



Municipality of Anchorage

Planning Department

Long-Range Planning Division

Memorandum



Date: June 7, 2019
To: Review Agencies
Subject: PZC Case No. 2019-0079, T21 Amendments to AMCR 21.90 & AMC 21.07 for 2040 Land Use Plan Action Item 4-6, Private Streets and Residential Driveways

The Planning Department is seeking comments on the Public Hearing Draft of Planning and Zoning Commission Case No. 2019-0079, Title 21 Amendments to the Anchorage Municipal Code of Regulations (AMCR) 21.90 and Anchorage Municipal Code (AMC) Chapters 21.07 and 21.14.

AMCR 21.90, at the time of its adoption, was the overarching regulation intended to guide residential private street development. An Applicability Section, Decision Tree, Table 21.90.002-1, and Example Design Standards are new sections and a new concept to AMCR 21.90. The Applicability Section and Decision Tree will assist in making correct determination early to avoid the need for waivers or other project decision delays. Table 21.90-002-1 contains new "Optional" private street design standards intended to conform to street standards found in Chapter 21.08. "Optional" standards also include the Woonerf Street.

This project helps carry out implementation Action 4-6 of the *Anchorage 2040 Land Use Plan's Goal 4: Housing and Neighborhoods*. It is related to other ongoing code amendment projects and actions that seek to achieve the goals of the *Anchorage 2040 Land Use Plan*.

For more information, visit the project website at: <http://www.muni.org/Planning/2040actions.aspx>

Your comments and recommendations on the Public Hearing Draft will be submitted to the Planning and Zoning Commission. The Planning and Zoning Commission Public Hearing is scheduled for **Monday, July 8, 2019, at 6:30 p.m. in the Assembly Chambers of the Z.J. Loussac Library, 3600 Denali Street, Anchorage**. Recommendations and findings from the Planning and Zoning Commission process will be forwarded to the Assembly, which will also hold a public hearing before taking final action.

Written comments provided by Wednesday, June 26, 2019, will be included in the packet that will go to the Commission before the meeting. Submit comments in the following ways:

by CityView: <http://munimaps.muni.org/planning/allcomments.cfm>
(insert case number 2019-0079)

by email: Anchorage2040@muni.org

by fax: (907) 343-7927

by mail: Long-Range Planning Division
MOA Planning Department
P.O. Box 196650
Anchorage, AK 99519-6650

If you have questions, please contact Kristine Bunnell in the Long-Range Planning Division at 343-7993.

Attachments: Attachment A: *Public Hearing Draft Recommendations Report - 6/7/19*
Attachment B: Draft Assembly Ordinance
Attachment C: What is a Woonerf Street - Design and Standards



Public Hearing Draft – June 7, 2019
PZC Case # 2019-0079
AMCR 21.90, 21.07, 21.14.040

2040 LUP ACTION ITEM 4-6

PUBLIC HEARING DRAFT RECOMMENDATIONS REPORT

PROJECT: IMPLEMENT 2040 LUP ACTION 4-6

PURPOSE

This ordinance will update Anchorage Municipal Code of Regulations (AMCR) 21.90, and certain chapters of Anchorage Municipal Code (AMC) Title 21 including 21.07 and 21.14. AMCR 21.90, at the time of its adoption, was the overarching regulation intended to guide residential private street development.

BACKGROUND

Currently, Private Development, Traffic Engineering, Project Management & Engineering, and the Planning Departments use a variety of regulations to determine when a driveway or private street is required to access developments with multiple dwelling units on a single lot or tract.

AMCR 21.90 regulates access, design, and parking requirements for these developments. AMC 21.07, AMC 21.08, Municipal Design Criteria Manual, International Fire Code, Municipal addressing standards, and Municipal Driveway Standards also factor into the decision on whether a private street or a driveway is required.

Updates to AMCR 21.90 are necessary to provide consistency between AMCR 21.90 and AMC 21.07 – Development and Design Standards. The AMCR 21.90 update will also bring this regulation in conformance with AMC 21.08 – Subdivision Standards.

The AMCR 21.90 Update adds an *Applicability Section* and a *Decision Tree*. These two additions will clearly define when access to residential projects is required to private street standards, something the current AMCR 21.90 lacks. The Update also offers new “Optional” street cross-sections, which is important to site circulation, parking, and the developer’s ability to provide compact infill housing.

NEW TO AMCR 21.90

Applicability, Decision Tree, and Example Design Standards

An Applicability Section, Decision Tree, Table 21.90.002-1, and Example Design Standards are new sections, and a new concept to AMCR 21.90. The Decision Tree asks specific questions about the development. The *number of structures* or the *number of units* guides whether AMCR 21.90 requires a private street or a driveway. There are however, exceptions found in the Applicability Section that may factor into the decision. Familiarization and use of the Applicability Section and Decision Tree will assist in making a correct determination early on to avoid the need for waivers or other project decision delays.

Table 21.90.002-1 and Woonerf Street

Table 21.90-002-1 contains new “Optional” private street design standards intended to conform to the street standards found in 21.08. These new standards use the number of units as a standard, instead of traffic volumes used in 21.08. “Optional” standards also include the Woonerf Street.

RECOMMENDATIONS

Table #1 presents the proposed recommendations to AMCR 21.90, AM 21.07, and AM 21.14. Staff from several Municipal departments including Planning, Development Services, Project Management & Engineering, and Traffic Engineering worked together with the 21.90 Technical Advisory Committee to refine the recommendations included in this *Public Hearing Draft Report* and *Public Hearing Draft Assembly Ordinance*.

Additions or edits to AMCR 21.90 include the following sections: Title, a new Applicability section, a new Decision Tree, Table 21.90-002-1 and Development Examples, Definitions, General duties of developer,

Responsibilities of developer, contractor, and municipality, Private Street Design section, deletes the Parking section, and edits the Noncompliance section.

Edits or additions to AM 21.07 include: 21.07.090 M.7. Ingress and Egress, a new item d, Title 21.07.110 F.2. e. *Minimum Standards* a new item iv, and 21.07.110 F.3. **Driveway Width** d. *Exceptions*.

Edits or additions to AM 21.14.040 – **Definitions** – amends the Driveway and Parking Space definitions.

TABLE #1: Recommendations for updates to AMCR 21.90, AMC 21.07 and 21.14:

AMCR 21.90	RECOMMENDATIONS	PZC ACTION	STAFF Response
<p><i>Update:</i> 21.90 Title to read:</p>	<p>Regulation 21.90 – Private Streets Standards for Residential Development [MULTIPLE DWELLING UNIT RESIDENTIAL DEVELOPMENT ON A SINGLE LOT OR TRACT].</p>		
<p><i>Insert:</i> 21.90.001 Applicability as a new section in 21.90.001:</p>	<p>21.90.001 – Applicability <u>Applicability: The standards of this regulation shall apply to all residential developments with:</u> <u>A. Multiple dwelling units on a single lot, or multiple dwelling units which are part of a common development on multiple lots, having one or more onsite vehicular access routes which serves more than three structures, or more than twelve dwelling units,</u> <u>or</u> <u>B. Developments with multiple dwelling units on a single lot, or multiple dwelling units which are part of a common development on multiple lots, with more than one parking facility separated by a “trunk” or “spine” vehicular access.</u></p> <p><u>Exemptions to A or B:</u></p> <ol style="list-style-type: none"> 1. <u>Developments with a parking facility connected directly to the public right-of-way by a driveway. These developments shall construct access in accordance with Municipal Driveway Standards, AMC 21.07, and the International Fire Code (IFC) as applicable.</u> 2. <u>Developments with access connected exclusively to a public alley. These developments shall construct access in accordance with Municipal Driveway Standards AMC 21.07, and the International Fire Code (IFC) as applicable.</u> 3. <u>Developments with three or less structures, or twelve or less dwelling units on a single vehicular access. These developments shall construct access in accordance with Municipal Driveway Standards, AMC 21.07, or IFC as applicable.</u> 		

AMCR 21.90	RECOMMENDATIONS	PZC ACTION	STAFF RESPONSE
<p><i>Insert :</i> 21.90.002 Decision Tree and Construction Examples as a new section in 21.90.002:</p> <p><i>(Continued on pages 4 and 5)</i></p>	<p><u>21.90.002 Decision Tree and Construction Examples</u></p> <p><u>The decision to build a private street or driveway will be factored by the number of structures or the number of dwelling units to be constructed. This section provides a Decision Tree (Illustration #1) with an accompanying table (Table 21.90.002-1) and construction examples (Illustrations #2-5).</u></p> <p><u>The construction examples in Illustrations #2-5 depict Private Street access in drawings A and B. Driveway access is depicted in drawings C and D.</u></p>		

Illustration #1: AMCR 21.90 Decision Tree

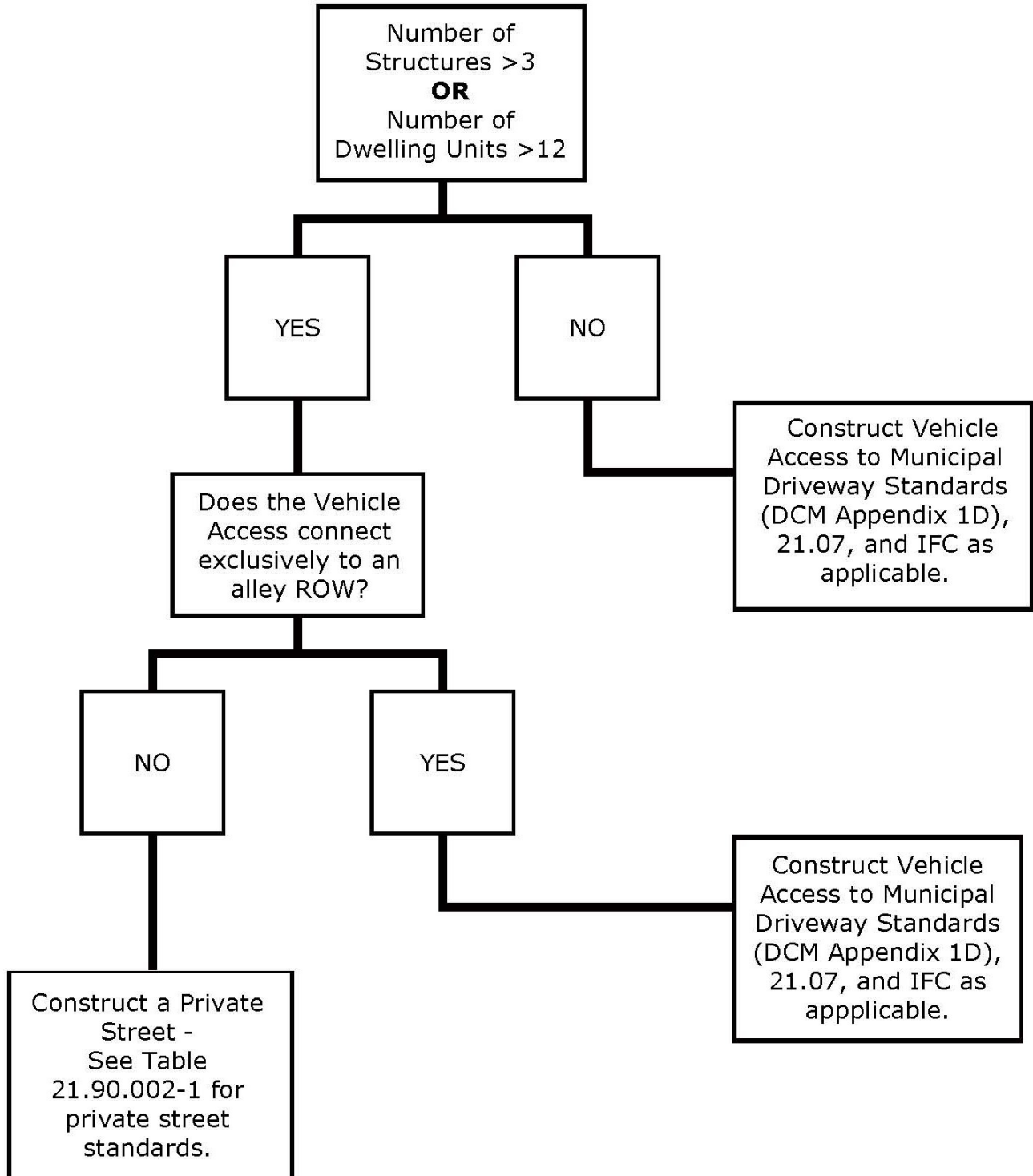


TABLE 21.90.002-1: Private Street - Minimum Standards

Number of Dwelling Units	Street Section ^{1,2} (feet)		Number of Lanes		Design Speed (mph)	Managed Guest Parking ³ Required	Sidewalk
	Standard	Optional ⁵	Moving	Parking			
4-12	31		2	1	20	No	None
		24	2	0	20	Yes	
13-19	31		2	1	20	No	One Side or Woonerf ⁴
		24	2	0	20	Yes	
20-34	33		2	1	25	No	One Side or Woonerf ⁴
		24	2	0	25	Yes	
35-49	33		2	1	25	No	Both Sides
		24	2	0	25	Yes	
50-79	33		2	1	25	No	Both Sides
		28	2	0	25	Yes	
80-200	38		2	1	25	No	Both Sides
		N/A					

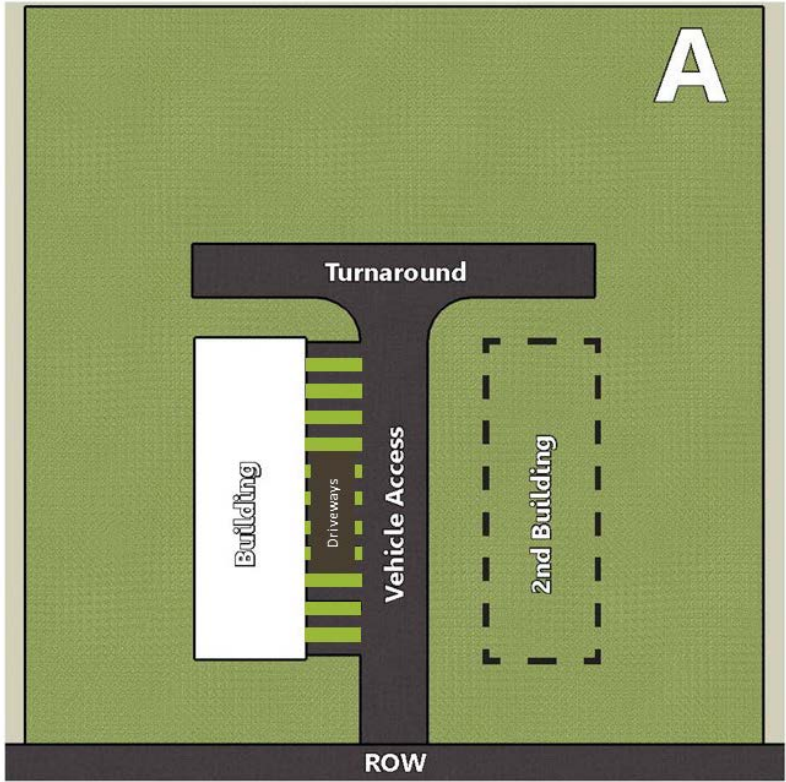
¹Street dimensions are from back of curb.

²The width of a private street may be reduced where it enters the public right-of-way upon approval by the Municipal Traffic Engineer.

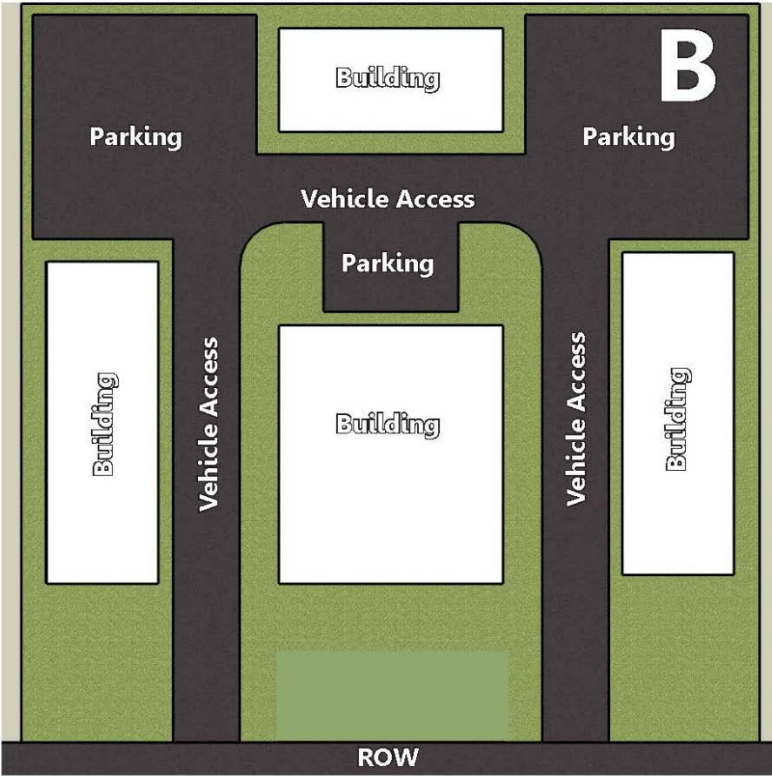
³Managed Guest Parking may not be provided in driveways of individual units.

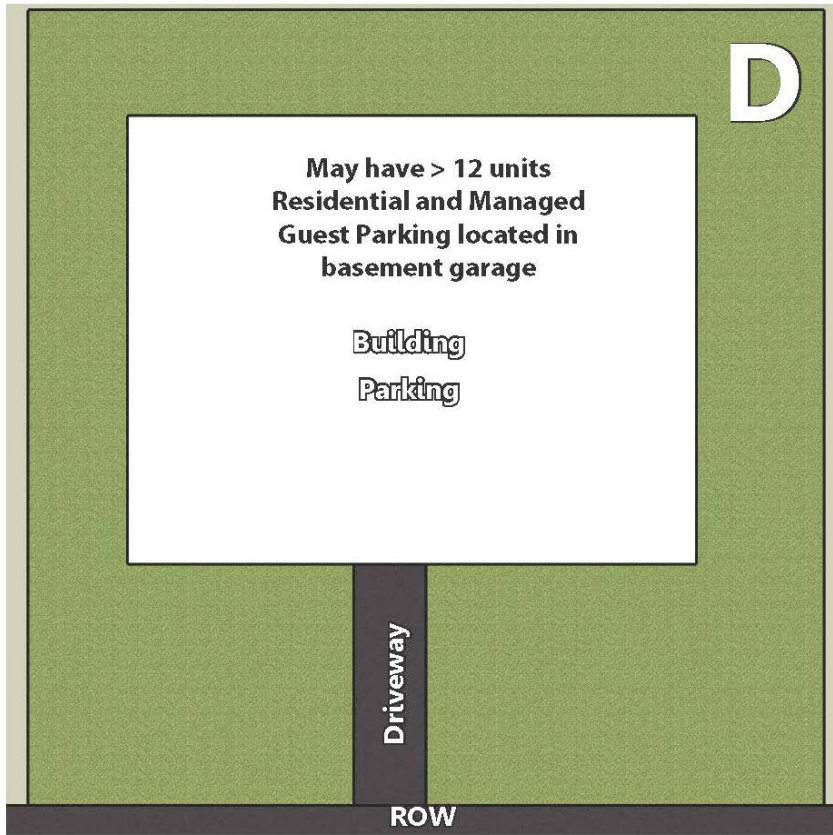
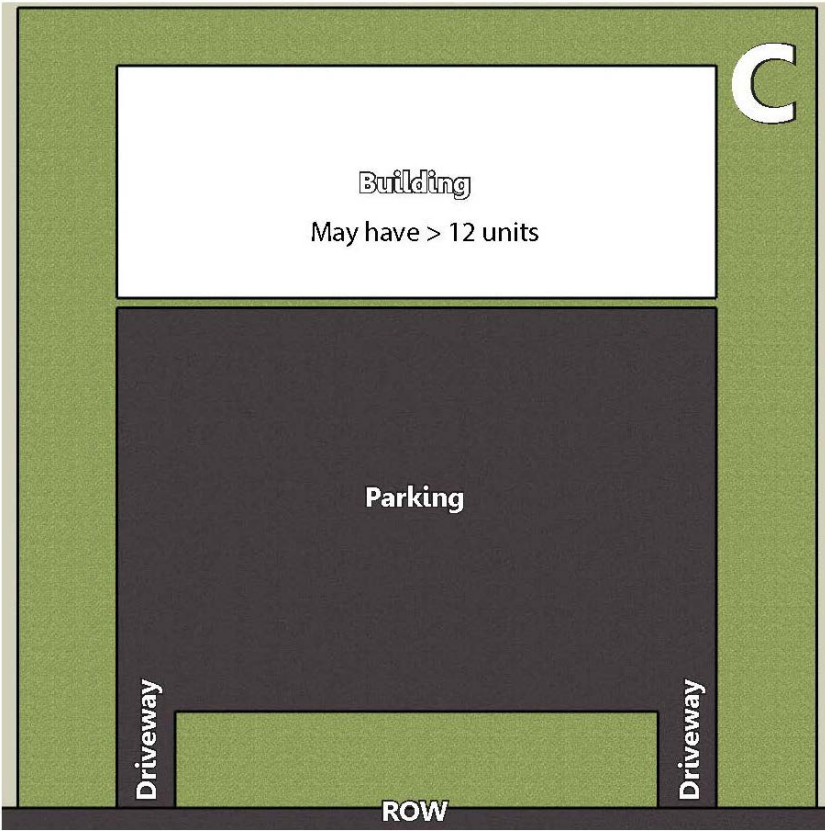
⁴See AMCR 21.90.003.F.1.ff for Woonerf Street requirements.

⁵Use of "Optional" street section where building height is 30' of greater requires a minimum unobstructed width of 26 feet for the private street.



Illustrations #2-3:
Private Street (A or B) Examples





**Illustrations #4-5:
Driveway (C or D) Examples**

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p>Update 21.90.001 Definitions to delete some conflicting definitions between 21.90 and 21.14.040, also updates some definitions in 21.90 and 21.14.040.</p>	<p>21.90.003 [1] - Definitions –</p>		
<p><i>Update:</i> Definition for Contractor</p>	<p>CONTRACTOR shall mean the party to whom a municipal building permit, land use permit, or right-of-way permit is issued, and who is responsible for the installation of all public and/or private <u>streets [ROADS]</u>, parking areas, pedestrian amenities, drainage features and utilities, and other associated site improvements required by the agreements or permits.</p>		
<p><i>Add:</i> Definition for Curb and gutter</p>	<p><u>Curb and gutter shall be defined as raised strips of concrete combined with a depressed concrete channel along the edges of streets or parking lots. Curbs provide structural support to the edge of pavement, provide a durable surface for snow plow blades, define borders between traveled and untraveled surfaces, and help contain low speed traffic within the edges of the pavement. When combined with gutters, curbs collect and convey storm-water runoff to point of collection and improve the efficiency of street sweepers by concentrating debris for easy mechanical clean-up.</u></p>		
<p><i>Update:</i> Definition for Developer:</p>	<p>Developer shall mean the party obligated under a subdivision agreement, development agreement, right-of-way permit, building permit, for all required <u>street [ROAD]</u> improvements, parking areas, pedestrian amenities, drainage features, utilities, and other improvements required by the agreements or permits. <u>This definition specific to AMCR 21.90</u></p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<i>Add:</i> Last sentence to definition of Development:	Development shall mean a residential development ultimately consisting of more than two dwelling units per lot or tract. <u>This definition specific to AMCR 21.90.</u>		
<i>Delete:</i> definition for Driveway and add reference to 21.14.040 for driveway definition.	<u>Refer to 21.14.040 for definition.</u> [DRIVEWAY SHALL MEAN THE PAVED CONNECTION MEETING MUNICIPAL DRIVEWAY STANDARDS LOCATED BETWEEN THE GARAGE OF A DWELLING UNIT AND THE ADJACENT STREET (PUBLIC OR PRIVATE) OR BETWEEN A PARKING FACILITY AND THE ADJACENT STREET (PUBLIC OR PRIVATE). A DRIVEWAY IS NOT A STREET. IT DOES NOT PROVIDE PRIMARY FRONTAGE OR ADDRESS FOR BUILDINGS, NOR IS IT PRIMARILY DESIGNED FOR NON-MOTORIZED PEDESTRIAN ACCESS].		
<i>Add:</i> Managed Guest Parking definition to 21.90.	<u>Managed Guest Parking shall mean parking managed under a parking agreement between the Municipality of Anchorage and the developer/property owner(s).</u>		
<i>Update:</i> MASS definition.	<u>MASS shall mean the abbreviation for the "Municipality of Anchorage Standard Specifications," which is a manual that identifies the approved common construction practices associated with subdivision development and public works projects.</u> [MASS shall mean Municipality of Anchorage Standard Specifications].		
<i>Delete:</i> Definition for Parking lot/area.	[PARKING LOT/AREA SHALL MEAN MORE THAN TWO PARKING SPACES, NOT LOCATED IN A STREET, DESIGNED TO PROVIDE PARKING FOR A DEVELOPMENT. MANEUVERING FOR THE PARKING SPACES MAY OCCUR EITHER IN THE STREET OR A TRAVEL AISLE WHERE PARKING IS BACK-TO-BACK, DEPENDING ON THE PARKING SPACE CONFIGURATION].		
<i>Add:</i> Reference for Parking Facility.	<u>Parking Facility: Refer to 21.14.040 for definition.</u>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<i>Delete:</i> Definition for Parking Space <i>Add:</i> make reference to 21.14.040.	Parking space: <u>Refer to 21.14.040 for definition.</u> [SHALL MEAN ONE SPACE WHERE A VEHICLE IS INTENDED TO BE PARKED].		
<i>Add:</i> Parking Space, Guest reference to 21.14.040.	<u>Parking Space, Guest: Refer to 21.14.404 for definition.</u>		
<i>Add:</i> Pedestrian Connection reference to 21.14.040.	<u>Pedestrian Connection: Refer to 21.14.040.</u>		
<i>Add:</i> Reference to 21.14.040 for additional information.	Plan shall mean a document, prepared by a professional engineer licensed in the State of Alaska, showing all applicable items as listed below in subsection 21.90.003E.1. <u>See 21.14.040 for additional information on different types of plans, as defined by Title 21.</u>		
<i>Edit and Delete:</i> Private Roadway definition. <i>Add:</i> Reference to 21.14.040 for additional information.	Edit 21.90 with: Private <u>Street:</u> [ROADWAY] <u>Refer to 21.14.040 for definition.</u> [SHALL MEAN A ROADWAY LOCATED ON PRIVATE PROPERTY THAT PROVIDES ACCESS FROM DRIVEWAYS TO PUBLIC ROADWAYS, MAINTENANCE FOR PRIVATE ROADWAYS SHALL BE THE RESPONSIBILITY OF THE PRIVATE OWNERS].		
<i>Edit and Delete:</i> Public Roadway definition. <i>Add:</i> Reference to 21.14.040 for additional information.	Edit 21.90 with: Public <u>Street</u> [ROADWAY]. <u>Refer to 21.14.040 for definition.</u> [SHALL MEAN A ROADWAY CONSTRUCTED IN PUBLIC RIGHT-OF-WAY OR IN A PUBLIC USE EASEMENT TO MUNICIPAL STANDARDS. THE MUNICIPALITY OF ANCHORAGE SHALL BE RESPONSIBLE FOR MAINTENANCE OF PUBLIC ROADWAYS].		
<i>Add:</i> Sidewalk with reference to 21.14.040.	<u>Sidewalk: Refer to 21.14.040 for definition.</u>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF RESPONSE
<p><i>Add:</i> Definition of Woonerf Street to 21.90.</p>	<p><u>Woonerf Street shall mean a street designed for vehicular travel, pedestrian travel, social gathering and recreation. Pedestrians and cyclists take precedence in the use of the street. The access for all modes is accommodated on the same surface, and is not differentiated by grade separation or other barriers. Woonerf Streets include traffic calming measures to ensure safe co-existence of all users. Traffic calming measures may include landscaping features, patterned paving, planters, trees, benches, or bollards. These features are intended to enhance user safety and use.</u></p>		
<p><i>Edit:</i> 21.90.002 – General duties of developer.</p>	<p>21.90.004[2] – General duties of developer. A. The developer shall be responsible for planning, designing, and constructing all elements of private <u>streets</u> [ROAD] within a development to meet or exceed municipal private <u>street</u> [ROAD] standards. Approval of an engineered <u>street</u> [ROAD] construction plan, quality control plan, and verification the developer has retained the services of a professional engineer, licensed in the State of Alaska, for inspection of the private <u>street</u> [ROAD] construction shall be required prior to obtaining building or land use permits from building safety. Certified as-built/record drawings and a compilation of weekly inspection and test reports for all private <u>street</u> [ROAD] construction shall be submitted to building safety prior to issuance of any certificates of occupancy for the development.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Edit:</i> 21.90.003 – Responsibilities of developer, contractor, and municipality.</p>	<p>21.90.005[3] – Responsibilities of developer, contractor, and municipality.</p> <p>1. The developer shall submit engineered plans for the construction of all private <u>streets</u> [ROADWAYS] and other facilities required to serve a development as part of the submittal package for a building or land use permit.</p> <p>2. The developer shall provide adequate public use easement dedication when required by the municipal traffic engineer for improved connectivity, circulation and/or public safety as set out in AMC Section <u>21.03.100</u> [21.15.150].</p> <p>3. The developer shall enter into a subdivision agreement, development agreement, or right-of-way permit for construction of all <u>streets</u> [ROADS] and other facilities within dedicated public use easements or right-of-way.</p>		
<p><i>Updates to:</i> Contractor Responsibilities.</p>	<p>B. Contractor Responsibilities.</p> <p>3. Prior to obtaining a building or land use permit, the contractor shall submit verification that the services of a licensed professional engineer have been retained for construction inspection of all private <u>street</u> [ROAD] improvements as well as an approved quality control plan and construction schedule for those improvements to be approved by the <u>building official</u> [MUNICIPAL ENGINEER].</p> <p>C. <u>Building official and</u> Municipal engineer responsibilities.</p> <p>1. The <u>building official</u> [MUNICIPAL ENGINEER] shall review and approve or disapprove all plans for all developments.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Updates, deletions, and additions to:</i> Municipal responsibilities</p>	<p>2. The <u>building official</u> [MUNICIPAL ENGINEER] shall determine to what standards any required improvements are to be constructed. The construction standards may not exceed the applicable standards of AMC Title 21.</p> <p>[3]. [THE MUNICIPAL ENGINEER SHALL INCLUDE THE APPROVED PLAN WITHIN THE APPLICABLE AGREEMENT].</p> <p>3[4].The municipal engineer and/or building official or their designee may periodically inspect construction of the required development improvements for conformance with the approved plan.</p> <p>4[5].The municipal engineer shall review and approve or disapprove all design or construction waivers from the standards in this regulation.</p> <p>5[6].The <u>building official</u> [MUNICIPAL ENGINEER] shall review the as-builts and inspection reports for consistency with these regulations and the approved plans.</p>		
<p><i>Updates and additions to:</i> 21.90.005[3] - Procedures - Section 1. Plan Preparation:</p>	<p>Section 1. Plan Preparation:</p> <p>b. Dimensions of all proposed <u>streets</u> [ROADS], driveways, <u>Primary Pedestrian Connections</u>, parking; <u>Resident Parking Spaces and Guest Parking Spaces</u> and adjacent right-of-way;</p> <p>m. Construction details and standard cross sections of all proposed <u>streets</u> [ROADS], public and private, showing street width, limits of excavation, frost classification of subgrade material, depth of classified fill, pavement thickness, curbs, gutters, shoulders, deep utilities, storm drain;</p> <p>n. Elevation profiles of all proposed <u>streets</u> [ROADS], public and private;</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Updates and additions to:</i> 21.90.005[3] - Section 2. Daily and weekly inspection reports....</p>	<p>2. Daily and weekly inspection reports shall be compiled by the engineer of record and submitted to building safety by close of business, Monday following the reporting period. Failure to comply with this requirement may subject the contractor to issuance of a stop work order until compliance and/or additional fees. The certificates of occupancy shall not be issued until all inspection reports have been received and approved by the <u>building official</u> [MUNICIPAL ENGINEER]. At a minimum, the inspection reports shall contain the following information:</p> <p>f. Sieve analysis and classification of structural fill material placed within the <u>street</u> [ROADWAY] prism or utility trenches;</p> <p>h. Sieve analysis and classification of structural fill material placed in the private <u>street</u> [ROADWAY], storm drain trench and/or utility trench;</p> <p>j. Results of field density testing as set out in subsection E.3. (below), for all <u>street</u> [ROAD] and trench backfill;</p>		
<p><i>Updates or additions to:</i> 21.90.005[3] - Section 4. Quality control testing standards:</p>	<p>a. All FDTs shall.....</p> <p>xi. Soil type and <u>proctor</u> [PROCTER] curve number;</p> <p>b. Minimum frequency of quality control testing...</p> <p>ii. Density testing for <u>street</u> [ROAD] construction: One test per 400 L.F. on each lift of classified fill and backfill, and one test per 400 L.F. on completed subgrade prior to placement of leveling course.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Updates or additions to:</i> 21.90.005[3] – F. Design.</p> <p><i>Continued on pages 17-20</i></p>	<p>1. Private <u>Street</u> [ROAD] design criteria:</p> <p>a. All private <u>streets</u> [ROADS] shall be constructed <u>in accordance with Table 21.90.002-1 and the criteria found in this section</u> [WITH 26 FEET OF PAVEMENT, CURB AND GUTTER ON BOTH SIDES, FOR A TOTAL 30-FOOT SECTION FROM THE BACK OF CURB TO BACK OF CURB].</p> <p>b. All private <u>streets</u> [ROADS] shall be crowned with minimum two percent cross slopes; [Inverted] alternative sections may be approved by the municipal engineer [FOR ROADWAYS LENGTHS LESS THAN 300 FEET].</p> <p>c. All private <u>streets</u> [ROADS] shall have a minimum longitudinal grade of one percent and a maximum grade of ten percent <u>unless otherwise approved by the municipal engineer.</u></p> <p>f. Vertical curves shall be used for transition between intersecting grades of <u>streets</u> [ROAD] when the change exceeds one percent.</p> <p>i. Clear vision areas and clear vision triangles for private streets shall be in compliance with [AMC SECTION 21.45.020] AMC Chapter 24.70, <u>DCM 1.9.E3</u>, and AASHTO Sight Distance Triangle (see Municipal Driveway Standards).</p> <p>j. <u>Any dead end private street with a length in excess of 150-feet (measured from the face of curb, or nearest edge of the traveled way for uncurbed streets, of the intersecting street to the end of the private street) shall be provided with turnaround provisions meeting the requirements of Handout F.02, Recommended Fire Lane Turnarounds.</u></p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
	<p><u>k. Use of the Optional private street section requires a recorded parking agreement between the Municipality of Anchorage and the developer(s)/property owner(s). The agreement shall include the following:</u></p> <ul style="list-style-type: none"> <u>i. The minimum number of Managed Guest Parking stalls is the number of guest parking stalls required by Table 21.07-4.</u> <u>ii. Managed Guest Parking stalls shall be individually signed to indicate that vehicles parked for more than the designated time period, not to exceed 24 hours, will be towed at the vehicle owner's expense.</u> <u>iii. The developer/property owner shall maintain a contract with a towing company for the immediate removal of any vehicles parked along the private street and any vehicles parked in Managed Guest Parking for a period of time in excess of the designated time period not to exceed 24 hours.</u> <u>iv. The developer/property owner shall post the name and phone number of the towing contractor at all locations posted as "no parking" and at Managed Guest Parking stalls.</u> <u>v. Optional private streets shall be signed as "No Parking Fire Lane."</u> <p><u>l. Sidewalks shall be constructed of Portland Cement Concrete with a minimum thickness of 4-inches and a minimum width of 5-feet.</u></p> <p><u>m. An 8' wide separated asphalt pathway may be substituted for a sidewalk.</u></p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
	<p>n. <u>When a development includes multiple parking facilities the preference is to consolidate access between separate parking facilities with a private street. Using the private street for turning and maneuvering should be avoided.</u></p> <p>p. [M] All organics shall be removed from the <u>street</u> [ROAD] subgrade unless approved by the municipal engineer.</p> <p>q. [N] The thickness of structural fill for private <u>streets</u> [ROADS] shall be designed using the limited subgrade frost penetration method as described in DCM Section 1.070F. All substitute design methods shall have prior approval by the municipal engineer.</p> <p>r. [O] Geotextile fabric shall be installed at the bottom of excavations <u>when recommended in DCM Section 1.10E.</u> [FOR ALL PRIVATE STREETS TO PREVENT CONTAMINATION OF STRUCTURAL FILL WITH FROST SUSCEPTIBLE SOILS, UNLESS OTHERWISE APPROVED BY THE MUNICIPAL ENGINEER.]</p> <p>s. [P] All structural fill <u>used in construction of</u> [FOR] private <u>streets</u> [ROADS] shall [BE TYPE II CLASSIFIED FILL MATERIAL, AS DEFINED IN THE] <u>comply with</u> MASS Section 20.21.[05] and shall be installed in accordance with the guidelines established in DCM Section 1.10B. [TYPE III CLASSIFIED FILL MATERIAL, AS DEFINED IN MASS, MAY BE USED FOR BACKFILL OF STORM DRAIN AND UTILITY TRENCHES BELOW THE ROAD BASE].</p> <p>t. [Q] All structural fill material for private <u>streets</u> [ROADS] shall be placed in lifts no greater than 12 inches thick and compacted to 95 percent maximum density at optimum moisture content.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
	<p><u>u.</u> [R] The top six inches of the structural fill for private <u>streets</u> [ROADS] shall be Type II-A classified fill material only, as set out in MASS Section 20.21.</p> <p><u>w.</u> [T] All private <u>streets</u> [ROADS] shall be designed with adequate catchment of surface water runoff to prevent adverse drainage impacts to adjacent properties and/or right-of-way.</p> <p><u>z</u>[W]. All private <u>streets</u> [ROADS] will be signed according to MUTCD Standards with a "private" designation on the street sign. A certificate of occupancy will not be issued until the street signs are installed and inspected. See traffic department for design of sign specified as a <u>D3-101PVT</u> [P3-1P].</p> <p><u>ee.</u> <u>A Woonerf Street shall include the following design elements:</u></p> <ul style="list-style-type: none"> i. <u>A width of 24-feet and must not exceed 500-feet in length.</u> ii. <u>Have a clear and distinct entrance with a sign indicating the Woonerf status.</u> iii. <u>Incorporate different colors and textures in pavement material.</u> iv. <u>Use traffic calming measures such as chicanes. Traffic calming measures must be placed at maximum intervals of 160-feet. Use of vertical traffic calming measures to be approved by the Fire and Traffic Engineering Departments.</u> <p><u>ff.</u> <u>A Woonerf Street may also include the following additional design elements:</u></p> <ul style="list-style-type: none"> i. <u>Eliminate the continuous curb.</u> ii. <u>Incorporate outdoor furnishings, landscaping and lighting.</u> <p><u>gg.</u> <u>Approval by the municipal engineer and the planning director is required for Woonerf Streets.</u></p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Edit:</i> Public Streets and Emergency Response Sections.</p>	<p>hh. <u>Woonerf Streets are considered Optional private streets and are required to provide Managed Guest Parking.</u></p> <p>ii. <u>Woonerf Street design elements must not interfere in Emergency vehicle access.</u></p> <p>2. Public <u>streets</u> [ROADS] constructed in P[Public U]se E[ements] (PUE).</p> <p>a. <u>Streets</u> [ROADS] determined by the traffic engineer to require a PUE dedication for purposes of access and/or connectivity shall be constructed to the standards identified in AMC Title 21 for public streets; and</p> <p>b. PUEs shall be <u>50</u> [44] feet wide to accommodate the <u>street</u> [ROADWAY] section and the snow storage area. Additional dedication shall be required in the event that pedestrian facilities are needed, as determined by the area wide trails plan, determined by a traffic impact analysis, or the <u>street</u> [ROADWAY] volumes are expected to exceed the requirements in AMC Title 21 for pedestrian facilities.</p> <p>3. Emergency Response.</p> <p>b. Residential developments with 30 or more dwelling units shall be provided with separate and approved access <u>streets</u> [ROADS], meeting the remote requirements of IFC D104.3., as adopted under AMC Title 23.</p> <p>c. The number of dwelling units on a single fire apparatus <u>street</u> [ROAD] shall not be increased unless fire apparatus access <u>streets</u> [ROADS] will connect with future developments as determined by the fire code official. No new structures shall be constructed on a fire apparatus access <u>street</u> [ROAD] unless approved by fire code official.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response												
<p><i>Entire Parking Section to be deleted from 21.90 – Continued on page 22).</i></p>	<p>[4. PARKING]</p> <p>[A. ALL OVER-FLOW PARKING AREAS AND PARKING AISLES SHALL BE DESIGNED TO MINIMIZE MANEUVERING IN THE MAIN PRIVATE ROADWAY].</p> <p>[B. OVERFLOW PARKING SHALL BE PROVIDED, IN ADDITION TO REQUIRED PARKING. OVERFLOW PARKING SHALL BE CALCULATED PER THE TABLE BELOW]:</p> <table border="1"> <thead> <tr> <th>[TYPE OF DEVELOPMENT</th> <th>% OF REQUIRED PARKING NECESSARY FOR OVERFLOW</th> </tr> </thead> <tbody> <tr> <td>TWO (2) AND THREE (3) DWELLING UNITS</td> <td>25%</td> </tr> <tr> <td>FOUR (4) TO SIX (6) DWELLING UNITS</td> <td>20%</td> </tr> <tr> <td>GREATER THAN SIX (6) DWELLING UNITS</td> <td>15%</td> </tr> <tr> <td>APARTMENT COMPLEX</td> <td>12%</td> </tr> <tr> <td>OTHER USES</td> <td>PER PARKING STUDY, IF REQUIRED]</td> </tr> </tbody> </table> <p>[C. OVERFLOW PARKING MAY BE PROVIDED ON-STREET, IF THE FOLLOWING REQUIREMENTS ARE MET: THE PARKING SPACE SHALL BE A MINIMUM OF 20 FEET LONG UNLESS BOUNDED ON BOTH ENDS BY PARKING SPACES, IN WHICH CASE, THE BOUNDED PARKING SPACE SHALL BE A MINIMUM OF 24 FEET LONG. FOR EXAMPLE, IF THERE ARE THREE PARKING SPACES BETWEEN TWO DRIVEWAYS, THOSE PARKING SPACES WOULD BE 20 FEET, 24 FEET AND 20 FEET LONG RESPECTIVELY. IF THE ON-STREET PARKING IS NOT SUFFICIENT TO MEET THE OVERFLOW PARKING REQUIREMENT, OFF-STREET PARKING SHALL BE PROVIDED].</p>	[TYPE OF DEVELOPMENT	% OF REQUIRED PARKING NECESSARY FOR OVERFLOW	TWO (2) AND THREE (3) DWELLING UNITS	25%	FOUR (4) TO SIX (6) DWELLING UNITS	20%	GREATER THAN SIX (6) DWELLING UNITS	15%	APARTMENT COMPLEX	12%	OTHER USES	PER PARKING STUDY, IF REQUIRED]		
[TYPE OF DEVELOPMENT	% OF REQUIRED PARKING NECESSARY FOR OVERFLOW														
TWO (2) AND THREE (3) DWELLING UNITS	25%														
FOUR (4) TO SIX (6) DWELLING UNITS	20%														
GREATER THAN SIX (6) DWELLING UNITS	15%														
APARTMENT COMPLEX	12%														
OTHER USES	PER PARKING STUDY, IF REQUIRED]														

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
	<p>[D. ALL PARKING SPACES INSIDE GARAGES AND CARPORTS SHALL MEET DESIGN REQUIREMENTS FOUND IN AMC SECTION 21.45.080, IF THE DRIVEWAY IS BEING USED TO MEET REQUIRED OR OVERFLOW PARKING REQUIREMENTS];</p> <p>[E. INDIVIDUAL DWELLING UNIT GARAGE DRIVEWAYS SHALL HAVE A MINIMUM OF 22 FEET BETWEEN THE GARAGE DOOR AND THE BACK OF CURB OR EDGE OF PAVEMENT FOR ALL ROADWAYS].</p> <p>[F. ALL OVER-FLOW PARKING LOCATED AT 90 DEGREES TO THE INTERIOR ROADWAYS OF THE DEVELOPMENT SHALL BE AT LEAST 24 FEET DEEP, INCLUDING ANY OVERHANG].</p> <p>[G. PRIVATE PARKING GARAGES SHALL PROVIDE A MINIMUM 30 FEET OF ON-SITE VEHICLE QUEUING/STACKING THAT DOES NOT INTERFERE WITH ANY PARKING STALLS OR ROADWAYS].</p> <p>[H. ALL PRIVATE MULTI-PLEX PARKING GARAGES SHALL HAVE AN ENTRANCE/EXIT THAT IS A MINIMUM OF 18 FEET WIDE].</p> <p>[I. ALL PRIVATE MULTI-PLEX PARKING GARAGES SHALL HAVE TWO ENTRANCE/EXIT POINTS, IF DESIGNED TO PROVIDE OVER 20 PARKING SPACES, UNLESS OTHERWISE APPROVED BY THE TRAFFIC ENGINEER].</p>		
<i>Edit:</i> Noncompliance Section	<p>5[6]. Failure to provide all inspection reports and as-built drawings of all private <u>street</u> [ROAD] construction, certified by a professional engineer registered in the State of Alaska shall result in non-issuance of all certificates of occupancy for the development.</p>		
<i>Add to Title 21:</i> Title 21.07.090 M.7. Ingress and Egress, a new item d.	<p><u>d. Minimum width of 20 feet for 2-way ingress/egress entries for parking structures. Formal waiver required from Municipal Traffic Engineer for a reduction/exception to this standard.</u></p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p>Add to Title 21: Title 21.07.110 F.2. e. <i>Minimum Standards</i> a new item iv.</p>	<p><u>iv. Guest Parking: Locate guest parking spaces as to minimize maneuvering in private streets and circulation aisle and not exclusive to or physically associated with any individual dwelling.</u></p>		
<p>Amend Title 21: 21.07.110 F.3. Driveway Width d. <i>Exceptions</i></p>	<p>The traffic engineer <u>and the planning director</u> may approve a departure from the standards of this section, such as a narrow driveway, if documentation prepared by a <u>licensed professional in the state of Alaska</u> [TRAFFIC ENGINEERING PROFESSIONAL] demonstrates <u>the driveway still meets this chapter standards and the Municipal driveway standards memo issued by the Municipal Traffic Engineer, and</u> [TO THE SATISFACTION OF THE TRAFFIC ENGINEER] that change is appropriate. [TRAFFIC ENGINEER A]. Approval shall be contingent on factors such as street typology, urban context, traffic volume and speed, curb return radii, street travel lane offset from face of curb, pedestrian and bicycle facilities, snow storage, driveway configuration and length, site and project characteristics, number of vehicles, expected to use the driveway, and comprehensive plan polices. The traffic engineer <u>and planning director</u> may also be more restrictive than the standards of this section, provided [THE TRAFFIC ENGINEER] <u>they</u> document[S] the rationale.</p>		

AMCR 21.90	RECOMMENDATIONS	PZC Action	STAFF Response
<p><i>Amend Title 21:</i> Title 21.14.040 - DEFINITIONS</p>	<p>Driveway The paved connection meeting municipal driveway standards located between the garage of a dwelling unit and the adjacent street (public or private) or between a parking facility and the adjacent street (public or private). [A PRIVATE TRAVEL WAY PROVIDING MOTOR VEHICLE ACCESS FROM A PARKING SPACE OR PARKING FACILITY TO A STREET] A driveway is not a street. It does not provide primary frontage or address for buildings, nor is it primarily designed for non-motorized pedestrian access.</p> <p>Parking Space A space for the parking of one vehicle [AUTOMOBILE].</p>		

Submitted by: Chair of the Assembly at
the Request of the Mayor

Prepared by: Planning Department

For reading:

**ANCHORAGE, ALASKA
AO NO. 2019-___**

AN ORDINANCE OF THE ANCHORAGE MUNICIPAL ASSEMBLY AMENDING ANCHORAGE MUNICIPAL CODE OF REGULATIONS (AMCR) 21.90; MULTIPLE DWELLING UNIT RESIDENTIAL DEVELOPMENT ON A SINGLE LOT OR TRACT, ANCHORAGE MUNICIPAL CODE (AMC) TITLE 21: AMC 21.07.090; AND 21.07.110; DEVELOPMENT AND DESIGN STANDARDS; AMC 21.14 RULES OF CONSTRUCTION AND DEFINITIONS MULTIFAMILY RESIDENTIAL DISTRICT; AND AMC 21.06.020, DIMENSIONAL STANDARDS TABLES; TO PROVIDE DIRECTION TO ACCESS REQUIREMENTS FOR RESIDENTIAL PROJECTS WITH MULTIPLE STRUCTURES OR MULTIPLE DWELLING UNITS, AND TO PROVIDE OPTIONAL PRIVATE STREET CROSS SECTIONS TO REDUCE CONSTRUCTION COST AND ENCOURAGE INFILL DEVELOPMENT CONSISTENT WITH THE ANCHORAGE 2040 LAND USE PLAN.

(Planning and Zoning Commission Case 2019-0079)

WHEREAS, this ordinance amends AMCR 21.90 with a new Applicability Section, a project decision tree (Illustration #1) with accompanying revised private street design standards (Table 21.90.002-1), deletes redundant definitions, deletes redundant parking requirements, and introduces the Woonerf Street private street option; and

WHEREAS, this ordinance also amends AMC chapter 21.07 with new minimum width ingress/egress entry standards, guest parking requirements when constructing private streets, and in 21.07 *Exceptions* allows for additional review and input from the Planning Director; and

WHEREAS, this ordinance also amends AMC section 21.14.040 *Definitions* to reduce redundancy between AMCR 21.90 and AMC 21.14.040 definitions; and

WHEREAS, the proposed AMCR 21.90, AMC 21.07, and AMC 21.14.040 amendments implement *Anchorage 2040 Land Use Plan (2040 Plan) – Strategy 9: Infill Housing Development Regulations*; by encouraging the efficient use of residential land, and providing increased flexibility in some site development standards to meet the projected housing demand presented in the *2040 Plan*; now, therefore,

THE ANCHORAGE ASSEMBLY ORDAINS:

Section 1. AMCR 21.90 – is hereby amended to read as follows:

1 **Regulation 21.90 – Private Street Standards for Residential Development**
2 **[MULTIPLE DWELLING UNIT RESIDENTIAL DEVELOPMENT ON A SINGLE**
3 **LOT OR TRACT]**
4

5 **21.90.001 – Applicability**
6

7 Applicability: The standards of this regulation shall apply to all residential
8 developments with:
9

- 10 A. Multiple dwelling units on a single lot, or multiple dwelling units which
11 are part of a common development on multiple lots, having one or
12 more onsite vehicular access routes which serves more than three
13 structures, or more than twelve dwelling units, or
14
15 B. Developments with multiple dwelling units on a single lot, or multiple
16 dwelling units which are part of a common development on multiple
17 lots, with more than one parking facility separated by a “trunk” or
18 “spine” vehicular access.
19

20 Exemptions to A or B:

- 21 1. Developments with a parking facility connected directly to the
22 public right-of-way by a driveway. These developments shall
23 construct access in accordance with Municipal Driveway
24 Standards, AMC 21.07, and the International Fire Code (IFC)
25 as applicable.
26
27 2. Developments with access connected exclusively to a public
28 alley. These developments shall construct access in
29 accordance with Municipal Driveway Standards AMC 21.07,
30 and the International Fire Code (IFC) as applicable.
31
32 3. Developments with three or less structures, or twelve or less
33 dwelling units on a single vehicular access. These
34 developments shall construct access in accordance with
35 Municipal Driveway Standards, AMC 21.07, or IFC as
36 applicable.
37

38 **21.90.002 Decision Tree and Construction Examples**
39

40 The decision to build a private street or driveway will be factored by the
41 number of structures or the number of dwelling units to be constructed. This
42 section provides a Decision Tree (Illustration #1) with an accompanying table
43 (Table 21.90.002-1), and construction examples (Illustrations #2-5).
44

45 The construction examples in Illustrations #2-5 depict Private Street access
46 in drawings A and B. Driveway access is depicted in drawings C and D.

Illustration #1 – AMCR 21.90 Decision Tree

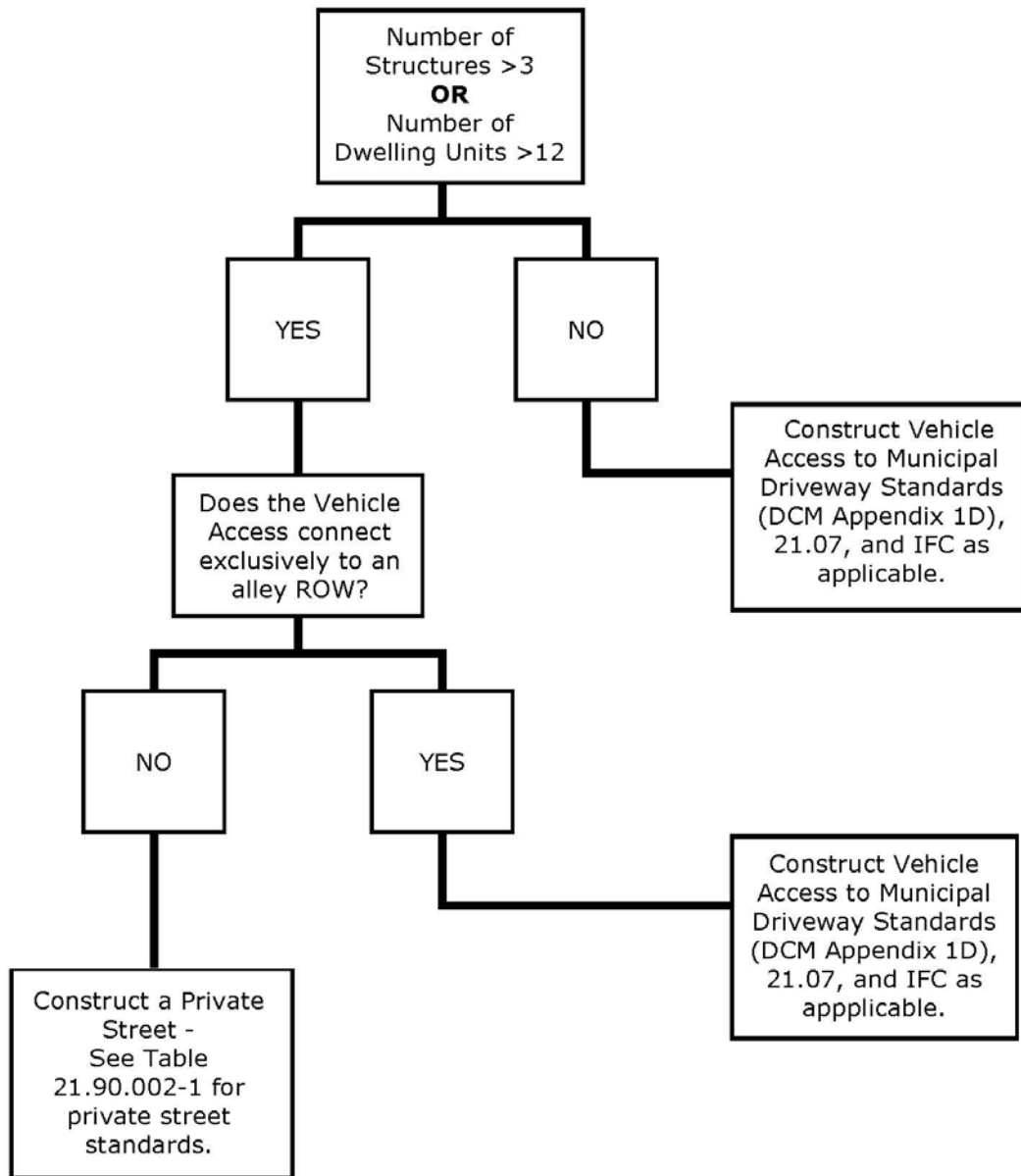
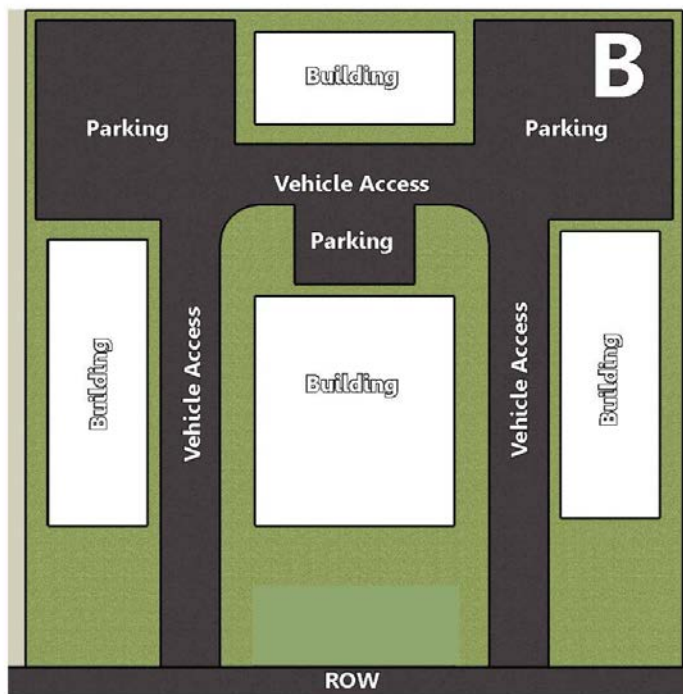
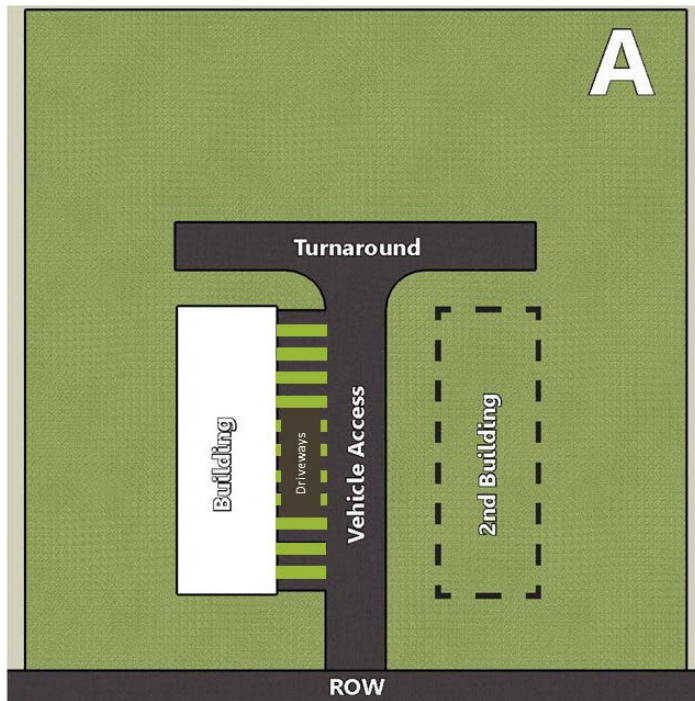


TABLE 21.90.002-1: Private Street - Minimum Standards							
Number of Dwelling Units	Street Section ^{1,2} (feet)		Number of Lanes		Design Speed (mph)	Managed Guest Parking ³ Required	Sidewalk
	Standard	Optional ⁵	Moving	Parking			
4-12	31		2	1	20	No	None
		24	2	0	20	Yes	
13-19	31		2	1	20	No	One Side or Woonerf ⁴
		24	2	0	20	Yes	
20-34	33		2	1	25	No	One Side or Woonerf ⁴
		24	2	0	25	Yes	
35-49	33		2	1	25	No	Both Sides
		24	2	0	25	Yes	
50-79	33		2	1	25	No	Both Sides
		28	2	0	25	Yes	
80-200	38		2	1	25	No	Both Sides
		N/A					

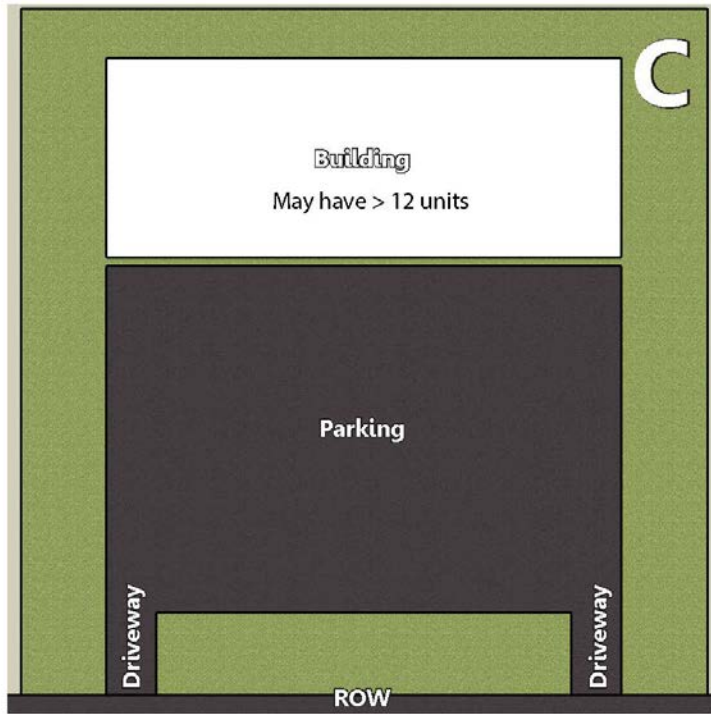
¹Street dimensions are from back of curb.
²The width of a private street may be reduced where it enters the public right-of-way upon approval by the Municipal Traffic Engineer.
³Managed Guest Parking may not be provided in driveways of individual units.
⁴See AMCR 21.90.003.F.1.ff for Woonerf Street requirements.
⁵Use of "Optional" street section where building height is 30' or greater requires a minimum unobstructed width of 26 feet for the private street.

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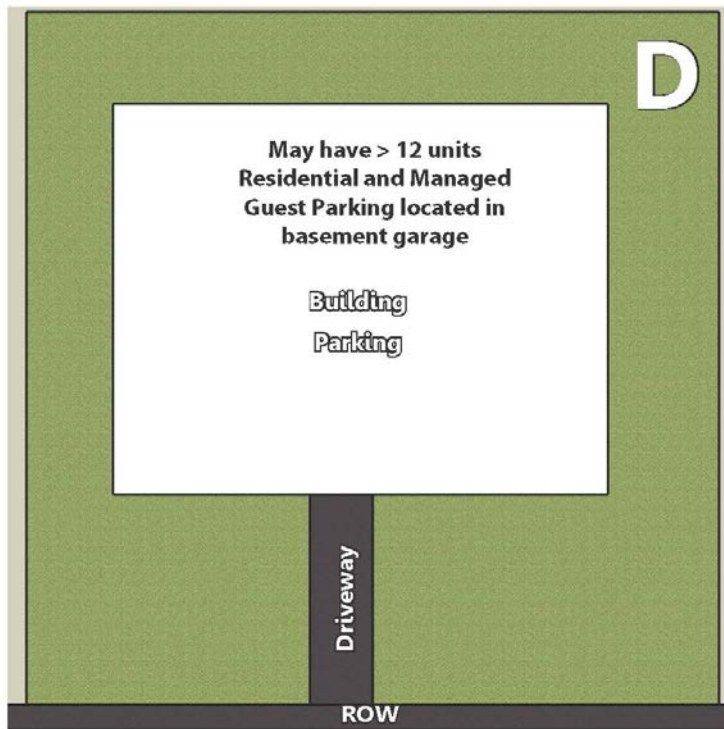
Illustrations #2-3: Private Streets (A or B) Design Examples



Illustrations #4-5: Driveway (C or D) Design Examples



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21.90.003[1]- Definitions

1 The following words, terms and phrases, when used in this chapter, shall have
2 the meanings ascribed to them in this section, except where the context clearly
3 indicates a different meaning.

4
5 AASHTO shall mean American Association of State Highway and
6 Transportation Officials.

7
8 AMC shall mean Anchorage Municipal Code.

9
10 BMP shall mean Best Management Procedures.

11
12 Contractor shall mean the party to whom a municipal building permit, land use
13 permit, or right-of-way permit is issued, and who is responsible for the installation of
14 all public and/or private streets [ROAD], parking areas, pedestrian amenities,
15 drainage features and utilities, and other associated site improvements required by
16 the permit.

17
18 Curb and gutter shall be defined as raised strips of concrete combined with a
19 depressed concrete channel along the edges of streets or parking lots. Curbs
20 provide structural support to the edge of pavement, provide a durable surface for
21 snow plow blades, define borders between traveled and untraveled surfaces, and
22 help contain low speed traffic within the edges of the pavement. When combined
23 with gutters, curbs collect and convey storm-water runoff to point of collection and
24 improve the efficiency of street sweepers by concentrating debris for easy
25 mechanical clean-up.

26
27 DCM shall mean the Municipal Design Criteria Manual.

28
29 Developer shall mean the party obligated under a subdivision agreement,
30 development agreement, right-of-way permit, building permit, or land use permit, for
31 all required street [ROAD] improvements, parking areas, pedestrian amenities,
32 drainage features, utilities and other improvements required by the agreements or
33 permits. This definition specific to AMCR 21.90.

34
35 Development shall mean a residential development ultimately consisting of
36 more than two dwelling units per lot or tract. This definition is specific to AMCR
37 21.90.

38
39 Driveway: See 21.14.040 for definition [SHALL MEAN THE PAVED
40 CONNECTION MEETING MUNICIPAL DRIVEWAYS STANDARDS LOCATED
41 BETWEEN THE GARAGE OF A DWELLING UNIT AND THE ADJACENT
42 ROADWAY(PUBLIC OR PRIVATE) OR BETWEEN THE TRAVEL AISLE OF A
43 PARKING LOT/AREA AND THE ADJACENT ROADWAY (PUBLIC OR PRIVATE)].

44 Managed Guest Parking shall mean parking managed under a parking
45 agreement between the Municipality of Anchorage and the developer/property
46 owner(s).

47

1 MASS shall mean the abbreviation for the “Municipality of Anchorage Standard
2 Specifications,” which is a manual that identifies the approved common construction
3 practices associated with subdivision development and public works projects.
4 [MASS SHALL MEAN MUNICIPALITY OF ANCHORAGE STANDARD
5 SPECIFICATIONS].

6
7 MUTCD shall mean Manual on Uniform Traffic Control Devices.

8
9 [PARKING LOT/AREA SHALL MEAN MORE THAN TWO PARKING SPACES,
10 NOT LOCATED IN A STREET, DESIGNED TO PROVIDE PARKING FOR A
11 DEVELOPMENT. MANEUVERING FOR THE PARKING SPACES MAY OCCUR
12 EITHER IN THE STREET OR A TRAVEL AISLE WHERE PARKING IS BACK-TO-
13 BACK, DEPENDING ON THE PARKING SPACE CONFIGURATION].

14
15 Parking Facility: Refer to 21.14.040 for definition.

16
17 Parking space: Refer to 21.14.040 for definition [SHALL MEAN ONE SPACE
18 WHERE A VEHICLE IS INTENDED TO BE PARKED].

19
20 Parking space, guest: Refer to 21.14.040 for definition.

21
22 Pedestrian connection: Refer to 21.14.040 for definition.

23
24 Plan shall mean a document, prepared by a professional engineer licensed in
25 the State of Alaska, showing all applicable items as listed below in subsection
26 21.90.003E.1. Refer to 21.14.040 for additional information on different types of
27 plans, as defined by Title 21.

28
29 Private Street [ROADWAY]: Refer to 21.14.040 for definition. [SHALL MEAN
30 A ROADWAY LOCATED ON PRIVATE PROPERTY THAT PROVIDES ACCESS
31 FROM DRIVEWAYS TO PUBLIC ROADWAYS. MAINTENANCE FOR PRIVATE
32 ROADWAYS SHALL BE THE RESPONSIBILITY OF THE PRIVATE OWNERS].

33
34 Public Street [ROADWAY]: Refer to 21.14.040 for definition. [SHALL MEAN A
35 ROADWAY CONSTRUCTED ON PUBLIC RIGHT-OF-WAY OR IN A PUBLIC USE
36 EASEMENT TO MUNICIPAL STANDARDS. THE MUNICIPALITY OF
37 ANCHORAGE SHALL BE RESPONSIBLE FOR MAINTENANCE OF PUBLIC
38 ROADWAYS].

39
40 PUE shall mean public use easement(s).

41
42 Sidewalk: Refer to 21.14.040 for definition.

43
44 Woonerf Street shall mean a street designed for vehicular travel, pedestrian
45 travel, social gathering and recreation. Pedestrians and cyclists take precedence in
46 the use of the street. The access for all modes is accommodated on the same
47 surface, and is not differentiated by grade separation or other barriers. Woonerf
48 Streets include traffic calming measures to ensure safe coexistence of all users.

1 Traffic calming measures may include landscaping features, patterned paving,
2 planters, trees, benches, or bollards. These features are intended to enhance user
3 safety and use.
4

5 (AR No. 2004-108(S-2), § 1, 6-8-04)
6

7 **21.90.004[2] - General duties of developer.**
8

- 9 A. The developer shall be responsible for planning, designing, and
10 constructing all elements of private streets [ROAD] within a
11 development to meet or exceed municipal private street [ROAD]
12 standards. Approval of an engineered street [ROAD] construction
13 plan, quality control plan, and verification the developer has retained
14 the services of a professional engineer, licensed in the State of Alaska,
15 for inspection of the private street [ROAD] construction shall be
16 required prior to obtaining building or land use permits from building
17 safety. Certified as-built/record drawings and a compilation of weekly
18 inspection and test reports for all private street [ROAD] construction
19 shall be submitted to building safety prior to issuance of any
20 certificates of occupancy for the development.
21

22 (AR No. 2004-108(S-2), § 1, 6-8-04)
23

24 **21.90.005[3] - Responsibilities of developer, contractor, and**
25 **municipality.**
26

- 27 A. Developer responsibilities.
28
- 29 1. The developer shall submit engineered plans for the
30 construction of all private streets [ROADWAYS] and other
31 facilities required to serve a development as part of the
32 submittal package for a building or land use permit.
33
 - 34 2. The developer shall provide adequate public use easement
35 dedication when required by the municipal traffic engineer for
36 improved connectivity, circulation and/or public safety as set
37 out in AMC Section 21.03.100 [21.15.150].
38
 - 39 3. The developer shall enter into a subdivision agreement,
40 development agreement, or right-of-way permit for construction
41 of all streets [ROADS] and other facilities within dedicated
42 public use easements or right-of-way.
43
 - 44 4. The developer shall ensure that subsequent builders or owners
45 performing work on-site or in the adjacent right(s)-of-way are
46 supplied with a copy of the approved site plans.
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5. The developer shall be responsible for all work on-site or in adjacent right(s)-of-way until the development is issued final certificates of occupancy. The developer shall not be responsible for the actions of a third party performing work outside of the developer's subdivision agreement, right-of-way permit, building permit, or land use permit.
6. The developer shall retain the services of a professional engineer, registered in the State of Alaska, for inspection of all private street [ROAD], drainage and utility construction to ensure all improvements are in compliance with applicable municipal standards.
7. The developer shall work with the contractor to ensure daily and weekly inspection and test reports are prepared and submitted in accordance with the requirements set out in subsection E.2. below; and that certified as-built drawings are prepared for all private street and drainage construction and submitted to the municipal building safety department.
8. The developer shall be responsible for identifying all permits required for a development (including, but not limited to, right-of-way permit, flood hazard permit, wetlands fill permit, Corps of Engineers 404 Permit, Title 16 Fish Habitat Permit) and for working with all concerned regulatory agencies to obtain required permits prior to the commencement of work.
9. Prior to issuance of individual building permits, the developer shall be responsible for the preparation of a hydro-geologic report to provide accurate assessments of seasonal high groundwater table elevations for the purpose of maximum foundation depth determination, and to resolve the need for footing and foundation drains. The report shall be based on analysis of groundwater table tests conducted in accordance with the procedures specified in subsection E.6. below, and shall bear the signature and stamp of the responsible engineer or hydrogeologist. The report shall contain recommendations for the mitigation of groundwater penetration into crawlspaces and/or basements.

B. Contractor responsibilities.

1. The contractor shall construct all improvements associated with a development in accordance with the approved plans, issued permits and in compliance with all applicable municipal standards.

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2. The contractor and all subcontractors shall perform all site work such that it will not cause adverse pedestrian and vehicle safety impacts to the development, adjoining developments, or adjoining right-of-way.
3. Prior to obtaining a building or land use permit, the contractor shall submit verification that the services of a licensed professional engineer have been retained for construction inspection of all private street [ROAD] improvements as well as an approved quality control plan and construction schedule for those improvements to be approved by the building official [MUNICIPAL ENGINEER].
4. The contractor shall be responsible for compiling daily and weekly inspection reports for submittal as set out in subsection E.2. below.
5. The contractor shall be responsible for repairing or replacing any improvements found to be insufficient or damaged due to materials, workmanship or the actions of the contractor or subcontractors.

C. Building official and Municipal engineer responsibilities.

1. The building official [MUNICIPAL ENGINEER] shall review and approve or disapprove all plans for all developments.
2. The building official [MUNICIPAL ENGINEER] shall determine to what standards any required improvements are to be constructed. The construction standards may not exceed the applicable standards of AMC Title 21.
- [3. THE MUNICIPAL ENGINEER SHALL INCLUDE THE APPROVED PLAN WITHIN THE APPLICABLE AGREEMENT].
- ~~3~~[4]. The municipal engineer and/or building official or their designee may periodically inspect construction of the required development improvements for conformance with the approved plan.
- ~~4~~[5]. The municipal engineer shall review and approve or disapprove all design or construction waivers from the standards in this regulation.
- ~~5~~[6]. The building official [MUNICIPAL ENGINEER] shall review the as-builts and inspection reports for consistency with these regulations and the approved plans.

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- D. Municipal traffic engineer responsibilities.
1. The municipal traffic engineer shall review and approve or disapprove proposed plans to ensure all vehicle and pedestrian safety standards as well as parking and maneuverability standards have been met.
 2. The municipal traffic engineer shall review proposed plans to determine if plans comply with the municipal driveway standards.
 3. The municipal traffic engineer shall review and approve or disapprove all waivers from the applicable standards in this regulation.
- E. Procedures. The developer shall adhere to the procedural matters as outlined in this section to provide consistent plan submittals and standardized field inspection and testing. All procedures detailed shall not exceed those required under a subdivision agreement.
1. Plan preparation: Construction plans shall include the following information:
 - a. Scaled drawing; minimum scale one inch equals 50 feet zero inches;
 - b. Dimensions of all proposed streets [ROADS], driveways, Primary Pedestrian Connections, parking; Resident Parking Spaces and Guest Parking Spaces and adjacent right-of-way;
 - c. Existing and proposed property lines;
 - d. Adjoining right-of-way;
 - e. Existing and proposed drainage facilities on property and in the right-of-way;
 - f. Existing and proposed topography extending a minimum 25 feet beyond all property boundaries;
 - g. Proposed post-development drainage patterns including grade breaks, grade break elevations and drainage arrows;
 - h. Easements dedicated by plat or recorded by book and page;

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- i. Development setbacks;
- j. Wetland boundaries;
- k. Stream protection setbacks;
- l. Relevant cross sections of parking areas, sidewalks, curbs, loading bays, ramps, and all other features of the parking area where cross sections will clarify grade breaks and elevations;
- m. Construction details and standard cross sections of all proposed streets [ROADS], public and private, showing street width, limits of excavation, frost classification of subgrade material, depth of classified fill, pavement thickness, curbs, gutters, shoulders, deep utilities, storm drain;
- n. Elevation profiles of all proposed streets [ROADS], public and private;
- o. All street geometrics including curb return radii;
- p. Water plans and elevation profiles;
- q. Sewer plans and elevation profiles;
- r. Building footprint(s) and driveway location(s);
- s. Finished floor elevations and/or finished garage floor elevations;
- t. All proposed landscaping;
- u. Locations of all proposed erosion and sediment control BMPs;
- v. All proposed points of ingress/egress and AASHTO sight distance triangles at those proposed points shall be identified;
- w. Parking calculations;
- x. Illumination plans with certified lighting and glare statement;

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- y. Certified site lighting analysis and glare statement for parking lot lighting where an independent lighting system is provided for parking lots exceeding 20 parking spaces;
 - z. Clearing limits;
 - aa. Storm drain plans and elevation profiles; and
 - bb. Applicable manhole details, pavement cut, and replacement details in conformance with MASS.
2. Daily and weekly inspection reports shall be compiled by the engineer of record and submitted to building safety by close of business, Monday following the reporting period. Failure to comply with this requirement may subject the contractor to issuance of a stop work order until compliance and/or additional fees. The certificates of occupancy shall not be issued until all inspection reports have been received and approved by the building official [MUNICIPAL ENGINEER]. At a minimum, the inspection reports shall contain the following information:
- a. Date the work was observed;
 - b. Project name;
 - c. Scope of work;
 - d. Weather conditions and temperature while work was observed;
 - e. Depth of excavation;
 - f. Sieve analysis and classification of structural fill material placed within the street [ROADWAY] prism or utility trenches;
 - g. Verification that all organics have been properly removed from the subgrade;
 - h. Sieve analysis and classification of structural fill material placed in the private street [ROADWAY], storm drain trench and/or utility trench;
 - i. Source and method of backfill;
 - j. Results of field density testing as set out in subsection E.3. (below), for all street [ROAD] and trench backfill;

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- k. Compaction methods;
 - l. Any ground water encountered or dewatering performed;
 - m. Asphalt pavement thicknesses observed from core samples;
 - n. Status and effectiveness of erosion and sediment control BMPs; and
 - o. Engineer's or representative's signature.
3. Guidelines for quality control plan submittal:
- a. Identify all haul routes, material sources, and disposal sites, including frequency and types of proposed maintenance of haul routes, and emergency telephone number and contact person. List the days and hours of haul route use, and submit a traffic control plan, if required;
 - b. List the source and types of soils to be used, including provisions to ensure quality control of all native soils anticipated for use in construction of the development;
 - c. Identify the types and frequency of all testing in accordance with subsection E.4. below; and
 - d. Provide procedures for reporting quality control activities, including discoveries of deficiencies in the work, and methods to correct, repair, and retest deficiencies.
4. Quality control testing standards:
- a. All FDTs shall include the following information:
 - i. Project name;
 - ii. Test number;
 - iii. Date;
 - iv. Field technician's name;

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- v. Location by station (from approved plans) and offset distance;
- vi. Elevation (from approved plans);
- vii. Description (sidewalk subgrade, street fill by type, water, trench backfill, pavement, etc.);
- viii. Nuclear gauge make, model, and number;
- ix. Calibration date;
- x. Probe depth;
- xi. Soil type and proctor [PROCTER] curve number;
- xii. Wet density (pcf);
- xiii. Moisture content (percentage);
- xiv. Dry density (pcf);
- xv. Maximum dry density (pcf — from proctor);
- xvi. Marshall density (pcf);
- xvii. Percent compaction;
- xviii. Remarks; and
- xix. All failing FDT's shall be retested until they pass, and the contractor's method of improving the compaction shall be noted on the test form.

b. Minimum frequency of quality control testing. These are minimum frequencies; additional testing may be necessary, depending on circumstances and failure rate:

- i. Mechanical analysis on imported material:
 - (A) Classified backfill, all types — one per 2,000 tons;
 - (B) Bedding, all types — one per 500 L.F.;
 - (C) Leveling course — one per 1,000 tons;
 - (D) Seal coat aggregate — one per 1,000 tons.

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- ii. Density testing for street [ROAD] construction: One test per 400 L.F. on each lift of classified fill and backfill, and one test per 400 L.F. on completed subgrade prior to placement of leveling course.
 - iii. Density testing for trench backfill: One test per 300 L.F. of trench at spring line, mid-trench and surface.
 - iv. A.C. pavement: One truck sample of each day's run for marshal series, and one core sample correlated to truck sample for density and thickness.
5. Inspection and as-built standards:
- a. Provide a qualified representative at the site to inspect the work on a daily basis. The engineer shall provide written daily reports in conformance with subsection E.2 above.
 - b. The engineer's representative shall be responsible for compilation of as-built information, and preparation of as-built drawings and utility service connection records. The minimum requirements and standards for as-builts is set out in MASS, Section 65.00.
 - c. The engineer shall notify the building safety department if employment is terminated or is reduced to the point that the engineer can no longer perform the services described.
6. Groundwater table elevation testing.
- a. The bottom of the test hole shall be at least six feet below the bottom of the anticipated foundation depth, or a minimum of ten feet deep.
 - b. A perforated plastic pipe, or similar device, shall be installed to the bottom of the test hole, and the test hole shall be backfilled and mounded to slope away from the pipe.
 - c. The water level in the pipe shall be measured a minimum of seven days after installation to determine water table depth below the surface.
 - d. Test hole density:

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- i. Developments one acre or less in size shall install a minimum of three monitoring wells, evenly distributed throughout the property with respect to horizontal and vertical topography;
- ii. Developments between one and five acres in size shall install a minimum of two monitoring wells per acre, evenly distributed throughout the property with respect to horizontal and vertical topography; or
- iii. Developments greater than five acres in size shall install a minimum of one and one-half test wells per acre, evenly distributed throughout the property with respect to horizontal and vertical topography.

F. Design.

- 1. Private Street [ROAD] design criteria:
 - a. All private streets [ROADS] shall be constructed in accordance with Table 21.90.002-1 and the criteria found in this section [WITH 26 FEET OF PAVEMENT, CURB AND GUTTER ON BOTH SIDES, FOR A TOTAL 30-FOOT SECTION FROM THE BACK OF CURB TO BACK OF CURB].
 - b. All private streets [ROADS] shall be crowned with minimum two percent cross slopes; [INVERTED] alternative sections may be approved by the municipal engineer [FOR ROADWAYS LENGTHS LESS THAN 300 FEET].
 - c. All private streets [ROADS] shall have a minimum longitudinal grade of one percent and a maximum grade of ten percent unless otherwise approved by the municipal engineer.
 - d. At intersections with peripheral right-of-way, private street grades shall not exceed four percent within a minimum distance of 30 feet from back of curb or edge of shoulder of the peripheral street.
 - e. The minimum grade of an asphalt swale or "valley gutter" at private street intersections without catchment facilities immediately upgrade shall be one percent.

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- f. Vertical curves shall be used for transition between intersecting grades of streets [ROAD] when the change exceeds one percent.

- g. At intersections with arterial or collector streets, private streets shall have a minimum curb return radius of 30 feet. At intersections with all other streets, private streets shall have a minimum curb return radius of 20 feet.

- h. All interior radii shall conform to IFC D103.3, minimum turning radius for emergency vehicles, as adopted under AMC Title 23.

- i. Clear vision areas and clear vision triangles for private streets shall be in compliance with [AMC SECTION 21.45.020] AMC Chapter 24.70, DCM 1.9.E3, and AASHTO Sight Distance Triangle (see Municipal Driveway Standards).

- j. Any dead end private street with a length in excess of 150 feet (measured from the face of curb, or nearest edge of the traveled way for uncurbed streets, of the intersecting street to the end of the private street) shall be provided with turnaround provisions meeting the requirements of Handout F.02, Recommended Fire Lane Turnarounds.

- k. Use of the Optional private street section requires a recorded parking agreement between the Municipality of Anchorage and the developer(s)/property owner(s). The agreement shall include the following:
 - i. The minimum number of Managed Guest Parking stalls is the number of guest parking stalls required by Table 21.07-4.

 - ii. Managed Guest Parking stalls shall be individually signed to indicate that vehicles parked for more than the designated time period, not to exceed 24 hours, will be towed at the vehicle owner's expense.

 - iii. The developer/property owner shall maintain a contract with a towing company for the immediate removal of any vehicles parked along the private street and any vehicles parked in Managed Guest Parking for a period of time in excess of

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the designated time period not to exceed 24 hours.

iv. The developer/property owner shall post the name and phone number of the towing contractor at all locations posted as “no parking” and at Managed Guest Parking stalls.

v. Optional private streets shall be signed as “No Parking Fire Lane.”

i. Sidewalks shall be constructed of Portland Cement Concrete with a minimum thickness of 4 inches and a minimum width of 5 feet.

m. An 8-foot wide separated asphalt pathway may be substituted for a sidewalk.

n. When a development includes multiple parking facilities the preference is to consolidate access between separate parking facilities with a private street. Using the private street for turning and maneuvering should be avoided.

o [L]. All pre-design subsurface investigations shall be in accordance with the soil investigation standards given in DCM section 1.040.

p [M]. All organics shall be removed from the streets [ROAD] subgrade unless otherwise approved by the municipal engineer.

q [N]. The thickness of structural fill for private streets [ROADS] shall be designed using the limited subgrade frost penetration method as described in DCM section 1.070F. All substitute design methods shall have prior approval by the municipal engineer.

r [O]. Geotextile fabric shall be installed at the bottom of excavations when recommended in DCM Section 1.10E. [FOR ALL PRIVATE STREETS TO PREVENT CONTAMINATION OF STRUCTURAL FILL WITH FROST SUSCEPTIBLE SOILS, UNLESS OTHERWISE APPROVED BY THE MUNICIPAL ENGINEER.]

s [P]. All structural fill used in construction of [FOR] private streets [ROADS] shall [BE TYPE II CLASSIFIED FILL MATERIAL, AS DEFINED IN THE] comply with MASS

1 Section 20.21.05 and shall be installed in accordance
2 with the guidelines established in DCM Section 1.10B.
3 [TYPE III CLASSIFIED FILL MATERIAL, AS DEFINED
4 IN MASS, MAY BE USED FOR BACKFILL OF STORM
5 DRAIN AND UTILITY TRENCHES BELOW THE ROAD
6 BASE].
7

8 t[Q]. All structural fill material for private streets [ROADS]
9 shall be placed in lifts no greater than 12 inches thick
10 and compacted to 95 percent maximum density at
11 optimum moisture content.
12

13 u[R]. The top six inches of the structural fill for private streets
14 [ROADS] shall be Type II-A classified fill material only,
15 as set out in MASS Section 20.21.
16

17 v[S]. Leveling course and pavement thickness shall be in
18 accordance with MASS.
19

20 w[T]. All private streets [ROADS] shall be designed with
21 adequate catchment of surface water runoff to prevent
22 adverse drainage impacts to adjacent properties and/or
23 right-of-way.
24

25 x[U]. All manholes, inlets and storm drain lines shall be
26 designed and constructed to municipal standards as
27 defined in MASS Division 55.
28

29 y[V]. Names for private streets will be submitted to the
30 municipal addressing department for review and
31 approval prior to having the site plan approved.
32

33 z[W]. All private streets [ROADS] will be signed according to
34 MUTCD Standards with a "private" designation on the
35 street sign. A certificate of occupancy will not be issued
36 until the street signs are installed and inspected. See
37 traffic department for design of sign specified as a D3-
38 101PVT [P3-1P].
39

40 aa[X]. Private streets shall have "No Parking, Fire Lane"
41 signage on the side of the street where parking is
42 prohibited.
43

44 bb[Y]. Covenants, where applicable, shall provide for the
45 association and/or management company to be able to
46 tow vehicles parked illegally and covenants shall state
47 parking is prohibited on one side of the street.
48

1 cc[Z]. Covenants, where applicable, shall require the
2 association to maintain signage and enforce no-parking
3 areas.
4

5 dd [AA]. Each street shall be named, and each building address
6 shall be based on the access street. (For example, no C
7 Street address if the building does not access off of C
8 Street.)
9

10 ee. A Woonerf Street shall include the following design
11 elements:
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13 i. A width of 24 feet and must not exceed 500 feet in
14 length.
15

16 ii. Have a clear and distinct entrance with a sign
17 indicating the Woonerf status.
18

19 iii. Incorporate different colors and textures in
20 pavement material.
21

22 iv. Use traffic calming measures such as chicanes.
23 Traffic calming measures must be placed at
24 maximum intervals of 160 feet. Use of vertical traffic
25 calming measures to be approved by the Fire and
26 Traffic Engineering Departments.
27

28 ff. A Woonerf Street may also include the following
29 additional design elements:
30

31 i. Eliminate the continuous curb.
32

33 ii. Incorporate outdoor furnishings, landscaping and
34 lighting.
35

36 gg. Approval by the municipal traffic engineer and the
37 planning director is required for Woonerf Streets.
38

39 hh. Woonerf Streets are considered Optional private streets
40 and are required to provide Managed Guest Parking.
41

42 ii. Woonerf Street design elements must not interfere in
43 Emergency vehicle access.
44

45 2. Public streets [ROADS] constructed in P[P]ublic U[U]se
46 E[E]asements (PUE).
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- a. Streets [ROADS] determined by the traffic engineer to require a PUE dedication for purposes of access and/or connectivity shall be constructed to the standards identified in AMC Title 21 for public streets; and
 - b. PUEs shall be 50 [44] feet wide to accommodate the street [ROADWAY] section and the snow storage area. Additional dedication shall be required in the event that pedestrian facilities are needed, as determined by the area wide trails plan, determined by a traffic impact analysis, or the street [ROADWAY] volumes are expected to exceed the requirements in AMC Title 21 for pedestrian facilities.
3. Emergency response.
- a. Streets with hydrants on them shall have continuity and not be dead ends, unless located on cul-de-sacs approved by the traffic engineer and the fire department. Hydrants shall be accessible from two directions.
 - b. Residential developments with 30 or more dwelling units shall be provided with separate and approved access streets [ROADS], meeting the remote requirements of IFC D104.3., as adopted under AMC Title 23.
 - c. The number of dwelling units on a single fire apparatus street [ROAD] shall not be increased unless fire apparatus access streets [ROADS] will connect with future developments as determined by the fire code official. No new structures shall be constructed on a fire apparatus access street [ROAD] unless approved by fire code official.
 - d. To prevent conflagration, one or two family residential developments shall have a clear space of at least ten feet between exterior walls (not including area under the eaves), unless each structure has an approved automatic sprinkler system.
 - e. Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall meet requirements of IFC D105, as adopted under AMC Title 23.

[4. PARKING]

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- [A. ALL OVER-FLOW PARKING AREAS AND PARKING AISLES SHALL BE DESIGNED TO MINIMIZE MANEUVERING IN THE MAIN PRIVATE ROADWAY].

- [B. OVERFLOW PARKING SHALL BE PROVIDED, IN ADDITION TO REQUIRED PARKING. OVERFLOW PARKING SHALL BE CALCULATED PER THE TABLE BELOW]:

[TYPE OF DEVELOPMENT	% OF REQUIRED PARKING NECESSARY FOR OVERFLOW
TWO (2) AND THREE (3) DWELLING UNITS	25%
FOUR (4) TO SIX (6) DWELLING UNITS	20%
GREATER THAN SIX (6) DWELLING UNITS	15%
APARTMENT COMPLEX	12%
OTHER USES	PER PARKING STUDY, IF REQUIRED]

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[C. OVERFLOW PARKING MAY BE PROVIDED ON-STREET, IF THE FOLLOWING REQUIREMENTS ARE MET: THE PARKING SPACE SHALL BE A MINIMUM OF 20 FEET LONG UNLESS BOUNDED ON BOTH ENDS BY PARKING SPACES, IN WHICH CASE, THE BOUNDED PARKING SPACE SHALL BE A MINIMUM OF 24 FEET LONG. FOR EXAMPLE, IF THERE ARE THREE PARKING SPACES BETWEEN TWO DRIVEWAYS, THOSE PARKING SPACES WOULD BE 20 FEET, 24 FEET AND 20 FEET LONG RESPECTIVELY. IF THE ON-STREET PARKING IS NOT SUFFICIENT TO MEET THE OVERFLOW PARKING REQUIREMENT, OFF-STREET PARKING SHALL BE PROVIDED].

[D. ALL PARKING SPACES INSIDE GARAGES AND CARPORTS SHALL MEET DESIGN REQUIREMENTS FOUND IN AMC SECTION 21.45.080, IF THE DRIVEWAY IS BEING USED TO MEET REQUIRED OR OVERFLOW PARKING REQUIREMENTS];

[E. INDIVIDUAL DWELLING UNIT GARAGE DRIVEWAYS SHALL HAVE A MINIMUM OF 22 FEET BETWEEN

1 THE GARAGE DOOR AND THE BACK OF CURB OR
2 EDGE OF PAVEMENT FOR ALL ROADWAYS].

3
4 [F. ALL OVER-FLOW PARKING LOCATED AT 90
5 DEGREES TO THE INTERIOR ROADWAYS OF THE
6 DEVELOPMENT SHALL BE AT LEAST 24 FEET
7 DEEP, INCLUDING ANY OVERHANG].

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9 [G. PRIVATE PARKING GARAGES SHALL PROVIDE A
10 MINIMUM 30 FEET OF ON-SITE VEHICLE
11 QUEUING/STACKING THAT DOES NOT INTERFERE
12 WITH ANY PARKING STALLS OR ROADWAYS].

13
14 [H. ALL PRIVATE MULTI-PLEX PARKING GARAGES
15 SHALL HAVE AN ENTRANCE/EXIT THAT IS A
16 MINIMUM OF 18 FEET WIDE].

17
18 [I. ALL PRIVATE MULTI-PLEX PARKING GARAGES
19 SHALL HAVE TWO ENTRANCE/EXIT POINTS, IF
20 DESIGNED TO PROVIDE OVER 20 PARKING
21 SPACES, UNLESS OTHERWISE APPROVED BY THE
22 TRAFFIC ENGINEER].

23
24 4[5]. Plan review and approval. Plans providing all of the required
25 components shall be submitted with the "master" building
26 permit application. The appropriate review agencies shall
27 provide comment to the building official. The building permit
28 shall not be issued until all appropriate departments have
29 provided approval.

30
31 5[6]. Noncompliance.

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33 a. Failure of the developer or builder to obtain appropriate
34 permits shall result in investigation fees as set out in
35 AMC Chapter 23.10.

36
37 b. Failure to provide all inspection reports and as-built
38 drawings of all private street [ROAD] construction,
39 certified by a professional engineer registered in the
40 State of Alaska shall result in non-issuance of all
41 certificates of occupancy for the development.

42
43 c. Failure to comply with the approved plans, permits, and
44 construction inspection requirements herein may result
45 in issuance of a stop work order until such compliance.

1 **Section 2.** Anchorage Municipal Code section 21.07.090 M.7. Ingress and
2 Egress – is hereby amended to read as follows (*the remainder of the section is not*
3 *affected and therefore not set out*):

- 4
5 d. Minimum width of 20 feet for 2-way ingress/egress entries for parking
6 structures. Formal waiver required from Municipal Traffic Engineer for
7 a reduction/exception to this standard.

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9 **Section 3.** Anchorage Municipal Code section 21.07.110F.2.e., *Minimum*
10 *Standards*, is hereby amended to read as follows (*the remainder of the section is*
11 *not affected and therefore not set out*):

- 12
13 iv. Guest Parking: Locate guest parking spaces as to minimize
14 maneuvering in private streets and circulation aisle and not
15 exclusive to or physically associated with any individual dwelling.

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17 (AO 2012-124(S), 2-26-13; AO 2013-117, 12-3-13; AO No. 2015-36, §§ 8,
18 9, 5-14-15; AO No. 2015-100, § 8(Exh. C), 10-13-15; AO No. 2016-34(S), §
19 2, 4-12-16; AO No. 2016-136am, § 5, 1-1-17; AO No. 2017-160, § 5, 12-19-
20 17; AO No. 2017-176, § 9, 1-9-18; AO No. 2018-59, § 2, 7-31-18)

21
22 **Section 4.** Anchorage Municipal Code section 21.07.110F.3.d., **Driveway width**
23 **Exceptions**, is hereby amended to read as follows:

24
25 The traffic engineer and the planning director may approve a departure
26 from the standards of this section, such as a narrow driveway, if
27 documentation prepared by a licensed professional in the state of Alaska
28 [TRAFFIC ENGINEERING PROFESSIONAL] demonstrates the driveway
29 still meets this chapter standards and the Municipal driveway standards
30 memo issued by the Municipal Traffic Engineer, and [TO THE
31 SATISFACTION OF THE TRAFFIC ENGINEER] that change is
32 appropriate. [TRAFFIC ENGINEER A]. Approval shall be contingent on
33 factors such as street typology, urban context, traffic volume and speed,
34 curb return radii, street travel lane offset from face of curb, pedestrian and
35 bicycle facilities, snow storage, driveway configuration and length, site and
36 project characteristics, number of vehicles, expected to use the driveway,
37 and comprehensive plan polices. The traffic engineer and planning director
38 may also be more restrictive than the standards of this section, provided
39 [THE TRAFFIC ENGINEER] they document[S] the rationale.

40
41 (AO 2012-124(S), 2-26-13; AO 2013-117, 12-3-13; AO No. 2015-36, §§ 8,
42 9, 5-14-15; AO No. 2015-100, § 8(Exh. C), 10-13-15; AO No. 2016-34(S), §
43 2, 4-12-16; AO No. 2016-136am, § 5, 1-1-17; AO No. 2017-160, § 5, 12-19-
44 17; AO No. 2017-176, § 9, 1-9-18; AO No. 2018-59, § 2, 7-31-18)

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46 **Section 5.** Anchorage Municipal Code section 21.14.040, DEFINITIONS, is
47 hereby amended as follows (*the remainder of the section is not affected and*
48 *therefore not set out*):

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Driveway

The paved connection meeting municipal driveway standards located between the garage of a dwelling unit and the adjacent street (public or private) or between a parking facility and the adjacent street (public or private). [A PRIVATE TRAVEL WAY PROVIDING MOTOR VEHICLE ACCESS FROM A PARKING SPACE OR PARKING FACILITY TO A STREET] A driveway is not a street. It does not provide primary frontage or address for buildings, nor is it primarily designed for non-motorized pedestrian access.

*** *** ***

Parking Space

A space for the parking of one vehicle [AUTOMOBILE].

*** *** ***

(AO 2012-124(S), 2-26-13; AO 2013-117, 12-3-13; AO No. 2015-82, § 7, 7-28-15; AO No. 2015-100, § 9, 10-13-15; AO No. 2015-133(S), § 6, 2-23-16; AO No. 2015-138, § 5, 1-12-16; AO No. 2015-142(S-1), § 10, 6-21-16; AO No. 2016-3(S), § 18, 2-23-16; AO No. 2016-144(S), § 2, 1-1-17; AO No. 2017-55, § 14, 4-11-17; AO No. 2018-12, § 2, 2-27-18; AO No. 2018-67(S-1), § 9, 10-9-18; AO No. 2018-92, § 1, 10-23-18)

Section 6. This ordinance shall become effective immediately upon passage and approval by the Assembly.

PASSED AND APPROVED by the Anchorage Assembly this _____ day of _____, 2019.

ATTEST: _____
Municipal Clerk

Chair

What is a Woonerf Street?

- **Definition:** A Woonerf Street is designed for both vehicular and non-vehicular traffic, such as pedestrians and cyclists, and can be used as a social gathering or recreation space.

Pedestrians and cyclists take precedence in the use of the street. The access for all modes is accommodated on the same surface, and not differentiated by grade separation or other barriers. Woonerfs include traffic calming measure to ensure safe co-existence of vehicles and non-vehicular users. Landscaping features, including patterned paving, planters, trees, benches, or bollards, may enhance pedestrian safety and use.

- **Purpose:** Woonerf Streets provide an alternative cross-section for circulation of multiple user groups. This street design accommodates vehicle traffic, and prioritizes pedestrian and bike movement, as well as recreation. The Woonerf Street option does not require two-lane street construction with parallel sidewalks separating user groups. The Woonerf Street accommodates multi-modal uses within the same street section. Woonerf Streets include traffic-calming strategies and landscaping amenities to address the safety of non-motorized users. Children may feel safe enough to play in a Woonerf. Drivers should be more alert and drive with increased caution. All users should feel welcome and safe. The Woonerf Street option is intended to provide a balanced integration between cars and people.
- **Alternative Compliance:** The Traffic Engineer and the Planning Director may approve an alternative design that meets or exceeds the Woonerf Street standards if, and only if, the variation is from the required street width.



*Woonerf in Downtown Anchorage
by the Municipality of Anchorage
City Hall*

Photo - Kristine Bunnell

- **Design Elements:** The Woonerf Street shall include the following design elements:
 - a. A width of 24 feet and must not exceed 500 feet in length.
 - b. Have a clear and distinct entrance with a sign indicating the Woonerf status.
 - c. Incorporate different colors and textures in pavement material.

- d. Use traffic-calming measures, such as chicanes. Traffic-calming measures must be placed at maximum intervals of 160 feet. Use of vertical traffic calming measures to be approved by the Fire and Traffic Departments.
 - e. Administrative approval.
 - f. Woonerf Streets are considered an “Optional” private street and are required to provide Managed Guest Parking.
 - g. Woonerf Street design elements must not interfere in Emergency vehicle access.
- A Woonerf Street may also include the following optional design elements:
 - a. Eliminate the continuous curb.
 - b. Incorporate outdoor furnishings, landscaping, and lighting.
- Woonerf Street Standards:
 - a. The Traffic Engineer may deny the permit or require the access be redesigned if all the design guidelines are not met.
 - b. The Woonerf may serve as the required pedestrian access to the site, only if all standards are met.
 - c. The entire Woonerf is designed for both vehicles and people, with an emphasis on pedestrians and usable, safe, and attractive pedestrian and bicycle space that could be used both for travel, recreation, and social use that includes children at play.
 - d. The Woonerf will serve no more dwelling units than Table 21.90.002-1 indicates.
 - e. The minimum width of a Woonerf shall be equivalent to those shown in Table 21.90.002-1, and need not include the additional width of sidewalks.
 - f. A Woonerf may access a street, alley, Parking Courtyard that follows 21.07.060F.18. or parking spaces, but may not provide access to a parking facility.
 - g. A Woonerf can provide through access for cars if and only if the posted speed limit is less than 15 mph. Through access for only pedestrians permitted for any speed limit.
 - h. At any intersection with a public or private street, traffic lanes and pedestrian areas must be effectively separated along the Woonerf for 20 feet from the private street curb, or the public right-of-way.
 - i. Sections of the Woonerf where pedestrian and vehicular traffic are separate shall maintain an unobstructed width of at least 20 feet for two-way vehicle traffic, or 12 feet for one-way vehicle traffic.
 - j. A special paving scheme and landscape treatment is applied to the full width and length of the Woonerf that prioritizes pedestrian safety. Such techniques may include, but are not limited to, planters, trees, curves, raised intersections, or bollards.
 - k. Provide signage or visual cues to alert drivers to expect other users in the roadway.
 - l. Alternative Compliance: The director may approve an alternative design that meets or exceeds the Woonerf standards if and only if the variation is from the required street width.