

Kenai Peninsula Borough

Flood Plain Task Force
March 18, 2009
6:00 PM



photo by: Chris Becker

Seward City Hall, Upstairs Conference Room
410 Adams Street., Seward

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Kenai Peninsula Borough

Flood Plain Task Force

March 18, 2009 - 6:00 p.m.

Regular Meeting

Seward City Hall, 410 Adams Street, Seward

Ron Long
Assembly Member

Charlie Pierce
Assembly Member

Kevin Lyon
Capital Projects

Dan Mahalak
Capital Projects

Jane Gabler
Kenai River Center

Holly Montague
Legal Department

Scott Walden
Office of Emergency
Services

Todd Peterson
Planning Commission

Sue McClure
Planning Commission

Max Best
Planning Department

Ron Wille
Road Service Area
Board

Bill Williamson
Seward Bear Creek
Flood Service Area

Randy Stauffer
Seward Bear Creek
Flood Service Area

Jim McCracken
Public Representative

Robert Hicks
Public Representative

Matt Gray
Public Representative

Christie Terry
City of Seward
Planning Department

Staff:

Shellie Morgan
Deputy Clerk

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Kenai Peninsula Borough

Flood Plain Task Force Meeting Summary

March 4, 2009 - 6:00 p.m.

Regular Meeting

Seaview Plaza, Suite 123, Seward

CALL TO ORDER

A regular meeting of the Flood Plain Task Force was held on March 3, 2009, in Suite 123 of the Seaview Plaza, Seward, Alaska. Chair Long called the meeting to order at 6:00 p.m.

There were present:

Ron Long, Chair	Kevin Lyon
Charlie Pierce, Vice Chair	Dan Mahalak
Bill Williamson	Max Best
Randy Stauffer	Jane Gabler
Ron Wille	Jim McCracken
Todd Petersen	Matt Gray
Sue McClure	Christy Terry
Scott Walden	Colette Thompson

Absent:

Bob Hicks (Excused)

Also in attendance was:

Shellie Morgan, Deputy Clerk
Christina Stauffer, Seward-Bear Creek Flood Service Area
Claudia Neckleson, KPB Seward Office

WELCOME AND INTRODUCTIONS

Chair Long welcomed everyone to the first meeting of the Flood Plain Task Force and thanked them for attending. He summarized Resolution 2009-05 which outlined the mission of the task force.

GOALS AND OBJECTIVES

Chair Long stated he had no preconceived expectations of the task force, when the moratorium was suggested he received numerous comments of objection, the task force was created as an alternative to the moratorium. He proposed a two step process; the first step being Ordinance 2009-09 which would create a flood hazard district outside of the flood insurance rate map area; the second step would be done through the task force reviewing all aspects that effect flood plain management, such as planning and zoning, subdivision, and road related codes.

Chair Long stated the collective knowledge in the task force, would be used to improve on Borough Code. He stated that during the March 3, 2009 Assembly Meeting an amendment was made to Borough Staff appointed to the task force making the positions ex-officio. He said that it would take the efforts of the Service Area, Borough Assembly and Legislature to achieve a permanent fix.

Mr. McCracken stated one goal should be to have the Borough receive a royalty portion of the navigable river.

Mr. Lyon said there was a challenged navigability on Salmon Creek and others. He said a Department of Natural Resources meeting was scheduled for March 6, 2009.

Mr. Walden stated one important issue was providing proof that Homeland Security needed to continue assistance in the area. He said it would be helpful in the future when requesting assistance from FEMA to show that the community and local governing body had worked together on the problem.

Chair Long stated there might be a way to come up with more community rating points.

Mr. Stauffer commented on the sunset clause within Ordinance 2009-09, and asked if it would be a goal of the task force to have a permanent solution available when Ordinance 2009-09 met its sunset date.

Chair Long stated that the Ordinance could be extended or there may be alternative ideas to the Ordinance at the sunset of Ordinance 2009-09.

Mr. Wille asked if anyone had addressed the fee being charged by the Department of Natural Resources (DNR) for gravel removal, and if DNR was aware of the opposition to the fee. He noted the Seward Bear Creek Flood Service Area had written a mitigation plan and a valuable option would be for the task force to find ways to implement the plan.

Mr. Walden agreed with Mr. Wille, and said the charge being applied by DNR for gravel removal, was due to DNR classifying gravel as a mineral. He said DNR made no accommodation for flood response or mitigation and applied the charge regardless of it being a flood response or mitigation removal, the cost was usually fifty cents per cubic yard, with the first 5,000 cubic yards exempt.

Chair Long stated that redefinition of gravel would be an option; however, it was written into the constitution, and the constitution would have to be amended.

Mr. Gray stated Channel Migration Zone (CMZ) seemed like a scientific approach to the problem, and he felt it was in the best interest of the task force to pursue this option further.

Ms. Thompson stated there were multiple options that should be explored; reclassifying gravel, buy out options for property owners, and an alternate ways of controlling the stream flow. She said each of these ideas could be used to identify specific problems in multiple locations.

Mr. Petersen said the planning department received plats that were in known problem areas, and there needed to be a way to identify the problem on the plat. He noted that CMZ had potential and felt it should be further explored.

PUBLIC COMMENT

Bob White, PO Box 201, Seward, said he would like to see something put in place that allowed the Planning Department to deny subdivisions based on safety and hazard. He said there was a large piece of land in the area that could be a potential problem, depending on how the owner choose to develop it. The unknowing property owners who purchase land and built their homes on it were the ones who had to deal with flood damages, and regulations put on the property at a later date.

Claudia Neckleson, KPB Seward Office, said she was concerned due to the number of people looking to buy land at an inexpensive price, and the less expensive lands were generally in the flood zones. She said she would like some type of enforcement options included with the changes made to Borough Code.

Chair Long said enforcement had been brought up at a service area meetings, and since there was no law enforcement available for this type of enforcement, it would have to be a civil enforcement, and funds would be required for a test case. He said it would rely on self policing, and to be successful, the community would have to be in full support.

Mr. Petersen said Ms. Neckleson's statements were accurate, and one answer would be opening up some of the public lands owned by the Borough.

Mr. Williamson said the Service Area had been working on maps to increase the credibility of the community. He said every year a location within the area floods and gathering the data would enforce the credibility that a real problem existed.

Mr. McCracken said another options was property owners donating flood property, the owners would then get a large conservation credit that could be used toward a purchase of new land.

Ms. Terry said an option to consider would be applying covenants on the property.

Jay Bishop, 1772 Clear Creek, Seward, stated there was a piece of property north of his home that could be used to alleviate flooding problems, and he felt the Borough should consider purchasing it .

Jim Conant, 11724 Seward Highway, Seward, said he would like to see more access through the Nash Road area.

CHANNEL Migration ZONE INTRODUCTION

Dan Mahalak and Kevin Lyon gave a presentation on Channel Migration Zone (CMZ). Mr. Lyon stated the object of a CMZ was to protect human life and health, minimize expenditure of public money for costly flood control projects and damages to public infrastructure, rescue and relief efforts associated with flooding, and damage to critical fish and wildlife habitat areas. He said it would also ensure potential buyers were aware the property was in a flood hazard area, and occupants of flood hazard areas would assume responsibility for their actions.

Mr. Lyon said it would provide a long term understanding of landscape evolution, and address issues that the current National Flood Insurance Program (NFIP) did not address. He said CMZ refers to areas where a stream or river has been and will be susceptible to channel erosion and channel occupation, he stated that human landscape disturbance can exaggerate or constrain channel migration.

Mr. Mahalak used maps and demonstrated the river bank recession from 2006 through 2008, the avulsion near Bear Lake Subdivision, and the change in active channels from 1930 through 2000. He explained channel behaviors being effected by slope, flow, sediment load, and sediment size, he addressed predicted changes due to climate change, and the factors used to set channel migration area boundaries.

Mr. Mahalak stated Flood Insurance Rate Map (FIRMS) was based on a fixed bed hydraulics and had limited application in planning areas for safe development. He said CMZ delineation reduced risk by guiding development away from areas prone to channel erosion.

Mr. Lyon said the current flood plain management regulations did not account for streams subject to sediment driven events, and the FEMA flood maps were inaccurate over relative term.

DISCUSSION OF ORDINANCE 2009-09

Chair Long said Ordinance 2009-09 was a short term attempt to address the problem, it would not affect city limits, existing developments, or existing structures. He said it was not an attempt to regulate anything that had already happened on those parcels, an ideal outcome would be a level of protection for residents based on the principals of disclosure, so people would know the consequences of their development. He said there was an obligation to provide some type of protection and there needed to be regulations outside of the currently mapped flood zones.

QUESTIONS

Ms. Stauffer asked why the Borough was using Ordinance 2009-09 to address the problems, instead of adding more historic zones. Mr. Lyon said once the areas were added they could not be removed.

Ms. Terry asked why the Borough was adding more regulation, instead of adjusting the current regulations. Mr. Lyon said the Borough was adding at a minimal level, they did not want to be as strict as the FEMA regulations.

Mr. Gray asked if the task force would be reviewing the regulations in the Flood Insurance Rate Maps (FIRMS). Mr. Long said the regulations were available on-line for any members who would like to review them.

Ms. Thompson said it was concerning to impose regulations on areas outside of the FEMA map because of the liability, and FEMA did not update the maps on a regular basis.

Mr. McCracken asked if the sunset provision in Ordinance 2009-09 could be modified at a later date. Mr. Long said he did allow for provisions to the sunset date to be made.

Ms. Gabler stated concerns with the general public in the creeks removing material, due to a previous incident which caused damages, she asked how this was going to be addressed in the application process of this type of project. Mr. Long said implementation of a check off permit application would help, engineer's or surveyors checking off on a permit, determine if the property was within a flood zone, and in-house staff approval.

Mr. McCracken stated that due to the short construction season the turnaround time for application approval had to be addressed.

DISCUSSION OF PROPOSED FEMA MAPS

Mr. Mahalak stated that he had all of the data requirements being utilized by FEMA in the process of making FEMA maps, and had the capability of making maps in-house.

Mr. Stauffer stated one problem was a large portion of mapped area was class C, and FEMA was no longer using class C zones, so these areas had to be re-zoned.

GENERAL DISCUSSION AND QUESTIONS

Ms. Terry asked if the Borough would consider recording a document warning the potential buyers. Ms Thompson said it could be done.

Mr. Stauffer said the flood board had recommended information being added to maps, and to the plats.

Chair Long asked how difficult it would be to add a note of warning to maps and plats? Mr Lyon said an appeal process should be available to the owners prior to applying warnings, since floods did not always affect the entire piece of property, and applying a warning to this type of property would be done incorrectly.

Mr. Best stated there were current warnings stating the area was subject to flooding; however, they were not identified by parcel.

Mr. Williamson said the best thing we could do was get updated maps and correct information out to the public.

Mr. Stauffer said the Seward-Bear Creek Flood Service Area voted unanimously to not allow a plat for the CIRI phase five development; however, there was no code that allows them to prevent the plat.

Mr. Gray said we need a credible planning tool like the CMZ program, this type of plan would be possible two to three years from now; however, there was not much that could be done right now.

Mr. Petersen asked if the plat being approved on CIRI land could have a note added showing the flood zones. Mr. Best stated that would need to go through legal to address the Borough's authority to add the note. Ms. Thompson stated a general statement could be put in suggesting the purchaser consult with the Kenai Peninsula Borough Planning Department.

Ms. Stauffer stated that if the plat notes were in a readable size, people may pay more attention to them.

Mr. McCracken suggested the possibility of posting signs on the roads leading to properties subject to flooding, stating the facts regarding past and possible future floods.

Mr. Wille suggested the Borough look into options regarding a possible land swap with CIRI now instead of doing it later with individual property owners who had improved the lots.

TASK FORCE MEETING AND ANNOUNCEMENTS

The next meeting of the Flood Plain Task Force was scheduled for March 18, 2009 at 6:00 p.m.

ADJOURNMENT

The committee adjourned at 8:30 p.m.

activity shall be conducted only in accordance with the issued permit conditions. Permits shall be issued subject to the conditions set forth in this chapter and any road service area resolutions adopted consistent with this chapter.

- C. No private person, individual, or entity may, by any manner, regulate or purport to regulate the flow of traffic, or place any traffic regulatory device or sign within a right-of-way without the express permission of the Kenai Peninsula Borough. Nor may any private person, individual, or entity prevent others lawful use of the right-of-way by constructing or erecting any barricade or other blockage.

(Ord. No. 2000-57, § 7, 12-12-00)

14.40.040. Right-of-way use permits.

The borough shall issue the following types of right-of-way use permits for borough rights-of-way:

- A. *Right-of-way construction permits.* Right-of-way construction permits are issued for construction of roads, driveways, trails and any blockading which impedes traffic flow or lawful use of rights-of-way related to construction, which include the following types of permits:
1. Driveway permits for intersections within borough rights-of-way between private drives and borough rights-of-way.
 2. Seasonal permits may be issued to someone holding a State of Alaska contractor's license. Such permits shall be valid from May 1 through November 15 of each year for all projects a contractor is constructing to the typical section under KPB 14.06.120(A). Projects within the right-of-way not constructed to the typical section require a project-specific permit or a driveway permit. In order for the seasonal permit to remain in effect, the contractor must hold a current contractor's license issued pursuant to title 8 of the Alaska Statutes, and must not be in arrears in any financial obligations to the borough. A contractor must provide 48 hours' written notice to the borough prior to commencing construction on each individual road subject to the seasonal permit. Facsimile notice is acceptable. The contractor shall also provide a list of roads constructed under that year's seasonal permit no later than December 31 of the year in which the permit was granted.
 3. Project-specific construction permits for all construction within a borough right-of-way that is not covered by a seasonal permit or a driveway permit. Project-specific permits require improvement of a right-of-way, and may require improvement to borough standards set forth in KPB 14.06, Road Construction Standards.
- B. *Maintenance permits.* Maintenance permits are issued for citizen maintenance for borough rights-of-way. All maintenance and improvements of borough-maintained roads shall be performed in accordance with the road service area policies as adopted by the mayor.

- C. *Oversize and overweight permits.* Vehicle oversize and overweight permits are issued by the roads director for vehicles exceeding the gross weight, height, or width set forth in 17 AAC 25, and any regulation of the flow of traffic or use of rights-of-way related to rights-of-way use by oversize and overweight vehicles.
- D. *Prior permits; expiration.* Permits issued prior to the adoption of these regulations shall be valid for three months after the effective date of these regulations. Permits which are not fulfilled within this time frame shall expire, however, permittee may request a new permit under current regulations.
- E. *Permits; priority.* Multiple permits may be issued for a right-of-way where the applications do not present a conflict. Permits may be issued for an upgraded or different use of a right-of-way, or section of right-of-way, which is already subject to a permit. The director has discretion to determine how to resolve conflicts over right-of-way permits in the borough's best interest.

(Ord. No. 2001-06, § 7, 4-17-01; Ord. No. 2000-57, § 8, 12-12-00; Ord. No. 99-48, § 2, 8-17-99; Ord. No. 96-24, § 1(part), 1996)

14.40.050. Right-of-way construction permit required.

A right-of-way construction permit is required under the circumstances set forth in this section.

- A. *Construction.* Construction permits are required for construction of a road or driveway within a dedicated right-of-way.
- B. *Traffic flow; barricades.* Construction permits are required to regulate the flow of traffic, to place any traffic regulatory device or sign within a dedicated right-of-way, or for placement of any barricade or blockage which impedes lawful use of a constructed right-of-way, or right-of-way under construction.
- C. *Information required.* The following information shall be required for all applications to construct, improve, or alter a borough right-of-way:
 - 1. A statement of the length and width of right-of-way to be constructed, the proposed uses after construction, and a drawing on the plat of the location and proposed design and method of the construction;
 - 2. Approximate locations of flood plain, floodways, wetlands, streams, lakes, or other water bodies adjacent to or within 50 feet of the outer boundaries of the right-of-way;
 - 3. Approximate grades of the natural terrain and final grade of the proposed road;
 - 4. Soil conditions of the area subject to construction;
 - 5. Identification of all properties to be served or accessed by the proposed construction;
 - 6. Amount, type and placement of materials used in construction; and

7. Where information provided by existing topographic maps, aerial photography, and photographs is inadequate to accurately reflect conditions of the right-of-way or potential problems created or exacerbated by construction, additional information, surveys, or engineering analysis may be required prior to issuance of a permit.

(Ord. No. 98-09, § 1, 6-16-98; Ord. No. 96-24, § 1(part), 1996)

14.40.060. Permit application and conditions.

The following application procedures and conditions must be met for right-of-way construction permits:

A. *Application form.* A right-of-way construction permit may be obtained by filing an application on a form provided by the borough, which contains the information required by KPB 14.40.050(C). The construction activity shall be conducted only in accordance with the issued permit conditions.

B. *Mandatory conditions.* All permits shall be subject to the following conditions:

1. The permittee has responsibility to properly locate the proposed facility within the named right-of-way and to coordinate its construction activity with utilities in the same right-of-way.
2. Driveways or roads crossing utility installations shall cross as nearly perpendicular as possible to the utility line. The line locator phone number shall be included on the permit form by the borough.
3. The Kenai Peninsula Borough disclaims any warranty or liability regarding location or coordination with utility companies.
4. Materials or trees shall not be used or removed except to the extent necessary to construct the road or driveway and provide adequate snow storage areas. Gravel may not be mined from any borough right-of-way unless the permittee has specific prior written approval by RSA staff.
5. The permittee must agree to comply with the terms, conditions and requirements of KPB Chapter 14.40, and any regulations adopted pursuant to this chapter.
6. All permits shall contain an expiration date determined by the roads director.
7. Upon completion, permittee shall agree not to restrict the flow of traffic, place traffic signs, or prevent use by the public unless prior approval has been received from the borough.
8. The permittee shall indemnify, defend, and hold and save the borough, its elected and appointed officers, agents and employees harmless from any and all claims, demands, suits, or liability of any nature, kind or character including costs, expenses, and attorneys fees. The permittee shall be responsible under this clause for any and all legal actions or claims of any character arising from applicant or applicant's agents' performance or failure to perform this permit in any way whatsoever. This defense and

indemnification responsibility includes claims alleging acts or omissions of the borough or its agents, which are said to have contributed to the losses, failure, violations, or damages.

9. Permittee is responsible for determining the need for any other local, state, or federal permits and acquiring the same. Permittee must abide by all applicable local, state, and federal laws.
10. Violation of the permit's terms may result in its termination and/or an assessment of penalties against the permittee. The borough reserves the right to revoke the permit at any time for its convenience.
11. Construction of rights-of-way for motor vehicle use within the Kenai Peninsula Borough Road Service Area under a seasonal permit shall meet the borough road standards set forth in KPB 14.06. All other construction projects are subject to either a driveway or a project-specific permit, and may be required to meet road construction standards pursuant to road service area board policies approved by the mayor. Construction shall not damage the right-of-way, adjacent properties, or adjacent water bodies.

C. *Discretionary conditions.* The director may impose the following discretionary conditions:

1. The permit may be subject to additional conditions to protect and manage borough rights-of-way by preventing damage to the rights-of-way and adjacent public and private property or water bodies.
2. The posting of a bond in favor of the borough or other security may be required for permits involving right-of-way construction, except driveway construction permits. The amount of bond shall be based on the length of right-of-way subject to construction. The bond shall be released upon the receipt of the as-built survey and the borough's determination that the construction has been performed in compliance with permit requirements, within the boundaries of the right-of-way, and does not pose a threat to the right-of-way or adjacent lands and water bodies. The bond warrants the permittee will faithfully observe the terms and conditions of the permit and may be used to defray any costs for restoration and rehabilitation of the property, including without limitation environmental damage and cleanup. The bond may be in the form of a certificate of deposit ("CD") of a term specified by the borough appropriate to the period of time it will take to complete construction. The certificate of deposit shall be in the borough's name, deposited with a duly licensed commercial bank having a branch office in Soldotna, Alaska. Principal and interest may be applied to defray any costs incurred by the borough in rehabilitation and restoration of the right-of-way. Upon satisfactory compliance with all permit conditions and termination of the permit, any balance remaining, including any remaining accrued interest, will be returned to the permittee. The security, bond or CD shall not be the borough's exclusive monetary remedy if the costs of restoration and cleanup exceed the amount of the CD.

3. A right-of-way construction permit may be denied if conditions cannot be placed on it to prevent damage to the rights-of-way, adjacent public or private property, or water bodies. Dedication of right-of-way alone does not mean a construction permit will be issued if issuance may damage the right-of-way, adjacent private or public property, or watercourses and water bodies.
4. Upon completion of construction, the permittee shall provide an as-built drawing prepared by a professional land surveyor registered to practice in Alaska under AS 8.48, if deemed necessary by the roads director.

D. *[Reserved.]*

(Ord. No. 2008-03, § 1, 4-1-08; Ord. No. 2003-16, § 1, 6-3-03; Ord. No. 2000-57, §§ 4, 9, 12-12-00; Ord. No. 99-48, § 4, 8-17-99; Ord. No. 98-09, §§ 2—4, 6-16-98; Ord. No. 96-24, § 1(part), 1996)

14.40.061. Additional requirements for waterbody access and crossing permits.

A. *Stream crossing permit conditions.*

1. A project-specific permit issued pursuant to KPB 14.40.040—14.40.060 is required for waterbody crossings where a dedication crosses a waterbody catalogued as important to the protection of anadromous fish under AS 41.14.870(a), which shall be renumbered as AS 16.05.871 effective July 1, 2008, as now enacted or hereinafter amended.
2. Project-specific permits for crossing an anadromous waterbody within a dedicated right-of-way will only be issued upon receipt by the RSA of an applicant's completed applications for project permits to the United States Army Corps of Engineers and Alaska Department of Natural Resources Office of Habitat Management and Permitting, changed after July 1, 2008 to the Alaska Department of Fish and Game Division of Habitat. It shall be the sole responsibility of all applicants for project-specific permits to ensure compliance with all applicable state and federal law, including permitting requirements.
3. Anadromous waterbody crossings and approaches shall be designed to withstand a 100-year flood event as defined by KPB 21.06.020(K). The crossing shall be designed by a licensed professional civil engineer. The design shall be presented to the RSA board for review and approval prior to construction. The engineer shall certify that the crossing and approaches are constructed to withstand a 100-year flood event.
4. Project specific permits issued pursuant to KPB 14.40.060 that permit work within a right-of-way within 250 feet of the ordinary high water mark on both sides of a dedicated crossing of an anadromous waterbody catalogued under AS 41.14.870(a), renumbered as AS 16.05.871 effective July 1, 2008, shall require a crossing to be constructed within the dedicated right-of-way as a permit condition.

B. *Waterbodies.* Right-of-way construction permits pursuant to KPB 14.40.040—14.40.060 will not be issued to construct any part of a road or driveway or other development within the right-of-way where the construction or development will be parallel and within 100 feet of the

ordinary high water mark of a watercourse or lake unless necessary for access to a lot where no reasonable alternative access exists or unless the road is for access to a bridge or public facility, waterbody, or watercourse.

C. *Development conditions for rights-of-way accessing water bodies.* No development within 100 feet of the high water mark of a waterbody within a right-of-way providing access to the waterbody may occur without a permit. All permits issued under this section shall be submitted to the RSA board for its consideration. A written RSA staff report shall be provided to the RSA board with every permit application. The staff report shall include comments from the planning department. The RSA board shall make written findings to support denial or issuance of the permit. There must be facts which support the following standards in order to issue a waterbody public access permit.

1. Any development in the right-of-way will not be detrimental to the waterbody, or any potential detriment is mitigated by conditions placed on the permit;
2. Any development in the right-of-way will not be detrimental to adjacent public or private property; and
3. The public benefit of development in the right-of-way outweighs the potential detriment to the public interest caused by the development. Any detriment to the public interest must be mitigated through permit conditions to the maximum extent reasonably possible.

(Ord. No. 2008-03, § 2, 4-1-08)

14.40.065. Maintenance permits.

A. A maintenance permit is required for rights-of-way which are subject to citizen maintenance. Permits for citizen maintenance on borough rights-of-way shall be issued by the roads director. A maintenance permit is not required for snow removal on roads not certified for maintenance by the road service area.

B. Maintenance includes, but is not limited to, snow removal; grading; replacing lost gravel (not to exceed a depth of six inches); reshaping shoulders, slopes, and ditches; unplugging culverts and clearing ditches; filling potholes; dust control; and other similar activities consistent with the goals set forth in subsection A. Maintenance does not include such activities as relocating a road; survey and design of road; widening a road; adding lost material in excess of six inches in depth; and other such activities that would constitute road construction as opposed to road maintenance. Construction within a borough right-of-way must comply with the right-of-way construction permit provisions of KPB 14.40.

C. Citizens applying to perform maintenance on a borough right-of-way must file an application which shall include: the applicant's name, mailing address, physical address, and phone number; the name of the person or contractor performing the work; the name of the road and the location where the maintenance will be performed; the time frame within which the maintenance will be performed; the quantity and quality of material to be used in performing

the maintenance; and the equipment to be used in performing the maintenance. A single application may be filed for several rights-of-way or for ongoing seasonal maintenance. Applicants for seasonal maintenance shall reapply each year.

D. Citizen maintenance shall limit interference with the traveling public, and shall not create a hazard to the road, the traveling public, or adjacent properties. The director may require security in the form of a bond, certificate of deposit, or certified check or other practical means to ensure compliance with the terms of these application procedures. The citizen shall hold the borough harmless for the maintenance that is the subject of the application.

E. The director shall issue approvals or denials of applications for citizen road maintenance. If the basis for denial is that the project constitutes construction, and not maintenance, the applicant shall be advised of the right-of-way construction permit process.

F. There shall be no fee for citizen maintenance applications.
(Ord. No. 2000-57, § 10, 12-12-00; Ord. No. 99-48, § 5, 8-17-99)

14.40.070. Oversize and overweight permits—Size and weight restrictions.

A. Regulation establishment. If it is determined by the road service area director that oversize and overweight regulations are needed within the road service area, the road service area director shall decide to which rights-of-way the restrictions will apply. The rights-of-way proposed for regulation shall be published in a newspaper of general circulation within the borough at least once before imposition, with the first date of published notice being at least seven days prior to imposition. The notice shall be published two additional times in a newspaper or newspapers of general circulation within the road service area while the restrictions are in place. The roads director shall provide a report of the restrictions to the service area board prior to or at the next meeting of the road serviced area board. The road service area board may modify the restrictions. Restrictions for particular rights-of-way remain in place unless modified or discontinued by the road service area director through publication of a notice in a newspaper of general circulation within the road service area.

B. Permit required. An oversize and overweight permit is required for those vehicles and equipment exceeding the gross weight, width and height set forth in 17 AAC 25. The permit may be obtained from the road service area administrative office by filing an application on a form provided by the borough.
(Ord. No. 2000-35, § 1, 9-12-00; Ord. No. 98-09, § 5, 6-16-98; Ord. No. 96-24, § 1(part), 1996)

14.40.080. Oversize and overweight permits—Application.

The application must provide at a minimum the information required by this section.

- A. Right-of-way. The applicant shall provide the name and location of the right-of-way in which the oversize or overweight vehicle(s) or equipment will be used.
- B. Vehicles. The applicant shall list the vehicle(s) or equipment which will be used.

- C. Weight, size. The applicant shall provide the gross weight, width, height, and number of axles for each vehicle(s) or equipment which will be used.
 - D. Load classification. The applicant shall provide the classification of any material to be hauled within the right-of-way as either agricultural, forestry, fishery, or other appropriate classification, if none of the foregoing is applicable.
 - E. Contact. The applicant shall provide the applicant's name, mailing address, physical address, day and evening phone numbers, facsimile phone number, and secondary contact person.
 - F. Registration. The applicant shall provide a copy of the current vehicle registration and vehicle license plate numbers.
 - G. Additional information. The applicant shall provide such other additional information as the director or his/her designee deems necessary to ensure protection of the right-of-way.
- (Ord. No. 96-24, § 1(part), 1996)

14.40.090. Oversize and overweight permits—Mandatory conditions.

All oversize and overweight permits shall be subject to the conditions set forth in this section.

- A. Hold harmless. The permittee shall indemnify, defend, and hold and save the borough, its elected and appointed officers, agents and employees harmless from any and all claims, demands, suits, or liability of any nature, kind or character including costs, expenses, and attorneys fees. The permittee shall be responsible under this clause for any and all legal actions or claims of any character resulting from injuries, death, economic loss, damages, violation of statutes, ordinances, constitutions or other laws, rules or regulations, contractual claims, or any other kind of loss, tangible or intangible, sustained by any person, or property arising from permittee or permittee's agents' performance or failure to perform this permit in any way whatsoever. This defense and indemnification responsibility includes claims alleging acts or omissions of the borough or its agents, which are said to have contributed to the losses, failure, violations, or damages.
- B. Permit on request. The operator must be able to produce an issued permit upon request.
- C. Vision restrictions. No equipment or vehicle operation in borough rights-of-way is allowed if vision is restricted to less than 1,000 feet by inclement weather. The operator must travel with lights on at all times.
- D. Signage. The operator must abide by any borough-posted signage in the right-of-way.
- E. Operator's route. The operator's exact route must be specified for width greater than 14 feet and for all overweight loads.

(Ord. No. 96-24, § 1(part), 1996)

14.40.100. Oversize and overweight permits—Discretionary conditions.

In addition to the mandatory conditions set forth in KPB 14.40.090 the roads director may impose conditions related to the regulations set forth in this section.

- A. **Operation hours.** The roads director may set conditions related to hours of operation on the right-of-way including but not limited to restrictions to daylight hours and restrictions during holidays.
- B. **Safety.** The roads director may set additional restrictions to protect the public safety, protect the borough's right-of-way and adjacent properties and water bodies, and promote traffic management of the borough's rights-of-way.
- C. **Bond.** The roads director may set permit conditions allowing loads in excess of size and weight restrictions upon the permittee posting a bond or providing adequate security for any damage caused and cost of repair resulting from use of vehicles in excess of size and weight restrictions.
- D. **Load limits.** The roads director may specify load limits.
- E. **Vehicle numbers.** The roads director may set restrictions on the number or type of oversize or overweight vehicles on rights-of-way at certain times.

(Ord. No. 96-24, § 1(part), 1996)

14.40.110. Oversize and overweight permits—Signage.

The roads director may post individual roads with load limits based on the condition of the road and traffic. Posting does not negate the requirement for published notice set forth in KPB 14.40.070(A).

(Ord. No. 2000-35, § 2, 9-12-00; Ord. No. 96-24, § 1(part), 1996)

14.40.120. Permit appeal—Permit review.

A. *Initial permit review.* The director shall have seven days from the date the permit applications are received to issue a written denial or approval of the permits requested, unless for good cause stated, the director extends the time frame for permit determinations or refers the permit to the RSA board for initial review. The director shall, by first-class mail, facsimile, or hand-delivery transmit written notice of approval or denial to the applicant at the most recent address provided to the borough in writing by the applicant.

(Ord. No. 2004-16, § 1, 6-1-04; Ord. No. 2000-35, § 3, 9-12-00; Ord. No. 96-24, § 1(part), 1996)

14.40.130. Permit appeal—Decision final—Appeal.

When the RSA director provides the initial permit review, his decision is appealable to the RSA board within seven days of the distribution of the RSA director's written decision. The appeal shall be in writing on a form provided by the RSA and shall state the reasons the appellant believes the director's decision to be in error and shall include reference to code sections violated by the director's decision. Whether the RSA board reviews a permit on appeal or provides the initial permit review, the applicant for a permit may appeal the RSA board's

determination to the superior court in Kenai, Alaska, pursuant to Part 6 of the Alaska Rules of Appellate procedure. Nothing in this regulation shall prohibit utilization of a mutually-acceptable alternative dispute resolution procedure.

(Ord. No. 2004-16, § 2, 6-1-04; Ord. No. 2000-57, § 11, 12-12-00; Ord. No. 97-33, § 1, 1997; Ord. No. 96-24, § 1(part), 1996)

14.40.140. Permit appeal—Penalty.

Failure to obtain a permit required by this regulation, or failure to comply with the conditions of an issued permit, will cause the violator to be subject to a civil penalty up to \$250.00 for each violation as more specifically set forth in KPB 14.40.260. Each day a violation continues is a separate violation.

(Ord. No. 96-24, § 1(part), 1996)

14.40.150. Right-of-way use permits—Repair and maintenance of rights-of-way.

The permittee has an ongoing responsibility to maintain the right-of-way in a condition equal to that which existed before the permittee's operation began so long as the maintenance required can be attributed to the permittee. The permittee shall repair the right-of-way immediately after discovery of any damage or deterioration caused by the permittee's use of the right-of-way. Such repair must return the right-of-way to at least the same condition as existed before the permittee damaged the right-of-way. In the event the permittee fails to comply with this section, the borough may repair the right-of-way at the permittee's expense 24 hours after giving the permittee telephonic or facsimile notice of the need for repair or maintenance. Repair costs may be deducted from the bond posted or pursued through a personal action. This section does not require a construction permittee to perform right-of-way maintenance after construction is completed.

(Ord. No. 99-48, § 6, 8-17-99; Ord. No. 98-09, § 6, 6-16-98; Ord. No. 96-24, § 1(part), 1996)

14.40.155. Temporary road closure.

The director may temporarily close a road with a physical barricade and signage where damage to the right-of-way or a threat to public safety is presented by continued use of the road. The road may be reopened when the director determines that the condition causing the threat to public safety or damage to the right-of-way has been repaired or alleviated.

(Ord. No. 99-48, § 7, 8-17-99; Ord. No. 98-09, § 7, 6-16-98)

14.40.160. Right-of-way use permits—Traffic routing.

When traffic or lawful use of the right-of-way by others will be affected by the permittee's use of the right-of-way, the permittee shall so state on the permit application and shall provide signage and safeguards in accordance with the Alaska Traffic Manual and shall obtain any further permission for such routing from the appropriate entities including but not limited to the borough fire, emergency medical, police, and school bus transportation agencies.

(Ord. No. 96-24, § 1(part), 1996)

14.40.170. Right-of-way use permits—Closing rights-of-way.

In the event the permittee may need to temporarily close a right-of-way, the permittee shall indicate on the permit application the proposed date, time and duration of the proposed closure. The director shall indicate on the permit whether the proposed closure is authorized. The director may require a date, time, or duration for right-of-way closure different from that proposed by the permittee if it is in the best interests of the borough. The permittee will be responsible for obtaining any further permission needed for an approved closure from the appropriate entities including but not limited to borough fire, emergency medical, police, and school bus transportation agencies.

(Ord. No. 96-24, § 1(part), 1996)

14.40.175. Damage to right-of-way.

Persons or entities using or working in the right-of-way in a manner causing damage are liable to the borough for the cost of repair and subject to a fine set forth in KPB 14.40.260. Pursuant to AS 29.25.070, on application for injunctive relief and a finding of a violation or threatened violation, the superior court shall grant an injunction to stop or prevent damage to a right-of-way. The director shall issue fines under this section in accordance with KPB 14.40.260—270.

(Ord. No. 2000-35, § 4, 9-12-00)

14.40.180—14.40.250. Reserved.

Editor's note—Ord. No. 2000-37, § 1, adopted Aug. 15, 2000, repealed §§ 14.40.180—14.40.250, which pertained to parking regulations. See the Code Comparative Table.

14.40.260. Civil penalties—Schedule.

In addition to other remedies afforded by law, the borough establishes the following schedule of civil fines for violation of KPB 14.40.

KPB 14.40.050	Unlawful Regulation of Traffic Flow; Barricading Right-of-Way	\$125.00
KPB 14.40.060	Violation of Permit Conditions (each condition)	\$150.00
KPB 14.40.065	Failure to Obtain Maintenance Permit; Violation of Permit Conditions	\$25.00

KPB 14.40.070(B)	Failure to Obtain Right-of-way Construction or Size and Weight Permit	\$250.00
KPB 14.40.175	Damage to Right-of-way	\$100.00
KPB 14.40.270(B)	Failure to Respond to Citation/Complaint	\$75.00

Each day a violation occurs constitutes a separate violation.

(Ord. No. 2000-57, § 12, 12-12-00; Ord. No. 2000-35, § 5, 9-12-00; Ord. No. 2000-37, § 5, 8-15-00; Ord. No. 99-48, § 8, 8-17-99; Ord. No. 98-09, § 10, 6-16-98)

14.40.270. Civil penalties—Citation—Answer—Hearing—Appeal.

A. Citation. A complaint or citation may be used as the charging document for violations set forth in the civil penalty schedule. The charging document shall state the fine, the ordinance or regulation section violated, that the recipient is entitled to a hearing to contest the citation, and that the recipient is allowed to testify and present evidence and witnesses. The citation shall set forth the procedures the recipient need follow in responding to the citation, and consequences of failure to respond.

B. Answer; payment. The recipient may respond to the charging document by paying the fine within 10 days of issuance of the citation or complaint or requesting a hearing on the citation form within 10 days of citation issuance. Failure to respond to a citation or complaint shall result in a fine of up to \$250.00, more specifically set forth in KPB 14.40.260.

C. Hearing. The director shall set the hearing giving at least 15 days notice of the date, time and place of the hearing. For good cause the director may delay the date of hearing. The director shall set the agenda for the hearing and may call witnesses and request additional evidence. The director may allow for telephonic participation in the hearing. If necessary the director may continue the hearing to gather additional evidence or take the subject matter of the hearing under advisement. Upon the presentation of the testimony, evidence, and witnesses the director shall issue a written decision with supporting findings and conclusions within five days of the hearing. The director may uphold the charge and fine, modify the charge, dismiss, or reduce the fine and issue whatever related compliance orders are necessary.

D. Appeal. The recipient may appeal the director's decision pursuant to Part 6 of the Alaska Rules of Appellate Procedure to the Superior Court in Kenai, Alaska.

E. Collection. Unpaid fines are collectible through filing actions in the trial courts of the State of Alaska and may include judgments for the fine, costs, and attorneys fees. Fines for charges appealed to superior court are subject to collection unless the appellant receives a stay pending appeal from the court. Arrangements for payment plans may be made by the director if the director determines it is in the borough's best interest.

(Ord. No. 99-48, § 9, 8-17-99; Ord. No. 98-09, § 11, 6-16-98; Ord. No. 97-33, § 2, 1997; Ord. No. 96-24, § 1(part), 1996)

14.40.280. Definitions.

The following definitions are applicable to these regulations.

A. "Applicant" means the person requesting a right-of-way use permit from the borough.

- B. "Borough" means the Kenai Peninsula Borough.
- C. "Anadromous waterbody" means any waterbody catalogued pursuant to AS 29.45.870 and after July 1, 2008, AS 16.05.871, as important to the spawning, rearing or migration of anadromous fish.
- D. "Contractor" is defined as set forth in AS 08.18.171(4).
- E. "Construction," "right-of-way construction," or "construction of right-of-way" means the improving, building, erection, assembly, alteration, demolition, or repair (including, but not limited to, dredging, culvert placement or replacement) of roads, streets, trails, paths, and other improvements in rights-of-way, or near rights-of-way which physically impact the rights-of-way.
- F. "Dedicated road right-of-way" or "right-of-way" means a right-of-way dedicated on a plat for road, street, or utility purposes in accordance with the platting requirements of the Kenai Peninsula Borough, or such rights-of-way as have been specifically granted by easement or dedicated by statute, excluding rights-of-way within the boundaries of an incorporated city.
- G. "Development" means any human-caused change to improved or unimproved right-of-way, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of materials or use of the right-of-way.
- H. "Director" means the Roads Director of the Kenai Peninsula Borough, unless otherwise specified.
- I. "Maintenance" is defined as work performed on a routine basis to maintain a road in its originally constructed condition, (or subsequently improved condition), or to prevent deterioration of the road. Maintenance does not include road construction or improvement.
- J. "Operator" means the person operating or driving vehicles or equipment, who may or may not be the owner of the vehicle or equipment.
- K. "Ordinary high water mark" means the line on the shore or bank established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- L. "Permittee" means the person granted a right-of-way use permit by the borough.
- M. "Recipient" means a person issued a citation or charging document from the Kenai Peninsula Borough.
- N. "Road" means in this chapter a right-of-way which has undergone improvement by construction and placement of material making the surface of the right-of-way suitable for motor vehicles which may lawfully travel on state highways.

- O. "Trail" means clearing or construction of a right-of-way for access by pedestrians, bikes, horses, all-terrain vehicles, snow machines, or other motorized vehicles which are designed primarily for off-road use.
 - P. "Waterbody" means any permanent body of water, including any creek, canal, river, lake or bay, or any other body of water, natural or artificial.
 - Q. "Watercourse" means a running stream of water fed from natural or permanent sources such as rivers, creeks, glaciers, and rivulets which flows in a particular direction, though it need not flow continuously, and may be periodically dry. It must flow in a definite channel, having a bed or banks, and usually discharge itself into another stream or water body. It must be more than mere surface drainage.
- (Ord. No. 2008-03, § 3, 4-1-08; Ord. No. 2000-57, § 13, 12-12-00; Ord. No. 99-48, § 10, 8-17-99; Ord. No. 98-09, § 12, 6-16-98; Ord. No. 96-24, § 1(part), 1996)

ROAD CONSTRUCTION STANDARDS

I. Introduction

The following criteria for the construction of local roads within the Kenai Peninsula Borough represent a minimum standard of construction. Roads shall be built to the highest standard practicable within economical constraints. A right-of-way construction permit prior to construction is required. No roads will be accepted for maintenance before June 1 or after October 15 of each year.

An application for maintenance shall be submitted on a form approved by the Road Service Area (RSA). Applications for road maintenance must be made pursuant to policies adopted by the RSA Board. Applications for maintenance of existing roads shall be subject to inspection by the RSA. Such inspection may include test holes every 150 feet; engineering analysis of road geometry, drainage, and general adequacy for anticipated traffic; and an as-built survey of the road scaled by a professional land surveyor registered in the State of Alaska under AS 8.48. Applicant shall be responsible for the costs associated with inspection.

II. Definitions

Roads shall be constructed for specific traffic volumes and levels of service appropriate for the category of road set forth below. There are four categories of roads. Individual roads shall be constructed in accordance with the standard for the category of road being constructed.

Category I: A cul-de-sac road or other minor road, both of which serve less than 15 lots.

Category II: A road which serves between 15 and 40 lots.

Category III: A road which serves between 41 and 100 lots.

Category IV: A road that serves greater than 100 lots.

III. Road Widths

<u>Category of Road</u>	<u>Minimum Width (Feet)*</u>	<u>Maximum Width (Feet)*</u>
I	20	28
II	22	28
III	26	28
IV	28	28

(*Shoulder to shoulder)

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IV. Structures/Bridges

Bridges, bottomless culverts, walls and other structures on roads certified for borough maintenance shall be in accordance with the current "Standard Specifications for Highway Bridges" (16th edition) and in accordance with the "Policy on Geometric Design of Highways and Streets" (1994). Plans, prepared and stamped by a licensed professional engineer, shall be submitted to the RSA Board prior to acceptance of the road for maintenance.

V. Construction Standards

- A.** Gravel roads shall be constructed in accordance with the Typical Section (see Drawing A-1 attached) and Table A. Additional requirements are:
1. Roads must be contiguous with the existing road system maintained by the borough and the state. All roads must be on a dedicated right-of-way and must be built along the right-of-way centerline. Minimum right-of-way width is to be 60 feet, enabling utilities to be installed outside the edge of roadside ditches. Minimum width for cul-de-sacs serving no more than six lots which cannot be further subdivided is 50 feet.
 2. All organic material shall be stripped and removed to a minimum depth of four (4) feet below finished grade. If geotextile is utilized over organics, then the depth of subbase must be three (3) feet minimum or greater as required for stable embankment.
 3. Extraction of material between the ditch lines for any purpose other than excavation to subgrade is prohibited.
 4. Geotextile shall be placed over all subgrade soils consisting of silts or clays with a frost classification of F-4 (U.S. Corps of Engineers.)
 5. The roadway embankment shall be placed in lifts and compacted to not less than 90% of maximum density. Maximum density shall be determined by AASHTO T 180, Method D.
 6. In place or useable excavation material meeting the specifications of the required embankment material may be utilized in lieu of borrow.
- B.** A project specific design may be submitted if prepared and sealed by a licensed professional engineer. The design shall include typical section(s), centerline plan and profile. The design shall provide for adequate drainage.

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The design shall be based on a soils investigation with test holes at least every 500 linear feet. A report shall be submitted with test hole logs and soil analyses. Project specific designs are subject to approval by the RSA Board prior to construction. The RSA Board may require a project-specific as-built, engineering analysis and design to address existing or proposed roads.

- C. Alternate construction methods may be utilized for Category I and Category II roads where soil, economic and other conditions are such that the standard typical section is not practical. It is the developer's responsibility to construct a functional road that will be suitable for traffic and maintenance operations. Final acceptance by the RSA will be based on inspection and performance testing. Roads constructed under this alternate method must meet the following requirements:
1. A RSA application must be filed prior to start of construction.
 2. The road must meet the minimum requirements shown on the Alternate Typical Section (see Drawing A-2 attached).
 3. Three inspections are required by the RSA, consisting of initial, midway and final inspections. The final inspection will be conducted one year after the initial application, during the summer season when the subgrade and roadbed are frost free. Photographic documentation will be done by the RSA representative.
 4. The applicant must provide the means to conduct a proof roll test during the final inspection. The proof roll test will consist of a fully loaded 12 cubic yard end dump truck traversing the road as directed by the inspector. The minimum proof rolling is full length of the road, on both lanes. If excessive rutting, greater than three (3) inch depth tracks, occurs, remedial work will be required. The RSA representative will designate the defective areas in a written report.
 5. Winter maintenance only will be provided during the interim period for one year.
- D. The RSA Board may make an exception to the standard requirements under the following conditions:
1. Compliance with the standard is not economically feasible considering topography, location, and width of right-of-way; traffic volume; traffic flow; or other physical characteristics;

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2. The applicant did not cause the condition upon which the request for the exception is based;
3. Substantial compliance with the standards is the most practical means of meeting the objectives of KPB 14.06 and Appendix A, and strict compliance would result in rejection of the road for borough maintenance; and
4. Alternate treatments, if required by the RSA Board, will bring the road into substantial compliance with these standards.

The burden is on the applicant to meet the above factors and demonstrate to the RSA board that granting the exception will not undermine the objectives of the standards. The board may deny, modify, or grant the requested exception.

VI. ALIGNMENT

A. Vertical Alignment

Roads shall be constructed in a manner such that grades shall not exceed 6 percent on arterial roads and 10 percent on all other roads, nor 4 percent within 100 feet of any intersection.

B. Horizontal Alignment

Horizontal alignment shall meet the requirements of KPB 20.20.120, 20.20.130 and 20.20.140. Roads shall be constructed along the centerline of the right-of-way and shall have curves meeting the minimum radius requirements of not less than 300 feet for right-of-ways 100 feet in width or more, and not less than 200 feet on all other roads.

There shall be a roadside clear of hazardous objects or conditions for a distance consistent with the speed, traffic volume, and geometric conditions of the site. Roads shall be constructed with a minimum clear zone of 6.5 feet. Where hazardous physical features exist which cannot be located outside the clear zone, alternative treatments such as guardrails may be required.

C. Turnarounds

Roads designed to have one end closed, either permanently or temporarily, shall be constructed with a suitable turnaround with a minimum radius of 25 feet. Dedicated cul-de-sacs shall be constructed with a minimum radius of 30 feet. The turnaround shall be constructed to a 4 percent grade or less.

D. Intersections

Street intersections shall be constructed as nearly at right angles as possible. A minimum unobstructed sight distance of 150 feet shall be provided unless a definite finding by the board that a lesser distance is appropriate due to topography, traffic flow or other physical characteristics. Appropriate warning signs may be required by the board if an exception to site distance is granted.

Road intersections shall be constructed with a minimum return radius of 20 feet. Where acute intersections are provided, return radii shall be increased appropriately.

VII. Drainage and Culvert Material

Roads shall be constructed to prevent ponding of runoff waters in roadside ditches. Drainage ditches shall be constructed such that runoff waters will be conveyed to natural drainage courses, ditches or waterways, or other man-made drainage courses. Outfalls shall be constructed to prevent excessive siltation of riparian habitats, channel erosion or other drainage to public or private property. The RSA Board may require engineering analysis and design for locations susceptible to flooding, excessive siltation, or other natural conditions potentially damaging to the right-of-way, adjacent property, or water courses and water bodies. A roadway cross culvert shall be minimum diameter of 18 inches and driveway culverts shall be a minimum of 12 inches. All culverts, coupling bands and special sections shall be corrugated steel pipe, with a minimum of 16 gauge.

VIII. Typical Section Materials

A. Subbase

Subbase shall contain no muck, frozen materials, roots, sod or other deleterious matter. It shall have a liquid limit not greater than 25 and plasticity index not greater than 6 as determined by AASHTO T89 and T90.

Requirements for Grading for Subbase Percent Passing by Weight		
Sieve Designation	Grading A	Grading B
4 Inch	100	-
2 inch	85-100	100
No. 4	30-70	30-70
No. 200	6-12	0-6

B. Selected Material, Type C

Selected Material, Type C, shall be earth, sand, gravel, rock or a combination thereof, and shall contain no muck, peat, frozen material, roots, sod or other deleterious material and shall be compactible.

C. Geotextile Fabric

Geotextile fabric shall meet or exceed the following physical and mechanical requirements.

<u>Geotextile Property</u>	<u>Test Method</u>	<u>Required Minimum</u>
Grab Tensile Strength	ASTM D 1682	190 lbs.
Grab Elongation	ASTM D 1682	30 %
Burst Strength	ASTM D 751	290 psi
Trapezoidal Tear Strength	ASTM D 117	50 lbs.
Permeability	AASHTO M 288	K(soil)

Geotextile shall be installed in accordance with manufacturer's recommendations. If multiple sections of fabric are required, the fabric shall be joined by overlapping adjacent sections a minimum of 3 feet.

IX. Paving Specifications

A. Description

The work under this section consists of the performance of all work required for the construction of asphalt concrete pavement on a prepared base (see Drawing A-3 attached). Current editions of "Standard Specifications for Highway Construction," as adopted by the Alaska Department of Transportation and Public Facilities and the "Standard Specifications for Streets, Drainage, and Utilities," as adopted by the Municipality of Anchorage

will be the references used for asphalt paving.

B. Material and Testing

1. Asphalt

The contractor shall submit a certified analysis of the asphalt to the RSA for review and approval. The RSA reserves the right to make check tests of the asphalt at the project site, and if the asphalt is not in accordance with the certified analysis he may reject the materials.

The asphalt required by these specifications shall conform to the requirements of The Asphalt Institute for the type and grade and shall comply with ADOT/PF specifications used in the area.

The contractor/developer, at their own expense, will be required to perform three field tests measuring aggregate gradation, asphalt content and compaction (95%).

The prepared base shall meet the standards for a Category III road. Inspection of the subbase, by a RSA approved party, is required prior to paving.

C. Certification of Design

The RSA requires the asphalt design be submitted and stamped by an Alaska licensed professional engineer.

D. Other Specifications

The RSA will use the same specifications previously cited to address seal coat, prime coat, paving geotextile and recycled asphalt paving.

X. Signs

A. General Information

1. Sign location, type of installation, and sign removal will be ON as designated by the Roads Director consistent with these standards and RSA Board policy.

Street name signage shall be installed by developers of new roads, following the specifications set forth in the "Alaska Sign Design

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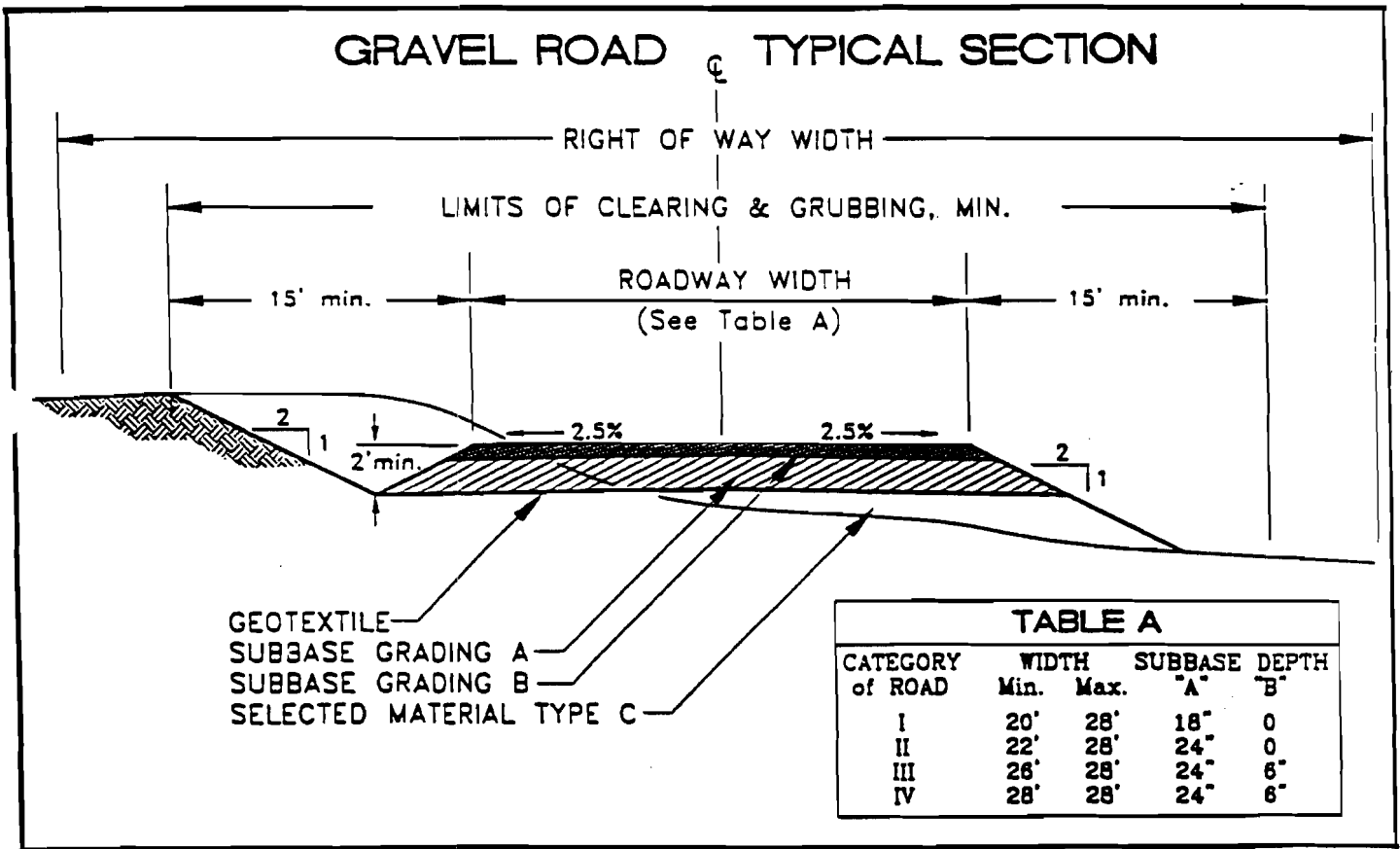
Specifications.”

2. Speed signage and parking signage shall comply with the requirements of KPB 12.02 and KPB 14.40, respectively, and RSA Board policy.
3. Unauthorized signs located in the Kenai Peninsula Borough right-of-way may be removed by the RSA.
4. The removal, defacing and or destruction of RSA signs will be punished to the fullest extent of the law.

XI. Fee Schedule

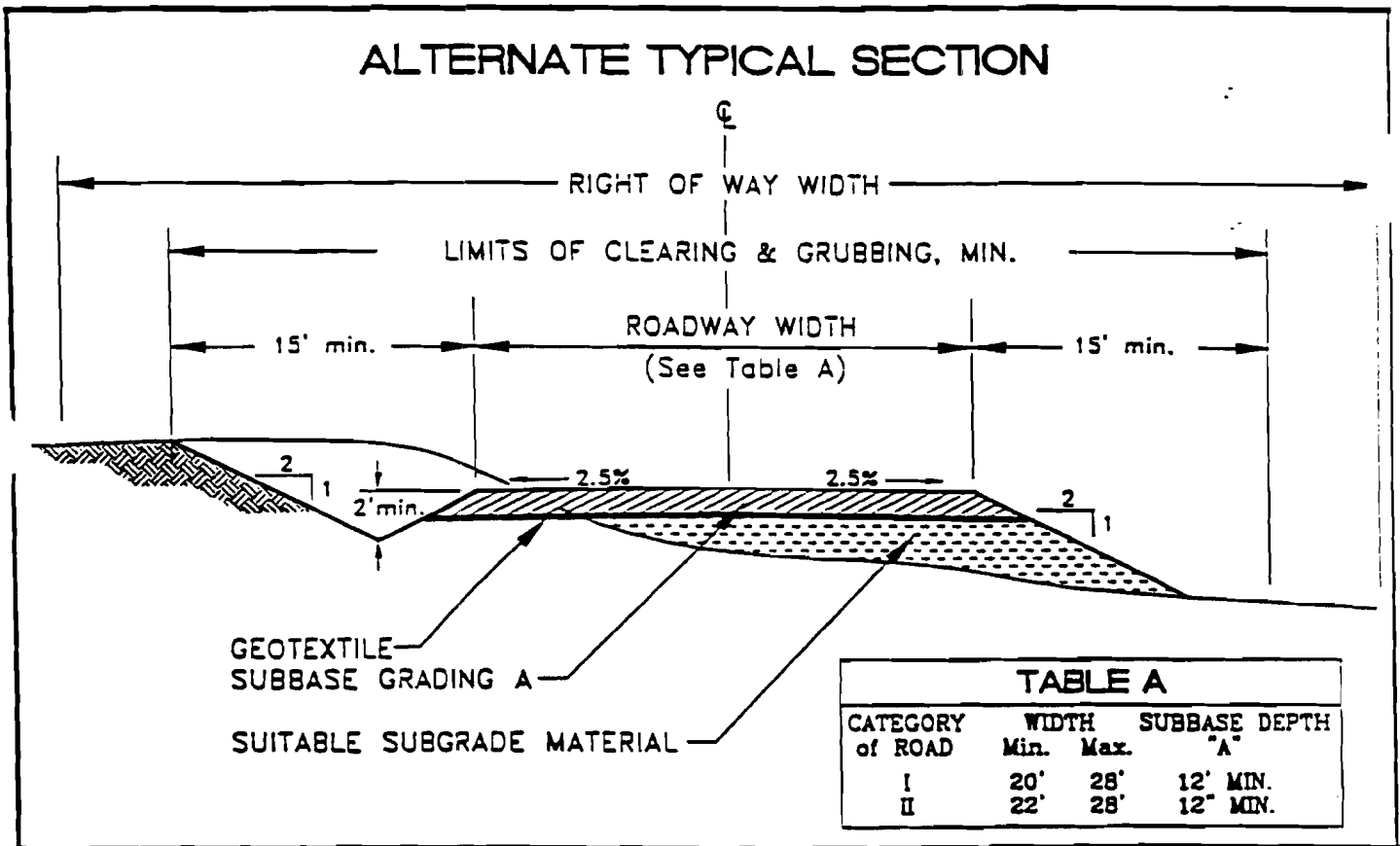
The RSA Board may establish a fee schedule to recover costs related to road standard implementation or inspection.

DRAWING A-1

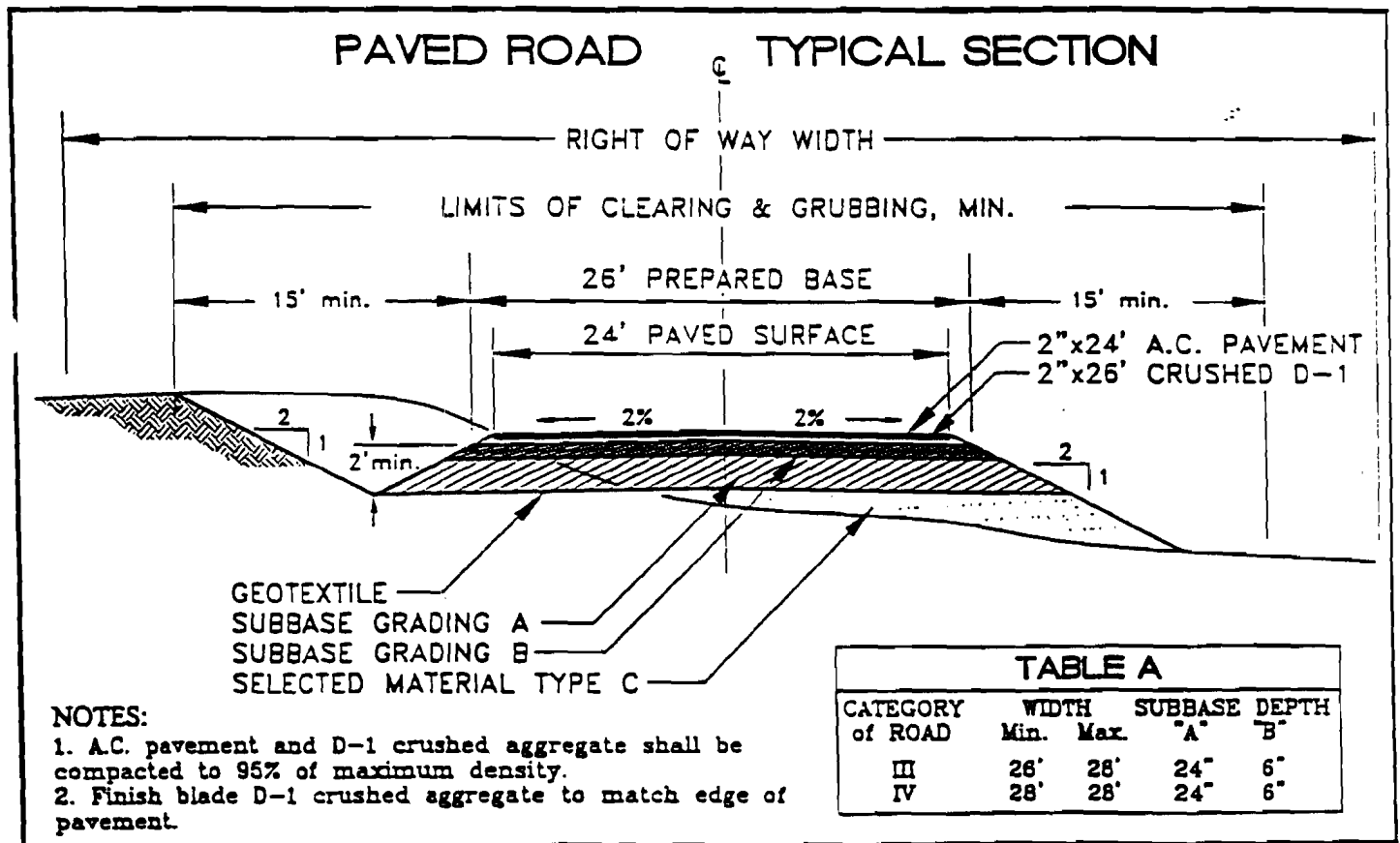


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DRAWING A-2



DRAWING A-3



20.20.230. Building setbacks.

A minimum 20-foot building setback shall be required for subdivisions located outside cities. The setback shall be noted on the plat in the following format:

"Building setback - A setback of _____ feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate Planning Commission."

(Ord. No. 80-4, § 1, 1980; Ord. No. 78-37, § 2(part), 1979)

20.20.235. Building setbacks—Within cities.

The building setback requirements for subdivisions located within cities shall be governed by the provisions of municipal district zoning contained in the borough code of ordinances. (Ord. No. 80-4, § 2, 1980)

20.20.240. Unsubdivided remainder.

When an existing parcel is subdivided and a portion of the parcel is not included in the subdivision, that portion is an unsubdivided remainder. No unsubdivided remainder of less than 40 acres that does not abut on a dedicated public right-of-way shall be permitted. (Ord. No. 78-37, § 2(part), 1979)

20.20.250. Different standards in cities.

Where cities have enacted by ordinance different design standards than those set forth in this chapter, the planning commission may apply such city standards in lieu of those set forth in this chapter. (Ord. No. 78-37, § 2(part), 1979)

20.20.260. Flood plain requirements.

A. All subdivision plats which are within areas where the flood plain has been identified by the Army Corps of Engineers, and which involve 50 lots or 5 acres whichever is lesser, shall include base flood elevation data and delineate the area involved within the flood plain on the plat.

B. Each plat within a city which has met the requirements of this section shall contain the following statement: "The first finished and habitable floor of a building constructed within a flood plain shall be built at or above the 100-year flood level."

C. This section applies to all cities which adopt a resolution requesting participation in the program and which are subsequently recognized by the state as participants.

D. A city which wishes greater restrictions than those contained in subsection A may do so by passing a more restrictive ordinance as a part of their building code. (Ord. No. 84-85, § 1, 1984)

CHAPTER 21.06. FLOODPLAIN MANAGEMENT**21.06.010. Findings and statement.**

The assembly adopts the following findings and statements establishing a floodplain management chapter:

- A. **Findings.** The flood hazard areas of Kenai Peninsula Borough are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- B. **Statement of Purpose.** It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
 - 1. To protect human life and health;
 - 2. To minimize expenditure of public money and costly flood control projects;
 - 3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - 4. To minimize prolonged business interruptions;
 - 5. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
 - 6. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
 - 7. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
 - 8. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- C. **Objectives.** In order to accomplish its purposes, this chapter includes methods and provisions for:
 - 1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 - 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - 3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
 - 4. Controlling filling, grading, dredging, and other development which may increase flood damage; and

5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

(Ord. No. 88-7, § 2(part), 1988)

21.06.020. Definitions.

For the purposes of this chapter, the following words and phrases shall be defined as follows:

- A. "Coastal high hazard area" means the area subject to high velocity waters due to wind, tidal action, storm, tsunami or any similar force, acting singly or in any combination resulting in a wave or series of waves of sufficient magnitude, velocity or frequency to endanger property and lives.
- B. "Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building.
- C. "Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
- D. "Federal Emergency Management Agency" is the agency responsible for administration of the National Flood Insurance Program.
- E. "Flood hazard area" means the land area covered by the flood, having a 1 percent chance of occurring in any given year. See also "100-year flood".
- F. "Flood Insurance Rate Map (FIRM)" means the map of the community issued by the FEMA which delineates the area subject to the 100-year flood, the water surface elevation of the base flood and the flood insurance rate zones.
- G. "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height, usually 1 foot, at any point.
- H. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than the basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found at Section 21.06.050(B)(1).
- J. "Manufactured home" means a structure, transportable in 1 or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

- K. "100-year flood" (also called "regulatory flood," "base flood" or "special flood hazard area") means a flood of a magnitude which can be expected to occur on an average of once every 100 years. It is possible for this size flood to occur during any year, and possibly in successive years. It would have a 1 percent chance of being equalled or exceeded in any year. Statistical analysis of available streamflow or storm records, or analysis of rainfall and runoff characteristics of the watershed, or topography and storm characteristics are used to determine the extent and depth of the 100-year flood.
 - L. "Planning department" means the planning department of the Kenai Peninsula Borough.
 - M. "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
 - N. "Structure" means a walled and roofed building including liquid or gas storage tank, as well as a manufactured home that is principally above ground.
 - O. "Substantial improvement" means any remodeling, repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started or, if the property has been damaged and is being restored, before the damage occurred.
 - P. "Variance" means a grant of relief from the requirements of this chapter, which permits construction in a manner that would otherwise be prohibited by this chapter.
- (Ord. No. 88-7, § 2(part), 1988)

21.06.030. General provisions.

A. *Lands to Which this Chapter Applies.* This chapter shall apply to all flood hazard areas within the Kenai Peninsula Borough exclusive of the cities of Homer, Kenai, and Soldotna.

B. *Basis for establishing flood hazard areas.* Flood hazard areas are identified by the flood insurance rate maps with an effective date of May 19, 1981, revised on July 5, 1983 and December 6, 1999. The map panels numbered 020012-1350 and 1700 have been deleted and the areas depicted by these panels are not subject to the terms of this chapter. Excluding these panels, the flood insurance rate maps are adopted by reference and declared to be a part of this chapter. The flood insurance rate maps are on file at the planning department.

C. **Warning and Disclaimer of Liability.** The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the Kenai Peninsula Borough, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

D. **Noncompliance—Enforcement.** No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of this chapter are infractions, and are subject to civil fines. Violation of the provisions of this chapter by failure to comply with any of its requirements shall be enforced pursuant to the provisions of KPB 21.24.

(Ord. No. 99-73, § 1, 1-18-00; Ord. No. 97-55, § 1, 1997; Ord. No. 88-7, § 2(part), 1988)

21.06.040. Administration.

A. **Development Permit Required.** A development permit shall be obtained before construction or development begins within flood hazard areas established in Section 21.06.030(B). The permit shall be for all structures and for all other development including fill and other activities. Application for a development permit shall be made on forms furnished by the borough and shall include but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level to which any structure has been floodproofed;
3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 21.06.050(B)(2);
4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

B. **Designation of the Borough Administrator.** The planning department is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

C. **Duties and Responsibilities of the Planning Department.** Duties of the planning department shall include, but not be limited to:

1. **Permit Application Review.**
 - a. Review all development permit applications to determine that the permit requirements have been met,

- b. Review all development permit applications to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required,
 - c. Review all development permit applications to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 21.06.050(C)(1) are met.
2. Issue Permit.
 - a. Upon determination that the submitted and recorded information connected with the permit application meets the terms of this chapter, the planning department shall issue a floodplain development permit to the original applicant.
 - b. The floodplain development permit shall be valid for a period of 1 year from the issue date.
 - c. The floodplain development permit is not assignable without permission from the planning department.
3. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 21.06.030(B), the Planning Department shall obtain, review, and reasonably utilize any base flood and floodway elevation data available from a federal, state or other source, in order to administer subsections (B)(1), (B)(2) and (C) of Section 21.06.050.
4. Information to be Obtained and Maintained.
 - a. Where base flood elevation data is provided through the Flood Insurance Study or required in subsection (C)(2) of this section, record the actual elevation as submitted (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
 - b. For all new or substantially improved floodproofed structures:
 - i. Record the actual elevation as submitted (in relation to mean sea level), and
 - ii. Maintain the floodproofing certifications required in Section 21.06.040(A)(3);
 - c. Maintain for public inspection all records pertaining to the provisions of this chapter.
5. Alteration of Watercourses.
 - a. Notify adjacent communities and the Department of Community and Regional Affairs prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
6. Fee Required. The planning department shall charge fees for permits and variances. Fees shall be established by resolution of the planning commission of the Kenai Peninsula Borough to be paid by the applicant at the time that the floodplain development permit application is submitted.

(Ord. No. 88-7, § 2(part), 1988)

21.06.050. Standards.

A. General Standards. In all flood hazard areas, the following standards are required:

1. Anchoring.
 - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 - b. All manufactured homes must be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
2. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - c. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
3. Utilities.
 - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
 - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and,
 - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
4. Subdivision Proposals.
 - a. All subdivision proposals shall be consistent with the need to minimize flood damage.
 - b. All proposed improvements such as water, sewer, natural gas, telephone and electrical facilities shall be located and constructed in a manner which will minimize damage in the event of a flood.
 - c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
 - d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and which contains 50 lots or 5 acres, or greater.

- e. It is the responsibility of the subdivider to provide all necessary information regarding flood protection measures at the time the preliminary plat is presented for consideration by the planning commission.
5. **Review of Building Permits.** Where elevation data is not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available.
- B. Specific Standards.** In all flood hazard areas where base flood elevation data has been provided as set forth in Section 21.06.030(B), the following provisions are required:
1. **Residential Construction.**
 - a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above the base flood elevation.
 - b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - i. A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
 - ii. The bottom of all openings shall be no higher than 1 foot above grade.
 - iii. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 2. **Nonresidential Construction.** New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
 - a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in Section 21.06.040(C)(4)(b).
 - d. Nonresidential structures that are elevated, not floodproofed, must meet the same standard for space below the lowest floor as described in Section 21.06.050(B)(1)(b).

- e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are 1 foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as 1 foot below that level).
3. **Manufactured Homes.** All manufactured homes to be placed or substantially improved within Zones A1-30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection (A)(1) of this section.
- C. **Floodways.** Located within flood hazard areas established in Section 21.06.030(B) are areas designated as floodways. Since the floodway is an extremely hazardous area due to erosion potential and the velocity of floodwaters which carry debris, the following provisions apply:
- 1. All encroachments, including fill, new construction, substantial improvements, and other development are prohibited unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 - 2. If subdivision (1) of this subsection is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this section.
- D. **Coastal High Hazard Areas.** When FEMA has identified on the communities FIRM Zones V1-V30 (coastal high hazard areas) construction shall meet the following requirements in addition to all other provisions in this chapter:
- 1. All new construction shall be located landward of the reach of mean high tide.
 - 2. All new construction and substantial improvements within Zones V1-V30 on the FIRM shall be elevated on adequately anchored pilings or columns such that:
 - a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level; and
 - b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a 1 percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval); and
 - c. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subdivisions (2)(a) and (2)(b) of this subsection.
 - 3. All new construction and substantial improvements shall have the space below the lowest floor free of obstructions or constructed with breakaway walls. Such temporarily

enclosed space shall not be used for human habitation. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

- a. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - b. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a 1 percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
4. The use of fill for structural support of buildings within Zones V1-V30 on the FIRM is prohibited.

(Ord. No. 88-7, § 2(part), 1988)

21.06.060. Variance procedure.

A. Appeal Board.

1. The Kenai Peninsula Borough Planning Commission shall hear and decide appeals and requests for variances from the requirements of this chapter.
2. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the planning department in the enforcement or administration of this chapter.
3. Those aggrieved by the decision of the planning commission, or any taxpayer, may appeal such decision to the board of adjustment, as provided in AS 29.40.050.
4. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards specified in other section of this chapter, and:
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity to the facility of a waterfront location, where applicable;
 - f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

- g. The compatibility of the proposed use with the existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
5. Upon consideration of the factors of subsection (A)(4) of this section and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter,
 6. The planning department shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

B. Conditions for Variances.

1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of $\frac{1}{2}$ acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing subparagraphs (a) through (k) of subsection (A)(4) of this section have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
2. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.
3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;

- c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
 6. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
 7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-flood proofing where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection (B)(1) of this section, and otherwise complies with Section 21.06.060(A) and (B).
 8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (Ord. No. 2005-30, § 3, 8-2-05; Ord. No. 93-51, § 3, 1993; Ord. No. 88-7, § 1(part), 1988)



FEMA

DISASTER ASSISTANCE POLICY

DAP9523.5

I. TITLE: **Debris Removal from Waterways**

II. DATE:

III. PURPOSE:

This policy provides guidance for determining the eligibility of debris removal from commonly navigated waterways under the Public Assistance Program.

IV. SCOPE AND AUDIENCE:

The policy is applicable to all major disasters and emergencies declared on or after the date of publication of this policy. It is intended for personnel involved in the administration of the Public Assistance Program.

V. AUTHORITY:

Sections 403, 407, and 502 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, (Stafford Act), 42 U.S.C. 5121-5206, as amended.

VI. BACKGROUND:

The U.S. Army Corps of Engineers (USACE) has primary responsibility for the removal of debris from Federally maintained navigable channels and waterways. Section 202 of the Water Resources Development Act of 1976 (PL 94-587) authorizes the USACE to remove debris from Federally maintained commercial harbors, and water areas immediately adjacent thereto. Additionally, the USACE is responsible for the removal of salvageable vessels, marine debris, and other obstructions from Federally maintained navigable waterways under emergency conditions, pursuant to Sections 15, 19, and 20 of the River and Harbor Act of 1899, as amended. USACE will remove a salvageable vessel using its emergency authorities only if the owner, operator, or lessee cannot be identified or they cannot effect removal in a timely and safe manner.

Under the National Contingency Plan, the United States Coast Guard (USCG) is responsible for the removal of oil discharges and hazardous substance releases that occur in the coastal zone. The Environmental Protection Agency (EPA) is responsible for the emergency removal of oil, pollutants, hazardous materials and their containers from inland zones. The precise boundaries of coastal and inland zones are determined by an interagency agreement between the EPA and the USCG.



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Sections 403, 407, and 502 of the Robert T. Stafford Act and 44 CFR §206.224 authorizes FEMA to provide assistance to eligible applicants to remove debris and wreckage from publicly and privately owned waters to eliminate an immediate threat to lives, public health and safety, or improved property; or to ensure the economic recovery of the affected community. The debris, wreckage, and unsalvageable vessels must be the direct result of a Presidentially declared disaster and located in the declared disaster area, and the applicant must have the legal responsibility to remove the threat. FEMA may provide assistance to remove eligible debris, wreckage, and unsalvageable vessels from commonly navigated waterways only when another Federal agency does not have the specific authority to fund the activity. FEMA will make eligibility determinations of debris removal from commonly navigated waterways on a case-by-case basis in coordination with the State and other Federal agencies, as necessary.

VII. POLICY:

A. Definitions:

1. **Coastal Zone** refers to all waters of the United States that are subject to the tide, the Great Lakes, specified ports and harbors on inland rivers, any other waters subject to the National Contingency Plan, and the land adjacent to these waters.
2. **Commonly Navigated Waterways** refer to waterways that are currently used for commercial and recreational navigation traffic and are not Federally maintained or under the authority of a Federal agency.
3. **Federally Maintained Navigable Channels and Waterways** refer to those waters that are maintained under the authorities and responsibilities of USACE. These channels include USACE authorized projects (e.g., specified harbors, canals, turning basins, anchorage and mooring areas, and waterways) that are designed, constructed, and maintained by USACE for use by commercial and/or recreational navigation traffic.
4. **Inland Zone** refers to areas inland of the coastal zone, excluding the Great Lakes and specified ports and harbors on inland rivers.
5. **Specified Ports and Harbors** are areas on inland rivers, including land immediately adjacent to those waters, where the USCG acts as the pre-designated on-scene coordinator. These ports and harbors are determined by regional agreements between the EPA and the USCG, and identified in Federal Regional Contingency Plans and Area Contingency Plans.



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6. **Unsalvageable Vessels** are damaged vessels that cannot be returned to service and have no commercial market value.

7. **Wetlands** are areas that are inundated or saturated by surface or ground water at a frequency that supports vegetation adapted for life in saturated soil conditions (e.g., swamps, marshes, bogs).

B. Approval for FEMA Assistance

In order to be eligible for Public Assistance funding, FEMA must approve the removal of debris and unsalvageable vessels by an eligible applicant from commonly navigated waterways, the coastal zone or inland zone, or navigable wetlands prior to the commencement of work. FEMA may fund the removal and disposal of debris from the coastal zone or inland zone, commonly navigated waters, and navigable wetlands by an eligible applicant, if (1) the removal is in the public interest, and (2) another Federal agency does not have specific authority to perform or fund the work.

1. Demonstration of Public Interest

Pursuant to 44 CFR §206.224, an eligible applicant must demonstrate that debris removal is in the "public interest," which is defined as being necessary to:

- a. Eliminate immediate threats to life, public health, and safety;
- b. Eliminate immediate threats of significant damage to improved public or private property; or
- c. Ensure economic recovery of the affected community to the benefit of the community-at-large.

The applicant must demonstrate that the debris removal is in the public interest by providing information on estimated debris quantities, locations, and types in relation to the public use characteristics of the waterway. The applicant should send the public interest assessment to FEMA and the State for review prior to the commencement of work.

2. Legal Responsibility

Pursuant to 44 CFR §206.223(a)(3), an eligible applicant must demonstrate that it had the legal responsibility, at the time of disaster, to remove debris and obstructions from the impacted



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waterway. An applicant's authorities, codes, and ordinances should be germane to the condition(s) presenting an immediate threat to life, public health, and safety, and not merely define the applicant's uniform level of services. The applicant's legal responsibility to take action where there is an immediate threat to life, public health, and safety should be independent of any expectation, or request, that FEMA will reimburse costs incurred for debris removal. The Applicant should provide FEMA with copies of all applicable authorities, codes, and ordinances for review. Maintenance records may also be provided for the purposes of establishing legal responsibility.

C. Eligibility of Debris Removal from Commonly Navigated Waterways

1. FEMA will determine the amount of eligible debris to be removed that is necessary to eliminate an immediate threat to public health and safety from commonly navigated waterways, on a case-by-case basis. FEMA will conduct eligibility assessments with the assistance of representatives for the applicant, State, and other Federal agencies, as necessary. FEMA may require applicants to provide maintenance records or surveys to demonstrate the pre-disaster condition and capacity of the waterway and its facilities, as appropriate.
2. FEMA will reimburse reasonable costs for the use of side scan sonar to identify submerged debris, wreckage, or unsalvageable vessels after the applicant provides an eligible initial scope of work and cost estimate, and the public interest assessment described in Section VII.B.1. Side scan sonar missions should be limited in scope to address the impacted areas of commonly navigable waterways and developed in coordination with FEMA and the State. Applicants should provide documentation that demonstrates the need for the use of side scan sonar to identify immediate threats. This documentation should be directly related to the impacted area(s) and debris estimates and locations.
3. FEMA may determine that debris located at or below the surface of commonly navigated waterways that presents an immediate threat to navigation is eligible for removal to a depth equal to the maximum draft of the largest vessel that utilized the waterway prior to the storm plus two feet. Example: If the maximum draft of the largest vessel using the waterway is four feet, two feet will be added so that any debris below this six feet zone is not eligible. As an exception, debris that extends from the waterway bottom upward into the eligible zone may also be deemed eligible for complete removal.
4. The removal of trees still rooted to the embankment of a commonly navigated waterway may be eligible if:
 - a. The tree is partially or wholly floating or submerged in the waterway; and



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- b. The tree presents an immediate threat to public health and safety.

In such cases, FEMA may determine that the floating or submerged portion of the tree is eligible to be cut at the water's edge.

5. FEMA may determine that debris along a commonly navigated waterway's bank is eligible if it presents an immediate threat to public health and safety. If FEMA determines that disaster-related debris on a bank is eligible, but the debris is located on private property, a Right of Entry (ROE) will be required, in advance, to collect such debris.

6. FEMA may fund the removal and disposal of containers of pollutants and hazardous substances from the coastal zone or inland zone, commonly navigated waters, and navigable wetlands by an eligible applicant, if the removal is in the public interest, and another Federal agency does not have specific authority to perform the work.

7. FEMA may determine that storm-damaged vessels can be treated as eligible debris if the vessel cannot be salvaged or returned to seaworthiness and it is floating or submerged in the coastal or inland zones, navigable waterways or navigable wetlands. However, if any part of the damaged vessel can be used to identify an owner, the applicant should contact the owner and follow its local ordinances and State laws to demonstrate legal responsibility to remove and dispose of the vessel.

D. Ineligible

1. The removal of debris by an applicant for which another Federal agency has specific authority, or from Federally maintained navigable channels and waterways is ineligible under the Public Assistance Program.
2. The removal of unsalvageable vessels from Federally maintained navigable channels and waterways is ineligible.
3. Dredging of sediment and substrate from unimproved waterways is ineligible.
4. Dredging or filling of wetlands is ineligible.
5. Use of heavy machinery to remove debris in wetlands is ineligible.
6. With the exception of hazardous materials or oil discharges, the removal of debris from non-navigable wetlands is ineligible.



FEMA

DISASTER ASSISTANCE POLICY

E. Duplication of Benefits. Pursuant to Section 312 of the Stafford Act and 44 CFR §206.191, FEMA is prohibited from providing funds for work that is covered by another source of funding. Therefore, applicants should take steps to verify that insurance coverage or any other source of funding does not exist for the debris removal work.

F. Environmental and Historic Review Requirements. Eligible waterway debris removal activities must satisfy environmental and historic preservation compliance review requirements as established by 44 CFR Parts 9 and 10, and all other applicable local, State, and Federal legal requirements.

VIII. RESPONSIBLE OFFICE: Disaster Assistance Directorate (Public Assistance Division).

IX. SUPERSESION: This policy supersedes all previous guidance on this subject.

X. REVIEW DATE: This policy does not automatically expire, but will be reviewed three years from the date of publication.

James A. Walke
Acting Assistant Administrator
Disaster Assistance Directorate



FEMA

The National Flood Insurance Program

The Mitigation Directorate, a component of the Federal Emergency Management Agency (FEMA), manages the National Flood Insurance Program (NFIP). The three components of the NFIP are:

- Flood Insurance
- Floodplain Management
- Flood Hazard Mapping

Nearly 20,000 communities across the United States and its territories participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes Federally backed flood insurance available to homeowners, renters, and business owners in these communities. Community participation in the NFIP is voluntary.

Flood insurance is designed to provide an alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Flood damage is reduced by nearly \$1 billion a year through communities implementing sound floodplain management requirements and property owners purchasing of flood insurance. Additionally, buildings constructed in compliance with NFIP building standards suffer approximately 80 percent less damage annually than those not built in compliance.

In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the Nation's floodplains. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed for floodplain management programs and to actuarially rate new construction for flood insurance.

- The NFIP Program Description offers a more detailed overview and history of the program.
- Buying flood insurance is the best thing you can do to protect your home, your business, family, and financial security.



FEMA

Flood Insurance Rate Maps (FIRMs)

- What is a FIRM?
- Why would I need to use a FIRM?
- How do I read a FIRM?
- How can I change or correct a FIRM?

Find a FIRM

What is a FIRM?

It is the official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

Why would I need to use a FIRM?

- **Private citizens and insurance and brokers** use the FIRM to locate properties and buildings in flood insurance risk areas.
- **Community officials** use the FIRM to administer floodplain management regulations and to mitigate flood damage.
- **Lending institutions and federal agencies** use the FIRM to locate properties and buildings in relation to mapped flood hazards, and to determine whether flood insurance is required when making loans or providing grants following a disaster for the purchase or construction of a building.

How do I read a FIRM?

How to Read A Flood Insurance Rate Map (FIRM) Tutorial

This tutorial educates users on the use and application of FEMA FIRMs. Each component of the FIRM is explored. The tutorial includes a section that contains examples of getting specific information from FIRMs.

How can I change or correct a FIRM?

FEMA has established administrative procedures for changing effective FIRMs based on new or revised scientific or technical data.

- Learn more about the process for changing a FIRM
- Or contact your regional office to discuss having your mapping needs assessed