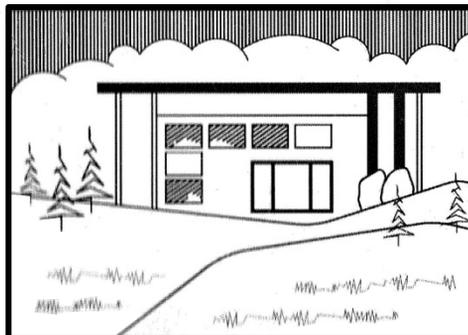
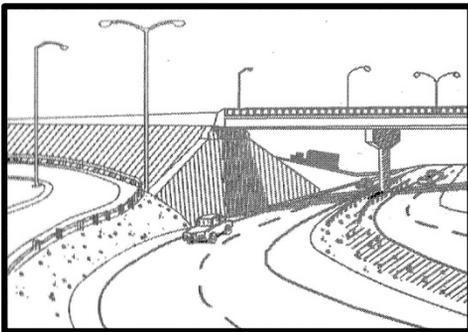
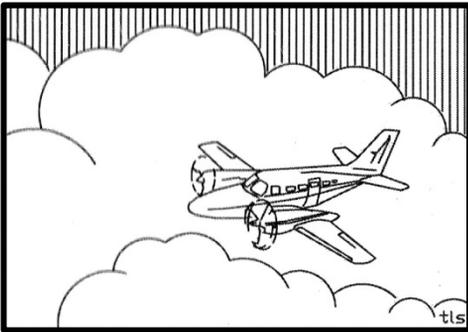


FINDING OF NO SIGNIFICANT IMPACT

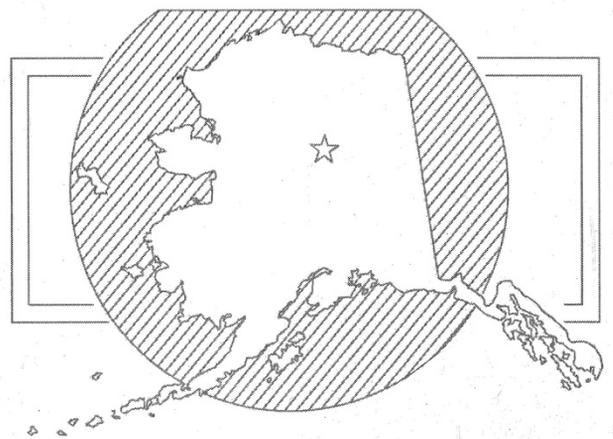
KOTZEBUE TO CAPE BLOSSOM ROAD

PROJECT No. NCPD-0002(204)/76884



STATE OF ALASKA

Department of Transportation
and Public Facilities



NORTHERN REGION

December 2013

U.S. Department of Transportation
Federal Highway Administration
FINDING OF NO SIGNIFICANT IMPACT

for the

KOTZEBUE TO CAPE BLOSSOM ROAD

Federal Project Number: NCPD-0002(204)

State Project Number: 76884

The Alaska Department of Transportation and Public Facilities (DOT&PF) proposes to construct an all-season road from Kotzebue, Alaska, south across the Baldwin Peninsula to a beach access area near Cape Blossom. The Upgrade Route is the Preferred Alternative. The Kotzebue to Cape Blossom Road Upgrade Route would reconstruct approximately 2.7 miles of Air Force Road south of the Hillside Road intersection, and end adjacent to the Kotzebue Electric Association (KEA) Wind Farm. The route would continue south for another 8.9 miles, cross Sadie Creek, and terminate at a beach access ramp. The Federal Highway Administration (FHWA) has determined the Upgrade Route alternative will have no significant impact on the human environment.

Public Involvement: Community coordination began in 2008 while working on the Kotzebue to Cape Blossom Road Reconnaissance Report. DOT&PF initiated public and agency coordination for the Kotzebue to Cape Blossom Road project Environmental Assessment (EA) in the spring of 2012. DOT&PF presented the project at the joint Northwest Arctic Borough (NWAB) and City of Kotzebue Planning Commission meeting on March 22, 2012, after completion of the project's Reconnaissance Study. Agency scoping letters and emails were sent to Federal, State and local agencies, City of Kotzebue, NWAB and surrounding Villages, Native Village of Kotzebue, Alaska Native Claims Settlement Act (ANCSA) Corporations, and other interested parties beginning on April 9, 2012. A scoping meeting was held on May 10, 2012.

On Oct 29, 2013, DOT&PF held a public meeting to announce the availability of the EA and request comments. Prior to the meeting, notices and copies of the EA were provided to the City of Kotzebue and NWAB. Letters or email communications were sent to Federal, State and local agencies, City of Kotzebue, NWAB and surrounding Villages, Native Village of Kotzebue, ANCSA Corporations, and other interested parties announcing the availability of the EA and request comments. Letters and comments received during the comment period are included in Appendix A.

Mitigation and Environmental Commitments:

- Turnouts and off-highway access ramps will be placed by existing trails. DOT&PF will work with the community and Tribe to determine appropriate turnout and ramp locations to maintain accessibility to traditional ATV and snow machine trail routes. Trail users will be notified in advance of, and during construction that trail access may be temporarily interrupted. Appropriate signage will be placed on the road and trails during construction and operation indicating trail/road intersections. Access for off-road vehicles will be maintained during construction.
- If archeological resources are discovered during ground disturbing activities, work will stop until the area is evaluated by an archaeologist and the landowner, and the State Historic Preservation Office (SHPO) will be notified.
- DOT&PF contractors will prepare and comply with an Erosion and Sediment Control Plan; Stormwater Pollution Prevention Plan; Hazardous Material Control Plan; and Spill Prevention, Control, and Countermeasures Plan.

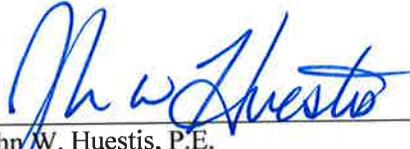
- No equipment or vehicles will operate in flowing waters. Fueling and maintenance will not occur within 100 feet of waterbodies. Equipment will be routinely inspected and serviced to prevent leaks and accidental spills.
- DOT&PF's construction contractor will abide by the Hazardous Materials Control Plan to address spill response and the storage and handling of hazardous materials, including fuel and lubricants. If leaks or spills occur, all contaminated material and soils would be contained and disposed of properly in accordance with Alaska Department of Environmental Conservation regulations. Solid waste will be disposed of in the Kotzebue permitted landfill.
- Best management practices will be implemented during construction to minimize disturbance of wetlands and streams.
- Construction limits will be clearly marked to minimize the potential for accidental wetland disturbance. Construction activities off the embankment will protect the tundra in accordance with project permits by using temporary matting, ice roads, and ice pads.
- DOT&PF will work with the Alaska Department of Fish and Game (ADF&G) to determine a construction window for in-water work in order to minimize impacts to fish resources. DOT&PF will obtain a Fish Habitat permit for winter construction in Sadie Creek and for completion of the road in the spring, when compaction, crushed aggregate placement and grading will occur. Construction of the Sadie Creek stream crossing will adhere to all compliance measures in the ADF&G Fish Habitat permit.
- Construction at Sadie Creek will occur in winter, and the crossing will be engineered to meet the estimated hydraulic flow. Appropriate drainage structures will be designed. Stream bank vegetation disturbance will be minimized.
- Dust impacts to surrounding property and adjacent vegetation will be controlled by placing gravel surfacing with a dust palliative, maintaining adequate drainage, installing geotextile fabric under the road base, watering during dry conditions, and posting lower speed limits. Material stockpiles will be covered if left in place.
- Construction will avoid the U.S. Fish and Wildlife Service (USFWS) recommended spring and summer bird migration timing windows. Alterations to vegetated sites will take place outside the bird nesting period.
- Drainage structures and culverts will be designed to control flood flows and adequately accommodate stormwater.
- Material delivery trucks traveling through the City of Kotzebue will coordinate operations near potential noise receptors based on the City's requirements.
- DOT&PF will obtain all necessary permits and agency approvals listed in the EA. All stipulations, conditions and requirement will be met.

This Finding of No Significant Impact (FONSI) is based on the attached EA, Endangered Species Act (ESA, Section 7 Consultation) concurrence from the USFWS, and National Historic Preservation Act (NHPA, Section 106 Consultation) concurrence from SHPO. The concurrence letters are included in Appendix B. The FHWA independently evaluated these documents and determined the EA adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. The EA complies with Executive Orders 12898, Environmental Justice; 11988, Floodplain Management; 11990, Protection of Wetlands; 11593, Protection and Enhancement of the Cultural Environment; 13084 Consultation and Coordination with Indian Tribal Governments; and 13112, Invasive Species.

The EA and concurrence documents provide sufficient evidence and analysis for determining an Environmental Impact Statement is not required. FHWA takes full responsibility for the accuracy, scope and content of the EA, and the ESA and NHPA consultations.

12-10-2013

Date



John W. Huestis, P.E.
Northern Region Area Engineer
Federal Highway Administration

Appendix A
Finding of No Significant Impact
Environmental Assessment
Public Meeting Materials

Kotzebue To Cape Blossom Road

ADOT&PF Project No. 76884/NCPD-0002(204)

The Alaska Department of Transportation and Public Facilities (ADOT&PF) announces the availability of the Draft Environmental Assessment (EA) for the Cape Blossom Road project in Kotzebue, Alaska for public review.

The ADOT&PF proposes to construct a road from Kotzebue to Cape Blossom on the Baldwin Peninsula in western Alaska. The proposed project includes:

- ⊗ Upgrading Air Force Road from Hillside Road to the Kotzebue Electric Association (KEA) Wind Farm.
- ⊗ Constructing a two-lane gravel road from the wind farm to a beach access ramp above the high tide line near Cape Blossom.

The proposed road would provide all-season access between Kotzebue and Cape Blossom. The Draft EA addresses the proposed action and potential economic, social, and environmental effects.

If you're unable to make the meeting, but wish to provide comments on the EA, you can find the Draft EA on the project website and at the Northwest Arctic Borough office in Kotzebue. Written comments can be made until November 8, 2013.

For more information, contact:

Christopher Johnston, P.E., Project Manager
Alaska Department of Transportation & Public Facilities, Northern Region
2301 Peger Road, Fairbanks, AK 99709
(907) 451-2322, chris.johnston@alaska.gov

Visit Website: dot.alaska.gov/nreg/capeblossomroad

The ADOT&PF operates Federal Programs without regard to race, color, national origin, sex, age, or disability. Full Title VI Nondiscrimination Policy: dot.alaska.gov/tvi_statement.shtml. To file a complaint go to: dot.alaska.gov/cvlrts/titlevi.shtml.

PUBLIC MEETING

Tuesday
October 29th, 2013

Refreshments and sign-in at
6 pm

Presentation at 6:30 pm,
public comments until 8 pm

Northwest Arctic Borough
Assembly Chambers,
Kotzebue



Kotzebue To Cape Blossom Road

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PUBLIC MEETING

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Northwest Arctic Borough
Assembly Chambers,
Kotzebue

Visit Website: dot.alaska.gov/nreg/capeblossomroad

Brooks & Associates
1704 Rogers Park Court
Anchorage, AK 99508-4070

Kotzebue To Cape Blossom Road

Public Meeting

Tuesday
October 29th, 2013, 6 pm

PRESORTED STD
U.S. POSTAGE
PAID
PERMIT NO. 537
ANCHORAGE, AK



PUBLIC SERVICE ANNOUNCEMENT – KOTZEBUE TO CAPE BLOSSOM ROAD

30 SECOND SPOT

October 24, 2013, Fairbanks. THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES ANNOUNCES THE AVAILABILITY OF THE DRAFT ENVIRONMENTAL ASSESSMENT FOR THE CAPE BLOSSOM ROAD PROJECT IN KOTZEBUE FOR PUBLIC REVIEW. THE PROJECT PROPOSES TO CONSTRUCT A ROAD FROM KOTZEBUE TO CAPE BLOSSOM. A PUBLIC MEETING IS PLANNED FOR TUESDAY, OCTOBER 29TH, FROM 6 TO 8 P.M. AT THE NORTHWEST ARCTIC BOROUGH ASSEMBLY CHAMBERS IN KOTZEBUE. WRITTEN COMMENTS WILL BE ACCEPTED UNTIL NOVEMBER 8TH. FOR MORE INFORMATION CONTACT CHRISTOPHER JOHNSTON AT 451-2322.

#####

For more information contact:

Alaska Department of Transportation and Public Facilities

Christopher Johnston, Project Manager

ADOT&PF, Northern Region

(907) 451-2322

E-mail: chris.johnston@alaska.gov



Kotzebue to Cape Blossom Road Project Location

0 1 2 4 Miles

Date: 9/3/2013 Scale: 1 in = 2 miles

Revision: 3 Figure: 1.1

Legend

Material Site
 Stream Crossing
 Winter Trail
 Kotzebue Corp. Boundary
 VORTAC Easement

Route Alternatives

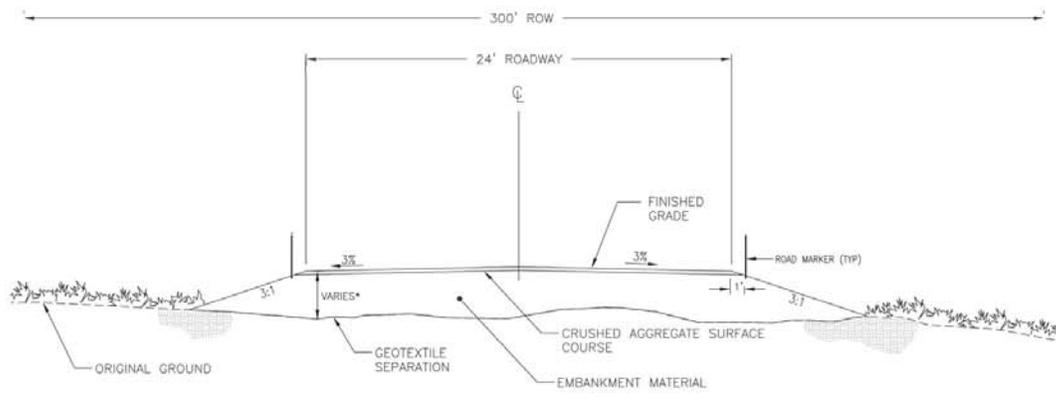
Upgrade Route
 Dismissed
 Staging Pad

Land Status

Cemetery
 KEA Windfarm
 ANCSA - City
 KIC Patent
 KIC Selection
 KIC & NANA
 NANA Patent
 Native Allotment
 State Selection Application

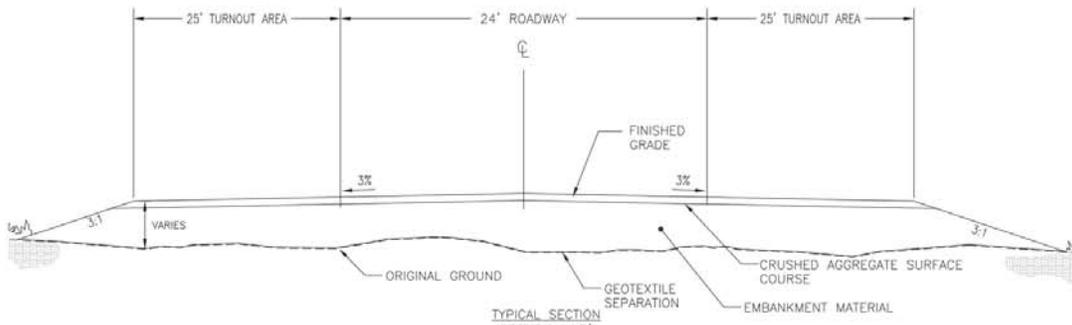
Sources: DOT&PF, BLM, DNR, FWS, McClintock Land Associates Inc.



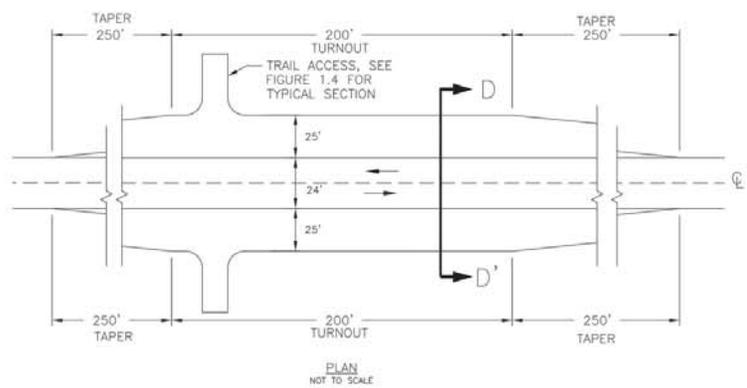


TYPICAL SECTION
NOT TO SCALE

* EMBANKMENT HEIGHT WILL VARY BETWEEN 3 TO 8 FEET. EMBANKMENT HEIGHT OF 6" MAY BE USED IN AREAS OF POTENTIAL SNOW DRIFTING. EMBANKMENT HEIGHT WILL BE 8" IN AREAS WHERE THERE IS CONCERN OF THAWING UNDERLYING PERMAFROST.



TYPICAL SECTION
SECTION D-D'
NOT TO SCALE



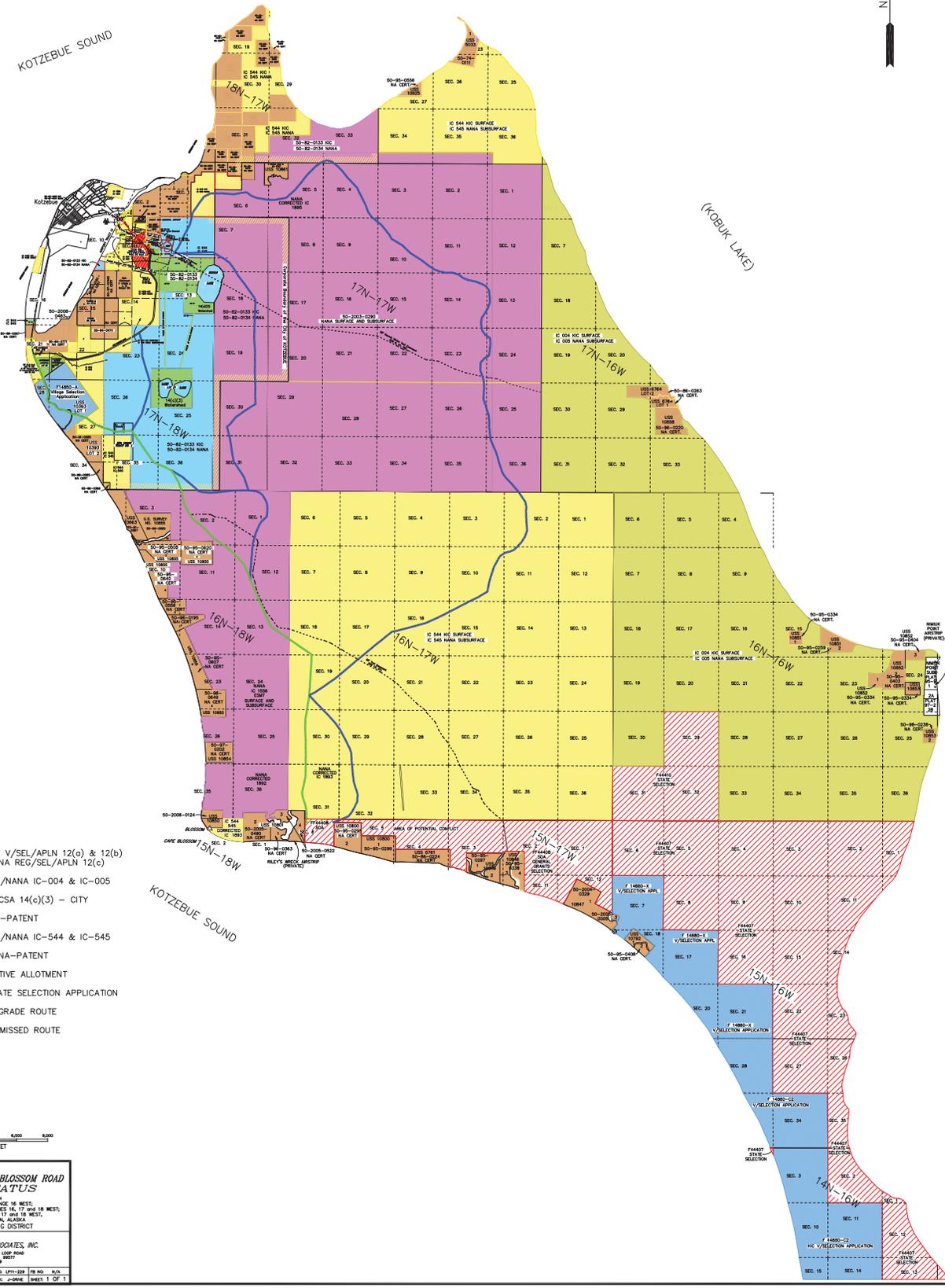
NOTE: TURNOUTS WITH TRAIL ACCESS WILL BE PROVIDED AT TRADITIONAL USE TRAILS. TURNOUTS MAY BE ON EITHER SIDE OF THE ROAD OR BOTH SIDES DEPENDING

Roadway Details



KOTZEBUE SOUND

(KOBUK LAKE)



- KIC V/SEL/APLN 12(a) & 12(b)
NANA REG/SEL/APLN 12(c)
- KIC/NANA IC-004 & IC-005
- ANCSA 14(c)(3) - CITY
- KIC-PATENT
- KIC/NANA IC-544 & IC-545
- NANA-PATENT
- NATIVE ALLOTMENT
- - - STATE SELECTION APPLICATION
- UPGRADE ROUTE
- DISMISSED ROUTE

0 2000 4000 6000 8000
SCALE IN FEET

**MAP OF
KOTZEBUE TO CAPE BLOSSOM ROAD
LAND STATUS**

REVISED WHEN:
TOWNSHIP 14 NORTH, RANGE 16 WEST,
TOWNSHIP 15 NORTH, RANGE 17 and 18 WEST,
TOWNSHIP 16 NORTH, RANGE 17 and 18 WEST,
KATZEL, FROV, NORTON, ALASKA,
KOTZEBUE RECORDING DISTRICT

PREPARED BY:
MCCLINTON LAND ASSOCIATES, INC.
1640 NORTH SALEM AVENUE, SUITE 200
ANCHORAGE, ALASKA 99503
(907) 491-1889

DATE: 11-20-09 SHEET: 011-259 OF NO. SHEETS: 1 OF 1
DATE: 03-10-2010 DATE: 03-10-2010 DATE: 03-10-2010

Meeting Minutes

Kotzebue to Cape Blossom Road EA		Baker Project No: 128262 DOT&PF/Federal Project No: 76884/NCPD-0002(204)
Subject:	Kotzebue to Cape Blossom Road EA Public Meeting	
Date:	October 29, 2013	
Time:	6 p.m. to 8 p.m., presentation at 6:30 p.m., public comments until 8 p.m.	
Location:	Kotzebue, AK: Northwest Arctic Borough Assembly Chambers (NWAB)	
Meeting Outreach:	<ul style="list-style-type: none"> • Meeting notice posted on the project website, October 25, 2013 • Display advertisement in Arctic Sounder, October 24, 2013, inviting the public to the open house • Postcard invitations to local agencies, and elected officials in Kotzebue, October 18, 2013 • Postcard invitations mailed to all local businesses and residents in Kotzebue, October 25, 2013 • Fliers posted in Kotzebue on October 29, 2013 • Public service announcement request sent to: KINU-FM, KOTZ-AM, and GCI, to request to broadcast announcement inviting public to meeting, October 25, 2013-October 28, 2013 	
Meeting Attendance:	37 individuals signed in	
Meeting Materials:	<ul style="list-style-type: none"> • Welcome sign • Proposed and Dismissed Routes map • Land status map • Typical Section figure • Environmental Assessment copies • Sign in Sheets • Comment Sheets • Display Advertising 	

Participants:

Name	Title/Discipline	Organization
Al Beck	Aviation Group Chief	Alaska DOPT&PF
Christopher Johnston	Project Manager	Alaska DOPT&PF
Paul Karczmarczyk	Environmental Analyst	Alaska DOPT&PF

Meeting Minutes

Name	Title/Discipline	Organization
Derek Christianson	Project Manager	Michael Baker Jr., Inc.
Karen Brown	Environmental Task Lead	Michael Baker Jr., Inc.
Michelle Onuska	Public Involvement Support	Michael Baker Jr., Inc.

A public meeting was held in Kotzebue on October 29, 2013 to announce the availability of the Kotzebue to Cape Blossom Road Environmental Assessment (EA) to the community. The meeting began at 6:00 p.m. and the presentation began about 6:15 p.m.

Attendees were greeted at the door and asked to sign in. Written comment forms were provided. Food and beverages were available for the attendees to enjoy during the meeting. The project team was available to discuss the project before and after the presentation.

The meeting started with an invocation given by an Elder of Kotzebue. Chris Johnston introduced the staff and consultants in attendance. Once introductions were completed, Chris provided an overview of the project. He described the Proposed Action including the route from Kotzebue to Cape Blossom in logical segments and provided information on other routes studied and land ownership. He explained the decision making process guiding the development of alternatives. He described how previous reports and reconnaissance studies helped in the developmental process of current route options considered and carried forward for further study or dismissed. He also explained the input received from the public and agencies over the past few years helped in the developmental process as well.

Paul Karczmarczyk described the environmental and National Environmental Policy Act (NEPA) processes and timeline for providing comments on the EA.

Derek Christianson of Michael Baker Jr., Inc. reviewed the purpose and need as specified in the EA. He elaborated on the anticipated improvements that would occur for access to a better barge landing area, and subsistence and recreational uses of the lower Baldwin Peninsula. He also explained that improvements to a better barge landing area would improve lightering efficiency and likely result in an increase in economics for transportation of barged freight.

Karen Brown of Michael Baker Jr., Inc. provided an overview of field and desktop studies that provided data for determination of potential impacts to the natural environment. These included fish and avian species, hydrology, wildlife, wetlands, cultural and archeological resources, air, water and sound. She also detailed anticipated human environmental impacts including access to traditional camps, Native allotments, subsistence resources, and recreational uses. She pointed out the potential economic benefits that access could provide to the community.

Karen explained that all Federal, State and local agencies agreed that there wouldn't be impacts to the Right-of-Way (ROW). The EA concluded there would be no negative impacts to community transportation. She mentioned that while there were historical sites connected to the radar station, the State Historic Preservation Office (SHPO) made a finding of no effect for the project.

Karen emphasized if any cultural resources were discovered during construction, work would be stopped and SHPO would be notified before work could resume. She continued explaining that there

Meeting Minutes

should not be temporary impacts to wildlife resources during construction, but there could be some impacts to terrestrial mammals from operation. The new road will improve access to berry picking areas.

She explained that dust will be controlled by palliatives added to the gravel surface during construction, and the road would be watered to limit impacts to land and water. Noise and water quality impacts were most likely to occur during construction. Karen continued that there were no anticipated long term impacts to fish, wildlife or suitable nesting habitat for raptors, and there are no Endangered Species Act -listed species in the project area. The route would avoid all lakes, but will cross Sadie Creek, and appropriate drainage structures would be placed at the creek crossing and other locations along the road.

Karen indicated there are previously identified contaminated sites associated with the Long-Range Radar Site, but these were previously remediated, and no other portions of the project area were anticipated to contain contaminated sites or materials. She explained that the project will terminate above the high water mark, and therefore would not affect beach processes. The entire project area is in wetlands, and approximately 109 wetland acres would be impacted. The project would require a permit from the United States Army Corps of Engineers.

Chris Johnston followed up by indicating the need for public and agency comments, and the project team will provide responses to comments. Any changes to the EA will be incorporated and a Finding of No Significant Impact (FONSI) will be written and approved by the Federal Highway Administration. Once the FONSI is signed, final design will begin, and the ROW will be acquired. A design study report and final design will be completed before the start of construction.

Questions from those present:

Q: When will you put out a project bid?

A: *The acquisition of the ROW is the critical path, but construction bids could be requested and constructed started within two years if things go smoothly. If the project takes an accelerated path and ROW acquisition goes quickly, the project could be out to bid in winter 2014-2015.*

Q: The ROW is generally 150 feet on either side of the centerline?

A: *DOT&PF described land ownership and potential ROW width by project location, and in certain areas the ROW width would vary.*

Q: Is there a port associated with the project?

A: *DOT&PF: This project is for a road to Cape Blossom. The port is a separate, stand-alone project and not addressed in the EA.*

Q: Would winter only construction include the bridge?

A: *Much of the work including bridge construction would be done in winter, with some summer work necessary, such as final surfacing, grading, and signage.*

Q: Would the State be constructing the road alone or with city and military assistance.

A: *The City has been working with U.S. Army Innovative Readiness Training. At this point, the entire project would be put out to a contractor for bid and construction.*

Meeting Minutes

Q: Walter Sampson: Have there been any negative comments from Non-governmental Organizations or others?

A: *No negative comments have been received. The U.S. Fish and Wildlife Service provided comments on impacts to wetlands, and requested the project minimize wetland footprint. Overall the comments received from agencies and the community have been positive.*

Q: Walter Sampson: Where will gravel from the project come from.

A: *The gravel would be contractor furnished. Iggy Hill is one potential, and there are other sources a contractor could draw from. Ultimately, it would be the contractor's call on materials.*

Q: Walter Sampson: Have you looked at any sites with good gravel potential?

A: *DOT&PF conducted a gravel investigation along the centerline of the proposed road, but no potential gravel sources were found. They also did some drilling offshore around the proposed road terminus, but again did not find a competent gravel source. During the airport relocation reconnaissance, gravel was found at the Iggy Hill site, and DOT&PF has looked other places on the Baldwin Peninsula.*

Q: Walter Sampson: If there's a potential source at Iggy Hill, could there be more at the higher hill areas nearby?

A: *DOT&PF: Nimiuk Point may have a little gravel, and there might be some offshore sources but they have salt and really cannot be used. It will depend on the quality of gravel. The contractor will likely choose the closest source and the most economical.*

Q: What material sites has DOT&PF investigated?

A: *DOT&PF has investigated several sites but found most to be undesirable including those along the road center line, airport spoils, and off-shore at Cape Blossom. Good gravel was found at the Iggy Hill site.*

Q: The road near the radar site has a sharp turn and is very close to the site fence. Is anything being proposed to fix the turn? Will the fence be impacted?

A: *DOT&PF will probably be able to avoid it, but will depend on the ROW. The 300 feet ROW might narrow near the facilities.*

Q: Walter Sampson: Does Kotzebue Electric Association (KEA) have any ideas on what they want there?

A: *Eugene Smith gave some information on KEA. KEA leases the land from Kikiktagruk Inupiat Corporation (KIC). Cape Blossom Road would provide KEA with better access to the wind farm. Both KEA and KIC are in favor of the road.*

Q: Will the increase in traffic impact the route through the airport?

A: *This project starts at the intersection of Hillside Road. The airport project is separate, and the airport project will help with the traffic situation at the airport, but the gates at the airport will be open even after that project is done.*

Q: What is the design and construction schedule?

Meeting Minutes

A: DOT&PF requests comments on the EA by November 8. DOT&PF anticipates FHWA will issue the FONSI by the end of the year. Detailed design will begin approximately 6 weeks later. ROW negotiations are expected to take 1 to 2 years. Construction will begin once the ROW negotiations are complete. Construction could begin in the winter of 2014/2015 if ROW can be obtained.

Comments:

Chris reiterated the comment deadline is November 8. The comments will be addressed and provided to FHWA quickly. Once the FONSI is completed and signed and the NTP is received, DOT&PF can begin design and complete the design study report. The ROW process will begin, and as soon as DOT&PF can get ROW acquisition completed, the project will go out to bid.

Comment from Chairman of KIC Board: It would be good to get KIC and NANA together to work together with DOT&PF on ROW. Working together would speed the process along.

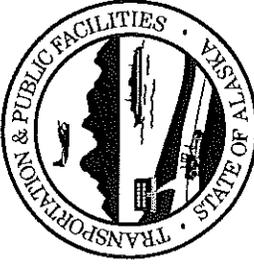
DOT&PF is open to working together and would like to speed things up if possible, and will mention your desire to our ROW people to see what we can do.

*This information is **voluntary**. Its purpose is to ensure fair and equal representation by the public in all projects and programs administered by the Alaska Department of Transportation and Public Facilities.

ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PUBLIC MEETING

SIGN IN SHEET



PROJECT NAME: Kotzebue to Cape Blossom Road, PROJECT NO.: 76844/NCPD-0002(204), DATE: October 29, 2013

NAME (PLEASE PRINT)	ADDRESS (to receive project notices, you MUST provide)	PHONE	*GENDER (M/F)	*RACE (W, AN, N, B, H, A, P, O)
Cynthia Fields		442-2801	F	AN
Wanda Baltazar		442-3794	F	AN
Jennifer Snider		412-1268	F	AN
John Chase	jchase@nusbor.org	442 8212	M	AK Note
Sheila Stein	Box 786 Kotzebue AK 99752	712 0834	F	AN
Katherine Gregg		412-0392	F	AN

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PROJECT NAME: Kotzebue to Cape Blossom Road, PROJECT NO.: 76844/NCPD-0002(204), DATE: October 29, 2013

NAME (PLEASE PRINT)	ADDRESS (to receive project notices, you MUST provide)	PHONE	*GENDER (M/F)	*RACE (W, AN, N, B, H, A, P, O)
Dore Myers	P.O. Box 728	442-2535	M	W
Clement Richards SR	Box 823		M	N
Frank Hayes	Box 1029	442-5301	M	W
Jason Jessup	Box 46	442-5204	M	W
Barbara Colton	Box 532	442-3374	Fe	W
Susan Georgette	Box 278	442-3336	F	W
ITEL Smith	Box 1197	442-1764	M	AN
Bish Callahan	Box 909	360-5385	M	
Bill Beck	2301 PETER RD TARRAWES, AK 99709	457-2276	M	W

*RACE CATEGORIES: WHITE (W), ALASKA NATIVE (AN), NATIVE AMERICAN (N), BLACK (B), HISPANIC (H), ASIAN (A), PACIFIC ISLANDER (P), and OTHER (O)

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ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PUBLIC MEETING

SIGN IN SHEET



PROJECT NAME: Kotzebue to Cape Blossom Road, PROJECT NO.: 76844/NCPD-0002(204), DATE: October 29, 2013

NAME (PLEASE PRINT)	ADDRESS (to receive project notices, you MUST provide)	PHONE	*GENDER (M/F)	*RACE (W, AN, N, B, H, A, P, O)
KAREN BROWN	1400 W. Benson Blvd Ste 200 ANCHORAGE AK 99503	273 1638	F	W
DEREK CHRISTIANSON	1400 W. BENSON BLVD. SUITE 200 ANCHORAGE AK 99503	273-1600	M	W
Peter Johanknecht	1500 W. 33rd Ave, Suite 100 Anchorage AK 99503	351-5757	M	W
Walker Ampsun	Box 1088 Kotzebue, AK 99752	442 3605	M	AN
COLE W. SCHWENKER	Box 1050 Kotzebue AK 99752	442 3605	M	AN
SANDY HUSS	P.O. Box 277 KOTZEBUE, AK 99752	412- 2121	M	W

3904.06 PI Docs:3909.06 Meetings:3906.06 060329 Meeting:3904.06_060329 Title YI Sign-In.doc

*RACE CATEGORIES: WHITE (W), ALASKA NATIVE (AN), NATIVE AMERICAN (N), BLACK (B), HISPANIC (H), ASIAN (A), PACIFIC ISLANDER (P), and OTHER (O)

1 of _____

revised: March 2005

*This information is voluntary. Its purpose is to ensure fair and equal representation by the public in all projects and programs administered by the Alaska Department of Transportation and Public Facilities.

PROJECT NAME: Kotzebue to Cape Blossom Road, PROJECT NO.: 76844/NCPD-0002(204), DATE: October 29, 2013

NAME (PLEASE PRINT)	ADDRESS (to receive project notices, you MUST provide)	PHONE	*GENDER (M/F)	*RACE (W, AN, N, B, H, A, P, O)
ERANIE NORTON	604 361 Kotzebue, AK	442-3410	M	ESIC
Josephine H. Sampson	Box 212 Kotz, AK	442-2525		
WARREN R THOMPSON	P.O. Box 994 Kotzebue	442-3144	M	CAU
EDWARD	Box 1015, OTZ	442-2470	M	E
Ron Margold	Box 593, Kotz	442-3953	M	W
Nathan Gottwald	Box 90 Kotzebue	442-3851	M	
Noah Naylor	P.O. Box 1110	442-2500	M	E
Enoch Shiet	Box 234	442-4582	M	E
Paul Karozmanezuk	Box 0301, Kotz P.O. Box 215, AK	442-2508	M	W
Michelle Onuska	1400 W. Benson Blvd. Anchorage, AK	764-312-1019	F	W

*RACE CATEGORIES: WHITE (W), ALASKA NATIVE (AN), NATIVE AMERICAN (N), BLACK (B), HISPANIC (H), ASIAN (A), PACIFIC ISLANDER (P), and OTHER (O)

*This information is **voluntary**. Its purpose is to ensure fair and equal representation by the public in all projects and programs administered by the Alaska Department of Transportation and Public Facilities.

ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PUBLIC MEETING

SIGN IN SHEET



PROJECT NAME: Kotzebue to Cape Blossom Road, PROJECT NO.: 76844/NCPD-0002(204), DATE: October 29, 2013

NAME (PLEASE PRINT)	ADDRESS (to receive project notices, you MUST provide)	PHONE	*GENDER (M/F)	*RACE (W, AN, N, B, H, A, P, O)
Willie Thompson	1216 Kotz	442-2661		
Paul Hansen	1252 Kotz	995-2881	M	
Eugene Smith	703 1158 Kotz Ak	360-4696	M	N
Arny Clark Sr	P.O. Box 215 Kotzebue	442-278	m	.
Gordon Killbuck	P.O. Box 916 Kotz	442-2990		
Wilbur Skim	Box 434 OTZ	412-0363	m	

3904.06 PI Does:3909.06 Meetings:3906.06 060329 Meeting:3904.06_060329 Title VI Sign-in.doc

*RACE CATEGORIES: WHITE (W), ALASKA NATIVE (AN), NATIVE AMERICAN (N), BLACK (B), HISPANIC (H), ASIAN (A), PACIFIC ISLANDER (P), and OTHER (O)

1 of _____

revised: March 2005



Kotzebue to Cape Blossom Road

Project No. 76844/NCPD-0002(204)

Your Comments Please... Please use this form to provide written comments about the Cape Blossom Road project—the purpose and need or any issues or concerns that should be addressed in the environmental documentation. We appreciate your written input!

Name <i>Katherine Gregg</i>	
Street Address or PO Box <i>P.O. box 786</i>	
City, State, Zip <i>Kotzebue AK 99752</i>	
Email <i>Katherine_99465@hotmail.com</i>	Phone <i>412-0392</i>

Your comments:

I'm concerned about garbage disposal on the road and how it will affect the subsistence life and I'm also concerned about if the city of Kotzebue will actually do something about the dust. I am one of many that pick berries and hunt along the coast. The dust and garbage will affect our subsistence life and also our allotment.

We welcome your input. Please send written comments:



Mail

ADOT&PF Northern Region
 Attn: Christopher Johnston, P.E., Engineering Manager
 2301 Peger Road
 Fairbanks, AK 99709

Call

Alaska Relay
 TTY 800-770-8973 or
 Toll Free: 1-866-535-1877



Email chris.johnston@alaska.gov

Comment Form



Kotzebue to Cape Blossom Road

Project No. 76844/NCPD-0002(204)

Your Comments Please... Please use this form to provide written comments about the Cape Blossom Road project—the purpose and need or any issues or concerns that should be addressed in the environmental documentation. We appreciate your written input!

Name <i>Sheila Stein</i>	
Street Address or PO Box <i>Box 786</i>	
City, State, Zip <i>Kotzebue, AK</i>	
Email <i>drqchp@hotmail.com</i>	Phone <i>9074120834</i>

Your comments:

The road is near our allotment—how far away ~~do~~ you need to be from our property? Who will be responsible for garbage left? We access our allotment from the beach side. Can you move away from our allotment any more?

We welcome your input. Please send written comments:



Mail

ADOT&PF Northern Region
 Attn: Christopher Johnston, P.E., Engineering Manager
 2301 Peger Road
 Fairbanks, AK 99709

Call

Alaska Relay
 TTY 800-770-8973 or
 Toll Free: 1-866-535-1877



Email chris.johnston@alaska.gov

Comment Form



Kotzebue to Cape Blossom Road

Project No. 76844/NCPD-0002(204)

Your Comments Please... Please use this form to provide written comments about the Cape Blossom Road project—the purpose and need or any issues or concerns that should be addressed in the environmental documentation. We appreciate your written input!

Name Willie Towksjhea	
Street Address or PO Box 258A 3rd Ave	
City, State, Zip Kotzebue AK 99752	
Email	Phone 402-3401

Your comments:

Like idea of the road.
 On side of rd or in rd build in a pipeline
 to come from Kotzebue to South
 fill boages go to villages + put in
 more pipelines + pump station to villages
 to reduce costs of fuel

Rd is important to the community

Now fly fuel into villages,

We welcome your input. Please send written comments:



Mail

ADOT&PF Northern Region
 Attn: Christopher Johnston, P.E., Engineering Manager
 2301 Peger Road
 Fairbanks, AK 99709

Call

Alaska Relay
 TTY 800-770-8973 or
 Toll Free: 1-866-535-1877



Email

chris.johnston@alaska.gov

Comment Form



November 7, 2013

Department of Transportation & Public Facilities
Attn.: Chris Johnston, P.E.
2301 Peger Road
Fairbanks, AK 9970

Regarding: The Cape Blossom Port Access Road

Dear Chris Johnston, P.E.:

Thank you for the opportunity to comment on the Draft Environmental Assessment for the Cape Blossom Road Project. NANA Regional Corporation, Inc. (NANA) is one of the 13 Regional Alaska Native corporations created pursuant to the Alaska Native Claims Settlement Act (ANCSA) of 1971. NANA's mission is to improve the quality of life for our people by maximizing economic growth, protecting and enhancing our lands, and promoting healthy communities with decisions, and behaviors inspired by our Iñupiat Illitqisiat (Iñupiaq cultural values) consistent with our core principles.

The NANA region includes 11 rural Alaska Native villages (Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, Shungnak). NANA has more than 13,300 Iñupiat shareholders who depend on goods shipped at great expense from outside of our region.

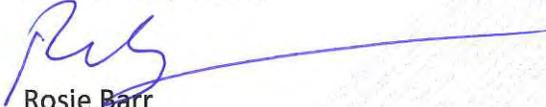
The majority of goods coming into the NANA Region arrive through the hub town of Kotzebue via barge. Currently, the barges must anchor 12-15 miles away from town and have the goods lightered to the dock on smaller craft. This adds considerable cost to the food, fuel, clothing, and construction materials from Outside that improve our shareholder's everyday lives. A 2008 study found that goods were 61% more expensive in Kotzebue than in Anchorage. The costs in the outlying villages are higher still, impeding the growth of an area already challenged by high poverty levels.

The Cape Blossom Road and Port Project would also serve to make the area safer for the increasing marine traffic moving through the Bering Strait. With the general trend of decline in the mean summer sea ice extent, there have been more cargo ships transiting the Northwest Passage around Canada and the Northern Shipping Route to the north of Siberia. Small cruise lines are already selling passage through the area. This raises the risk of accidents in the region, and with no ports for hundreds of miles, one at Kotzebue could mean the difference between life and death for a stricken vessel.

NANA views the Cape Blossom Road Project as imperative to the region's economic growth, making basic supplies affordable to our shareholders, and the general safety and well-being of ships and passengers passing through the area.

Thank you for taking my comments into consideration.

Respectfully Yours,



Rosie Barr
Senior Director of Lands
NANA Regional Corporation

F A X**Native Village of Kotzebue**

P.O. Box 296

600 5th street

Kotzebue, Alaska 99752

907-442-3467

www.kotzebueira.org

To: Scott Maybrier or Chris Johnston
Fax number: 907-451-5126

From: Jennifer Snider
Fax number: 907-442-2162

Date: **11/8/13**

Regarding: Public comments on draft EA for
cape blossom road project

Phone number for follow-up:
907-442-3467 ext.

of Pages including cover:

Comments:

Native Village of Kotzebue

Kotzebue IRA

November 5, 2013

Knowledge of Language

Christopher Johnston
Engineering Manager

Knowledge of Family Tree

AK DOT&PF
2301 Peger Road

Sharing

Fairbanks, Alaska 99701

Humility

Chris.johnston@alaska.gov

Respect for Others

RE: Kotzebue to Cape Blossom Road Draft Environmental Assessment
Project No.: 76844/NCPD-0002(204)

Love for Children

Dear Mr. Johnston,

Cooperation

On behalf of the Native Village of Kotzebue, please accept these as additional comments submitted by Ukallaysaaq Okleasik and Alex Whiting dated October 28, 2013. Overall, the tribe is very supportive of the proposed Cape Blossom Road to provide access to a deep water port, commercial freight transport, recreational uses, and subsistence access and uses.

Hard Work

Respect for Elders

Respect for Nature

As background, our principal goal of the tribe's transportation department is to assist our community in building a safe and healthy transportation infrastructure. Secondary goals include providing employment and training, and advocacy for the transportation, erosion, and flooding concerns of the region.

Avoid Conflict

Family Roles

Humor

The tribe fully understands Kotzebue's needs for better infrastructure improvements in our community, currently there are no roads extending outside of Kotzebue. Funding for transportation projects is becoming increasingly difficult to secure as funds diminish and competition for limited funds increases.

Spirituality

Domestic Skills

As a related transportation project completed by the tribe, Ted Stevens Way was built in 2000. The tribe working with the BIA as a federal agency, worked with a relatively small amount of funds, and had to stretch resources to build the road before the Air Force Road become restricted to the public. Although since then FAA backed away from closing Air Force Road. However, before its initial order the construction had issues with insulation under the shoulders of the road. Since construction, the shoulders have not held up well over the years therefore, the road is currently in a rehabilitation design phase.

Hunter Success

Responsibility to Tribe

To learn from this project and improve the chances for success on the Cape Blossom project, there needs to be proper oversight of the proposed road construction and the tribe needs to keep in mind for developing infrastructure that will work into the next 20 years from now. Our tribal and community members would benefit greatly from a new road in our community. Providing greater access to subsistence resources/native allotments, easier trail access points, and upgrade Air Force Road, seasonal jobs, and an increase tribal roads inventory.

In conclusion, the tribe supports the efforts of everyone involved on this project. Thank you for taking the time to review our comments. We appreciate this opportunity to express concerns for the new road to Cape Blossom.

Sincerely,



Jennifer Snider,
Transportation Coordinator



Ukallaysaaq T. Okleasik,
Executive Director

Native Village of Kotzebue Kotzebue IRA

October 28, 2013

Chris Johnston
Project Manager
AK DOT&PF
2301 Peger Road
Fairbanks, AK 99701
chris.johnston@alaska.gov

Knowledge of Language

Knowledge of Family Tree

Sharing

**RE: Kotzebue to Cape Blossom Road Draft Environmental Assessment
Project No.: 76844/NCPD-0002(204)**

Humility

Respect for Others

Dear Manager Johnston,

Love for Children

The Native Village of Kotzebue appreciates the opportunity to comment on the draft EA for the Cape Blossom Road project. The Tribe has been reviewing the plans for this effort since the initial reconnaissance study was released in February 2011 and has participated in some of the baseline collection through contracting with Michael Baker to provide cultural advisors. The Tribe agrees with the need for the project to establish an all-season transportation link to the City of Kotzebue from a barge landing site at Cape Blossom. The upgrade route chosen is the best suited to achieve the objective while minimizing costs, environmental impacts, and avoiding impacts to other landowners.

Cooperation

Hard Work

Respect for Elders

Respect for Nature

Avoid Conflict

As for comments on the EA document itself, the tribe notes that the bibliography section there is a reference to the Native Village of Kotzebue Corporation for the Sam Barr personal comment. The Native Village of Kotzebue is a federally-recognized tribe and should be referenced as simply the Native Village of Kotzebue or the Native Village of Kotzebue IRA. Also, on a similar note the Native Village of Kotzebue could be referenced in the community profile discussions as the tribal government serving the people of Kotzebue. Currently, there is no mention of the Tribe in the background/profile discussions.

Family Roles

Humor

Spirituality

Domestic Skills

Hunter Success

Responsibility to Tribe

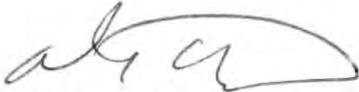
The document appears to address sufficiently the impacts posed by the project on the immediate environment; however the Tribe would like more discussion on the impacts of increased ATV use stemming from increased access to the country the road traverses. There are currently many more ATV trails out from Kotzebue than ever before and the new road will likely lead to many more trails becoming established from the new road. While, the Tribe supports continued access to the interior of the Baldwin Peninsula using ATV's there may be ways to manage this use and access in a more orderly fashion; it should at least be noted as a likely cumulative impact to the environment from the road being built, even if ATV use management itself is beyond the scope of this project.

The other issue that is unclear from the document is how the road will impact snowmachine access from one side of the road to the other. While the document does address access points, it is not entirely clear if road construction methods or materials may preclude access along significant portions of the length of the road from one side to the other with snowmachines during winter. Additionally, winter maintenance has the potential to result in impassable snow piling for various lengths on either side of the road. It would be helpful if this issue could be addressed in the Final EA.

Lastly, dust generation will probably be one of the more common long term impacts to the environment and the Tribe encourages a long term plan to address dust beyond the construction phase, in addition to a maintenance plan to keep the road up to safe operational standards.

Thank you for the consideration of these comments.

Sincerely,



Alex Whiting
Environmental Specialist



Ukallaysaaq Tom Okleasik
Executive Director

Appendix B
USFWS and SHPO Concurrence Letters



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Fairbanks Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701
November 7, 2013



Paul Karczmarczyk
Environmental Analyst
DOT&PF
2301 Peger Road
Fairbanks, AK 99709

Re: Kotzebue to Cape Blossom Road

This letter is in response to your request for concurrence on your effect determinations for endangered and threatened species, pursuant to Section 7 of the Endangered Species Act of 1973, as amended (Act).

THE PROPOSED ACTION

Based on the information provided, we understand that The Alaska Department of Transportation and Public Facilities (DOT&PF) proposes to construct an all-season road (Figure 1) from Kotzebue, Alaska, south across the Baldwin Peninsula to a beach access area near Cape Blossom. Additionally, the U.S. Army Corps of Engineers (USACE) would permit placement of fill in wetlands pursuant to the Clean Water Act (Table 1). The Cape Blossom Road would be approximately 11 miles long, with 24 feet of road surface and side slopes 3:1 or steeper. The road would include turnouts with ramps to access traditional trail crossings and potentially other areas. The proposed road would be designed for commercial freight transport and recreational uses with an estimated volume of 100 vehicles per day or less, which is below the Very Low-Volume Local Road designation by the American Association of State Highway and Transportation Officials guidelines of less than 400 vehicles.

The road would reconstruct approximately 2.7 miles of Air Force Road south of the Hillside Road intersection and end adjacent to the Kotzebue Electric Association (KEA) Wind Farm. The route would continue south for another 8.9 miles, cross Sadie Creek, and terminate at a beach access ramp. The beach access ramp would end above high tide line. Plans include construction of a staging pad on the east side of the road about 0.25 miles north of the shoreline. Anticipated uses of the pad include container and barge freight staging and storage, vehicle and boat trailer parking, and material stockpiles.

The road would be constructed on geotextile fabric placed on the tundra. A leveling course may be required under the geotextile depending on tundra tussock heights. The existing organic mat would not be removed. Clearing may occur but would be limited to brush removal within the roadway footprint. When the ground is frozen, embankment material would be placed on the fabric. The material would likely be supplied by either ice road from the recently permitted Iggy Hill material site or barged in and stockpiled from a regional material site. After the embankment

material thaws, the road would be compacted and leveled with additional material, and a surface layer of crushed aggregate would be applied. The crushed aggregate would be barged locally from the Baldwin Peninsula. A dust palliative surface treatment would be applied. Stream crossings would use appropriately-sized drainage structures, with cross culverts installed along the roadway as needed to equalize drainage areas. Except for the beach access ramp, excavation would be avoided to minimize thermal degradation of the subgrade. Insulation would be installed under the road bed at the beach access excavation site for thermal protection.

Construction would begin in the winter 2014/2015 after the ground freezes and would be completed after spring breakup. After breakup, the road would be graded, and the final surface layer of gravel would be added. Construction would be phased as funds become available. Currently, available funds would allow road construction to Sadie Creek.

Table 1. Footprint of the Cape Blossom Road with associated fill.

Road Segment	Length (miles)	72-Foot Road Footprint (acres)	300-Foot Right-of-Way Footprint (acres)	Total Fill ¹ Quantity (cubic yards)
Upgrade Route	11.6	104	430	889,000
Staging Pad			9	112,000

¹ – Maximum footprint acreage and fill quantity estimates are based on an 8-foot high, 24-foot wide road surface with 3:1 side slopes; these calculations assume a constant 72-foot wide road base. Turnouts are included in the road footprint and fill quantity.

THE ACTION AREA

The action area includes the footprint of the Cape Blossom Road and a buffer each side where direct and indirect effects to listed species may occur.

EFFECTS OF THE ACTION ON LISTED SPECIES

Project effects on Spectacled and Steller’s Eiders

The Service listed the spectacled eider (*Somateria fisheri*) as threatened on May 10, 1993 (58 FR 27474) and the Alaska-breeding population of the Steller’s eider (*Polysticta stelleri*) as threatened on June 11, 1997 (62 FR 31748). Listed eiders may migrate through the project area, but neither species currently nests in the area. Road construction would occur in winter when eiders are not present, and thus no effects for this part of the project are expected.

Road traffic may disturb migrating eiders. While migrating eiders may rest and feed in freshwater or terrestrial habitat within the action area, we expect disturbance to migrating eiders would be minor because these birds can respond to human presence or disturbance by moving to a perceived safe distance. Because listed eider density in the action area is extremely low and disturbance to migrating eiders would be so minor that injury or death would not occur, we expect project effects to these birds would be insignificant.

Project Effects on Polar Bears

Due to threats to its sea ice habitat, on May 15, 2008 the Service published a Final Rule in the Federal Register listing the world-wide population of the polar bear (*Ursus maritimus*) as threatened (73 FR 28212) under the Act. Polar bears may occur in the area, however their density is very low and encounters are expected to be rare. Due to lack of preferred denning habitat, polar bears rarely den near Kotzebue. Furthermore, given existing levels of human activity and development, we would expect polar bears denning in or near the action area to be extremely unlikely.

Although rare, transient bears could conceivably enter the action area and be disturbed by the presence of humans or equipment noise. However, we expect disturbances would be minor and temporary because transient polar bears would likely respond by departing the area. For informational purposes, the Service has enclosed standard *Polar Bear Interaction Guidelines* for the unlikely event that personnel encounter a polar bear during project activities. Because (1) the density of polar bears in the action area is very low; (2) project effects on denning polar bears are not anticipated; and (3) behavioral effects to transient bears are expected to be rare, minor, and temporary, we expect effects of the proposed action on polar bears would be insignificant.

CONCLUSION

The proposed action could temporarily disturb listed eiders or polar bears in the project area; however, we expect the effects of disturbance to be insignificant. Therefore the Service concludes that the proposed action is not likely to adversely affect listed eiders or polar bears. Preparation of a Biological Assessment or further consultation under Section 7 of the Act is not necessary at this time. Thank you for the opportunity to comment on this project. If you need further assistance, please contact Shannon Torrence at (907) 455-1871.

Sincerely,



Ted Swem
Branch Chief
Endangered Species

Cc: Michiel Holley, Regulatory Department,
Karen Brown, Environmental Manager, Michael Baker Jr., Inc.



Figure 1. New proposed barge channel for the proposed Kotzebue Airport and Safety Area Improvement Project.

POLAR BEAR INTERACTION GUIDELINES

These Polar Bear Interaction Guidelines (Guidelines) were developed to ensure that activities are conducted in a manner that avoids conflicts between humans and polar bears. Polar bears are protected under the Marine Mammal Protection Act (MMPA), and were listed as a threatened species under the Endangered Species Act (ESA) in 2008. The MMPA and ESA both prohibit the “take” of polar bears without authorization. Take includes disturbance/harassment, as well as physical injury and killing of individuals.

In addition to sea ice, polar bears use marine waters and lands in northern Alaska for resting, feeding, denning, and seasonal movements. They are most likely to be encountered within 25 miles of the coastline, especially along barrier islands during July-October. Polar bears may also be encountered farther inland, especially females during the denning period (October-April). Polar bears may react differently to noise and human presence. The general methods for minimizing human-bear conflicts are to: 1) avoid detection and close encounters; 2) minimize attractants; and 3) recognize and respond appropriately to polar bear behaviors. These Guidelines provide information for avoiding conflicts with polar bears during air, land, or water-based activities.

Unusual sightings or questions/concerns can be referred to: Susanne Miller or Craig Perham, Marine Mammals Management Office (MMM Office), 1-800-362-5148; or to Sarah Conn (907) 456-0499 of the Fairbanks Fish & Wildlife Field Office (FFWFO).

When operating aircraft:

- If a polar bear(s) is encountered, divert flight path to a minimum of 2,000 feet above ground level or ½ mile horizontal distance away from observed bear(s) whenever possible.

When traveling on land, ice, or water:

- Avoid surprising a bear. Be vigilant—especially on barrier islands, in river drainages, along bluff habitat, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks.
- Between October and April special care is needed to avoid disturbance of denning bears. If activities are to take place in that time period the MMM Office should be contacted to determine if any additional mitigation is required. In general, activities are not permitted within one mile of known den sites.
- Avoid carrying bear attractants (such as strongly scented snacks, fish, meat, or dog food) while away from camp; if you must carry attractants away from camp, store foods in air-tight containers or bags to minimize odor transmission until you return them to “bear-resistant” containers.*

- If a polar bear(s) is encountered, remain calm and avoid making sudden movements. Stay downwind if possible to avoid allowing the bear to smell you. Do not approach polar bears. Allow bears to continue what they were doing before you encountered them. Slowly leave the vicinity if you see signs that you've been detected. Be aware that safe viewing distances will vary with each bear and individual situation. Remember that the closer you are to the animal, the more likely you are to disturb it.
- If a bear detects you, observe its behavior and react appropriately. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors:
 - *Curious* polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up.
 - *A threatened or agitated* polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side. These are signals for you to begin immediate withdrawal by backing away from the bear. If this behavior is ignored, the polar bear may charge. Threatened animals may also retreat.
 - In rare instances you may encounter a *predatory* bear. It may sneak or crawl up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior. This behavior suggests the bear is about to attack. Standing your ground, grouping together, shouting, and waving your hands may halt the bear's approach.
- If a polar bear approaches and you are in the bear's path—or between a mother and her cubs—get out of the way (without running). If the animal continues to approach, stand your ground. Gather people together in a group and/or hold a jacket over your head to look bigger. Shout or make noise to discourage the approach.
- If a single polar bear attacks, defend yourself by using any deterrents available. If the attack is by a surprised female defending her cubs, remove yourself as a threat to the cubs.

When camping:

- Avoid camping or lingering in bear high-use areas such as river drainages, coastal bluffs and barrier islands.
- Store food and other attractants in “bear-resistant” containers*. Consider the use of an electric fence as additional protection. Do not allow the bear to receive food as a reward in your camp. A food-rewarded bear is likely to become a problem bear for you or someone else in the future.

- Maintain a clean camp. Plan carefully to: minimize excess food; fly unnecessary attractants out on a regular basis (i.e. garbage, animal carcasses, excess anti-freeze or petroleum products); locate latrines at least ¼ mile from camp; and wash kitchen equipment after every use.
- If a polar bear approaches you in camp, defend your space by gathering people into a large group, making noise and waving jackets or tarps. Continue to discourage the bear until it moves off. Have people watch the surrounding area in case it returns later, keeping in mind that polar bears are known to be more active at night. Additional measures to protect your camp, such as electric fences or motion sensors can be used.

Harassment of polar bears is not permissible, unless such taking (as defined under the MMPA) is imminently necessary in defense of life, and such taking is reported to FWS within 48 hours.

*Containers must be approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant." Information about certified containers can be found at <http://www.igbconline.org/html/container.html>.



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Natural Resources

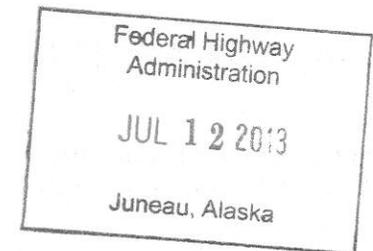
DIVISION OF PARKS AND OUTDOOR RECREATION
Office of History and Archaeology

550 West 7th Avenue, Suite 1310
Anchorage, Alaska 99501-3565
Web: <http://dnr.alaska.gov/parks/oha>
Phone: 907.269.8721
Fax: 907.269.8908

July 10, 2013

File No.: 3130-1R FHWA
3330-6N KTZ-00037, 3330-6 KTZ-00190,
3330-6N KTZ-00231, 3330-6N KTZ-00232

John W. Huestis, P.E.
Northern Region Area Engineer
Department of Transportation & Public Facilities
P.O. Box 21648
Juneau, AK 99802-1648



Subject: Kotzebue to Cape Blossom Road Project

Dear Mr. Huestis:

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated June 17, 2013) on June 20, 2013.

Following our review of the documentation, we concur with your determination that because the Kotzebue White Alice Communication System Historic District (KTZ-00037) has been adequately mitigated and subsequently demolished, it has been rendered **not eligible** for the National Register of Historic Places (NRHP). Further, we concur with your determination that KTZ-00190 no longer contributes to the historic district, but remains individually **eligible** for the NRHP under Criterion A. Finally, we concur that KTZ-00231 and KTZ-00232 are **not eligible** for the NRHP.

As there are no historic properties present within the project's area of potential effects (APE), we concur that a finding of **no historic properties affected** is appropriate for the proposed undertaking.

Your letter indicates that a great deal of consultation on potential effects to historic properties has been ongoing since at least late 2007. We are accustomed to receiving initiation letters that include preliminary information about the scope and scale of these types of projects as well as a preliminary definition of the APE, especially when there are potential effects to historic properties or when a cultural resource inventory is conducted. Our records do not indicate receipt of an initiation letter on the subject undertaking. Despite our concurrence with the determinations and finding of effect provided, in the future, we would greatly appreciate the opportunity to be involved in consultation early in an undertaking's planning (per 36 CFR 800.1[c]).

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes, or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our comment letter does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) in consultation with our office.

Thank you for the opportunity to comment. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Judith E. Bittner". The signature is fluid and cursive, with the first name "Judith" being the most prominent.

Judith E. Bittner
State Historic Preservation Officer

JEB:sad

U.S. Department of Transportation
Federal Highway Administration
ERRATA

KOTZEBUE TO CAPE BLOSSOM ROAD

Federal Project Number: NCPD-0002(204)

State Project Number: 76884

Changes were made to the Environmental Assessment (EA) in response to comments. Copies of the comments are attached. The following table shows the modification to the EA.

Environmental Assessment Comment Summary and Revisions

Comment	Location	Response/Revisions to the EA
Ensure proper road design and construction with insulation to decrease maintenance and extend the life of the road (Native Village of Kotzebue, Snider and Okleasik, November 5, 2013)	Section 1.1 Page 23	Construction: Road design and construction plans include maintaining the existing organic mat, using geotextile fabric, placing a 3' to 8' thick embankment, and installing appropriate cross culverts to equalize drainage. No changes were made to the EA.
Cape Blossom Road Project is imperative to the region's economic growth (NANA, Barr, November 7, 2013)	Section 2.1 Page 25	Purpose: The regional priority of the road is addressed in the project purpose including the independent resolutions passed by the local governments and ANCSA Corporations.
	Section 2.2 Pages 25 and 26	Need: Improved access and consistency with transportation and land use planning is described as a priority for the NWAB, surrounding communities, and ANCSA Corporations. No changes were made to the EA.
Native Village of Kotzebue has contributed to the planning effort for the project and is not mentioned in the community profile. (Native Village of Kotzebue, Whiting and Okleasik, October 28, 2013)	Section 3 Page 27	Alternatives: The Native Village of Kotzebue is added to the list of entities involved in the road planning. (Revised)
Native Village of Kotzebue could be referenced in the community profile discussion as a tribal government. (Native Village of Kotzebue, Whiting and Okleasik, October 28, 2013)	Section 4.1.1 Pages 33 and 34	Existing Conditions: The Native Village of Kotzebue is a federally-recognized tribe, and as the tribal government, services the people of Kotzebue. (Inserted)

Environmental Assessment Comment Summary and Revisions

Comment	Location	Response/Revisions to the EA
Location of the road in close proximity to a Native allotment near the beach (Stein, October 29, 2013)	Section 4.1.2 Page 34	Direct and Indirect Impacts: The road would avoid Native allotments. (Inserted)
	Section 4.1.3 Pages 35 and 36	Avoidance, Minimization, and Mitigation: The road alignment will be optimized during final design to avoid native allotment boundaries. It will have a buffer from native allotment boundaries to ensure activities associated with the road will avoid trespassing onto the allotments. (Inserted)
Include a pipeline in the road corridor (Towksjhea, October 29, 2013)	Section 4.1.2 Page 35	Cumulative Impacts: No utilities are planned along the road; however, the 300-foot right-of-way could accommodate future utilities within the road corridor. (Inserted)
Concerns about the road creating additional impacts from increased all-terrain vehicles (ATV) use in summer and prohibiting snow machine access across the road in winter (Native Village of Kotzebue, Whiting and Okleasik, October 28, 2013)	Section 4.1.2 Page 35	Cumulative Impacts: Comments from the Native Village of Kotzebue have suggested the existing use of ATVs throughout the Baldwin Peninsula has created new trails and widened existing trails. ATV use near the road could increase. (Inserted)
	Section 4.1.3 Pages 35 and 36	Avoidance, Minimization, and Mitigation: DOT&PF would work with the community and tribes to reasonably establish pullouts with ramps at appropriate locations to maintain traditional use. In summer, steep road side slopes would discourage crossing the road at locations without ramps. In winter, as snow gathers around the road embankment, snow machines would be able to find suitable crossing locations or use pullouts and ramps. (Inserted)

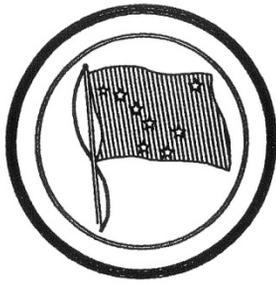
Environmental Assessment Comment Summary and Revisions

Comment	Location	Response/Revisions to the EA
<p>Spectacled and Steller’s Eiders may migrate through the project area, but neither species currently nests in the area. Road construction would occur in winter when eiders are not present, and no effects are expected.</p> <p>Road traffic may disturb migrating eiders, but eider density is extremely low in the area and effects are expected to be insignificant.</p> <p>Polar bears are rare, but could transit through the area and be disturbed by humans or noise. However, expected disturbances would be minor and temporary, and effects are expected to be insignificant.</p> <p>U.S. Fish and Wildlife Service, Endangered Species Act, Section 7 Consultation, November 7, 2013)</p>	<p>Section 4.8.2 Page 56</p>	<p>Direct, Indirect and Cumulative Impacts: No impacts to ESA-listed species would be expected.</p> <p>No changes were made to the EA.</p>
<p>Illegal garbage disposal along the road (Gregg, October 29, 2013) (Stein, October 29, 2013)</p>	<p>Section 4.9.2 Page 58</p> <p>Section 4.9.3 Page 58</p>	<p>Direct and Indirect Impacts: City of Kotzebue Ordinance, Chapter 8.04 prohibits littering upon any public or private place. The Northwest Arctic Borough Code, 9.25.020 requires refuse to be burned, deposited into refuse receptacles, or backhauled to a disposal site. However, illegal dumping could occur along the road. (Inserted)</p> <p>Avoidance, Minimization, and Mitigation: The landfill is located along the existing upgrade route. The City of Kotzebue’s Litter Control Board addresses problems and implements solutions to illegal dumping. The City’s Refuse Department has regularly scheduled household trash collection. Hazardous materials and appliances disposal is also available. The City also has a recycling program. Routine maintenance of roadways includes the removal of illegally dumped refuse. (Inserted)</p>

Environmental Assessment Comment Summary and Revisions

Comment	Location	Response/Revisions to the EA
Effects of dust from the road on safety, subsistence and berry picking (Gregg, October 29, 2013)	Section 4.12.3 Pages 66 and 67	Avoidance, Minimization, and Mitigation: Dust impacts to surrounding property and adjacent vegetation will be controlled by placing gravel surfacing with a dust palliative, maintaining adequate drainage, installing geotextile fabric under the road base, watering during dry conditions, and posting lower speed limits. Material stockpiles will be covered if left in place.
		No changes were made in the EA.
Change reference for the personal comment from Sam Barr with the Native Village of Kotzebue Corporation to Native Village of Kotzebue (Native Village of Kotzebue, Whiting and Okleasik, October 28, 2013)	Section 7 Page 91	Reference: Native Village of Kotzebue 2012. Native Village of Kotzebue. Personal communication with Sam Barr, Subsistence Advisor to Laura Gutierrez, ABR. July 27, 2012. (Revised)

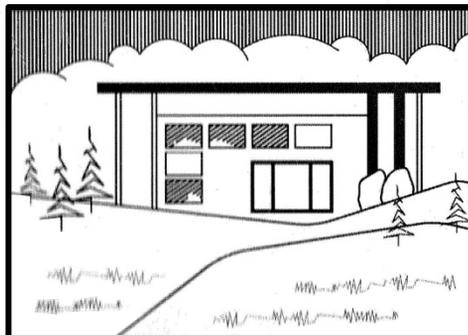
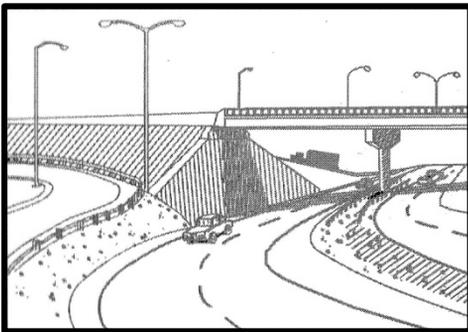
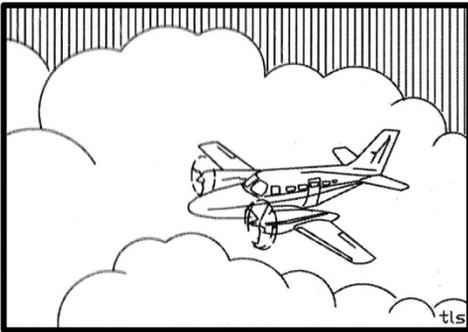
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REVISED ENVIRONMENTAL ASSESSMENT

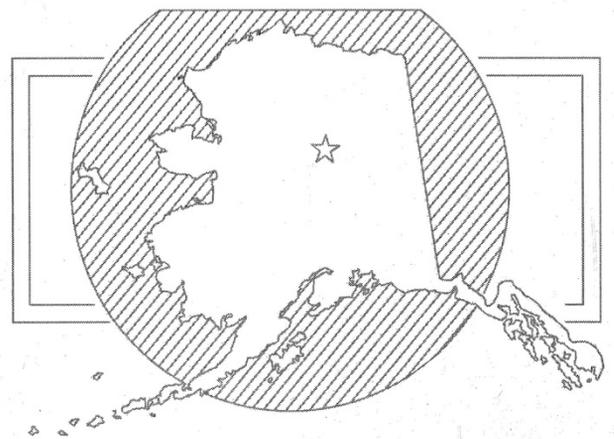
KOTZEBUE TO CAPE BLOSSOM ROAD

PROJECT No. NCPD-0002(204)/76884



STATE OF ALASKA

Department of Transportation
and Public Facilities



NORTHERN REGION

December 2013

KOTZEBUE TO CAPE BLOSSOM ROAD

Federal Project Number: NCPD-0002(204)

State Project Number: 76884

REVISED ENVIRONMENTAL ASSESSMENT

Submitted pursuant to 42 U.S.C. 4332(2)(c)

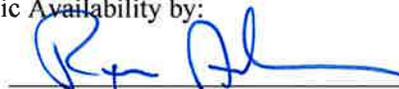
By the
U.S. Department of Transportation
Federal Highway Administration
And
State of Alaska
Department of Transportation and Public Facilities

This action complies with
Executive Order 12898, Environmental Justice;
Executive Order 11988, Floodplain Management;
Executive Order 11990, Protection of Wetlands;
Executive Order 11593, Protection and Enhancement of the Cultural Environment; and
Executive Order 13112, Invasive Species.

Recommended for Public Availability by:

12/16/2013

Date



Ryan F. Anderson, P.E.

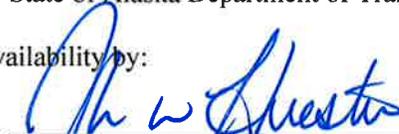
Regional Preconstruction Engineer

State of Alaska Department of Transportation and Public Facilities

Approved for Public Availability by:

12-10-2013

Date



John W. Huestis, P.E.

Northern Region Area Engineer

Federal Highway Administration

The following individuals may be contacted for additional information concerning this document:

Brett Nelson, Environmental Manager, Alaska Department of Transportation and Public Facilities,
Northern Region, 2301 Peger Road, Fairbanks, Alaska 99709

John W. Huestis, P.E., Northern Region Area Engineer, Federal Highway Administration, Alaska
Division, P.O. Box 21648, Juneau, Alaska 99802-1648

The proposed action includes: upgrading Air Force Road from Hillside Road to the Kotzebue Electric Association (KEA) Wind Farm, and constructing a two-lane gravel road from the wind farm to a beach access ramp above the high tide line near Cape Blossom. The proposed road would provide all-season access between Kotzebue and Cape Blossom.

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Acronyms and Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
ANCSA	Alaska Native Claims Settlement Act
APE	Area of Potential Effect
BLM	U.S. Bureau of Land Management
BMPs	Best Management Practices
C	Celsius
CFR	Code of Federal Regulation
CO	Carbon Monoxide
cy	Cubic Yards
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Environmental Assessment
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESI	Environmental Sensitivity Index
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
IC	Institutional Controls
IRA	Indian Reorganization Act
IRT	Innovative Readiness Training
KEA	Kotzebue Electric Association
KIC	Kikiktagruk Inupiat Corporation

LRRS	Long-Range Radar Site
NANA	Northwest Arctic Native Association
NLUR	Northern Land Use Research
NOAA	National Oceanographic and Atmospheric Administration
NRHP	National Register of Historic Places
NWAB	Northwest Arctic Borough
NWI	National Wetland Inventory
OHA	Alaska Department of Natural Resources, Office of History & Archaeology
OHW	Ordinary High Water
PM	Particulate Matter
ROW	Right-of-way
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control and Countermeasures
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USFWS	U.S. Fish and Wildlife Service
VORTAC	VHF Omnidirectional Range/Tactical Aircraft Control

1 Proposed Action

The Alaska Department of Transportation and Public Facilities (DOT&PF) proposes to construct an all-season road from Kotzebue, Alaska, south across the Baldwin Peninsula to a beach access area near Cape Blossom. Kotzebue is the transportation hub and the largest of the 11 communities in the Northwest Arctic Borough (NWAB). Approximately 5,000 tons of freight is barged into Kotzebue each year, of which about 2,000 tons is transferred to NWAB villages (King 2012). This freight includes semi-perishable goods, basic construction supplies, and vehicles such as cars and all-terrain vehicles, but does not include fuel or materials and supplies for capital projects (King 2013).

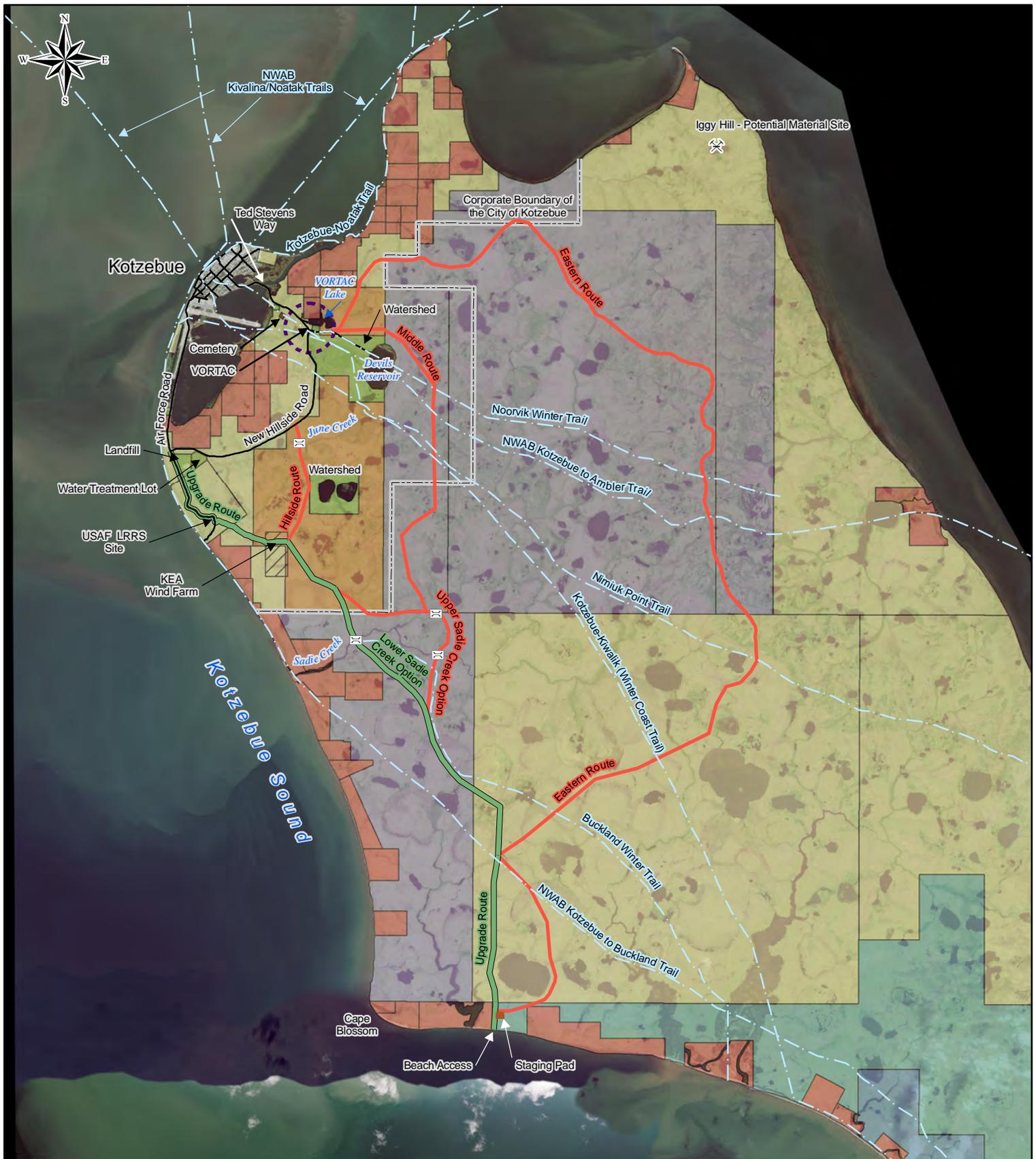
The proposed Cape Blossom Road would be designed for commercial freight transport and recreational uses with an estimated volume of 100 vehicles per day or less. It would be designed to adhere to the American Association of State Highway and Transportation Officials (AASHTO) *Guidelines for Geometric Design of Very Low-Volume Local Roads*. The AASHTO guidelines consider low-volume roads to be those with an average daily traffic volume of less than 400 vehicles.

The Proposed Action is to construct a two-lane gravel road approximately 11 miles long, with a road surface width of 24 feet and side slopes 3:1 or steeper. Turnouts with ramps down to the tundra would be constructed along the road near traditional trail crossings and potentially in other areas.

The Baldwin Peninsula is underlain by continuous permafrost (Brown et al. 1997). Thermal degradation of locally ice-rich permafrost leads to thaw, settlement, and loss of embankment stability. The road would be constructed on an embankment up to 8 feet thick. The embankment height would be engineered to minimize potential road surface snow drifting and to provide thermal protection for the permafrost. Cross culverts would be installed as necessary to maintain drainage.

The Upgrade Route has been identified as the preferred alternative. The Upgrade Route would reconstruct approximately 2.7 miles of Air Force Road south of the Hillside Road intersection, and end adjacent to the Kotzebue Electric Association (KEA) Wind Farm. The route would continue south for another 8.9 miles, cross Sadie Creek, and terminate at a beach access ramp. The beach access ramp would end above high tide line. No construction would occur below the high tide line. A staging pad would be constructed on the east side of the proposed road about 0.25 miles north of the shoreline. Anticipated uses of the pad include container and barge freight staging and storage, vehicle and boat trailer parking, and material stockpiles.

The project location including the proposed road alternatives is shown in Figure 1.1. Figure 1.2 shows a typical road section. Turnout and trail access typical details are shown in Figure 1.3 and Figure 1.4, respectively. The staging pad typical is shown in Figure 1.5, and Figure 1.6 shows the beach access ramp.

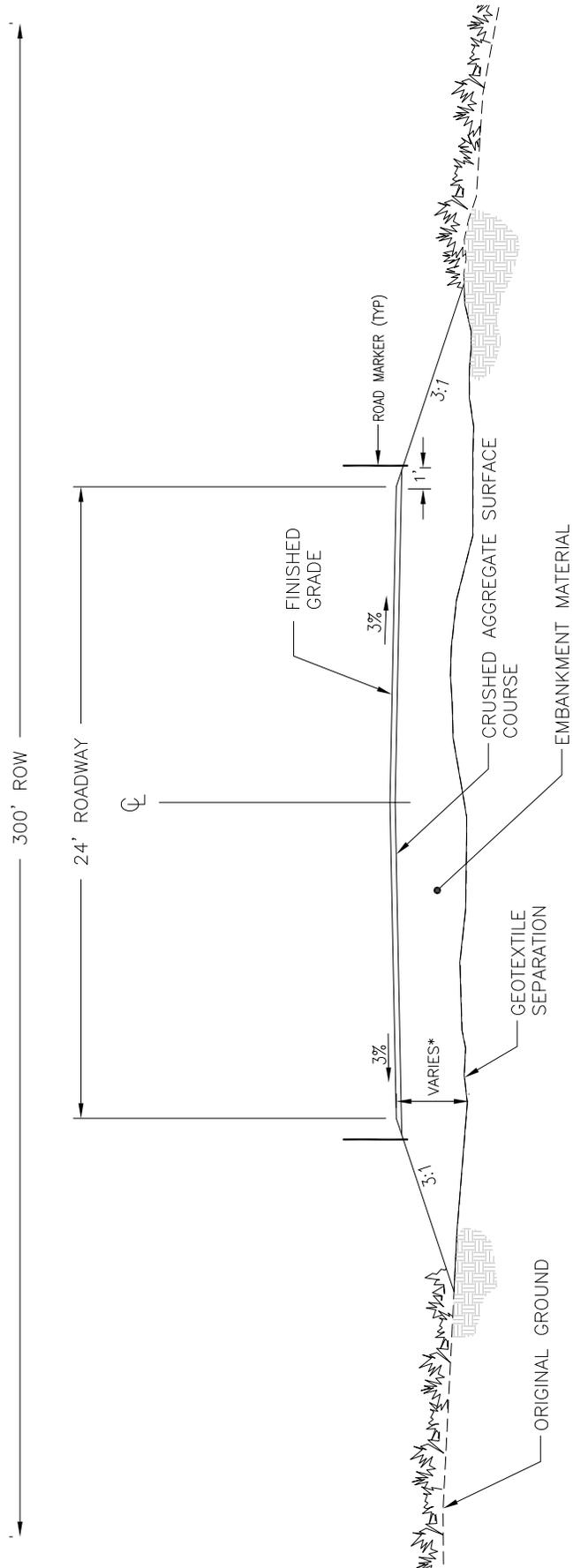


Kotzebue to Cape Blossom Road Project Location	
Date: 9/3/2013	Scale: 1 in = 2 miles
Revision: 3	Figure: 1.1

Legend	
<ul style="list-style-type: none"> Material Site Stream Crossing Winter Trail Kotzebue Corp. Boundary VORTAC Easement 	Land Status <ul style="list-style-type: none"> Cemetery KEA Windfarm ANCSA - City KIC Patent KIC Selection KIC & NANA NANA Patent Native Allotment State Selection Application
Route Alternatives <ul style="list-style-type: none"> Upgrade Route Dismissed Staging Pad 	
Sources: DOT&PF, BLM, DNR, FWS, McClintock Land Associates Inc.	



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TYPICAL SECTION
SECTION F-F'
NOT TO SCALE

* EMBANKMENT HEIGHT WILL VARY BETWEEN 3 TO 8 FEET. EMBANKMENT HEIGHT OF 6' MAY BE USED IN AREAS OF POTENTIAL SNOW DRIFTING. EMBANKMENT HEIGHT WILL BE 8' IN AREAS WHERE THERE IS CONCERN OF THAWING UNDERLYING PERMAFROST.

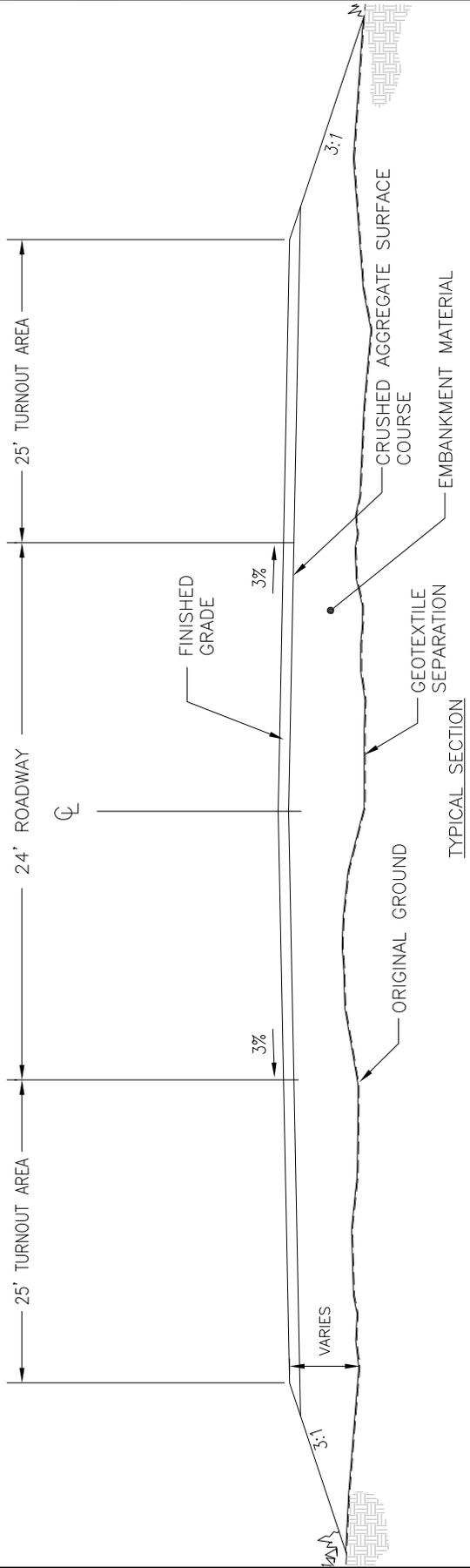
PRELIMINARY

STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
KOTZEBUE TO CAPE BLOSSOM ROAD 76884 ROAD TYPICAL SECTION Figure 1.2	
NORTHWEST ARCTIC BOROUGH	
DATE:	JANUARY 2013

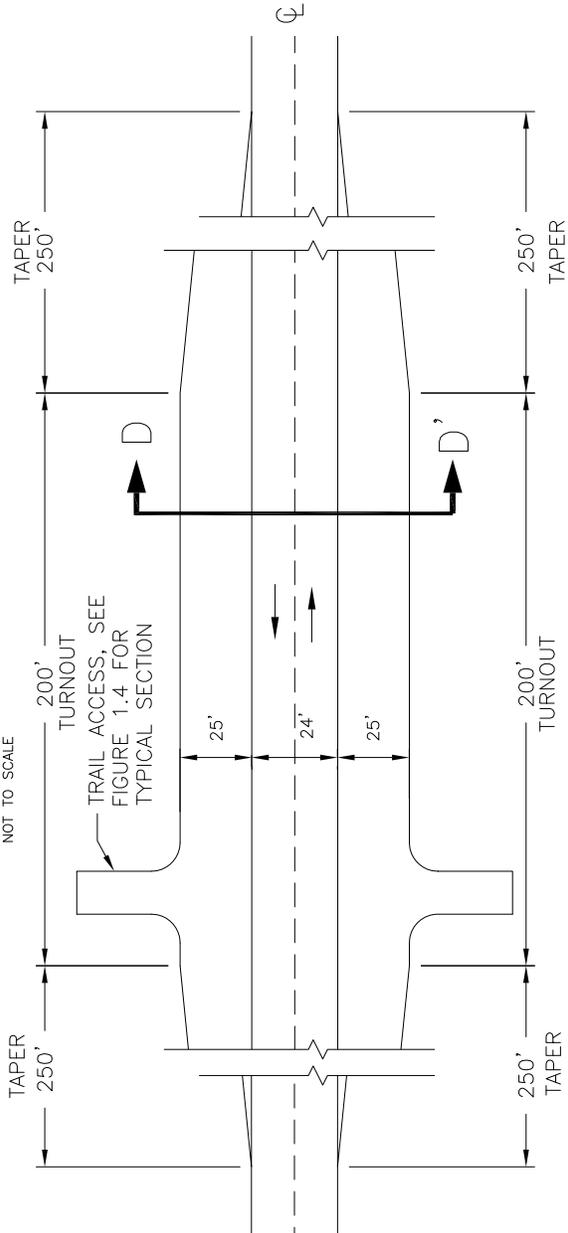
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PRELIMINARY



TYPICAL SECTION SECTION D-D' NOT TO SCALE



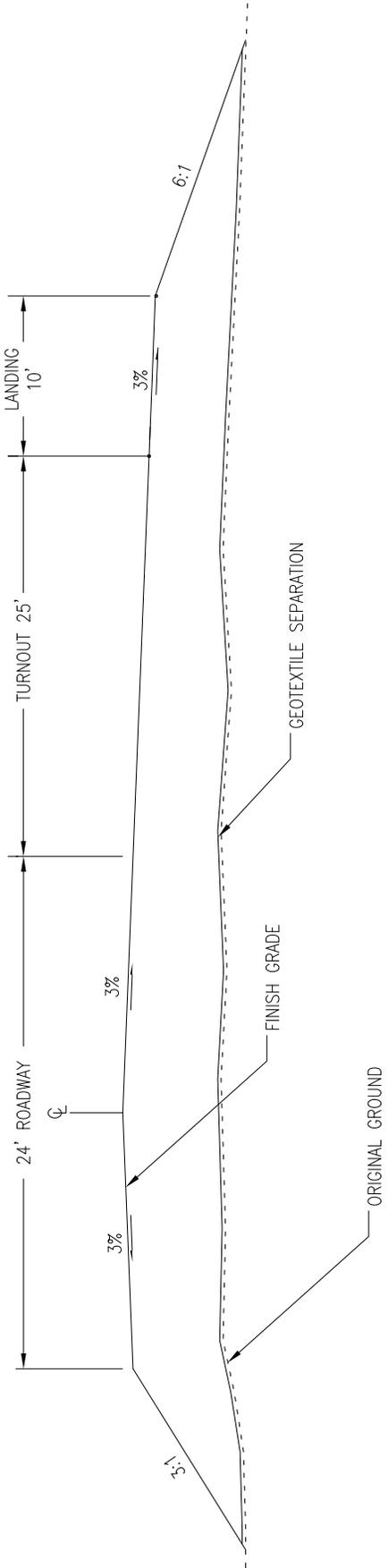
PLAN NOT TO SCALE

NOTE: TURNOUTS WITH TRAIL ACCESS WILL BE PROVIDED AT TRADITIONAL USE TRAILS. TURNOUTS MAY BE ON EITHER SIDE OF THE ROAD OR BOTH SIDES DEPENDING ON TRAIL LOCATION.

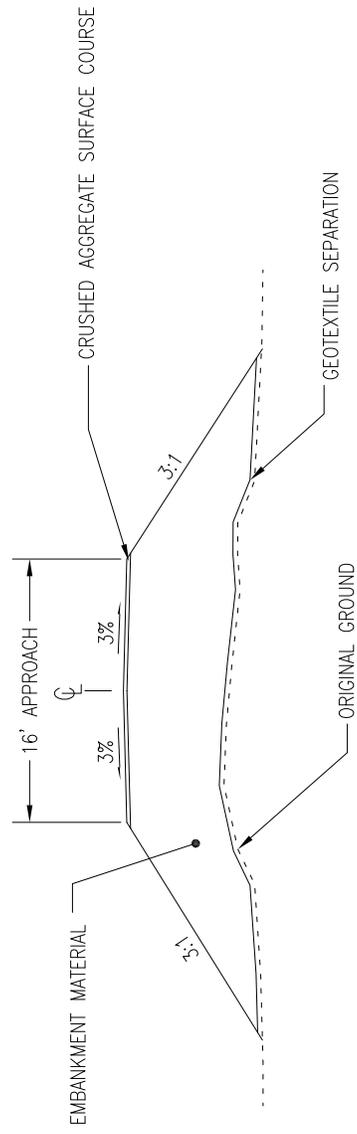
STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
KOTZEBUE TO CAPE BLOSSOM ROAD 76884 TURNOUT TYPICAL Figure 1.3	
NORTHWEST ARCTIC BOROUGH	
DATE:	JANUARY 2013

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TRAIL ACCESS - PROFILE
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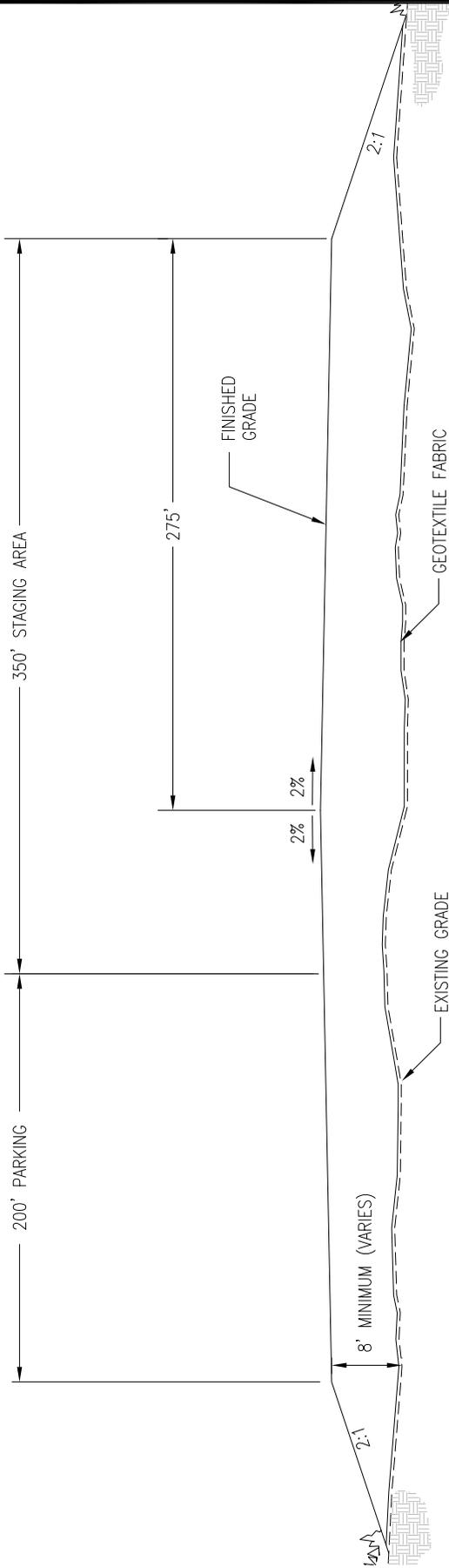
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PRELIMINARY

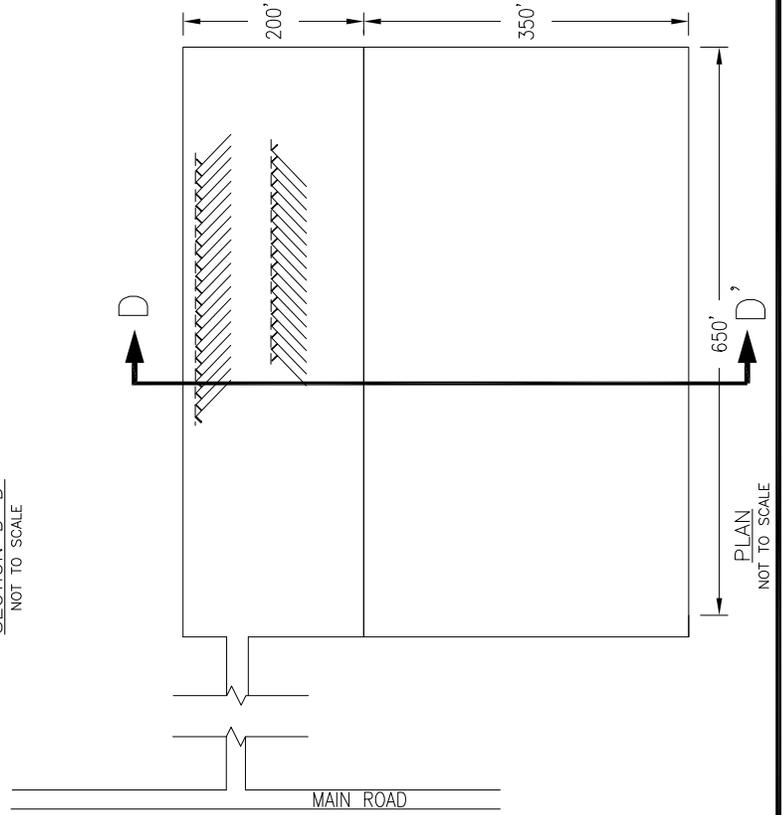
STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
KOTZEBUE TO CAPE BLOSSOM ROAD 76884 TRAIL ACCESS TYPICAL Figure 1.4	
NORTHWEST ARCTIC BOROUGH	
DATE:	JANUARY 2013

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TYPICAL SECTION
SECTION D-D'
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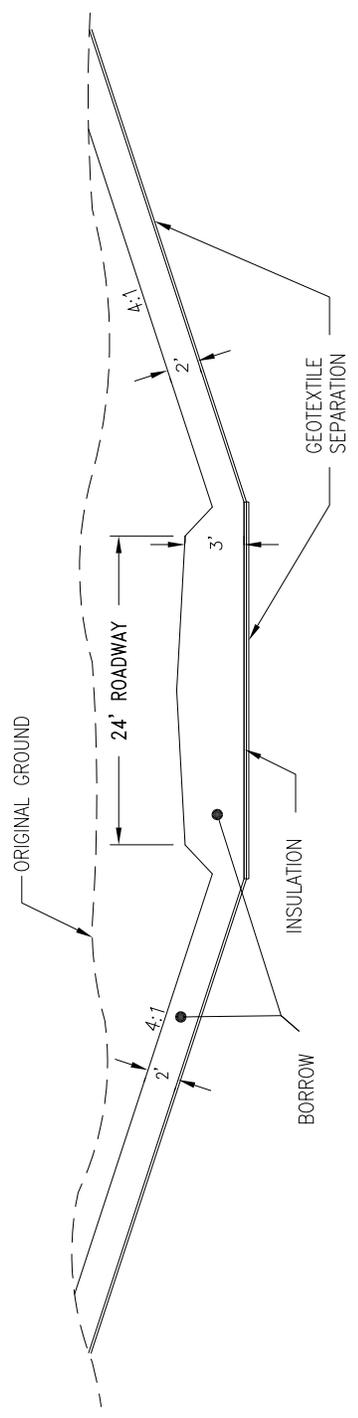
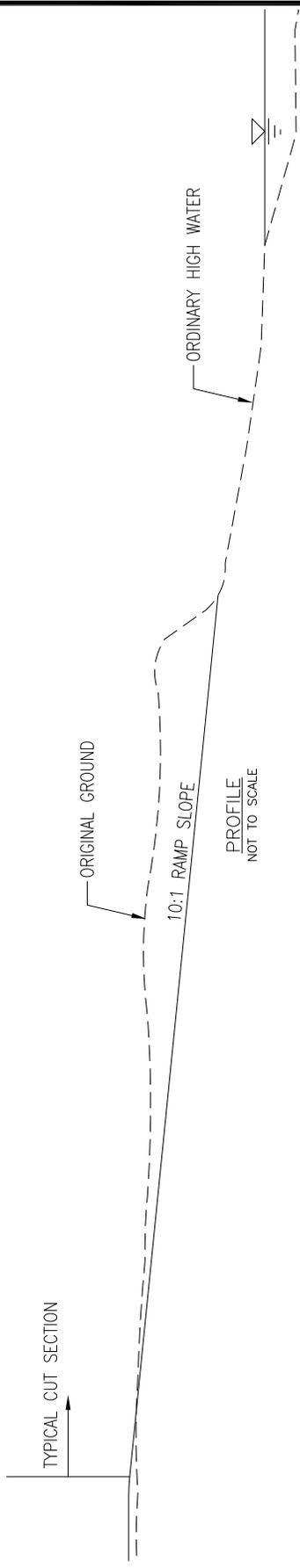
PRELIMINARY

STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
KOTZEBUE TO CAPE BLOSSOM ROAD 76884 STAGING PAD TYPICAL Figure 1.5	
NORTHWEST ARCTIC BOROUGH	
DATE:	JANUARY 2013

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PRELIMINARY



STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
KOTZEBUE TO CAPE BLOSSOM ROAD 76884 BEACH ACCESS RAMP Figure 1.6	
NORTHWEST ARCTIC BOROUGH	
DATE:	JANUARY 2013

TYPICAL CUT SECTION
NOT TO SCALE

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1.1 Construction

Construction of the road would begin in the winter 2014/2015 after the ground freezes and would be completed after spring breakup. Construction would be phased as funds become available. Currently available funds would likely construct the road to Sadie Creek.

The City of Kotzebue has applied to the Office of the Assistant Secretary of Defense for Reserve Affairs, Innovative Readiness Training (IRT) program to construct a portion of the road and the Sadie Creek crossing. Civil-military IRT projects enhance military training and readiness while filling a community need. The State would act as a facilitator for an agreement between the City of Kotzebue and the IRT program. The military would supply personnel and equipment, and State grants and bond money would be used to purchase the construction materials. IRT personnel would be housed locally in existing facilities. Portions of the project built utilizing federal funds or those not constructed through the IRT program would likely be constructed by a low bid contractor.

The road would be constructed on geotextile fabric placed on the tundra. A leveling course may be required under the geotextile depending on tundra tussock heights. The existing organic mat would not be removed. Clearing may occur but would be limited to brush removal within the roadway footprint. When the ground is frozen, embankment material would be placed on the fabric. The material would likely be supplied by either ice road from the recently permitted Iggy Hill material site or barged in and stockpiled from a regional material site. After the embankment material thaws, the road would be compacted and leveled with additional material, and a surface layer of crushed aggregate would be applied. The crushed aggregate would be barged in from a source located outside the Baldwin Peninsula. A dust palliative surface treatment would be installed as part of the construction project. The stream crossings would use appropriately sized drainage structures, with cross culverts installed along the roadway as needed to equalize drainage areas.

Except for the beach access ramp, excavation would be avoided to minimize thermal degradation of the subgrade. Insulation would be installed under the road bed at the beach access excavation site for thermal protection.

1.1.1 *Material Sources*

The estimated fill quantities for the Cape Blossom Road preferred alternative is 889,000 cubic yards (cy) for constructing the Upgrade Route. Additional fill quantities include: 112,000 cy for constructing a staging pad. A geotechnical investigation of the road alignment did not identify any material sites suitable for road construction within the road corridor.

Several commercial sources for embankment fill are located in the region. The closest material site with a sufficient quantity of material to construct the road is the Kikiktagruk Inupiat Corporation (KIC) Iggy Hill material site. In anticipation of supplying aggregate material for this and other projects, KIC has recently permitted the Iggy Hill gravel source (Norton 2012a) and permitted a sea ice road to assist with development and gravel delivery (LAS 28743; Norton 2013a). KIC plans to begin development of the material site in winter 2013/2014, and is applying for permits for a permanent gravel road (Norton 2013a). Aggregate would be mined and stockpiled at the mine site in summer and delivered in winter.

Other nearby material sites include the existing Drake Construction material site on the Noatak River, an existing material site at Nimiuk Point, and an existing material site near the community of Buckland (NANA 2009). The Noatak River site and Nimiuk Point site are potential sources of gravel, while the Buckland site may be a source for rock and gravel. Crushed aggregate for the road surface would likely be purchased from one of these existing sources. Material delivery from these sites would be by barge and would increase road construction costs.

2 Purpose and Need

2.1 Purpose

The purpose of the Cape Blossom Road project is to improve transportation efficiency and reduce the cost of shipping freight between cargo barges and the NWAB communities. The project would construct an all-season transportation facility and freight staging area, and provide access to a barge landing site. The road would be capable of supporting commercial freight carriers between Kotzebue and the southwest shoreline of the Baldwin Peninsula, and would comply with Federal legislation and local government resolutions. Kotzebue is a transportation and economic center for northwest Alaska. The road would provide a surface connection to the trails and beaches surrounding the Baldwin Peninsula which are used as transportation routes between Kotzebue and various NWAB communities, and also provide access to subsistence and recreation areas and private lands along the coast.

The proposed project is identified as a regional priority needed to address transportation deficiencies and provide economic opportunities. Advancement of the road project is included in the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation (SAFETEA-LU 2005). In 2010, the NWAB and City of Kotzebue Joint Planning Commission passed Resolution JPC-10-01 supporting development of Cape Blossom Road. Through independent resolutions, the NWAB Assembly (03-05), City of Kotzebue (02-19), Northwest Arctic Native Association (NANA) Regional Corporation Board of Directors (2003-04), and KIC (03-23) identified the Kotzebue to Cape Blossom Road as a priority transportation project.

2.2 Need

Improved Access: This road project has been identified as a priority for the NWAB and surrounding communities in the transportation planning process because there are currently no all season roads providing access to this area of the peninsula. The road would establish an all-season transportation link to Kotzebue that facilitates freight movement from barges landing at Cape Blossom. The gravel staging pad would accommodate temporary parking of vehicles, equipment, freight and supplies being transported to or from Kotzebue via barge.

Deep draft marine freight vessels serving Kotzebue currently set anchor in 30 feet of water approximately 15 miles from shore at the north end of the Baldwin Peninsula. From these offshore anchorages, freight is then lightered by smaller vessels over constantly shifting mudflats during incoming tides. In contrast to this current practice, waters 1 mile offshore of Cape Blossom are approximately 25 feet deep with no dynamic shoaling evident.

An all season road would reduce the distance and cost for freight lightering, and provide modal connectivity for deep draft barges, thereby improving access and efficiency for transportation of freight and other commodities to Kotzebue and nearby communities in the NWAB. About 5,000 tons of freight including semi-perishable goods, basic construction supplies, and vehicles is currently barged to Kotzebue each year, of which approximately 2,000 tons is transferred to nearby communities. This total is not inclusive of material and supplies for capital projects or fuel (King 2012 and King 2013). Materials for capital projects such as road construction, airport improvements, new buildings, and wind turbines for KEA are considered above and beyond this underlying base demand.

Portions of the shoreline proximate to Cape Blossom are often too soft to allow passage to vehicles traveling between Kotzebue and nearby communities. The road would bypass the soft beach areas and terminate where soils can safely accommodate beach vehicular traffic. Cape Blossom Road would connect to existing trails and the beach and improve access and transportation efficiency between Kotzebue and the surrounding communities and subsistence use areas.

Consistency with Transportation and Land Use Planning: Development of the Kotzebue to Cape Blossom Road project would comply with SAFETEA-LU legislation and address resolutions passed by the NWAB, the City of Kotzebue, KIC, and NANA Regional Corporation. The road project is also consistent with the Northwest Alaska Transportation Plan (DOT&PF 2004).

3 Alternatives

DOT&PF worked with the City of Kotzebue and NWAB, Joint Planning Commission, KIC, NANA and community members to develop, select and evaluate alternatives prior to, during and after project scoping. Community open houses, Joint Planning Commission presentations, and meetings with local government and Native organizations were held to collect information and comments on the alternatives. DOT&PF developed and considered four build alternatives for construction of a road to Cape Blossom, and two options to cross Sadie Creek. The 3.5-mile long upper Sadie Creek option requires two stream crossings, and the 2.5-mile long lower Sadie Creek option requires a single stream crossing. Two of the alternatives and the upper option to cross Sadie Creek were dismissed early in the process from further study because of higher costs and greater environmental impacts. These alternatives represented the longest routes, largest footprints, and greatest amount of wetland impacts.

The remaining build alternatives, via either the Hillside or Upgrade route, were carried forward for further study. Both would meet the purpose and need with fewer environmental impacts and at a reduced cost. The Hillside Route was dismissed as a build alternative after considerable study. The Hillside Route alternative is discussed in the attached technical reports (Appendices A, B, D and E). The Hillside Route was dismissed because it would create more impacts to undeveloped areas, requires an additional stream crossing at June Creek, and does not have community support.

The alternatives are shown on Figure 1.1. They are the Eastern Route, Middle Route via the upper Sadie Creek option, Hillside Route, and Upgrade Route. Table 3.1 provides the length of the alternative route segments and the total length by alternative.

Table 3.1. Lengths of Segments Considered

Segment	Length (miles)	Alternatives			
		Hillside Route	Upgrade Route	Middle Route Alternative	Eastern Route Alternative
Eastern Route	21.3				X
Middle Route via Upper Sadie Creek	13			X	
Hillside Route to Wind Farm Road	1.9	X			
Upgrade Route to Wind Farm Road	2.7		X		
Wind Farm Road to Cape Blossom	8.9	X	X		
Upper Sadie Creek Crossing Option	3.5				
Lower Sadie Creek Crossing Option	2.5				
Total Length		10.8	11.6	13	21.3

3.1 Alternative Routes and Route Segments Dismissed from Further Study

Eastern Route: The 21.3-mile long route alternative would begin at New Hillside Road, travel east through the 2000-foot VHF Omnidirectional Range/Tactical Aircraft Control (VORTAC) easement, and continue north and then east before turning southwest to the terminus at the Cape Blossom beach access. The route avoids the Sadie Creek drainage and is located at higher elevations. This is the longest potential route alternative identified in the Kotzebue to Cape Blossom Road Reconnaissance Study (DOT&PF 2011a). Historically, the Federal Aviation Administration (FAA) has not granted an adequate title for a road right-of-way (ROW) through its property. The Eastern Route has been dismissed from further study because of the risk of failure in obtaining an adequate title from the FAA, and the higher costs and potential for increased environmental impacts associated with construction of the longest route.

Middle Route: The 13-mile long route would begin at New Hillside Road and travel east through the VORTAC easement, continue south to the north bank of Sadie Creek, and then proceed south to the Cape Blossom beach access along the same route as the Proposed Action. This alternative would require two crossings of Sadie Creek. The Middle Route has been dismissed from further study because of the risk of failure in obtaining an adequate title from the FAA, and the higher costs and potential for increased environmental impacts from constructing the longer route.

Upper Sadie Creek Crossing Option: The 3.5-mile long route crosses Sadie Creek at two locations. This option would cross the Buckland Alaska Native Claims Settlement Act (ANCSA) 17 (b) winter trail. This route has been dismissed because it is longer than the 2.5-mile Lower Sadie Creek crossing option; the

lower crossing has a single stream crossing and does not cross the Buckland ANCSA trail. The Upper Sadie Creek Crossing Option has the potential for increased environmental impacts.

The Eastern and Middle alignments and Upper Sadie Creek crossing option would increase the footprint of the road and the amount of material required for construction compared to the other alternatives. The larger footprint in wetlands and increased wetland impacts would not meet the U.S. Army Corps of Engineers (USACE) definition of the least environmentally damaging practicable alternative. USACE would likely not issue permits for either of these alternatives without compelling reasons.

Hillside Route: This route was studied in detail before it was dismissed. The Hillside Route would involve construction of a new all-season road, beginning at New Hillside Road, to the terminus at a beach access ramp near Cape Blossom. The Hillside Route would begin two miles east of Air Force Road at an unnamed lake. The road would travel 1.9 miles south to the eastern edge of the KEA wind farm, where it would intersect with the wind farm access road. A stream crossing at June Creek would be required. The road would travel south and east approximately 8.9 miles to end at a beach access ramp. A staging pad would be constructed on the east side of the road about 0.25 miles north of the shoreline. Total length of this alternative is 10.8 miles. The Hillside Route was dismissed because it would create additional impacts from the introduction of a road in an undeveloped area when an existing route is available. The Hillside Route also requires an additional waterbody crossing compared to the Upgrade Route. The community did not support the Hillside Route and preferred upgrading the existing Air Force Road to the wind farm.

Table 3.2 provides an estimate of the wetland footprint and fill quantities for the dismissed routes.

Table 3.2. Dismissed Alternatives Estimated Wetland Footprint and Fill Quantities

Alternative	Length (miles)	72-Foot Road Footprint ¹ (acres)	300-Foot Right-of-Way Footprint (acres)	Total Fill ¹ Quantity (cubic yards)
Eastern Route	21.3	191	775	1,666,000
Middle Route	13.0	118	473	1,046,000
Upper Sadie Creek Crossing Option	3.5	32	127	266,000
Hillside Route	10.8	99	402	829,000
Staging Pad			9	112,000

¹ – Maximum footprint acreage and fill quantity estimates are based on an 8-foot high, 24-foot wide road surface with 3:1 side slopes; these calculations assume a constant 72-foot wide road base. Turnouts are included in the road footprint and fill quantity.

Note: Staging pad impacts are the same for all alternatives.

3.2 Alternatives Carried Forward

3.2.1 *No-Action Alternative*

Under the No-Action Alternative, a road would not be constructed to Cape Blossom. New access would not be constructed for freight transportation between Kotzebue and a site suitable for a barge landing for offloading and staging freight for overland transportation on the southwest side of the Baldwin Peninsula.

3.2.2 *Build Alternative*

The Upgrade Route was selected as the preferred alternative after public and agency review comments and impacts were considered for this Environmental Assessment (EA). The Upgrade Route would include construction of an 11.6 mile-long, two-lane, all-season road between Kotzebue and Cape Blossom with a stream crossing of Sadie Creek via the Lower Crossing Option.

The route would begin at the intersection of New Hillside Road and Air Force Road, and travel along Air Force Road south past the existing landfill through U.S. Air Force (USAF) property at the Kotzebue Long-Range Radar Site (LRRS) to the KEA wind farm. From here, the route proceeds south and east approximately 8.9 miles to the Cape Blossom beach access ramp. This alternative would upgrade an existing road corridor by widening, realigning, and upgrading 2.7 miles of Air Force Road and the KEA wind farm access road. The route does not cross June Creek. The community supports the Upgrade Route.

Turnouts and ramps to the tundra would be constructed along the road near trail crossings and potentially in other areas. These turnouts would also be used for staging equipment and materials during construction. The road surface width would be 24 feet, and the road base width would be approximately 72 feet dependent on site specific topography. Side slopes 3:1 or steeper would be constructed. The road bed would be up to 8 feet thick to provide permafrost protection and minimize subsurface thaw. The embankment height would also be engineered to minimize potential road surface snow drifting. Cross culverts would be installed as necessary to equalize drainage.

An approximately 550 feet by 650 feet staging pad that would be used as a parking and staging area would be constructed on the east side of the road about 0.25 miles north of the shoreline. A beach access ramp would be constructed at the terminus of the road above high tide line. No construction would occur below the high tide line. Up to 10 feet of soil would be excavated during construction of the beach access ramp, and the excavated material would be used during construction of the staging pad to avoid additional wetland impacts or disposed of in an approved site. Polystyrene foam boards would be installed at the bottom of the excavation to insulate the permafrost. Aggregate embankment material and then crushed aggregate base course would be placed on top of the insulation to complete the beach access ramp.

The road would be constructed on private land owned by KIC and NANA with construction easements or ROWs issued to DOT&PF. The road would be platted for public use. All Native Allotments would be avoided. Road material would be purchased from a local commercial source. The material would be installed during winter on geotextile fabric placed on the tundra for stabilization. A leveling course may be required under the geotextile depending on tundra tussock heights. Clearing may occur but would be limited to brush removal within the roadway footprint. After breakup, the road would be compacted and graded, and the final material course of crushed aggregate would be added.

3.3 Past, Present and Potential Future Actions

Cumulative impacts could occur from other past, present and future projects developed as a result of the proposed Cape Blossom Road project or occur within the same time frame or geographic area. No potential future projects have been identified. One project, KIC's Iggy Hill material site, is studied as a present action because it is the most likely gravel source for the road based on proximity, the large quantity of gravel required and lower delivery costs. Purchasing gravel from other regional material sites would require barging large quantities of gravel to Kotzebue and transferring to trucks which would increase road construction costs.

Iggy Hill material site is currently in the final planning stage. Material site development will begin in winter 2013/2014 (Norton 2013a). KIC has selected a site development contractor and holds the following development permits: NWAB Title 9 Zoning Permit, USACE Section 404 permit (POA-2011-1077), and State of Alaska Land Use Permit (LAS 28743). KIC is planning to construct a 9-mile long, all season gravel road from Iggy Hill to Kotzebue and has applied to the State of Alaska for an overland ice road permit to assist with development of the material site in winter 2013/2014 (Norton 2013a). Gravel from the Iggy Hill material site would be used for present and future construction and maintenance projects near Kotzebue. It is considered in the cumulative impact assessment because it is the closest material source to the Cape Blossom Road project area, and gravel delivery by truck would be the least expensive choice.

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4 Environmental Consequences

This section describes the existing environment in the vicinity of the Proposed Action. The environmental consequences for the Upgrade Route and the No-Action Alternative are compared and discussed. Direct, indirect, and cumulative effects are also addressed.

Environmental consequences are defined in 40 Code of Federal Regulation (CFR) Section 1508.8: “Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action, and occur later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR §1508.8).” The regulation uses effects and impacts synonymously.

Direct, indirect, and cumulative effects can be beneficial or detrimental. Ecological, aesthetic, historic, cultural, economic, social, and health effects are determined for the Proposed Action and all alternatives. Components, structures, and functions of natural resources are considered when determining effects.

Cumulative impacts result from the “...incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.” (40 CFR § 1508.7).

All avoidance, minimization, and mitigation measures are identified. Mitigation includes:

- “Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.”
(40 CFR §1508.20)

4.1 Right-of-Way Impacts

4.1.1 Existing Conditions

Native lands along the proposed road corridor are KIC and NANA. KIC is a Native Village Corporation, and NANA is a Native Regional Corporation. Both were formed under ANCSA (Public Law 92-203) (BLM 1971). Additionally, the City of Kotzebue, the Native Village of Kotzebue, USAF, KEA, USACE,

Alaska Department of Natural Resources (ADNR), and U.S. Bureau of Land Management (BLM) would all have an interest or involvement for the ROW currently identified.

The Native Village of Kotzebue Indian Reorganization Act (IRA), through a deed from KIC, owns New Hillside Road. New Hillside Road connects Ted Stevens Way and Air Force Road. Maps of the area often erroneously refer to New Hillside Road as Ted Stevens Way (HP-0002(104)/60778).

The Upgrade Route travels through USAF property at the Kotzebue LRRS. KEA holds the lease for the wind farm property from KIC.

Currently, land along the proposed Cape Blossom Road corridor is predominately accessed by all-terrain vehicles in the summer and snow machines in the winter. Existing access to private Native Allotments in the project area is across the tundra or from the beach. The 25-foot wide Buckland trail (EIN 12, D1) easement begins on Sadie Creek approximately 100 feet east of the proposed road crossing and is used for winter access to Buckland. The ANCSA 17(b) easement allows use by foot, dogsled, animals, snow machines, two- and three-wheeled vehicles, and small all-terrain vehicles weighing less than 3,000 pounds (BLM 2005). The existing winter trail easement is located along portions of the proposed road alignment. The proposed road alignment would cross the NWAB Kotzebue-to-Buckland trail.

The land ownership and winter trails are shown in Figure 1.1. No camps, cabins, or other structures are located along the proposed road corridor. Several ANCSA 14(c) campsites are located on the coast near the terminus of the road, but not within the proposed road corridor.

A complete Land Status Report is included in Appendix A.

4.1.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and ROW procurement would not occur.

Direct and Indirect Impacts: The southern-most portion of the proposed route is held by BLM. The State of Alaska has selected the lands. A ROW permit may be required from ADNR for a title interest in this area. NANA is currently working with BLM and ADNR to prioritize and negotiate the selection of this area. Any portion of the route crossing the LRRS site will require a ROW interest from the USAF in conjunction with the USACE Realty Office.

Highway easements will be acquired from NANA and KIC in a manner compliant with Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, related federal regulations, State law and DOT&PF policy guidelines. The ADNR would grant a ROW to

cross Sadie Creek. The proposed Cape Blossom Road would be located 100-feet west of the Buckland ANCSA 17 (b) winter trail head on Sadie Creek. The road would cross the NWAB Kotzebue-to-Buckland trail, and the borough would issue a Conditional Use Permit. Turnouts with trail access ramps will be placed by existing traditional trails for access.

KEA will work with KIC to grant a non-objection for the proposed route to cross the wind farm and its associated utilities. The KEA wind farm is the only utility in the project area.

Kotzebue IRA would also grant an easement and ROW to DOT&PF for connecting the proposed Cape Blossom Road to New Hillside Road.

NANA, KIC, the City of Kotzebue, KEA and NWAB all support the proposed road project for its direct and indirect beneficial effects on the local economy. The anticipated ROW width is 300 feet.

Native Allotees have seasonal subsistence camps on the beach near the terminus of the road. No camps, cabins, or other structures would be acquired or relocated. The road would indirectly benefit campsite users and adjacent Native Allotment owners by providing year-round road access. Also, road access to Cape Blossom would likely result in additional requests for ROWs across KIC and NANA lands to Native Allotments.

Minorities and disadvantaged groups would benefit from positive, disproportional effects provided by all-season, vehicle access to the lands, subsistence resources, and camps in the project area.

The Upgrade Route crosses USAF property. Construction, operation, and maintenance of the road through LRRS property would involve completing a likely protracted ROW procurement process with the USAF and the USACE. The route would provide beneficial improvements on the existing road between New Hillside Road and the KEA wind farm.

Cumulative Impacts: Additional ROW transfers from KIC and NANA and development on some Native Allotments could be expected. Delivery of gravel for new construction projects would be facilitated by construction of the road.

4.1.3 Avoidance, Minimization and Mitigation

The Buckland trail and road intersections would be designed for safe crossing by trail users, including snow machines, dog sleds, and all-terrain vehicles. Turnouts and ramps will be placed by existing trails to cause less of a disturbance to the road corridor. Road construction would occur in winter when the trails are in use. DOT&PF would notify NWAB residents in advance of and during construction. The trails

would remain open during construction, but access may be restricted periodically for safety. Appropriate signs would be placed on the road and on the trail during construction and operation.

4.2 Social Environment

4.2.1 *Existing Conditions*

There are approximately 3,200 residents in Kotzebue. Over 80 percent of the population is Alaska Native, primarily Inupiat Eskimo practicing a subsistence lifestyle. The subsistence lifestyle is important for sustaining cultural values, attitudes and beliefs; passing on traditional knowledge; and creating ties between kin groups and other residents (Simpson 1999). Inupiat Eskimos have inhabited the area for at least 600 years, and the historic Village of Kikiktagruk, now Kotzebue, was a hub of ancient arctic trading routes. The City of Kotzebue was incorporated as a Second Class City in 1958 (DCCED 2012). Because of its location at the confluence of the Kobuk, Noatak, and Selawik rivers, Kotzebue is the service and transportation center for the NWAB villages and serves as the transfer point for freight. Travel to and from Kotzebue is via aircraft, snow machine, boat, and all-terrain vehicle (DCCED 2012). About 5,000 tons of semi-perishable goods, basic construction supplies, and vehicles for the region arrive in Kotzebue via barge each year (King 2012 and King 2013). Approximately 3,000 tons stays in Kotzebue. These estimates are reflective of underlying base demand (King 2012), and do not include materials and supplies for capital projects or fuel (King 2013).

4.2.2 *Environmental Consequences*

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and no changes to the social environment would occur.

Direct and Indirect Impacts: The proposed Cape Blossom Road would have positive impacts on the social environment by providing, all-season passenger vehicle access to the lands, subsistence resources, and camps in the project area.

Cumulative Impacts: Development of the Iggy Hill material site would have a positive impact on the social environment by providing a nearby gravel source needed to construct and maintain roads, pads, and other features. Combined with the beneficial impacts from the proposed Cape Blossom Road, the community would benefit from both projects.

4.3 Economic Environment

4.3.1 *Existing Conditions*

Kotzebue has a cash economy that is dependent on government, transportation, fishing, construction, and service industry jobs. Most of the available work is seasonal, and many residents rely on the strong non-cash subsistence economy (City of Kotzebue 2012). The value of the subsistence economy is not counted in dollars, but in food harvested and the byproducts of the hunt that supply materials for clothing, arts, and crafts. Byproducts such as antlers, tusks, bones, and skins are used for carvings, jewelry, garments, toys, and other artworks. Cash revenues can be earned from selling these items, but the most important benefit of the subsistence economy is the nutritional value of the food it supplies to the family and village (Simpson 1999).

About 71 percent of residents are in the labor force, with 56 percent of those employed. Unemployment is just over 29 percent (US Census 2010). The majority of employment is through the school district, Maniilaq Association, City of Kotzebue, and NWAB. Maniilaq Association is a non-profit corporation representing 12 Federally-recognized tribes. Maniilaq coordinates Tribal and traditional assistance programs and environmental and subsistence protection services, and is one of the NWAB's largest employers (Maniilaq 2012). The Red Dog Mine, located north of Kotzebue nearer to the Village of Kivalina, is another large regional employer. Commercial fishing provides some seasonal employment. In 2011, 89 commercial fisheries permit holders were registered in Kotzebue.

The average median household income is almost \$67,000, and the per capita income was about \$23,000. The income estimates are given in 2010 dollars adjusted for inflation (US Census 2010). Approximately 15 percent of residents have incomes below the poverty level. Most residents of Kotzebue rely on subsistence to supplement their income (DCCED 2012).

4.3.2 *Environmental Consequences*

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom. Positive benefits from improved access to subsistence hunting and gathering areas would not occur. New jobs and additional revenues would not be created by road construction and maintenance.

Direct and Indirect Impacts: The proposed Cape Blossom Road would have positive impacts on the economic environment by providing jobs and increased revenue for the construction contractors and material suppliers. The road would benefit some subsistence users by providing all-season, passenger vehicle access, and would allow those unable to ride snow machines and all-terrain vehicles to hunt and gather on the lands adjacent to the corridor.

Cumulative Impacts: The development of the Iggy Hill material site and construction of the proposed Cape Blossom Road would have positive impacts on the local economy by providing jobs and revenue from the sale and delivery of gravel.

4.4 Local Land Use and Transportation Plans

4.4.1 Existing Conditions

The project area is located on the Baldwin Peninsula in the NWAB south of the City of Kotzebue. The northern portion of the road is within the municipal boundary. The southern part of the alignment is located in an area recommended for annexation by the City of Kotzebue. The proposed road project is included in and consistent with the City of Kotzebue *Comprehensive Plan* (City of Kotzebue 2013).

The undeveloped project area is within the NWAB Subsistence Conservation Zoning District and was determined to be of high importance to borough residents for subsistence resources and activities (NWAB 2009a). The districts are designated to conserve the natural ecosystem, promote access to subsistence resources, and includes lands used regularly for subsistence harvest. The road through the Subsistence Conservation District would be permitted as a conditional use under the NWAB Title 9 code. Title 9 provides the authority to control and regulate future land development within the NWAB in accordance with land use policies. After a public notice and hearing, the Planning Commission makes the decision to issue the Conditional Use Permit (Chase 2013). The project must apply to the NWAB Planning Commission for rezoning of the road corridor (Title 9, Article VIII, Section 9.28.220) because the proposed road is located outside the Resource Development and Transportation Corridor Districts. The project is consistent with the NWAB transportation objectives described in the *Northwest Arctic Borough Comprehensive Plan* (NWAB 1993).

Local government resolutions in favor of the road were passed by NWAB, the City of Kotzebue, NANA, and KIC. KIC and NANA have provided letters reaffirming their intention of granting easements for the road (NANA 2012) (KIC 2012).

The proposed road project is consistent with the *Northwest Alaska Transportation Plan* (DOT&PF 2004) and is included in SAFETEA-LU legislation funding.

The State of Alaska *Northwest Area Plan* (ADNR 2008) allows for the authorization of transportation facilities across State-owned waterbodies.

4.4.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and land use would not change.

Direct and Indirect Impacts: The proposed road would be compatible with landowner and management intent and would not impact local or regional land use or transportation plans.

Cumulative Impacts: There would be no cumulative impacts to land use or transportation plans from development of the Iggy Hill material site and proposed road to Cape Blossom.

4.5 Cultural Resources

4.5.1 Existing Conditions

Currently, 99 Alaska Heritage Resource Survey sites are located within 3 miles of the proposed road Alternative A routes. The majority of the sites are located in and around the modern community of Kotzebue. A 2006 Northern Land Use Research (NLUR) survey tested and supported a hypothesis that cultural resources sites on the upper Baldwin Peninsula would be located less than half a mile from the coast, with the possible exception of Sadie Creek, which has been identified as an access route for interior subsistence activities. The closest sites to the project are found along Air Force Road on the Upgrade Route.

NLUR built on the 2006 survey conclusions and classified most of the route south of the wind farm as a Type A, low probability area for cultural resources (DOT&PF 2012a). Sadie Creek and in the vicinity of the proposed beach access area were classified as Type B, high probability areas. Type A low probability areas are defined as lands located more than half a mile from the shoreline, except along the banks of the main channel of Sadie Creek. Type B high probability areas are defined as lands located within half a mile of the shoreline, including the banks of the main channel of Sadie Creek.

NLUR's 2012 cultural resources research design included 100 percent helicopter survey coverage of the low probability areas and a combination of helicopter, pedestrian, and subsurface testing surveys in high probability areas. Pedestrian and subsurface testing would have been conducted in low probability areas if areas had characteristics that would make it attractive for human occupation. During this survey, no sites were identified.

The pedestrian survey of the high probability areas of the Sadie Creek crossings revealed limited evidence of recent land use in the form of modern trash. No paleontological remains were found within the survey area. No new sites, features, or artifacts potentially eligible for listing on the NRHP were recorded during the 2012 survey for either the low or high probability areas. Cultural resources in the project area are described in the Kotzebue to Cape Blossom Road Environmental Document, Cultural Resources Survey.

4.5.2 *Environmental Consequences*

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and cultural resources would not be impacted.

Direct and Indirect Impacts: Based on the results of the 2012 field observations and literature reviews, the alignment south of the wind farm does not warrant additional archaeological field surveys.

The south end of the alignment is located within half a mile of Kotzebue Sound and was classified as a high probability area for this study based on its proximity to the coast. Observations made during the helicopter survey noted the flat terrain was waterlogged and covered with tussock tundra, and the area did not warrant subsurface testing. No sites, features, or artifacts potentially eligible for listing on the NRHP were recorded during the 2012 survey.

The SHPO has concurred that the Proposed Action will result in no historic properties affected (Appendix B).

Cumulative Impacts: There would be no cumulative impacts to cultural resources from development of the Iggy Hill material site and proposed road to Cape Blossom.

4.5.3 *Avoidance, Minimization, and Mitigation*

Archeological materials, features, and other potentially significant cultural remains are commonly buried, and therefore would not likely be identifiable from the surface or revealed in limited subsurface sampling. If during ground disturbing activities additional, significant cultural resources are encountered, all work in the area would cease until it is evaluated by an archaeologist and the landowner. The SHPO would be notified.

If human remains are found, all project activity will cease until the Alaska State Troopers, DOT&PF, SHPO, and local officials are contacted. If remains are found within Federal or Tribal lands, the Native American Graves Protection and Repatriation Act would be implemented. Immediate steps to secure and protect the remains and cultural items would be implemented. Local Native Alaskan organizations likely to be culturally affiliated with the discovered remains would be notified.

SHPO concurs with the DOT&PFs finding of no historic properties affected. The concurrence letter is included in Appendix B.

4.6 Wetlands

4.6.1 Existing Conditions

In summer 2012, wetland studies were conducted for the proposed road corridor. The study area encompassed a 1,000-foot corridor (500 feet on either side of the assumed centerline). The study provided a delineation and a wetland functions and values assessment for the proposed Cape Blossom Road corridor.

Wetlands and waters of the U.S. were mapped using the digital National Wetland Inventory (NWI) (USFWS 2012) and aerial imagery. NWI identified wetlands on the Baldwin Peninsula and project delineated wetlands in the road corridor are shown on Figure 4.1. The results were field verified during the wetland survey in August 2012. Field wetland determinations were completed for 68 sites. The wetland determinations were performed using the USACE 3-parameter approach. Wetlands are dominated by hydrophytic plants, with hydric soils and hydrologic regimes. Wetlands and waters of the U.S. are characterized using Cowardin et al. (1979), and Viereck et al. (1992) was used to assign vegetation class.

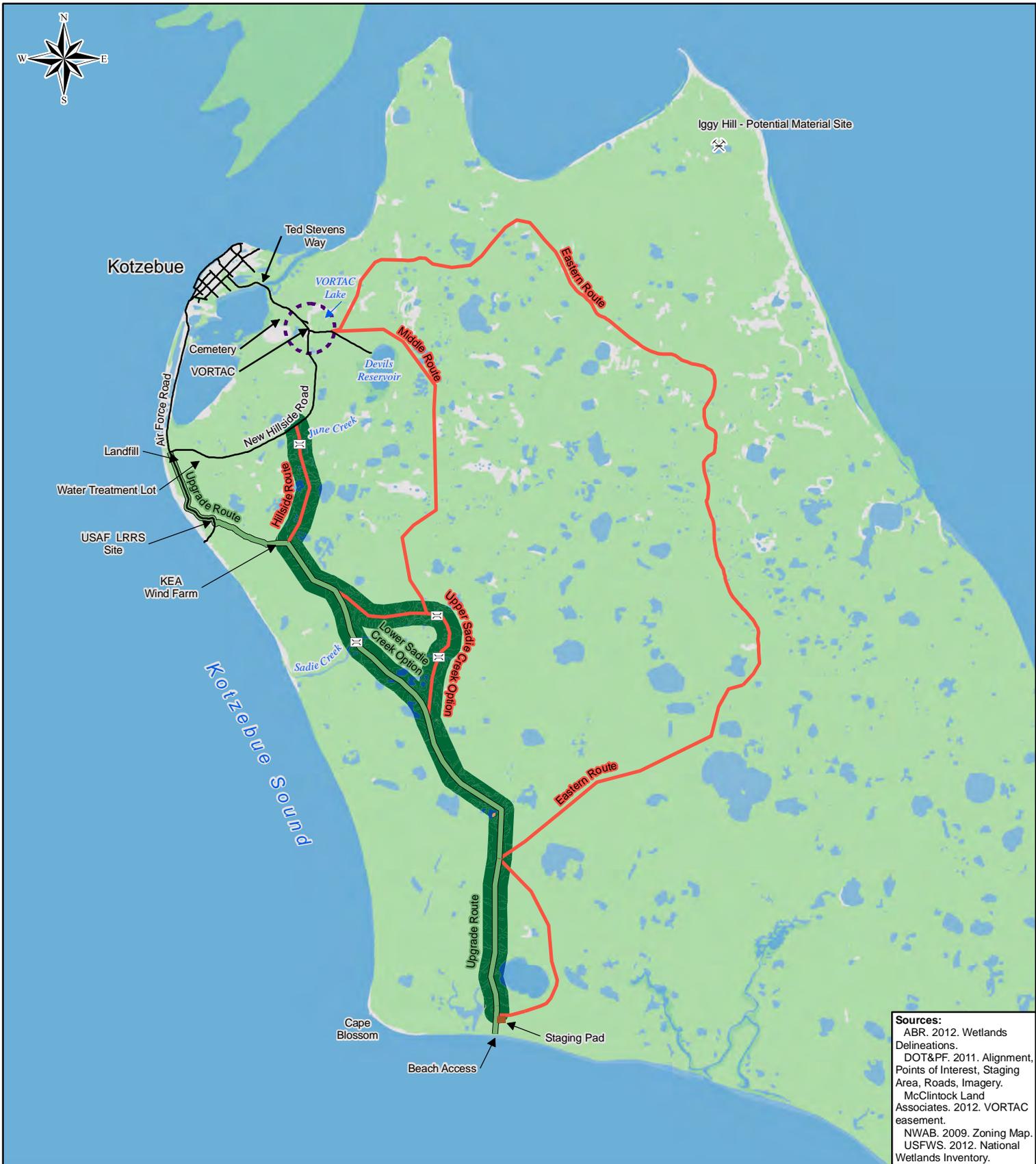
A functional assessment was performed using recommendations summarized in Regulatory Guidance Letter (RGL 09-01) (USACE 2009). Incidental observations of wildlife use and human activities were also noted.

The entire length of the road corridor and most of the Baldwin Peninsula are wetlands. Wetlands mapped in the study area include: permanently flooded; semi-permanently flooded; seasonally flooded-saturated emergent; seasonally flooded-saturated and saturated broadleaf and needleleaf; and seasonally flooded-saturated and saturated emergent and shrub complex.

The survey shows the northern portion of the study area is dominated by saturated wetlands, as are Sadie Creek and June Creek and their tributaries. The southern portion is dominated by emergent wetlands in drained lake basins with lowland physiography. Wetlands in the project area are delineated, and a functional assessment is included, in the Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C.

Table 4.1 shows the wetlands within the proposed Cape Blossom Road corridor. The project would require a USACE Section 404/10 Individual Permit for construction and operation of the road.

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Sources:
 ABR. 2012. Wetlands Delineations.
 DOT&PF. 2011. Alignment, Points of Interest, Staging Area, Roads, Imagery.
 McClintock Land Associates. 2012. VORTAC easement.
 NWAB. 2009. Zoning Map.
 USFWS. 2012. National Wetlands Inventory.



Kotzebue to Cape Blossom Road Wetlands and Waterbodies

0 1 2 4 Miles

The Baldwin Peninsula is designated by the Northwest Arctic Borough as a Subsistence Conservation Zoning District.

Date:	Revision:	Figure:
9/3/2013	3	4.1

Legend

- ✕ Material Site
- ⊠ Stream Crossing
- ⊞ VORTAC Easement
- Staging Pad

Route Alternatives

- Upgrade Route
- Dismissed

NWI Wetland Type

- Waterbody
- Wetland

Surveyed Wetland Type

- Waterbody
- Wetland
- Upland



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Table 4.1. Cape Blossom Road Wetland Footprint and Fill Quantities

Road Segment	Length (miles)	72-Foot Road Footprint (acres)	300-Foot Right-of-Way Footprint (acres)	Total Fill ¹ Quantity (cubic yards)
Upgrade Route	11.6	104	430	889,000
Staging Pad			9	112,000
¹ – Maximum footprint acreage and fill quantity estimates are based on an 8-foot high, 24-foot wide road surface with 3:1 side slopes; these calculations assume a constant 72-foot wide road base. Turnouts are included in the road footprint and fill quantity.				

4.6.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and wetlands would not be impacted by road construction.

Direct and Indirect Impacts: The proposed road would permanently impact wetlands and waters of the U.S. along the proposed ROW. The estimated permanent wetland loss by segment is shown in Table 4.1. According to the National Wetland Inventory, the northern section of the Baldwin Peninsula contains over 100,000 acres of wetlands and mapped waterbodies (USFWS 2012). Based on a 72-foot road bed, the project would permanently impact approximately 104 acres of wetlands for the Upgrade Route. The percentage of permanent wetland losses on the Baldwin Peninsula would be about 0.1 percent for construction of the Upgrade Route. Based on the percentage of wetland loss and the amount of similar wetlands on the Baldwin Peninsula, impacts would be minor.

Road access may encourage land owners to develop portions of their land. Because the Baldwin Peninsula is mostly wetlands, it would likely be necessary to fill wetlands to support new development. Indirect impacts to tundra wetlands could result from development of nearby land within the proximity of a new road.

Cumulative Impacts: Approximately 9 acres of wetlands would be impacted by excavation during the development of the Iggy Hill material site (USACE 2012). The material used to construct the proposed Cape Blossom Road may be obtained from the Iggy Hill material site or other local or regional sources.

There would be indirect cumulative impacts to wetlands from development of the Iggy Hill material site and Cape Blossom Road created by the development of land near the proposed road.

4.6.3 Avoidance, Minimization and Mitigation

Wetlands cannot be avoided along the road alignment.

DOT&PF has minimized the wetland footprint to the extent practicable during preliminary alternative route siting and design. Minimization measures would be incorporated into the preliminary design. Steeper side slopes that limit the width of the fill footprint to the minimum necessary for a stable road base would be constructed when practicable. Turnouts at trail crossings and other areas along the road and the staging pad approximately 0.25 miles from the road terminus would be used for staging construction equipment and supplies. Additional staging areas used strictly for construction are not anticipated.

The road would be constructed on geotextile fabric and no ROW clearing or excavation would take place. Up to 10 feet of soil would be excavated during construction of the beach access ramp, and the excavated material would be used during construction of the staging pad to avoid additional wetland impacts or disposed of in an approved site. Dredging along the road corridor would be limited to the installation of culverts at June Creek and Sadie Creek if the foundation investigation determines culverts are appropriate. Dredged material would be temporarily stockpiled near the excavation site and used as backfill or disposed of in an approved site. Construction limits would be clearly marked to minimize accidental wetland disturbance. Construction activities off the embankment would protect the tundra in accordance with project permits by using temporary matting, ice roads, and ice pads. Construction of the stream crossing would require the use of temporary matting and an ice pad. Stream banks and vegetation would not be disturbed outside the road footprint.

An Erosion and Sediment Control Plan, Stormwater Pollution Prevention Plan, and Hazardous Material Control Plan would be implemented to protect streams and wetlands, and to minimize the introduction of sediment and runoff. State water quality standards would be adhered to during construction. Best management practices (BMPs) would be implemented to minimize disturbance to wetlands and streams. BMPs include locating stockpiles away from streams and lakes; and equipment would not be parked overnight, maintained or fueled within 100 feet of a stream channel.

4.7 Fish & Wildlife

A wildlife habitat assessment was performed for the proposed road corridors. Fish habitat evaluations and population surveys were conducted at Sadie Creek to determine the presence and distribution of resident, amphidromous, and anadromous fish populations. Incidental wildlife sightings were recorded during field studies. Avian resources were studied via aerial survey and specifically sought to determine the presence within, or use of, the project area by yellow-billed loons and cliff-nesting raptors.

4.7.1 *Anadromous or Resident Fish Present*

4.7.1.1 *Existing Conditions*

Fish surveys were conducted in July and August 2012 at Sadie Creek, the largest stream in the project area. Minnow traps, seine nets, and fyke nets were deployed to collect fish. The results of the surveys show greater fish abundance in August than in July at the sample sites. Ninespine sticklebacks were the most abundant, with almost 1,200 fish collected at 9 of the 10 sample sites. The catch rate for the ninespine stickleback was over 21 fish per hour. Thirty-eight northern pike were captured, representing the second most common fish caught. Threespine sticklebacks were captured in low numbers during July and August at the farthest downstream survey sites. Three species of whitefish, including broad whitefish, humpback whitefish, and least cisco, were also caught in the north and south forks of Sadie Creek. Subsistence fishers harvest whitefish at the mouth of Sadie Creek in June (Barr 2012). Alaska blackfish were caught during August sampling at the farthest inland site on Sadie Creek in near slack water (DOT&PF 2012c).

Sadie Creek, June Creek, and other smaller drainages crossed by the proposed road are not listed as anadromous fish streams by the Alaska Department of Fish and Game (ADF&G) *Atlas to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes*. ADF&G does not identify any anadromous fish streams in the project area.

Chum salmon are known to occur in Kotzebue Sound (Menard and Kent 2011). The physical characteristics of Sadie Creek suggests salmon runs are not likely to occur because of its low gradient, slow flow, and fine organic substrates (Bjornn and Reiser 1991). No salmon or other anadromous fish were captured in Sadie Creek during the July or August 2012 surveys.

Based on the types of fish collected and the depth of water in the channels, Sadie Creek likely provides overwinter habitat for some fish in some areas greater than 5 feet deep. In general, water depths of less than 5 feet indicate the areas likely freeze to the bottom and ground naturally during the winter (grounded ice). The depths of June Creek and Sadie Creek at the crossing locations are reported by a local community member to be greater than 5 feet. A stream crossing survey measured the depth of Sadie Creek at the crossing location at 6 feet (Miller 2013).

Fish presence and abundance in Sadie Creek is discussed in the Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C.

4.7.1.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom, and drainage structures would not be installed in Sadie Creek and June Creek. No impacts would occur.

Direct and Indirect Impacts: Winter construction at stream crossing locations with un-grounded ice would create short-term impacts to fish if they are present. Once flow resumes in spring, construction would be completed. Drainage structures and culverts would be designed and installed to facilitate flow and fish passage. Fish passage would not be impacted. Water withdrawal could occur for use as a dust control agent during construction and road maintenance. Proper withdrawal methods with approved pumps and screens on intake structures would be used and would reduce the likelihood of fish impingement at the screen/water interface. Water withdrawal from fish bearing waterbodies could create minor impacts.

Road access would not likely create more fishing on the stream at the crossing locations because other, more productive fishing spots are available. Therefore, indirect impacts would not occur.

Cumulative Impacts: There would be no cumulative impacts to Sadie Creek fish from development of the Iggy Hill material site and proposed road to Cape Blossom.

4.7.1.3 Avoidance, Minimization and Mitigation

Construction in the creeks would take place in winter. In the spring, during the final compacting, addition of the final crushed aggregate course, and grading of the road, a construction window would be established with ADF&G. The Storm Water Pollution Prevention Plan (SWPPP) and BMPs will also be implemented when work is being conducted by or in streams.

4.7.2 Essential Fish Habitat

There is no designated essential fish habitat (EFH) in the project area (2005). The National Oceanographic and Atmospheric Administration (NOAA) designated Kotzebue Sound as EFH; however, there are no plans to construct any improvements below the high tide line near Cape Blossom.

4.7.3 Wildlife Resources

4.7.3.1 Existing Conditions

Numerous species of birds and mammals occur in the project area. Aquatic and terrestrial habitats in the project area are important for breeding and foraging waterfowl and shorebirds. According to the U.S. Fish and Wildlife Service (USFWS), about 160 species of birds are found in the surrounding area during late spring and summer (USFWS 2011).

Shrub and tundra habitats provide forage for herbivores such as caribou and moose and cover for small animals like foxes and hares. Caribou, moose, shorebirds, and water birds temporarily occupy and use 73 percent of the study area in a variety of wildlife habitats (DOT&PF 2012b). Moose can be found year-round on the Baldwin Peninsula in low densities (Georgette and Loon 1993).

Waterbodies in the project area provide foraging habitat for waterfowl, loons, moose, and river otters. Wildlife habitat suitability was assessed for the project corridor. The results for birds, mammals, and fish are provided in the Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C.

The Baldwin Peninsula is designated as a caribou migratory area by ADF&G. Information from the Western Arctic Caribou Herd radio collar satellite research program conducted by ADF&G shows caribou would be locally available on the peninsula. One collared caribou tracked through the area from 1988 through 2008. Caribou migrate through the area from August to November (ADF&G 2003).

USFWS has designated Kotzebue Sound as polar bear feeding critical habitat (USFWS 2010). The NOAA Environmental Sensitivity Index (ESI) identifies Kotzebue Sound as habitat for beluga whales, ringed seals, spotted seals, bearded seals, and Pacific walrus (NOAA 2002). Figure 4.2 shows mammal habitats. The waterfowl ESI shows tundra swan habitat along the eastern coast of the Baldwin Peninsula. The southern half of the project area, generally south of Sadie Creek, provides habitat for yellow-billed loon, greater scaup, northern pintail, Pacific loon, and red-breasted merganser. Red-throated loon habitat is located on the Baldwin Peninsula and in Kotzebue Sound (NOAA 2002). Figure 4.3 shows waterfowl habitat.

Incidental sightings of Pacific and red-throated loons were made during the June 2012 aerial bird survey. Pacific loons are the most common loon breeding in northwest Alaska where they nest on shores, islands, and emergent vegetation of shallow and deep lakes. During the June study, 48 Pacific loons were recorded, and 2 red-throated loons were observed on a lake near the south end of the survey area. Red-throated loons nest on smaller, shallow ponds.

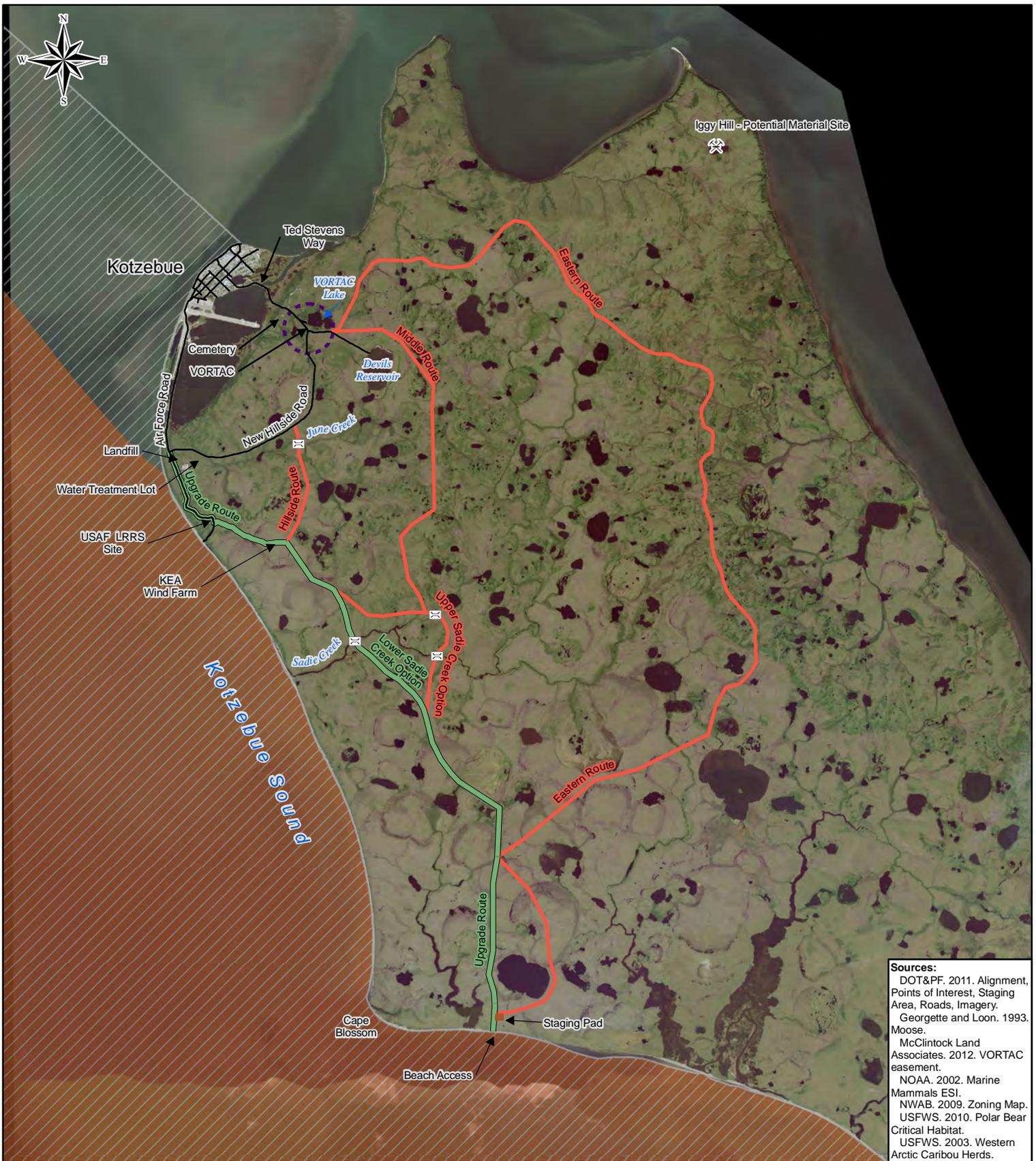
No raptors or raptor nests were found on the bluffs along the southwest coast at Cape Blossom. Active erosion of the bluff in some areas would make it unsuitable for nesting. Some areas provide moderate value nesting habitat for peregrine falcons, rough-legged hawks, and low value habitat for gyrfalcons and golden eagles. Whitewash identified at one location is likely a roosting perch.

4.7.3.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom and no impacts would occur.

Direct and Indirect Impacts: Winter road construction would avoid all impacts to migratory birds, raptors, and caribou migration. Road construction would continue in spring on the same footprint covered by gravel in winter; there would be no additional ground disturbance and no impacts to migratory bird or raptor nesting areas. Moose can be found year-round on the peninsula and minor impacts to foraging areas would occur. Indirect impacts to wildlife would be caused by improved access to subsistence hunting areas, and there would be a potential for vehicle/animal collisions. Some wildlife may avoid the road area during construction and operation. The project would not impact any habitat below the high tide line of Kotzebue Sound.

Cumulative Impacts: There would be no cumulative impacts to wildlife from development of the Iggy Hill material site and proposed road to Cape Blossom.



Iggy Hill - Potential Material Site

Kotzebue

Ted Stevens Way

VORTAC Lake

Devils Reservoir

Middle Route

Eastern Route

New Hill Side Road

June Creek

Upgrade Route

Sadie Creek

Upper Sadie Creek Option

Lower Sadie Creek Option

Eastern Route

Kotzebue Sound

Cape Blossom

Staging Pad

Beach Access

Sources:
 DOT&PF. 2011. Alignment, Points of Interest, Staging Area, Roads, Imagery.
 Georgette and Loon. 1993. Moose.
 McClintock Land Associates. 2012. VORTAC easement.
 NOAA. 2002. Marine Mammals ESI.
 NWAB. 2009. Zoning Map.
 USFWS. 2010. Polar Bear Critical Habitat.
 USFWS. 2003. Western Arctic Caribou Herds.



Kotzebue to Cape Blossom Road Selected Mammal Habitat



The Baldwin Peninsula is designated by the Northwest Arctic Borough as a Subsistence Conservation Zoning District.

Date: 9/3/2013	Revision: 3	Figure: 4.2
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- Material Site
- Stream Crossing
- VORTAC Easement
- Staging Pad

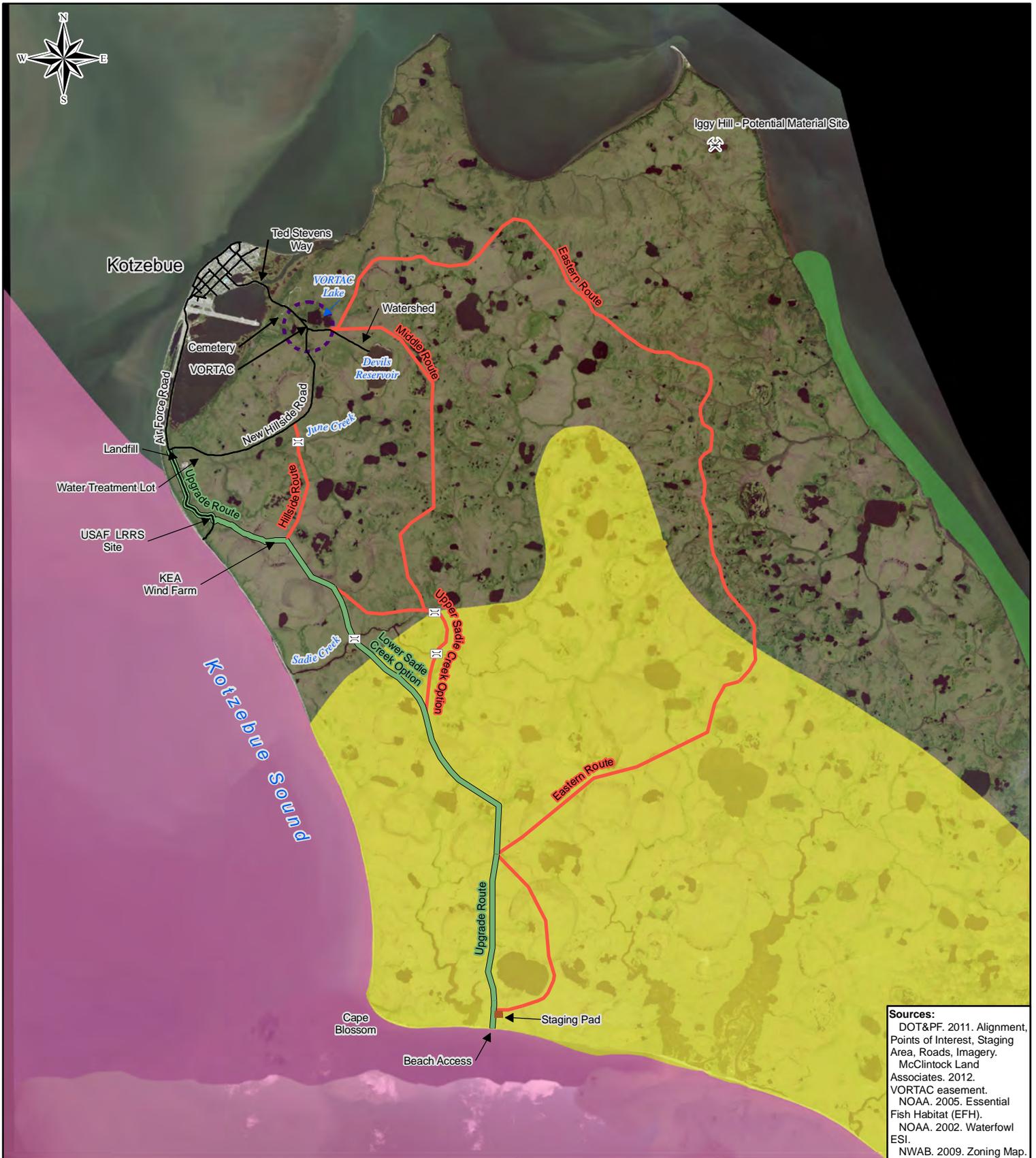
Legend

- Marine Mammals**
- Beluga Whale
- Bearded Seal and Walrus
- Route Alternatives**
- Upgrade Route
- Dismissed

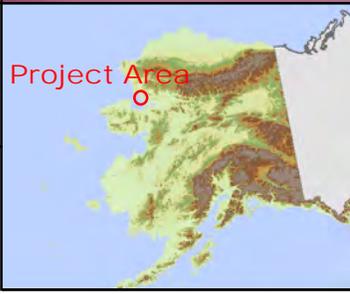
Note: All offshore areas are polar bear feeding critical habitat, ringed seal habitat, and spotted seal habitat. All onshore areas are Western Arctic caribou habitat and moose habitat.



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Sources:
 DOT&PF. 2011. Alignment, Points of Interest, Staging Area, Roads, Imagery.
 McClintock Land Associates. 2012. VORTAC easement.
 NOAA. 2005. Essential Fish Habitat (EFH).
 NOAA. 2002. Waterfowl ESI.
 NWAB. 2009. Zoning Map.



Kotzebue to Cape Blossom Road Selected Waterfowl and Essential Fish Habitat

0 1 2 4 Miles

The Baldwin Peninsula is designated by the Northwest Arctic Borough as a Subsistence Conservation Zoning District.

Date:	Revision:	Figure:
9/3/2013	3	4.3

Legend

✕ Material Site
 ⊠ Stream Crossing
 ⊞ VORTAC Easement
 ■ Staging Pad

Route Alternatives

— Upgrade Route
 — Dismissed

Waterfowl

— Tundra swan
 — Red-throated loon
 — Yellow-billed loon, Greater Scaup, Northern Pintail, Pacific Loon, Red-breasted Merganser, and Red-throated Loon

Note: All offshore areas are essential fish habitat (EFH).



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4.7.4 *Golden and Bald Eagles*

4.7.4.1 *Existing Conditions*

Bald eagles are uncommon on the Baldwin Peninsula and rarely seen in the summer. Golden eagles are more common (Sweeney 2012). Suitable raptor nesting habitat in the project area is limited to coastal bluffs and cliffs on the west and south coasts of the Baldwin Peninsula. All potential breeding habitats within 3 miles of the proposed road corridor were surveyed via helicopter. No raptors or nests were observed during the aerial survey in June 2012. The Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C describes the results of the raptor survey.

The Iggy Hill material site is located approximately 200 feet above Hotham Inlet. According to KIC, the hill is a gentle incline, and no raptor activity has been spotted in the area. Site specific raptor surveys were not required during USACE permitting (Norton 2013b).

4.7.4.2 *Environmental Consequences*

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom and no impacts would occur.

Direct and Indirect Impacts: No bald or golden eagles were observed in the project area during the aerial survey. Active erosion of the bluff in some areas would make it unsuitable for nesting. No impacts to bald and golden eagles are anticipated.

The hill adjacent to the Iggy Hill material site would not likely be suitable for raptor nesting and no impacts to raptor nesting habitat are anticipated. The gravel used to construct the proposed Cape Blossom Road may be obtained from the Iggy Hill material site, or other local or regional sources.

Cumulative Impacts: The Proposed Action and development of the Iggy Hill material site would not impact raptor nesting habitat. Therefore, there would be no cumulative impacts to bald or golden eagles from development of the Iggy Hill material site and proposed road to Cape Blossom.

4.8 Threatened and Endangered Species

4.8.1 *Existing Conditions*

There are no Endangered Species Act (ESA)-listed species in the project area. The Baldwin Peninsula is not designated as polar bear, Pacific walrus, spectacled eider, or Steller's eider critical habitat. No terrestrial critical habitat is within the project area. Yellow-billed loons are candidate species for listing under the ESA.

All potential breeding habitats for the yellow-billed loon within 3 miles of the proposed road corridor were surveyed. Yellow-billed loons often nest on fish bearing lakes in coastal tundra. Numerous waterbodies adjacent to the proposed road could provide suitable nesting and rearing habitat. Loons make their nests at the water's edge and raise their young on lakes in coastal and inland low-lying tundra (ADF&G 2012a). In the mid-1990s, USFWS conducted a breeding pair survey on the Baldwin Peninsula; one adult was observed on a lake outside the 2012 survey area (Earnst 2004). No yellow-billed loons or nests were observed during the June 2012 aerial surveys.

The results of the yellow-billed loon survey are described in the Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C.

4.8.2 Environmental Consequences

No-Action Alternative: No ESA-listed threatened or endangered species occur in the project area. Yellow-billed loons were not spotted during the 2012 survey, and no sightings have been documented in the project area. No impacts would occur to ESA species under the No-Action Alternative.

Direct, Indirect, and Cumulative Impacts: There are no ESA-listed species or designated critical habitat in the project area.

To protect migratory birds during nesting and brood rearing, USFWS recommends avoiding land clearing in the project area between May 20 and July 20 (USFWS 2009). Initial construction of the proposed road would occur in winter and would not impact yellow-billed loon or any other active migratory bird nests. During the road completion after breakup, compaction and installation of the final gravel surface would take place on the footprint of the road, pad, turnouts, and trail and beach access points. Additional areas outside the existing construction footprint would not be disturbed; therefore, no impacts to yellow-billed loon or other migratory bird nests would occur.

The project area is dotted by lakes and ponds. Waterbodies 5 feet deep or less would be expected to freeze to the bottom each winter and would not support fish. Larger lakes are in the project area which may support fish, but all are located greater than 100 feet from the road corridor. Because yellow-billed loons nest on the shores of fish bearing lakes, and all potential fish bearing lakes in the project area would be avoided; yellow-billed loon rearing or nesting areas would not be impacted by construction. The proposed Cape Blossom Road would not impact any ESA-listed or candidate species.

4.9 Subsistence

4.9.1 *Existing Conditions*

Subsistence activities occur year round throughout the Baldwin Peninsula. Late spring to early summer (late May to early June) is the busiest season of subsistence use each year. Residents of Kotzebue, Kivalina, Noatak, and Noorvik all frequent the peninsula for subsistence hunting. The remaining villages of the NWAB use the waters bordering the peninsula for subsistence purposes (Schroeder et al. 1987).

Kotzebue residents rely on a combination of subsistence resources including terrestrial mammals, marine mammals, fish, berries, plants, birds, and eggs. Most subsistence resources areas require access by boat (during open water season) or a snow machine (in winter). More easily available and harvested resources are often taken opportunistically. Sadie Creek is the site of subsistence hunting for birds, fish, and caribou (oral comment from public meeting in Buckland 5/11/12).

Moose and caribou can be found on the peninsula, but are usually hunted along the Noatak, Kobuk, and Selawik river drainages from late August to early November. Some Kotzebue residents hunt moose in the fall on the peninsula, but moose are taken throughout the year as needed (Georgette and Loon 1993).

Marine mammals are an important part of the Baldwin Peninsula subsistence lifestyle and diet. Once the Kotzebue Sound sea ice begins to form in October, hunters begin searching for bearded and spotted seals. Bearded seals are the primary marine mammal targeted. Most seal hunting by local subsistence users takes place in the marine waters surrounding Kotzebue, but some residents travel to other communities (Georgette and Loon 1993). Bearded seals are also hunted about 10 miles south of Cape Blossom (oral comment from public meeting in Buckland 5/11/12).

Fish make up the largest portion of the subsistence diet and are found in the marine waters surrounding the Baldwin Peninsula, at the mouth of Sadie Creek, Riley Wreck, and Iglugruat near Cape Blossom. Chum salmon, sheefish, and whitefish make up the majority of the fish diet (Georgette and Shiedt 2005). Fish camps south of the city and near the mouth of Sadie Creek are used to process the fish away from the dust of the city (DOT&PF 2012c). Whitefish are harvested at the mouth of Sadie Creek in June (Barr 2012).

Plants and berries make up a smaller portion of the subsistence diet, and are gathered throughout the peninsula from late July through September (DOT&PF 2012c). Many people travel by boat to harvest locations, but some harvest takes place in the Kotzebue area. Popular spots are between Cemetery Hill and Sadie Creek, and along the beach road (Georgette and Loon 1993) outside of the project area. The

project area is a prime subsistence use area for plant and berry gathering. Many favorable berry gathering areas are found throughout the Baldwin Peninsula (DOT&PF 2012c).

Birds and eggs make up a small portion of the subsistence diet. A large percentage of households harvest these items. They are a prized seasonal resource and are readily available close to Kotzebue. Migratory ducks and geese and resident ptarmigan species constitute most of the harvest. Ptarmigan are often hunted incidentally during other subsistence hunts. The migratory birds are taken in the spring and fall from the lakes and other areas of the peninsula (Georgette and Loon 1993). Subsistence hunters from Noatak have been known to use the northern part of the Baldwin peninsula to harvest upland birds. The first waterfowl of the year is usually taken in late April or early May.

4.9.2 Environmental Consequences

No-Action Alternative: A road would not be constructed from Kotzebue to Cape Blossom. No impacts would occur. Subsistence use would continue to occur as it does currently.

Direct and Indirect Impacts: The proposed road is likely to have positive effects for subsistence users through improved access to parts of the Baldwin Peninsula, especially during the breakup and freeze up season when all-terrain vehicles, snow machines, and boats cannot be used.

Some berry and plant habitat will be eliminated by the new road footprint. Increases in dust emissions may also have negative impacts on berries, and subsistence users may avoid gathering in areas that are too dusty. The road would provide passenger vehicle access to favored berry locations, and other new locations would be more accessible with the new road.

Cumulative Impacts: The majority of fauna traverse through the Iggy Hill project area to better feeding grounds (USACE 2012). Some fauna would avoid the material site during migration, but migration would not be impeded by the material site or the road. The road would enhance subsistence hunting and gathering by providing improved access. Cumulative impacts to subsistence resources would not occur from operation of the Iggy Hill material site and road to Cape Blossom.

4.9.3 Avoidance, Minimization, and Mitigation

A dust palliative would be installed on the completed road as part of the construction project and would reduce dust impacts to adjacent berry picking areas. By constructing the road embankment in winter, the project would comply with the Migratory Bird Treaty Act by adhering to the USFWS recommended vegetation clearing spring and summer timing windows. Alterations to vegetated sites would take place outside of the nesting periods.

4.10 Water Body Involvement

4.10.1 Existing Conditions

Waterbodies on the Baldwin Peninsula in the project area consist of thaw lakes and small streams. The thaw lakes are shallow, and most freeze to the bottom in winter (City of Kotzebue 2012). No fill would be placed in thaw lakes in the project area during road construction. The proposed road would cross Sadie Creek. This creek is not designated as navigable by the USACE (USACE 1995) or the U.S. Coast Guard (USCG 2000). USACE would regulate the placement of fill in the creek under Section 404 of the Clean Water Act, and an Individual Permit would be required for construction. The Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C and the Kotzebue to Cape Blossom Road 2012 Spring Breakup Study: Sadie Creek report in Appendix D describes the results of hydrologic studies conducted along the project corridor.

Sadie Creek and its tributaries are slow flowing incised streams with soft mud and organic bottom substrates. Surface drainage in the vicinity of the proposed road flows to the west, following June Creek and Sadie Creek into Kotzebue Sound (DOT&PF 2012d). The upper portion of the peninsula has permafrost extending to a depth of several hundred feet. The permafrost contains large volumes of ground ice and is considered shallow (DOT&PF 2011a).

Spring breakup monitoring was performed in May 2012 at four proposed stream crossing locations; including two sites on Sadie Creek, one site on a tributary (northern branch) of Sadie Creek, and one site on an unnamed swale near June Creek. Water depths and velocities were measured and peak breakup discharge was calculated, with results ranging from 13 to 339 cubic feet per second. At the monitoring locations, peak water depths ranged from approximately 1 to 5 feet, and peak velocities ranged from 0.4 to 5.6 feet per second; both were measured in the stream thalwegs (DOT&PF 2012d).

Field surveys for fish species and quantities in the project area were conducted in August 2012. Water velocities and depths were measured at three sites; one on the northern branch of Sadie Creek just downstream of the proposed crossing location, one on Sadie Creek upstream of the proposed crossing location, and one near the headwaters of Sadie Creek. Discharge was calculated from cross sectional velocities and depth. Total discharge for August 2012 at the sampling sites ranged from 2 to 10 cubic feet per second (0.1 to 0.3 cubic meters per second) (DOT&PF 2012c).

Sadie Creek is a narrow, low-lying lake for most of the summer months. The mouth of the creek is built up by tides and wave action from Kotzebue Sound. As rain runoff accumulates, the elevated gravel bar at the mouth holds the water in place until enough pressure builds up to release and cause flow. Local residents indicate certain storm events from the west cause seawater to infiltrate the channel (DOT&PF

2012d). The Sadie Creek drainage area is estimated to be 35 square miles (DOT&PF 2011a). Hydraulic model estimates would be used to design appropriate drainage structures for each location.

At the end of the proposed Cape Blossom Road, the shore is prone to erosion from a 50-year storm according to local elders. The shore area is reportedly inundated during severe storms, and storm surge can sometimes deposit debris on the tundra below 15 feet elevation (Norton 2012b). Storm surges are generally from the east-southeast (Norton 2013b).

Two lakes and the surrounding property adjacent to the proposed road corridor have been set aside for use as a future watershed by the City of Kotzebue. Figure 1.1 shows the watershed location.

No federally designated wild or scenic rivers are in the project area.

4.10.2 Environmental Consequences

No-Action Alternative: A road would not be constructed, and Sadie Creek would not be crossed. No impacts would occur to waterbodies.

Direct and Indirect Impacts: All lakes would be avoided along the proposed Cape Blossom Road corridor. No impacts would occur to seasonal thaw lakes. A stream crossing would impact Sadie Creek. The stream crossing has the potential to affect flow velocities by changing the characteristics of the stream bottom.

Cumulative Impacts: There would be no cumulative impacts to streams and lakes in the Cape Blossom Road project area from operation of the Iggy Hill material site.

4.10.3 Avoidance, Minimization and Mitigation

The Sadie Creek crossings would not likely be grounded ice in winter. The project would adhere to all compliance measures in the ADF&G permit to protect fish habitat. The stream crossings would be engineered to meet the estimated hydraulic flow. Vegetation disturbance would be kept to a minimum at stream approaches and crossings. Appropriate drainage structures would be designed to minimize impacts at stream crossings.

4.11 Hazardous Waste and Contaminated Sites

4.11.1 Existing Conditions

The ADEC contaminated sites database search showed 54 known sites in Kotzebue. Twenty-two of these sites are closest to and along the Upgrade Route and are associated with the Kotzebue LRRS.

Required remediation work has been completed at all of the 22 known contaminated sites, but institutional controls (IC) have been imposed at several sites where contamination persists. Table 4.2 shows the status of the LRRS contaminated sites, and Figure 4.4 shows the location of the sites (ADEC 2012a). Alaska Department of Environmental Conservation (ADEC) approval is required prior to soil disturbance at the IC sites.

Table 4.2 Status of Kotzebue LRRS Contaminated Sites

Site(s)	Contaminant(s)	Status
SS-01 Waste Accumulation Area 1	Drum storage–waste oil and solvents	Cleanup Complete
SS-02 Waste Accumulation Area 2, Landfill	Diesel range organics (DRO) General refuse Tar	Cleanup Complete – Institutional Controls
SD-03 Road Oiling	Pesticides Shop wastes	Cleanup Complete
ST-04 White Alice Tanks	DRO Petroleum, oil and lubricants (POL)	Cleanup Complete
ST-05 Beach Tanks	Diesel DRO Xylenes	Cleanup Complete – Institutional Controls
SS-06 Spill Area 1	Diesel	Cleanup Complete
SS-07 Former Water Supply Lake	Polychlorinated biphenyl (PCB) Pesticides	Cleanup Complete
SS-08 Barracks Pad	DRO	Cleanup Complete
SS-09 PCB Spill	PCB	Cleanup Complete
SS-10 Solvent Spill	PCB	Cleanup Complete
SS-11 Jet Fuel Spill	Jet Fuel	Cleanup Complete
SS-12 Spill Areas 2 and 3	Diesel DRO	Cleanup Complete – Institutional Controls
SS-13 Land farm	POL	Cleanup Complete
ST-14 East Tanks	DRO Gasoline Range Organics (GRO)	Cleanup Complete
SS-15 Garage Power Plant	DRO GRO	Cleanup Complete
SS-16 Navigational Aid Buildings	DRO	Cleanup Complete
SS-17 PCBs at Building 102	PCB, DRO	Cleanup Complete
SS-18 Truck Fill Stand	DRO	Cleanup Complete – Institutional Controls
SS-19 PCB Spills at South Fence	DRO PCB	Cleanup Complete – Institutional Controls
SS-20 Septic Holding Tank	Metal PCB Pesticides	Cleanup Complete – Institutional Controls
AOC 2 POL Line	POL	Cleanup Complete
AOC 8 White Alice Garage	Petroleum PCB	Cleanup Complete

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**Kotzebue to Cape Blossom Road
Kotzebue LRRS Contaminated Sites**

0 750 1,500 3,000 Feet

Date: 9/3/2013 Scale: 1 in = 1,500 feet

Revision: 3 Figure: 4.4

Legend

Contaminated Sites	Land Status
▲ Cleanup Complete	▨ KEA Windfarm
▲ Institutional Controls	■ ANCSA - City
— Upgrade Route	■ KIC Patent
	■ KIC & NANA
	■ Native Allotment

Sources: DOT&PF, BLM, DNR, McClintock Land Associates Inc.



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There are no other known contaminated or hazardous waste sites identified in the project area (ADEC 2012a). During preliminary engineering and environmental field studies, no areas of concern were identified. No demolition would be associated with the project, and no known asbestos or leaking fuel tanks were identified along the proposed route.

The City of Kotzebue operates a permitted (SW2A010-13) Class II landfill approximately 3 miles south of Kotzebue off Air Force Road along the Upgrade Route. Construction debris is accepted (ADEC 2012b).

The Environmental Protection Agency (EPA) lists 11 Resource Conservation and Recovery Act large, small, and conditionally exempt waste generators in Kotzebue. The Kotzebue LRRS on Air Force Road along the Upgrade Route is listed as a small-quantity generator (EPA 2012b). No other generators are located in the project area.

4.11.2 Environmental Consequences

No-Action Alternative: A road would not be constructed, and no impacts would occur from contamination or hazardous wastes.

Direct and Indirect Impacts:

For the remainder of the project corridor, no known hazardous waste sites, generators, or contaminated sites are identified in the project area. Therefore, contamination or hazardous waste would not likely be encountered during construction, and no impacts would be expected.

4.11.3 Avoidance, Minimization and Mitigation

The construction contractor would develop a Hazardous Materials Control Plan to address spill response and the storage and handling of hazardous materials, including fuel and lubricants. If leaks or spills occur, all contaminated material and soils would be contained and disposed of properly.

The construction contractor would be required to stop work and notify the DOT&PF Project Engineer if suspected contaminated soil or water is encountered. DOT&PF would notify ADEC in compliance with 18 Alaska Administrative Code 75.300. All contamination would be handled and disposed of in accordance with an ADEC-approved corrective action plan. All solid waste generated during construction would be disposed of in the Kotzebue Class II permitted landfill.

4.12 Air Quality Conformity

4.12.1 Existing Conditions

In accordance with the Clean Air Act (42 United States Code 85), EPA sets National Ambient Air Quality Standards (40 CFR 50) for six criteria pollutants: carbon monoxide (CO), lead, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter (PM). PM with a diameter of 2.5 microns or less (PM_{2.5}) and PM₁₀ are regulated criteria pollutants. PM_{2.5} is the result of wood smoke and PM₁₀ is the result of dust. Kotzebue is in attainment for all criteria pollutants, including CO and PM₁₀ (EPA 2012a).

The Federal Highway Administration does not require the project to undergo a transportation conformity analysis for CO or PM₁₀ because Kotzebue and the Baldwin Peninsula are not located in non-attainment or maintenance areas (40 CFR Parts 51 and 93).

In Kotzebue and on the Baldwin Peninsula, unpaved roads are used by light-duty passenger vehicles, all-terrain vehicles, and snow machines. Dust from unpaved roads can occur during dry periods between ice breakup and freeze-up. Dust accumulation on the tundra could result in melting permafrost (LHMP 2008).

The amount of dust potentially generated by the project during construction and operation depends on the 1) type and gradation of the road materials, 2) type and intensity of traffic loading, 3) climate, 4) type of dust suppressant, 5) drainage, 6) thermal stability, and 7) available maintenance resources (ADEC 2006).

4.12.2 Environmental Consequences

No-Action Alternative: A road would not be constructed to Cape Blossom, and the No-Action Alternative would have no effect on air quality.

Direct and Indirect Impacts: The road embankment would be constructed during the winter, and fugitive dust would not be expected when working with the frozen material. After breakup when construction resumes, temporary air quality impacts would occur in the vicinity of the road. During dry periods, minor localized impacts from vehicles driving on the road and wind blowing across the road would create dust.

Cumulative Impacts: All-season, passenger vehicle access to Native Corporation land adjacent to the proposed Cape Blossom Road could result in construction and use of gravel and dirt driveways and pads. The gravel surfaces would create additional dust during dry periods. Operation of the Iggy Hill material site and gravel delivery would create dust impacts.

4.12.3 Avoidance, Minimization and Mitigation

Constructing roads to ensure structural integrity, providing gravel surfaces, increasing moisture content, and posting lower speed limits are effective means of controlling dust (ADEC 2006).

Material stockpiles, when left in place over the winter, would be covered. During the spring, when the road is graded and the top course is added, water would be applied to control fugitive dust. Dust palliatives would be installed during construction. Sound engineering, good drainage, use of geotextile fabric under a solid road base with a gravel surface, and watering during dry periods would reduce dust emissions.

4.13 Floodplains Impacts

4.13.1 *Existing Conditions*

The Baldwin Peninsula is characterized by rolling, lake-dotted lowlands that include sloping hills with approximately 350 feet maximum elevation. The NWAB and the City of Kotzebue participate in the National Flood Insurance Program (FEMA 2012) and regulate the protection of property from floodwaters and permit projects through Title 9 of the borough code. There are no mapped floodplains within the project area.

Flooding in Kotzebue has historically resulted from coastal storms and wind-driven tidal surges. The primary flooding and erosion hazards in the project area are from melting permafrost, ice jams, snow melt, and rainfall. Flooding around streams is usually repetitive, occurring in the same place under similar conditions, and is therefore fairly predictable (NWAB 2009b). Flood flows are influenced by precipitation type, rainfall amounts, breakup meltwater quantities, icing conditions, drainage area, ground cover, soil types, terrain, and storage potential.

A spring breakup study in 2012 was conducted at Sadie Creek and at a swale near June Creek. In 2012, spring breakup began in mid-May on the Baldwin Peninsula. Peak water surface elevation occurred between May 22 and 24 at Sadie Creek and on May 28 on the swale near June Creek. The amount of accumulated ice was not sufficient to impact the breakup processes, and negligible backwater effects because of ice were observed at Sadie Creek. Maximum breakup channel top widths at the study locations ranged between 6 and 300 feet. The swale near the June Creek tributary underwent local melt processes until enough backwater formed to degrade the snow and induce flow (DOT&PF 2012d). The Kotzebue to Cape Blossom Road 2012 Spring Breakup Study: Sadie Creek Report is included in Appendix D.

At the end of the proposed Cape Blossom Road, the shore is prone to erosion from a 50-year storm according to local elders. This shore area is reportedly inundated during severe storms, and debris is sometimes deposited above the beach on the tundra (Norton 2012b). Storm surges are generally from the east-southeast and do not travel farther inland than an elevation of 15 feet (Norton 2013b).

The project does not involve a regulatory floodway and would not likely increase the backwater elevation of the 100-year floodplain. The project would conform to applicable Federal, State, and local floodplain protection standards and is consistent with Executive Order 11988. No occupancy of the floodplain would occur.

4.13.2 Environmental Consequences

No-Action Alternative: A road would not be constructed to Cape Blossom, and the No-Action Alternative would have no effect on the floodplains.

Direct and Indirect Impacts: Design of the road and stream crossings would eliminate flood impacts to the road and surrounding area. The beach access will end above mean high water and outside of the active beach zone so it will not impact the natural beach erosion and sediment transport.

The Sadie Creek crossing location has not been designated as a flood hazard zone. Culverts would be designed to accommodate 50-year flood events. Bridges would be designed to withstand 100-year flood flows. Stream crossings would be designed to protect the road and surrounding land. There would be no adverse effects to the floodplain.

Cumulative Impacts: There would be no additive impacts associated with the Iggy Hill material site.

4.13.3 Avoidance, Minimization and Mitigation

This area has not been designated as a flood hazard area. Drainage structures and culverts would be designed in accordance with the DOT&PF's Alaska Highway Drainage Manual.

4.14 Noise Impacts

4.14.1 Existing Conditions

There are no permanent noise receptors identified in the project area. Noise receptors are locations that may be affected by noise. Sensitive noise receptors include residences, schools, churches, parks, hotels, hospitals, libraries, and other public buildings.

Existing roads near the project area include New Hillside Road and Air Force Road. Vehicles use the roads to access the landfill, LRRS site, wind farm, and subsistence hunting, fishing and gathering areas. Snow machines and all-terrain vehicles travel over the tundra and on the beaches in the proposed project area. There are no camps within or adjacent to the proposed road ROW. There are Native Allotments and camps located on the beach south of the proposed Cape Blossom Road. The closest allotments and camps are located at the end of the proposed road along the shore. The nearest Native Allotment is

approximately 180 feet from the proposed road. The road corridor comes within approximately 300 feet of another allotment. All other allotments are over 1,600 feet from the closest point of the road.

The proposed Cape Blossom Road project does not meet the definition of a Type I or Type II project, and therefore does not require a noise analysis or consideration of noise abatement (DOT&PF 2011b).

4.14.2 Environmental Consequences

No-Action Alternative: A road would not be constructed to Cape Blossom. Noise in the project area would be associated with traffic on New Hillside Road and Air Force Road. Snow machines and all-terrain vehicles would continue to operate on the beaches, streams, tundra, and winter trails. Because there are no permanent sensitive noise receptors, there would be no impacts.

Direct and Indirect Impacts: Temporary noise from road construction would occur. Subsistence camp users would temporarily be impacted by noise from road construction, passenger vehicles, and road maintenance equipment. Construction noise would be short-term and minor. Generally, hunters use the camps on the coast near Cape Blossom in January for ringed seals and in May for ringed and bearded seals (Whiting et al. 2011). However, camp users could be present at any time during the year. Other than camp users, there are no noise receptors in the project area.

Cumulative Impacts: There would be no additive impacts associated with the development of the Iggy Hill material site. Delivery of material to construct driveways and pads would increase use of the road, but any minor noise increases would be temporary. The only receptors are camp users along the shore near Cape Blossom.

4.14.3 Avoidance, Minimization and Mitigation

Material delivery trucks traveling through the City of Kotzebue would be required to coordinate traffic near potential noise receptors based on the City's requirements.

4.15 Water Quality

4.15.1 Existing Conditions

The Baldwin Peninsula is characterized by thaw lakes from permafrost melting. These lakes are typically shallow and freeze to the bottom in winter (City of Kotzebue 2012). Numerous thaw lakes are in the project area and Sadie Creek. Most of the project area is undeveloped, and there are no known contaminant sources that would cause water quality degradation. There are no known impaired waterbodies in the project area. There is no municipal stormwater system, and there would be no mix of discharges from a permitted industrial facility.

Devil's Lake supplies the City of Kotzebue with water through pipelines connected to the city's water treatment plant. Previously, VORTAC Lake supplied water for the city, but this lake is no longer used because of an inoperable pump. Two lakes, designated as part of the City of Kotzebue's watershed, are located adjacent to the proposed road corridor. Additionally, the City of Kotzebue is in the process of securing funding to complete municipal groundwater wells.

Water quality measurements were collected in July and August 2012. Data collection included temperature, pH, and specific conductance. Mean water temperatures in Sadie Creek were 10.6 to 12.1°Celsius (C) in July and between 14.0 to 16.5°C in August. The pH was considered normal for tundra streams and measured between 6.0 and 7.1. Specific conductance ranged from 59.2 to 964.0 microsiemens per centimeter; the values were variable across the sites and between July and August sampling events. Dissolved oxygen ranged from 66.2 to 91.2 percent. The results are included in the Kotzebue to Cape Blossom Road 2012 Environmental Study in Appendix C.

4.15.2 Environmental Consequences

No-Action Alternative: A road would not be constructed to Cape Blossom, and there would be no impacts to water quality.

Direct and Indirect Impacts: Minor, short-term impacts to water quality would result from culvert placement, drainage structure construction, and stormwater runoff from the road. Accidental spills or leaks from vehicles or heavy equipment also have the potential to cause water quality impacts. Construction of un-grounded stream crossings in winter would cause impacts to water quality. During spring breakup, mixing of sediment and water would temporarily increase turbidity levels. The existing vegetative mat outside the roadway footprint will be preserved.

The road would be designed, constructed, and maintained to be protective of the watershed areas. The proposed road is a sufficient distance from the watershed source lakes, and no impacts are anticipated.

Cumulative Impacts: No streams, rivers, or lakes are within or flow through the proposed Iggy Hill material site. No materials would be placed in Kotzebue Sound. Development of the Iggy Hill material site would not impact water quality (USACE 2012). Accidental spills or leaks from vehicles using Cape Blossom Road could cause water quality impacts.

4.15.3 Avoidance, Minimization and Mitigation

The construction contractor would be required to develop a Spill Prevention, Control, and Countermeasures (SPCC) Plan, Hazardous Materials Control Plan, and a SWPPP. No equipment or vehicles would operate within flowing creeks. Fueling or equipment maintenance would not be performed

within 100 feet of waterbodies. Equipment would be routinely inspected and serviced to prevent leaks and accidental spills. The Hazardous Materials Control Plan would establish procedures for responding to accidental spills.

Potential water quality impacts would be minimized through the use of BMPs and implementation of the project SWPPP. The SWPPP would identify all receiving waters and specify the structural and procedural BMPs to be used during construction to prevent erosion and untreated runoff from reaching nearby waterbodies.

4.16 Permits and Authorizations

Construction of a new road requires numerous permits and authorizations. The permits are listed in Table 4.3.

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Table 4.3. Cape Blossom Road Permits and Authorizations

#	Permit or Plan; Agency	Statute / Regulation	Definition	Why Permit is Required	Data Needs	Commentary
Federal Permits and Authorizations						
1	National Environmental Policy Act (NEPA) Document Environmental Assessment (EA) Federal Highway Administration (FHWA)	Public Law (PL) 91-190, 42 U.S. Code (USC) §4321-4327, January 1, 1970, as amended; Council on Environmental Quality, 40 Code of Federal Regulations (CFR) §1502.9; 15 USC 719(h)(c)(3)	NEPA is a national mandate for the protection of the environment; requires full consideration of reasonable project alternatives to minimize potentially adverse impacts to the human and natural environment, and provides public disclosure of the environmental impacts associated with federal actions.	NEPA is triggered by the need for federal permits and approvals. A detailed statement of environmental effects of the project, in this case an EA.	<ul style="list-style-type: none"> Purpose and need Alternatives description Evaluation of direct, indirect, and cumulative impacts 	<ul style="list-style-type: none"> FHWA will be the lead federal agency Signed Finding of No Significant Impact (FONSI) for an EA
2	Section 404 Clean Water Act (CWA) Wetlands Dredge or Fill Permit; U.S. Army Corps of Engineers (USACE)	CWA Section 404, 33 USC §1344; 33 CFR 320-330	Authorizes USACE to issue permits (Section 404) for the discharge of dredge or fill material into federally designated wetlands and waters	A Section 404 permit is necessary for the placement of fill into wetlands and other waters of the U.S.	<ul style="list-style-type: none"> Description of project activity Location information Requires identification of quantity and footprint of fill material for the roads and stream crossings Requires completion of the EA process and a signed FONSI. Requires selection of the Least Environmentally Damaging Practicable Alternative (LEDPA) 	<ul style="list-style-type: none"> USACE adheres to NEPA guidelines for all permits USACE must select the LEDPA for the 404 CWA permit Permit will be issued after the FONSI and LEDPA has been signed for the EA
3	Right of Way; Bureau of Land Management (BLM)	43 CFR 2800-2807	Grants permission to use public lands for the construction and operation of transportation systems.	A road crossing public lands requires authorization.	<ul style="list-style-type: none"> Description of project activity Estimated schedule for constructing, operating, maintaining and terminating the project Map of proposed location and existing adjacent facilities 	<ul style="list-style-type: none"> BLM adheres to NEPA guidelines Coordinates all regulations and actions with State and local governments and other entities.
4	Endangered Species Act (ESA) Section 7 Consultation; U.S. Fish and Wildlife Service (USFWS)	ESA, § 7(a)(2); 16 USC § 1531-1544	Federal agencies that permit, license, fund, or otherwise authorize activities must ensure their actions will not jeopardize the continued existence of any listed species.	Section 7 Consultation will occur in conjunction with the EA.	<ul style="list-style-type: none"> Consultation with USFWS Preparation of Biological Evaluation, as required 	<ul style="list-style-type: none"> Included in the NEPA process FHWA as lead federal agency for the EA will initiate Section 7 consultation. Winter construction will avoid nesting birds
5	Migratory Bird Treaty Act (MBTA); USFWS	MBTA 16 USC § 703-712	Prohibits taking of migratory birds unless specifically exempt or authorized; taking can include loss of habitat.	Must be addressed as part of the EA.	<ul style="list-style-type: none"> Consultation with USFWS 	<ul style="list-style-type: none"> Included in the NEPA process Early coordination with USFWS regarding data collection requirements and timing windows for construction activities

#	Permit or Plan; Agency	Statute / Regulation	Definition	Why Permit is Required	Data Needs	Commentary
6	ANCSA 17(b) Trail Easement; BLM and NANA	Public Law 92-203 43 USC §1616(b)	ANCSA 17 (b) authorizes the reservation of public easements on lands conveyed to Native Regional and Village Corporations.	Road crossing of the Buckland Winter ANCSA 17(b) trail (EIN 12, D1) easement requires authorization	<ul style="list-style-type: none"> Location Purpose 	<ul style="list-style-type: none"> NANA Regional Corporation would coordinate with BLM and provide a letter of non-objection for the road crossing easement. BLM Department Manual, Public Lands, Part 601, Chapter 4 establishes procedures for the administration of an easement
State Permits and Authorizations						
7	Cultural, Historical, and Archeological Resources Consultation (Section 106 Review); Alaska Department of Natural Resources (ADNR), Office of History & Archaeology (OHA), and State Historic Preservation Office (SHPO)	National Historic Preservation Act (NHPA), § 106, 16 USC § 470 et seq.; Executive Order 11593, Protection and Enhancement of the Cultural Environment; Alaska Historic Preservation Act, Alaska Statute (AS) 41.35.010-240	Provides for the identification and protection of historic, archeological, and cultural properties; requires federal agencies to avoid and minimize impacts to properties on or eligible for the National Register of Historic Places.	Must be addressed as part of the EA.	<ul style="list-style-type: none"> Consultation with ADNR, OHA, and SHPO 	<ul style="list-style-type: none"> Included in the NEPA process Completion of a Section 4(f) Evaluation
8	Section 401 Certification – Certificate of Reasonable Assurance; Alaska Department Environmental Conservation (ADEC) Division of Water Quality	CWA, Section 401; 33 USC § 1344; 18 Alaska Administrative Code(AAC) 15	Authorizes the state to grant, deny, or condition certification of CWA Section 404 permits	Must accompany Section 404 permits.	<ul style="list-style-type: none"> USACE will notify ADEC automatically when Section 404 permit application is received 	<ul style="list-style-type: none"> Coordination with ADEC is necessary Necessary for USACE Section 404 permit authorization

#	Permit or Plan; Agency	Statute / Regulation	Definition	Why Permit is Required	Data Needs	Commentary
9	Right of Way (State-owned non-marine waters and submerged lands); ADNR, Division of Mining, Land, & Water State (DMLW)	AS 38.05.850 11 AAC 96	Access across state land for trails, roads, ditches, requires authorization from the State	Permanent Crossing of State Land.	<ul style="list-style-type: none"> • Project Description • General vicinity and site maps (1:250,000 or 1:63,360) • Duration and season • Specific location, including proposed access routes (GPS coordinates, township, range, section, meridian, and size of area) • Boundaries and dimensions of the proposed area and relation to geographic features • Site description (current condition, improvements, use, materials present, noting any trash, garbage, debris, or signs of possible contamination) • Locations and dimensions of structures and storage area • Location and type of crossing • Plans, specifications • Site map 	<ul style="list-style-type: none"> • NEPA not required • State will complete a Best Interest Finding
10	Temporary Land Use Permit (Non-Marine Waters and Submerged lands); ADNR, DMLW State Right of Way	AS 38.05.850; 11 AAC 96 11 AAC 58.210	Temporary activities occurring on state lands, including activities in non-marine waters and submerged lands.	For temporary project activities including staging and construction.	<ul style="list-style-type: none"> • Project Description • General vicinity and site maps (1:250,000 or 1:63,360) • Duration and season • Specific location, including proposed access routes (GPS coordinates, township, range, section, meridian, and size of area) • Boundaries and dimensions of the proposed area and relation to geographic features • Site description (current condition, improvements, use, materials present, noting any trash, garbage, debris, or signs of possible contamination) • Locations and dimensions of structures and storage areas Location and type of crossing • Plans, specifications • Site map 	<ul style="list-style-type: none"> • NEPA not required • State will complete a Best Interest Finding • State of Alaska is the submerged landowner at Sadie Creek

#	Permit or Plan; Agency	Statute / Regulation	Definition	Why Permit is Required	Data Needs	Commentary
11	Alaska Pollutant Discharge Elimination System (APDES) General Permit (GP) for Stormwater Associated with Large and Small Construction Activities for Alaska Construction General Permit (CGP); ADEC, Division of Water	CWA § 402; 33 USC §1342; 40 CFR §122	Allows for discharge of stormwater / surface water runoff from soil disturbing construction activities exposing one or more acres of cleared land to potential erosion and runoff to nearby surface waters.	Project disturbs greater than 1 acre and therefore requires a permit.	<ul style="list-style-type: none"> Stormwater Pollution Prevention Plan (SWPPP) An applicant is required to submit a Notice of Intent to gain coverage under the GP 	<ul style="list-style-type: none"> NEPA not required Generally submitted immediately before construction activities commence
12	Title 16 Fish Habitat Permit; Alaska Department of Fish and Game	Alaska Fishway Act, AS 16.05.841 and Anadromous Fish Act AS 16.05.871	Project must notify and obtain authorization and approval for all activities within the limits of ordinary high water (OHW) of any streams with fish presence.	Advice should be sought on ways to protect fish.	<p>Title 16 Fish Habitat Permit to Conduct In-Water Activities Affecting Anadromous Fish Streams:</p> <ul style="list-style-type: none"> Type and purpose of project Location and type of crossing (including legal description) Plans, specifications, and aerial photos Project timeframe Description of any alteration, modification, bed, bank, or floodplain (including temporary or material deposited or removed), stream diversion, etc. Time of year when crossing would occur Description of precautions to minimize adverse impacts to fish and other aquatic organisms Hydraulic evaluation 	<ul style="list-style-type: none"> NEPA not required Required for alteration or motorized crossing of fish-bearing streams
State Construction Plans						
13	SWPPP; ADEC, Division of Water	CWA 33 USC 1251 et seq. § 402 ADEC approval under CWA Section 401	Developed as part of the APDES CGP for stormwater and as required by the U.S. Environmental Protection Agency the SWPPP is intended to prevent and minimize releases of stormwater into state waters.	ADEC certifies APDES Stormwater CGPs for construction of the project facilities.	<ul style="list-style-type: none"> Stormwater Pollution Prevention Team Site description Site map Summary of potential pollutant sources Spill prevention and response procedures Maintenance Erosion and sediment controls Management of runoff Employee training Control measures Monitoring Inspections and documentation 	<ul style="list-style-type: none"> Refer to APDES CGP (#11) for industrial stormwater.

#	Permit or Plan; Agency	Statute / Regulation	Definition	Why Permit is Required	Data Needs	Commentary
Local Permits and Authorizations						
14	Community Infrastructure and Conditional Use Permit; Northwest Arctic Borough (NWAB) Planning Department	Title 9 of NWAB Code	The Planning Department implements land use regulation according to Title 9 of NWAB code. For road construction in the Subsistence Conservation District, a Conditional Use Permit is required for development. Requires Planning Commission decision and approval.	Permit required for community infrastructure projects including roads.	<ul style="list-style-type: none"> • Project Location • Proposed Use • Structures or fill in: streams, or wetlands • Any fresh water usage • Fuel storage • Development in the floodplain or flood prone areas 	<ul style="list-style-type: none"> • NEPA not required • Fee required • Roads and placement of fill in wetlands in the Subsistence Conservation District of the NWAB requires a Conditional Use Permit • Requires 20-day Public Notice and Planning Commission Public Hearing and Approval

Notes:

AAC – Alaska Administrative Code

ADEC – Alaska Department of Environmental Conservation

ADNR – Alaska Department of Natural Resources

APDES – Alaska Pollutant Discharge Elimination System

AS – Alaska Statute

BLM – U.S. Bureau of Land Management

CGP – Construction General Permit

CFR – Code of Federal Regulation

CWA – Clean Water Act

DMLW – Division of Mining, Land, & Water

EA – Environmental Assessment

ESA – Endangered Species Act

FHWA – Federal Highway Administration

FONSI – Finding of No Significant Impact

FWCA – Fish and Wildlife Coordination Act

GP – General Permit

LEDPA – Least Environmentally Damaging Practicable Alternative

MBTA – Migratory Bird Treaty Act

NEPA – National Environmental Policy Act

NWAB – Northwest Arctic Borough

PL – Public Law

OHA – Alaska Department of Natural Resources, Office of History & Archaeology

SHPO – State Historic Preservation Officer

SWPPP – Storm Water Pollution Prevention Plan

USACE – U.S. Army Corps of Engineers

USC – U.S. Code

USFWS – U.S. Fish and Wildlife Service

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4.17 Construction Impacts

4.17.1 Existing Conditions

No construction projects are planned for the proposed Cape Blossom Road project area other than the proposed action. Ongoing construction activities are limited to the City of Kotzebue projects and road maintenance. The largest ongoing project is the Airport Reconstruction Project within the Kotzebue city limits.

Construction impacts from the proposed Cape Blossom Road would be temporary. Construction would be phased as funding becomes available. Most of the construction would occur in winter. After breakup, the road would be compacted and graded, and a final crushed aggregate course would be laid.

4.17.2 Environmental Consequences

Right-of-way: NANA and KIC would grant DOT&PF site control though temporary construction easements. A temporary land use permit from the State of Alaska to construct the road across Sadie Creek would also be required. BLM would provide a Right-of-Way Grant to construct the Upgrade Route through LRRS property. Access on the winter trails would be temporarily interrupted during construction. Snow machine traffic would be routed around the work zones as required for safety.

Social Environment: There are no impacts associated with construction on the social environment.

Economic Environment: Local workers and material suppliers would be positively impacted by income generated during construction.

Local Land Use and Transportation Plans: There are no associated construction impacts on land use or transportation plans.

Cultural Resources: There is minimal excavation associated with project construction; therefore, it is unlikely new cultural sites would be discovered. If artifacts are found, construction would be halted on that segment until DOT&PF and SHPO were notified and an assessment was performed.

If human remains are found, all project activity will cease until the Alaska State Troopers, DOT&PF, SHPO, and local officials are contacted. The area would be secured and local Native Alaska organizations likely to be culturally affiliated with the discovered remains would be notified.

Wetlands: Construction would permanently impact approximately 113 acres of wetlands for the Upgrade Route.

Anadromous and Resident Fish: ADF&G does not identify any anadromous fish streams in the project area, and no anadromous fish were identified in Sadie Creek during the summer field study. Streams would not likely freeze to the bottom at the road crossing locations if they are greater than 5 feet deep. Therefore, construction would impact overwinter fish habitat if they are present. Water from lakes and streams in the project area could be used as a dust control agent during construction. ADF&G approved pump sizes, withdrawal velocities, and intake structure screens would be used to reduce the likelihood of fish impingement. Water withdrawals from fish bearing waters would be permitted by ADF&G. Any impacts to fish would be minor.

Essential Fish Habitat: There is no designated EFH in the project area, and therefore no impacts.

Wildlife Resources: Winter road construction would avoid all impacts to migratory birds and caribou migration. Wildlife present in the project area may temporarily avoid active construction sites. Minor, temporary construction impacts may occur to some species traversing through the area.

Golden and Bald Eagles: Golden and bald eagle nesting areas have not been identified in the project area. Bald eagles are not common to the area. Suitable raptor nesting habitat is limited to the coastal bluff near the southern end of the road. Construction would occur in winter outside of the nesting season. Therefore, no construction impacts would occur.

Threatened and Endangered Species: There is no federally designated critical habitat in the project area. No ESA-listed species were found in the project area during field reconnaissance. Yellow-billed loons are candidate species. No occurrences have been documented in the project area, no critical habitat has been designated, and construction would occur in winter outside of the migratory bird nesting season. Therefore, no construction impacts would occur to yellow-billed loons or ESA-listed species.

Water Body Involvement: Construction impacts to waterbodies would be minimized with winter construction of the stream crossings. The placement of drainage structures and culverts would not under normal conditions increase water velocity, but these activities could result in ice accumulation. During storms or breakup when higher flow conditions occur, the culverts would increase velocities. There would be no construction impacts to thaw lakes in the project area.

Hazardous Waste and Contaminated Sites: Most of the project area is undeveloped, and there would be no impacts anticipated during construction from existing contamination. Coordination with ADEC would occur prior to construction of the Upgrade Route near known remediated sites. If contamination is encountered, the DOT&PF Project Engineer would be notified and cleanup would occur according to ADEC requirements. A Hazardous Materials Control Plan would be developed and adhered to during

construction. If leaks or spills occur during construction, contaminated materials would be contained and disposed of as required by ADEC guidelines. Solid wastes from construction would be properly disposed of in the local landfill.

Air Quality: Operation of heavy equipment and hauling of fill material can create dust. Roads would be watered as necessary to reduce dust during final compaction and grading and when the final course of crushed aggregate is added after breakup. Temporary air quality impacts from dust may occur during construction.

Floodplains: No materials would be stored within the floodplains during construction. Culverts at drainage crossings would be properly installed and would have adequate capacity. The beach access ramp above the tidelands would be constructed in winter when Kotzebue Sound is frozen, and there would be no likelihood of storm surges inundating the area. No construction impacts to floodplains would occur.

Noise: While construction would generate noise, there are no permanent receptors in the undeveloped project area; therefore, construction noise would not impact any sensitive receptors. As the road nears the beach at Cape Blossom, there are multiple camps on Native Allotments. Camp users may experience short-term minor noise impacts from heavy equipment during construction.

Water Quality: No excavation or vegetation clearing is proposed, and winter construction is planned. After spring breakup, work would include final compaction and grading and addition of a crushed aggregate top-course. Increases in turbidity and temporary minor impacts to water quality may occur during breakup from sediment-laden runoff. Construction equipment and vehicles would be inspected for leaks and properly maintained to avoid spills. Fueling and equipment maintenance would not occur within 100 feet of waterbodies.

Stormwater runoff would be addressed prior to construction with the development of a project SWPPP and the use of BMPS and erosion and sediment control measures. Fuel spill and leaks would be addressed prior to construction in a Hazardous Materials Control Plan and SPCC Plan.

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5 Comments and Coordination

5.1 Scoping

DOT&PF conducted meetings with local governments and agencies while working on the Kotzebue to Cape Blossom Road Reconnaissance Report. DOT&PF initiated public and agency coordination for the Kotzebue to Cape Blossom Road project EA in the spring of 2012. DOT&PF presented the project at the joint NWAB and City of Kotzebue Planning Commission meeting on March 22, 2012, after completion of the project's Reconnaissance Study. The project team created and updated contact lists for Federal, State and local agencies; as well as borough, city, Tribal and ANCSA entities in the NWAB to prepare for the scoping outreach.

A project website was developed and hosted by DOT&PF to provide access to information about the project (<http://dot.alaska.gov/nreg/capeblossomroad/>). The website provided a history of the project, the current status, the *Kotzebue to Cape Blossom Road Reconnaissance Study* and the *Feasibility Analysis: Kotzebue Deep Water Port/Airport*, contact information, and a mechanism for sending comments directly to the project team.

5.1.1 Agency Scoping

On April 9, 2012, letters were sent to 13 Federal and 16 State agencies seeking formal comments on the proposed project. The letter included the purpose and need and a figure showing the alternative routes to be examined and considered in this document. In response to some agency preferences, a follow up email was sent on April 10, 2012, containing the original letter content and attachment, and making the same request that was in the April 9, 2012 letter.

The scoping letter and follow up email was also sent to borough, city, Tribal and ANCSA entities on April 9, 2012 and April 10, 2012. All letter and email recipients were invited to attend the Kotzebue May 10, 2012 scoping meeting. All were encouraged to contact the project team if they desired a scoping meeting in their NWAB community. The deadline for formal comments was May 31, 2012. Scoping letters, attachments, and responses are contained in Appendix E.

Pursuant to Section 106 of the National Historic Preservation Act, letters were sent on June 17, 2013 to 26 State and local agencies and organizations seeking comments on impacts to cultural resources in the project area. No local agencies or organizations provided comments. On July 10, 2013, SHPO concurred there are no historic properties present in the Proposed Action's area of potential effect (APE), and no historic properties would be affected.

Table 5.1 summarizes the agencies' comments. Written agency comments were received from the USACE, USFWS, and ADF&G.

Table 5.1. Agency Comment Summary

Category	Issue
Bird Nesting Seasons	Clearing, excavation, and fill activities in potentially suitable nesting habitats should be completed prior to the nesting season (May 20 through July 20) to avoid impacts to breeding migratory birds.
Cultural Resources	Concur with the Federal Highway Administration’s (FHWA) determination that no historic properties are present in the project’s APE, and no historic properties will be affected.
Endangered Species	Three species listed as threatened under the ESA may occur in the project area: spectacled eiders, Alaska-breeding Steller’s eiders, and polar bears. Candidate species under the ESA including yellow-billed loons and Pacific walrus may also occur in the project area.
Fish Habitat	<p>With brief review, Sadie Creek is likely used by anadromous and resident fish species.</p> <p>Sadie Creek is likely to be nominated for inclusion in the Anadromous Waters Catalog during 2012 or 2013, based on fish sampling.</p> <p>In addition to considering fish passage and water conveyance at stream crossings, we recommend the design criteria also focus on protecting stream health by maintaining riparian, floodplain, and tidal processes.</p> <p>The shorter, western-most route will have the lowest overall impact to fish and wildlife resources and will disturb lower quantities of wetland habitat and require less overall gravel and gravel mining.</p> <p>The reroute of the western route avoiding Sadie Creek appears to provide the highest likelihood of the most flow accommodating stream crossing structures for the cost and have the lowest potential for adverse impacts on fish, their passage and habitat.</p> <p>The shorter, western-most route will have the lowest overall impact to fish and wildlife resources.</p>
Invasive Weeds	Implement BMPs for minimizing the introduction and proliferation of invasive species
Mitigation	Policy regarding impacts to fish and wildlife habitat includes first avoiding, then minimizing, and finally compensating for the remaining unavoidable impacts. If impacts are unavoidable, then it is recommended that compensatory mitigation for the unavoidable impacts by restoring or permanently protecting equal or higher-value wetlands nearby.
Road Design and Alignment/Route	<p>Prefers the most direct route from Kotzebue to Cape Blossom that will have the least impact on higher-value wetlands and required new construction.</p> <p>Encourages consideration of steeper side slopes and construction of a one-lane</p>

Table 5.1. Agency Comment Summary

Category	Issue
	<p>road with turnouts. Consider these options where practicable and where safety is not compromised.</p> <p>All routes carry potential for impacts to wildlife due to increases in human access to the area.</p> <p>These road alternatives could cause localized negative effects on wildlife and they could increase access to subsistence resources.</p> <p>Sadie Creek crossing location and bridge design will need to address the hydro geomorphology of Sadie Creek.</p>
Subsistence Impacts	<p>Access to the area of the proposed road alternatives is already present via snow machine and ATV so, at least initially; it is likely that access and increased activity would not be significantly different post-construction than that already occurring.</p> <p>All the alternatives could provide increased access to subsistence resources including wild game, fish, and berries.</p> <p>See Wildlife Impacts</p>
Wetlands	<p>Seek ways to avoid or minimize adverse impacts to higher-value wetland habitats, including shrub thickets that may not be classified as wetlands by the Clean Water Act.</p>
Wildlife Impacts	<p>All routes carry some potential for impacts to wildlife resources primarily from increases in human access to the area and associated local avoidance by wildlife such as caribou, moose, and bears.</p> <p>Activity along the road may cause potential diversion of caribou away from Kotzebue during their spring and fall migrations, and possibly during winter. This occurrence would not impact the Western Arctic Caribou Herd, but could impact subsistence harvest in some years (ADF&G 2012b). Localized negative effects on wildlife from these road alternatives would likely be modest.</p> <p>The eastern-most routes could provide enough increased access to achieve a reduction in the northern Baldwin Peninsula moose population through both harvest and avoidance of the area by moose, providing additional support for the more western route.</p>

5.1.2 Public Scoping

Scoping meetings were held in Kotzebue on May 10, 2012 and in Buckland on May 11, 2012. The Buckland meeting was the only meeting requested by an area community. A combined meeting notice was used for both meetings. The Buckland meeting date changed from May 10, 2012 to May 11, 2012, to

accommodate the Buckland K-12 school graduation ceremony. The public scoping meetings were advertised in emails, public notices, flyers, the *Arctic Sounder* newspaper (May 3 and May 10, 2012), and broadcast on KOTZ radio. The radio broadcast reached radio listeners throughout the NWAB. Initial notice was provided on April 9 and 10 in the scoping letters, and follow up emails were sent on April 30 containing a meeting flyer. A follow up on May 3 provided notice of the Buckland date change. The local entities, NANA, Maniilaq, NWAB, City of Kotzebue, and others, printed and posted the flyers on bulletin boards in Kotzebue, Buckland, and surrounding communities.

At the public meetings, residents shared knowledge of the area and natural resources that assisted in the development of the alternatives and the Proposed Action. The comments described the affected environment and alternative routes and made design suggestions. Four written comments were received from the public. Meeting announcements, mailing lists, presentations, attendance sheets, and written and email comments are included in Appendix E.

Table 5.2 provides a summary of the public scoping comments.

Table 5.2. Public Scoping Comment Summary

Category	Issue
Barges	First barges arrive in Buckland around the 1 st of July.
Construction Material Sources	Use of Pipes Pit for gravel and consider barge or trucking to get it to the site. Gravel is available in Buckland.
Erosion	Take a look at erosion along the proposed routes.
Offshore conditions	There are rough waters at Cape Blossom.
Project Support	The Village of Buckland will fully support the project because fuel prices (fuel oil & diesel) are very high. The project will help reduce fuel costs.
Purpose and Need	Future port is important to the NWAB and surrounding communities because it will improve transportation and lower costs of goods in the region. Reduces fuel costs.
Region Energy Development	Port will be important to future oil and gas drilling and production in the area.
Schedule for project	Proposed action has been a priority for the community for many years. Keep to an approved schedule, and do not question this project. We have been waiting for 25 years for this project to start. Waiting will drive up construction costs and will affect this project.
Scoping Information	Informative meeting, proposal staff has good information, and appreciate willingness to hear concerns of the community and for providing food for the

Table 5.2. Public Scoping Comment Summary

Category	Issue
	attendees.
Subsistence Areas	Buckland meeting allows team to understand issues in the surrounding communities, particularly subsistence.
Subsistence Resources	Sadie Creek is the site of subsistence hunting for birds, fish, or caribou. Avoiding Sadie Creek is a good idea. Bearded seals are hunted about 10 miles straight out from Cape Blossom.
Transportation	The road would make it possible for family members to bring needed goods as far as Cape Blossom and then be transported via boat to Buckland.
Wildlife	Caribou frequent the coast. Caribou that go through Kivalina cross the Baldwin Peninsula.

Project support letters were received from NANA and KIC confirming their commitment to provide easements for the Cape Blossom Road alignment. The letters are included in Appendix E.

6 Section 4(f) Evaluation

There are no publicly owned parks, recreation areas, or wildlife refuges in the vicinity of the proposed Cape Blossom Road Upgrade Route. SHPO concurred with FHWA findings of no historic properties present in the Proposed Action's APE, and no historic properties would be affected.

The Cultural Resources Survey contains more information on the study's findings and eligibility of sites along the Upgrade Route.

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