

CHAPTER 21.07: DEVELOPMENT AND DESIGN STANDARDS

21.07.010 GENERAL PROVISIONS

A. Purpose

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

1. To encourage the proper use of the land by promoting an appropriate balance between the built environment and the preservation and protection of open space and natural resources;
2. To provide standards that reasonably balance community goals, economic growth, quality of life, and development costs;
3. Promote the protection of natural features and resources, water quality and hydrological functions, and important or hazardous environmental areas;
4. To provide appropriate standards to ensure a high quality appearance for the municipality and promote good design while also allowing flexibility, individuality, creativity, and artistic expression;
5. To provide development and design standards that address and are tailored to the municipality's northern climate and winter city character;
6. To protect and enhance residential neighborhoods, commercial districts, and other areas by encouraging physical development that is of high quality and is compatible with the character, scale, and function of the surrounding area;
7. To encourage developments that relate to adjoining public streets, open spaces, and neighborhoods with building orientation and physical connections that contribute to the surrounding network of streets, walkways, pathways, and trails.

B. Buildings to Have Access

Every building shall be on a lot abutting on a constructed public street with principal access to such street, or with access to a constructed private street approved by the appropriate fire authority, public works department, development services department, traffic department, and planning department. This standard may be waived by approval of the municipal engineer, traffic engineer, and the director.

C. Addresses

It is the responsibility of the property owner to affix street address numbers assigned by the municipality to the affected building(s) or on another structure (natural or otherwise) nearer to the street, to be plainly visible and legible from the street named in the address. Sub-addresses shall also be visible when approaching the building and on each applicable entrance.

D. Alternative Equivalent Compliance

1. Purpose

Alternative equivalent compliance is a procedure that allows development to meet the intent of this chapter through an alternative design. The procedure permits a site-specific plan that is equal to or better than the strict application of a design standard specified in

1 this title. This procedure is not intended as a substitute for a variance or administrative
2 modification or as a vehicle for relief from standards in this chapter.

3 **2. Applicability**

4 The alternative equivalent compliance procedure shall be available only for the following
5 sections of this chapter:

- 6 a. Section 21.07.110, *Residential Design Standards*;
7 b. Section 21.07.120, *Large Commercial Establishments*; and
8 c. Subsection 21.09.080, *Building Design Standards* (Girdwood).

9 **3. Pre-Application Conference Required**

10 An applicant proposing to use alternative equivalent compliance under this section shall
11 request and attend a pre-application conference prior to submitting the site plan for the
12 development, to determine the preliminary response from the director. Based on that
13 response, the site plan application shall include sufficient explanation and justification, in
14 both written and graphic form, for the alternative compliance requested.

15 **4. Decision-Making Responsibility**

16 Final approval of alternative equivalent compliance under this section shall be the
17 responsibility of the decision-making body responsible for deciding upon the application.
18 By-right projects that would not ordinarily require review under this title, yet which are
19 proposing alternative equivalent compliance, shall receive written approval of the
20 alternative equivalent compliance from the director.

21 **5. Timing of Decision**

22 If the director is the decision-making body, the director shall render a written decision
23 within 21 days of receipt of an application for alternative compliance. Should a decision
24 not be rendered within 30 days, the application shall stand as approved.

25 **6. Criteria**

26 To grant a request for alternative equivalent compliance, the decision-making body shall
27 find that all of the following criteria are met:

- 28 a. The proposed alternative design achieves the intent of the subject design
29 standard to the same or better degree than the subject standard.
30 b. The proposed alternative design achieves the goals and policies of the
31 comprehensive plan to the same or better degree than the subject standard.
32 c. The proposed alternative design results in benefits to the community that are
33 equivalent to or better than compliance with the subject design standard.

34 **7. Effect of Approval**

35 Alternative compliance shall apply only to the specific site for which it is requested and
36 does not establish a precedent for assured approval of other requests.

37 **21.07.020 NATURAL RESOURCE PROTECTION**

38 **A. Purpose**

39 The municipality contains many natural amenities including streams, natural drainages, wildlife
40 habitat areas, water bodies, scenic features such as mountains and coastal areas, wetlands, and
41 hillsides, as well as significant amounts of native forest, tree cover, and open space, all of which
42 contribute to the municipality's character, public health, quality of life, and property values. The

1 requirements of this section are intended to ensure that the natural character of the municipality is
2 reflected in patterns of development and redevelopment, where feasible and appropriate.

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

4 **1. Purpose**

5 The following requirements are intended to promote, preserve, and enhance the
6 important hydrologic, biological, ecological, aesthetic, recreational, and educational
7 functions provided by streams, associated riparian areas, water bodies, and wetlands,
8 particularly by minimizing impervious surface and by reducing erosion and the
9 contamination of streams, wetlands, and water bodies by pollutants or invasive plants.

10 It is the intent of the municipality to follow the adoption of the Title 21 Rewrite Project
11 (2002-2012) within six months with a separate public process to complete the
12 development of a stream protection setback amendment to title 21. Objectives include:

- 13 a. To provide wider stream protection setbacks; and
14 b. To provide relief for property that would be impacted or rendered nonconforming
15 by such wider setbacks.

16 **2. Applicability**

17 This subsection 21.07.020B. shall apply to new development, except for the following
18 development or activities:

- 19 a. Maintenance and repair of existing public roads, utilities, and other public
20 facilities within an existing right-of-way or easement, or otherwise within a
21 setback;
22 b. Flood prevention or rehabilitation work carried out by a government agency or
23 approved by a government agency;
24 c. Maintenance and repair of flood control structures and activities in response to a
25 flood emergency; and
26 d. Wetland, stream channel, and wildlife habitat restoration, construction, and/or
27 enhancement that improves or restores the wetland or stream functions, provided
28 that the proposed activity is approved by the appropriate agency such as the
29 U.S. Corps of Engineers or the Alaska department of fish and game.

30 **3. Relationship to Other Regulations**

- 31 a. This subsection 21.07.020B. does not repeal or supersede any existing federal,
32 state, or local laws, easements, covenants, or deed restrictions. When this
33 subsection imposes a higher or more restrictive standard than found in another
34 applicable ordinance, statute, or regulation, this subsection shall apply.
35 b. No person shall engage in any activity that will disturb, remove, drain, fill, dredge,
36 clear, destroy, or alter any area, including vegetation, within a wetland that falls in
37 the jurisdiction of the federal government and its agencies, except as may be
38 expressly allowed under a permit issued by the appropriate federal agency.
39 c. The decision-making body may grant final approval to any development or
40 activity, including subdivisions and rezonings, in a wetland that falls within the
41 federal government's jurisdiction conditioned upon all necessary federal
42 approvals and permits having been obtained.

1 **4. Buffer/Setback Requirements**

2 **a. Water Courses**

3 i. In all zoning districts except for the R-10 district and the area covered by
4 the *Hillside District Plan*, buildings, accessory structures, and parking lots
5 shall be set back at least 25 feet horizontally from the ordinary high-
6 water mark on each side of streams or, if not readily discernible, from
7 each side of the defined bank of the stream. In the R-10 district and in
8 the area covered by the *Hillside District Plan*, the setback shall be 50
9 feet. Except as provided in B.6. below, no disturbance is permitted in the
10 setback area.

11 ii. In all zoning districts, buildings, accessory structures, and parking lots
12 shall be set back at least 10 feet horizontally from the edge of each side
13 of drainageways and ephemeral channels defined or verified by the
14 public works department. Except as provided in B.6. below, no
15 disturbance is permitted in the 10-foot setback area. The public works
16 department may require a greater setback, if in their professional
17 judgment, the additional setback is necessary to provide for groundwater
18 discharge zones or infiltration areas, the disturbance of which would alter
19 natural flow characteristics.

20 iii. Segments of streams or tributaries that are contained underground in
21 pipes or culverts have no setback.

22 iv. For parcels where there are wetlands contiguous with a stream, setback
23 requirements are listed in table 2 of the *Anchorage Wetlands*
24 *Management Plan*.

25 **b. Alternate Setback Option for Stream Corridor**

26 i. A stream channel alteration or restoration project may create a “stream
27 corridor” containing appropriate meander widths based on topographic
28 conditions and hydraulic design. Where established, the “stream
29 corridor” shall be the stream setback for the purposes of municipal code.

30 ii. The stream corridor width shall be subject to public works department
31 approval.

32 iii. Stream corridor widths shall be based on appropriate reference stream
33 reaches, considering slope, soils, discharge, elevation, and channel
34 pattern and function and shall not be less than 100 feet wide.

35 iv. The design of the new stream channel may meander within this corridor.
36 Channel alteration design shall comply with subsections 6.c. and 6.d.
37 below. The ordinary high water mark of the designed channel shall not
38 come within 25 feet of the edge of the corridor, and not more than 20
39 percent of its length shall be within 25 to 35 feet of the edge of the
40 corridor.

41 v. Before site work begins, the stream corridor shall be established by a
42 recorded survey or an approved plat.

43 **c. Wetlands**

44 i. To the maximum extent feasible, class A and those class B wetlands
45 which, as a result of a U.S. Corps of Engineers decision or permit
46 condition, are not authorized for development, shall be platted into
47 separate tracts and not included as part of a development lot. Wetland

1 classes are defined and delineated in the *Anchorage Wetlands*
2 *Management Plan*.

- 3 ii. Except as provided in B.6. below, all buildings, accessory structures, fills
4 and other storage of materials, and parking lots shall be set back at least
5 15 feet horizontally from the delineated edge of all class A wetlands, and
6 all portions of class B and C wetlands not authorized for development; no
7 disturbance is permitted in the 15-foot setback area.

8 **d. Water Bodies**

9 In all districts, buildings, accessory structures, and parking lots shall be set back
10 at least 25 feet horizontally from the edge of water bodies. The setback shall be
11 vegetated, except for minimal areas to allow for access to those uses such as
12 docks, boathouses, and floatplane storage that require direct access to a water
13 body by their very nature or function.

14 **e. Credit for Other Requirements of this Title**

15 Stream, water body, and wetland setback areas shall be credited toward any
16 applicable private open space requirements or landscaping requirements only if
17 such setback areas serve the purposes of those requirements as set forth in this
18 title.

19 **5. Boundary Delineation**

20 **a. Official Definitions and Standards**

21 i. In cases where water courses or water bodies are not mapped and
22 recorded in official plans or other documents, delineation of such
23 features shall be made according to public works department
24 procedures, and shall be subject to formal verification by the public
25 works department.

26 ii. In cases where wetlands are not mapped and recorded in official plans
27 or other documents, including the *Anchorage Wetlands Management*
28 *Plan*, delineation of such features shall be performed using procedures
29 as described by the U.S. Corps of Engineers. Delineations shall be
30 subject to formal verification by the U.S. Corps of Engineers.

31 **b. Water Course Boundaries**

32 Water course boundaries shall be delineated at the ordinary high-water mark or,
33 if not readily discernible, the defined bank of the stream, as those terms are
34 defined in chapter 21.14. In those instances where the defined bank of the water
35 course is not readily discernible, the public works department shall establish the
36 effective ordinary high-water mark. The public works department shall maintain
37 the official record of all water course boundaries.

38 **c. Wetland Boundaries**

39 **i. Mapped Wetlands**

40 Boundary delineation of wetlands shall be established by reference to
41 the *Anchorage Wetlands Management Plan*, which is available for
42 reference in the department and which is hereby adopted and
43 incorporated into this title by reference. Plats shall depict class A and B
44 wetland boundaries, and boundaries of class C wetlands that are not
45 authorized for development.

46 **ii. Unmapped Wetlands**

47 The review of a development proposal may discover a potential wetland
48 that has not been mapped or for which the boundaries have not been

1 clearly established. In such instances, the boundaries of the wetland
2 shall be delineated according to subsection 5.a.ii. above. Any new
3 wetland boundaries delineated herein shall be submitted to the U.S.
4 corps of engineers for approval.

5 **6. Development Standards**

6 **a. Activities, Uses, and Structures Allowed in a Required Water Course or**
7 **Wetland Setback With Prior Approval, As Noted**

8 i. With the appropriate approvals and/or permits and in accordance with
9 the conditions of subsection 6.c. below, maintenance, including
10 placement of riprap, debris removal, glaciation control, sediment
11 removal, protection of adjacent or downstream property from flooding,
12 soil stabilization, and erosion control, may be performed within the water
13 course and/or the setbacks described in B.4. above. Appropriate
14 approvals and/or permits may include a U.S. Corps of Engineers permit,
15 a municipal flood hazard permit, or a storm water treatment plan
16 approval.

17 ii. Channel alteration, including restoration and relocation projects, with
18 appropriate state and federal permits and in accordance with the
19 conditions of 6.c. below, are allowed.

20 iii. Culvertization of water courses, with any appropriate permits, is allowed.

21 iv. Redevelopment of structures or uses existing on January 1, 2014 is
22 allowed in the setback where:

23 (A) The director determines there is no practical or feasible
24 alternative to encroaching into the setback; and

25 (B) The redevelopment does not increase the encroachment over
26 the existing situation.

27 v. On undeveloped platted lots existing before January 1, 2014 where the
28 director determines the setback precludes practical or feasible
29 development of the lot, the director shall approve a site plan that allows
30 but minimizes encroachment into the setback.

31 **b. Activities, Uses, and Structures Allowed in a Required Water Course or**
32 **Wetland Setback Without Prior Approval, Unless Specifically Noted**

33 i. The following structures and uses of land or structures are permitted
34 generally perpendicular to the setback or stream edge within the stream,
35 drainageway, ephemeral channel, wetland, and water body setback,
36 where it is necessary in order to cross or enter the feature:

37 (A) Roads, driveways, trails, and other transportation and public
38 recreation facilities;

39 (B) Utility facilities pursuant to 6.e. below;

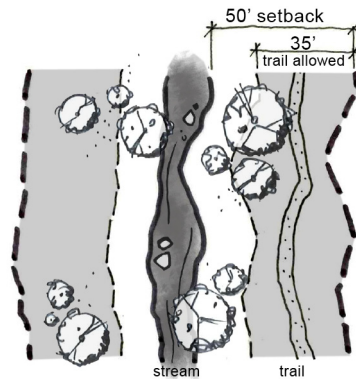
40 (C) Drainage facilities, in accordance with subsection 21.07.040 and
41 approved by the public works department.

42 ii. The following structures and uses of land or structures are permitted
43 parallel to the stream within the outer 10 feet (15 feet in the R-10 district
44 and in the area covered by the *Hillside District Plan*) of the setback:

- (A) Public recreation facilities such as trails;
- (B) Utility facilities pursuant to 6.e. below;
- (C) Drainage facilities, in accordance with subsection 21.07.040 and approved by the public works department.

The structures and uses listed in subsections ii.(A)-(C) above are allowed provided that utility facilities and applicable drainage facilities are buried, and provided that all disturbed areas shall be revegetated with trees, shrubs, and ground cover similar to natural vegetation in the area. Revegetation is to occur during the same growing season, except as otherwise permitted by the director.

- iii. Only in the area covered by the Hillside District Plan, trails are permitted parallel to the stream within the outer 35 feet of the setback. Through the design and permitting process, trails may be located closer to the stream for a justified reason, such as overcoming a physical, topographical, or land ownership constraint, or taking advantage of a viewpoint.



- iv. All disturbed areas associated with permitted activities shall be revegetated with landscaping similar to the natural vegetation of the area. Revegetation shall occur during the same growing season as the permitted activity, unless otherwise permitted by the director.

c. Conditions

All work within a water course or water course setback, whether permitted by-right or allowed through a specific approval process, shall meet the following conditions, along with any other required permits:

- i. Materials used or the removal of ground cover shall not create turbidity or other water quality problems;
- ii. There shall be no increase in flooding or erosion problems upstream or downstream;
- iii. If applicable, flow lines of the altered section of the water course shall match those in the existing water course at the endpoints of the alteration;

- 1 iv. If applicable, the gradient/meander balance, grade control, and bed
2 stability shall be adequate to maintain the natural stream function of
3 water conveyance and sediment transport, in accordance with the
4 judgment of the public works department; and
- 5 v. If applicable, the alteration shall have no negative effect on fish habitat.
- 6 d. **Prohibited Activities**
- 7 i. No person shall engage in any activity that will disturb, remove, fill, drain,
8 dredge, clear, destroy, or alter an area, including vegetation, within water
9 courses, water body edges, wetlands, or their associated setback areas,
10 except as may be expressly allowed in this section or title.
- 11 ii. Except as allowed in 6.a. and 6.b. above, channel alteration is prohibited
12 unless required in emergency situations. In emergency situations, the
13 municipal engineer shall be notified on the next business day after
14 channel alteration has begun. After inspection, the municipal engineer
15 shall prescribe any measures necessary to meet the conditions of 6.c.
16 above. For the purposes of this standard, an "emergency" is a situation
17 which would result in an unacceptable hazard to life, a significant loss of
18 property, or an immediate, unforeseen, and significant economic
19 hardship if corrective action requiring a permit is not undertaken
20 immediately.
- 21 iii. No storage or processing of hazardous materials or other substances
22 that would constitute a violation of AMC chapter 15.40 is permitted.
- 23 e. **Utilities**
- 24 Utilities and potable water wells may be allowed in a setback area only if the
25 decision-making body determines that there is no practical alternative. Any
26 disturbance of the setback area shall be reclaimed by regrading to original
27 contours and revegetation with native species. Provisions for reclamation of the
28 disturbed area shall be included in any development or improvements agreement
29 for the project, with adequate collateral to guarantee the reclamation will be
30 completed. Utility corridors in setback areas shall be located at the outside edge
31 of the area or if crossing the setback laterally shall disturb only the minimum area
32 necessary to install the utility. Access roads for maintenance of utilities shall be
33 located outside the setback area to the maximum extent feasible. Access for
34 maintenance of utilities in setback areas shall be at specific points rather than
35 parallel to the utility corridor whenever possible.
- 36 f. **Recreation, Education, or Scientific Activities**
- 37 Structures and improvements for recreational, educational, or scientific activities
38 such as trails, swimming beaches, docks, fishing access, and wildlife
39 management and viewing may be permitted in a setback area by the appropriate
40 government agency.
- 41 7. **Preservation and Restoration of Vegetation**
- 42 All existing vegetation within the stream or wetland setback area shall be preserved and,
43 where necessary to repair damaged riparian areas, supplemented with additional native
44 planting and landscaping. The removal of trees or vegetation that are a threat to the
45 public health, safety, or welfare; the removal of species identified as invasive by the state
46 of Alaska; or the removal of dead or naturally fallen trees or vegetation, shall be exempt
47 from this requirement.

1 **8. Implementation of Anchorage Wetlands Management Plan**

2 **a. Zoning and Platting Actions**

3 Zoning and platting actions taken under this title shall be consistent with the
4 *Anchorage Wetlands Management Plan*.

5 **b. Application of Plan to Approved Projects**

6 Conditional uses and preliminary plats approved prior to March 12, 1996, the
7 date of adoption of the revised *Anchorage Wetlands Management Plan*, shall not
8 have additional conditions imposed upon them as a result of requirements of the
9 plan except as follows:

10 i. The "A" designation shall apply regardless of prior approvals.

11 ii. Approved plats or conditional uses in wetlands that are returned to the
12 platting authority or planning and zoning commission for major
13 amendment may be examined for conformity with goals and enforceable
14 policies of the *Anchorage Wetlands Management Plan*.

15 iii. A new U.S. Corps of Engineers permit is required.

16 **C. Steep Slope Development**

17 **1. Purpose**

18 The purpose of this subsection 21.07.020C. is to establish standards that help achieve
19 the following objectives for development on steep slopes:

20 a. Prevent soil erosion and landslides;

21 b. Provide safe circulation of vehicular and pedestrian traffic to and within hillside
22 areas and to provide access for emergency vehicles necessary to serve the
23 hillside areas;

24 c. Encourage only minimal grading that relates to the natural contour of the land
25 and discourage mass grading of large pads and excessive terracing;

26 d. Encourage building types, grading design, lot sizes, site design, density,
27 arrangement, and spacing of buildings in developments in sloped areas that
28 integrate into the natural terrain with minimal re-contouring, in accordance with
29 adopted goals and policies;

30 e. Encourage innovative architectural, landscaping, circulation, and site design;

31 f. Encourage the protection of visually significant and/or prominent natural features,
32 such as ridgelines and rock outcroppings;

33 g. Incorporate drainage design that does not adversely impact neighboring or
34 nearby properties, downstream properties, receiving waters, and public
35 infrastructure; and

36 h. Encourage the retention of natural, indigenous vegetation that provides wildlife
37 habitat, helps retain runoff, and maintains the area's visual character.

38 **2. Applicability**

39 Any lot with an average slope of 20 percent or greater, or where adverse conditions
40 associated with slope stability, erosion, or sedimentation are present as determined by
41 the municipal engineer, shall comply with the standards of this subsection 21.07.020C.

1 Lots being subdivided shall comply with chapter 21.08, including subsection 21.08.030H.,
2 *Subdivisions on Slopes*, if applicable.

3 **3. Standards**

4 Except as allowed in subsection C.4. below, all proposed development subject to this
5 section shall comply with the following standards.

6 **a. Determination of Original/Natural Grade**

7 Original/natural grade shall be as defined in chapter 21.14. If there has been
8 previous development on the lot (e.g., gravel extraction), the director shall
9 determine original/natural grade, taking into account the previous development,
10 the existing grade of surrounding lots, the availability of information on pre-
11 development grade, and the feasibility of using pre-development grade.

12 **b. Slopes Greater than 30 Percent**

13 That contiguous portion of any lot which is 5,000 square feet or larger with slopes
14 steeper than 30 percent shall remain undisturbed, except as allowed in
15 subsection C.4. below.

16 **c. Site Disturbance Envelope**

17 i. There shall be a site disturbance envelope on each applicable lot. Earth
18 disturbance and vegetation clearing shall be limited to the site
19 disturbance envelope. Clearing, grubbing, or grading outside the site
20 disturbance envelope is prohibited except to modify fuels in order to
21 reduce fire risk, or to accommodate utility service connections.

22 ii. The size of the site disturbance envelope shall be as follows:

23 (A) Lots less than 40,000 square feet: 10,000 square feet maximum
24 or 50 percent of the lot area maximum, whichever is less.

25 (B) Lots 40,000 square feet to two acres in area: 20,000 square feet
26 maximum.

27 (C) Lots over two acres but less than five acres: 30,000 square feet
28 maximum.

29 (D) Lots five acres or greater: 40,000 square feet maximum.

30 iii. Areas outside the site disturbance envelope shall not be used for
31 stockpiling materials or excess fill, construction vehicle access, storage
32 of vehicles during construction, or similar uses. Temporary construction
33 fencing shall be installed around the perimeter of the site disturbance
34 envelope, to be removed after the final certificate of zoning compliance is
35 issued.

36 iv. The front setback of the lot may be reduced to 10 feet.

37 v. If the average slope of the site disturbance envelope is less than 20
38 percent, the development is exempt from subsections 3.e., 3.f., 3.g., 3.h.,
39 and 3.i.

40 **d. Cutting, Grading, and Filling**

41 i. Cutting and grading to create benches or pads for buildings or structures
42 shall be limited to within the site disturbance envelope.

- 1 ii. All grading and drainage shall comply with section 21.07.040, title 23, the
2 *Design Criteria Manual* (current approved edition), and the municipality's
3 *Storm Water Treatment Plan Review Guidance Manual*.
- 4 iii. Except where otherwise provided in this section, development shall
5 preserve the natural surface drainage pattern unique to each site as a
6 result of topography and vegetation. Grading shall ensure that drainage
7 flows away from all structures. Natural on-site drainage patterns may be
8 modified on site only if the applicant shows that there will be no
9 significant adverse environmental impacts on site or on adjacent
10 properties. If natural drainage patterns are modified, appropriate
11 stabilization techniques shall be employed.
- 12 iv. Development shall not adversely impact adjacent and surrounding
13 drainage patterns.
- 14 h. ***Ground Cover and Revegetation***
15 Ground cover and vegetation shall be maintained to control erosion and
16 sedimentation. All areas that are denuded for any purpose shall be revegetated
17 or the soils stabilized to prevent erosion and sedimentation prior to November 1
18 of the year of construction. No excavation shall be permitted after November 1
19 or before May 1 except under emergency conditions, as determined by the
20 building official.
- 21 i. ***Building Design Standards***
22 The purpose of the building design standards is to minimize site disturbance,
23 avoid extreme grading required by large building pads on steep slopes, and
24 reduce the risk of damage from natural hazards.
- 25 i. All buildings and structures shall have a foundation which has been
26 designed by a professional engineer, architect, or other qualified
27 professional.
- 28 ii. At any given point, the height of the structure shall not exceed 25 feet
29 above the original (natural) grade.
- 30 4. **Slopes Greater Than 30 Percent**
- 31 a. ***Purpose***
32 The requirements of this section are intended to allow consideration of
33 development on slopes up to 50 percent. In order to assure the safety and
34 stability of such development and to reduce offsite impacts, additional submittals
35 are required as described in this subsection. Nothing in this subsection
36 guarantees approval to disturb slopes greater than 30 percent.
- 37 b. ***Applicability***
38 If the site disturbance envelope as defined in C.3.c. above contains slopes over
39 30 percent, the standards of this section shall apply.
- 40 c. ***Slopes Greater Than 50 Percent***
41 All slopes greater than 50 percent shall remain undisturbed.
- 42 d. ***Existing Lots***
43 Notwithstanding other standards of this section, lots existing on January 1, 2014
44 that, due to the prevalence and/or distribution of slopes over 50 percent, are not
45 able to meet these standards, are allowed a site disturbance envelope of 20,000

- 1 square feet. Within this site disturbance envelope, slopes over 50 percent are
2 allowed to be disturbed.
- 3 **e. *Administrative Site Plan Review Required***
4 Development on slopes greater than 30 percent but not exceeding 50 percent
5 requires an administrative site plan review. In addition to the site plan approval
6 criteria set forth in subsection 21.03.180F., the approval criteria in subsection
7 4.g. below shall apply.
- 8 **f. *Additional Submittal Requirements***
9 In addition to the submittal requirements for an administrative site plan review,
10 the following information is required:
- 11 i. A geotechnical engineering report, stamped by an engineer licensed in
12 the state of Alaska, to include the following:
- 13 (A) Nature, distribution, strength, and stability of soils; conclusions
14 and recommendations for grading procedures; recommendations
15 for frequency of soil compaction testing, design criteria for
16 corrective measures; and opinions and recommendations
17 covering the adequacy of the site to be developed.
- 18 (B) Slope stability analysis: conclusions and recommendations
19 concerning the effects on slope stability of excavation and fill,
20 introduction of water (both on and offsite), seismic activity, and
21 erosion.
- 22 (C) Foundation investigation: conclusions and recommendations
23 concerning the effects of soil conditions on foundation and
24 structural stability, including permeability, bearing capacity, and
25 shear strength of soils.
- 26 (D) Specific recommendations for cut and fill slope stability, seepage
27 and drainage control, or other design criteria to mitigate geologic
28 hazards, slope failure, and soil erosion.
- 29 (E) Depth to groundwater in the wettest seasonal conditions, and to
30 bedrock, if less than 15 feet.
- 31 (F) Complete description of the geology of the site, a complete
32 description of bedrock and subsurface conditions and materials,
33 including artificial fill, soil depth, avalanche and mass wasting
34 hazard areas, fractures, or other significant features.
- 35 (G) A summary of field exploration methods and tests on which the
36 report is based, such as probings, core drillings, borehole
37 photography, or test pits. The project management and
38 engineering department shall confirm that the analysis methods
39 and age of data are a reliable gauge of the site conditions and
40 the potential impacts.
- 41 ii. A site development plan showing the following:
- 42 (A) Site disturbance envelope as set forth in C.3.c. above.
- 43 (B) Location of all driveways, and utility lines and installations.

- 1 (C) Location of all structures.
- 2 (D) Elevation drawings of all structures.
- 3 iii. Grading and drainage plans that provide the following:
- 4 (A) Topographic survey of existing conditions depicting at a
5 minimum two foot contour intervals on a legible site map of one
6 inch equaling 50 feet, or better.
- 7 (B) Proposed grading plan indicating limits of disturbed area,
8 finished grade at minimum two foot contour intervals, proposed
9 elevations of improvements, driveway grading at minimum 10
10 foot intervals measured on centerline, delineation of cut and fill
11 areas, constructed slopes, proposed drainage features, and
12 related construction.
- 13 (C) Drainage plans showing approximate locations for all surface
14 and subsurface drainage devices, retaining walls, dams,
15 sediment basins, storage reservoirs, and other protective
16 devices to be constructed with, or as part of, the proposed work,
17 together with a map showing drainage area, how roof and other
18 impervious surface drainage will be disposed, the complete
19 drainage network, including outfall lines and natural drainage
20 ways which may be affected by the proposed development, and
21 the estimated volume and rate of runoff of the area served by the
22 drains.
- 23 (D) A plan for erosion control and other specific control practices to
24 be employed on the disturbed area where necessary.
- 25 iv. A revegetation plan that shows:
- 26 (A) The type, size, location, and grade of vegetation that will be used
27 to complete the development plan and restore areas disturbed
28 during construction, on a scaled plan of one inch equaling 30
29 feet, or better.
- 30 (B) Slope stabilization measures to be installed.
- 31 g. **Standards**
32 The following subsections apply to development under this subsection C.4.:
- 33 i. 21.07.020C.3.c., *Site Disturbance Envelope*;
- 34 ii. 21.07.020C.3.d., *Cutting, Grading, and Filling*;
- 35 iii. 21.07.020C.3.g., *Natural Drainage Patterns*;
- 36 iv. 21.07.020C.3.h., *Ground Cover and Revegetation*; and
- 37 v. 21.07.020C.3.i., *Building Design Standards*.
- 38 h. **Approval Criteria**
39 i. The proposed development minimizes disruption of the natural
40 topography and protects natural features on the site in their natural state
41 to the greatest degree possible.

- 1 ii. The principal and accessory structures have been sited in such a
2 manner as to protect natural features of the site, minimize grading,
3 preserve the appearance of scenic vistas, and minimize the risk of
4 property damage and personal injury from natural hazards.
- 5 iii. The design of the structures includes massing, roof lines, exterior
6 materials and colors, and decking that complements the terrain and
7 complies with the building design standards set forth in paragraph C.3.i.
8 above.
- 9 iv. Proposed landscaping preserves the natural character of the area while
10 minimizing erosion and fire hazard risks to persons and property.
- 11 v. The drainage design of the development will have no adverse impact on
12 neighboring or nearby properties.
- 13 vi. Areas not well suited for development due to soil stability characteristics,
14 geology, hydrology limitations, or wastewater disposal, have been
15 avoided.

16 **D. Wildlife Management Corridors**

17 **1. Intent**

18 The purpose of this section is to reduce wildlife-human conflicts by managing certain
19 linear stream corridors to minimize adverse human-wildlife interactions and to facilitate
20 more safely the movement of wildlife in those corridors identified in this section. It is not
21 the intent of this section to reduce density that is otherwise allowed.

22 **2. Applicability**

23 This subsection shall apply within 200 feet on either side of the ordinary high water mark
24 of the following streams: Peters Creek and its tributaries upstream of the Old Glenn
25 Highway, Eagle River, South Fork of Eagle River (below the falls), Ship Creek (upstream
26 from Reeve Blvd.), Campbell Creek (upstream from Lake Otis Parkway), North Fork of
27 Little Campbell Creek (upstream from Elmore Road), Rabbit Creek, Little Rabbit Creek,
28 Indian Creek, Bird Creek, Penguin Creek, California Creek, Glacier Creek, Virgin Creek
29 and Portage Creek.

30 **3. Standards**

31 Within the area identified in subsection D.2. above, the following mandatory standards
32 shall apply:

- 33 a. No new landfills, solid waste transfer stations, schools, or campgrounds are
34 allowed.
- 35 b. All outdoor trash receptacles shall be bear-resistant, and food shall not be stored
36 outside.
- 37 c. Roads, driveways, or trails, including bridges, shall be designed to facilitate
38 wildlife passage along streams and to minimize wildlife-human conflicts.
- 39 d. Trails shall be sited with direct consultation with the state department of fish and
40 game.

41 **4. Discretionary Approvals**

- 42 a. For discretionary approvals before the planning and zoning commission, the
43 urban design commission, the platting board, or the zoning board of examiners

1 and appeals that include the area identified in subsection D.2. above, the
2 following shall be considered during deliberations:

- 3 i. Location of new buildings, permanent structures, trails, and fences.
4 ii. Long-term retention of natural vegetation and terrain in a landscape
5 pattern that provides cover for wildlife movement and directs wildlife
6 away from residential structures or other structures occupied on a
7 frequent basis.

- 8 b. All applicable discretionary approvals under this section shall be referred to the
9 Alaska department of fish and game, wildlife division, for their review, comments,
10 and recommendations, which shall be considered by the decision-making body.

11 **5. Review Report**

12 All applications affected by this section shall be referred to the Alaska Department of Fish
13 and Game for its review, comments, and recommendations, which shall be considered by
14 the decision-making body. Recommendations for approval shall be supported by
15 evidence in the report submitted by that department.

16 **21.07.030 PRIVATE OPEN SPACE**

17 **A. Purpose**

- 18 1. In residential development, private open space is intended to provide residents with
19 opportunities for active and passive outdoor recreation, relaxation, and enjoyment.
20 2. In nonresidential development, private open space is intended for the general quality of
21 the public domain, and to provide employees and customers with space for active or
22 passive recreation and relaxation.

23 **B. Applicability and Open Space Requirement**

24 Development shall be required to set aside private open space according to the following
25 minimum requirements. For the purposes of this section, gross floor area shall not include floor
26 area devoted to parking or loading, or indoor private open space that meets the standards of D.5.
27 below.

- 28 1. R-2M districts: 480 square feet of private open space per dwelling unit, or an area equal
29 to five percent of the gross floor area of group living uses or nonresidential development.
30 2. R-3 district: 400 square feet of private open space per dwelling unit. At least half of the
31 private open space shall be shared in common among the units. Group living uses and
32 nonresidential development shall provide an area equal to five percent of the gross floor
33 area for open space.
34 3. R-4 and R-4A districts: 120 square feet of private open space per dwelling unit, and at
35 least half of the private open space shall be shared in common among the units. Group
36 living uses and nonresidential development shall provide an area equal to five percent of
37 the gross floor area for open space.
38 4. B-1A, B-1B, B-3, RO, and nonresidential development in residential districts:
39 a. Private open space equal to five percent of the gross floor area of the
40 nonresidential portion of the development shall be provided, up to a maximum
41 requirement of 2,000 square feet.

1 **b.** Where dwelling units are part of the development, an additional 120 square feet
2 of private open space per dwelling unit shall be provided, which shall not be
3 combined with private open space for the nonresidential portion of the
4 development. For townhouse-style construction, the private open space may be
5 provided for the exclusive use of each dwelling unit. For other building types, at
6 least half of the private open space shall be shared in common among the units.

7 **5.** DT districts: [to be determined through Downtown Plan and regulations processes]

8 **C. Exemptions**

9 The following are exempt from the private open space requirement:

- 10 **1.** Single-family, two-family, mobile home, and townhouse residential uses;
- 11 **2.** Parks, Public Safety Facility, Transportation Facility, Utility Facility, Telecommunication
12 Facility, Agricultural Uses, Animal Boarding, Large Domestic Animal Facility;
- 13 **3.** Vehicles and Equipment, Manufacturing and Production, Warehouse and Storage, and
14 Waste and Salvage use categories;
- 15 **4.** Any building floor area devoted to parking and/or loading;
- 16 **5.** Any building floor area provided as indoor private open space that meets the standards of
17 subsection D.5. below; and
- 18 **6.** Any nonresidential building with less than 5,000 square feet of gross floor area.

19 **D. Standards**

20 **1. Areas Not Credited**

21 Lands within the following areas shall not be counted towards required private open
22 space areas:

- 23 **a.** Setbacks with slopes over 10 percent;
- 24 **b.** Swales with side slopes over 10 percent, and drainage ditches;
- 25 **c.** Required site perimeter and parking lot landscaping;
- 26 **d.** Public or private streets or street rights of way;
- 27 **e.** Parking facilities, driveways, other motor vehicle circulation areas, loading areas,
28 and refuse collection areas; and
- 29 **f.** Land covered by structures not intended solely for recreational uses.

30 **2. Use of Private Open Space Areas**

31 Required private open space may be private yard, garden, patio, deck, balcony, or other
32 open space reserved for the exclusive use of a single dwelling unit. It shall be designed
33 for the occupants of a specific dwelling, and provided immediately adjacent to, and with
34 direct access from the dwelling. The minimum inside dimension for such an area used to
35 meet the private open space requirement shall be no less than 15 feet for ground level
36 spaces such as yards, or six feet for above ground level spaces such as balconies.
37 Individual private open space for the exclusive use of each dwelling unit shall have a
38 slope of 10 percent or less.

1 **3. Physical Delineation**

2 A fence, hedge, earth berm, railings on decks, and/or other continuous linear landscaping
3 features shall define and separate ground-level private open space from abutting streets
4 and rights-of-way. Such features may be incorporated as part of required perimeter
5 landscaping. A nonresidential private open space such as a plaza or outdoor seating
6 area shall be exempt from the physical delineation requirement where it abuts a sidewalk
7 or other public pedestrian space. Private open space shall be separated from refuse
8 collection areas by L1 visual enhancement landscaping.

9 **4. Common Private Open Space**

10 Private open space areas to be used in common by residents and/or associated with
11 nonresidential uses or mixed uses are intended to be usable spaces that incorporate user
12 amenities facilitating passive or active recreation and relaxation. These areas shall meet
13 the following standards:

- 14 **a.** At least half of the common private open space shall be contiguous.
- 15 **b.** Common private open space shall be conveniently accessible to residents or
16 users of the development. The nearest building façade to the open space, any
17 façade sharing a corner with the nearest building façade, or any façade directly
18 facing the open space, shall have a primary entrance. A walkway shall connect
19 common private open space to primary building entrances.
- 20 **c.** The minimum inside dimension for an area used to meet the requirement shall be
21 18 feet for residential uses and 15 feet for nonresidential uses.
- 22 **d.** Common private open space may include lawn areas; picnic areas; gardens;
23 natural vegetation; equipped recreation areas; sports courts; hard surfaced
24 pedestrian spaces such as patios, decks, courtyards, housing courtyards, or
25 plazas; indoor private open space pursuant to D.5. below; and/or roof tops or
26 terraces.
- 27 **e.** Up to 25 percent of the total required open space area may be developed for
28 active recreation, such as with play equipment or delineated sports field.

29 **5. Indoor Private Open Space Option**

30 Up to 25 percent of the total required private open space for residential uses, and up to
31 50 percent of the total required private open space for nonresidential uses, may be
32 indoors. Such space:

- 33 **a.** Shall be located and designed to maximize sunlight access by providing one
34 square foot of transparent window and/or skylight area for each two square feet
35 of floor area of the indoor private open space;
- 36 **b.** Shall be climate controlled and furnished with features and amenities that
37 encourage its use;
- 38 **c.** Shall be accessible to all residents, or to all employees and customers of the
39 development; and
- 40 **d.** Shall not be combined with some other function, such as laundry or storage.

41 **6. Incentive for High Quality Spaces**

42 The total open space area requirement may be reduced by 25 percent if the largest
43 common open space area meets all the other requirements of this section and the
44 following standards:

- 1 a. Has less than an average five percent slope;
- 2 b. Is well-drained and not wetlands;
- 3 c. Has a minimum inside dimension of 25 feet for residential uses, or 20 feet for
- 4 nonresidential uses; and
- 5 d. Receives sunlight access on the majority of the open space for at least four
- 6 hours per day between the spring and fall equinox.

7 **7. Ownership**
8 All private open space areas not reserved for the exclusive use of a single dwelling unit
9 shall be owned jointly or in common by the owners of the development or permanently
10 preserved through some other mechanism satisfactory to the director. While private
11 open space may be platted into separate tracts, those tracts which provide required
12 private open space shall not be sold separately from the development.

13 **8. Fee In Lieu Prohibited**
14 The payment of fees in lieu of the set-aside of land for private common open space is
15 prohibited.

16 **21.07.040 DRAINAGE, STORM WATER TREATMENT, EROSION CONTROL, AND PROHIBITED**
17 **DISCHARGES**

- 18 **A. Purpose**
- 19 **1.**Drainage plans and the requirements of this section and the *Design Criteria Manual* are
20 intended to implement the following principles of drainage planning:
 - 21 a. The design of a drainage system shall not transfer a problem from one location to
 - 22 another.
 - 23 b. Adequate space shall be provided for drainage conveyance and storage.
 - 24 c. Good drainage design incorporates the effectiveness of the natural systems,
 - 25 rather than negating, replacing, redirecting, or ignoring them. The features,
 - 26 capacity, and function of the existing natural system shall be considered and
 - 27 utilized.
 - 28 d. Drainage and storm water management facilities shall be designed with ease of
 - 29 maintenance, long-term function, sub-arctic climate function, protection of public
 - 30 safety, and accessibility as primary considerations.
 - 31 **2.**Other purposes of this section include:
 - 32 a. Regulating development preparation and land-disturbing activity in order to
 - 33 control erosion and sedimentation and accordingly to prevent water pollution
 - 34 from sedimentation, to prevent accelerated erosion and sedimentation of lakes
 - 35 and natural watercourses; and to prevent damage to public and private property
 - 36 by erosion and/or sedimentation during and after construction;
 - 37 b. Regulating storm water discharge to improve the quality of the environment for
 - 38 residents of the municipality, administer the Municipal Separate Storm Sewer
 - 39 permit, and manage impacts to the watersheds in the municipality; and
 - 40 c. Minimizing point and non-point source pollution into the water bodies of the
 - 41 municipality.

1 **B. Guidance Documents**

2 The municipal engineer shall develop, implement, and maintain various guidance manuals which
3 shall provide standards and guidelines for this section 21.07.040. The *Design Criteria Manual*
4 and the *Storm Water Treatment Plan Review Guidance Manual* are examples of such manuals.

5 **C. Emergencies**

6 Where site work deviates from approved plans due to an emergency, the municipal engineer shall
7 be notified on the next business day. Changes to an approved plan shall be submitted within 14
8 days to the public works department. For the purposes of this section, an “emergency” is a
9 situation which would result in an unacceptable hazard to life, a significant loss of property, or an
10 immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is
11 not undertaken immediately.

12 **D. Drainage**

13 **1. Intent**

14 A drainage plan shall show the post-development drainage patterns of the site.

15 **2. Applicability**

16 This section applies to all development within the municipality.

17 **3. Drainage Plan Required**

18 **a.** Applications for the following entitlements shall include a drainage plan:

- 19 **i.** A permit from the development services department, for projects that
20 include land disturbance;
- 21 **ii.** Subdivision plat (both preliminary and abbreviated plats);
- 22 **iii.** Site plan review (administrative and major); and
- 23 **iv.** Conditional use.

24 The drainage plan submittal requirement may be waived by the director and the
25 municipal engineer if both agree that such a plan is not necessary.

26 **b.** The drainage plan shall show the area affected by the application, as well as
27 watercourses, drainage and water quality easements, appropriate drainage
28 outfall for surface water, roof drainage, and other impervious surfaces, and any
29 other pertinent information, and shall address surface and subsurface drainage.
30 The drainage plan shall also indicate impacts, if any, on adjacent, up-gradient,
31 and down-gradient properties.

32 **c.** An approved drainage plan is required before any site work commences.

33 **4. Standards**

34 Drainage plans shall comply with the requirements of municipal code and the guidance of
35 the *Design Criteria Manual*. Post-development drainage plans shall be designed in a
36 manner such that there will be no adverse off-site impacts. Any net increase of water
37 volumes shall be mitigated and/or directed to an adjacent drainage system or receiving
38 water that has the demonstrated capability to handle the new flows. The municipality
39 may require a dedicated drainage easement(s) to ensure the drainage is consistent and
40 compatible with surrounding drainage patterns.

- 1 **5. When No Permit is Required**
- 2 **a.** In situations where a building or land use permit is not required, all design and
- 3 construction activities shall comply with municipal code.
- 4 **b.** If the municipal engineer reasonably believes that a project is significant in nature
- 5 or that it will have negative impacts on surrounding property, water quality,
- 6 drainage, or the roadways, the municipal engineer may require submittal of a
- 7 drainage plan and a full review of the project. The applicant shall pay the
- 8 appropriate review fees for the review. If the project is under construction, the
- 9 municipal engineer may issue a stop work order until the project has been
- 10 reviewed and approved.
- 11 **c.** If a project has been completed and there are negative impacts on surrounding
- 12 property, water quality, drainage, or the roadways, the municipal engineer may
- 13 pursue enforcement actions under chapter 21.13.
- 14 **6. Exposure of Subsurface Flows**
- 15 If, during site work, unexpected subsurface flows are exposed, the municipality shall be
- 16 informed immediately. If the subsurface flow cannot be contained within the site and has
- 17 a significant off-site impact, work shall cease immediately and shall not be resumed until
- 18 a temporary flow management plan has been submitted to and accepted by the
- 19 municipality. In addition, the developer shall amend the drainage plan to address the
- 20 exposed flows and potential for glaciation and shall submit it to the municipality and
- 21 receive approval before resuming site work other than temporary flow management.
- 22 **E. Storm Water Treatment and Erosion and Sediment Control**
- 23 **1. Intent**
- 24 A storm water treatment plan shall show both the controls put in place during construction
- 25 and any needed post-development controls to prevent erosion and protect water quality.
- 26 **2. Applicability**
- 27 Storm water treatment plan approval is required prior to commencement of land clearing
- 28 or ground disturbing activities; the discharge of surface water (including from snow
- 29 disposal sites); the construction, alteration, installation, modification, or operation of a
- 30 storm water treatment or disposal system; demolition or utility work; connection to the
- 31 municipal separate storm sewer system; work in water bodies, wetlands, or
- 32 watercourses; or dewatering activities, except as listed in E.4. below. All construction,
- 33 development, and maintenance activities shall be in accordance with the approved storm
- 34 water treatment plan.
- 35 **3. Nonconformities**
- 36 No nonconforming rights are granted for this section 21.07.040E.
- 37 **4. Exceptions**
- 38 A storm water treatment plan shall not be required for the following. An erosion control
- 39 plan may still be required if the discharge is so concentrated as to cause soil disturbance.
- 40 The municipal engineer may waive the requirement for a storm water treatment plan for
- 41 other activities that, in his or her judgment, will not create erosion or impair water quality.
- 42 **a.** Building improvements where no earth is disturbed;
- 43 **b.** Any earth disturbance that is less than 500 square feet in area;

- 1 c. Agricultural activities (not including site landscaping). Discharges from
2 agricultural activities are still subject to water quality standards and potential
3 enforcement for illicit discharges to watercourses or the storm sewer system;
- 4 d. Discharges of the following into the municipal separate storm sewer system:
- 5 i. Uncontaminated water line flushing;
- 6 ii. Residential irrigation water;
- 7 iii. Rising ground waters;
- 8 iv. Uncontaminated ground water infiltration;
- 9 v. Uncontaminated discharges from potable water sources;
- 10 vi. Foundation drains;
- 11 vii. Air conditioning condensate;
- 12 viii. Springs;
- 13 ix. Uncontaminated water;
- 14 x. Individual residential car washing;
- 15 xi. Flows from riparian habitats and wetlands;
- 16 xii. De-chlorinated swimming pool discharges;
- 17 xiii. Street wash waters; or
- 18 xiv. Flows from emergency fire fighting activity.
- 19 **5. Submittal Requirements and Review Procedure**
- 20 Storm water treatment plans shall be submitted to the public works department on the
21 form provided. The submittal shall include plans for both temporary (during construction)
22 and permanent storm water treatment and erosion control, and any supplementary
23 information required in the user's guide or the *Design Criteria Manual*.
- 24 a. ***Storm Water Treatment Plan Review Guidance Manual***
- 25 The *Storm Water Treatment Plan Review Guidance Manual* shall be used to
26 develop, review, and approve storm water treatment plans. Applicants
27 submitting plans under this subsection shall comply with the manual regarding
28 plan requirements and reviews, and if necessary shall gather data to confirm
29 storm water conditions.
- 30 b. ***Changes to an Approved Storm Water Treatment Plan***
- 31 Any changes to permanent storm water controls from an approved storm water
32 treatment plan require approval by the municipal engineer. Changes in
33 temporary or construction storm water treatment controls or best management
34 practices necessary to maintain effective storm water treatment do not require
35 municipal approval but shall be documented.
- 36 c. ***New Application Required***
- 37 If dewatering, land clearing, construction, alteration, installation, modification, or
38 operation has not begun within one year after issuance of a storm water

1 treatment plan approval, the approval is void, and a new application shall be
2 submitted to the public works department for review and approval.

3 **d. Project-Wide Approval**

4 The municipal engineer may issue a project-wide approval to an applicant who
5 plans to conduct an operation with the same runoff characteristics at various
6 discharge locations. He or she may require the submittal of site-specific plans,
7 including a schedule and description of all planned discharge activities, for
8 approval, and may restrict that approval to certain proposed discharge activities.

9 **6. Land Clearing**

10 Mechanized land clearing of one acre or greater requires an approved storm water
11 treatment plan. Until a subsequent use is approved, a temporary native vegetation buffer
12 shall be retained on the perimeter of the lot being cleared, equal to or greater than the
13 specified minimum setback required in the zoning district. This buffer shall be at least 15
14 feet wide on the perimeter of lots in commercial and industrial zoning districts, except
15 where these are adjacent to PLI and/or residential zoning districts, where the temporary
16 buffer shall be a minimum of 30 feet wide. Those areas of native vegetation in
17 commercial and industrial zoning districts not essential to the parcel's development and
18 situated on the perimeter of the site shall be retained and protected from disturbance as
19 specified in subsection 21.07.080F.3.

20 **7. Erosion and Sediment Control Administrator**

21 A qualified erosion and sediment control administrator, who shall be responsible for the
22 erosion, sedimentation, and best management practices during construction, shall be
23 identified in each storm water treatment plan submitted for approval, except for storm
24 water treatment plans for owner-built single- and two-family dwellings. Evidence of
25 contractual liability shall be provided when requested.

26 **a.** In order to be identified as a qualified administrator, a person shall successfully
27 complete a training course and associated test for certification from a training
28 program approved by the public works department.

29 **b.** The qualified administrator shall maintain their certification in active status
30 throughout the length of the project. In the case where the qualified
31 administrator's certification becomes expired or revoked, a new qualified person
32 shall be selected to be the erosion and sediment control administrator and shall
33 be identified on the storm water treatment plan.

34 **8. Alternate Materials, Design, and Method of Construction**

35 **a.** The provisions of this section are not intended to prevent the use of any alternate
36 material, design, or method of construction not specifically prohibited by this
37 code, provided any alternate has been approved and its use authorized by the
38 municipal engineer.

39 **b.** The municipal engineer may approve any such alternate, provided that he or she
40 finds that the proposed design complies with the intent and purpose of this code,
41 and that the material, method, or work offered is, for the purpose intended, at
42 least the equivalent of that required in this code in suitability, effectiveness,
43 durability, safety, sanitation, and degree of structural integrity. The details of any
44 action granting modifications or the acceptance of a compliance alternative shall
45 be recorded and entered in the public works department's files.

46 **c.** Whenever there is insufficient evidence of compliance with any of the provisions
47 of this code or evidence that any material or construction does not conform to the
48 requirements of this code, the municipal engineer may require tests as proof of

1 compliance to be made at no expense to the municipality. Test methods shall be
2 as specified by this code or by other recognized test standards. If there are no
3 recognized and accepted test methods for the proposed alternative, the
4 municipal engineer shall determine test procedures. All tests shall be made by
5 an approved agency. Reports of such tests shall be retained by the municipal
6 engineer for the period required for the retention of public records.

7 **9. Inspections**

8 **a. Required Inspections**

9 Prior to the commencement of or during land clearing or ground disturbing
10 activities of one acre or greater, the discharge of surface water, or dewatering
11 activities subject to this section, an inspection of approved best management
12 practices associated with the storm water treatment plan shall be conducted.
13 Prior to the issuance of a certificate of zoning compliance, permanent site
14 controls shall be verified by inspection or other means, as determined by the
15 municipal engineer. The owner or contractor of record is responsible for
16 requesting the required inspections at the appropriate times.

17 **b. Other Inspections Authorized**

18 i. A municipal official, upon presentation of proper identification, may enter
19 the premises at reasonable times to inspect or perform duties imposed
20 by this code, for the purpose of determining whether the owner or
21 operator thereof is in compliance with the specific requirements of this
22 section. If such premises are unoccupied, the official shall first make a
23 reasonable effort to locate the owner or other person having charge or
24 control of the premises and request entry. If entry is refused, any
25 approvals issued under this section may be immediately suspended until
26 an inspection is conducted, and the official shall have recourse to the
27 remedies provided by law to secure entry. Permittees, owners, or
28 operators shall immediately stop all work upon the site being posted with
29 a stop work order for failure to allow inspection.

30 ii. A municipal official may inspect any property or facility suspected as the
31 source of illicit discharges in violation of 33 USC 1342 (1987) as
32 amended.

33 iii. No inspection for which a warrant would be required under the
34 constitution of this state or the United States may be conducted under
35 this section without the proper warrant.

36 **c. Availability and Production of Plans and Records**

37 Approved plans and specifications shall be available on site for review by
38 municipal inspectors at the time of requested inspections. At the request of
39 municipal officials and during normal working hours, owners or operators of
40 facilities, construction sites, premises, or areas shall produce and make available
41 for inspection or copying all records or information required to be maintained or
42 reported under the provisions of this section.

43 **F. Snow Storage and Disposal**

44 **1. Intent**

45 This section addresses seasonal storage and management of plowed snow from on-site
46 parking lots and other motor vehicle areas. It requires developments to provide space to
47 accommodate plowed snow, and also allows alternative and innovate solutions. This
48 section is not designed to increase the amount of area already used for snow storage by
49 existing developed residential and commercial property; instead it is intended to clarify

1 applicable regulations and encourage thoughtful site planning and snow management
2 with respect to adjacent property and other requirements of this title. Its objectives are:

- 3 a. Ensure water quality treatment and drainage control of snow melt;
- 4 b. Maintain safe and convenient access and circulation; and
- 5 c. Protect adjacent landscaping, walkways, streets, and property.

6 **2. Applicability**

7 Except where stated otherwise, all existing and new uses with on-site surface areas to be
8 plowed for motorized vehicle access or parking shall comply with this section. For
9 example, this includes surface areas such as parking spaces, circulation and parking
10 aisles, associated driveways, queuing lanes, emergency vehicle access lanes, loading
11 areas, tractor trailer areas, and vehicle sales and display areas. The following uses and
12 surfaces are exempt:

- 13 a. Single-family, two-family, three-unit multifamily, townhouse, and mobile home
14 dwellings on individual lots;
- 15 b. Snow disposal sites subject to subsection 21.05.060E.8.; and
- 16 c. Ice-free (snow-melting) surfaces and/or covered surfaces.

17 **3. Operational Standards**

18 For all applicable uses (including existing uses and new development):

- 19 a. Plowed snow shall not interfere with required pedestrian or vehicle circulation or
20 sight distance.
- 21 b. Snow storage shall not interfere with access to utility equipment or create a
22 hazard around utility equipment, in accordance with utility tariffs. For example,
23 snow piles shall not be placed underneath an overhead utility line such that the
24 snow pile reduces clearances to less than National Electrical Safety Code
25 (NESC) ground clearance requirements.
- 26 c. Plowed snow may be removed to an approved snow disposal site, or shared
27 among abutting or contiguous lots jointly managed for snow storage and disposal
28 purposes. Plowed snow shall not be otherwise removed from the property.
29 Snow shall not be moved to a right-of-way or other public place without a valid
30 right-of-way permit pursuant to title 24.
- 31 d. Snow piles stored longer than on a 72 hour temporary basis shall not result in
32 direct offsite drainage such as onto neighboring properties or public rights-of-
33 way, except for snow melt drainage directed into an approved drainage facility.
- 34 e. Winter trash accumulation from plowed snow shall be removed and paved snow
35 storage areas swept by June 1 (or as soon as snowmelt conditions permit).

36 **4. Snow Storage Areas on New Development Sites**

37 Developments involving the construction of new principal buildings, the removal and
38 replacement of existing principal buildings, and/or the expansion or redevelopment of on-
39 site surface areas to be plowed for motorized vehicle access and parking shall provide for
40 snow storage and disposal on the site plan, as provided below. Tenant improvements,
41 renovations, alterations, and enlargements of existing developments are exempt, except
42 that the addition or expansion of parking lots or other areas for motorized vehicle parking

- 1 and access by the greater of either 10 parking spaces or 10 percent of the existing area
2 shall comply.
- 3 **a.** If snow will be stored on-site, snow storage areas shall be designated on the site
4 plan as provided in 4.b. through 4.g. below. If snow will be removed off-site to a
5 snow disposal facility or another alternative snow management strategy is used
6 as provided in subsection F.5. below, then the snow storage areas may be
7 reduced or eliminated from the site plan.
- 8 **b.** For residential uses, an area equal to at least 10 percent of the surface area on
9 the site to be plowed for motorized vehicle parking and access (as identified in
10 subsection F.2.) shall be designated for snow storage. For nonresidential uses,
11 this area requirement shall be five percent.
- 12 **c.** As an alternative to 4.b. above, the applicant shall provide a calculation stamped
13 by a professional registered with the Alaska State Board of Registration for
14 Architects, Engineers, and Land Surveyors, that indicates the proposed snow
15 storage and disposal strategy will be adequate to accommodate the plowed snow
16 in an average snow year, considering the site plan layout, the amount of surface
17 area to be plowed for motorized vehicles (as identified in subsection F.2.), and
18 the proposed method(s) of snow storage and disposal.
- 19 **d.** Snow storage areas shall be located to comply with the operation standards of
20 subsection F.3. above, and shall abut the surface area to be plowed.
- 21 **e.** Snow storage areas shall have a minimum dimension of eight feet to
22 accommodate snow piling from a plow blade.
- 23 **f.** The site plan shall not, unless allowed through an administrative site plan review,
24 designate snow storage areas in required perimeter landscaping, required
25 residential private open space, or on required trees. Designation of required
26 residential private open space for snow storage shall be permitted only on the
27 condition that the snow pile and trash accumulation from plowed snow be
28 removed and the space made usable by May 1.
- 29 **g.** Snow storage areas shall be planted with ground-cover (such as grass), or paved
30 subject to subsection 21.07.090H.13., *Paving*.

31 **5. Alternative Snow Management Strategies**

32 Alternative snow management strategies such as snow melters, underground storage, or
33 removal to an approved snow disposal site, may be approved by the municipal engineer
34 in lieu of a required snow storage area, subject to the following:

- 35 **a.** The owner shall either set aside the area that would otherwise be needed to
36 provide the required snow storage area on the site, or enter into an agreement
37 with the municipality, in conformance with the title 21 user's guide, which is
38 recorded, runs with the use of the land, and ensures continuation of the
39 alternative strategy and the future implementation of contingency measures if
40 such contingency measures are ordered by the municipal engineer.
- 41 **b.** Areas to be used for temporary storage of plowed snow awaiting removal or
42 disposal shall be depicted on the site plan.
- 43 **c.** The method of treatment and disposal shall comply with subsection F.8. below.

- 1 **6. Setbacks**
2 Plowed snow shall be set back from streams, watercourses, wetlands, and water bodies
3 as specified in section 21.07.020, and is prohibited within ten feet of storm water outfalls
4 and discharge points.
- 5 **7. Snow Melt Drainage**
6 Developments shall comply with subsection 21.07.040D., *Drainage*, to address drainage
7 of snow melt in areas of the site affected by the development.
- 8 **8. Snow Melt Treatment**
9 Detention and treatment practices and/or facilities for chloride, particulates, and other
10 pollutants shall be provided prior to discharge of snow melt from a site sufficient to
11 comply with subsection 21.07.040E., and shall be subject to review and approval by the
12 municipal engineer.

13 **G. Prohibited Discharges**

- 14 **1. Applicability**
15 This section applies throughout the municipality.
- 16 **2. Prohibited Discharges or Acts**
17 No person shall cause or permit illicit discharges:
- 18 **a.** Into any waters of the state, or waters of the United States, unless such is first
19 treated in a manner approved by the federal, state, or other agencies having
20 jurisdiction; or
- 21 **b.** Into a storm sewer of the municipality, other than pursuant to a dewatering
22 permit, an approved storm water treatment plan, a national pollutant discharge
23 elimination system permit, or a permit issued by a local, state, or other agency
24 having jurisdiction. Examples of discharges that are prohibited include:
- 25 **i.** Grease, fatty materials, offal, or garbage;
- 26 **ii.** Sand, sand dust, dirt, gravel, sawdust, metal filings, broken glass, or any
27 material which may cause or create an obstruction in the sewer;
- 28 **iii.** Gasoline, benzene, fuel oil, or a petroleum product or volatile liquid;
- 29 **iv.** Milk or any liquid milk waste product in quantities in excess of ten gallons
30 during any 24-hour period;
- 31 **v.** Wax, cyanide, phenols, or other chemical or substance that may cause
32 damage to materials of which the sewer system is constructed; or
- 33 **vi.** Wastewater, as defined in AMC section 15.20.010.

34 For the purposes of this section, "illicit discharges" means pollutants or any materials
35 other than storm water.

- 36 **3. Dumping in Watercourses and Water Bodies**
37 No person shall deposit, dump, abandon, throw, scatter, or transport solid waste,
38 garbage, rubbish, junk, fill, soil, dirt, snow, ice, vegetation, or other material in such a
39 manner as to obstruct, impound, or cause siltation of any river, stream, creek,
40 watercourse, water body, stream or water body or wetland setback, water quality
41 easement, storm sewer, ditch, drain, or gutter except as otherwise allowed by valid

1 federal, state, and other permits or licenses relative to water pollution, water
2 impoundment, or water quality control.

3 **H. Hazardous Sites**

4 1. For the purposes of this section, any site meeting any or all of the conditions and defects
5 described below shall be deemed to be hazardous, provided that such conditions or
6 defects exist to the extent that the health of the watershed, the requirements of the
7 Municipal Separate Storm Sewer System permit, or the safety of the public are
8 endangered, as determined by the municipal engineer.

9 a. Any site that causes sediment to be discharged in such a way that it may be
10 delivered directly or indirectly to the storm sewer or receiving waters;

11 b. Any site that causes pollution to be discharged in such a way that they may be
12 delivered to the watershed;

13 c. Any property for which the owner, manager, or tenant fails to install and/or
14 maintain properly permitted BMPs; or

15 d. Any site where actions are causing soil masses to be in danger of sloughing,
16 destabilizing, failing, or collapsing as a mass wasting event.

17 2. All sites which are determined after inspection by the municipal engineer to be a
18 hazardous shall be abated as determined by the municipal engineer.

19 **I. Violations and Penalties**

20 **1. Violations**

21 a. Any person who violates any provisions of this section shall report such violation
22 to the project management and engineering department and shall make available
23 any information or records related to the contents of the substance discharged.

24 b. In addition to any other remedy or penalty provided by this title, any person who
25 violates any provision of this title or regulations adopted there under shall be
26 subject to the civil penalties or injunctive relief, or both, as provided by AMC
27 section 1.45.010B.

28 c. In any action under this section, the municipality, if not a party, may intervene as
29 a matter of right.

30 **2. Penalties**

31 a. All sites operating without approval under this section may be immediately
32 posted with a stop work order and shall pay double fees for all required permits
33 or inspections under this section, as well as any fines which may be assessed.
34 In addition to any other remedy permitted by law, fines may be assessed for
35 failure to have a permit or approved plan, failure to allow inspections, or failure to
36 obey a properly issued stop work order. Violators of this section may also be
37 charged \$1,000 per day until the violation(s) is corrected.

38 b. Any person who negligently or intentionally permits or causes a discharge in
39 violation of this section shall, upon conviction, be subject to a civil fine penalty of
40 \$5,000 to \$10,000 per day, or injunctive relief to cease the violation, or both. In
41 addition to any fine assessed under this section, any person who violates any
42 provision of this section or any rule or regulation adopted pursuant to this section
43 shall be subject to a further civil penalty of up to double the cleanup and
44 remediation costs incurred as a result of the violation.

- 1 c. Any person who permits or causes a discharge in violation of this section shall be
2 strictly liable, regardless of intent, for the full amount of any fines or other
3 liquidated penalties incurred by the municipality for any violations of federal law
4 which are caused by the discharge.
- 5 d. No certificate of zoning compliance shall be issued until all fines levied under this
6 section have been paid.

7 **J. Appeals**

- 8 1. Appeals of orders, decisions, or determinations made by the municipal engineer shall be
9 heard by the zoning board of examiners and appeals, pursuant to subsection
10 21.03.050B.
- 11 2. The zoning board of examiners and appeals shall have no authority over the
12 interpretation of the administrative provisions of this section, nor shall the board be
13 empowered to waive requirements of this section.

14 **21.07.050 UTILITY DISTRIBUTION FACILITIES**

15 **A. Underground Placement Required for New or Relocated Lines**

- 16 1. Except as provided in subsection B. below, all newly installed or relocated utility
17 distribution lines (as defined in section 21.14.040) shall be placed underground.
- 18 2. Utility distribution lines owned or operated by utilities that are parties to a joint trench
19 agreement shall be placed underground in a joint trench.
- 20 3. Nothing in this section restricts the maintenance, repair, or reinforcement of existing
21 overhead utility distribution lines.

22 **B. Exceptions**

- 23 1. Except where an assessment district has been formed to convert overhead utility
24 distribution lines as provided in title 19.60, utility distribution lines need not be placed
25 underground in the class B improvement area defined in subsection 21.08.050B., or in
26 the I-2 zoning district. However, in the following areas newly installed or relocated utility
27 distribution lines shall be placed underground: Lower Hillside, between and including
28 Abbott Road, Rabbit Creek Road, Hillside Drive and the New Seward Highway.
- 29 2. Except where an assessment district has been formed to convert overhead utility
30 distribution lines as provided in AMC chapter 19.60, CATV utility distribution lines need
31 not be placed underground where there are other overhead utility distribution lines;
32 provided that, when all of the other overhead distribution lines are placed underground,
33 the CATV utility distribution line shall also be placed underground.
- 34 3. A new utility distribution line may be placed overhead when necessary immediately to
35 restore service interrupted by accident or damage by flood, fire, earthquake or weather;
36 provided that the utility distribution line shall be replaced by a utility distribution line
37 conforming to this chapter within 12 months of its placement.
- 38 4. A utility distribution line or service connection may be placed on the surface of frozen
39 ground, provided that it is placed underground within 12 months thereafter.
- 40 5. New facilities may be added to existing overhead utility distribution facilities located
41 outside target areas.

- 1 **6.** A temporary utility distribution line may be placed overhead in connection with new
2 construction if the utility's tariff approved by the state public utilities commission expressly
3 provides for removal of that line by a date certain, not to exceed 12 months thereafter.

4 **C. Variances**

- 5 **1.** The director may grant a variance from subsection A. above when any of the following is
6 found:

- 7 **a.** Placing a utility distribution line underground would cause an excessive adverse
8 environmental impact;
- 9 **b.** Placing a utility distribution line underground would threaten public health and
10 safety, because the placement cannot be shown to meet acceptable technical
11 standards for safety; or
- 12 **c.** Placing a utility distribution line underground in an environmentally sound and
13 safe manner would cost more than three times the cost of placing the line
14 overhead, where the applicant demonstrates the relative cost to the satisfaction
15 of the director.

- 16 **2.** The director may grant a variance from subsection A. above when he or she finds that
17 the utility distribution line is being placed overhead temporarily for one of the reasons
18 listed in this subsection:

- 19 **a.** The line is being placed to provide service when weather conditions do not allow
20 excavation for underground placement;
- 21 **b.** A permanent location for underground placement is not available because of
22 construction in progress; or
- 23 **c.** The line is being placed to provide service to a temporary use or structure.

24 A variance issued under this subsection C.2. shall expire within two years of its issuance.

25 **D. Relationship to Chapter 21.12, Nonconformities**

26 Existing overhead utility distribution lines located where this title requires new or relocated utility
27 distribution lines to be placed underground are nonconforming utility distribution lines and are
28 subject to the provisions of this subsection. A utility distribution line is not a nonconforming
29 structure or use under chapter 21.12, *Nonconformities*, solely because it is a nonconforming
30 overhead line under this section.

31 **E. Designation of Target Areas**

- 32 **1.** An electric utility that owns poles that support nonconforming utility distribution lines shall
33 prepare or otherwise include as part of its annual capital improvement plan, a five-year
34 undergrounding program consistent with subsection F. below. This five-year program
35 shall be updated on an annual basis. Priorities shall be based on undergrounding in
36 conjunction with the electric utility's essential system improvements and then by target
37 area as set forth below in no particular order of priority. The director shall review and
38 provide comment for consideration by the electric utilities on these five-year programs.
39 When reviewing and commenting on these programs, the director shall consider the
40 following factors in no particular order of priority:

- 41 **a.** Whether undergrounding will avoid or eliminate an unusually heavy concentration
42 of overhead distribution facilities.

- 1 vi. Boniface Parkway between and including 30th Avenue and New Glenn
2 Highway.
- 3 vii. Spenard Road between and including Hillcrest Drive and International
4 Airport Road.
- 5 viii. Arctic Boulevard between 17th Avenue and Tudor Road.
- 6 ix. Lake Otis Parkway between Tudor Road and Abbott Loop
- 7 e. All park, recreational use, and scenic interest areas.
- 8 f. Eagle River Central Business District between and including the New Glenn
9 Highway, North Eagle River Access Road, Aurora Street as extended to the Old
10 Glenn Highway, and the Old Glenn Highway.
- 11 g. Any area where utility distribution facilities are provided by more than one utility
12 as a result of mergers and boundary changes approved by the state public
13 utilities commission.
- 14 h. School and university areas.
- 15 **F. Nonconforming Overhead Lines**
- 16 1. An electric utility that owns poles that support nonconforming utility distribution lines shall
17 remove the poles and place those lines underground. Any other utility that attaches to
18 such poles shall place its lines underground at the same time that the pole owner places
19 lines underground.
- 20 a. The electric utility that owns poles shall, in each fiscal year, expend at least two
21 percent of a three-year average of its annual gross retail revenues derived from
22 utility service connections within the municipality, excluding toll revenues,
23 revenues from sales of natural gas to third parties, and revenues from sales of
24 electric power for resale for purposes of undergrounding nonconforming lines.
25 An electric utility's expenditures, pursuant to AS 42.05.381(h), within the
26 municipality, shall be counted toward satisfaction of the two percent expenditure
27 required by this subsection.
- 28 b. A utility with lines attached to a pole that is to be removed under this subsection
29 shall place its lines underground at the same time that the pole owner places its
30 lines underground. To underground nonconforming utility lines, an attached
31 utility shall not be required to expend more than two percent of its annual gross
32 retail revenues derived from utility service connections within the municipality,
33 excluding toll revenues. For the purpose of satisfying subsection 21.07.050F.,
34 the utility's expenditures pursuant to AS 42.05.381(h) within the municipality are
35 counted toward this two percent expenditure limit.
- 36 c. The electric utility that owns poles may choose which existing lines to
37 underground in order to fulfill the two percent expenditure requirement, in
38 consultation with appropriate public agencies and any other utilities.
- 39 d. An electric utility that owns poles that does not expend the amount required in
40 subsection F.1. of this section, or that expends more than that amount, may carry
41 over the under expenditure or over expenditure as an adjustment to the following
42 year's obligation.

- 1 2. The electric utility that owns poles shall notify the director, and utilities or entities with
2 lines attached to such poles, of the approximate date that the owner plans to remove the
3 poles. Such notice, where possible, shall be given at least four months in advance of the
4 undergrounding except where an emergency or other unforeseen circumstances
5 preclude such notice, in which case such advance notice as is reasonable under the
6 circumstances shall be provided.
- 7 3. A utility shall annually submit a report of its undergrounding projects and expenditures for
8 non-conforming lines to the director within 120 days of the end of the preceding calendar
9 year.
- 10 4. All new service connections shall be placed underground in the same manner as required
11 for utility distribution lines under subsections A. and B. above. New service lines may be
12 temporarily installed above ground from October through May, if placed underground
13 prior to the next October.

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

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

29 **H. Conversion of Service Connections**

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

34 **21.07.060 TRANSPORTATION AND CONNECTIVITY**

35 **A. Purpose**

36 The purpose of this section 21.07.060 is to support the creation of a safe and highly connected
37 transportation system within the municipality in order to provide choices for drivers, bicyclists, and
38 pedestrians; increase effectiveness of municipal service delivery; promote walking and bicycling;
39 connect neighborhoods to each other and to local destinations such as employment, schools,
40 parks, and shopping centers; reduce vehicle miles of travel and travel times; improve air quality;
41 reduce emergency response times; support the pattern of designated land uses; mitigate the
42 traffic impacts of new development; create road and trail connectivity to free up arterial capacity
43 while protecting neighborhood identity and safety; and, in high-volume traffic corridors, maintain
44 an adequate degree of crossings for local circulation and minimize road and traffic impacts on
45 adjacent uses.

1 **B. Applicability**

2 The standards of this section 21.07.060 shall apply to all development in the municipality.

3 **C. Traffic Impact Mitigation**

4 **1. Traffic Impact Analysis Required**

5 The transportation system for new development shall be capable of supporting the
6 proposed development in addition to the existing uses in the area. Evaluation of system
7 capacity shall be undertaken through a traffic impact analysis (TIA), which should
8 consider the following factors without limitation: street capacity and level of service;
9 vehicle access and loading; on-street parking impacts; the availability of transit service
10 and connections to transit; impacts on adjacent neighborhoods; and traffic safety
11 including pedestrian safety. Unless the traffic engineer issues a substantiated written
12 finding, based on location of the project and professional judgment, that there is no need
13 for a TIA, a traffic impact analysis (TIA) shall be required with applications for
14 development review and approval when:

- 15 a. Thresholds established in the traffic department's *Policy on Traffic Impact*
16 *Analyses* are met;
- 17 b. A TIA is required by the planning and zoning commission or assembly as a
18 condition of any land use application approved pursuant to the requirements of
19 this title;
- 20 c. Any case where the traffic engineer determines that the previous TIA for the
21 property is out of date and no longer accurate—in such case the TIA shall not be
22 less than two years old;
- 23 d. Any case where increased land use intensity will result in substantially increased
24 traffic generation or reduction of the existing level of service on affected streets
25 by at least one service level; or
- 26 e. Any case in which the traffic engineer determines that a TIA should be required
27 because of other traffic concerns that may be affected by the proposed
28 development.

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

- 30 a. Prior to the development of a required TIA, there shall be a scoping meeting that
31 includes the traffic department, the applicant, and all other relevant parties.
- 32 b. The development and review of a TIA shall be according to the traffic
33 department's *Policy on Traffic Impact Analyses*.
- 34 c. When state-owned roads are involved, the applicant shall coordinate with the
35 state department of transportation and public facilities, and the development of a
36 TIA shall follow state regulations as defined in 17 AAC 10.095.

37 **3. Traffic Mitigation Measures**

38 The applicant shall, as part of the traffic impact analysis, recommend measures to
39 minimize and/or mitigate the anticipated impacts and determine the adequacy of the
40 development's planned access points. Mitigation measures shall be acceptable to the
41 traffic engineer and may include, without limitation: an access management plan;
42 transportation demand management measures; a reduction in the intensity or size of the
43 proposed development; street improvements on or off the site; phasing of the proposed
44 development to coincide with, and not outpace, the necessary upgrades to off-site
45 infrastructure; placement of pedestrian, bicycle, or transit facilities on or off the site; or

1 other capital improvement projects such as traffic calming infrastructure or capacity
2 improvements.

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

4 **1. Street Standards**

5 All streets shall meet the standards and requirements set forth in subsections
6 21.08.030F.2., *Street Grades*, 21.08.030F.4., *Street Alignment*, and 21.08.030F.5. *Street*
7 *Intersections*.

8 **2. Parking Lots**

9 In addition to complying with the standards in this subsection 21.07.060D., parking lots
10 shall comply with the standards set forth in section 21.07.090, *Off-Street Parking and*
11 *Loading*.

12 **3. Street Connectivity**

13 **a. Purpose**

14 Street and block patterns should include a clear hierarchy of well-connected
15 streets that distribute local traffic over multiple streets, providing multiple direct
16 connections for neighborhood residents to and between local destinations, and
17 avoid traffic congestion on principal routes. Within each residential development,
18 the access and circulation system should accommodate the safe, efficient, and
19 convenient movement of vehicles, bicycles, and pedestrians through the
20 development; provide ample opportunities for linking adjacent neighborhoods,
21 properties, and land uses; and be designed in such a way as to limit and
22 discourage cut-through traffic and protect the new development and adjacent
23 development from adverse impacts. This section is not intended to increase
24 speed limits in neighborhoods, create opportunities for cut-through traffic, or
25 encourage freight movement through residential areas.

26 **b. Internal Street Connectivity**

27 **i.** Developments, whether subdivisions or not, shall meet the block length
28 requirements of subsection 21.08.030G.

29 **ii.** Whenever cul-de-sac streets are created, at least one 10 foot wide
30 pedestrian access easement shall be provided, to the extent reasonably
31 feasible, between each cul-de-sac head or street turnaround and the
32 closest adjacent street or pedestrian walkway. This requirement shall
33 not apply where it would result in damage to or intrusion into significant
34 natural areas such as stream corridors, wetlands, and steep slope areas,
35 or if the configuration of existing adjacent development prevents such a
36 connection.

37 **c. External Street Connectivity**

38 **i.** The arrangement of streets in a development shall provide for the
39 alignment and continuation of existing streets from the boundaries of the
40 development. The arrangement of streets shall provide connections to
41 adjacent lands that are undeveloped and intended for future
42 development as required in subsection 3.e. below, or that are developed
43 and include opportunities for such connections. This arrangement may
44 be reduced or waived by the decision-making body if the applicant can
45 show how connectivity is provided by a different arrangement of streets.
46 Vehicular and/or pedestrian connections to adjacent municipal parks or
47 municipal lands designated as parks shall be required unless waived by
48 the director of the parks and recreation department.

1 ii. Street rights-of-way shall be extended to or along adjoining property
2 boundaries such that a roadway connection or street stub shall be
3 provided for development at least every 1,300 feet for each direction
4 (north, south, east, and west) to the maximum extent feasible. The
5 director may waive this requirement where the configuration of existing
6 adjacent development, topography, or the presence of sensitive natural
7 areas makes compliance impractical.

8 d. ***Vehicular Access to Public Streets***

9 Unless the decision-making body determines otherwise, any development of
10 more than 100 residential units or additions to existing developments such that
11 the total number of units exceeds 100 shall be required to provide vehicular
12 access to at least four public streets to the extent reasonably feasible, due to
13 topography, natural features, or the configuration of existing adjacent
14 developments. These connections (if possible) shall be made to foster and
15 accommodate connectivity into, out of, and within the new development,
16 regardless of the macro-level access to and connectivity of the general area.

17 e. ***Connections to Vacant Land***

18 Where new development is adjacent to land likely to be developed or
19 redeveloped in the future, all streets, sidewalks, pathways, trails, walkways, and
20 access ways in the development's proposed street system shall continue through
21 to the boundary lines of the site of new development, as determined by the
22 director and the traffic engineer, to provide for the orderly subdivision of such
23 adjacent land or the transportation and access needs of the community.

24 f. ***Neighborhood Protection from Cut-through Traffic***

25 Street connections should connect neighborhoods to each other and to local
26 destinations such as schools, parks, greenbelt trail systems, and shopping areas,
27 while minimizing neighborhood cut-through vehicle traffic movements that are
28 non-local in nature. Configuration of local and internal streets and traffic calming
29 measures should be used to discourage use of the local street system for cut-
30 through collector or arterial vehicle traffic.

31 g. ***Pedestrian Connectivity***

32 Where the director and the traffic engineer have determined a vehicular
33 connection required above is not feasible or appropriate, a pedestrian access
34 way shall be provided as long as:

35 i. The topography and existing development patterns allow for pedestrian
36 access; and

37 ii. The land uses allowed on either end of the potential pedestrian
38 connection are such that may generate pedestrian traffic.

39 E. **Standards for Pedestrian Facilities**

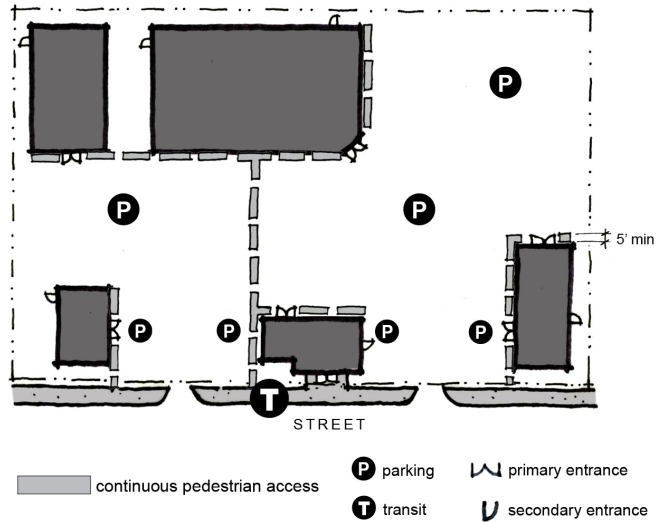
40 1. **Purpose**

41 The purpose of this section is to provide convenient, safe, and regular pedestrian
42 facilities along streets and within and between developments. Such facilities create a
43 healthful built environment in which individuals have opportunities to incorporate physical
44 activity, such as walking or bicycling, into their daily routine. Injuries and fatalities are
45 reduced when interactions between pedestrians and vehicles are minimized. Adequate
46 pedestrian facilities meet community goals for mobility and access, as well as for
47 providing transportation choices. Safe pedestrian access for students to their schools is
48 also an essential purpose of these standards.

2. Sidewalks

- a. All sidewalks shall be designed to comply with the standards of the *Design Criteria Manual* (DCM) and *Municipality of Anchorage Standard Specifications* (MASS).
- b. In all class A zoning districts except for industrial districts, sidewalks shall be installed on both sides of all streets (local, collector, arterial, public or private, including loop streets). Where indicated in the comprehensive plan, a pathway may replace a sidewalk on one side. In industrial zoning districts, a sidewalk shall be installed on one side of all local streets, and on both sides of local streets if the new sidewalks would connect to existing sidewalks on both ends and the needed sidewalk length is no greater than one quarter mile.
- c. In cul-de-sacs in class A zoning districts, the following shall apply:
- i. For cul-de-sacs with fewer than 150 average daily trips and with speeds limited to 25 miles per hour by design, no sidewalks are required on the cul-de-sac stem or bulb.
 - ii. For cul-de-sacs with 150 to 500 average daily trips, and for those with fewer than 150 average daily trips but a design speed of greater than 25 miles per hour, a sidewalk on one side of the cul-de-sac stem is required.
 - iii. For cul-de-sacs with more than 501 average daily trips, or for cul-de-sacs that are used to access a school or a park (notwithstanding subsections c.i. and c.ii. above), sidewalks on both sides of the stem are required.
 - iv. Average daily trips shall be computed by the traffic division.
- d. In class B zoning districts, sidewalks, walkways, pathways, and trails shall be provided in accordance with the comprehensive plan. In all cases, pedestrian facilities shall be provided on at least one side of collector and arterial streets.
- e. The requirements of 2.b. and 2.c. shall not apply in steep-slope areas where sidewalks on one side of the street may be approved by the director to reduce excessive slope disturbance, adverse impacts on natural resources, and potential soil erosion and drainage problems.
- f. Development on lots along existing streets in class A zoning districts shall install sidewalks in the following situations:
- i. In R-4, R-4A, and commercial districts.
 - ii. Along streets identified in Appendix A of the *Anchorage Pedestrian Plan* as “missing sidewalk” or “inadequate sidewalk”, with a total point rating of five or higher.
- g. Where sidewalks are not specifically called for on both sides of the street by the comprehensive plan, the decision-making body may reduce a requirement to provide sidewalks (or other pedestrian facilities) on both sides of a street after considering the following:
- i. Site conditions and the potential for significant negative impacts on the natural environment;
 - ii. The need to maintain and improve sidewalk continuity;

- 1 iii. Evidence that a sidewalk would decrease pedestrian safety;
- 2 iv. Extensive public testimony offering rational arguments against sidewalks;
- 3 v. Availability of an alternate trail system; and
- 4 vi. Vehicular speeds and pedestrian safety.
- 5 **3. Through-Block Connections**
- 6 Within new developments, pedestrian walkways, crosswalks, or multi-purpose trails no
- 7 less than five feet in width shall be constructed near the center and entirely through any
- 8 block that is 900 feet or more in length. This standard may be waived during a site plan
- 9 review, if justified by the decision-making body.
- 10 **4. On-Site Pedestrian Walkways**
- 11 a. ***Continuous Pedestrian Access***
- 12 Pedestrian walkways are intended to form a convenient on-site circulation
- 13 system that minimizes conflict between pedestrians and traffic at all points of
- 14 pedestrian access to on-site parking and building entrances. This subsection E.4.
- 15 does not apply to single- and two-family development, or to industrial and utility
- 16 facility uses in the I-1 and I-2 zoning districts.
- 17 b. ***On-Site Pedestrian Connections***
- 18 The following walkways shall be provided. Where one walkway fulfills more than
- 19 one requirement, only one walkway need be provided. If they can provide a
- 20 relatively direct route, public pedestrian facilities such as public sidewalks shall
- 21 satisfy any or all of the requirements below.
- 22 i. A walkway shall connect the primary entrance to the abutting primary
- 23 street frontage, except where a proposed walkway connection to an
- 24 alternative street frontage is determined by the director to provide equal
- 25 or better pedestrian access. No walkway need be provided to the
- 26 primary street frontage if that frontage is a restricted access street or a
- 27 frontage road, unless there is a pathway or other pedestrian facility to
- 28 which access can be provided along the restricted access street or
- 29 frontage road, in which case a walkway shall connect to that pedestrian
- 30 facility. The walkway route shall be clear and direct, to the extent
- 31 reasonably feasible.
- 32 ii. All primary building entrances on a site shall be connected to the street
- 33 by a convenient system of walkways. This includes multiple primary
- 34 entrances into one building, and primary entrances in separate buildings
- 35 on a site.



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iii. A walkway shall connect the primary entrances to any transit stop abutting the site, where on an active transit route with scheduled service. The walkway shall be clear and direct to the extent reasonably feasible.

c. **Walkway Clear Width**

The minimum width of a required pedestrian walkway shall be five feet of unobstructed clear width, excluding vehicular overhang, except where otherwise stated in this title. A walkway that provides access to no more than four residential dwelling units may provide an unobstructed clear width of three feet.

d. **Walkways and Parking**

i. Where an on-site pedestrian walkway system or required pedestrian area abuts a parking lot or internal street or driveway, the pedestrian facility shall be clearly marked and physically separated from the parking lot or drive, through the use of an upright curb of six inches in height, bollards spaced a maximum of six feet apart, or other physical buffer approved by the traffic engineer; and a change of paving materials distinguished by color, texture, textured edge, or other edge, or striping.

ii. The vehicle overhang established in table 21.07-7, *Parking Angle, Stall And Aisle Dimensions*, shall not encroach into the minimum required walkway width or area.

iii. Where an on-site pedestrian walkway crosses an internal street or driveway, the crosswalk shall be clearly marked and delineated through a change in paving materials distinguished by color, texture, textured edge, other edge, or striping, and shall meet the requirements of the Americans with Disabilities Act.

iv. Multifamily or townhouse developments may provide a parking courtyard in lieu of required walkways, where specifically allowed in section 21.07.110 and in conformance with subsection 21.07.060F.18.

e. **Walkways, Landscaping, and Open Space**

Walkways shall be credited toward a required private open space where they are contiguous. A walkway that crosses a required landscaping bed (at or near

perpendicular) shall be credited against the required landscaping area and amount of planting material.

5. Trails

All trails shall meet the following requirements in addition to the standards contained in the *Areawide Trails Plan*, *Design Criteria Manual* (DCM), and *Municipality of Anchorage Standard Specifications* (MASS):

- a. All trail connections shall be well-signed with destination and directional signing as approved by the traffic engineer or the parks director as appropriate.
- b. Trails shall be designed in such a manner that motor vehicle crossings can be eliminated or significantly minimized.
- c. Trails that connect to the street system shall do so in a safe and convenient manner as determined by the traffic engineer.

6. Use and Maintenance of Sidewalks, Walkways, Pathways, and Trails

a. Restrictions on Use

Sidewalks, walkways, pathways, and trails are intended to provide pedestrian access. Vehicle parking, snow storage, 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, walkway, pathway, trail, or other pedestrian way. Pedestrian amenities including bollards are exempt from this requirement.

b. Maintenance and Snow Removal

Walkways required by this title shall be maintained in usable condition throughout the year, including snow and ice removal as appropriate. Sidewalks shall be maintained in a usable condition in accordance with AMC title 24.

F. Pedestrian Amenities

1. Purpose

The purpose of this section is to define and provide standards for pedestrian amenities that may be required or included in a menu of choices to meet a requirement, or listed as a special feature that can count toward a bonus incentive anywhere in this title. For example, another section of this title may list a pedestrian amenity as a special feature for which bonus floor area may be granted. The standards contained in this section give predictability for applicants, decision-makers, and the community for the minimum acceptable standards for pedestrian amenities. It also ensures the amenities will improve and enhance the community to the benefit of all, and respond to the northern latitude climate. This title provides flexibility to encourage and allow for creativity and unique situations through the alternative equivalent compliance and minor modifications process.

2. Applicability

Pedestrian amenities shall meet the minimum standards of this section in order to be credited toward a requirement, menu choice, or as a special feature bonus incentive of this title.

3. Walkway

A walkway is a surface, either improved or not, for the purpose of pedestrian and other non-motorized use, which connects two points and is not aligned along a vehicular public right-of-way. A walkway may be in a publicly dedicated pedestrian easement. Examples include pedestrian connections within one development site, mid-block, between subdivisions, or leading from streets to public amenities, such as schools or parks.

1 a. A walkway shall have a minimum unobstructed clear width of five feet, except
2 where otherwise stated in this title. A walkway that provides access to no more
3 than four residential dwelling units may have an unobstructed clear width of three
4 feet.

5 b. Walkways shall be improved in accordance with subsection 21.08.050H.

6 **4. Primary Pedestrian Walkway**

7 A primary pedestrian walkway is intended to provide an unobstructed clear width of at
8 least eight feet for pedestrian movement with additional space incorporating features
9 along the walkway such as storefront sidewalk space, room for residential stoops or
10 building foundation plantings, and peripheral space that accommodates landscaping,
11 furniture, and utilities. As established generally in subsection F.1 and F. 2 above, the
12 standards of this subsection apply only where the specific term "primary pedestrian
13 walkway" is listed as a requirement, menu choice, or special feature that counts toward a
14 bonus. Thus subsection is not a generally applicable requirement for other large
15 walkways.

16 a. A primary pedestrian walkway shall be developed as a continuous pedestrian
17 route extending for at least 50 feet.

18 b. A primary pedestrian walkway shall have an unobstructed clear width of at least
19 eight feet. Where adjacent to a ground-floor building elevation it shall also have
20 a sidewalk storefront or building interface zone a minimum of two feet in width for
21 foundation landscaping or three feet in width of sidewalk space for opening doors
22 or seating and transition pedestrian spaces. In addition, a buffer space of at
23 least four feet in width shall be incorporated as part of the walkway when abutting
24 any street or vehicle area, to accommodate street trees, landscaping beds, light
25 poles, utilities, benches, and other objects to be kept clear of the walkway.

26 c. At least one pedestrian feature as defined by this title shall be provided for every
27 50 feet of length along a primary pedestrian walkway.

28 d. A primary pedestrian walkway shall be illuminated with pedestrian scale lighting.

29 e. A primary pedestrian walkway shall directly connect to surrounding public streets
30 and sidewalks, and be publicly accessible at all times.

31 **5. Ice-Free (Snow Melting) Walkway**

32 An ice-free (snow melting) walkway has a heated surface for the full extent of the
33 walkway clear width. The walkway shall be maintained as ice-free at all times in areas
34 required to be publicly accessible, and otherwise during all hours of operation of an
35 establishment.

36 **6. Plaza or Courtyard**

37 A plaza is an open space which is designed to be used for relaxation, conversation,
38 eating, or other outdoor activities.

39 a. A plaza shall contain at least one pedestrian feature as defined by this title for
40 each 200 square feet of plaza or courtyard area.

41 b. A plaza shall be visible and directly accessible from the public sidewalk and at no
42 point be more than five feet above nor more than 12 feet below the curb level of
43 the nearest street.

- 1 c. A plaza shall be unobstructed to the sky except for certain permitted obstructions
2 such as canopies or awnings, landscaping, or ornamental features such as
3 fountains and flag poles.
- 4 d. A plaza shall be positioned so that at least two-thirds of its area receives at least
5 four hours of direct or reflected sunlight on March 21 and September 21. A plaza
6 or courtyard may be credited towards a requirement, menu choice, or bonus as
7 long as it meets this standard. The director may reduce this requirement in
8 cases where topography or vegetation shadow the site. Reductions shall be the
9 minimal action that would address these factors.
- 10 e. Plazas shall not be paved with asphalt.

11 **7. Housing Courtyard**

12 A housing courtyard may be created when a multifamily building or buildings are
13 arranged or configured to enclose and frame a common private open space. To receive
14 credit as a housing courtyard, the space shall achieve the following:

- 15 a. The residential building(s) shall enclose a clearly defined courtyard open space.
16 The structure(s) surrounding the housing courtyard may, for example, form an O,
17 L, or U shaped enclosure.
- 18 b. A courtyard shall comply with the plaza requirement for pedestrian features, and
19 with the common private open space standards of section 21.07.030.
- 20 c. All individual dwelling units around the perimeter of a courtyard shall have
21 windows, entrances, and/or transitional spaces such as porches or balconies that
22 face the courtyard.
- 23 d. A courtyard shall have a solar orientation as defined by this title in terms of
24 openings in the courtyard and the lower height of surrounding buildings.

25 **8. Transit Stop or Transit Shelter**

26 A transit stop or transit shelter shall meet or exceed the minimum design standards
27 established by the transit facilities design guidelines in the *Design Criteria Manual*.

28 **9. Pedestrian Shelter such as a Canopy, Awning, or Marquee**

29 A pedestrian shelter is a roof-like structure extending out from the building face that
30 provides year round overhead protection from precipitation and wind, and that can
31 provide visual interest and wayfinding orientation to primary entrances, passenger
32 loading areas, or waiting areas. Pedestrian shelter may be composed of awnings,
33 canopies, marquees, cantilevered overhangs, colonnades, or similar overhangs along the
34 pedestrian route.

- 35 a. A pedestrian shelter shall have a minimum dimension of six feet measured
36 horizontally from the building wall, or shall extend to a line two feet from the curb
37 line of the street or nearest motor vehicle area, whichever is less.
- 38 b. A pedestrian shelter shall have a minimum vertical clearance of eight feet and a
39 maximum vertical clearance of 12 feet, except that a pedestrian shelter that
40 projects out more than eight feet measured horizontally from the building wall
41 shall have a maximum vertical clearance of 16 feet.
- 42 c. A pedestrian shelter may be indented as necessary to accommodate street trees,
43 landscaping beds, street lights, bay windows, or similar building accessories. A

1 pedestrian shelter shall not extend out to within three feet of the center of the
2 main trunk of a street tree.

3 d. A pedestrian shelter shall incorporate architectural design features of the building
4 from which it is supported.

5 **10. Arcade (or Building Recess)**

6 An arcade is a covered passageway created by the overhanging upper portion of the
7 building along a sidewalk or walkway to provide a sheltered area at grade level. An
8 arcade is usually separated from the adjacent street, sidewalk/walkway, or pedestrian
9 space by a line of supporting columns or arches. A ground level building recess without
10 supporting columns may also receive credit if it achieves the following standards:

11 a. An arcade shall be developed as a continuous covered space extending along a
12 street, plaza, or courtyard or other pedestrian open space. An arcade shall be
13 open for its entire length to the street or pedestrian open space, except for
14 building columns.

15 b. An arcade shall have a minimum vertical clearance of no less than 12 feet, and
16 on average no greater than 18 feet.

17 c. An arcade shall have a minimum horizontal walkway clear width of eight feet
18 between the building and any supporting columns, and a maximum covered
19 width of 20 feet.

20 d. An arcade shall not at any point be above the level of the adjacent sidewalk,
21 walkway, or pedestrian open space (whichever is higher). The width and spacing
22 of the supporting columns shall be such that maximum visibility is maintained.

23 e. The spacing and rhythm of the supporting columns shall relate to the structural or
24 architectural pattern of the building and shall be consistent along the length of the
25 arcade.

26 f. No off-street parking spaces, passenger loading zones, driveways, or off-street
27 loading berths are permitted anywhere within an arcade or within 10 feet of any
28 portion thereof, unless the decision-making body determines that such activity
29 will not adversely affect the air quality or functioning of the arcade. In no event
30 shall such vehicular areas be eligible for credit as part of the arcade.

31 g. An arcade shall be publicly accessible at all times.

32 **11. Atrium, Galleria, or Winter Garden**

33 An atrium, galleria, or winter garden is a publicly accessible sunlit interior space suited for
34 year-round public use, and which takes advantage of windows and sunlight access to
35 provide brightness, orientation, and visual connections to the outdoors.

36 a. An atrium, galleria, or winter garden shall be developed and maintained as a
37 temperature controlled, publicly accessible space furnished with features and
38 amenities that encourage its use.

39 b. An atrium, galleria, or winter garden shall contain at least one pedestrian feature
40 as defined by this title for each 200 square feet of floor area.

41 c. An atrium, galleria, or winter garden shall be co-located with primary entrances
42 and pedestrian activity areas, and either adjoin or directly connect to a publicly
43 accessible sidewalk or open space.

- d. The publicly accessible portion of the atrium, galleria, or winter garden shall be at least 400 square feet, with a minimum dimension of 16 feet.
- e. At least half of an atrium, galleria, or winter garden's ceiling area and at least a portion of its wall area shall consist of transparent glazing.
- f. An atrium, galleria, or winter garden shall be exposed to direct an/or reflected sun for at least four hours daily for eight months of the year.

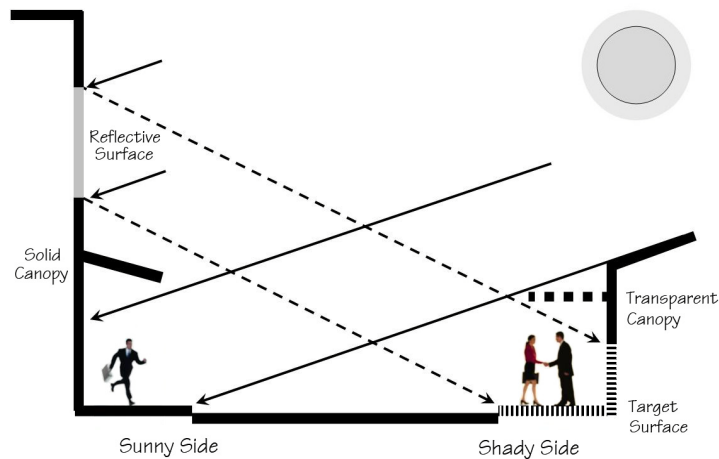
12. Sun Pocket (or Sun Trap)

A sun pocket or sun trap is a pedestrian space that captures direct and reflected sunlight. A sun pocket shall be a clearly defined open space partly sheltered by building walls, fences, or landscape features, such as a C, L, or U shaped semi-enclosure. The protected space shall contain at least 250 square feet of pedestrian area that is exposed to direct and reflected sunlight access for at least six hours on March 21 and September 21.

13. Reflected Sunlight

Reflected sunlight as a pedestrian amenity is created by a light-colored, partially reflective, upper-story façade surface that redirects sunlight radiation to pedestrian spaces and walkways to brighten or increase the comfort level in those spaces.

- a. The reflective façade surface shall have a solar orientation.
- b. The reflective façade surface shall have a reflectance of at least 50 percent and no greater than 75 percent in order to avoid excessive glare.
- c. The reflective façade surface shall be an upper floor above ground-level.
- d. Reflected sunlight shall fall on at least 400 square feet of a publicly accessible walkway, open space, and/or abutting ground-level wall area for at least four hours on March 21 and September 21.



14. Sheltered Transition Space

A sheltered transition space is an outdoor or glass covered space such as café seating along a building façade that provides a comfortable transition between indoor areas and unsheltered outdoor spaces.

- 1 a. A sheltered transition space shall be a minimum of 400 square feet.
- 2 b. A sheltered transition space shall comply with the dimensional standards for
3 pedestrian shelter or arcade.
- 4 c. A sheltered transition space shall contain a minimum of one pedestrian feature
5 as defined by this title.
- 6 d. A sheltered transition space shall not obstruct the minimum clear width of the
7 adjoining walkway or sidewalk.

8 **15. Bicycle Parking Facilities**

- 9 a. Required bicycle parking or a sign leading thereto shall be located in an area
10 visible from a primary entrance area and no farther from a primary entrance than
11 the closest motor vehicle parking space, not including designated accessible
12 parking, carpool, or vanpool spaces. It may also be located inside the building
13 served, in a location that is easily accessible for bicycles.
- 14 b. A required bicycle parking space shall include a securely fixed structure that
15 allows the bicycle wheel and frame to be locked to the facility, and that supports
16 the bicycle frame in a stable position without damage to the bicycle, or shall be in
17 a bicycle locker, lockable bicycle enclosure, or lockable room.
- 18 c. A required bicycle parking space shall be a minimum of six feet long and two feet
19 wide.
- 20 d. The surfacing of bicycle parking facilities shall be designed and maintained to be
21 clear of mud and snow.
- 22 e. Bicycle parking shall not obstruct pedestrian walkways, building access, or use
23 areas.

24 **16. Pedestrian-Interactive Use**

25 A pedestrian-interactive use is intended to provide ground-floor spaces that strongly
26 engage the sidewalk with street-facing windows and entrances, feature activities and
27 services that support neighborhood residents, and generally contribute to the pedestrian-
28 oriented environment. The standards that follow apply where the term "pedestrian-
29 interactive use" is listed in this title as a requirement, special feature for a bonus, or a
30 menu choice.

- 31 a. A pedestrian-interactive use shall be any of the following uses that are permitted
32 in the district: retail and pet services; financial institution providing banking
33 services open to the public with at least one employee on site; food or beverage
34 service; personal service; cultural facility; or the frontage of entryways or
35 stairways through which such uses are principally accessed;
- 36 b. Retail sales uses that are permitted in the district shall be considered pedestrian-
37 interactive uses, except for the following types of retail sales uses: fueling
38 station; building materials store.
- 39 c. The following uses supporting residential neighborhood and housing
40 development are also considered pedestrian-interactive uses when permitted in
41 the district: residential dwellings with individual front entries along the street;
42 elementary school; middle or high school; health services; child care center.

- 1 d. A pedestrian-interactive use shall provide a primary entrance facing the street.
2 Entrances at building corners facing a street may be used to satisfy this
3 requirement.
- 4 e. A pedestrian-interactive use shall occupy a habitable space at least 24 feet deep
5 extending along the full length of the ground-floor, street-facing building
6 elevation, allowing for pedestrian and vehicle entrances, entry lobbies or atriums,
7 and stairwells.
- 8 f. A pedestrian-interactive use shall comply with subsection 21.06.030C.5.,
9 *Maximum Setbacks*.
- 10 g. Street-facing ground-floor wall areas of a pedestrian-interactive use shall be 67
11 percent visual access windows, except that such wall areas for dwellings shall be
12 at least 20 percent visual access windows.
- 13 h. Where a building has three or more street frontages, these criteria apply along
14 only two of the frontages.

15 **17. Enhanced Sidewalk Option**

16 An enhanced sidewalk promotes sidewalk widening and streetscape enhancements to
17 support higher levels of pedestrian activity and access in mixed-use developments. An
18 enhanced sidewalk environment with “main street” style amenities may be provided in
19 lieu of required site perimeter landscaping where it is logical to support a pedestrian zone
20 as determined through an administrative site plan review, and subject to the following:

- 21 a. The sidewalk width shall be at least 12 feet, and include a pedestrian movement
22 zone, building interface zone, and street interface zone. The street interface
23 zone shall be at least four feet wide along major arterials. A pedestrian-
24 interactive use meeting the standards of F.16. above shall be provided in the
25 building next to the designated sidewalk.

26 [illustration]

- 27 i. A public use easement shall be recorded for any part of the designated
28 sidewalk to be located within the subject parcel.
- 29 ii. Physical obstructions within the sidewalk’s building interface zone, such
30 as landscaping, entry stoops, or seating, shall extend no more than two
31 feet into the minimum required 12 foot width, so that at least ten feet
32 remain.

- 33 b. The enhanced sidewalk shall provide at least two-thirds the number of trees and
34 shrubs required for site perimeter landscaping.

- 35 c. The enhanced sidewalk may be placed wholly or in part within a right-of-way,
36 subject to approval of the traffic engineer and municipal engineer.

- 37 i. The enhanced sidewalk shall be subject to the applicable requirements
38 of title 24, including sections 24.30.020., *Permit to use Public Places*,
39 and 24.90, *Encroachment Permit*.

- 40 ii. Improvements within the public right-of-way shall be consistent with the
41 DCM and MASS.

- 1 iii. Existing improvements that meet the standards of the enhanced
2 sidewalk may be counted towards the requirements of this section,
3 subject to approval by the director.
- 4 iv. The owner shall maintain landscaping and amenities for the enhanced
5 sidewalk within the right-of-way, and comply with the provisions for
6 removal of snow and ice in AMC 24.80.090, 100, and 110.
- 7 v. Where the right-of-way is not adequate or cannot be configured to
8 accommodate the enhanced sidewalk, then the development shall be set
9 back from the street frontage as necessary to accommodate part of the
10 improvements within the property.

11 **18. Parking Courtyard**

12 A parking courtyard is a pedestrian-oriented parking facility for residential developments
13 that uses the principles of a “Woonerf Street” or “Play Street.” It is designed and
14 operated as a shared space to allow all resident users, not only drivers, to use it safely.
15 A parking courtyard that is credited towards a residential pedestrian facility requirement
16 or menu choice of this title shall meet the following standards:

- 17 a. The parking courtyard serves no more than eight dwelling units and contains no
18 more than 12 parking spaces (not including garage spaces in individual
19 dwellings);
- 20 b. The parking courtyard is a dead end and does not lead or provide access to
21 other dwelling units, parking facilities, or streets;
- 22 c. An administrative site plan review is performed, unless a higher level of review is
23 already required;
- 24 d. A walkway is provided between the parking courtyard and the street—the
25 common access driveway does not qualify as a pedestrian walkway;
- 26 e. A special paving scheme and landscape treatment is applied, as approved
27 through the review;
- 28 f. The space is designed for both vehicles and people, with an emphasis on
29 pedestrians and usable, safe, and attractive pedestrian and play space, as
30 approved through the review; and
- 31 g. The parking courtyard achieves the intent of this title for pedestrian access, as
32 determined through the review.

33 **21.07.070 NEIGHBORHOOD PROTECTION STANDARDS**

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

35 This section makes available a menu of additional tools to use in discretionary approvals to
36 protect residential neighborhoods from potential adverse impacts of adjacent nonresidential uses,
37 including limitations on hours of operation, noise, and lighting.

38 **B. Discretionary Conditions**

39 A decision-making body through application of this section shall:

- 40 1. Make findings regarding the potential adverse impact that is anticipated by the proposed
41 development;

1 2. Propose conditions that are specifically related and commensurate to the anticipated
2 impacts identified in the findings; and

3 3. Propose conditions that are the minimum necessary to avoid or mitigate the anticipated
4 impacts identified in the findings.

5 **C. Nonresidential Development Adjacent to Existing Residential Use**

6 As a condition of the approval of any conditional use permit, site plan review, subdivision, or
7 variance of any nonresidential use located within 200 feet of any residential district, the decision-
8 making body shall be authorized to impose conditions that are necessary to reduce or minimize
9 any potential adverse impacts on residential property. Such conditions shall be based on findings
10 which support the imposed condition as required by subsection 21.07.070B., and may include but
11 are not limited to the following:

12 1. Hours of operation and deliveries;

13 2. Location on a site of activities that generate potential adverse impacts on adjacent uses,
14 such as noise and glare;

15 3. Placement of trash receptacles, compactors, or recycling;

16 4. Location and screening of loading and delivery areas, garages, vehicle fleet parking, or
17 vehicle maintenance areas;

18 5. Lighting location, intensity, and hours of illumination;

19 6. Placement and illumination of outdoor vending machines, telephones, or similar outdoor
20 services and activities;

21 7. Additional landscaping and screening to mitigate adverse impacts;

22 8. Height restrictions to preserve light and privacy;

23 9. Ventilation and control of odors and fumes;

24 10. Paving to control dust; and

25 11. Location and orientation of changeable type or illuminated signs, to protect residential
26 character and privacy and views from residential units.

27 **D. Residential Development Adjacent To Existing Nonresidential Use**

28 When a residential development is proposed adjacent to an existing commercial or industrial use,
29 the decision-making body may impose neighborhood protection standards, including but not
30 limited to increased landscaping, traffic calming measures, and requiring the residential
31 development to be configured and dwelling units located to minimize potential conflicts with or
32 adverse impacts from the existing nonresidential development. Any required mitigation measures
33 shall be installed and maintained by the residential development, not the existing commercial or
34 industrial use.

35 **21.07.080 LANDSCAPING, SCREENING, AND FENCES**

36 **A. Purpose**

37 This section is intended to ensure that new landscaping and the retention of existing vegetation is
38 an integral part of all development. It is also the intent of this section to provide flexible

1 requirements that encourage and allow for creativity in landscape design. More specifically,
2 these provisions are intended to:

- 3 1. Visually enhance industrial, commercial, community use, and residential development
4 through retention of existing native or ornamental vegetation or through new landscaping
5 improvements.
- 6 2. Integrate new or renovated development into the surrounding context of the community
7 including its neighborhoods and street corridors.
- 8 3. Separate, screen, and buffer adjacent incompatible land uses through the use of
9 landscape plantings, fencing, and other appropriate landscape architectural features.
- 10 4. Reduce and treat runoff of storm water to preserve the quality of local streams and water
11 bodies.
- 12 5. Promote the use of existing vegetation and retention of trees, woodlands, habitat, and
13 urban forest.
- 14 6. Reduce runoff and erosion, control dust, and preserve air and water quality.
- 15 7. Encourage use of native plants or provide landscaping that is compatible with the climate
16 and natural setting of the municipality and can provide desired effects even during harsh
17 urban and winter conditions.

18 **B. Exemption for Temporary Uses**

19 Unless required under section 21.05.080, temporary uses in accordance with section 21.05.080
20 are exempt from the requirements of this section.

21 **C. Landscape Plan**

- 22 1. All landscaping and screening required under this section 21.07.080 shall be reflected on
23 a landscape plan for review and approval by the decision-making body.
- 24 2. Except for lots where there is a single principal structure containing between one and four
25 dwelling units and any development of a single principal structure where the sum of the
26 required perimeter and parking lot landscaping is less than 1,000 square feet, all
27 development shall have a landscape plan prepared by a licensed landscape architect
28 registered by the state of Alaska consistent with AS 08.48 and 12 AAC 36, for review and
29 approval by the decision-making body. Minimum requirements for the landscape plan
30 are as follows:
 - 31 a. Plan scale shall be easily readable and not smaller than one inch equals 30 feet.
 - 32 b. Plans and/or schedules shall call out the common and scientific name for each
33 plant type or ground cover to be used.
 - 34 c. The plan shall identify plant locations and sizes in accordance with the sizing
35 standards of the American Standard for Nursery Stock (ANSI Z60.1-2004) as
36 published by the American Nursery and Landscape Association.
 - 37 d. The plan shall identify locations and areas where existing native vegetation is
38 being used to fulfill the requirements of this section.
 - 39 e. The location of buildings, walkways, vehicular circulation (to include adjacent
40 streets), retaining walls, and fences shall be indicated.

- 1 f. Topography, expressed in contours or spot elevations, shall be identified on
2 plans. Additionally, all drainage features to include swales, biofiltration swales,
3 drainage basins, snow storage and disposal areas, and any inlets for storm
4 drains shall be identified on plans. A separate plan, detailing site grading, that
5 includes contours and/or spot elevations is acceptable.

- 6 g. The plan shall identify existing and proposed utility elements such as easements,
7 transformers, utility poles, street lights, and curb cuts that affect the landscape
8 plan.

- 9 h. Planting details shall be provided.

- 10 i. North arrow and scale shall be included.

11 **D. Cross-References to Other Requirements**

- 12 1. **Landscaping**
13 Any use that is required to provide landscaping or screening pursuant to the district-
14 specific standards of chapter 21.04, the use-specific standards of chapter 21.05, or the
15 standards of other sections of this chapter 21.07, shall provide such landscaping or
16 screening. In the event of a conflict between other requirements and the requirements of
17 this section 21.07.080, the more restrictive provisions shall govern.

- 18 2. **Walkways**
19 Refer to subsection 21.07.060E.4.e.

- 20 3. **Parking and Loading Facilities and Vehicular Overhangs**
21 Refer to subsections 21.07.090H.3. and H.9.

- 22 4. **Private Open Space**
23 Refer to subsection 21.07.030D.

- 24 5. **Snow Storage**
25 Refer to subsection 21.08.040F.4.

26 **E. Types of Landscaping**

27 Four types of landscaping may be required for a development, depending on the use and zoning
28 district of the property and adjacent properties, and the portion of the property involved. These
29 types of landscaping are: (1) site perimeter landscaping; (2) parking lot landscaping—perimeter
30 and interior; (3) site enhancement landscaping applied in site interiors; and (4) tree requirements
31 for new residential development. Minimum requirements for these landscaping types are set forth
32 in subsections 21.07.080E.1. through E.4. below and in table 21.07-1.

TABLE 21.07-1: LANDSCAPING SPECIFICATIONS			
TYPE OF LANDSCAPING	BED WIDTH OR AREA/LOCATION REQUIRED	PLANT MATERIALS REQUIRED	OPTIONAL DESIGN STANDARDS
SITE PERIMETER LANDSCAPING REQUIREMENTS			
Visual Enhancement Landscaping (L1)	<p>Minimum average planting bed width: 8 feet as measured for each leg of the perimeter.</p> <p>Minimum planting bed width: 5 feet.</p> <p>No more than one-half the property line length or 50 feet, whichever is less, may have a planting bed width less than 8 feet in width. The maximum bed width used for the calculation of average bed width may not be greater than 12 feet.</p>	<p>Provide 1 tree and 6 shrubs per 20 linear feet of property requiring visual enhancement landscaping.</p> <p>All area within the planting bed shall be covered with living ground cover, turf, or mulch.</p> <p>All trees, shrubs, and ground covers shall be chosen for suitable hardiness and length of season for the specific area to be planted.</p>	<p>Use of raised planters, pedestrian amenities, and pedestrian scale lighting may be used to offset up to 1/3 of trees and 1/3 of shrubs, through an administrative site plan review.</p> <p>Up to 1/2 of total required shrubs may be substituted with perennial plantings at a ratio of three 1-gallon container perennials for every shrub required.</p> <p>Trees may be substituted with an equal number of shrubs at 6-foot minimum planting height in utility easements with overhead lines.</p>
Buffer Landscaping (L2)	<p>Minimum average planting bed width shall be 15 feet, with minimum width at any point not less than 10 feet, except as modified by the Optional Design Standards, in which case the overall minimum planting bed width shall be 10 feet.</p>	<p>Provide 2 trees and 6 shrubs per 20 linear feet of property line requiring buffer landscaping.</p> <p>At minimum, 1/2 of all trees shall be coniferous.</p> <p>Distribute trees and shrubs evenly along the length of the planting bed.</p> <p>All areas within the planting bed shall be covered with living ground cover, turf, or mulch.</p> <p>If relying on existing vegetation to meet these requirements, use of a site-obscuring or screening fence as an optional design standard is not allowed.</p> <p>All trees, shrubs, and ground covers shall be chosen for suitable hardiness and length of season for the specific area to be planted.</p>	<p>A 6-foot high ornamental sight-obscuring or screening fence may be used in lieu of 5 feet of planting bed width on side or rear property lines, but not along streets or street rights-of-way. The fence shall be situated within or on the edge of the planting bed, except where utilities or existing conditions create a conflict.</p> <p>Trees may be substituted with an equal number of shrubs at 6 feet minimum planting height in utility easements with overhead lines.</p>
Screening Landscaping (L3)	<p>Minimum planting bed width of 30 feet, except as allowed by the Optional Design Standards.</p>	<p>Provide 3 trees and 10 shrubs per 20 linear feet of property line requiring screening landscaping.</p> <p>At minimum, 75% of all trees shall be coniferous.</p> <p>Trees and shrubs shall be evenly distributed along the frontage.</p> <p>All areas within the planting bed shall be covered with living ground cover, turf, or mulch.</p> <p>All trees, shrubs, and ground covers shall be chosen for suitable hardiness and length of season for the specific area to be planted.</p>	<p>On side or rear property lines, but not along streets or street rights-of-way, planting bed width may be reduced by 10 feet with provision of an eight-foot high ornamental screening fence.</p>

TABLE 21.07-1: LANDSCAPING SPECIFICATIONS			
TYPE OF LANDSCAPING	BED WIDTH OR AREA/LOCATION REQUIRED	PLANT MATERIALS REQUIRED	OPTIONAL DESIGN STANDARDS
Freeway Landscaping (L4)	<p>Freeway landscaping requirements shall apply to any lot abutting the right-of-way of:</p> <ol style="list-style-type: none"> Seward Highway between Tudor Road and Potter Valley Road. Glenn Highway between Boniface Parkway and the northern municipal boundary. Minnesota Drive/O'Mally Road between International Airport Road and the Old Seward Highway. <p>Minimum planting bed width of 30 feet, except as allowed by the Optional Design Standards.</p>	<p>Provide 3 trees and 10 shrubs per 20 linear feet of property line requiring freeway landscaping.</p> <p>At minimum, 1/2 of all trees shall be coniferous.</p> <p>Trees and shrubs may be distributed along frontage at owner's discretion.</p> <p>All areas within the planting bed shall be covered with living ground cover, turf, or mulch.</p> <p>All trees, shrubs, and ground covers shall be chosen for suitable hardiness and length of season for the specific area to be planted.</p>	<p>Planting bed width may be reduced by 10 feet with provision of an 8-foot high ornamental screening fence. If this option is chosen, the fence shall be set back 20 feet from the right-of-way, plant material requirements remain the same, and all required plantings shall be on the freeway side of the fence.</p>
PARKING LOT LANDSCAPING REQUIREMENTS			
Parking Lot Perimeter Landscaping	<p>Same as perimeter landscaping bed width requirements for L1 or L2 landscaping, as applicable. Refer to L1 and L2 perimeter landscaping requirements above in this table.</p>	<p>As required for L1 visual enhancement or L2 buffer landscaping (see subsection E.2.b.ii.)</p> <p>Trees and shrubs may be grouped to best serve the design intentions for the site and promote safe use. Sight-lines for entry and egress shall be considered for placement of landscaping.</p> <p>All areas within the planting bed shall be covered with living ground cover, turf, or mulch.</p>	<p>Where L1 visual enhancement landscaping is required in the same location as site perimeter landscaping, the requirement for parking lot landscaping takes precedence—no use of optional design standards allowed.</p> <p>Where parking lot perimeter landscaping is in the same location as a higher level of site perimeter landscaping, the site perimeter landscaping requirement takes precedence.</p>
Parking Lot Interior Landscaping	<p>Provide total area in accordance with parking lot interior landscaping requirements in subsection E.2.c.</p> <p>Minimum area for individual beds shall be 165 square feet.</p> <p>Minimum bed width: 8 feet.</p>	<p>1 tree and 6 shrubs per 150 square feet of total internal landscaping required.</p> <p>All areas within the planting bed shall be covered with living ground cover, turf, or mulch.</p> <p>Plant materials shall be evenly distributed throughout planting beds in the parking lot.</p>	<p>Individual planting beds that are designed to be used for biofiltration may substitute up to 3/4 of the required trees and 2/3 of the required shrubs with site appropriate herbaceous plant material in planting beds designed as rain gardens according to the municipal Low Impact Development Design Guidance Manual (latest edition), at a ratio of 12 plants per tree and 2 plants per shrub.</p>
SITE ENHANCEMENT LANDSCAPING REQUIREMENTS			
Site Enhancement Landscaping	<p>Provide on all areas of the site not occupied by buildings, structures, driveways, walkways, off-street parking, or other authorized uses or installations, and not otherwise devoted to landscaping required by this title.</p>	<p>Areas subject to site enhancement landscaping shall be covered with living ground cover, turf, or planting beds with trees and shrubs, at the discretion of the property owner. Existing natural vegetation can be applied toward meeting site enhancement landscaping requirements.</p>	

- 1 **1. Site Perimeter Landscaping Requirements**
2 **a. Purpose**
3 Site perimeter landscaping separates land uses of different characteristics or
4 intensities, to minimize the effects of one land use on another. Perimeter
5 landscaping also marks the interface between public streets and individual
6 property. Four basic levels of site perimeter landscaping are provided to
7 accommodate a variety of land uses at a variety of intensities: (1) visual
8 enhancement landscaping; (2) buffer landscaping; (3) screening landscaping; (4)
9 freeway landscaping. Specifications for these landscaping types are found in
10 table 21.07-1.
- 11 **b. Applicability**
12 Site perimeter landscaping shall be provided along the perimeter property line of
13 development sites in accordance with table 21.07-2, except for the following:
- 14 i. At approved points of pedestrian or vehicle access;
- 15 ii. On individual single-family and two-family lots that are not being
16 developed as part of a subdivision, unless required elsewhere in this title;
17 and
- 18 iii. Along alleys.
- 19 **c. Exceptions**
20 i. Development which is eligible to use enhanced “main street” style
21 sidewalk environment standards of subsection 21.07.060F.17. may use
22 those standards in lieu of required visual enhancement or buffer
23 landscaping along public streets.
- 24 ii. L4 freeway landscaping may be replaced with L2 buffer landscaping in
25 the following situations:
- 26 **(A)** Any lot whose area, less the 30-foot setback area for the L4
27 freeway landscaping, is less than the minimum lot area required
28 in the zoning district; or
- 29 **(B)** Any lot whose depth, excluding all setbacks required by this title,
30 is less than 100 feet.

TABLE 21.07-2: MINIMUM SITE PERIMETER LANDSCAPING – BY ABUTTING DISTRICT OR STREET

Abutting District or Street	Required Level of Site Perimeter Landscaping (Levels 1-4) ^{1,2}												
	R-6, R-8, R-9, R-10, TA	R-1, R-1A, R-2A, R-2D, R-5, R-7	R-2M	R-3	R-4, R-4A	PLI	B-1A, B-1B, B-3, RO	I-1, I-2, MC, MI	PR	Freeway	Arterial, Expressway	Collector	Local Street
R-6, R-8, R-9, R-10, TA		L2	L2	L2	L2	L2	L2	L2		L4	L2		
R-1, R-1A, R-2A, R-2D, R-5, R-7	L2		L2	L2	L2	L2	L2	L2		L4	L2	L1	
R-2M	L2	L2			L2	L2	L2	L2		L4	L2	L1	
R-3	L2	L2				L2	L2	L2		L4	L2	L1	L1
R-4, R-4A	L2	L2	L2			L2	L1	L2		L4	L1	L1	L1
PLI	L2	L2	L2	L2	L2		L1	L1	L1	L4	L1	L1	L1
B-1A, B-1B, B-3, RO	L2	L2	L2	L1	L1	L1		L1	L2	L4	L1	L1	L1
I-1, I-2, MC, MI, AF	L2	L2	L2	L2	L2	L1	L1		L2	L4	L1	L1	L1
PR						L1	L2	L2		L4	L1	L1	L1

NOTES:

¹ This table lists minimum site perimeter landscaping standards. Other chapters or sections of title 21 may have stricter site perimeter landscaping standards which would be used instead of the standards listed in this table.

² L3 screening landscaping is not included in this table as it only occurs as a use-specific standard for certain industrial uses, or through development-specific application in processes such as conditional use approvals.

1 d. **Visual Enhancement Landscaping**
2 Visual enhancement landscaping is intended to integrate new or renovated
3 development into the surrounding community and is required along property
4 perimeters that abut another zoning district or a public right-of-way. Landscaping
5 improvements shall be placed within the area identified as the perimeter
6 landscaping area and may be organized to the best advantage of property
7 development.

8 e. **Buffer Landscaping**
9 Buffer landscaping is intended to help separate one land use from another land
10 use that may be incompatible for reasons such as the intensity of use or the
11 visual character.

12 f. **Screening Landscaping**
13 Screening landscaping provides the highest level of buffering between land uses,
14 and is mostly applied by use-specific standards in chapter 21.05 between
15 residential land uses and abutting industrial uses.

16 g. **Freeway Landscaping**
17 Freeway landscaping is intended to enhance the appearance of the municipality
18 along portions of the Seward Highway, the Glenn Highway, and Minnesota
19 Drive/O'Malley Road. Landscaping improvements in these designated areas
20 may be used to screen adjacent uses, such as residential uses impacted by the
21 adjacent roadways, and to enhance the appearance of major visual and scenic
22 corridors and entrance gateways of the community. Freeway landscaping is
23 limited to specific areas along major highways in Anchorage as identified in table
24 21.07-1.

25 2. **Parking Lot landscaping Requirements**

26 a. **Purpose**
27 Parking lot landscaping softens the view and breaks up the visual impact of
28 extensive paved surfaces associated with multifamily residential and
29 nonresidential development. It also contributes to storm water management,
30 provides orientation to entrances, increases outdoor comfort levels, and mitigates
31 wind and dust in large parking lots. Parking lot landscaping consists of parking
32 lot perimeter landscaping and parking lot interior landscaping.

33 b. **Parking Lot Perimeter Landscaping**
34 i. Parking lot perimeter landscaping is required for all parking lots with 10
35 or more parking spaces that are associated with any multifamily or
36 nonresidential use, and for parking lots that are a principal use on a site.
37 ii. Parking lot perimeter landscaping shall be placed on all perimeters of a
38 parking lot, which includes appurtenant driveways, where the parking lot
39 abuts a property line. L2 buffer landscaping shall be used where a
40 nonresidential district abuts a residential district, or is adjacent to a
41 residential district across an alley, and where a multifamily district abuts
42 a single-family residential district. All other sides of the parking lot
43 perimeter shall have L1 visual enhancement landscaping.

44 iii. Exceptions include:
45 (A) At approved points of pedestrian and vehicle access; and

1 (B) Adjacent to lots being developed under a common development
2 plan, where the director waives the requirement.

3 c. **Parking Lot Interior Landscaping**

4 Parking lot interior landscaping is intended to visually enhance and break up the
5 area of larger parking lots. Parking lot interior landscaping is required for any
6 parking lot with 40 or more parking spaces. The area of the parking lot shall be
7 determined by the total paved area including parking, circulation aisles, and
8 appurtenant driveways.

9 i. Parking lot interior landscaping requirements are as follows:

10 (A) 40 to 100 parking spaces: An area equal to at least five percent
11 of the parking lot shall be devoted to landscaping.

12 (B) 101 to 200 parking spaces: An area equal to at least eight
13 percent of the parking lot shall be devoted to landscaping.

14 (C) More than 200 parking spaces: An area equal to at least ten
15 percent of the parking lot shall be devoted to landscaping.

16 ii. Areas eligible to be counted as parking lot interior landscaping in
17 subsection c.i. above shall be surrounded by parking area and/or
18 driveway on at least three sides, except that up to 50 percent of the total
19 parking lot interior landscaping, up to a maximum of 800 square feet,
20 may include landscaping areas with parking area and/or driveway on
21 only two sides (such as corner areas of parking lots).

22 iii. For parking lots with more than 200 spaces, a linear landscaping break
23 with a minimum width of 8 feet shall be provided parallel to every third
24 drive aisle. This area may count toward the total interior parking lot
25 landscaping requirement.

26 iv. Parking lots with more than 200 spaces and exceeding the parking
27 requirements by 25 percent or more shall increase the parking lot interior
28 landscaping area by the amount provided in subsection 21.07.090E.4.d.

29 v. Fifty percent of the area required for parking lot interior landscaping may
30 be accommodated by biofiltration swales. The use of biofiltration swales
31 to partially fulfill some portion of the need for parking lot interior
32 landscaping requires that swales be a minimum of ten feet in width and
33 designed to promote biofiltration.

34 3. **Site Enhancement Landscaping**

35 a. **Purpose**

36 Site enhancement landscaping provides plant materials to open areas of a site to
37 enhance the appearance and function of the building and site, to help prevent
38 erosion and dust by covering bare disturbed areas, and to help reduce and clean
39 storm water runoff.

40 b. **Applicability and Requirements**

41 Site enhancement landscaping requirements, including required area and
42 planting materials, are provided in table 21.07-1.

1 **4. Trees for Residential Development**

2 **a. Purpose**

3 This section establishes a minimum requirement for trees in new residential
4 development. It encourages the retention of existing trees and in general
5 promotes a sustained presence of trees and woodlands for their benefits to
6 property values, community character, wildlife habitat, and the natural
7 environment in urban areas of the municipality.

8 **b. Applicability**

9 This section applies to residential development, except for single-family and two-
10 family lots that were platted before January 1, 2014.

11 **c. Requirements**

12 All individual lots in a subdivision shall have a minimum of one tree. A minimum
13 of 20 trees per acre is required in new residential developments. Deciduous tree
14 plantings shall be two-inch caliper or greater, and coniferous tree plantings shall
15 be six feet in height or greater. This section may be fulfilled by the preservation
16 of existing trees as provided in subsection F.1.b. below. Existing cottonwood
17 trees may not be used to fulfill this requirement.

18 **F. General Landscaping Requirements and Standards**

19 **1. Plant Materials**

20 Anchorage lies generally within the USDA climatic zone 3. This categorization is
21 intended to help identify plants with suitable hardiness to survive in our climate. There
22 are known microclimates within Anchorage that are less severe in some areas and more
23 severe in others. It is not the intent of this title to dictate the use of individual species;
24 however property owners are encouraged to understand the local climate and to use
25 plant species known to be hardy. It is the property owner's responsibility to replace plant
26 materials which are provided in response to the requirements of this title, but perish due
27 to poor maintenance, lack of hardiness, mechanical damage, or some other reason. In
28 all cases, the plant materials shall be living and free of defects and of normal health,
29 height, and spread as defined by the American Standard for Nursery Stock, ANSI Z60.1,
30 latest available edition, American Nursery and Landscape Association. Plants may be
31 nursery grown or native transplants, provided they meet the requirements of ANSI Z60.1.

32 **a. Minimum Size of Planting Materials**

33 **i. Trees**

34 **(A)** Deciduous trees: 2 inch caliper

35 **(B)** Coniferous trees: 6 feet in height

36 **ii. Shrubs**

37 **(A)** Deciduous shrubs: 18 inches in height

38 **(B)** Evergreen shrubs: 18 inches in height

39 **(C)** Creeping evergreen shrubs: 18 inch spread

40 **b. Preservation of Existing Plant Material**

41 This title acknowledges the great benefit of preserving existing mature plan
42 material over the replacement of such material with new immature landscape
43 plantings. The mature landscaping may consist of a mass of native plant
44 materials that include a complete community of trees, shrubs, and ground
45 covers, or it may consist of mature individual tree specimens.

1 c. ***Native Plant Material Mass***

2 A mass of existing native plant material preserved on site may be utilized to fulfill
3 a portion of the landscaping requirements identified in this title. To fulfill this
4 requirement, existing plant materials shall include trees, shrubs, and
5 groundcovers. The quantity of trees within the stand of native plant materials
6 shall be at least equal to the quantity of trees required for the types of
7 landscaping identified above. Cottonwood trees (*Populus balsamifera* and
8 *Populus trichocarpa*) may be kept, but shall not be included in the count of trees
9 to meet these requirements. Provided that the stand(s) of existing vegetation
10 meet the requirement for the quantity of trees, the area of the stand of existing
11 vegetation shall be equal to at least 50 percent of the total square foot area for
12 which the existing vegetation is fulfilling the landscaping requirement. Use of
13 existing vegetation may be mixed with planted landscaping improvements to fulfill
14 total requirements.

15 d. ***Individual Tree Specimens***

16 Existing individual tree specimens that are preserved on-site may be used
17 towards meeting the landscaping requirements for visual enhancement, buffer,
18 screening, or freeway landscaping, as identified above, if these trees are located
19 in the applicable site perimeter or parking lot landscaping areas. Retained
20 existing trees that meet the above requirements shall be credited as follows:

21 i. Coniferous trees 10 feet or more in height are equivalent to three new
22 trees.

23 ii. Deciduous trees 6 inches or greater caliper are equivalent to three new
24 trees.

25 Cottonwood trees (*Populus balsamifera* and *Populus trichocarpa*) may not be
26 used to meet this requirement.

27 2. **Planting Location**

28 a. ***Utility Easements***

29 i. Required landscaping areas may overlap with utility easements.

30 ii. The developer shall coordinate landscape projects within utility
31 easements with the respective utilities and ensure that the landscaping is
32 compatible with the utility's need to safely and reliably operate and
33 maintain its facilities. The utility shall provide written notice to property
34 owners about planned projects that affect landscaping within utility
35 easements.

36 b. ***Visibility Clearance Areas***

37 All landscaping and screening materials shall comply with the clear vision area
38 requirements of the traffic division.

39 3. **Planting Bed and Vegetation Areas**

40 a. ***Protection of Landscaping***

41 All required landscaped areas shall be protected from potential damage by
42 adjacent uses, such as parking and storage areas. Concrete barrier curbs or an
43 alternate barrier capable of maintaining separation between vehicles and
44 plantings and at least six inches in height shall be provided between vehicular
45 use areas and landscaped areas. Landscaped areas shall be protected from
46 impacts resulting from snow removal operations.

1 **b. *Existing Plant Materials***

2 Where existing plant materials are used to meet the requirements of this section,
3 plant materials shall be protected from construction activities in accordance with
4 the following:

5 **i. *Construction Fence***

6 A construction fence shall be placed around each tree or group of trees
7 and shrubs to be retained at or beyond the edge of the tree protection
8 zone. Construction fencing shall be placed prior to the commencement
9 of construction work and shall be maintained for the duration of the
10 construction period. Construction fencing in high-traffic areas of the
11 construction site shall consist of a durable material, such as chain link or
12 wood. Plastic fencing that is properly anchored and not on movable
13 posts is acceptable for low-traffic areas of the construction site. Plastic
14 tape is not an acceptable alternate.

15 **ii. *Plant Material Replacement***

16 In the event that existing plant materials die as a result of construction
17 activity or for any other reason, the owner is responsible for replacement
18 with other landscaping materials in accordance with the requirements of
19 this section.

20 **c. *Ground Covers and Mulches***

21 **i.**Planting beds containing trees and shrubs shall use mulches which
22 consist of shredded bark, wood chips, or mineral mulches that do not
23 become compacted.

24 **ii.**For areas of the site outside of planting beds and subject to site
25 enhancement landscaping, ground cover plants such as lawn grasses or
26 native perennial ground covers and wildflowers shall be planted to
27 provide continuous ground coverage within three years.

28 **4. Installation of Landscaping**

29 **a. *Timing***

30 All required landscaping and screening shall be installed by the developer. All
31 landscaping shall be installed before a certificate of zoning compliance is issued.
32 If a certificate of zoning compliance is requested between September and May,
33 then the certificate shall be conditioned upon the landscaping being installed
34 before the following August 31.

35 **b. *Guarantee of Landscaping Survival***

36 **i.**The owner shall be responsible for landscaping installed to fulfill the
37 requirements of this title and the approved site landscape plan. In order
38 to ensure the preservation or replacement of required and installed
39 landscaping, the owner shall provide to the municipality a warranty
40 guarantee such as a letter of credit, escrow, performance bond, or other
41 surety as approved by the director. Single-family and two-family homes
42 on individual lots are exempt from providing this guarantee. The warranty
43 guarantee shall be in an amount equal to the following schedule, and
44 shall remain in effect for two years, starting on the date the municipality
45 witnesses the installation per the approved landscape plan.

1 a. **Applicability**

2 The standards of this subsection 21.07.080G.2. shall apply to all outdoor refuse
3 collection receptacles, including dumpsters, compactors, garbage cans, debris
4 piles, and grease containers, except for the following:

- 5 i. Receptacles in Chugiak-Eagle River which are subject to chapter 21.10.
6 ii. Receptacles that receive refuse collection service only from an alley.
7 iii. Public trash receptacles for pedestrians.
8 iv. Public drop-off recycling receptacles, which are subject to the recycling
9 drop-off use-specific standards of subsection 21.05.060E.7.
10 v. Waste receptacles for temporary uses such as construction sites.
11 vi. Refuse collection receptacles that are stored indoors and brought
12 outdoors on garbage pickup days.

13 b. **Service Provider Standards**

14 Approval under this title does not by itself guarantee that a service provider will
15 service the receptacle. Property in the municipal solid waste service area shall
16 also abide by AMC 26.70.050 which requires approval of enclosure plans by
17 solid waste services prior to construction. Other service providers may have
18 similar requirements.

19 c. **Residential Dwellings**

- 20 i. In class A districts, single-family, two-family, townhouse, and three-unit
21 multifamily dwellings on lots less than 40,000 square feet shall not have
22 dumpsters, except where serviced from an alley.
23 ii. In class B districts, dumpsters are permitted and shall be screened in
24 accordance with the standards below.

25 d. **Site Plans**

26 Site plans for applicable development shall include the proposed location and
27 type of refuse receptacle screening that will be used and the access provisions
28 for service trucks. If a screening enclosure is necessary pursuant to G.2.f.
29 below, the site plan shall include the construction details of the enclosure to
30 ensure the dimensions comply with the service provider's standards. Site plans
31 with refuse receptacles in alleys shall identify the location of the refuse
32 receptacle and the methods with which the receptacle shall be contained in its
33 identified location.

34 e. **Location**

35 Outdoor refuse collection receptacles shall not be located in any required front
36 setback and shall, to the extent reasonably feasible and depending on the size,
37 location, and configuration of the site, and need for access by refuse collection
38 vehicles, be set back from the front plane of the principal structure. Refuse
39 collection receptacles shall not be located within any area used to meet the
40 minimum landscaping or parking requirements and loading berth requirements of
41 this chapter, or be located in a manner that obstructs or interferes with any
42 designated vehicular or pedestrian circulation routes onsite. Refuse collection
43 vehicle access and circulation shall be considered and shown on the site plan, in
44 conformance with the requirements for commercial trucks in subsection
45 21.07.090H.8.b., *Vehicle Access and Circulation*.

1 **f. Screening**

2 Each refuse collection receptacle shall be screened from view from streets and
3 rights-of-way abutting the property, if the receptacle is to be stored within 300
4 feet of the street or right-of-way. The screening may be achieved by buildings
5 and structures, fences, landscaping, topography, or a refuse collection receptacle
6 screening enclosure.

7 i. If a screening enclosure is necessary to meet the standards of this
8 subsection, the screening enclosure shall consist of a durable, three-
9 sided screening structure. Screening enclosure construction and
10 dimensions shall comply with service provider industry standards, as
11 provided in the title 21 user's guide and AMC 26.70.050.

12 ii. If the refuse collection receptacle is visible through the open side of the
13 required screening structure from the abutting street or right-of-way, the
14 opening shall be screened with a sight-obscuring gate. The enclosure
15 and any gate shall be maintained in working order to function as a
16 screening structure. The gate shall remain closed except on refuse
17 collection days and the prior evening.

18 **g. Amortization of Nonconforming Refuse Collection Receptacles**

19 Existing dumpsters that are located at residential uses indicated in subsection
20 21.07.080G.2.c.i. shall be removed within 18 months from the effective date of
21 this title. Sites with refuse collection receptacles that are subject to the location
22 and screening requirements of this subsection 21.07.080G.2. shall meet the
23 requirements of this section within seven years from the effective date of this title,
24 except where an administrative variance is granted in accordance with
25 subsection 2.h. below.

26 **h. Administrative Variance for Refuse Receptacle Location and Screening**

27 The municipality recognizes that full compliance with the refuse receptacle
28 location and screening standards will not be reasonably feasible for some
29 existing developments approved prior to January 1, 2014. The intent of this
30 subsection is to provide for partial or complete exemption in such cases, through
31 a documented administrative process. The variance should be the minimum
32 action necessary to provide relief, with the intent to encourage existing
33 development to move in the direction of conformity.

34 i. If a site was developed prior to January 1, 2014, the property owner may
35 apply for an administrative variance from the location and/or screening
36 standards of this section, using the administrative variance procedure of
37 subsection 21.03.240J., subject to the following approval criteria:

38 **(A)** Compliance would conflict with other requirements of this title, or
39 other laws, ordinances, or regulations;

40 **(B)** Compliance would not be compatible with standards for access
41 and safety of refuse collection operations, as documented in the
42 title 21 user's guide;

43 **(C)** A proposed alternative achieves the intent of this section to the
44 same or better degree; or

45 **(D)** The applicant demonstrates that compliance would be
46 incompatible with the existing layout, function, or appeal of the
47 development for its users, such as interference with or proximity

1 to primary pedestrian access, required landscaping, side or rear
2 setbacks and minimum separation from buildings, outdoor
3 activity spaces, snow storage areas, proximity to windows to
4 living spaces, or vehicle access and parking.

- 5 ii. An applicant for an administrative variance from this section shall submit
6 the information specified in the title 21 user's guide.
- 7 iii. The director shall make written findings and conclusions for each
8 administrative variance request.

9 **3. Service and Off-Street Loading Areas**

10 **a. Applicability**

11 This standard is intended to mitigate visual and noise impacts of service and off-
12 street loading areas on abutting residential uses and neighborhoods, and streets.
13 The standards shall apply to all service and off-street loading areas serving
14 nonresidential uses that are visible from a street or a nonindustrial zoning
15 district.

16 **b. Standard**

17 Applicable non-enclosed service and off-street loading areas shall be screened
18 as follows:

- 19 i. A wall or fence at least eight feet high shall be located along at least one
20 exposed edge of the service or loading area that is parallel to
21 vehicles/trailers parked in the service or loading area. The wall or fence
22 shall extend the length of the longest vehicle/trailer anticipated to be
23 parked in the service or loading area.
- 24 ii. Additional landscaping shall be provided along the site perimeter at the
25 location of the service or loading area to visually obscure the area from
26 the abutting street or property.
- 27 iii. An alternate screening plan may be approved by the director if the
28 proposed plan effectively screens the service or loading area from
29 abutting streets and nonindustrial districts.

30 **H. Fences**

31 **1. Applicability**

32 The provisions of this subsection 21.07.080H. shall apply to all construction, substantial
33 reconstruction, or replacement of fences, retaining walls not required for support of a
34 principal or accessory structure, or any other linear barrier intended to delineate different
35 portions of a lot or to separate lots from each other. The provisions of this subsection do
36 not apply to temporary fencing for construction, emergencies, or special public events or
37 performance areas.

38 **2. Location**

39 A fence may be constructed within property boundaries, or at the lot line, subject to the
40 limitations in this section. No fence shall be installed so as to block or divert a natural
41 drainage flow onto or off of any other property.

42 **3. Maximum Height**

43 Unless specifically required elsewhere in this title for screening fences, fences shall not
44 exceed the maximum heights set forth below. Such maximum heights shall be measured
45 from the top of any retaining wall, or if no retaining wall has been constructed, then from

1 natural grade. Unless specifically allowed by this title, no fence shall exceed eight feet in
2 height.

- 3 a. In the R-1, R-1A, R-2A, R-2D, R-2M, R-3, R-4, R-4A, R-5, and R-7 districts:
- 4 i. Fences in front setbacks shall not exceed four feet in height.
- 5 ii. Fences in secondary front setbacks that abut a street of arterial or
6 greater classification may be up to eight feet in height.
- 7 iii. The director may approve a fence in a secondary front setback to be up
8 to six feet in height where the property owner shows that such fence is
9 necessary to block headlights of in-street traffic, the sight distance
10 triangle is preserved, and no direct vehicular access to the street is
11 provided.
- 12 iv. Fences in side or rear setbacks shall not exceed six feet in height,
13 except where across an alley from or abutting a nonresidential district, in
14 which case the fence may be up to eight feet in height.
- 15 b. In the R-6, R-8, R-9, and R-10 districts, fences in front setbacks shall not exceed
16 six feet in height if the fence is a screening or sight-obscuring fence.
- 17 c. In the B-1A, B-1B, B-3, and R-O districts, fences in front setbacks shall not
18 exceed four feet in height.
- 19 d. In the MC district, fences in front setbacks shall not exceed six feet in height.
- 20 e. Fences in front setbacks in nonresidential districts shall be located interior to any
21 required landscaping.
- 22 f. Enclosures provided as a part of a permitted tennis court, ball field, or other
23 recreational facility shall be exempt from the height restrictions of this section.

24 **4. Finished Appearance Outward**

25 Whenever any fence will be visible from adjacent streets, and whenever a fence is
26 installed as part of required site perimeter or parking lot perimeter landscaping and is
27 visible from adjacent properties, it shall be installed so that the more finished side (i.e.,
28 the side with fewer or no visible structural framing or bracing elements) faces outward
29 from the lot on which it is installed.

30 **5. Prohibited Materials**

31 Fences made of debris, junk, or waste materials are prohibited, unless such materials
32 have been recycled and reprocessed into building materials marketed to the general
33 public and resembling new building materials, unless approved by the director.

34 **21.07.090 OFF-STREET PARKING AND LOADING**

35 **A. Purpose**

36 This section establishes off-street parking and loading requirements as a necessary part of the
37 development and use of land, to ensure the safe and adequate flow of traffic in the public street
38 system, and to ensure that parking lots are designed to perform in a safe, efficient manner. It is
39 also the intent of this section to attenuate the adverse visual, environmental, and economic
40 impacts of parking lots, and to achieve a compact and efficient land use pattern. Specific
41 purposes include to:

- 1 1. Ensure that off-street parking, loading, and access demands will be met without
2 adversely affecting other nearby land uses and neighborhoods;
- 3 2. Provide for safe and orderly circulation and parking in parking and loading facilities, and
4 minimize conflicts between pedestrians and vehicles;
- 5 3. Encourage the efficient use of land and avoid the encumbrance of more space than is
6 necessary for parking;
- 7 4. Improve the visual appearance of public street corridors by encouraging buildings and
8 other attractive site features to become more prominent relative to parking lots;
- 9 5. Provide for better pedestrian movement and encourage alternative modes of
10 transportation by reducing the expanses of parking that must be traversed between
11 destinations;
- 12 6. Support a balanced transportation system that is consistent with cleaner air and water,
13 greater transportation choices, and efficient infill and redevelopment; and
- 14 7. Allow flexibility in addressing vehicle parking, loading, and access, including providing for
15 reductions and alternatives to minimum parking requirements.

16 **B. Applicability**

- 17 1. **Generally**
 - 18 a. The off-street parking and loading standards of this section 21.07.090 shall apply
19 to all development in the municipality, including changes of use.
 - 20 b. Except for the off-street loading requirements of subsection 21.07.090G., all
21 other requirements of this section shall apply to Girdwood unless specifically
22 preempted in chapter 21.09.
 - 23 c. Except when specifically exempted, the requirements of this section shall apply
24 to all temporary parking lots and parking lots that are a principal use on a site.
- 25 2. **Expansions, Relocations, and Enlargements**

26 A site to which a building is relocated shall provide the required parking and loading
27 spaces. An expansion or enlargement that is an increase in the floor area or other
28 measure of off-street parking and loading requirements shall provide spaces as required
29 for the increase.
- 30 3. **Use of Required Parking Spaces**

31 Required parking spaces shall be available for the parking of passenger automobiles by
32 residents, occupants, customers, visitors, or employees of the use. Required parking
33 spaces may not be assigned, leased, or rented in any way to a use on another site, or to
34 anyone who is not a resident, occupant, customer, guest, or employee, except for shared
35 parking situations. See subsection 21.07.090F.16. Also, required parking spaces shall
36 not be used for the parking of equipment or for storage of goods or inoperable vehicles.
- 37 4. **Regulation of Parking Space Use**

38 The providers of required off-street parking spaces may reasonably control the users
39 thereof by means that may include, but are not limited to, restricting all parking to the
40 users of the facility; parking lot attendants; control gates; tow-away areas; areas for
41 exclusive use by employees, tenants or staff; areas restricted for use by customers or
42 visitors; and imposing time limitations on users. Fees may be charged for the use of
43 required parking, subject to approval of the traffic engineer. Prior to approval of the
44 permit the traffic engineer may review all methods of control and may disapprove of any

1 restriction such as fees that adversely affects the purpose of this section. The
2 municipality may enforce any approved parking plan or restrictions through any of the
3 code enforcement provisions set forth in chapter 21.13, *Enforcement*.

4 **5. Parking Nonconformities**

5 When a site is out of compliance as to the number of required or allowed parking spaces,
6 section 21.12.060, *Characteristics of Use*, applies.

7 **C. Computation of Parking and Loading Requirements**

8 **1. Fractions**

9 When measurements of the number of required or allowed parking spaces result in a
10 fractional number after subtracting for parking reductions or alternatives, the fraction shall
11 be rounded as provided in section 21.14.020O., *Fractions*.

12 **2. Multiple Uses**

13 The number of parking spaces is computed based on the uses on the site. When there
14 are two or more uses on a site, the required or allowed parking for the site is the sum of
15 the required or allowed parking for the individual uses. For shared parking, see
16 subsection 21.07.090F.16. below.

17 **3. Area Measurements**

18 Unless otherwise specified in table 21.07-4, all square footage-based parking and loading
19 standards shall be computed on the basis of gross floor area of the use in question. For
20 the purposes of this section, all gross floor area shall be counted in such measurement,
21 except for floor area dedicated for parking spaces; driveways; circulation aisles; loading
22 areas; or enclosed and isolated floor area exclusively for HVAC mechanical equipment
23 serving the building, provided such area is located in a mechanical penthouse or topmost
24 floor of a multistory building. The traffic engineer may also waive the floor area for HVAC
25 mechanical equipment occupying another story in the building, provided the majority of
26 such story (including the mechanical equipment) is non-habitable floor area.

27 **4. Occupancy Load Factors**

28 Where parking requirements for assembly rooms or other uses are based on maximum
29 capacity under provisions of AMC title 23, the occupancy load factors of AMC title 23
30 shall not be adjusted.

31 **5. Additional Computation Standards**

32 **a. Off-Street Loading Space**

33 Required off-street loading space shall not be included as off-street parking
34 spaces in computation of required or allowed number of off-street parking
35 spaces, unless approved by the traffic engineer pursuant to subsection G.5.
36 below.

37 **b. Fleet Vehicle Parking**

38 For the purpose of calculating parking requirements, fleet vehicle parking shall
39 not count against either the minimum or maximum requirements.

40 **c. Areas that Count Toward Minimum but Not Maximum Parking**
41 **Requirements**

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

- 45 i. Accessible parking spaces;

- 1 ii. Passenger loading zones including taxi cab stands;
- 2 iii. Vanpool and carpool parking spaces;
- 3 iv. Parking spaces provided as the required parking for a use on another
4 parcel through a municipally approved shared parking or off-site parking
5 agreement; and
- 6 v. Parking structures, underground parking, and parking within, above, or
7 beneath the building(s) it serves.

8 **D. Parking Lot Layout and Design Plan**

9 **1. Applicability**

10 For all commercial, mixed-use, industrial, community, multifamily, and townhouse
11 residential developments, the applicant shall submit a parking facility layout, circulation,
12 and design plan for review and approval by the traffic engineer. The plan shall contain
13 sufficient detail to enable the traffic engineer and the director to verify compliance with
14 this section 21.07.090. Subject to approval of the traffic engineer, the parking layout and
15 design plan may be combined with other plans required under this title, such as the
16 landscaping plan required in 21.07.080, *Landscaping, Screening, and Fences*.

17 **2. Minimum Plan Requirements**

- 18 a. The parking facility layout, circulation, and design plan shall be prepared by a
19 design professional and stamped by a professional registered with the Alaska
20 State Board of Registration for Architects, Engineers, and Land Surveyors,
21 except that parking lots with fewer than 20 parking spaces shall be exempt.
- 22 b. The director and traffic engineer shall establish the minimum submittal
23 requirements for such plans that will enable staff to adequately review and
24 ensure compliance with the standards and requirements of this section
25 21.07.090. Such submittal requirements, to be included in the user's guide, shall
26 include but not be limited to elements such as placement and dimensions of
27 spaces, landscaping, pedestrian and vehicle circulation, snow storage, lighting,
28 loading and trash collection areas, and drainage.
- 29 c. The traffic engineer shall ensure that provisions have been made for minimum
30 interference with street traffic flow and safe interior vehicular and pedestrian
31 circulation, transit, and parking.

32 **E. Off-Street Parking Requirements**

33 **1. Minimum Number of Spaces Required**

34 Unless otherwise expressly stated in this title, off-street parking spaces shall be provided
35 in accordance with table 21.07-4, *Off-Street Parking Spaces Required* and subsection
36 E.2. below. Reductions, exemptions, and alternatives to the required minimum number
37 of parking spaces are provided in subsection 21.07.090F. below.

38 **2. Minimum of Three Parking Spaces**

39 Where a use is required to provide off-street parking and the amount specified in table
40 21.07-4 would result in fewer than three spaces being required for the use, the use shall
41 provide at least three parking spaces including one van-accessible parking space
42 pursuant to subsection 21.07.090J. Where there are multiple uses located on a site, the
43 uses may share the accessible space as long as the requirements of subsection
44 21.07.090J.1. are met. Parking reductions in subsection 21.07.090F. shall also comply
45 with this subsection E.2. The minimum of three parking spaces shall not apply to
46 residential household living uses, community gardens, parks and open space, utility

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substations, or fueling stations and food and beverage kiosks that are exclusively for drive-through customers.

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
RESIDENTIAL USES			
Household Living	Dwelling, mixed-use, multifamily, single-family attached, two-family, and townhouse	1 per studio or efficiency or one bedroom du Add 0.5 spaces for each additional bedroom Add 0.25 guest parking spaces for each multifamily du with single-family or two-family style construction Add 0.15 guest parking spaces for each multifamily du with townhouse style construction Add 0.10 guest parking spaces for each multifamily du, with a minimum of 1 guest space Add 0.10 guest parking spaces for each mixed-use du, with a minimum of 1 guest space	X
	Dwelling, single-family detached	2 per du up to 2,400 square feet; 3 per du over 2,400 square feet, including any unfinished area which may be converted to living area	
	Accessory dwelling unit (ADU)	See subsection 21.05.070D.	
	All other household living uses	2 per du	
Group Living	Assisted living facility (9+ client capacity)	1 per 4 beds plus 1 per 350 sf of office area plus requirement for dwelling, if located in a dwelling	X
	Correctional community residential center	1 per 2,000 sf gfa	X
	Habilitative care facility	1 per 400 sf gfa, and 1 passenger loading space, reserved for pickup and delivery of adults, per 800 sf gfa	X
	Roominghouse	0.6 per guestroom	
	Transitional living facility	1 per 2 beds plus 1 per 4 persons in principal assembly area based on maximum occupancy provisions of AMC title 23	
COMMUNITY USES			
Adult Care	Adult care facility, 3-8 persons	1 per 400 sf gfa, and 1 passenger loading space, reserved for pickup and delivery of adults, per 2,000 sf gfa (plus requirement for principal use, if approved as accessory use)	
	Adult care facility, 9+ persons	1 per 400 sf gfa, and 1 passenger loading space, reserved for pickup and delivery of adults, per 2,000 sf gfa	X

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
Child Care	Child care home	No additional requirements beyond those required for the dwelling unit If the establishment is for fewer than 9 children and is not located in a dwelling, then the requirement is as provided in subsection 21.07.090E.2.	
	Child care center, 9-15 children	1 space in addition to what is required for the dwelling	
	Child care center, more than 15 children	1 per 400 sf gfa, and 1 passenger loading space, reserved for pickup and delivery of children, per 800 sf gfa	
Community Service	Cemetery or mausoleum	See subsection 21.07.090E.3.	X
	Community center or religious assembly	1 per 5 persons in principal assembly area based on maximum occupancy provisions of AMC title 23	
	Crematorium	1 per 4 persons in the main chapel based on maximum occupancy provisions of AMC title 23	
	Family self-sufficiency service	1 per 300 sf gfa	
	Government administration and civic buildings	1 per 300 sf gfa	X
	Homeless and transient shelter	1 per 300 sf administrative area, and 1 per 20 pillows	
	Neighborhood recreation center	See subsection 21.07.090E.3.	
Cultural Facility	Aquarium	1 per 500 sf gfa	X
	Botanical gardens	See subsection 21.07.090E.3.	X
	Library	1 per 400 sf gfa	X
	Museum or cultural center	1 per 400 sf gfa	X
	Zoo	1 per 5,000 sf of site area	X
	All other uses	1 per 400 sf gfa or 1 per 10,000 sf of site area for outdoor uses	X
Educational Facility	Boarding school	See subsection 21.07.090E.3.	X
	College and university	See subsection 21.07.090E.3.	X
	Computer-aided learning center	1 per 300 sf of enclosed floor space	X
	Elementary school and middle school	1 per 6 students, based on State of Alaska EED capacity provisions	X

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
	High school	6 per classroom Where the traffic engineer has reason to believe that, based on similar or comparable schools, parking study data, or other information, that parking demand for the proposed high school development is likely to exceed the requirement, the traffic engineer may require up to 1 parking space per 3 students, based on State of Alaska EED capacity provisions.	X
	Instructional services	6 per classroom, plus 1 per 300 square feet of dance or other training area	X
	Vocational or trade school	1 per 2 students based on maximum occupancy provisions of AMC title 23	X
Health Care Facility	Health services, including outpatient medical and dental offices, co-located with a hospital/ hospital campus Other health services, including outpatient medical and dental offices	1 per 250 sf gfa 1 per 300 sf gfa	X
	Hospital/ health care facility	1 per 2 beds, based on maximum capacity, plus 1 per 350 sf of office and administrative area	X
	Nursing facility	1 per 4 beds, based upon maximum capacity.	X
Park and Open Area	Community garden	1 per 5,000 sf of lot area	
	Park, public or private	See subsection 21.07.090E.3. Playfields (soccer, baseball, etc.) shall have minimum of 25 spaces per field, unless otherwise approved by the traffic engineer, for up to four fields. Facilities with more than four fields shall be subject to the determination of the traffic engineer.	
Public Safety Facility	All uses	See subsection 21.07.090E.3.	
Transportation Facility	All uses	See subsection 21.07.090E.3.	
	Railroad freight terminal	See subsection 21.07.090E.3.	
	Railroad passenger terminal	See subsection 21.07.090E.3.	

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
Utility Facility	Utility facility	1 per 1,000 sf gfa	
	Utility substation	See subsection 21.07.090E.3.	
Communication Structures	All uses	None	
COMMERCIAL USES			
Agricultural Uses	Commercial horticulture	See subsection 21.07.090E.3.	
Animal Sales, Service & Care	Animal boarding	1 per 800 sf gfa	
	Animal shelter	1 per 400 sf gfa	
	Large domestic animal facility, principal use	1 per 4 seats or 1 per stall, whichever is greater	
	Retail and pet services	1 per 350 sf gfa	
	Veterinary clinic	1 per 600 sf gfa	
Assembly	Civic/convention center	1 per 4 persons in assembly areas based on maximum occupancy provisions of AMC title 23	X
	Club/lodge/meeting hall	1 per 4 persons in assembly areas based on maximum occupancy provisions of AMC title 23.	X
Entertainment and Recreation	Amusement establishment	Indoor entertainment facility: 1 per 300 sf gfa	
	Bowling alley	4 per bowling lane	
	Bingo parlor	1 per 4 persons in assembly areas based on maximum occupancy provisions of AMC title 23.	
	Indoor shooting range	1 per target area, or 1 per 5 seats, whichever is greater	
	Entertainment facility, major	See subsection 21.07.090E.3.	
	Fitness and recreational sports center	1 per 300 sf gfa	
	General outdoor recreation, commercial	See subsection 21.07.090E.3.	X
	Golf course	4 per green	
	Golf driving range	0.5 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

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
	Movie theater	1 per 4 persons based on maximum occupancy provisions of AMC title 23	
	Nightclub	1 per 3 persons based on maximum capacity under provisions of AMC title 23	X
	Shooting range, outdoor	1 per target area, or 1 per 5 seats, whichever is greater	
	Skiing facility, alpine	See subsection 21.07.090E.3.	
	Theater company or dinner theater	1 per 4 persons based on maximum capacity under provisions of AMC title 23	
Food and Beverage Service	Bar	1 per 100 sf gfa	X
	Food and beverage kiosk	0 per establishment, plus vehicle queuing spaces	
	Restaurant	1 per 100 sf gfa and outdoor seating area 1 per 125 sf gfa for drive-through restaurants (plus vehicle queuing spaces)	X
Office	Financial institution	1 per 350 sf gfa (plus vehicle queuing spaces if drive-through is provided)	
	Office, business or professional	1 per 350 sf gfa	X
	Broadcasting facility	1 per 350 sf gfa	
Personal Service, Repair, and Rental	Business service establishment	1 per 500 sf gfa	X
	Funeral services	1 per 4 persons in main assembly areas based on maximum occupancy provisions of AMC title 23	X
	Small equipment rental	1 per 400 sf gfa	
	General personal services	1 per 400 sf gfa	X
Retail Sales	Auction house	1 per 300 sf gfa	X
	Convenience store	1 per 350 sf gfa	X
	Farmers market	See subsection 21.07.090E.3.	
	Fueling station	1 per attendant for stand-alone fueling stations; also refer to subsection 21.07.090H. for queuing requirement	
	Furniture and home appliance store	1 per 800 sf gfa	X
	General retail	1 per 350 sf gfa	X
	Grocery or food store	1 per 250 sf gfa	X
	Liquor store	1 per 400 sf gfa	X

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
	Building materials store	1 per 600 sf gfa and outdoor display area	X
	Pawnshop	1 per 350 sf gfa	X
Vehicles and Equipment	Aircraft and marine vessel sales	1 per 7,000 sf outdoor display/sales area; 1 per 400 sf indoor floor area	X
	Vehicle parts and supplies	1 per 400 sf gfa; 1 per 7,000 sf outdoor display/sales area	X
	Vehicle – large and small, sales	1 per 7,000 sf outdoor display/sales area; 1 per 400 sf indoor floor area	X
	Vehicle – large and small, rental	1 per 400 sf of indoor floor area	
	Vehicle service and repair, major and minor	0.5 per car wash bay; 4 per other service 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)	
Visitor Accommodations	Camper park	1 space per 10 recreational vehicle or tent camping spaces	
	Extended-stay lodgings	1 per guestroom or one bedroom unit; 1.25 per two bedroom unit; 1.5 per three bedroom or more unit, plus 1 per 4 persons in meeting rooms based on maximum occupancy provisions of AMC title 23.	X
	Hostel	1 per 600 sf gfa	
	Hotel, motel and inn	0.9 per guestroom, plus 1 per 4 persons in meeting rooms based on maximum occupancy provisions of AMC title 23.	X
	Recreational and vacation camp	See subsection 21.07.090E.3.	
INDUSTRIAL USES¹¹			
Industrial Service ¹¹	Data processing facility	1 per 1,000 sf gfa	X
	Dry cleaning establishment	1 per 750 sf dry cleaning plant area plus 1 per 600 sf of customer service area	
	General industrial service	1,000-3,000 sf gfa: 1 per 750 sf gfa; Add 1 space per each 1,000 sf gfa above 3,000 sf gfa, up to 5,000 sf gfa; Add 1 space per each 1,500 sf gfa above 5,000 sf gfa, up to 50,000 sf gfa; Add 1 space per each 2,000 sf gfa above 50,000 sf gfa	
	Governmental service	1 per 600 sf gfa	X

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
	Heavy equipment, sales and rental	1 per 400 sf indoor floor area	X
	Research laboratory	1 per 350 sf gfa	
Manufacturing and Production ¹¹	Commercial food production	1 per 400 sf gfa for catering; 1 per 800 sf gfa for food processing	X
	Cottage Crafts	1 per 600 sf gfa	
	Manufacturing (heavy and light)	1,000-3,000 sf gfa: 1 per 750 sf gfa; Add 1 space per each 1,000 sf gfa above 3,000 sf gfa, up to 5,000 sf gfa; Add 1 space per each 1,500 sf gfa above 5,000 sf gfa,	
	Natural resource extraction	See subsection 21.07.090E.3.	
Marine Facility ¹¹	Aquaculture	See subsection 21.07.090E.3.	
	Facility for combined marine and general construction	See subsection 21.07.090E.3.	
	Marine operations	See subsection 21.07.090E.3.	
	Marine wholesaling	1 per 800 sf gfa	
Warehouse and Freight Movement ¹¹	Bulk storage of hazardous materials	See subsection 21.07.090E.3.	
	Impound yard	1 per 500 sf gfa, plus 1 per 5,000 sf of outdoor storage area	
	Motor freight terminal	see Warehouse	
	Self-storage facility	1 per 75 units, plus vehicle queuing 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
	Storage yard	1 per 2,000 sf of outdoor storage area	
	Warehouse	1,000-10,000 sf gfa: 1 per 1,000 sf gfa; Add 1 space per each 1,250 sf gfa above 10,000 sf gfa, up to 50,000 sf gfa; Add 1 space per each 1,500 sf gfa above 50,000 sf gfa,	
	Wholesale establishment	1 per 800 sf gfa	
Waste and Salvage	All uses	See subsection 21.07.090E.3.	

TABLE 21.07-4: OFF-STREET PARKING SPACES REQUIRED (“du” = dwelling unit; “sf” = square feet; “gfa” = gross floor area)			
Use Category	Use Type	Minimum Spaces Required	See Loading Subsection 21.07.090G.
NOTES:			
¹¹ The off-street parking requirements for industrial uses in this schedule A shall not include space devoted to office or other non-industrial related use. Where a warehousing or industrial facility contains office or other non-industrial related use, off-street parking for such spaces shall be computed using the requirements set forth in this table.			

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3. Uses Not Listed or that Have No Specific Requirement

In the case of a use or category of uses not listed in table 21.07-4, or that is listed without a specific requirement, the requirements for off-street parking facilities shall be determined by the director and the traffic engineer. Such determination shall be based upon the requirements for the use specified in table 21.07-4 that is most nearly comparable to the unspecified use, traffic engineering principles, and/or parking studies. Any parking study prepared by the applicant 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 shall include other reliable data collected from uses or combinations of uses that are the same as or comparable with the proposed use. Comparability shall 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.

4. Maximum Number of Spaces Permitted

a. Purpose

The purpose of this subsection is to establish an upper limit on the number of parking spaces allowed in order to promote efficient use of land, enhanced urban design, a safe and walkable pedestrian environment, alternative modes of transportation, and to protect air and water quality. Exceptions and flexibility procedures are provided where the required limit on the number of parking spaces is problematic for a certain use.

b. Applicability

For any use categorized as a community or commercial use in table 21.05-1, *Table of Allowed Uses*, the maximum number of off-street vehicle parking spaces shall be as provided below. Temporary parking, the uses “parking lot, principal use” and “parking structure, principal use”, and uses in the Educational Facility, Parks and Open Areas, Transportation Facility, and Utility Facility use categories are exempt.

c. Maximum Number of Spaces

Developments may provide a maximum of one parking space per 250 square feet of gross floor area, or 125 percent of the minimum number of parking spaces required in table 21.07-4, whichever is greater.

d. Increased Landscaping in Large Parking Lots

Development sites with more than 200 parking spaces required in table 21.07-4 and that are proposed by the applicant to have at least 25 percent more than the minimum number of parking spaces required in table 21.07-4 shall increase the overall amount of area devoted to parking lot interior landscaping area to an area equal to at least 12 percent of the parking lot, including parking, internal

1 circulation, and appurtenant driveways. This shall apply to uses which utilize the
2 exceptions offered in subsection 4.e. below.

3 **e. Exceptions**

4 i. Restaurants without a drive-through, dinner theaters, and bars may
5 provide up to 200 percent of the minimum number of parking spaces
6 required in table 21.07-4.

7 ii. If application of the maximum parking standard would result in fewer than
8 six parking spaces, the development shall be allowed six parking spaces.

9 iii. Exceptions to the maximum parking requirement may be allowed by the
10 traffic engineer and the director in situations that meet all of the following
11 criteria:

12 (A) The applicant provides a parking demand study of similar sites in
13 the municipality that demonstrates that parking demand cannot
14 be accommodated within the maximum number of parking
15 spaces allowed or through any of the available parking
16 reductions and alternatives such as on-street parking, shared
17 parking with nearby uses, or incentives for alternatives to single-
18 occupancy vehicle use; and

19 (B) The request is the minimum necessary variation from the
20 standards.

21 **5. Parking Location**

22 Except as provided in subsection 21.07.090F., all required parking shall be on the same
23 lot as the use served. However, required parking may be on an abutting or adjacent lot
24 provided the zoning district in which the lot is located allows for off-street parking as a
25 permitted principal use, site plan review use, or conditional use; in which case there shall
26 be a parking agreement which meets the requirements of subsection F.1. below.

27 **F. Parking Reductions and Alternatives**

28 The traffic engineer and director may approve reductions and alternatives to providing the
29 number of off-street parking spaces required by table 21.07-4, and/or to the circulation and
30 dimensional standards of subsections H.8. and H.9., in accordance with the following standards.

31 **1. Parking Agreements**

32 A parking reduction or alternative shall require a written parking agreement between the
33 property owner(s) and the municipality, except where expressly stated otherwise.

34 **a. Recordation**

35 The municipality shall record the parking agreement at the district recorder's
36 office as a covenant that runs with the land and is binding on the owner and all
37 successors and assigns for as long as the required number of off-street parking
38 spaces is not provided as a result of the parking reduction or alternative. All
39 parties involved in the parking reduction or alternative shall participate in the
40 parking agreement. Recordation of the agreement shall take place before
41 issuance of an entitlement requiring a parking reduction or alternative.

42 **b. Content**

43 The form and content of the parking agreement shall be approved by the director.
44 It shall guarantee installation and maintenance of any required improvements by
45 the owner, and/or the owner's continued participation in any parking

1 management strategy required for a parking reduction. The parking agreement
2 shall assure future implementation of a contingency plan by the owner if so
3 ordered by the traffic engineer. The contingency plan may include strategies
4 such as installation of parking, payment to the municipality for the full cost of
5 providing the required parking, transportation demand management programs, or
6 other parking management strategies identified in the parking reductions or
7 alternatives of this section.

8 **c. Termination**

9 If for any reason the parking agreement terminates, owners and all successors
10 and assigns who are parties to the parking agreement shall comply with all
11 provisions of this title governing the required number of off-street parking spaces.

12 **2. Calculation of Parking Reductions**

13 **a. Multiple Reductions**

14 A development may be eligible for multiple reductions from the required number
15 of parking spaces. The total impact of parking reductions shall be calculated as
16 being multiplicative and not additive where a development is eligible for more
17 than one. For example, if one reduction is 20 percent, and a second reduction is
18 an additional 15 percent, their combined reduction shall be calculated as 80
19 percent times 85 percent equals 68 percent, or a 32 percentage point total
20 reduction, rather than adding 20 percent plus 15 percent equals 35 percent. This
21 is because the 15 percent reduction applies to a base that is already reduced 20
22 percent.

23 **b. Minimum Reduction Credit of One Space**

24 If the total approved reduction from the required number of parking spaces for a
25 development is calculated to be a reduction of less than one parking space, it
26 shall be credited as a reduction of one parking space.

27 **3. Qualifying Site Development**

28 Uses shall provide the following enhancements to be eligible for any reduction in the
29 number of required parking spaces, except where stated otherwise. The qualifying site
30 criteria shall not be required for the following parking reductions and alternatives: land
31 banking, stacked and tandem parking, or smaller parking spaces for low-turnover uses.
32 Industrial uses, public safety facilities, transportation facilities, and utility facilities are
33 exempt from the qualifying site development criteria.

34 **a. Street Oriented Building**

35 Primary entrances and/or windows providing visual access shall comprise at
36 least 15 percent of the area of any street facing building elevation. For
37 nonresidential uses, windows providing visual access and/or primary entrances
38 shall comprise at least 50 percent of the length and 25 percent of the ground-
39 floor wall area of any street facing building elevation.

40 **b. Walkway to the Street**

41 A walkway meeting the requirements of section 21.07.060 shall connect at least
42 one primary entrance to a street.

43 **c. Parking Facility Location**

44 For buildings constructed after January 1, 2014, parking facilities including
45 driveways shall comprise no more than 50 percent of the area between the street
46 property line and the street facing building elevation, and garage doors shall
47 comprise no more than 50 percent of the length of the street facing building
48 elevation. These requirements apply to no more than two street frontages.

- 1 d. **Private Open Space**
2 For residential developments that are required to provide private open space, an
3 additional 40 square feet of private open space that meets the requirements of
4 section 21.07.030 shall be provided for each reduction of one parking space.
5 This shall be common private open space in the case of multifamily and mixed-
6 use dwellings.
- 7 e. **Cross-Access to Adjacent Properties**
8 The director and the traffic engineer may determine there is potential for
9 driveway or walkway cross-access to abutting properties and may require a
10 cross-access facility and/or easement within the subject property to the site
11 boundary. Vehicular cross-access may only be required in commercial districts.
- 12 4. **Downtown**
13 Uses located in DT-1, DT-2, and DT-3 districts are exempt from providing off-street
14 parking spaces. However, if parking is provided, all other standards of this section shall
15 apply in the DT districts. Notwithstanding the provisions of F.1. and F.2. above, parking
16 agreements and qualifying site criteria shall not be required for this exemption.
- 17 5. **Residences in Walking Distance to Downtown**
18 Residential household uses located north of 15th Avenue, west of Orca Street, east of L
19 Street, and south of Ship Creek are eligible for a reduction of up to 25 percent of the
20 minimum number of required parking spaces.
- 21 6. **Districts That Promote a Mix of Uses**
22 a. Uses located in the R-4A district are eligible for a reduction of up to 10 percent of
23 the minimum number of required parking spaces.
- 24 b. Uses located in the B-1A district are eligible for a reduction of up to 10 percent of
25 the minimum number of required parking spaces, if the B-1A district abuts
26 residential districts on the majority of its perimeter, and has a contiguous area of
27 no more than one acre, excluding rights-of-way.
- 28 c. Certain developments in the B-1B and B-3 districts are eligible for a reduction of
29 the minimum number of required parking spaces, as specified in the mixed-use
30 development standards or overlay district standards of chapter 21.04. Such
31 reductions shall be reviewed and administered under this section 21.07.090F.
- 32 7. **Residences in Center City Neighborhoods**
33 a. Residential household uses located in center city neighborhoods are eligible for a
34 reduction of up to 10 percent of the minimum number of required parking spaces.
- 35 b. For the purposes of this provision, the center city area is bounded to the north by
36 Elmendorf Air Force Base, to the south by Tudor Road, to the east by Ingra
37 Street and the Seward Highway, and to the west by Minnesota Drive. Any part of
38 Fairview, South Addition, Government Hill, or Mountain View community council
39 is also in the eligible area.
- 40 c. This reduction recognizes proximity to employment centers, characteristics such
41 as traditional street grids and development patterns, household characteristics,
42 emphasis on walkable northern city environments, and lower parking demand in
43 these areas.
- 44 8. **Uses Adjacent to Transit Service**
45 A use is eligible for a reduction of up to five percent of the minimum number of required
46 parking spaces if it is located within 800 feet of the street right-of-way centerline of any

1 municipal public transit route, subject to approval by the traffic engineer and the director.
2 The public transportation department may require a public use easement or transit stop
3 and/or transit shelter improvements if the subject property abuts an existing or planned
4 transit stop. If the public transportation department requires such an easement or
5 improvements, then the use is eligible for an additional reduction of two percent or one
6 more parking space, whichever is greater.

7 **9. Rideshare Programs**

8 A nonresidential use is eligible to substitute participation in municipal rideshare programs
9 for up to a maximum of five percent of the minimum number of required parking spaces.
10 The land area that would otherwise be needed in order to provide the required number of
11 parking spaces shall be set aside on the site to provide for the future construction of a
12 parking lot in conformance with subsection 21.07.090F.12., *Land Banking*.

13 **a. Carpool**

14 Every designated carpool space may count as 1.8 spaces toward meeting the
15 minimum number of required spaces. The carpool spaces shall be those closest
16 to the primary entrance or elevator, but not closer than accessible spaces or
17 those signed for exclusive customer/visitor use. Signs shall be posted indicating
18 these spaces are reserved for carpool use. The traffic engineer shall consult with
19 the public transportation department in providing carpool spaces and the location
20 of carpool parking.

21 **b. Vanpool**

22 For every vanpool purchased or leased by the applicant for employee use
23 operated through the municipal rideshare program, the number of required
24 parking spaces shall be reduced by up to six spaces. The traffic engineer may
25 require a safe and convenient designated vanpool passenger loading zone.

26 **10. Transit Pass Benefits**

27 A use in which the owner or employer offers transit passes cost-free to all employees or
28 residents is eligible for a parking reduction of up to 10 percent of the minimum number of
29 required parking spaces. The use shall be located within 800 feet of the street right-of-
30 way centerline of any municipal transit route. The public transportation department may
31 require a public use easement or transit stop and/or transit shelter improvements if the
32 subject property abuts an existing or planned transit stop. If the public transportation
33 department requires such an easement or improvements, then the use is eligible for an
34 additional reduction of two percent or one more parking space, whichever is greater.

35 **11. Parking Cash-Outs**

36 A use is eligible for a reduction of up to 10 percent of the minimum number of required
37 parking spaces if it implements a parking cash-out program by which commuters are
38 provided the option to choose between free parking and its equivalent cash value for
39 using an alternative mode of travel.

40 **12. Land Banking**

41 Subject to approval by the traffic engineer and the director, the land area that would
42 otherwise be needed in order to provide up to 25 percent of the minimum number of
43 required parking spaces may be set aside on the site to provide for the future
44 construction of a parking facility. The applicant shall submit a parking demand study
45 prepared in a form and manner prescribed by the traffic engineer that indicates the
46 reduced parking lot will accommodate expected parking needs, and an alternate site plan
47 to be approved by the traffic engineer that accommodates the parking that would be
48 required without the land banked parking reduction. The area set aside shall be
49 landscaped with site enhancement landscaping and/or pedestrian amenities approved by

1 the director. The parking agreement shall guarantee that, if the director and the traffic
2 engineer determine at some point in the future that additional parking spaces are needed,
3 the owner shall construct parking on the land banked area in conformance with the
4 alternate site plan.

5 **13. Affordable Housing**

6 Affordable housing units that are deed-restricted for households having an income at the
7 time of initial occupancy of 30 percent or less of median family income are eligible for a
8 reduction of up to 30 percent of the minimum number of required parking spaces.
9 Affordable housing units for low income households having an income at the time of initial
10 occupancy of 60 percent or less of median family income are eligible for a reduction of up
11 to 15 percent of the minimum number of required parking spaces. The affordable
12 housing units shall be consistent with the standards of subsection 21.07.110H.,
13 *Standards for Affordable Housing*.

14 **14. Senior Housing**

15 Dwelling units that meet the definition of senior housing are eligible for a reduction of up
16 to 15 percent of the minimum number of required parking spaces. Dwelling units that
17 meet the definition of senior housing that is intended for, and solely occupied by, persons
18 62 years of age or older are eligible for a reduction of up to 25 percent of the minimum
19 number of required parking spaces. The agreement to provide a dwelling as housing for
20 older persons is an obligation that runs with the land and is binding on subsequent
21 property owners for as long as the required parking is not provided.

22 **15. Housing Density**

23 Residential household uses are eligible for a reduction of one percent of the minimum
24 number of required parking spaces for every four dwellings per acre above a net density
25 of 40 dwellings per acre on the site, up to a maximum reduction of 20 percent of the
26 minimum number of required parking spaces.

27 **16. Shared Parking**

28 Shared use of required parking spaces may occur where two or more uses on the same
29 or separate sites are able to share the same parking spaces because their peak parking
30 demands occur at different times. The traffic engineer and director may approve shared
31 parking facilities for uses with different peak business periods if the shared parking
32 complies with all of the following standards:

33 **a. Shared Parking Study**

34 The applicant shall submit a shared parking study to the director that
35 demonstrates the feasibility of shared parking. The study shall be provided in a
36 form established by the traffic engineer and shall be made available to the public.
37 The study shall demonstrate that any parking reduction requested will not result
38 in the spillover of parking onto other properties or public streets, by, at a
39 minimum, addressing the following: the size and type of the proposed
40 development, location of required parking, the composition of tenants, the
41 anticipated rate of parking turnover, and the anticipated peak parking and traffic
42 loads for all uses that will be sharing off-street parking spaces.

43 **b. Calculation of Parking Spaces Required**

44 The shared parking study shall follow one of the following procedures:

- 45 i. The method under subsection 16.c.;
- 46 ii. The most current published procedures of the Urban Land Institute or the
47 Institute of Transportation Engineers; or

iii. Other procedures as specifically approved by the traffic engineer.

c. **Alternative Calculation Method**

For each use sharing the parking facility, calculate the number of off-street parking spaces required for that use in table 21.07-4. Multiply that number across the row for its land use in table 21.07-5, *Shared Parking Credit*, to determine the typical parking required for that use during the eight time periods. For each time period, add the resulting products for each of the uses sharing the parking. The column total that generates the highest number of parking spaces then becomes the shared parking requirement. This represents the time period with the highest total parking demand.

Land Uses ¹²	Weekday Time Periods				Weekend Time Periods			
	7 am to 6 pm	6 pm to 1 am	1 am to 3 am	3 am to 7 am	7 am to 6 pm	6 pm to 1 am	1 am to 3 am	3 am to 7 am
Residential	65%	100%	100%	100%	75%	90%	10%	100%
Religious Assembly	25%	50%	0%	0%	100%	50%	0%	0%
Health Services	100%	30%	5%	5%	100%	0%	0%	0%
Assembly	100%	50%	5%	5%	100%	50%	5%	5%
Fitness Center	90%	100%	60%	60%	100%	100%	80%	80%
Movie Theater	60%	100%	0%	0%	80%	100%	0%	0%
Bar or Nightclub	40%	100%	90%	0%	50%	100%	90%	0%
Restaurant	80%	100%	50%	50%	85%	100%	25%	25%
Restaurant - Fast Food	100%	90%	15%	15%	100%	80%	15%	15%
Office or Financial	100%	10%	0%	5%	15%	0%	0%	0%
Retail Sales / Services	100%	80%	0%	0%	100%	60%	0%	0%
Visitor Accommodations	75%	100%	100%	100%	75%	100%	100%	100%

NOTES: ¹² If one or more of the land uses proposed to make use of shared parking facilities do not conform to the land use classifications in this table, as determined by the director, then the applicant shall submit sufficient data to indicate the periods of peak parking demand for the uses. Based on this information, the traffic engineer shall determine the appropriate shared parking requirement.

d. **Distance to Parking Spaces**

Shared parking spaces for residential units shall be located within 500 feet of the dwelling unit entrance they serve. Shared spaces for other uses shall be within 800 feet of a primary entrance of the uses served. The traffic engineer and the director may approve a portion of shared parking spaces at a greater distance based on factors such as the pedestrian environment, availability of attendant parking, weather protection, and the type of use served.

e. **Pedestrian Connection**

Clear and safe pedestrian walkways shall connect the shared parking facility and the primary entrances of the uses it serves. The traffic engineer may require pedestrian street crossing improvements.

f. **Separation by Streets**

Separation of a use and its shared parking facility by a local street is allowed. Shared parking spaces shall not be separated from the served use by a collector or greater classification street, unless approved by the traffic engineer with

1 consideration of the ease and safety of pedestrian access, or as specifically
2 allowed by a comprehensive plan element specific to an area or district.

3 **g. Residential Neighborhoods**

4 A nonresidential use shall not participate in a shared parking facility that is
5 located in a residential district, if the use itself is not permitted in the residential
6 district.

7 **h. Instructional Signs**

8 The shared parking facility shall provide instructional signs on the premises
9 indicating the availability of the facility for patrons of the uses it serves.

10 **i. Shared Parking Plan**

11 A shared parking plan shall be submitted for review and approval by the traffic
12 engineer and the director. The shared parking plan may be combined with other
13 parking plans required by this title.

14 **j. Changes in Use or Shared Parking Facility**

15 Any subsequent change to the shared parking facility or in use type shall require
16 a review by the department and the traffic engineer for compliance with this
17 section, including proof that sufficient parking will be available. Any change shall
18 be approved prior to being implemented.

19 **k. Expiration**

20 Notwithstanding F.1.a. above, a shared parking agreement may be recorded for
21 a time certain period, not to be less than ten years. At the end of the life of the
22 agreement, property owners who are parties to the agreement shall comply with
23 all provisions of this code governing the required number of off-street parking
24 spaces.

25 **17. Off-Site Parking**

26 The traffic engineer and the director may approve the location of required parking spaces
27 on a separate lot from the principal use if the off-site parking complies with all of the
28 following standards:

29 **a. Accessible Parking Spaces**

30 Required accessible parking spaces shall not be located off-site.

31 **b. Location**

32 The maximum distance between off-site parking spaces and the use(s) served
33 shall be the same as provided in subsection 21.07.090F.16.d. for sharing parking
34 spaces (measured along the shortest legal pedestrian route). Separation of a
35 use and its off-site parking spaces by a street shall be subject to subsection
36 21.07.090F.16.f.

37 **c. Pedestrian Connection**

38 Clear and safe pedestrian walkways shall connect the off-site parking facility and
39 the primary entrance(s) of the uses served. The traffic engineer may require
40 sidewalk or pedestrian crossing improvements to enhance pedestrian safety or
41 mobility to and from the off-site parking.

42 **d. Instructional Signs**

43 Instructional signs shall be posted on the principal site providing notice of the
44 availability and location of additional parking. The off-site parking facility shall
45 provide instructional signs indicating the availability of the facility for patrons of
46 the uses it serves.

1 e. **Residential Neighborhoods**

2 A nonresidential use shall not participate in an off-site parking facility that is
3 located in a residential district, if the use itself is not permitted in the residential
4 district.

5 **18. District Parking**

6 The traffic engineer may reduce the minimum number of required off-street parking
7 spaces for uses within the boundaries of a municipally recognized public parking district
8 that provides off-site parking facilities to serve an area. To determine eligibility for this
9 reduction or the size of the reduction to be allowed, the traffic engineer shall consider
10 factors such as:

11 a. Peak hours of use and turnover rate;

12 b. The ability of the use to meet the parking requirement through other means;

13 c. The availability of spaces in the nearby district parking facility;

14 d. The relative distance to the use from the district parking facility; and

15 e. Measures provided by the applicant to ensure employee and patron use of the
16 district parking facility, and ease and safety of pedestrian access.

17 **19. On-Street Parking**

18 If approved by the traffic engineer, on-street parking spaces in the street or right-of-way
19 abutting the frontage of the site may be counted toward the minimum required number of
20 off-street parking spaces, including guest parking spaces. In addition, as determined by
21 the traffic engineer, a portion of the remaining on-street parking spaces located within the
22 maximum distance provided in subsection 21.07.090F.16.d. for shared parking spaces
23 may be counted toward the minimum required off-street parking spaces, in an amount
24 consistent with a fair apportionment of on-street parking spaces among the properties on
25 the street. Upon approval, each on-street space may be substituted for one required off-
26 street space. The provisions apply only to street frontages where on-street parking is
27 allowed. Determination of the location and dimensions of on-street parking spaces to be
28 counted toward the parking requirement shall be the authority of the traffic engineer
29 based on a review of the situation. The street curb next to on-street parking spaces shall
30 be a vertical curb (not a rolled curb), and a sidewalk shall extend the full length of the
31 subject property.

32 **20. Stacked and Tandem Parking**

33 a. **Nonresidential Uses**

34 Stacked and tandem parking spaces for nonresidential uses are allowed to count
35 toward the minimum number of required spaces if the owner ensures through the
36 parking agreement that attendant parking is provided for such spaces. An
37 accessible passenger loading zone shall be provided with attendant parking
38 services at or near a primary entrance. Availability of this service shall be
39 conspicuously posted inside and outside the primary entrance. The traffic
40 engineer may waive the parking attendant requirement for automated parking
41 structures.

42 b. **Residential Uses**

43 Two required parking spaces for any residential dwelling may be arranged in
44 tandem or stacked one above the other using a car stacker, so long as parking
45 required for the dwelling unit is arranged independently from parking serving any
46 other dwelling unit, with unobstructed vehicle access for at least one of the

spaces required for each dwelling unit, and the owner assigns the two spaces toward the same dwelling and enforces their assigned use.

21. Smaller Parking Spaces for Parking Structures and Low-Turnover Uses

If approved by the traffic engineer, up to 20 percent of the total number of required parking spaces located in a parking structure and/or designated for employee or resident parking only may be eight feet six inches wide, subject to the requirements of table 21.07-7, *Parking Space and Aisle Dimensions*. Such spaces shall be signed for employee or resident parking only.

22. Bicycle Parking

A use is eligible to permanently or seasonally substitute bicycle parking spaces for required automobile parking spaces. Each automobile parking space shall be replaced by a minimum of six bicycle parking spaces not required by this title. Bicycle parking spaces shall comply with the standards of subsection 21.07.060F.15. and be separated from motor vehicle areas by bollards or other physical buffer approved by the traffic engineer.

23. Other Eligible Reductions or Alternatives

The traffic engineer and the director may approve any parking reduction or other alternative in addition to the choices above, or that increases the percentage reduction in any of the choices above, if the applicant demonstrates to the satisfaction of the traffic engineer and the director that the proposed parking management strategy will protect surrounding neighborhoods, and maintain traffic circulation patterns at least the same extent as would strict compliance with otherwise applicable off-street parking standards. Additional parking management strategies may include, for example, transportation demand programs, car sharing, unbundled parking, or a combination of strategies. The applicant shall provide a parking demand study prepared in a form and manner prescribed by the traffic engineer that demonstrates a reduction is appropriate based on the expected parking needs of the development, availability of transit, and similar factors. It shall be determined that:

- a. The use will be adequately served by the proposed parking due to project location, transportation characteristics of the persons residing, working, or visiting the site, or because the applicant has undertaken a program or strategy that will reduce parking demand at the site; and
- b. Parking demand generated by the project will not exceed the capacity of or have a detrimental impact on the supply of on-street parking in the surrounding area.

G. Off-Street Loading Requirements

No building or structure used for any use specified in the loading column of table 21.07-4 shall be erected, nor shall any such existing building or structure be altered so as to increase its gross floor area by 25 percent or more, without prior provision for off-street loading berth in conformance with the following minimum requirements:

1. Types of Loading Berths

Required off-street loading shall be provided in berths that conform to the following minimum specifications:

- a. Type A berths shall be at least 60 feet long by 10 feet wide by 14 feet six inches high, inside dimensions.
- b. Type B berths shall be at least 30 feet long by 10 feet wide by 14 feet six inches high, inside dimensions.

c. Type C berths shall be located in the rear of a lot and utilize part of an adjacent alley. The building setback shall be a minimum of five feet from the property line along the alley for the entire width of the lot.

2. Number of Spaces

The following numbers and types of berths shall be provided for the specified uses in table 21.07-6, *Off-Street Loading Berths*; provided, however, that, in any DT district, or in any mixed-use development where an alley is available that is not shared with any adjacent R-1, R-1A, R-2A, R-2D, R-2M, or R-3 zoned residential lot, one type C berth may be substituted for one type B berth. The uses specified in this subsection shall include all structures designed, intended, or arranged for such use.

TABLE 21.07-6: OFF-STREET LOADING BERTHS			
Use	Aggregate Gross Floor Area (square feet) or Number of Dwelling Units	Berths Required	Type
Residential Uses			
Multifamily and mixed-use dwellings	50-149 dwelling units in a structure	1	B
	150-249 dwelling units in a structure	2	B
	Each additional 100 dwelling units or portion thereof	1 additional	B
Community Uses			
Cultural facilities	24,000--50,000	1	B
	50,001--100,000	2	B
	Over 100,000, each additional 50,000 or fraction thereof	1 additional	B
Educational facilities	Over 25,000	1	B
Health care facilities	25,000--100,000	1	B
	Over 100,000	2	B
Railroad freight terminals and other transportation facilities	12,000--36,000	1	A
	36,001--60,000	2	A
	60,001--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A
Commercial Uses			
Assembly uses	25,000--150,000	1	B
	150,001--400,000	2	B
	Each additional 250,000 or fraction thereof	1 additional	B
All commercial establishments not otherwise specified	10,000 --24,000	1	B
	24,001--50,000	2	B
	50,001--100,000	3	B
	Over 100,000, each additional 50,000 or fraction thereof	1 additional	B

TABLE 21.07-6: OFF-STREET LOADING BERTHS

Use	Aggregate Gross Floor Area (square feet) or Number of Dwelling Units	Berths Required	Type
Visitor accommodations, health services, and office uses	25,000--40,000	1	B
	40,001--100,000	2	B
	Each additional 100,000 or fraction thereof	1 additional	B
Industrial Uses			
All industrial uses	12,000--36,000	1	A
	36,001--60,000	2	A
	60,001--100,000	3	A
	Each additional 50,000 or fraction thereof	1 additional	A

3. Uses Not Specifically Mentioned

In the case of a use not specifically mentioned in this section, the requirements for off-street loading berths shall be the same as the use mentioned in this section which, in the opinion of the director, is most similar to the use not specifically mentioned.

4. Concurrent Different Uses

When any proposed structure will be used concurrently for different purposes, the loading requirements shall be the total requirements for each use based upon its aggregate gross floor area, unless otherwise approved by the traffic engineer and the director.

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, except as provided in subsection 21.07.090G.1.c. for type C loading berths. Where parking facilities are not allowed between a building and a street, loading berths are also not allowed.

6. Manner of Using Loading Areas

No loading berth shall be so located that a parked vehicle or tractor-trailer using such loading berth projects into any street or across a required pedestrian facility or sidewalk. Loading berths shall be provided with access to an alley, or, if no alley abuts the lot, with access to a street. Any required front, side, or rear setback may be used for loading unless otherwise prohibited by this title. Design and location of entrances and exits for required off-street loading berths shall be subject to the approval of the traffic engineer.

7. Signs

The owners of the property shall provide, locate, and maintain loading signs as specified by the traffic engineer. Such signs shall not be counted against allowed advertising sign area or number.

H. Parking and Loading Facility Design Standards

1. Purpose

The parking and loading facility design standards promote vehicle areas which are safe, efficient, convenient, and attractive for motorists and pedestrians. Parking facility locations within a site are encouraged to be located elsewhere than the front area between the building and its street frontage, in order to enhance the function, character,

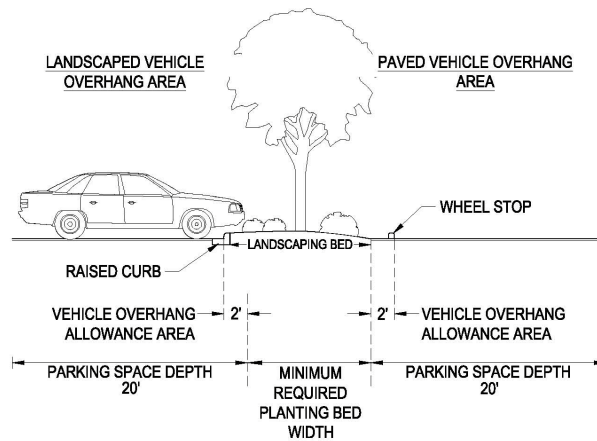
1 and walkability of the area. These design standards also enhance the compatibility of
 2 parking and loading facilities with their surroundings.

3 **2. Applicability**

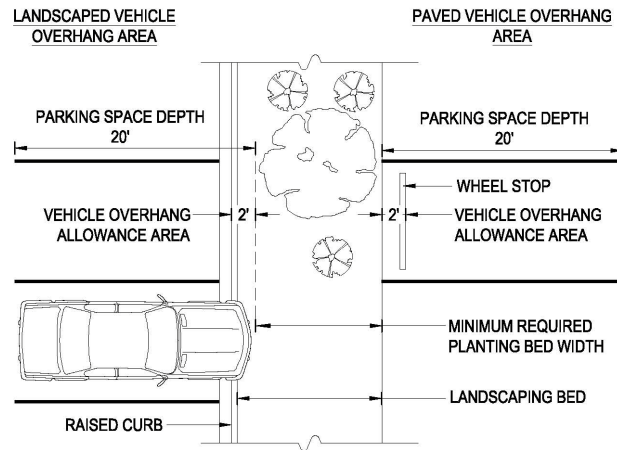
4 These standards apply to any parking facility or loading facility including all parking
 5 spaces in a development, except where stated otherwise. A temporary parking lot shall
 6 comply with all applicable development requirements of this title for surface parking lots
 7 and parking lot landscaping, except when associated with another temporary use
 8 permitted pursuant to section 21.05.080.

9 **3. Landscaping and Screening**

10 Parking and loading facilities shall comply with the landscaping provisions of section
 11 21.07.080. If the loading facilities are adjacent to the lot line, a maximum of 35 percent of
 12 one side of the loading area perimeter landscaping and the site perimeter landscaping
 13 may be replaced by a screening fence of a minimum height of six feet. That area for the
 14 proposed screening fencing shall only be located where adjacent to a loading area and/or
 15 dumpster screening area, and shall not be located adjacent to a residentially zoned
 16 parcel or a street. Provisions for location and screening of refuse containers and other
 17 elements are in section 21.07.080. No automobile or bicycle parking facility or loading
 18 facility shall be permitted in any required landscaping area. No vehicle overhang
 19 allowance area, as measured in table 21.07-7, may extend into the minimum required
 20 planting bed width of required landscaping. See figures that follow.



**VEHICLE OVERHANG AND REQUIRED LANDSCAPING
 SECTION VIEW (90° ANGLE PARKING SPACE)**

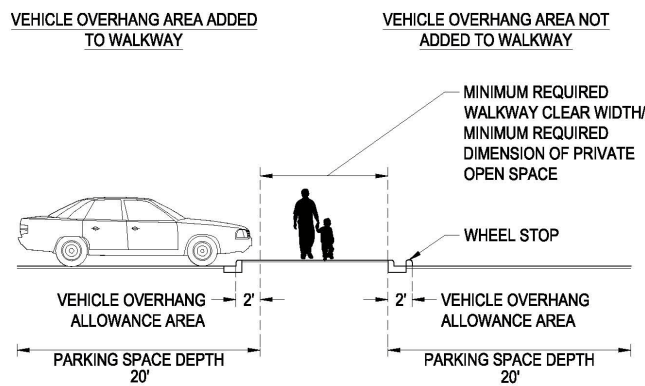


VEHICLE OVERHANG AND REQUIRED LANDSCAPING
 PLAN VIEW (90° ANGLE PARKING SPACE)

- 1 **4. Drainage and Storm Water Management**
- 2 Parking and loading facilities shall comply with the parking and loading related provisions
- 3 of section 21.07.040, *Drainage, Storm Water Treatment, Erosion Control, and Prohibited*
- 4 *Discharges*.

- 5 **5. Exterior Lighting**
- 6 Parking and loading areas shall comply with the exterior lighting provisions of section
- 7 21.07.100.

- 8 **6. Pedestrian Access and Circulation**
- 9 Parking and loading facilities shall comply with the provisions of subsection 21.07.060E.,
- 10 *Pedestrian Facilities*. No vehicle overhang allowance area, as measured in table
- 11 21.07-7, may extend into the minimum required dimension of required walkways,
- 12 pedestrian areas, or private open space. See figure that follows.



VEHICLE OVERHANG AND REQUIRED PEDESTRIAN FACILITIES

- 13 **7. Relationship to Buildings**
- 14 **a. Nonresidential Buildings**
- 15 Parking spaces and parking aisles shall be separated from any nonresidential
- 16 building by a walkway or site enhancement landscaping planting area, or both, of
- 17 at least four feet in width. Other motor vehicle areas shall also be subject to this

1 requirement only where the traffic engineer determines it necessary for a safe
2 pedestrian walkway route between a building entrance or parking lots.
3 Otherwise, loading berths, rear service areas, motor vehicle entrance and service
4 bays, queuing lanes, and drive-throughs are exempt.

5 **8. Vehicular Access and Circulation**

6 Parking lots and structures shall be designed for a safe and orderly flow of traffic
7 throughout the site, as provided in the subsections that follow.

8 **a. Key Elements**

9 The parking facility layout, circulation, and design plan shall address the following
10 elements as they relate to parking lots, including but not limited to: fire lanes,
11 emergency access, drive-throughs, queuing spaces, passenger loading zones,
12 pedestrian circulation, and loading berths.

13 **b. Circulation Patterns**

14 Internal circulation patterns and the location and traffic direction of all circulation
15 aisles, driveways, and queuing lanes shall be designed and maintained in
16 accordance with the municipal driveway standards currently established by the
17 traffic engineer, and with accepted principles of traffic engineering and safety, per
18 the traffic engineer's review based on the current manuals of the Institute of
19 Transportation Engineers and the Urban Land Institute, and the *Manual of*
20 *Uniform Traffic Control Devices* or the successor documents. Circulation
21 patterns within parking facilities shall be well defined with pavement marking and
22 signage, curbs, landscaping, landscaped islands, and/or other similar features.
23 In order to define circulation and provide better sight distance, curbed end
24 islands shall be required at the end of each row of parking spaces. Where
25 loading facilities or on-site refuse collection are provided, commercial truck
26 circulation shall be considered, and truck turning radii shall be shown on the
27 parking facility layout, circulation, and design plan when required by the traffic
28 engineer.

29 **c. Parking Spaces Along Major Site Entrance Drives**

30 The provision, location, design, and dimensions of parking spaces on a major
31 access driveway that serves as an entry or exit for a large establishment with
32 multiple lots, tracts, or businesses, shall conform to municipal standards for on-
33 street parking and be subject to review and approval by the traffic engineer.

34 **d. Parking Lot Entries/Driveways**

35 Entries and driveways providing access to parking lots shall conform to the
36 municipal driveway standards currently established by the traffic engineer.
37 Access to streets owned by the state of Alaska requires compliance with state
38 driveway standards, department of transportation and public facilities approval,
39 and a current valid state of Alaska driveway permit. Ingress and egress to
40 parking facilities shall be designed to maintain adequate sight distance and
41 safety and as prescribed in the municipal driveway standards.

42 **i. Residential Uses**

43 Residential driveway entrances shall comply with subsection
44 21.07.110G.3., *Driveway Width*.

45 **ii. Nonresidential Uses**

46 The total width of driveway entrances to a nonresidential lot from a street
47 shall not exceed 40 percent of the frontage of the lot, or 33 percent of the
48 frontage if the platting authority or traffic engineer finds that conditions

warrant it, unless the applicant provides for snow storage in a manner approved by the decision-making body.

e. *Parking and Maneuvering*

All circulation aisles, driveways, and vehicle maneuvering areas required by this section shall be located entirely off-street and on the property unless specifically provided otherwise by this section.

i. *Access to Parking Spaces*

To ensure safe and efficient vehicular access to parking spaces, each off-street parking space shall open directly on a parking aisle or driveway of such width and design as provided in table 21.07-7 and the illustrations that follow the table. Adequate ingress and egress to each parking space shall be provided without backing more than 25 feet.

ii. *Maneuvering Area*

Off-street parking facilities shall be designed with sufficient maneuvering room so that all maneuvers associated with the parking shall occur in the off-street parking facility, and that all vehicles enter the abutting street in a forward motion.

iii. *Some Dwellings Exempted*

Single-family, two-family, townhouse, and mobile home dwellings on individual lots shall be exempted from this subsection.

iv. *Loading Berth Maneuvering*

Vehicle maneuvering for loading berths shall be subject to the requirements of subsection 21.07.090G.6., *Manner of Using Loading Areas*.

f. *Dead-End Parking Aisles*

Dead-end parking aisles may be allowed only with the approval of the traffic engineer.

g. *Alleys*

Subject to safety approval by the traffic engineer, the usable portion of an alley may be credited as circulation and/or parking aisle space.

h. *Cross Access and Joint Access with Adjacent Sites*

The plan shall show existing parking and circulation patterns on adjacent properties and potential connections. Required parking lots serving a site, whether located on that same lot or on an adjacent lot, may be connected by means of a common access driveway within or between the interior of such lots. Applicants are encouraged to provide shared vehicle and pedestrian access to adjacent properties for convenience, safety, and efficient circulation. An access easement shall be provided on the plat, or a shared access agreement running with the land shall be recorded by the municipality, as approved and executed by the director, guaranteeing the continued availability of the shared access between the properties.

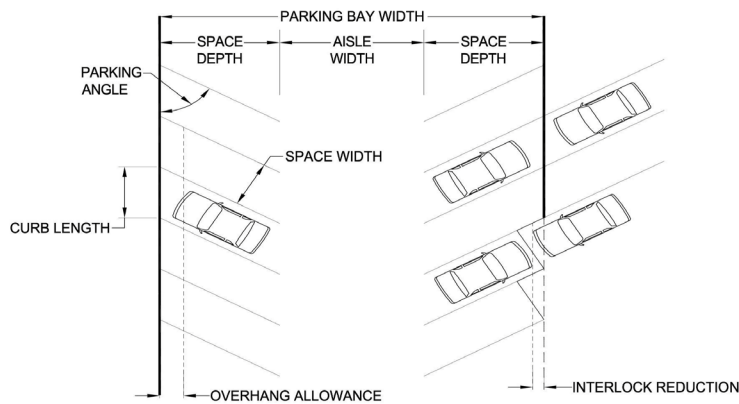
9. *Dimensions of Parking Spaces and Aisles*

The minimum dimensions for parking spaces and parking aisles shall be as provided in table 21.07-7, and calculated as depicted in the figures that follow the table. The minimum parking space width shall be 9'0" except as provided elsewhere in this section. The parking configuration stated in the following table and figures shall apply to all off-street parking, except as stated elsewhere in this section.

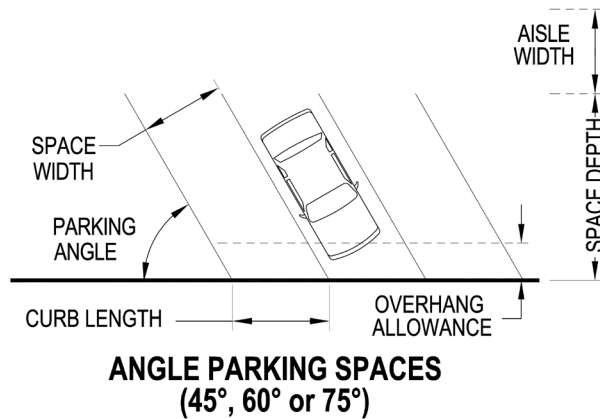
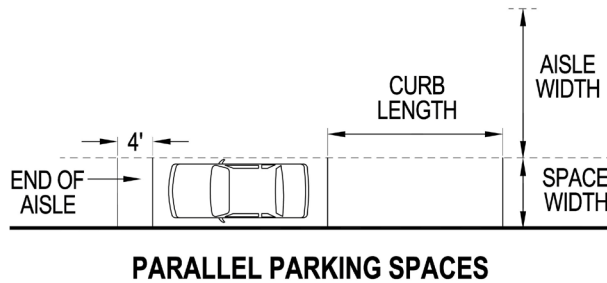
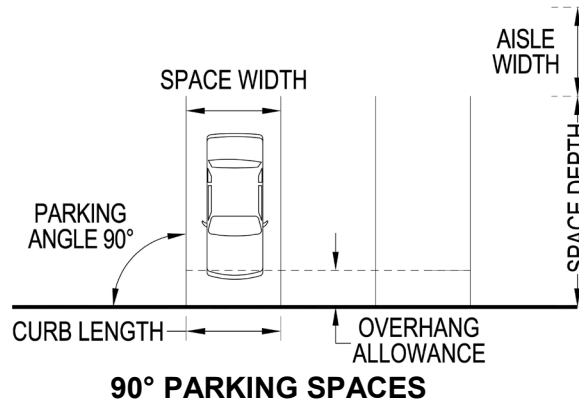
TABLE 21.07-7 PARKING ANGLE, STALL, AND AISLE DIMENSIONS

Parking Angle	Space Width	Curb Length (Width Projection)	Space Depth (Vehicle Projection)	Aisle Width 1-way	Aisle Width 2-way	Typical Parking Bay Width (Module)	Interlock Reduction	Over-hang Allowance
0 (parallel)	8' 6"	23' 0"	8' 6"	12' 6"	24	41' 0"	0' 0"	0' 0"
	9' 0"	23' 0"	9' 0"	12' 0"	24	42' 0"	0' 0"	
	9' 6"	23' 0"	9' 6"	12' 0"	24	43' 0"	0' 0"	
	10' 0"	23' 0"	10' 0"	12' 0"	24	44' 0"	0' 0"	
45	8' 6"	12' 0"	18' 9"	12' 6"	24	61' 6"	3' 0"	1' 5"
	9' 0"	12' 9"	20' 6"	12' 0"	24	65' 0"	3' 2"	
	9' 6"	13' 5"	20' 10"	12' 0"	24	65' 9"	3' 4"	
	10' 0"	14' 2"	21' 3"	12' 0"	24	66' 5"	3' 6"	
60	8' 6"	9' 10"	19' 10"	18' 6"	24	63' 8"	2' 2"	1' 8"
	9' 0"	10' 5"	21' 10"	18' 0"	24	67' 8"	2' 3"	
	9' 6"	10' 12"	22' 1"	18' 0"	24	68' 2"	2' 5"	
	10' 0"	11' 7"	22' 4"	18' 0"	24	68' 8"	2' 6"	
75	8' 6"	8' 10"	19' 7"	19' 6"	24	63' 2"	1' 1"	1' 11"
	9' 0"	9' 4"	21' 8"	19' 0"	24	67' 4"	1' 2"	
	9' 6"	9' 10"	21' 9"	18' 6"	24	67' 7"	1' 3"	
	10' 0"	10' 4"	21' 11"	18' 0"	24	67' 10"	1' 5"	
90	8' 6"	8' 6"	18' 0"	23' 6"	24	60' 0"	0' 0"	2' 0"
	9' 0"	9' 0"	20' 0"	23' 0"	24	64' 0"	0' 0"	
	9' 6"	9' 6"	20' 0"	22' 0"	24	64' 0"	0' 0"	
	10' 0"	10' 0"	20' 0"	22' 0"	24	64' 0"	0' 0"	

1



PARKING DIMENSIONS



- 1 a. **Parking Angle**
 2 Parking angles between zero and 45 degrees and between 75 and 90 degrees
 3 are not permitted, except as approved by the traffic engineer. Angles between
 4 45 and 75 degrees are permitted. The dimensions for such angles shall be
 5 calculated by the applicant using a method prescribed by the traffic engineer.
 6 The angle parking spaces diagram above, including the elements of a parking
 7 space that it depicts relative to the required space dimensions in table 21.07-7,
 8 are equally applicable to either front-in or back-in angle parking spaces.
- 9 b. **Parking Aisle Width**
 10 Where the parking angle differs across a one-way parking aisle, the greater
 11 required parking aisle width shall be provided. In the case of on-street parking,

- 1 the parking aisle width is replaced by the street's travel lane, and municipal street
2 standards for street land widths apply.
- 3 **c. *Reduction in Parking Space Depth Due to Interlock***
4 Parking space depth (vehicle projection) may be reduced through the use of
5 interlock between angled parking bays as shown in the parking dimensions
6 figure. The amount of reduction in the parking space depth shall be as provided
7 in the interlock reduction column of table 21.07-7. The parking angle of the
8 abutting parking bays shall be equal in order to use the interlock reduction.
- 9 **d. *Overhang Allowance with a Parking Space***
10 The maximum overhang allowance shall be as shown in table 21.07-7 and the
11 figures that follow it. The distance between the end of the parking space and the
12 face of any raised curb or wheel stop used in the parking space shall be equal to
13 (no greater or less than) the overhang allowance provided in table 21.07-7. The
14 relationship between the overhang allowance and adjacent required landscaping
15 and pedestrian facilities is established in subsections 21.07.090H.3. and H.6.
16 Surfacing options for the overhang allowance area of the parking space are
17 provided in subsection 21.07.090H.12b.6., *Paving Alternatives*.
- 18 **e. *Parking Spaces Abutting a Wall, Fence, or Other Obstruction***
19 Minimum required parking space dimensions shall be clear of all obstructions,
20 other than wheel and curb stops and structural columns that meet the
21 requirements of subsection 9.f. below. When the length of a parking space abuts
22 a wall, fence, or other obstruction, the required width of the parking space shall
23 be increased by one foot for each side with an obstruction. The parking space
24 angle and dimension requirements shall apply to the inside dimension of a
25 parking space abutting an obstruction.
- 26 **f. *Structural Columns***
27 A structural column may encroach into the width of a parking space by up to one
28 foot if the column is located within four feet of either end of the parking space.
29 Such column shall not be located within one foot of the drive aisle.
- 30 **g. *Minimum Vertical Clearance***
31 A minimum height of 14 feet shall be maintained clear of obstructions from any
32 parking lot surface to any structure or landscape feature above that may interfere
33 with the safe passage of vehicles. The minimum vertical clearance for a
34 structured parking facility, carport, or garage shall be seven feet four inches,
35 except as follows:
- 36 i. The minimum vertical clearance for van accessible parking spaces,
37 access aisles serving them, and vehicle routes to the van accessible
38 spaces shall be eight feet two inches.
- 39 ii. The minimum vertical clearance for passenger loading zones including
40 vehicular pull-up spaces, access aisles serving them, and a vehicular
41 route between an entrance and exit and the passenger loading zone
42 shall be nine feet six inches.
- 43 **h. *Smaller Parking Spaces for Low Turnover Uses***
44 Reduced parking space dimensions may be approved by the traffic engineer
45 pursuant to subsection F.21. above.

- 1 i. **Recreational Vehicle Spaces**
2 Parking spaces for recreational vehicles, if provided and delineated, shall be a
3 minimum of 10 feet wide by 40 feet long.
- 4 j. **Stacked, Automated, or Tandem Spaces**
5 The traffic engineer may approve reduced parking space dimensions for stacked
6 parking spaces, and/or tandem spaces in an attendant parking facility.
- 7 10. **Parking Facility Maintenance**
8 a. Paved surface parking lots with 20 or more spaces shall be cleaned annually, or
9 as otherwise required by the current MS4 permit, including once following spring
10 melt prior to June 1 or as snowmelt conditions permit, in a manner that meets air
11 quality and water quality standards.
- 12 b. On-site storm water detention and runoff facilities serving parking facility runoff
13 shall be cleaned and maintained in a functional manner, or as otherwise required
14 by the current MS4 permit.
- 15 c. Grit or oil and water separator devices shall be cleaned and maintained in a
16 functional manner, or as otherwise required by the current MS4 permit.
- 17 11. **Maximum Grade of Surface Parking Lots**
18 The maximum grade for any parking space or circulation aisle shall be five percent,
19 except that for accessible spaces the maximum grade shall be two percent, as required
20 by the Americans with Disabilities Act. Circulation aisles that are covered or heated may
21 have an increased maximum grade with the approval of the traffic engineer.
- 22 12. **Paving**
23 a. **Material**
24 Except as provided below, all parking spaces, loading berths, driveways, and
25 other motor vehicle driving surfaces shall be paved and maintained with dustless,
26 all-weather, hard materials appropriate for the municipality's sub-arctic
27 environment, and equal in strength to two inches municipal Type E asphaltic
28 concrete and a base material suitable for the intended traffic, to standards
29 prescribed by the municipal engineer or as otherwise approved by the traffic
30 engineer.
- 31 b. **Paving Exceptions and Alternatives**
32 The traffic engineer may approve the following exceptions and alternatives to the
33 paving requirement, provided that the first 50 feet of a driveway, as measured
34 from the edge of the street travelled way, shall be paved if connecting to a paved
35 public street. This length is reduced to 15 feet for single-family and two-family
36 uses. Where a driveway throat is less than 50 feet, the traffic engineer may
37 approve an alternative driveway surface that effectively reduces or eliminates the
38 tracking of sediment onto paved public streets.
- 39 i. **Use-Specific Exceptions**
40 Certain uses may use gravel in lieu of paving, as specified in chapter
41 21.05.
- 42 ii. **Exceptions for Small Parking Lots in Class B Districts**
43 Parking lots of 10 spaces or fewer in class B districts may instead be
44 surfaced with a layer of crushed rock of no more than one inch in
45 diameter, to a minimum depth of three inches.

- 1 iii. *Exceptions for Some Vehicle Storage Areas*
2 Outdoor vehicle storage areas associated with a self-storage facility use;
3 storage, sales, or rental of heavy equipment; seasonal large vehicle
4 storage; and tractor trailer storage areas not used for loading berths,
5 loading berth maneuvering, access to bay doors, site access, or parking
6 need not be paved. Such areas are still subject to the drainage
7 requirements of subsection 21.07.040.
- 8 iv. *Exceptions for Parks and Open Spaces*
9 Subject to review and approval by the traffic engineer, some required
10 parking spaces for parks facilities that are demonstrated to have a highly
11 variable seasonal demand need not be paved.
- 12 v. *Paving Alternatives*
13 Pervious alternatives to the specified surface may be used, subject to
14 approval by the traffic engineer. All surfacing shall control dust, treat
15 storm water to municipal standards, and be such that rock and other
16 debris is not tracked off-site. If, after construction, the traffic engineer
17 determines that the alternative is not adhering to these requirements, the
18 surface shall be replaced.
- 19 vi. *Landscaping in Lieu of Paving*
20 The vehicle overhang allowance portion of the parking space depth as
21 measured in table 21.07-7 and illustrated in the figures following the
22 table, may be landscaped with a low-growth, hardy plant material in lieu
23 of paving, allowing a bumper overhang while maintaining the required
24 parking dimensions. Landscaped overhang allowance areas may be
25 contiguous with required landscaping but shall not be counted toward the
26 minimum required planting bed width.
- 27 vii. *Exception for Temporary Parking Lots*
28 Temporary parking lots associated with another temporary use pursuant
29 to section 21.05.080, need not be paved, unless required by the traffic
30 engineer.

31 **I. Passenger Loading Zones**

32 All institutional, entertainment, and commercial uses such as schools/daycare, stadiums, and
33 theaters that have high-volume peak traffic volumes shall provide an area for drop-offs and pick-
34 ups that meets the following requirements:

35 **1. Passenger Loading Zone**

36 In addition to the required minimum number of parking spaces established in subsection
37 21.07.090E., the traffic engineer may require one or more passenger loading zone
38 spaces, depending on the type, intensity, and traffic patterns of the proposed use. The
39 passenger loading zone for large commercial establishments or other intensive uses may
40 be required by the traffic engineer to include one or more spaces dedicated to taxi cabs
41 and/or other specialized high occupancy vehicles.

42 **2. Passenger Loading Zone Dimensions**

43 Any passenger loading zone that is provided for a development shall consist of one or
44 more passenger drop-off/pick-up spaces parallel to the driveway or circulation aisle
45 adjacent to the building. Each space shall be a minimum of 20 feet in length and eight or
46 more feet in width, with an access aisle at least five feet wide abutting the full length of
47 the space. As an alternative, subject to approval of the traffic engineer, a passenger

loading zone may consist of one or more parking spaces that meets the accessible parking space dimensional standards of subsection 21.07.090J.7.

3. Plan

The parking facility layout, circulation, and design plan shall show the location and design of proposed passenger loading zones. For certain intensive uses, the traffic engineer may require the plan to include a traffic control plan addressing projected usage, hours of operation, peak loading/unloading time, plans for directing traffic, safety measures, and other information deemed necessary by the traffic engineer to designing a safe and well-functioning drop-off area.

4. Accessible Route

An accessible pedestrian route to the building or facility entrance shall be provided pursuant to subsection 21.07.090J.9., *Accessible Routes*.

5. Schools

Passenger loading zones shall be required for schools (public or private). Length, location, and design of the passenger loading zones shall be approved by the traffic engineer.

J. Accessible Parking Spaces

1. Required Number of Accessible Parking Spaces

A portion of the total number of parking spaces provided in each parking facility for commercial, industrial, community, multifamily, and mixed-use residential uses shall be accessible parking spaces. The number of accessible parking spaces shall be determined based on the total number of parking spaces provided, in accordance with table 21.07-8, *Accessible Parking Spaces*, except where otherwise stated in this section.

TABLE 21.07-8: ACCESSIBLE PARKING SPACES		
Total Parking Spaces Provided	Total Accessible Spaces Required	Number of Accessible Spaces that shall be Van-Accessible
1 to 25	1	1
26 to 50	2	1
51 to 75	3	1
76 to 100	4	1
101 to 150	5	1
151 to 200	6	1
201 to 300	7	2
301 to 400	8	2
401 to 500	9	2
501 to 1000	2 percent of total	1 for every 6 accessible spaces
1001 and over	20 plus 1 for each 100 over 1000	1 for every 6 accessible spaces

2. Passenger Loading Zones Attendant Parking

If passenger loading zones are provided, then at least one passenger loading zone shall be an accessible passenger loading zone. The requirements of table 21.07-8 do not apply to attendant parking spaces.

- 1 **3. Multifamily and Mixed-Use Residential**
2 Two percent, but not less than one space, of the parking spaces provided for a
3 multifamily or mixed-use residential development with type A and type B dwelling units as
4 defined in AMC title 23 shall be accessible.
- 5 **4. Medical Facilities**
6 At least 10 percent of patient and visitor parking spaces provided to serve hospital
7 outpatient facilities shall be accessible. At least 20 percent of patient and visitor parking
8 spaces provided to serve rehabilitation facilities and outpatient physical therapy facilities
9 shall be accessible.
- 10 **5. Location**
11 Accessible parking spaces shall be located on the shortest accessible route of travel from
12 adjacent parking to an accessible primary entrance. The accessible route of travel shall
13 not pass behind parking spaces. In parking facilities that do not serve a particular
14 building, accessible parking spaces shall be located on the shortest accessible route of
15 travel to an accessible pedestrian entrance of the parking facility. In buildings with
16 multiple accessible primary entrances with adjacent parking, accessible parking spaces
17 shall be dispersed and located closest to the accessible entrances.
- 18 **6. Location—Exceptions**
19 In multilevel parking structures, van accessible parking spaces are permitted to be
20 located on one level. Accessible parking spaces shall be permitted to be located in
21 different parking facilities if it is demonstrated to the traffic engineer that substantially
22 equivalent or greater accessibility is provided in terms of distance from an accessible
23 entrance(s), parking fee, and user convenience.
- 24 **7. Dimensions**
25 Car accessible spaces shall be at least eight feet wide with an access aisle at least five
26 feet wide abutting the space. Van accessible spaces shall be at least eight feet wide with
27 an abutting access aisle at least eight feet in width. Two accessible parking spaces may
28 share a common access aisle.
- 29 **8. Maximum Grade**
30 Accessible parking spaces and access aisles shall have surface slopes not exceeding
31 two percent in all directions.
- 32 **9. Accessible Routes**
33 **a. Location**
34 At least one accessible route to the building or facility entrance shall be provided
35 from accessible parking and passenger loading zones.
- 36 **b. Surface Textures**
37 Ground surfaces along accessible routes shall be stable, firm, and slip-resistant.
- 38 **c. Changes in Levels**
39 Changes in level up to one-fourth inch may be vertical and without edge
40 treatment. Changes in level between one-fourth inch and one-half inch shall be
41 beveled with a slope no greater than one to two. Changes in level greater than
42 one-half inch shall be accomplished by means of a ramp.
- 43 **d. Gratings**
44 If gratings are located in walking surfaces on an accessible route, then they shall
45 have spaces no greater than one-half inch wide in one direction. If gratings have
46 elongated openings, then they shall be placed so that the long dimension is
47 perpendicular to the dominant direction of travel.

1 e. **Ramps**

2 ADA ramps cannot protrude into the ADA access aisle. Ramp details shall be
3 included on the plans.

4 **10. Signs and Striping**

5 Each accessible parking space shall be designated as reserved by pavement markings
6 and a sign showing the symbol of accessibility. Van-accessible spaces shall have an
7 additional sign reading "Van-Accessible" mounted below the symbol of accessibility.

8 a. Signs shall be located so that they do not obstruct the ramps or other pedestrian
9 access.

10 b. An accessible parking sign detail shall be included in the plan submittal per
11 M.A.S.S.

12 c. All accessible spaces and aisles shall be striped with blue paint to color
13 specifications prescribed by the *Manual of Uniform Traffic Control Devices*,
14 including the total length of the curb encompassing the accessible parking space
15 and accessible aisle.

16 **11. Implementation of ADA**

17 Regulations may be promulgated under section 21.03.210, *Title 21–Text Amendments*, to
18 implement the requirements of Americans with Disabilities Act of 1991 as it may be
19 amended or interpreted by federal regulation.

20 **12. Standards for Parking as Principal Use**

21 Where a parking structure or lot is a permitted principal or conditional use and is not
22 providing required parking for another principal use, accessible parking spaces in
23 accordance with this section shall be provided.

24 **K. Bicycle Parking Spaces**

25 All nonresidential, multifamily, and mixed-use dwelling developments with more than 40 parking
26 spaces required in table 21.07-4 shall provide at least four bicycle parking spaces, or a number of
27 bicycle parking spaces equal to three percent of the number of required automobile parking
28 spaces, whichever is greater.

29 **L. Vehicle Queuing Spaces**

30 The vehicle queuing space requirements of this section shall apply unless otherwise expressly
31 approved by the traffic engineer in accordance with L.7. below:

32 **1. General**

33 Uses of land and structures requiring vehicles and customers waiting in vehicles for
34 service at drive-through facilities, pump stations, auto service bays, or similar uses, shall
35 provide sufficient queuing spaces within the site to avoid impeding traffic movement in
36 the public right-of-way. Such uses shall demonstrate to the traffic engineer that sufficient
37 in-line waiting spaces are provided on-site as part of the parking plan to ensure the
38 queue does not extend into the adjacent street, and that queuing minimizes interference
39 with parking facility circulation aisles.

40 **2. Minimum Number of Queuing Spaces Leading to Service Window**

41 In addition to the minimum number of required off-street parking spaces, any use listed in
42 table 21.07-9, *Vehicle Queuing Spaces*, shall provide the number of on-site queuing
43 spaces indicated in the table for each service window. The required number of queuing
44 spaces does not include the vehicle space to be provided at the pick-up window, teller
45 machine, or other station where the service occurs.

TABLE 21.07-9: VEHICLE QUEUING SPACES

Activity Type	Minimum Queuing Spaces
Financial institution teller lane	4 before teller or window
Automated teller machine drive-through	3 before teller machine
Restaurant drive-through	With no ordering board/window, 4 before pick-up window; with ordering board/window, 4 before ordering board plus 4 between ordering board or window and pick-up window
Car wash bay, automatic	5 before entrance to car wash bay
Car wash bay or stall, self-service	2 before entrance to car wash bay or stall
Food and beverage kiosk	3 before pick-up window
Fueling station pump island	2 at each end of pump island lane
Security gate entrance for self storage or vehicle storage facility	The queuing lane before the security gate shall measure a minimum of 50 feet in length and 24 feet in width. The width of the self-storage security gate is excluded.
Parking garage or structure	See subsection 21.07.090M., <i>Structured Parking</i>
School	See subsection 21.07.090I., <i>Passenger Loading Zones</i>
Other use with lane of vehicle queuing spaces	Determined by traffic engineer.

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3. Queuing Lanes Leaving the Use

Queuing lanes shall be integrated with the on-site circulation and shall merge with the circulation aisle instead of exiting directly into a public right-of-way, except where the traffic engineer approves otherwise. The queuing lane may merge directly into a driveway, subject to approval by the traffic engineer. A minimum of 30 feet of queuing lane shall be required between the service window, bay, or station, and the point of vehicle egress to the adjacent parking facility circulation aisle, street, or right-of-way, however the traffic engineer may require more. The length and design of the queuing lane leaving a car wash bay or stall shall ensure the water and ice from vehicles do not adversely affect adjacent streets, storm drainage systems, or the safe circulation of vehicles and pedestrians.

4. Queuing Dimensions

Queuing lanes shall have a minimum width of 10 feet along straight portions and 12 feet along curved segments. Queuing spaces shall have a minimum length of 20 feet.

5. Traffic Circulation Conflicts

Queuing spaces shall not interfere with on- or off-site traffic movements or movements into or out of off-street parking and loading areas.

6. Delineation

Queuing spaces shall be delineated from other queuing lanes, driveways, internal circulation and parking aisles, loading areas, and refuse collection areas by striping, curbing, landscaping, alternative paving materials, or raised medians. Walk-in customer crosswalks across queuing lanes shall be avoided to the extent reasonably feasible and permitted upon approval by the traffic engineer. If approved, such crosswalks shall provide mitigation such as warning signage aimed at both the pedestrian and vehicle.

1 **7. Exceptions**

2 The traffic engineer may approve a reduction in the number of required queuing spaces
3 or other departure from the queuing space requirements if documentation prepared by a
4 traffic engineering professional demonstrates to the satisfaction of the traffic engineer
5 that the change is appropriate and consistent with the intent of the requirements. The
6 applicant shall enter into an agreement with the municipality which is recorded, runs with
7 the use of the land, and ensures continuation of the alternative strategy and the future
8 implementation of contingency measures if ordered by the traffic engineer.

9 **M. Structured Parking**

10 **1. Purpose and Applicability**

11 Parking structures and structured parking within occupied buildings shall comply with the
12 provisions of this subsection, in order to be compatible with the architectural character
13 and quality of adjacent buildings; avoid adverse impacts to abutting sidewalks or
14 residential properties; use color, massing, and other architectural features to reduce
15 apparent bulk; and screen potential visual impacts from garage lighting or parked
16 vehicles. It is also the intent of this section to ensure safe and convenient vehicle access
17 and parking, and to avoid impeding traffic on adjacent streets and pedestrian facilities.
18 The requirements which follow do not apply to garages for individual dwellings.

19 **2. Ground Floor Use**

20 In the B-3, R-4, and R-4A districts along streets that have been specifically designated in
21 the comprehensive plan as a main street, transit street, mixed-use street, or with a similar
22 street typology, ground-floor structured parking shall be enclosed along that street
23 frontage by a first-story habitable space that:

- 24 **a.** Has a minimum depth of 25 feet;
- 25 **b.** Extends the full length of the building elevation facing the designated street,
26 excluding pedestrian and vehicle entrances and exits, stairwells, elevators, and
27 centralized payment booths;
- 28 **c.** Is designed and used for residential, community, office, retail, or other
29 commercial use; and
- 30 **d.** Includes ground floor windows providing visual access and/or primary entrances
31 that comprise at least 25 percent of the ground level wall area.

32 **3. Façade Treatment**

33 The street-facing façade of a parking structure shall have a repeating pattern that
34 includes no less than three instances of either (1) color change, (2) texture change, (3)
35 material module change, or (4) expression of an architectural or structural bay through a
36 change in plane no less than 12 inches in width, such as an offset, reveal, or projecting
37 rib. At least one of these elements shall repeat at an interval of not more than 30 feet.
38 The director may approve an alternative design to this standard if the applicant can
39 demonstrate an alternative building design that significantly articulates a wall plane.

40 **4. Screening**

41 Ground floor structured parking within a building shall be screened by a wall or façade or
42 other architectural treatment consistent with the rest of the building in terms of style,
43 detail, and materials. The perimeter of each parking structure floor above the ground
44 floor shall have an opaque screen or other screening mechanism to shield vehicle
45 headlights from public view. The screen shall be at least three and one half feet high
46 measured from the finished floor elevation. An architectural treatment, such as a finished
47 fascia, shall be provided to shield any unfinished structural elements such as electrical

1 elements, exposed metal beams, and mechanical appurtenances. Lights visible from the
2 exterior of the structure shall be covered or screened with a diffusing lens and oriented to
3 minimize the visual impact on adjacent streets and properties.

4 **5. Landscaping**

5 The perimeter of a parking structure shall be planted with L1 visual enhancement
6 landscaping in any commercial district, except at points of vehicular and pedestrian
7 entrance and exit, where the structure abuts an alley right-of-way, where the structure
8 directly abuts another building, or where there is a ground floor use that meets the
9 standards of subsection M.2. above.

10 **6. Ingress and Egress**

11 a. Non-automated parking structures designed to provide more than 500 parking
12 spaces shall have at least two vehicle entrance driveways and two vehicle exit
13 driveways.

14 b. Vehicle entrance driveways shall provide a minimum of one queuing space in
15 addition to the vehicle space at the ticket dispenser or access reader, unless a
16 traffic analysis indicates more queuing is needed. Such queuing space(s) shall
17 meet the standards of subsection 21.07.090L., *Queuing Spaces*.

18 c. Vehicle exit driveways shall provide a minimum of 30 feet of on-site vehicle
19 queuing that does not interfere with any parking stalls, rights-of-way, access
20 easements, pedestrian facilities, or private streets.

21 **7. Maximum Gradients**

22 The maximum gradient of parking aisles shall be six percent. The grade of non-parking
23 ramps shall be no greater than 12 percent, and shall comply with the requirements of
24 Americans with Disabilities Act of 1991 as it may be amended or interpreted by federal
25 regulation. Where special circumstances warrant, the traffic engineer may approve
26 steeper grades according to accepted engineering practices, subject to special conditions
27 of approval such as an ice-free (snow melting) ramp surface.

28 **8. Layout and Internal Circulation**

29 The configuration of parking and dimensions within a non-automated parking structure
30 shall be subject to the requirements of table 21.07-7, except that a modified layout and
31 internal circulation pattern may be approved by the traffic engineer when it can be shown
32 that a structure meets the design guidelines of the latest Urban Land Institute, Parking
33 Institute, or Institute of Transportation Engineers manuals.

34 **9. Automated Parking Structures**

35 a. Automated parking structures shall require a traffic analysis and be subject to
36 review and approval by the traffic engineer.

37 b. Automated parking structures are exempt from the parking stall and aisle
38 dimensions and vertical clearance requirements of this section.

39 c. Automated parking structures shall be located wholly within an enclosed building
40 and shall not be visible from outside the building or facility.

41 d. Automated parking structures shall be operated as attendant parking.

42 **21.07.100 EXTERIOR LIGHTING**

43 [RESERVED]

44 **21.07.110 RESIDENTIAL DESIGN STANDARDS**

1 **A. Purpose**

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

- 6 1. Promote new residential developments that are distinctive, have character, and relate
7 and connect to established neighborhoods;
- 8 2. Avoid monotony in structure design and site layout by providing variety and visual interest
9 in the exterior design of residential buildings;
- 10 3. Enhance the residential streetscape, walkability, and the pedestrian environment by
11 diminishing the prominence of garages and parking lots;
- 12 4. Enhance public safety by preventing garages from obscuring main entrances or blocking
13 views of the street from inside residences;
- 14 5. Locate active living spaces, entrances, and windows to improve the physical and visual
15 connection from residences to the street, and foster opportunities for casual surveillance
16 of the street and outwardly expressed proprietorship of the neighborhood; and
- 17 6. Improve the compatibility of residential development with the residential character of
18 surrounding neighborhoods and protect property values of both the subject property and
19 surrounding development.

20 **B. Alternatives and Flexibility**

21 1. **Alternative Equivalent Compliance**

22 The alternative equivalent compliance procedure set forth in subsection 21.07.010D. may
23 be used to propose alternative means of complying with the intent of this section.
24 Structures over eight units may apply directly to the urban design commission for
25 alternative compliance with plans at least 30 percent complete, that include exterior
26 elevations and dimensions, floor plans, landscaping, and parking plans.

27 2. **Minor Modifications**

28 Minor modifications may be applied, pursuant to section 21.03.120, *Minor Modifications*.

29 3. **Design Innovation Credit**

30 The decision-making body may approve design innovations not covered by the menu
31 choices, to be used as credit for up to four design features from the menus of this
32 section. The applicant shall demonstrate a specific feature that realizes the intent of the
33 subsection and that:

- 34 a. Achieves an equal or better design solution for the development than would
35 result from application of the basic menu choices; and
- 36 b. Does not adversely affect adjacent properties or streets.

37 **C. Standards for Multifamily Residential**

38 1. **Purpose**

39 The purpose of these standards is to improve the appearance of design and functionality
40 of multifamily development, recognizing the importance of design in the economic
41 success of neighborhood areas, the need for more efficient land use, and the need to
42 ensure the adequate protection of the surrounding area. Specific objectives include:

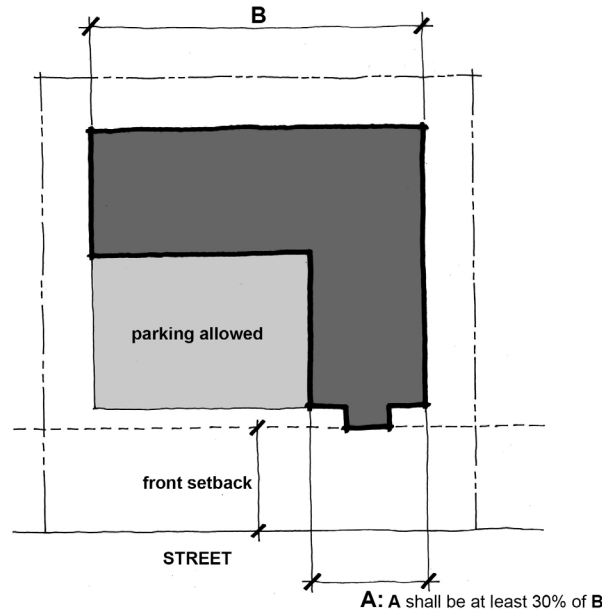
- 1 a. Provide visual interest and architectural variety in multifamily residential
2 developments that avoids featureless design, and reduces the apparent bulk of
3 large building masses;
- 4 b. Promote sensitive design and planning of multifamily housing units that
5 preserves or improves the characteristics of surrounding development;
- 6 c. Promote building design, placement, and orientation that contributes to public
7 safety, attractive street frontages, pedestrian access, and a sense of
8 neighborhood and community;
- 9 d. Promote building design, placement, and orientation that considers Alaska's
10 northern climate in terms of weather protection and access to sunlight;
- 11 e. Protect property values of the subject property and surrounding development and
12 promote economic investment in neighborhoods;
- 13 f. Improve the quality of life of residents of multifamily residential dwellings; and
- 14 g. Provide flexible standards that allow for creativity and innovation.
- 15 2. **Applicability**
16 These standards apply to any multifamily structure (three or more units) or residential
17 portion of a mixed-use structure. This section does not apply in Girdwood.
- 18 3. **Daylighting, Views, and Building Spacing**
- 19 a. **Windows**
20 Windows or primary entrance doors shall be provided on any building elevation
21 facing a street, required private common open space, or that has primary
22 entrances to dwellings. At least 15 percent of the wall area of the building
23 elevation shall be windows or primary entrance doors. Windows in a garage
24 door do not count towards the minimum area in this section.
- 25 b. **Building Spacing**
- 26 i. When the front wall or rear wall of a row of dwelling units faces the front
27 wall or rear wall of another row of dwelling units on the development site,
28 the average distance between shall be a minimum of 24 feet, plus one
29 foot of distance for each foot of building height above 24 feet, up to a
30 maximum requirement of 30 feet.
- 31 ii. When the end wall of a row of dwelling units faces the front wall or rear
32 wall of another row of dwelling units on the development site, the
33 average distance between shall be a minimum of 20 feet.
- 34 iii. End walls facing end walls are not subject to the building spacing
35 requirement of this section.
- 36 iv. Building projections allowed under subsection 21.06.030C.2. are
37 permitted to project into the required space between buildings.
- 38 v. For the purposes of this subsection 21.07.110C.3.b., front walls and rear
39 walls are defined as those walls that are generally perpendicular to party
40 walls between dwelling units. End walls are generally parallel to party
41 walls separating dwelling units, and are located at the end of a row of
42 units. Front and rear walls in a building are typically the primary location

- 1 of openings for light and air for the dwelling units, while end walls are
2 not.
- 3 **c. Exceptions**
- 4 i. Up to one-third of the required window and entrance wall area and/or
5 required spacing distance between buildings may be transferred to
6 another story or side of the structure, subject to an administrative site
7 plan review. Transferred space shall be added to private open space
8 that meets the standards of section 21.07.030. It shall be demonstrated
9 to the director's satisfaction that the transfer responds to a site specific
10 attribute such as solar orientation, photovoltaic panels placed for solar
11 energy collection, a noisy arterial street, or objectionable view, and that
12 mitigating features will be provided for the affected wall or area.
- 13 ii. An overall reduction in required window area may be approved if
14 demonstrated by calculation by an energy rater certified by the state of
15 Alaska, that the reduction is necessary to achieve an upgraded energy
16 star rating of five star or five star plus.
- 17 **4. Relationship to Parking**
- 18 Parking spaces, driveways, and circulation aisles shall be separated from any multifamily
19 residential building façade by a landscaping planting area of at least five feet in width,
20 and allowing breaks for individual garage entrances or (where not facing the street) rows
21 or clusters of garage entrances. The area shall be planted with site enhancement
22 landscaping of at least ten shrubs per 20 linear feet of building length. Trees may be
23 used in lieu of shrubs—one tree replacing five shrubs.
- 24 **5. Relationship to Pedestrian Access Requirements**
- 25 Walkway connections from primary entrances to the street are required in accordance
26 with subsection 21.07.060E.4., except that multifamily developments may provide one of
27 the following alternatives instead:
- 28 a. Primary entrances for individual dwellings may connect to the street by the
29 dwelling unit's individual driveway if such is provided; or
- 30 b. A parking courtyard may be provided in conformance with subsection
31 21.07.060F.18.
- 32 **6. Building and Site Orientation**
- 33 Buildings shall be oriented to surrounding streets, sidewalks, common private open
34 spaces, and the public realm through at least three of the following menu choices:
- 35 a. **Courtyard Housing**
- 36 Arrange or configure the building(s) to enclose and frame a housing courtyard as
37 described in subsection 21.07.060F.7.
- 38 b. **Orientation of Living Spaces and Windows—Ground Floor**
- 39 Provide windows and/or pedestrian entrances comprising at least 20 percent of
40 the ground-floor wall area of any elevation fronting on a street or private common
41 open space or having a primary entrance serving multiple dwellings.
- 42 c. **Orientation of Living Spaces and Windows—Overall Development**
- 43 As an alternative to 6.b. above, provide windows and/or pedestrian entrances
44 comprising at least 20 percent of the total wall area of all building elevations

1 facing a street or private common open space or having a principal front entrance
2 serving multiple dwellings.

3 **d. Street Frontage – Parking Beside or Behind the Building**

4 No more than 70 percent of a street-facing building elevation shall have parking
5 facilities (including garages) between it and the street.



6
7
8 **e. Street Frontage – Limited Parking Width**

9 As an alternative to 6.c. above, limit driveways and parking facilities to no more
10 than 50 percent of the total site area between the building and the street, and
11 garages to no more than 50 percent of the street facing building elevation.

12 **f. Street Corner Building**

13 On a corner lot, provide choices 6.b. and 6.c. on both street frontages, such that
14 the building (including its habitable floor area with windows) is placed nearest the
15 corner, and any parking facilities are located beside or behind the building away
16 from the street corner. [Illustrate]

17 **g. Entrance with Separated Walkway to the Street**

18 Provide a primary entrance on each street-facing building elevation or a private
19 common open space visible from the street, connected to the street by a clear
20 and direct walkway separated from and not routed through a parking facility.

21 **h. Site Entry Feature**

22 Highlight and define a pedestrian and/or vehicle entrance to a development site
23 using three or more of the following elements:

- 24 i. Landscape treatment with seasonal color and trees, which clearly
25 distinguishes and highlights the site entry.
- 26 ii. Plaza or courtyard as described in subsection 21.07.060F6. or 7.
- 27 iii. Identifying building primary entrance form including a covered entry.

- iv. Special paving, pedestrian scale lighting, and/or bollards.
- v. Ornamental gate and/or fence.

7. Building Articulation and Visual Variety

Any building elevation facing a street or having a primary entrance shall provide at least four features from the menu below. If the applicable building elevation is 42 feet or longer, then a wall modulation choice shall be selected as one of the four features. This section shall apply to no more than two building elevations, with priority to elevations facing a street or with the principal front entrance(s).

a. Wall Modulation—at Intervals

Provide wall plane projections, recesses, or reveals at least six feet wide, with a change in plane of at least four feet, spaced at intervals of no more than 32 feet, except allowing for:

- i. The maximum interval may be increased by two and one half feet for each foot of additional change in wall plane of the projection or recess—up to a maximum interval of 42 feet;
- ii. The depth of the modulation may be reduced by two and one-half feet where the wall modulation is tied to a change in siding material, balcony, bay window, or roofline modulation, as defined below;
- iii. The standard applies on a minimum of 60 percent of the height of the building wall.

[illustrate]

b. Wall Modulation—Separate Façade Planes

As an alternative to 7.a. above, divide the wall into separate façade planes that project or recess from abutting façade planes by a minimum depth of 18 inches. In order to be considered a separate façade plane, a portion of the façade shall have a minimum area of 150 square feet and a maximum area of 500 square feet.

c. Wall Modulation—Alternative Choice

An alternative wall modulation design prepared by a licensed architect may be used as a design innovation credit, as provided in subsection 21.07.110B.3.

d. Wall Modulation – Overall Building Massing

Provide wall plane projections or recesses having a depth of at least 15 percent of the length of the building elevation or 12 feet (whichever is less), extending at least 25 percent of the length of the building elevation, for at least 60 percent of the building height, with no uninterrupted façade exceeding 56 horizontal feet.

[illustrate]

e. Upper Story Cantilever or Step-Back

Provide an upper story cantilever or step-back with a change of wall plane of at least four feet, or 18 inches if accentuated by a change in siding material or the façade is only two stories in height. At least two-thirds of the building elevation length shall have such cantilever or step-back. Building elevations that receive credit for menu choice 7.b., *Wall Modulation—Separate Façade Planes*, shall not receive credit for this choice.

1 **p. *Variation in Building Form or Scale***

2 Provide a minimum of two kinds of variation in architectural form or scale, such
3 as between individual dwellings in a building, or from one building to the next in
4 the development. Variations may include reversed building elevations, a different
5 pattern or arrangement of building modulation or articulation features, a different
6 dwelling unit layout or design that is evident on the exterior, or a change in scale
7 such as varying the number of stories, the number of units from one building to
8 the next, or the width of abutting units.

9 **8. *Primary Entrance Treatment***

10 Each building shall incorporate at least three of the following massing, façade, or detail
11 features to define and emphasize a primary entrance:

12 **a.** Entrance on a porch or landing with a minimum inside dimension of six feet and
13 sheltered by a roof, canopy, portico, marquee, or similar weather protection roof
14 feature.

15 **b.** Double doors.

16 **c.** Massing features such as architectural bays that define or emphasize entry
17 locations.

18 **d.** Side-lights (glazed openings to the side of the door), and/or transom-lights
19 (glazed opening above the door) in the entry design.

20 **e.** Outdoor entrance patio, plaza, or courtyard.

21 **f.** Integrated planters or wing walls that incorporate landscaped areas and/or
22 seating areas.

23 **9. *Weather Protection and Sunlight***

24 Building and site design shall respond to Alaska's northern climate, including the effects
25 of snow, ice, low temperatures, wind exposure, and low and seasonal sunlight conditions,
26 by providing at least four features from the following menu. The features set forth in
27 menu choices 9.e., *Year-Round Access to Sunlight*; 9.f., *Sunlight Access for Neighbors*;
28 9.h., *Sun Trap*; 9.i., *Atrium*; and 9.k., *Sunlit and Wind Protected Courtyards* shall each
29 count as two features.

30 **a. *Weather Protected Entrance***

31 Provide outdoor shelter that covers at least 32 square feet for any primary
32 entrance that serves one dwelling, 48 square feet for any primary entrance that
33 serves up to four dwellings, and 64 square feet for any primary entrance that
34 serves more than four dwellings.

35 **b. *Sheltered Passenger Loading Zone, Bicycle Parking, or Transit Stop***

36 Provide pedestrian shelter over a passenger loading zone, accessible parking
37 aisle or route, bicycle parking, or a transit shelter.

38 **c. *Ice-Free Walkway***

39 Provide an ice-free (snow melting) walkway for a required walkway connection to
40 a primary entrance.

41 **d. *Orientation for Sunlight Access***

42 Provide windows and/or primary entrances for at least 20 percent of the wall area
43 with a solar orientation and demonstrate each is likely to receive at least six
44 hours of sunlight access on March/September 21. Natural features existing at

- 1 the time of development, such as trees, shall not be considered as blocking
2 sunlight access, but newly installed landscaping material shall be planted so as
3 to minimize blocking of sunlight access.
- 4 **e. Year-Round Access to Sunlight**
5 Ensure that one or more windows of every dwelling in the development will
6 receive sunlight access for at least one hour on December 21. Natural features
7 existing at the time of development, such as trees, shall not be considered as
8 blocking sunlight access, but newly installed landscaping material shall be
9 planted so as to minimize blocking of sunlight access.
- 10 **f. Sunlight Access for Neighbors**
11 Preserve sunlight access at least six hours daily on March/September 21 to any
12 adjacent lot zoned PR, any sidewalk across the street, and neighboring
13 residentially zoned property, through building placement, massing, and height.
- 14 **g. Daylighting**
15 Provide for apartment daylighting and building spacing as follows: Locate at
16 least one window in the main living area of each dwelling such that an imaginary
17 daylight plane extending from the window and formed by an angle of 60 degrees
18 that is unobstructed for a horizontal distance of 60 feet. The plane angle shall be
19 measured horizontally from the center of the bottom of the window. As an
20 alternative, two angles with a sum of 60 degrees may be used. [Illustrate]
- 21 **h. Sun Trap**
22 Incorporate a sun trap or “pocket” meeting the requirements of subsection
23 21.07.060F.12, *Sun Pocket* that captures direct and reflected sunlight as part of a
24 common private open space.
- 25 **i. Atrium**
26 Provide an atrium interior sunlit common private open space or primary entrance
27 area, meeting the requirements of subsection 21.07.060F.11., which takes
28 advantage of direct and/or reflected sunlight.
- 29 **j. Stepped or Terraced Building Forms**
30 Provide a stepped or terraced building form above the second story that adheres
31 to a daylight plane with a step-back angle no steeper than one foot of rise per
32 one foot of run, to reduce the potential shadowing and wind turbulence effects of
33 a tall building.
- 34 **k. Sunlit and Wind Protected Courtyards**
35 Provide a housing courtyard as described in subsection 21.07.060F.7.
- 36 **10. Accessory Elements**
37 **a. Storage**
38 A multifamily project shall provide at least 30 square feet of covered, enclosed,
39 and secure bulk storage area per dwelling unit for bicycles, winter tires, and other
40 belongings that typically cannot be accommodated within individual dwelling
41 units. Storage areas shall not include closets accessed from within the dwelling,
42 but may include garage floor area not required for vehicle maneuvering or
43 parking. Storage and other accessory buildings shall be designed with materials
44 and/or architectural elements that are related to the principal building(s).
- 45 **b. Trash Receptacles/Dumpsters**
46 Where dumpsters are allowed, they shall comply with the requirements of
47 21.07.080G.2. Where dumpsters are not provided, multifamily developments

1 shall provide covered storage for trash receptacles. Such storage shall not be
2 located between any building and the primary adjacent street frontage.

3 **c. Garages**

4 **i. Attached or Detached Garages**

5 To the maximum extent feasible, garage entries and carports shall not be
6 located between a principal multifamily building and a required street
7 frontage, but shall instead be internalized in building groups so that they
8 are not visible from adjacent streets.

9 **ii. Size**

10 Street-facing detached garages and carports shall be limited to six
11 spaces per structure to avoid a continuous row of garages or carports.
12 No more than six garage doors may appear on any multifamily building
13 elevation facing a street, and the plane of each garage door shall be
14 offset at least two feet from the plane of the garage door adjacent to it.

15 **iii. Design**

16 Detached garages and carports shall be integrated in design with the
17 principal building architecture, and shall incorporate similar and
18 compatible building and roof forms, scale, materials, color, and details.

19 **d. Mechanical and Electrical Equipment**

20 Mechanical and electrical equipment serving a single building shall be screened
21 from view as provided below. This requirement applies to heating, ventilation,
22 and cooling equipment; pumps; generators; and groups of four or more utility
23 meters. The screening requirement does not apply to telecommunications
24 equipment, chimneys, minor vent pipes, wall vents that are flush/near-flush with
25 the building wall, or solar collectors and reflectors. Screening shall comply with
26 AMC title 23 and the access and safety requirements of utilities.

27 **i. Rooftop Mechanical and Electrical Equipment**

28 Rooftop mechanical and electrical equipment shall be screened from
29 view of abutting streets and the ground level of residentially zoned lots
30 using the menu choices provided in subsection d.ii. below. If menu
31 choice ii.(C). is the only choice selected, then the roof mounted
32 equipment shall also be set back from the roof edge (where the roof
33 meets the façade wall) at least three feet for each foot of height of the
34 equipment.

35 **ii. Mechanical and Electrical Equipment – Other**

36 All other mechanical and electrical equipment shall be screened from
37 view from abutting streets, except where located more than 40 feet from
38 the street or right-of-way, using one of the following choices:

39 **(A)** Sight-obscuring landscaping consisting of shrubs, trees, berms,
40 and/or hardscape materials. Other landscaping required by this
41 title, such as perimeter landscaping, may be used if it meets this
42 standard.

43 **(B)** A sight-obscuring fence, wall, or structure that is adequate in
44 height to screen the equipment.

45 **(C)** Wall-mounted utility meter bases finished in a color that is
46 consistent with other areas of the building façade, unless an
47 alternative color or design is approved by the director.

- 1 (D) Equipment that is disguised, camouflaged, or hidden so that its
2 function as mechanical or electrical equipment is imperceptible
3 to an uneducated eye.

4 **D. Standards for Townhouse Residential**

5 **1. Purpose**

6 The purpose of these standards is to:

- 7 a. Provide visual interest and architectural variety to attached dwellings that
8 enhances the neighborhood character;
- 9 b. Diminish the impacts of rows of garages and driveways on the pedestrian
10 environment and street;
- 11 c. Reduce the apparent bulk and scale of townhouse buildings, and avoid long
12 unbroken facades;
- 13 d. Encourage pedestrian access to be convenient, visible, safe, and inviting; and
- 14 e. Promote daylighting and views, front yard landscaping, front entries, and
15 windows facing the street.

16 **2. Applicability**

17 These standards shall apply to any townhouse development and any townhouse-style
18 structure, any attached single-family use, and any two-family use that is constructed in
19 townhouse-style. This section does not apply in Girdwood.

20 **3. Building Size**

21 The maximum number of dwellings attached in a single row or building shall be:

- 22 a. Two dwellings in the R-2A and R-2D districts.
- 23 b. Six dwellings in the R-2M district.
- 24 c. Ten dwellings in all other districts in which the use is allowed.

25 **4. Daylighting, Views, and Building Spacing**

26 Residential buildings shall comply with subsection 21.07.110C.3., *Daylighting, Views, and*
27 *Building Spacing*, above.

28 **5. Entryway Treatment**

29 Primary entrances shall be given emphasis and physical access by the following:

- 30 a. Placement on a street-facing building elevation, or where the entry door is visible
31 from (if not facing) the street, or facing a common private open space such as an
32 entry courtyard;
- 33 b. A porch, landing, or other outdoor transition space with a minimum dimension of
34 four feet, and distinguished from abutting parking surfaces by changes in
35 material or elevation;
- 36 c. A sheltering roof structure such as an overhang, recess, portico, or other
37 permanent architectural feature of at least 16 square feet; and
- 38 d. Connection to the street by walkways and/or the unit's individual driveway, or a
39 parking courtyard as provided in subsection 21.07.060F.18.

1 **6. Building Articulation**

2 Principal buildings shall comply with subsection 21.07.110C.7., *Building Articulation and*
3 *Visual Variety*, above, except that the standard for meeting menu item C.7.a., *Wall*
4 *Modulation*, shall be as follows:

5 **a. Wall Modulation—At Intervals**

6 Provide projections, recesses, or reveals at least four feet wide, with a change in
7 wall plane of at least two feet, provided at the common wall between units or at
8 intervals of no more than 24 feet apart, except:

9 i. The maximum interval may be increased by two and one half feet for
10 each foot of additional width and change in wall plane of the projection or
11 recess—up to a maximum interval of 48 feet.

12 ii. The standard applies on a minimum of 60 percent of the height of the
13 building wall.

14 **7. Front-Facing Garages**

15 Where the garage or driveway faces the street or is on the same building elevation as the
16 primary entry to the dwelling, the following standards shall be met:

17 a. The garage door width shall not exceed the greater of 10 feet or 50 percent of
18 the width of the elevation of the dwelling, except as provided below.

19 b. The garage door width may be up to 67 percent of the width of each dwelling, if
20 the building elevation provides at least one feature more than the minimum
21 number required in subsection C.7., *Building Articulation*.

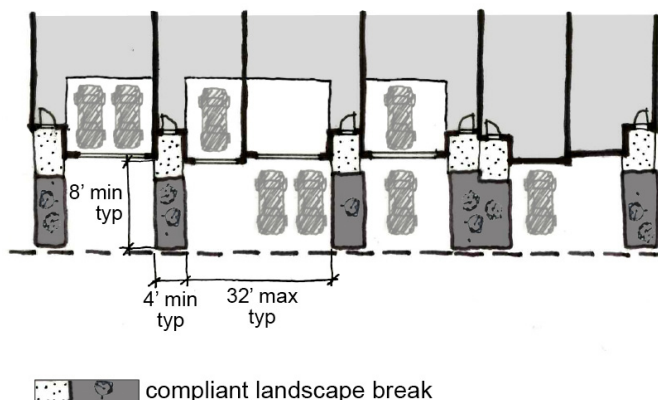
22 **8. Landscaping**

23 **a. Semi-Private Transition Space**

24 For dwelling units that front onto a street, the area between the front entry porch
25 or landing and the abutting street shall be planted as provided in 8.d. below.
26 Front driveway width and other motor vehicle parking facilities shall not encroach
27 into this area.

28 **b. Front Driveway Separations**

29 Where townhouse units are served by individual garages or driveways fronting
30 onto the street or on the same building elevation as the primary entry to the
31 dwelling, a landscaping planting area with a width of no less than four feet shall
32 be provided between each individual driveway. The planting area shall extend
33 out from the building façade or front entry landing the full distance to the street,
34 shared driveway, parking bay, or circulation aisle, but in no case extend out less
35 than eight feet from the building garage facade. Driveways may be combined for
36 a maximum of two dwellings, however no driveway or driveway combination shall
37 exceed 32 feet in width without a landscaped break. A parking courtyard may
38 provide an alternative design that departs from this provision in accordance with
39 subsection 21.07.060F.18.



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- c. **Common Parking Facilities and Driveways**
 A foundation planting bed conforming to the requirements of subsection 21.07.110C.4., *Relationship to Parking*, shall be provided along townhouse-style structure elevations that abut common parking and access facilities, including parking bays, circulation aisles, and access driveways shared in common among multiple units.
 - d. **Landscaping Bed and Planting Material Standards**
 Landscaping area required by subsections 8.a. and 8.b. above shall be planted with at least one tree and five shrubs in front of each dwelling. Planting beds shall be separated from parking spaces and driveways by landscape edging.
9. **Utility Meters, Electrical Conduit, and Other Service Utility Apparatus**
 Utility meters and rooftop mechanical equipment shall comply with the multifamily utility screening requirements in subsection 21.07.110C.9.d. above.

E. Standards for Some Single-Family and Two-Family Residential Structures

- 1. **Applicability**
 The standards of this subsection E. apply to the developments listed below that are constructed after January 1, 2014. This section does not apply to dwellings constructed prior to January 1, 2014, accessory dwelling unit uses, or in Girdwood.
 - a. Any single-family use except for single-family residential uses on lots of 20,000 square feet or greater.
 - b. Any two-family use that is not constructed in townhouse-style and is on a lot less than 20,000 square feet.
 - c. Any multifamily use with single-family or two-family style construction.
- 2. **Mix of Housing Models**
 Any subdivision or development of five or more units shall have a mix of housing models, as determined during the building permit process, according to table 21.07-10. This applies to abutting or adjacent lots.

TABLE 21.07-10 MIX OF HOUSING MODELS	
Number of units	Number of different models required
5-10	2
11-20	4
21-30	5
31 or more	6

Each housing model shall be noticeably different through at least three of the following variations. For the purposes of this provision, “noticeably different” means a change that is easily apparent when looking at building plans and elevation drawings, without resorting to using measurements and scales/rulers in order to determine a difference in design.

- a. Window placement and entrance location.
- b. Façade detail elements, siding material, or siding colors.
- c. Placement of the building footprint on the lot. A four foot setback differential to the closest front corner of the adjacent façade shall be acceptable.
- d. Garage placement.
- e. Roof design/feature. This includes the main ridgeline being oriented differently, two or more additional roof planes, addition of at least one dormer, or a different roof style.
- f. Exterior elevations.
- g. Building massing.

The development (of five or more units) shall be arranged to avoid placing identical housing types, including mirror image floor plans, on lots that share side lot lines.

3. Primary Entrance

- a. A porch or landing with at least 16 square feet shall be provided at the primary entrance. The porch or landing shall be covered by a roof of at least 16 square feet.
- b. The primary entrance of each residence and the walkway to that entrance shall be clearly visible from the street. Primary entrances shall not be located on the rear of the structure.
- c. A hard-surfaced pedestrian walkway shall be provided from the street, sidewalk, or driveway to the primary entrance. Roof drainage shall not fall upon the walkway.

4. Garages

- a. Where a garage (with no habitable floor area above) extends from the rest of the structure towards the street, the width of the non-garage portion of the front building elevation shall be no less than the length that the garage extends from the rest of the structure.

- 1 **b.** Garage doors facing the street shall comprise no more than 67 percent of the
2 total width of a dwelling's building elevation.
- 3 **c.** Dwelling units with a street-facing building elevation that is 40 feet wide or
4 narrower and with garage doors that face the street shall feature at least one
5 design element from each of the three lists below.
- 6 **i.** *List A:*
- 7 **(A)** At least one dormer that is oriented toward the street.
- 8 **(B)** The front building elevation has two or more facades that are
9 offset by at least 16 inches. Each façade or a combination of
10 offset facades shall be at least one third of the area of the
11 building elevation.
- 12 **(C)** Front-facing balcony, accessible from a habitable room, at least
13 six feet wide, that projects from a façade at least two feet and is
14 enclosed by an open railing.
- 15 **ii.** *List B:*
- 16 **(A)** A primary entrance area with a covered porch or landing at least
17 eight feet wide, incorporating visual enhancements such as
18 gabled roof forms, roof brackets, fascia boards, side lights,
19 and/or ornamental columns divided visually into top, middle, and
20 bottom.
- 21 **(B)** A bay window on the front elevation at least six feet wide that
22 extends a minimum of 12 inches outward from a façade, forming
23 a bay or alcove in the room within.
- 24 **(C)** If the garage is more than one car wide, multiple garage doors
25 are used.
- 26 **iii.** *List C:*
- 27 **(A)** Windows and primary entrance door(s) that occupy a minimum
28 of 25 percent of the wall area of the front elevation. Windows in
29 the garage door do not count towards the 25 percent.
- 30 **(B)** Trim (minimum three and one half inches wide) of a different
31 color from the primary siding color, shall outline all windows,
32 doors, and roof edges on the front building elevation, and may
33 outline corners and projections/recesses on the front building
34 elevation.
- 35 **(C)** A minimum of two different siding materials and/or patterns are
36 used on the front building elevation. Doors and trim do not
37 qualify as a type of siding material.
- 38 **d.** The house may encroach into the primary front setback by up to five feet when
39 there is no garage, or where there is a garage (attached or detached) where the
40 front wall of the garage is located at least 8 feet behind the front façade of the
41 house.
- 42 **5. Windows**
- 43 **a.** Windows and primary entrance door(s) shall occupy a minimum of 15 percent of
44 the wall area of a building elevation facing a street or required private common

1 open space. Windows in the garage door do not count towards the 15 percent
2 requirement.

3 b. Any building elevation with solar orientation shall have at least one window that is
4 a minimum of six square feet.

5 c. An overall reduction in required window area may be approved if demonstrated
6 by calculation by an energy rater certified by the state of Alaska that the
7 reduction is necessary to achieve an upgraded Energy Star rating of Five Star or
8 Five Star Plus.

9 **F. Prohibited Structures**

10 [RESERVED]

11 **G. Site Design**

12 **1. Subdivisions**

13 Subdivisions of land shall comply with the standards of chapter 21.08, *Subdivisions*.

14 **2. Multiple Structures on One Lot**

15 **a. Intent**

16 This section regulates the development of multiple residential structures on a
17 single lot. The section is intended to allow flexibility from the subdivision
18 regulations while still achieving neighborhoods that are healthy, safe, and
19 convenient, and meet the goals of the comprehensive plan. The approval
20 processes and standards are intended to result in a development with a cohesive
21 neighborhood identity, an attractive and functional streetscape, a hierarchy of
22 streets and driveways, convenient and safe pedestrian circulation, sufficient
23 parking near each dwelling unit, usable and well-located open space, a positive
24 image of higher density residential development, and well designed and visually
25 pleasing structures and neighborhoods.

26 **b. Applicability and Review Process**

27 i. This section applies to the development of three or more principal
28 residential structures on a single lot. It does not apply to the
29 development of an accessory dwelling unit or a caretaker's unit.

30 ii. Multiple residential structures on a single lot are permitted in the R-2M,
31 R-3, R-4, R-4A, B-3, and RO districts.

32 iii. Applicable developments with between two and 15 dwelling units shall
33 be approved by administrative site plan review pursuant to subsection
34 21.03.180C. Applicable developments with 16 or more dwelling units
35 shall be approved by major site plan review pursuant to subsection
36 21.03.180D.

37 iv. All approvals under this section shall use the approval criteria of
38 subsection 2.c. below, in addition to the general site plan review approval
39 criteria. The decision-making body may place conditions on the
40 development as it may deem necessary to meet the approval criteria.

41 **c. Approval Criteria**

42 i. The proposal shall clearly distinguish between streets and driveways.
43 Streets shall allow vehicles to travel into and within the development, and
44 shall be the means for assigning an address to dwelling units.

- 1 Driveways shall access garages and parking areas. Some small
2 developments may not need a street network.
- 3 ii. Dwelling units shall be oriented towards streets (either within the
4 development or along the boundary of the development) or towards a
5 courtyard or similar common open space. Buildings with frontage on
6 both a street and a driveway shall be oriented towards the street. If the
7 development is so small that no internal street network is necessary,
8 then buildings and dwelling units shall be oriented towards the local
9 public streets on the boundaries of the development, or towards common
10 open space.
- 11 iii. The area between the front of a unit facing a street and the street shall
12 include landscaping or lawn, so that the streetscape features green
13 space rather than just paved parking areas. Adequate snow storage
14 area shall be provided. On-street parking shall be accommodated (if
15 provided).
- 16 iv. Developers should make every effort to design and arrange dwelling
17 units in such a manner as to provide “eyes on the street,” take advantage
18 of solar access, and to the extent feasible, provide privacy for
19 neighboring units’ yards.
- 20 v. In addition to sidewalks required by section 21.07.060, pedestrian
21 pathways shall be provided to large open space areas and in the middle
22 of long blocks. Pedestrian circulation should be convenient both within
23 the development and to appropriate neighboring areas outside the
24 development.
- 25 vi. The development is designed to take advantage of any significant natural
26 features on site, and to provide usable open space and recreation areas.
- 27 d. **Development Agreement**
28 The developer shall enter into a development agreement with the department,
29 using the provisions established in subsection 21.03.100E., *Improvements*
30 *Associated with Land Use Permits*.
- 31 e. **Minimum Standards**
32 All development with multiple residential structures on a single lot shall meet the
33 following minimum standards, in addition to the applicable standards of this title.
- 34 i. **Open Space**
35 A minimum of 30 percent of the site shall be reserved as open space
36 which shall meet the standards of section 21.07.030, *Private Open*
37 *Space*. Any requirement in section 21.07.030 for open space for the
38 individual use of a dwelling shall count towards the total 30 percent
39 requirement. The open space shall not be simply the lot setbacks and
40 leftover fragments such as corner bits that are unusable for other
41 purposes.

- 1 ii. *Buffers for Neighboring Uses*
2 Common open space with L2 buffer landscaping shall be provided along
3 any lot line abutting a residential neighborhood where the density is less
4 than half the density of the development with multiple residential
5 structures on a single lot.
- 6 iii. *Building Spacing*
7 Within a development, no portion of any single-, two-, or three-story
8 building shall be closer than 10 feet from any other single-, two-, or
9 three-story building. All portions of any building taller than three stories
10 shall be separated by no less than 20 feet from any other building.
- 11 iv. *Vehicle Plug-In*
12 Each unit with no garage shall be provided with at least one electrical
13 outlet that is convenient to the required parking space(s).
- 14 3. **Driveway Width**
- 15 a. ***Purpose***
16 This section limits the width of a driveway at the property line and at the street
17 curb. The intent of these limitations is to provide adequate space for snow
18 storage within the right-of-way, to have space for on-street parking where
19 appropriate, and to discourage the majority of the front area of a lot from being
20 paved and/or used for vehicle parking.
- 21 b. ***Applicability***
- 22 i. This section applies to driveway throat width at the property line and
23 street curb.
- 24 ii. Residential driveways are also subject to the municipal driveway
25 standards currently established by the traffic engineer. Where there is a
26 conflict, this section shall govern. Access to streets owned by the state
27 of Alaska requires compliance with state driveway standards, as
28 provided in subsection 21.07.090H.8.d.
- 29 iii. When a driveway serves both residential and nonresidential principal
30 uses, the driveway dimensions shall be as required for the nonresidential
31 use, unless approved otherwise by the traffic engineer.
- 32 c. ***Percent of Lot Frontage***
- 33 The total width of driveway entrances to a residential lot from a street shall not
34 exceed 40 percent of the frontage of the lot, or 33 percent of the frontage if the
35 platting authority or traffic engineer finds that conditions warrant it.
- 36 i. A driveway for multifamily dwellings, mixed-use dwellings, or a group
37 living use may always be at least 14 feet wide.
- 38 ii. A driveway for a single-family, two-family, or townhouse dwelling may
39 always be at least ten feet wide, provided the traffic engineer determines
40 snow storage, traffic flow and safety, and the urban context are
41 addressed, and provided townhouse driveways are attached in pairs to
42 the maximum extent feasible.
- 43 iii. Flag lots are exempt from the percentage limitations, but shall have a
44 maximum driveway width of 20 feet. Abutting flag lots may share a
45 driveway up to 24 feet wide (12 feet per lot).

1 d. **Exceptions**

2 The traffic engineer may approve a departure from the standards of this section,
3 such as a narrower driveway, if documentation prepared by a traffic engineering
4 professional demonstrates to the satisfaction of the traffic engineer that the
5 change is appropriate. Traffic engineer approval shall be contingent on factors
6 such as street classification, street typology, urban context, traffic volume and
7 speed, curb return radii, street travel lane offset from face of curb, pedestrian and
8 bicycle facilities, snow storage, driveway configuration and length, site and
9 project characteristics, number of vehicles expected to use the driveway, and
10 comprehensive plan policies. The traffic engineer may also be more restrictive
11 than the standards of this section, provided the traffic engineer documents the
12 rationale.

13 4. **Alleys**

14 a. Access to parking for residential uses shall be from the alley when the site abuts
15 an alley, except that street access is permitted in any of the following situations:

16 i. Access to a townhouse dwelling on a corner lot may be from the street
17 frontage having the secondary front setback or the alley.

18 ii. Due to the relationship of the alley to the street system and/or the
19 proposed housing density of the development, the traffic engineer
20 determines that use of the alley for parking access would be a significant
21 traffic impact or safety hazard.

22 iii. The traffic engineer determines that topography or other natural feature
23 or physical barrier makes alley access infeasible.

24 iv. The alley is not improved and traffic engineer determines that
25 improvement is not feasible.

26 v. A single-family dwelling, two-family dwelling, or townhouse dwelling with
27 two units, with alley access may have a garage or driveway that faces
28 the street if the garage door is no wider than 10 feet and the driveway no
29 wider than 12 feet at any point.

30 b. In situations where a group of lots front an entire block on one side of a street
31 between two intersections, abut a mid-block alley, and are being developed
32 together, then parking access to the structures shall be from the alley, and
33 building(s) may encroach into the front setback by up to five feet.

34 c. If a new development includes alleys, the lot depth requirement is reduced by
35 half the width of the alley and the lot area requirement is reduced by 12 percent
36 for those lots that abut an alley. Vehicular access to all dwelling units on lots
37 abutting alleys shall be from the alley, and vehicular access to such units from
38 the street is prohibited.

39 H. **Affordable Housing**

40 1. **Purpose**

41 This subsection provides the minimum acceptable standards for affordable housing units
42 that are intended to be counted towards a bonus incentive or any other requirement of
43 this title, to ensure that affordable housing will provide a benefit to future residents and
44 the community overall.

2. Standards

Affordable housing units shall meet the following standards in order to be credited towards a requirement, menu choice, or as a special feature bonus incentive of this title.

- a. The affordable housing units shall meet the definition of affordable housing in chapter 21.14;
- b. At least 50 percent of the habitable floor area of affordable housing units shall be located in a story above grade plane, as defined in chapter 21.14, except that the finished surface of the floor above the affordable housing unit shall be a minimum of four feet above grade;
- c. The affordable housing units shall be intermingled with all other dwelling units in the development; and
- d. The exterior appearance of the affordable housing units shall be indistinguishable from the other dwelling units in the development, except where the director determines that the exterior is compatible in appearance and consistent in quality with the other dwelling units.

21.07.120 LARGE ESTABLISHMENTS

A. Large Commercial Establishments

Large commercial establishments often have high visibility from major public streets and a great volume of use by many residents and visitors. As a consequence, their design determines much of the character, function, and image of this community and its streetscapes and commercial areas. The purpose of this section is to encourage major commercial developments to contribute to and respect the municipality as a unique place and to physically integrate with the community in a positive and architectural and site design sensitive manner. The standards of this section augment existing basic standards for development found elsewhere in this chapter with more specific interpretations that apply to large commercial establishments. These standards promote: a basic level of architectural variety and interest; a compatible appearance and scale; pedestrian and parking lot access; orientation of buildings and entrances in relation to surrounding streets; provisions for adaptive reuse of prominent vacant buildings; and mitigation of negative impacts of large scale commercial developments.

1. Applicability

The standards of this section 21.07.120 shall apply to any use in the Retail Sales; Animal Sales, Service, and Care; Food and Beverage Services; or Entertainment and Recreation use categories, or any combination thereof, occupying more than 20,000 gross square feet of floor area, provided the following limitations:

- a. The standards of this section shall apply only to buildings which are intended exclusively or principally for the uses listed above, such as a general merchandise retail store, grocery store, or multi-tenant retail building.
- b. This section shall not apply to mixed-use buildings with upper stories, or distinct sections designed specifically for residential, office, or other uses not listed above.
- c. [RESERVED—POTENTIAL AMENDMENTS TO SELF-STORAGE FACILITIES IN 21.05 TO ADDRESS MULTI-STORY FACILITIES]

2. Relationship to Other Standards

The provisions of this section shall apply in addition to all other generally applicable standards found elsewhere in this chapter and title. Where there is a conflict with

1 generally applicable standards in this chapter, the standards of this section shall apply.
2 Where there is a conflict with district-specific standards in chapter 21.04 of this title, the
3 district-specific standards shall apply.

4 **3. Alternative Equivalent Compliance**

5 The alternative equivalent compliance procedure in subsection 21.07.010D. may be used
6 to propose alternative means of complying with the intent of this section. Applicants for
7 alternative equivalent compliance shall demonstrate design strategies that address each
8 of the mandatory standards set forth below in subsection A.5.

9 **4. Major Site Plan Review**

10 All applicable large commercial establishments shall be approved by major site plan
11 review in accordance with section 21.03.180. The applicable commission shall ensure
12 that the site plan provides architectural variety, compatible scale, access amenities,
13 mitigation of negative impacts, and convenience and safety of patrons.

14 **5. Mandatory Standards**

15 **a. Vehicular Access**

16 Primary vehicular access shall be from a street designated collector or greater on
17 the *Official Streets and Highways Plan*. Secondary vehicular access may be
18 from a street designated less than a collector, provided the applicant
19 demonstrates that any traffic and visual impacts on adjacent residential and
20 commercial areas are sufficiently minimized.

21 **b. Parking**

22 Aesthetic features, landscaping, and the design of parking lots shall reduce the
23 appearance of large expanses of parking from neighboring streets, and enhance
24 the view of the establishment from its principal point(s) of access.

25 **c. Weather Protection for Pedestrians**

26 i. Buildings and roofs shall be designed so that drainage from the roof shall
27 not fall on sidewalks, walkways, or building entrances.

28 ii. All primary entrances shall have a roof, canopy, arcade, overhang, or
29 similar effective weather protection that meets the standards of
30 subsection 21.07.060F.9., *Pedestrian Shelter*.

31 iii. Building elevations that face public streets or customer parking lots and
32 that have a walkway along the façade shall provide weather protection
33 meeting the standards of subsection 21.07.060F.9., *Pedestrian Shelter*
34 *such as a Canopy, Awning, or Marquee*, or subsection 21.07.060F.10.,
35 *Arcade (or Building Recess)*, along at least 60 percent of such building
36 elevation. This standard is intended to apply to up to two elevations, but
37 the applicable commission may increase or reduce the requirement.

38 **d. Adjacent Residential Development**

39 L3 screening landscaping shall be provided along property lines that are adjacent
40 to a residential district. The landscaping shall allow for any pedestrian
41 connections provided by this section.

42 **e. Community Space**

43 The establishment shall provide at least one public space, such as a plaza, patio,
44 courtyard, or atrium, either indoors, outdoors, or a combination of
45 indoors/outdoors, at or near the principal customer building entrance. Each
46 public space shall be no less than 5 percent of the gross building area, up to a
47 maximum of 2,000 square feet, and no dimension shall be less than 30 feet.

1 Outdoor community space shall meet the standards for plaza or courtyard in
2 subsection 21.07.060F.6. Indoor community space shall meet the standards for
3 atrium, galleria, or winter garden in subsection 21.07.060F.11. Common spaces
4 are encouraged to provide views of the Chugach mountains or other major
5 landmark(s). Community space fulfills the private open space requirement of
6 section 21.07.030. If any standards of this subsection conflict with subsection
7 21.07.030, this subsection shall control.

8 **f. Wall Modulation**

9 Each building elevation that faces a street or a customer parking lot shall be
10 modulated. The wall and foundation line shall be offset at intervals so that there
11 is at least one offset every 140 feet of wall length that varies the depth of the
12 building wall by a minimum of 12 feet. Offsets shall comprise at least 20 percent
13 of the length of the elevation, for at least 60 percent of the building height.

14 **g. Ground Level Expression**

15 Each building elevation that faces a public street shall provide, along at least 60
16 percent of the building length, three of the following features:

- 17 i. Windows with kickplates or projecting sills;
- 18 ii. Architectural bays and mullions dividing windows;
- 19 iii. Pedestrian scale ornamental lighting;
- 20 iv. Tilework, masonry or stone veneer, glass block, or other similar accent
21 materials;
- 22 v. Belt courses or masonry strips of distinct color or texture;
- 23 vi. Columns with plinths; or
- 24 vii. Other façade detail features integrated into the façade design.

25 **h. Materials and Colors**

26 The buildings shall have exterior building materials and colors which are
27 aesthetically pleasing and compatible with the overall site plan. Construction
28 material shall provide color, texture, and scale.

29 **i. Roofs**

30 Provide a modulated roof on each building elevation facing a street or
31 residentially zoned lot, using features such as a terracing parapet, multiple
32 peaks, jogged ridge lines and dormers, with a maximum of 140 feet of
33 uninterrupted roofline between roof modulation elements. Each modulation
34 element shall provide a minimum of three feet of vertical change in the roofline.
35 Modulation elements shall equal at least 20 percent of the roofline on each
36 applicable building elevation.

37 **j. Entryways**

38 Primary entrances shall incorporate changes in architectural mass, surface, or
39 finish to provide a clearly defined primary entrance that is easily visible from
40 streets and sidewalks. At least two of the following features shall be provided:

- 41 i. Recessed or projected entrance;
- 42 ii. Peaked, arched, or other entrance roof form;

- 1
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- iii. Transom or clerestory windows, along with double entry doors and sidelight windows;
- 3
4
- iv. Façade detail features such as tilework, moldings, or lighting, integrated into the building design; or
- 5
6
- v. Integrated planters or wing walls that incorporate landscaped and/or seating areas.
- 7
- k. ***Prohibited Materials***
- 8
9
- Exterior building materials shall not include the following as a general field material:
- 10
- i. Plywood;
- 11
- ii. Unstained or untreated wood, except for cedar or redwood; and
- 12
- iii. T-111 siding.
- 13
- l. ***Mechanical and Electrical Equipment Screening***
- 14
15
- Large commercial establishments shall comply with the mechanical and electrical equipment screening provisions of subsection 21.07.120D.2.
- 16
- m. ***Outdoor Sales, Display, and Storage***
- 17
- i. ***Intent Statement***
- 18
19
20
- To screen storage and display areas of large commercial establishments from adjacent properties, public streets, and customer entrances, and to mitigate visual and noise impacts.
- 21
- ii. ***Permanent Outdoor Display, Sales, and Storage of Merchandise***
- 22
23
- (A) Any outdoor storage, display, or sales location shall be permanently defined on a site plan.
- 24
- (B) The maximum size of permanent outdoor storage, display, and
- 25
26
- sales areas shall be 10 percent of the footprint of the principal building, or 15,000 square feet, whichever is less.
- 27
- (C) Permanent outdoor storage, display, and sales areas shall be
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- contiguous to the building and shall not be within 100 feet of residential property.
- 30
- (D) All outdoor storage, display, and sales areas shall have
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- permanent walls and/or screening fences, no more than 15 feet high, made of materials and colors designed to be complementary to those used as predominant materials and colors on the building. Merchandise shall not be stacked above the height of the screening wall or fence.
- 36
- (E) Outdoor storage, display, and sales areas shall be counted when
- 37
- calculating required parking.

- 1 n. **Master Site Plan and Secondary Buildings**
2 i. *Intent*
3 To integrate the location, orientation, and appearance of all structures
4 and improvements within a large commercial establishment as a unified,
5 coherent and accessible site development.
- 6 ii. *Master Site Plan*
7 Large commercial establishments on sites that include more than one
8 building, or that include multiple pad lots or platted lots for separate
9 commercial establishments, shall, at the time of plat review or major site
10 plan review, be required to establish a master site plan for the location,
11 design and orientation of principal and secondary buildings on site.
- 12 iii. *Applicability of Large Commercial Establishment Regulations*
13 Building and site design standards for large commercial establishments
14 in this section, unless stated to apply specifically to principal buildings,
15 apply to both principal and secondary buildings on any commercial tract
16 within a large commercial establishment site or site master plan area.
- 17 iv. *Usage of Community Use and Commercial Design Standards*
18 As an alternative to meeting the building orientation requirements of
19 subsection o.v. below, and the requirements of *Mandatory Standards*
20 subsections 5.a. through 5.m., and subsection A.6., *Optional Standards*
21 *Menu*, the design of individual secondary buildings with less than 20,000
22 square feet of gross floor area may instead be approved through
23 compliance with the standards of subsection 21.07.120, *Community Use*
24 *and Commercial Design Standards*.
- 25 v. *Secondary Building Orientation to Public Streets*
26 Peripheral secondary buildings located at the edge of the site next to a
27 public street or street corner shall provide windows on the street-facing
28 elevation as established in subsection 21.07.120E.4.b.i.

29 6. **Optional Standards Menu**
30 In addition to the mandatory standards of subsection A.5. above, establishments shall
31 choose two features from the options below.

- 32 a. **Location of Parking Lots**
33 No more than 50 percent of vehicle parking spaces provided shall be located in
34 the front parking lot (defined in chapter 21.14).
- 35 b. **Building Placement Close to the Street**
36 A minimum of 30 percent of the front building elevation of the principal building
37 shall be within 20 feet of a property line abutting a street, and a customer
38 entrance shall be located in the 30 percent.
- 39 c. **Pedestrian-Friendly Entrance**
40 At least one primary entrance of the principal building is located within 90 feet of
41 the property line abutting the street from which the main access to the site is
42 taken, and connected to the street by a direct walkway.
- 43 d. **Multiple Entrances**
44 The principal building(s) shall have customer entrances on at least two sides of
45 the building that face an abutting street from which access to the site is taken,
46 with at least one of the required entrances facing the street to which the building
47 is closest. A corner entrance shall be counted as an entrance on either façade.

- 1 e. **Building Walkways**
2 Walkways a minimum of six feet unobstructed clear width, excluding vehicular
3 overhang, shall be provided along the full length of every building elevation that
4 has a customer entrance or abuts a customer parking lot.
- 5 f. **Street Facing Windows**
6 Provide visual access windows and/or primary entrances on each street-facing
7 building elevation (up to a maximum of two elevations) comprising at least 15
8 percent of the ground-floor wall area. An elevation that is more than 150 feet
9 away from the facing street right-of-way shall be exempt, unless it is the only
10 applicable elevation. Qualifying windows shall be no more than four feet above
11 finished grade.
- 12 g. **Screening Vegetation**
13 L3 screening landscaping shall be provided along lot lines that abut public
14 streets, totaling at least 25 percent of the site perimeter.
- 15 h. **Foundation Landscaping**
16 Planting beds at least eight feet wide with one tree and six shrubs per 20 linear
17 feet shall be provided along at least 50 percent of each building elevation that
18 faces public streets and/or parking lots.
- 19 i. **Ice-free Walkway**
20 Provide an ice-free (snow melting) walkway along a minimum of 35 percent of
21 the length of the building elevation that contains a primary entrance. The
22 walkway shall be a minimum of six feet unobstructed clear width, excluding
23 vehicular overhang. This feature is not applicable for credit where the walkways
24 and entrances are covered.

25 **B. Large Non-Residential Establishments in or Surrounded by Large Lot Residential Districts**

26 Certain non-residential uses that are allowed in large lot residential districts have the potential to
27 create negative impacts on large lot residential neighborhoods when the nonresidential uses are
28 significantly larger and more intensive than the typical development in these areas. This section
29 provides consistent standards for such cases.

30 **1. Applicability**

31 The standards of this section shall apply to any child care center, neighborhood
32 recreation center, religious assembly, educational facility (elementary, middle, or high
33 school, or instructional services), commercial horticulture, animal boarding, veterinary
34 clinic, cultural facility, or utility facility, or any combination thereof, where the sum of the
35 gross floor area of all applicable buildings on the lot is more than 10,000 square feet, and
36 the use is within a class B zoning district or the parcel under development abuts property
37 in a class B zoning district for more than 50 percent of its boundary. Single-family
38 residential dwelling units associated with such a use (e.g., a rectory) shall not be counted
39 toward the gross floor area size threshold, but shall meet the standards below.

40 **2. Relationship to Other Standards**

41 The provisions of this section are in addition to other requirements of this title, and may
42 be more stringent than other requirements of this title. Where there is a conflict with
43 other applicable standards, the more stringent standard shall apply.

44 **3. Setbacks**

45 Structures that are over 35 feet in height shall be setback beyond the underlying side or
46 rear setbacks of the district by one foot per foot of height over 35 feet.

- 1 **4. Buffers**
2 **a.** L3 screening landscaping shall be provided along all lot lines that abut a
3 residential zoning district or a street.
- 4 **b.** The developer shall retain existing vegetation in buffer areas that are in the side
5 and rear setbacks.
- 6 **c.** The decision-making body may adjust the buffer requirements of subsections
7 4.a. and 4.b. above if the applicant demonstrates that the requirements are
8 unreasonable for the specific situation.

- 9 **5. Parking**
10 **a.** No parking lot, circulation aisle, driveway, loading area, or vehicular storage area
11 shall be within 25 feet of any side or rear lot line.
- 12 **b.** Vehicle storage and fleet vehicle parking are not allowed within setbacks equal to
13 those of the abutting property.

- 14 **6. Vegetated Open Space**
15 A minimum of 35 percent of the lot area shall remain as planted open area, landscaped
16 area, bio-retention area (and other similar vegetated area designed to retain/detain storm
17 water runoff), or natural vegetation area, to exclude buildings, driveways, parking areas,
18 sidewalks, etc., unless the decision-making body determines that retention of less than
19 35 percent provides a development character in keeping with the surrounding
20 neighborhood.

- 21 **7. Long Elevations**
22 Building elevations longer than 100 feet that face residential lots or public streets shall
23 provide façade modulations that meet either subsection 21.07.110C.7.a., or
24 21.07.110C.7.d., or provide an eight-foot wide foundation planting bed along the
25 foundation of the entire elevation (breaks allowed for garage doors and pedestrian
26 entrances), planted with at least one tree and six shrubs per 20 linear feet.

- 27 **C. Tall Buildings**
28 This section addresses the effects of tall buildings in Alaska’s northern climate, including wind
29 downdraft impacts on pedestrian comfort and safety, and shadowing impacts on sunlight access
30 to neighboring properties.

- 31 **1. Wind**
32 Buildings that exceed 90 feet in building height (as measured in subsection 21.06.030D.),
33 including additions or modifications to the exterior building envelope, shall be designed
34 so that wind speeds on sidewalks, walkways, and other pedestrian spaces surrounding
35 the building will remain within thresholds for outdoor comfort and safety, or at least not
36 add to existing wind problems, as follows:

- 37 **a. Wind Speed Criteria**
38 Acceptable wind speed thresholds for outdoor comfort and safety shall be as
39 specified in the title 21 user’s guide, or as supported by ASCE publications, and
40 based on the types of pedestrian activity anticipated to occur around the
41 proposed building.

- 42 **b. Method for Determining Wind Conditions**
43 A wind study by a wind engineering/building aerodynamics expert shall be used
44 to forecast wind conditions and present wind control measures or design

1 modifications as necessary to demonstrate that wind speeds will remain within
2 the accepted thresholds.

3 **c. Incentives for Wind Mitigation**

4 Any development that incorporates a wind tunnel test and the wind speed criteria
5 of this section into the design of a multistory building shall be eligible for a floor
6 area bonus as provided in section 21.04.030H.2.b.

7 **2. Sunlight Access**
8 [RESERVED]

9 **3. Exceptions**

10 The director may allow wind speeds to exceed accepted thresholds for comfort, and/or
11 shadowing beyond the accepted minimum threshold for sunlight access, if:

- 12 **a.** The building avoids worsening pre-existing conditions;
- 13 **b.** The impact will be insubstantial because of the limited location or time period in
14 which the wind speed or sunlight shadowing threshold is exceeded; or
- 15 **c.** It has been demonstrated that the proposed development conforms to the
16 maximum extent feasible.

17 **21.07.130 SKYWAYS AND OTHER PROJECTIONS INTO PUBLIC AIRSPACE**

18 [RESERVED: Updated land use regulations to address overpasses, skywalks, building
19 marquees, and similar substantial projections into the public airspace from private property,
20 will be prepared and adopted separately. These development standards will not apply to
21 bridges that are part of the street and trail network. Instead, these development standards
22 will be specific to updating the pre-existing title 21 regulations in order to provide for skywalks and
23 other structures originating from private property and projecting over or across rights-of-way
24 and other public property.]

25 **21.07.140 OPERATIONAL STANDARDS**

26 **A. Purpose**

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

31 **B. Applicability**

32 The provisions of this section 21.07.140 shall apply to all land within the municipality. The
33 director may authorize temporary exemptions from one or more of the standards in this section
34 during construction.

35 **C. Standard**

36 No use may cause excessive noise, vibrations, smoke, dust or other particulate matter, toxic or
37 noxious matter, humidity, heat, or glare at or beyond any lot line of the lot on which it is located.
38 No equipment or process shall be used which creates visual or audible interference in any radio
39 or television receivers off the premises, or causes a fluctuation in line voltage off the premises.

40 The term "excessive" is defined for the purpose of this subsection as to a degree exceeding that
41 generated by uses permitted in the district in their customary manner of operation, or to a degree
42 injurious to the public health, safety, welfare, or convenience.