ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2009-XX

An Ordinance Repealing and Reenacting Title 49, Chapter 35
Public Improvements, and Amending the Land Use Code at
Definitions.

BE IT ENACTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

Section 1. Classification. This ordinance is of a general and permanent nature
and shall become a part of the City and Borough Code.

Section 2. Repeal and Reenactment. Title 49.15 Article IV. Minor and Major
Subdivisions, is repealed and reenacted as 49.15 Article IV. State Project Review, to
read:

ARTICLE IV.
MINOR AND MAJOR SUBDIVISIONS
STATE PROJECT REVIEW

49.15.410 ________________ The commission shall review proposed Alaska State
Capital Improvement Projects for consistency with this title pursuant to AS 35.30.010,
and may impose conditions on and modification to such projects.
Section 3. Repeal and Reenactment. Title 49.15 Article V. Design Review Permits, is repealed and reenacted as 49.15 Article V. Driveways in Public Rights-of-Ways, to read:

ARTICLE V.

DESIGN REVIEW PERMITS

DRIVEWAYS IN PUBLIC RIGHTS-OF-WAYS

49.15.580 State project review.

The commission shall review proposed Alaska State Capital Improvement Projects for consistency with this title pursuant to AS 35.30.010, and may impose conditions on and modifications to such projects.

49.15.510 Purpose.

A permit for driveways in the public rights-of-way is to allow access to lots to be constructed to less than full public street construction standards in an existing undeveloped public right-of-way and may be approved according to the following:

49.15.520 Submittals.

The applicant must submit the following:

(a) The appropriate application form.
(b) A preliminary plan and profile of the proposed street and any proposed public or private utilities. This plan can have less detail than necessary for construction plans;

49.15.530 Department action.

The director shall forward the complete application to the engineering, public works, and fire departments for their comments.

49.15.540 Driveways abutting five or fewer lots or serving ten or fewer dwellings.

If a proposal to construct a driveway in the public right-of-way will abut five or fewer lots, and has the potential to serve ten or fewer dwelling units based on the allowable density, the director may approve a permit to allow a driveway in the right-of-way according to the following:

(a) Public notice. The department must give written notice to the owners of property adjoining the proposed driveway that an application has been submitted, and require the applicant to place a public notice sign, according to chapter 49.15 Permits, specifically 49.15.230 Public notice.

(b) Criteria. The director, in order to approve the permit, must find that all of the following criteria are met, in addition to all other applicable requirements of the CBJ Code:
(1) That the proposed driveway will be located in a public right-of-way that has not been accepted for public maintenance;

(2) That the proposed driveway does not endanger the public safety or welfare;

(3) That the proposed driveway will be improved to meet the needs for emergency service access; and

(4) That the proposal to allow a driveway, taking into account previously approved driveway permits and the number of adjoining lots and their potential for future development, will not generate the need for a publicly maintained roadway to handle the increase in vehicle or non-motorized traffic, or the need for enhanced emergency service access.

(c) Directors action. The director can approve the permit, approve the permit with conditions, or deny the permit. The director can place conditions on the permit and shall incorporate the recommended conditions of the engineering and fire departments in the permit. The director shall approve the application and grant the permit unless it finds, by a preponderance of the evidence, that one or more of the criteria above have not been met. In either case, the director shall make written findings stating the basis for the decision.
49.15.550 Driveways abutting six or more lots and having the potential to provide access to 11 or more dwellings.

If a proposal to allow a driveway in the public right-of-way will abut any portion of six or more lots, or has the potential to provide access to 11 or more dwelling units based on the density allowed, the commission may approve a permit for a driveway in the public right-of-way according to the following:

(a) Public Notice. Written public notice must be given to the owners of property adjoining the proposed driveway. In addition, a public hearing shall be held according to chapter 49.15 Permits, specifically 49.15.230 Public notice.

(b) Director action. The director will prepare a staff report to the commission. The director's report will include any conditions recommended by the engineering and fire departments.

(c) Commission action. The commission will hold a public hearing on the application and either approve, approve with conditions, or deny the permit. The commission shall approve the application and grant the permit unless it finds, by a preponderance of the evidence, that one or more of the following criteria have not been met. In either case the commission shall adopt written findings that state the basis for its decision.
(d) **Criteria.** The commission, in order to approve a permit to allow a driveway in the public right-of-way, must find that the proposal will meet all the criteria listed above in CBJ 49.15.540.

49.15.560 **Mandatory conditions of the permit.** The following conditions must be attached to all permits to construct a driveway in the public right-of-way:

(a) That the applicant provides the department with a notarized statement, which states the following:

1. The applicant acknowledges that the City and Borough is not obligated to provide any maintenance or snow removal for the driveway that is not provided as a matter of course, for a driveway on private land;

2. The applicant and the applicant’s heirs, successors, and assigns, will defend, indemnify and hold harmless the City and Borough from any claim or action for any injury, loss or damage suffered by any person arising from the design, maintenance, or use of the driveway;

3. The applicant will ensure that the driveway will not be blocked from use by the public for access.

(b) That the City and Borough will have unimpeded access in the right-of-way;
(c) That the applicant must purchase a sign from the City and Borough for placement by the public works department in the right-of-way. This sign will convey the message that the driveway is not maintained by the City and Borough.

49.15.570 Notice of decision.

The director will prepare and file a notice of decision according to chapter 49.10, specifically 49.10.140 Decisions, that includes the director’s or commission’s findings and any conditions of approval. After the notice of decision has been filed with the clerk of the City and Borough, a copy will immediately be forwarded to the engineering department.

49.15.580 Other requirements.

(a) No new lots may be created from the division of any parcel of land that is served by a driveway in the public right-of-way that has been approved under this section of code.

(b) If a permit for a driveway in the public right-of-way is approved, the applicant must apply to the engineering department for a permit to construct the driveway under chapter 62.05 Public Ways and Property - Excavations, accompanied by final construction plans. Additional fees and bonding may be required for final plan review, inspection, and construction of the driveway and utilities.
Section 3. Repeal and Reenactment. CBJ 49.35 Public improvements, is repealed and reenacted at CBJ 49.17, to read:

Chapter 49.17

ARTICLE IV PUBLIC IMPROVEMENTS

49.17.405 Generally.

49.17.410 Construction plans.

49.17.415 Easements.

49.17.020 Permits and Schedules.

49.17.425 Streets.

49.17.430 Water systems.

49.17.435 Sewer systems.

49.17.440 Drainage.

49.17.445 Pedestrian and bicycle access.

49.17.450 Utilities.

49.17.405 Generally.

(a) Purpose. The purpose of this chapter is to:

(1) Establish design and development criteria for public improvements; and

(2) Outline the procedures and responsibilities of the subdivider for furnishing plans and completing the improvements.
(b) **Extent of improvements.** The subdivider must install all of the required improvements within the boundaries of the subdivision, and may be required to make improvements beyond the subdivision boundary in order for all the improvements to function properly. In addition, improvements must be designed and constructed to provide for future extension to adjoining lands.

(c) **Standards.** The subdivider must construct all improvements according to this chapter, and, at a minimum, meet the requirements of the CBJ Standard Specifications for Civil Engineering Projects and Subdivision Improvements, and the Standard Details.

(d) **Oversizing sewer, water, and storm drainage lines.** When the subdivider is required to install connecting lines, to increase the size of existing public lines, or to install a distribution system as part of a subdivision proposal, the director for minor and major in-house subdivisions, and the commission for major subdivisions, after reviewing a recommendation from the director of engineering, may require any or all parts of such installation to be oversized if the director of engineering finds it likely that within the expected life of the new construction an increase in capacity will be required to serve other areas.

(e) **Unusual or unforeseen conditions.** The director of engineering may prescribe different or additional standards than those listed above in subsection (c) of this section, if unusual or unforeseen conditions exist in a particular subdivision, and the alternative meets or exceeds the intent of the original standard.
49.17.410 Construction plans.

(a) Generally. The subdivider must submit construction plans for all proposed public improvements and associated private improvements and utilities within and outside the proposed subdivision boundary.

(b) Construction plan submittal.

(1) Plan sets. Prior to the submittal of the final plat, and before the start of any construction, the subdivider must furnish to the City and Borough Permit Center complete sets of construction plans, profiles, details, and special construction provisions for all existing and proposed improvements. The director of engineering shall determine the number of plan sets to be submitted. Plan sets will be forwarded to the appropriate City and Borough departments and agencies.

(2) Engineer’s stamp. Construction plans must be stamped by the professional engineer licensed in the State of Alaska who is responsible for the improvement designs. Multiple engineer stamps are required for plans with multiple discipline designs, e.g. civil, electrical, structural engineering.
(c) Construction plans - Details.

(1) Size. All construction plans shall be submitted on 22 by 34 inch sheets. The director of engineering may approve alternative sheet sizes.

(2) Information. The drawings must contain the following information:

   (A) Name of subdivision;
   
   (B) Type of work;
   
   (C) Date;
   
   (D) Name of engineer preparing the drawings and the engineer’s stamp;
   
   (E) Space for approval by the director of engineering; and
   
   (F) A north arrow and scale.

(3) Scale. Horizontal scale must be one inch equals 50 feet or greater. Vertical scale must be one inch equals five feet or less with a minimum scale of one inch equals ten feet. The director of engineering may approve alternative scales.
(4) **Benchmarks.** The locations, elevations and description of datum of permanent benchmarks must be shown.

(5) **Street profiles.** Profiles of streets shall indicate finished and existing grades for the centerline of the street and shall extend a minimum of 200 feet beyond the limits of the proposed project or, if intersecting an existing street, extend to the far side of the existing street.

(6) Plans and profiles, where applicable, shall include location, elevation, size, materials, and all other details of the proposed improvements.

(7) Complete survey data must be shown for all horizontal and vertical curves.

(d) *As-built drawings.* The subdivider, upon completion of required improvements must submit a reproducible and digital format copy of as-built plans unless otherwise required by the director of engineering.

### 49.17.415 Easements.

(a) **Easements, public.** Where easements are required, and approved, for public water systems, sanitary sewers, storm drainage facilities, or other similar public uses, the following requirements apply:

(1) **Width.** All easements must be accessible by maintenance vehicles and must have adequate space within the easement to accomplish
maintenance, excavation, and stockpiling of material. The minimum width for a public easement that does not abut a public right-of-way is 20 feet, unless otherwise required by the director of engineering.

(2) **Surface.** Easement surfaces shall be graded and compacted to provide a drivable surface for maintenance vehicles.

(3) **Gate.** Where easements adjoin a public street, the director of engineering may require a locked gate be installed to prevent access by the public.

(b) **Easements, private.** The director or planning commission may require easements to be shown on a plat that grant access or other rights in the favor of certain properties. These private easements are not dedicated to or maintained by the public and must be noted as such on the plat.

(c) **Plat notes.** A note must be added to the plat stating the purpose of the easement, the grantee of the easement, restrictions on the easement use, and whether the easement is permanent or temporary; private or public.

**49.17.420 Permits and schedule.** The subdivider must obtain a Public Transmission Facilities (PTF) permit from the engineering department and a building permit from the community development department before any work related to the construction of the subdivision begins. The applicant must provide a detailed schedule for the completion of all improvements as part of the application for a PTF permit.
49.17.425 Streets.

(a) Street design.

(1) Right-of-way widths. The minimum right-of-way width of proposed streets is as follows:

(A) Arterials: primary, 100 feet; secondary, 80 feet;

(B) Collectors: 60 feet;

(C) Streets other than arterial and collectors;

(I) With paving, curbs, gutters, and sidewalks on both sides of the street: 50 feet;

(ii) Without two sidewalks and curb and gutter: 60 feet;

(D) Cul-de-sacs, temporary or permanent turnaround: a radius of 50 feet;

(E) Alleys: 20 feet;
(F) *Half streets.* Whenever there exists a dedicated or platted half street or alley adjacent to the tract of land to be subdivided, the other half of the street or alley must be platted, dedicated, and the entire street or alley constructed to current improvement standards.

(G) *Substandard width.* Any previously platted right-of-way less than 50 feet in width shall be expanded to meet the minimum dimensions established by this title. The department for minor and in-house major subdivisions, and the planning commission for major subdivisions may require additional right-of-way dedication for an existing right-of-way that is 50 feet or more in width but less than the minimum required by section 49.17.425(a)(1), if they find the extra width will likely be needed to serve development in the area.

(2) *Sight distance.* Passing and stopping sight distances must be in accordance with the specifications set forth in *A Policy on Geometric Design of Highways and Streets, 1984*, as published by the American Association of State Highway and Transportation Officials (AASHTO).

(3) *Street grades.* Street grades are as follows:

(A) *Maximum.* Grades on arterial streets must not exceed six percent.

Grades on other streets must not exceed 12 percent.

(B) *Minimum.* The minimum grade for all streets is one half percent.
(C) *Cross slope.* The minimum cross slope on all streets is 3 percent.

(D) *Exception.* Grades for streets in hillside areas may be increased under certain circumstances according to chapter 70, article II, Hillside Development.

(4) *Intersections.*

(A) *Corner sight distance.* Corner sight distance must be in accordance with CBJ 49.17.425(a)(2) *Sight distance* above; however in no case shall the sight distance be less than 200 feet.

(B) *Intersection angle.* Intersections of right-of-way lines must not be less than 60 degrees. The intersection of the centerline of the constructed roadway must not be less than 80 degrees.

(C) *Grade.* The grade for the approach leg of a new roadway at an intersection must not exceed 2 percent for the first 30 feet, measured from the edge of the existing roadway. The grade for the next 70 feet of the new roadway must not exceed 6 percent (See Figure 2).

(D) *Adjustment to grade.* In certain circumstances, the director of engineering may require the centerline grade to be adjusted to ensure the grades along the edge of the intersecting street do not exceed the maximum grades listed above (See Attachment).
(E) **Alignment.** A proposed street that will intersect with an existing cross street shall, whenever practicable, align with an existing street intersection on the opposite side of the cross street. Street jogs that have center line offsets of less than one hundred feet, shall not be permitted (See Figure 3).

(5) **Curves.** Curves shall be designed to fit the use of the street and meet the required sight distance.

(A) **Design.** Curves shall be designed to fit the use of the street and meet the required sight distance.

(B) **Vertical curve.** The minimum length of vertical curves is 200 feet unless otherwise approved by the director of engineering.

(6) **Cul-de-sacs.**

(A) **Length.** Streets designed to have one end permanently closed shall be no more than 600 feet and not less than 150 feet in length measured from the center of the intersection to the radius point of the turnaround. The director for minor subdivisions, and the commission for major subdivisions, may authorize a longer or shorter cul-de-sac if it is found that the unique characteristics of the site warrant modification to the length.
(B) **Turnaround diameter.** The diameter of the right of way for a cul de sac turnaround is 100 feet.

(C) **Temporary cul-de-sacs.** Temporary cul-de-sacs will be allowed where a street can logically be extended in the near future, and if the following are met:

(I) The temporary portions of the cul-de-sac turnaround will be shown as easements on the plat rather than as dedicated right-of-way;

(ii) All of the cul-de-sac will be constructed to permanent street construction standards except as noted in (vii) below;

(iii) The CBJ will record a release of the easements for the temporary portions of the turnaround at the State recorders office at the time the turnaround is removed and the street improvements have been extended;

(iv) Easement lines for the temporary turnaround will be considered front property lines for determining building setbacks;

(v) All improvements, including utilities, must be designed to accommodate the eventual extension of the street and reversion of the temporary turnaround to adjoining properties;
(vi) Temporary cul-de-sacs must be extended to as close to the adjoining property boundary as practical. If it is not practical to construct the turnaround portion of the cul de sac at this location, then the right-of-way must be extended beyond the temporary turnaround to the adjoining property line, and the street extension constructed to standard (See Figure 4);

(vii) If the temporary turnaround is constructed on property outside of the subdivision boundary; curb, gutter, and sidewalks are not required for the temporary turnaround.

(viii) Before final acceptance of all subdivision improvements by the CBJ, the subdivider must provide a financial guarantee to cover the cost of removal of the temporary turnaround and reconstruction of the street. The guarantee must be for a period of five years from the date the plat is recorded. If it is necessary to construct the street to the adjoining property within that 5-year period, the subdivider can complete the reconstruction and extension, or the guarantee may be used by the CBJ for that purpose. If a right-of-way has not been dedicated on the adjoining property for the purpose of connection to the temporary cul-de-sac within this five-year period, the financial guarantee will be released.
(ix) When the subdivider of adjoining property is required to connect
to the temporary cul-de-sac, and the temporary cul-de-sac has not
been extended through subsection (viii) of this section, then the
subdivider must remove the temporary portions of the
turnaround and reconstruct and extend the street to CBJ
standards at that time;

(b) Street construction standards. The subdivider must construct streets according
to the following:

(1) Urban Service Area. Street construction requirements within the Urban
Service Area as shown in the Comprehensive Plan, are as follows:

(A) Arterials. The subdivider is not responsible for the construction of
arterial streets, but may be required to dedicate the necessary right-of-way during the platting process.

(B) Collectors. The roadway portion of collector streets must be at least
32 feet wide and must be constructed by the subdivider with a paved
roadway, curbs, gutters, streetlights, sidewalks on both sides of the
street, and a storm drainage system.

(C) Local Streets. Except as provided in subsection (D) of this section, the
roadway portion of local streets must be at least 28 feet wide and
must be constructed by the subdivider with a paved roadway, curbs,
gutters, streetlights, sidewalks on both sides of the street, and a storm

drainage system.

(D  Low-density alternative for local streets. In areas zoned D1, D3, or RR
the subdivider may choose to construct an alternative street section
according to the following:

(I)  Width. The roadway portion of the low-density alternative
for local streets must be at least 26 feet wide.

(ii)  Construction. At least 22 feet must be paved. The subdivider
must construct the roadway, street lights, storm drainage,
and at least one paved sidewalk.

(iii)  Length. A low-density alternative to a local street must not
exceed 600 feet in length.

(iv)  Dwelling units. The estimated maximum traffic to be carried
by the proposed street is less than 500 ADT. The
commission, in the case of major development, and the
director, in the case of minor development, shall base the
traffic estimate on the maximum development allowed in the
zoning district for the proposed subdivision and the adjacent
lands that could be served by the proposed street and its’
potential extension. ADT will be estimated by applying
traffic generation rates established by the Institute of Transportation Engineers or another recognized standard acceptable to the director of engineering. In a transition zone, estimates shall be based upon the zoning district that allows the higher density.

(E) *Cul de sacs.* The diameter of the constructed portion of a cul de sac turnaround is 80 feet.

(F) *Temporary cul-de-sacs.* Special construction standards apply to temporary cul-de-sacs as shown in CBJ 49.17.425(a)(6)(B)(vi) through (ix).

(2) *Outside the Urban Service Area.* Street construction requirements outside the Urban Service Area are as follows:

(A) *Arterials.* The developer is not be responsible for the construction of arterial streets but may be required to dedicate the necessary right-of-way during the subdivision process.

(B) *Collectors.* The roadway portion of collector streets must be at least 32 feet wide with a gravel surface.
(C) Local streets. Except as provided in (D) of this section, the roadway portion of streets other than arterials and collectors must be constructed by the subdivider to at least a 28 foot width with a gravel surface.

(D) The roadway portion of local streets in new subdivisions located outside the urban service boundary may be constructed to a width of not less than 24 feet provided the estimated maximum traffic to be carried by the proposed street is less than 250 ADT. The estimation of traffic shall be based upon the maximum development allowed in the zoning district for the proposed subdivision and adjacent lands that could be served by the proposed street and its' potential extensions. ADT will be estimated by applying traffic generation rates established by the Institution of Transportation Engineers, or another recognized standard acceptable to the director of engineering.

(E) Cul de sacs. The diameter of the constructed portion of a cul de sac turnaround is 80 feet.

(F) Temporary cul de sacs. Special construction standards apply to temporary cul de sacs as shown in CBJ 49.17.425(a)(6)(B)(vi) through (ix).
(3) **Signs and markings.** The subdivider must install street name signs, traffic control signs, and traffic control pavement markings in accordance with the approved plans and the requirements of the current issue of the *Manual on Uniform Traffic Control Devices*, including the current *Alaska Traffic Manual Supplement*, published by the Alaska Department of Transportation and Public Facilities.

(c) **Street construction waivers.** The commission, or director as noted, may waive the following and no other street improvement requirements:

(1) **Right-of-way relocation.** If a plat is submitted for the purpose of relocating a right-of-way, the commission may waive all or some of the construction requirements under the following conditions:

(A) The proposed relocation will improve access to abutting or neighboring property not otherwise adequately served;

(B) The subdivider has provided sufficient engineering information to demonstrate to the director of engineering the feasibility of constructing a public street at the location of the relocated right-of-way;

(C) The relocated right-of-way and the resulting subdivision layout will conform to all the other standards of this chapter;
(D) The improvements required in the new right-of-way will not be less than those in the existing right-of-way; and

(E) No additional lots are being platted.

(2) **Stub streets.**

(A) The director for minor and major in-house subdivisions, and the commission for major subdivisions may waive the full construction of a roadway within a right-of-way that is required to provide access to a bordering property, and does not provide required access to any lot within the subdivision. The commission or director may require provision of a roadbed, utility line extensions, or other appropriate improvements. (See Figure 5)

(B) In addition, before final acceptance of subdivision improvements, the subdivider must provide a financial guarantee to cover the costs of constructing that part of the roadway improvements waived by the commission in subsection (A) of this section. The guarantee must be for a period of five years from the date the plat is recorded. If it is necessary to connect the roadway to adjoining property within that five-year period, the subdivider may complete the construction, or the guarantee may be used by the City and Borough for that purpose. If a right-of-way has not been dedicated on the adjoining property that accomplishes the connection to the stub street within this five-year
period, the financial guarantee will be released.

(C) When the subdivider of adjoining property is required to connect to the stub street, and the stub street will not be constructed through subsection (B) of this section, then the subdivider of the adjoining property will be required to construct the stub street to City and Borough standards at the time;

(3) Cost equivalent. If a proposed subdivision includes dedication of a right-of-way that extends an existing street, the commission may allow a subdivider to improve all or a portion of the existing street, as well as the proposed street, to a standard of improvement that would result in a cost equivalent to that of meeting the full improvement standards for the construction of the proposed street. The commission will base its decision to allow this cost equivalent alternative on whether the proposal meets or exceeds the intent of the original standard.

(4) Remote subdivisions. The commission and the director may waive roadway improvements and other construction requirements for remote subdivisions according to CBJ 49.17.____.

(5) The procedure for waiving full construction of a street in an existing public right-of-way to public standards is found in chapter 49.15.____, Driveways in public rights-of-ways.
(a) Public water systems required. For new subdivisions, the subdivider must construct a public water system that provides for daily water supply and fire protection needs according to the following:

(1) Applicability. The subdivider must construct a public water distribution system within the subdivision, and the connection to the existing public system, in conformance with the City and Borough of Juneau Subdivision Standard Specifications and Standard Details, under the following circumstances:

(A) If a major subdivision is proposed within 500 feet of an existing public water system; or

(B) If a minor subdivision is proposed within 200 feet of an existing public water system.

(2) Nonresidential subdivisions. The subdivider must provide an evaluation by an Alaska licensed engineer and submit the written evaluation to the director of engineering for review and approval to determine the specific quantity and distribution requirements for the nonresidential subdivision.
(3) **Distance.** For the purpose of this section, distance is measured as the radial distance from the closest water main to the nearest point of the subdivision boundary.

(4) **Fire protection.** Fire protection requirements are based on whether a subdivision is located within or outside Service Area 10, the Fire Protection Service Area. All public water distribution systems constructed according to subsections (1) and (2) of this section, and located in Service Area 10, must be sized and constructed to meet fire flow and hydrant requirements, and provide the necessary fire flows for fire protection. All improvements must be constructed according to the International Fire Code (IFC). The director of engineering and the City and Borough fire marshal must approve all plans.

(b) **Private water systems required.** If a proposed subdivision is located at greater distances from the existing public water system as specified in CBJ 49.17.430(a)(1) above, and the subdivider chooses not to connect to the public system, the subdivider must construct a water system that provides for daily water supply and fire protection needs according to the following:

(1) **Major in-house subdivisions and major subdivisions.** For major in-house subdivisions and major subdivisions, the subdivider must construct a water system adequate to supply water for daily use according to the following:
(A) *Daily water supply.* There are two acceptable options for meeting the
daily water supply for a subdivision:

(I) *Community water system.* A subdivider can choose to construct
a community water system if the following requirements are met:

(a) The community system must meet the quantity standards
established in CBJ 49.17.430(b)(1)(B) below.

(b) Any proposed water system must be approved by the Alaska
Department of Environmental Conservation and any other
agency having jurisdiction. The subdivider must submit
proof of approval(s) to the department.

(c) All improvements must meet the City and Borough
standards for construction of public water systems. The
community system must provide a separate service to the
boundary of each proposed lot.

(d) The subdivider must submit the appropriate documents that
show how the continued maintenance of the community
water system is guaranteed. The City and Borough may
review and comment on the documents, but is not responsible
for their content, or enforcement of any provisions.
(ii) Individual wells. A subdivider can also choose the option of individual wells to supply daily water needs, if the following requirements are met:

(a) The subdivider must clearly demonstrate to the satisfaction of the director of engineering, through test wells, draw down tests, and other suitable methods, that the quantity standards in CBJ 49.17.430(b)(1)(B) below can be met for all proposed lots.

(b) The proposed source and supply system must be approved by the Alaska Department of Environmental Conservation and other agencies having jurisdiction. Proof of the approval must be submitted to the department.

(B) Quantity. Quantity requirements are as follows:

(I) Residential use. The proposed source and system for residential use must be capable of producing and delivering not less than 75 gallons per capita per day and a peak hour factor of 150 percent.

(ii) Nonresidential subdivisions. To determine quantity and distribution requirements for nonresidential subdivisions, the subdivider must provide an evaluation by an engineer licensed in the State of Alaska and submit the written evaluation to the department.
director of engineering for review and approval.

(iii) Water rights. The subdivider must show proof that the appropriate application and certification has been obtained from the State of Alaska for water rights for the source of water being proposed for use in the subdivision. The specific documents required, and the timing for their submittal, are spelled out in the subdivision permitting process as shown in CBJ 49.17._____.

(C) Fire protection. For a major subdivision proposed within Service Area 10, and not connecting to the public water system, the subdivider must, nevertheless, must construct a water supply system that will provide adequate fire protection. This distribution system must meet all the requirements of CBJ 49.17.430(a)(4) above and may be separated or combined with the domestic water supply system.

(2) Minor subdivisions.

(A) Neither a community water system, nor individual wells are required for minor subdivisions. Cross Reference to 49.17._____.

(B) Fire protection. Fire protection requirements will be determined at the time the individual lots are developed.
(3) *Exception for remote subdivisions.* Neither a community water system nor individual wells are required for all subdivisions designated as remote subdivisions according to CBJ 49.17.____.

49.17.435 Sewer systems.

(a) *Public sewer systems required.* For new subdivisions, the subdivider must construct a public sewer system according to the following:

(1) *Applicability.* A subdivider must construct a public sewer system within the subdivision, and connect to the existing public sewer system, in conformance with the City and Borough of Juneau Subdivision Standard Specifications and Standard Details, under the following circumstances:

(A) If a major subdivision is proposed within 500 feet of an existing public sewer system; or

(B) If a minor subdivision is proposed within 200 feet of an existing public sewer system.

(2) *Distance.* For the purpose of this section, distance is measured as the radial distance from the closest sewer main to the nearest point of the boundary of the proposed subdivision.
(b) *Private wastewater systems required.* If a proposed subdivision is located at greater distances from the existing public sewer system as specified in CBJ 49.17.435(a) above, and the subdivider chooses not to connect to the public system, then the requirements for wastewater systems in new subdivisions are as follows:

(1) **Major in-house subdivisions and major subdivisions.** For major in-house subdivisions and major subdivisions, the following wastewater systems shall be acceptable:

(A) *Community and cluster wastewater systems.* Community wastewater systems, which have shared collection, treatment, and disposal and cluster wastewater systems, which have individual on-site treatment with a shared collection and disposal system are acceptable if the following requirements are met:

(I) The subdivider must provide a report and certification by a registered, qualified engineer licensed by the State of Alaska, which clearly shows that the proposed community or cluster wastewater system will operate satisfactorily, and how it will meet all other state and federal standards, to the satisfaction of the director of engineering.

(ii) The director of engineering must review the report and make a recommendation to the commission. The director of engineering will not make independent findings, but will make a
recommendation as to the adequacy of the methodology and data provided in the report.

(iii) All improvements must meet the City and Borough standards of construction for public sewer systems. The community and cluster wastewater systems must provide separate service to the boundary of each proposed lot.

(iv) The proposed wastewater systems must be approved by the Alaska Department of Environmental Conservation and any other agencies having jurisdiction. Proof of approval must be submitted to the department.

(B) On-site wastewater systems. Wastewater systems, which have individual on-site treatment and individual on-site disposal shall be acceptable if all the following requirements are met:

(I) The subdivider must provide a report and certification by a registered, qualified engineer or geologist licensed by the State of Alaska, which clearly shows that the proposed lots are large enough and have existing soils of sufficient permeability to permit the construction of on-site wastewater treatment and disposal systems.
(ii) The director of engineering shall review the report and make a recommendation to the director for major in-house subdivisions and to the commission for major subdivisions. The director of engineering will not make independent findings but will make a recommendation as to the adequacy of the data provided and of the methodology proposed in the report for wastewater treatment and disposal.

(iii) If adequate soils are not available on site, the applicant can propose alternative methods for individual on-site wastewater systems. Alternative methods may include mound systems, marine outfalls, or other suitable wastewater systems. Review and approval of a proposal under this section must meet the applicable requirements of subsections (I) and (ii) of this section.

(2) Minor subdivisions. On lot wastewater treatment for minor subdivisions will be approved if the requirements for major in-house and major subdivisions in CBJ 49.17.435(b)(1)(B) above are met with the following exceptions:

(A) Prohibited wastewater systems. Community and cluster wastewater systems will not be approved for minor subdivision proposals.
(3) **Residential wastewater systems - property owner responsibility.** The responsibilities of individual property owners for their individual wastewater systems are as follows:

(A) **Permitting.** All the owners of lots in new, minor, in-house major, and major, residential subdivisions using cluster or on-site wastewater systems must obtain a City and Borough on-site wastewater treatment and disposal system (OWTDS) permit from the engineering department, and have completed construction and inspection of the system prior to issuance of any certificate of occupancy. The requirements for obtaining a wastewater treatment and disposal system permit, and the permit fees, shall be established by regulations issued by the manager pursuant to CBJ 01.60.

(B) **Limited maintenance contract required.** In addition, the property owners in new residential, major in-house, and new residential major subdivisions shall be required to enter into a contract with the department of public works or its designee for inspection, monitoring, and treatment plant pumping of the private wastewater facility according to CBJ ____________ of this chapter. All other maintenance of the wastewater system is the responsibility of the property owner.

(C) Violation of a regulation adopted pursuant to subsections (A) and (B) of this section is an infraction.
(c) Compliance with (b) *Private wastewater systems required* of this section does not exempt the subdivider or individual property owners from meeting all requirements of the Alaska State Department of Environmental Conservation regarding approval of wastewater systems.

**49.17.440 Drainage.**

(a) *Drainage plan.* The subdivider must provide a total surface drainage plan for approval by the director of engineering. This plan is an extension of the plan submitted with the preliminary plat as shown in CBJ 49.17.____. The plan must be prepared by a civil engineer licensed to practice in the State of Alaska, must show all drainage facilities, and must include:

1. The calculated increase in stormwater runoff resulting from the proposed development as well as the runoff from the total drainage area(s) associated with the site. Runoff calculation shall be based on a fully developed subdivision and a 25-year storm event.

2. An evaluation of existing drainage ways and structures located between the subdivision and the receiving water body shall verify that the existing drainage ways can accommodate the increased runoff.

3. All public and any required private drainage facilities.
(4) A demonstration of how drainage from the proposed subdivision will outlet into an established drainage channel(s), unless an alternative drainage way(s) is approved by the director of engineering.

(b) **Easements.** All subdivisions must be provided with necessary drainage easements, and drainage facilities adequate to prevent increased surface or subsurface runoff to abutting properties.

(c) **Drainage systems required.** The subdivider must install all on and off-site improvements necessary to deal with increases in or changes to existing flows as shown on the approved drainage plan.

(d) **Construction timing.** Any drainage improvements required by this section must be constructed and approved prior to or at the same time as the completion of any street construction.

(e) **Municipal planned area drainage system (Reserved).**

**49.17.445 Pedestrian and bicycle access.**

(a) **Shared use pathways.** Shared-use pathways for pedestrian and bicycle use may be required through blocks longer than 600 feet, or where deemed necessary to provide reasonable circulation within and between residential areas, or to provide access to schools, playgrounds, shopping centers, transportation or other community facilities according to the following:
(1) **Shared-use pathway width.** The width of a shared use pathway must not be less than 8 feet.

(2) **Construction standards.** Shared-use pathways, where required, must be constructed according to the *Alaska Department of Transportation and Public Facilities Preconstruction Manual on “Bicycle Ways.”* The director of engineering may approve alternative construction when deemed appropriate to the conditions of the site.

(3) **Right-of-way width.** A shared-use pathway must be located in dedicated right-of-way with a minimum width of 10 feet. The width of the right-of-way may be modified by the director for minor or major in-house subdivisions, and by the planning commission for major subdivisions, to accommodate the width of the fully constructed pathway and/or topographic features of the site.

(4) **Construction timing.** Shared use pathways must be constructed prior to occupancy of any dwellings on lots located adjacent to the pathway, or at the time all subdivision improvements are accepted by the City and Borough, whichever comes first.

(b) **Sidewalks.** The subdivider shall construct sidewalks on both sides of all streets furnished with curbs and gutters in any subdivision within the Urban Service Area.

(1) **Minimum width.** The minimum width of sidewalks is five feet.
(2) *Low-density alternative.* The low-density alternative for a local street may be constructed with one sidewalk not less than five feet wide.

(3) *Waiver.* The commission may waive the requirement for sidewalks and allow alternative pedestrian improvements to be constructed upon a finding that the alternative will:

(A) Take advantage of natural features of the site or implement the Juneau Non-motorized Transportation Plan; and

(B) Provide a safety, quality, and functional equivalent to the requirement being waived.

49.17.450 Utilities.

(a) *Underground utilities.* The requirements for the undergrounding of utilities in new subdivisions are found in CBJ 62.40.070, New installations; underground utilities required.

(b) *Provision of utilities.* [Reserved]

Section 3. Amendment of Section. The definitions section contained in CBJ 49.80.120 is amended at the following definitions which are to be incorporated in alphabetical order as follows:
49.80.120 Definitions.

Bicycle lane means a portion of a street which has been designated for the preferential or exclusive use of bicycles. It is distinguished from the portion of the roadway for motor vehicular traffic by a paint stripe, signage or similar devices.

Cluster wastewater treatment system means a system with individual on-site wastewater treatment and a shared wastewater collection system under some form of common ownership, other than public ownership, that collects wastewater from two or more dwellings and conveys it for disposal on a suitable site near the dwellings.

Community wastewater treatment and disposal system means a system with a shared wastewater treatment and collection system under some form of common ownership, other than public ownership, that collects wastewater from two or more dwellings and conveys it to a treatment plant and disposal system located on a suitable site near the dwellings.

Department means the community development department.

Director means the director of the community development department or a designee.

Director of engineering means the director of the engineering department or a designee.
Driveway in the public right-of-way means a street that the department or the commission has permitted to be constructed at less than full public street standards in an existing right-of-way. The driveway in the public right-of-way can be used by the public, and can provide access to more than one parcel, but will not be publicly maintained. A driveway in the public right-of-way is distinguished from an ordinary driveway in that an ordinary driveway provides access between a parcel of land and the public portion of the street, and is not for public access. (See Figure 6).

Private improvements means those improvements required as part of a subdivision or other land use permit that will not be maintained by the City and Borough or other public agency of government.

Public improvements means those improvements required as part of a subdivision or other use permits that will be maintained by the City and Borough or other public entity including but not limited to, streets, retaining walls, street signs and markings, curbs and gutters, street lights and associated power conduits, sidewalks, shared use pathways, sewer mains, pump stations, service laterals, manholes, cleanouts and all associated parts, storm sewer mains, manholes, catch basins, pump stations, service laterals, and all associated parts, water mains, fire hydrants, service laterals, valves, pump stations, reservoirs, and all associated parts.

Radial distance means the shortest distance measured along a radius extending from a point of the object being measured from to a point on the object being measured to.
Subdivider means the owner of the property being subdivided or a designee.

Public sewer and water system means any system that is operated by a municipality or governmental agency, or a public entity licensed as such by the state for the collection, treatment and disposal of wastes and the furnishing of potable water and fire protection.

Public way means pedestrian ways and streets and any other way held for or held open by a public entity for purposes of public access.

Right-of-way means a strip of land including surface and overhead and/or underground space, which is granted by deed, easement, or dedication that is condemned and occupied or intended to be occupied by a street, sidewalk, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary and storm sewer and other similar uses.

Roadway means the portion of a street intended for vehicular traffic; where curbs are laid, the portion of the street between the back of the curbs.

Shared-use pathway means a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the right-of-way or within an independent right-of-way. Shared-use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other nonmotorized users.
Sight distance means the distance, which a driver needs to react appropriately to a situation. Three types are commonly used in traffic engineering: stopping sight distance, passing sight distance, and intersection sight distance.

Street means entire right-of-way of a public way, including a right-of-way, a roadway, and all other improvements, which affords the principal means of access to properties abutting the right-of-way.

Urban Service Area means the area of the City and Borough that is planned for urban type growth as shown in the latest adopted version of the comprehensive plan of the City and Borough of Juneau as the Urban Service Area or the Urban Service Area boundary.

Section 4. Effective Date. This ordinance shall be effective 30 days after its adoption.

Adopted this day of 2009.

____________________________
Bruce Botelho, Mayor

Attest:

____________________________
Laurie J. Sica, Clerk