APPENDIX H: CULTURAL RESOURCES EVALUATION

Scammon Bay Airport Planning Study
Cultural Resource Evaluation

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Acronyms

AC&W…….. Aircraft Control and Warning
AHRS…… Alaska Heritage Resources Survey
ANCSA……. Alaska Native Claims Settlement Act
ATG……... Alaska Territorial Guard (ATG)
CEMML…….Center for Environmental Management of Military Lands
DEW…….. Distant Early Warning
DOT&PF……Alaska Department of Transportation & Public Facilities
FEMA…… Federal Emergency Management Agency
MHHW…….. Mean High Higher Water
NARA…… National Archives and Records Administration
NEPA…….National Environmental Policy Act
NHPA…….National Historic Preservation Act
NOAA……National Oceanic and Atmospheric Administration
NRHP…….National Register of Historic Places
PD&E……Preliminary Design & Engineering
TEKLEK……Traditional Ecological Knowledge / Local Environmental Knowledge
USS……United States Survey
WACS……White Alice Communication System

Scammon Bay Airport Cultural Resource Evaluation

The Alaska Department of Transportation & Public Facilities (DOT&PF), Preliminary Design and Engineering (PD&E) Section, conducted a literature and data review of known and potential historic and cultural resources on or near the Scammon Bay Airport and within the area identified in the Scammon Bay Airport Feasibility Study area (CFAPT01005). The review is consistent with the requirements of the National Historic Preservation Act (NHPA) Section 106 and the National Environmental Policy Act (NEPA). This review establishes historic context for the Scammon Bay area. To date, the known historic and cultural properties have not qualified for listing in the National Register of Historic Places (NRHP). The discussion focuses on the level of potential harm to known and potential historic and cultural resources but does not recommend a preferred alternative.

Environment

The area between the Yukon and Kuskokwim rivers is a vast area of river delta, lakes and streams with two mountainous areas, including the Askinuk Mountains where the modern community of Scammon Bay was built. Scammon Bay is bounded on the south by the rocky cliffs of the Askinuk Mountains, to the west by a series of sand bar islands (Neragon, Sand and Krakatok) and to the north by the flat wet tundra which continues to the north and the mouth of the Yukon River. The current runway, apron, road and lighting system is constructed on a flood plain of the Kun River that is subject to periodic flooding from storm surge, ice jams and other fluvial processes.

The vast sedimentary plain to the south and east is the remains of delta which developed as the Yukon and Kuskokwim Rivers changed level and flow as the late Pleistocene deglaciation began (Ager 2003; Knebel and Creager 1973; Olson and Lang 2020). Yukon River channels were abandoned and lakes formed as the ice beneath the surface melted and the formerly exposed surfaces of Beringia were inundated (Nelson and Creager 1977; McManus and Creager 2017). The existing Yukon River delta configuration is approximately 2,500 years in age. One of a few rare volcanic vents emerges from the sediment near Scammon Bay (Hoare and Condon 1968). A synthesis for the Yukon Delta just to the north was published by the Minerals Management Service (Thorsteinson, Becker and Hale 1989). The landscape is dynamic yet vulnerable to climate change, storms, flooding, wind and rapid erosion (Jorgenson, Frost and Dissing 2018; Frost, Bhatt, Jorgenson, Macander, Bieniek, Whitley and Fienup-Riordan 2017).

Prehistoric Period

The prehistory of Western Alaska is limited to data recovered from a few sites and only recently have long term extensive excavations been conducted in the region (Knecht and Jones 2019). Funk (2010) provides an overview of the historical and archaeological context of the region specific to the Scammon Bay-Hooper Bay-Chevak Triangle. Robert D. Shaw (1983, 1985) indicated that the earliest defined archaeological culture in the region was Norton, which began some 2,000 years ago. Norton is characterized by check stamped pottery, chipped slate tools, and well-developed fish nets with specialized floats and sinkers for their use. Shaw supposes that the

advent of this highly productive fishing technology enabled the occupation of this region at the beginning of the Norton period (Shaw 1998).

Approximately one thousand years ago a new technological regime appeared in the archaeological record that indicates the influence of or incursion by people using what has been named the Thule culture, which is named for its distant expression in Greenland in a form consistent with that around Bering Strait (McCartney 1979; Mason, Jensen, Rinck, Alix, Bowers and Hoffecker 2020). This culture had a greater focus on marine resource harvests, perhaps fostered by climate induced productivity increase of marine mammal resources which supported expansion of Thule east and south (Mason et al 2020). Thule is marked by toggling harpoon points, ground rather than pecked stone tools, corrugated or paddled pottery transitioning to plain ware, elaborate engraved decoration on items, and location of architecturally distinctive village sites in locations to facilitate interception of migratory marine mammals (Ackerman 2001).

Perihistoric Period

This period is marked by the recollection and recitation of oral histories of persons, places and events which preceded written records. The most prominent subject matter for these perihistoric narratives are the oral narratives of what became known as the Bow and Arrow War. Dr. Caroline Funk (2010) directly and the many works of Ann Fienup-Riordan (e.g. Fienup-Riordan and Rearden 2016) more broadly address this period of Yup'ik history as recorded in oral narratives and through ethnographic interviews. Key episodes include the Bow and Arrow Wars which took place during an indefinite time period but may be associated with a series of population migrations through the region with the "Triangle" of communities including Scammon Bay, Hooper Bay and Chevak (Funk 2010; Kurtz 1985). Speculation and contemporary accounts regarding the movement of the Aglurmiut south towards the Nushagak River may indicate the end of the period of warfare, attributed in narratives to the contacts with Russians (Funk 2010; Kurtz 1985).

John Pingayak (1998) wrote an important curriculum document for Chevak schools from an emic perspective describing important aspects of traditional life, history and culture for Cup'ik students. Yup'iit people living in the delta region thrived through knowledge of the land and waters with cultural and technical skills that fostered life in the challenging subarctic environment, and a rich heritage of transmitted local and traditional knowledge.

History

Russia

Russian maritime exploration began in the 1600s as Dezhnev sought to discover and map the separation of Russian lands from the New World (Fisher 1999). Russian efforts to develop the fur trade that lured independent fur traders into the North Pacific for sea otters also moved into the Bering Sea in pursuit of walrus, seals, sea lions and other peltry through direct harvest and trade. Bering and Chirikov followed the Aleutian Islands along the North Pacific Coast in a harrowing journey in 1741. Other exploration soon followed north of the Aleutians into the Bering Sea. Subsequent explorations were in the service of the independent fur traders, mostly by sea from Okhotsk but also overland as fur traders sought routes to new markets in the interior.

Independent parties of fur traders spread mostly along the sea otter habitat of the north Pacific, establishing a practice of coercion, hostage-taking and theft from Aleuts and Koniags engaged as hunters during the expeditions. As profits, distance, risks and costs increased, larger companies were organized to pursue sea otters, seals, sea lions and walrus, with the Lebedev-Lastochkin and Shelikhov-Golikov companies engaged in aggressive competition. This increased cost to Alaska Native peoples in the hunt as resource producers were abducted from their families and communities. Abuses led to blowback including coordinated resistance by Alaska Native groups to Russian incursions (Black 2004; Boraas and Leggett 2013). These abuses and the financial and political issues related to the fur trade as well as lobbying by parties at the imperial court resulted in the forced unification of the remaining companies in Alaska under royal charter which dictated company behavior and practice in the colony and made some indigenous persons Russian colonial citizens and those of mixed Russian- Alaska Native heritage as creoles (Black 2004).

The newly unified company established the capital at Sitka and bases at numerous locations on the North Pacific littoral. Expansion was focused on following sea otter habitat down the coast of north, central and south America until sea otters were nearly extinct. The company effort looked north for land peltry. From Cook Inlet and Kodiak, by land and sea, company traders proceeded to explore over land and by sea.

The Russian America company established a trading post at Novoalexandrovsk Redoubt on the Nushagak River in 1824 with direct, sustained contact with the Yup'iit on Bristol Bay. Vasilev explored over land to Norton Sound in 1828-1830. A Russian trading post was established at St. Michael near the mouth of the Yukon River in 1833 and from there, trails went overland to the Kuskokwim River, thence to the Nushagak River before crossing the Alaska Peninsula, with a string of trading posts leading to the first Russian capital of Alaska at Kodiak across the Shelikof Strait. Trade was mainly conducted at the posts, but traders would also arrange trades during travel rounds between posts when encountering groups of Yup'iit dispersed on the landscape during their resource harvest pursuits. Russian Orthodoxy and the presumption that indigenous people were subjects of the Russian crown were concepts with limited penetration in the vicinity of Scammon Bay, greater along the Yukon River where contact was direct and sustained (Black 2004).

Epidemic disease arrived with Russian expansion but was not limited by the geographic limits of Russian presence. The first pandemic to devastate the region was smallpox in 1838-1842 (Pingayak 1998; Zagoskin in Michael 1967). Other diseases that were novel to indigenous people followed and were an additive problem to diseases which may have been present, such as tuberculosis (Fortuine 1989; 2005).

Russian trade effort shifted to the Kuskokwim and Yukon rivers because of fur market shifts and geopolitical changes across the world. Lt. Lavrentiy Zagoskin was tasked to explore the Kuskokwim and Yukon River drainages in order to map the rivers and to establish whether the state, chartered Hudson's Bay Company had encroached on Russian land claims in Alaska by establishing trading posts on the Yukon River west of the treaty boundary (Zagoskin in Michael 1967). Zagoskin did not visit Scammon Bay, but related descriptions of the people given him by

asking residents of Ikogmiut and other neighboring trade centers (e.g. Kurtz 1985). Trade continued from St. Michael, served by sea, up rivers, and over land via portages between the Nushagak, Kuskokwim, and Yukon River portages. Despite this penetration, it appears that no resources were present in sufficient quantity to drive Russian traders along the shallow coast of the Yukon River delta nor over land to Scammon Bay. All trade was indirect or by voyage undertaken by Yup'iit seeking the products available from the Russian company.

Russia lost its monopoly on trade with China as Portugal, Spain and Britain made incursions on China. This led to territorial incursions as British, French, and American explorers moved into the Russian possessions in the Pacific. Whaling ships crossed north of the Aleutians in 1840 in a rush for marine mammal oil, peltry and meat, defying Russian control or regulation (Black 2004). Gold rushes saw California taken by the United States with the discovery near the former Russian Fort sold to John Sutter, and gold rushes in British Columbia were concerning as they moved north up the coast from the Fraser River mouth to the Stikeen River in Russian territory. Russia lacked the ability to control the vast territory it claimed and had not acculturated many of its colonial residents. Russia had lost the Crimean War with Britain, France and Turkey in 1856 and began a period of reforms including ending serfdom in 1861. Russia sought favor with the United States and offered to sell Alaska to the United States on several occasions, provided naval military support to the Union during the Civil War and after the Civil War a treaty of cession was concluded.

United States

The United States purchased Alaska in 1867 from Russia but did not immediately assert authority or control over the territory. A cruise of the Yukon River was performed to remove the Hudson's Bay Company fort from Fort Yukon but little further effort was expended on governance for many years.

Interest in Western Alaska grew with the discovery of gold at the upper end of the Yukon River and later at Nome and other locations. The Klondike Gold Rush saw a vast number of people trying to access the upper Yukon River by one of two routes: overland such as through Chilkoot Pass and up the Yukon River by steamboat. The Russian fort at St. Michael was occupied by the U.S. Army and the area became a port of call and transfer point with warehouses for supply of gold prospectors via the Yukon River (Antonson 1976).

The influx of mass numbers of people into the region, many exposed to novel diseases, pausing at St. Michael and Yukon River ports created additional vectors and reservoirs (e.g. Fortuine 1989, 2024; Nome Semi-Weekly Nugget 1904). Scammon Bay was also affected by the 1918 flu which victimized young healthy people, leaving many children orphaned and villages no longer occupied (Pingayak 1998). Children's homes were established in many locations to care for orphaned children.

Efforts to shift the lifeways of local peoples took two paths in the American period: missionaries and later government schooling organized around reindeer herding (Willis 2010). The Bureau of Education under Sheldon Jackson assigned this area of Alaska to the Catholic church for missionization, and Jesuit priests and volunteer missionaries established schools and facilities to support a mobile mission that could travel between widespread communities in their region

(Balcom 1970; Llorente 1990; Renner 2008). The church placed missionaries at Hooper Bay in 1928 with the task of traveling to Scammon Bay and Chevak once a month (Balcom 1970). The Swedish Evangelical covenant mission in the same year sent Alaska Native missionaries to Hooper Bay in 1926 and Scammon Bay in 1928 to evangelize and run day schools (Anderson 1935).

World War II saw the formation of the Alaska Territorial Guard (ATG), which included soldiers from Scammon Bay (Marston 1972). With relatively small investments in people, arms and equipment a capable scout force was assembled to defend Western Alaska from credible threat of invasion. This was not necessarily an easy experience, however, and substantial cultural conflict and prejudice had to be overcome (Marston 1972). The demonstration of competence and ability by ATG members had significance which lasted beyond the end of the war (Annabel 1947).

The federal government, through Alaska's delegation, sought money to develop Scammon Bay and other Western Alaska communities after World War II. Edmond Smagge, his wife and two adopted children established a Christian Day School in their home after following a calling to evangelize in Scammon Bay (Hansen 1952). This called them to take a 1600-mile trip in four boats down the Yukon River to establish their mission. They were replaced by Dwight Milligruk and his family, Inupiat from Barrow who trained at the seminary in Unalakleet (Milligruk 1953). The Bureau of Indian Affairs had established boarding schools but the remoteness of Scammon Bay may have deterred efforts at outreach. These efforts appear to have missed Scammon Bay/Kutmiut.

In 1952 the BIA began construction of a school at the site of Scammon Bay. This likely drove consolidation of people who were formerly seasonally dispersed at locations along the rivers and on the tundra. Martha Teeluk was the first teacher for the Alaska Native Service in Scammon Bay (Teeluk 1962). Teeluk started teaching in a log cabin day school building provided by the church. School lunch program supplies and educational materials were stored in local residents' homes. 45 children attended class in the 15x25 foot cabin which had three-foot-high walls and a five-foot-high gabled roof, leading to problems with deep snow. By the mid-1950s the building collapsed, and the BIA began construction of the local school (Teeluk 1962). A new BIA school was dedicated on September 27, 1964 (Canoe and Sundown 1964).

The Cold War was manifested on the area with the construction of an Aircraft Control and Warning (AC&W) station at Cape Romanzof in 1952 for the U.S. Air Force. Soon a Distant Early Warning (DEW) Line radar site with companion White Alice Communication System (WACS) were completed on the same site.

In 1961 the federal government began to assert legal authority over game harvests in rural Alaska under the game laws in place, including the Migratory Waterfowl Treaty of 1916. The result of the new enforcement effort and the arrest and citation of subsistence hunters resulted in an uprising against the federal government as represented by the US Fish and Wildlife Service. In Barrow and other places hunters turned themselves in to law enforcement as a protest against the new enforcement regime. These issues were among those of great concern to Alaska Native peoples in the 1960s that reached a crescendo with the discovery of oil on the North Slope in 1968 and subsequent events with the rapid development of oil production infrastructure and the

Trans Alaska Pipeline. The development of the oilfields required settlement of outstanding Alaska Native land claims; the result was the Alaska Native Claims Settlement Act (ANCSA).

Ethnographic Overview

The Western Union Telegraph Expedition explored the proposed route of a telegraph line from the United States to Europe through Siberia in 1865 (Dall 1870). This was the first systematic accounting in English by Americans of the territory. Dall made the following statement about the vicinity:

> North of Cape Dyer, a small river called by Captain Smith the *Maria Louisa River* (*Kun* of the Innuit), empties into Scammon Bay. Ten miles from the mouth is a native settlement, known as Kúttenmut. Several other shallow streams come to the coast between Scammon Bay and the Yukon delta.

Dall's accounts were followed by those of Edward W. Nelson (1900). Nelson purchased artifacts and recorded observations of the Yup'iit between the Kuskokwim and Yukon rivers. The Handbook of North American Indians (Hodge 1907) puts a village called Igiak (aka Igiagamute, Igiogagamut, Igragamiut) as inland from Scammon Bay with a population of 10.

Hrdlička (1930) described the area based on his view from the USRCS *Bear* in 1912, listing it as "90. Kut (Kutmiut)-Small village on Kut River, head of Scammon Bay." Hrdlička goes on to describe the area from Cape Romanzof to Apoon Pass:

> On this coast there is little information since the time of Nelson. There are a number of occupied villages as well as old sites. The region is bleak and the Eskimo there are reported to live miserably.

Kutmiut appears to have been abandoned, and the trading post labeled on earlier maps as Scammon Bay (Figure 1) with the construction of a BIA school in 1952. Some documentation in the National Archives and Records Administration (NARA) document the funding of the school, the survey of the lots on which the BIA facilities were built, and the other facilities constructed at the same time to provide clean water.

Botanist Eric Hultėn (1962) visited Scammon Bay June 16-27, 1961, to conduct research on plants and mosses, with a discussion by Persson of the bryophytes. No indication is given of use of indigenous knowledge of plants, but assistance was provided by the schoolteacher.

More recently scientific research on the environment of the area has involved indigenous perspectives. Marine mammal research most recently has included direct informant interviews to elicit Traditional Ecological Knowledge / Local Environmental Knowledge (TEKLEK) focused on seals, walrus, sea lion and beluga whales (Huntington, Nelson and Quakenbush 2017).

Geodesy

In the USGS map sheet for Hooper Bay compiled in 1951 (Figure 1) the village of Kutmiut is depicted as downstream from the confluence of the Ear and Kun rivers 2.6 miles east of the present Scammon Bay airport. A trading post north of the river mouth was listed as the community of Scammon Bay on early maps (Figure 1). In the 1953 edition of the map Kutmiut

is absent, the former Scammon Bay is marked "cabins," and a new community of Scammon Bay is located near the mouth of the Kun River where it reaches Scammon Bay.

Surveys of the Yukon Delta were completed in 1899 by J.F. Pratt, G.R. Putnam and R.L. Fairs for the Coast and Geodetic Survey. Geodetic survey was conducted in the area beginning with the 1899 placement of the marker at a rock formation listed as 'BOULDER' on National Oceanic and Atmospheric (NOAA) maps (NOAA, 2025). Photographs were taken at this time but do not show indications of human occupation (Putnam 1899; Figure 2).

The Bulletin of the American Geographical Society of New York (1899) reported that:

> Dr. Edmunds passed around the whole delta from the south mouth to Kotlik in a Peterborough canoe, finding it necessary sometimes to drag it through miles of mud or go out of sight of land to obtain sufficient depth of water. Scammon Bay near Cape Dyer, south of the mouth of the Yukon, was examined as a possible port in lieu of St. Michaels, but the harbor was found to be useless, and the route to the Yukon mouth necessarily out to sea, whereas from St. Michaels craft can hug the shore.

Jarvis (1900) gives a brief description of the waters of Scammon Bay for navigation of ships but makes no mention of people or landmarks of human construction. Marcus Baker (1906) makes multiple mentions of Kutmiut based on the Dall and Putnam accounts, with the river named Khun by the Coast and Geodetic Survey. Figure 3 shows the subsequent USGS map for the Askinuk Mountains area as of 1964 following the reorganization of communities into towns centered on schools, post offices, stores and churches. This concentration was enabled by the development of small, motorized vehicles and outboard powered boats which reduced the time needed for residents to access traditional lands and resources but tied them to the wage economy (e.g. Wolfe and Walker 1987).

Trail maps held by DOT&PF (1973) and Bureau of Land Management (BLM) were documented as ANCSA 17(b) easements conveyed to Askinuk Corporation (Figure 4) which document trails connecting Scammon Bay in its current location with public lands in the surrounding area including Kongishluk Bay to the west, Igiayarok Pass in the Askinuk Mountains to the east, the former trading post to the north on the trail to Kotlik, the former village location of Kunmiut, and subsistence lots which may have had seasonal residences in the perihistoric period and before (e.g. Jenness and Rivers 1989). Pipkin (2015) inventoried a trail to the north as RST 323, the Scammon Bay-Hamilton-Kotlik Winter Trail (ARC trail 73c) heading north. RST 93 is the Hooper Bay-Scammon Bay trail by which Scammon Bay received mail from the post office in Hooper Bay (Pipkin 2015).

In 1952, survey markers were placed at STAFF, MAGMA, and IVUK, and the marker for BOULDER (placed 1899) was revisited. Points were placed as controls for establishing boundaries for the AC&W site at Cape Romanzof and later for parcels in Scammon Bay for the school, armory, and cemetery (USS 4099) (CEMML 2013). The Cape Romanzof site became a DEW Line/White Alice site and is still active as a Long-Range Radar Station. These were revisited in 1974 when STAFF and IVUK were reported as missing. Surveys took place to

outline lots in the community of Scammon Bay including for the school and other facilities (USS 4099 and USS 5050) and re-established STAFF.

Orth (1967) reported that the present Scammon Bay was established as a permanent village with the post office in 1951, called by residents Mariuk and the residents called Mariagamiut. The bay and community were named in honor of Captain Charles M. Scammon of the US Revenue Cutter Service, chief of the maritime component of the Western Union Telegraph Expedition of 1867 (ibid.).

Newspaper Reports

Historic news articles regarding the area of Scammon Bay are sparse or nonexistent until a 1911 newspaper article in the Nome Nugget (1911) regarding the Goodnews Bay area platinum placer deposits. The article interviews Frank Waskey, a notable Alaska figure, as having sailed from Goodnews Bay to Nome from the discovery with a stop at Scammon Bay where a Richard Negus was reported as in residence and prospecting for gold (Nome Nugget 1911, Pratt 2015, Waskey 2015). Negus was reportedly a fur trader in residence at Scammon Bay (Daily Nome Industrial Worker 2013; Nome Nugget 1924). This was likely not the current village location. He and his indigenous wife Alice were at Mountain Village on the Yukon River in the 1920 Census (US Bureau of the Census 1920). Negus was in court in 1924 for the alleged manslaughter of a Scammon Bay man named Mike, for which he was found not guilty (Nome Nugget 1924). He reportedly sold his trading post in 1927 but promised to return (Daily Alaska Empire 1928). Negus was in Seattle and involved in fraternal group the Elks in 1929 (Nome Nugget 1929). Negus visited several places from his youth in the continental U.S. but reiterated his desire to return to Alaska (Denver Post 1929). Dan Campbell of the UPI wire service interviewed Negus in a lighthearted piece on the life and times of a sourdough Klondike prospector (Campbell 1929). No information regarding Scammon Bay or Kutmiut was found in newspapers again until 1951.

The Scammon Bay school had a newspaper, Fresh Water News, published by the elementary and middle school children. Issues were archived by the BIA during the years 1961 to 1964. The name was taken from the stream from which the community took its drinking water. Students reported numerous significant events, such as the establishment of a town site and city government, public health service visits to immunize and test residents for preventable diseases, and the daily and seasonal events as people went fishing for needlefish and tomcod through the ice, or sea mammals at locations up the coast. Descriptions of life included the split of the town between Catholic parishioners whose clergy came once a month from Hooper Bay for services and the Evangelical Covenant church with migrants living in town.

There are broad concerns in communities in Western Alaska and among emergency services and infrastructure agencies regarding the changes to the landscape, including the human environment, due to climate change. One example is that of the community of Quinhagak, which has sponsored archaeological salvage work at their former village site. Threats to Yup'ik lands from climate effects in synergistic collusion result in the loss of large areas of land when storms and floods arise in the absence of permanently frozen ground and shore fast ice to stabilize the sediment and persistent sea ice to minimize sea wave heights Documentation of recent historic

changes to the land in the area between the Yukon and Kuskokwim rivers were presented as part of the multidisciplinary studies at Nunalleq near Quinhagak (Gleason, S., Lim, J., Marsden, D., Pleasant, J., Jones, W., & Church, W. 2022; Knecht and Jones 2019).

Areas of Potential Effect

Scammon Bay was established to be closer to the Bering Sea to facilitate supply by barge and ship. Air traffic was by seaplane from Bethel and Nome. The current Scammon Bay airport was built in 1973, more than 20 years after the establishment of the community, and has existing facilities and utilities on the site. The area where the runway was constructed is subject to tidal inundation, storm surges, and seasonal flooding, and areas of the runway prism have been previously armored with rock. The Federal Emergency Management Agency (FEMA) sponsored emergency repairs in 2016 as project 58357 that included building a temporary gravel haul road from the barge landing to the runway, replaced the lighting, wind cone and segmented circle, and resurfaced and repaired the runway, apron, taxiway, access road, wind cone access and segmented circle pad. DOT&PF widened the runway 20 feet, extended the runway safety area 400 feet and expanded the apron by 40,000 square feet as part of project 57981 in 1988.

The areas of potential effect for an airport improvement project would include the area within the property boundary of the runway, taxiway and aprons, the access roads and material sources which may be located off the airport property.

The relocation sites are distant from the community and would require construction of miles of access roads and new material sites in addition to the runway, aprons, utilities and other improvements required for construction of an airport in a greenfield location.

Identified Historic Sites

There are no known historic properties on the airport property or the access roads. The airport is located within the Alaska Heritage Resources Survey (AHRS) polygon associated with Scammon Bay village. Due to confidentiality concerns, a reference map is not included.

The Scammon Bay Village site (XHB-00113) is a large polygon that includes within it several other AHRS sites and 1.56 square kilometers or 386 acres. This polygon is intended to encompass a large potential prehistoric and historic archaeological deposit, the historic town site and activity areas, a transportation corridor and part of an adjacent landform at the base of the Askinuk Mountains which includes a large wetland delta facing Scammon Bay proper where XHB-00112 is located. This property has not been determined eligible.

Within Scammon Bay proper are sites associated with installation of buried water pipes (XHB-00119, XHB-00120, and an evaluation of the Federal Scout Readiness Center (FSRC, XHB-00117). XHB-00119, a surface deposit of discarded materials, and XHB-00120, a buried water pipe, were determined not eligible for listing on the National Register of Historic Places (NRHP). The FSRC XHB-00117 was found not eligible for listing but by agreement with SHPO would treat the structures as eligible for listing on the NRHP.

Outside the townsite but within the polygon for XHB-00113 is XHB-0112, Northern Commercial Company Store ruins. This site is in a stream cut indentation and flood plain beyond

the mouth of the river proper with better access for lightering freight from ships to shore, including possibly Revenue Cutter Service ships and Alaska Native Service ships like the Northstar. A tugboat, the Helen Lee, and two lighters used to move freight to shore was beached in the bay in 1950 and later salvaged (Nome Nugget 1950).

Outside the polygon for Scammon Bay (XHB-00113) are the former village site of Kutmiut (XHB-00002) east of the modern community, a site on Kongishluk Bay (XHB-00094), and Kangirrlak (XHB-00095). Only the former Kutmiut site (XHB-00002) is located near an alternative airport location. Review of aerial photographs indicates that there are numerous candidates for possible residential surface depression sites in this area and indications of ATV use.

The alternative airport facilities locations identified in the Scammon Bay Planning Study, intersect with trails which have been documented as part of RS 2477 and Section 17(b) of the Alaska Native Claims Settlement Act (ANCSA). These trails likely originated in the prehistoric past and their significance continues to the present day as paths for travel to neighboring communities and resource harvest locations. Winter trails with summer use, especially in the uplands of the Askinuk Mountains, transitioned from muscle powered sleds to motorized vehicles in the 1950s and 1960s. The trails have not been archaeologically assessed in the field.

Discussion

The Scammon Bay Feasibility Study evaluated five potential alternatives:

- Alternative 1 (“No Action”) would maintain the airport in its current configuration and provide improvements based on eligibility.
- Alternative 2 (“Shift & Raise”) would shift the runway 340 feet inland along its current alignment as protection from river movement. This alternative includes raising the surface elevation of the edge of the embankment to +19.5 feet MHHW to 19.5’ to meet and exceed the 50-year flood plain requirement.
- Alternative 3 (“Near”) would relocate the Airport onto the transitional area between lowlands and the Askinuk Mountains, near the community of Scammon Bay.
- Alternative 4 (“Castle Hill”) would relocate the Airport to the valley between Castle Hill and the Askinuk Mountains.
- Alternative 5 (“Ridgeline”) would relocate the Airport to the ridgeline south of Scammon Bay in the Askinuk Mountains.

Based on the geographic area of potential new impacts for the proposed alternatives, the least harm alternative would be the “No Action” alternative. Reconstruction of the existing airport within its existing footprint, including armoring of the existing facilities, without raising the elevation of the embankment, would have the least new ground disturbance because construction impacts would occur on areas already disturbed by prior airport construction and maintenance. This alternative does not remove the risk of flooding or erosion damage to the runway facilities.

The Shift & Raise alternative would cause new ground disturbance, but it would be less than the alternatives that would relocate the airport. Many improvements would occur within the footprint of the existing airport, utilizing the existing embankment and access road. Some of the land that

would need to be acquired for the project has experienced prior ground disturbance. However, land associated with the runway shift and a potential new local material source site would require subsurface geotechnical testing as part of a capital improvement project. A cultural resource survey would also be required under the NHPA and NEPA process as part of the capital improvement project for this alternative.

The three airport relocation alternatives, Near, Castle Hill, and Ridgeline, would have more ground disturbances than the No Action and Shift & Raise alternatives. The most disturbance would be with the Ridgeline Alternative. Airport relocation would require the construction of new roads, potential new material source sites, in addition to the new areas of disturbance required for the runway, apron, taxiway, pads, lighting and segmented circle/navaids. These alternatives would require more expansive cultural resource surveys under the NHPA and NEPA process as part of a capital improvement project. These alternatives would also require subsurface geotechnical testing and potentially other NEPA impacts analyses before further evaluation. The three relocation alternatives have the potential for the most harm due to significant new ground disturbance.

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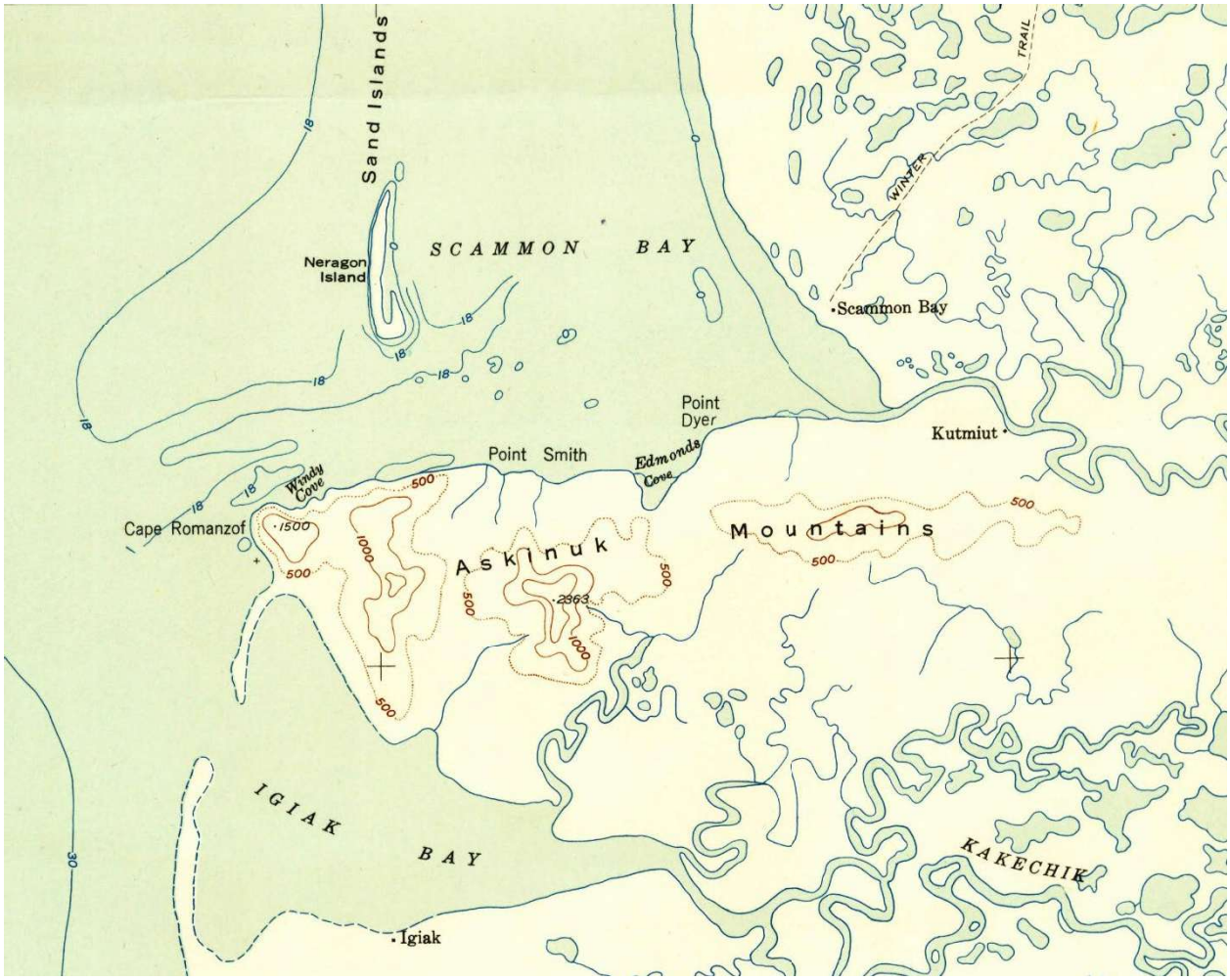

FIGURE 1: 1951 HOOPER BAY QUADRANGLE EXTRACT FROM 1942-1943 AIR PHOTOS AND 1945 STEREOPHOTOGRAMMETRY.

FIGURE 2: GEORGE PUTNAM PHOTOGRAPH OF KUN RIVER FROM SURVEY POINT, 1899.

FIGURE 3: 1964 HOOPER BAY MAP EXTRACT SHOWING THE ASKINUK MOUNTAINS.

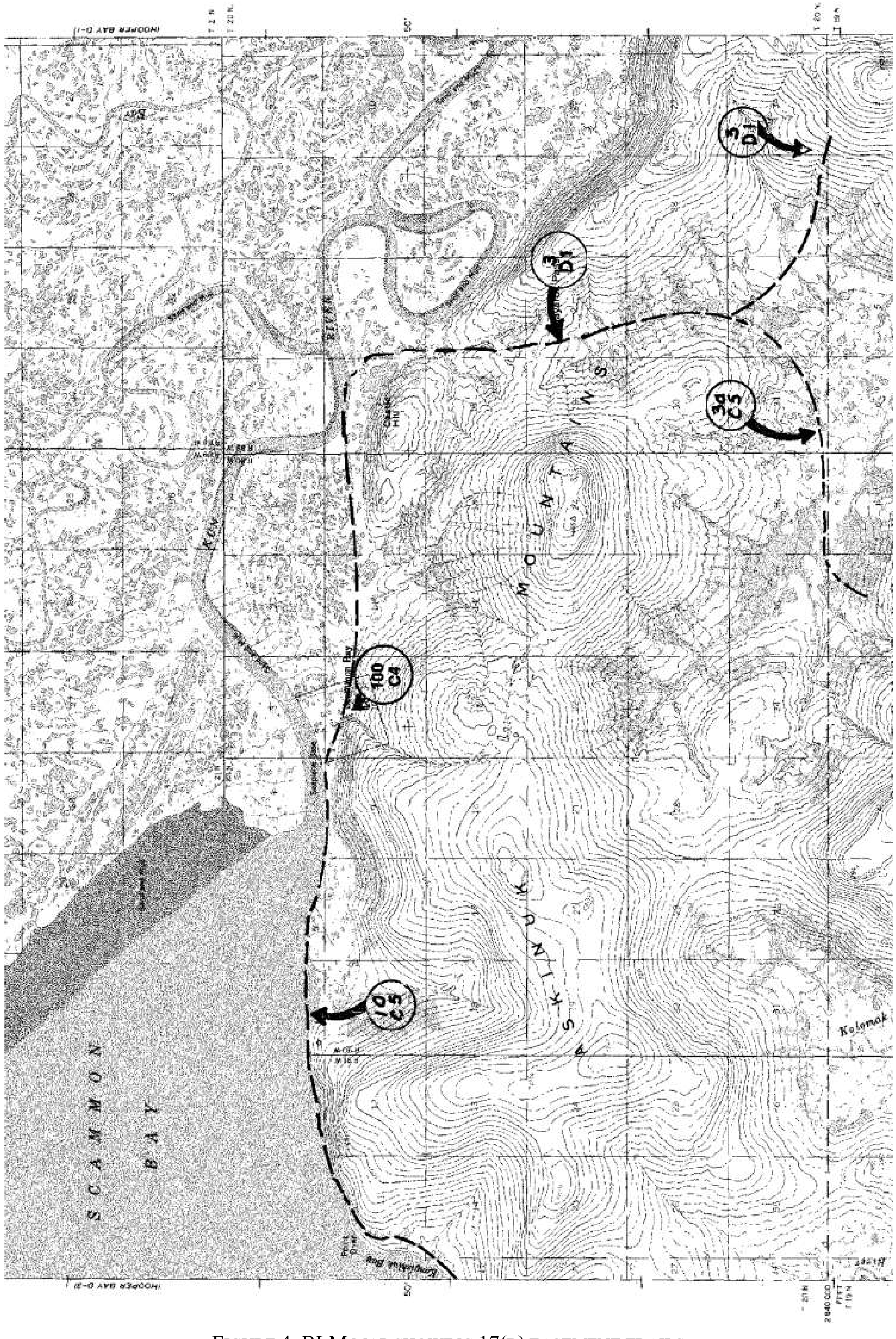

FIGURE 4: BLM MAP SHOWING 17(B) EASEMENT TRAILS

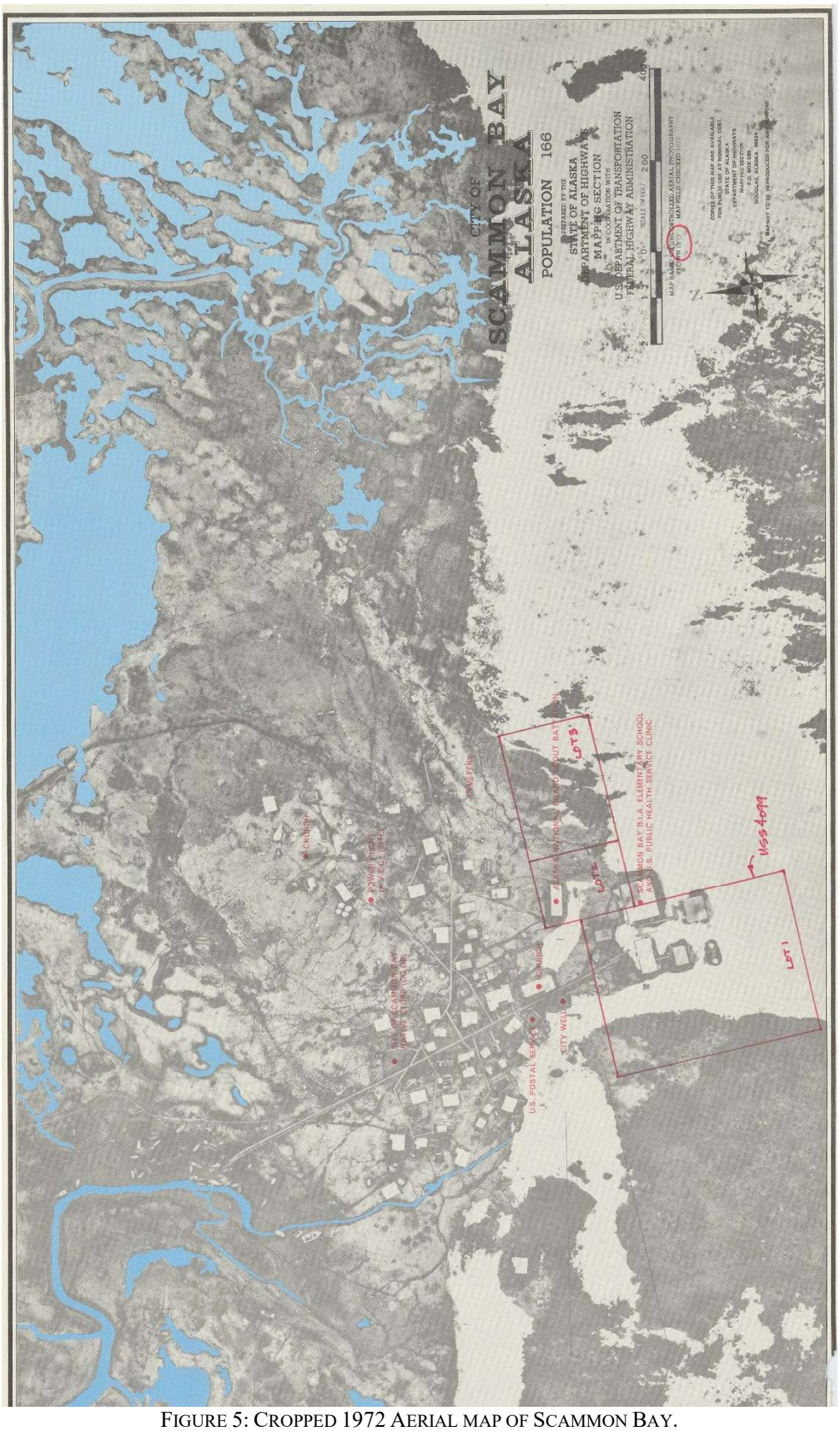

FIGURE 5: CROPPED 1972 AERIAL MAP OF SCAMMON BAY.