



*Port MacKenzie Rail Extension Project  
Iditarod Dog Sledding Historic District Workshop Summary  
and Implementation Plan*

**DRAFT**

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# **1 Introduction**

## **1.1 Project Overview**

The Alaska Railroad Corporation (ARRC), in partnership with the Matanuska-Susitna Borough (MSB), has undertaken planning for construction of the Port MacKenzie Rail Extension (PMRE) Project. In a November 2011 decision, the Surface Transportation Board (STB) approved a license allowing ARRC to construct and operate approximately 35 miles of new rail line connecting the Port MacKenzie District to a point on ARRC's existing main line near Houston, Alaska, using the Mac East Variant-Connector 3 Variant-Houston-Houston South alignment (Attachment A, Figure 1). That authorization was issued after completion of an Environmental Impact Statement (EIS), and is subject to environmental mitigation conditions, including a Programmatic Agreement<sup>1</sup> (PA; executed 5/25/2011) executed by STB, the Alaska State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation.

The PA identifies mitigation measures to address possible effects to historic properties<sup>2</sup>, including the Iditarod Dog Sledding Historic District (IDSHD). Stipulation V of the PA (Treatment of the Iditarod Dog Sledding Historic District) and Mitigation Measures 92 and 93 in the Record of Decision (ROD) for the Final EIS identify mitigation for adverse effects to the IDSHD, including preparation of this Implementation Plan developed in consultation with STB, SHPO, and parties interested in the IDSHD.

## **1.2 Purpose of the Document**

The purpose of this document is as follows:

- Identify consulting parties and consultation conducted to date (Section 1.2, Attachment B);
- Identify the IDSHD and trails, including the location and use of trails in the Area of Potential Effect (APE) identified by Stephen R. Braund & Associates (SRB&A) as contributing to the IDSHD and currently used for dog sledding (Section 3.2);
- Identify officially recognized trails proposed to be relocated (e.g., Big Lake Trail #5 - Iron Dog Connector Trail and Flat Lake Connector - Iron Dog Trail), including the rationale for the relocations rather than providing grade-separated or at-grade crossings (Sections 3.3 and 4.2);
- Describe potential impacts to existing trails and trail users and relevant concerns expressed by trail users (Section 4, Table 1, and Attachments D–H); and
- Summarize outcomes of the IDSHD workshops and consultation, including identification of trail crossings and design changes, modifications, and refinements developed in consultation with SHPO/consulting parties to avoid, mitigate, or minimize adverse effects (Sections 2.2 and 4, Tables 1 and 2, and Attachments C–H).

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<sup>1</sup> The PA was developed through the Section 106 process under the National Historic Preservation Act (NHPA)

<sup>2</sup> Historic properties are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (36 CFR 800.16(1)).

ARRC, in consultation with the Working Group<sup>3</sup> and SHPO, has drafted this document to document compliance with the requirements of the PA (Stipulation V) and the ROD (Mitigation Measures 92 and 93).

## **2 Method for Developing the Implementation Plan**

### **2.1 Consultation**

Consultation began with identification of appropriate consulting parties. The initial list was based on consulting parties identified in the PA (Stipulation V) as being interested in the IDSHD (e.g., Happy Trails Kennels [HTK], Willow Dog Musher's Association [WDMA], Knik Tribal Council [KTC], and MSB). In addition to SHPO, the Working Group, and consulting parties identified in the PA, the Project Team<sup>4</sup> contacted other dog mushers and parties known to be associated with dog sledding and other trail use in the project area were contacted. Agencies and organizations contacted for participation included:

- Alaska Department of Natural Resources (DNR)
- Aurora Dog Musher's Club
- Big Lake Trails, Inc.
- Bureau of Land Management (BLM), Iditarod National Historic Trail
- Dream a Dream Dog Farm
- Homestretch Kennel
- HTK
- Iditarod Historic Trail Alliance
- Iditarod Trail Blazers
- Iditarod Trail Committee
- Iron Dog Race
- Junior Iditarod Sled Dog Race
- Knik Dog Musher's Association
- Knik 200 Joe Redington, Sr., Memorial Sled Dog Race
- KTC
- MSB
- Mat-Su Trails Council, Inc.
- Northern Lights 300 Sled Dog Race

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<sup>3</sup> The Working Group is comprised of ARRC, MSB, and KTC representatives with input from STB and SHPO.

<sup>4</sup> The Project Team consists of ARRC, MSB, and their consultants.

- Perseverance Springs Farm
- SHPO
- WDMA
- Willow Trail Committee

The Project Team used a revised consulting party list for the invitation for the first IDSHD workshop and asked invited participants to forward the invitation to other individuals they thought might be interested in attending. This process was followed for each IDSHD workshop and meeting. Persons who received forwarded invitations were added to the consulting party list. In addition, the consulting party list was revised based on sign-in sheets at each IDSHD workshop and meeting. Communications with consulting parties were conducted in person as well as via email and telephone. The Project Team posted IDSHD-related events and associated materials on the project website and notified consulting parties when the materials had been posted. The consulting party list for the IDSHD workshops and meeting is included in Attachment B.

## **2.2 Workshops/Meetings**

The IDSHD workshop series and the MSB trail user open house, detailed below, document the extensive consultation conducted by the Project Team with dog mushers as well as other user groups and interested parties (see Section 2.1 and Appendix B). During the workshops and open house, the Project Team addressed both dog sledding and officially recognized trails relative to crossings types, trail relocations, and maintenance of connectivity. Attachments D through G provide workshop/meeting materials, including materials presented or distributed, sign-in sheets, and a summary of participants' substantive comments.

### **2.2.1 IDSHD Workshop Series**

The PA stipulates that ARRC, in consultation with STB and SHPO, hold a workshop with parties interested in the IDSHD, including KTK, WDMA, KTC, and MSB. The initial purpose of the workshop, as identified in the PA, was to “delineate the boundaries of contributing features within the APE of the alternative licensed by the STB; discuss which are still used for their historic function; and determine how that historic function could be maintained during and following construction of the Undertaking” (PA Stipulation V.A.1).

A series of three workshops<sup>5</sup> have been held and are described below.

The first workshop was held on June 28, 2011, at the Willow Area Community Organization Center in Willow, Alaska. There were 26 attendees. Materials from IDSHD Workshop 1 are included in Attachment D. The goals/purpose of that workshop were to:

- Provide a project update and background;
- Solicit input/comments on the APE;

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<sup>5</sup> While the PA only requires one workshop with parties interested in the IDSHD, SHPO advised ARRC during planning that the workshop's goals likely could not be met in a single meeting. Therefore, ARRC began planning for a series of workshops.

- Identify/discuss important features, functions, and uses of IDSHD trails/structures in the APE;
- Identify/discuss potential mitigation measures for IDSHD trails/structures in the APE to ensure continued functionality and connectivity of trails; and
- Identify the need for future workshops/meetings.

Following a formal presentation, participants were divided into groups. Each group had a facilitator who posed a series of questions, developed in consultation with SHPO, to participants:

- Does the proposed APE encompass the areas where impacts would likely occur? If not, where should the APE be altered to include these areas?
- What are important features, functions, and uses of IDSHD trails/structures in the proposed APE (e.g., access and connectivity, visual way finders, or different/distinct uses [freight, training, races])?
- Do you feel that the PMRE project will affect dog sledding or the features, functions, and uses of IDSHD trails through the proposed APE? If so, how?
- What can be done to further reduce these impacts?

Following the break-out session, participants reconvened to present questions and comments raised by each group. Participant discussions and comments at IDSHD Workshop 1 focused primarily on access, safety, and connectivity concerns. The Project Team did not receive substantive comments from participants regarding the APE, except that some participants suggested that the APE should be broader to include potential indirect effects, particularly in areas where trails cross the project right-of-way. Participants stated that future workshops were desired.

Based on Workshop 1 participant comments and further consultation with SHPO, the focus of the IDSHD workshops shifted to maintaining continued access, use, and connectivity of trails rather than attempting to identify additional contributing features of the IDSHD within the APE. Because the proposed rail line bisects the IDSHD, SHPO emphasized that the continued functionality of the IDSHD and use for dog sledding were more important than specific contributing features.

The second workshop was held on July 7, 2011, at the Big Lake Library in Big Lake, Alaska. Twelve Workshop 1 participants self-identified as being interested in participating in a smaller focus group; however, the actual attendance was larger than anticipated with 20 attendees at this workshop. Materials from IDSHD Workshop 2 are included in Attachment E. The goals/purpose of Workshop 2 were to:

- Review and clarify Workshop 1 comments;
- Develop and address the location and design of trail crossings to minimize or mitigate impacts to important characteristics of the IDSHD focusing on connectivity and use of the landscape; and
- Discuss the proposed APE (revised per input from Workshop 1).

Participants were provided with a summary of Workshop 1 comments/issues and revised APE maps prior to the meeting. The Project Team presented each comment/issue and asked

participants for further information or clarification. Comments focused primarily on access, safety, and connectivity, including recommendations for additional crossings and trails to maintain access and connectivity and revisions to crossing and approach designs to enhance safety. Workshop participants indicated that they wanted to ensure that trail users other than dog mushers were allowed a chance to comment on maintaining trail access and connectivity. Therefore, they requested that Workshop 3 be postponed until after a larger meeting was held with all trail users (held on October 27; see Section 2.2.2).

The third workshop was held on January 11, 2012, at the Houston Middle School in Houston, Alaska following the larger trail user meeting requested by workshop participants (see Section 2.2.2). There were 23 attendees at this meeting. Materials from IDSHD Workshop 3 are included in Attachment G. The purpose of Workshop 3 was to:

- Present/discuss the Project Team’s proposed resolutions to participant comments received to date
- Create understanding – the Project Team has heard, considered, and addressed participant comments where practicable

The format of this workshop was a presentation of summarized issues identified at the two previous IDSHD workshops and the MSB Open House followed by an opportunity for participant questions and comments following each issue. Comments again focused primarily on maintaining access and connectivity as well as safety issues. Workshop participants indicated that they felt the Project Team had accurately captured their comments and provided adequate responses to the majority of these comments (see Section 4.4 for a discussion of outstanding/unresolved issues).

### ***2.2.2 MSB Trail User Open House***

MSB, in consultation with the Working Group, sponsored a trail user open house at the request of IDSHD workshop participants. The MSB Trail User Open House was held between Workshops 2 and 3 on October 27, 2011, at the Houston High School in Houston, Alaska, and included 41 participants. Materials from the open house are included in Attachment F. The goals/purpose of the open house were to:

- Ensure that trail users other than dog mushers are being heard
- Present trail network connections for continued connectivity and use
- Listen and gain feedback from trail users

The open house included stations for the different use areas within the project area (e.g., Willow, Big Lake, Point MacKenzie) as well as stations dedicated to MSB trail designation and Section 106 activities. The use area stations were staffed by local users. Project Team members and SHPO circulated between stations to answer participants’ questions and receive comments. Similar to the IDHSD workshops, participant comments focused primarily on access, connectivity, and safety issues.

### ***2.2.3 Project Team Meetings***

Project Team members met with key property owners (e.g., DNR, University of Alaska [UA], Mental Health Land Trust [MHLT]), key interests (e.g., Federal Aviation Administration [FAA]), and trail users on several occasions throughout project development. In addition, the

Project Team held biweekly meetings, or met more frequently as demand warranted, to conduct design reviews, discuss modifications to address users concerns, and address issues that affect project development. These meetings are anticipated to continue during ongoing project design and development.

#### **2.2.4 Working Group Meetings**

The Working Group has been meeting regularly (i.e., generally consisting of weekly meetings) since April 2011. Working Group tasks are outlined in a Memorandum of Understanding executed on December 8, 2011. ARRC consulted with the Working Group and SHPO, and their representatives participated in planning for and attended the IDSHD workshops and the MSB Open House. They also participated in developing the Comment Resolution Summary (Attachment H) and this *Workshop Summary and Implementation Plan*.

### **2.3 Identification of Mitigation Measures**

As discussed in Sections 2.2.1 and 2.2.2, comments received at the IDHSD workshops and MSB Open House primarily focused on access, connectivity, and safety issues. Through comments and discussions at the IDSHD workshops/meetings, as well as the Project Team and Working Group meetings, the Project Team developed plans for grade separation and other minimization or mitigation measures specified in the ROD, including crossing design changes, modifications, and refinements as well as trail improvements and reroutes to avoid, minimize, or mitigate adverse effects on historic properties. Additional information regarding minimization or mitigation measures is included in Section 4 (Summary of Issues and Outcomes) and Attachment H (Comment Resolution Summary).

## **3 Descriptions**

### **3.1 Area of Potential Effect (APE)**

STB, in consultation with SHPO, established an APE for the project during studies conducted during development of the EIS. The PA stipulates that the Working Group, in consultation with HTK, WDMA, and other consulting parties interested in the IDSHD, shall review ARRC's final construction plans, apply the APE definition provided in PA, and delineate the proposed final APE for the Undertaking within 60 days of STB issuing a license for the project (PA Stipulation II.D).

The Project Team provided an explanation of the APE to participants and presented a proposed APE at Workshop 1 (see Attachment D). Further discussion of the APE was conducted at Workshop 2, including additional explanation of the APE and presentation of maps showing the Working Group's proposed delineation of the APE (Attachment E). Following the Working Group's presentation of the proposed APE, discussion with workshop participants, consultation with SHPO and no objections being raised to the proposed final APE by workshop participants, ARRC submitted the proposed final APE to STB and SHPO for review and comment on December 30, 2011. SHPO (January 9, 2012) and STB (January 17, 2012) indicated that they had no objections to the proposed APE. The final APE is illustrated in Figure 2 of Attachment A.

## **3.2 Iditarod Dog Sledding Historic District (IDSHD)**

The PMRE project bisects the historic and current dog sledding trail system between the Knik Arm coastline and the Susitna River. These trails are used by dog mushers as well as multiple users, including all-terrain vehicles (ATV), snow machines, hikers, and skiers.

In association with studies conducted under Section 106 and the EIS, Stephen R. Braund & Associates (SRB&A 2010<sup>6</sup>) examined a dog sledding cultural landscape in the project area. As part of this study, SRB&A reviewed existing literature and conducted interviews with people knowledgeable about dog sledding in the project area.

Consistent with SRB&A's recommendation, STB determined that the IDSHD (ANC-03326/TY0-00203), including trails and other contributing resources (e.g., dog kennels, clubs, roadhouses, etc.), was eligible for listing in the NRHP under Criterion A at the national level of significance. SHPO concurred with this determination for the period of significance of 1967–1978 (i.e., associated with the Iditarod Race and its development), but recommended that the boundaries of the IDSHD be further refined and developed.

The majority of the trails and buildings/structures identified by SRB&A as contributing elements to the IDSHD are located outside of the APE. Trails identified as contributing to the IDSHD within the APE include: the Iditarod National Historic Trail<sup>7</sup>, Iditarod Sled Dog Race Trail, United States Geological Survey (USGS) Transmission Line Trail, and Basemap Winter Trails 2<sup>8</sup>, 4, and 5 (see Attachment D, Crossing Locations map and APE map series for locations of contributing trails). Not all of these trails are still used for dog sledding. For example, workshop participants stated that Basemap Winter Trail 2 is no longer used for dog sledding; it is located on private/agricultural lands. Other contributing trails in the southern most end of the project are located within the Port MacKenzie District. The Project Team proposed one crossing, an oversized culvert for the Figure 8 Lake Loop Trail, at the southern end of the project, and participants raised no objections.

The most important trails in the project area that are identified as contributing to the IDSHD and are still used for dog sledding are the Iditarod National Historic Trail and Iditarod Sled Dog Race Trail. Subject to future refinement of the boundaries of the IDSHD, these trails contribute to the integrity of the historic district, are still in use for dog sledding, are necessary to maintain the connectivity of the district, and will be provided with a separated grade crossing.

Continued use of the IDSHD for dog sledding is dependent on maintaining access and connectivity across/through the railroad embankment, not on whether a trail is labeled as contributing or non-contributing to the historic district. As workshop participants pointed out, trails of more recent origin currently used by dog mushers are important, even if they are not contributing elements to the historic district. Therefore, as discussed in Section 2.2.1, following Workshop 1 and consultation with the Working Group and SHPO, the focus was on maintaining

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<sup>6</sup> SRB&A. 2010. *Port Rail Extension Project Report of 2009 Cultural Resources Fieldwork*. Anchorage, Alaska.

<sup>7</sup> This trail was designated as a National Historic Trail [NHT] in 1978 but has no determination of eligibility for the NRHP to date.

<sup>8</sup> Based on 2011 consultation, USGS Base Map Winter Trail 2 trail is no longer in use, so the Working Group recommends that it is no longer a contributing element to the IDSHD.

access and connectivity for dog sledding within the IDSHD rather than distinguishing between contributing and non-contributing trails.

### **3.3 Officially Recognized Trails**

Per the Final EIS, “Where the proposed rail line would cross an officially recognized trail, ARRC has stated it would provide public access by a grade-separated crossing. Alternatively, the trail could be relocated by ARRC to avoid crossing the rail line.” Mitigation Measure 93 requires ARRC to report on any officially recognized trails that it proposes to relocate rather than provide grade-separate or at-grade crossing, along with the rationale for the relocations. The Project Team does not intend to provide crossings for unofficial trails<sup>9</sup>.

Officially recognized trails in the project area include:

- Big Lake Trail #1 (Crossing 2)
- Big Lake Trail #2 (Crossing 3)
- Houston Lake Loop Trail (Crossing 4)
- Big Lake Trail #5 – Iron Dog Connector Trail (Crossing 5)
- Flat Lake Connector Trail – Iron Dog Trail (Crossing 5)
- Crooked Lake Trail – West Papoose Twins Road (Crossing 7)
- Big Lake Trail #14 – Iditarod Race Trail (Crossing 9)
- Iditarod National Historic Trail (Crossing 10)

All officially recognized trails have planned crossing structures with the exception of two trails that may be rerouted to facilitate providing a crossing: 1) Big Lake Trail #5 - Iron Dog Connector Trail, and 2) Flat Lake Connector - Iron Dog Trail. These trails may be rerouted under the five-span bridge at Crossing 5. Further discussion of these reroutes is included in Sections 4.2 and 4.4 and Attachment H (Comments 8 and 9).

Some of the officially recognized trails still do not have a formal right-of-way instrument in place despite being included in a local trails plan (e.g., Houston Lake Loop Trail, Big Lake Trail #2, Iron Dog Connector Trail and Flat Lake Connector-Iron Dog Trail). The Project Team is working diligently with trail users, property owners and agencies to secure easements or other potential legal instruments for the officially recognized trails crossing the new rail embankment.

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<sup>9</sup> Per the Final EIS, an unofficial trail is any trail “that is not specifically established within currently adopted plans by ADNR and/or MSB or is established within these plans at the time of construction or ROW conveyance (whichever occurs first), and whose location is not provided for by recorded ROW or easement. ARRC does not propose to provide crossings for unofficial trails. Unofficial trails would be blocked, and ARRC’s trespassing regulations would prohibit the public from crossing of the ROW without first obtaining approval from ARRC.”

## **4 Summary of Issues and Outcomes**

### **4.1 Participant Comments/Concerns**

The Project Team has worked to identify design changes, modifications, and/or refinements to the project to address mushers' and other trail users' concerns and mitigate impacts identified during IDSHD workshops/meetings and the MSB Open House. Participant comments/concerns provided at the IDSHD workshops and MSB Open House focused primarily on access, connectivity, and safety issues. Table 1 summarizes comments/concerns raised by participants at the IDSHD-related workshops/meetings. Further details regarding each of these comments/concerns are included in Attachment H (Comment Resolution Summary).

### **4.2 Constraints**

Multiple constraints (see Attachment A, Figure 3) have affected project design including:

- FAA VORTAC<sup>10</sup> radar site
- Wetlands (Environmental Protection Agency [EPA] and the U.S. Army Corps of Engineers [Corps])
- Land ownership
- Lack of legal easements

The Project Team has been working with FAA regarding constraints associated with the FAA VORTAC radar site. FAA has recently informed ARRC that it will not grant an easement across the 160-acre parcel where its VORTAC is located. In light of FAA's decision, a potential modification to the alignment is proposed (see Section 4.4 and Attachment I). The Project Team will continue to work with FAA regarding design needs within the three mile radius where construction restrictions apply (see Attachment A, Figure 3). These restrictions also resulted in the loss of one previously planned crossing (e.g., the Outflow of Muleshoe Lake could not meet the 14' of vertical clearance required).

Wetland complexes between Crossings 4 and 6 have made adding crossings difficult (see Attachment A, Figure 3). In consultation with the Project Team, the Corps and EPA requested that there be no increases in the project footprint in wetlands areas to accommodate a widened embankment area. As a result, the Project Team has worked to keep the rail embankment as low as possible in wetlands areas to minimize impact. In the case of the Iron Dog Connector Trail (an officially recognized trail), adding a grade-separated crossing would require raising the embankment high enough to provide 12' to 14' of clearance for trail users and would increase the fill footprint of the embankment over several miles. Adding an at-grade crossing would increase the impact to wetlands as the crossing would require additional embankment at the approaches to the proposed railroad crossing.

Land ownership and lack of legal easements are also challenges. The Project Team must consider property ownership when planning crossing locations, so as to not promote trespass or provide a crossing that may not be usable into the foreseeable future. This is a concern between Crossings 1 and 3 and Crossings 7 and 10 (see Attachment A, Figure 3). The MSB is currently

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<sup>10</sup> VHF Omnidirectional Range/Tactical Aircraft Control.

in discussions with UA and MHLT to attempt to establish easements for some of the currently used trails in the project area (e.g., at the Iditarod Race Trail).

### **4.3 Outcome of Workshops/Meetings**

The Project Team has tried to strike a reasonable balance between the needs of trail users, obligations to property owners and State and Federal agencies, and safety considerations. Based on comments received at the IDSHD workshops and MSB Open House, participants seemed to agree that the Project Team had made good progress toward resolving the reported issues and that these proposed measures would avoid, minimize, or mitigate adverse effects on the IDSHD. These measures are detailed in Attachment H (Comment Resolution Summary) and are summarized in Table 1 (Summary of IDSHD Workshop Comments/Issues and Resolutions), Table 2 (Crossing Comparison Summary), and below:

- Redesigning bridges/crossings with the vertical clearance increased to a minimum of 14', whenever possible (see Table 2 and Attachment H, Exhibit 1)
- Developing standards for sight distance needs and crossing approaches to accommodate a 100'-long vehicle/dog team (minimum 60' turn radius; see Attachment H, Exhibit 2)
- Redesigning bridges/crossings with minimum of three spans that will generally provide a minimum of 20' of horizontal clearance and providing relatively straight trail approaches (see Table 2 and Attachment H, Exhibit 1)
- Redesigning at-grade crossings to include parallel trails separated from the road with separated crossing panels on either side of the roadway (see Table 2)
- Working with trail users and agencies to obtain easements for existing trails in the project area that do not currently have legal easements or recognized trails that are proposed to be rerouted as part of the project
- Ensuring that crossings are provided for officially recognized trails
- Rerouting trails when crossings cannot be provided at current locations (see Attachment H, Exhibits 4 and 5)
- Working with trail users to identify trails/crossings to maintain east-west connectivity (see Attachment A, Figure 3; and Attachment H, Exhibit 6)
- Working with trail users to develop signage and trail kiosks (see Attachment H, Exhibits 7-9)
- Consulting with SHPO and the Working Group to refine the boundaries of the IDSHD

### **4.4 Outstanding Commitments/Issues**

While IDSHD workshop and MSB Open House participants indicated that they were pleased with the Project Team's efforts to address their comments/concerns, there are several outstanding commitments, including:

- Trails groups will be required to work with easement/property owners at Crossings 2 and 3 to ensure continued use and access (see Table 2, Figure 1, and Attachment C, Sections 3.0 and 4.0)

- MSB will continue to work with land owners/agencies (e.g., DNR, UA, MHLT) to obtain easements for certain existing trails in the project area that do not currently have legal easements (e.g., Iditarod Race Trail, the Houston Lake Loop Trail, and Big Lake Trail #2) and for recognized trails that are proposed to be rerouted as part of the project (e.g., Iron Dog Connector Trail and Flat Lake Connector - Iron Dog Trail; see Attachment H, Exhibit 4)
- Project Team will continue to investigate the potential for additional crossings between Crossings 2 and 10 (see Attachment A, Figures 1 and 3)
- MSB will work with Iron Dog Race Board of Directors regarding possible relocation of the Iron Dog Connector Trail to crossing Houston 6.3 (Crossing 5; see Attachment H, Exhibit 4)

While comments provided at the workshops and meetings suggest that participants generally agree that the Project Team has resolved many of the comments/concerns raised at the IDSHD workshops and MSB Open House, one comment/concern has not been fully resolved. Some workshop participants stated that they believed a trail (or trails) along the railroad right-of-way would facilitate east-west connectivity. The Project Team has been working with local trails groups/users, regulatory agencies, and other interested parties to maintain east-west connectivity. Providing a corridor along one or both sides of the rail right-of-way has many challenges, including: safety concerns, wetland and regulatory concerns, tree cover, topography, and cost of constructing additional bridge structures. The Project Team believes that the existing trail system west of the proposed rail corridor provides an adequate corridor (Attachment H, Figure 3); however, one area of concern has been identified between Crossings 7 and 10 (Attachment H, Exhibit 6). This area demonstrates the biggest gap in connectivity and is owned primarily by UA. The Project Team has developed an alternative corridor for north-south travel in this area that may work for trail users and property owners (see Attachment H, Exhibit 6).

During the IDSHD workshops and MSB Open House, the Project Team provided information to participants regarding FAA VORTAC constraints and how these constraints impact project design. As noted above, FAA recently denied ARRC's request for an easement across the 160-acre parcel where the VORTAC is located. The Project Team is currently working with STB and the Corps to address this issue. In light of FAA's letter, the Project Team has proposed potential modifications to the rail alignment that includes shifting approximately two miles of the alignment to the west of Muleshoe Lake (Attachment I). As originally proposed, the rail alignment was located on the east side of Muleshoe Lake and was going to require a slight realignment to the Houston Lake Loop Trail. The proposed modification would eliminate the need to realign this segment of the Houston Lake Loop Trail and would shift the proposed grade separated crossing of the Houston Lake Loop Trail (Crossing 4) approximately 420 feet north of the previous location. The Project Team invites comments from IDSHD consulting parties on this proposed modification of the rail alignment and will provide updates to consulting parties as this issue is resolved. Assuming the Corps of issues a permit for a modified alignment, the Project Team will submit a change to the final APE to STB and SHPO for review and comment pursuant to Section II.D.3 of the Programmatic Agreement. Any changes to the APE will be transmitted to consulting parties.

Consultation with SHPO associated with the IDSHD workshops has identified the need for additional investigation for the IDSHD. As currently defined, the IDSHD presents challenges

for future undertakings in the general project area. The IDSHD is eligible for the NRHP, which provides the same level of consideration regarding potential effects from Federal undertakings as being listed on the NRHP. However, the lack of a clear district boundary and guidelines for identifying contributing elements to the IDSHD make Section 106 consultation difficult for entities considering future development. ARRC, in consultation with SHPO and the Working Group, will address these challenges by preparing a report that refines the boundaries of the IDSHD, focusing on areas that best retain features representative of the IDSHD, and developing guidance for identifying and documenting property types that could be contributing elements. The draft report will include:

- Brief overview/description of the IDSHD (e.g., name, site number, general location/setting, ownership, function/use, types of associated resources, period of significance, area of significance)
- Summary of consultation and studies done to date regarding the IDSHD
- Brief overview of the historic context (based on SRB&A 2010) – what did the district look like/use during its period of significance (includes maps and photographs as appropriate)
- Explanation of why/how the district is significant/eligible for the NRHP
- Discussion of features that could be contributing elements to the district (e.g., what types of features, physical characteristics of these features that provide association with the district, important aspects of integrity needed to maintain association with the district)
- Identification of district boundaries (e.g., method for identifying the boundary, description of the boundary, justification for the boundary, maps)
- Summary form that includes the essential elements of NRHP nomination form 10-900

The draft report/form will be submitted to STB and SHPO for review and comment within one year of finalizing the Implementation Plan. Following a 30-day review and comment period, ARRC will address comments received as appropriate and submit a final report/form.

**Table 1: Summary of IDSHD Workshop Comments/Issues and Resolutions**

<b>Issue #</b>	<b>Comment/Issue Summary</b>	<b>Proposed Resolution Summary</b>	<b>Notes</b>
1	Increase height/vertical clearance to 12'+	Vertical clearance increased to a minimum of 14' whenever possible	Two crossings will have a vertical clearance less than 14': Crossings 14 (~12') and 16 (10-14'); see Table 1 in Attachment H
2	Consider length of a sled dog team (~85') during design of trail crossing approaches	Developed design standards for approaches to allow 100'-long team to turn/pass safely and allow adequate line of sight	See Exhibit 2 in Attachment H
3	Consider line of sight during crossing design; single-span bridges do not provide adequate line of sight	Bridges redesigned to include a minimum of 3 spans (20'+ horizontal clearance); approaches straightened to allow adequate line of sight	See Table 1 in Attachment H
4	Consider growth and development in crossing design	At-grade trail crossings will not be turned into road crossings; will include separated crossing panels on either side of selected roadways	See Attachment G
5	Obtain easements for trails that do not have them	MSB working with trail users/agencies to obtain easements for existing trails and rerouted legal trails	
6	Provide participants with constraints map illustrating where crossings cannot be located	Constraints map presented at MSB Open House and IDSHD workshops; posted on the project website	See Figure 1 in Attachment H
7	Add crossings between Crossings 2 and 10 to maintain connectivity	Project Team to continue to investigate inclusion of additional crossings, but is limited by: safety concerns, regulatory issues, design issues, property ownership, property/easement constraints	See Attachment A, Figure 3; and Attachment H, Figure 1
8	Provide crossing for the Iron Dog Connector Trail	Project Team proposed a reroute for trail due to safety concerns, wetland/regulatory concerns, tree cover/topography	MSB working with MHLT to acquire easements; see Exhibit 4 in Attachment H
9	Provide crossing for Flat Lake Connector Trail	Project Team proposed a reroute for trail due to design/safety issues	MSB working to acquire reroute easements
10	Incorporate safety considerations into design for Houston 6.3 crossing (Crossing 5)	Crossing redesigned to include: trails on either side of creek, 25'+ horizontal clearance, 17'+ vertical clearance, good line of sight, and approaches with gentle curves	See Exhibit 3 in Attachment H
11	Provide crossing for the Iditarod Race Trail; obtain an easement from the University of Alaska	If MSB is successful in obtaining an easement, crossing would be a 3-span bridge, 14'+ vertical clearance, ~25' horizontal clearance, and approach improvements	Reroute to Historic Iditarod Trail if easement cannot be secured; See Exhibit 5 in Attachment H

<b>Issue #</b>	<b>Comment/Issue Summary</b>	<b>Proposed Resolution Summary</b>	<b>Notes</b>
12	Provide separated grade crossing (bridge) and trail improvements for the Historic Iditarod Trail (Crossing 10)	A separated grade crossing will be provided: 3-span bridge, 14'+ vertical clearance, ~25' horizontal clearance, approaches with gentle curves/improvements	See Exhibit 1 in Attachment H
13	Add a crossing for the trail between current Crossings 12 and 13	This former trail is on agricultural land and is no longer used; no crossing needed	
14	Provide trail along one or both sides of the proposed right-of-way to maintain connectivity	Project primarily affects east-west connectivity; Project Team working with users to maintain connectivity; Project Team proposes additional corridor between Crossings 7 and 10 to fill gap in north-south connectivity	See Figure 3 in Attachment H
15	Provide adequate signage to warn trail users	Project Team to develop signage consistent with SnoTRAC guidelines; signage and kiosks placed at key points on trails, trail reroutes, and crossings	See Exhibits 7-9 in Attachment H
16	Consider creating a special use district (SPUD) or formalizing designation of the IDSHD for the NRHP	New SPUD/expansion of an existing SPUD must be initiated by Community Council and approved by MSB Assembly; IDSHD found eligible for NRHP which is same level of consideration as being listed	Project Team and SHPO will continue to consult to refine the boundaries of the IDSHD
17	Postpone Workshop 3 until after MSB Trail User Open House	MSB sponsored a larger trail user meeting in October 2011; included participants from multiple trail user groups	Comments/questions and responses posted on the project website; see Attachment F
18	Provide better/more detailed information on each crossing for the MSB Trail User Open House	Detailed information on crossings, approaches, and reroutes were provided at MSB Open House	Information posted on the Project website; see Attachment F
19	Ensure that trails in the MSB trails plan will have continued connectivity	Project Team is working with user groups, agencies, and land owners to maintain connectivity for official trails	Official trails that cannot be maintained in their current location will be rerouted
20	Explain the process for how the final decision will be made on the crossings	This document will be submitted to appropriate parties for a 30-day comment period; comments will be incorporated, a final plan will be submitted and posted on the project website	
21	Consider potential conflicts with moose during project design	Revised crossing/approach design will increase visibility and provide ample space for moose/wildlife to move away from rail embankment	

**Table 2: Crossing Comparison Summary**

Crossing # Crossing Name	Crossing Type	Original Design Description	Revised Design Description	Comment/Status
Crossing 1 Millers Reach Road	At-Grade, Road	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	<ul style="list-style-type: none"> <li>• 72' crossing width</li> <li>• 32' road surface</li> <li>• 10' separation, 10' trail (north and south)</li> <li>• 80' of crossing panels for road and trail</li> <li>• \$300,000</li> </ul>	
Crossing 2 Utility easement/Big Lake Trail	At-Grade	<ul style="list-style-type: none"> <li>• 14' utility corridor width</li> <li>• 20' crossing panels</li> <li>• \$75,000</li> </ul>	No change	Trails groups/users will be required to work with easement/property owner to ensure continued use and access.
Crossing 3 Private property/Big Lake Trail	At-Grade	<ul style="list-style-type: none"> <li>• 32' gravel drive width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	No change	Trails groups/users will be required to work with easement/property owner to ensure continued use and access.
Crossing 4 Houston Lake Loop Trail	Bridge	<ul style="list-style-type: none"> <li>• 146' multi-plate culvert (19' diameter)</li> <li>• 14' vertical clearance</li> <li>• 16'-3" horizontal clearance</li> <li>• \$335,000</li> </ul>	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 14' vertical clearance</li> <li>• 25'-3" horizontal clearance (center span)</li> <li>• \$1,600,000</li> </ul>	
Crossing 5 Unnamed Tributary to the Little Susitna River (H 6.3) Flat Lake/Iron Dog Connector Reroute	Bridge	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 12'-7.5" vertical clearance</li> <li>• 14' horizontal clearance (opening 1)</li> <li>• 26' horizontal clearance (opening 2)</li> <li>• 14' horizontal clearance (opening 3)</li> <li>• \$1,600,000</li> </ul>	<ul style="list-style-type: none"> <li>• 5-span bridge</li> <li>• 17'-7" vertical clearance</li> <li>• 25'-3" horizontal clearance (openings 2-4)</li> <li>• Opening 3 is a stream channel</li> <li>• \$2,200,000</li> </ul>	
Crossing 6 Unnamed Tributary to the Little Susitna River (H 4.3)	Bridge	<ul style="list-style-type: none"> <li>• Single span bridge</li> <li>• 17' vertical clearance</li> <li>• 45' horizontal clearance</li> <li>• \$1,200,000</li> </ul>	<ul style="list-style-type: none"> <li>• 5-span bridge</li> <li>• 14'-6" vertical clearance</li> <li>• 25'-3" horizontal clearance (opening 2-4)</li> <li>• Opening 3 is a stream channel</li> <li>• \$2,200,000</li> </ul>	
Crossing 7 West Papoose Twins Road	At-Grade, Road	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	<ul style="list-style-type: none"> <li>• 72' crossing width</li> <li>• 32' road surface</li> <li>• 10' separation, 10' trail (north and south)</li> <li>• 80' of crossing panels for road and trail</li> <li>• \$300,000</li> </ul>	Trail would be separated from road and would have separate panels
Crossing 8 West Susitna Parkway	At-Grade, Road	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	<ul style="list-style-type: none"> <li>• 72' crossing width</li> <li>• 32' road surface</li> <li>• 10' separation, 10' trail (north and south)</li> <li>• 80' of crossing panels for road and trail</li> <li>• \$300,000</li> </ul>	

<b>Crossing # Crossing Name</b>	<b>Crossing Type</b>	<b>Original Design Description</b>	<b>Revised Design Description</b>	<b>Comment/Status</b>
Crossing 9 Iditarod Race Trail	Bridge	<ul style="list-style-type: none"> <li>• Single span bridge</li> <li>• 13'-4" vertical clearance</li> <li>• 14' horizontal clearance</li> <li>• \$900,000</li> </ul>	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 14' vertical clearance</li> <li>• 25'-2" horizontal clearance (center span)</li> <li>• \$1,600,000</li> </ul>	Pending discussions with UA
Crossing 10 Iditarod Historic Trail	Bridge	<ul style="list-style-type: none"> <li>• Single span bridge</li> <li>• 12'-6" vertical clearance</li> <li>• 12'-6" horizontal clearance</li> <li>• \$900,000</li> </ul>	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 14' vertical clearance</li> <li>• 25'-3" horizontal clearance (center span)</li> <li>• \$1,600,000</li> </ul>	
Crossing 11 Outflow of Diamond Lake (H 0.8)	Bridge	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 18' vertical clearance</li> <li>• 60' horizontal clearance (center span)</li> <li>• \$1,600,000</li> </ul>	<ul style="list-style-type: none"> <li>• 5-span bridge</li> <li>• 18'-5" vertical clearance</li> <li>• 21'-11" horizontal clearance (opening 2 and 4)</li> <li>• 60' horizontal clearance (opening 3; stream channel)</li> <li>• \$2,400,000</li> </ul>	
Crossing 12 Ayrshire Avenue	At-Grade, Road	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	<ul style="list-style-type: none"> <li>• 72' crossing width</li> <li>• 32' road surface</li> <li>• 10' separation, 10' trail (north and south)</li> <li>• 80' of crossing panels for road and trail</li> <li>• \$300,000</li> </ul>	
Crossing 13 Holstein Avenue	At-Grade, Road	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	<ul style="list-style-type: none"> <li>• 72' crossing width</li> <li>• 32' road surface</li> <li>• 10' separation, 10' trail (north and south)</li> <li>• 80' of crossing panels for road and trail</li> <li>• \$300,000</li> </ul>	
Crossing 14 Baker Farm Bridge	Bridge (stream)	<ul style="list-style-type: none"> <li>• 3-span bridge</li> <li>• 11'-9" to 12' vertical clearance</li> <li>• 19'-7" horizontal clearance (opening 1)</li> <li>• 25'-3" horizontal clearance (opening 2)</li> <li>• 19'-2" horizontal clearance (opening 3)</li> <li>• \$1,600,000</li> </ul>	No change	
Crossing 15 Baker Farm Road	At-Grade, emergency access route	<ul style="list-style-type: none"> <li>• 32' road width</li> <li>• 40' crossing panels</li> <li>• \$150,000</li> </ul>	No change	Emergency access route
Crossing 16 Figure 8 Lake Loop Trail	Culvert	<ul style="list-style-type: none"> <li>• 146' multi-plate culvert (19' diameter)</li> <li>• 9' to 14' vertical clearance</li> <li>• 16'-3" horizontal clearance</li> <li>• \$335,000</li> </ul>	No change	A trail embankment and parking lot improvements are planned for the Figure 8 Loop Trail

## **Attachment A: Figures**

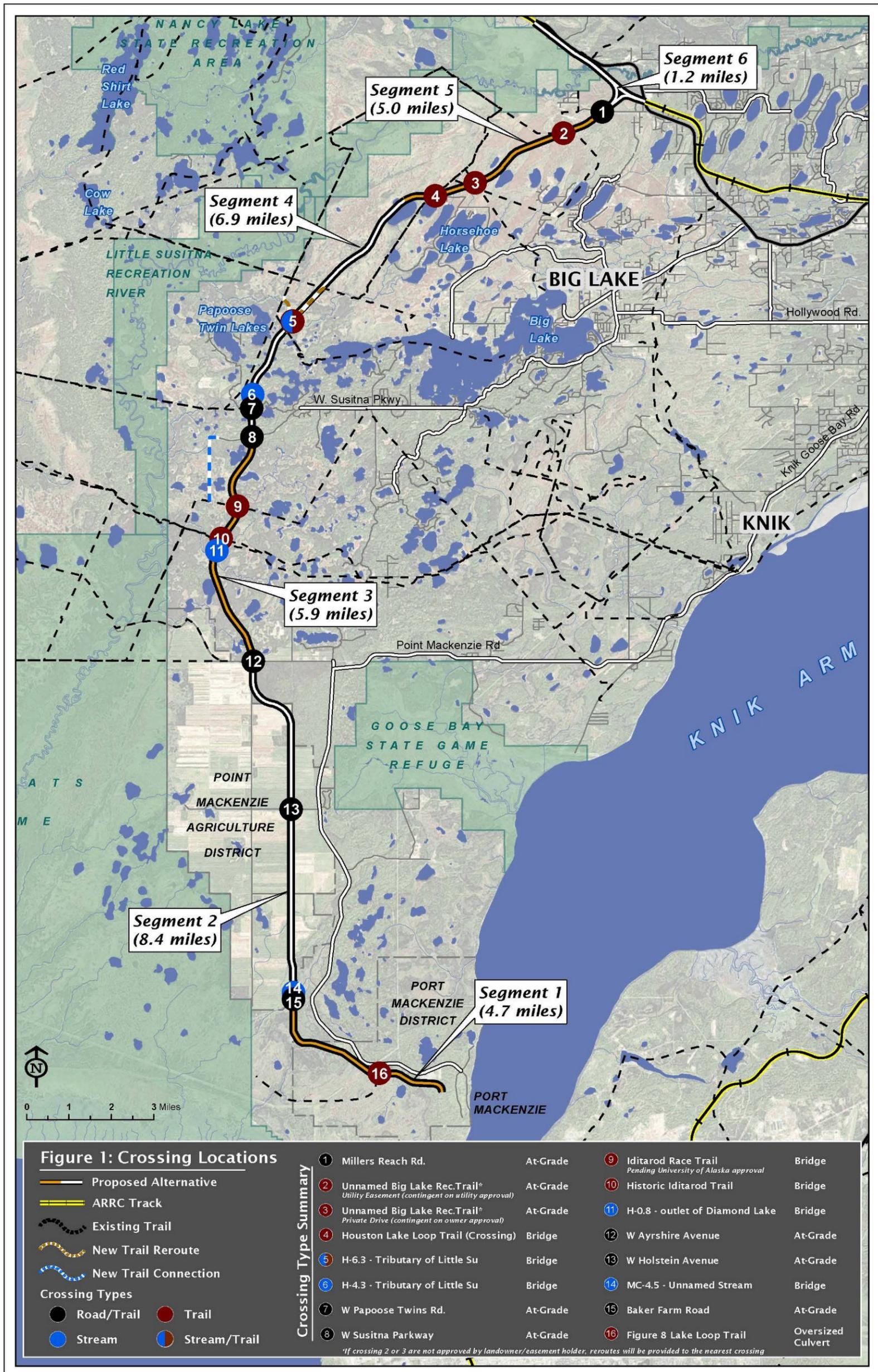


Figure 1: Project overview and crossing locations

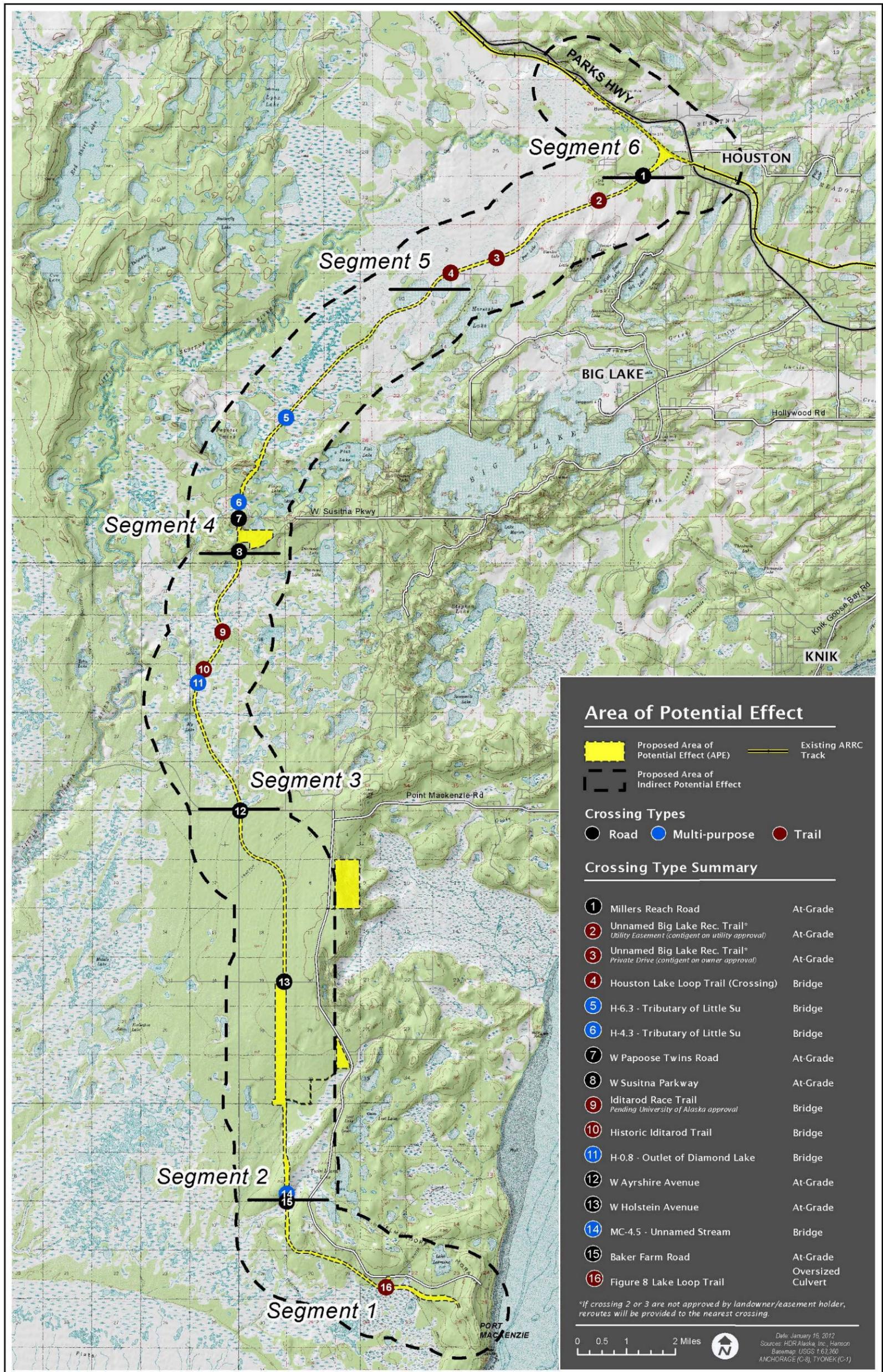


Figure 2: Area of Potential Effect (APE)

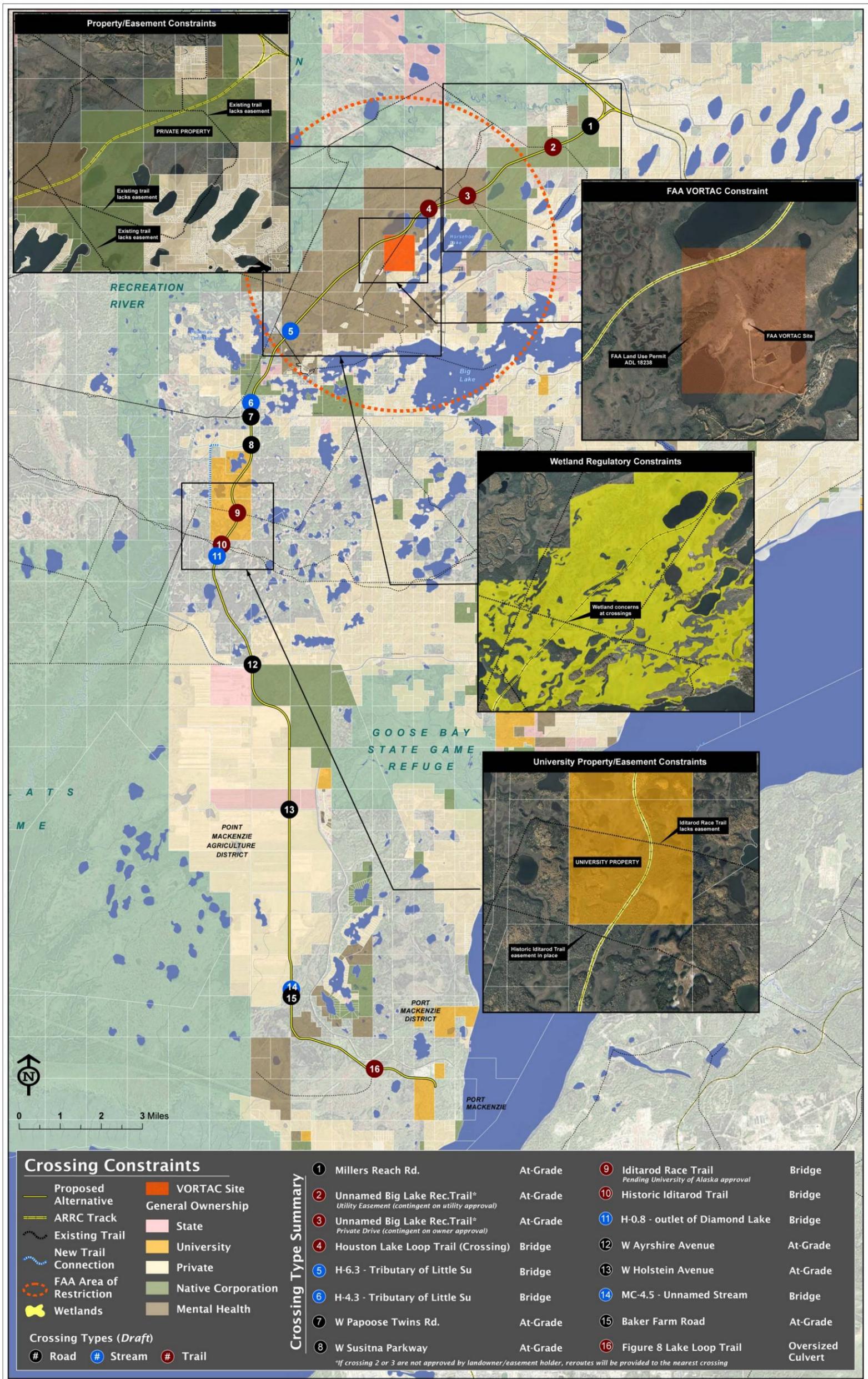


Figure 3: Constraints

## **Attachment B: IDSHD Consulting Parties and Participants**

*Port MacKenzie Rail Extension Project  
DRAFT Iditarod Dog Sledding Historic District Workshop Summary and Implementation Plan*

<b>Name</b>	<b>Organization</b>	<b>6/28/11 Workshop</b>	<b>7/7/11 Focus Group</b>	<b>10/27/11 MSB Open House</b>	<b>1/11/12 Workshop</b>
<b>Workshop/Meeting Participants</b>					
Bud Smyth	Aurora Dog Musers Club	x	x		
Carol Tyler	Aurora Dog Musers Club			x	
Vern Cherneski	Aurora Dog Musers Club		x		
Margaret Billinger	Big Lake Chamber of Commerce			x	
Dan Mayfield	Big Lake Trails		x	x	
Cathy Mayfield	Big Lake Trails			x	
Mike Donald	Big Lake Trails			x	
Cole Donald	Big Lake Trails			x	
Richard Gaffey	Big Lake Trails			x	
Jeff Bruno	DNR			x	
Kyle Kidder	DNR	x	x	x	x
Lesli Schick	DNR	x	x	x	x
Doug Gasek	DNR/SHPO	x	x		
Shina duVall	DNR/SHPO	x	x	x	x
Summer Rickman	DNR/SHPO				x
Judy Bittner	DNR/SHPO, Iditarod Historic Trail Alliance	x	x	x	x
Vern Halter	Dream a Dream Dog Farm	x	x	x	x
Martin Buser	Happy Trails Kennels				x
Ramey Smyth & Becca Moore	Homestretch Kennel	x	x		
Ralph Buzard	Houston Running			x	
Kevin Keeler	Iditarod National Historic Trail Administrator (BLM)			x	x
Terry Langholz	Iditarod Trail Blazers	x	x	x	x
Chas St. George	Iditarod Trail Committee	x	x		
Darrell Davis	Iditarod Trail Committee			x	
Greg Bill	Iditarod Trail Committee	x	x	x	x
Mark Nordman	Iditarod Trail Committee			x	x
Richard Plack	Jr. Iditarod Trail Manager	x		x	
Jon Brautigam	Knik Dog Musers Association, Iditarod Trail Blazers	x	x	x	x
Kelley Griffin	Knik Dog Musers Association	x	x		x
Angie Wade	Knik Tribal Council	x		x	x
Jaik Campbell	Mat-Su Trails Council			x	

*Port MacKenzie Rail Extension Project  
DRAFT Iditarod Dog Sledding Historic District Workshop Summary and Implementation Plan*

<b>Name</b>	<b>Organization</b>	<b>6/28/11 Workshop</b>	<b>7/7/11 Focus Group</b>	<b>10/27/11 MSB Open House</b>	<b>1/11/12 Workshop</b>
Sue Allen	Northern Lights 300 Dog Race			x	
Cim & Corinne Smyth	Perseverance Springs Farm	x	x	x	
Toby Riddell	Point MacKenzie Community Council			x	
Dale & Jenny Evans	Willow Dog Musers Association	x			
Donna Quante	Willow Dog Musers Association	x			
Sue Morgan	Willow Dog Musers Association	x			
Vic Stanculescu & Tina Owen	Willow Dog Musers Association			x	
Steve Charles	Willow Trial Committee	x	x	x	
Bill Johnson				x	
Chris Kosinski				x	
Elaine & Gene Martin			x		
Ellen Halverson				x	
Jim Clemensen				x	
Kathie Smith		x			
Mike & Anna Stephan		x			
Noreen Austermuhl				x	
Scott Lanene					x
Sharon Berg				x	
<b>Project Team Members Participating in Workshops/Meeting</b>					
Barbara Hotchkin	ARRC	x	x		x
Brian Lindamood	ARRC	x	x	x	x
Brad Sworts	MSB			x	x
Bruce Paulsen	MSB	x	x	x	x
Fran Seager-Boss	MSB	x	x	x	x
Heather Ralston	MSB	x			x
Todd Rinaldi	MSB			x	
Elizabeth Grover	HDR	x	x	x	x
Jessica Manifold	HDR	x		x	x
RaeShaun Schmidt	HDR	x	x	x	
Rosetta Alcantra	HDR	x	x	x	x
Zoe Meade	HDR				x
<b>Invited Parties (did not attend)</b>					
Bob Chlupach	Aurora Dog Musers Club				
Larisa Meyers-McCoin	Aurora Dog Musers Club				

*Port MacKenzie Rail Extension Project  
DRAFT Iditarod Dog Sledding Historic District Workshop Summary and Implementation Plan*

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<b>Name</b>	<b>Organization</b>	<b>6/28/11 Workshop</b>	<b>7/7/11 Focus Group</b>	<b>10/27/11 MSB Open House</b>	<b>1/11/12 Workshop</b>
Kathy Chapoton	Happy Trails Kennels				
Joanne Potts	Iditarod Trail Committee				
Kevin Kastner	Iron Dog				
Harry Caldwell	Knik Dog Musers Association, Knik 200 Organization				
Barb Redington	Knik Dog Musers Association				
Richard Porter	Knik Tribal Council				
Debra Call	Knik Tribal Council				
Helen Hegener	Northern Lights Media				
Jody Simpson	Senator Huggins Office				
Bruno & Joan Bryner	Willow Dog Musers Association				
DeeDee Jonrowe	Willow Dog Musers Association				
Erin McLarnon	Willow Dog Musers Association				
Robert Sexton	Willow Dog Musers Association				
Cindy Bettine					
Dan & Alice Huttunen					
Frank Sihler					
Joe Meehan					
Kevin Saiki					
Lynn McCoin					
Roxann Dayton					
Sam Amato					

## **Attachment C: Proposed At-Grade Crossings of Officially Recognized Trails**

[see Attached CD]

## **Attachment D: Workshop 1 Summary and Materials**

[see Attached CD]

## **Attachment E: Workshop 2 Summary and Materials**

[see Attached CD]

## **Attachment F: MSB Trail User Open House Summary and Materials**

[see Attached CD]

## **Attachment G: Workshop 3 Summary and Materials**

[see Attached CD]

## **Attachment H: Comment Resolution Summary**

[see Attached CD]

## **Attachment I: Muleshoe Lake/FAA VORTAC Site Alignment Shift**

