



**Kenai Planning & Zoning Commission -  
Regular Meeting**

**May 13, 2026 – 7:00 PM**

**Kenai City Council Chambers**

**210 Fidalgo Avenue, Kenai, Alaska**

[www.kenai.city](http://www.kenai.city)

**\*\*Telephonic/Virtual Information on Page 2\*\***

**Agenda**

**A. CALL TO ORDER**

1. Pledge of Allegiance
2. Roll Call
3. Approval of the Agenda and Consent Agenda (*Public comments on Consent Agenda Items limited to three (3) minutes per speaker; thirty (30) minutes aggregated*)

\*All items listed with an asterisk (\*) are considered to be routine and non-controversial by the Commission and will be approved by one motion. There will be no separate discussion of these items unless a Commission Member so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda as part of the General Orders.

**B. APPROVAL OF MINUTES**

**C. SCHEDULED PUBLIC COMMENT (*Public comment limited to ten (10) minutes per speaker*)**

**D. UNSCHEDULED PUBLIC COMMENT (*Public comment limited to three (3) minutes per speaker; thirty (30) minutes aggregated*)**

**E. CONSIDERATION OF PLATS**

**F. PUBLIC HEARINGS**

1. Granting the Application for a Variance Permit to Build Into the 20' Setback Along the North Side of Parcel 04515303.

**G. UNFINISHED BUSINESS**

**H. NEW BUSINESS**

1. Action/Approval - Subdivision Regulations

**I. REPORTS**

1. Planning Director
2. Commission Chair
3. Kenai Peninsula Borough Planning
4. City Council Liaison

J. **ADDITIONAL PUBLIC COMMENT** (*Public comment limited to five (5) minutes per speaker*)

K. **NEXT MEETING ATTENDANCE NOTIFICATION**

1. Next Meeting: May 27, 2026

L. **COMMISSION COMMENTS AND QUESTIONS**

M. **PENDING ITEMS**

N. **ADJOURNMENT**

O. **INFORMATIONAL ITEMS**

**\*\*COMMISSIONERS, PLEASE CONTACT US IF YOU WILL NOT BE ABLE TO ATTEND THE MEETING\*\***

*The agenda and supporting documents are posted on the City's website at [www.kenai.city](http://www.kenai.city). Copies of resolutions and ordinances are available at the City Clerk's Office or outside the Council Chamber prior to the meeting. For additional information, please contact the City Planner at 907-283-8237.*

**Registration is required to join the meeting remotely through Zoom.** Please use the following link to register:

<https://us02web.zoom.us/meeting/register/wdpXU1igToaVIR0UaRLiQA>



**CITY OF KENAI  
PLANNING AND ZONING COMMISSION  
RESOLUTION NO. PZ2026-09**

A RESOLUTION **GRANTING** THE APPLICATION FOR A VARIANCE PERMIT TO BUILD INTO THE 20' SETBACK ALONG THE NORTH SIDE OF PARCEL 04515303.

APPLICANT: Aleksey Rytikov, DBA A7 Construction

PROPERTY OWNER: Jonathan Coats

PROPERTY ADDRESSES: 209 Candlelight Way

LEGAL DESCRIPTIONS: Lot 1, Ropers Subdivision

KENAI PENINSULA BOROUGH PARCEL NUMBERS: 04515303

WHEREAS, a complete application meeting the requirements of Kenai Municipal Code 14.20.185(c) was submitted to the City on April 1, 2026; and,

WHEREAS, the applicant has demonstrated that the prerequisites of a Variance Permit have been met pursuant to Kenai Municipal Code 14.20.180(b); and,

WHEREAS, the City of Kenai Planning and Zoning Commission conducted a duly advertised public hearing on April 29, 2026, following requirements outlined in Kenai Municipal Code 14.20.280 for public hearings and notifications.

WHEREAS, the Planning and Zoning Commission finds the criteria are met as set forth in KMC 14.20.180(c):

1. *Special conditions or circumstances are present which are peculiar to the land or structures involved which are not applicable to other lands or structures in the same land use or zoning district.*

Findings: The subject property currently has double frontage access, as it borders two City streets. With the proposed build the double frontage will be eliminated, as it would have one access/driveway onto one street. This would be key to eliminating a potential traffic conflict point.

2. *The special conditions or circumstances have not been caused by actions of the applicant and such conditions and circumstances do not merely constitute pecuniary hardship or inconvenience.*

Findings: The double frontage pre-dates the current ownership. Staff finds that the request has not been caused by any actions on behalf of the property owner or petitioner.

3. *The granting of the variance shall not authorize a use that is not a permitted principal use in the zoning district in which the property is located.*

Findings: The granting of the variance will resolve the double frontage. Furthermore, it will allow for the site plan to comply with City requirements, for the construction of two new multi-family structures, which is a much-needed commodity within the community.

4. *The granting of a variance shall be the minimum variance that will provide for the reasonable use of the land and/or structure.*

Findings: Granting the variance will improve safety and bring the property into code compliance by reducing access to a single-entry point. The building will be placed in the northwest corner, with the northeast used for snow storage and a 20-foot east setback, ensuring clear visibility at Kaknu Way and Candlelight Drive. The north side will function as a side yard, with a 10-foot setback exceeding the 5-foot minimum required in this zone.

5. *The granting of a variance shall not be based upon other nonconforming land uses or structures within the same land use or zoning district.*

Findings: The granting of this variance permit is not based upon other non-conforming land uses or structures within the same land use or zoning district.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF KENAI, ALASKA:

**Section 1.** That the request for a variance permit to build into the 20' setback along the north side of the property known as Lot 1, Ropers Subdivision, located at 209 Candlelight Way, be approved.

**Section 2.** That the variance permit is subject to the following conditions:

1. Applicant must comply with all federal, State of Alaska, and local regulations.
2. Applicant must obtain all applicable permits and file all required Landscaping & Site Plans prior to beginning construction.

PASSED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF KENAI, ALASKA, THIS 13<sup>TH</sup> DAY OF MAY, 2026.

---

Jeanne Keaton, Chair

ATTEST:

---

Logan Parks, Deputy City Clerk



# STAFF REPORT

PLANNING & ZONING DEPARTMENT

**TO:** Planning and Zoning Commission  
**FROM:** Kevin Buettner, Planning Director  
**THROUGH:** Jessica See, Planning Technician  
**DATE:** April 15, 2026  
**SUBJECT:** Resolution No. PZ2026-09 - Variance Permit – Frontage Setback

---

**Request** The applicant is requesting for a variance permit to build into the 20-foot setback on the north side of the lot.

**Staff Recommendation** Adopt Resolution No. PZ2026-09 Approving a Variance Permit to build into the 20-foot setback on the north side of the lot.

---

Applicant: Aleksey Rytikov DBA A7 Construction  
Property Owner: Jonathan Coats  
Legal Descriptions: Lot 1, Ropers Subdivision  
Property Addresses: 209 Candlelight Way  
KPB Parcel Nos.: 04515303  
Lot Sizes: .46 Acre (20,038 square feet)  
Zoning: Suburban Residential  
Current Land Use: Suburban Residential  
Land Use Plan: Suburban Residential

## SUMMARY

---

The subject property is zoned Suburban Residential, which requires a twenty foot (20') front and rear setback. This .46-acre property is a corner lot with double frontage along Candlelight Drive and Kaknu Way. As shown in the attached site plan, the sole entry to the property will be from Candlelight Drive. The north side of the lot along Kaknu Way will act as a side lot line and will be blocked with a structure creating a solo entry from the east. The applicant is requesting a variance

to allow them to treat the north side of the lot as a side setback, which requires only five feet (5') of setback, allowing the proposed structure on the north side to be built ten feet (10') into the current twenty-foot (20') setback.

## ANALYSIS

---

Pursuant to KMC 14.20.180(a), the intent of a variance permit is to provide relief to the development requirements of KMC Chapter 14.20 when the literal enforcement would deprive a property owner of the reasonable use of his/her real property.

Prior to granting a variance permit, the Commission shall find that all of the conditions have been met as set forth in KMC 14.20.180(c) [Variance Permit] *Review Criteria*.

***Criteria 1: Special conditions or circumstances are present which are peculiar to the land or structures involved which are not applicable to other lands or structures in the same land use or zoning district.***

**Findings:** The subject property currently has double frontage access; With the proposed build the double frontage will be eliminated and eliminating a secondary traffic conflict point.

***Criteria 2: The special conditions or circumstances have not been caused by actions of the applicant and such conditions and circumstances do not merely constitute pecuniary hardship or inconvenience.***

**Findings:** The double frontage pre-dates the current ownership. Staff finds that the request has not been caused by any actions on behalf of the property owner or petitioner.

***Criteria 3: The granting of the variance shall not authorize a use that is not a permitted principal use in the zoning district in which the property is located.***

**Findings:** The granting of the variance will resolve the double frontage. Furthermore, it will allow for the site plan to comply with City requirements, for the construction of two new multi-family structures, which is a much-needed commodity within the community.

***Criteria 4: The granting of a variance shall be the minimum variance that will provide for the reasonable use of the land and/or structure.***

**Findings:** Granting the variance will improve safety and bring the property into code compliance by reducing access to a single-entry point. The building will be placed in the northwest corner, with the northeast used for snow storage and a 20-foot east setback, ensuring clear visibility at Kaknu Way and Candlelight Drive. The north side will function as a side yard, with a 10-foot setback exceeding the 5-foot minimum required for this zone.

***Criteria 5: The granting of a variance shall not be based upon other nonconforming land uses or structures within the same land use or zoning district.***

**Findings:** The granting of this variance permit is not based upon other non-conforming land uses or structures within the same land use or zoning district.

## **PUBLIC NOTICE**

---

Pursuant to Kenai Municipal Code 14.20.280 notices of the public hearing for the variance permit were mailed to property owners within a three hundred-foot (300') periphery of the subject properties. City staff published notice of the public hearing in the *Peninsula Clarion* on May 8, 2026. The property owner submitted an Affidavit of Posting verifying a sign was placed on the parcel with information on the public hearing for the variance permit request.

No public comment has been received at the time of this report and there are no stated objections to the variance permit.

## **STAFF RECOMMENDATION**

---

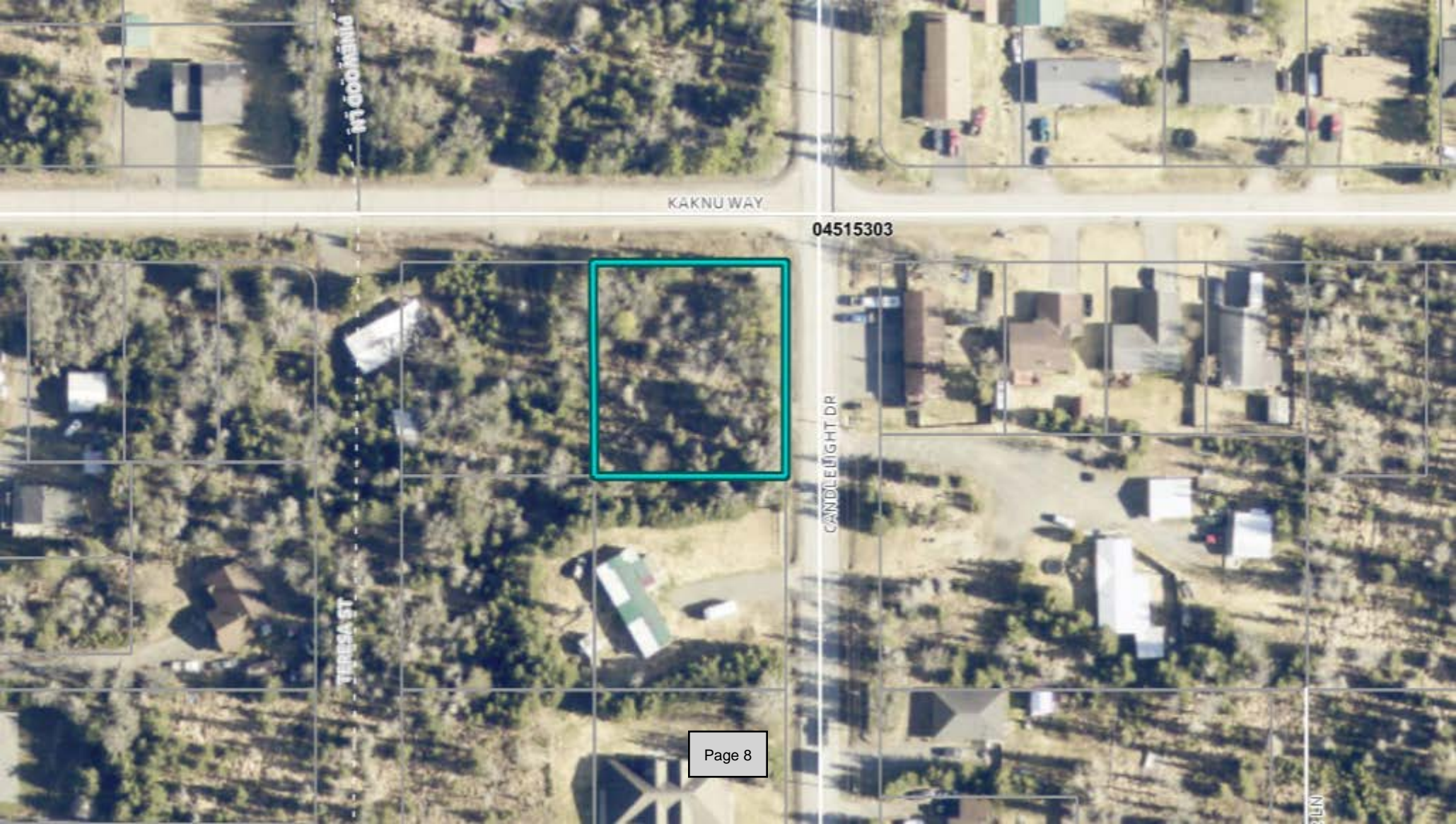
Staff finds that the proposed variance request meets the criteria for issuance of a Variance Permit as set forth in Kenai Municipal Code Section 14.20.180(c), and hereby recommends that the Planning and Zoning Commission approve the variance permit, subject to the following conditions:

1. Applicant must comply with all federal, State of Alaska, and local regulations.
2. Applicant must obtain applicable permits and file all required Landscaping & Site Plans prior to beginning construction.

## **ATTACHMENTS**

---

Aerial Map  
Application  
Site Plan



W. COOMANU

KAKNU WAY

04515303

TERESA ST

CANDLELIGHT DR

Page 8

ELLEN

RECEIVED 4/1/26  
 SCANNED 4/1/26



## Variance Permit Application

City of Kenai  
 Planning and Zoning Department  
 210 Fidalgo Avenue  
 Kenai, AK 99611  
 (907) 283-8200  
 planning@kenai.city  
 www.kenai.city/planning

### PROPERTY OWNER

PAID 4/1/26

Name:	Jonathan Coats			
Mailing Address:	47567 Winridge Ave			
City:	Kenai	State:	AK	Zip Code: 99611
Phone Number(s):	[REDACTED]			
Email:	[REDACTED]			

### PETITIONER REPRESENTATIVE (LEAVE BLANK IF NONE)

Name:	Aleksey Rytikov A7 Construction			
Mailing Address:	10672 Kenai Spur Hwy 112-300			
City:	Kenai	State:	AK	Zip Code: 99611
Phone Number(s):	[REDACTED]			
Email:	[REDACTED]			

### PROPERTY INFORMATION

Kenai Peninsula Borough Parcel # (Property Tax ID):	04515303
Physical Address:	209 Candlelight Drive
Legal Description:	T 6N R 11W SEC 34 SEWARD MERIDIAN KN 0001409 ROPERS SUB LOT 1
Zoning:	Suburban Residential
Acres:	.46

### VARIANCE DESCRIPTION

(include site plan with square footages and elevations of all existing/proposed buildings)  
 (use additional pages if necessary to answer questions)

A variance permit is the relaxation of the development requirements to provide relief when the literal enforcement would deprive a property owner of the reasonable use of their real property. The requirements for a variance permit in City Code must be met for a variance to be granted.

How is this property currently being used?	Vacant
Use of surrounding property - north:	Residential
Use of surrounding property - south:	Residential
Use of surrounding property - east:	Residential
Use of surrounding property - west:	Residential

Variance Requested for (attach additional sheets if necessary):

North lot line. Please see attached proposed site plan.

Explain the special conditions or circumstances present which are peculiar to the land or structure involved which are not applicable to other land or structures in the same land use or zoning district:

Double Road Frontage on Candlelight Drive and Kaknu Way. Would like a variance to build into the 20ft setback along Kaknu Way.

Explain the special conditions or circumstances present that have not been caused by actions of the applicant and such conditions and circumstances do not merely constitute pecuniary (monetary) hardship or inconvenience:

*See above*

Explain how this variance will not authorize a use that is not a permitted principal use in the zoning district in which the property is located:

N/A

Explain how the variance shall be the minimum variance that will provide for the reasonable use of the land and/or structure:

Would like to get the same setback requirements of 5', same as the side lots for this zoning.

Explain how the granting of a variance shall not be based upon other nonconforming land uses or structures within the same land use or zoning district:

N/A

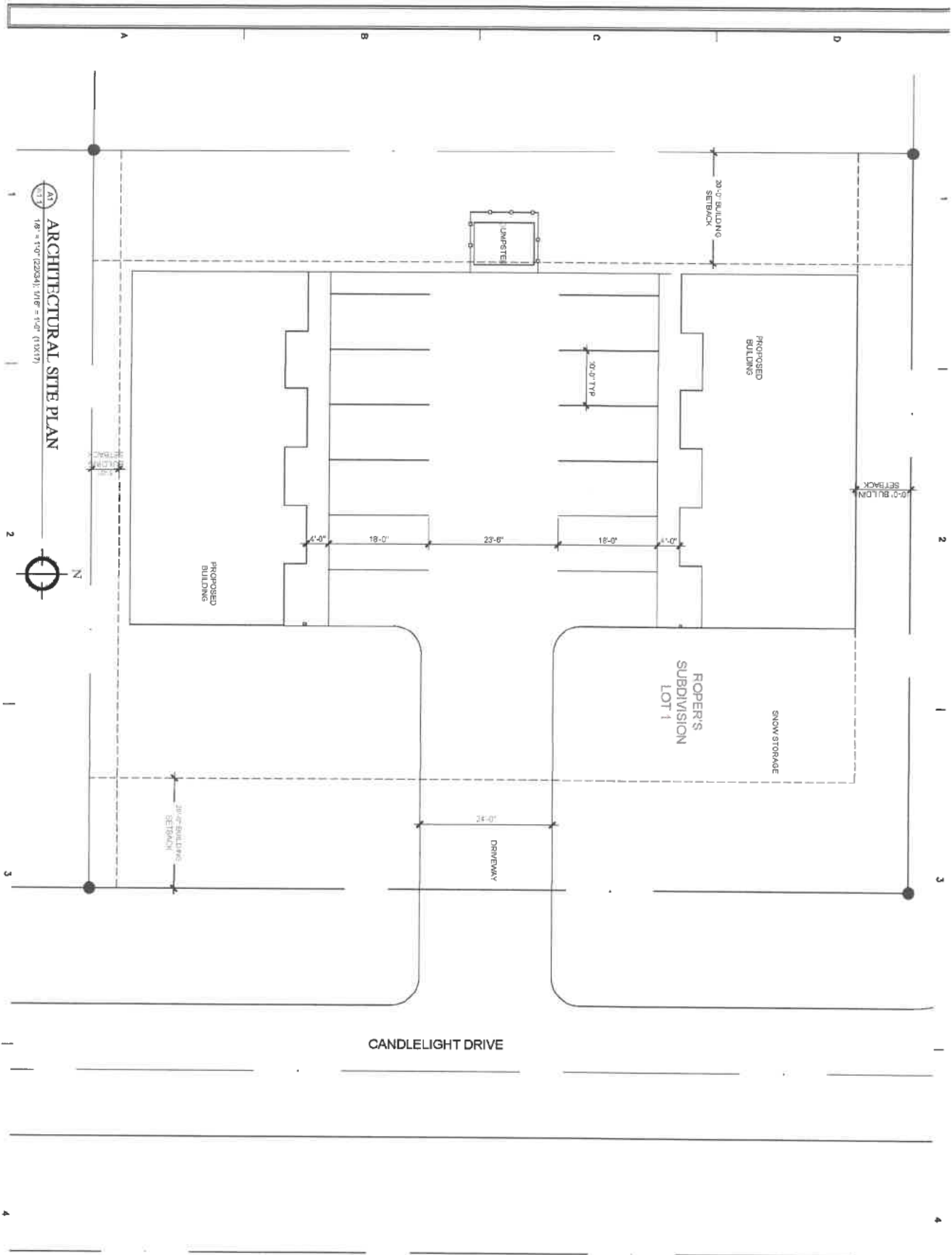
**AUTHORITY TO APPLY FOR A VARIANCE:**

I hereby certify that (I am) (I have been authorized to act for) owner of the property described above and that I petition for a variance permit in conformance with Title 14 of the Kenai Municipal Code. I understand that payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the variance. I also understand that assigned hearing dates are tentative and may have to be postponed by Planning Department staff of the Planning and Zoning Commission for administrative reasons. I understand that a site visit may be required to process this application. City of Kenai personnel are authorized to access the above-referenced property for the purpose of processing this application.

Signature:  Date: 4/1/2026

Print Name: Aleksey Rytikov Title/Business: A7 Construction, Owner

**For City Use Only** Date Application Fee Received: PZ Resolution Number:



**ARCHITECTURAL SITE PLAN**  
 1/8" = 1'-0" (2202x4), SITE = 1/4" = 1'-0" (13x17)



**A1.1**  
 PLOTTED HALF SCALE  
 SCALE AS SHOWN

<b>DRAWN:</b>	K GRAHAM
<b>JOB:</b>	26.3-A70000111/plex
<b>DATE:</b>	3.22.2026
<b>REVISIONS:</b>	

**ARCHITECTURAL SITE PLAN**  
 Page 11

**JONATHON COATS**  
**A7 CONSTRUCTION**  
**3-Plex Apartment**  
 209 CANDLELIGHT, KENAI, ALASKA

**DRAFT ALASKA**  
 Kenai, Graham  
 4524 Highway Court  
 Kenai, Alaska 99581  
 info@draftalaska.com  
 907.201.0831

THE SERVICES, ARRANGEMENTS, REPRESENTATIONS AND GRAPHICAL PRESENTATIONS ON THIS DOCUMENT ARE THE PROPERTY OF DRAFT ALASKA AND THE OWNER OF THIS DOCUMENT ACCEPTS THEM IN THEIR ENTIRETY.  
 ALL PROPOSED USES OF THIS DRAWING IS GRANTED SOLELY FOR THE PURPOSE OF THIS SPECIFIC PROJECT, AND LOCATION, AND NOT FOR CONSTRUCTION OF USE FOR ANY OTHER PROJECT.



**CITY OF KENAI  
ORDINANCE NO. 3520-2026**

AN ORDINANCE AMENDING KENAI MUNICIPAL CODE CHAPTER 14.10 - SUBDIVISION REGULATIONS AND AMENDING KENAI MUNICIPAL CODE SECTION 18.10.030 - STREET IMPROVEMENTS TO REMOVE ROAD DESIGN STANDARDS FROM CODE AND REPLACE THEM WITH A STREET DESIGN STANDARDS MANUAL.

---

WHEREAS, the availability and affordability of housing remain important issues for the community, and the City has taken steps to support residential development, including the sale and donation of City-owned land; and,

WHEREAS, Administration engaged with the Kenai Peninsula Borough, the Kenai Peninsula Economic Development District, local realtors, and both large- and small-scale developers to identify opportunities for the City to support additional residential development; and,

WHEREAS, development discussions highlighted the need for clearer and more consistent subdivision and roadway design standards; and,

WHEREAS, Public Works and Planning subsequently reviewed existing road and subdivision standards and in coordination with an engineering consultant, developed City of Kenai Street Design Standards Manual to reduce confusion, support predictable development review, and streamline processes for future development; and,

WHEREAS, Public Works posted the draft manual online and held an open to receive comments from local contractors and consultants and incorporate that feedback into the final manual; and,

WHEREAS, the City Council during their November 5, 2025 meeting approved a motion directing the Planning & Zoning Commission to bring forward recommendations to update Kenai Municipal Code 14.10 - *Subdivision Regulations*; and,

WHEREAS, at the Planning and Zoning Commission during their May 13, 2026 Meeting recommended the City Council \_\_\_\_\_ this Ordinance; and,

WHEREAS, the amendment of KMC 14.10 - *Subdivision Regulations* and the amendment of KMC 18.10.030 – *Street Improvements* to reference the Street Design Standards Manual is in the best interests of the City.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF KENAI, ALASKA, AS FOLLOWS:

**Section 1.** Amendment of Chapter 14.10 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.010 - General is hereby amended as follows:

(a) Preliminary plats showing a subdivision of land, or a replat caused by proposed vacation of public right-of-way, lying within the corporate boundary of a first class or home rule City [SHALL] must be first submitted to the appropriate City for review prior to submittal of the plat to the Kenai Peninsula Borough Planning Department. In such instances, the [CITY PLANNING COMMISSION SHALL] Planning & Zoning

Commission will have forty-nine (49) days from the receipt in which to review the preliminary plat and take action.

(b) The preliminary plat submitted to the City [SHALL] must comply with the requirements of Sections 20.12.060 and 20.12.070 of the Kenai Peninsula Borough Code.

(c) The [CITY PLANNING COMMISSION] Planning & Zoning Commission and, if necessary, other appropriate municipal departments [SHALL] will review the plat or replat of a proposed vacation action and prepare written comments which [SHALL] will be included with the submittal of the plat to the Borough. The subdivider bears the responsibility for presentations to, and discussions with, the City so the final plat will conform to lawful ordinances and requirements of said City.

**Section 2.** Amendment of Section 14.10.030 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.030 - Jurisdiction and Procedure, is hereby amended as follows:

(a) It is unlawful for any person being the owner, agent, or person having control of any land within the City of Kenai to subdivide or lay out such land in lots, unless by a plat, in accordance with the regulations contained herein. A preliminary plat [SHALL] must be submitted to the City of Kenai, who [SHALL] will make recommendations to the Borough Planning Commission.

(b) The design and layout of all subdivisions [SHALL] must conform with the requirements of Section 14.10.070 hereof. The subdivider [SHALL] must submit a preliminary plan in accordance with the specifications of Section 14.10.040 hereof. Following approval of the preliminary plan, the subdivider [SHALL] must install the minimum improvements, furnish a bond or provide for guaranteeing such installations in accordance with the requirements of Section 14.10.080 hereof. Upon approval of improvement installations or arrangements therefor, the final plat [SHALL] must be submitted in accordance with the provisions of Section 14.10.040 hereof.

**Section 3.** Amendment of Section 14.10.060 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.060 - Submission to City Council, is hereby amended as follows:

(a) After review of the final plat by the [CITY PLANNING COMMISSION] Planning & Zoning Commission, such final plat, together with the recommendations of the Commission, [SHALL] will be submitted to the Kenai Peninsula Borough Planning Commission for approval.

(b) If the [CITY PLANNING COMMISSION] Planning & Zoning Commission rejects or withholds approval of a plat, the subdivider may request said plat be submitted to the City Council. The [SECRETARY] Planning Director, on behalf of the [CITY PLANNING COMMISSION] Planning & Zoning Commission [SHALL] will forward the proposed plat together with the report of the [CITY PLANNING COMMISSION] Planning & Zoning Commission stating the reason or reasons for the action taken. The City Council may make such findings and determinations as are deemed proper. If either a preliminary or final plat is disapproved by the [CITY PLANNING COMMISSION] Planning & Zoning Commission, it may be approved by the City Council.

(c) In accordance with Kenai Municipal Borough Code 20.65.050 - Action on Vacation Application, a Kenai Peninsula Borough Planning Commission decision to approve a vacation is not effective without the consent of the City Council, if the vacated area to be vacated is within the City. All vacation decisions made by the Kenai Peninsula Borough impacting the City of Kenai will be brought forth at the next scheduled City Council meeting. The Council will have thirty (30) days from the date of the Kenai Peninsula Borough Planning Commission approval to either consent or to veto the vacation. Notice of veto will be immediately given to the Kenai Peninsula Borough Planning Commission. Failure to act on the vacation within thirty (30) days will be considered to be consent to the vacation.

**Section 4.** Amendment of Section 14.10.070 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.070 - Subdivision Design Standards, is hereby amended as follows:

(a) Relationship to Adjoining Street System. The arrangement of streets in new subdivisions [SHALL] will make provisions for the continuation of the principal existing streets in adjoining areas (or their proper projection where adjoining land is not subdivided) insofar as they may be deemed necessary by the Commission for public requirements. The width of such streets in new subdivisions [SHALL] will be not less than the minimum widths established [HEREIN] in the current edition of the City of Kenai Road Design Manual. The street and alley arrangement [SHALL] must be such as not to cause a hardship to owners of adjoining property when they plat their own land and seek to provide for convenient access to it. Offset streets should be avoided. Streets obviously in alignment with existing streets [SHALL] will bear the names of the existing streets. All proposed street names [SHALL] will be checked against duplication of other street names.

[(B) STREET AND ALLEY WIDTH.

(1) THE WIDTHS OF MAJOR HIGHWAYS SHALL CONFORM TO THE WIDTHS DESIGNATED ON THE MAJOR STREET PLAN.

(2) THE MINIMUM WIDTH FOR MINOR STREETS SHALL BE SIXTY (60) FEET, EXCEPT THAT THE KENAI CITY PLANNING AND ZONING COMMISSION, MAY, IN ITS DISCRETION BY MAJORITY VOTE OF ITS MEMBERS, LESSEN THIS DISTANCE TO NOT LESS THAN FIFTY (50) FEET. A WIDER STREET WIDTH MAY BE REQUIRED WHERE THE STORM WATER IS ACCOMMODATED IN AN OPEN DITCH OR IN DITCHES ALONG PAVEMENT. WHEN MINOR STREETS ADJOIN UNSUBDIVIDED PROPERTY, A HALF STREET AT LEAST THIRTY (30) FEET IN WIDTH MAY BE DEDICATED AND WHENEVER SUBDIVIDED PROPERTY ADJOINS A HALF STREET, THE REMAINDER OF THE STREET SHALL BE DEDICATED.

(3) ALLEYS ARE NOT RECOMMENDED IN SINGLE AND TWO-FAMILY RESIDENTIAL DISTRICTS; AND WHEN PROVIDED, A MINIMUM WIDTH OF TWENTY (20) FEET SHALL BE REQUIRED. ALLEYS ARE REQUIRED IN THE REAR OF ALL BUSINESS LOTS AND SHALL BE AT LEAST TWENTY (20) FEET WIDE. THERE SHALL BE PREPARED AND MAINTAINED FOR PUBLIC INFORMATION, A SET OF STANDARD SPECIFICATIONS FOR ALL CONSTRUCTION OF ANY NATURE TO ANY STREET, ALLEY, EASEMENT, OR OTHER PUBLIC WAY WITHIN THE CITY OF KENAI. SAID SPECIFICATIONS SHALL BE PREPARED BY THE CITY MANAGER AND SHALL BE MAINTAINED AS OTHER PUBLIC RECORDS.]

(b) [(C)] Easements. Easements of at least ten (10) feet in width [SHALL] must be provided on [EACH SIDE OF REAR] front lot lines and along the side or rear lot lines, where necessary, for poles, wires, conduits, storm, and sanitary sewers, gas, water, or other mains. Wherever possible, lot lines [SHALL] will be arranged to bisect the exterior angle so that pole guys will fall along the side lot lines. Easements of greater width may be required along or across lots where necessary for the extension of main sewers or other utilities or where both water and sewer lines are located in the same easement.

(c) [(D)] Blocks.

(1) No block [SHALL] will be longer than one thousand four hundred (1,400) feet. Where blocks are longer than one thousand (1,000) feet, a crosswalk at least ten (10) feet in width may be required near the center of the block.

(2) In platting residential lots containing less than ten thousand (10,000) square feet, the depth of the block should not exceed twice the minimum width allowed under the zone district in which the lot is located.

(3) Where a tract of land is of such size or location as to prevent a lot arrangement directly related to a normal street design, there may be established one or more courts, dead end streets, or other arrangements; provided, however, that proper access [SHALL] must be given to all lots from a dedicated street or court. A dead-end street [SHALL] must [TERMINATE IN AN OPEN SPACE (PREFERABLY CIRCULAR) HAVING A MINIMUM RADIUS OF FIFTY (50) FEET] conform to standards set by

the current edition of the City of Kenai Road Design Manual. [A DEAD END STREET SHALL NOT EXCEED ONE THOUSAND (1,000) FEET IN LENGTH.]

(d) [(E)] Lots.

(1) The lot arrangement and design [SHALL] must be such that all lots will provide satisfactory and desirable building sites, properly related to topography and the character of surrounding development.

(2) All sidelines of lots [SHALL] must be at right angles to straight street lines and radial to curved street lines, except where a variation to this rule will provide a better street and lot layout. Lots with double frontage shall be avoided.

(3) No lot [SHALL] must have an area or width less than that required by the zoning ordinance.

(4) Where corner lots back upon lots facing the side street, the corner lot [SHALL] must have an extra ten foot width sufficient to permit the establishment of front building lines on both the front and side of the lots adjoining the streets.

(5) In subdivisions where septic tanks or other individual sewage disposal devices are to be installed, the size of all lots included in such subdivision [SHALL] must be sufficient to meet Alaska Department of Environmental Conservation requirements.

(e) [(F)] Character of Development. The subdivider [SHALL] must confer with the Commission regarding the type and character of development that will be permitted in the subdivision, and may agree to place certain minimum restrictions upon the property to prevent the construction of substandard buildings, control the type of structures or the use of the lots which, unless so controlled, would clearly depreciate the character and value of the proposed subdivision and of adjoining property. Covenants running with the land may be included to provide for the creation of a Property Owners' Association or Board of Trustees for the proper protection and maintenance of the development in the future, provided, however, that such covenants [SHALL] may not contain reversionary clauses wherein any lots [SHALL] will return to the subdivider because of a violation thereon of the terms of the covenants. Covenants will not be enforced by the City.

(f) [(G)] Parks, Schools, and Sites. In subdividing property, consideration [SHALL] will be given to suitable sites for schools, parks, playgrounds, and other common areas for public use so as to conform to any recommendations of the City's Comprehensive Plan, or any City Council approved plan, such as the Parks & Recreation Master Plan or Airport Master Plan. Any provision for schools, parks, and playgrounds should be indicated on the preliminary plan in order that it may be determined when and in what manner such areas will be provided or acquired by the appropriate taxing agency.

(g) [(H)] Easements Along Streams. Whenever any stream or important drainage course is located in any area which is being subdivided, the subdivider [SHALL] must provide an adequate easement along each side of the stream for the purpose of widening, deepening, sloping, improving, or protecting the stream for drainage purposes.

(1) The State of Alaska Department of Fish and Game has jurisdiction over anadromous fish and pursuant to AS 16.05.871 and 5 AAC 95.011 maintains and updates the "Atlas and Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fish." Management of impacted watersheds is administered through the Kenai Peninsula Borough.

(2) The Kenai Peninsula Borough, through the Kenai River Center, reviews developments that may impact the Kenai River watershed. The City of Kenai Floodplain Administrator, as designated in KMC 14.30.040(b), will refer developers or subdividers to the River Center. An application for a permit must be made to the Kenai River Center, if impacts are deemed likely to occur.

**Section 5.** Amendment of Section of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.080 - Minimum Improvements Required, is hereby amended as follows:

(a) Receipt of the signed copy of the approved preliminary plan is authorization for the subdivider to proceed with the preparation of plans and specifications for the following minimum improvements and with the preparation of the final plat. Prior to the construction of any improvements required (or to the submission of a bond in lieu thereof), the subdivider [SHALL] must furnish the [CITY PLANNING COMMISSION] Planning & Zoning Commission all plans, information, and data necessary to determine the character of said improvements. These plans [SHALL] will be examined by the [CITY ENGINEER OR A PROFESSIONAL ENGINEER UNDER CONTRACT] City Public Works Director, or their designee to review all subdivisions by the [PLANNING COMMISSION] Planning & Zoning Commission, and will be approved if in accordance with the requirements of this section. Following this approval, construction can be started (or the amount of a bond determined).

(b) No final or official plat of any subdivision, except for subdivisions prepared by the City of Kenai, [SHALL] will be approved unless:

(1) The improvements listed in the following subsections have been installed prior to such approval, or

(2) The subdivider [SHALL] must file with the City Clerk security, such as but not limited to, a surety bond, cashier's check, or a certified check [UPON AN ALASKAN BANK] conditioned to secure the construction of the improvements listed in the following subsections in a satisfactory manner and within a period specified by the City Council, but such period [SHALL] may not exceed two (2) years. No such security, bond, or check [SHALL] will be accepted unless it be enforceable by or payable to the City in a sum at least equal to the cost of constructing the improvements as estimated by the [CITY ENGINEER OR HIS EQUIVALENT UNDER CONTRACT BY THE CITY] City Public Works Director, or their designee, and in form with surety and conditions approved by the City Attorney.

(c) All street and public ways [SHALL] must be graded to their full width and to the appropriate grade, and [SHALL] must be surfaced [TO A MINIMUM WIDTH OF THIRTY (30) FEET] as specified in accordance with [APPLICABLE STANDARD SPECIFICATIONS OF THE CITY] the current edition of the City of Kenai Road Design Manual, and all streets in any subdivision that the [CITY PLANNING COMMISSION] Planning & Zoning Commission [SHALL] designates as major streets [SHALL] must be surfaced to a minimum width [OF FORTY (40) FEET] as specified in accordance with the current edition of the City of Kenai Road Design Manual. The cross-section of construction [SHALL] must contain non-frost susceptible material to the depth [OF FORTY-TWO (42) INCHES FROM APPROPRIATE GRADE, AND IN THE ABSENCE OF ANY OTHER SPECIFIED DEPTH BY APPLICABLE STANDARD SPECIFICATIONS OF THE CITY] specified in the current edition of the City of Kenai Road Design Manual. Such construction [SHALL] will be subject to inspection and approval by the [CITY ENGINEER OR HIS EQUIVALENT UNDER CONTRACT BY THE CITY] City Public Works Director, or their designee, and [SHALL] must comply with all applicable City standards for construction.

(d) Concrete sidewalks [NOT LESS THAN FOUR (4) FEET IN WIDTH SHALL] must be constructed along specified road types as prescribed in the current edition of the City of Kenai Road Design Manual. [ALONG AT LEAST ONE SIDE OF ALL MAJOR STREETS AND ARTERIAL STREETS. THE PLANNING COMMISSION MAY ALSO REQUIRE THE CONSTRUCTION OF SIDEWALKS ALONG AT LEAST ONE SIDE OF MINOR STREETS. (IN SUBDIVISION OF TEN (10) LOTS OR LESS, THE SUBDIVIDER WILL INCLUDE A COVENANT ON THE RECORDED PLAT THAT WHEN AN IMPROVEMENT DISTRICT IS FORMED, THE REAL PROPERTY INVOLVED WILL BE A PART OF THE IMPROVEMENT DISTRICT WITHOUT FURTHER ACTION BY THE THEN OWNER OF THE PROPERTY IN QUESTION.)]

(e) In subdivisions [OF TEN (10) OR MORE LOTS], an approved [PUBLIC] water supply [SHALL] must be provided for each lot within the subdivision area. [WATER MAINS SHALL BE BURIED AT LEAST EIGHT (8) FEET DEEP WITH THE DEPTH TO BE DETERMINED BY MEASURING FROM THE GRADE LINE OF THE PLANNED

PRELIMINARY FUTURE STREET GRADES OR, IF THERE ARE NO PLANNED FUTURE STREET GRADES, FROM THE NATURAL GRADE OF THE ADJACENT RIGHT-OF-WAY TO THE TOP OF THE MAIN BEING INSTALLED. FIRE HYDRANTS SHALL ALSO BE INSTALLED IN ALL SUBDIVISIONS AND IN ACCORDANCE WITH THE SPECIFICATIONS OF THE NATION BOARD OF FIRE UNDERWRITERS. (IN SUBDIVISIONS OF TEN (10) LOTS OR LESS, THE SUBDIVIDER WILL INCLUDE A COVENANT ON THE RECORDED PLAT THAT WHEN AN IMPROVEMENT DISTRICT IS FORMED, THE REAL PROPERTY INVOLVED WILL BE A PART OF THE IMPROVEMENT DISTRICT WITHOUT FURTHER ACTION BY THE THEN OWNER OF THE PROPERTY IN QUESTION.)]

(f) The subdivider [SHALL] must install sanitary sewer lines to serve each lot. All such sewer lines [SHALL] must be constructed in accordance with regulations and requirements of, and under the supervision of the Public Works Director's office or [HIS] their equivalent under contract by the City if such sanitary sewers are available for connection by the said subdivider and are located within one thousand five hundred (1,500) feet of the subdivider's nearest lot line.

(g) All necessary facilities, either underground pipe or drainage ditches, [SHALL] must be installed to provide adequate disposal of surface water and to maintain any natural watercourses.

(1) In the event a subdivider is unable to comply with the requirements of this section, then any plat [SHALL] must contain a covenant that all of the lots in any subdivision, as defined in this chapter, [SHALL] will be subject to assessment for any of the improvements required herein when installed at a future time by the City, provided that insertion of covenants on a plat [SHALL] will not be permitted in lieu of installation of street improvements for new subdivisions as provided in this section, except for subdivisions fronting on dedicated streets or [STREETS] rights-of-way dedicated in federal patents or in subdivisions of two and one-half (2 1/2) acre homesites (or smaller) owned by the original patentee.

**Section 6.** Amendment of Section 14.10.100 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.100 – Enforcement, is hereby amended as follows:

(a) No plat of any subdivision [SHALL] will be qualified for recording in the office of the district magistrate of the State of Alaska or have any validity until approved in the manner prescribed herein.

(b) The City Council [SHALL] will not permit any public improvements over which it has not any control to be made or any money expended for improvements in any area that has been subdivided or upon any street that has been platted, after the date of the adoption of this chapter unless such subdivision or street has been approved in accordance with the provisions contained herein.

**Section 7.** Amendment of Section 14.10.110 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.110 – Changes and Amendments, is hereby amended as follows:

Any regulations or provisions of this chapter may be changed and amended from time to time by the City Council provided, however, that such changes or amendments [SHALL] will not become effective until after study and report by the Planning Commission and until after a public hearing has been held, public notice of which [SHALL] will have been given in a newspaper of general circulation at least fifteen (15) days prior to such hearing and posted in the City Hall.

**Section 8.** Amendment of Section 14.10.120 of Kenai Municipal Code: That Kenai Municipal Code, Section 14.10.120 – Division of a Commercial Tract, is hereby amended as follows:

(a) The owner of a commercial tract located in a commercial zone may divide the tract into fragment lots provided that such a division is not inconsistent with the approved commercial site plan and recorded declarations, covenants and restrictions applicable to the commercial tract. Any property description used to divide an area of the commercial tract into a fragment lot [SHALL] will not be considered a lot or tract under terms of this Title or Title 4 of this code, but [SHALL] will be otherwise a lawful lot or tract. Any

fragment lot created under this section [SHALL] must contain the minimum area, width and depth otherwise required for lots in the zoning district in which the fragment lot is located.

**Section 9.** Amendment of Section 18.10.030 of Kenai Municipal Code: That Kenai Municipal Code, Section 18.10.030 – Street Improvements, is hereby amended as follows:

All streets and public ways [SHALL] must be constructed in compliance the City of Kenai Street Design Standards Manual. [GRADED TO THEIR FULL WIDTH, AS REQUIRED BY THE CITY MANAGER TO THE APPROPRIATE GRADE, AND SHALL BE SURFACED TO A MINIMUM WIDTH OF THIRTY FEET (30'), AND ALL MAJOR STREETS SHALL BE SURFACED TO A MINIMUM WIDTH OF FORTY FEET (40'). THE CROSS-SECTION OF CONSTRUCTION SHALL CONTAIN NON-FROST, SUSCEPTIBLE MATERIAL TO THE DEPTH OF FORTY-TWO INCHES (42") OR DOWN TO SAND, AS REQUIRED BY THE CITY MANAGER, FROM THE GRADE APPROVED BY THE CITY, THEN THERE SHALL BE ADDED NON-FROST, SUSCEPTIBLE MATERIAL EIGHTEEN INCHES (18") OF THE NORMAL SURFACE GRADE OF THE ADJACENT LOTS; OR, AS ESTABLISHED BY THE CITY MANAGER, THERE SHALL BE ADDED THEREON GRAVEL APPROVED BY THE CITY MANAGER FOR A DEPTH OF SIX INCHES (6"), SO THE CROWN OF THE FINISHED STREET SHALL BE NOT LESS THAN TWELVE INCHES (12") FROM NORMAL SURFACE GRADE OF THE ADJACENT LOTS BEFORE COMPACTION OF THE GRAVEL.] Such construction shall be subject to inspection and approval by the [CITY MANAGER] City Public Works Director or their designee. [, AND SHALL COMPLY WITH ALL APPLICABLE CITY STANDARDS FOR CONSTRUCTION.]

**Section 10.** Severability: That if any part or provision of this ordinance or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment [SHALL] will be confined in its operation to the part, provision, or application directly involved in all controversy in which this judgment [SHALL] will have been rendered, and [SHALL] will not affect or impair the validity of the remainder of this title or application thereof to other persons or circumstances. The City Council hereby declares that it would have enacted the remainder of this ordinance even without such part, provision, or application.

**Section 11.** Effective Date: That pursuant to KMC 1.15.070(f), this ordinance shall take effect 30 days after enactment.

ENACTED BY THE COUNCIL OF THE CITY OF KENAI, ALASKA, THIS 20<sup>TH</sup> DAY OF MAY, 2026.

\_\_\_\_\_  
Henry H. Knackstedt, Mayor

ATTEST:

\_\_\_\_\_  
Logan Parks, Deputy City Clerk

Introduced: May 6, 2026  
Enacted: May 20, 2026  
Effective: June 19, 2026



# KENAI

City of Kenai | 210 Fidalgo Ave, Kenai, AK 99611-7794 | 907.283.7535 | www.kenai.city

## MEMORANDUM

**TO:** Chair Keaton and Planning & Zoning Commissioners

**FROM:** Kevin Buettner, Planning Director

**DATE:** May 6, 2026

**SUBJECT:** **Action/Approval: Ordinance No. XXXX-2026 – Amending Kenai Municipal Code Chapter 14.10 - Subdivision Regulations and Amending Kenai Municipal Code Section 18.10.030 - Street Improvements to Remove Road Design Standards from Code and Replace them with a Street Design Standards Manual. (Administration).**

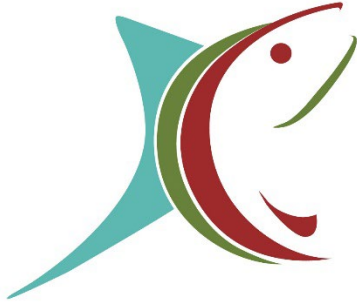
---

Based on the community survey in autumn 2025, housing availability and affordability were noted as important issues within the community. This was further highlighted during conversations with the Kenai Peninsula Borough, Kenai Peninsula Economic Development District (KPEDD), local realtors, and both large- and small-scale developers that took place during a Housing Assessment effort sponsored by KPEDD.

During the development discussions, developers highlighted the need for clean and consistent subdivision design, roadway, and utility standards. These requirements occur in several places in Kenai Municipal Code. Administration determined, in an effort to streamline development requirements, it would be best to remove the standards from code and reference a separate design manual. This policy would allow Administration to be update the manual as needed without making changes to code.

The Public Works Department subsequently reviewed existing road and subdivision standards and in coordination with an engineering consultant and developed a draft City of Kenai Street Design Standards Manual. This was in an effort to reduce confusion, support predictable development review, and streamline processes for future development. They held an Open House on April 13<sup>th</sup> and received comments from local contractors and consultants which have been reviewed and incorporated into the final document included. Council will be notified of future changes to the Manual. Utility standards are being reviewed and will be introduced at a future date.

Based on these changes, and following Council's directive from the November 5, 2025 regular meeting, the Planning & Zoning Department reviewed all code reference regarding subdivision regulations, as well as road standards, which are contained therein. After hosting a Work Session with the Planning & Zoning Commission in late 2025, the proposed changes to code and the draft standards are presented to Council for their consideration. Thank you for your consideration.



KENAI

Street Design

Standards

Manual DRAFT

City of Kenai Public Works Department

Date: March 25, 2026

# Table of Contents

Acronyms.....	iv
Definitions .....	v
Introduction.....	1
Section A. Street Design .....	2
<b>A1</b> General .....	2
<b>A2</b> Applicability .....	2
<b>A3</b> Street Classifications.....	2
<b>A4</b> Design Criteria .....	3
<b>A5</b> Typical Section.....	5
<b>A6</b> Turnarounds .....	5
<b>A7</b> Stub Streets .....	6
<b>A8</b> Intersections.....	7
<b>A9</b> Driveways .....	9
<b>A10</b> Bicycle and Pedestrian Paths.....	9
<b>A11</b> Signage .....	10
<b>A12</b> Average Daily Traffic.....	11
<b>A13</b> One Way Streets .....	11
<b>A14</b> Access-Driveway Standards .....	11
<b>A15</b> Paving.....	12
<b>A16</b> Design Deviations.....	12
Section B. Construction Requirements .....	13
<b>B1</b> General .....	13
<b>B2</b> Road Construction .....	13
<b>B3</b> Pioneer Road Construction Requirements .....	15
<b>B4</b> Winter Construction .....	15
<b>B5</b> Alternate Methods and Materials .....	15
<b>B6</b> Materials.....	15
Section C. Drainage .....	18
<b>C1</b> General .....	18
<b>C2</b> Requirements .....	18
<b>C3</b> Drainage Design Criteria.....	19
<b>C4</b> Drainage Ditches .....	19
<b>C5</b> Curb and Gutter .....	20
<b>C6</b> Culverts.....	20
<b>C7</b> Fish Passage Culverts.....	21
<b>C8</b> Stormwater Collection Systems .....	21

**C9** Soil Infiltration Facilities ..... 22

**C10** Rainfall Data ..... 22

Section D. Supplemental Design Elements ..... 23

**D1** General ..... 23

**D2** Pedestrian Facilities ..... 23

**D3** Street Lighting ..... 24

**D4** Mailboxes and Mailbox Pullouts ..... 24

Section E. Development Implementation ..... 25

**E1** General ..... 25

**E2** Subdivision Agreements ..... 27

**E3** Pioneer Road Development ..... 27

Section F. Utilities ..... 29

**F1** General ..... 29

**F2** Utility Location Guidelines ..... 29

References ..... 31

Appendix 1 – City of Kenai Road Classification Map ..... 32

## Figures

Figure A-1: Typical Section .....	5
Figure A-2: Cul-de-sac Options .....	5
Figure A-3: Alternate Turnarounds .....	6
Figure A-4: Intersection Sight Distance .....	8
Figure A-5: Intersection Angle .....	8
Figure A-6: Controlled Street Landing Profile .....	9
Figure A-7: Sign Placement .....	10
Figure A-8: Stop Sign Location .....	10
Figure A-9: Concrete Foundation for Sign Post .....	11
Figure B-1: Structural Sections for Gravel Roads .....	17
Figure B-2: Structural Sections for Paved Roads .....	17
Figure F-1: Utility Locations .....	30

## Tables

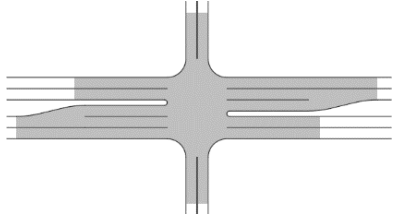
Table A-1: Design Criteria .....	4
Table A-2: Recommended and Minimum Intersection Sight Distance .....	7
Table A-3: Average Access Point Spacing .....	12
Table B-1: Aggregate Quality Properties for Base Course .....	16
Table B-2: Aggregate Gradations .....	16
Table C-1: Ditch Stabilization .....	19
Table C-2: Ditch Lining Materials .....	19
Table C-3: Stormwater Pipe Minimum Slopes .....	22

## SECTION A. ACRONYMS & ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ADFG	Alaska Department of Fish and Game
ADT	Average Daily Traffic
ADOT&PF	Alaska Department of Transportation and Public Facilities
ATM	Alaska Test Method
COK	City of Kenai
FHWA	Federal Highway Administration
ft	feet
h:v	Horizontal to vertical
IFC	International Fire Code
in	inches
L RTP	Long Range Transportation Plan
mph	miles per hour
N/A	Not applicable
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NTP	Notice to proceed
OHWM	Ordinary high water mark
OSHP	Official Streets and Highways Plan
ROW	Right-of-way
SCS	Soil Conservation Service
VPD	Vehicles per day

## SECTION B. DEFINITIONS

<b>Access Point</b>	The location along a road at which a driveway or road intersects.
<b>Alley</b>	A narrow street located behind or between buildings, often used as pedestrian access or rear vehicle service.
<b>Arterial</b>	A road that provides a high level of mobility within the transportation network. Arterials have managed access with a minimal number of intersections or interchanges.
<b>Average Daily Traffic</b>	The total number of vehicle trips during a given time period (in whole days greater than one day and less than one year) divided by the number of days in that time period.
<b>Backslope</b>	On a roadway section in a cut, the portion of the roadside that slopes up from the roadside ditch and away from the roadway to the top of the cut, see Figure A-1.
<b>Catchment Area</b>	The total area contributing stormwater runoff to a particular point, site, or structure.
<b>Collector</b>	A road that links local roads with arterials and performs some duties of each. Collectors have managed access with a moderate number of intersections and driveways.
<b>Curve Return</b>	The curve located at the corner of an intersection, connecting the roadway edge of one road to the roadway edge of an intersecting road or driveway.
<b>Detention</b>	The temporary storage of runoff, for later controlled release.
<b>Drainage Pattern</b>	The configuration of a drainage system including manmade and natural features within a catchment area.
<b>Driveway</b>	A vehicular access way between a road and a parking area within a lot or property.
<b>Embankment</b>	Earthen material that is placed and compacted for the purpose of raising the grade of a roadway.
<b>Engineer</b>	An individual who is registered as a Professional Civil Engineer in the State of Alaska.

<b>Feasible</b>	Reasonable and capable of being done or carried out.
<b>Foreslope</b>	On a roadway section, the portion of the roadside that slopes down and away from the roadway, see Figure A-1.
<b>Functional Area</b>	<p>The physical area of an intersection and the area extending both upstream and downstream which includes perception reaction distance, maneuver distance, and storage length.</p> 
<b>Intersection</b>	The general area where two or more roads join or cross.
<b>Local Road</b>	A road that provides access to abutting property, rather than to serve through traffic. Local roads are not access controlled and can have frequent intersections and driveways.
<b>Lot Frontage</b>	A property line that abuts the right-of-way that provides access to the lot.
<b>Ordinary High Water Mark</b>	The elevation marking the highest water level which has been maintained for a sufficient time to leave evidence upon the landscape. Generally, it is the point where the natural vegetation changes from predominately aquatic to upland species.
<b>Positive Drainage</b>	Clear, unobstructed flow of water away from structures and roadways without localized ponding.
<b>Regulated Stream</b>	Any watercourse along which the flood hazard areas have been mapped and approved by the Federal Emergency Management Agency; any stream which harbors fish, as determined by the Alaska Department of Fish and Game; or any stream designated as regulated by COK.
<b>Retention</b>	The prevention of runoff. Stormwater, which is retained, remains indefinitely, with the exception of the volume lost to evaporation, plant uptake, or infiltration.

<b>Right-of-way</b>	A strip of land reserved, used, or to be used for a street, alley, walkway, airport, railroad, or other public or private purpose.
<b>Road</b>	A general term denoting a public thoroughfare used, or intended to be used, for passage or travel.
<b>Road Prism</b>	The foundation that supports the roadway; see Figure A-1.
<b>Roadway</b>	The portion of a road that includes driving lanes and shoulders, see Figure A-1.
<b>Segment</b>	A portion of road between two significant intersections or an intersection and its terminus.
<b>Shoulder</b>	The portion of a roadway contiguous to any traveled way for lateral support of surface courses, see Figure A-1.
<b>Street</b>	A general term usually denoting an urban or suburban road.
<b>Stub</b>	A right-of-way or road segment that is planned to be extended, typically short in length, which terminates at the boundary of a subdivision or masterplan phase.
<b>T-intersection</b>	A three-leg intersection in the form of a “T”.
<b>Through Street</b>	A road given preferential right of way; roads which intersect a through street are controlled, such as with a stop sign or yield sign.
<b>Water Body</b>	A permanent or temporary area of standing or flowing water. Water depth is such that water, and not air, is the principal medium in which organisms live. Water bodies include, but are not limited to: lakes, ponds, streams, rivers, sloughs, and all saltwater bodies.

## INTRODUCTION

This manual is intended to accomplish the following goals:

- (1) To establish standards for the design and construction of transportation networks throughout the City of Kenai right-of-ways.
- (2) To provide information and guidelines for the design, construction, and upgrade of roads within rights-of-way.
- (3) To develop and maintain a safer and more efficient transportation system.
- (4) To minimize operation & maintenance efforts.

## SECTION A. STREET DESIGN

### A1 General

These provisions establish appropriate standards for the design of roads. The purpose of these provisions is to:

- (1) promote the safety and convenience of motorized and non-motorized traffic;
- (2) promote the safety of residents and users;
- (3) minimize the long-term costs for maintenance and repair; and
- (4) provide guidelines and standards for public use

### A2 Applicability

These standards apply to the design and construction of all subdivision road improvements and construction within the City of Kenai (COK).

### A3 Street Classifications

Roads within the COK fall within one of the following functional classifications as defined by the State of Alaska Department of Transportation, Interstate, Principal Arterial, Minor Arterial, Major Collector, Minor Collector, and Local Road. Functional classification of a road is based on its function, design, and current potential use. The functional classification of existing roads abutting or affecting the design of a subdivision or land development may be reviewed during the preapplication process. Existing mapping can be found here,

<https://akdot.maps.arcgis.com/home/webmap/viewer.html?webmap=8d34059bbfed4fada20a4fdc2a138aca>

This section provides design guidance for roads falling below arterials classifications. All interstates and arterials located within City of Kenai are owned, designed and maintained by the Department of Transportation. Local road, and collector functions including residential, residential sub-collector, residential collector, commercial, and pioneer road classifications are covered in this guide.

City of Kenai Road Classification Map included as Appendix 1.

#### A3.1 Residential Street

Residential streets are local roads intended to carry the least amount of traffic at the lowest speed. The Residential Street will provide the safest and most desirable environment for a residential neighborhood. Developments should be designed so that all, or the maximum number possible, of the homes will front this class of street.

#### A3.2 Residential Sub-Collector Street

Residential Sub-collector streets are local roads that carry more traffic than Residential streets.

### A3.3 Residential Collector Street

Residential Collector streets are the highest order of residential streets and are a type of collector. In large residential developments, this class of street may be necessary to carry traffic from one neighborhood to another or from the neighborhood to other areas in the community. Residential Collector streets should offer minimal direct access points.

### A3.4 Pioneer Road

Pioneer Roads may only be used where allowed by COK. This classification establishes minimum requirements for roads providing physical access, but should otherwise be designed to Residential, Residential Sub-Collector or Residential Collector standard as required by this section. No COK maintenance will be provided for Pioneer Roads. Pioneer Roads may be constructed no less than ½-width as required by the classification and be offset from the centerline of the ROW to facilitate future expansion. COK may require engineering or construction of a Pioneer Road at a higher classification if future development of a ROW is anticipated.

### A3.5 Commercial Street

Commercial Streets serve corridors with large amounts of adjacent commercial land uses. Commercial streets should emphasize convenient vehicular traffic movement and access to adjacent properties.

### A3.6 Alleys

Alleys are permitted provided legal and physical access conforms to COK or other applicable code. Alleys provide secondary access to lots. No COK maintenance will be provided for Alleys.

## **A4 Design Criteria**

The minimum design criteria for Residential, Residential Sub-Collector, Residential Collector streets, Pioneer Roads, and Commercial Streets are set forth in Table A-1. Any unspecified design criteria shall meet or exceed the design criteria for the roadway design speed in the latest edition of *A Policy on Geometric Design of Highways and Streets* (AASHTO).

Commercial streets should be designed to meet the standards of AASHTO, International Fire Code (IFC), and any other applicable standards or code along with the COK code.

**Table A-1: Design Criteria**

	Unit	Residential	Residential Sub-Collector	Residential Collector	Pioneer Road	Commercial
Average Daily Traffic	VPD	≤400	401 – 1000	1001 – 3000	–	–
Typical Section						
ROW Width <sup>1</sup>	ft	60	60	60	60	60
Lane Width	ft	10	11	12	11	14
Standard Gravel Shoulder Width	ft	2	2	2	0	2
Shared Paved Shoulder Width <sup>2</sup>	ft	4	4	6	N/A	6
Roadway Width	ft	24	26	28	12	32
Foreslope <sup>3</sup>	h:v	2:01	3:01	3:01	2:01	3:01
Backslope <sup>4</sup>	h:v	2:01	2:01	2:01	2:01	2:01
Crown, gravel	%	3	3	3	3	3
Crown, pavement	%	2	2	2	2	2
Engineering Criteria						
Design Speed <sup>6</sup>	mph	25	25	25	25	25
Stopping Sight Distance	ft	155	155	155	155	155
Horizontal Alignment						
Minimum Centerline Radius	ft	225	225	225	225	225
Minimum Tangent Between Curves	ft	100	100	100	100	100
Vertical Alignment						
Maximum Centerline Grade	%	10	10	10	10	6
Minimum Flow Line Grades	%	0.5	0.5	0.5	0.5	1
Intersections						
Minimum ROW Corner Radius	ft	30	30	30	30	45
Minimum Curve Return Radius <sup>5</sup>	ft	20	25	30	20	40
Maximum Grade on through street within 50 feet of intersection	%	4	4	4	-	4

<sup>1</sup> Minimum ROW required for new dedications; width of existing ROW may vary.

<sup>2</sup> An optional paved shoulder may be provided on one or both sides of paved streets for non-motorized shared use.

<sup>3</sup> Install guardrail when required by the latest edition of the *Roadside Design Guide* (AASHTO).

<sup>4</sup> 2:1 Back slopes may be steepened to 1.5:1 if cuts exceed 5 feet and appropriate slope stabilization, as determined by the design engineer, is used. Retaining walls may be used to replace or augment backslopes.

<sup>5</sup> 40-foot minimum curve return radius at intersections with higher order streets.

<sup>6</sup> Posted speeds are variable and approved by COK. Design speeds may be increased as approved by COK.

## A5 Typical Section

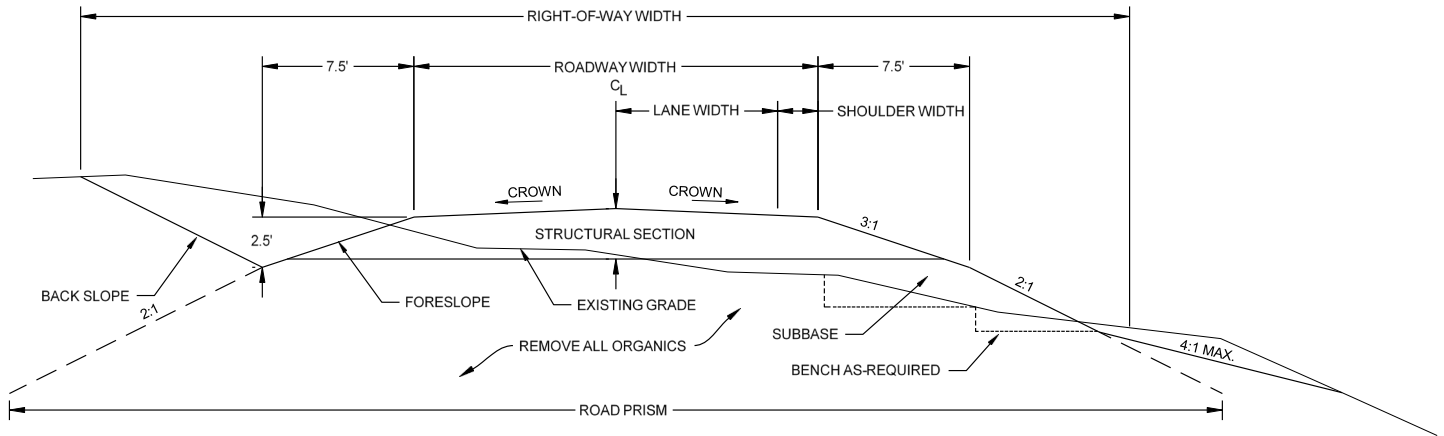


Figure A-1: Typical Section

## A6 Turnarounds

Streets with only one inlet shall terminate with a constructed turnaround, unless otherwise provided by A6.2.

### A6.1 Cul-de-sac Turnarounds

- A cul-de-sac turnaround with a drivable surface diameter (shoulder to shoulder) of 96 feet centered in a ROW diameter of 120 feet shall be provided at the terminus.
- Cul-de-sac turnarounds shall meet the configuration and dimensions shown in Figure A-2.
- The grade throughout the surface of a cul-de-sac, as depicted in the shaded portion of Figure A-2, shall not exceed 4 percent.

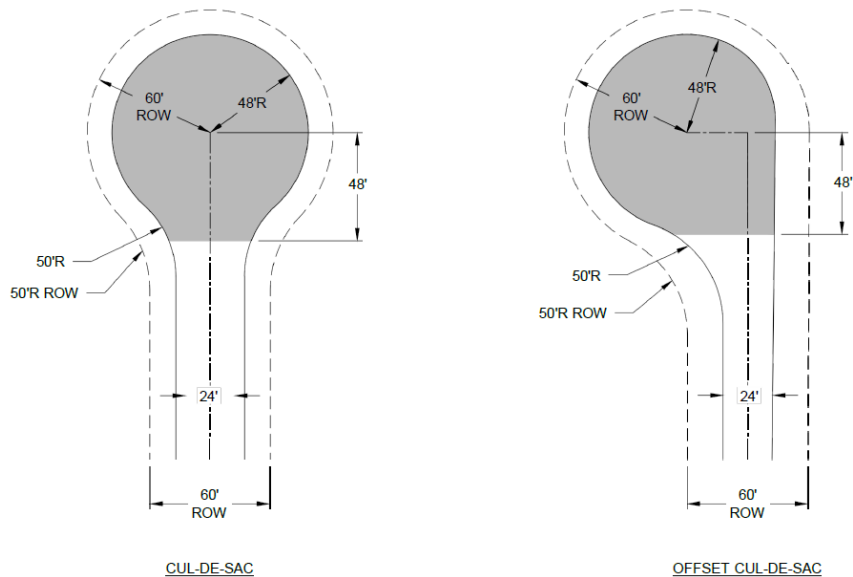


Figure A-2: Cul-de-sac Options

## A6.2 Alternate Turnarounds

- (a) COK may permit a street to terminate with an alternative turnaround that meets fire code when such a design is required by extreme environmental or topographical conditions, unusual or irregularly shaped tract boundaries, insufficient room for a cul-de-sac, or when the location of the turnaround is intended to become an intersection.
- (b) Alternate turnarounds shall meet the configuration and dimensions shown in Figure A-3.
- (c) The grade throughout the turnaround surface, as depicted in the shaded portion of Figure A-3, shall not exceed 4 percent.

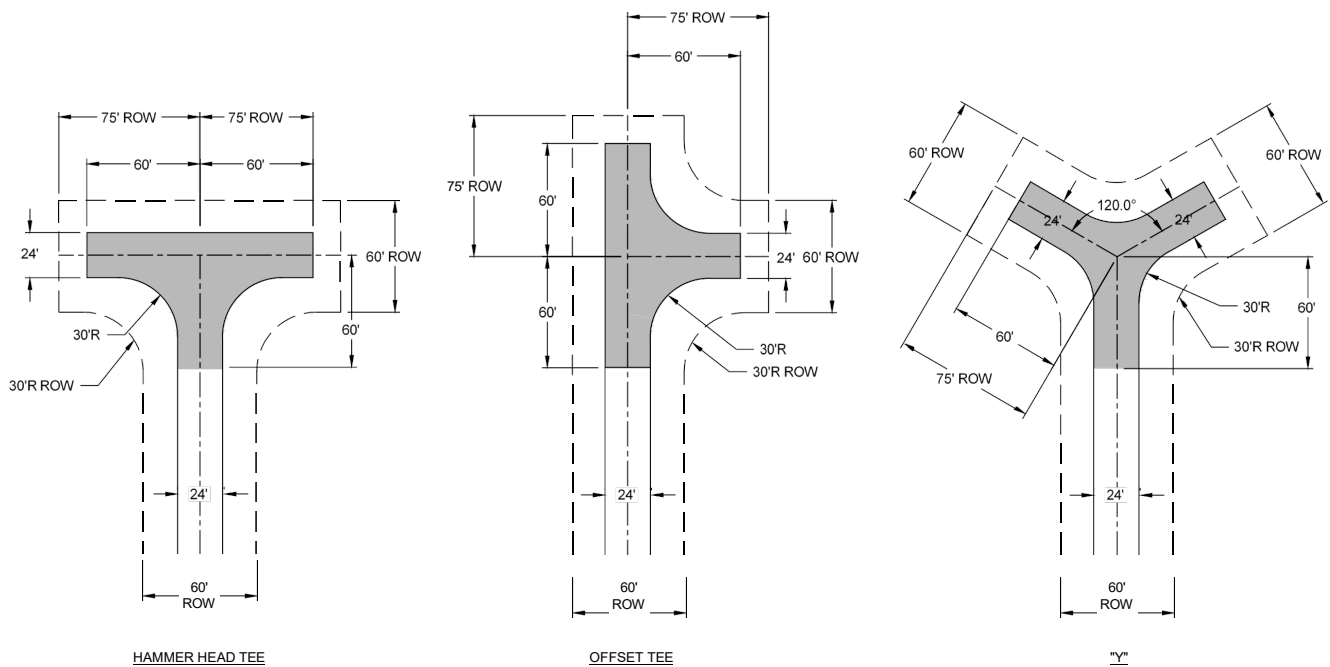


Figure A-3: Alternate Turnarounds

## A7 Stub Streets

### A7.1 Stub Street Construction

No construction is required if physical access is provided to all lots by adjoining streets as required by COK or other applicable code.

### A7.2 Temporary Turnarounds

Stub streets requiring construction that exceed 200 feet in length (measured from the intersection point to the end of required construction) will meet the requirements of A6.1 or A6.2. A temporary easement will be provided for the turnaround, which will automatically terminate upon extension of the street and physical removal of the turnaround. The centerline grade on stub streets without turnarounds shall not exceed 4%.

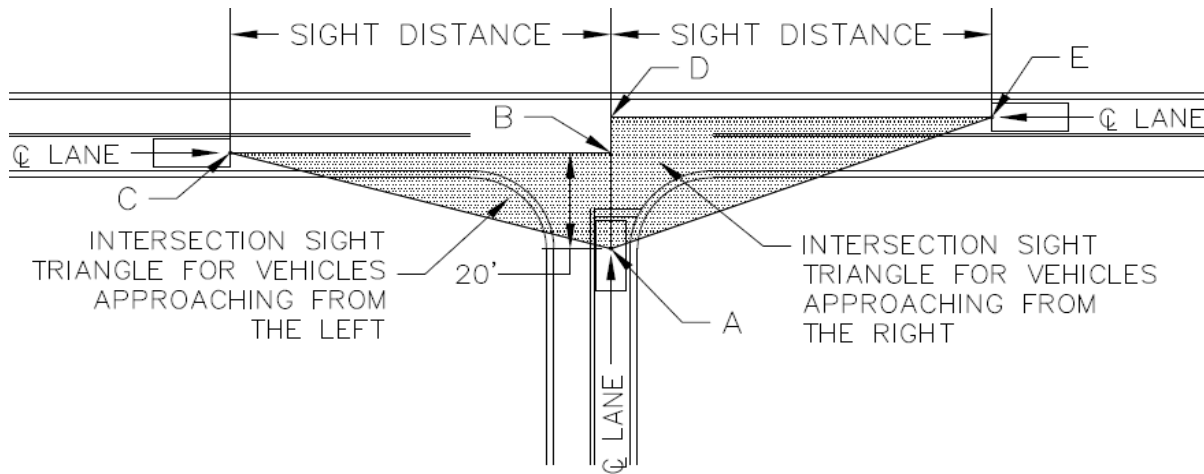
## A8 Intersections

### A8.1 Intersection Sight Distance

- (a) Whenever a proposed street intersects an existing or proposed street of higher order, the street of lower order shall be made a stop-controlled street, unless alternate intersection control is used as allowed by this subsection.
- (b) Stop controlled streets shall be designed to provide intersection sight distance as specified in this subsection, Table A-1, and Figure A-4.
- (c) The entire area of the intersection sight triangles shown in Figure A-4 shall be designed to provide a clear view from point A at 3.5 feet above the roadway to all points 3.5 feet above the roadway along the lane centerlines from point B to point C and point D to point E.
- (d) Sight distances less than the recommended shall only be used when there are topographical or other physical constraints outside of the applicant's control.
- (e) The minimum sight distances listed in Table A-2 are for a passenger car to turn onto a two-lane undivided street and minor road approach grades of 3 percent or less. For other conditions, the minimum sight distance should be calculated by the applicant's engineer according to *A Policy on Geometric Design of Highways and Streets* (AASHTO).
- (f) Sight distances less than the minimum, where no other options exist, will require alternate intersection control or warning signs as determined by the Applicant's engineer and approved by COK.
- (g) Intersection sight triangles shall be located in their entirety within ROW or a sight distance maintenance easement.
- (h) Yield controlled intersections shall conform to sight distance requirements according to *A Policy on Geometric Design of Highways and Streets* (AASHTO).
- (i) Intersections with state or other municipal ROW are subject to their respective requirements and review.

**Table A-2: Recommended and Minimum Intersection Sight Distance**

Design Speed or Posted Speed Limit (whichever is greater)	S <sub>d</sub> Recommended	S <sub>d</sub> Minimum
MPH	Ft	ft
15	225	170
20	300	225
25	370	280
30	450	335
35	580	390
40	750	445
45	950	500



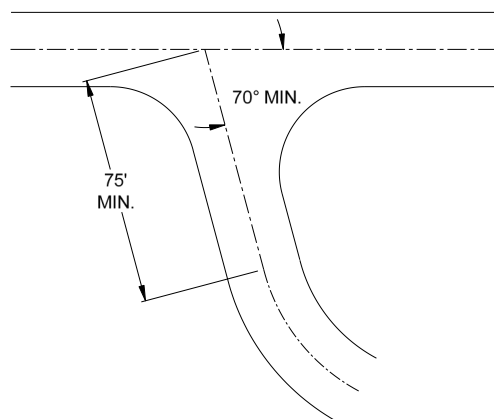
**Figure A-4: Intersection Sight Distance**

### A8.2 Intersection Spacing

- (a) Minimum centerline to centerline distance between intersections on the same side or opposing sides of the through street shall be:
  - (1) 155 feet on Residential streets;
  - (2) 200 feet on Residential Sub-Collector streets; or
  - (3) 300 feet on Residential Collectors.
- (b) If the above spacing along the through street cannot be met, intersections shall be aligned directly across from each other.
- (c) Where pre-existing conditions do not allow for the above spacing and no other legal access exists, alternate spacing or offset most closely meeting (a) or (b) above may be allowed.
- (d) Additional intersections should be avoided within the functional area of major intersections with turning bays and approach tapers. Exceptions require COK approval based upon constraints and no other feasible alternatives.

### A8.3 Minimum Intersection Angle

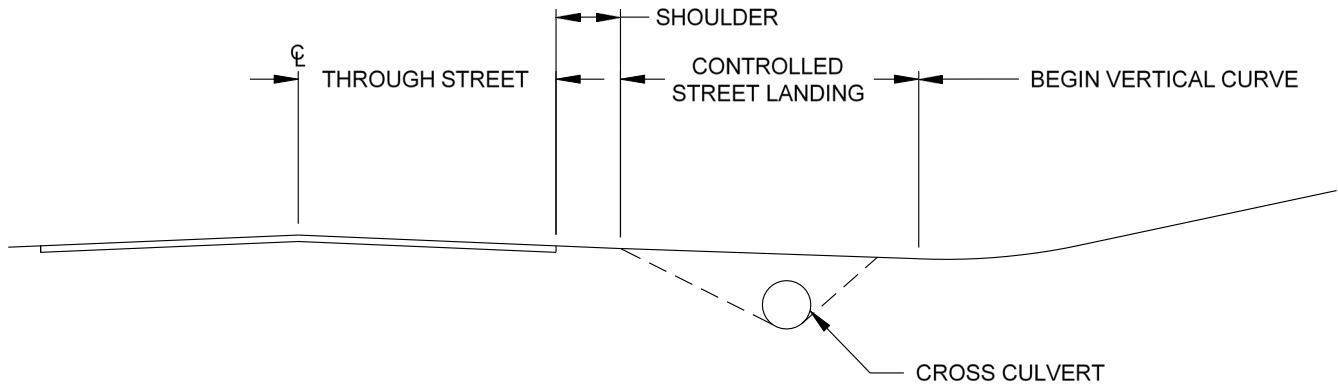
Streets should intersect with a straight segment at an angle as close to 90° as possible, but no less than 70°, for a minimum of 75 feet from the intersection point, as shown in Figure A-5.



**Figure A-5: Intersection Angle**

#### A8.4 Landing

Controlled streets shall be provided with a typical 30-foot landing, conforming to Figure A-6, at its approach to a through street. The landing shall be sloped to match the crown of the through street. Vertical curves shall not be located in the landing to the extent feasible. Where a negative slope away from the through street is not feasible due to topographical constraints, the road shall be constructed in a manner that prevents water from flowing onto the through street.



**Figure A-6: Controlled Street Landing Profile**

#### A8.5 Paved Apron

A proposed street, not requiring pavement, which intersects an existing paved street shall be provided with a paved apron 30 feet from the edge of the existing pavement.

### A9 Driveways

Driveways are not usually required to be constructed within the ROW at time of road construction. However, if an applicant chooses to construct driveways, driveway permits are required. An individual permit is required for each individual driveway along a road construction project. A driveway permit application can be obtained from COK.

Maximum width of driveways shall be 30 feet. Waivers for wider driveways must be approved through Planning and Zoning Commission. New driveways through sidewalks or multi-use pathways must conform to ADA guidelines and use parallel ramps where the cross slope does not exceed 2%.

Access onto State of Alaska or Kenai Peninsula Borough owned roads is regulated by those agencies and must conform to their requirements. COK does not require a COK Driveway Permit for access onto these roads, but the approved shall permit from the proper agency will be required for submittal for development of the lot.

### A10 Bicycle and Pedestrian Paths

Bicycle and pedestrian paths constructed within public ROW shall conform to the current edition of *Guide for the Development of Bicycle Facilities* (AASHTO), and any other applicable local, state, and federal requirements.

## A11 Signage

Signs shall be provided and installed by the applicant in conformance with the latest edition of the *Alaska Traffic Manual (ADOT&PF)* and the *Alaska Sign Design Specifications (ADOT&PF)*.

Signage shall be installed per Figure A-7, A-8 and A-9.

Install sign posts according to soil conditions. In firm soils, drive the post to a minimum depth of 30" or refusal. In loose soils use Figure A-9, excavate the post foundation 24" in diameter and depth specified based on sign area, place the base of the post in the bottom of the hole and backfill with subbase material to existing grade. Compact the backfill with a tamping bar or other method until firm. Soil conditions and point of refusal will be determined by Designer of Record or City Representative.

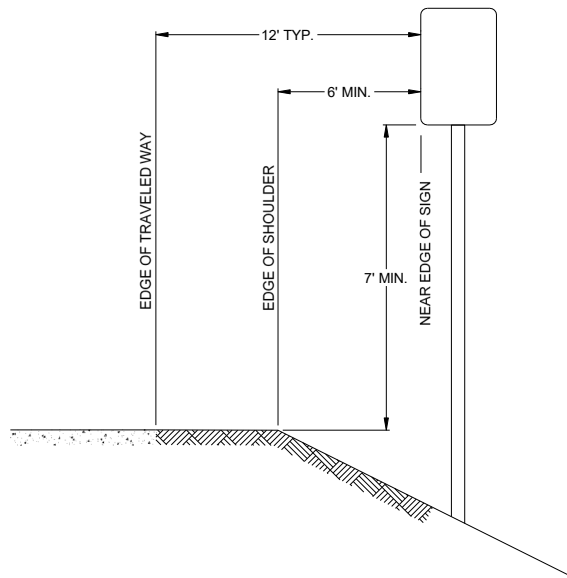


Figure A-7: Sign Placement

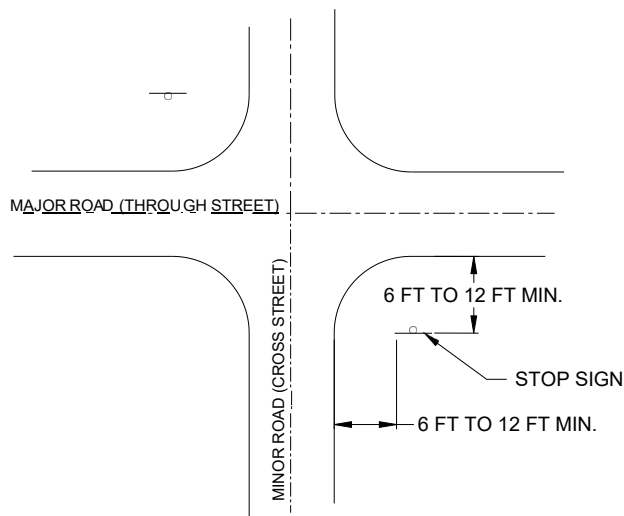
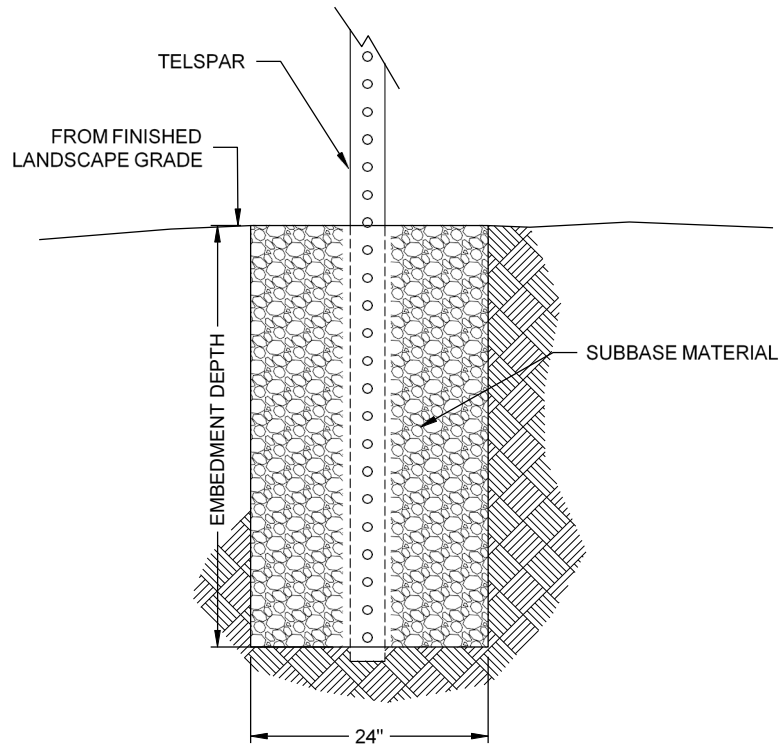


Figure A-8: Stop Sign Location



PERFORATED STEEL TUBES (P.S.T.) (12ga. - 0.105" WALL THICKNESS)		
SIGN SURFACE AREA SQUARE FOOT	POST SIZE	EMBEDMENT DEPTH
7' OR LESS	2" x 2"	30"
GREATER THAN 7'	2-1/2" x 2-1/2"	36"

**Figure A-9: Concrete Foundation for Sign Post**

### **A12 Average Daily Traffic**

The following formula shall be used to determine the required classification of streets: ADT = Number of lots x 10 for single-family residential use.

### **A13 One Way Streets**

One way streets shall be allowed to reduce the minimum lane width by half. All streets should handle two way traffic if feasible and request to develop a one way street must be submitted for approval with supporting information to develop one way street.

### **A14 Access-Driveway Standards**

- (a) The average access point spacing on roads, where other access standards do not exist, shall not exceed the minimums listed in Table B-2, based on the posted speed limit. Average access point spacing is calculated per segment and is equal to the segment length divided by the number of access points on both sides of the street. Undeveloped lots with only access to the major road corridor are counted as having at least one access point.

- (b) When the average access point spacing on a segment of an existing major road corridor is less than the minimum listed in Table B-2, the average access point spacing shall not decrease due to the subdivision.
- (c) On Roads with a speed limit of 25 mph or lower, the minimum spacing between the edges of adjacent driveways on the same side of the street shall be 35 feet.
- (d) Minimum corner clearance for a driveway to a corner lot shall be 50 feet from the property corner to the driveway edge.
- (e) Deviations in minimum spacing between access points or distances from corners may be administratively approved through Driveway Permit process.

**Table A-3: Average Access Point Spacing**

Posted Speed Limit (mph)	Minimum Average Access Point Spacing (feet)
30	250
35	300
40	360
45	425

**A15 Paving**

Asphalt Paving may be required by COK. Paving may be required if extending a new road off an existing paved road and/or providing a connection between two paved roads. Isolated roadways that do not connect to existing paved roadways will not be permitted to be paved and COK would likely require paving of connecting streets until main access is reached.

**A16 Design Deviations**

Design deviations will be considered to address extenuating circumstances including but not limited to: existing substandard ROW, environmental conditions, or existing utilities or other structures. Design deviation requests shall be submitted in writing and contain supporting information, justification, and suggested solutions.

## Section B. CONSTRUCTION REQUIREMENTS

### **B1 General**

This section establishes minimum construction requirements. Prior to any ground disturbing activities, call the Alaska Dig Line for utility locates in accordance with AS 42.30.400. Work in the ROW requires an approved License to Excavate in Public ROW and an approved Individual Project Permit for Excavation in or Adjacent to City ROW, both through COK.

### **B2 Road Construction**

#### **B2.1 Clearing**

Cut and dispose of all trees, down timber, stumps, brush, bushes, and debris. Cut trees and brush to a height of not more than 6 inches above the surrounding ground. Clear the ROW, slope easements, and sight distance triangles. Where ROW exceeds 60 feet, clear a minimum of 60 feet. Clear utility easements, if used, for utilities constructed with the development.

#### **B2.2 Grubbing**

Remove and dispose of all stumps, roots, moss, grass, turf, debris, or other deleterious material within the fill and cut catch limits of the road, within the ROW, and cleared utility easements for underground utilities.

#### **B2.3 Disposal**

Dispose of clearing and grubbing debris in an area designated by the applicant outside of all ROW, platted utility easements, and platted private road corridors. Organic debris 3 inches in diameter by 8 inches long, or smaller, may be left in place, outside of the road prism. Burial of cleared and grubbed organic matter within the ROW is not permitted.

#### **B2.4 Embankment Construction**

- (a) Construct the road with the required structural section, see Table A-1 and Figure A-1, as determined by its classification.
- (b) Clear the full extents of the right-of-way. Clearing debris must be removed from the right-of-way.
- (c) Prepare the subgrade. Remove all organics from the area below the road prism and dispose of offsite. Bench existing slopes that are steeper than 4:1, measured at a right angle to the roadway, where roadway embankment is to be placed. Excavation waste may be utilized as slope flattening where slopes exceed 2:1 upon COK approval.
- (d) Place material meeting, or verify in-situ material meets, the requirements for Subbase specified in subsection B6 to a minimum depth as required for road classification with the upper 6 inches having no material with a diameter larger than 6 inches. Place embankment in horizontal layers for the full width of the embankment and compact as specified before the next lift is placed.
- (e) Place Surface Course meeting the requirements specified in subsection B6. Finish with a 3 percent crown for a gravel road or 2 percent crown for a paved road, and compact as specified.
- (f) Compact all embankment to not less than 95 percent of the maximum dry density at the optimum moisture content.

- (g) Optimum moisture and maximum dry density will be determined by Alaska Test Method (ATM) 207 and ATM 212 or alternative methods approved by COK.
- (h) In-place density shall be determined by ATM 213 or alternative method approved by COK. Compaction tests on the Subbase layer shall be taken at representative locations along the roadways as follows:
  - (1) a minimum of three;
  - (2) at least one per segment;
  - (3) one additional test per 1000 linear feet, or portion thereof, when the combined length of roadway exceeds 1000 linear feet;
  - (4) at least one out of every three within three feet of the shoulder, and the remainder in the center of a driving lane.
- (i) For paved roadways, substitute Surface Course with a minimum of 2 inches of Base Course and 2 inches of Class E Asphalt Concrete Pavement per COK Standard Specifications. The width of the pavement shall be equal to two lane widths plus the shared paved shoulder width, if used, and finished with a 2 percent crown. If road is ditched, pavement edges shall be backed with additional Base Course graded and compacted flush with the pavement surface and tapered to the edge of the roadway. The pavement shall be washed or swept immediately following shouldering work. If road has concrete curb and gutter, tack should be applied per COK specifications on concrete and pavement shall be compacted flush with concrete surface.
- (j) Remove all loose material exceeding 6 inches in diameter from the ditches and foreslopes. Where slopes are 3:1 or steeper and longer than 10 feet measured along the slope face, trackwalk perpendicular to the slope, or the equivalent, to form 1-inch wide grooves parallel to the road no more than 12 inches apart. Stabilize foreslopes outside of structural section with topsoil and seed. Stabilization may be allowed to establish during warranty period. Other stabilization methods must be approved prior to placement.
- (k) Permanently stabilize backslopes with topsoil and seed. Stabilization may be allowed to establish during the warranty period. Other stabilization methods must be approved prior to placement.
- (l) Cross drainage culverts, minimum 18-inch diameter, will be installed where determined necessary and 24-inch ditches will be provided for drainage.
- (m) Geotextile shall be utilized when specified by Designer of Record.
- (n) All material testing is the responsibility of the Developer. Testing records will be made available to the COK prior to final approval. Tests need to meet or exceed specification referenced above. Designer of Record shall be present onsite to observe material testing.

## B2.5 Unsuitable Subgrades

When structurally unsuitable material such as peat, saturated material, or permafrost are present within the ROW, provide an appropriate structural design for approval by COK, according to Section E, prior to construction. Place embankment to a depth that will produce a stable road surface with a final grade 18 inches above the surrounding ground.

### **B3 Pioneer Road Construction Requirements**

Pioneer Roads shall meet the requirements of Table A-1 and Figure A-1. Place material meeting, or verify in-situ material meets, the requirements for Subbase specified in subsection B6 to the minimum depth of 18 inches. Additional road embankment may be required to provide a stable road surface. Surface course is not required. Roads may be constructed no less than ½-width and offset from the centerline of the ROW to facilitate future expansion of the road. Cross drainage culverts, minimum 18-inch diameter, will be installed where determined necessary and 24-inch ditches will be provided for drainage. Drainage galleries may also be required by City upon review. Developer shall schedule City of Kenai staff for two inspections to construct Pioneer Roads consisting of one inspection to verify existing ground after clearing, grubbing and removal of organics from the road prism and a second inspection to verify installation of road.

Pioneer Roads will not be maintained by COK. They are required to be constructed to a standard that could allow them to be expanded to meet the requirements of a Residential Street in the future that COK would maintain. They are not generally required to be designed by an Engineering Professional, but do require a permit be submitted and approved prior to construction.

Pioneer Roads will not be allowed to be paved unless designed by an Engineering Professional and the road meets all requirements of Section B. Road would need to be upgraded to meet paving requirements.

### **B4 Winter Construction**

Winter construction may be allowed. Plan for winter construction must be submitted and approved by COK. COK will not accept any roads until all ground has thawed and any settlement areas corrected.

### **B5 Alternate Methods and Materials**

Use of alternate materials and road construction methods that will more appropriately fit the conditions of the specific road locations, following general engineering practices, may be proposed by the applicant or their engineer in writing. Final acceptance of such plans must be approved by COK.

### **B6 Materials**

#### **B6.1 Subbase**

- (a) Is aggregate containing no muck, frozen material, roots, sod, or other deleterious matter;
- (b) has a plasticity index not greater than 6 as tested by (ATM) 204 and ATM 205; and
- (c) meets the requirements of Table C-2, as determined by ATM 304.
- (d) Bottom 12 inches of Subbase may be substituted with native in-situ material consisting of non-frost susceptible material free from organics, with <6% passing the No. 200 sieve. Must be approved by Designer of Record and/or COK.
- (e) If an existing gravel road is going to be paved, upper 6 inches of existing Surface Course shall be approved in lieu of subbase shown on Figure B-2.

## B6.2 Base Course

- (a) Crushed stone or crushed gravel, consisting of sound, rough, durable pebbles or rock fragments of uniform quality;
- (b) free from clay balls, vegetable matter, or other deleterious matters;
- (c) meets the requirements of Table B-1; and
- (d) meets the requirements of Table B-2, as determined by ATM 304.

## B6.3 Surface Course

- (a) Is a screened or crushed gravel, consisting of sound, rough, durable pebbles or rock fragments of uniform quality;
- (b) free from clay balls, vegetable matter, or other deleterious matters; and
- (c) meets the requirements of Table B-2, as determined by ATM 304.

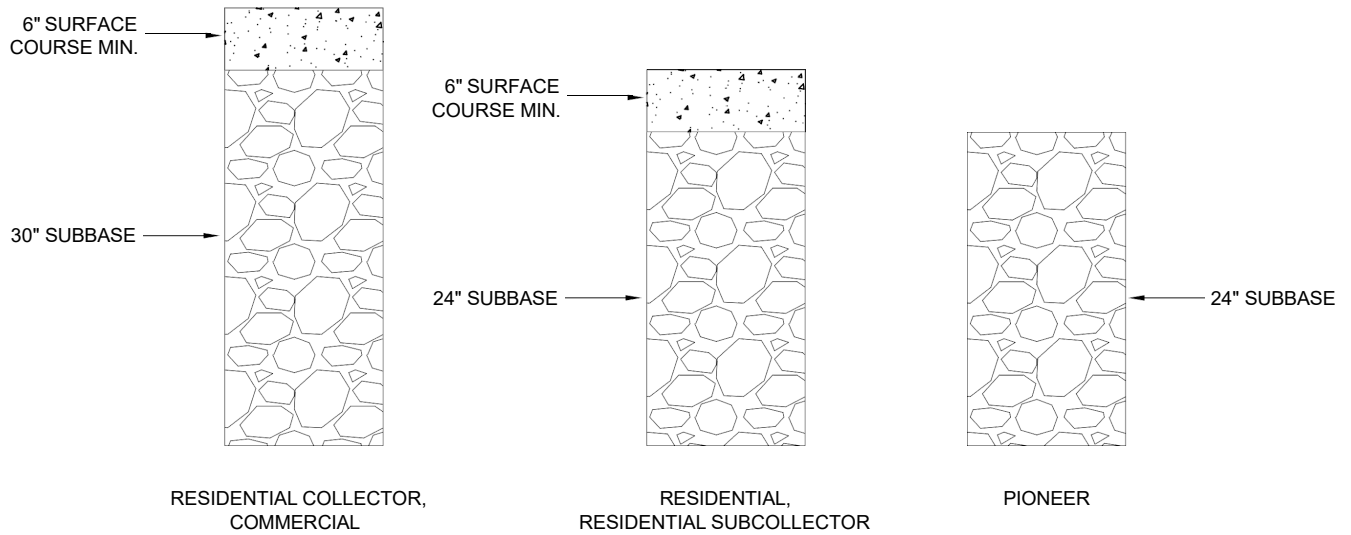
**Table B-1: Aggregate Quality Properties for Base Course**

Property	Test Method	Base Course
L.A. Wear, %	AASHTO T 96	50, max
Degradation Value	ATM 313	45, min
Fracture, %	ATM 305	70, min
Plastic Index	ATM 205	6, max
Sodium Sulfate Loss, %	AASHTO T 104	9, max (5 cycles)

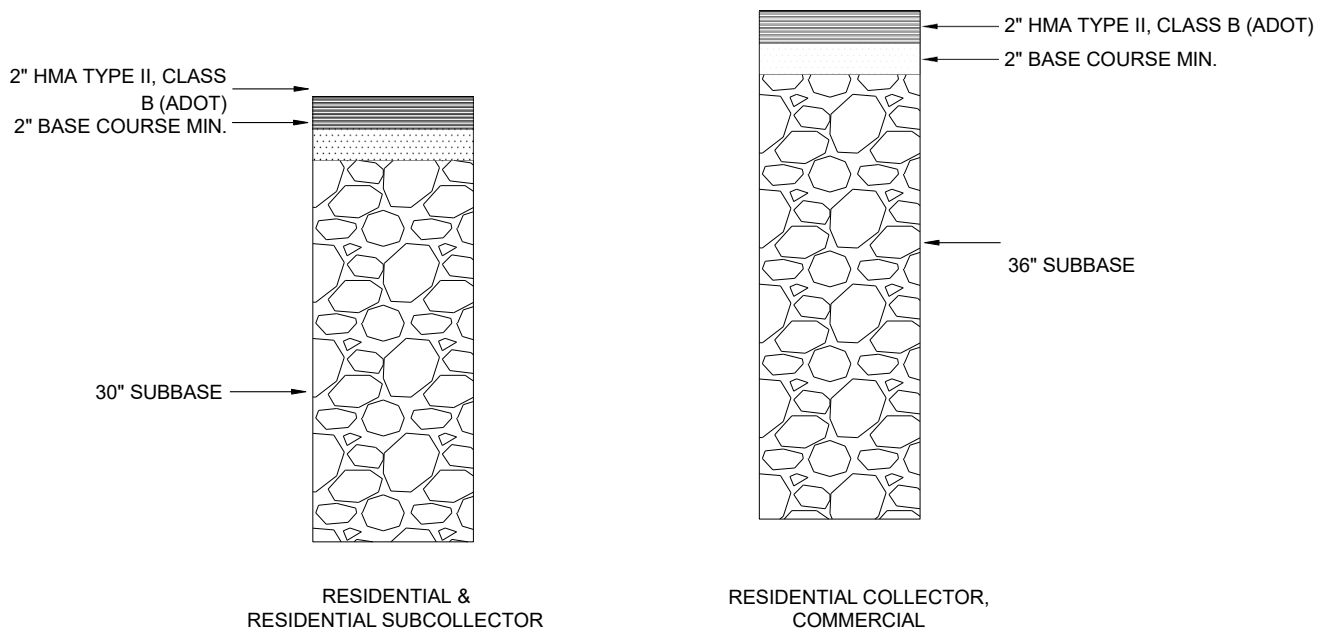
**Table B-2: Aggregate Gradations**

Sieve Designation	Subbase	Base Course	Surface Course
4 inch	95 to 100		
1 1/2 inch			100
1 inch		100	100
3/4 inch		70 to 100	70 to 100
3/8 inch		50 to 80	50 to 85
No. 4	20 to 60	35 to 65	35 to 75
No. 8		20 to 50	20 to 60
No. 50		6 to 30	15 to 30
No. 200	0 to 6	0 to 6	6 to 10

(Percent Passing By Weight)



**Figure B-1: Structural Sections for Gravel Roads**



**Figure B-2: Structural Sections for Paved Roads**

## SECTION C. DRAINAGE

### **C1 General**

The purpose of this section is to ensure that stormwater management is provided with ROW development activities. Responsible stormwater management is the treatment, retention, detention, infiltration, and conveyance of stormwater and other surface waters without adversely impacting adjoining, nearby, or downstream properties and receiving waters.

### **C2 Requirements**

A drainage plan is required for road construction projects. It is the applicant's responsibility to comply with all other applicable federal, state, and local codes and regulations including, but not limited to work in wetlands or flood plains.

The Applicant may request a waiver to this section. Waiver must be submitted and approved by COK. Justification for waiver may include, but is not limited to, sites where drainage is established and will not be altered or the construction will not substantially modify drainage on or through the project area.

#### **C2.1 Drainage Plan**

Submit a Drainage Plan, prepared by an engineer or other qualified professional registered in the State of Alaska, with the preliminary ROW construction permit application. The preliminary drainage plan shall show the project site and depict the following:

- (a) Existing and proposed property lines, the OHWM of water bodies, and existing mapped flood hazard areas if applicable.
- (b) Existing topography, with minimum 5-foot contour intervals.
- (c) Existing features that convey or retain drainage, including but not limited to: water bodies, wetlands, natural valleys, swales, ditches, check dams, culverts, and pipe systems.
- (d) Proposed drainage pattern and features, both constructed and natural, on site. Identify conveyance types, flow directions, and any drainage changes that may affect adjacent property if applicable.
- (e) Proposed stream crossings and anticipated culvert sizes. Identify fish-bearing streams.
- (f) Identify design elements, with supporting runoff calculations, necessary to show compliance with the drainage design criteria set forth in C3. No calculations required for ditching, curb and gutter, or driveway culverts.
- (g) Fish passage culvert plans and permits, if applicable.

#### **C2.2 Subdivisions or Large-Scale Development**

COK may require development of storm water structures within ROW or adjacent properties to manage storm water for a large development. Drainage plan shall be reviewed by COK to determine if existing infrastructure is sufficient for development or requires new storm water management structures as a part of the development. COK may require more conservative design criteria than Section C3 upon their review of development and existing infrastructure.

### C3 Drainage Design Criteria

- (a) Design a drainage system for the project site for conveyance of a 10-year, 24-hour storm.
- (b) Retain natural drainage patterns to the extent possible.
- (c) Changes to drainage patterns must not adversely affect adjacent property or ROW.
- (d) Base the size and capacity of the drainage system on runoff volumes and flow rates assuming full development of the catchment area.
- (e) Drainage to state or other municipal ROW are subject to their respective requirements and review.

### C4 Drainage Ditches

Stabilize ditches with gravel, turf, or rock riprap. See Table C-1 and Table C-2 for most common conditions and acceptable ditch lining materials.

Normal ditch depth shall be 24 inches and according to the typical section shown in Figure A-1. The design peak flow required by C3 shall be conveyed within ditches with a minimum freeboard of 12 inches.

**Table C-1: Ditch Stabilization**

Flow (cfs)	Ditch Slope (ft/ft)										
	0.005	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10
2.0	A	A	A	A	A	A	A	A	A	A	A
4.0	A	A	A	A	A	A	A	A	B	B	B
6.0	A	A	A	A	A	A	B	B	B	B	B
8.0	A	A	A	A	A	B	B	B	B	B	B
10.0	A	A	A	A	B	B	B	B	B	B	C
20.0	A	A	A	B	B	B	C	C	C	C	C
30.0	A	A	A	B	B	C	C	C	D	D	D
40.0	A	A	B	B	C	C	C	D	D	D	E
50.0	A	A	B	B	C	C	D	D	D	E	E
60.0	A	A	B	C	C	D	D	D	E	E	E
70.0	A	A	B	C	C	D	D	E	E	E	E
80.0	A	B	C	C	C	D	E	E	E	E	E
90.0	A	B	C	C	D	D	E	E	E	E	F
100.0	A	B	C	C	D	D	E	E	E	F	F

**Table C-2: Ditch Lining Materials**

Type	Material	D50 (in)	Dmax (in)	Dmin (in)	Thickness (in)
A	Native Grass, Turf, or Gravel with < 6% fines				
B	Riprap or Bone Rock	3.0	4.5	1.5	6.0
C	Riprap or Bone Rock	6.0	9.0	3.0	12.0
D	Riprap or Bone Rock	9.0	13.5	4.5	18.0
E	Riprap or Bone Rock	12.0	18.0	6.0	24.0

## **C5 Curb and Gutter**

Curb and gutter are used throughout City on all classifications of roads. Curb and gutter is preferred in locations where stormwater collection systems are needed and require underground piping. Curb and gutter type shall be approved by COK. Curb and gutter is not allowed on Pioneer Roads.

## **C6 Culverts**

### **C6.1 General Culvert Design Criteria**

The following criteria apply to all cross road culverts for runoff or seasonal drainage:

- (a) The minimum culvert slope is 0.5 percent.
- (b) Culverts longer than 100 feet require appropriate maintenance access and COK approval.
- (c) Cross road culverts shall have a minimum diameter of 18 inches.
- (d) Cross road culverts shall include end-sections.
- (e) Driveway culverts, where required, shall have a minimum diameter of 15 inches and may be galvanized steel corrugated metal pipe, heavy gauge aluminum corrugated metal pipe or corrugated polyethylene plastic pipe.
- (f) Culverts shall be sized to convey the design peak flow required by C3.
- (g) Culverts shall be corrugated metal pipe (CMP) and minimum:
  - (1) 16 gauge galvanized steel on Residential and Residential Subcollector streets;
  - (2) 12 gauge galvanized steel on Residential Collector and minor collector streets; or
  - (3) 16 gauge aluminum or aluminized if needed due to soil or water conditions.
- (h) Design and install energy dissipation rock aprons at culvert outlets in accordance with Hydraulic Engineering Circular No. 14 (FHWA).
- (i) Install culverts in accordance with the manufacturer's recommendations for the anticipated traffic loads.

### **C6.2 Stream Crossing Culvert Criteria**

The following criteria apply to all stream crossing culverts:

- (a) Contact the ADFG, Division of Habitat to determine if a stream reach harbors fish. If so, stream crossing culverts shall be designed, constructed, and maintained according to C7.
- (b) Stream crossing culverts shall be placed as close to the pre-existing channel alignment as possible. Avoid placing culverts at pools and stream bends.
- (c) Road alignment shall be as close to perpendicular to the stream channel as possible.
- (d) Culvert slope shall be within 25 percent of the natural stream slope. For example, if the natural stream slope is 1.0 percent, the minimum design slope of the culvert would be 0.75 percent and the maximum design slope would be 1.25 percent.
- (e) Culvert outlet and inlet protection shall be used as necessary to reduce the risk of scour and perching.
- (f) Stream crossings shall be composed of a single pipe or arch for the main stream channel.
- (g) Overflow culverts may be used but should be placed at a higher elevation so that flows up to the OHWM pass through the primary culvert.
- (h) Stream crossings shall maintain the connectivity of wetlands adjacent to stream channels and shall accommodate sheet flow within such wetlands.

- (i) Stream crossing culverts shall not interfere with the functioning of floodplains and shall be designed to convey the design peak flow required. Non-Regulated streams shall be designed for a 10-year, 24-hour event and Regulated streams shall be designed for a 100-year, 24-hour event. If the stream crossing culvert is not designed to accommodate the 100-year flow, a route must be established to safely convey flows exceeding the design peak flow without causing damage to property, endangering human life or public health, or causing significant environmental damage.
- (j) In cases of crossings within high entrenchment ratio environments, the ratio of the flood prone width to the OHWM width is greater than 2.2, floodplain overflow culverts may be beneficial to floodplain connectivity and can be used to pass the design flow. Minimum width requirements for the primary culvert still apply.
- (k) Stream crossing culverts shall have a minimum diameter of three feet.
- (l) Stream crossing culvert pipes and arches shall be metal.
- (m) Culverts longer than 100 feet require appropriate maintenance access and COK approval.
- (n) Install culverts in accordance with the manufacturer's recommendations for the anticipated traffic loads.
- (o) Alternate designs may be submitted for approval by City of Kenai.

## **C7 Fish Passage Culverts**

Fish Passage culverts shall meet the requirements of U.S. Fish & Wildlife Service Culvert Design for Ecological Function. Fish Passage Culverts must be designed by an engineer.

## **C8 Stormwater Collection Systems**

Stormwater collection systems must be engineered and approved by the City of Kenai and the Alaska Department of Environmental Conservation. Systems must meet the following minimum requirements.

- (a) Design system for a minimum 10-year, 24-hour event. City of Kenai may require 25-year or 100-year event depending upon review the drainage and associated stormwater collection systems.
- (b) Minimum piping diameter shall be 12" and piping may be galvanized steel corrugated metal pipe, heavy gauge aluminum corrugated metal pipe or corrugated polyethylene plastic pipe.
- (c) Manholes and catch basins shall be concrete and maximum spacing of manholes shall be 300 feet.
- (d) Minimum pipe grades shall be according to Table C-3.
- (e) Connection to an existing system may be allowed with City of Kenai approval. Engineer may be required to verify existing system is capable of supporting additional flows.

**Table C-3: Stormwater Pipe Minimum Slopes**

Pipe Diameter	Minimum Slope (ft/ft)
12"	0.005
15"	0.004
18"	0.003
21"	0.0025
24"	0.002
27"	0.0018
30"	0.0015
36"	0.0012

## **C9 Soil Infiltration Facilities**

Soil infiltration may be used to reduce stormwater flow and volume with the following criteria:

- (a) Soil infiltration facilities within City ROW or drainage easements should be designed such that they are not considered Class V injection wells. Per EPA’s memorandum addressing the subject in June 2008.
  - (1) Private drainage facilities that are considered Class V injection wells require conformance with EPA regulations.

## **C10 Rainfall Data**

### **C10.1 Rainfall Distribution**

Intensity-Duration-Frequency and 24-hour rainfall data are furnished by NOAA Atlas 14 Point Precipitation Frequency Estimates. Use SCS Type-I Rainfall Distribution and 24-hour rainfall depth to compute runoff.

### **C10.2 Runoff Transformation**

Use the Rational Method for estimating peak flows in drainage basins less than 200 acres and with times of concentration less than 20 minutes for design of conveyances. Use NRCS SCS Unit Hydrograph Method for estimating runoff volumes and peak flows for other conditions and applications. Other methods more appropriate for site conditions may be utilized upon COK approval.

## SECTION D. SUPPLEMENTAL DESIGN ELEMENTS

### D1 General

Roadways consist of many separate components that are not all applicable in every situation. When these elements are used, the following guidelines apply. Specific guidelines for the following components may be found in applicable DOT&PF or AASHTO publications. Any variation to the following guidelines must be approved by COK.

### D2 Pedestrian Facilities

Pathways and sidewalks shall be designed according to AASHTO guide for the Planning, Design, and Operation of Pedestrian Facilities, the 2010 Americans with Disabilities Act Standards for Accessible Design, and the requirements of this section.

#### D2.1 Sidewalks

Sidewalks are generally installed on Commercial and Residential Collector roads, but can exist on Sub-Collectors and Residential roads. Sidewalks should be at least 5 feet wide and have a surface of concrete. The installation of curb and gutter for sidewalks is required.

#### D2.2 Multi-Use Pathways

Multi-use pathways may be installed on ROW throughout the City. Multi-use pathways must be paved asphalt and have a minimum width of 8 feet. Pathway separation should be a minimum 5 feet edge of road where feasible and roadside ditching should be in between road and pathway where feasible. Modifications will be allowed where ROW is limited.

#### D2.3 Accessibility Requirements

All new construction and alterations within COK ROW must be designed to be accessible for all pedestrians in accordance with ADA when applicable. The complete Americans with Disabilities Act Accessibility Guidelines (ADAAG), which is part of the regulations enforcing ADA, is available online from the U.S. Architectural and Transportation Barriers Compliance Board at [www.access-board.gov](http://www.access-board.gov).

Designs that include pedestrian facilities within COK ROW shall conform to the version of ADA Guidelines for Accessible Public Rights-of-Way in effect at the time of submittal.

The followings are examples of some design elements covered under ADAAG:

New or widened road: all pedestrian elements, including curb ramps, sidewalk cross slope, driveway cross slope, clearance around utilities, pedestrian access to adjacent commercial properties, and accessible pedestrian construction detours.

Roadway surface rehabilitation only: new and complying curb ramp for every road crossing that has both sidewalk and curb, unless there is an existing curb ramp that meets all ADA standards.

### **D3 Street Lighting**

Lighting throughout COK consists of DOT&PF operated lighting along Kenai Spur Highway and Bridge Access Road, COK owned and operated lighting and Homer Electric Association (HEA) owned and operated lighting that is paid for by COK.

DOT&PF lighting managed by the State and is not regulated by these standards. COK lighting shall conform to COK Street Lighting Standards. HEA lighting may be installed in COK ROW at the request and/or approval of COK. HEA may be installed for wayfinding or safety purposes in areas of the City where it is not cost effective to expand City owned lighting infrastructure.

City of Kenai may require street lighting be installed if expanding a residential or commercial area that City owned and operated lighting exists adjacent to and lighting would match adjacent infrastructure.

For more information on COK Street Lighting and Standards, please see 2025 Street Light Assessment.

### **D4 Mailboxes and Mailbox Pullouts**

Installation of mailboxes or mailbox pullouts in COK ROW must be permitted through a ROW application permit. A site plan will be required with details for size of mailbox and foundation. COK may require a pullout be installed depending on location of mailbox, width of existing road and safety for queueing of vehicles in the area.

## SECTION E. DEVELOPMENT IMPLEMENTATION

### E1 General

This section describes the procedure that is to be followed before constructing any improvements required for constructing new residential classification or higher roads in existing ROW. The Applicant or their representative shall be the primary point of contact throughout this process.

It is the Applicant's responsibility to determine, acquire, and follow permits required by other agencies. Approval from COK does not supersede other agencies' permit requirements.

#### E1.1 Construction Plans

Submit construction plans to COK at least seven calendar days before the preconstruction conference. All plan drawing submittals shall be at a scale of 1-inch = 50-feet or more detailed, plottable on 11-inch by 17-inch paper. Plans must be completed and stamped by an Engineer. Construction plans shall include the following:

- (a) Drainage Plan, according to C2.1;
- (b) Road plan, profile, and cross-sections; and
- (c) As-built survey of visible improvements and utilities within and adjacent to the right-of-way;
- (d) Geotechnical information;
- (e) Copy of agency accepted permit applications or approvals required for the improvements prior to construction; and
- (f) Plans for any proposed improvements within the ROW that are outside of the scope of this manual (e.g. retaining walls or guard rails) or do not conform to the standards set forth herein, shall conform to ADOT&PF design criteria and standards.

#### E1.2 Preconstruction Conference

The preconstruction conference is for the purpose of reviewing and approving the Construction Documents for the required improvements. The Applicant may request scheduling of a preconstruction conference with COK after the construction plans have been submitted. The applicant, or designated representative, and the Applicant's engineer must attend the preconstruction conference. The applicant should identify any deviations from these standards.

In addition to the construction plans, the following items will be provided at or prior to the preconstruction conference:

- (a) If applicable, proof of compliance with the Alaska Pollutant Discharge Elimination System Program (ADPES);
  - (1) Acceptable proof includes a Notice of Intent (NOI), a Low Erosivity Waiver, or a determination by a qualified person that neither is needed.
  - (2) Applicant will need to include COK in APDES permit due to ownership of ROW, but applicant will be responsible for all fees.
- (b) Approximate construction schedule;
- (c) Copy of any issued permits required for the improvements prior to construction;

The Construction Plans must be signed by the applicant, or designated representative, and the engineer. Upon acceptance of the Construction Plans by COK and approval of ROW permit, COK will issue an Approval to Construct (ATC).

Some construction plans or permit approvals may take longer to develop or obtain, such as fish passage culvert plans and associated permits. Approvals to Construct from these agencies must be received and reviewed by COK before construction begins within the respective areas.

### E1.3 Interim Inspections

Applicant's engineer shall supervise all phases of construction and notify COK of changes to the approved plans. The changes should be approved by COK prior to completion of construction. Periodic interim inspections may be conducted by COK. Interim inspections may be requested by the Applicant's Engineer. Inspections by Applicant's engineer must be sufficient to complete as-built drawings and verify roadway was constructed per plans and specifications.

### E1.5 Pre-Final Inspection

When the Applicant has determined that construction of the improvements will be substantially complete according to the approved plans, the Applicant will request a Pre-Final Inspection. The Pre-Final Inspection request must be received by September 30<sup>th</sup> and shall include a description of work yet to be completed. The Pre-Final Inspection will be scheduled to occur within 14 calendar days of the request and shall be attended by the Applicant, Engineer, and COK. A punch list will be developed, if any work items remain, at the Pre-Final Inspection.

### E1.6 Final Inspection

When construction of the improvements and punch list items are complete according to the Construction Documents, the Applicant will request a Final Inspection of the improvements. The Final Inspection request must be received by October 15<sup>th</sup>. Final Inspections will cease October 31<sup>st</sup>, or when winter conditions prohibit inspection, whichever comes first. The Final Inspection will be scheduled to occur within 14 calendar days of the request and shall be attended by the Applicant, Engineer, and COK.

### E1.7 Final Report

Upon COK approval of the Final Inspection, the Applicant or their designee shall submit a written Final Report to COK. The Final Report shall include:

- (a) Stamped and signed memo describing at a minimum:
  - (1) project was constructed per plans and specs with approved deviations noted on as-builts
  - (2) road standard classification (Residential Subcollector, Residential, etc.) for each road constructed
- (b) Stamped and signed final drainage plan, if required (minimum 11"x17");
- (c) As-builts or record drawings;
- (d) Documentation verifying Surface Course thickness such as inspection forms with photos, asbuilt surveys, or alternative methods approved by COK;
- (e) Compaction test reports, as required;
- (f) Gradation tests, as required; and

(g) photos of each stage of construction.

COK will review the report and provide comments, if necessary, within 14 calendar days.

### **E1.8 Construction Acceptance**

Upon approval of the Final Report, COK will issue a Notice of Acceptance. COK will begin maintenance operations and ownership of road at this point. COK will not perform any maintenance on new roadway

If Construction is not accepted prior to winter conditions, Applicant will be responsible for any plowing and maintenance of the road until after thawing the following spring when any remaining work items can be completed and accepted by the City.

### **E1.9 Warranty**

All improvements are to be warrantied until October 31<sup>st</sup> of the calendar year following COK approval of the Final Inspection.

During the warranty period, the COK will be responsible for any road maintenance including, but not limited to: snow removal, maintaining a smooth road surface and crown, maintaining stabilized foreslopes and backslopes, and maintaining positive drainage. If any deficiencies arise during the warranty, COK will issue a punch list to the applicant by September 1<sup>st</sup> to allow time for completion of repairs. The applicant must notify COK of completion of repairs by October 15<sup>th</sup> for the roads to be eligible for continued maintenance on November 1<sup>st</sup>.

Maintenance may be denied, and the Certificate of Construction Acceptance revoked if deficiencies are not corrected to the satisfaction of COK. A notice may be recorded indicating to the public that the COK is not responsible for road upkeep and maintenance until such a time that the deficiencies are corrected. COK may require security to perform maintenance activities if deficiencies cannot be repaired for an extended period of time due to freezing conditions.

## **E2 Subdivision Agreements**

If a developer plans to construct a road within a proposed ROW that has not been platted, they will need to agree to an Installation Agreement per KMC 14.10.070. Installation Agreement will be required prior to approval of drawings for construction by COK. In lieu of an installation agreement, a developer may construct a road within a proposed ROW without City approval, but to be accepted by the City for maintenance, they must follow the Development Implementation of Section E1.

## **E3 Pioneer Road Development**

The following guidelines are for construction of a Pioneer Road within COK ROW. Applicant will need to complete a Pioneer Road Application to submit to COK for approval.

Pioneer Roads allow for roadways to be constructed in City ROW, but are not maintained by COK. The purpose is to allow for possible future expansion of Pioneer Road into a maintained road and verifying proper construction methods allows for reduced costs in future expansion.

### E3.1 Construction Plans

Submit construction plans to COK at least seven calendar days before the preconstruction conference. Plans shall show location of road within ROW, proposed width and any proposed drainage features. Applicant shall identify material and gradation of material being provided for backfill and it must meet requirements of Section B.

### E3.2 Preconstruction Conference

The preconstruction conference is for the purpose of reviewing and approving Pioneer Road Application. The Applicant may request scheduling of a preconstruction conference with COK after the application has been submitted. The applicant or designated representative must attend the preconstruction conference.

### E3.3 Excavation and Grubbing Inspection

After approval of the application, the Applicant may proceed with excavation and grubbing within the ROW. Prior to placing any fill, applicant must complete excavation of the proposed ROW down to native, non-frost susceptible soils and removing all organics from the road prism. The applicant shall coordinate an inspection with COK staff to verify and document limits of excavation prior to allowing backfill operations to proceed. A survey the length of the ROW the development is occurring in must be completed prior to inspection to clearly delineate the limits of the ROW and to verify that all work is taking place within ROW.

### E3.4 Final Inspection

After placement, grading and compaction of subbase materials to complete road construction are finished, the Applicant shall schedule a final inspection for the City to document construction. Any work items to be completed will be identified at this time and an additional inspection may be necessary. After the final construction is approved by COK, the Applicant will be provided with a Notice of Acceptance.

## SECTION F. UTILITIES

### F1 General

These standards apply to the design and construction of utility facilities within the COK. All utility installation within existing or proposed ROW or utility easements must comply with the provisions of COK or other applicable code, or as otherwise approved by the permitting authority.

### F2 Utility Location Guidelines

#### F2.1 Underground Utility Facilities:

- (a) The location of utility facilities placed within the ROW shall be coordinated with COK.
- (b) Water, sanitary sewer and storm sewer will be installed per COK requirements and may be placed in the roadway. Other utilities shall be placed in utility easements where feasible or per Figure F-1. Deviations may be approved by COK through ROW Permit Application process.
- (c) Backslopes or foreslopes which extend into a utility easement should not exceed 4:1. These limits are necessary for construction equipment for utility installation.
- (d) Utility facilities paralleling the road shall not be located within 10 feet of the edge of roadway unless otherwise approved by COK.
- (e) Underground road crossings shall be buried a minimum of 48 inches below finished grade. Backfill and surface course shall be reinstalled according to the requirements of Section B, or as otherwise approved by the COK.
- (f) Conduit road crossings, if used, shall be installed in accordance with each utility company's standards and applicable code.
- (g) Standard burial depth of longitudinal utilities is 36 inches below grade. The applicant should delineate areas, such as where driveways and drainage easements are planned, where deeper burial may be needed.
- (h) Warning tape shall be installed approximately 12 inches above underground utilities during installation.
- (i) Contractor completing underground work in ROW is responsible for restoring surface to previous condition including replacement of concrete, asphalt, topsoil, and seeding. Within 1-year of completion of work, contractor is responsible to repair any issues in roadway such as settlement of subgrade or reseeding.

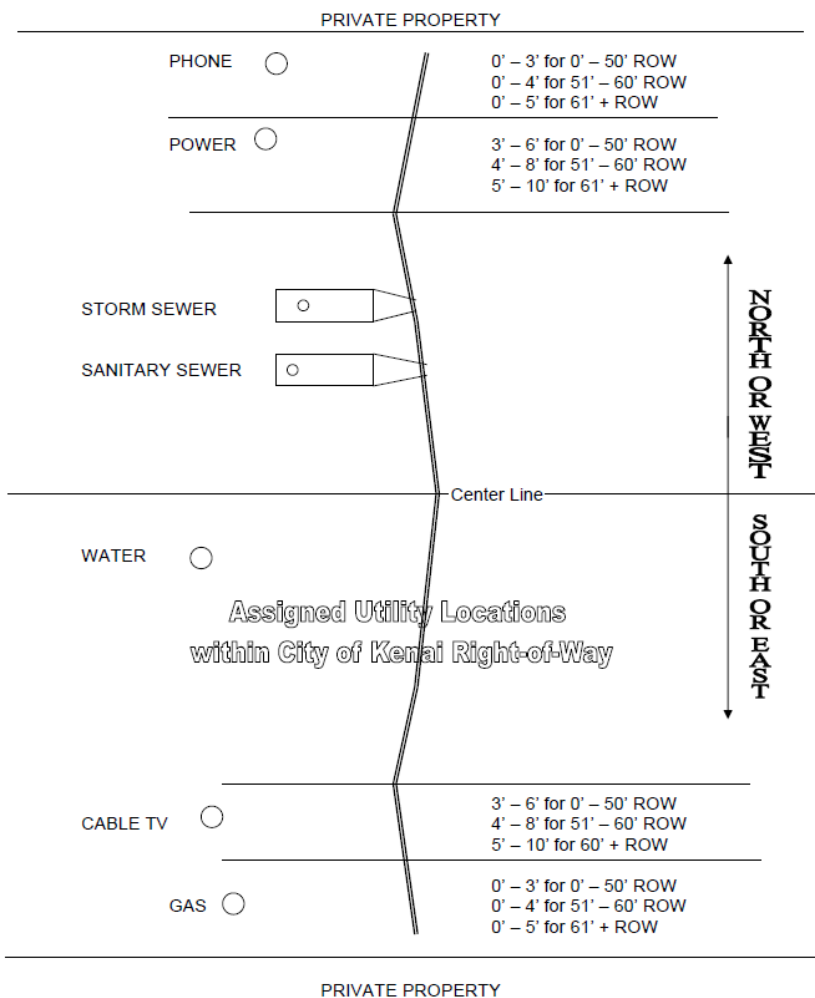
#### F2.2 Above Ground Utility Facilities:

- (a) Above ground pedestals, poles, and utility facilities shall not be located within 10 feet of the roadway, unless an alternate design meets clear zone requirements.
- (b) Above ground pedestals, poles, and utility facilities shall not be located such that they substantially block intersection or driveway sight triangles.
- (c) Unless otherwise authorized by COK, above ground pedestals, poles, and utility facilities shall not be located within the ROW nearer than 40 feet from the point of intersection of the extension of the property lines at any existing or proposed intersection on Residential Collector streets or higher classification.

- (d) Above ground pedestals, poles, and utility facilities shall not be located within a common access easement or drainage easement, within 20 feet of a common access point, or within 10 feet of a roadway cross culvert.
- (e) All guy wires installed within the ROW or utility easements adjacent to, or near to a roadway shall have a minimum 8-foot long yellow delineator installed above the anchor.
- (f) Pedestals located within the ROW shall be located within the outer 1 foot of the ROW.

**F2.3 Separation of Utilities:**

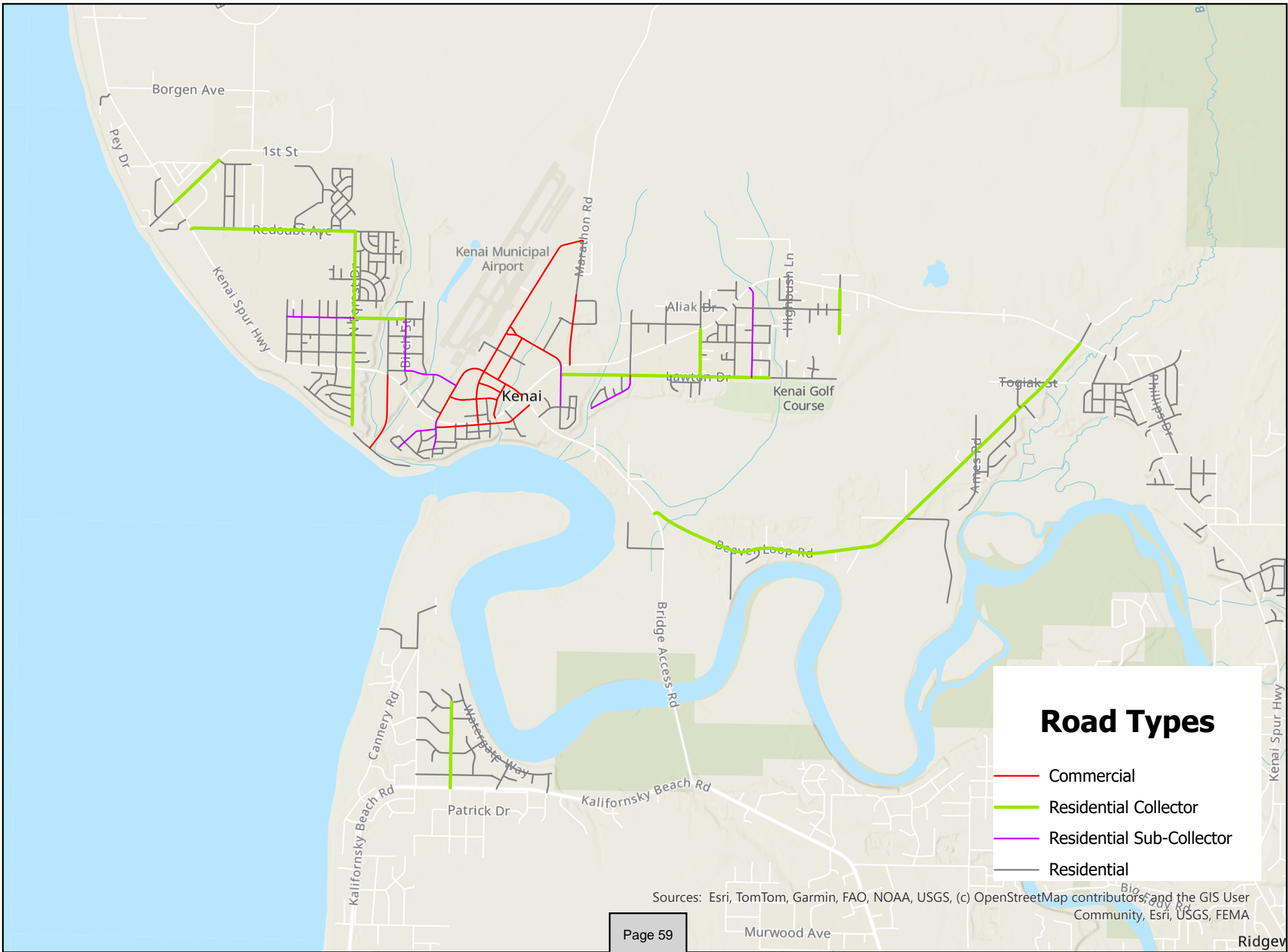
- (a) Recommended 5-foot horizontal separation between power poles and buried utilities.
- (b) Recommended minimum 1-foot physical separation between all underground utilities.
- (c) Separation of storm, sewer, and water utilities shall meet the requirements of the Alaska Department of Environmental Conservation.



**Figure F-1: Utility Locations**

## REFERENCES

- American Association of State Highway and Transportation Officials. (2018). *A Policy on Geometric Design of Highways and Streets* (7<sup>th</sup> ed.). Washington, DC.
- American Association of State Highway and Transportation Officials. (2011). *Roadside Design Guide* (4<sup>th</sup> ed.). Washington, DC.
- American Association of State Highway and Transportation Officials. (2017). *Guide for the Development of Bicycle Facilities* (4<sup>th</sup> ed.). Washington, DC.
- Alaska Department of Transportation & Public Facilities. (2023). *Alaska Highway Preconstruction Manual*. Juneau, AK.
- Alaska Department of Transportation & Public Facilities. (2020). *Alaska Standard Specifications for Highway Construction* (2020 ed.). Juneau, AK.
- Alaska Department of Transportation & Public Facilities. (2015). *Alaska Sign Design Specifications*. Juneau, AK.
- Alaska Department of Transportation & Public Facilities. (2023). *Alaska Test Methods Manual*. Juneau, AK.
- Alaska Department of Transportation & Public Facilities. (2016). *Alaska Traffic Manual*. Juneau, AK.
- Institute of Transportation Engineers. (2017). *Trip Generation Manual*. (11<sup>th</sup> ed.). Washington, DC.
- Matanuska-Susitna Borough. (2022). *Matanuska-Susitna Borough 2022 Subdivision Construction Manual*. Palmer, AK.
- Matanuska-Susitna Borough. (2025). *Matanuska-Susitna Borough Design Criteria Manual*. Palmer, AK.
- U.S. Department of Transportation Federal Highway Administration. (2012). *Manual of Uniform Traffic Control Devices for Streets and Highways* (2011 ed.). Washington, DC.



### Road Types

- Commercial
- Residential Collector
- Residential Sub-Collector
- Residential

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Esri, USGS, FEMA



April 27, 2026 – 7:30 PM

## Action Agenda

Betty J. Glick Assembly Chambers  
George A. Navarre Kenai Peninsula  
Borough Administration Building

**Jeremy Brantley, Chair**  
Sterling/Funny River  
Term Expires 2027

**Pamela Gillham, Vice Chair**  
Kalifornsky / Kaslof District  
Term Expires 2026

**Virginia Morgan**  
Cooper Landing / Hope  
Eastern Peninsula District  
Term Expires 2028

**Diane Fikes**  
City of Kenai  
Term Expires 2028

**Paul Whitney**  
City of Soldotna  
Term Expires 2027

**Franco Venuti**  
City of Homer  
Term Expires 2027

**Vacant**  
City of Seward  
Term Expires 2026

**Jeffrey Epperheimer**  
Nikiski District  
Term Expires 2026

**Dawson Slaughter**  
South Peninsula District  
Term Expires 2028

*Remote participation will be available through Zoom, or other audio or video means, wherever technically feasible*

### ZOOM MEETING DETAILS

**Zoom Meeting Link:** <https://us06web.zoom.us/j/9077142200>  
**Zoom Toll Free Phone Numbers:** 888-788-0099 or 877-853-5247  
**Zoom Meeting ID:** 907 714 2200

## A. CALL TO ORDER

## B. ROLL CALL

## C. APPROVAL OF AGENDA AND CONSENT AGENDA

(Action items listed with an asterisk (\*) are considered to be routine and non-controversial by the Planning Commission and will be approved by one motion. There will be no separate discussion of these items unless a Commissioner so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.)

### ACTION ITEMS CURRENTLY ON CONSENT AGENDA

#### \*3/4. Administrative/Final Approvals

- a. Cohoe Lakes Subdivision Frank Addition; KPB File 2025-152
- b. Kelly Acres Radtke Addition; KPB File 2025-159
- c. Rosewood Subdivision Farmgirl Addition; KPB File 2025-093
- d. Valhalla Heights Subdivision Thomsen Replat; KPB File 2025-129

#### \*6. Excused Absences

- a. Vacant, City of Seward

#### \*7. Minutes

- a. April 13, 2026 Planning Commission Meeting Minutes

**Motion to approve the consent & regular agendas passed by unanimous vote (8-Yes).**

## D. UNFINISHED BUSINESS – None

## E. NEW BUSINESS

**Public Hearing: Quasi-Judicial Matters** - *(Commission members may not receive or engage in ex-parte contact with the applicant, other parties interested in the application, or members of the public concerning the application or issues presented in the application)*

1. Utility Easement Vacation; KPB File 2026-030V  
Peninsula Surveying / Weisser  
Request: Vacates an approximately 10' x 320' utility easement along the eastern lot line of current Lot 2B, and an approximately 10' x 590' utility easement along the eastern lot line of current Lot 2C and an approximately 10' x 102' utility easement along the southern lot line of current Lot 2C, Fox River Estates Three, Plat HM 2005-80  
Fritz Creek Area

**Motion to grant the vacation as petitioned passed by unanimous vote (8-Yes)**

### **Public Hearing: Legislative Matters**

2. Section Line Easement Vacation; KPB File 2026-021V  
Survey Alaska, LLC / Nelson Community Property Trust  
Request: Vacates a portion of the 33' section line easement along the northern lot line of Lot 1, Block 4, Hill Park Estates Unit 1, Plat HM 76-50  
Anchor Point Area

**Motion to grant the vacation as petitioned passed by unanimous vote (8-Yes)**

3. Ordinance 2026-14: Authorizing a communications site lease agreement with GCI Communications Corporation, in Beluga

**Motion to forward to the Assembly a recommendation to adopt Ordinance 2026-14 passed by unanimous vote (8-Yes).**

4. Ordinance 2026-18: Authorizing the lease of borough owned land for a material site in Beluga by competitive lease offering through sealed bid procedures.

**Motion to forward to the Assembly a recommendation to adopt Ordinance 2026-18 passed by unanimous vote (8-Yes).**

5. Ordinance 2026-16: Authorizing the conveyance of 5 parcels of KPB owned land to the City of Homer for less than fair market value in support of a city need.

**Motion to forward to the Assembly a recommendation to adopt Ordinance 2026-16 passed by unanimous vote (8-Yes).**

6. Ordinance 2026-17: Re-authorizing the conveyance of KPB owned land to the State of Alaska Department of Transportation & Public Facilities for a public highway right-of-way in support of the "Sterling Safety Corridor Improvements, MP 82.5 to 94" project.

**Motion to forward to the Assembly a recommendation to adopt Ordinance 2026-17 passed by unanimous vote (8-Yes).**

**F. PLAT COMMITTEE REPORT** – The plat committee will review 3 plats.

**G. OTHER**

**H. PRESENTATIONS/PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA** (3 MINUTES PER SPEAKER)

**I. DIRECTOR'S COMMENTS**

**J. COMMISSIONER COMMENTS**

**K. ADJOURNMENT**

**MISCELLANEOUS INFORMATIONAL ITEMS**

**NEXT REGULARLY SCHEDULED PLANNING COMMISSION MEETING**

The next regularly scheduled Planning Commission meeting will be held **Monday, May 11, 2026** in the Betty J. Glick Assembly Chambers of the Kenai Peninsula Borough George A. Navarre Administration Building, 144 North Binkley Street, Soldotna, Alaska at **7:30 p.m.**

**CONTACT INFORMATION**

**KENAI PENINSULA BOROUGH PLANNING DEPARTMENT**

Phone: 907-714-2215 / Toll free within the Borough 1-800-478-4441, extension 2215

e-mail address: [planning@kpb.us](mailto:planning@kpb.us)

website: <http://www.kpb.us/planning-dept/planning-home>

A party of record may file an appeal of a decision of the Planning Commission in accordance with the requirements of the Kenai Peninsula Borough Code of Ordinances. An appeal must be filed with the Borough Clerk within 15 days of the notice of decision, using the proper forms, and be accompanied by the filing and records preparation fees.

Vacations of rights-of-way, public areas, or public easements outside city limits cannot be made without the consent of the borough assembly. Vacations within city limits cannot be made without the consent of the city council. The assembly or city council shall have 30 calendar days from the date of approval in which to veto the planning commission decision. If no veto is received within the specified period, it shall be considered that consent was given.

A denial of a vacation is a final act for which the Kenai Peninsula Borough shall give no further consideration. Upon denial, no reapplication or petition concerning the same vacation may be filed within one calendar year of the date of the final denial action except in the case where new evidence or circumstances exist that were not available or present when the original petition was filed.



April 27, 2026 – 7:00 PM

## Motion Agenda

Betty J. Glick Assembly Chambers  
George A. Navarre Kenai Peninsula  
Borough Administration Building

**Jeremy Brantley, Chair**  
Sterling/Funny River  
Term Expires 2027

**Pamela Gillham, Vice Chair**  
Kalifornsky / Kasilof District  
Term Expires 2026

**Virginia Morgan**  
Cooper Landing / Hope  
Eastern Peninsula District  
Term Expires 2028

**Diane Fikes**  
City of Kenai  
Term Expires 2028

**Paul Whitney**  
City of Soldotna  
Term Expires 2027

**Franco Venuti**  
City of Homer  
Term Expires 2027

**Vacant**  
City of Seward  
Term Expires 2026

**Jeffrey Epperheimer**  
Nikiski District  
Term Expires 2026

**Dawson Slaughter**  
South Peninsula District  
Term Expires 2028

### ZOOM MEETING DETAILS

Zoom Meeting Link: <https://us06web.zoom.us/j/9077142200>  
Zoom Toll Free Phone Numbers: 888-788-0099 or 877-853-5247  
Zoom Meeting ID: 907 714 2200

### A. CALL TO ORDER

### B. ROLL CALL

#### PLAT COMMITTEE MEMBERS:

- Jeremy Brantley, Sterling District
- Pamela Gillham, Kalifornsky/Kasilof District
- Virginia Morgan, Cooper Landing/Hope/Eastern Peninsula District
- Franco Venuti, City of Homer
- Paul Whitney, City of Soldotna

### C. APPROVAL OF AGENDA AND CONSENT AGENDA

(Action items listed with an asterisk (\*) are considered to be routine and non-controversial by the Planning Commission and will be approved by one motion. There will be no separate discussion of these items unless a Commissioner so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.)

#### ACTION ITEMS CURRENTLY ON CONSENT AGENDA:

- \*1. **Agenda**
- \*2. **Excused Absences - None**
- \*3. **Minutes**
  - a. April 13, 2026 Plat Committee Meeting Minutes
- \*4. **Grouped Plats**
  - None

**Motion to approve the agenda and the April 13, 2026 Plat Committee minutes passed by unanimous vote (5-Yes).**

### D. UNFINISHED BUSINESS – None

## E. NEW BUSINESS

**Public Hearing: Quasi-Judicial Matters** *(Commission members may not receive or engage in ex-parte contact with the applicant, other parties interested in the application, or members of the public concerning the application or issues presented in the application)*

Platting Staff Contact: Platting Manager Vince Piagentini

1. Forest Hills Lookout Subdivision Morrison Addition; KPB File 2026-031  
Johnson Surveying / Morrison  
Location: Paper Birch Lane, Quillback Drive & Moran Street  
Sterling Area

**Motion to grant preliminary approval passed by unanimous vote (5-Yes)**

2. Benjamin Bardarson Subdivision 2025 Replat; KPB File 2025-037  
Peninsula Surveying / Salmon Bake Cabins, LLC  
Location: Herman Leirer Road & Bronze Avenue  
Bear Creek Area

**Motion grant the exception to KPB 20.60.150 – Utility Easements, passed by unanimous vote . (5-Yes).**

3. **Fox River Estates 2026 Replat; KPB File 2026-030**  
Peninsula Surveying / Weisser  
Location: Hubbard Lane & Cloverdale Circle  
Fritz Creek Area

**Motion to grant preliminary approval passed by unanimous vote (5-Yes)**

**Motion to grant the exception to KPB 20.30.200(B) – Lots Minimum Size for Tract 2B-1, passed by unanimous vote (5-Yes)**

## F. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA (3 MINUTES PER SPEAKER)

## G. ADJOURNMENT

### MISCELLANEOUS INFORMATIONAL ITEMS

#### NEXT REGULARLY SCHEDULED PLAT COMMITTEE MEETING

The next regularly scheduled Plat Committee meeting will be held **Monday, May 11, 2026** in the Betty J. Glick Assembly Chambers of the Kenai Peninsula Borough George A. Navarre Administration Building, 144 North Binkley Street, Soldotna, Alaska at **6:30 p.m.**

#### CONTACT INFORMATION

##### KENAI PENINSULA BOROUGH PLANNING DEPARTMENT

Phone: 907-714-2215 / Toll free within the Borough 1-800-478-4441, extension 2215

e-mail address: [planning@kpb.us](mailto:planning@kpb.us)

website: <http://www.kpb.us/planning-dept/planning-home>

A party of record may file an appeal of a decision of the Planning Commission in accordance with the requirements of the Kenai Peninsula Borough Code of Ordinances. An appeal must be filed with the Borough Clerk within 15 days of the notice of decision, using the proper forms, and be accompanied by the filing and records preparation fees.



## Kenai City Council - Regular Meeting

May 06, 2026 — 6:00 PM

Kenai City Council Chambers

210 Fidalgo Avenue, Kenai, Alaska

[www.kenai.city](http://www.kenai.city)

**\*\*Telephonic/Virtual Information on Page 3\*\***

### Action Agenda

#### A. CALL TO ORDER

1. Pledge of Allegiance
2. Roll Call
3. Approval of the Agenda and Consent Agenda (*Public comments on Consent Agenda Items limited to three (3) minutes per speaker; thirty (30) minutes aggregated*)

\*All items listed with an asterisk (\*) are considered to be routine and non-controversial by the council and will be approved by one motion. There will be no separate discussion of these items unless a council member so requests, in which case the item will be removed from the consent agenda and considered in its normal sequence on the agenda as part of the General Orders.

#### B. SCHEDULED ADMINISTRATIVE REPORTS

#### C. SCHEDULED PUBLIC COMMENTS (*Public comments limited to ten (10) minutes per speaker; twenty (20) minutes aggregated*)

#### D. UNSCHEDULED PUBLIC COMMENTS (*Public comments limited to three (3) minutes per speaker; thirty (30) minutes aggregated*)

#### E. PUBLIC HEARINGS

1. **ENACTED WITHOUT OBJECTION. Ordinance No. 3513-2026** - Amending Kenai Municipal Code Chapter 7.15 - Purchases and Sales, to Remove Requirements to Publish Advertisements in Newspapers. (Administration)
2. **ENACTED WITHOUT OBJECTION. Ordinance No. 3514-2026** - Increasing Estimated Revenues and Appropriations in the General Fund and Airport Fund and Awarding a Contract for Purchase of Firefighting Foam. (Administration)
3. **ENACTED WITHOUT OBJECTION. Ordinance No. 3515-2026** - Increasing Estimated Revenues and Appropriation in the Airport Snow Removal Equipment Capital Project Fund to Transfer Residual Balance from a Completed Project Back to the Original Funding Source. (Administration)
4. **ENACTED WITHOUT OBJECTION. Ordinance No. 3516-2026** - Increasing Estimated Revenues and Appropriations in the General Fund - Fire Department for Overtime Costs in Excess of Budgeted Amounts. (Administration)
5. **ENACTED WITHOUT OBJECTION. Ordinance No. 3517-2026** - Increasing Estimated Revenues and Appropriations in the General Fund and Authorizing a Consulting Agreement to Evaluate Natural Gas Storage Opportunities on Kenai Municipal Airport Lands. (Administration)

6. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-29** - Authorizing the Purchase of a new Ventrac Tractor and Attachments Utilizing Innovative Procurement. (Administration)
7. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-30** - Authorizing a Contract Award for the 2026 Fire Systems Testing, Inspection and Monitoring. (Administration)
8. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-31** - Authorizing the City Manager to Enter into an Airline Operating Agreement and Terminal Area Lease with Fox Air, LLC. (Administration)
9. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-32** - Authorizing Extension of a Contract for Purchase of Water and Wastewater Chemicals. (Administration).
10. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-33** - Authorizing Extension of a Contract for Refueling Services for City Facility Fuel Tanks. (Administration)
11. **APPROVED WITHOUT OBJECTION. Resolution No. 2026-34** - Affirming City Support of Non-Discrimination Policies as Outlined in Title VIII of the 1968 Civil Rights Act Known as the Federal Fair Housing Act to Comply with Certain Grant Requirements. (Administration)

#### F. MINUTES

1. \*Regular Meeting of April 22, 2026. (City Clerk)

#### G. UNFINISHED BUSINESS

1. **POSTPONED TO MAY 20, 2026. Ordinance No. 3510-2026** - Amending the Official Zoning Map by Rezoning the Property at 10060 Kenai Spur Highway from Conservation to Suburban Residential Zoning District. (Administration)

**Ordinance No. 3510-2026 (Substitute)** - Amending the Official Zoning Map by Rezoning a Portion of the Property at 10060 Kenai Spur Highway from Conservation to Suburban Residential Zoning District. (Administration)

*[Clerk's Note: At the April 1, 2026 City Council Meeting, Ordinance No. 3510-2026 was postponed to May 6, 2026. At the May 6, 2026 meeting, Ordinance No. 3510-2026 (Substitute) was referred back to Planning and Zoning Commission to hold a Public Hearing at their May 27, 2026 meeting and make a recommendation for City Council to take back up Ordinance No. 3510-2026 (Substitute) at the June 3, 2026 Council meeting.]*

#### H. NEW BUSINESS

1. **\*Action/Approval** - Bills to be Ratified. (Administration)
2. **\*Action/Approval** - Consent to Assignment of Lease Agreement, of Lot 1, Block 5, General Aviation Apron No. 1 Amended. (Administration)
3. **\*Action/Approval** - Special Use Permit to Weaver Brothers, Inc. for Truck Trailer Storage. (Administration)
4. **\*Ordinance No. 3518-2026** - Amending Kenai Municipal Code Title 6 - Elections, Chapters 6.05, 6.15 and 6.40 Relating to Election Dates, Candidate Filing, Compensation of Election Officials, and Canvassing of Elections. (City Clerk)
5. **\*Ordinance No. 3519-2026** - Accepting and Appropriating Grant Funds from the Alaska High Intensity Drug Trafficking Area for Drug Investigation Overtime Expenditures (Administration)

6. **\*Ordinance No. 3520-2026** - Amending Kenai Municipal Code Chapter 14.10 - Subdivision Regulations and Amending Kenai Municipal Code Section 18.10.030 - Street Improvements to Remove Road Design Standards from Code and Replace them with a Street Design Standards Manual. (Administration)
7. **APPROVED. Action/Approval** - Council on Aging Commission 2026 Work Plan. (Council on Aging Commission)
8. **WORK SESSION SCHEDULED FOR MAY 20, 2026 AT 5:00 P.M. Discussion** - Parks and Recreation Masterplan Memo.

**I. COMMISSION REPORTS**

1. Council on Aging Commission  
    Council on Aging Commission 2025 Annual Report
2. Airport Commission
3. Parks and Recreation Commission
4. Planning and Zoning Commission
5. Beautification Commission

**J. REPORT OF THE MAYOR**

**K. ADMINISTRATION REPORTS**

1. City Manager
2. City Attorney
3. City Clerk

**L. ADDITIONAL PUBLIC COMMENTS**

1. Citizens Comments (*Public comments limited to five (5) minutes per speaker*)
2. Council Comments

**M. EXECUTIVE SESSION**

**N. PENDING ITEMS**

**O. ADJOURNMENT**

**P. INFORMATION ITEMS**

*The agenda and supporting documents are posted on the City's website at [www.kenai.city](http://www.kenai.city). Copies of resolutions and ordinances are available at the City Clerk's Office or outside the Council Chamber prior to the meeting. For additional information, please contact the City Clerk at 907-283-8231.*

**Registration is required to join the meeting remotely through Zoom.** Please use the following link to register:

<https://us02web.zoom.us/meeting/register/1G3Sxc4dQiOWoM97EvEGLA>