminates the need to provide glare control provisions for each type of lighting—parking, building, etc. It also eliminates potential loopholes in the code for light intensive uses like car sales lots.

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**b. District-Specific Shielding Standards**

Shielding requirements specific to the various districts shall be as shown in Table 2. Residential uses in the R-5, R-6, R-9, and R-10 districts, and full cut-off luminaires on collector or greater class streets shall be exempt from Table 2 standards.

**TABLE 21.07-15: REQUIRED SHIELDING AND MAXIMUM LUMENS**

Lighting Zone	Full Cut-off Luminaire	Cut-off Luminaire	Semi Cut-off Luminaire	Non Cut-off Luminaire
LZ-1	10,000	6,000	1,000	1,000
LZ-2	26,000	10,000	2,000	1,000
LZ-3	40,000	10,000	5,000	2,000

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[Staff will illustrate the luminaire cut-off types here.]

**c. Glare onto Neighboring Properties**

All lighting that emits more than 2,000 lumens shall be aimed, shielded, or located such that the source of illumination (bulb or direct bulb image) is not visible from any adjacent property, measured at the site's property line.

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**2. Light Trespass**

Maximum light levels measured at the site's property line, at eye level in a plane perpendicular to line-of-sight, shall be as shown in Table 3.<sup>120</sup>

**TABLE 21.07-16: MAXIMUM LIGHT TRESPASS**

Lighting Zone of Neighboring Property	Maximum Light at the Property Line
LZ-1	.3 footcandles
LZ-2	.8 footcandles
LZ-3	1.5 footcandles

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**3. Horizontal Bulb Position<sup>121</sup>**

A vertically mounted bulb in a light fixture introduces glare and reduces the effectiveness of shielding. If the bulb position within a fixture is vertical, any or all of the following may be required to ensure that the conformity to the shielding specifications in Table 2 is not compromised:

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- a. A high socket mount;
- b. A translucent fixture lens;
- c. An opaque coating or shield on a portion of the perimeter of the lens; or,
- d. Other industry accepted measures.

<sup>120</sup> Suggested maximum light trespass figures in Table 3 are suggested by the IESNA as a starting point for community discussion for community lighting ordinances.

<sup>121</sup> NOTE: Suggested subsection is from Douglas County CO, and based on Nancy Clanton's observation that large retail establishments can, and often do, use the vertical bulb position to effectively circumvent cut-off luminaire standards. The resulting glare can reduce visibility in the parking lot. Recent large retail establishments in Anchorage have used the vertical bulb position.

4. **Mounting Height**

Mounting heights of lighting fixtures shall be limited to avoid defeating the purpose of cut-off style shielding, as follows:

a. **Pole Mounted Lighting**

Lights mounted onto poles or any structures intended primarily for mounting of lighting shall not exceed a maximum mounting height according to the following table:

Lighting Zone	Parking Lots, Driveways, Exterior Sales and Display, Loading Areas.	Pedestrian Walkways and Areas
LZ-1	20	14
LZ-2	25	18
LZ-3	25 [1]	18

Additional Standards:  
 [1] The mounting height may be up to 35 feet where the fixture is located beyond 75' from the site's boundary, provided that for mounting heights in excess of 25 feet, the distance of the fixture to the site's boundary is not less than three times the mounting height.

b. **Lighting Mounted to Buildings or Structures**

Light fixtures mounted to buildings or other structures shall not exceed the height of the roof or eave of the building or structure at the location of the light.

H. **Timing Controls**

Exterior lighting shall be timer-controlled. Simple dusk-to-dawn controls keep lights on for the maximum time during hours of sleep and inactivity, and waste energy. More appropriate timing controls shall be used, as follows:

a. All non-residential building, service and loading area lighting, except security lighting, shall be turned off one hour after business operations have ceased for the day and shall remain turned off until one hour before business operations resume on the next day.<sup>122</sup>

b. Security lighting shall be activated with motion sensors so that lights come on only when someone is in the immediate area, except where the applicant can demonstrate that motion-sensor lighting will cause unacceptable increased risk and continuous security lighting levels must be maintained. Maximum illumination levels for security lighting that is not motion activated shall be 1.5 footcandles.

I. **Standards for Specific Types of Lighting**

The additional standards in this subsection shall be in addition to the generally applicable standards. However, where there is a conflict, the more restrictive standard shall apply.

<sup>122</sup> NOTE: IESNA suggests lowering lighting levels. NEMA suggests lowering lighting levels only in certain areas.

- 1                   **1.     Lighting of Service Canopies** <sup>123</sup>
- 2                   a.     Service canopy lighting fixtures shall be fully recessed or full cut-off,
- 3                         as defined by the IESNA. However, indirect up light is permitted
- 4                         under a canopy provided that no lamp or vertical element of a lens or
- 5                         diffuser is visible from beyond the canopy and no direct up light is
- 6                         emitted beyond the canopy.
- 7                   b.     Lights shall not be mounted on the top or sides (fascias) of canopies,
- 8                         and the sides (fascias) of canopies shall not be externally illuminated,
- 9                         except as part of an internally illuminated sign.
- 10                  **2.     Lighting of Building Façades**
- 11                  Building façade lighting may only be used to highlight important building
- 12                  entries or specific architectural features. Uniform floodlighting of building
- 13                  facades is discouraged and shall be permitted only by through a [design
- 14                  variance or administrative alternative compliance review process]. To the
- 15                  maximum extent feasible, lighting fixtures shall be located, aimed and
- 16                  shielded so that light is directed downward rather than upward, and only onto
- 17                  the building façade.
- 18                  **3.     Hardscape and Landscape Lighting**
- 19                  Light fixtures used to illuminate flags, statues, or any other objects mounted
- 20                  on a pole, pedestal, or platform shall keep light beams entirely within the
- 21                  mass of the display by using shielding and luminaires with the correct beam
- 22                  spread. Luminaires should be located and aimed so that the source of light
- 23                  cannot be seen directly.
- 24                  **4.     Lighting of Exterior Sports / Performance Facilities**
- 25                  a.     **Dual Lighting System**
- 26                         The main lighting of the event or activity shall be turned off no more
- 27                         than forty-five (45) minutes after the end of the event or activity. A
- 28                         low level lighting system shall be installed to facilitate patrons leaving
- 29                         the facility, cleanup, nighttime maintenance, etc. The low level
- 30                         lighting system shall provide an average horizontal illumination level,
- 31                         at grade level, of no more than 3.0 fc with a uniformity ratio no greater
- 32                         than 10:1.
- 33                  b.     **Lighting of Primary Playing or Activity Areas**
- 34                         Where playing fields, ski slopes, or other special activity areas are to
- 35                         be illuminated, lighting fixtures may include spotlighting and
- 36                         floodlighting. Regardless, all fixtures shall be shielded, mounted, and
- 37                         aimed so that their beams fall within the primary playing area and
- 38                         immediate surroundings, and so that no direct illumination is directed
- 39                         off the site.
- 40                  **5.     High Intensity, Special Purpose Lighting**
- 41                  The following lighting systems are prohibited from being installed or used
- 42                  except by special approval by variance, which shall not be granted for any
- 43                  use in LZ-1.

<sup>123</sup> NOTE: Need to move gas station canopy standards from 21.05.050.L.2.b.i.(B) here to be generally applicable, and consolidate it with canopy lighting provisions.

- 1                   a.     Aerial Lasers;
- 2                   b.     “Searchlight” or beacon style lights;
- 3                   c.     Blinking, flashing, or changing intensity lights except for temporary
- 4                             holiday displays;
- 5                   d.     Other very intense lighting, defined as having a light source
- 6                             exceeding 200,000 lumens or intensity in any direction of 2,000,000
- 7                             candelas or more.

8   **21.07.150 OPERATIONAL STANDARDS<sup>124</sup>**

9                   **A.     Purpose**

10                             The purpose of these operational standards is to prevent land or buildings within the  
11                             Municipality from being used or occupied in any manner so as to create any  
12                             dangerous, injurious, noxious, or otherwise objectionable condition that would create  
13                             adverse impacts on the residents, employees, or visitors on the property itself or on  
14                             nearby properties.

15                   **B.     Applicability**

16                             The provisions of this Section 21.07.150 shall apply to all land within the Municipality.

17                   **C.     Standards**

18                             **1.     Vibration**

19                                     No vibration shall be produced that is transmitted through the ground and is  
20                                     discernible without the aid of instruments at or at any point beyond the lot line.

21                             **2.     Air Pollution**

22                                     There shall not be discharged into the atmosphere any contaminant for which  
23                                     threshold limit values are listed for working atmosphere by the American  
24                                     Conference of Governmental Industrial Hygienists in such quantity that the  
25                                     concentration of the contaminant at ground level at any point beyond the  
26                                     boundary of the property shall at any time exceed the threshold limit. Visible  
27                                     emissions of any kind at ground level past the lot line of the property on which  
28                                     the source of the emissions is located are prohibited.

29                             **3.     Odors**

30                                     Any condition or operation that results in the creation of odors, vapors, or  
31                                     gaseous emissions of such intensity and character as to be detrimental to the  
32                                     health and welfare of the public or that interferes unreasonably with the  
33                                     comfort of the public shall be removed, stopped, or so modified as to remove  
34                                     the odor.

35                             **4.     Electromagnetic Radiation**

36                                     It shall be unlawful to operate, or cause to be operated, any planned or  
37                                     intentional source of electromagnetic radiation for such purposes as

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<sup>124</sup> NOTE: Suggested new section. These are relatively simple performance standards intended help protect adjacent properties from the impacts of intensive uses.

1 communication, experimentation, entertainment, broadcasting, heating,  
2 navigation, therapy, vehicle velocity measurement, weather survey, aircraft  
3 detection, topographical survey, personal pleasure, or any other use directly  
4 or indirectly associated with these purposes that does not comply with the  
5 then-current regulations of the Federal Communications Commission  
6 regarding such sources of electromagnetic radiation.

7 **5. Fire and Explosion**

8 In all districts in which the storage, use, or manufacture of blasting agent,  
9 combustible fibers, combustible liquid, or compressed gas is permitted, the  
10 requirements as set forth in the Building and Fire Codes, as adopted in --- of  
11 the Anchorage Municipal Code, shall be met.

12 **6. Materials and Waste Handling**

13 No person shall cause or permit any materials to be handled, transported, or  
14 stored in a manner that allows particulate matter to become airborne or liquid  
15 matter to drain onto or into the ground. All materials or wastes that might  
16 cause fumes or dust or that constitute a fire hazard or that may be edible by  
17 or otherwise be attractive to wildlife or insects shall be stored outdoors only in  
18 closed, impermeable trash containers that are screened in accordance with  
19 this Title. Toxic and hazardous materials and chemicals shall be stored,  
20 secured and maintained so that there is no contamination of ground, air, or  
21 water sources at or adjacent to the site. Notwithstanding anything contained  
22 herein, all treatment, storage, disposal, or transportation of hazardous waste  
23 shall be in conformance with all federal and state statutes, codes, and  
24 regulations. Provisions shall be provided so that all lubrication and fuel  
25 substances shall be prevented from leaking and/or draining onto the property.

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**21.07.160 MIXED-USE DISTRICTS**<sup>125</sup>**A. Purpose**

The mixed-use districts are established to provide for and encourage development and redevelopment that contains a compatible mix of residential, business, and institutional uses within close proximity to each other, rather than a separation of uses, in accordance with the Comprehensive Plan. The mixed-use districts define the uses of land and the siting and character of the improvements and structures allowed on the land in a manner that allows a balanced mix of uses. A key feature of all the mixed-use districts is an efficient pedestrian-access network connecting the nonresidential uses, residential neighborhoods, and transit facilities. New buildings should be oriented to the street with parking located in parking structures or to the side or behind the buildings. The districts are intended to recognize areas where redevelopment of underutilized parcels and infill development of vacant parcels should concentrate on pedestrian-oriented residential and mixed-use development. The mixed-use districts specifically are intended to:

1. Promote higher-density residential development near and within designated neighborhood and town centers, redevelopment/mixed use areas, major employment centers and other areas as appropriate;
2. Concentrate higher-density commercial and office employment growth efficiently in and around major employment centers, town centers, and other designated centers of community activity;
3. Encourage mixed-use and higher-density redevelopment, conversion, and reuse of aging and underutilized areas, and increase the efficient use of available commercial land in the Municipality;
4. Create compact and pedestrian-oriented urban environments that encourage transit use and pedestrian access;
5. Concentrate a variety of commercial retail /services and public facilities that serve the surrounding community; and
6. Ensure that the appearance and function of residential, commercial, and institutional uses are of high quality and are integrated with one another and the character of the area in which they are located.

**B. Types of Mixed-Use Districts**

The following mixed-use districts are established:

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<sup>125</sup> NOTE: THIS MATERIAL WILL BE RELOCATED AND INTEGRATED INTO CHAPTER 21.04 WHEN THE COMPLETE CODE DRAFT IS PREPARED. This section presents a new version of the mixed-use districts. This section builds on and replaces the material that appeared as Section 21.04.050 in Module 2 of the draft Anchorage Title 21. This section has been heavily modified and supplemented by staff. Such standards may be used to ensure that new development is high quality and crafted to implement the goals of *Anchorage 2020*. These standards are included here to provide a sense of the types of additional standards that may be appropriate in mixed-use districts, beyond general standards applicable to all development. Echoing an earlier point, it will important to ensure that the standards are not so stringent that they discourage development in the mixed-use districts. Also, keep in mind that the MU districts also have to comply with the mix of uses standards already presented in Chapter 21.04.

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1. **NMU: Neighborhood Mixed-Use District**  
The NMU district is intended to facilitate the development of a mixed-use center at the neighborhood scale. The NMU should contain facilities vital to the day-to-day activity of a neighborhood (e.g., small grocery/convenience store, drug store, church, service station) located in close proximity to one another. The district is characterized by small-scale, attractive, non-obtrusive, and convenient shopping and services for residential areas. Site and architectural design of uses in this district should be compatible with surrounding neighborhoods and designed with a goal of reducing vehicle trips. The NMU should facilitate and encourage pedestrian travel between the residential and nonresidential uses. The NMU district may be used for the “neighborhood commercial centers” identified in the *Anchorage 2020 Anchorage Bowl Comprehensive Plan*.
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2. **CCMU: Community Commercial Mixed-Use District**  
The CCMU district is intended to facilitate the development of a mixed-use center at the community scale. Communities are generally made up of three to five neighborhoods. They are intended to be generally about one-half to one mile in diameter and located approximately 2-4 miles apart. The CCMU area contains commercial, institutional, recreational, and service facilities needed to support the surrounding neighborhoods (e.g., large supermarket, large drug store, specialty shops, and community park). Around the core, the RMX district should contain high-density housing, and development in both districts should facilitate and encourage pedestrian travel between residential and nonresidential uses. The CCMU district may be used for the “town centers” and the “redevelopment/mixed-use areas” identified in the *Anchorage 2020 Anchorage Bowl Comprehensive Plan*.
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3. **RCMU: Regional Commercial Mixed-Use District**  
The RCMU district is intended is intended to facilitate the development of a mixed-use center at the regional scale. A region is a collection of adjacent communities. This district is intended to encourage the development of large-scale, distinctive, attractive regional centers containing a mix of concentrated land uses. The center should contain major economic generators, most with a regional economic draw, such as a regional shopping mall, major employer, a large high school or community college, restaurants, theaters, hotels, and relatively dense office development. The area should contain concentrations of medium- to high-density office development, with employment densities of more than 50 employees per acre. The area also should contain a broad mix of complementary uses, such as major civic and public facilities, and parks. The district should be surrounded by high-density housing located in the RMX district, and development in both districts should facilitate and encourage pedestrian travel between residential and nonresidential uses. Transit facilities and pedestrian-friendly elements are important components of development in this type of center, in order to reduce demand for auto travel as well as increase visual interest. The RCMU district may be used for the “major employment centers” identified in the *Anchorage 2020 Anchorage Bowl Comprehensive Plan*.
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4. **RMX: Residential Mixed-Use District**  
The RMX district is intended to facilitate the development of higher-density residential development surrounding both the CCMU and the RCMU districts. The RMX area contains primarily medium- to higher-density residential

1 development, though it also may contain some limited small-scale  
2 commercial, institutional, recreational, and service facilities needed to support  
3 residential development in the surrounding area. Development in the RMX  
4 district should facilitate and encourage pedestrian travel between residential  
5 and nonresidential uses. This residential district is often adjacent and  
6 incidental to a mixed-use core of a town center, neighborhood commercial  
7 center, or other type of mixed-use or major employment center designated in  
8 the Comprehensive Plan.

### 9 C. Development Standards for Mixed-Use Districts

#### 10 1. Applicability

11 All development in the mixed-use districts, including the RCMU, CCMU, NMU,  
12 and RMX districts, shall comply with the standards set forth in this subsection  
13 21.04.150.C.

#### 14 2. Concept and Key Features

15 Development in a mixed-use district shall:

- 16 a. Be consistent with the general description of the mixed-use district in  
17 which it is located as specified in subsection B. above.
- 18 b. Contain a road network designed to ensure that residential areas will  
19 have direct access to adjacent non-residential portions of the  
20 proposed development/redevelopment, in lieu of entering and exiting  
21 through thoroughfares and/or collector streets; and
- 22 c. Provide an adequate and interconnected transportation system that  
23 encourages multiple modes of transportation, disperses traffic, and  
24 provides streets that accommodate multiple transportation modes,  
25 including motor vehicles, transit, bicycles, and pedestrians;
- 26 d. Arrange residential, employment, retail, service, and open space uses  
27 to be convenient to and compatible with each other and with transit;
- 28 e. Design early phases of development so as to promote long-term  
29 quality and character;
- 30 f. Include buildings that provide human scale and interest through use  
31 of varied forms, materials, details, and colors.
- 32 g. Encourage housing in a range of densities, sizes, and types; and
- 33 h. Be consistent with an approved district plan or neighborhood plan, if  
34 applicable.

#### 35 3. Street Pattern and Connectivity

##### 36 a. Purpose

37 In order to promote more walkable communities, faster response times  
38 for emergency service vehicles, and reduced air pollution, streets in  
39 mixed-use areas should interconnect in a grid-like pattern, forming  
40 short, walkable-scale blocks with multiple, convenient route choices  
41 for both personal vehicles and pedestrians. The network should

1 connect throughout residential areas, and connect residential to  
2 commercial areas within mixed-use centers.

3 **b. Relationship to Other Regulations**

4 Streets in mixed-use districts shall comply with all requirements in  
5 Section ---, *Transportation and Connectivity*, and Section 21.08.030,  
6 *Design Standards*, in addition to the requirements of this section.

7 **c. Grid Street Pattern and Short Blocks**

8 The block standards of this subsection shall apply to all development  
9 that contains at least four acres or more of gross land area.

10 i. Each block face shall range between a minimum of 200 feet  
11 and a maximum of 600 feet.<sup>126</sup>

12 ii. The average block face across each development site and  
13 the entire MU zone district shall be a maximum of 500 feet.

14 iii. For block faces that exceed 400 feet, a mid-block pedestrian  
15 pass-through shall be provided connecting opposite sides of  
16 block faces.

17 iv. Where a block face between streets exceeds 400 feet, or the  
18 total perimeter of the block is greater than 1600 feet, the  
19 developer may propose a new street connection to subdivide  
20 the block into smaller blocks, subject to the approval of the  
21 Municipality. As an incentive to encourage the creation of  
22 such additional street connections, the developer shall be  
23 entitled to count the land devoted to the new street  
24 connection in the calculation of maximum FAR.

25 v. An applicant may submit alternative block standards,  
26 provided that such alternative achieves the intent of the  
27 above standards and the procedures and criteria of Section --  
28 -, *Alternative Compliance*.

29 **d. Street System for Multi-Building Developments and Campuses**

30 The site plan of large institutions, campus developments, and other  
31 multiple building developments, either public or private, shall integrate  
32 with the street grid system and buildings in mixed-use districts. The  
33 site circulation system of streets, driveways, and walkways should be  
34 an extension of the surrounding street and walkway network into the  
35 onsite layout of buildings and spaces. Primary entrances and  
36 facades of buildings on the site should front on the public street or the  
37 onsite network of walkways. Major retail establishments or large  
38 single-use institutions that are larger in scale than the surrounding  
39 city blocks shall be broken into a series of small spaces, buildings,  
40 and blocks that complement, extend, repair, or enhance the  
41 surrounding street grid and building fabric of the adjacent mixed-use  
42 area, so that the institution is patterned as an extension of the

<sup>126</sup> NOTE: If this section is retained and adopted, then the minimum block size allowed in Chapter 21.08 should be lowered from 300 feet to 200 feet.

1 Municipality. Massive institutional or retail buildings isolated from the  
2 rest of the mixed-use district shall be avoided.

3 **e. Secondary Streets and Alleys**

4 **i. Intent**

5 There should be a hierarchy of primary, public, and  
6 pedestrian-friendly street frontages, versus secondary streets  
7 and rear alleys that accommodate utilities and service  
8 functions such as parking and vehicle access, dumpsters,  
9 garbage service, commercial loading and deliveries, and  
10 utility maintenance. Secondary streets make it possible to  
11 maintain high-quality, pedestrian-and-commerce friendly  
12 primary streets in all mixed-use areas, particularly  
13 commercial centers.

14 **ii. Guideline**

15 Mid-block through alleys or secondary streets are  
16 encouraged to enable secondary vehicle access.<sup>127</sup>

17 **4. Mix and Intensity of Land Uses and Activities**

18 **a. Purpose**

19 The purpose of this section is to help integrate public/institutional,  
20 residential, and commercial activities around the same shared public  
21 streets and spaces. All uses should be located and convenient to  
22 each other by walking. People who work, shop, and live in the  
23 different buildings share the same public sidewalks and spaces.

24 **b. Mix of Principal Uses Required**

25 **i. Use Categories**

26 Each principal use allowed in any of the mixed-use districts,  
27 as listed in Section 21.05, *Table of Permitted Uses*, is  
28 grouped into one of the following four general use categories:

29 **(A)** Residential Uses;

30 **(B)** Public/Institutional Uses;

31 **(C)** Commercial/Office Uses; and

32 **(D)** Commercial/Other (All commercial use that are not  
33 listed under the office category).

34 **ii. Required Mix and Proportion of Land Uses<sup>128</sup>**

35 A mix of land uses shall be required on any development or  
36 redevelopment project in any of the mixed-use districts that is  
37 one acre in gross land area or larger.

38 **(A)** The development/redevelopment shall include at  
39 least two of the four use categories listed in  
40 subsection b.1. above.

<sup>127</sup> NOTE: A density bonus or other incentive may be appropriate to encourage alleys in mixed-use developments.

<sup>128</sup> NOTE: This section proposed for discussion purposes. Specific ratios may need to be adjusted for each mixed use district.

(B) No one use category listed in subsection b.1. shall comprise more than fifty percent of the net land area of the development/redevelopment. "Net land area" for purposes of this provision means gross land area less dedicated public rights-of-way.

c. **Public Focus Areas**<sup>129</sup>

Any mixed-use development that is --- gross acres or larger shall include a public focus area such as a public/institutional use, plaza, public space, or town square. The purpose of such an area is encourage the presence of civic or institutional uses, such as a public library; to promote mixed-use areas as centers of community activity; and to attract greater pedestrian traffic and activity to mixed-use areas.

d. **Neighborhood Scale and Intensity of Uses and Activities**

i. **NMU Size Limitations**<sup>130</sup>

The uses listed in the table below shall be allowed in the NMU district subject to the listed gross floor area restrictions. Individual businesses not specified in the table below but allowed in the NMU district pursuant to the use table in Chapter 21.05 shall be permitted to occupy up to a maximum of 10,000 square feet of gross floor area on development sites that have a floor area ratio (FAR) of at least 0.65, or a maximum of 5,000 square feet of gross floor area on sites that have a FAR of less than 0.65.

**TABLE ---: GROSS FLOOR AREA RESTRICTIONS IN THE NMU DISTRICT**

Use	Size Restrictions (gross floor area)
Animal grooming service or pet shop	2,500 sq. ft. maximum per use
Financial institution	3,000 sq. ft. maximum, provided that the majority floor area of such use provides retail services.
Bar or tavern, Restaurant, Brew Pub	1,500 sq. ft. maximum per use
Offices, including governmental and charitable organization	1,500 sq. ft. maximum per office use and the cumulative total of all office uses shall not exceed 15% of the total floor area of the NMU district
Retail, personal service use	1,500 sq. ft. maximum per use
Farmers market	10,000 sq. ft. maximum if indoors; total development site size of no greater than 20,000 square feet.
General retail	5,000 sq. ft. maximum, provided that such use has a floor area ratio (FAR) of at least 0.5, and does not exceed 35% of the NMU district
Grocery or food	25,000 sq. ft. maximum, provided that such use has a

<sup>129</sup> NOTE: Additional discussion necessary as to what types of public focus areas would be desirable and would satisfy the requirement.

<sup>130</sup> NOTE: This is Table 21.04-2 which appeared in module 2 and originally referred to gross floor area restrictions in the C-1 and NMU districts. The table here refers only to the NMU district.

TABLE ---: GROSS FLOOR AREA RESTRICTIONS IN THE NMU DISTRICT	
Use	Size Restrictions (gross floor area)
store	floor area ratio (FAR) of at least 0.5, and does not exceed 50% of the NMU district
Liquor store	1,500 sq. ft. maximum per use
Fuel sales with convenience store, gasoline service station, vehicle service and repair	Total site size of no greater than 20,000 square feet; and the cumulative total of all fuel sales, gasoline service station, and service/repair uses does not exceed two establishments

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ii. *RMX Size Limitations*<sup>131</sup>

The uses listed in the table below shall be allowed in the RMX district subject to the listed gross floor area restrictions. Individual businesses allowed in the RMX district pursuant to the use table in Chapter 21.05 shall be located within a mixed-use residential building with at least 50 percent of building gross floor area being residential, or in a building with a maximum footprint of 2,500 square feet of gross floor area. Off-street parking for nonresidential uses in the RMX district shall be limited to seven spaces per establishment. Hours of operation shall be limited to between 7 a.m. and 10 p.m.

TABLE ---: GROSS FLOOR AREA RESTRICTIONS IN THE RMX DISTRICT	
Use	Size Restrictions (gross floor area)
Animal grooming service or pet shop	2,500 sq. ft. maximum per use
Financial institution	3,000 sq. ft maximum, provided that the majority floor area of such use provides retail services.
Restaurant	3,000 sq. ft. maximum per establishment
Offices	1,500 sq. ft. maximum per office use .
Retail, personal service use	1,500 sq. ft. maximum per use
General retail, or Convenience store	5,000 sq. ft. maximum
Grocery or food store	5,000 sq. ft. maximum
Extended-stay Lodgings or Inns	5,000 sq. ft. maximum

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5. **Parking**  
 a. ***Required Parking Ratios and Shared Parking***  
     ***Reduced Parking Ratios***

<sup>131</sup> NOTE: This section drafted by staff. Staff notes: "The RMX district needs size restrictions and other limits on business establishments to maintain the surrounding residential character. The table is starter content and a table for size restrictions for nonresidential uses permitted in the RMX district. The proposed restrictions are recommended by the APA in PAS 479 "Principles of Smart Development", page 32." Clarion notes that some sizes proposed may be too small and unrealistic; also, the standards in the first paragraph, if retained, should be broken apart into separate provisions.

1 Development in the mixed-use districts shall only be required  
2 to provide 95% of the off-street parking required in Section  
3 21.07.---, *Off-Street Parking and Loading*.

4 ii. *Parking Alternatives*

5 Shared parking agreements shall be standard for  
6 developments, to the maximum extent feasible. Development  
7 projects shall use at least one of the parking alternatives  
8 provided in 21.07.[x-ref] *Parking Alternatives*, such as shared  
9 parking, valet parking, tandem parking, on-street parking, or  
10 another alternative method approved by the Traffic Engineer.  
11 Residential development in the RMX district is exempt from  
12 this standard.

13 b. *Onsite Parking Location and Design*

14 i. *Parking Located Behind, Beneath, or Beside Buildings*

15 In order to reduce the scale of the paved surfaces and to  
16 shorten the walking distance between the parked car and the  
17 building, A minimum of [60] percent of the off-street surface  
18 parking spaces provided for all uses contained in the  
19 development's primary building shall be located to the rear or  
20 side of, or underneath, the building and shall not be located  
21 between the façade of the primary building and the primary  
22 abutting street.

23 ii. *Parking Lot Frontages*

24 For block faces that are composed entirely of surface parking  
25 lot areas, a street or enhanced drive aisle that provides a  
26 detached sidewalk, defined pedestrian crossings, and street  
27 or parking lot trees along the block face shall border the block  
28 face. Buildings containing commercial or residential space  
29 along street frontages are encouraged to line the frontage  
30 between large parking lots and the street along main  
31 commercial streets.

32 iii. *"Shadow Platting" of Large Parking Lots*

33 Any parking lot greater in size than one city block (300 x 300  
34 feet) shall be broken into smaller units by its system of  
35 parking lot driveways and walkways, using the "shadow  
36 platting" technique, by which the unit parking areas, each  
37 divided from the others by drive aisles ("streets" with  
38 walkways), may gradually be redeveloped one-by-one into  
39 buildings, and the drive aisles mature into streets, as a way of  
40 accommodating future infill development.

41 6. *Building Placement and Orientation*

42 a. *Placement, Orientation, and Openness to the Sidewalk*

43 i. *Purpose*

44 Building frontages should be built and oriented to the street,  
45 lining sidewalks and public spaces with frequent shops,  
46 entrances, windows with interior views, and articulated  
47 ground-level façades. Comfortable, human-scale transition  
48 spaces such as entrance areas, patios, or café seating may

- 1 be placed between the building and public sidewalk, as long  
2 as the building remains close, accessible, and inviting from  
3 the sidewalk.
- 4 **ii. *Building Placement and Street Setbacks***  
5 Buildings shall be built to or close to the public sidewalk,  
6 using the setbacks required in subsection 21.06.010.C.,  
7 *Table of Dimensional Standards: Mixed Use and Other*  
8 *Districts.*
- 9 **iii. *Building Entrances***  
10 All buildings shall have at least one primary resident, public,  
11 or customer entrance oriented toward an abutting street that  
12 is not separated from the building by on-site parking. If the  
13 building is a within a large development site and not located  
14 on the street, then the entrance shall orient toward an on-site  
15 pedestrian walkway connected to a public sidewalk.
- 16 **iv. *Prominent Entrances***  
17 The primary public entry to the building shall be visually  
18 obvious and emphasized through the use of such  
19 architectural treatments as differing colors or materials,  
20 arches, or arcades.
- 21 **v. *Fenestration and Transparency***  
22 **(A)** Ground-floor windows shall be required for all civic  
23 and commercial uses over 5,000 square feet.
- 24 **(B)** All elevations of buildings abutting any street shall  
25 provide at least 50 percent of their ground-floor  
26 façades between two feet and ten feet above grade  
27 as entrances and/or windows that allow views into  
28 interior spaces such as lobbies, merchandise  
29 displays, shopping, customer service areas, or  
30 working areas. On corner lots this provision shall  
31 apply to both elevations. Elevations of buildings  
32 adjacent to alleys or vehicle accessways used  
33 primarily for service and delivery access shall  
34 be exempt from this requirement. Residential frontages  
35 shall include windows with views out of living spaces  
36 that provide a sense of human presence on the  
37 street.
- 38 **(C)** Blank walls facing streets shall be avoided or  
39 minimized.
- 40 **vi. *Indoor-Outdoor Connections***  
41 Climate-protective atria, arcades, malls, and other internal  
42 pedestrian networks shall connect directly to the outdoor  
43 network of streets, sidewalks, and public spaces, to allow  
44 people and activity to flow in and out of buildings and public  
45 spaces year-round. Alternative interior pedestrian networks

1 that channel people, activity, and investment away from  
2 public street frontages are discouraged.

3 **vii. Residential Frontages**

4 Ground-floor residential frontages shall have transition  
5 spaces such as front steps, porches, and windows to provide  
6 a transition between interior living spaces and the public  
7 sidewalk. Upper floor residential frontages shall include  
8 windows and/or balconies over the street. Attached  
9 townhouse, attached single-family, and duplex housing types  
10 shall provide front porches or landings on the street side at a  
11 minimum depth of six feet or more and a minimum width of  
12 eight feet.

13 **b. Sun and Wind Orientation of Buildings and Outdoor Spaces**

14 A comfortable pedestrian environment is essential to mixed-use  
15 centers. The layout of master plans, site master plans, site plans,  
16 buildings and design details shall take into account local climate  
17 conditions, and locate and orient buildings, building entrances,  
18 windows and outdoor pedestrian spaces to maximize solar access  
19 and provide protection from prevailing winds during times of  
20 pedestrian activity, to the maximum extent feasible, where not in  
21 conflict with the intent of subsection "a" above.

22 **7. Pedestrian Amenities<sup>132</sup>**

23 **a. Pedestrian Amenities Required**

24 All new developments or redevelopments to existing buildings in the  
25 mixed-use districts shall provide pedestrian amenities, as specified in  
26 this subsection. The number of pedestrian amenities provided shall  
27 comply with the following sliding scale.

**TABLE ---: PEDESTRIAN AMENITIES**

Size of Development or Redevelopment (Building Square Footage)	Number of Amenities
Less than 5,000 sq. ft.	1
5,000 – 10,000 sq. ft.	2
10,000 – 50,000 sq. ft.	3
Greater than 50,000 sq. ft.	4

28 **b. Acceptable Pedestrian Amenities<sup>133</sup>**

29 Acceptable pedestrian amenities include:

- 30
- 31 **i.** Sidewalks that are at least 50 percent wider than required by  
32 this Title, incorporating paving treatments, including but not  
33 limited to concrete masonry unit pavers, brick, or stone.

<sup>132</sup> NOTE: This section includes an example of a menu-based standard. This type of flexible regulation could be appropriate in Anchorage for a variety of design-related regulations.

<sup>133</sup> NOTE: In addition to the listed items, suggested by Clarion, staff also proposed two additional items: bicycle parking and outdoor seating. However, we do not believe that such relatively inexpensive items would be sufficiently meaningful to count as pedestrian amenities under this provision.

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- ii. A public outdoor seating plaza adjacent to or visible and accessible from the street, with a minimum useable area of 300 square feet.
  - iii. Sidewalk planters between sidewalk and building including stormwater swales.
  - iv. Public art including but not limited to sculptures, fountains, clocks, or murals with a value equal to or greater than one percent of construction value of the structure.
  - v. Pocket parks with a minimum usable area of 300 square feet.
- c. ***Guidelines for the Siting, Construction, and Character of Pedestrian Amenities***
- i. Amenities shall be visible and accessible to the general public from a fully improved street. Access to pocket parks, plazas, and sidewalks shall be provided via a public right-of-way or a public access easement.
  - ii. The size or capacity of pedestrian amenities shall be roughly proportional to their expected use, including use by employees, customers, residents, and other visitors, as determined by the Director. The Director may alter minimum area standards for pocket parks and plazas based on this guideline.
  - iii. Amenities shall be consistent with the character and scale of surrounding developments. For example, similarity in awning height, bench style, planter materials, street trees, and pavers is recommended to foster continuity in the design of pedestrian areas. Materials shall be suitable for outdoor use in a northern climate, easily maintained, and have at least a 10-year expected service life.
8. **Compatibility**
- a. ***Purpose***  
This section is intended to provide land use tools to mitigate possible conflicts between land uses of varying intensities and differing character.
  - b. ***Applicability***  
This section shall apply to all development in MU zoning districts where either of the following occurs:
    - i. Development of a more intensive land use adjacent to an existing, planned, or zoned less less-intensive land use, either inside or outside the MU zone district boundary. The Director shall have the authority to make a final determination regarding relative intensity of adjacent land uses, taking into consideration, at a minimum, the relative size, design, operation, and traffic generation patterns of the adjacent land uses; or

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- ii. Establishment of visual impacts, uses, or activities on a development site that, as determined by the Director, could reasonably be regarded as a nuisance to neighbors.
  - iii. For purposes of this section, “surrounding development” shall mean: (1) immediately adjacent development on the same block face or on facing blocks as the subject site, as well as (2) prevalent patterns established in the existing neighborhood located within one-quarter mile of the subject development site.
- c. Standards**
- i. When a transition tool is required in a MU zone district, an applicant shall incorporate site and building transition tools, green/open space transition tools, and transition uses before using landscape buffers or screens.
  - ii. The following are approaches, methods, and techniques that are permitted transition tools under this section:
    - (A) Site and building transition tools, including but not limited to, building setbacks as established by surrounding development, building placement and orientation as established by surrounding development, similar building height, similar building width, similar roof form, similar building materials, and façade articulation.
    - (B) Green/open space transition tools, including but not limited to the use of courts, squares, parks and plazas, and use of natural features such as topography, waterways, and existing stands of trees.
    - (C) Locating transition uses and other community-serving, less-intensive uses such as banks and post offices at the perimeter of the MU zoning district.
    - (D) Parkways, streets, and streetscapes.
    - (E) Landscape buffers and screens.
- 9. Dimensional Standards (to be moved to 21.06)**

**TABLE 21:06-4: TABLE OF DIMENSIONAL STANDARDS  
 MIXED-USE DISTRICTS**

*(Additional Standards May Apply - See Use-Specific Standards in Section 21.05.020)*

Uses	District Size		Minimum Residential Density [1]	Front Setbacks	Building Bulk and Height		
	Min.	Max.			Maximum Height (Ft)	Min. Lot Coverage	Maximum Floor Area Ratio [4]
<b>NMU: Neighborhood Mixed Use District</b>							
All	None	15 acres	None	Min: 0 ft. Max: 10 ft. Max (residential on ground floor): 15 ft.  Building shall occupy a minimum of 35 percent of frontage line.  20-foot minimum setback for 3 <sup>rd</sup> story uses	35 feet or 3 stories	25%	0.67:1 FAR [2] [3]
<b>CCMU: Community Commercial Mixed Use District</b>							
All	10 acres	160 acres	None	Min: 0 ft. Max: 10 ft. Max (residential on ground floor): 15 ft.  Building shall occupy a minimum of 50 percent of frontage line.	45 feet or 4 stories	35%	1.0:1 FAR [2] [3]
<b>RCMU: Regional Commercial Mixed-Use District</b>							
All	50 acres	None	8 dwelling units/acre	Min: 0 ft. Max: 10 ft. Max (residential on ground floor): 15 ft.  Building shall occupy a minimum of 50 percent of frontage line.	120 feet or 8 stories	35%	
<b>RMX: Residential Mixed-Use District</b>							
All	None	None	8 dwelling units/acre	Min: 0 ft. Max: 10 ft. Max (residential on ground floor): 15 ft.  Building shall occupy a minimum of 35 percent of frontage line.  20-foot minimum setback for 3 <sup>rd</sup> story uses			

**NOTES:**

[1] Minimum residential density shall be measured as an average over the gross land area of only the residential portion of the zone district.

[2]: Floor Area Ratio *Mixed-use Incentive*: An additional .07 FAR is not included in the calculation of maximum allowable FAR if the additional .07 FAR is residential, and residential is 50% or more of the gross floor area of the development project.

[3]: Floor Area Ratio *Private Usable Open Space Incentive*: An additional .02 FAR is not included in the calculation of maximum allowable FAR if the additional .02 FAR is residential, and the majority of residential dwellings in the development project each have at least 72 square feet of *private usable open space*.

[4]: To calculate floor area ratio (FAR), use Section 6.[x-ref new section] below. Garages, uninhabitable attics, and usable open space areas are not included in FAR.

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**21.07.170 DOWNTOWN DISTRICTS**

**A. Development Standards for Downtown Districts<sup>134</sup>**

**1. Applicability**

The development standards of this section apply to all development in the C-2A, C-2B, and C-2C districts.

**2. Bulk Regulations and Maximum Lot Coverage**

Construction of buildings in the C-2A, C-2B, and C-2C districts, above three stories in height, shall conform to the following bulk requirements:

**a. Building Tower Design**

One tower not exceeding the bulk requirements outlined in subsections i. and ii. below shall be allowed for a development on a parcel of land containing 13,000 square feet or a fraction thereof, or one tower not exceeding the bulk requirements outlined in subsections iii. and iv. below shall be allowed for a development on a parcel of land containing 19,500 square feet. For a development on a parcel of land containing more than 19,500 square feet, one additional tower not exceeding the bulk requirements outlined in subsections i. and ii. below, shall be allowed for every additional 13,000 square feet of land area, or, alternatively, one additional tower not exceeding the bulk requirements outlined in subsections iii. and iv. below, shall be allowed for every additional 19,500 square feet of land area.

- i. Maximum plan dimension: 130 feet.
- ii. Maximum diagonal plan dimension: 150 feet.
- iii. Maximum plan dimension: 130 feet.
- iv. Maximum diagonal plan dimension: 180 feet.

Variances from the specific bulk requirement dimensions listed in this subsection may be granted by the Planning and Zoning Commission on developments covering a land area of more than 26,000 square feet, provided that the Commission finds that the spirit and intent of the central business districts are maintained.

**b. Alternative Structure Designs**

Alternative building designs may be submitted in the form of a project development plan to the Director for approval. Alternative design forms may be approved that provide for at least 15 percent more access either to scenic views of adjoining mountains and Cook Inlet or for solar access<sup>135</sup> as compared to designs allowed under

<sup>134</sup> NOTE: This existing material is placed here temporarily and will be located in Chapter 21.04 in the revised, full public draft of the new Title 21. The district-specific standards for the downtown are relatively unchanged, pending the separate project to update the plan and zoning for the downtown.

<sup>135</sup> NOTE: Staff notes that recent projects under this section have had plazas, but have not increased solar access or scenic views.

1 subsection 21.07.170.A.2.a. above, *Building Tower Design*. The  
 2 percentage amount of additional scenic or solar access shall be  
 3 based on total building volume of the alternative design compared to  
 4 a representative tower design. Site development plans submitted  
 5 under this subsection must include a schematic of a project designed  
 6 under subsection 21.07.170.A.2.a., *Building Tower Design*, a site  
 7 development plan of the design utilizing the provisions of this  
 8 subsection and calculations to establish the increased scenic or solar  
 9 access required in this subsection. Designs using the provisions of  
 10 this subsection are allowed an additional one story of base height  
 11 prior to the utilization of the bonus point requirements of subsection  
 12 21.07.170.A.3. below, *Height Exceptions for Downtown Districts*.

13 **c. Existing Structures**

14 Notwithstanding the bulk regulations and maximum lot coverage  
 15 limitations contained in Table 21.06-2, *Table of Dimensional*  
 16 *Standards: Commercial and Industrial Districts*, and the requirements  
 17 of this subsection 21.07.170.A.2., where a lawful structure existed on  
 18 September 9, 1974, that is pre-stressed for enlargement by the  
 19 addition of one or more stories, such structure may be enlarged within  
 20 the full plan dimensions of the existing structure by the addition of not  
 21 more than two stories.

22 **3. Height Exceptions for Downtown Districts<sup>136</sup>**

23 Irrespective of the height limitations specified by Section 21.06.010, the  
 24 following exceptions and limitations apply to structures in the C-2A, C-2B, and  
 25 C-2C districts.

26 **a.** Building floor area may be constructed above the maximum building  
 27 height permitted under Section 21.06.010 by earning bonus points for  
 28 site and design amenities under a site development plan approved by  
 29 the Planning Department as specified in Table (x-ref below table),  
 30 provided:

31 **i.** Each bonus point permits an additional 400 square feet of  
 32 floorspace.

33 **ii.** All new development must accumulate a minimum of one  
 34 bonus point for each 1,600 square feet of site area to be  
 35 approved. Only urban design amenities related to  
 36 pedestrians and landscaping of those features designated  
 37 "streetscape" in Table 21.06-5, below, may be used to fulfill  
 38 this requirement.

39 **iii.** No more than one bonus point per each 200 square feet of  
 40 site can be accumulated for any single amenity option.  
 41 Bonus points can be obtained by combining any of the  
 42 options provided in Table 21.06-5, below.

<sup>136</sup> NOTE: This is carried forward from the requirements specified in the central business district sections of the existing Chapter 21.40, "Zoning Districts," with no substantive changes. There is a new summary table consolidating bonus point information in one place. Because the downtown districts are not a central focus of this project, we have heard little input on how well this existing material is working. Some modest tweaks to the system may be possible now, but more likely the entire system should be reevaluated as part of the new downtown planning and zoning effort being contemplated.

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- iv. At least 25 percent of all bonus points required for floorspace must be accumulated from amenities designated "streetscape." This amount can include bonus points earned under subsection (ii) above.

<b>Table 21.06-5: DESIGN AMENITIES AND BONUS POINTS FOR C-2A, C-2B, &amp; C-2C DISTRICTS</b>			
<b>Urban Design Amenity (*Streetscape Amenity)</b>	<b>Bonus Points for Districts</b>		
	<b>C-2A</b>	<b>C-2B</b>	<b>C-2C</b>
Street trees*	1 point per tree	1 point per tree	1 point per tree
Seating units, street furniture*	1 point per 2 units (maximum of 6 points)	1 point per 2 units (maximum of 6 points each)	1 point per 2 units (maximum of 6 points each)
Decorative street illumination*	2 points per 1 unit	2 points per 1 unit	2 points per 1 unit
Sidewalks*	1 point per 300 sq. ft.	1 point per 300 sq. ft.	1 point per 400 sq. ft.
Sidewalk texture*	1 point per 200 sq. ft.	1 point per 250 sq. ft.	1 point per 300 sq. ft.
Bike racks, open*	1 point per 3 open storage units (maximum accumulation of 3 points)	1 point per 3 open storage units (maximum accumulation of 3 points)	1 point per 3 open storage units (maximum accumulation of 3 points)
Bike racks, covered*	1 point per covered storage unit (maximum accumulation of 3 points)	1 point per covered storage unit (maximum accumulation of 3 points)	1 point per covered storage unit (maximum accumulation of 3 points)
Kiosk*	1 point per unit (maximum accumulation of 3 points)	1 point per unit (maximum accumulation of 3 points)	1 point per unit (maximum accumulation of 3 points)
Canopy over sidewalk*	1 point per 200 sq. ft.	1 point per 240 sq. ft.	1 point per 290 sq. ft.
Covered arcade*	1 point per 100 sq. ft.	1 point per 115 sq. ft.	1 point per 180 sq. ft.
Open air plaza, or landscaped park*	1 point per 70 sq. ft. (corner); 1 point per 80 sq. ft. (other)	1 point per 70 sq. ft. (corner); 1 point per 80 sq. ft. (other)	1 point per 100 sq. ft. (corner); 1 point per 115 sq. ft. (other)
Public restrooms at ground level	1 point per 35 sq. ft.	1 point per 35 sq. ft.	1 point per 100 sq. ft.
Climate-controlled public plaza or court (galleria)*	1 point per 50 sq. ft.	1 point per 70 sq. ft.	1 point per 100 sq. ft.
Shops (50 percent or more transparent windows on ground floor street front*)	1 point per 100 sq. ft.	1 point per 130 sq. ft.	1 point per 200 sq. ft.
Shops (Less than 50 percent transparent windows on ground floor street front)	1 point per 140 sq. ft.	1 point per 225 sq. ft.	1 point per 160 sq. ft.
Shops (Second floor shops)	1 point per 140 sq. ft.	1 point per 225 sq. ft.	1 point per 160 sq. ft.
Shops (Third floor or basement level)	1 point per 350 sq. ft.	N/A	N/A

<b>Table 21.06-5: DESIGN AMENITIES AND BONUS POINTS FOR C-2A, C-2B, &amp; C-2C DISTRICTS</b>			
<b>Urban Design Amenity (*Streetscape Amenity)</b>	<b>Bonus Points for Districts</b>		
	<b>C-2A</b>	<b>C-2B</b>	<b>C-2C</b>
Commercial theater	1 point per 200 sq. ft.	N/A	N/A
Public rooftop recreation area or public viewing deck	1 point per 100 sq. ft.	1 point per 100 sq. ft.	1 point per 200 sq. ft.
Housing	1 point per 140 sq. ft. of area devoted to housing	1 point per 80 sq. ft. of area devoted to housing	1 point per 80 sq. ft. of area devoted to housing
Hotels	1 point per 200 sq. ft. of area devoted to hotel rooms	1 point per 200 sq. ft. of area devoted to hotel rooms	1 point per 300 sq. ft. of area devoted to hotel rooms
Enclosed parking	N/A	11 points per space above or on grade; 13 points per space below grade	10 points per space above or on grade; 14 points per space below grade
Transit amenities	3 points per covered shelter; 10 points per bus pull-out	3 points per covered shelter; 10 points per bus pull-out	3 points per covered shelter; 10 points per bus pull-out
Historic preservation	1 point per 200 sq. ft. of area devoted to a retained historic structure	1 point per 200 sq. ft.	1 point per 200 sq. ft.
Sidewalk landscaping* (not otherwise credited)	1 point per 425 sq. ft. (public land); 1 point per 30 sq. ft. (private land)	1 point per 425 sq. ft. (public land); 1 point per 30 sq. ft. (private land)	1 point per 425 sq. ft. (public land); 1 point per 30 sq. ft. (private land)
Skywalks <sup>137</sup>	10 points per skywalk	10 points per skywalk	10 points per skywalk
Day care, 24-hour child care facilities	1 point per 200 sq. ft.	1 point per 200 sq. ft.	1 point per 200 sq. ft.

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- b. Amenities for which bonus points have been granted must be maintained after construction of a project; provided, however, that amenities can be eliminated and others substituted on a point-for-point basis upon the approval of Planning Department staff.
- c. Maximum height near Town Square Park is as follows:
- i. The maximum height of structures in Blocks 69 through 71, Anchorage Original Townsite, shall not exceed the following:
- (A) Block 69
- (1) Northwest quarter: 115 feet.
- (2) Northeast quarter: 85 feet.
- (3) South half: 200 feet.
- (B) Block 70

<sup>137</sup> NOTE: Staff recommends reducing the bonus points for skywalks from the current 30 to 10.

- 1 (1) North half: 55 feet.
- 2 (2) South half: 230 feet.
- 3 (C) Block 71
- 4 (1) Northwest quarter: 85 feet.
- 5 (2) Northeast quarter: 115 feet.
- 6 (3) South half: 200 feet.
- 7 ii. The Director may waive this height limit for a structure that
- 8 will not cast a shadow greater than that cast by existing
- 9 structures on the Town Square Park on Block 51, Anchorage
- 10 Original Townsite, from April 21 to August 21 between the
- 11 hours of 9:00 a.m. and 3:00 p.m., solar time.
- 12 iii. Subject to the maximum height requirements of the Airport
- 13 Height Overlay District, at the request of the owner of a lot in
- 14 Blocks 69 through 71, Anchorage Original Townsite, the right
- 15 to construct the amount of building square footage permitted
- 16 on that lot under subsection B. of this section, less the
- 17 amount allowed under this subsection I,<sup>138</sup> may be added to
- 18 the amount allowed under this Title on one or more lots not in
- 19 those blocks located in the C-2A, C-2B or C-2C district.<sup>139</sup>
- 20 d. Structures in excess of three stories shall be allowed additional
- 21 buildable area for that portion of the required sidewalk within private
- 22 property between the structure setback line determined by subsection
- 23 B.2.h., of this section, Setbacks from Project Rights-of-Way, and a
- 24 sidewalk width of 11.5 feet. This additional area shall be calculated
- 25 by multiplying the lineal feet of sidewalk affected by this subsection by
- 26 33 feet. This additional area can be included as part of the maximum
- 27 building height allowed in the Airport Height Overlay District.

<sup>138</sup> NOTE: It is unclear how these existing cross-references should be updated.

<sup>139</sup> NOTE: Regarding this existing provision, staff notes: "The extent of this transferable right ("the amount of building square footage permitted on that lot under subsection B. of this Section, less the amount allowed under this subsection I") should be determined and a letter recorded against the property. As building area is transferred from one lot to another, documents detailing the transfer should be recorded against both properties. PLEASE make this record-keeping a requirement."