B A R R O W
Long Range Transportation Plan

2 0 1 6

May 2016 DRAFT

Native Village of Barrow

This page is intentionally left blank

Native Village of Barrow Tribal Council
Thomas Olemaun, President
Muriel Brower, Vice President
Marjorie Solomon, Treasurer
Fannie Suvlu, Secretary
Rebecca Brower, Sergeant-At-Arms
Richard Unagrook, Member
George Olemaun, Member

Native Village of Barrow
Charlie Brower, Tribal Transportation Manager

Consultant
UMIAQ Design and Municipal Services, LLC

This page is intentionally left blank

Table of Contents

Table of Figures

Table of Tables

Acronyms

AADT	Average Annual Daily Traffic
AC	Alaska Commercial Company
ADEC	Alaska Department of Environmental Conservation
ADOT&PF	Alaska Department of Transportation and Public Facilities
ADT	Average Daily Traffic
ANCSA	Alaska Native Claims Settlement Act
ATV	All-Terrain Vehicle
BARC	Barrow Arctic Research Center
BEO	Barrow Environmental Observatory
BIA	Bureau of Indian Affairs
BIA-DOT	Bureau of Indian Affairs Division of Transportation
BUECI	Barrow Utilities & Electric Cooperative, Inc.
CFR	Code of Federal Regulation
CIP	Capital Improvement Program
DEW Line	Distant Early Warning System
DMV	Division of Motor Vehicles
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
FARS	Fatal Accident Reporting System
FHWA	Federal Highways Administration
FLH	Federal Lands Highways
FY	Fiscal Year
HSIP	Highway Safety Improvement Program
ICAS	Iñupiat Community of the Arctic Slope
IRA	Indian Reorganization Act
IRR	Indian Reservation Roads
LRTP	Long Range Transportation Plan
NARL	Naval Arctic Research Laboratory
NPR-A	National Petroleum Reserve – Alaska
NSB	North Slope Borough
NVB	Native Village of Barrow
PAR	Project Analysis Report
PARR	Project Analysis Report Request
SAFTEA-LU	Safe, Affordable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
STIP	Statewide Transportation Improvements Program
TNHA	Tagiugmiullu Nunamiullu Housing Authority
TTAM	Tribal Transportation Allocation Methodology
TTP	Tribal Transportation Program
UIC	Ukpeagvik Iñupiat Corporation
Vpd	Vehicles per day

Chapter 1: Introduction

The 2016 Barrow Long Range Transportation Plan (LRTP) is a twenty-year plan developed by the Native Village of Barrow (Native Village or NVB) to comprehensively plan for the Barrow community's current and future transportation needs in accordance with both federal regulations and those of the Indian Reservation Roads (IRR) Program Rule 25 Code of Federal Regulation (CFR) Part 170.

The IRR program provides funding to federally recognized Tribes to improve public transportation to and within Indian and Alaskan Native Communities. Federal guidance and requirements for long range transportation planning are found in the IRR Program Final Rule (IRR Rule 25 CFR 170.410-415). Federal regulations generally require public involvement and recommend a twenty year planning horizon and suggest contents for Tribal long range transportation plans.

1.1. Native Village of Barrow Inupiat Traditional Government

The Native Village of Barrow is one of eight federally recognized Tribal organizations within the North Slope Borough under the Indian Reorganization Act of 1934 amended by the Acts of June 15, 1935 and Alaska Act of May 1, 1936 for Alaska Natives by the Act of Congress of the United States of America.

The mission of the Native Village of Barrow is to "protect and promote Inupiat Rights, Self-Determination and Self Sufficiency; as well as preserve and strengthen Inupiat Culture/Traditions for Tribal Members by providing quality services in a fair and accountable manner" (Native Village of Barrow, 2015).

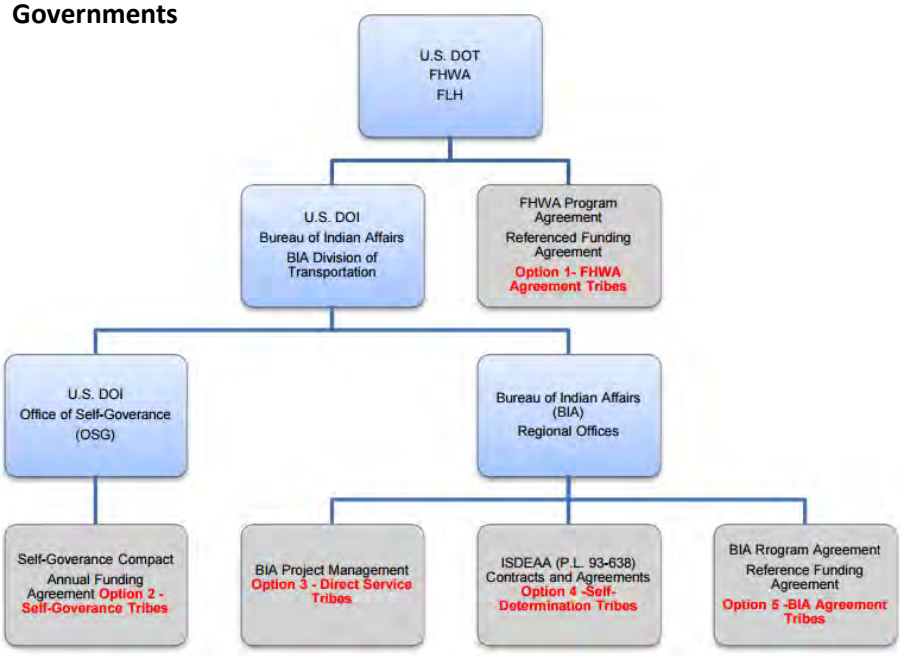
NVB represents approximately 3,315 Tribal members and is governed by a seven member Tribal council that provides direction to the staff and represents the interest of the village members who elect them. The members have an open election using secret ballots that elect council members. Elected council seats are on three year term and terms are staggered. The president of the council is elected by the governing council annually. The president is heavily involved in the operation of the council and Native Village operations. In addition to transportation planning, the Native Village of Barrow has programs focused on economic development, the environment, housing, realty, social services, tribal court, wildlife and workforce.

1.2. Tribal Transportation

Tribal Transportation Program. The Tribal Transportation Program (TTP) assists in providing for the transportation needs of Tribes through funds for planning, design, construction and maintenance activities for public roads that provide access to and within Indian reservations, Indian trust land, restricted Indian land and Alaska native villages. The Tribal Transportation Program replaces the former Indian Reservation Roads (IRR) Program and remains housed under the U.S. Department of Transportation, Federal Highway Administration Division, Federal Lands Highway Program. The Program

has been co-administered by the Federal Highway Administration's (FHWA) Federal Lands Highway Office and the Bureau of Indian Affairs (BIA) since 1983.

Figure 1: Five TTP Program Administration Options for Indian Tribal Governments



Source: U.S. Department of Transportation [U.S. DOT], 2013a

There are five different options for tribal governments in administering their Tribal Transportation Program, illustrated in Figure 1. Tribes that enter into a program agreement directly with FHWA must demonstrate financial stability and financial management capability (U.S. Department of Transportation [U.S. DOT], 2013a). Native Village of Barrow has a programmatic agreement with the FHWA to participate in the TTP program.

As of September 2013, TTP funds are allocated amongst Tribes using a statutory formula based on Tribal population, road mileage and average tribal shares of the Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) IRR funding (U.S. DOT2015a). The program funding level was $450 million for 2013 and for 2014.

Tribal Transportation Improvement Program. A Tribal Transportation Improvement Program (TTIP) is a list of a list of projects to be funded in the near future. 25 CFR 170 specifically states that the TTIP is "a multiyear financially constrained list of proposed transportation projects developed by a Tribe from the Tribal priority list or the long-range transportation plan. The TTIP may also include federal, state, township, municipal and tribal transportation projects that were initiated by or developed in cooperation with the Tribe. There is also a Regional IRR TTIP that is prepared by the Regional BIA Office that includes a prioritized list of IRR funded projects. The Regional IRR TTIP is included in the State Transportation Improvement Program (STIP).

National Tribal Transportation Facility Inventory. The National Tribal Transportation Facility Inventory (NTTFI) is a comprehensive database of all transportation facilities eligible for program funding by tribe, reservation, BIA agency and region, Congressional district, state and county. Other specific information collected and maintained includes classification, route number, bridge number, current and future

traffic volumes, maintenance responsibility, and ownership (U.S. Department Of The Interior [U.S. DOI], 2015).

1.3. Long Range Transportation Plan Purpose and Scope

According to 25 CFR 170.410(a), the purpose of long term transportation planning is to "clearly demonstrate a tribe's transportation needs and to fulfill tribal goals by developing strategies to meet these needs. These strategies should address future land use, economic development, traffic demand, public safety, and health and social needs" (U.S. Government Publishing Office [U.S. GPO], 2015).

In addition to fulfilling a funding requirement, the Native Village of Barrow seeks to identify current transportation issues and future transportation needs and to provide guidance and coordination for Tribal and community decision-making about future infrastructure planning and funding over the short, medium and long term. This plan also provides a foundation for transportation planning as required by the Tribal Transportation Program to receive TTP funding. Funding allocations are used to construct and maintain roads and other transportation facilities in the Barrow area in support of economic, subsistence and cultural activities and to construct access to individual land allotments which resulted from the passage and implementation of the Alaska Native Claims Settlement Act (ANCSA) in 1971. This plan is also intended to identify, survey and map key transportation routes, facilities, services and needs important to the community; prioritize specific transportation projects; build partnerships with local and state government agencies and tribal organizations to increase the effectiveness of local and regional transportation improvement financing; and increase the Native Village's administrative capacity to plan and manage transportation improvements.

Barrow residents depend on access to facilities and services within the community, including private residences, places of employment, grocery stores, health care facilities, social services, recreation facilities and access to subsistence activities, among others. Access to these services and facilities depends upon a network of roads, pedestrian routes and ATV/snow machine trails as well as transportation services, such as public transit, Iḷisaġvik shuttle service and private taxis. Together these transportation systems greatly contributes to the health and well-being of both Native Village Tribal members and the Barrow community as a whole.

This plan contains an overview of the Barrow community, existing conditions, and Native Village of Barrow transportation priorities and potential or anticipated transportation projects and initiatives over the short range (less than five years), mid-range (five to ten years) and long range (to twenty years) to serve as a guide for programmatic and budgetary transportation improvements. It also includes potential transportation funding sources. Updates to this plan will be undertaken every five years or as needed due to changing conditions and priorities

1.4. Community Involvement

Community involvement is an opportunity to capture Barrow's values and needs, identify issues and concerns and establish a consensus. Involving the community is integral to any planning effort, including

transportation planning and should take place throughout the entire planning process. IRR Rule 25 CFR 170.410-415 specifies requirements related to public involvement, bulleted below.

For public meetings, the Native Village of Barrow must:

- Advertise each public meeting in local public newspapers at least 15 days before the meeting date. In the absence of local public newspapers, the tribe may post notices under local acceptable practices;
- Provide at the meeting copies of the draft long-range transportation plan;
- Provide information on funding and the planning process; and
- Provide the public the opportunity to comment, either orally or in writing.

To meet public notice requirements, the Native Village must:

- Published a notice in the local and tribal newspapers when the draft long-range transportation plan is complete. In the absence of local public newspapers, the tribe may post notices under local acceptable practices; and
- State in the notice that the long-range transportation plan is available for review, where a copy can be obtained, whom to contact for questions, where comments may be submitted, and the deadline for submitting comments, typically 30 days.

The Native Village of Barrow solicited board feedback from the community using the following strategies:

- The Native Village of Barrow was kept informed at each of their regularly scheduled Council. The Council identified transportation projects to be initiated over the next 20 years and projects were ranked in order of priority to the Tribe.
- A community-wide public meeting held on XX to gain input from the residents on the needs and priorities of those that live in the community. The event was announced for two weeks in the Arctic Sounder, announced regularly on KBRW, posted on X bulletin boards throughput the community, distributed via the North Slope Borough email system and announced on the GCI rolling channel. The opportunity to speak publically at the meeting was provided, as were paper surveys and contact information to provide feedback. At the meetings, planners and stakeholders discussed the scope of the project, the transportation plan, transportation priorities, funding, and transportation issues in the community.
- Announcements of the public comment period were made on KBRW and in the Arctic Sounder. Additionally flyers in XX locations throughout the community. Hard copies of the Plan were placed at XX locations throughout the community and electronic copies were made available on the NVB website.
- Representatives from the North Slope Borough, City of Barrow, Native Village of Barrow, Ukpeagvik Inupiat Corporation, Alaska Department of Transportation and Public Facilities (ADOT&PF) and BIA were contacted for their input on transportation considerations that may be pertinent to the community and to obtain the most current information on socioeconomic conditions, Tribal needs, development trends and traffic data.

The final plan was submitted to the Native Village of Barrow Tribal Council after public comments were addressed. The Plan was adopted through resolution, included here in Appendix A. The Native Village Tribal Council intends to keep the Plan up-to-date.

1.5. Transportation Goals

This Long Range Transportation Plan is the Native Village of Barrow's vision for future transportation construction to meet the community's transportation needs over the short and long term. The planning process and methodology used in this plan includes examination of tribal and IRR program goals and objectives and transportation issues to identify future needs.

Transportation Goals:

Goal 1: Provide efficient and proactive transportation planning and management.

Goal 2: Provide a safe and efficient transportation network within the Barrow community.

Goal 3: Develop a transportation system to foster and support economic development and provide access to new housing opportunities.

Goal 4: Improve overall road and trail conditions to ensure safety and efficiency through continued and proactive maintenance.

Goal 5: Protect and enhance traditional, historical, cultural and subsistence resources and activities.

1.6. Plan Organization

The Barrow Long Range Transportation Plan contains four chapters:

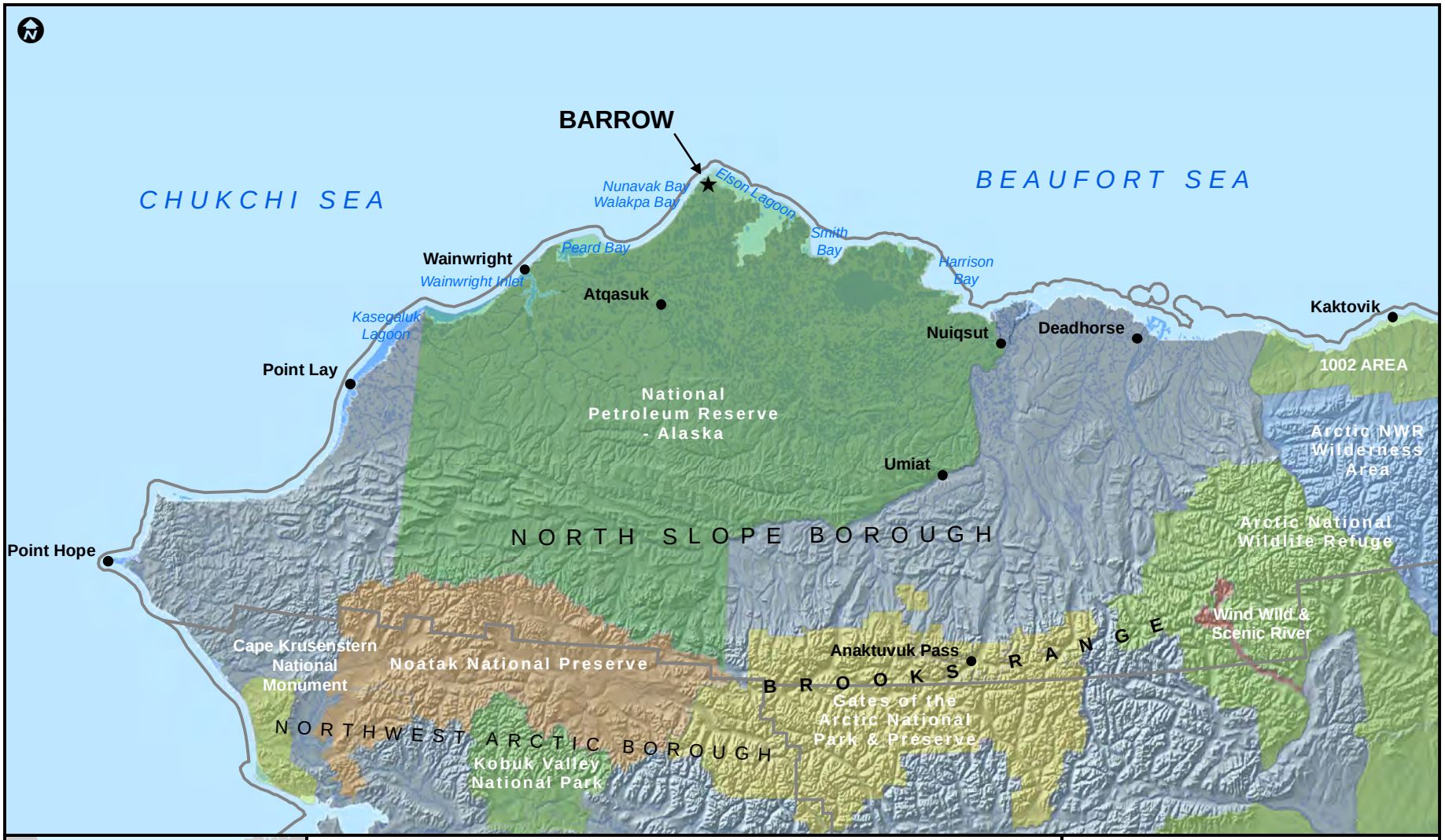
Chapter 1 provides an introduction, including an overview of the Native Village of Barrow, the Tribal Transportation Program, the scope and purpose of a LRTP and the strategies used to ensure that the Barrow community was involved and engaged in the plan contents and review.

Chapter 2 includes background information on the Barrow community, including its unique location, culture and history as well as an overview of the government, demographics, natural environment and existing infrastructure.

Chapter 3 outlines the current transportation system, including roads, trails, aviation facilities, hazards and other background information relating to transportation.

Chapter 4 is the implementation strategy for the plan. It includes transportation goals and strategies as well as priorities and potential sources of transportation funding.

This page is intentionally left blank



- BOROUGH BOUNDARIES
- NATIONAL PETROLEUM RESERVE
- NATIONAL PARK
- NATIONAL WILDLIFE REFUGE
- NATIONAL MONUMENT
- NATIONAL PARK & PRESERVE
- NATIONAL PRESERVE
- NATIONAL WILD & SCENIC RIVER
- NATIONAL WILDERNESS AREA

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BARROW, ALASKA VICINITY MAP

Scale: 0 25 50 75 100 125 Miles

Figure: 2

UMIAQ

10/29/2015

UMQ: BRW_NVB_VICINITY_r00

This page is intentionally left blank

Chapter 2: Community Background

2.1. Barrow, the Northernmost Community

Barrow is the northernmost community in the United States, located at the base of Point Barrow peninsula along Chukchi Sea coast of the Arctic Ocean. It lies 325 miles above the Arctic Circle, 725 air miles northwest of Anchorage, Alaska and within the North Slope Borough. Barrow is located at 71°17'44"N 156°45'59"W. Due to its remote location, the overarching transportation network locally, between villages and beyond is especially important to residents. Families and friends can follow the well-traveled route of an historic trail to a traditional Iñupiat celebration. At the same time another Borough resident can be boarding a jet airliner for a business trip to Anchorage or destinations further south. Regardless of its form, transportation can serve both the traditional and contemporary needs of the Borough.

2.2. Barrow Governance

Barrow is the seat of borough government for the North Slope and serves as a regional hub. The Barrow community has four primary governing bodies. The two regional governments are the non-Tribal North Slope Borough (NSB) and the Tribal Iñupiat Community of the Arctic Slope (ICAS). The two local governments are the non-Tribal City of Barrow and the Tribal Native Village of Barrow Inupiat Traditional Government (NVB).

Regional Governance. The North Slope Borough is a first class borough and a political subdivision of the State of Alaska that was incorporated in 1972. It has a mayor and seven-member assembly. Its primary source of revenue is taxation on oil and gas infrastructure, its primary source of revenue. The borough also has the responsibility for land use planning within its jurisdiction. The Iñupiat Community of the Arctic Slope is the regional tribal government for North Slope villages. It was established in 1974 and is one of only two regional sovereign tribal governments in Alaska recognized by the United States government[1]. It represents Anaktuvuk Pass, Atqasuk, Point Lay and Wainwright that combine their Tribal Transportation Program funding.

Local Governance. The City of Barrow was incorporated in 1958 as a first class city and political subdivision of the State of Alaska. The City of Barrow has six council seats and the Mayor. The City provides valuable input on transportation-related projects but does not fund, maintain or construct road or related projects. The Native Village of Barrow Iñupiat Traditional Government, is the governing body for tribal matters for Barrow and is a sovereign government recognized by the U.S.

[1] The other is Tlingit-Haida Central Council

2.3. History and Culture

The city of Barrow, also known as Ukpeagvik, the "place where snowy owls are hunted" in Iñupiaq. It is home to the Iñupiat, an indigenous Inuit ethnic group that has inhabited the area for over 1,500 years. The community is located approximately eight miles south of archaeological remains of sixteen dwelling mounds from the Birnik culture, a prehistoric Inuit society that is the precursor to the modern day Eskimo culture. The Birnik Site was designated a National Historic Landmark in 1962 and listed on the National Register of Historic Places in 1966 (U.S. DOI, 1962; U.S. DOI, 1966).

The City of Barrow is named after Point Barrow, named for Sir John Barrow of the British Admiralty. The Cape Smythe Whaling and Trading Station was constructed in 1893. A Presbyterian church was established in 1899 and the U.S. Post Office for Barrow was opened two years later, in 1901.

The United States government and military have played an influential role in the growth of Barrow. The U.S. Army established a meteorological and magnetic research station near Barrow in 1881. Over forty years later, the National Petroleum Reserve – Alaska (NPR-A) was established by President Warren G. Harding in 1923 that encompasses the North Slope communities of Barrow, Wainwright, Atqasuk and Nuiqsut; oil and gas exploration in this area began in 1946. The development of the Naval Arctic Research Laboratory (NARL), three miles north of the Barrow community, began in 1947 to provide laboratory resources for scientific study of the arctic. During the 1940s and 1950s, the Distant Early Warning System (DEW) Line was established, a system of radio and communications stations that stretched across Western Alaska, through the Canadian Arctic to Greenland. The DEW Line was created to provide advance warning of a sea-and-land invasion.

The Native Village of Barrow Iñupiat Tribal Government was organized as a federally recognized Native American Tribe in 1940. The City of Barrow was incorporated as a fourth class city in 1959, later to be reclassified as a second and then finally a first class city in 1972. The North Slope Borough incorporated as a first class borough in 1972. Although not within the community of Barrow, the construction of the Prudhoe Bay oilfields and the Trans-Alaska Pipeline have also greatly influenced the Barrow community and the entire North Slope. Tax revenue from the oilfields fund much of Barrow's infrastructure and governmental services, including roads, sanitation facilities and health, education and emergency services and facilities (Alaska Department of Commerce, Community and Economic Development [DCCED], 2015).

Subsistence hunting, fishing, gathering and whaling are central to the Iñupiat culture. The North Slope Borough 2010 Economic Profile and Census Report reported over 80% of households in Barrow use subsistence foods and that nearly 60% of the Iñupiat households receive at least half of their household diet from subsistence foods (North Slope Borough [NSB], 2010).

The foundation of the culture are the Iñupiaq values, shown in Figure 3.

Figure 3: Iñupiaq Values

Paaqłaktautaiññiq - Avoidance of Conflict.
The Iñupiaq way is to think, act, speak, and live positively.

Nagliktuutiqaġniq – Compassion.
Though the environment is harsh and cold, our ancestors learned to live with warmth, kindness, caring and compassion.

Paammaaġigñiq – Cooperation.
Together we have an awesome power to accomplish anything.

Ilagiigñiq - Family and Kinship.
As Iñupiaq people, we believe in knowing who we are and how we are related to one another. Our families bind us together.

Qiñuiññiq – Humility.
Our hearts command that we act on goodness without a reward in return. This is part of our cultural fiber.

Quvianġuniq – Humor.
Indeed, laughter is the best medicine!

Aŋuniallaniq - Hunting Traditions.
Reverence for the land, sea and animals provides the foundation for our hunting traditions.

Iñupiuraallaniq - Knowledge of Our Language.
With our language we have an identity. It helps us to find out who we are in our mind and in our heart.

Piqpakkutiqaġniq suli qiksiksrautiqaġniq utuqqanaanun allanullu - Love and Respect for our Elders and One Another.
Our elders model our traditions and ways of being. They are a light of hope to younger generations. May we treat each other as our elders have taught us.

Qiksiksrautiqaġniq iñuuniaġvigmun - Respect for Nature.
Our Creator gave us the gift of our surroundings. Those before us placed ultimate importance on respecting this magnificent gift for future generations.

Aviktuaqatigiigñiq – Sharing.
It is amazing how sharing works. Your acts of giving always come back.

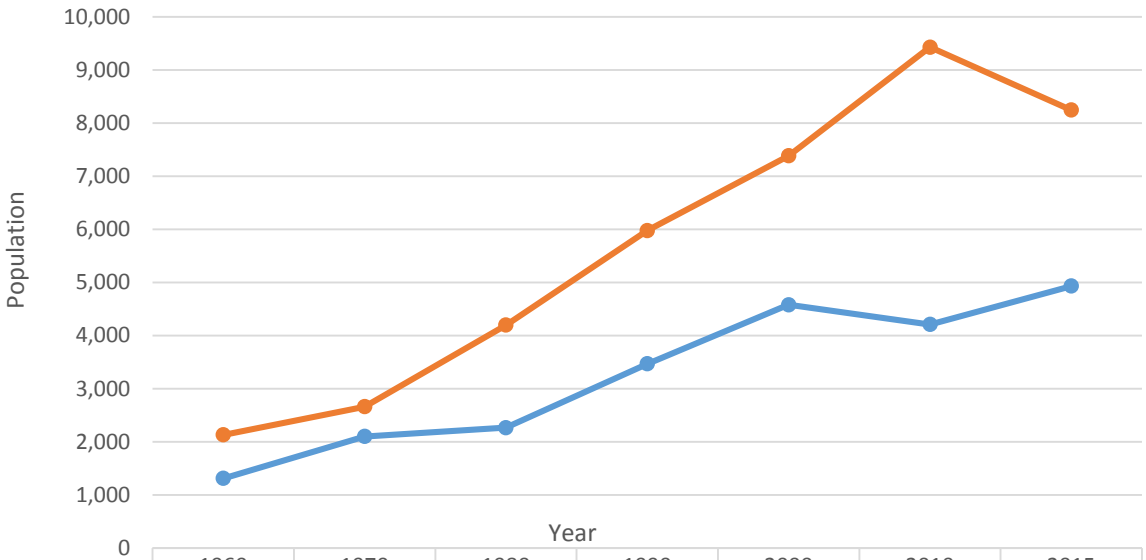
Ukpiqqutiqaġniq – Spirituality.
We are a spiritual people.

2.4. Population

The majority of residents in Barrow are Iñupiat and are Native Village of Barrow Tribal members. Barrow grew significantly over since the City incorporated in 1958 but experienced a slowed growth, and even a slight population decrease, during the early 2000s. Since 2010, the population has increased from 4,212 to an estimated 4,825, an approximately 15% increase over just four years.

In 2010 the State of Alaska and the North Slope Borough did not agree with the number of residents collected for the State census. The North Slope Bough conducted an independent census count and officially challenged the State's count, arguing that the actual population was 762 in 2010 higher than reported by the State (NSB, 2010). The population figures below are from the State of Alaska census.

Figure 4: Barrow and North Slope Borough Population History 1960 - 2015



	1960	1970	1980	1990	2000	2010	2015
BRW Population	1,314	2,104	2,267	3,469	4,581	4,212	4,933
NSB Population	2,133	2,663	4,199	5,979	7,385	9,430	8,246

Source: U.S Department of Commerce, 2016; Bergerson, Jason, 2016.

Of the eight villages on the North Slope, Barrow is the largest and most diverse. Sixty-five percent of the population is Iñupiat Eskimo, an indigenous Inuit ethnic group that has inhabited the area for over 1,500 years. Other Native Alaskans make up only 0.8 percent of the total population. After Iñupiat Eskimos, the next largest group is Caucasians, making up 15.8 percent of the population. Other ethnicity groups include Filipinos and Pacific Islanders (NSB, 2010). Because the majority of residents are Inupiat Eskimos, traditional subsistence activities are a large and active part of the culture.

2.5. Housing

Barrow is suffering a severe housing shortage. According to the North Slope Borough 2010 Economic Profile and Census Report, there are 1,644 total dwelling units in Barrow (NSB, 2010). While both the NSB Census and the 2010 Decennial Census indicate that there is a healthy vacancy rate in Barrow, residents have provided anecdotal evidence that does not support this. The rate of overcrowding is a frequently used indicator to assess housing affordability, economic health and the quality of life within a community. The 2008-2012 American Community Survey 5-Year estimates indicate that 13% of households in Barrow are overcrowded, 4% of which are severely overcrowded. By comparison, the national average for overcrowding is 2.3% and severe overcrowding is 1.0% (U.S. Department of Commerce [US DOC], 2015a; US DOC, 2015b). A high rate of overcrowding in Barrow is also an indicator that there is not sufficient vacant housing.

Figure 5: Barrow Home

Source: UMIAQ, 2015b

Many efforts are being made in response to the housing shortage. Both Tagiugmiullu Nunamiullu Housing Authority (TNHA), the local housing authority, and NVB are constructing homes. The NSB has dedicated capital funds to assist in remedying the crisis across the North Slope communities. It has also formed the Housing Solutions Group to provide technical assistance for all North Slope residents with financing, land purchase and home construction. NVB has also used IRR funds to design and permit roads to shareholder lots, enabling members to construct homes on lots owned by the local native corporation, Ukpeagvik Iñupiat Corporation (UIC). Road construction is expected to begin during the summer of 2016.

2.6. Natural Environment

Climate. Barrow is a polar desert, an area with annual precipitation of less than 9.84 inches and a mean temperature during the warmest month of less than 50 °F. Barrow averages less than five inches of rainfall equivalent[2] annually. Whiteout conditions from blowing snow and extremely cold windchills are common during winter months. The Chukchi Sea is usually ice-free in late July and remains that way until late October. Barrow has the lowest average temperatures of any city in Alaska. The temperature often remains below freezing from early October through late May. The temperatures are moderated by both the surrounding flat and treeless tundra and the community's proximity to maritime water. Winters in Barrow are long and harsh while summers are short and mild. February is typically the coldest month of the year; temperatures average - 14 °F while in July, typically the warmest month, temperatures average 47 °F. The daily minimum temperature is below freezing more than 300 days of

[2] Twelve inches of snow contains approximately equal water content to one inch of rain.

the year and can fall below freezing any day of the year. The sun sinks below the horizon on about November 18th for about 65 days and does not rise again until about January 23rd of each year. There are also 82 days of continuous daylight during the summer months; on May 10th or 11th each year, the sun rises and does not set again until about August 1st or 2nd.

Geology and Vegetation. The predominant land type in the Barrow area is tundra characterized by hundreds of lakes, swampy areas and drained thaw-lake basins. The tundra is formed over a continuous region of deep permafrost. Undisturbed permafrost, generally located outside the developed areas, is tundra covering ice-rich frozen soils that may be up to several hundred feet deep. In and around Barrow, there is significant scarring of the permafrost from vehicular traffic, development and/or previous clean-up activities. In these areas, the ground is assumed to consist of degraded permafrost. Disturbed landscape from gravel roads and building pads within the developed area alter the natural function of vegetation and make categorization difficult.

Careful siting of future development can minimize impacts to higher value wetland areas, often a habitat for sensitive wildlife species or natural functions, such as water purification, flood protection, shoreline stabilization, or groundwater recharge. Focusing development in areas with less valuable wetlands can also reduce the financial costs of mitigation.

Wildlife. The Barrow area is home to a wide variety of animal species that include polar bear, arctic fox, caribou and migratory birds.

Common species that are either candidates or are listed as threatened or endangered by the U.S. Fish and Wildlife Service include:

- Bowhead whale, endangered
- Polar bear, endangered
- Pacific walrus, candidate
- Steller's eider, endangered
- Spectacled eider, endangered
- Yellow-billed loon, candidate

Climate Change. Alaska has warmed more than twice as quickly as the rest of the United States over the past 60 years; the statewide average annual air temperature has increased by 3°F and average winter temperature by 6°F. Average annual temperatures in Alaska are projected to rise by an additional 2°F to 4°F by 2050. If global emissions continue to increase during the remainder of this century, temperatures can be expected to rise 10°F to 12°F in northern Alaska. Even with substantial emissions reductions, Northern Alaska is projected to warm by 6°F to 8°F in the north by 2100. The dramatic changes would have great impacts on North Slope communities, which would be highly vulnerable to climate change because of the impacts on subsistence activities and the strong cultural connection to the land and the sea (U.S. Global Change Research Program, 2014). Warming temperatures threaten not only migratory patterns of terrestrial and marine mammals, but also the ability to store traditionally harvested food in ice cellars. Many ice cellars have been failing in recent years.

2.7. Barrow Infrastructure

Barrow is the largest community on the North Slope and is the government, transportation, economic and administrative center of the North Slope Borough and has infrastructure needs that reflect that role in the region. Public facilities are depicted in Figure 8.

Barrow Utilities & Electric Cooperative, Inc. (BUECI) is a member owned cooperative. It provides the majority of Barrow with water, sewer and electric service. It operates under an elected nine member board of directors and has approximately 55 full-time employees. The North Slope Borough maintains ownership of most of the facilities while BUECI operates and maintains them. The NSB subsidizes capital infrastructure improvements by including upgrade projects in the NSB capital improvement program (CIP).

Power. The power plant is operated by BUECI. There are seven generators in the power plant with maximum production capacity of 20.5 megawatts (MW). The current capacity of the power plant is well above the anticipated requirements of potential community growth over the next twenty years (North Slope Borough, 2005).

Water. The water system distributes potable water using a circulating water piping network via direct bury or within the Barrow Utilidor system. There are some homes and businesses that are not connected to the water distribution system and instead depend on private truck distribution. The water is then stored in individual above ground tanks. BUECI has a storage capacity of 1.5 million gallons of water and the water treatment plant can process up to 345,000 gallons per day. Water is pumped from Lower Isatkoak Lagoon Reservoir into the BUECI water treatment plant for processing. The treatment plant can process enough for anticipated future population growth over the next twenty years (NSB, 2005).

Wastewater. BUECI also operates the wastewater collection and treatment system. The wastewater flows are gravity fed to pump stations located throughout Barrow, collected using sewage lines. The treatment plant is expected to reach capacity in 2026 (NSB, 2005)

Natural Gas. In 1984, the federal government transferred 19 existing natural gas wells and subsurface resources to the North Slope Borough for community use. North Slope Borough capital contributions have greatly subsidized natural gas production and deliverability for residents.

Solid Waste. The NSB Barrow landfill is an Alaska Department of Environmental Conservation (ADEC) permitted Class II Municipal Solid Waste Landfill. The North Slope Borough provides refuse service to commercial businesses and households free of charge. The current landfill site, opened in 2008, is located approximately four miles southeast of Barrow and is accessed from Eastfield Road. This landfill will have eleven cells when completely constructed (NSB, 2005).

Education. The North Slope Borough School District operates four schools in Barrow. During the 2013-2014 school year, Ipalook Elementary School had an enrollment of 691 students in K3, K4 and kindergarten through fifth grades; Hopson Middle School had 247 students in sixth, seventh and eighth grades; and Barrow High School has 207 students in grades ninth through twelfth. Kiita Learning Community, an alternative high school, had an enrollment of 44 students in grades nine through twelve (Alaska Department of Education and Early Development [AK EED], 2014). The North Slope Borough School District provides bus transportation for all students.

Public Safety. Emergency services include police, fire, search and rescue and risk management. These services are provided by the NSB. The NSB Police Department's headquarters are in Barrow, as are the jail and 24-hour dispatch center. The NSB Fire Department, also headquartered in Barrow, responds to fires and other emergencies. Staff includes medical professionals for critical care air ambulance and medevac services, instruction at Iḷisaġvik College and fire prevention and safety programs for school children. There is one fire station in Barrow, another in Browerville and a third proposed to be located at the Cakeeater Road and the Laura Madison extension intersection. NSB Search and Rescue provides medevac, search and rescue and other emergency services with four dedicated aircraft, including a new helicopter that is expected to be delivered in December 2015. There is also a volunteer search and rescue organization in Barrow. NSB Risk Management Division provides disaster coordination and emergency preparedness and response. Risk Management stores supplies and equipment for immediate deployment in the case of an emergency.

Communication Services. Telecommunications service in Barrow include a fully digital local exchange telephone system, internet service, cellular telephone service, cable television, public radio broadcast and a public teleconferencing center. Quintillion, an Alaskan owned company, is proposing to develop a subsea communication network linking six Alaska communities, including Barrow, to provide high-speed internet and communication capabilities. The fiber optic cable will tie into an existing terrestrial fiber optic cable that available to residents in the first quarter of 2017.

Health Care. Barrow is the regional center for many North Slope Borough Health Services. The primary providers include Arctic Slope Native Association (ASNA), NSB Health Department and the State of Alaska Department of Health and Social Services. Residents of Point Hope and Anaktuvuk Pass typically travel to Anchorage or Fairbanks for health care.

Religious Services. There are seven churches offering worship services in Barrow: Inupiat Assembly of God, Calvary Bible Baptist, Utqiagvik Presbyterian, Church of Jesus Christ of Latter-day Saints, Cornerstone Community, Saint Patrick Catholic and Barrow Seventh Day Adventist.

Commercial. Barrow has three hotels, six restaurants, a dry cleaner, fur shop and a bank. There is one large grocery store, Alaska Commercial Company (AC), and three smaller convenience stores: Arctic Coast Trading Post, Arctic Grocery and AC Quick Stop. There are also several hardware stores, auto mechanic services, private practice dentists, a coffee shop, a U.S. Post Office and several small gift shops.

2.8. Barrow Land Ownership

Ukpeaġvik Iñupiat Corporation (UIC), the village Native Corporation established under ANSCA, is the primary landowner in Barrow. UIC is owned by approximately 2,500 Iñupiat shareholders. UIC has selected and received 175,620 acres under ANCSA sections 14(a), 12(b) and the NARL Transfer Agreement with the U.S. Navy and has 7,177 acres remaining to select to receive its full ANSCA land entitlement. In Barrow, the Arctic Slope Regional Corporation (ASRC) owns the subsurface estate to over 175,000 acres of land beneath UIC surface estate.

In addition to private ownership, there are restricted townsite lots. The 1926 Alaska Native Townsite Act was passed by the United States Congress to convey public lands to Native Alaskans for homes within villages. All the townsite acts were repealed by the passage of the Federal Land Use Policy and Management Act (FLPMA) in 1976. However, lots that were already designed as Native restricted lose their status. There are at least 200 restricted lots within Barrow that the property owner cannot lease, sell or convey without obtaining approval from the BIA.

The State of Alaska, NSB, City of Barrow, Native Village of Barrow, federal government, housing authority, utility company and religious institutions are also land owners in Barrow. Barrow and Browerville land ownership is illustrated in Figures 6 and 7.

This page is intentionally left blank

- CORPORATION (COR)
- CITY (CTY)
- FEDERAL (FED)
- HOUSING AUTHORITY (HAS)
- NATIVE RESTRICTED (NAT)
- NORTH SLOPE BOROUGH (NSB)
- RELIGIOUS (REL)
- SHAREHOLDER (SHR)
- STATE OF ALASKA (SOA)
- PRIVATE (PVT)

SOURCE:
Imagery: 2014 UMIAQ
NSB GIS PARCELS
***Ownership was derived from 2014 NSB Assessor's data.**

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BARROW, ALASKA OWNERSHIP

Scale:
0 280 560 840 1,120 1,400 Feet

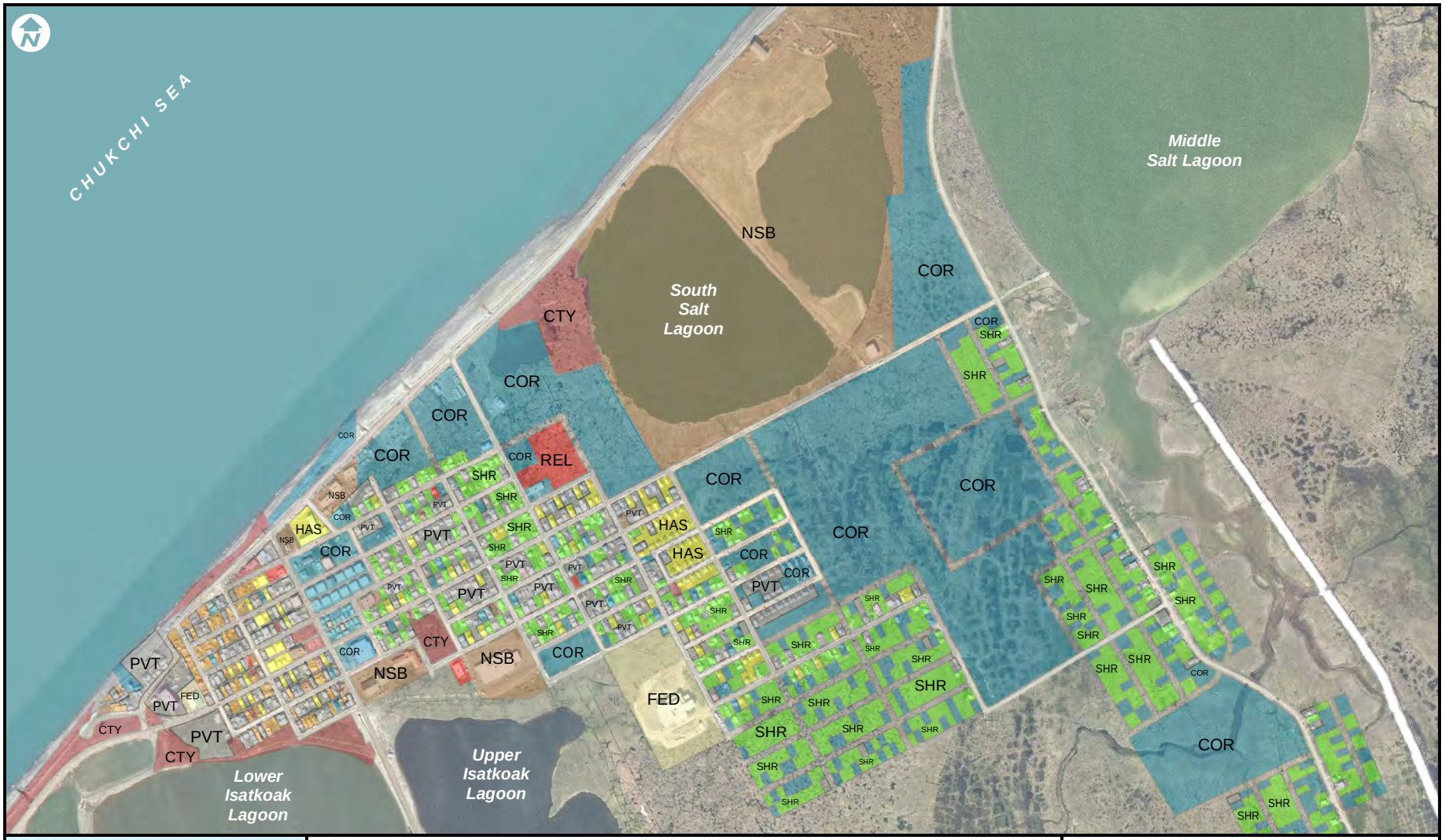
Figure: **6**

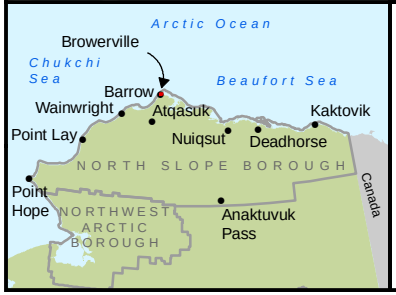
UMIAQ

10/29/2015

UMQ: BRW_NVB_OWNER_r00

This page is intentionally left blank





- CORPORATION (COR)
- CITY (CTY)
- FEDERAL (FED)
- HOUSING AUTHORITY (HAS)
- NATIVE RESTRICTED (NAT)
- NORTH SLOPE BOROUGH (NSB)
- RELIGIOUS (REL)
- SHAREHOLDER (SHR)
- STATE OF ALASKA (SOA)
- PRIVATE (PVT)

SOURCE:
Imagery: 2014 UMIAQ
NSB GIS PARCELS
***Ownership was derived from 2014 NSB Assessor's data.**

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BROWERVILLE, ALASKA
OWNERSHIP

Scale:
0 500 1,000 1,500 2,000 2,500 3,000 Feet

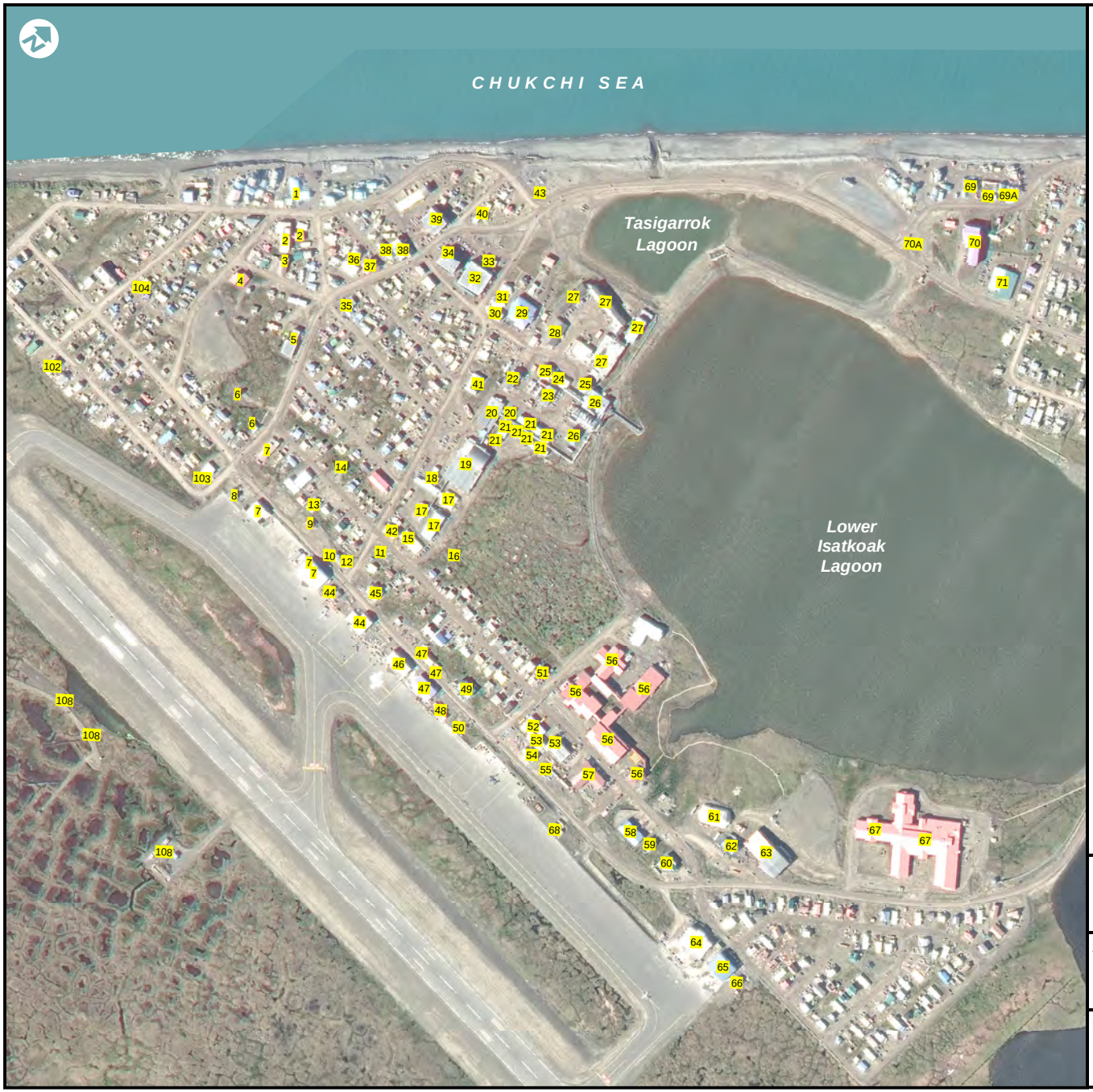
Figure: 7

UMIAQ

10/29/2015

UMQ: BROW_NVB_OWNER_r00

This page is intentionally left blank



ID	FACILITY	ID	FACILITY
1	City of Barrow - Community Hall	39	Wells Fargo Bank
2	NSB - Wellness Center	40	ASTAC
3	St. Patrick's Catholic Church	41	Armory
4	Alaska Eskimo Whaling Commission	42	Airport Inn
5	NSB Fire Department	43	Sadie Neakok Playground
6	National Weather Service	44	RAVN Alaska - Terminal
7	RAVN Alaska	45	ASRC Warehouse
8	Federal Aviation Administration	46	State of Alaska
9	NSB Transit Transfer Station	47	RAVN Alaska
10	City of Barrow	48	King Eider Inn
11	City of Barrow	49	Barrow Arctic Science Consortium
12	Visitor's Center	50	NSB - Management Information System Department
13	Cavalry Baptist Church	51	NSB School District - Bus Barn
14	Dental Clinic	52	NSB
15	TNHA Main Office	53	UIC - Car Rentals
16	BUECI Gas Line Valve Station	54	SKW Eskimos - Offices
17	NSB School District Housing	55	Barrow High School
18	NSB Grants division	56	NSB - Public Works Department
19	City of Barrow - Roller Rink	57	NSB School District - Maintenance & Operations
20	NSB School District	58	KBRW Radio Station
21	NSB School District - Housing	59	NSB - Health Department/Children & Youth Services
22	BUECI Main Office	60	Tuupikpuk Ice Rink
23	BUECI Bus Plant	61	City of Barrow - Main Office
24	BUECI Water Plant	62	Piuraagvik Recreation Center
25	BUECI Water Storage Tank	63	NSB - Rish Management Office/Shipping & Receiving
26	BUECI Water Storage Tank	64	NSB - Search & Rescue
27	ASNA	65	NSB
28	ASNA Warehouse/Garage	66	Arctic Helicopter Company
29	NSB Main Office	67	Fred Ipalook Elementary School
30	CE Building	69	ASRC
31	Ukeagvik Presbyterian Church	69A	ASRC Polaris Shop
32	UIC/Quickstop/SOA Courthouse	70	Top of the World Hotel
33	NSB Assessing Division/CPD	70A	Aarigaa Java
34	ASRC	71	U.S. Post Office
35	NSB Health Department	102	NSB Planning Department
36	Assembly of God Church	103	Boys & Girls Club
37	NSB School District - Central	104	ASTAC - Garage
38	NSB Police Department	108	SOA - DOT

SOURCE:
Facilities - NSB & DCCED
As Identified on
Community Mapping Sheets

DISCLAIMER

FOR INFORMATIONAL PURPOSES ONLY.

NATIVE VILLAGE OF BARROW

BARROW, ALASKA FACILITIES

Scale:

0 300 600 900 1,200 1,500 Feet

Figure: 8

UMIAQ

10/29/2015

UMQ: BRW_NVB_FACILITIES_r00

This page is intentionally left blank

2.9. Prior Long Range Planning

Successful administration of the Native Village of Barrow transportation program, including the IRR, depends on close cooperation with other organizations that actively own and maintain various transportation rights-of-way and services. The principal public agency involved with transportation infrastructure development and maintenance is the North Slope Borough. The State of Alaska Department of Transportation and Public Facilities and the City of Barrow also play a role in transportation planning in Barrow. In addition to public agencies, there are private and non-profit organizations that either provide alternative transportation services, such as the Iḷisaġvik shuttle and taxi companies, or have distinct transportation services needs based upon their specific services they provide, such as the NSB Health Department providing senior and health care services.

Table 1: Prior Long Range Planning

Planning Effort	Completion Date
Barrow Airport Master Plan	1983 / 2000 / 2014
Northwest Alaska Transportation Plan	2004
North Slope Borough Comprehensive Plan	1983 / 2005
North Slope Borough Transportation Plan	2005
City of Barrow Local All Hazard Mitigation Plan	2005
Barrow Comprehensive Plan	2014
Native Village of Barrow Long Range Transportation Plan	2010 / 2012
North Slope Borough All Hazard Mitigation Plan	2015

The first **North Slope Borough Comprehensive Plan** was adopted in 1983. Attempted revisions were undertaken in both 1993 and 1998 with an adopted update in 2005. A **NSB Transportation Plan** was developed and adopted in conjunction with the 2005 Comprehensive Plan update and is incorporated as now an element within the Comprehensive Plan. The 2005 NSB Transportation Plan provides an inventory of existing community and regional transportation networks on the North Slope, identifies important transportation issues facing the borough, presents objectives and policies to address those issues and analyzes the borough's fiscal ability to maintain their transportation network. The **Barrow Comprehensive Plan**, adopted in 2014, is also an element of the NSB Comprehensive Plan.

The **Northwest Alaska Transportation Plan**, adopted in 2004 by the State of Alaska as an element of the Alaska Statewide Transportation Plan, is one of six regional plans for the State of Alaska that were prepared by the Alaska Department of Transportation and Public Facilities. These plans are regional and multi-modal transportation in nature with a goal to define the transportation network improvements that were needed to promote economic development and to meet existing and projected demand for transportation services with a focus on investment for sustained development.

The **Barrow Airport Master Plan** update was competed in 2014. It focuses on comparing aviation demand with existing conditions and facilities to identify future development needs over the next twenty years and to guide that development cost-effectively while considering potential environmental and socioeconomic impacts.

The **2005 City of Barrow Local All Hazard Mitigation Plan** includes assessment of the risks and which facilities or infrastructure are vulnerable to a disaster, provides a mitigation strategy and methods for evaluating and monitoring the plan. The Barrow plan has recently been updated with the **North Slope Borough All Hazard Mitigation Plan**. This plan is hazard specific; it describes each potential hazard, and the North Slope villages that are susceptible while also providing mitigation strategies.

Chapter 3: Barrow Transportation System

A transportation system is made up of different element, functions that work together to create a network. The Barrow community is not connected by road to the rest of Alaska. However, there is a network of community trails, roads, pedestrian walkways, parking lots and water and air transport facilities that provide residents and visitors mobility within the community. An inventory was conducted to better understand how these elections work together. This section provides a comprehensive overview of Barrow's transportation system.

3.1. Barrow Road Network

Barrow is not connected by road to the rest of Alaska. While the majority of traffic generators are within the community itself, residents also frequently travel outside the community for subsistence activities and to visit neighboring communities via snow machine in the winter months or via boat during the summer months.

There are several community centers that influence trip generation and the flow of traffic. From north to south, they are: the Naval Arctic Research Laboratory (NARL), important for science research and home of Iḷisaġvik College, NSB Department of Wildlife Management; Browerville, where the majority of the residential homes are located; the City Center of Barrow, the primary office and business area of the community.

Naval Arctic Research Laboratory. The Naval Arctic Research Laboratory (NARL) facilities were constructed in 1947 for scientists to conduct studies on arctic issues. At its height, NARL consisted of nearly 200 buildings, an airstrip, and an antenna field. After the U.S. Navy ended its support for research in 1980, the parcel was divided. NARL now consists of former laboratory and support buildings clustered along the coast between Imikpuk Lake and Middle Salt Lagoon and is owned by the village Native Corporation, Ukpeagvik Inupiat Corporation (UIC). Current uses within NARL include Iḷisaġvik College, a hotel, limited offices and residences, most of which focus on either science research or education and equipment and material storage. The Barrow Arctic Research Center (BARC) and Barrow Environmental Observatory (BEO) are located southeast of NARL.

The proposed Tom Gordon Expressway/Uivaqsaagiaq Road would provide a Stevenson Street alternative connection to NARL and BARC. Once constructed, Tom Gordon Expressway/Uivaqsaagiaq Road would begin at the Laura Madison/Cakeeater Road intersection and follow the south shore of Middle Salt Lagoon, terminating at BARC. Figure 24 illustrates the proposed location of the Tom Gordon Expressway/Uivaqsaagiaq.

Browerville. Browerville is a suburb located north of Barrow, across Isotkoak Lagoon and connected by Eben Hopson and Ahkovak streets. Browerville includes residential homes; a U.S. Post Office; the primary grocery store, AC or Stuaqpuk; Kiita Learning Community and Eben Hopson Middle schools;

Native Village of Barrow and Iñupiaq Community of the Arctic Slope (ICAS) offices; Iñupiat Heritage Center; Tuzzy Consortium Library; some NSB government offices; several small businesses including a hotel, two restaurants, two auto parts stores and a gas station. The new Samuel Simmonds Memorial Hospital has become a new center of community activity and the newly constructed Yugit Street Extension provides alternative hospital access from Ahkovak Street. Traffic flow is concentrated along Ahkovak Street and Laura Madison Street connecting with Eben Hopson Street to cross to / from Barrow and along Stevenson Street. As Barrow and Browerville continue to grow, additional space will be needed for institutional, commercial and residential development. The area around the hospital offers future growth opportunity, especially for non-residential uses. Subdivisions in both Browerville and along Cakeeater Road have been platted to accommodate future residential growth. The 2015 Barrow Comprehensive Plan offers alternative development scenarios to proactively plan for Barrow's future.

Barrow. The City Center of Barrow includes the Wiley Post – Will Rogers Memorial Airport, NSB Police Station, village and regional native corporation headquarters, the State of Alaska Court system, Piuraagvik Recreation Center, Fred Ipalook Elementary and Barrow High schools, the State of Alaska Court system, several hotels, government offices and facilities, utility offices and production/treatment facilities, and local businesses such as Wells Fargo Bank, convenience stores, hotels and restaurants. The main thoroughfares in Barrow are Eben Hopson Street from the U.S Post Office across Tasigarrok Lagoon to the Bank Building; Ahkovak Street, owned by the State of Alaska, that connects Browerville with the airport; Okpik street that runs in front of Barrow High School; and Momeganna Street running north south connecting to Eben Hopson Street to cross to Browerville.

Other Destinations. Community destinations other than NARL, Browerville and Barrow include the Niksiuraq boat ramp that is approximately six miles north of Barrow; the NARL barge off-loading beach site; Barrow High School football field; and the U.S. Navy runway that is used for fall subsistence whaling activities.

Future Development. Additional development will occur in Barrow. There is currently a need for additional roads and utility infrastructure to shareholder lots in Browerville as one way to relieve the housing crisis. Additional potential facilities indicated in the 2015 Barrow Comprehensive Plan include another fire station and/or police station in Browerville, Iḷisaġvik College relocating near the hospital or in Barrow city center; daycare(s); a consolidated NSB administrative building among others. All of these potential developments should consider traffic impacts during the planning and design phases to ensure safe and efficient circulation throughout the community. This Plan does not provide projected travel demand for potential new development or for the community in general. Without oil and gas development, the Barrow population is expected to increase to 6,379 residents, up from 4,973 in 2010 (NSB, 2015). The additional 1,406 people in Barrow could strain the existing transportation network and should be evaluated in the near future at both a community level and by individual development.

3.2. Functional Classification Systems

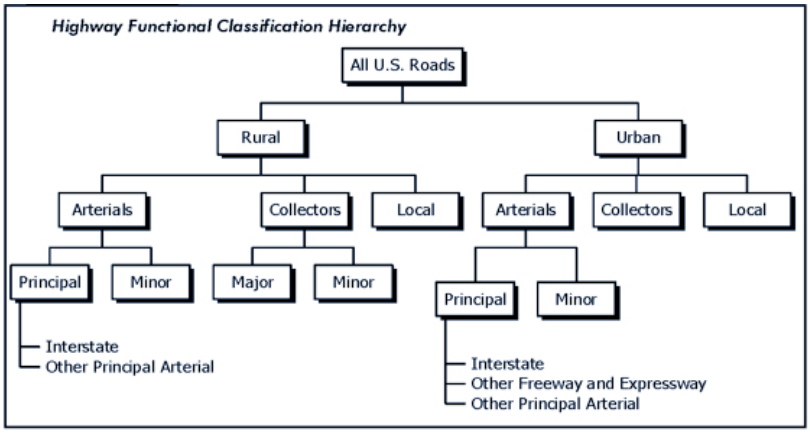
Functional classification is a system to group streets and highways into classes, or systems, by the type of service they are intended to provide. A functional classification system delineates how travel can be channeled within a transportation network in a logical and efficient manner by defining the part that any particular road or street should play in serving the flow of trips through a highway network.

3.2.1. State of Alaska DOT&PF Functional Classification System

The three overarching functional classification categories used by the State of Alaska and the U.S. Department of Transportation are arterial, collector and local roads. An arterial road's primary function is to move through-traffic at high speed over long distances with limited access to adjacent property and cross traffic. Local roads allow shorter trips at lower speeds and are intended to accommodate cross-traffic. Definitions of these general functional classifications are provided below.

Arterials. There are two types of arterials: principal and minor. Principal arterials, also known as major arterials, include U.S. and Interstate highways as well as state highways that serve urban areas with a population greater than 50,000. Principal arterials usually have four traffic lanes with two lanes in each direction, allow left turns at most intersections and are separated by a median or continuous left turn lane. There is not a principal arterial in Barrow. Minor arterials are routes that provide interstate and inter-county service to urban areas with populations of less than 25,000 and other traffic generators capable of attracting travel over long distances. Minor arterials may only have two traffic lanes and allow left turns at major intersections. There are several rural minor arterials in Barrow, forming an circle around Isatoak Lagoon beginning on Momeganna Street heading south, connecting to Ahkovak Street and passing in front of the Wiley Post – Will Rogers Memorial Airport, continuing into Browerville and turning south on Laura Madison Street to the Eben Hopson Street intersection with Church Street[3]. There are approximately 2.4 miles of rural minor arterial roads.

Figure 9: Federal Highway Administration Functional



Source: U.S. DOT, 2006

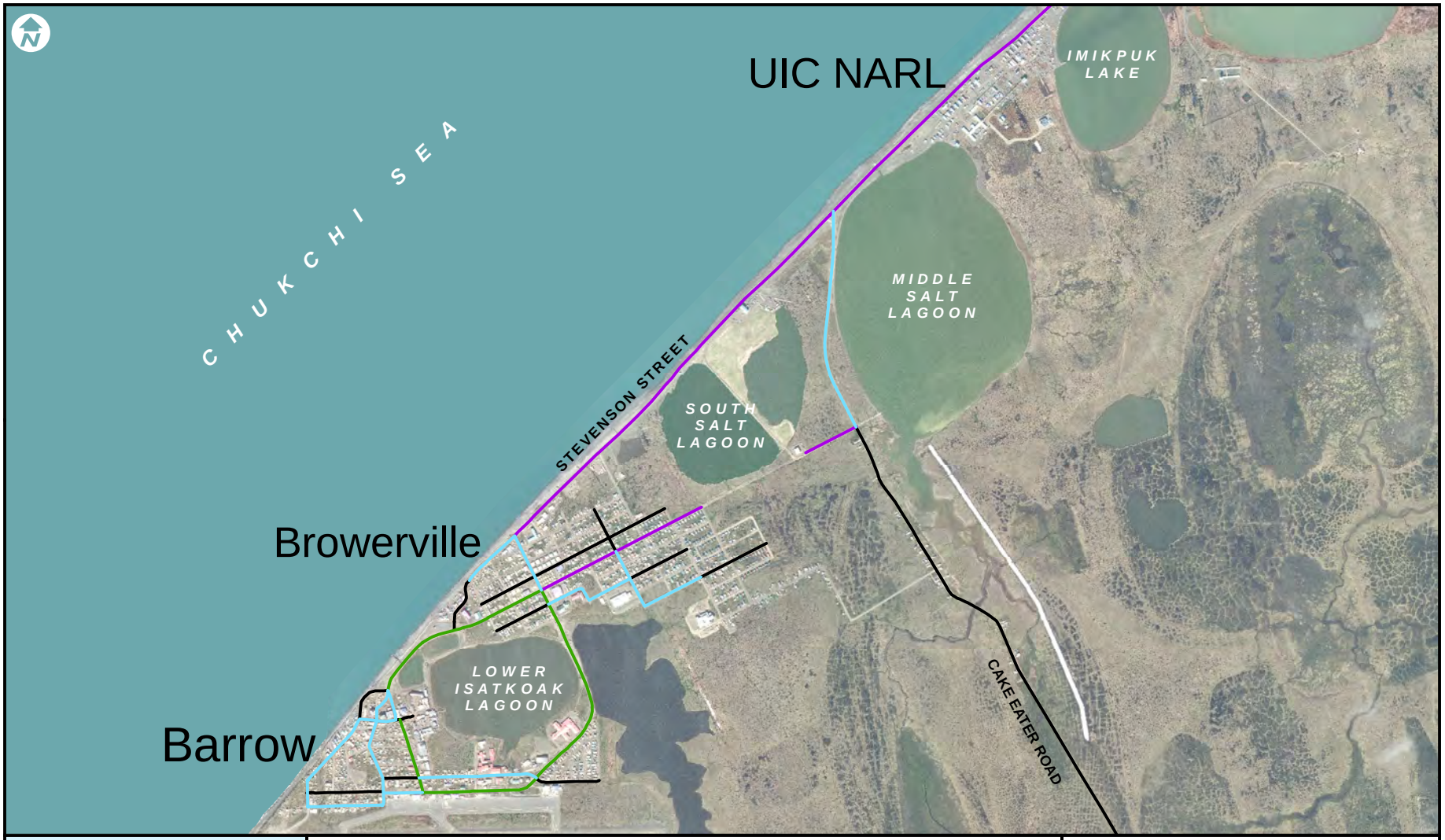
Collectors. These roads are generally intended to have shorter travel distances than arterials and are primarily regional importance rather than statewide importance. Collectors allowing access to abutting properties, providing a greater balance between mobility and land access. There are two categories of collectors: major and minor. Major collectors provide service to communities not served by an arterial

[3] Where differences occur between the 2011 DOT&PF Functional Classification Update Project and the Alaska DOT&PF Roadway Data Mapping webpage, this report defers to the Alaska DOT&PF Roadway Data Mapping webpage.

or areas of regional importance. There are two rural major collectors in Barrow: Laura Madison Street from Ahkovak Street to its terminus at Qaiyaan Street[4] and Stevenson Street from Ahkovak Street to the North Salt Lagoon (Alaska Department of Transportation and Public Facilities [AK DOT&PF], 2015a). Rural minor collectors are spaced at intervals consistent with population density, collect traffic from local roads, and provide access to all developed areas within a reasonable distance of a major collector or higher classified road. A minimum right-of-way width of 80 to 100 feet is desirable for a collector. There are a number of rural minor collectors, including in Barrow: Agvik Street; Kiogak Street; Pisokak Street; Apayauk Street; Stevenson Street; Okpik Street from Momeganna Street to Ahkovah Street; and the small segment of Ahkovah Street from Kiogak to Momeganna streets; in Browerville: Stevenson from Tahak to Ahkovah streets; Ahkovah Street from Stevenson to Laura Madison streets; from North Star Street north of Ahkovah Street through C Avenue and Transit Street; A Avenue from Laura Madison to Yugit streets; and Yugit Street from A Avenue to Uula Street. Cakeeater Road from Stevenson Street to the Laura Madison Extension is also classified as a rural minor collector. There are approximately 7.4 miles of rural major collector roads and 4.3 miles of rural minor collector roads in Barrow.

Local Roads. The majority of roads in Barrow carry both low volume and low speed traffic with a principal purpose to provide access to residential neighborhoods. Local roads are often classified by default; once arterials and collectors are identified, the remaining roadways are classified as local roads (U.S. DOT, 2013b). There are nearly 40 miles of local roads.

[4] The DOT&PF Roadway Data Mapping webpage does not illustrate the newly completed Laura Madison extension to Cakeeater Road. However, the portion of Laura Madison Extension that provides access to the Sewage Treatment Facility is identified as a major collector.



ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE FUNCTIONAL CLASSIFICATION INFORMATION

- MINOR ARTERIAL (~2.4 Miles)
- MAJOR COLLECTOR (~7.4 Miles)
- MINOR COLLECTOR (~4.3 Miles)
- LOCAL

SOURCE:
Imagery: 2014 UMIAQ

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BARROW, ALASKA
AKDOT & PF
FUNCTIONAL CLASSIFICATION

Scale:
0 0.25 0.5 0.75 1 Miles

Figure: 10

UMIAQ

11/4/2015

UMQ: BRW_NVB_FUNC_CLASS_OVR_r02

This page is intentionally left blank

3.2.2. Bureau of Indian Affairs Functional Classification System.

The BIA has a functional classification system for Tribal roads that is used to delineate the difference between the various road standards eligible for funding under the IRR program. As part of the IRR system management, all transportation facilities included on or added to the IRR inventory must be classified according to the functional classifications below (U.S. DOI, 2004; U.S. Government Publishing Office [U.S. GPO], 2015). There are approximately 52 miles of unpaved roads within the Barrow community (NSB, 2005).

Class 1. Major arterial roads providing an integrated network with characteristics for serving traffic between large population centers, generally without stub connections and having average daily traffic volumes of 10,000 vehicles per day or more with more than two lanes of traffic.

Class 2. Rural minor arterial roads providing an integrated network having the characteristics for serving traffic between large population centers, generally without stub connections. May also link smaller towns and communities to major resort areas that attract travel over long distances and generally provide for relatively high overall travel speeds with minimum interference to through traffic movement. Generally provide for at least inter-county or inter-state service and are spaced at intervals consistent with population density. This class of road will have less than 10,000 vehicles per day.

Class 3. Streets located within communities serving residential areas.

Class 4. Rural major collector roads are collectors to rural local roads.

Class 5. Rural local road that is either a section line and/or stub type roads, make connections within the grid of the IRR system. This class of road may serve areas around villages, into farming areas, to schools, tourist attractions, or various small enterprises. Also included are roads and motorized trails for administration of forests, grazing, mining, oil, recreation, or other use purposes.

Class 6. City minor arterial streets that are located within communities and serve as access to major arterials.

Class 7. City collector streets that are located within communities and serve as collectors to the city local streets.

Class 8. This class encompasses all non-road projects such as paths, trails, walkways, or other designated types of routes for public use by foot traffic, bicycles, trail bikes, snowmobiles, all-terrain vehicles (ATVs), or other uses to provide for the general access of non-vehicular traffic.

Class 9. This classification encompasses other transportation facilities such as public parking facilities adjacent to IRR routes and scenic byways, rest areas, and other scenic pullouts, ferry boat terminals, and transit terminals.

Class 10. This classification encompasses airstrips that are within the boundaries of the IRR system grid and are open to the public. These airstrips are included for inventory and maintenance purposes only.

Class 11. This classification indicates an overlapping or previously inventoried section or sections of a route and is used to indicate that it is not to be used for accumulating needs data. This class is used for reporting and identification purposes only.

3.3. Traffic Volume

The annual average daily traffic (AADT) is the total volume of vehicle traffic of a road for a year divided by the number of days in a year to provide a measurement of the amount of traffic on a given road. It is one of the most basic measurement used for both transportation planning and management and is used to both determine capacity deficiencies and identify potential projects to improvement those deficiencies.

In 2013, the most recent data available from the State of Alaska, an expanded traffic count was taken for Ahkovak Street, Eben Hopson Street, Laura Madison Street and Stevenson Street. Additionally, new 2013 traffic counts were taken on Hopson Street and Karluk Street. There are not any permanent traffic stations in Barrow. Traffic volume data from the State of Alaska is provided below in Table 2, indicating that the traffic volume on virtually all roads included in the count have increased between 2011 and 2013.

Table 2: Traffic Volume Counts

Street	Average Annual Daily Traffic (AADT)[5]		
	2013	2012	2011
Ogrook Street - Stevenson to Kiogak	1,400	1,400	1,300
Ahkovak Street - Takpuk to Kiogak Street	1,950	2,612	2,160
Ahkovak Street - D to Takpuk	1,625		
Ahkovak Street - Stevenson to D	3,600		
Okpik Street - Kiogak to end	1,305	1,265	
Momegana Street - Agvik to Ahkovak	2,160	2,159	1,890
Stevenson Street - Apayuak to Eben Hopson	2,070	2,066	3,380
Hopson Street - Agvik to Eben Hopson	750		
Eben Hopson Street - Hopson to Brower	4,575	4,575	4,530
Eben Hopson Street - Brower to Laura Madison	2,250		
Laura Madison Street - Eben Hopson to Ahkovak	4,225	2,669	3,555
Laura Madison Street - Ahkovak to end	2,670		
Karluk Street - Tahak to Ahmaogak	670		
Stevenson Street - Simmonds to Ahkovak	1,500	1,646	1,955
Stevenson Street - Ahkovak to end (shooting station)	1,795		

Sources: AK DOT&PF, 2013; AK DOT&PF 2014b

[5] Where the State source documents difference in AADT, the number from the Alaska Traffic Counts GIS mapping is provided.

3.4. Vehicle Types

There is a wide variety of vehicles that use Barrow roadways: automobiles, pick-up trucks, ATVs and snow machines are the most common. Also sharing the roadways is an array of heavy equipment that includes road watering trucks and graders, dump trucks, forklifts and loaders as well as buses, ambulances and fire trucks. The State of Alaska Department of Motor Vehicles does not provide the numbers of currently registered vehicle types for Barrow alone. However, the Department does have available data for vehicles registered in 2015 for the entire North Slope, presented in Table 3. Because all of the North Slope villages, with the exception of Barrow, are exempt from registration and mandatory insurance law (Alaska Department of Administration, 2016), most of the vehicles registered in the North Slope are in Barrow. Not included in the data provided by the State of Alaska are the number of registered ATVs or boats.

Table 3: Number and Type of Vehicles Registered in the North Slope Borough in 2015

Vehicle Type	Number
Passenger vehicle	1,080
Motorcycle	35
Commercial Trailer	132
Trailer	84
Commercial truck	1,824
Pick-up	716
Bus	43
Snow machine	328
All vehicles	4,242

3.5. Pedestrian Travel, Trails and Paths

Trails are an important form of travel in rural Alaska, a vast area of wildness with few roads. Trails have always been used for traveling long distance for subsistence activities and to visit with friends and family in nearby communities. The method has changed from dog sleds or walking to summer ATV travel and winter snowmachine travel.

There are many trails link Barrow to other North Slope villages and provide routes for subsistence activity. For travelers to safely arrive at their destinations, trail markers, GPS coordinates and up-to-date maps are all needed. Trail markers are especially helpful in leading disoriented travelers to the nearby communities. They also can advise travelers of the distances to their destinations and warn them of trail changes. Markers area also valuable in finding lost travelers during search and rescue operations. See Figure 11 for a map of multi-use trails in the Barrow area and across the North Slope.

Table 4: North Slope Trails

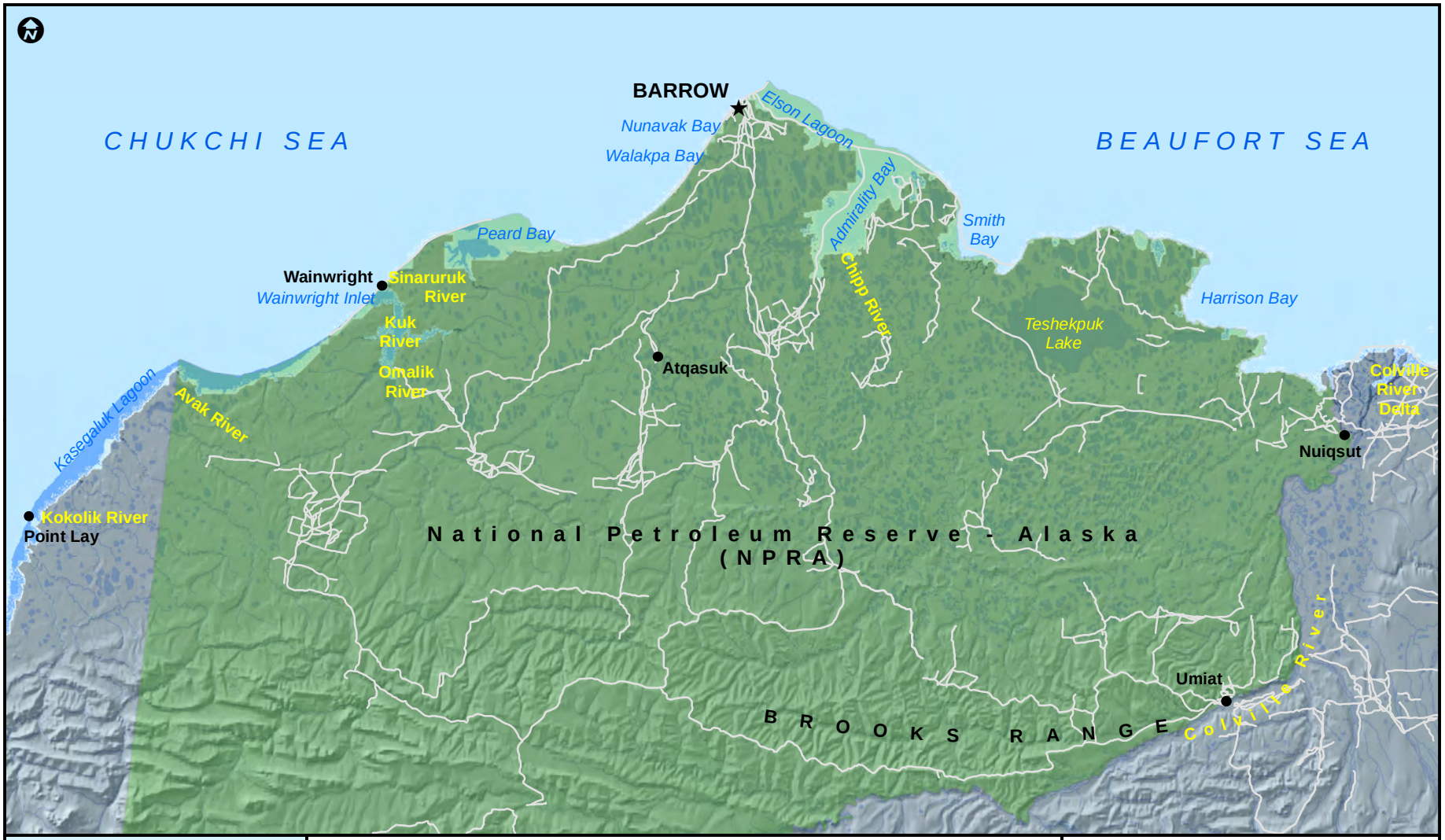
Trail Segments	Distance (miles)
Point Hope to Kivalina	80
Barrow to Atqasuk	60
Deadhorse to Nuiqsut	60
Atqasuk to Wainwright	70
Barrow to Wainwright	90
Wainwright to Point Lay	100
Point Lay to Point Hope	120
Nuiqsut to Anaktuvuk Pass	140
Nuiqsut to Atqasuk	150
Total Mileage	**870**

Source: AK DOT&PF, 2004

The 2004 Northwest Alaska Transportation, prepared by the Alaska Department of Transportation and Public Facilities, indicates that there were 60 miles in trail segments between Barrow and Atqasuk and

90 miles between Barrow and Wainwright. Those communities act as links to villages farther away. The miles of trail segments between North Slope communities is depicted in Table 3.

Barrow residents have traversed the frozen arctic from the Dalton Highway to bring new vehicles and supplies to Barrow. A 2012 PAR analyzed the cost and feasibility of constructing a temporary sea ice route from Prudhoe Bay to Barrow by clearing a path on the grounded sections of sea-ice along the Beaufort shoreline for vehicular transportation with safety area(s). The route would be maintained periodically for serval months to provide safe transportation of goods. While the PAR has been completed, funds have not been dedicated to this project.



TRAILS - Multi Use, Winter, Summer

National Petroleum Reserve - Alaska

Communities and Camps

TRAILS SOURCE:
MapMakers Alaska:
Digitized from 1:250K USGS TOPO

DISCLAIMER

FOR INFORMATIONAL PURPOSES ONLY.
NOT FOR NAVIGATION.

BARROW, ALASKA
TRAILS - MULTI USE

Scale: 0 10 20 30 40 50 Miles

Figure: 11

UMIAQ

10/29/2015

UMQ: BRW_NVB_TRAILS_r00

This page is intentionally left blank

3.6. Maintenance

All public roads are maintained by the North Slope Borough and extensive maintenance is required all year.

- During the summer months when constant winds keep the roads dry even on cloudy days, roads are watered several times a day to control dust. Routine grading is also required throughout the summer to minimize the development of potholes and permafrost thaw spots. Additional gravel cover as new surface course to maintain appropriate road elevations and maintain gravel cover minimums needed over culverts.

- Before accumulated snow piles have melted in the spring, snow is plowed back onto the roads and streets to keep the dust down. If road beds are left untended some thawed areas can develop into deep holes. During spring breakup, Ahkovak Street on the northern side of the Rogers-Post Memorial Airport deteriorates and is frequently impassable. This road is on State property and is currently under design to be upgraded with improved drainage.

- During the winter, the wind drifts snow on most east/west roads on the northern/northeast sides of Barrow, including the portion of Ahkovak Street that turns west towards the Chukchi Sea. The Stevenson Street and Ahmaogak Street intersection is often drifted closed and Stevenson Street north of Ahmaogak Street must be routinely plowed to provide access to NARL, the science district and Iḷisaġvik College. The NSB is responsible for clearing snow on all publically dedicated streets and roadways.

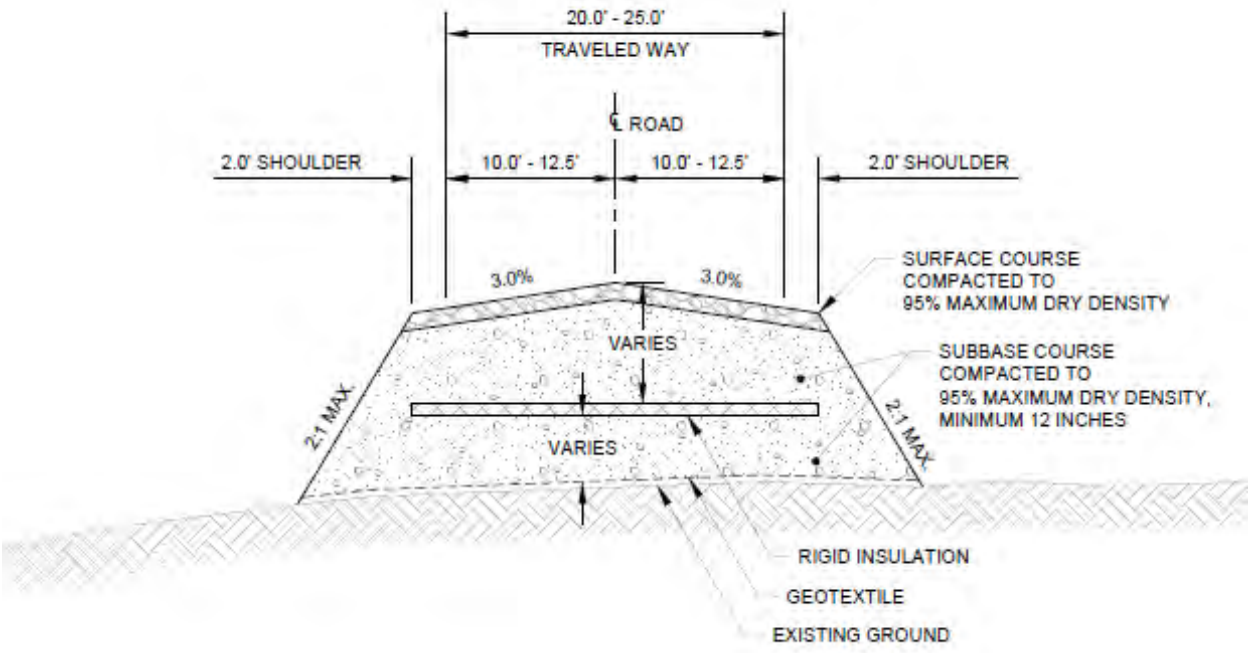
3.1. Road Construction Methodology

Barrow is comprised of tundra, characterized by low laying marshy lakes and swampy areas, with under laying deep, ice-rich permafrost. This permafrost is a soil that has a significant amount of water in it, in the form of ice. In an undisturbed form is stable. However, it does not have the ability to support development such as roads, when thawed, because of this high water content. Surface development compromises the surface insulating properties and without proper engineering practices to preserve the frozen condition, the road development ultimately will fail. To maintain integrity during freeze-thaw cycles, embankment depth and amount of insulation is determined by soil type and underlying permafrost conditions. Utilities in Barrow are buried in the road system, with maintenance trenching done in winter months.

Typical arctic construction methods are used to build roads in Barrow, necessary to preserve frozen layers beneath the road sections. Road design utilizes placement of a thick gravel road prism at a sufficient thickness to establish the insulating value (generally between 4-7 feet of gravel) to keep all heat created by the road from reaching the bottom of the fill. Typically, geotextile fabric is placed first, followed by a well-draining gravel material (subbase) placed on top. Insulation is frequently used to minimize the amount of gravel needed. In simplistic terms, with a layer of blue board sheet insulation in place, less gravel is needed to protect the tundra below, so the road prism thickness can be thinner.

When a coarse gravel material is available, a base surface course (less fines than subbase material) is used as a final layer on the road prism bed to provide additional road stabilization, and protection of traffic wear and tear. The surface course will firm the road surface, and minimize road rutting. A typical road prism cross section is provided in Figure 12, which illustrates the road prism construction details. Culverts are critical to equalize drainage, and are needed to allow surface water to still circulate from one side of the road bed to the other, especially during periods of thaw in the spring and summer. In some circumstances, spring snowmelt causes flooding conditions, with quick moving streams with high volumes of water which can wash out or top road culvert crossings. Erosion into and around culvert placements is common. This situation is more seasonal in nature, and once the snow melt has subsided, further drainage requirements subside, depending on nearby land topography or adjacent development features.

Figure 12: Typical Road Section



Source: UMIAQ, 2015a

Examples of older road beds that are not constructed to current Arctic standards are visible in Barrow. Roads not built up and properly insulated will thaw under the surface, melting the permafrost below, and begin to subside into the tundra. The condition continues year after year, worsening with each thaw season, and in warm years create soft spots through the entire road prism, worsened into deep rutting caused by the vehicular road traffic. The roads then get very muddy and impassable during spring break-up.

There are two operating gravel mines in the Barrow area supplying gravel for non-airport construction and maintenance needs (NSB, 2015). SKW operates one owned by the City of Barrow, located at the southwest end of the airport. It is nearing the end of its useful life, although recent plans to relocate a

gas pipeline along the southern boundary will allow for mining to continue in the old pipeline location. The soils here are classified as gravel, producing a sandy gravel and gravelly sand.

During the construction of the airport, the material was mined from the Alaska Department of Transportation and Public Facilities pit located on State land between the runway and the City of Barrow site. This material is not currently available for commercial use.

3.2. Coastal transportation

Freight and fuel arrive at the coastal communities by barge during the summer making deliveries to villages along the Chukchi and Beaufort Sea coasts. Barges originate in Seattle, leaving for Barrow in late June, to make the most of the limited shipping season and arrive in Barrow in late July or early August. The marine waters near Barrow are too shallow for the barges to directly offload on the shore, cargo and fuel is placed in shallow draft vessels for the final half mile to the beach. In Barrow, cargo is off-loaded near the U.S. Navy runway north of NARL. Barges also make stops at Point Hope, Point Lay, Wainwright, Prudhoe Bay and Kaktovik.

Figure 13: Bowhead Transport Tugboat

Source: Bowhead Transport, 2015

There has been significant interest in developing a port in Barrow. In 2014, the North Slope Borough Assembly passed an ordinance to establish a port authority that was later approved by voters. The port authority would create, fund, and operate port facilities and related activities along the North Slope coast. While the water off the shores of Barrow is too shallow for a deep-water port, UIC has been investigating the possibility of dredging to create a deep water port in Barrow.

Other modes of travel on the North Slope include seal skin boats, called umiaqs, for spring whaling and conventional boats for fall whaling and other marine subsistence activities, such as fishing and seal and walrus hunting.

3.3. Aviation Facilities

Due to the lack of a contiguous road system with the rest of Alaska, year round access to Barrow is limited to air travel. The one airport in Barrow, the Wiley Post – Will Rogers Memorial Airport, began as a small airfield constructed in 1964 as a dirt and gravel strip long enough to accommodate small aircraft. It has expanded to a 7,100-foot-long paved runway supporting both daily passenger and cargo flights utilizing jet and propeller aircraft (AK DOT&PF, 2014a). As the population continues to grow, so does

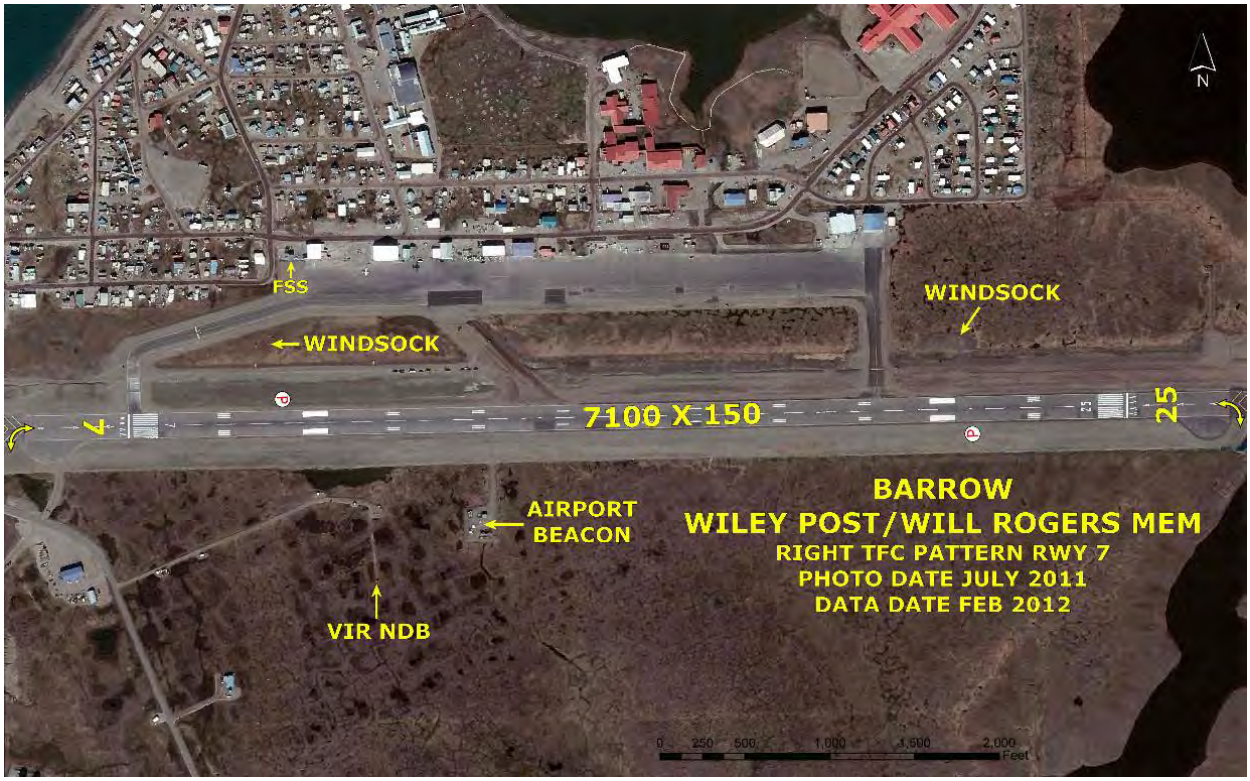
the demand for flights and the congestion along Ahkovak Street in front of the airport, owned by the State of Alaska and maintained by the North Slope Borough.

As the largest community on the North Slope, Barrow is not only the economic and administrative hub, it is also the transportation hub. Four outlying villages connect through Barrow to reach other areas of Alaska and beyond: Atqasuk, Point Lay, Wainwright and Nuiqsut (Nuiqsut can also connect through Deadhorse or directly out of Fairbanks). These communities also receive cargo through the Barrow Airport. Approximately 8.7 million pounds of mail flows into Barrow annually, 1.8 million pounds of which is transported to the four villages (AK DOT&PF, 2014a).

Alaska Airlines transports passengers, freight and mail to Barrow daily. Ravn Alaska also provides passenger and freight service to Barrow three times a week. Northern Air Cargo schedules cargo deliveries to Barrow four days a week. Because the only mode of transportation to deliver goods to Barrow is by air, transportation costs are high and often cause financial hardship on Borough residents.

The Barrow Airport Master Plan has recently been updated in 2014 to compare current aviation demand with existing conditions and facilities to identify future development needs. The plan has a twenty year planning horizon in five, ten and twenty year increments to guide airport development cost-effectively while considering both potential environmental and socioeconomic impacts.

Figure 14: Wiley Post – Will Rogers Memorial Airport



Source: AK DOT&PF, 2014a

3.4. Public Transit

The NSB operates a transit system in the Barrow area. The system has four small buses, with one in operation from 6:30 am to 7:00 pm, Monday through Friday. The bus has a fixed route throughout the Barrow area, including the hospital, residential areas, retail stores, and Iḷisaġvik College but not fixed bus stop locations; riders flag the driver to stop. The cost is $1 for children 3 to 13 and $2 for those aged 14 to 59. Seniors are free.

3.1. Bridges

There is one bridge in the Barrow area. It functions as a stream crossing for a gas field spur road. The road is also used to access inland areas for subsistence activities.

Figure 15: East Gasfield Spur Road Bridge

Photo Source: UMIAQ, 2015b

3.2. Transportation Hazards

Narrow Roadways. The largest major streets in Barrow are typically about 25 feet wide, with the minor streets 20 feet wide or less, especially in the original Barrow townsite. To accommodate two-way traffic, 12 foot wide travel lanes is preferred and nine feet travel lanes is the minimum. This means that normal two-way traffic on minor roads is tight, allowing only nine foot wide travel lanes, and not much space for line of sight variances or side shoulders for disabled vehicles to safely pull over out of the travel lane. To accommodate the narrower road widths, slower traffic speed is critical. In addition, most all of the roads in Barrow are without sidewalks for pedestrian traffic, increasing hazards with an unsafe mix of pedestrian and vehicular traffic. Without sidewalks, pedestrian traffic use the roadways, ATV and snow machine trails, and several boardwalks to reach destinations.

Seasonal Hazards. During the dark winter months when the sun is below the horizon, street lighting is critical to help increase visibility for both pedestrians and drivers. In addition, icy road conditions prevail for all of the winter months, increasing risk of sliding out of control in attempts to avoid hazards such as pedestrians, animals, other vehicles or utility appurtenances.

Figure 16: Blowing Snow on Stevenson Street

Photo Source: UMIAQ, 2015b

Fall and winter storms also create road hazards in the Barrow area. Storm surges have increased due to reduced sea ice, causing flooding of the coastal roads such as Stevenson Street. During some storms, large sections of Stevenson between NARL and Cakeeater Road have been submerged completely under water, making NARL inaccessible. Minor annual flooding due to coastal storm surges causes smaller portions of the road to be impassible. Completing the already platted and permitted Tom Gordon Expressway/Uivaqsaagiaq Road would provide alternative access to NARL. Constant erosion necessitates installation of annual gravel reinforcements along Stevenson Street. The west end of Cakeeater Road is also at risk of flooding during coastal storms, as is Egasak Street and the west end of Ahkovak Street, Ahmaogak Street, C Avenue and Nachik Street. The portion of Ahkovak Street over Isatkoak Lagoon (Dam Road) could also be rendered impassible during a large scale flood event. Blowing snow is prevalent and reduces driving visibility. Total white-outs are common. Snowmachine and ATV collisions with utility appurtenances, snow fences and other utility protection fences are especially dangerous during these types of conditions.

During winter road surfaces are frozen and stable but warmer seasons bring a number of roadway issues including mud, potholes, roadway rutting or wash boarding and airborne dust. Roads are typically graded in the early spring when temperatures reach above freezing. Gravel placement is often needed to repair roadways to drivable conditions. Additionally, airborne dust can cause respiratory problems such as bronchitis, asthma and is responsible for a high incidence of sinus infection (North Slope Borough, 2005). Dusty road conditions also create visibility issues, often making it difficult to see and breathe while the dust levels can be thick enough to obscure road edges. Dusty roads can also contaminate drying meat or fish.

Figure 17: Utility Barriers

Source: Golden, 2015

Utility Hazards. Utilities in Barrow are, for the most part, buried within the road prism. All utility repairs and maintenance are done with winter trenching, requiring frozen conditions. Street lighting is a major source of light, but it is limited. Also used are mobile power plants that generate enough light for the project. Many utility appurtenances such as sewer lift stations, water hydrants, natural gas valves and some service barrels are located on the edge of the roadways. Most lift stations, natural gas valves and some fire hydrants are protected with corner bollards to protect them from vehicle impacts. The placement of the utility fixtures so close to the road edge is a hazard for vehicles, and the

bollards are unforgiving when there is a collision, especially for ATVs and snowmachines.

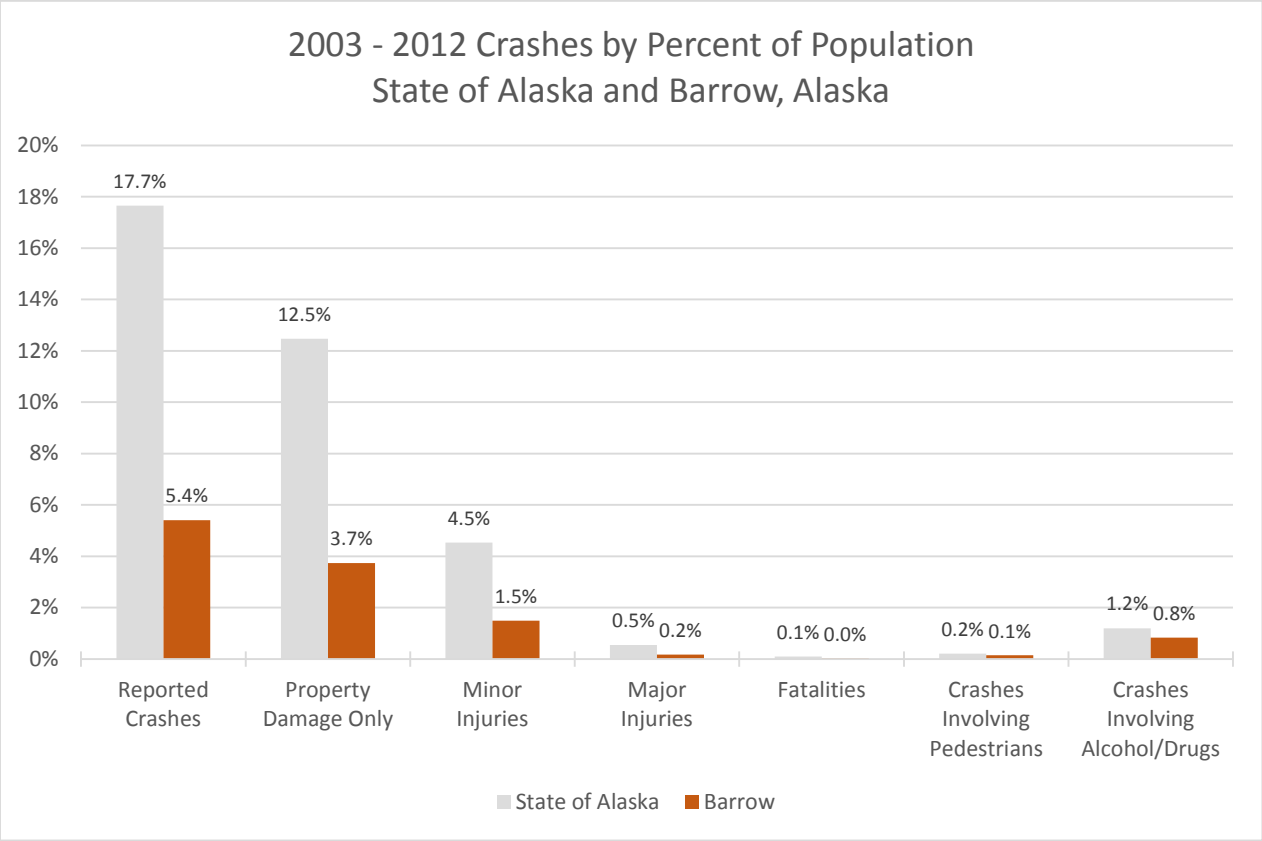
An unfunded Project Analysis Report Request (PARR) was been submitted in 2010 and 2011 to determine the cost associated with redesigning or relocating infrastructure that pose a threat to public safety. Specifically, the proposed Project Analysis Report (PAR) would inventory manholes and fire hydrants and their protective barriers and other infrastructure located within the road rights-of-way in Barrow. The study would further consider whether infrastructure located where vehicular accidents routinely occur or those that pose a serious threat to safety due to their location within the right of way or too near the roadway could be redesigned or relocated. Community maps from 2010 that illustrate accident locations with power poles, fire hydrants and other public utilities are included in Appendix D. As noted by AK DOT, there are the non-crashworthy barriers around the crashworthy fire hydrants. Figure 17 illustrates one such barrier around the utility barrel at the intersection of Laura Madison and Ahmaogak streets that could be relocated to a less vulnerable position. This type of project could be potentially funded by the Highway Safety Improvement Program (HSIP).

Crash Data. The Alaska Department of Transportation and Public Facilities maintains records of reported motor vehicle traffic crashes reported by both the local police and individuals. There were 229 reported vehicular accidents in Barrow between 2003 and 2012. Seventy percent (158) of the reported accidents involved only property damage; 28% (63) involved a non-incapacitating/possible injury; 3% (7) had an incapacitating injury; and .4% (1) involved a fatality (AK DOT, 2012a). Alcohol and/or drugs appear to have played a role in 17% of all reported crashes and 38% of those accidents that resulted in either an incapacitating injury or death. There were six accidents over the ten year timeframe that involved pedestrians, two of which were on Stevenson Street near the access to NARL.

Figure 18: Pedestrian in Barrow

Source: UMIAQ, 2015b

Figure 19: State of Alaska and Barrow Crashes 2003 - 2012



Source: AK DOT&PF, 2012

Data is not collected on crashes between passenger vehicles and recreational vehicles. However, because automobiles, trucks, ATVs and snowmachines share the roadway in rural Alaska, conflicts are bound to occur. Snowmachine drivers are often known to drive between buildings and across roadways at high rates of speed. With icy conditions and blowing snow, common across the arctic, the potential for collisions is high.

3.1. Right-of-Way Status

The definition of a BIA System Road states that it is a road "for which the BIA has, or plans to obtain legal right-of-way." Currently, the BIA does not have any right-of-way within the Barrow community. The road and trail rights-of-way in Barrow are owned by the State of Alaska, North Slope Borough or City of Barrow. Some trail rights-of-way are owned by UIC.

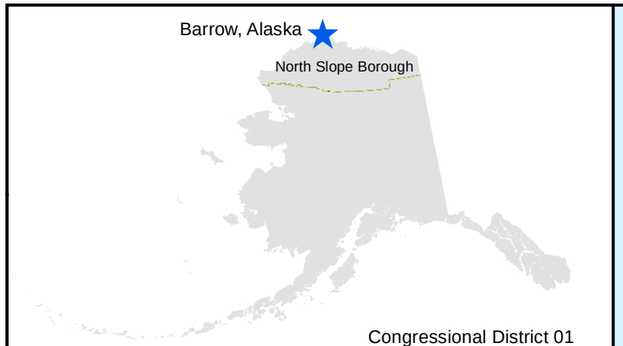
3.2. Indian Reservation Roads Inventory

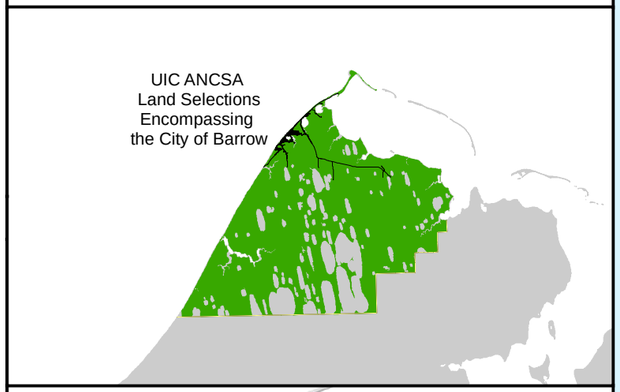
The Barrow Reservation Roads (IRR) Inventory is a database that contains significant amount of information for each road and street in Barrow. Updates to the Barrow IRR Inventory have not been made and accepted since 2012. The Inventory needs to be reviewed to ensure that all current routes are included. Additionally, existing routes need to be verified for accuracy and updated when needed, including revised strip maps. Figures 20, 21 and 22 illustrate the existing IRR routes.

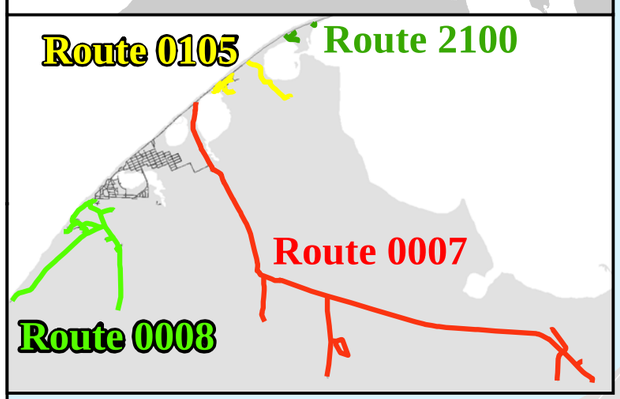
3.3. Traffic Controls

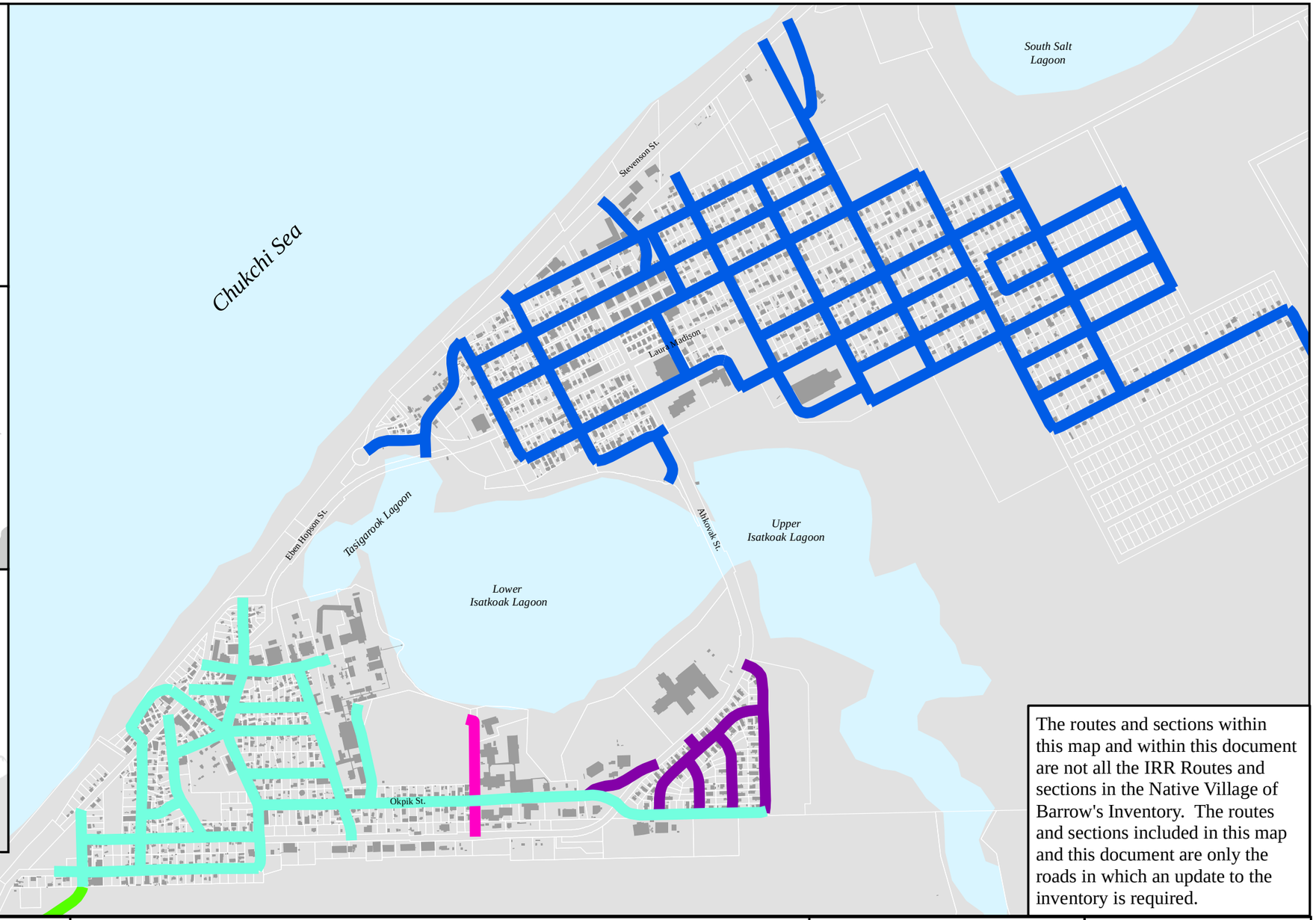
Traffic control devices are all signs, signals, markings and devices placed on or adjacent to a street or highway by a public body having authority to regulate, warn or guide traffic. The Manual on Uniform Traffic Control Devices is the publication that sets forth the basic principles which govern the design and usage of traffic control devices. The Manual was prepared by the National Committee on Uniform Traffic Control Devices which includes representation by state, county, and municipal highway officials, among others. Within Barrow, road signs are the primary method of traffic control. There are not any traffic lights within the community.

This page is intentionally left blank









The routes and sections within this map and within this document are not all the IRR Routes and sections in the Native Village of Barrow's Inventory. The routes and sections included in this map and this document are only the roads in which an update to the inventory is required.

IRR Routes

0101 0103

0102 0104

B.I.A. Indian Reservation Road Inventory Key Map

Barrow, Alaska

NAD 83, Alaska Albers Equal Area

DISCLAIMER

For informational purposes only. Umiaq makes no expressed or implied warranties of merchantability or fitness with regards to character and function of this printed map. All attempts have been made to identify discrepancies among data sources and are provided as is. The user is cautioned against using this map for detailed analysis or interpretations.

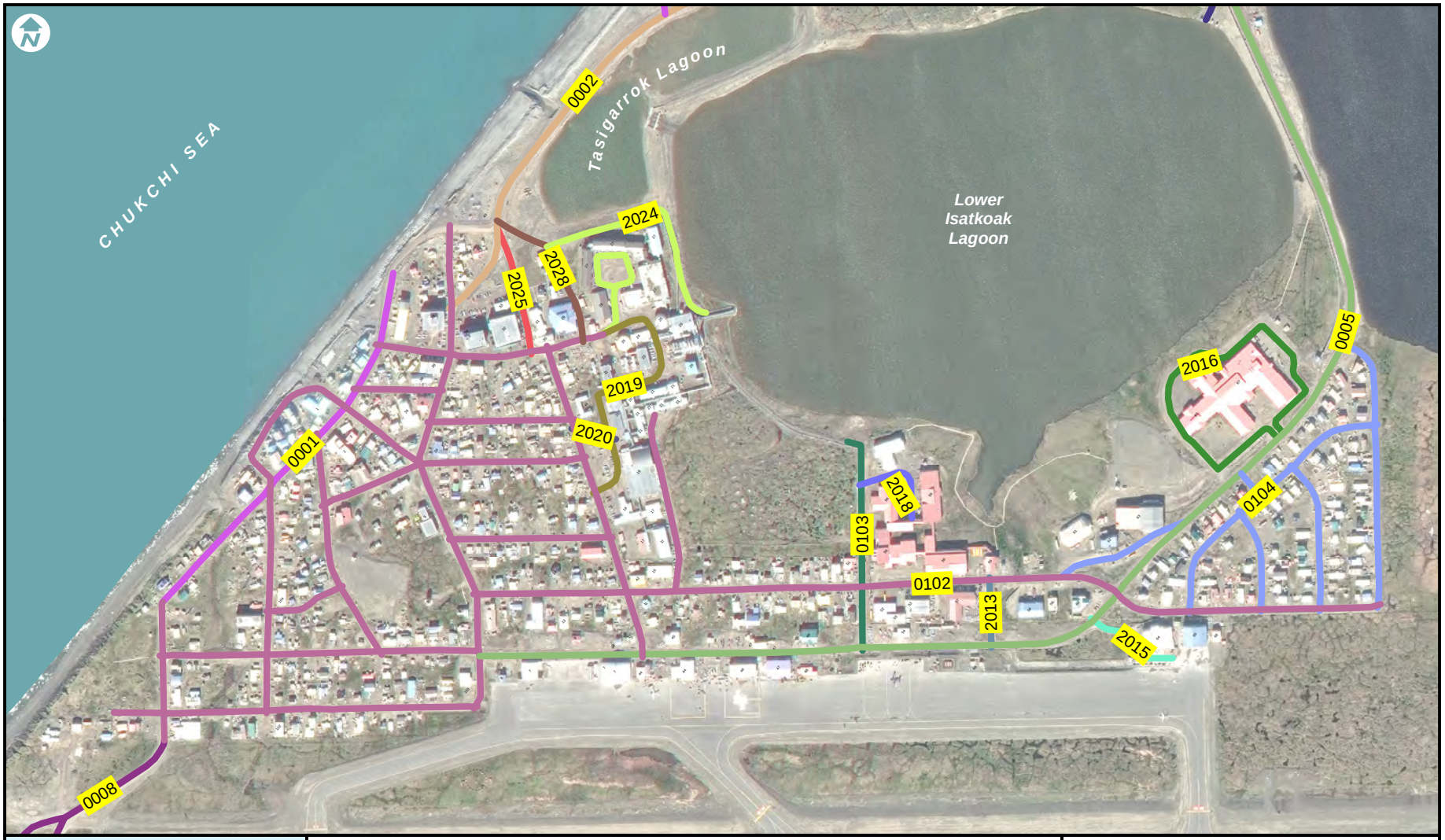
Figure: 20

Scale: 1 inch = 1,000 feet

0 250 500 1,000 Feet

Date: 6/7/2011

This page is intentionally left blank



BUREAU OF INDIAN AFFAIRS (BIA) - INDIAN RESERVATION ROADS (IRR)
BARROW ROADS BY ROUTE #

0001	0101	2013	2019	2028
0002	0102	2015	2020	
0005	0103	2016	2024	
0008	0104	2018	2025	

SOURCE:
Imagery: 2014 UMIAQ
Roads: UMIAQ

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BARROW, ALASKA
BIA - IRR ROUTE NUMBER

Scale:
0 500 1,000 1,500 Feet

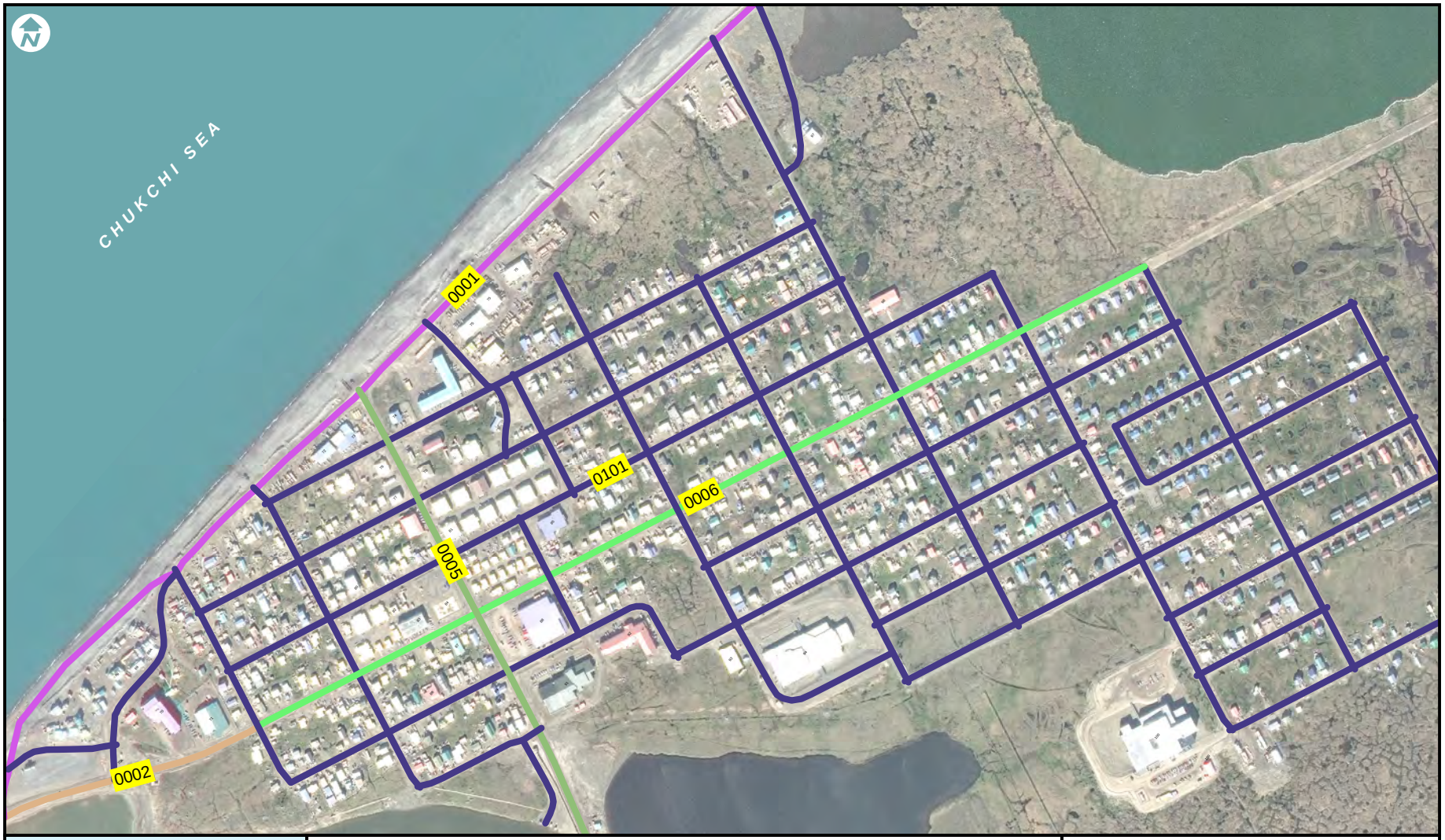
Figure: 21

UMIAQ

10/29/2015

UMQ: BRW_NVB_BIA_ROUTE_r00

This page is intentionally left blank



BUREAU OF INDIAN AFFAIRS (BIA) - INDIAN RESERVATION ROADS (IRR)
BROWERVILLE ROADS BY ROUTE #

0001 0002 0005 0006 0101

SOURCE:
Imagery: 2014 UMIAQ
Roads: UMIAQ

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BROWERVILLE, ALASKA
BIA - IRR ROUTE NUMBER

Scale:
0 500 1,000 1,500 Feet

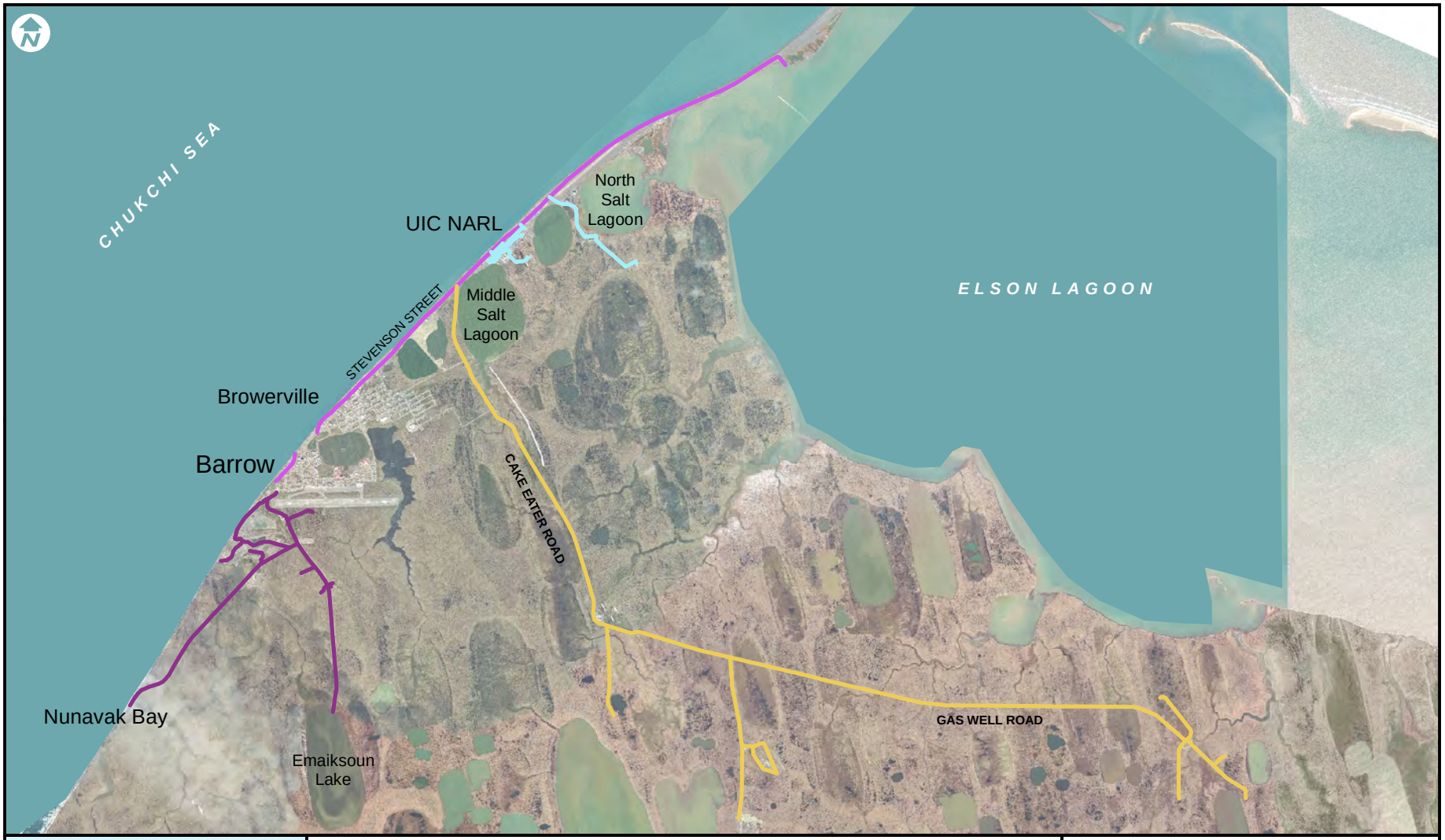
Figure: 22

UMIAQ

10/29/2015

UMQ: BROW_NVB_BIA_ROUTE_r00

This page is intentionally left blank



BUREAU OF INDIAN AFFAIRS (BIA) - INDIAN RESERVATION ROADS (IRR)
BARROW OVERVIEW - ROADS BY ROUTE #

0001 0007 0008 0105

SOURCE:
Imagery: 2014 UMIAQ
Roads: UMIAQ

DISCLAIMER
FOR INFORMATIONAL PURPOSES ONLY.

BARROW, ALASKA
BIA - IRR ROUTE NUMBER

Scale:
0 1 2 3 Miles

Figure: 23

UMIAQ

10/29/2015

UMQ: BRW_NVB_BIA_ROUTE_OVR_r00

This page is intentionally left blank

Chapter 4: Barrow Transportation System Needs and Implementation

This chapter includes goals and strategies to meet those goals, Native Village of Barrow priority projects and a discussion of potential funding sources.

4.1. Goals, Objectives, Strategies

The Native Village of Barrow has established the following goals and strategies for this Long Range Transportation Plan. *Goals* are broad statements that describe long-term desired outcomes and *strategies* describe specific implementation steps.

Goal 1: Provide efficient and proactive transportation planning and management.

- Continually monitor and update the Long Range Transportation Plan as community and transportation conditions and needs change.
- Verify the accuracy of the IRR Inventory annually and update to ensure maximum funding.
- Provide training and opportunities to network with other Tribal transportation staff to keep NVB up-to-date on the latest programmatic and regulatory changes and initiatives and funding opportunities.
- Proactively build relationships with transportation partners and officials.
- Collaboratively work with other community entities, such as the City of Barrow, North Slope Borough and TNHA, as well as outside entities, such as AK DOT&PF and BIA to effectively plan and coordinate projects and infrastructure.
- Seek broad resident involvement and support for transportation projects and programs.
- Annually review NVB priority projects list of projects to ensure that projects are current and reflect the need of the community.
- Continually seek to diversify NVB's transportation funding by pursuing alternative funding sources.

Goal 2: Provide a safe and efficient transportation network within the Barrow community.

- Create a dust control program focusing on improving the health of community residents.
    a. Investigate options for utilizing a chemical dust suppressant or hardener to reduce dust and implement when necessary.
    b. Work with NSB and AK DOT&PF to implement an ordinance to reduce speed limits during dry or windy conditions
    c. Produce posted warning signs about driving slowly to lessen dusty conditions.
    d. Create a dust education campaign, targeting the entire community and specifically the most vulnerable populations focused on the health effects of dusty.
- Create a transportation safety improvement program

a. Create a working group that includes representatives from a variety of organizations within the community to evaluate transportation-related safety issues and make recommendations for improvement.
b. Create a plan to remediate safety issues, such as ensuring sufficient street lighting or a share the road campaign for bicycle, ATV, snowmachine and pedestrian safety.

- Relocate utilities and other obstructions located within the rights-of-way or roadway.
    a. Work with NSB and AK DOT&PF to identify most problematic utilities and create plan for relocation and/or barrier upgrades.
    b. Work with NSB Public Works to identify and relocate dumpsters and other roadway obstructions.

Goal 3: Develop a transportation system to foster and support economic development and provide access to new housing opportunities.

- Provide access to new subdivisions to allow construction of additional housing, assuaging housing overcrowding.
- Consider alternative modes of transportation to accommodate residents that walk, bicycle or use recreational vehicles to travel between work or other major trip generators or community centers.

Goal 4: Improve overall road and trail conditions to ensure safety and efficiency through continued and proactive maintenance

- Promote trail staking between Barrow and neighboring villages to safely travel between communities.
- Construct a warm storage facility for supplies and heavy equipment to increase their maximum useful life.
- Prioritize those that transportation projects that consider the changing arctic environment, such as increasing flooding and storm surges. An example is the alternative access road to NARL, the Tom Gordon Expressway/Uivaqsaagiaq Road.
- Implement erosion control and drainage measures where possible to protect the existing transportation network.

Goal 5: Protect and enhance traditional, historical, cultural and subsistence resources and activities.

- Actively consider subsistence activities when determining transportation priorities and the effects of transportation projects on subsistence.
- Consider and incorporate where possible Barrow and the North Slope's unique history and culture when designing and installing transportation–related improvements.

4.2. Transportation Priorities

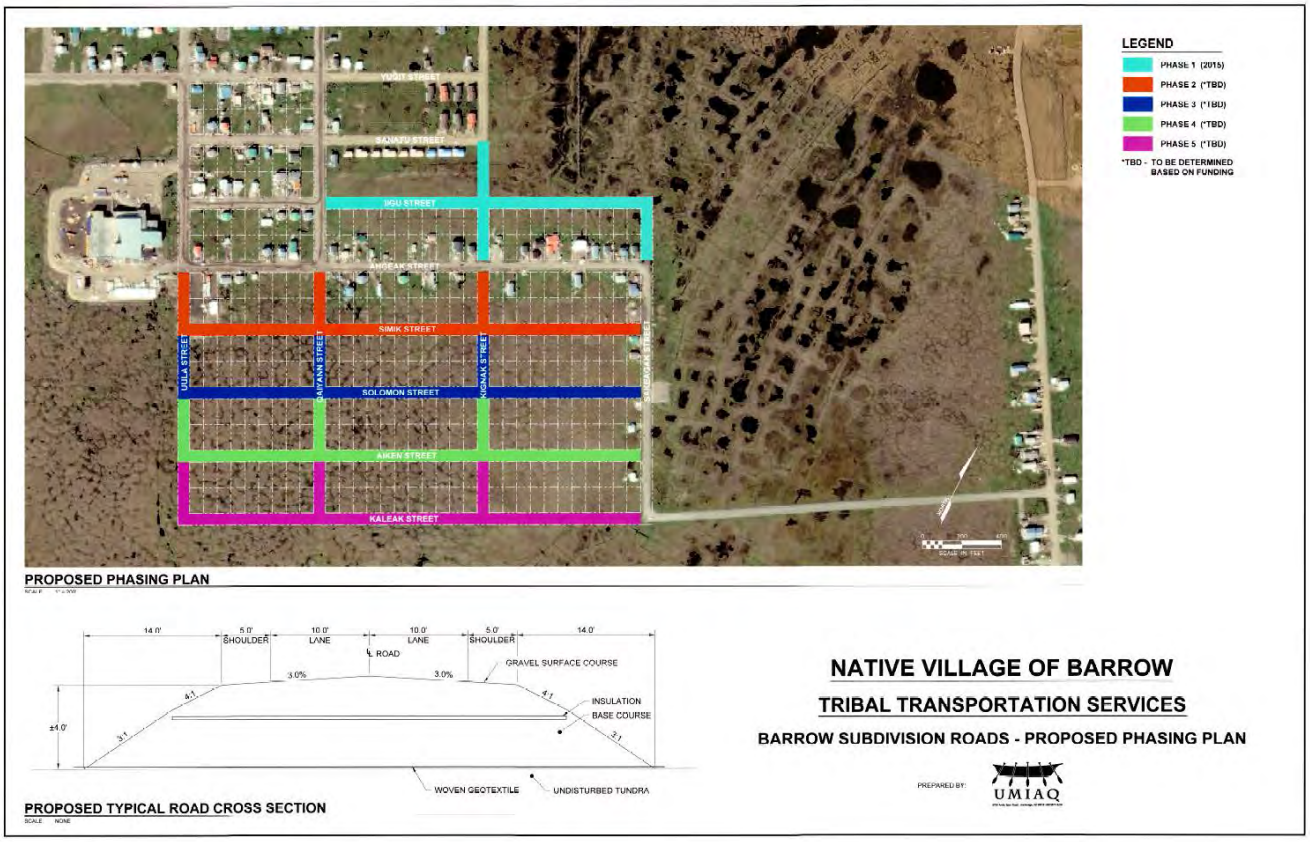
The Native Village of Barrow has identified nine targeted transportation priorities.

Priority 1: East Barrow Shareholder Lot Road Construction

The design for the East Browerville Shareholder Lot Roads project is complete. This five phase project is to construct 3.01 miles of subdivision roads in Browerville to access shareholder lots (See Figure 23). Phase I will extend Kignak Street from Sanatu to Ahgeak streets and complete Iigu Street from Qaiyaan Street to an extension of Sakeagak Street for a total of .94 miles, is completely funded and expected to be under construction during the summer of 2016.

The remaining phases will complete Simik, Solomon, Aiken and Kaleak streets for the platted subdivision, blocks 31 through 38 and 41 through 44. The construction funds for phases II – V have not yet been secured. The design of these roads has been the first step to providing access to home building sites owned by Native Village of Barrow tribal members and alleviating the housing crisis for many within the community of Barrow. The estimated cost of the remaining four phases is $7,760,000

Figure 24: Browerville Subdivision Roads



Priority 2: Dust Control

Dust from traffic can cause or exacerbate health problems and contaminate subsistence foods. Sensitive people, such as the very young or elderly, or those with respiratory conditions, including asthma, bronchitis and sinus infections, are particularly affected by excessive dust. Dust can also settle drying subsistence foods, such as berries, fish or meat. It is especially prevalent during dry conditions with traffic or wind. Dust can also be an indicator of roadway loss. When fines particles are lost from a gravel surface, the stone and sand-sized particles that remain will tend to remain loose on the surface, leading to some distresses like washboarding and reduced skid resistance and become more difficult to maintain. Fresh gravel with a higher percentage of fines needs to be hauled in, an expensive remedy in Barrow. Applying a dust control product helps to ensure that the fine material in gravel cannot loosen and dust away. This also means that the stone portion of the gravel will tend to remain embedded in the surface and will not be lost to the edge of the road or whipped off from heavy traffic. A road surface that remains tightly bound and stable will require much less blade maintenance. While extra blading, shaping and mixing is needed to prepare a road for dust control, the overall need for blade maintenance should be greatly reduced. This can be a great savings in equipment expense and labor. Virtually all methods of dust control require annual treatment.

Currently in Barrow, dust control amounts to constantly watering the roads with water trucks. This is a costly effort beginning in May and continuing through August each year. This test project will attempt to discover a more economical and effective method of dust control. The estimated cost for the pilot project is $250,000.

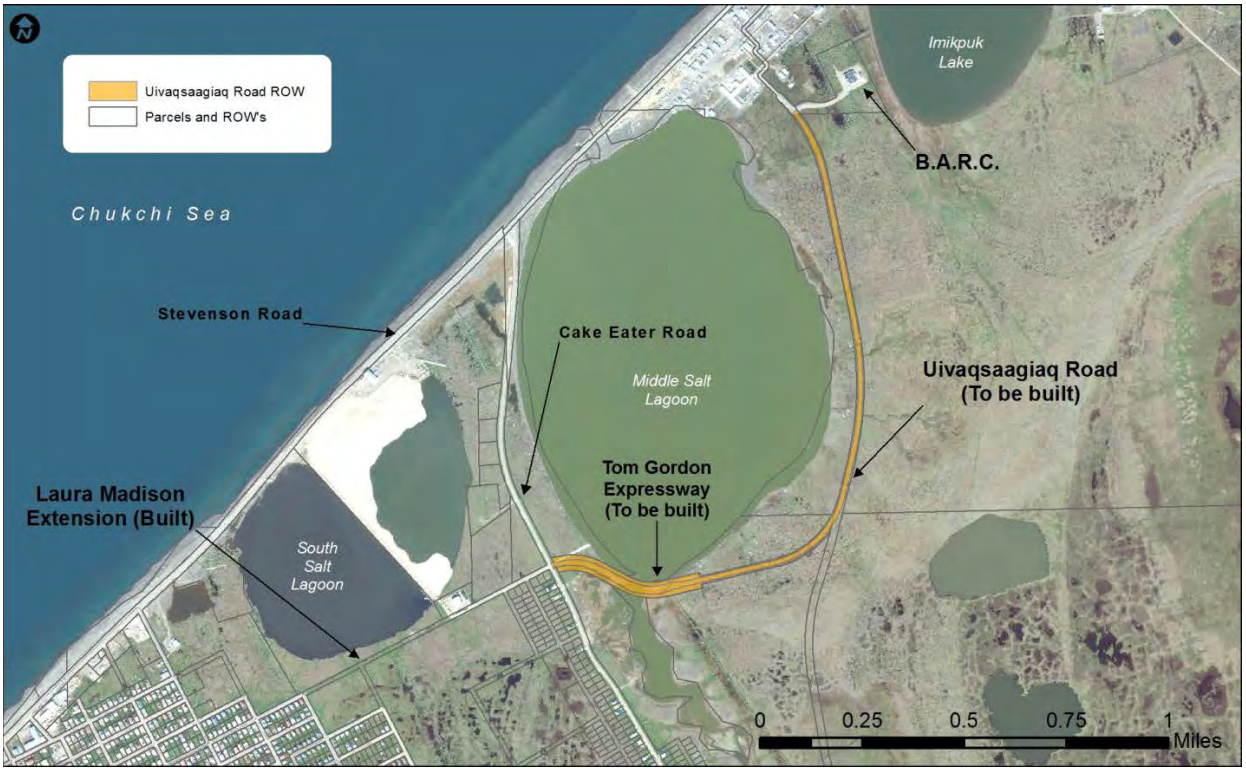
Priority 3: Tom Gordon Expressway/Uivaqsaagiaq Road Construction

This planned road would connect Cakeeater Road to the Barrow Arctic Research Center (BARC) and NARL. The road design is 100% complete but a lack of funding has delayed the project. It is designed as a gravel, class 3 road that is approximately 24 feet wide and 2.2 miles long. Figure 24 illustrates this proposed road.

The only road that connects Barrow to NARL is Stevenson Street which is often subject to closure during high water events. The Tom Gordon Expressway/Uivaqsaagiaq Road would replace Stevenson Street to prevent NARL from being cut-off from the rest of the community during a storm.

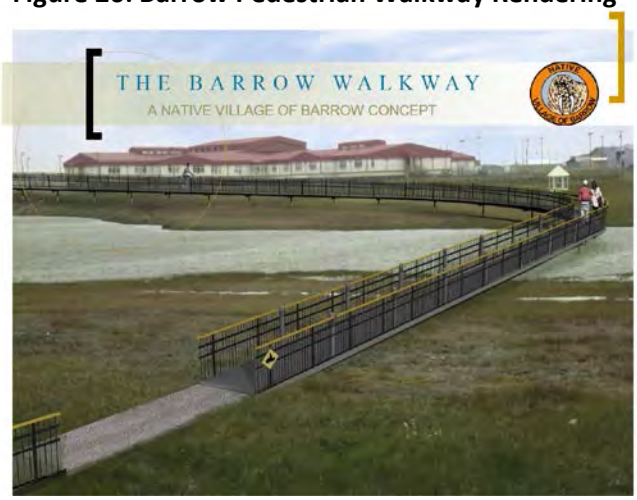
This project was included in the 2012-2015 Alaska State Transportation Improvement Program (STIP) for funding/partial funding (AK DOT&PF, 2012b). Is has not been included in the draft 2016-2019 STIP (AK DOT&PF, 2015b). The total estimated project cost is $22,331,000; approximately $12,000,000 in funding has already been secured.

Figure 25: Tom Gordon Expressway/Uivaqsaagiaq Road



Priority 4: Barrow Pedestrian Walkway

Figure 26: Barrow Pedestrian Walkway Rendering



One NVB priority project is to design an all-weather pedestrian/bicycle walkway to community facilities and connect Barrow with Browerville to facilitate safe travel throughout the community.

The current walkway is in poor repair and skirts lagoons and environmentally sensitive areas. It does not extend to all facilities which results in pedestrian shortcuts, sometimes across unsafe ice and muddy, environmentally sensitive areas. The proposed walkway would connect the new hospital, library, Senior Center, Stuaqpuk (AC Store), elementary school, middle school and high schools, Barrow City Hall, post office and downtown Barrow businesses and government offices. Figure 25 provides a rendering of the proposed walkway. The estimated cost for the pedestrian walkway design and construction is approximately $11,000,000.

Priority 5: Warm Storage Facility

Priority 5 is to construct a warm storage facility for the Native Village of Barrow's heavy equipment to increase its useful life. The storage facility will also house supplies. Keeping materials indoors during the cold winter months will ensure that they are available and useable when needed. The estimated cost is $300,000

Priority 6: Nunavak Road Repair and Upgrade

Priority 6 is to provide funds to upgrade or provide extensive repair to Nunavak Road that provides access to Nunavak Bay subsistence cabins and subsistence hunting and fishing areas southwest of Barrow. It has become impassible during the summer months. The estimated cost of repairs and upgrades is $2,900,000.

Priority 7: Gas Well Road Maintenance

Gas Well Road Gas has not been well maintained over the years. Many Barrow residents use this road to access subsistence hunting and gathering areas further inland. Additionally, this road provides access to critical gas well facilities. The road is in need of upgrade and maintenance. The estimated cost of repairs and upgrades is $30,000,000.

Priority 8: Trail Marking

Poorly or unmarked trails create significant safety hazards, especially with winter travel to Wainwright and Atqasuk. This project will acquire and install trail marking safety signs on major trails to other villages and subsistence hunting and fishing areas, including signs with GPS and directional information. The estimated cost is $350,000.

Priority 9: Maloney Bridge

Maloney Bridge washes out periodically during swift breakup events. The bridge crosses a stream in an area for used for subsistence hunting and fishing and general access to traditional lands. Replacing the bridge would facilitate safer and more efficient travel. The estimated cost is unknown.

4.3. Transportation Funding

There is increasing competition for transportation funding, while simultaneously funds for transportation projects are diminishing. The vast majority of transportation funding comes from federal highway acts that require Congressional authorization for a specific period of time and require reauthorization once the act reaches its expiration date. The current transportation legislation is the

Fixing America's Surface Transportation (FAST) Act. This act determines funding for BIA, the states and other entities.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Moving Ahead for Progress for Users (SAFETEA-LU) was a multi-year funding and authorization bill that governed federal surface transportation spending between 2005 and 2009, and expended multiple times until 2012. The Moving Ahead for Progress in the 21st Century Act (MAP-21) was originally a two-year surface transportation bill that governed spending after SAFETEA-LU. MAP-21 was reauthorized through November 2015 and replaced with the FAST Act in December 2015.

This section includes a discussion of the new FAST Act as well as other transportation funding sources. However, there are many potential funding sources; this list should not be considered all all-inclusive.

Fixing America's Surface Transportation Act. The FAST Act is a five-year, fully paid bill aimed at improving the nation's surface transportation infrastructure. The law concentrates on:

- Strengthening surface transportation infrastructure and safety programs;
- Refocusing programs on national priorities, including nationally and regionally significant projects and the movement of freight;
- Increasing flexibility for states and local governments to better address their own infrastructure priorities;
- Streamlining environmental review and project approval processes;
- Improving passenger rail infrastructure and safety programs, reducing costs, leveraging private sector resources, creating greater accountability and transparency for Amtrak, and accelerating rail project delivery;
- Promoting innovation;
- Maintaining a strong commitment of highway, rail, and hazmat safety (U.S. House of Representatives, 2015)

There are several changes included in the FAST Act that affect the Tribal Transportation Program, outlined below.

- The funding for the program has increased from $450 to $465 million for fiscal year (FY) 2016; there will be additional annual increases of $10 million until FY 2020. There are also increases for the Tribal Transit Program to total $35 million.
- The Tribal High Priority Project (HPP) Program that was established in MAP-21 is not reauthorized under the FAST Act. HPP was funding for tribes with insufficient formula funding to construct their priority transportation projects.
- The new Nationally Significant Program will be funded with $100 million per year. This grant program is established for "nationally significant" federal lands and tribal transportation projects. Projects must have a cost of no less than $25 million to be eligible and extra priority is given to higher cost projects.

- Included in the FAST Act is a bill from the Senate Committee on Indian Affairs, the Tribal Infrastructure and Roads Enhancement and Safety Act, that reduces BIA administrate expenses from 6 percent to 5 percent; Tribal Transportation Facility Bridges program funding set-aside increase from 2 percent to 3 percent; new data collection and reporting requirements for tribes; and a requirement that the DOT Secretary report to Congress on tribal transportation safety (Strommer, 2015).

Transportation Investment Generating Economic Recovery (TIGER). TIGER is a discretionary grant program is administered by the U.S. Department of Transportation to invest in road, rail, transit and port projects. The TIGER program was created by the 2009 economic stimulus bill, and is included in the Grow America Act with funding at $7.5 million over a six year period. The program allows states to apply for funding for transportation projects that have a significant impact on the nation, a metropolitan area or a region (U.S. DOT, 2015b).

Recent funding was recently announced totaling $500 million. The U.S Department of Transportation stated that 43% of the funding was granted to infrastructure projects in rural areas, the highest percentage in the TIGER program's seven-year history. Nearly $3 million in funding was award in November 2015 to the Native Village of Point Hope to redesign and construct five critical roads, construct sidewalks and improve ADA accessibility to transit within the community (U.S. DOT, 2015c)

Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE). FASTLANE is a new program in the FAST Act that funds critical freight and highway projects. The program has $800 million in funding for FY 2016, 25 percent is reserved for rural projects and 10 percent for smaller projects.

FEMA Pre-Disaster Mitigation Grant Program. This program is designed to assist States, territories, Federally-recognized tribes, and local communities to implement a sustained pre-disaster natural hazard mitigation program with a goal of reducing the overall risk to both the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters. This program awards planning and project grants and provides opportunities for raising public awareness about reducing future losses before disaster strikes. Mitigation planning. Floodplain management and protection of wetlands. Feasibility. Relocating at-risk infrastructure

Federal Lands Access Program (FLAP). This funding program was created to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators. New information on the program after the passage of the FAST Act in December 2015 is not yet available.

The Denali Commission. The Denali's Commission role after the passage of the FAST Act is uncertain. However, the Commission does continue to administer their transportation program that focuses on two major components: rural roads and waterfront development (Denali Commission, 2016).

4.4. Transportation Plan Updates

This Barrow Long Range Transportation Plan contains the current requirements for transportation facilities based on the community's existing conditions, anticipated future development and Tribal priorities.

This plan should not be considered a static document; it is a flexible document that should be referred to when making transportation decisions and modified as the Native Village of Barrow and community's needs and priorities change. The plan should be reviewed by the Tribe and BIA Alaska regional office annually to ensure consistency with the program and coordinated so as to not impede funding and program implementation. At the least, the Barrow Long Range Transportation Plan should be updated every five years. Its update should be coordinated with other planning efforts in the community.

This page is intentionally left blank

References

Alaska Department of Administration, Division of Motor Vehicles. (2016). *Communities Exempt from Registration.* Retrieved from http://doa.alaska.gov/dmv/reg/exempt.htm.

Alaska Department of Commerce, Community and Economic Development. (2015, August 18). *Community Database Online - Barrow Profile.* Division of Community and Regional Affairs. Retrieved August 10, 2015, from www.commerce.alaska.gov/dcra/DCRAExternal/community/

Alaska Department of Education and Early Development. (2014). *Report Card To The Public.* Retrieved September 11, 2015, from https://education.alaska.gov/ReportCardToThePublic/

Alaska Department of Transportation and Public Facilities. (2004). *Northwest Alaska Transportation Plan.* Retrieved from www.dot.alaska.gov/stwdplng/areaplans/area_regional/assets/nw/nw_cta_final.pdf

Alaska Department of Transportation and Public Facilities. (2012a). *2010-10-21 Barrow Trans Plan - 10 Years of Crashes.*

Alaska Department of Transportation and Public Facilities. (2012b). *2012 - 2015 Statewide Transportation Improvement Program.* Retrieved August 5, 2015, from www.dot.state.ak.us/stwdplng/cip/stip/

Alaska Department of Transportation and Public Facilities. (2013). *Alaska Traffic Counts 2012 - 2013: AADT GIS Map.* Retrieved September 10, 2015, from http://dot.alaska.gov/stwdplng/transdata/traffic_AADT_map.shtml

Alaska Department of Transportation and Public Facilities. (2014a). *Barrow Airport Master Plan Update.* Department of Transportation and Public Facilities.

Alaska Department of Transportation and Public Facilities. (2014b). *Northern Region Annual Traffic Volume Report 2011, 2012, 2013.* Retrieved September 10, 2015, from http://dot.alaska.gov/stwdplng/transdata/pub/Regional_Traffic_Reports/trafficdata_reports_nor/NR_2013_Traffic_Volume_Report.pdf

Alaska Department of Transportation and Public Facilities. (2015a). *Statewide Functional Classification GIS Map*. Retrieved October 22, 2015, from Transportation Information Group: www.dot.alaska.gov/stwdplng/fclass/fclassmaps.shtml

Alaska Department of Transportation and Public Facilities. (2015b). *2016-2019 Draft STIP Original*. Retrieved from Statewide Transporation Improvement Program (STIP): www.dot.state.ak.us/stwdplng/cip/stip/amendments/1619DraftSTIP/0/index.shtml

Bowhead Transport. (2015). *Tugs and Barges*. Retrieved October 12, 2015, from UIC Marine Services: www.bowheadtransport.com/vessels/tugs-and-barges/

Denali Commission. (2016). *Programs: Transportation.* Retrieved from https://www.denali.gov/programs#transportation

Golden, P. (2015, October 22). *Northern Region Traffic and Safety Engineer.* Alaska Department of Transportation and Public Faciities.

Native Village of Barrow. (2010). *Long Range Transportation Plan.*

Native Village of Barrow. (2015, October 6). Retrieved from www.nvbarrow.com

North Slope Borough. (2005). *City of Barrow Local All Hazards Mitigation Plan.* Risk Management Division.

North Slope Borough. (2005, March 3). *North Slope Borough Comprehensive Plan.* Retrieved August 12, 2015, from www.north-slope.org/your-government/comprehensive-plan

North Slope Borough. (2010). *North Slope Borough 2010 Census Data.* (D. C. Carl E. Shepro, Ed.) Retrieved July 12, 2015, from North Slope Borough: www.north-slope.org/your-government/census-2010

North Slope Borough. (2015). *Barrow Comprehensive Plan.* Retrieved August 11, 2015, from www.north-slope.org/assets/images/uploads/Barrow_Comp_Plan_March_2015_FINAL.pdf

Strommer, G. D. (2015). *Tribes Have Transportation Self-Governance At Last.* Law 360. Retrieved February 17, 2016, from www.law360.com/articles/737643/tribes-have-transportation-self-governance-at-last

U.S. Department of Commerce. (2015a). *U.S. Census Bureau American FactFinder*. Retrieved September 8, 2015, from 2009-2013 American Community Five Year Estimates: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

U.S. Department of Commerce. (2015b). *U.S. Census Bureau American FactFinder*. Retrieved September 8, 2015, from 2008-2012 American Community Five Year Estimates: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

U.S. Department of the Interior. (1962, December 29). *National Park Service.* Retrieved August 12, 2015, from National Historic Landmarks Program: www.nps.gov/nhl/find/statelists/ak/AK.pdf

U.S. Department of the Interior. (1966, October 15). *National Park Service.* Retrieved August 15, 2015, from National Register of Historic Places Inventory: www.nrhp.focus.nps.gov

U.S. Department of the Interior. (2004). *Coding Guide and Instructions for IRR Inventory.* Bureau of Indian Affairs. Retrieved from www.bia.gov/cs/groups/public/documents/text/idc-001946.pdf

U.S. Department Of The Interior, Bureau of Indian Affairs, Division of Transportation. (2015, October 6). *Indian Reservation Roads Inventory (IRR)*. Retrieved from www.indianaffairs.gov/WhoWeAre/BIA/OIS/Transportation/IRR/index.htm

U.S. Department of Transportation. (2006). *2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance.* Report to Congress, Federal Highway Administration, Polic and Governmental Affairs. Retrieved October 12, 2015, from www.fhwa.dot.gov/policy/2006cpr/

U.S. Department of Transportation. (2013a). *Tribal Transportation Program Delivery Guide: A Manual for FHWA and BIA Program Agreement Tribes.* Federal Highway Administration. Retrieved 15 October, 2015, from http://flh.fhwa.dot.gov/programs/ttp/guide/documents/03.pdf

U.S. Department of Transportation. (2013b, December 2). *Highway Functional Classification Concepts, Criteria and Procedures*. Retrieved September 22, 2015, from Federal Highway Administration: Planning Processes, Statewide Transportation Planning: www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section03.cfm

U.S. Department of Transportation. (2015b). *Grow America: Alaska.* Retrieved November 4, 2015, from www.transportation.gov/grow-america/state-by-state/alaska

U.S. Department of Transportation. (2015c). *TIGER Awards.* Retrieved October 4, 2015, from https://www.transportation.gov/sites/dot.gov/files/docs/TIGER%202015%20Project%20Fact%20Sheets_0.pdf

U.S. Department of Transportation, F. H. (2015a). *Tribal Transportation Program (TTP)*. Retrieved from MAP-21 - Moving Ahead for Progress in the 21st Century: www.fhwa.dot.gov/map21/factsheets/ttp.cfm

U.S. Global Change Research Program. (2014). *2014 National Climate Assessment.* Retrieved September 10, 2015, from http://nca2014.globalchange.gov/report/regions/alaska

U.S. Government Publishing Office. (2015). Code of Federal Regulations. *25 CFR 170.410(a)*. Retrieved October 2, 2015, from www.ecfr.gov

UMIAQ. (2015a). *Typical Road Section.*

UMIAQ. (2015b). *Photo Library.*

Appendices

Appendix A: NVB Resolution Adopting the 2016 Barrow Long Range Transportation Plan

Appendix B: Public Meeting Notice

Appendix C: Public Comments

Appendix D: 2010 Barrow/Browerville Accident Maps

Appendix E: NVB IRR Program Inventory Data Sheet

Appendix F: NVB IRR Program Strip Maps

Appendix A: NVB Resolution Adopting the 2016 Barrow Long Range Transportation Plan

This page is intentionally left blank

Appendix B: Public Meeting Notice

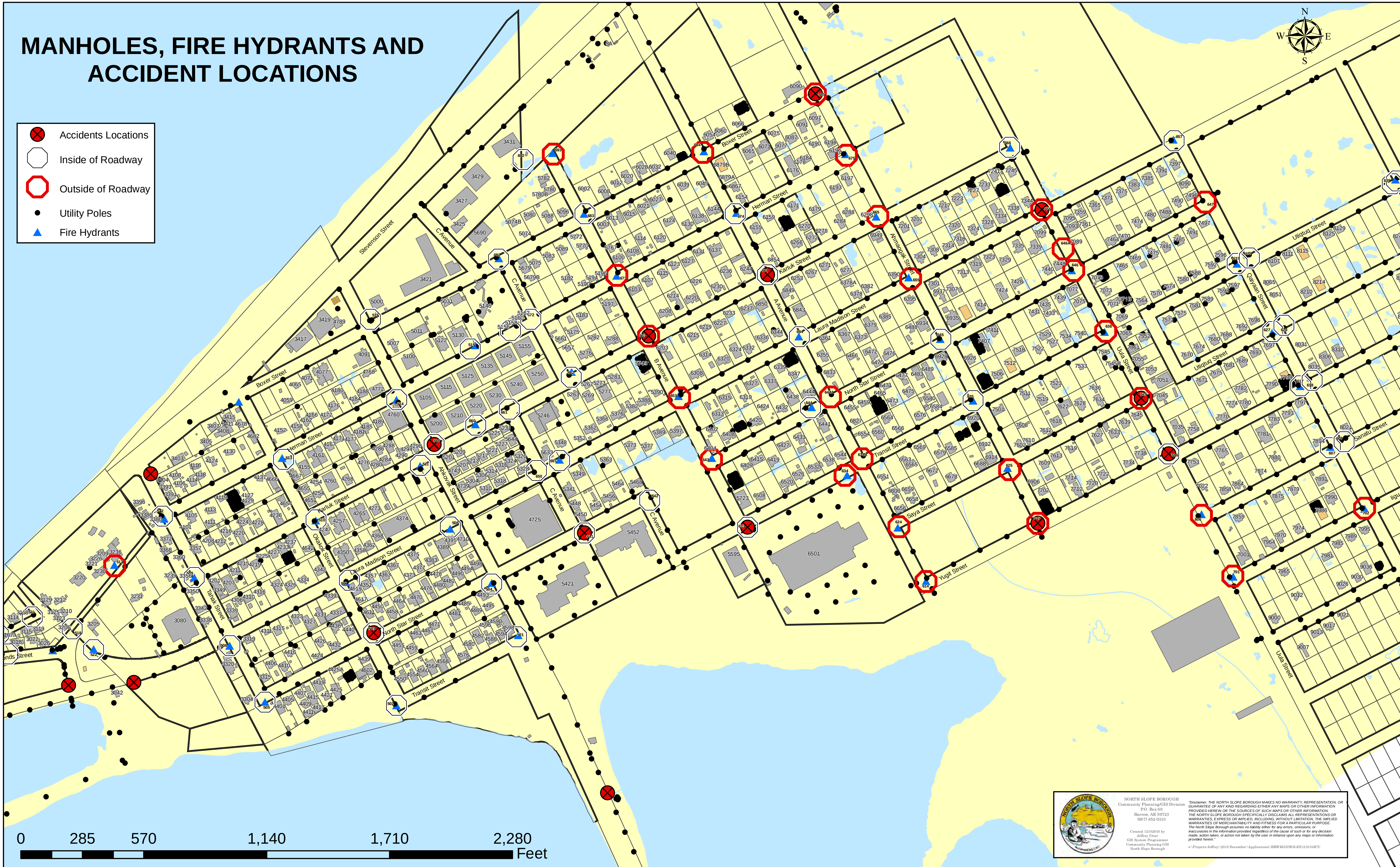
This page is intentionally left blank

Appendix C: Public Comments

This page is intentionally left blank

Appendix D: 2010 Barrow/Browerville Accident Maps

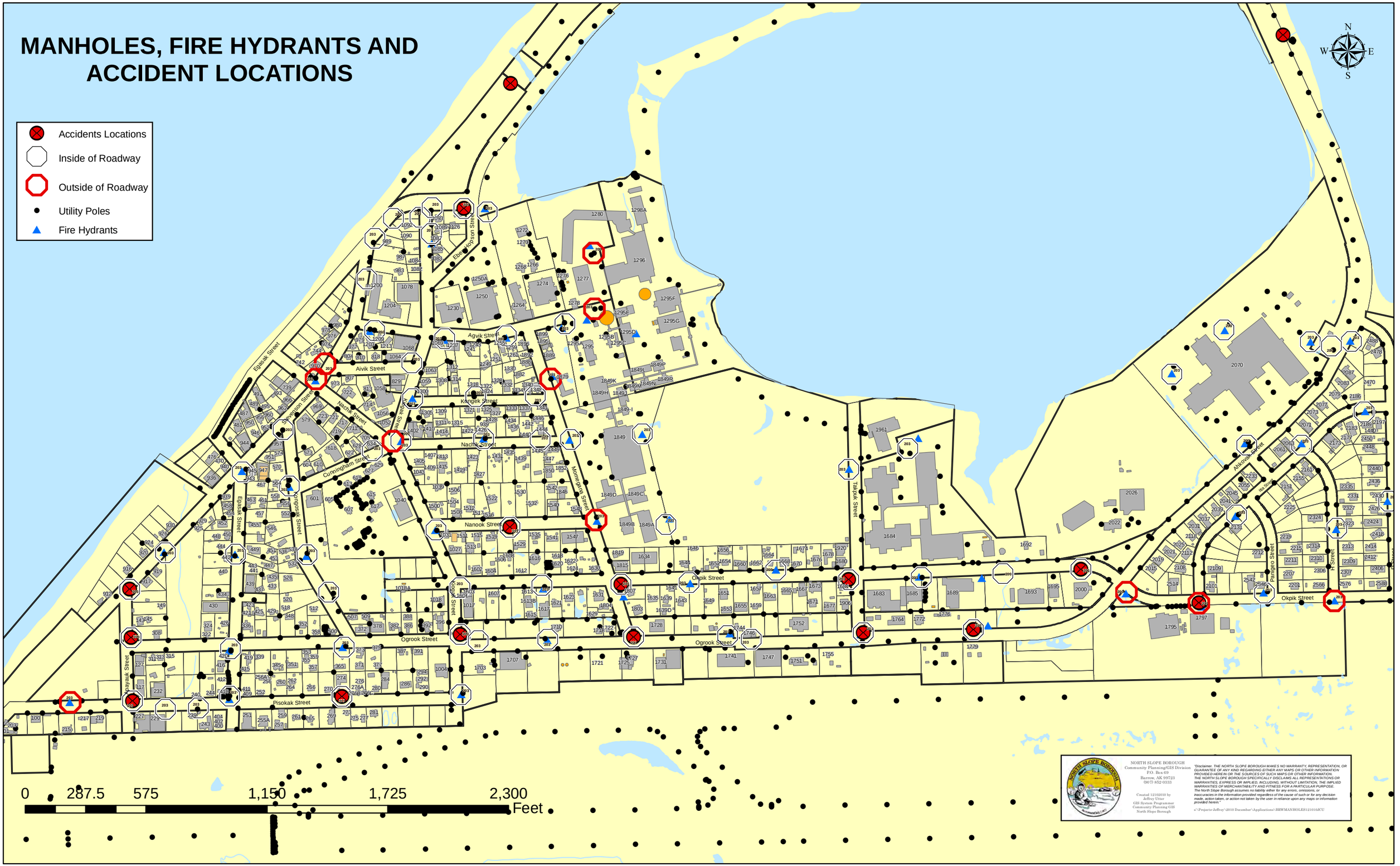
This page is intentionally left blank



MANHOLES, FIRE HYDRANTS AND ACCIDENT LOCATIONS
Accidents Locations
Inside of Roadway
Outside of Roadway
Utility Poles
Fire Hydrants
N
S
E
W
Stevenson Street
C Avenue
B Avenue
A Avenue
Boxer Street
Herman Street
Karluk Street
Laura Madison Street
North Star Street
Transit Street
Saya Street
Yugit Street
Ahkovak Street
Okakok Street
Tahak Street
Ahmaogak Street
Uula Street
Qaiyaan Street
Utiqtuq Street
Sanatu Street
Iigu Street
0
285
570
1,140
1,710
2,280
Feet
NORTH SLOPE BOROUGH
Community Planning/GIS Division
P.O. Box 69
Barrow, AK 99723
(907) 852-0333
Created 12102010 by
Jeffrey Utter
GIS System Programmer
Community Planning GIS
North Slope Borough
"Disclaimer. THE NORTH SLOPE BOROUGH MAKES NO WARRANTY, REPRESENTATION, OR GUARANTEE OF ANY KIND REGARDING EITHER ANY MAPS OR OTHER INFORMATION PROVIDED HEREIN OR THE SOURCES OF SUCH MAPS OR OTHER INFORMATION. THE NORTH SLOPE BOROUGH SPECIFICALLY DISCLAIMS ALL REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. The North Slope Borough assumes no liability either for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or information provided herein."
s:\Projects-Jeffrey\2010 December\Applications\BRWMANHOLES121010JCU

This page is intentionally left blank

MANHOLES, FIRE HYDRANTS AND ACCIDENT LOCATIONS



This page is intentionally left blank

Appendix E: NVB IRR Program Inventory Data Sheet

This page is intentionally left blank

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Stevenso	Stevenso	Stevenso	Stevenso	Eben Hop	Eben Hop	Eben Hop	
4-IRR Route Number	0001	0001	0001	0001	0002	0002	0002	0003
5-Section Number	10	15	20	30	10	20	30	10
10-Class	4	4	4	4	4	4	4	3
15-Length of Section	0.4	0.3	2.0	4.7	0.1	0.2	0.3	2.9
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	2
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain	1	1	1	1	1	1	1	1
25-Roadbed Condition	4	0	4	4	4	4	4	0
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	30	24	27	24	28	39	39	0
13-Surface Type	1	0	1	1	1	1	1	0
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT		8058	2037	1831	4713			
21-ADT Year		2009	2009	2009	2009			
23-Percent Trucks		23	15	4	1			
34-Owner Route Number	STEVE	STEVE	STEVE	STEVE	EBENH	EBENH	EBENH	BAR03
Roadway Width	**30**	**24**	**27**	**24**	**28**	**39**	**39**	**10**
TTAM Future ADT	**74**	**11966**	**3025**	**2719**	**6999**	**74**	**74**	**37**
TTAM ADS Number	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**18**
TTAM Future Surface Type	**G**	**P**	**P**	**P**	**P**	**G**	**G**	**E**
35-Drainage Condition	*2*		*2*	*2*	*3*	*3*	*3*	*0*
36-Shoulder Condition	*0*		*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								*0*
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								*0*
26-Level of Maintenance	*3*		*3*	*3*	*3*	*3*	*3*	
27-Snow & Ice Control	*4*		*4*	*4*	*4*	*4*	*4*	
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*9*
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2010**	**2010**	**2010**	**2010**	**2008**	**2008**	**1993**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name		Ahkovak	Ahkovak	Ahkovak	Laura Ma			Uiuaqsaa
4-IRR Route Number	0004	0005	0005	0005	0006	0007	0007	0007
5-Section Number	10	10	20	30	10	10	10	20
10-Class	3	4	4	4	4	4	4	4
15-Length of Section	4.6	0.6	0.7	0.4	0.9	4.2	12.3	2.2
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	2	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain	1	1	1	1	1	1	1	1
25-Roadbed Condition	0	4	4	4	4	0	3	0
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	0	30	30	30	24	24	24	24
13-Surface Type	0	1	1	1	1	0	3	0
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT		1624	3221	3252	4653			
21-ADT Year		2004	2009	2004	2009			
23-Percent Trucks		15	17	17	12			
34-Owner Route Number	BAR04	AHKOV	AHKOV	AHKOV	LAURA			UIUA
Roadway Width	**10**	**30**	**30**	**30**	**24**	**24**	**24**	**24**
TTAM Future ADT	**37**	**2412**	**4783**	**4829**	**6910**	**74**	**74**	**74**
TTAM ADS Number	**18**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
TTAM Future Surface Type	**E**	**P**	**P**	**P**	**P**	**G**	**G**	**G**
35-Drainage Condition	*0*	*2*	*2*	*2*	*2*			
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*			
37/38 # RR X I NG/RR XING TYPE	*0*							
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost	*0*							
26-Level of Maintenance		*2*	*2*	*2*	*2*			
27-Snow & Ice Control		*4*	*4*	*4*	*4*			
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*9*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*	*7 5 0 0 0*			
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change							*1959*	
Update Year	**1993**	**2005**	**2010**	**2005**	**2010**	**2005**	**2011**	**2005**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Uic Pit	Uic Land	E. Gas N	E. Gas S	E. Gas E	S. Gas S		Nunavak
4-IRR Route Number	0007	0007	0007	0007	0007	0007	0008	0008
5-Section Number	30	40	50	60	70	80	10	10
10-Class	5	5	5	5	5	5	4	4
15-Length of Section	1.9	1.1	0.7	0.7	0.2	1.0	1.4	2.7
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain	1	1	1	1	1	1	1	1
25-Roadbed Condition	5	4	3	3	3	3	0	3
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	35	40	22	16	17	20	24	24
13-Surface Type	3	3	3	3	1	3	0	3
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*3*	*3*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*60*	*60*	*60*	*60*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width			0		0	0	0	0
14-Shoulder Type						1		
22-Existing ADT								
21-ADT Year								
23-Percent Trucks								
34-Owner Route Number								
Roadway Width	**35**	**40**	**22**	**16**	**17**	**20**	**24**	**24**
TTAM Future ADT	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**
TTAM ADS Number	**13**	**13**	**13**	**13**	**13**	**13**	**10**	**10**
TTAM Future Surface Type	**G**	**G**	**G**	**G**	**G**	**G**	**G**	**G**
35-Drainage Condition	*3*	*3*	*2*	*2*	*2*	*2*		
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*		
37/38 # RR X I NG/RR XING TYPE	*0*	*0*	*0*	*0*	*0*	*0*		
39-Right of Way Utility	*2*	*2*	*2*	*2*	*0*	*2*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*2*	*2*	*2*	*2*	*2*		
27-Snow & Ice Control	*4*	*3*	*2*	*2*	*2*	*2*		
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]							*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*7 4 0 0 0*	*7 5 0 0 0*	*6 0 0 0 0*	*6 0 0 0 0*	*6 0 0 0 0*	*6 0 0 0 0*		
51-Road Category	*S*	*S*	*W*	*W*	*E*	*L*	*A*	*A*
52-Year of Construction Change	*1959*	*1959*	*1959*	*1959*		*1959*	*1959*	*1959*
Update Year	**2011**	**2011**	**2011**	**2011**	**2011**	**2011**	**2005**	**2011**
Status	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**OFFICIAL**	**RETURNED-TO-FIE**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name		Fresh Wa	Pit Rd.	Faa Nort	Noaa 1	Satellit	Satellit	Satellit
4-IRR Route Number	0008	0008	0008	0008	0008	0008	0008	0008
5-Section Number	20	20	30	40	50	60	70	80
10-Class	4	4	5	5	5	5	5	5
15-Length of Section	1.6	2.7	1.4	0.3	0.2	0.1	0.1	0.1
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	3	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain	1	1	1	1	1	1	1	1
25-Roadbed Condition	0	3	5	4	4	4	3	3
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	24	24	35	15	15	11	12	12
13-Surface Type	0	3	3	3	3	3	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*3*	*0*	*3*	*3*	*3*	*3*
29-Right of Way Width	*0*	*0*	*60*	*0*	*60*	*60*	*60*	*60*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0						
14-Shoulder Type								
22-Existing ADT		112	278					
21-ADT Year		2009	2010					
23-Percent Trucks		16	33					
34-Owner Route Number								
Roadway Width	**24**	**24**	**35**	**15**	**15**	**11**	**12**	**12**
TTAM Future ADT	**74**	**166**	**413**	**74**	**74**	**74**	**74**	**74**
TTAM ADS Number	**10**	**10**	**13**	**13**	**13**	**13**	**13**	**13**
TTAM Future Surface Type	**G**	**G**	**P**	**G**	**G**	**G**	**G**	**G**
35-Drainage Condition			*3*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition			*0*					
37/38 # RR X I NG/RR XING TYPE			*0*	*0*	*0*	*0*	*0*	*0*
39-Right of Way Utility	*0*	*0*	*2*	*0*	*2*	*2*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance			*3*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control			*4*	*3*	*3*	*3*	*3*	*3*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*						
46-50 Grade/Sight/Curve/Stop / Safe	*74 00 0*	*70 00 0*	*70 00 0*	*70 00 0*	*70 00 0*	*70 00 0*	*70 00 0*	
51-Road Category	*A*	*A*	*S*	*J*	*J*	*J*	*J*	*K*
52-Year of Construction Change		*1956*	*1959*	*1959*	*1959*	*1959*		
Update Year	**2005**	**2011**	**2011**	**2011**	**2011**	**2011**	**2011**	**2011**
Status	**OFFICIAL**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Million	Pit Rd.	Ahgeak S	Ahgeak S	Iigu St	Iigu St	Sanatu S	Sanatu S
4-IRR Route Number	0008	0008	0101	0101	0101	0101	0101	0101
5-Section Number	90	110	10	10	20	20	30	30
10-Class	5	5	3	3	3	3	3	3
15-Length of Section	0.3	0.4	0.1	0.4	0.1	0.1	0.3	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain	1	2						
25-Roadbed Condition	2	2	4	4	4	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	30	35	21	21	30	30	33	33
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width			0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT								
21-ADT Year								
23-Percent Trucks								
34-Owner Route Number			AHGEA	AHGEA	IIGU	IIGU	SANAT	SANAT
Roadway Width	**30**	**35**	**21**	**21**	**30**	**30**	**33**	**33**
TTAM Future ADT	**74**	**74**	**37**	**37**	**37**	**37**	**37**	**37**
TTAM ADS Number	**13**	**14**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**G**	**G**	**E**	**E**	**E**	**E**	**E**	**E**
35-Drainage Condition	*3*	*0*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE	*0*	*0*						
39-Right of Way Utility	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control	*3*	*2*	*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]			*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*4 2 0 0 0*	*5 3 0 0 0*						
51-Road Category	*E*	*E*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2011**	**2011**	**2008**	**2012**	**2008**	**2012**	**2008**	**2012**
Status	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**OFFICIAL**	**ETURNED-TO-REG**	**OFFICIAL**	**ETURNED-TO-REG**	**OFFICIAL**	**ETURNED-TO-REG**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Yugit St	Yugit St	Saya St	Utiqtuq	Utiqtuq	Utiqtuq	Transit	Transit
4-IRR Route Number	0101	0101	0101	0101	0101	0101	0101	0101
5-Section Number	40	41	50	60	60	70	80	90
10-Class	3	7	3	3	3	3	3	3
15-Length of Section	0.5	0.3	0.3	0.3	0.3	0.3	0.1	0.4
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	4	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	0	4	4	4	4	4	4
24-Surface Condition Index	0		0	0	0	0	0	0
16-Surface Width	33		36	33	33	30	27	31
13-Surface Type	1	0	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	9.03	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0		0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT	831		96					550
21-ADT Year	2009		2009					2009
23-Percent Trucks	52		37					36
34-Owner Route Number	YUGIT		SAYA	UTIQT	UTIQT	UTIQT	TRANS	TRANS
Roadway Width	**33**		**36**	**33**	**33**	**30**	**27**	**31**
TTAM Future ADT	**1234**	**74**	**143**	**37**	**37**	**37**	**37**	**817**
TTAM ADS Number	**18**	**17**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**G**	**G**	**E**	**E**	**E**	**E**	**P**
35-Drainage Condition	*2*		*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*		*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*		*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*2*		*2*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control	*4*		*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*		*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*A*		*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2012**	**2010**	**2008**	**2012**	**2008**	**2008**	**2010**
Status	**OFFICIAL**	**RETURNED-TO-REG**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-REG**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	North St	North St	Simmonds	Simmonds			Karluk S	Herman S
4-IRR Route Number	0101	0101	0101	0101	0101	0101	0101	0101
5-Section Number	100	110	120	120	130	140	150	160
10-Class	3	3	3	3	3	3	3	3
15-Length of Section	0.4	0.5	0.1	0.1	0.1	0.1	0.8	0.7
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	4	4	4	4	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	24	24	36	36	33	27	27	30
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT	743	229					1358	725
21-ADT Year	2009	2009					2009	2009
23-Percent Trucks	59	28					70	28
34-Owner Route Number	NORTH	NORTH	AHGEA	AHGEA	AHGEA	AHGEA	AHGEA	AHGEA
Roadway Width	**24**	**24**	**36**	**36**	**33**	**27**	**27**	**30**
TTAM Future ADT	**1103**	**340**	**37**	**37**	**37**	**37**	**2017**	**1077**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**P**	**E**	**E**	**E**	**E**	**P**	**P**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2010**	**2008**	**2012**	**2008**	**2008**	**2010**	**2010**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**ETURNED-TO-REG**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Boxer St	Tahak St	Okakok S	C Ave	C Ave	C Ave	C Ave	B Ave
4-IRR Route Number	0101	0101	0101	0101	0101	0101	0101	0101
5-Section Number	170	180	190	200	210	220	230	240
10-Class	3	3	3	3	3	3	3	3
15-Length of Section	0.6	0.2	0.3	0.1	0.1	0.1	0.1	0.4
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	4	4	4	4	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	27	27	21	24	24	24	27	33
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT	1126	592	419			341		185
21-ADT Year	2009	2009	2009			2009		2009
23-Percent Trucks	15	23	20			21		3
34-Owner Route Number	AHGEA	TAHAK	AHGEA	C AVE	C AVE	C AVE	C AVE	AHGEA
Roadway Width	**27**	**27**	**21**	**24**	**24**	**24**	**27**	**33**
TTAM Future ADT	**1672**	**879**	**622**	**37**	**37**	**506**	**37**	**275**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**P**	**P**	**E**	**E**	**P**	**E**	**P**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2010**	**2010**	**2008**	**2008**	**2010**	**2008**	**2010**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	A Ave	Ahmaogak	Uula St	Qaiyaan	Kignak S	Kignak S	Sakeagak	Kaleak S
4-IRR Route Number	0101	0101	0101	0101	0101	0101	0101	0101
5-Section Number	250	260	270	280	290	290	300	310
10-Class	3	3	3	3	3	3	5	5
15-Length of Section	0.4	0.6	0.5	0.4	0.2	0.2	0.2	0.4
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain							1	1
25-Roadbed Condition	4	4	4	4	4	4	5	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	33	30	30	36	33	33	20	21
13-Surface Type	1	1	1	1	1	1	3	3
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*3*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*60*	*60*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0		
14-Shoulder Type								
22-Existing ADT	799	884	813	801				
21-ADT Year	2009	2009	2009	2009				
23-Percent Trucks	12	14	28	3				
34-Owner Route Number	AHGEA	AHGEA	AHGEA	AHGEA	AHGEA	AHGEA		
Roadway Width	**33**	**30**	**30**	**36**	**33**	**33**	**20**	**21**
TTAM Future ADT	**1187**	**1313**	**1207**	**1189**	**37**	**37**	**74**	**74**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**13**	**13**
TTAM Future Surface Type	**P**	**P**	**P**	**P**	**E**	**E**	**G**	**G**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*		
37/38 # RR X I NG/RR XING TYPE							*0*	*0*
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*4*	*6*	*3*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*		
46-50 Grade/Sight/Curve/Stop / Safe							*7 0 0 0 0*	*6 0 0 0 0*
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*W*
52-Year of Construction Change							*1959*	*1959*
Update Year	**2010**	**2010**	**2010**	**2010**	**2008**	**2012**	**2012**	**2012**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-REG**	**RETURNED-TO-REG**	**RETURNED-TO-REG**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Icas St.	Hms Rd.	Water Tr		Apayauak	Apayauak	Pisokak	Pisokak
4-IRR Route Number	0101	0101	0101	0101	0102	0102	0102	0102
5-Section Number	320	330	340	400	10	10	20	20
10-Class	5	5	5	6	3	3	3	3
15-Length of Section	0.2	0.2	0.1	1.2	0.2	0.1	0.3	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*010*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	4	2	2	2	2
11-Terrain	1	1	1					
25-Roadbed Condition	3	5	3	0	4	4	4	4
24-Surface Condition Index	0	0	0		0	0	0	0
16-Surface Width	15	16	12		30	30	30	30
13-Surface Type	3	3	3	0	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*3*	*3*	*3*	*1*	*0*	*0*	*0*	*0*
29-Right of Way Width	*60*	*60*	*60*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	9.03	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width					0	0	0	0
14-Shoulder Type								
22-Existing ADT						2261		1359
21-ADT Year						2010		2010
23-Percent Trucks						34		21
34-Owner Route Number					APAYA	APAYA	PISOK	PISOK
Roadway Width	**15**	**16**	**12**		**30**	**30**	**30**	**30**
TTAM Future ADT	**74**	**74**	**74**	**74**	**37**	**3358**	**37**	**2018**
TTAM ADS Number	**13**	**13**	**13**	**16**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**G**	**G**	**G**	**G**	**E**	**P**	**E**	**P**
35-Drainage Condition	*2*	*2*	*2*		*2*	*2*	*2*	*2*
36-Shoulder Condition					*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE	*0*	*0*	*0*					
39-Right of Way Utility	*2*	*2*	*0*		*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*2*	*2*	*2*		*3*	*3*	*3*	*3*
27-Snow & Ice Control	*3*	*6*	*3*		*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]					*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*7 0 0 0 0*	*7 0 0 0 0*	*7 0 0 0 0*					
51-Road Category	*J*	*J*	*W*		*A*	*A*	*A*	*A*
52-Year of Construction Change	*1959*	*1959*	*1959*					
Update Year	**2012**	**2012**	**2012**	**2012**	**2005**	**2011**	**2005**	**2011**
Status	**ETURNED-TO-REG**	**ETURNED-TO-REG**	**ETURNED-TO-REG**	**ETURNED-TO-REG**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**RETURNED-TO-FIE**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Egasak S	Egasak S	Ogrook S	Firelane	Kingosak	Kingosak	Cunningh	Cunningh
4-IRR Route Number	0102	0102	0102	0102	0102	0102	0102	0102
5-Section Number	30	30	40	50	60	60	70	70
10-Class	3	3	3	3	3	3	3	3
15-Length of Section	0.5	0.3	0.3	0.1	0.2	0.2	0.1	0.1
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	4	4	4	4	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	28	28	30	24	32	32	32	32
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT		292	1227			305		281
21-ADT Year		2010	2009			2010		2010
23-Percent Trucks		50	22			27		23
34-Owner Route Number	EGASA	EGASA	OGROO	FIREL	KINGO	KINGO	CUNNI	CUNNI
Roadway Width	**28**	**28**	**30**	**24**	**32**	**32**	**32**	**32**
TTAM Future ADT	**37**	**434**	**1822**	**37**	**37**	**453**	**37**	**417**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**E**	**P**	**P**	**E**	**E**	**P**	**E**	**P**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2005**	**2011**	**2010**	**2005**	**2005**	**2011**	**2005**	**2011**
Status	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**RETURNED-TO-FIE**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Nachik S	Nachik S	Aivik St	Aivik St	Agvik St		Kiogak S	Momegann
4-IRR Route Number	0102	0102	0102	0102	0102	0102	0102	0102
5-Section Number	80	80	90	90	100	110	120	130
10-Class	3	3	3	3	3	3	3	3
15-Length of Section	0.2	0.3	0.1	0.1	0.2	0.1	0.5	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	4	4	4	4	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	20	20	31	31	33	24	25	33
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0	0	0	0
14-Shoulder Type								
22-Existing ADT	188	188		295	873		1227	2345
21-ADT Year	2009	2009		2010	2009		2009	2009
23-Percent Trucks	17	17		43	22		22	23
34-Owner Route Number	NACHI	NACHI	APAYA	APAYA	APAYA		APAYA	MOMEG
Roadway Width	**20**	**20**	**31**	**31**	**33**	**24**	**25**	**33**
TTAM Future ADT	**279**	**279**	**37**	**438**	**1296**	**37**	**1822**	**3482**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**P**	**E**	**P**	**P**	**E**	**P**	**P**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2011**	**2005**	**2011**	**2010**	**2005**	**2010**	**2010**
Status	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Okpik St	Nanuk St	Nanuk St	Kongek S	Kongek S	Old Ipal	Tapak St	Itta St
4-IRR Route Number	0102	0102	0102	0102	0102	0102	0103	0104
5-Section Number	140	150	150	160	160	170	10	10
10-Class	3	3	3	3	3	3	3	3
15-Length of Section	0.9	0.2	0.2	0.2	0.1	0.2	0.2	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	5	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition	4	4	4	4	4	3	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	30	31	31	27	27	18	33	30
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*3*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*60*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0	0		0	0
14-Shoulder Type								
22-Existing ADT	1802		381		1038		421	
21-ADT Year	2009		2010		2010		2010	
23-Percent Trucks	23		50		31		28	
34-Owner Route Number	OKPIK	NANUK	NANUK	KONGE	KONGE		TAPAK	ITTA
Roadway Width	**30**	**31**	**31**	**27**	**27**	**18**	**33**	**30**
TTAM Future ADT	**2676**	**37**	**566**	**37**	**1541**	**37**	**625**	**37**
TTAM ADS Number	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**E**	**P**	**E**	**P**	**E**	**P**	**E**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*2*	*3*	*3*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*		*0*	*0*
37/38 # RR X I NG/RR XING TYPE						*0*		
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*2*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*3*	*3*	*3*	*3*	*2*	*3*	*3*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*3*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*		*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe						*7 0 0 0 0*		
51-Road Category	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2010**	**2005**	**2011**	**2005**	**2011**	**2011**	**2011**	**2005**
Status	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Paniego	H St	D St	Paniego	City Of			
4-IRR Route Number	0104	0104	0104	0104	0104	0105	0105	0105
5-Section Number	20	30	40	50	60	10	20	30
10-Class	3	3	3	3	5	3	3	3
15-Length of Section	0.1	0.1	0.3	0.1	0.1	0.1	0.4	0.4
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	3	2	2	2
11-Terrain					1			
25-Roadbed Condition	4	4	4	4	2	4	4	4
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	30	30	27	24	17	27	21	21
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0		0	0	0
14-Shoulder Type								
22-Existing ADT	230	235	427					
21-ADT Year	2010	2010	2009					
23-Percent Trucks	30	37	10					
34-Owner Route Number	PANIE	H ST	D ST	PANI2				
Roadway Width	**30**	**30**	**27**	**24**	**17**	**27**	**21**	**21**
TTAM Future ADT	**342**	**349**	**634**	**37**	**74**	**37**	**37**	**37**
TTAM ADS Number	**18**	**18**	**18**	**18**	**13**	**18**	**18**	**18**
TTAM Future Surface Type	**P**	**P**	**P**	**E**	**G**	**E**	**E**	**E**
35-Drainage Condition	*3*	*3*	*3*	*3*	*2*	*2*	*2*	*2*
36-Shoulder Condition	*0*	*0*	*0*	*0*		*0*	*0*	*0*
37/38 # RR X I NG/RR XING TYPE					*0*			
39-Right of Way Utility	*2*	*2*	*2*	*2*	*0*	*2*	*2*	*2*
40-Right of Way Cost								
26-Level of Maintenance	*3*	*3*	*3*	*3*	*2*	*3*	*3*	*3*
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*4*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*		*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe					*0 0 0 0*			
51-Road Category	*A*	*A*	*A*	*A*	*J*	*A*	*A*	*A*
52-Year of Construction Change								
Update Year	**2011**	**2011**	**2010**	**2005**	**2011**	**2005**	**2005**	**2005**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name					Barc Rd.	Dew Line		
4-IRR Route Number	0105	0105	0105	0105	0105	0105	1002	1010
5-Section Number	40	50	60	70	80	90	10	10
10-Class	3	3	3	3	5	5	4	3
15-Length of Section	0.1	0.1	0.4	0.1	0.4	1.5	7.1	0.7
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	2	2
12-Construction Need	2	2	2	2	2	0	2	2
11-Terrain					1	1	2	1
25-Roadbed Condition	4	4	4	4	4	5	1	0
24-Surface Condition Index	0	0	0	0	0	0	0	0
16-Surface Width	33	20	17	18	45	17	22	0
13-Surface Type	1	1	1	1	3	3	9	0
9-Federal Aid Category	1	1	1	1	1	1		1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*60*
TTAM BIA Share	100	100	100	100	100	100	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0	0	0			0	0
14-Shoulder Type						3		
22-Existing ADT								
21-ADT Year								
23-Percent Trucks							25	
34-Owner Route Number							BARR2	
Roadway Width	**33**	**20**	**17**	**18**	**45**	**17**	**22**	**24**
TTAM Future ADT	**37**	**37**	**37**	**37**	**74**	**74**	**74**	**37**
TTAM ADS Number	**18**	**18**	**18**	**18**	**13**	**13**	**11**	**18**
TTAM Future Surface Type	**E**	**E**	**E**	**E**	**G**	**G**	**G**	**E**
35-Drainage Condition	*2*	*2*	*2*	*2*	*2*	*3*	*0*	*0*
36-Shoulder Condition	*0*	*0*	*0*	*0*	*0*		*0*	*0*
37/38 # RR X I NG/RR XING TYPE					*0*	*0*	*0*	*0*
39-Right of Way Utility	*2*	*2*	*2*	*2*	*0*	*2*	*0*	*3*
40-Right of Way Cost							*0*	*0*
26-Level of Maintenance	*3*	*3*	*3*	*3*	*3*	*2*	*1*	
27-Snow & Ice Control	*4*	*4*	*4*	*4*	*4*	*3*		
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*			*01*	
46-50 Grade/Sight/Curve/Stop / Safe					*6 5 0 0 0*	*6 0 0 0 0*	*7 5 0 0 9*	*9*
51-Road Category	*A*	*A*	*A*	*A*	*W*	*J*	*A*	*Y*
52-Year of Construction Change					*1959*	*1959*		
Update Year	**2005**	**2005**	**2005**	**2005**	**2011**	**2011**	**1993**	**2002**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name		Cakeeate	Laura Ma	Laura Ma	Public W	Airport	High Sch	School D
4-IRR Route Number	1020	2011	2012	2012	2013	2015	2018	2019
5-Section Number	10	10	10	20	10	10	10	10
10-Class	4	5	6	6	3	3	3	3
15-Length of Section	2.2	1.8	0.4	0.3	0.1	0.1	0.1	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	2	8	8	8	8	3	8	8
12-Construction Need	2	2	4	2	2	2	2	2
11-Terrain	1	1						
25-Roadbed Condition	0	4		4	2	4	2	2
24-Surface Condition Index	0	84		74	0	78	0	0
16-Surface Width	0	24		24	16	24	18	15
13-Surface Type	0	3		3	1	3	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*1*	*2*	*2*	*2*	*0*	*2*	*0*	*0*
29-Right of Way Width	*60*	*60*	*0*	*60*	*0*	*60*	*0*	*0*
TTAM BIA Share	100	100	9.03	9.03	100	9.03	100	100
30-Additional Incidental Percent								
17-Shoulder Width	0	0		0	0	0	0	0
14-Shoulder Type								
22-Existing ADT								35
21-ADT Year								2009
23-Percent Trucks	5							18
34-Owner Route Number								
Roadway Width	**24**	**24**		**24**	**16**	**24**	**18**	**15**
TTAM Future ADT	**74**	**74**	**74**	**74**	**37**	**37**	**37**	**52**
TTAM ADS Number	**10**	**13**	**16**	**16**	**18**	**18**	**18**	**18**
TTAM Future Surface Type	**G**	**G**	**G**	**G**	**E**	**E**	**E**	**G**
35-Drainage Condition	*0*							
36-Shoulder Condition	*0*							
37/38 # RR X I NG/RR XING TYPE	*0*							
39-Right of Way Utility	*0*							
40-Right of Way Cost	*0*							
26-Level of Maintenance								
27-Snow & Ice Control								
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]		*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe	*6 5 1 1 9*							
51-Road Category	*Y*							
52-Year of Construction Change		*1978*		*1985*		*1987*		
Update Year	**2002**	**2008**	**2008**	**2008**	**2008**	**2011**	**2008**	**2010**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**OFFICIAL**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	School D	Hospital	Church R	North Sl	Pigniq W	Pigniq C	Pigniq L	Ice Road
4-IRR Route Number	2020	2024	2025	2028	2100	2100	2100	2200
5-Section Number	10	11	10	10	10	20	30	10
10-Class	3	3	3	3	5	3	3	8
15-Length of Section	0.1	0.2	0.1	0.1	0.4	0.2	0.2	0.3
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain					1			
25-Roadbed Condition	2	3	4	4	3	2	2	
24-Surface Condition Index	0	81	76	72	0	0	0	
16-Surface Width	15	40	24	24	20	15	25	5
13-Surface Type	1	3	3	3	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*1*	*2*	*2*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*		*60*	*60*	*0*	*0*	*0*	*0*
TTAM BIA Share	100	100	100	100	100	100	100	9.03
30-Additional Incidental Percent								
17-Shoulder Width	0		0	0				
14-Shoulder Type								
22-Existing ADT			1016					
21-ADT Year			2009					
23-Percent Trucks			2					
34-Owner Route Number								ICE
Roadway Width	**15**	**40**	**24**	**24**	**20**	**15**	**25**	**5**
TTAM Future ADT	**37**	**37**	**1509**	**37**	**74**	**37**	**37**	**30**
TTAM ADS Number	**18**	**18**	**18**	**18**	**13**	**18**	**18**	**19**
TTAM Future Surface Type	**E**	**E**	**P**	**E**	**G**	**E**	**E**	
35-Drainage Condition					*2*	*0*	*0*	*3*
36-Shoulder Condition					*0*	*0*	*0*	
37/38 # RR X I NG/RR XING TYPE					*0*	*0*	*0*	
39-Right of Way Utility					*2*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance					*2*	*1*	*1*	*1*
27-Snow & Ice Control					*2*	*3*	*3*	*0*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*		*01*	*01*				*01*
46-50 Grade/Sight/Curve/Stop / Safe					*6 0 0 0 0*	*6 5 0 0 0*	*6 5 0 0 0*	
51-Road Category					*E*	*W*	*W*	*E*
52-Year of Construction Change		*2000*	*1993*	*1992*				
Update Year	**2008**	**2012**	**2010**	**2010**	**2011**	**2011**	**2011**	**2005**
Status	**OFFICIAL**	**OFFICIAL**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**RETURNED-TO-FIE**	**OFFICIAL**

Indian Reservation Roads Program
Inventory Data Sheet (ver2)
FY 2015 Inventory

Filter Criteria				
E	2015	03	033	

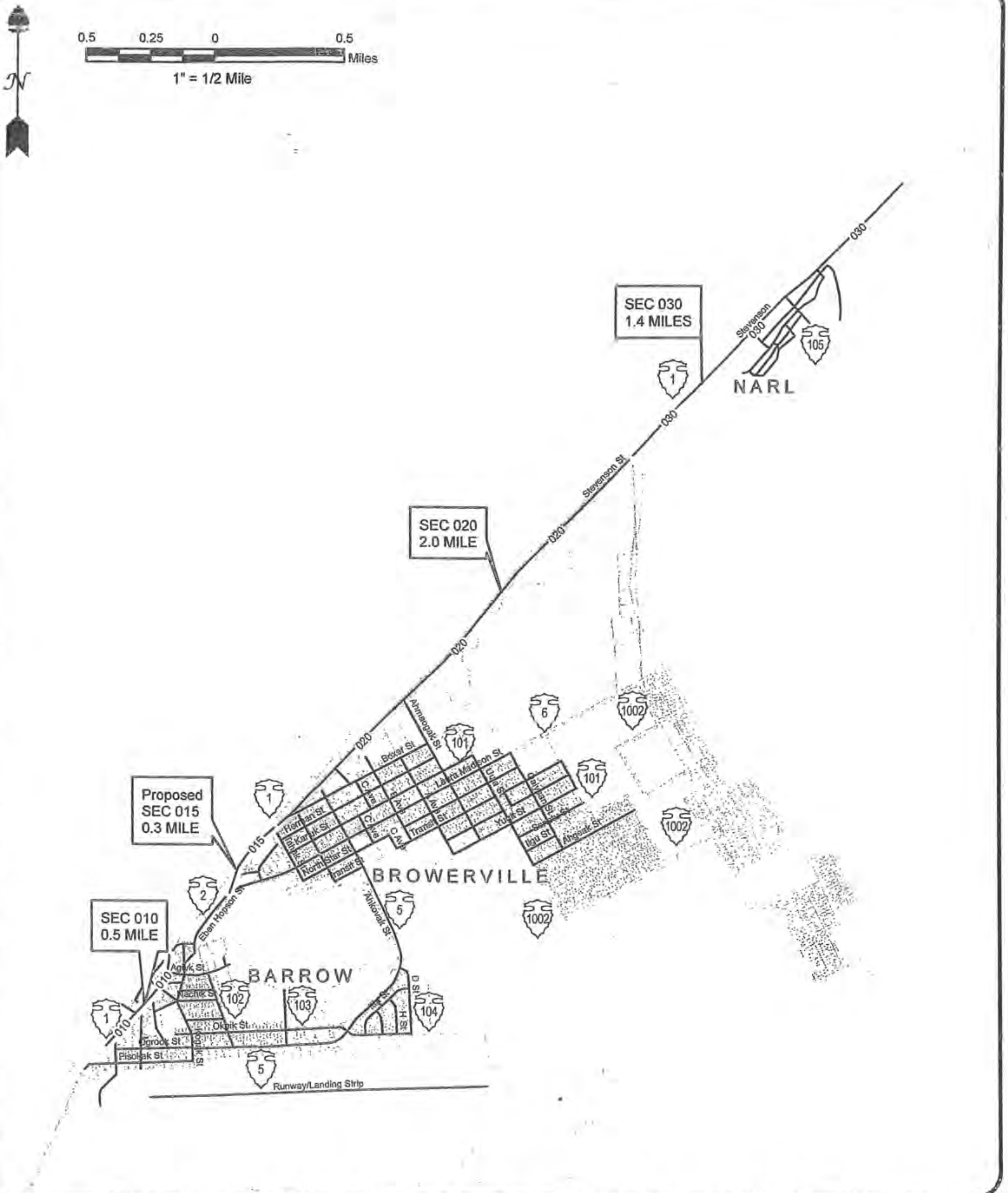
For construction costs use the Greenbook Report

Itallicized fields are direct update data and bold fields are derived data.

Location ID	E03033	E03033	E03033	E03033	E03033	E03033	E03033	E03033
Region	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska
Agency	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank	Fairbank
Reservation	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I	Barrow I
Road Name	Wainwrig	Wainwrig	Atqasuk	Atqasuk	Singiluk	Nuiqsut	Alaktak	Trail
4-IRR Route Number	7040	7040	7040	7040	7040	7040	7040	7040
5-Section Number	10	20	30	40	50	60	70	80
10-Class	8	8	8	8	8	8	8	8
15-Length of Section	49.7	47.8	26.0	32.4	99.4	94.7	76.3	19.9
18-Bridge Number								
19-Bridge Condition								
20-Bridge Length								
32-County	*040*	*040*	*040*	*040*	*040*	*040*	*040*	*040*
33-Congressional District	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
7-State	AK	AK	AK	AK	AK	AK	AK	AK
8-Ownership	8	8	8	8	8	8	8	8
12-Construction Need	2	2	2	2	2	2	2	2
11-Terrain								
25-Roadbed Condition								
24-Surface Condition Index								
16-Surface Width	5	5	5	5	5	5	5	5
13-Surface Type	1	1	1	1	1	1	1	1
9-Federal Aid Category	1	1	1	1	1	1	1	1
28-Right of Way Status	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29-Right of Way Width	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TTAM BIA Share	9.03	9.03	9.03	9.03	9.03	9.03	9.03	9.03
30-Additional Incidental Percent								
17-Shoulder Width								
14-Shoulder Type								
22-Existing ADT								
21-ADT Year								
23-Percent Trucks								
34-Owner Route Number	TRLWN	TRLWR	TRLAT	TRLAT	TRLSI	TRLNU	TRLAL	TRL
Roadway Width	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
TTAM Future ADT	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**
TTAM ADS Number	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**
TTAM Future Surface Type								
35-Drainage Condition	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
36-Shoulder Condition								
37/38 # RR X I NG/RR XING TYPE								
39-Right of Way Utility	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
40-Right of Way Cost								
26-Level of Maintenance	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*
27-Snow & Ice Control	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
41-Begin Latitude								
42-End Latitude								
43-Begin Longitude								
44-End Longitude								
45-Atlas Map Number [99]	*01*	*01*	*01*	*01*	*01*	*01*	*01*	*01*
46-50 Grade/Sight/Curve/Stop / Safe								
51-Road Category	*E*	*E*	*E*	*E*	*E*	*E*	*E*	*E*
52-Year of Construction Change								
Update Year	**2005**	**2005**	**2005**	**2005**	**2005**	**2005**	**2005**	**2005**
Status	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**	**OFFICIAL**

Appendix F: Native Village of Barrow Strip Maps

This page is intentionally left blank



BARROW, BROWERVILLE, and NARL

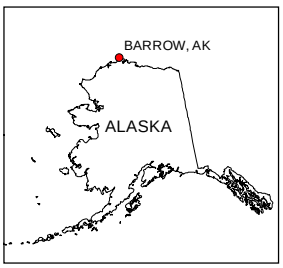
NORTH SLOPE
ALASKA REGION

BIA Route 0001
SECTIONS 010-030

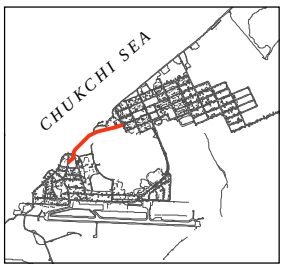
Township 22-23 North / Range 18-19 West

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0002
10,20,30

BIA Route #

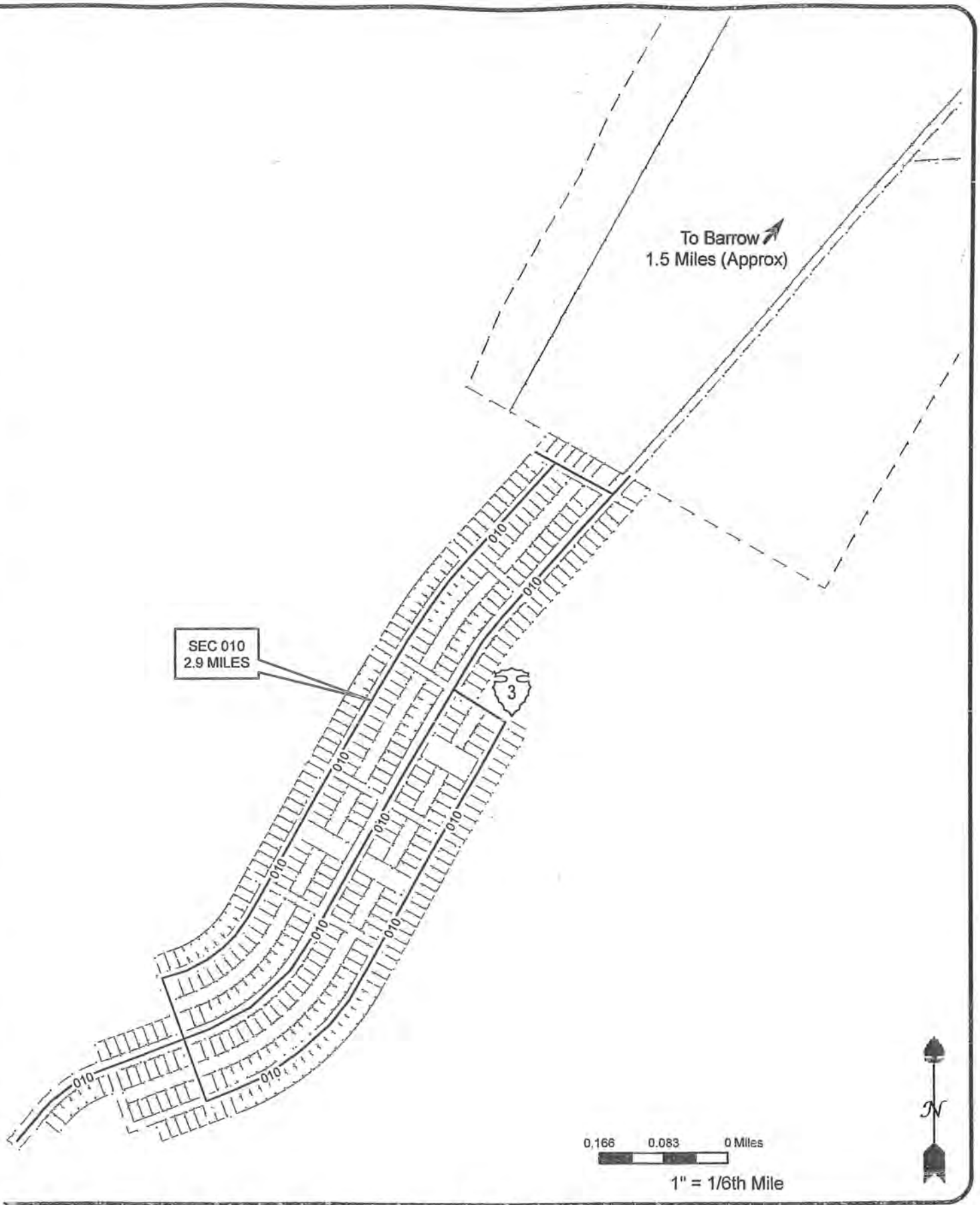
BIA Section of Route #

Eben Hopson St.

March 2010

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
eben hopson	0002	010	0.1	71.293	-156.784	71.294	-156.782
eben hopson	0002	020	0.2	71.294	-156.782	71.297	-156.775
eben hopson	0002	030	0.3	71.297	-156.775	71.298	-156.764

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees



BARROW, BROWERVILLE, and NARL

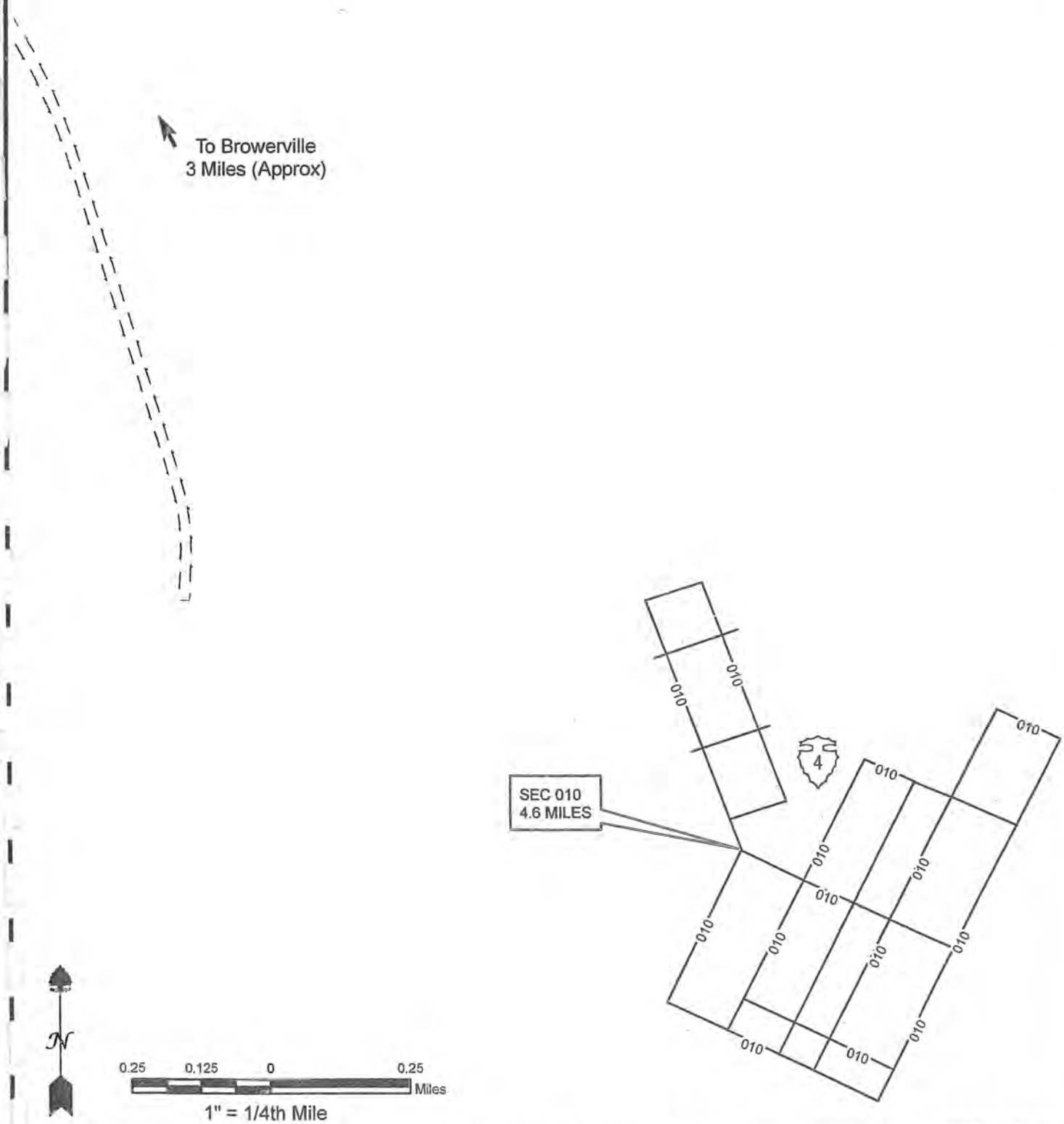
NORTH SLOPE
ALASKA REGION

BIA Route 0003
SECTION 010 (Proposed)

Township 22 North / Range 19 West / Section 13-14

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



BARROW, BROWERVILLE, and NARL

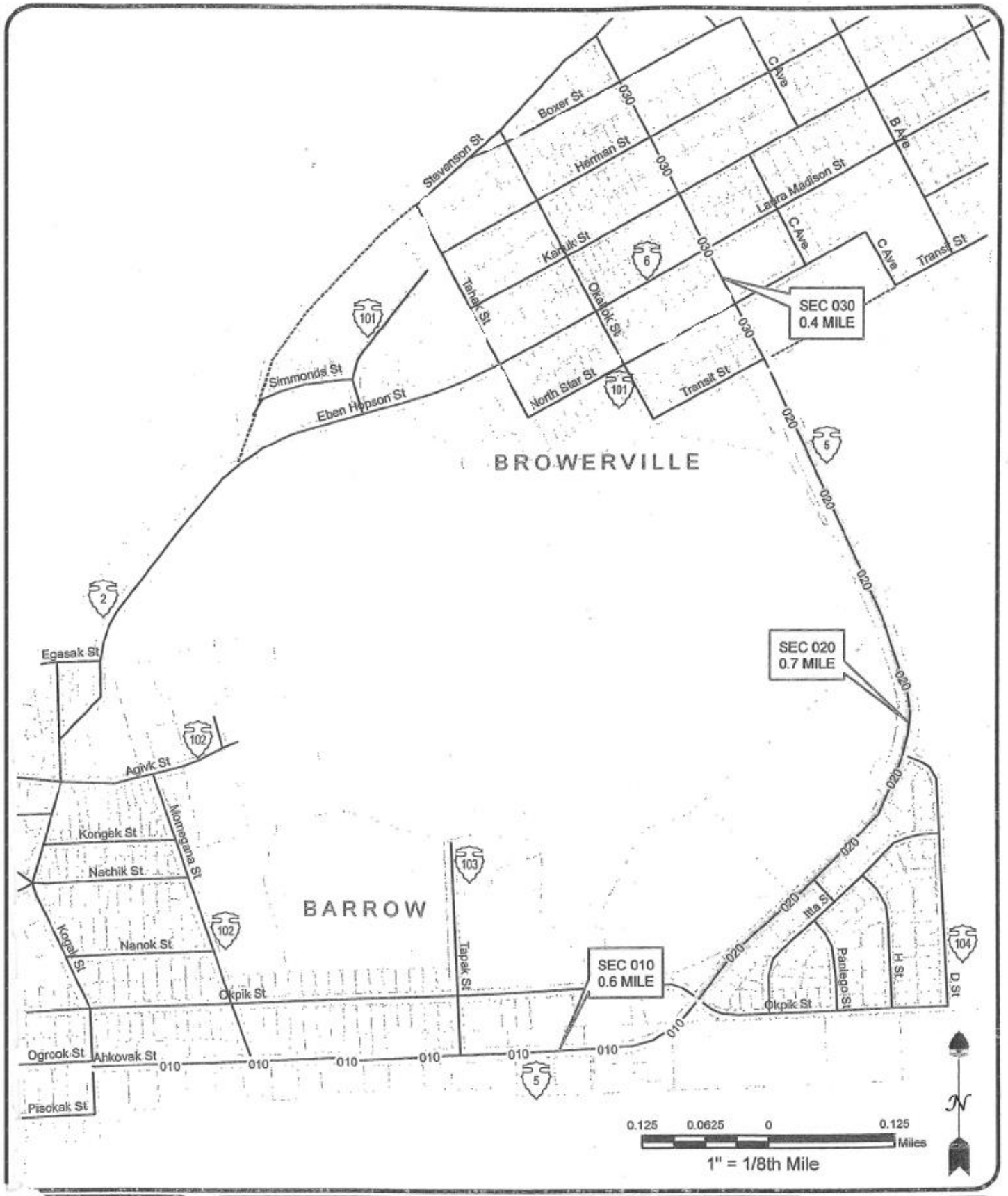
NORTH SLOPE
ALASKA REGION

BIA Route 0004
SECTION 010 (Proposed)

Township 22 North / Range 18 West

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



BARROW, BROWERVILLE, and NARL

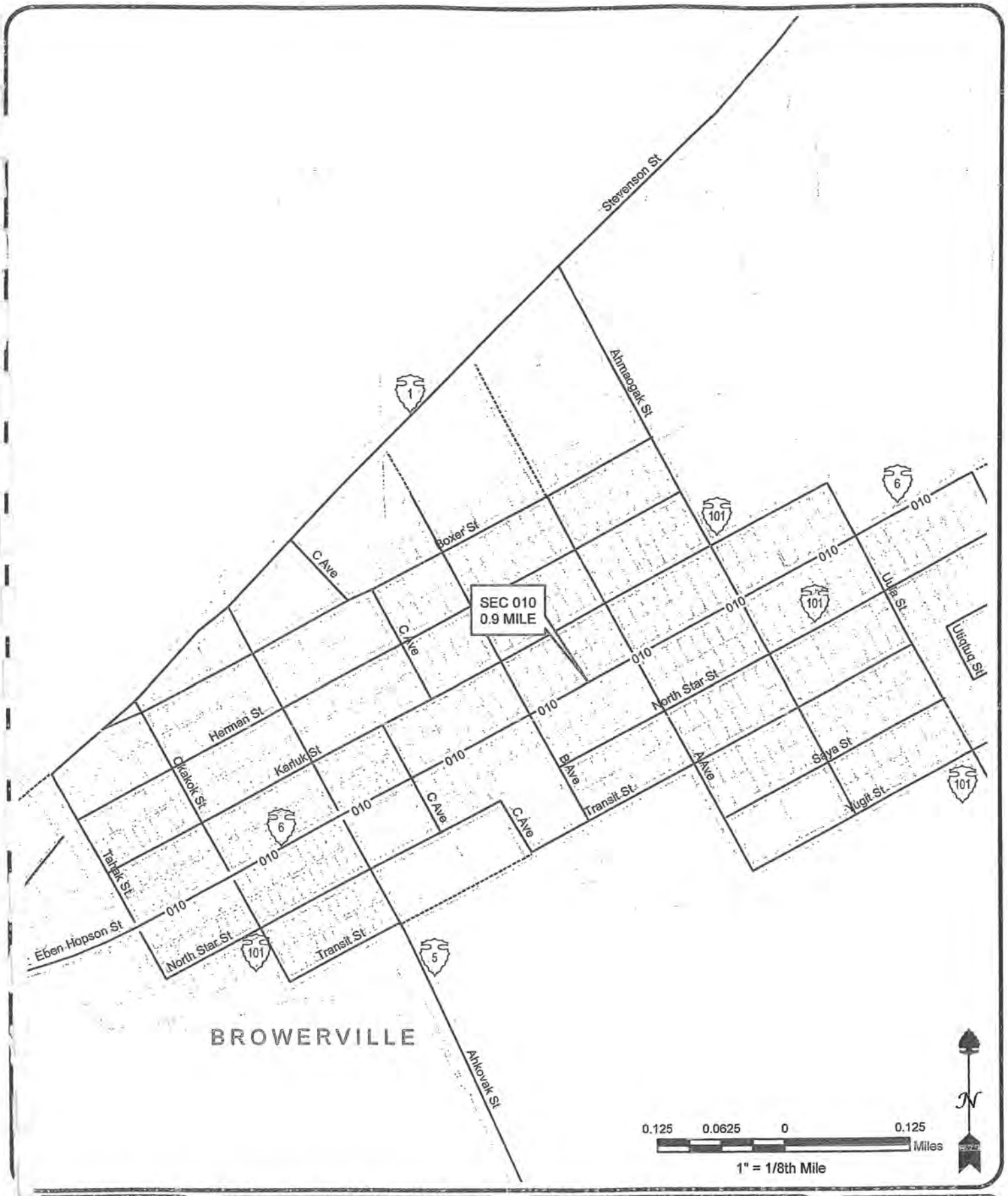
NORTH SLOPE
ALASKA REGION

BIA Route 0005
SECTIONS 010-030

Township 22 North / Range 18 West / Sections 5-6
Township 23 North / Range 18 West / Section 32

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



BARROW, BROWERVILLE, and NARL

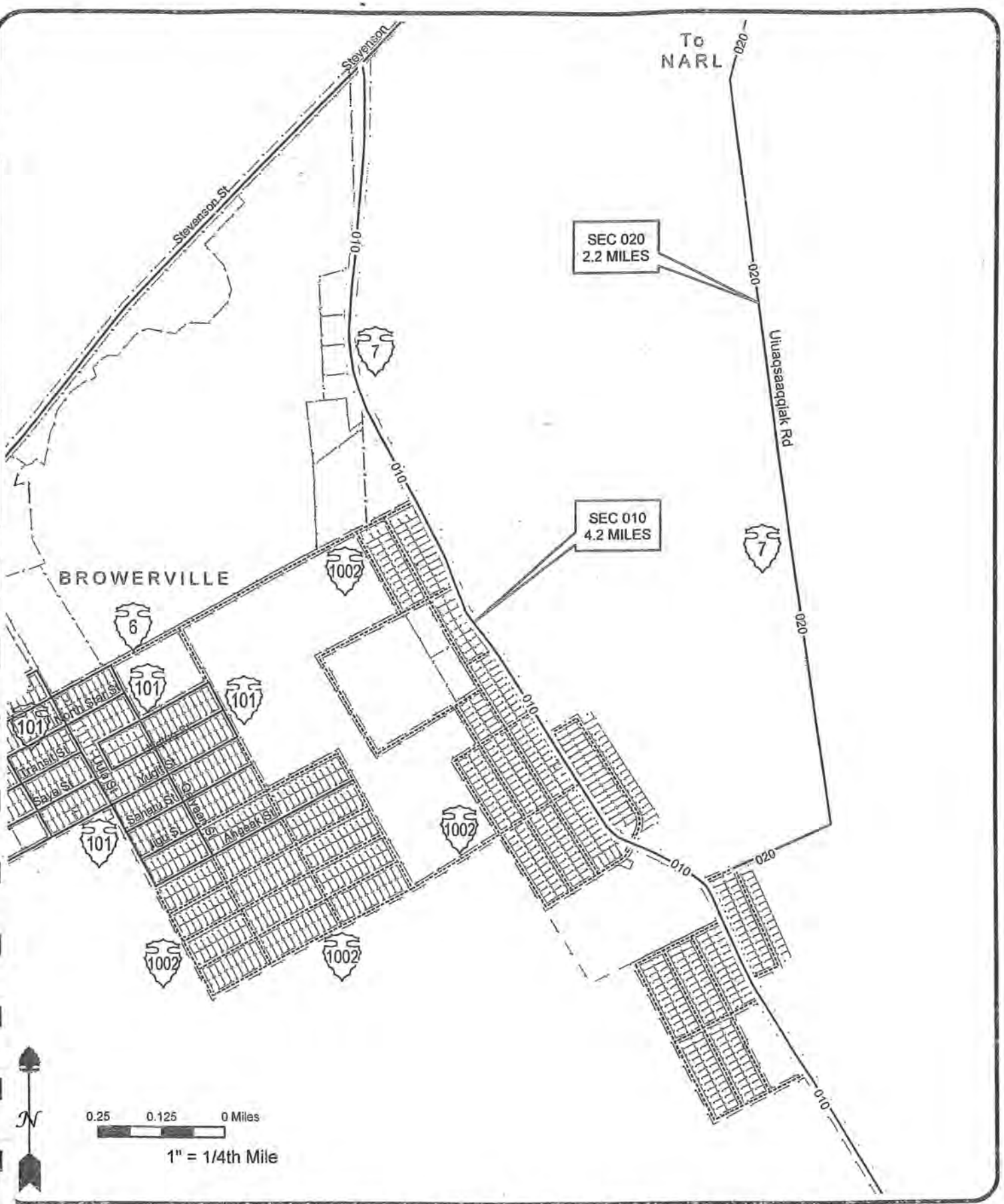
NORTH SLOPE
ALASKA REGION

BIA Route 0006
SECTION 010

Township 23 North / Range 18 West / Section 32

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



BARROW, BROWERVILLE, and NARL

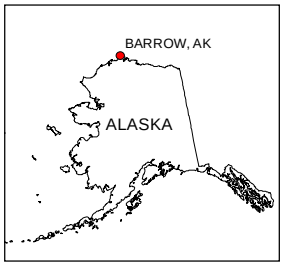
NORTH SLOPE
ALASKA REGION

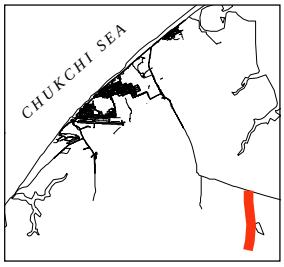
BIA Route 0007
SECTIONS 010-020(Proposed)

Township 22 North / Range 19 West / Section 13-14

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
030

BIA Route #

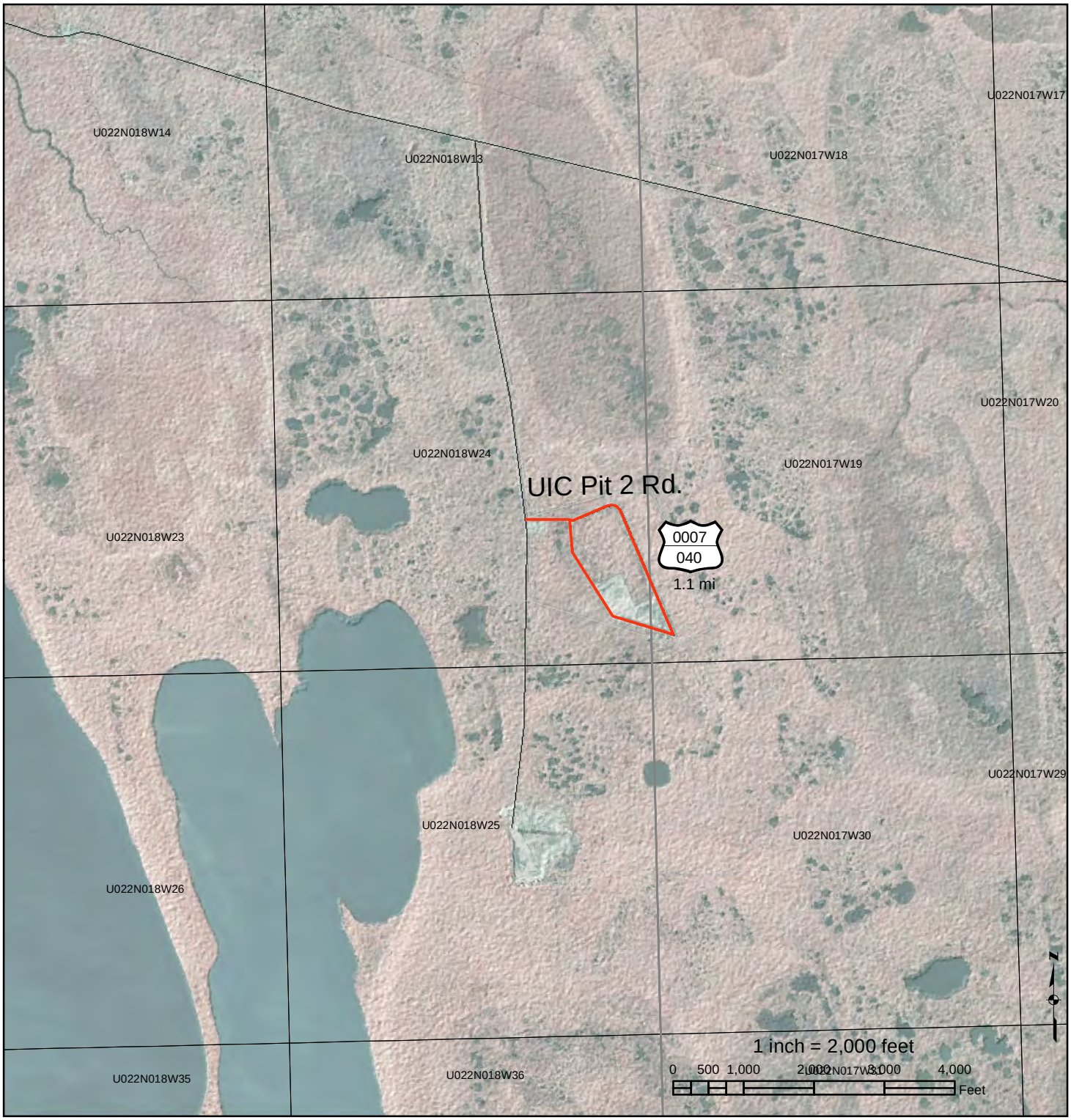
BIA Section of Route #

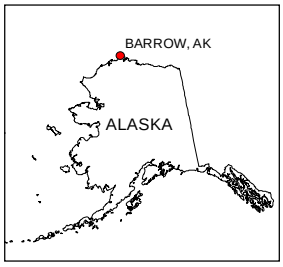
UIC Pit Rd.

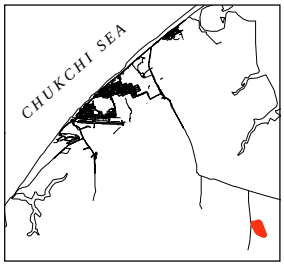
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
uic_pit	7	30	1.9	71.258	-156.565	71.232	-156.562

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.







Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
040

BIA Route #

BIA Section of Route #

UIC Pit 2 Rd.

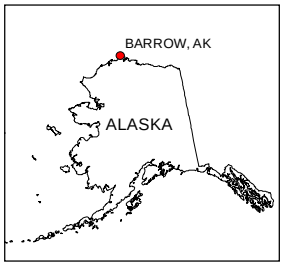
NATIVE VILLAGE OF BARROW

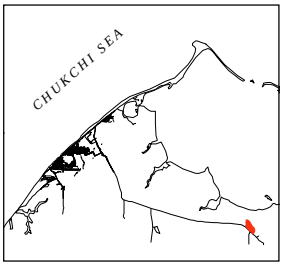
UMIAQ

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
uic_pit_2	7	40	1.1	71.244	-156.560	71.244	-156.555

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
050

BIA Route #

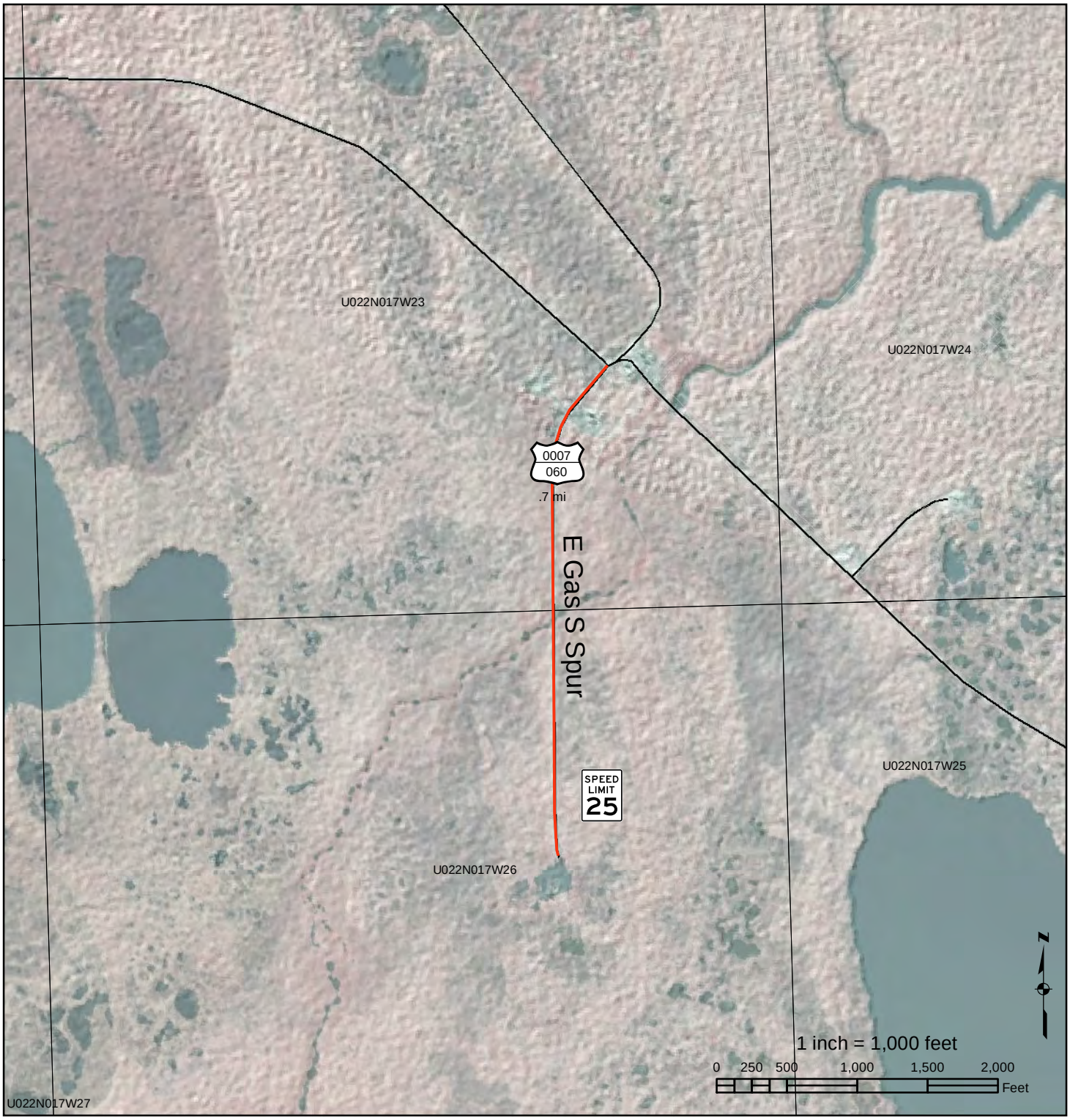
BIA Section of Route #

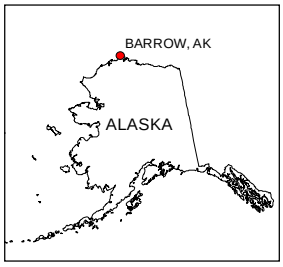
E Gas N Spur

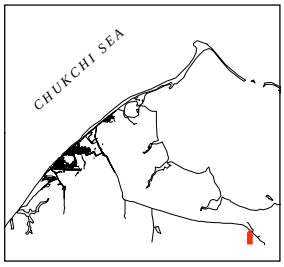
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
e_gas_n_spur	7	50	0.7	71.250	-156.345	71.243	-156.332

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.







Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
060

BIA Route #

BIA Section of Route #

E Gas S Spur

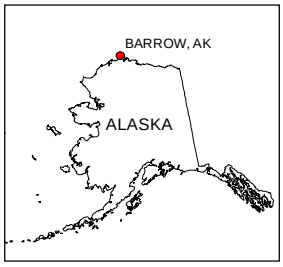
NATIVE VILLAGE OF BARROW

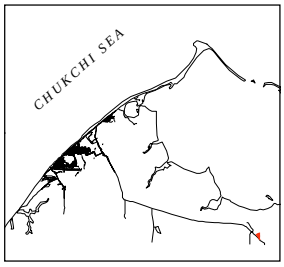
UMIAQ

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
e_gas_s_spur	7	60	0.7	71.243	-156.333	71.233	-156.336

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
070

BIA Route #

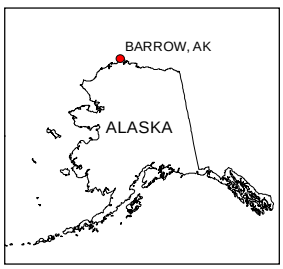
BIA Section of Route #

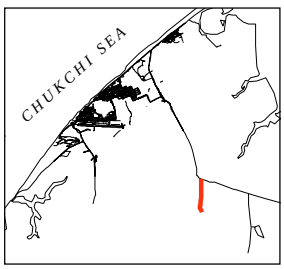
E Gas E Spur

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
e_gas_e_spur	7	70	0.2	71.238	-156.318	71.240	-156.312

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0007
080

BIA Route #

BIA Section of Route #

S Gas Spur

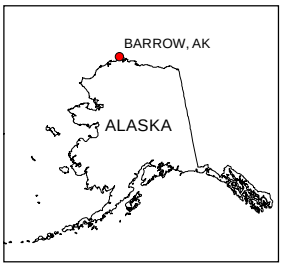
NATIVE VILLAGE OF BARROW

UMIAQ

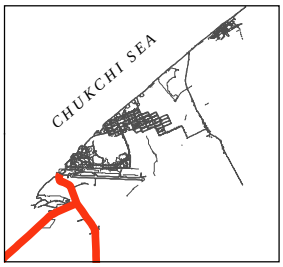
6/6/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
s_gas_spur	7	20	1.0	71.264	-156.628	71.249	-156.625

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
10, 20

BIA Route #

BIA Section of Route #

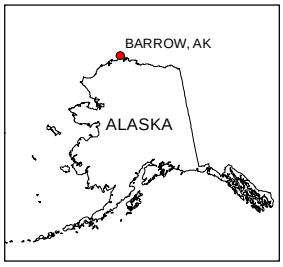
Fresh Water Lake Rd
Nunavak Rd.

UMIAQ

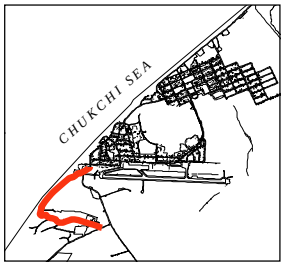
3/15/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
fresh water	8	20	2.7	71.286	-156.800	71.251	-156.769
nunavak	8	10	2.7	71.279	-156.786	71.253	-156.873

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
030

BIA Route #

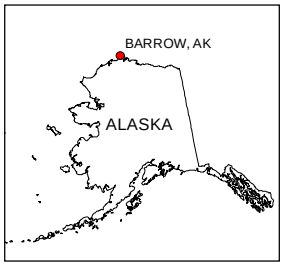
BIA Section of Route #

Pit Rd. 1

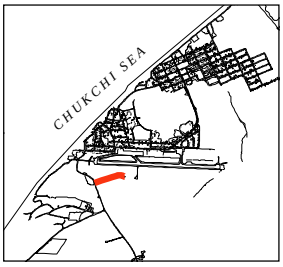
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pit_road_1	8	30	1.4	71.287	-156.796	71.278	-156.790

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
040

BIA Route #

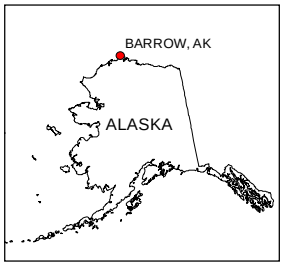
BIA Section of Route #

FAA North

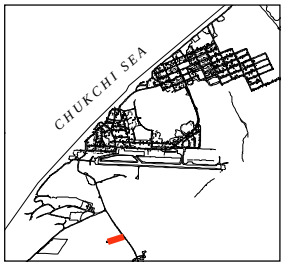
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
faa_north	8	40	0.3	71.283	-156.791	71.284	-156.778

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
050

BIA Route #

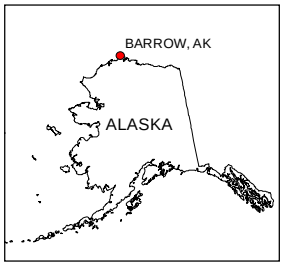
BIA Section of Route #

NOAA 1

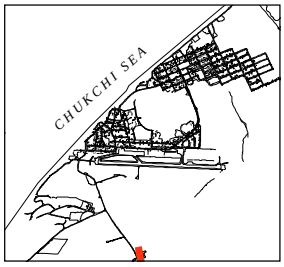
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
noaa_1	8	50	0.2	71.275	-156.777	71.274	-156.784

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
060

BIA Route #

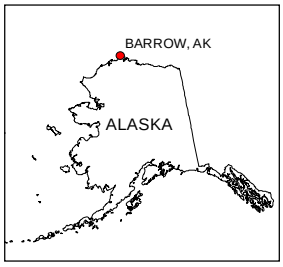
BIA Section of Route #

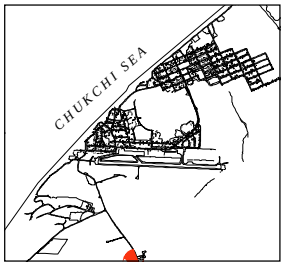
Satellite E Rd.

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
satellite_e	8	60	0.1	71.272	-156.771	71.272	-156.768

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
070

BIA Route #

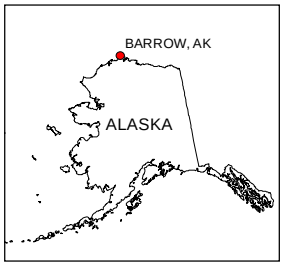
BIA Section of Route #

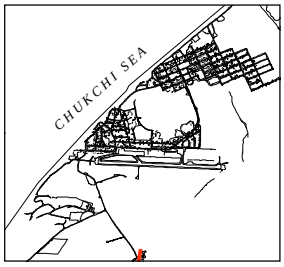
Satellite W Rd.

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
satellite_w	8	70	0.1	71.272	-156.771	71.270	-156.774

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
080

BIA Route #

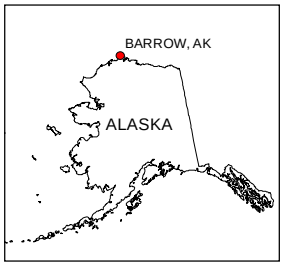
BIA Section of Route #

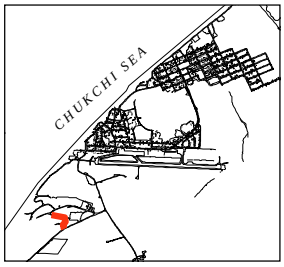
Satellite E 2 Rd.

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
satellite_e_2	8	80	0.1	71.271	-156.771	71.271	-156.769

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
090

BIA Route #

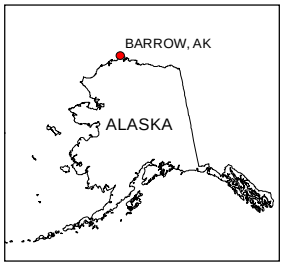
BIA Section of Route #

Million Dollar Hill Rd.

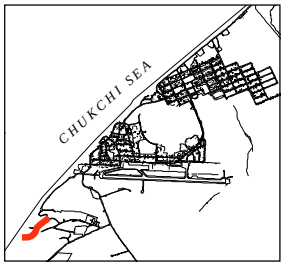
3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
million_dollar_hill	8	90	0.3	71.276	-156.804	71.278	-156.810

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0008
110

BIA Route #

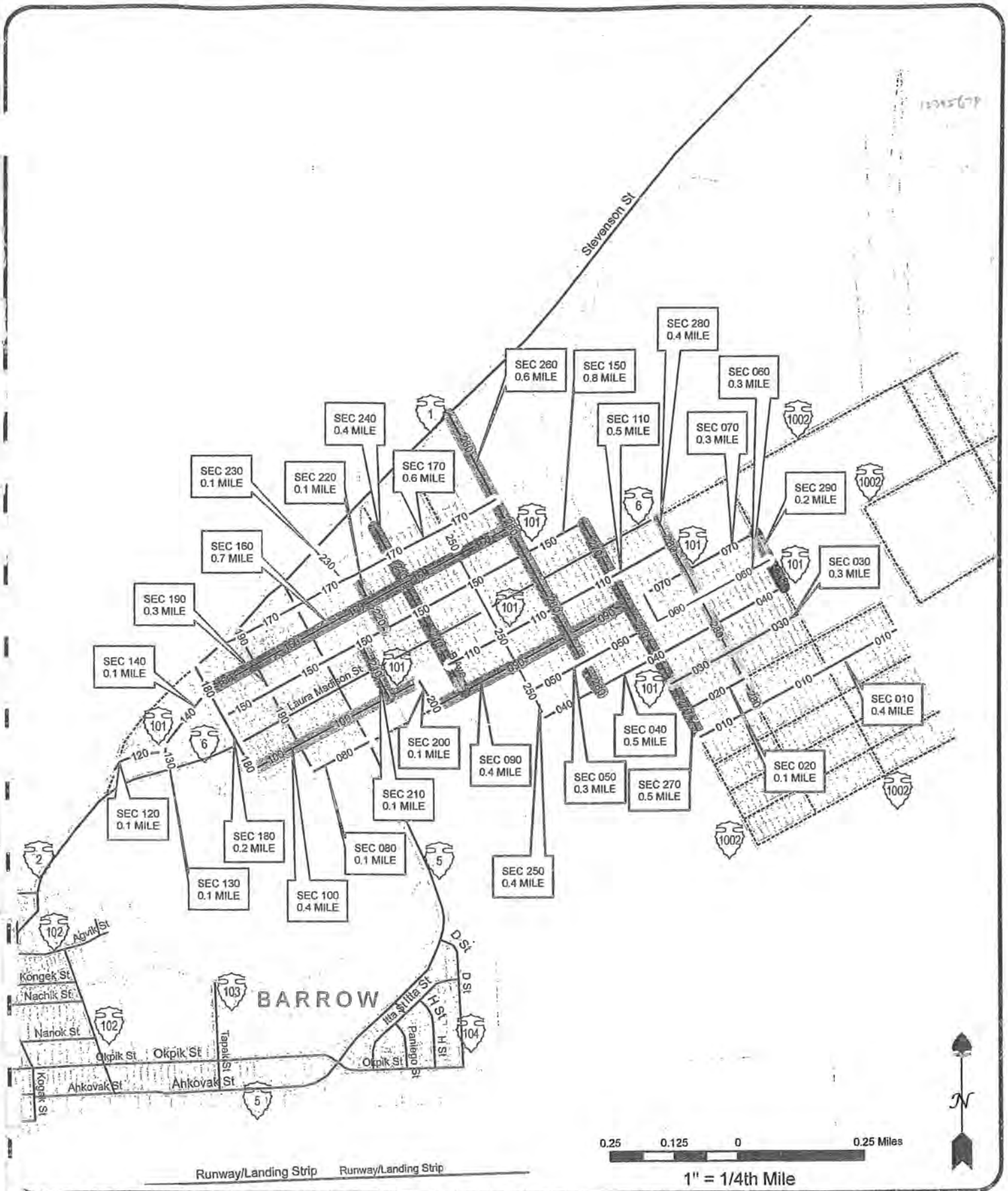
BIA Section of Route #

Pit Rd. 2

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pit_road_2	8	110	0.4	71.279	-156.814	71.276	-156.826

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

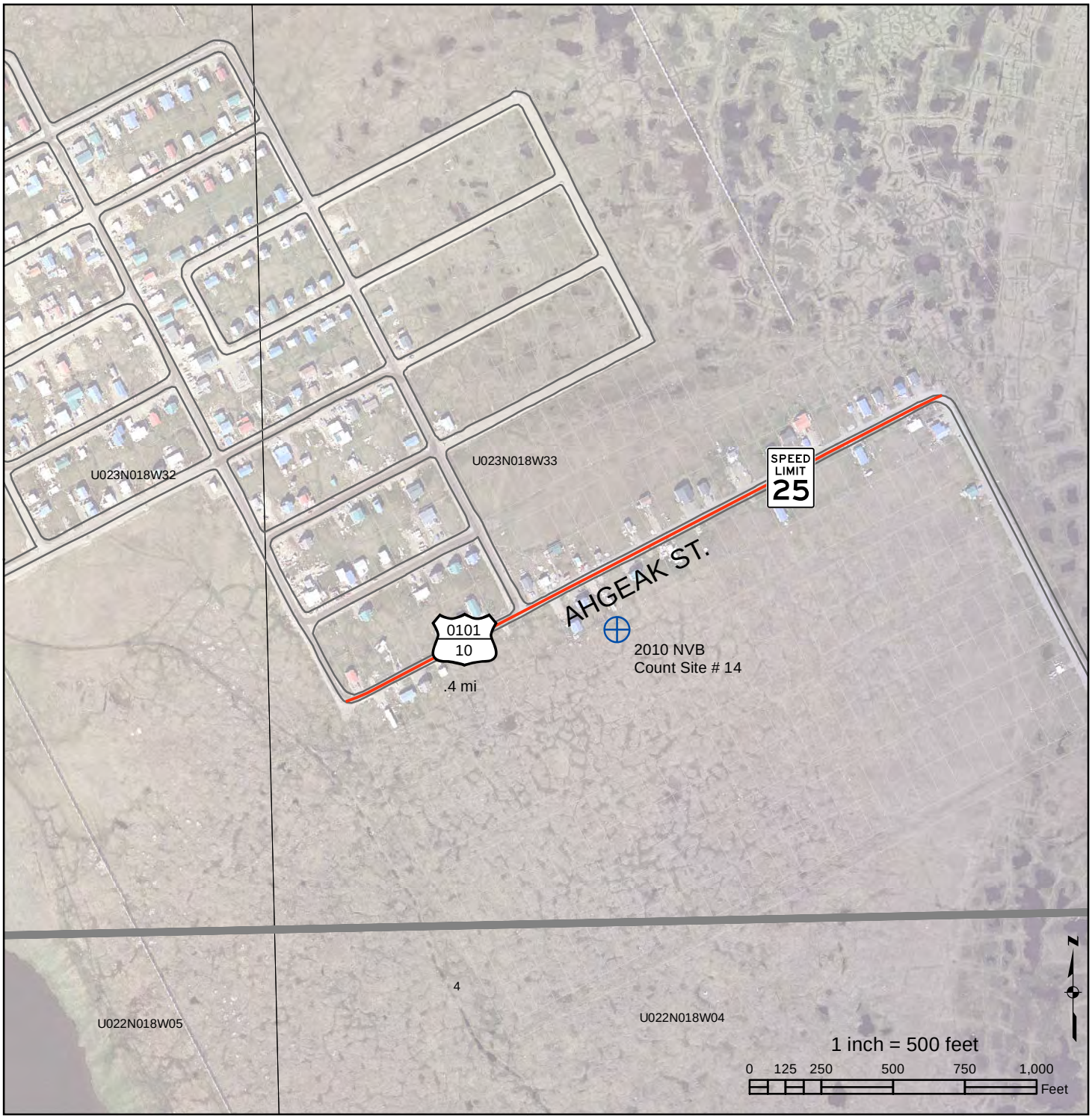
NORTH SLOPE ALASKA REGION

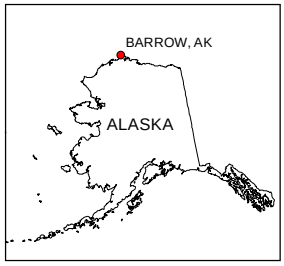
BIA Route 0101
SECTIONS 010-290

Township 23 North / Range 18 West / Sections 31-33

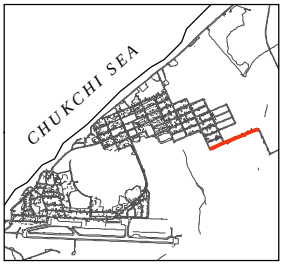
JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1





Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
10

BIA Route #

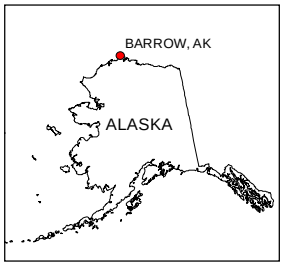
BIA Section of Route #

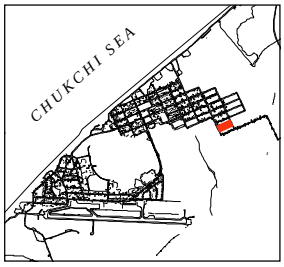
Ahgeak St.

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
ahgeak	101	10	0.4	71.298	-156.723	71.301	-156.705

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
020

BIA Route #

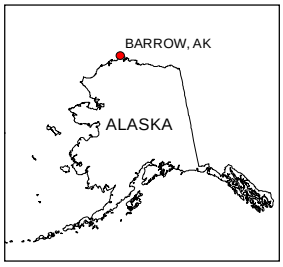
BIA Section of Route #

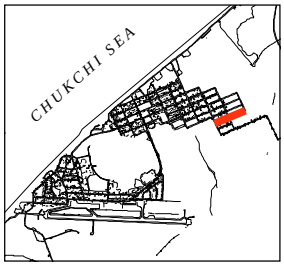
Iigu St.

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
iigu	101	20	0.1	71.299	-156.724	71.299	-156.718

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
030

BIA Route #

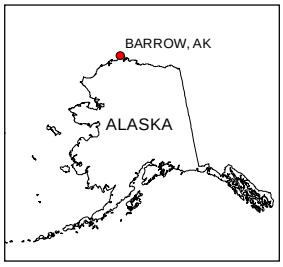
BIA Section of Route #

Sanatu St.

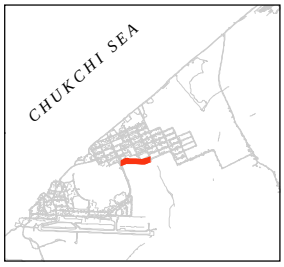
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
sanatu	101	30	0.3	71.299	-156.725	71.301	-156.713

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
41

BIA Route #

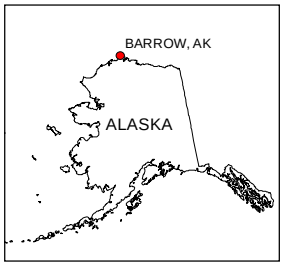
BIA Section of Route #

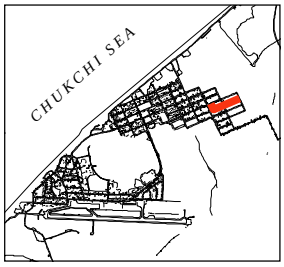
Yugit St. Extension
(Proposed)

3/12/2012

St. Name	Route	Section	Miles	Lat POB	Long POB	Lat POE	Long POE
Yugit St. Extension	101	41	0.349	71.299	-156.736	71.298	-156.751

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
060

BIA Route #

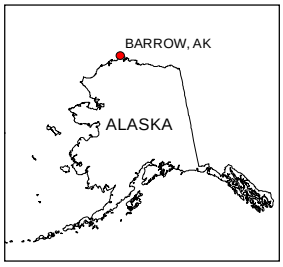
BIA Section of Route #

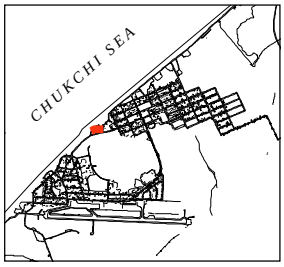
Utiqtuq

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
utiqtuq	101	60	0.3	71.303	-156.716	71.302	-156.727

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
120

BIA Route #

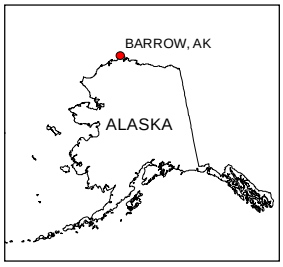
BIA Section of Route #

Simmonds St.

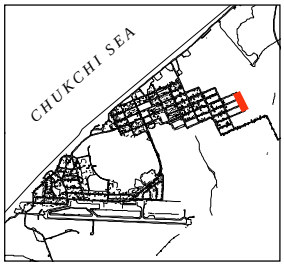
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
simmonds	101	120	0.1	71.298	-156.774	71.298	-156.770

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
290

BIA Route #

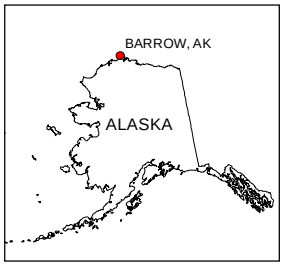
BIA Section of Route #

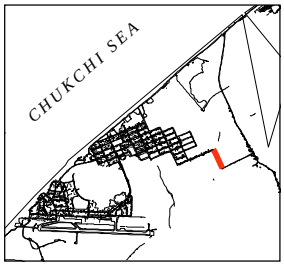
Kignak St.

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
kignak	101	290	0.2	71.304	-156.717	71.301	-156.713

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
300

BIA Route #

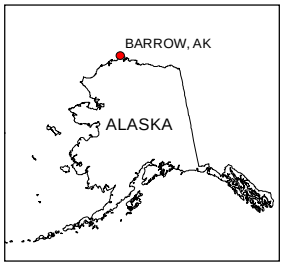
BIA Section of Route #

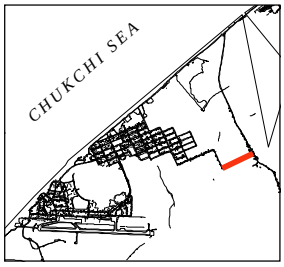
Sakeagak St.

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
sakeagak	101	300	0.2	71.301	-156.705	71.297	-156.700

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
310

BIA Route #

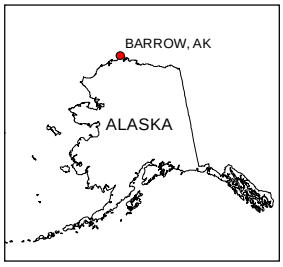
BIA Section of Route #

Kaleak St.

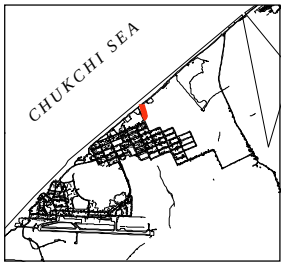
3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
kaleak	101	310	0.4	71.300	-156.685	71.297	-156.700

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
320

BIA Route #

BIA Section of Route #

ICAS St.

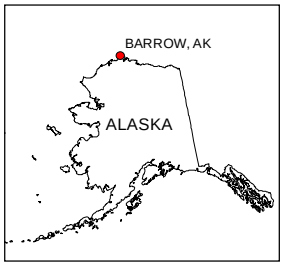
NATIVE VILLAGE OF BARROW

UMIAQ

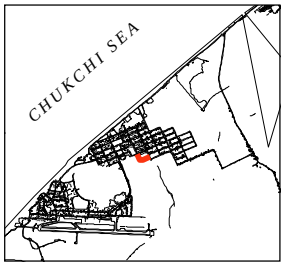
3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
icas	101	320	0.2	71.305	-156.741	71.308	-156.742

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
330

BIA Route #

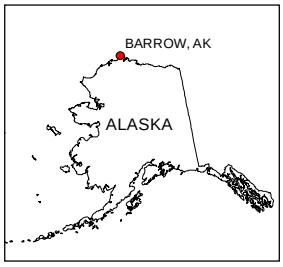
BIA Section of Route #

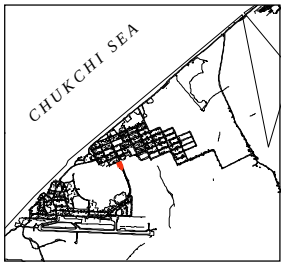
HMS Rd.

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
hms	101	330	0.2	71.299	-156.737	71.299	-156.743

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
340

BIA Route #

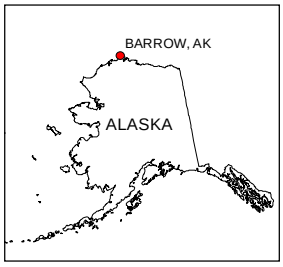
BIA Section of Route #

Water Truck Rd.

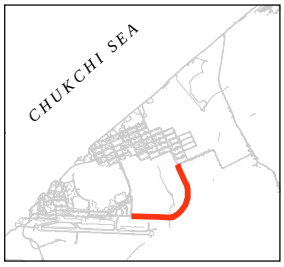
3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
water_truck	101	340	0.1	71.298	-156.752	71.297	-156.752

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0101
400

BIA Route #

BIA Section of Route #

New Hospital Route
(Proposed)

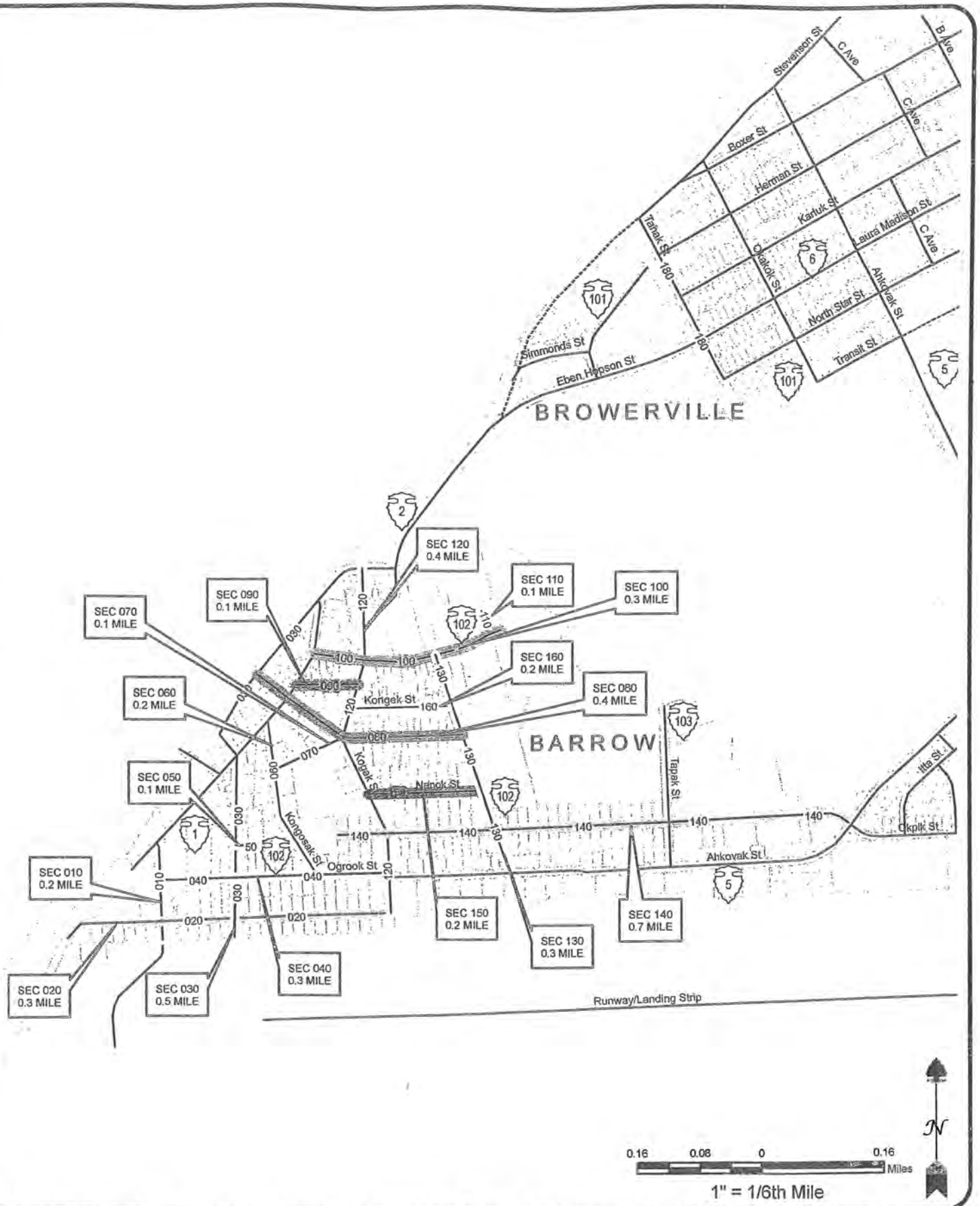
NATIVE VILLAGE OF BARROW

UMIAQ

3/13/2012

St. Name	Route	Section	Miles	Lat POB	Long POB	Lat POE	Long POE
New Hospital Route	101	400	1.2	71.298	-156.723	71.289	-156.745

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

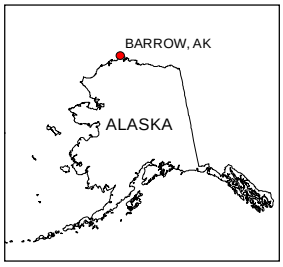
NORTH SLOPE
ALASKA REGION

BIA Route 0102
SECTIONS 010-160

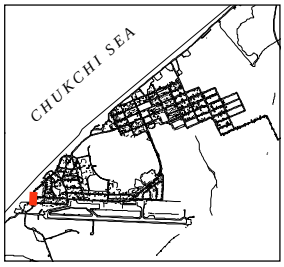
Township 22 North / Range 18 West / Sections 5-6

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
010

BIA Route #

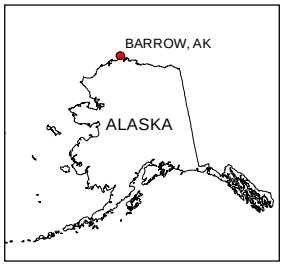
BIA Section of Route #

Apayauk St.

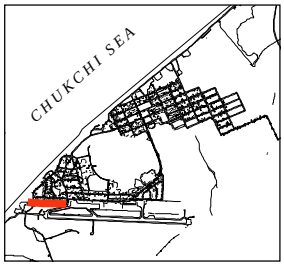
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
apayauk	102	10	0.1	71.289	-156.796	71.287	-156.796

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
020

BIA Route #

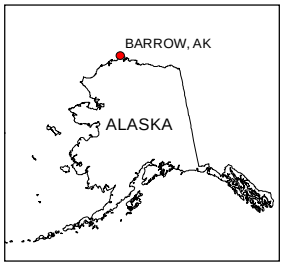
BIA Section of Route #

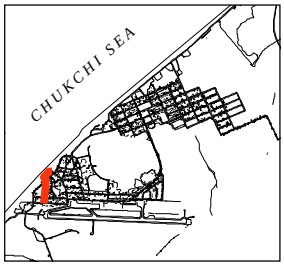
Pisokak St.

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pisokak	102	20	0.3	71.288	-156.798	71.288	-156.783

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
030

BIA Route #

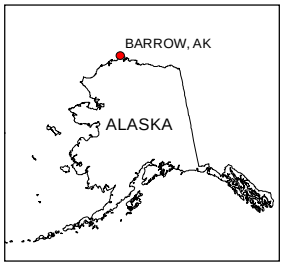
BIA Section of Route #

Egasak St.

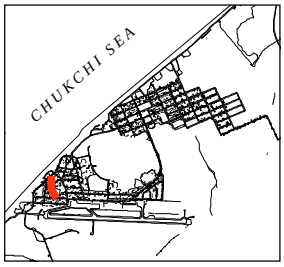
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
egasak	102	30	0.3	71.288	-156.792	71.292	-156.789

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
060

BIA Route #

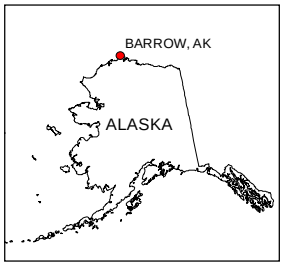
BIA Section of Route #

Kongosak St.

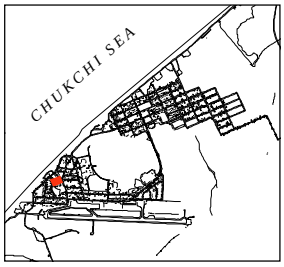
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
kongosak	102	60	0.2	71.288	-156.787	71.291	-156.789

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
070

BIA Route #

BIA Section of Route #

Cunningham St.

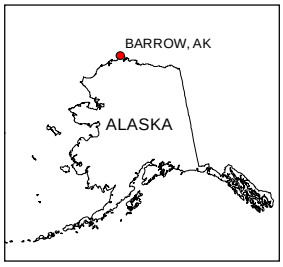
NATIVE VILLAGE OF BARROW

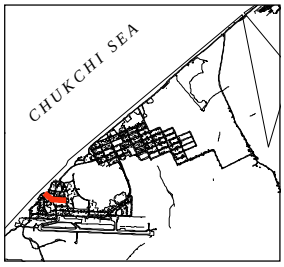
UMIAQ

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
cunningham	102	70	0.1	71.290	-156.789	71.291	-156.785

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
080

BIA Route #

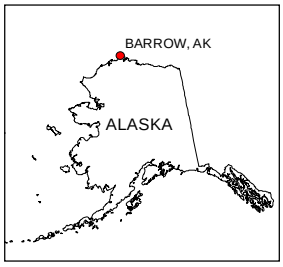
BIA Section of Route #

Nachik

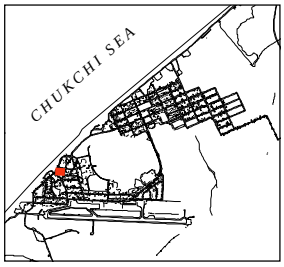
3/15/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
nachik	102	80	0.3	71.291	-156.778	71.292	-156.789

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
090

BIA Route #

BIA Section of Route #

Aivik St.

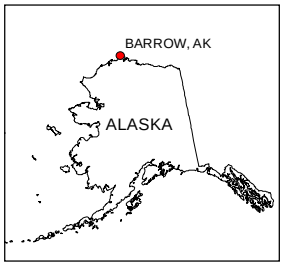
NATIVE VILLAGE OF BARROW

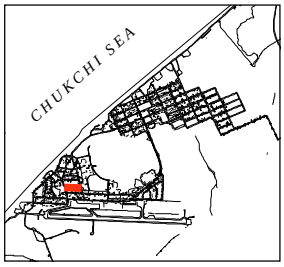
UMIAQ

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
aivik	102	90	0.1	71.292	-156.788	71.292	-156.784

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
150

BIA Route #

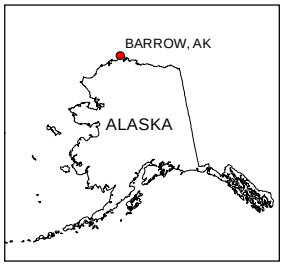
BIA Section of Route #

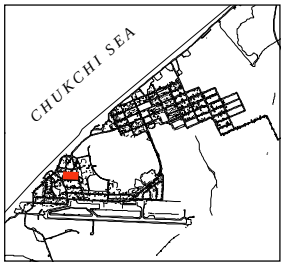
Nanook St.

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
nanook	102	150	0.2	71.290	-156.784	71.290	-156.777

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
160

BIA Route #

BIA Section of Route #

Kongek St.

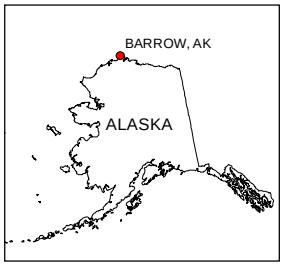
NATIVE VILLAGE OF BARROW

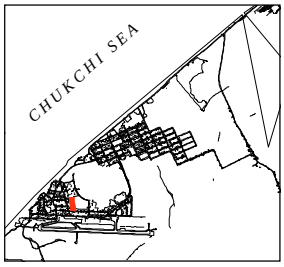
UMIAQ

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
kongek	102	160	0.1	71.291	-156.785	71.291	-156.779

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0102
170

BIA Route #

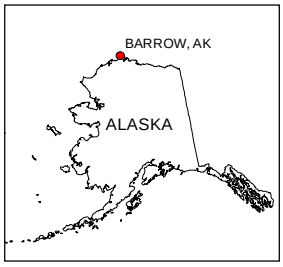
BIA Section of Route #

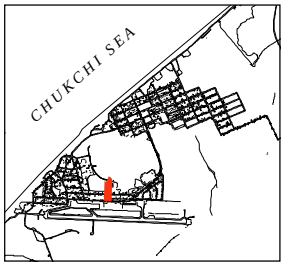
Old Ipalook Housing St.

3/15/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
old_ipalook_housing	102	170	0.2	71.289	-156.774	71.291	-156.775

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0103
010

BIA Route #

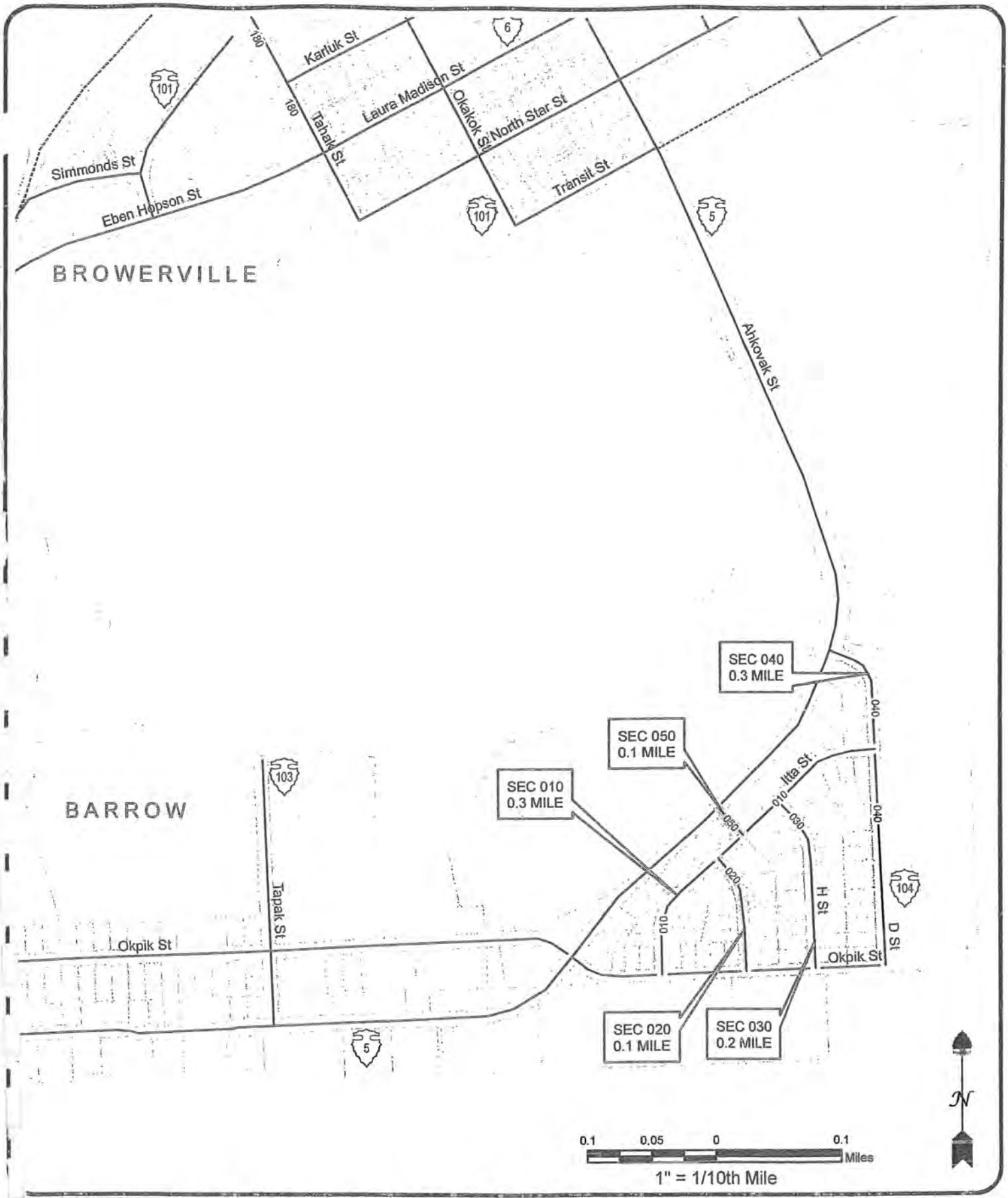
BIA Section of Route #

Takpuk

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
takpuk	103	10	0.2	71.288	-156.767	71.291	-156.767

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

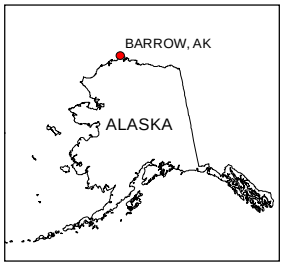
NORTH SLOPE
ALASKA REGION

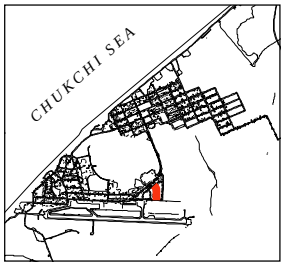
BIA Route 0104
SECTIONS 010-050

Township 22 North / Range 18 West / Section 5

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0104
030

BIA Route #

BIA Section of Route #

H St.

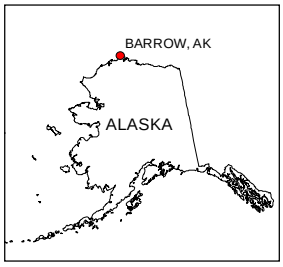
NATIVE VILLAGE OF BARROW

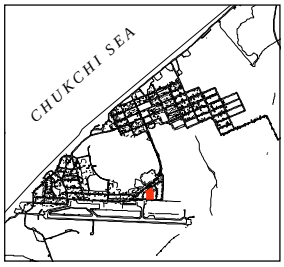
UMIAQ

3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
h	104	30	0.1	71.289	-156.747	71.291	-156.748

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0104
050

BIA Route #

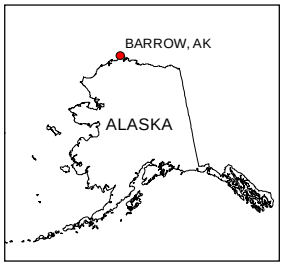
BIA Section of Route #

Panigeo St.

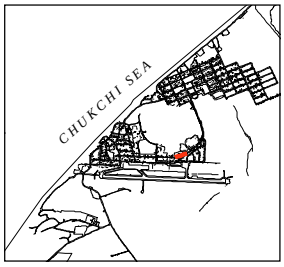
3/13/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
panigeo	104	50	0.1	71.290	-156.750	71.291	-156.751

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0104
060

BIA Route #

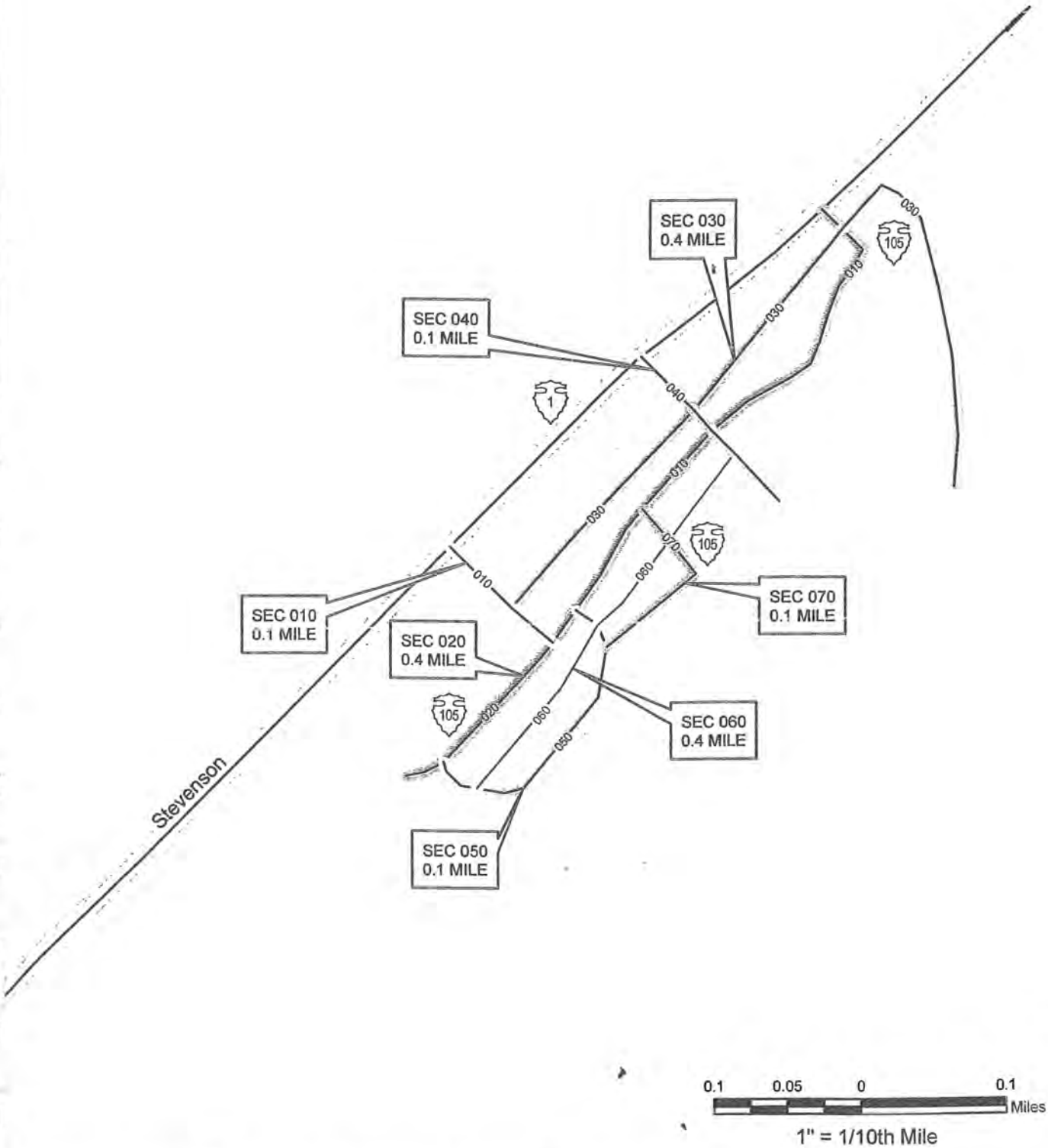
BIA Section of Route #

City of Barrow Rd.

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
city_of_brw	104	60	0.1	71.290	-156.753	71.289	-156.758

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

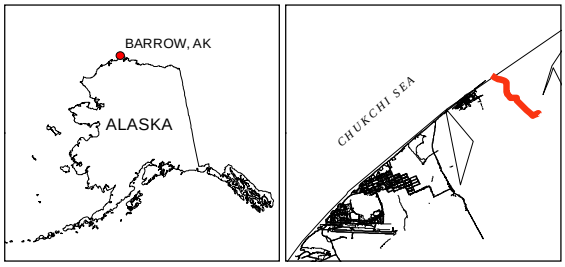
NORTH SLOPE
ALASKA REGION

BIA Route 0105
SECTIONS 010-070

Township 23 North / Range 18 West / Sections 21-22

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0105
030

BIA Route #

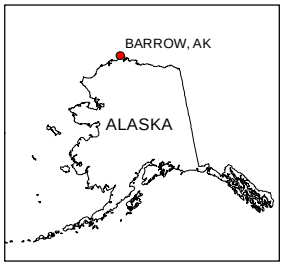
BIA Section of Route #

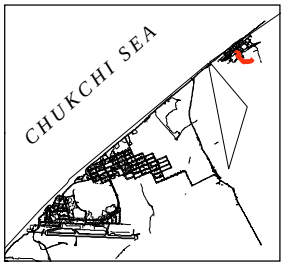
Dew Line Rd.

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
dew_line	105	30	1.5	71.335	-156.652	71.324	-156.608

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

0105
080

BIA Route #

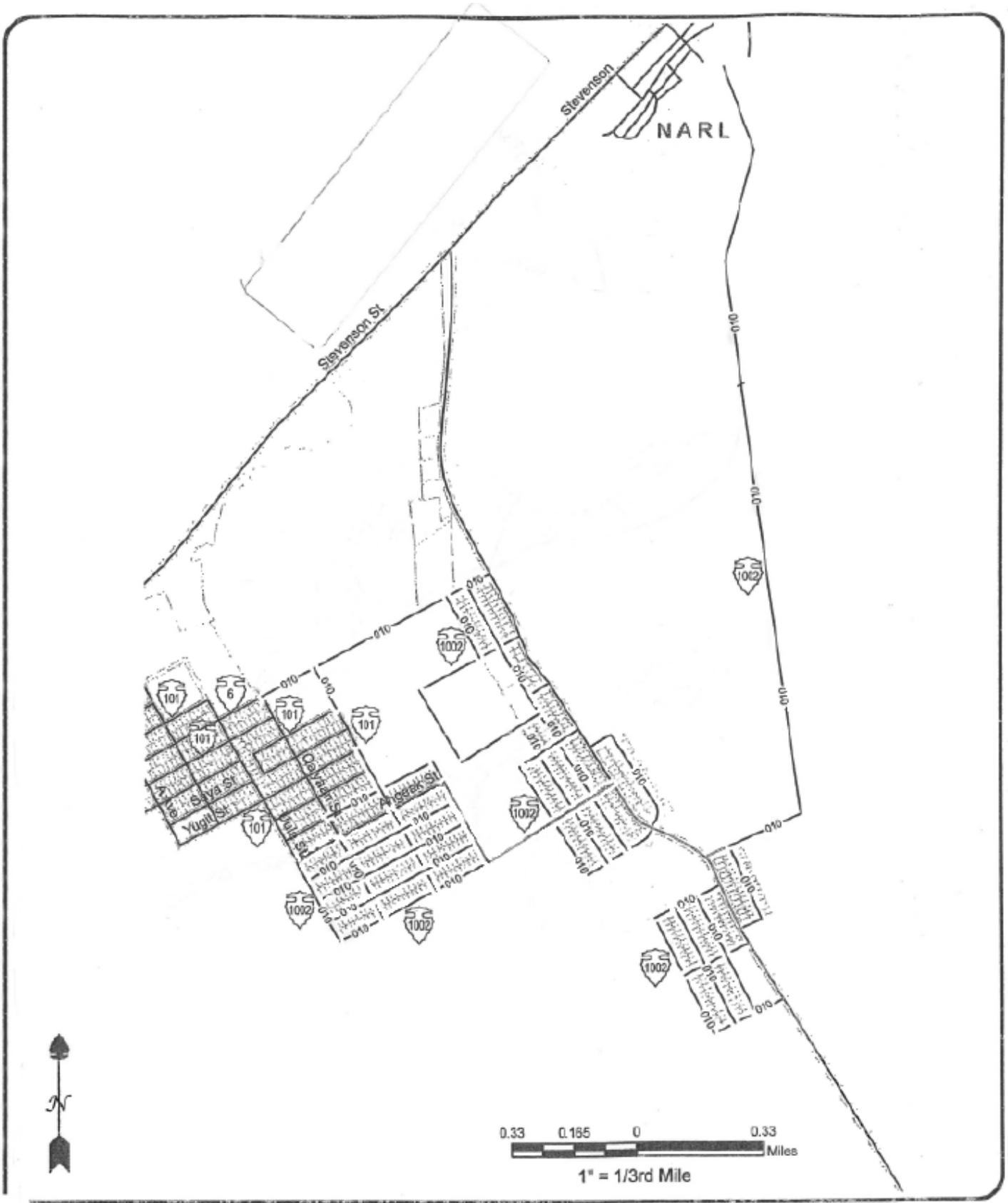
BIA Section of Route #

BARC Rd.

3/10/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
barc	105	80	0.4	71.325	-156.664	71.326	-156.675

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

NORTH SLOPE
ALASKA REGION

BIA Route 1002
SECTION 010 (Proposed)

Township 22 North / Range 18 West / Sections 3-4
Township 23 North / Range 18 West / Sections 33-34

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1

ROUTE 1010

ROAD IMPROVEMENTS

31,800 LF ROAD MAINTENANCE

83,950 LF OF NEW ROADS

	ROAD	COST ESTIMATE	PHASING PLAN	LINEAL FEET
(1)	"A" AVENUE	TABLE 7 PAGE 32	TABLE 11 PAGE 78-80	800
(2)	"B" AVENUE	TABLE 8 PAGE 33	TABLE 11 PAGE 78-80	300
(3)	STEVENSON STREET	TABLE 9 PAGE 33	TABLE 11 PAGE 78-80	1500
(4)	TRANSIT STREET	TABLE 10 PAGE 34	TABLE 11 PAGE 78-80	800
(5)	"C" STREET	TABLE 11 PAGE 34	TABLE 11 PAGE 78-80	11,000
(6)	"A" AVENUE	TABLE 12 PAGE 35	TABLE 11 PAGE 78-80	1000
(7)	AGVIK STREET	TABLE 13 PAGE 35	TABLE 11 PAGE 78-80	800
(8)	"B" AVENUE	TABLE 14 PAGE 36	TABLE 11 PAGE 78-80	300
(9)	BOKER STREET	TABLE 15 PAGE 36	TABLE 11 PAGE 78-80	800
(10)	EBEN HOPSON STREET	TABLE 16 PAGE 37	TABLE 11 PAGE 78-80	3300
(11)	HERMAN STREET	TABLE 17 PAGE 37	TABLE 11 PAGE 78-80	1100
(12)	INAGSAUN ROAD	TABLE 18 PAGE 38	TABLE 11 PAGE 78-80	6000
(13)	ITTA STREET	TABLE 19 PAGE 38	TABLE 11 PAGE 78-80	1400
(14)	KABLUK STREET	TABLE 20 PAGE 39	TABLE 11 PAGE 78-80	800
(15)	WOMEGANNA STREET	TABLE 21 PAGE 39	TABLE 11 PAGE 78-80	1300
(16)	NARL ROAD	TABLE 22 PAGE 40	TABLE 11 PAGE 78-80	5700
(17)	OGROOK STREET	TABLE 23 PAGE 40	TABLE 11 PAGE 78-80	2700
(18)	OKPIK STREET	TABLE 24 PAGE 41	TABLE 11 PAGE 78-80	2800
(19)	PISUKAR STREET	TABLE 25 PAGE 41	TABLE 11 PAGE 78-80	1500
(20)	UMIAQNDS STREET	TABLE 26 PAGE 42	TABLE 11 PAGE 78-80	500
(21)	STEVENSON STREET	TABLE 27 PAGE 42	TABLE 11 PAGE 78-80	1500
(22)	UGLA STREET	TABLE 28 PAGE 43	TABLE 11 PAGE 78-80	1200
(23)	ADAMS STREET	TABLE 29 PAGE 43	TABLE 11 PAGE 78-80	4400
(24)	AHSOGEAK STREET	TABLE 30 PAGE 44	TABLE 11 PAGE 78-80	1000
(25)	AIKEN STREET	TABLE 31 PAGE 44	TABLE 11 PAGE 78-80	2300
(26)	ANDERSON STREET	TABLE 33 PAGE 45	TABLE 11 PAGE 78-80	1100
(27)	BROWER STREET	TABLE 34 PAGE 45	TABLE 11 PAGE 78-80	1900
(28)	BURNELL STREET	TABLE 35 PAGE 46	TABLE 11 PAGE 78-80	1100
(29)	IGU STREET	TABLE 35 PAGE 46	TABLE 11 PAGE 78-80	1700
(30)	KALEAK STREET	TABLE 36 PAGE 47	TABLE 11 PAGE 78-80	3500
(31)	KIGNAK STREET	TABLE 37 PAGE 47	TABLE 11 PAGE 78-80	2600
(32)	LAURA MADISON STREET	TABLE 38 PAGE 48	TABLE 11 PAGE 78-80	3600
(33)	LEAVITT LOOP	TABLE 39 PAGE 48	TABLE 11 PAGE 78-80	3800
(34)	LOPEZ STREET	TABLE 40 PAGE 49	TABLE 11 PAGE 78-80	4300
(35)	NAGEAK STREET	TABLE 41 PAGE 49	TABLE 11 PAGE 78-80	1900
(36)	NEAKOK STREET	TABLE 42 PAGE 50	TABLE 11 PAGE 78-80	1900
(37)	NUSUNGINYA STREET	TABLE 43 PAGE 50	TABLE 11 PAGE 78-80	1900
(38)	PATKOTAK STREET	TABLE 44 PAGE 51	TABLE 11 PAGE 78-80	8400
(39)	QAYAAN STREET	TABLE 45 PAGE 51	TABLE 11 PAGE 78-80	1300
(40)	REXFORD STREET	TABLE 46 PAGE 52	TABLE 11 PAGE 78-80	8200
(41)	SAKTAGAK STREET	TABLE 47 PAGE 52	TABLE 11 PAGE 78-80	500
(42)	SHORT STREET	TABLE 48 PAGE 53	TABLE 11 PAGE 78-80	300
(43)	SIKIK STREET	TABLE 49 PAGE 53	TABLE 11 PAGE 78-80	2300
(44)	SOLOMON STREET	TABLE 50 PAGE 54	TABLE 11 PAGE 78-80	2300
(45)	STOTTS STREET	TABLE 51 PAGE 54	TABLE 11 PAGE 78-80	1000
(46)	ULLA STREET	TABLE 52 PAGE 55	TABLE 11 PAGE 78-80	1300

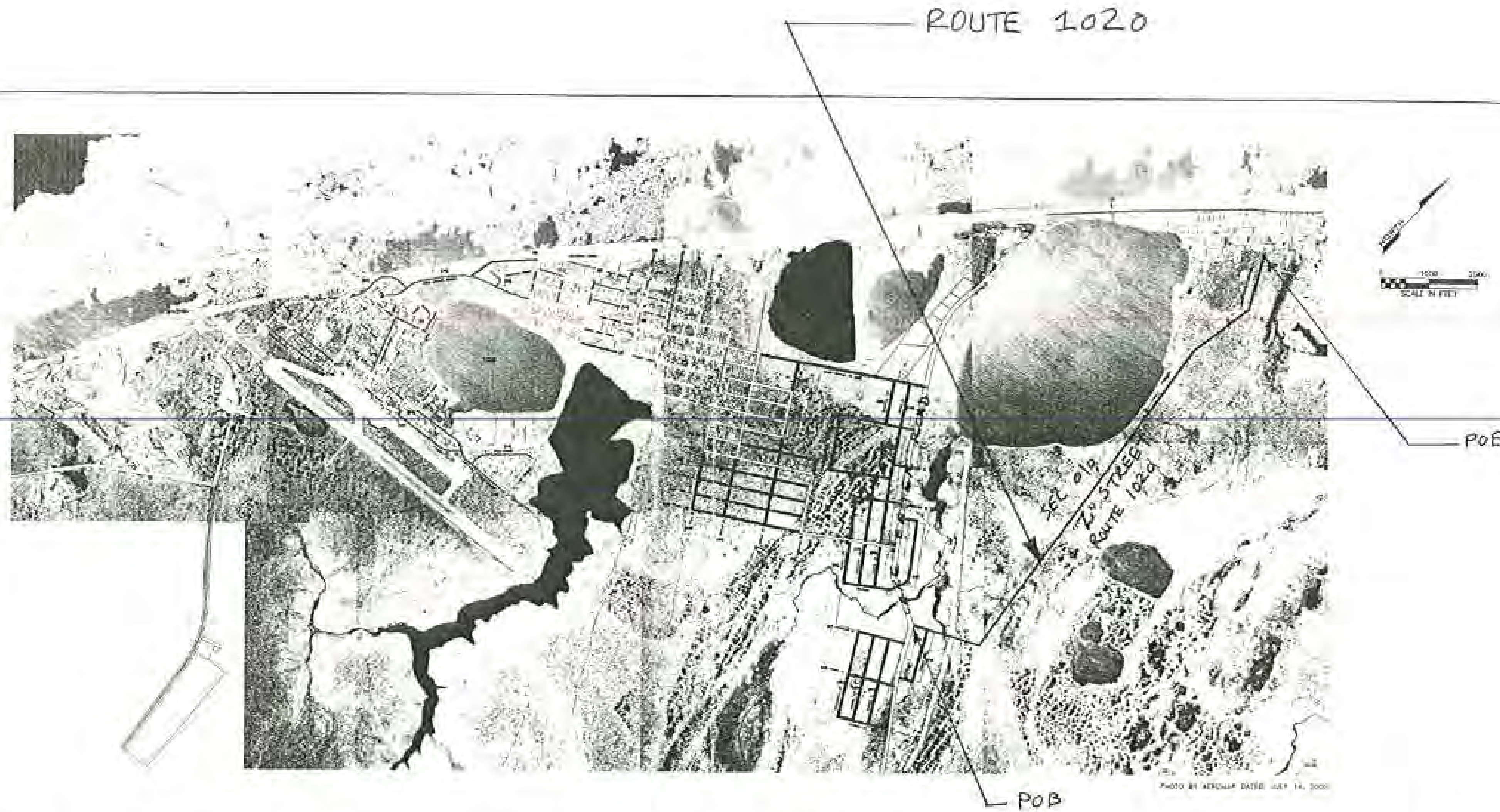
NORTH SLOPE BOROUGH

NORTH SLOPE BOROUGH ROADS PAR

BARROW LAYOUT PLAN

LCMF Incorporated

38



ROAD		COST ESTIMATE	COMMUNITY PRIORITIZATION	LINEAL FEET
(1)	"A" AVENUE	TABLE 7 PAGE 33	TABLE III PAGE 79-80	800
(2)	"B" AVENUE	TABLE 8 PAGE 33	TABLE III PAGE 79-80	300
(3)	STEVENSON STREET	TABLE 9 PAGE 33	TABLE III PAGE 79-80	1500
(4)	TRANSIT STREET	TABLE 10 PAGE 34	TABLE III PAGE 79-80	800
(5)	"Z" STREET	TABLE 11 PAGE 34	TABLE II PAGE 79-80	11,500
(6)	"A" AVENUE	TABLE 12 PAGE 35	TABLE II PAGE 79-80	1000
(7)	AGVIK STREET	TABLE 13 PAGE 35	TABLE III PAGE 79-80	600
(8)	"D" AVENUE	TABLE 14 PAGE 36	TABLE III PAGE 79-80	300
(9)	BOXER STREET	TABLE 15 PAGE 36	TABLE III PAGE 79-80	500
(10)	EBEN HOPSON STREET	TABLE 16 PAGE 37	TABLE III PAGE 79-80	3300
(11)	HERMAN STREET	TABLE 17 PAGE 37	TABLE III PAGE 79-80	1100
(12)	IMAGSALN ROAD	TABLE 18 PAGE 38	TABLE III PAGE 79-80	8000
(13)	ITTA STREET	TABLE 19 PAGE 38	TABLE III PAGE 79-80	1400
(14)	KAPLUK STREET	TABLE 20 PAGE 39	TABLE II PAGE 79-80	500
(15)	MOMEGANNA STREET	TABLE 21 PAGE 39	TABLE II PAGE 79-80	1300
(16)	NARL ROAD	TABLE 22 PAGE 40	TABLE II PAGE 79-80	5700
(17)	OGROOK STREET	TABLE 23 PAGE 40	TABLE III PAGE 79-80	2700
(18)	OKPIK STREET	TABLE 24 PAGE 41	TABLE III PAGE 79-80	2600
(19)	PISOKAK STREET	TABLE 25 PAGE 41	TABLE III PAGE 79-80	1600
(20)	SIMMONDS STREET	TABLE 26 PAGE 42	TABLE III PAGE 79-80	500
(21)	STEVENSON STREET	TABLE 27 PAGE 42	TABLE III PAGE 79-80	1500
(22)	UULA STREET	TABLE 28 PAGE 43	TABLE III PAGE 79-80	1200
(23)	ADAMS STREET	TABLE 29 PAGE 43	TABLE III PAGE 79-80	4400

ROAD		COST ESTIMATE	COMMUNITY PRIORITIZATION	LINEAL FEET
(24)	AHSOGEAK STREET	TABLE 30 PAGE 44	TABLE II PAGE 79-80	1000
(25)	AIKEN STREET	TABLE 31 PAGE 44	TABLE III PAGE 79-80	2300
(26)	ANDERSON STREET	TABLE 32 PAGE 45	TABLE III PAGE 79-80	1000
(27)	BROWER STREET	TABLE 33 PAGE 45	TABLE III PAGE 79-80	1900
(28)	BURNELL STREET	TABLE 34 PAGE 46	TABLE II PAGE 79-80	1100
(29)	NGU STREET	TABLE 35 PAGE 46	TABLE III PAGE 79-80	1700
(30)	KALEAK STREET	TABLE 36 PAGE 47	TABLE III PAGE 79-80	2300
(31)	KIONAK STREET	TABLE 37 PAGE 47	TABLE III PAGE 79-80	2600
(32)	LAURA MADISON STREET	TABLE 38 PAGE 48	TABLE III PAGE 79-80	3600
(33)	LEAVITT LOOP	TABLE 39 PAGE 48	TABLE II PAGE 79-80	1800
(34)	LONG STREET	TABLE 40 PAGE 49	TABLE III PAGE 79-80	4200
(35)	NAGEAK STREET	TABLE 41 PAGE 49	TABLE III PAGE 79-80	1800
(36)	NEAKOK STREET	TABLE 42 PAGE 50	TABLE III PAGE 79-80	1800
(37)	NUSUNGINYA STREET	TABLE 43 PAGE 50	TABLE III PAGE 79-80	1900
(38)	PATKOTAK STREET	TABLE 44 PAGE 51	TABLE III PAGE 79-80	3400
(39)	QAYAAN STREET	TABLE 45 PAGE 51	TABLE III PAGE 79-80	1300
(40)	REXFORD STREET	TABLE 46 PAGE 52	TABLE III PAGE 79-80	3200
(41)	SAKEAGAK STREET	TABLE 47 PAGE 52	TABLE II PAGE 79-80	350
(42)	SHORT STREET	TABLE 48 PAGE 53	TABLE III PAGE 79-80	350
(43)	SIMIK STREET	TABLE 49 PAGE 53	TABLE II PAGE 79-80	2300
(44)	SOLOMON STREET	TABLE 50 PAGE 54	TABLE II PAGE 79-80	2300
(45)	STOTTS STREET	TABLE 51 PAGE 54	TABLE III PAGE 79-80	1000
(46)	UULA STREET	TABLE 52 PAGE 55	TABLE III PAGE 79-80	1300

ROAD IMPROVEMENTS

- 31,800 LF ROAD MAINTENANCE
- 83,850 LF OF NEW ROADS

NORTH SLOPE BOROUGH

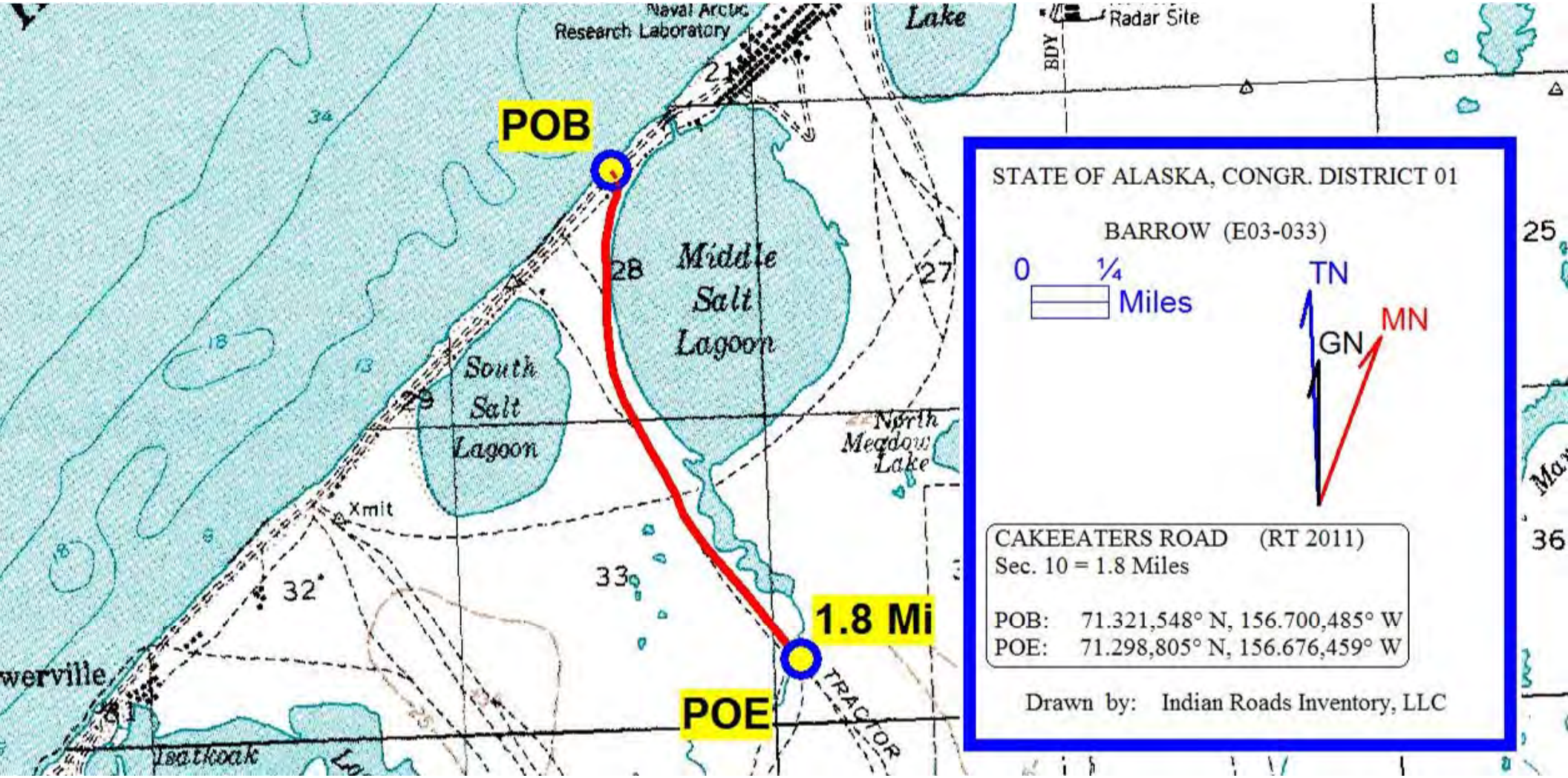
NORTH SLOPE BOROUGH ROADS FAR

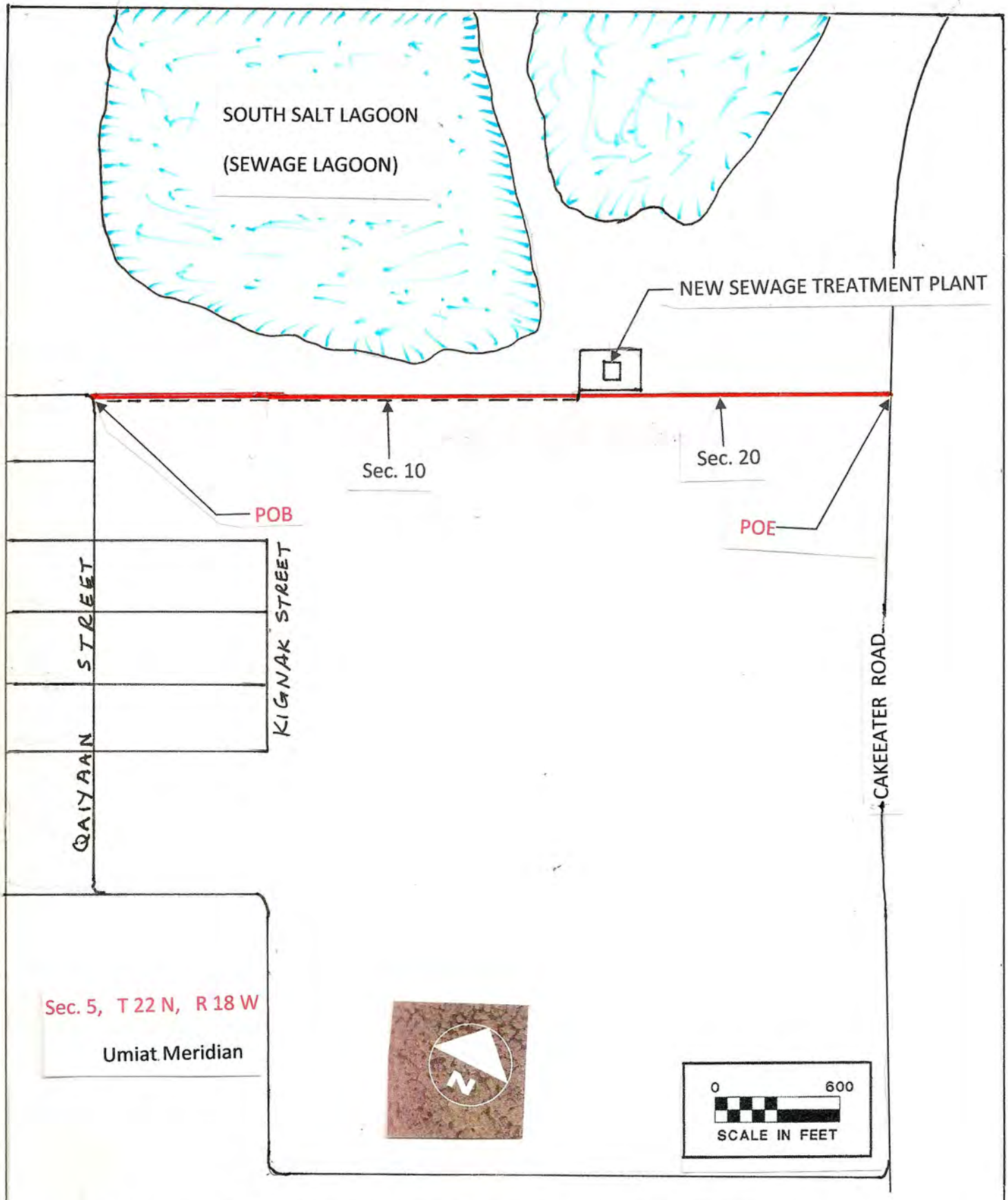
BARROW LAYOUT PLAN

BARROW, ALASKA

LCMF Incorporated

3


POB
POE
1.8 Mi
Middle Salt Lagoon
South Salt Lagoon
North Meadow Lake
Lake
Radar Site
Naval Arctic Research Laboratory
Xmit
TRACTOR
STATE OF ALASKA, CONGR. DISTRICT 01
BARROW (E03-033)
0 ¼ Miles
TN
MN
GN
CAKEEATERS ROAD (RT 2011)
Sec. 10 = 1.8 Miles
POB: 71.321,548° N, 156.700,485° W
POE: 71.298,805° N, 156.676,459° W
Drawn by: Indian Roads Inventory, LLC



STATE OF ALASKA, CONGRESSIONAL DISTRICT 01 / BARROW (E03-033)

LAURA MADISON ROAD EXTENSION (RT 2012), Sec. 10 = 0.4 Miles, Sec 20 = 0.3 Miles

STATE OF ALASKA, CONGRESSIONAL DISTRICT 01

BARROW (E03-033)

N

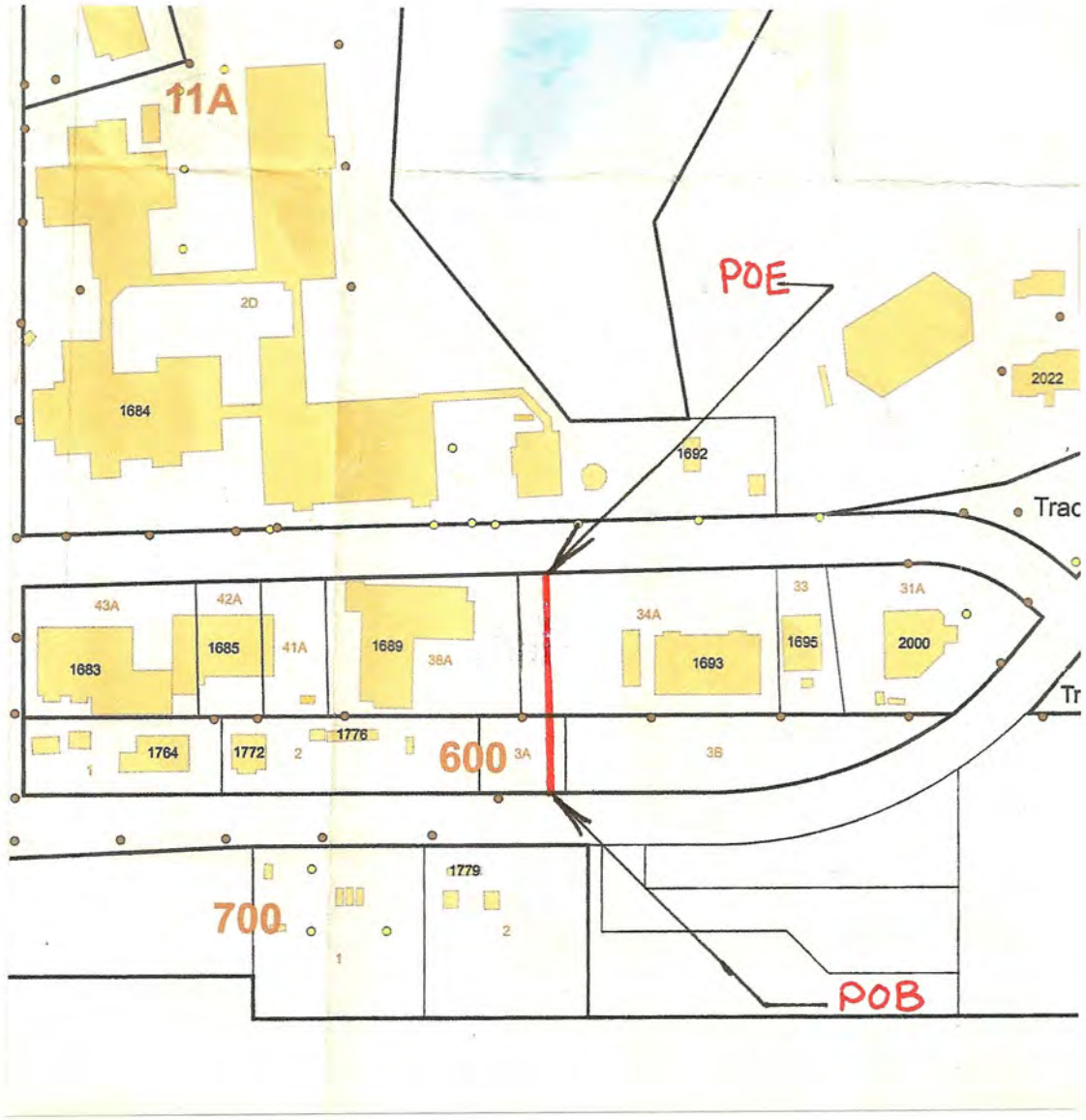
ROUTE NAME	Public Works Access Road
ROUTE No.	2013
Sec. 10 = 0.1 Miles	

Sec. 5, T22 N, R 18 W
UMIAT MERIDIAN

Scale

0.0 — 0.1

Miles



STATE OF ALASKA, CONGRESSIONAL DISTRICT 01

BARROW (E03-033)

N

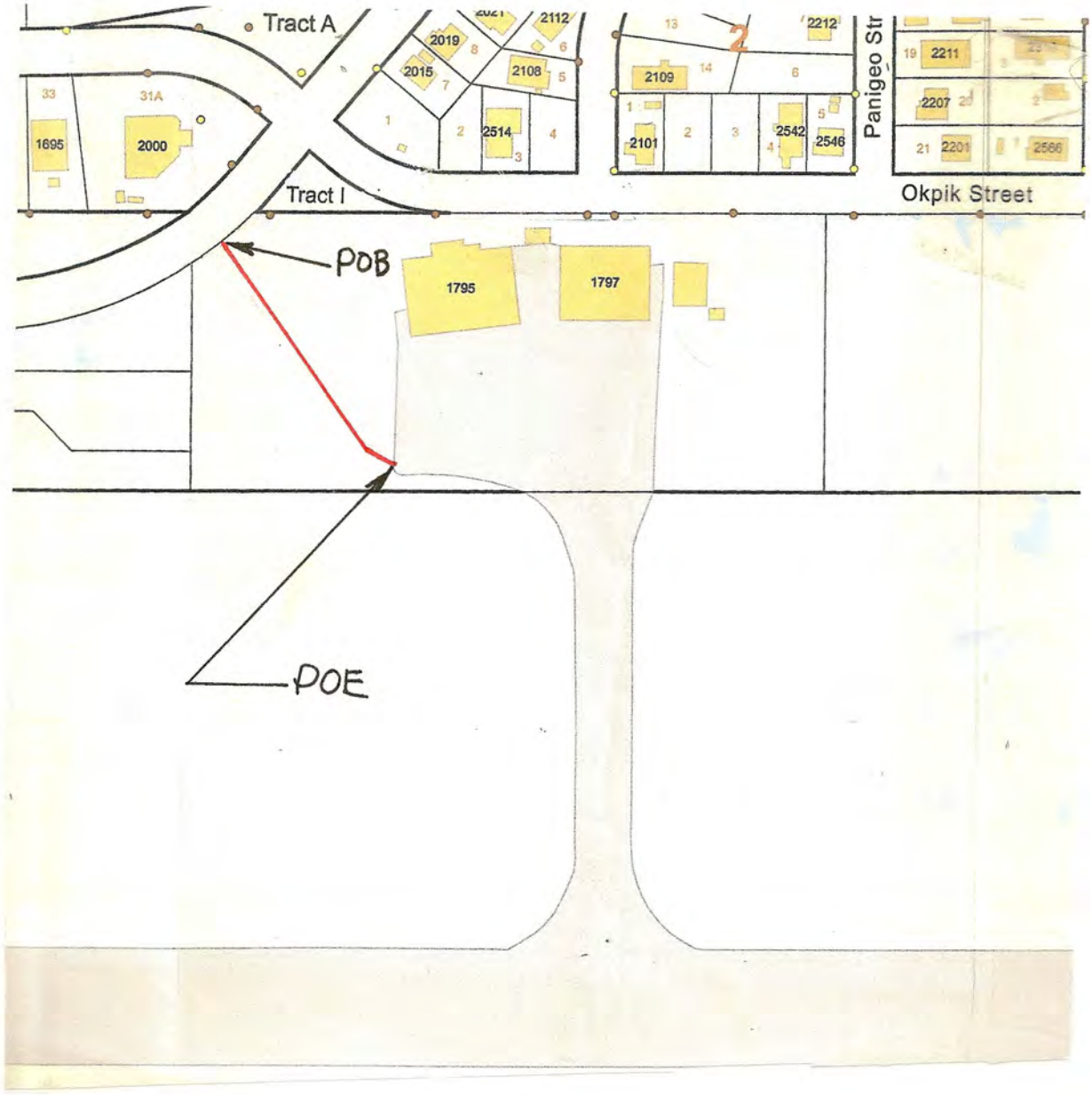
ROUTE NAME	Airport Terminal Road
ROUTE No.	2015
Sec. 10 = 0.1 Miles	

Sec. 5, T22 N, R 18 W
UMIAT MERIDIAN

Scale

0.0 — 0.1

Miles



STATE OF ALASKA, CONGRESSIONAL DISTRICT 01

BARROW (E03-033)

ROUTE NAME	High School Road
ROUTE No.	2018

Sec. 10 = 0.1 Miles

Scale

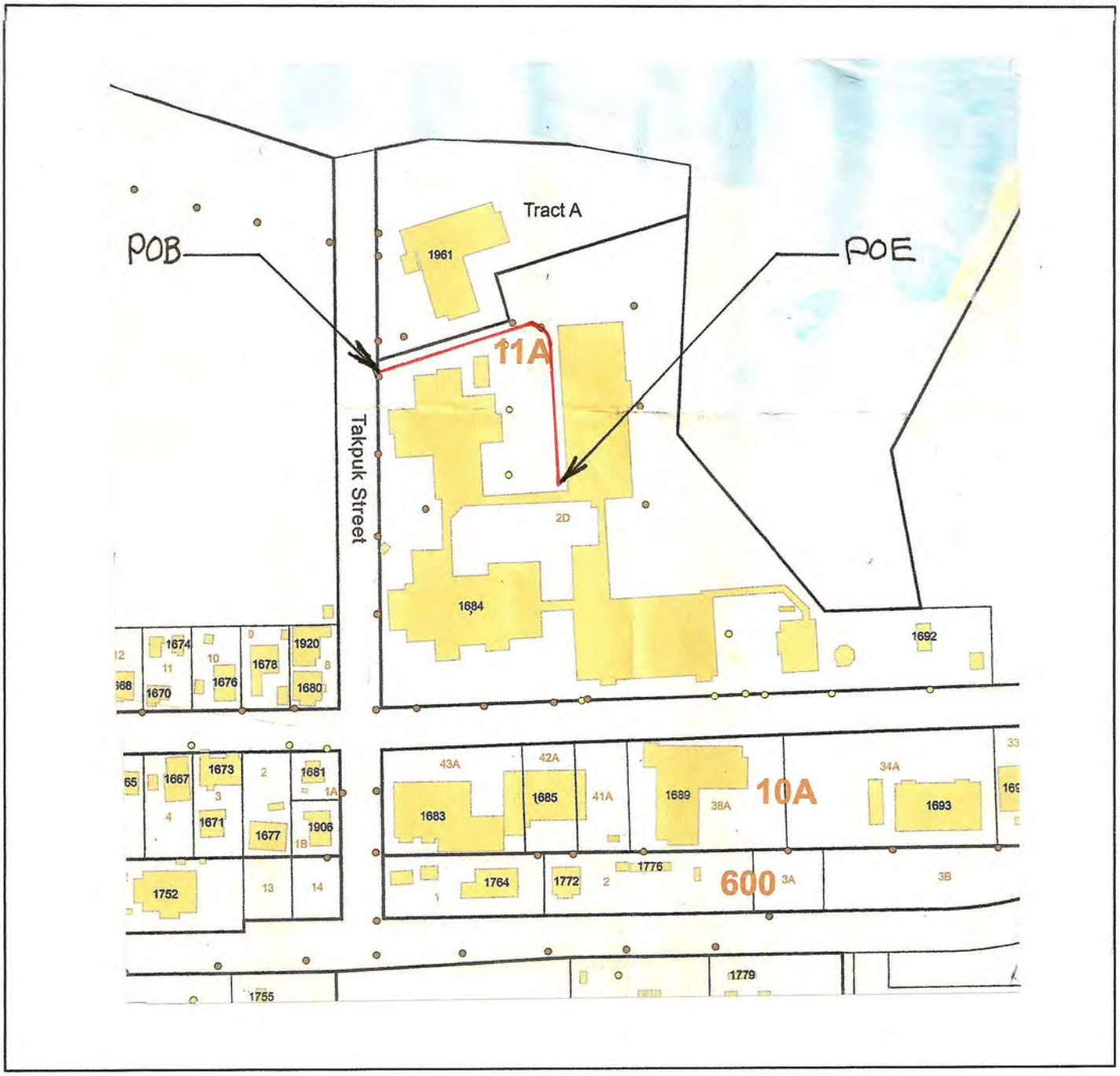
0.0 — 0.1

Miles

N

Sec. 5, T22 N, R 18 W

UMIAT MERIDIAN



Congressional District 01

Barrow, Alaska

B.I.A. Indian Reservation Road Inventory Strip Map

2019
010

BIA Route #

BIA Section of Route #

Power Plant Rd.

March 2010

name	route	route_section	miles	lat_pob	long_pob	lat_poe	long_poe
power plant rd	2019	010	0.3	71.29	-156.778	71.293	-156.777

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.

STATE OF ALASKA, CONGRESSIONAL DISTRICT 01

BARROW (E03-033)

ROUTE NAME	Scool District Storage Access Road
ROUTE No.	2020
Sec. 10 = 0.1 Miles	

Scale

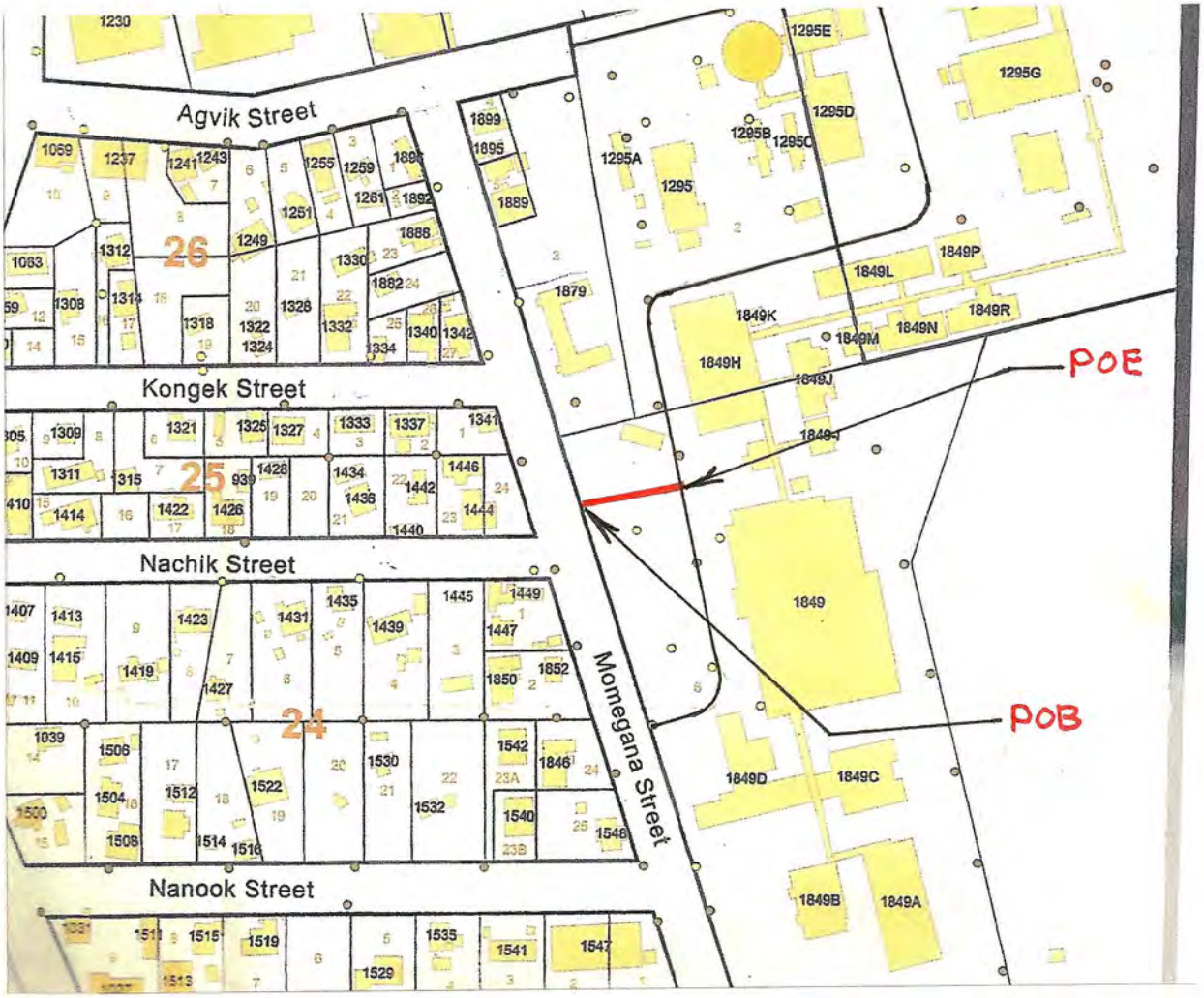
0.0 — 0.1

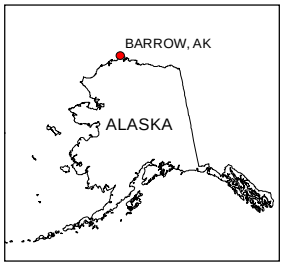
Miles

N

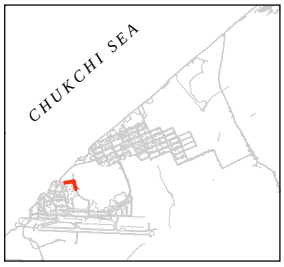
Sec.6, T22 N, R 18 W

UMIAT MERIDIAN





Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2024
11

BIA Route #

BIA Section of Route #

Hospital Housing Rd.

3/12/2012

St. Name	Route	Section	Miles	Lat POB	Long POB	Lat POE	Long POE
Hospital_Housing	2024	11	0.225	71.294	-156.780	71.293	-156.773

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.

STATE OF ALASKA, CONGRESSIONAL DISTRICT 01

BARROW (E03-033)

ROUTE NAME	Church Road
ROUTE No.	2025
Sec. 10 = 0.1 Miles	

Scale

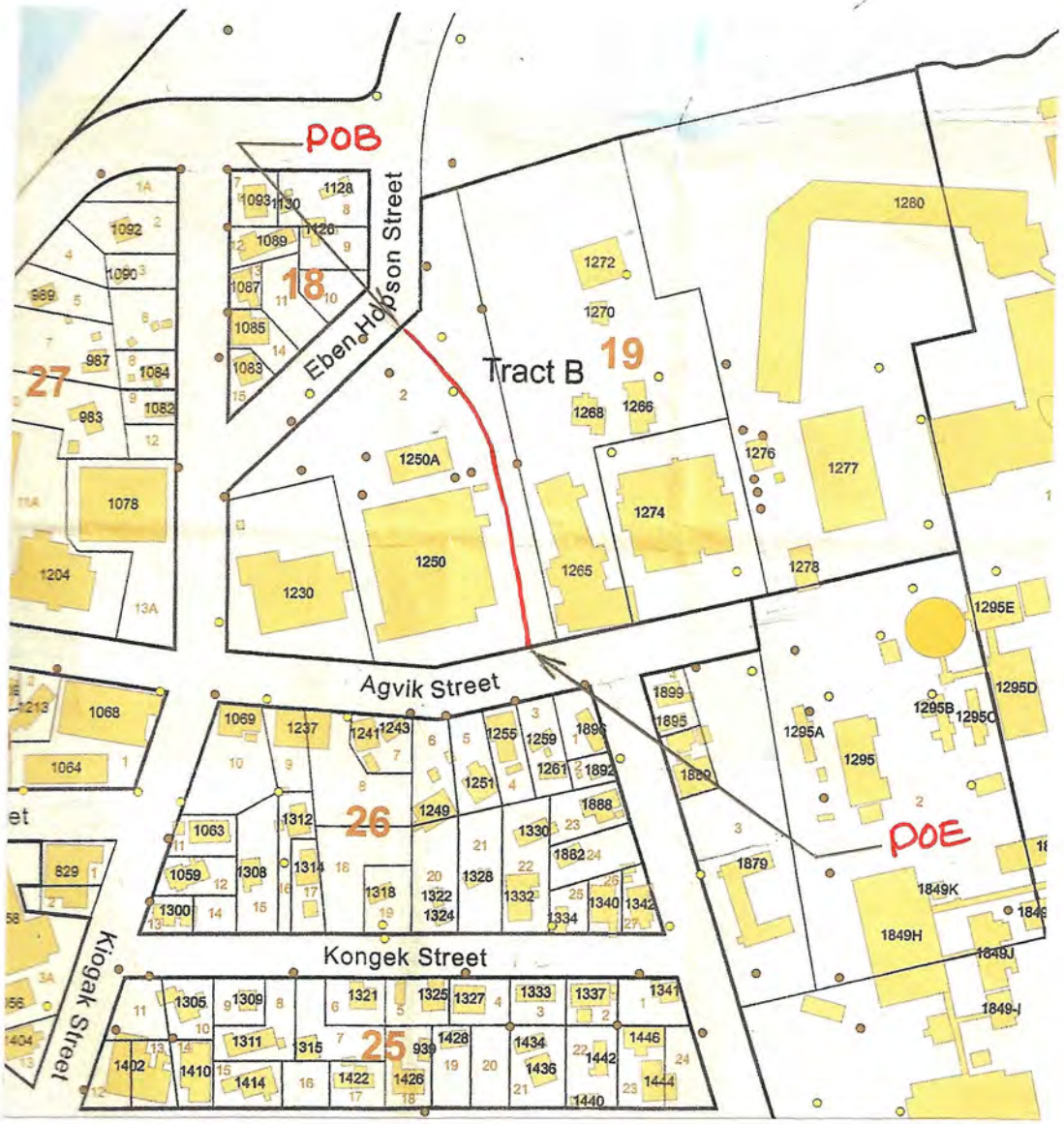
0.0 — 0.1

Miles

N

Sec.6, T22 N, R 18 W

UMIAT MERIDIAN



Congressional District 01

Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2028
010

BIA Route #

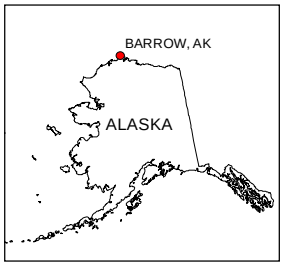
BIA Section of Route #

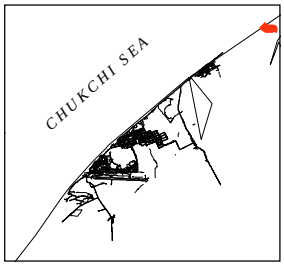
Firelane St.

March 2010

name	route	route_section	miles	lat_pob	long_pob	lat_poe	long_poe
fire lane	2028	010	0.2	71.292	-156.778	71.294	-156.782

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.





Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2100
010

BIA Route #

BIA Section of Route #

Pigniq West Rd.

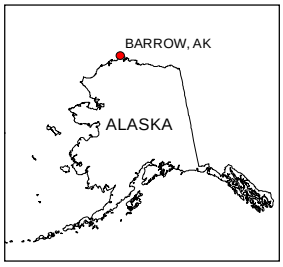
NATIVE VILLAGE OF BARROW

UMIAQ

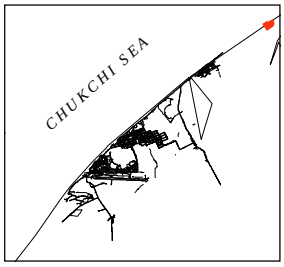
3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pigniq_west	2100	10	0.4	71.344	-156.616	71.342	-156.604

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2100
020

BIA Route #

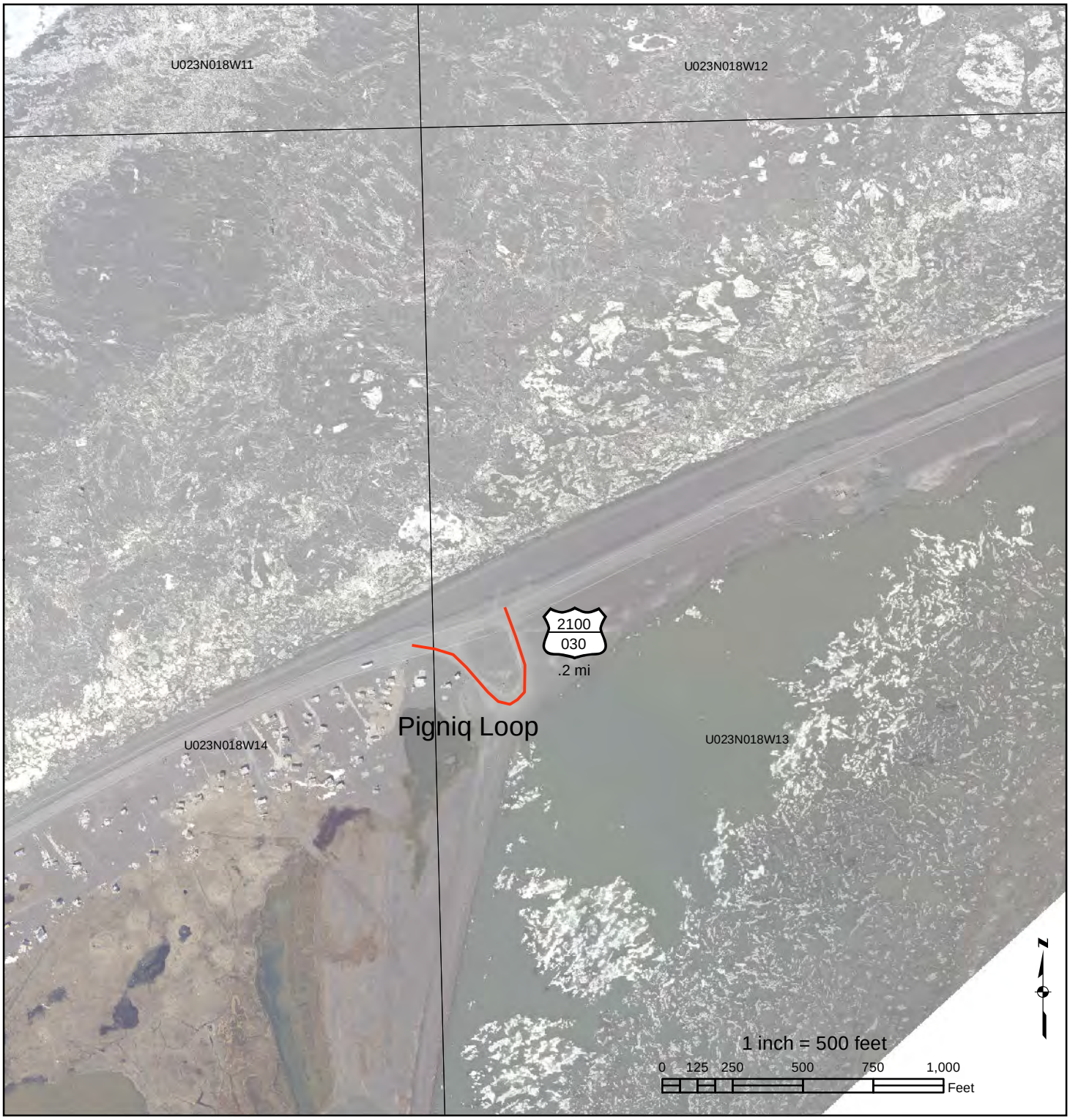
BIA Section of Route #

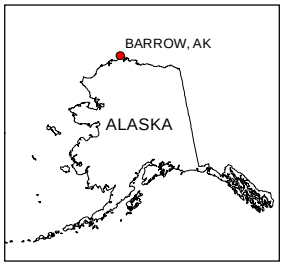
Pigniq Cabin Rd.

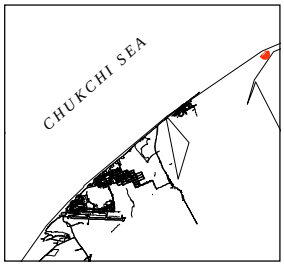
3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pigniq_cabin	2100	20	0.2	71.346	-156.609	71.343	-156.613

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.







Congressional District 01 Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2100
030

BIA Route #

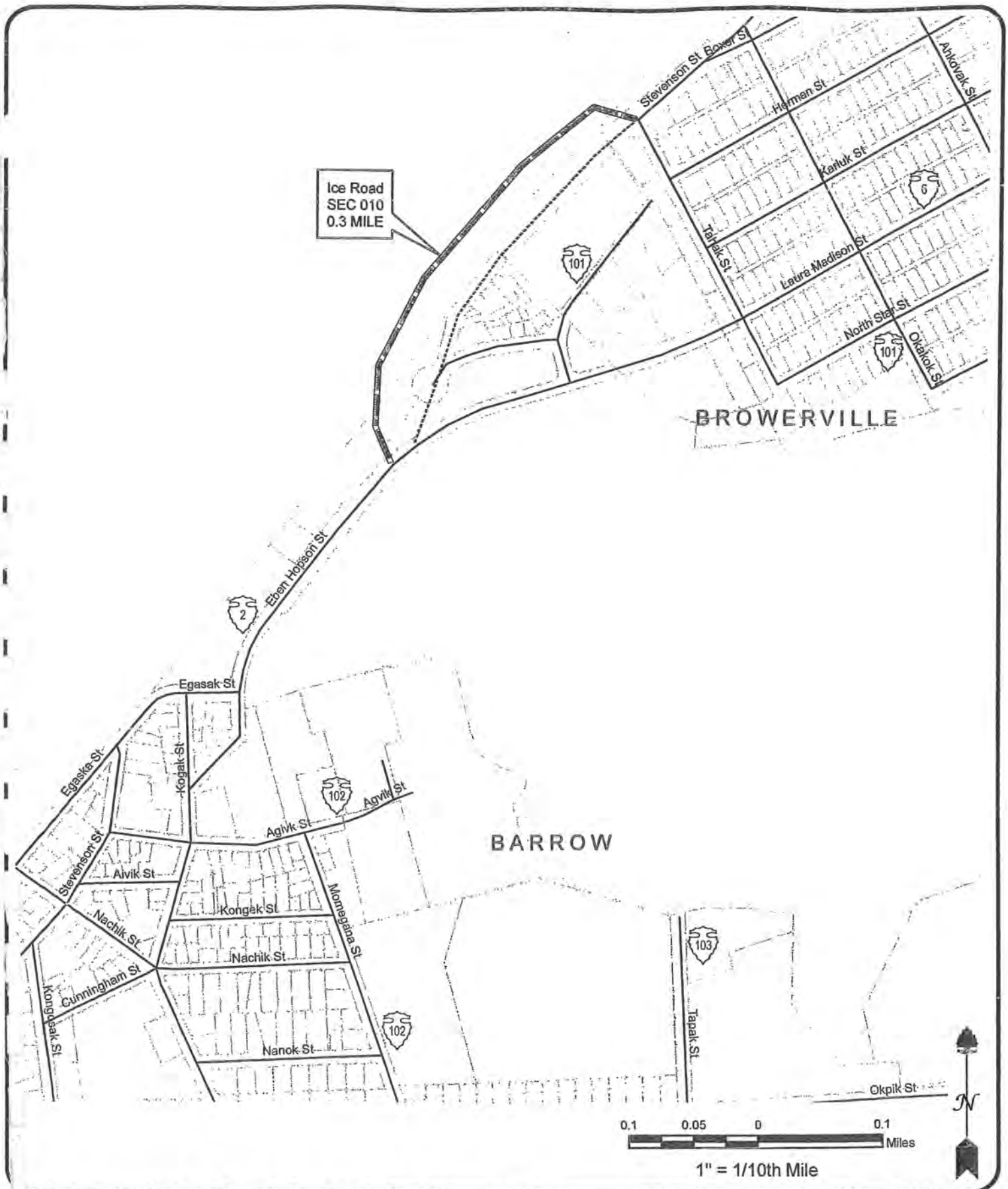
BIA Section of Route #

Pigniq Loop

3/11/2011

name	route	route_sec	miles	lat_pob	long_pob	lat_poe	long_poe
pigniq_loop	2100	30	0.2	71.349	-156.588	71.348	-156.591

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

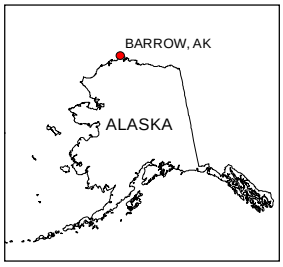
NORTH SLOPE ALASKA REGION

Route 2200 (Ice Road)
SECTION 010

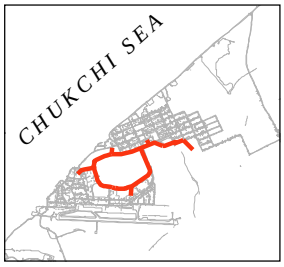
Township 22 North / Range 18 West / Section 6
Township 23 North / Range 18 West / Section 31
Township 23 North / Range 18 West / Section 32

JOB NO:	
DATE:	10/2004
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1



Congressional District 01



Barrow, Alaska

B.I.A. Indian Reservation Road Inventory
Strip Map

2200
010

BIA Route #

BIA Section of Route #

Barrow Walkway
(Proposed)

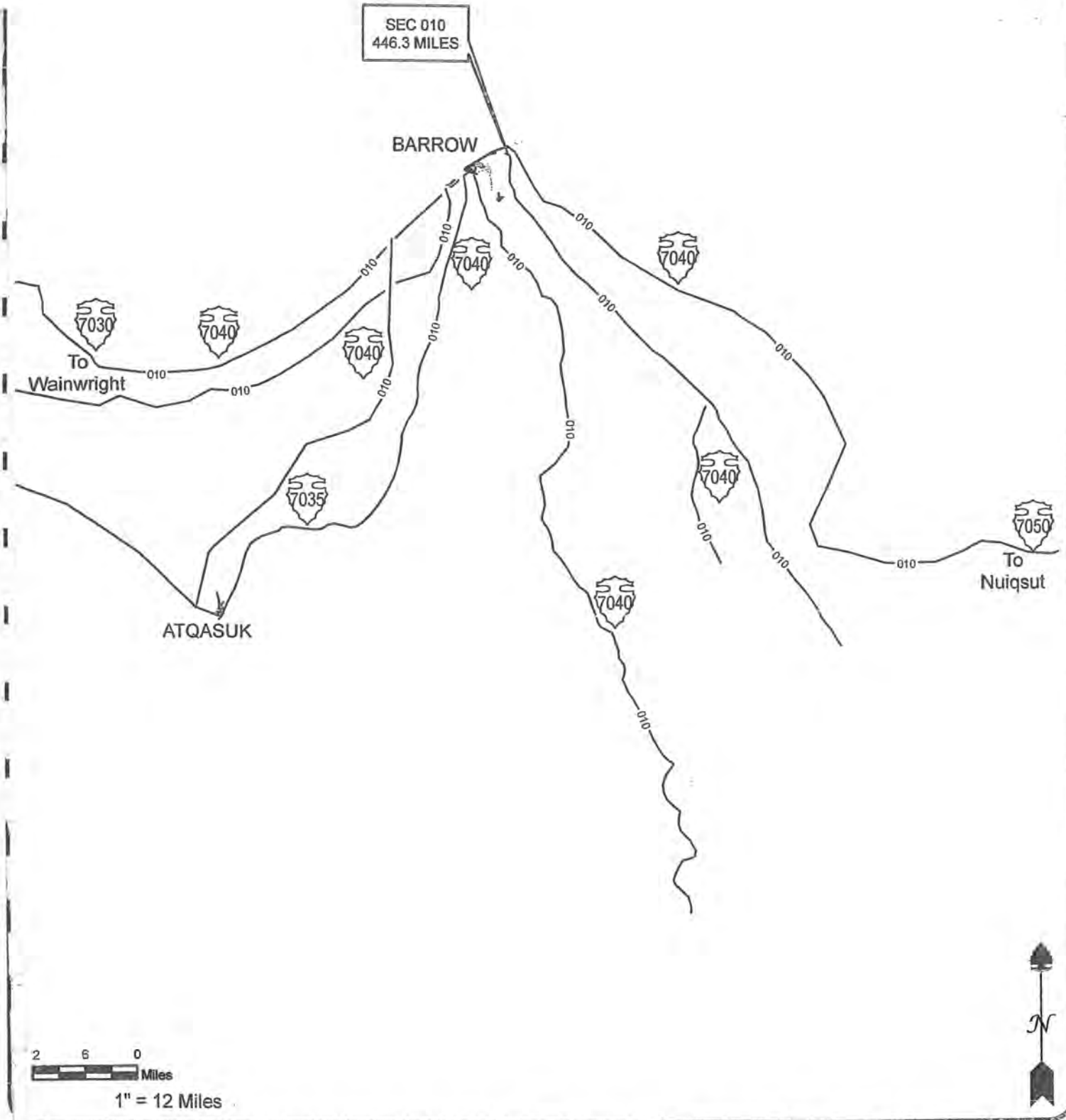
NATIVE VILLAGE OF BARROW

UMIAQ

3/12/2012

St. Name	Route	Section	Miles	Lat POB	Long POB	Lat POE	Long POE
Barrow Walkway	2200	10	2.8	71.298	-156.727	71.293	-156.782

Points of Beginning and Ending (ie: lat_pob, long_poe) were Recorded in WGS 84 Decimal Degrees.



BARROW, BROWERVILLE, and NARL

NORTH SLOPE
ALASKA REGION

ROUTE 7040 (Trail)
SECTION 010

Township 10-23 North / Range 10-24 West

JOB NO:	
DATE:	01/2005
DRAWN BY:	JKR
CHECKED BY:	
DRAWING NO:	

SHEET 1 OF 1