

Appendix D
Eagle/Raptor Nest Survey

Nenana-Totchaket Road Project
NSHWY00657



Stantec Consulting Services Inc.
475 Riverstone Way Unit 3
Fairbanks, AK 99709

July 19, 2022

Project/File: Totchaket Road

Reference: Eagle/Raptor Nest Survey

1 Purpose

This memo reports the results of the June 7, 2022, eagle nest survey for the Alaska Department of Transportation and Public Facilities (DOT&PF) Totchaket Road (project). The survey was performed by Stantec Consulting Services Inc. (Stantec).

The purpose of the survey is to assist with compliance for protections for Bald and Golden Eagles under the Bald and Golden Eagle Protection Act and the National Environmental Policy Act. These animals are protected from 'take,' which the US Fish and Wildlife Service (USFWS) defines as to *pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb* (50 CFR 22.6). An 'incidental take' is when an activity causes a take which is associated with, but not the purpose of, the activity (i.e. construction).

Construction activity has the potential to cause an incidental take, by causing noise and disturbances, which both have the potential to disturb eagles.

To help manage the incidental take, and the related permitting requirements, a professional biologist surveys for eagle nests.

2 Methods

The USFWS Eagle Nest Atlas was consulted and does not list any nests within the study area (USFWS 2019). The atlas shows a nest recorded 5 miles north of the study area on the Kantishna River, and one 12 miles south on the Kantishna River, both recorded in 2006. A nest was also recorded in 2002, 3.5 miles south of the study area on the Nenana River.

The flight path and survey was conducted using the 500 foot wide wetland study area. The wetland study area is wider than the proposed footprint of the project (Figure 1). This method allowed for a conservative (slightly larger) survey area for nests around the project. The helicopter survey also purposely flew outside the study area, to inspect habitat along the edge of the study area. Stantec Biologist Steve Reidsma was the survey observer.

Stantec provided a georeferenced map on an electronic tablet to assist the pilot with navigation. This tablet provides live location tracking, so that the pilot can fly transects along the study area. The survey team also

Reference: Eagle Nest Survey

had Global Positioning System (GPS) devices, binoculars, cameras, and electronic tablet maps. These extra devices provide redundancy should any single device fail.

Stantec performed a pre-flight briefing with the pilot to review best practices on completing eagle nest surveys. Discussion points included:

- Pre-flight briefings should take place to familiarize pilots and observers with the area, objectives, and project
- The best speeds to fly for nest detection are 20 – 40 knots
- Flights should conduct multiple passes to view the same area from different angles
- If hovering near nests is required for species identification, flights should hover for no more than 30 seconds, and at distances of >20 meters
- Flying eagles should be given deference at all times
- Disturbance of eagle behavior should be noted by the observer, to better inform future surveys
- During the flight, the locations of all observed nests should be recorded with GPS. Telephoto pictures should be taken of the nests. The condition and status of the nest (e.g. occupied versus unoccupied) and the species utilizing the nest should be recorded.

Reference: Eagle Nest Survey

3 Results

The flight took place between 12pm and 2pm on Tuesday June 7, 2022. The flight paths were laid out to provide overlapping surveys of all higher probability habitat, to include wetland edges, stream boundaries, riparian habitat, and bluffs as well as the study area boundaries. Multiple passes were conducted from different viewing angles for each part of the project. Flight paths are depicted on Figure 1.

The weather was 65-70 degrees Fahrenheit, with clear blue skies. The sun was bright and shining from the east. There was no precipitation, fog, or other weather hindrances to visibility. Leaf-out had already occurred, and trees were in full foliage.

Much of the study area is low probability habitat. The 2009 Minto Flats South fire boundary covers much of the project study area. The Kantishna River floodplains to the west, and the eastern 3.7 miles of the existing road are not within the fire perimeter. Although there are unburned mosaics within the study area, over half of the area has burned, with standing and downed dead wood throughout the study area and vegetative regrowth occurring (Photo 1). The Kantishna River (Photo 2) and the eastern study area drainages were followed up and downstream.

Photo 1: Vegetative Regrowth in Previously Burned Forest



Reference: Eagle Nest Survey

Photo 2: Kantishna River and Proposed Material Site Location



No nests were identified during the survey.

In addition, wetland and cultural surveys occurred in the area between May 31st and June 7th. Neither the pilot nor field teams sighted eagles or nests during daily flights to field targets. One bald eagle was seen flying through the study area along the existing roadway near a large wetland/stream complex 4.5 miles west of the Nenana River (Photo 3) during the wetland field work, but no nest was found in this location during the nesting flight.

Visibility into vegetation was moderate for the survey. Leaf-out had already occurred.

The larger deciduous trees (e.g. cottonwood, white spruce) that provide better nesting habitat allowed for improved visibility. The structure of these trees is more open, particularly when viewed from the air. Leaf out typically does not preclude the observation of nests but would have made it more difficult in determining status (e.g. number of fledglings). These trees were also often growing individually, allowing the inspection of individual trees during overflights.

Reference: Eagle Nest Survey

Photo 3: Drainage Along Existing Roadway



4 Recommendations

Although no nests were found during this survey, additional surveys should be conducted prior to construction activities. There is still the possibility of eagle nests:

- built after the date of this survey
- not observed by this survey

To avoid take, consultation with the USFWS is recommended if nests are found near the study area.

Reference: Eagle Nest Survey

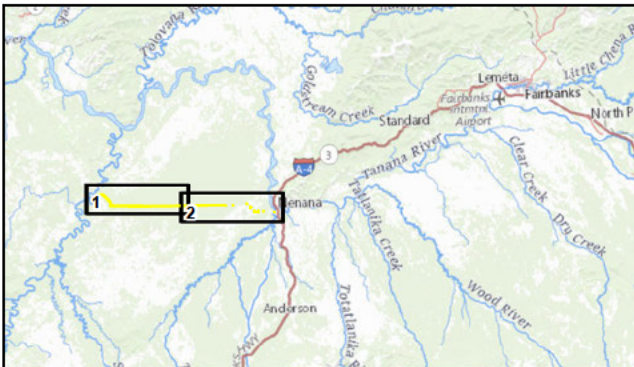
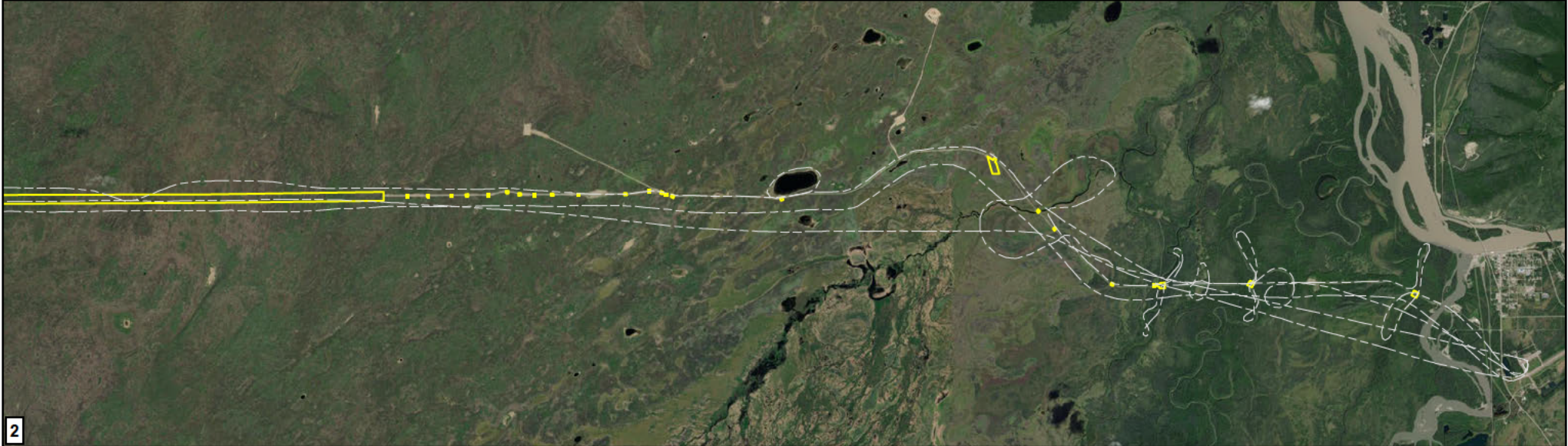
STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read "S-Reidsma".

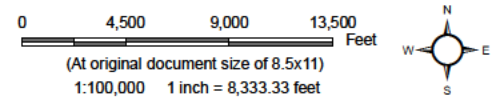
Steve Reidsma, PWS
Biologist
Steve.reidsma@stantec.com

5 References

USFWS. 2019. Alaska Bald Eagle Nest Atlas. Accessed May 31, 2022 at
<https://gis.data.alaska.gov/maps/d0be8220447747f2bb25e43a36513482/about>



- Helicopter Survey Track
- ▭ Study Area



Client
AK Dept. of Transportation & Public Facilities

Project
Nenana Totchaket Road

Figure
Wildlife Survey