

EI-18065

Woods, Hova

From: Summerville, Alan
Sent: Friday, February 05, 2010 12:44 PM
To: Woods, Hova; Bauer, David; Barry, Shawna; Hammerle, Kelly
Subject: FW: FD 35095, PDEIS, Chapter 1
Attachments: Chapter_1_Purpose_and_Need_Feb_3_20101.doc; Chapter 2.doc

FYI. I'm on a call at the moment and then we can determine what to do.

From: kusske.floyd.kathryn@DORSEY.com [mailto:kusske.floyd.kathryn@DORSEY.com]
Sent: Friday, February 05, 2010 12:32 PM
To: NaveckyD@stb.dot.gov
Cc: lindamoodb@akrr.com; Summerville, Alan; Kathryn Kusske-Floyd
Subject: Fw: FD 35095, PDEIS, Chapter 1

Kathryn Kusske Floyd
Dorsey and Whitney LLP
1801 K Street N.W., Suite 750
Washington, D. C. 20006
202-442-3520 (direct)
202-247-5050 (cell)

From: Kusske Floyd, Kathryn
To: Kusske Floyd, Kathryn
Sent: Fri Feb 05 08:52:34 2010
Subject: RE: FD 35095, PDEIS, Chapter 1
Dave,

Attached please find ARRC's comments on Chapters 1 and 2 of Preliminary Draft EIS.

Thank you for the opportunity for verification of these Chapters.

Please let me know if you have any questions.

With best regards,

Kathryn

From: David.Navecky@stb.dot.gov [mailto:David.Navecky@stb.dot.gov]
Sent: Wed 2/3/2010 3:45 PM
To: Kusske Floyd, Kathryn
Subject: FD 35095, PDEIS, Chapter 1

Kathryn -

2/5/2010

Please find attached Chapter 1 of the Preliminary Draft EIS for the Applicant's verification of the purpose and need.

Chapter 2 to follow by separate email.

Thanks,

Dave Navecky

(See attached file: Chapter_1_Purpose_and_Need_Feb_3_2010[1].doc)

2/5/2010

1. PURPOSE AND NEED FOR AGENCY ACTION

1.1 Introduction

On December 5, 2008, Alaska Railroad Corporation (ARRC or the Applicant) filed a petition with the Surface Transportation Board (STB or the Board) pursuant to 49 U. S. Code (U.S.C.) 10502 for the authority to construct and operate approximately 30 to 45 miles of rail line to connect the Port MacKenzie District in Matanuska-Susitna Borough (MSB) to a point on the existing ARRC main line between Wasilla and north of Willow, Alaska. Referred to as the Port MacKenzie Rail Extension, the proposed rail line would provide a rail connection for freight services between Port MacKenzie and Interior Alaska.

As shown in Figure 1-1, which provides an overview of the route alternatives, the southern terminus of the proposed rail line extension would be in the Port MacKenzie District, and the northern terminus would be at one of four locations along the existing ARRC main line, depending on alternative. The southern terminus would be approximately 2 or 3 miles from the Port MacKenzie docks, depending on alternative. In addition to constructing the rail line, the Applicant would construct other structures (such as access roads, sidings, and communications towers) to support rail line operations. The anticipated train traffic would be two trains daily – one train traveling in each direction.

1.1.1 Background

Port MacKenzie is a deepwater port on the north side of Knik Arm. It lies approximately 30 miles southwest of Wasilla and 5 miles north of Anchorage across Knik Arm. Capable of serving large ships (such as Cape Class and Panamax vessels), the deep-draft dock is enhanced by the Port MacKenzie's 8,940 upland acres and 1,300 tideland acres (called the Port MacKenzie District). To address its market opportunities, Port MacKenzie has published tariff rates for a variety of materials including bulk commodities, vans or containers, iron or steel materials, vehicles and heavy equipment, mobile or modular buildings. The Port's customers include shippers of wood chips, saw logs, sand/gravel, cement and scrap metal.

MSB began investigating the development of Port MacKenzie and supporting infrastructure, including a rail line, in the 1970s. In 1993, MSB adopted the Point MacKenzie Area Which Merits Special Attention Plan in the MSB Coastal Management Plan. The Area Which Merits Special Attention has been designated a Major Energy Facility Area intended to facilitate the development and growth of Port MacKenzie. Previous MSB studies have noted that good surface transportation access is necessary to accommodate growth at Port MacKenzie and develop it as a strong economic driver in MSB. At present, Port MacKenzie is only connected to the transportation network via roadways.

The 1997 MSB Long Range Transportation Plan (MSB, 1997) described the need for rail and improved road access to Port MacKenzie. In 2003, MSB completed a preliminary study of road and rail corridor alternatives that would connect Port MacKenzie to the Alaska Railroad. In 2007, the State of Alaska granted MSB an appropriation to perform conceptual engineering and environmental documentation for the Port MacKenzie Rail Extension. MSB requested ARRC to

Deleted: Port MacKenzie is a deepwater port on the north side of Knik Arm. It lies approximately 30 miles southwest of Wasilla and 5 miles north of Anchorage across Knik Arm. Capable of serving large ships (such as Cape Class and Panamax vessels), the deep-draft dock is enhanced by the Port MacKenzie's 8,940 upland acres and 1,300 tideland acres (called the Port MacKenzie District).

1 | investigate providing rail service to Port McKenzie. MSB intends to secure additional state
2 | funding for the rail extension project.

3 | **1.1.2 National Environmental Policy Act Process**

4 | The Board, pursuant to 49 U.S.C. 10901, is the agency responsible for granting the authority to
5 | construct and operate proposed rail lines and associated facilities. Accordingly, the Board,

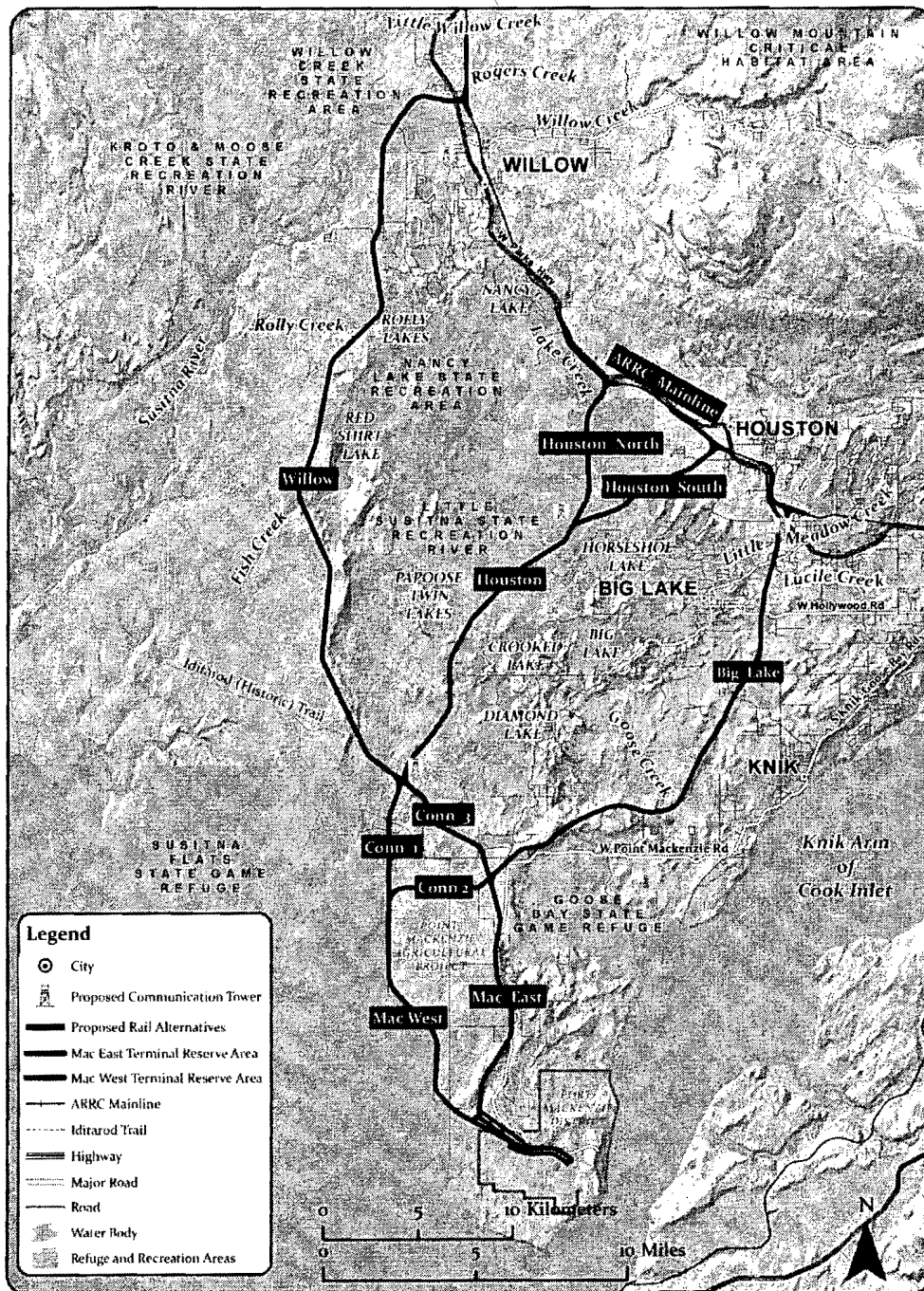


Figure 1-1. Overview of Proposed Port MacKenzie Rail Extension Route Alternatives

1 through its Section of Environmental Analysis (SEA), is the lead agency responsible under
2 National Environmental Policy Act (NEPA) for preparing this Environmental Impact Statement
3 (EIS) to identify and evaluate potential environmental impacts associated with the proposed
4 action and alternatives. The proposed action is to construct and operate a rail line extension from
5 Port MacKenzie to the existing ARRC main line between Wasilla and north of Willow, Alaska.
6 Under the build alternatives, the proposed rail line extension would follow one of several routes.
7 Under the No-Action Alternative, ARRC would not construct the proposed rail line extension.

8 Three Federal agencies are cooperating in the preparation of this EIS pursuant to Council on
9 Environmental Quality (CEQ) NEPA implementing regulations at 40 Code of Federal
10 Regulations (CFR) 1501.6. CEQ regulations emphasize agency cooperation early in NEPA
11 process and allow a lead agency (in this case, the Board) to request the assistance of other
12 agencies with either jurisdiction by law or special expertise in matters relevant to preparing this
13 EIS. Table 1-1 lists each cooperating agency and describes its roles and responsibilities.

Table 1-1
Cooperating Agency Involvement in the Port MacKenzie Rail Extension EIS

Federal Railroad Administration	Could provide funding to ARRC for rail line construction or operations.
U.S. Army Corps of Engineers	Could issue a Section 404 Clean Water Act permit and/or a Section 10 Rivers and Harbors Act permit.
U.S. Coast Guard	Could issue bridge permits.

14
15 SEA and the cooperating agencies (collectively the Agencies) prepared this Draft EIS in
16 accordance with NEPA, CEQ regulations, and the Board's environmental regulations (49 CFR
17 1105) to provide the Board; the cooperating agencies; other Federal, state, and local agencies;
18 Alaska Natives; and the public with clear and concise information on the potential environmental
19 impacts of the proposed action and alternatives, including the No-Action Alternative. While
20 much of this EIS generally refers only to SEA, the document reflects input from all three
21 cooperating agencies.

22 The Agencies also prepared this EIS in accordance with Federal Railroad Administration (FRA)
23 NEPA guidance at 64 CFR 28545; U.S. Army Corps of Engineers NEPA-implementing
24 regulations at 33 CFR 230; and U.S. Coast Guard COMDTINST M16475.1D—NEPA-
25 Implementing Procedures and Policy for Considering Environmental Impacts.

26 SEA is issuing this EIS for public review and comment. SEA will consider all comments
27 received on this Draft EIS and respond to all substantive comments in a Final EIS. The Final
28 EIS will include final recommended environmental mitigation conditions, as applicable. The
29 Board will consider the entire environmental record, the Draft and Final EISs, all public and
30 agency comments, and the SEA environmental recommendations in making its final decision on
31 the application to construct and operate the proposed Port MacKenzie Rail Extension.

32 The Board will decide whether to approve, approve with conditions (which could include
33 conditions designed to mitigate impacts on the environment), or deny the Applicant's request for
34 a license to construct and operate a proposed rail line from Port MacKenzie to the existing main
35 line to the north. As established by the ICC [Interstate Commerce Commission] Termination

1 Act of 1995, the Board shall authorize construction and operation "unless the Board finds that
2 such activities are inconsistent with the public convenience and necessity" (49 U.S.C. 10901;
3 Public Law 104-88, December 29, 1995). The cooperating agencies that could issue individual
4 decisions concerning the proposed action intend to use information in this EIS for
5 decisionmaking purposes.

6 1.2 Purpose and Need

7 The Applicant has stated that the purpose of the Port MacKenzie Rail Extension is to provide
8 rail service to Port MacKenzie and connect the Port with the remainder of the ARRC rail
9 system, providing Port MacKenzie customers with rail transportation between Port MacKenzie
10 and Interior Alaska. Port MacKenzie is an existing deepwater facility on the north side of Knik
11 Arm in upper Cook Inlet, in Southcentral Alaska. The Port's market includes bulk commodities
12 (e.g., wood chips, saw logs, sand/gravel, and cement), vans or containers, iron or steel materials
13 (e.g., scrap metal), vehicles and heavy equipment, mobile or modular buildings. At present,
14 freight truck is the only available mode of surface transportation for bulk materials and other
15 freight to and from Port MacKenzie. The proposed rail line would satisfy the need for an
16 additional mode of transportation for the movement of freight to and from Port MacKenzie. The
17 proposed project would also support ARRC's statutory goal to foster and promote long-term
18 economic growth and development in the State of Alaska.

Deleted: to establish a rail link between

Deleted: and shippers

Deleted: freight

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The Applicant has also stated that

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containers, and other

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Deleted: and would be consistent with
Port MacKenzie's economic development
plans, which include the continued
development of Port MacKenzie as a
multi-modal and bulk materials export
and import facility.

19 1.3 Project Context

20 The proposed rail line extension would end at a terminal reserve (rail yard) approximately 2 or 3
21 miles, depending on the route, from the existing Port MacKenzie docks. Rail facilities Port
22 MacKenzie might construct to connect to the rail line extension would be particular to the
23 specific traffic needs and would be expected to be generally consistent with Port MacKenzie
24 master planning documents. These facilities might include buildings, roads, industrial spurs,
25 sidings, loading/unloading tracks, and other associated facilities throughout the upland Port
26 MacKenzie District. These facilities would be developed as Port MacKenzie continued to grow,
27 but would be independent of the planned rail extension. At present, MSB is developing a bulk
28 materials facility at Port MacKenzie to accommodate the need for expansion of facilities to
29 handle bulk material cargo to be transported to Port MacKenzie by truck, independent of the
30 planned rail line extension. MSB has stated that as it continues to plan for the bulk materials
31 facility and future Port MacKenzie development, it will consider the location of ARRC's
32 proposed rail line extension in its decisionmaking.

33 1.4 Agency Responsibilities

34 This EIS considers actions by the STB, FRA, U.S. Army Corps of Engineers, and U.S. Coast
35 Guard. These agencies could make decisions concerning the proposed action and alternatives
36 and could use this EIS for the disclosure and analysis of potential environmental impacts related
37 to those decisions, as NEPA requires. Sections 1.4.1 and 1.4.2 describe the roles of the lead and
38 cooperating agencies. Additional Federal agencies have review of and oversight responsibilities
39 for this EIS and other components of the environmental process. Section 1.4.3 briefly describes
40 these agencies and their responsibilities. Appendix A contains a selection of correspondence
41 between the lead agency and other Federal, state, and local agencies.

1 **1.4.1 Lead Agency**

2 The STB, pursuant to 49 U.S.C. 10901, is the agency responsible for granting authority for the
3 construction of proposed rail line associated facilities and their subsequent operation. The STB
4 is a bipartisan, decisionally independent adjudicatory body, organizationally housed within the
5 U.S. Department of Transportation (USDOT). The ICC [Interstate Commerce Commission]
6 Termination Act of 1995 (49 U.S.C. 10101 *et seq.*; Public Law 104-88, December 29, 1995)
7 established the STB to assume some (but not all) functions of the ICC, particularly those related
8 to the regulation of freight rail lines. The STB has jurisdiction over rail line rate and service
9 issues, and rail structuring transactions, such as proposed line construction, line sales, line
10 abandonments, and rail line mergers. Accordingly, the STB, through SEA, is the lead agency
11 responsible for preparing this EIS.

12 **1.4.2 Cooperating Agencies**

13 **1.4.2.1 Federal Railroad Administration**

14 The FRA administers rail line assistance programs and consolidates government support of rail
15 transportation activities. The FRA develops and enforces rail line safety regulations and would
16 enforce these regulations on ARRC's proposed rail line. The FRA could provide funding to
17 ARRC for the Port MacKenzie Rail Extension project using a grant. The USDOT regulation
18 known as "Section 4(f)" (23 CFR 774) applies because of the involvement of the FRA. The
19 FRA would not be permitted to provide funding for the project if the STB authorized an
20 alternative that would involve the use of a Section 4(f) property and there were prudent and
21 feasible alternatives that would not use Section 4(f) properties. See Appendix M of this EIS for
22 more detail about Section 4(f) resources.

23 **1.4.2.2 U.S. Army Corps of Engineers**

24 The U.S. Army Corps of Engineers, under Section 404 of the Clean Water Act of 1977 (33
25 U.S.C. 1251 *et seq.*), has jurisdiction over activities that would result in the discharge of dredge
26 or fill material into waters of the U.S., including lakes, rivers, streams, oxbows, ponds, and
27 wetlands. Activities that affect these systems require a Section 404 permit from the Corps of
28 Engineers. Construction of the proposed rail line extension would impact waters of the U.S.;
29 therefore, the Applicant would have to obtain a Section 404 permit prior to commencing project
30 construction.

31 In addition, the Corps of Engineers is responsible for activities that could affect navigable waters
32 of the U.S., pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
33 Section 10 requires any entity proposing to perform work or place a structure in, over, or under a
34 navigable water to obtain a Section 10 permit from the Corps of Engineers prior to commencing
35 the activity. Construction of the proposed rail line extension would involve crossing navigable
36 waters of the U.S.; therefore, the Applicant would have to obtain a Section 10 permit prior to
37 commencing project construction.

38 The Army Corps of Engineers intends to use this EIS to fulfill its NEPA requirements associated
39 with permit evaluation under Section 404 of the Clean Water Act and Section 10 of the Rivers
40 and Harbors Act.

1.4.2.3 U.S. Coast Guard

The Coast Guard, under Section 9 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 *et seq.*), the General Bridge Act of 1946, as amended (60 Stat. 847; 33 U.S.C. 525 *et seq.*), and the Department of Transportation Act of 1966 (Public Law 89-670, 80 Stat. 931-950; 49 U.S.C. 1651-1659), has authority for approval of bridges over navigable waters of the U.S. The Coast Guard is responsible for assessing the navigational and environmental impacts of constructing, maintaining, and operating the proposed bridges associated with the Port MacKenzie Rail Extension. This assessment would be a component of the Coast Guard review of whether to issue bridge permits under Section 9 of the Rivers and Harbors Act. The Coast Guard intends to use this EIS to fulfill its NEPA requirements associated with any decision to grant bridge permits.

1.4.3 Other Federal Agencies

1.4.3.1 U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) has broad oversight and implementing responsibility for many Federal environmental laws, including the:

- Clean Air Act
- Clean Water Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Superfund Amendment and Reauthorization Act
- Toxic Substances Control Act
- Resource Conservation and Recovery Act

The USEPA also provides guidance on compliance with certain Executive Orders, including Executive Order 12898, *Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*; 11990, *Protection of Wetlands*; and 11988, *Floodplain Management*. Under Section 309 of the Clean Air Act (42 U.S.C. 7609), the USEPA reviews and comments on the environmental impacts of major Federal actions for which an agency prepares an EIS under NEPA. The USEPA Office of Federal Activities, which is responsible for reviewing EISs, evaluates and comments on the quality of analysis in this EIS and the extent of the proposal's impact on the environment. The USEPA also announces the availability of any Draft EIS for public comment in the *Federal Register*. SEA will consider the USEPA evaluations and comments on this Draft EIS in the Final EIS.

1.4.3.2 Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation administers the National Historic Preservation Act (Public Law 89-665, October 15, 1966; 16 U.S.C. 470 *et seq.*), which requires Federal agencies to consider the effects of their actions on historic and cultural resources. Under the National Historic Preservation Act, the STB consults with the appropriate State Historic Preservation Officer and the Advisory Council. For the proposed action and alternatives, the STB has consulted with the State Historic Preservation Officer at the Alaska Office of History and Archaeology, a part of the Alaska Department of Natural Resources (ADNR). The Advisory Council is an independent Federal agency created under the authority of National Historic

1 Preservation Act. It is responsible for advocating consideration of historic values in agency
2 decision making, issuing regulations to implement Section 106 of the National Historic
3 Preservation Act, and reviewing Federal programs and policies to further historic preservation.
4 SEA will continue to consult with the Advisory Council and the Alaska Office of History and
5 Archaeology as necessary, and is providing them this Draft EIS for review.

6 The Advisory Council on Historic Preservation also is responsible for ensuring that projects are
7 in compliance with other requirements concerning historic and cultural resources. These include
8 the Archaeological Resource Protection Act, the Native American Graves Protection and
9 Repatriation Act, the American Indian Religious Freedom Act, and Executive Orders requiring
10 consultation with Native American Tribes.

11 **1.4.3.3 U.S. Fish and Wildlife Service**

12 The U.S. Fish and Wildlife Service is the Federal agency with primary expertise in fish, wildlife,
13 and natural resources issues. The Fish and Wildlife Service is responsible for implementation of
14 the Endangered Species Act (7 U.S.C. 136; 16 U.S.C. 1531 *et seq.*) and, through its field offices,
15 for consulting with other Federal agencies on potential impacts to threatened and endangered
16 species.

17 Under Section 7 of the Endangered Species Act, the Fish and Wildlife Service is responsible for
18 the review of Federal agency actions and potential impacts to terrestrial and freshwater
19 threatened and endangered species, and could issue a determination, in the form of a biological
20 opinion, that details projected impacts to threatened and endangered species in the area of a
21 proposed agency action. The STB is responsible for initiating Section 7 consultation with the
22 Fish and Wildlife Service. SEA will continue to consult with the Fish and Wildlife Service as
23 necessary, and is providing the Fish and Wildlife Service this Draft EIS for review.

24 **1.4.3.4 National Marine Fisheries Service**

25 Under Section 7 of the Endangered Species Act, the National Marine Fisheries Service is
26 responsible for the review of Federal agency actions and potential impacts to threatened and
27 endangered marine and anadromous fish species, and could issue a determination, in the form of
28 a biological opinion, that details projected impacts to threatened and endangered species in the
29 area of a proposed agency action. The STB is responsible for initiating Section 7 consultation
30 with the National Marine Fisheries Service.

31 Under the Marine Mammals Protection Act (16 U.S.C. 1361 *et seq.*), the National Marine
32 Fisheries Service is responsible for the review of Federal agency actions that may cause "take"
33 of marine mammals protected under the act.

34 The Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265)
35 requires that Federal agencies consult with the National Marine Fisheries Service on Federal
36 actions that could adversely affect Essential Fish Habitat (50 CFR 600.905-930). The Act
37 requires coordination between the STB and the National Marine Fisheries Service to protect,
38 conserve, and enhance Essential Fish Habitat. The National Marine Fisheries Service has
39 requested an assessment of the potential effect of the Port MacKenzie Rail Extension on
40 Essential Fish Habitat in the area of the proposed action and alternatives.

1 SEA will continue to consult with National Marine Fisheries Service as necessary and is
2 providing them this Draft EIS for review.

3 **1.5 Scoping and Public Involvement**

4 **1.5.1 Scoping Notice and Public Meetings**

5 On February 12, 2008, SEA published the Notice of Intent to Prepare an EIS, Draft Scope of
6 Study, Notice of Scoping Meetings, and Request for Comments (73 *Federal Register* [FR]
7 8106). SEA distributed a letter to more than 7,700 citizens; elected officials; Federal, state, and
8 local agencies; tribal organizations; and other potentially interested stakeholders to introduce the
9 Port MacKenzie Rail Extension Project; announce SEA's intent to prepare an EIS; request
10 comments; and give notice of six public scoping meetings. The distribution encompassed the
11 communities surrounding the proposed action and alternatives and groups outside the project
12 area that could have an interest in the Project. SEA also posted meeting notices in public
13 locations (such as post offices, grocery stores, and restaurants) in the project area and initiated a
14 toll-free project hotline. SEA also provided project information on the STB Web site at
15 www.stb.dot.gov and on an STB-sponsored project Web site at www.stbportmacraileis.com.
16 SEA placed notices of the scoping meetings in several newspapers, including the *Frontiersman*,
17 the *Talkeetna Times*, and the *Anchorage Daily News*.

18 SEA held public scoping meetings in Knik, Big Lake, Willow, Houston, Wasilla, and
19 Anchorage, Alaska, on March 3, 4, 5, 6, 10, and 11, 2008, respectively. SEA used a workshop
20 format to allow attendees to provide comments to and ask questions of SEA. Approximately 146
21 citizens, representatives of organizations, elected officials, and officials from Federal, state, and
22 local agencies attended the meetings. Some attendees submitted written comments during the
23 meetings, and SEA received additional scoping comment letters during the scoping comment
24 period, which closed on March 21, 2008.

25 SEA considered agency and public input to the scoping process and on July 17, 2009 issued the
26 final scope of study for this EIS. SEA published the final scope of study in the *Federal Register*,
27 placed it on the STB and project Web sites, and mailed an announcement of the availability of
28 the final scope of study to approximately 8,000 individuals, agencies, and other interested parties
29 on the SEA project mailing list. The final scope of study summarized the comments received
30 and potential impacts to be analyzed.

31 As part of the environmental review process to date, SEA has conducted broad public outreach
32 activities to inform the public about the proposed action and to facilitate public participation.
33 SEA consulted with and will continue to consult with Federal, State of Alaska, and local
34 agencies, tribal organizations, affected communities, and all interested parties to gather and
35 disseminate information about the proposed project.

36 **1.5.2 Tribal and Government-To-Government Consultation**

37 SEA consulted with Federally Recognized Tribes and other tribal organizations during the
38 preparation of this EIS (see Appendix B). Prior to issuing the Notice of Intent to Prepare an EIS,
39 SEA informed tribal organizations of the proposed Port MacKenzie Rail Extension and requested

1 comments on the project. SEA also contacted the following Federally Recognized Tribes, tribal
2 groups, and Alaska Native Regional Corporations for input in the development of the
3 Government-to-Government Consultation and Coordination Plan:

- 4 • Chickaloon Village Traditional Council
- 5 • Chickaloon-Moose Creek Native Association, Incorporated
- 6 • Cook Inlet Region, Incorporated
- 7 • Eklutna, Incorporated
- 8 • Knik Tribal Council
- 9 • Knikatu, Incorporated
- 10 • Native Village of Eklutna
- 11 • Native Village of Tyonek
- 12 • Tyonek Native Corporation

13 The plan describes the objectives and approach to the consultation process and provided an
14 opportunity for the recipients to indicate how they wanted to participate further in government-
15 to-government coordination for the proposed project.

16 After sending consultation letters and following up with phone calls, SEA received completed
17 questionnaires from two Federally Recognized Tribes, tribal groups, and Alaska Native Regional
18 Corporations. Both organizations asked to continue to receive project information by mail and to
19 participate in the public involvement process.

20 **1.5.3 Request for Comments on the Draft EIS**

21 SEA encourages the public and any interested parties to submit written comments on all aspects
22 of this Draft EIS. SEA will consider all comments in preparing the Final EIS, which will include
23 responses to all substantive comments, SEA's final conclusions on potential impacts, and SEA's
24 final recommendations. All comments on the Draft EIS must be submitted within the published
25 comment period, which will close 45 days after the Notice of Availability of the Draft EIS is
26 published in the *Federal Register*. When submitting comments on the Draft EIS, the STB
27 encourages commenters to be as specific as possible and substantiate concerns and
28 recommendations.

29 Mail written comments on the Draft EIS to:

30 David Navecky
31 Surface Transportation Board
32 395 E Street, SW
33 Washington, DC 20423
34 Attention: Environmental Filing
35 STB Finance Docket No. 35095

36 SEA also encourages commenters to submit comments electronically. Comments submitted
37 electronically will be given the same attention as mailed comments. Persons who submit
38 comments electronically do not have to also send those comments by mail. Environmental
39 comments may be filed electronically on the STB Web site at www.stb.dot.gov by clicking on
40 the "E-FILING" link. By selecting "Environmental Comments" after the link, individuals will

1 not be required to log in to submit their comments. Comments can be typed into the online form
2 provided, or attached as Microsoft Word[®], Corel Word Perfect[®], or Adobe[®] Acrobat[®] files.

3 **Please refer to STB Finance Docket No. 35095 in all correspondence addressed to the**
4 **Board, including e-filings.**

5 Additional information about the project can be obtained by calling the SEA toll-free number at
6 1-888-257-7560 (telecommunications device [TDD] for the hearing impaired is 1-800-877-
7 8339).

8 This Draft EIS is also available on the STB Web site at www.stb.dot.gov and on the project Web
9 site at www.stbportmacraileis.com.

10 **1.5.4 Public Comment Meetings**

11 In addition to receiving written comments on the Draft EIS, SEA will host public meetings. SEA
12 involved the cooperating agencies in planning and conducting the public meetings. At each
13 meeting, SEA will give a brief presentation and interested parties may then make oral comments.
14 SEA will have a transcriber present at each meeting to record the oral comments. Attendees may
15 also submit written comments at the meetings. Meetings will be held at the following locations,
16 dates, and times: [To Be Determined]

17 **1.6 EIS Organization and Format**

18 This EIS is organized in a manner consistent with NEPA and CEQ NEPA implementing
19 regulations at 40 CFR 1502.10. It is intended to provide clear and concise information on the
20 proposed action and alternatives to agency decisionmakers and the public. This EIS describes
21 the proposed action and alternatives, existing environmental conditions, and potential
22 environmental impacts associated with the proposed action and alternatives. The Table of
23 Contents lists chapters and specific topics within chapters to help readers find topics of interest.
24 The Table of Contents lists tables and figures numerically by the chapter in which they appear.
25 The Index at the end of the main body of this EIS more specifically identifies the locations of
26 topics of interest. Appendices are lettered and are provided in alphabetical order after the main
27 body of this EIS.

28 Analyses in this document address proposed activities associated with construction and operation
29 of proposed rail associated facilities and their potential environmental impacts, as appropriate.
30 This EIS reports potential direct and indirect impacts from construction and operation of the
31 proposed rail line and associated facilities, and for the No-Action Alternative, the potential direct
32 and indirect impacts of not implementing the proposed action. Impact areas addressed include
33 geology and soils, water resources, biological resources, cultural and historic resources,
34 subsistence, air quality, noise and vibration, energy, transportation safety and delay, navigation,
35 land use, socioeconomics, and environmental justice.

36 This EIS also addresses potential cumulative impacts to the environment that would result from
37 the incremental impact of the action when added to other past, present, and reasonably
38 foreseeable future actions, regardless of what agency (Federal or non-Federal) or person
39 undertakes such actions.

2. PROPOSED ACTION AND ALTERNATIVES

This chapter describes the Alaska Railroad Corporation (ARRC or the Applicant) proposed action for the Port MacKenzie Rail Extension; the development of potential rail line alignments; a reasonable range of alternatives for analysis in this Environmental Impact Statement (EIS), including the No-Action Alternative; and alternatives considered but not included for detailed study.

2.1 Proposed Action

Under the proposed action, ARRC would construct and operate a single-track rail line from Port MacKenzie to a point on the existing ARRC main line between Wasilla and north of Willow, Alaska. The Federal Railroad Administration (FRA) establishes the standards for class of track and maximum operating speed for passenger and freight on each class of track (49 Code of Federal Regulations [CFR] 213). ARRC proposes to transport commercial freight on the rail line, and would construct and maintain the rail line to Class 4 standards because of its desired operating speed for freight service. ARRC would construct other facilities to support rail line operations. ARRC proposes a right-of-way (ROW) of approximately 200 feet for the rail line. Unless otherwise noted, this EIS assumes that all construction activities would occur within this 200-foot-wide ROW. ARRC might reduce the width of the ROW, as necessary, to minimize impacts to sensitive resources or accommodate the terrain. The ROW could contain an above-ground power line, buried utility lines, and an access road (see Figure 2-1). In addition, ARRC would construct one rail line siding within the existing main line ROW at the tie-in location with the rail extension. The area in the ROW that is cleared of vegetation for construction, but not needed for permanent structures, would be restored to natural conditions, to the extent practicable, consistent with rail line operating requirements. ARRC would need to acquire public and private lands to establish the linear ROW.

In addition to the rail line, ARRC would construct associated facilities. The locations of some of the associated facilities, such as construction staging areas and communication towers, would vary depending on which alternative segments, if any, the Board authorizes for construction and operations. ARRC would also build temporary associated facilities to support construction and would remove them after the completion of construction of the rail line and associated facilities. Most associated facilities would require permanent or temporary access roads. Locations for communications towers and terminal reserve areas (rail yards and maintenance facility at the southern terminus of the proposed rail line) have been identified. The locations of other associated facilities would be determined during final design. Where practicable, ARRC would site construction staging areas inside the 200-foot ROW.

2.1.1 Proposed Rail Line Construction

This section describes proposed rail line construction, including ROW needs, construction components and materials, roadways, bridges, and permanent and temporary facilities. This section also describes the general construction process and schedule.

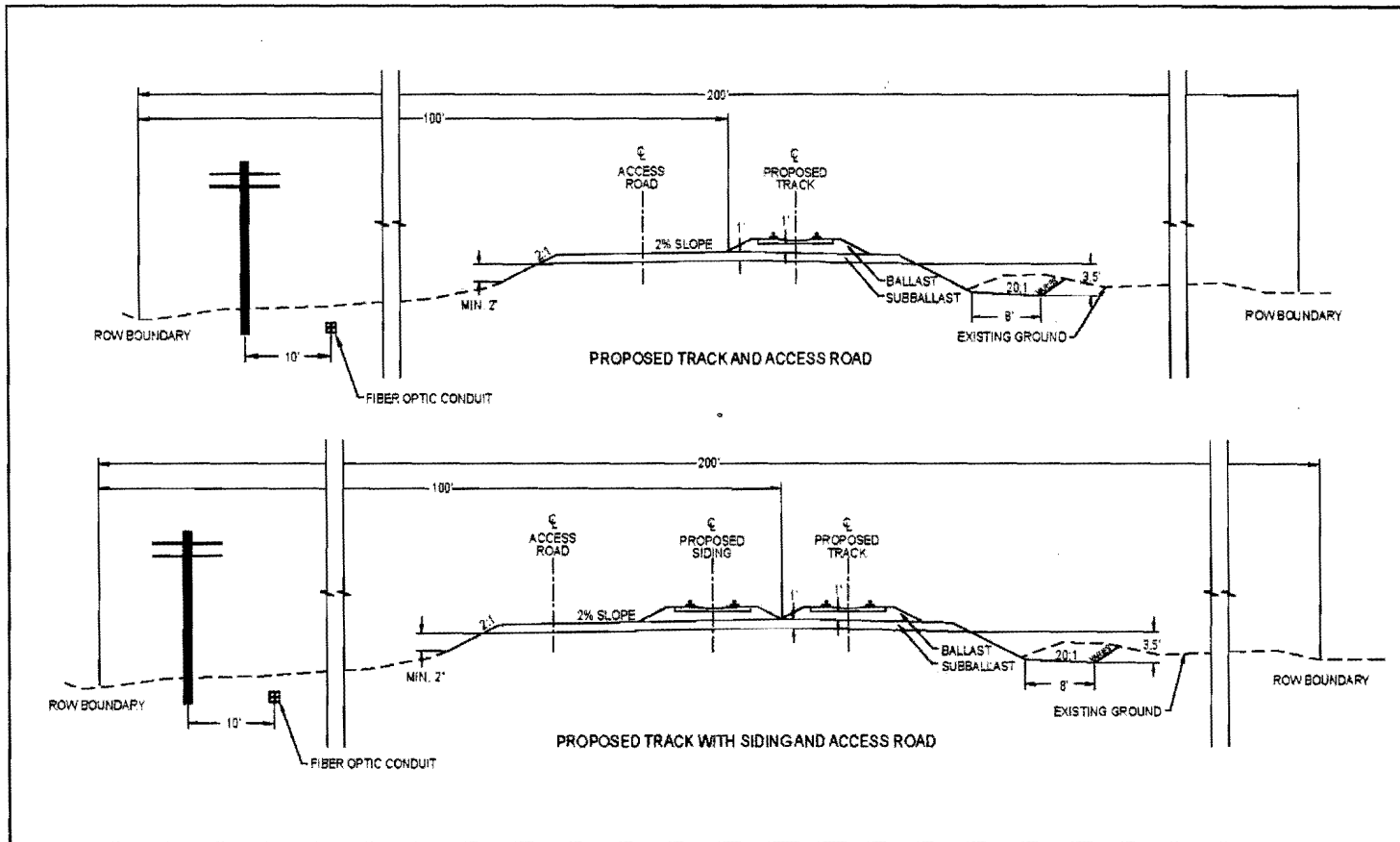


Figure 2-1. Cross-Sections of Rail Line Right-of-Way

1 **2.1.1.1 Right-of-Way**

2 Unless otherwise indicated, construction activities would occur within the 200-foot ROW. For
3 purposes of analysis, SEA assumes that the entire ROW would be permanently cleared of
4 vegetation for construction and then operations. However, some areas might not require full use
5 of the ROW, and those areas would be restored after construction or left undisturbed if not
6 needed.

7 **2.1.1.2 Rail Line Access Roads**

8 For rail line construction and post-construction operations, ARRC would build a permanent
9 access road parallel to the rail alignment and within the 200-foot ROW. ARRC would construct
10 the access road before the rail line and would use the access road for construction of the rail line.
11 ARRC would not maintain the access road as a public road.

12 Based on conceptual engineering information, ARRC does not anticipate additional access roads.
13 However, final engineering for the selected alignment could identify the need for new roads in
14 certain areas to shorten haul distances for fill or track material.

15 **2.1.1.3 Railbed Construction**

16 Before any track could be placed, ARRC would construct a suitable railbed. The railbed would
17 form the base upon which ARRC would lay the ballast, rail ties, and rail. Railbed construction
18 would require clearing, excavating earth and rock on previously undisturbed land, and removing
19 and stockpiling topsoil, where needed. Construction would require both cuts and fills. To the
20 extent practicable, ARRC would adjust the design profile grade to balance cut and fill quantities.
21 ARRC would remove excess fill material created during railbed construction and would transport
22 and deposit it in an appropriate location. ARRC would store unsuitable railbed material on site
23 for application to finished slopes and to facilitate revegetation and provide erosion control, or
24 would remove unsuitable material from the area and dispose of it in an acceptable manner.

25 **2.1.1.4 Track Construction**

26 ARRC would place ties and rail using conventional construction and track-mounted equipment
27 in successive application. In-place track construction would consist of placing ties, rail, and
28 ballast on top of the railbed. First, ARRC would place the ties on the subballast. ARRC would
29 weld rails together to form rail strings and then use special equipment to unload and secure the
30 rail onto the ties, unload ballast from rail ballast cars or trucks, and dump ballast evenly along
31 the skeleton track. ARRC would then use equipment to raise the rail line to achieve the proper
32 ballast depth.

33 Alternatively, ARRC could decide to construct skeleton track panels at several of its facilities.
34 These 40- to 80-foot-long panels would consist of rails, ties, and fastening systems constructed
35 and loaded onto railcars for delivery to the construction site. At the construction site, the panels
36 would be lifted from the railcars and placed in their final location. The panels would be fastened
37 together to form the skeleton track.

1 **2.1.1.5 Acquisition of Materials for Rail Line Construction**

2 Ballast, subballast, fill material, rail ties, and rail would be required for construction of the
3 proposed rail line. This section briefly describes the acquisition and use of these materials.

4 ARRC would obtain ballast from existing commercial quarries or its existing quarry in Curry,
5 Alaska. ARRC would transport ballast from Curry to the project area by rail or by a combination
6 of rail and truck, and anticipates that ballast from other sources would likely be trucked directly
7 to the construction site.

8 ARRC would obtain subballast primarily from materials excavated during railbed construction,
9 from existing commercial sources, and from borrow areas established along the rail line ROW.
10 As part of the final design and permitting process, ARRC would perform geotechnical testing to
11 identify borrow locations with suitable material. Consistent with other construction
12 requirements, ARRC would maintain short intervals between borrow sites to minimize average
13 haul distance. Any excess material (overburden) from these activities would be distributed
14 evenly along the railbed as nonstructural fill to support revegetation.

15 ARRC would obtain fill material from cut-and-fill activities during railbed construction, and to
16 the extent practicable, would adjust the design profile grade to balance cut and fill quantities. If
17 needed, ARRC would obtain additional fill material from borrow sources within the ROW or off
18 site.

19 ARRC would obtain rail ties and steel rail from commercial sources to create rail strings, and
20 anticipates that these materials likely would be shipped to the project area by ship, rail, and
21 truck. The rail would be delivered in short lengths individually, or as preconstructed track
22 panels.

23 **2.1.1.6 Construction Staging Areas**

24 The proposed rail line might require construction staging areas to store material, weld sections of
25 the rail line, and otherwise support rail line construction activities. The staging areas would be
26 identified before construction began. ARRC has stated that it would attempt to locate staging
27 areas within the proposed ROW at relatively flat, previously disturbed areas with established
28 access to existing public roads. The project would either consume all stockpiled materials or
29 ARRC would remove them from the staging areas following construction.

30 **2.1.1.7 Bridges and Culverts**

31 Rail and access road bridges and culverts would be required for crossing streams, rivers, and
32 some wetlands. New culverts would extend across the combined width of both the railbed and
33 access-road bed. Crossing structures the Applicant has identified as "drainage structures" would
34 be determined during the final design process and could include culverts, pre-cast arches, and
35 single or multiple short-span bridges. Existing culverts would also be extended and new bridges
36 constructed for the new rail siding proposed along the existing ARRC main line where any of the
37 alternatives would connect to the main line. The locations, types, and sizes of all proposed
38 bridges and culverts are approximate and preliminary; the exact locations, types, and sizes would
39 be determined during the final design and permitting process. In addition, the Applicant could

1 add culverts to maintain drainage and add equalization culverts through wetland areas. The need
2 for, locations, types, and sizes of these additional culverts would be determined during the final
3 design and permitting process.

4 Where it has not proposed bridges, the Applicant proposes to build culverts into the railbed and
5 vehicle roadbed to allow water to flow under the rail line and access road. ARRC proposes to
6 construct between 16 and 34 single culverts and between 2 and 7 drainage structures, depending
7 on alternative. The Applicant would design and construct culverts with a width greater than or
8 equal to 125 percent of the width of the stream at the mean high water line of anadromous fish
9 habitat. The Applicant would design and construct culverts so as not to impede fish passage.
10 Culverts used for anadromous stream crossings would be designed and constructed in accordance
11 with the National Marine Fisheries Service 2008 publication, "Anadromous Salmonid Passage
12 Facility Design," ADF&G Title 16 fish habitat permit requirements, or as otherwise specified in
13 permit conditions.

14 In addition, the Applicant proposes to construct up to four rail bridge crossings along the rail
15 line, depending on alternative. Waterbodies that these bridges would cross include the Little
16 Susitna River, Willow Creek, Rogers Creek, and a tributary to Little Willow Creek. With the
17 exception of the tributary to Little Willow Creek, these crossings would likely consist of multiple
18 spans of 28-foot standard ARRC deck girder bridges because the widths of the channels exceed
19 the length of a single 28-foot span. The smaller crossing at the tributary to Little Willow Creek
20 would likely consist of a single 28-foot standard-span ARRC deck girder bridge.

21 At a minimum, ARRC would design rail bridges to pass the mapped 100-year flood. ARRC
22 would also design culverts for the 100-year flood event.

23 ARRC would start constructing bridges and large culverts before other infrastructure because
24 they would take longer to construct and would be needed for construction activity. Each bridge
25 would require a bridge construction staging area that could be within the 200-foot ROW.

26 **2.1.1.8 Construction Schedule**

27 Construction would be conducted throughout the year, although severe weather would limit
28 winter-time construction to land-clearing activities, material and equipment staging, most bridge
29 construction, and interior work associated with facility buildings. The specific timeframe and
30 sequence of construction would depend on funding, final design, and permit conditions, such as
31 requirements to avoid sensitive breeding periods for migratory birds and raptors and when
32 salmon are spawning, incubating, or rearing in specific areas.

33 ARRC anticipates that construction of the Port MacKenzie Rail Extension would be completed
34 in 24 months. To meet a 24-month construction schedule, there could be construction activities
35 24 hours a day (up to three crews working 8-hour shifts) along some portions of the rail line.
36 However, there would not be construction activities 24 hours a day along significant portions of
37 the project length because of environmental and human constraints. ARRC anticipates that the
38 construction work force would vary from 66 persons during grading and embankment
39 construction to 100 during ballast and track installation.

2.1.1.9 Grade Crossings

To maintain access to existing public and private roads across the rail line, ARRC would install grade crossings where the rail line would cross a roadway. In places where the rail line would cross Parks Highway, Big Lake Road, Baker Farm Road, Holstein Avenue, or Hollywood Road, depending on the alternative, ARRC proposes grade-separated crossings. Where the rail line would cross public roadways with usage levels of 500 or more vehicles per day, the routes would cross at grade and the Applicant proposes active warning devices, such as flashing lights and gates. Where the rail line would cross public roadways with usage levels less than 500 vehicles per day, the routes would cross at-grade and the Applicant proposes passive warning devices, such as crossbucks and stop signs. Where the proposed rail line would cross a trail that is officially recognized, meaning specifically established within currently-adopted plans by ADNR and/or MSB or are established within these plans at the time of construction or ROW conveyance (whichever occurs first), and are located on state, MSB property, or whose locations are provided for by recorded ROW or easement, ARRC proposed to provide public access by a grade-separated crossing where practicable, or the trail could be relocated to avoid crossing the rail line. The design of the crossing would accommodate existing trail users at the time of construction or ROW conveyance (whichever occurs first). ARRC would coordinate with the trail owner and consult with user groups as appropriate where the crossing location could have to be relocated to accommodate a grade-separation, or multiple crossings within one mile might be consolidated. ARRC does not propose to provide crossings for unofficial trails. Unofficial trails would be blocked, and ARRC's trespassing regulations would prohibit crossing of the ROW. The following trails have been identified by ARRC for grade-separated crossings and/or relocation.

- | | |
|---------------------------------|------------------------------------|
| • Aurora Dog Mushers Club Trail | • Iditarod National Historic Trail |
| • Crooked Lake Trail | • Iron Dog Trail |
| • Figure 8 Lake Loop Trail | • Lucky Shot Trail |
| • Flat Lake Connector | • Mud Lake Trail |
| • Flathorn Lake Trail | • Pipeline Trail |
| • Herning Trail | • West Gateway Trail |
| • Houston Lake Loop Trail | • Nancy Lake – Susitna Trail |
| • Iditarod Link Trail | |

2.1.1.10 Associated Facilities

The proposed action includes the construction and operation of several associated facilities. These permanent facilities would include a terminal reserve area, communications towers, and a track siding along the existing main line. ARRC would construct these facilities at the same time as the proposed rail line. ~~While, offloading facilities could be constructed along the proposed rail line, none have been proposed.~~

Terminal Reserve Area

ARRC would construct a terminal reserve area along the southern terminus of the rail line. This area would consist of yard sidings, storage areas, and a terminal building to support train maintenance. ARRC has proposed two terminal reserve areas, but would build only one

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1 depending on which alternative the Board authorized, if any. The terminal reserve area would be
2 approximately 1,000 feet wide and approximately 9,800 feet long. The terminal reserve area for
3 the Mac East Segment would also include relocation of a portion of Baker Farm Road, including
4 construction of a grade-separated crossing of the rail line, to provide vehicle access to the
5 northern end of the terminal reserve area; construction of a road within the terminal reserve area;
6 and construction of an approximately 1,500 foot access road, with a grade-separated crossing,
7 between the terminal reserve area and Point MacKenzie Road along the northern edge of the
8 Chugach Electrical Association transmission line ROW.

9 **Communications Towers**

10 ARRC has identified five locations for communications towers throughout the project area; two
11 or three new towers, depending on the alternative, are anticipated to be constructed to support
12 rail line operations. Tower locations would depend on which alternative the Board authorized, if
13 any. The tower locations include one near Port MacKenzie, one in the central area of the
14 proposed project, and three in the northern portion of the proposed project area near the existing
15 ARRC main line track. Tower sites could require new access roads if they would not be
16 accessible via existing roads.

17 **Track Sidings**

18 ARRC would construct one 8,000-foot double-ended siding to the north of the proposed tie-in
19 point with the main line. The siding would allow train passage and access to rail services. The
20 arrangement of the track siding and tie-in would be a "wye" connection. The siding would be
21 placed, where possible, on tangent sections of the alignment and would be in the 200-foot ROW.

22 **2.1.2 Proposed Rail Line Operations**

23 After rail line construction, trains would transport freight providing Port MacKenzie customers
24 with rail transportation between Port MacKenzie and Interior Alaska. The Port's market
25 includes bulk commodities (e.g., wood chips, saw logs, sand/gravel, cement), vans or containers,
26 iron or steel materials (e.g., scrap metal), vehicles and heavy equipment, mobile or modular
27 buildings. ARRC anticipates an average of approximately 2 freight trains per day (1 in each
28 direction) with an average of 40 to 80 freight cars each.¹ Train speeds would be a maximum 60
29 miles per hour.

30
31
32 ARRC would perform periodic maintenance and inspections to ensure safe and reliable rail line
33 operations. Primary maintenance activities would include signal testing and inspection; minor
34 rail, tie, and turnout replacement; and routine ballasting and surfacing tasks. Additional

¹ This estimated level of train traffic would be sufficient to fill approximately 13 Panamax class ships per year with bulk materials. Based on current market opportunities, ARRC estimates ship traffic for export of bulk commodities from the Port MacKenzie Rail Terminal would include five Panamax class ships per year.

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1 maintenance activities would be performed on an as-needed basis and would include vegetation
2 control, snow removal, and vehicle and equipment maintenance.

3 **2.2 Alternatives Development**

4 ARRC filed a petition with the STB for the authority to construct and operate approximately 30
5 to 45 miles of a proposed rail line between Port MacKenzie and the existing ARRC main line
6 between Wasilla and north of Willow, Alaska. Prior to filing with the STB, ARRC identified
7 and considered several potential alignments for this rail line extension. This section summarizes
8 the process ARRC used to develop various alignments and SEA's review and consideration of
9 those alignments as EIS alternatives.

10 **2.2.1 Alignment Development Process**

11 More than 10 years ago, Matanuska-Susitna Borough (MSB or the Borough) identified a
12 potential need for rail transport from Port MacKenzie (which was not constructed at that time) to
13 the ARRC main line north of Port MacKenzie. In 2003, MSB commissioned a constraints
14 analysis study of rail and road access to Port MacKenzie to determine feasibility and potential
15 impacts. The study identified 11 potential rail and road corridors.

16 MSB consulted the U.S. Army Corps of Engineers regarding potential impacts to wetlands, the
17 Alaska Department of Natural Resources (ADNR) regarding potential impacts to state lands and
18 coastal resources, and the Alaska Department of Fish and Game (ADF&G) regarding potential
19 impacts to fisheries and other wildlife. Based on these agency consultations and potential
20 impacts to private property and wetlands, ARRC eliminated 9 of the 11 potential corridors from
21 further consideration for construction of a rail line.

22 In 2007, the State of Alaska granted MSB an appropriation to perform conceptual engineering
23 and environmental documentation for the Port MacKenzie Rail Extension. From September to
24 December 2007, MSB and ARRC jointly conducted a constraints analysis based on engineering
25 requirements and available environmental data to re-evaluate the alignments from the 2003 MSB
26 study and develop alignments that could minimize potential impacts to the environment. MSB
27 and ARRC then conducted public open houses and agency overview meetings to provide
28 information about and receive comments on the proposed project. ARRC used feedback from
29 stakeholders to refine potential rail alignments to reduce potential impacts and develop
30 preliminary voluntary mitigation measures. Based on this information, in January 2008 ARRC
31 issued the Preliminary Environmental and Alternatives Report (ARRC, 2008), which presented
32 eight possible alignment configurations.

33 In early 2008, ARRC submitted the Preliminary Environmental Alternatives Report to SEA.
34 Since then, ARRC has refined some of the potential alignments and SEA has evaluated those and
35 other potential alignments during this environmental review process.

36 **2.2.2 Alternatives Considered but Eliminated from Detailed Study**

37 ~~DELETED FOR PURPOSES OF REDACTION~~

38

2.3 Alternatives Selected for Detailed Study

SEA independently reviewed the Applicant's Preliminary Environmental Alternatives Report, conducted field studies, consulted various Federal and state agencies, reviewed scoping comments, and worked with cooperating agencies to determine a reasonable range of alternatives. Through this process, SEA and the cooperating agencies determined that the alignments described below are a reasonable range of alternatives for detailed study.

The alternatives are composed of southern and northern segments, with possible connector segments between. The southern segments, Mac West and Mac East, would run either east or west of the Point MacKenzie Agricultural Project.² There are three main sections north of the Point MacKenzie Agricultural Project – Willow, Houston, and Big Lake – with Houston having north and south variants. Connector segments link the north and south segments to create eight possible routes for the proposed rail line, as listed below and shown in Figure 2-2.

- Mac West, Connector 1, and Willow. This route would be 44.8 miles long.
- Mac West, Connector 1, Houston, and Houston North. This route would be 35.1 miles long.
- Mac West, Connector 1, Houston, and Houston South. This route would be 34.5 miles long.
- Mac West, Connector 2, and Big Lake. This route would be 35.8 miles long.
- Mac East, Connector 3, and Willow. This route would be the longest, 45 miles.
- Mac East, Connector 3, Houston, and Houston North. This route would be 35.3 miles long.
- Mac East, Connector 3, Houston, and Houston South. This alternative would be 34.7 miles long.
- Mac East and Big Lake. This alternative would be the shortest, 31.8 miles.

Although SEA and the cooperating agencies have examined the eight alternatives listed above in detail, the agencies note that some of these alternatives may not be eligible for federal funding from USDOT agencies such as the FRA. ARRC could seek Federal funding for the proposed rail line through programs offered by the FRA and, potentially, other Federal agencies. Publicly-owned parks, recreation areas, wildlife and waterfowl refuges, and public and private historical sites are protected under Section 4(f) of the Department of Transportation Act (DOT Act) of 1966, codified at 49 U.S.C. § 303. The DOT Act, as amended by Section 6009(a) of the Safe,

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² The State of Alaska initiated the Point MacKenzie Agricultural Project in the 1980s. The Agricultural Project is an area of agricultural land sold or leased by the state with agricultural covenants. Owners are required to submit conservation plans for each parcel to the ADNR Division of Agriculture to ensure that the agricultural resources in the area are preserved. While the area's designation as an agricultural project does not confer special status on these parcels beyond the parcel's agricultural restrictions, the area is the largest contiguous agricultural area in Alaska. There are easements specifically reserved for railroad development throughout the agricultural area; however, these easements are discontinuous and generally cut through the middle of the arable land.

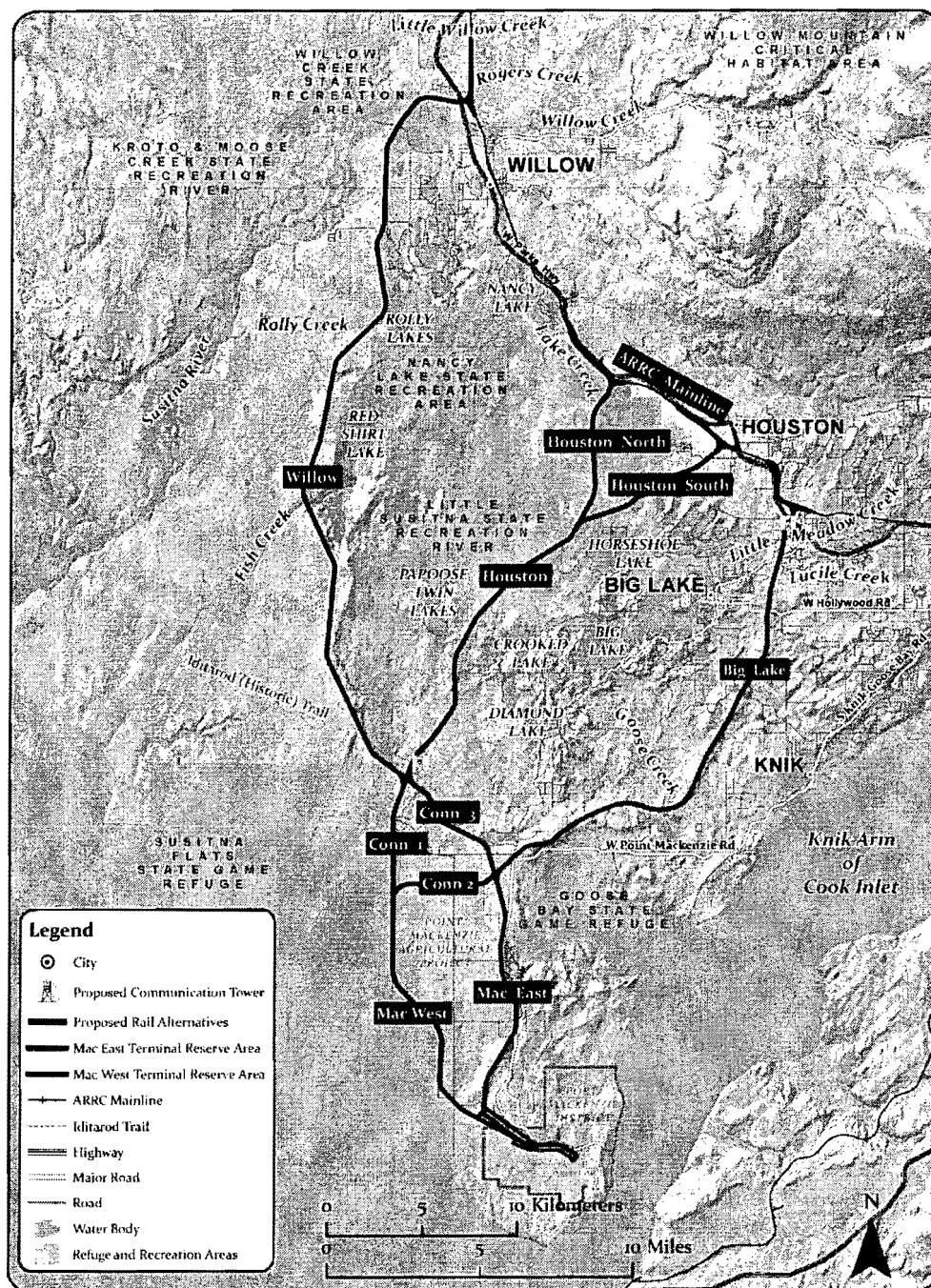


Figure 2-2. Alternatives Considered for the Port MacKenzie Rail Extension

Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005, provides that USDOT agencies³ such as the FRA cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites – referred to as Section 4(f) resources – unless:

- There is no “prudent and feasible alternative” to the use of the land, and the project includes “all possible planning to minimize harm” to the protected property resulting from use, or
- The use would result in *de minimis* impacts to Section 4(f) resources.

The Willow, Mac West and Houston North segments would traverse the Willow Creek State Recreation Area, Nancy Lake State Recreation Area, Little Susitna State Recreation River, and/or Susitna Flats State Game Refuge. These recreation and refuge areas are all Section 4(f) resources. It is therefore unlikely that FRA or any other USDOT agencies subject to Section 4(f) could provide funding for the project if the Board authorizes construction and operation of an alternative that includes any of these three segments because there are prudent and feasible alternatives that do not use Section 4(f) resources. This EIS provides the information necessary for any decisions required under Section 4(f). Appendix M provides additional detail about Section 4(f).

2.3.1 Southern Segments

2.3.1.1 Mac West

The Mac West Segment would begin in the terminal reserve area and would proceed northwest across relatively flat terrain toward the southwest corner of the Point MacKenzie Agricultural Project. The segment would continue west of the agricultural area, traversing along the eastern boundary of Susitna Flats State Game Refuge. The terminal reserve area is proposed along the south side of Mac West.

2.3.1.2 Mac East

The Mac East Segment would begin in the terminal reserve area and would proceed north along the side of a ridge along the east side of the Point MacKenzie Agricultural Project. Near Mile Post 4.7, the segment would cross a ravine and then curve to the northeast along the top of another ridge. North of Mile Post 6, the segment would follow the alignment of Port MacKenzie Road, offset 200 feet or more to the west. The segment would continue along undulating terrain before reaching its junction with the Big Lake Segment or Connector 3 Segment. The terminal reserve area is proposed along the north side of Mac East.⁴

³ The Surface Transportation Board is a bipartisan, decisionally independent adjudicatory body, organizationally housed within the USDOT.

⁴ Based on Port MacKenzie planning and development information and additional field data collected during the summer of 2008, ARRC revised the proposed location for the terminal reserve area for the Mac East Segment. This terminal reserve area is shifted to the west in relation to its previous location. This change occurred after issuance of ARRC's Preliminary Environmental and Alternatives Report. ARRC also considered relocating the terminal reserve area for the Mac West Segment to this revised location as well, but found that topography and safety considerations made it impractical, so the location presented in the Preliminary Environmental and Alternatives Report was retained.

1 See Figure 2-3 for a detailed map of the southern segments and terminal reserve areas.

2 **2.3.2 Connector Segments**

3 **2.3.2.1 Connector 1**

4 This 4.1-mile-long segment would connect the Mac West Segment to the Willow or Houston
5 segment. From Mac West, this connector segment would continue north along the eastern
6 boundary of the Susitna Flats State Game Refuge on level terrain. The segment would cross a
7 tributary of the Little Susitna River.

8 **2.3.2.2 Connector 2**

9 This 3.7-mile-long segment would connect the Mac West Segment to the Big Lake Segment. At
10 the northwestern end of the Point MacKenzie Agricultural Project, this connector segment would
11 turn due east and travel along the southern boundary of the Point MacKenzie Correctional Farm.

12 **2.3.2.3 Connector 3**

13 This 4.5-mile-long segment would connect the Mac East Segment to the Willow or Houston
14 segment. At the northeastern end of the Point MacKenzie Agricultural Project, this connector
15 segment would shift to the northwest and cross Ayrshire Avenue and Farmers Road. The
16 segment would continue north of My Lake and cross an adjacent ravine. The remaining mile of
17 the segment would be nearly level.

18 See Figure 2-3 for a detailed map of the connector segments.

19 **2.3.3 Northern Segments**

20 **2.3.3.1 Willow**

21 From Connector 1 Segment or Connector 3 Segment, the Willow Segment would continue
22 northwest where it would cross a corner of Susitna Flats State Game Refuge, Little Susitna State
23 Recreation River, and the Little Susitna River (see Figure 2-4). Over the next 7 miles, the
24 segment would continue north through rolling terrain. The segment would cross Fish Creek, the
25 outlet for Red Shirt and Cow Lakes. It would then proceed north, generally following the west-
26 facing slope of a glacial moraine west of Red Shirt Lake. It would continue north through the
27 Nancy Lake State Recreation Area for approximately 0.5 mile. The Willow Segment would
28 cross the outlet for Vera Lake, continue over rolling terrain, and cross Willow Landing Road.
29 The segment would then continue through the Willow Creek State Recreation Area, where it
30 would cross Willow Creek. The segment would curve to the east and cross Parks Highway with
31 a grade separation, before connecting to the existing ARRC main line near Mile Post 188.9.

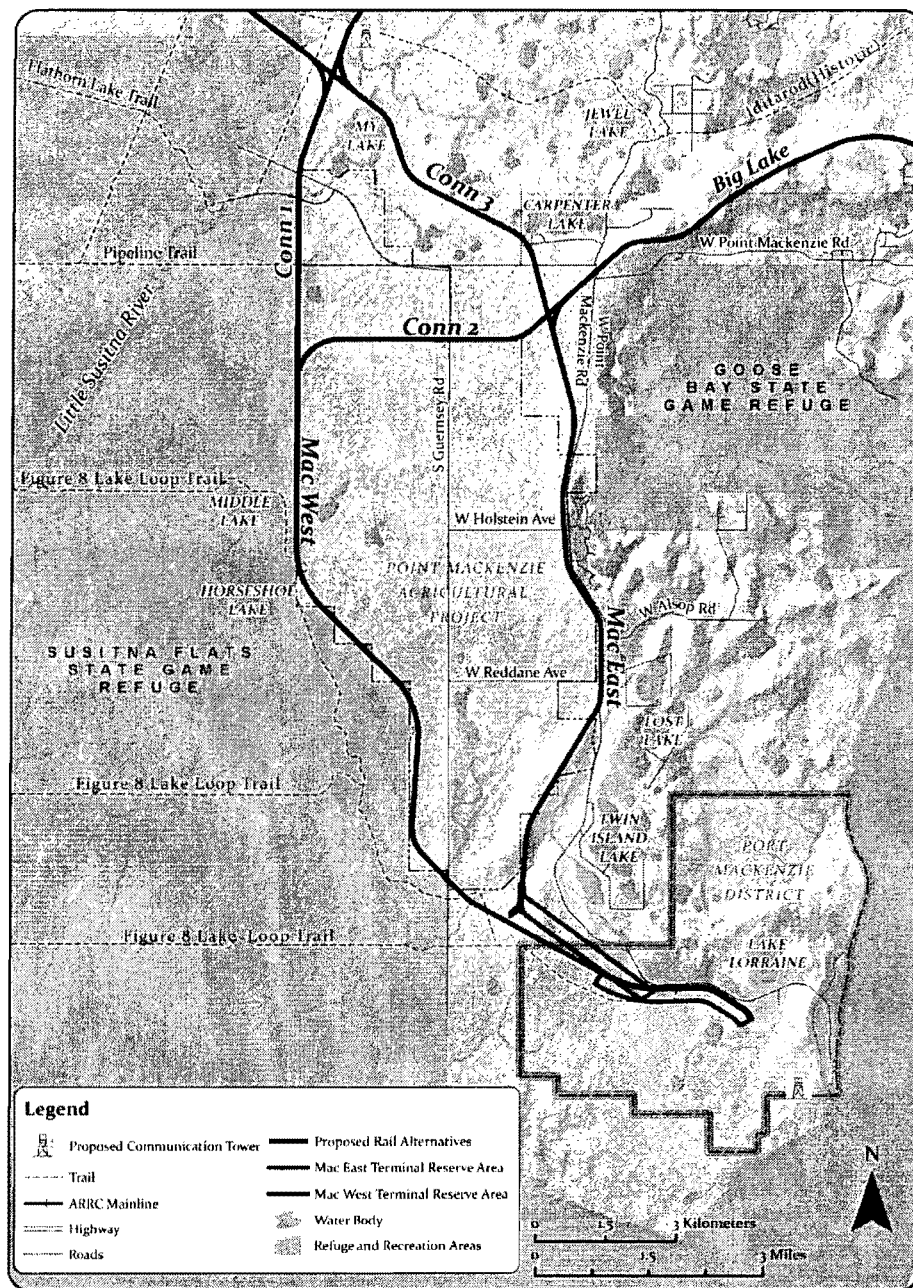


Figure 2-3. Mac East, Mac West, and Connector Segments

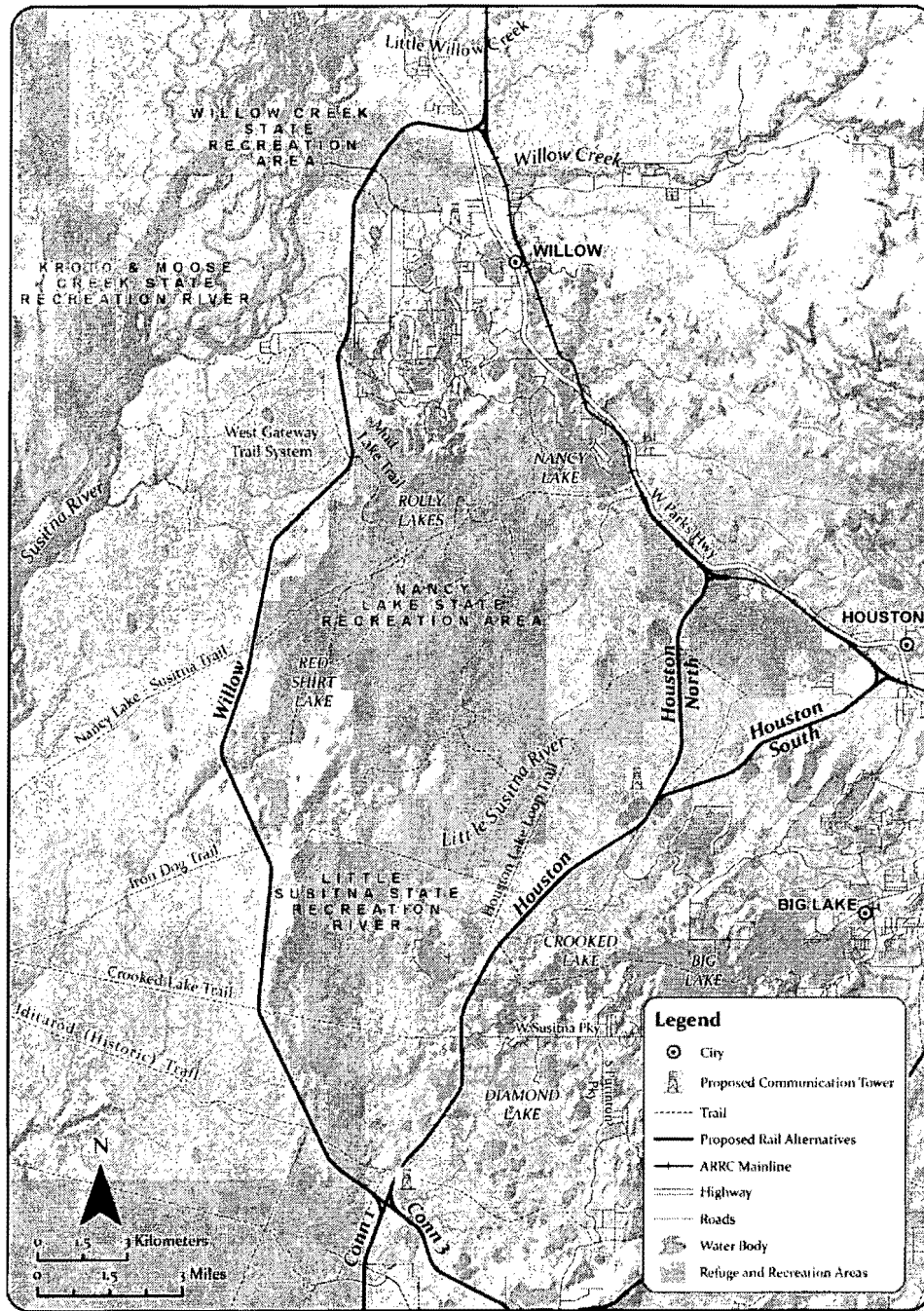


Figure 2-4. Willow and Houston Segments

2.3.3.2 Houston

From Connector 1 Segment or Connector 3 Segment, the Houston Segment would proceed northeast, traveling through slightly undulating terrain with areas of wetland (see Figure 2-4). The segment would pass between Papoose Twins Lakes and Crooked Lake, crossing an area of hilly terrain. The remaining 4 miles of the Houston Segment would be in a gradually rising wetland area to a point near Muleshoe Lake and Little Horseshoe Lake, where it would connect to either the Houston North Segment or the Houston South Segment.

2.3.3.3 Houston North⁵

From the Houston Segment, the Houston North Segment would continue north (see Figure 2-4), crossing over the Castle Mountain Fault. The Houston North Segment would cross Cow Lake Trail, which is part of Houston Lake Loop Trail. It would continue through the Little Susitna State Recreation River, where it would cross the Little Susitna River. The segment would continue north on rolling terrain along the east side of Houston and Little Houston Lakes, descending gradually to lower terrain adjacent to Lake Creek. The Houston North Segment would tie into the existing ARRC main line near Mile Post 178 along the proposed rail line without crossing Parks Highway.

2.3.3.4 Houston South

Also beginning between Muleshoe Lake and Little Horseshoe Lake, this proposed segment would traverse northeast, passing just west of Pear Lake (Figure 2-4). The segment would cross several gravel ridges that parallel the lakes in this area. The segment would tie into the existing main line near Mile Post 174.0 without crossing the Parks Highway.

The proposed track siding for Houston South would include reconfiguration of the main line to construct the new siding. ARRC would construct 1.5 miles of new main line within the existing ROW and would convert 7,000 feet of existing main line to use as a new siding. ARRC would construct an additional 6,800 feet of new siding in the main line ROW to create a 13,800-foot siding.

2.3.3.5 Big Lake

From the Mac East Segment or Connector 2 Segment, the Big Lake Segment would run northeast for approximately 3 miles (See Figure 2-5). It would continue on rolling terrain, crossing over Goose Creek, Fish Creek, Lucile Creek, and tributaries of Lucile Creek and Little Meadow Creek. The segment would cross Burma Road and Big Lake Road, where it would be grade-separated over Big Lake Road. The Big Lake Segment would continue north through a residential area before crossing under Parks Highway with a grade-separated crossing.

The Big Lake Segment would connect with the existing ARRC main line near Mile Post 170.3 along the proposed rail line in a wetland area surrounding a stream that feeds into Long Lake.

⁵ Based on environmental impacts associated with the original proposed connection with the main line as presented in the Preliminary Environmental and Alternatives Report, ARRC shifted the connection point south approximately 1 mile southeast to its present location.

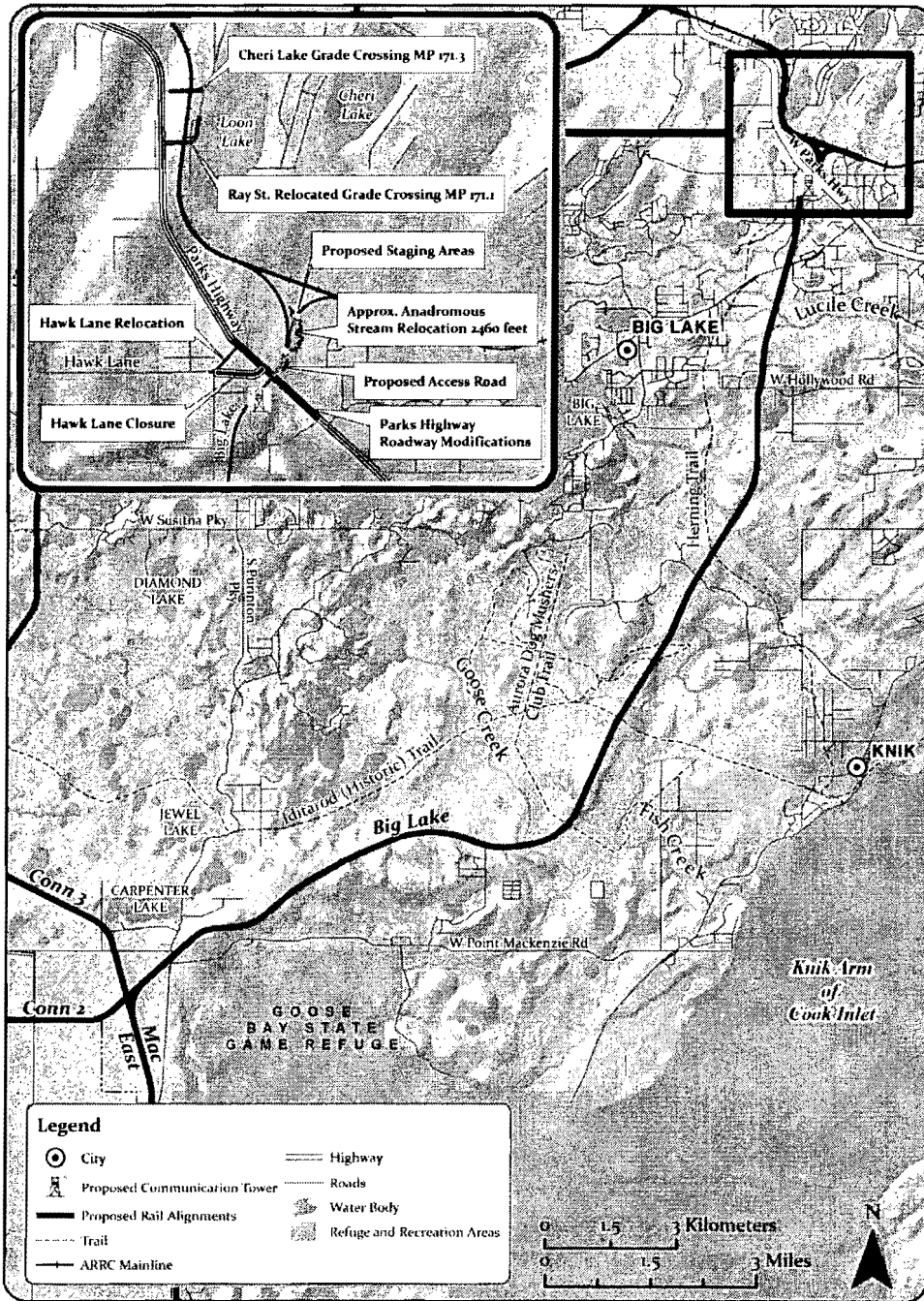


Figure 2-5. Big Lake Segment

1 Additional information ARRC collected during the 2008 summer field season provided the
2 Applicant with better data to consider the tie-in location for the Big Lake Segment. The
3 following ARRC-supplied information supplements the Preliminary Environmental and
4 Alternatives Report (Figure 2-5):

- 5 • Construct an approximately 430-foot bridge on Parks Highway over the proposed rail line
6 and an unnamed anadromous fish stream.
- 7 • Relocate approximately 2,400 feet of unnamed anadromous fish streams adjacent to the
8 proposed rail line.
- 9 • Relocate approximately 1,000 feet of Hawk Lane on the south side of Parks Highway
10 (because of the new Parks Highway bridge).
- 11 • Close approximately 865 feet of Cheri Lake Drive where it crosses the existing main line and
12 intersects with Parks Highway.
- 13 • Extend Ray Street approximately 1,405 feet from Loon Street to Parks Highway, which
14 would include an at-grade crossing of the existing ARRC main line.
- 15 • Acquire eight recreational/residential parcels along Loon Lake because access to the parcels
16 would be permanently blocked due to lack of access from the relocated road crossing (Cheri
17 Lake Drive) and the new siding.
- 18 • Relocate the business on the southwest corner of Parks Highway and Cheri Lake Drive due
19 to the Hawk Lane relocation.

20 The Big Lake Segment also would cross two wetland mitigation bank parcels that are part of the
21 Su-Knik Mitigation Bank. Use of these two mitigation bank parcels for the proposed rail line
22 could require concurrence from the entities that created the mitigation bank or ARRC ROW
23 acquisition through eminent domain.

24 **2.3.4 No-Action Alternative**

25 Under the No-Action Alternative, ARRC would not construct an extension of the existing rail
26 line to transport commercial freight.

27 **2.4 Comparison of Alternatives**

28 ~~DELETED FOR PURPOSES OF REDACTION~~