

I. Project Description, Alternatives, Location

Location

The Alaska Department of Transportation and Public Facilities (DOT&PF) is proposing to replace the Wendell Avenue Bridge over the Chena River in downtown Fairbanks, Alaska. The project is located within T1S, R1W, Section 11; Fairbanks Meridian; USGS Quad Map Fairbanks D2. The bridge coordinates are Latitude 64°50'46.84"N, Longitude -147°40'30.27"W (WGS 84). See Figure 1 for a project location map.

Description

This proposed project includes the following work items: 1) replace the Wendell Avenue Bridge on the existing bridge alignment; 2) alter bridge hydraulic features as needed including the bridge elevation, bridge span, and abutments; 3) modify the highway approaches as needed to accommodate the new bridge; 4) improve the pedestrian and bicycle facilities including wider sidewalks, and improved linkages; and 5) relocate existing utilities present in the project area as needed. Temporary construction work may include temporary cofferdam to isolate work areas from surrounding waters, a temporary work bridge or causeway to facilitate bridge construction, and/or temporary erosion control measures. Material sites would be contractor furnished.

Resource Setting

The Wendell Avenue Bridge is a high traffic volume (9,015 ADT) bridge with one 12-foot lane, 3-foot shoulder, and 5-foot sidewalk in each direction. The bridge which crosses near river mile 11 of the Chena River is located in a developed urban setting. Lands surrounding the highway include: The Morris Thompson Cultural and Visitor's Center (MTCVC), residences, commercial businesses, and Tanana Chief Conference tribal buildings. See Figure 2. Two parks are adjacent to the bridge along the river banks: Graehl Park to the northeast and Griffin Park along the south river bank. See Figure 2. Griffin Park is a narrow strip of land with a pedestrian path that runs beneath the south end of the bridge. Graehl and Griffin parks are officially designated parks and are Section 4(f) resources that may be affected by the project. The project does not anticipate permanent right-of-way acquisition from private parcels. The lower Chena River, an impaired water body, is anadromous supporting the presence of chum and Chinook salmon as well as resident fish species. Approximately 0.15 acres of predominately willow-dominated shrub wetlands are located along the stream banks southwest and northeast of the bridge. See Figure 2. Cultural resource surveys of the surrounding land use area have identified no historical properties that could be affected by the project.

II. Purpose and Need of Project

The purpose of the project is to provide a safe and efficient roadway bridge crossing of Wendell Avenue over the Chena River for vehicles and pedestrians. The bridge was inspected in 2012 and it was classified as structurally deficient due to its poor condition. The deck elements are substantially deteriorated. The bridge foundation elements are describe as unstable, weak, and brittle making them vulnerable to seismic event damage. The bridge rails are damaged and need repair or replacement. Wider sidewalks to improve conditions for bicycles and pedestrians are proposed and can be incorporated into the construction of the new bridge at the same or less cost than repairing or retrofitting the existing bridge.

III. Environmental Consequences

A. Right-of-Way (ROW) Impacts:

1. ROW required:
 - a. Property required from a state or federal agency.
 - (1) State Park? Name: **None**
 - (2) State Refuge or Critical Habitat Area? Name: **None**
 - (3) Federal Park? Name: **None**

- b. Property required from local government entity. **Potential**
Type Property: **The pathway connections from Graehl Park to the bridge may require easements from the City of Fairbanks and/or the Fairbanks North Star Borough (FNSB).**
 - c. Business or residential property required.
(1) Residential: (indicate number) **0** (2) Business: (indicate number) **0**
 - d. Property required from a Tribe or ANCSA corporation.
Name: **None**
2. Describe:
The project is not anticipated to require permanent right-of-way acquisition. Permanent easements may be required from an existing City of Fairbanks public right-of-way and/or a small portion of Graehl/Griffin Parks for improvements to existing paths and path connections.

B. Socio-Economic Impacts:

- 1. Project could affect community cohesion, neighborhoods, or other community facilities. **The project is not expected to have adverse social impacts on communities. Temporary traffic detours would occur during construction but no long-term effects would occur.**
- 2. Project could affect economic development, such as established area businesses. **The project is not expected to have long term adverse effects to business users or their customers but rather to assure that safe and continuous access across the river is maintained at its current location. Business users and customers may experience detours throughout construction. Detours will be established to minimize misdirection. Adequate notices and signing of detours will be provided to minimize delays.**
- 3. Project could affect travel patterns and accessibility. **Throughout construction traffic delays, interruptions, and/or detours may occur. In the long term the project would maintain existing travel patterns and improve accessibility by providing an improved river crossing and associated features and extending the service life of the roadway.**
- 4. Project could disproportionately affect minorities or disadvantaged persons (E.O. 12898) **No. The project would maintain the existing roadway alignment. The adjacent land users would be equally affected both in terms of temporary impacts and long term benefits.**

C. Impacts to Historic Properties:

- 1. National Register listed eligible/potentially eligible historic properties in project area/area of potential effect (APE).
A cabin on the National Register of Historic Places (NRHP) is incorporated into the grounds of the MTCVC. See Figure 2. The cabin however lies 300 or more feet away from Wendell Avenue on the west border of the over 5-acre property parcel. The cabin is distant from the project's direct effects and is visually impeded from the project work area by the main MTCVC buildings and landscape features such that no indirect effects would occur. No other NRHP-eligible sites are located in the project's area of potential effect.
- 2. Places of traditional religious or cultural importance to Tribes are present in the project area. **As a result of consultation with Tribes and the State Historic Preservation Office, no places of traditional religious or cultural importance to Tribes have been identified in the project vicinity.**
- 3. Historic Properties survey may be required to identify if sites are present.

Cultural resources surveys of the project area identified no historic properties of concern.

4. Possible adverse effect on historic properties. **Based on cultural resources surveys for the project it is expected that no historic properties would be affected by the project. Final survey documentation and coordination with the State Historic Preservation Office needs completion to confirm.**

D. Fish & Wildlife Impacts:

1. Project could affect anadromous or resident fishes. **The Alaska Department of Fish and Game (DFG) on-line fisheries database indicates that the lower Chena River is anadromous supporting the presence of chum and Chinook salmon as well as resident fish species. The DOT&PF will coordinate with DFG on fisheries-related issues. With implementation of any necessary fish habitat permit provisions no adverse effects to anadromous or resident fishes is expected.**
2. Problem fish pass culverts within the project area. **Culvert work is anticipated with the project. The DFG online database does not identify culvert fish pass concerns in the project area.**
3. Essential Fish Habitat (EFH) present in the project area. **Yes**
4. Wildlife Resources:
 - a. Project in area of high wildlife/vehicle accidents. **No**
 - b. Project could bisect migration corridors. **No**
 - c. Project could segment habitat. **No**
 - d. Species of concern to ADF&G in the project area **None known**
5. Bald Eagle and Golden Eagle Protection Act: Eagle nesting tree(s) in the project area. **No known bald eagle nests are located in the project area.**

E. Threatened and Endangered (T&E) Species Impacts:

1. Listed T&E species present. **No**
2. T&E species migrate through the project area. **None known**
3. Proposed species present in project area. **No**
4. Candidate species present in the project area. **No**
5. Critical habitat in the project area. **No**
6. Describe:

No federally recognized threatened, endangered, proposed, or candidate species or critical habitat are known to occur in the project vicinity.

F. Waters of the U.S and Water Bodies:

1. Project affects Waters of the U.S. (as defined by USACE), Section 404/10/103. **Yes**
2. Project affects Navigable Waters of the U.S. (as defined by USACE), Sec. 10. **Yes**
3. Project affects a Cataloged Anadromous Fish Stream (i.e., 41.14.870). **Yes**

4. Proposed river or stream involvement:

a. Temporary

Riprap Culvert Work Cofferdam Fill Relocation Diversion

b. Permanent

Riprap Culvert Embankment Fill Relocation Diversion

5. Describe:

Temporary and permanent impacts to the Chena River would occur as a result of the bridge replacement.

G. Wetlands Impacts:

1. Project involves wetlands as defined by USACE. **Yes**

2. Acres: **0.15 acres in project vicinity.**

3. Fill: **Quantity unknown at this time.**

4. Dredge: **None**

5. USACE authorization required: **Yes**

Describe: **Approximately 0.15 acres of willow-dominated shrub wetlands are located along the stream banks in the vicinity of the bridge. See Figure 2. One third of these acres may be directly affected by the bridge work. Wetlands potentially affected are substantially disturbed by riprap and footpaths to the river under the south end of the bridge.**

H. Hazardous Waste:

1. Known or potentially contaminated sites along the corridor. **Yes**

2. ROW required from, or extensive excavation adjacent to, a known hazardous waste site.

No permanent right-of-way acquisition is planned. Project excavation may be in areas susceptible to contamination.

2. The existing and/or proposed ROW is contaminated.

Contamination of the existing right-of-way is unknown but very possible considering surrounding and historic land uses. Permanent easements may be required from the City of Fairbanks public right-of-way and from adjacent FBNB parks.

3. Potential for encountering hazardous waste during construction is high.

There is notable potential for encountering contamination given the number of active contaminated sites in the project vicinity.

4. Describe:

A search of the Alaska Department of Environmental Conservation (ADEC) contaminated site database found numerous contaminated sites in the vicinity of the project. Some permanent easement may be required for the project. DOT&PF will work with the Alaska Department of Environmental Conservation to determine the extent to which contamination may be encountered in project excavation areas and to develop a plan to handle any contaminated soils and/or groundwater during construction.

J. Air Quality Impacts (NEPA and Conformity):

1. NEPA (all projects):

- a. The project is located in an air quality nonattainment or maintenance area (i.e. CO or PM-10).

Yes

If yes, indicate CO or PM-2.5

The project is of the type exempt from an air quality analysis per 40 CFR 93.126 (Table 2 and Exempt Projects). **Yes.**

DOT&PF finds the project to be exempt from the requirements to determine air quality conformity in accordance with 40CFR 93.126. Specifically the project involves reconstructing a bridge with no addition of travel lanes as well as bicycle and pedestrian facility work. Both activities are listed as exempt in Table 2 of 40 CFR 93.126. DOT&PF anticipates that these types of improvements would have no adverse effects on air quality and requests additional input others may have related to emissions impacts related to this project.

2. Conformity (projects in nonattainment areas only): **Exempt**

K. Floodplains Impacts (23 CFR Part 650, Subpart A):

1. Project encroaches onto a 100-year floodplain.

The project encroaches into FEMA-mapped Zone AE, a special flood hazard area inundated by the 100-year flood.

4. Project involves a regulatory floodway. **Yes**

5. Project is located within an area protected by local flood hazard ordinances. **Yes**

6. Flood hazard permit is required from local government. **Yes, from Fairbanks North Star Borough**

7. Describe:

The project is located within a FEMA-mapped 100-year floodplain and will require a floodplain permit from the Fairbanks North Star Borough

L. Noise Impact (23 CFR Part 772):

1. There are noise-sensitive receivers/land uses adjacent to the proposed project? **Yes**

2. The project is located on new location, would result in substantial changes in vertical or horizontal alignment, or would increase the number of through lanes? **No. The proposed horizontal alignment does not reduce the distance to a receptor by half or less. The proposed vertical alignment does not remove visual shielding or open up a new line of sight to receptors. The project would not increase the number of through lanes or add an auxiliary lane.**

M. Water Quality Impact:

1. Project could involve a public or private drinking source. **No**

2. Project could result in a discharge of storm water to Waters of the U.S. **Runoff only**

3. Project could affect a designated impaired water body. **Yes**

List name(s) and location(s): **Lower Chena River miles 0-15**

4. Is there a municipal separate storm sewer system (MS4) NPDES permit or will runoff be mixed with discharges from an NPDES permitted industrial facility? : **Yes**
5. If extensive dewatering (>250,000 gallons) is anticipated, is the area to be dewatered within 1 mile of a contaminated site? **Sites with contaminated groundwater are located within 1 mile of the project. Extensive dewatering is not anticipated. If a contractor were to propose such dewatering, necessary permits and approvals would be required to be obtained from the Alaska DNR and Alaska DEC.**

6. Describe:

No storm water discharges outside of storm water runoff are proposed. Storm water runoff may leave the site and flow to down-gradient waters of the U.S. Best management practices will be implemented for the purpose of meeting state and federal water quality standards. As needed, a project-specific erosion and sediment control plan will be developed prior to construction initiation and a Storm Water Pollution Prevention Plan (SWPPP) will be developed and implemented by the construction contractor. A SWPPP will comply with the Alaska Pollution Discharge Elimination System (APDES) General Permit for Construction Activities.

N. Section 4(f)/6(f):

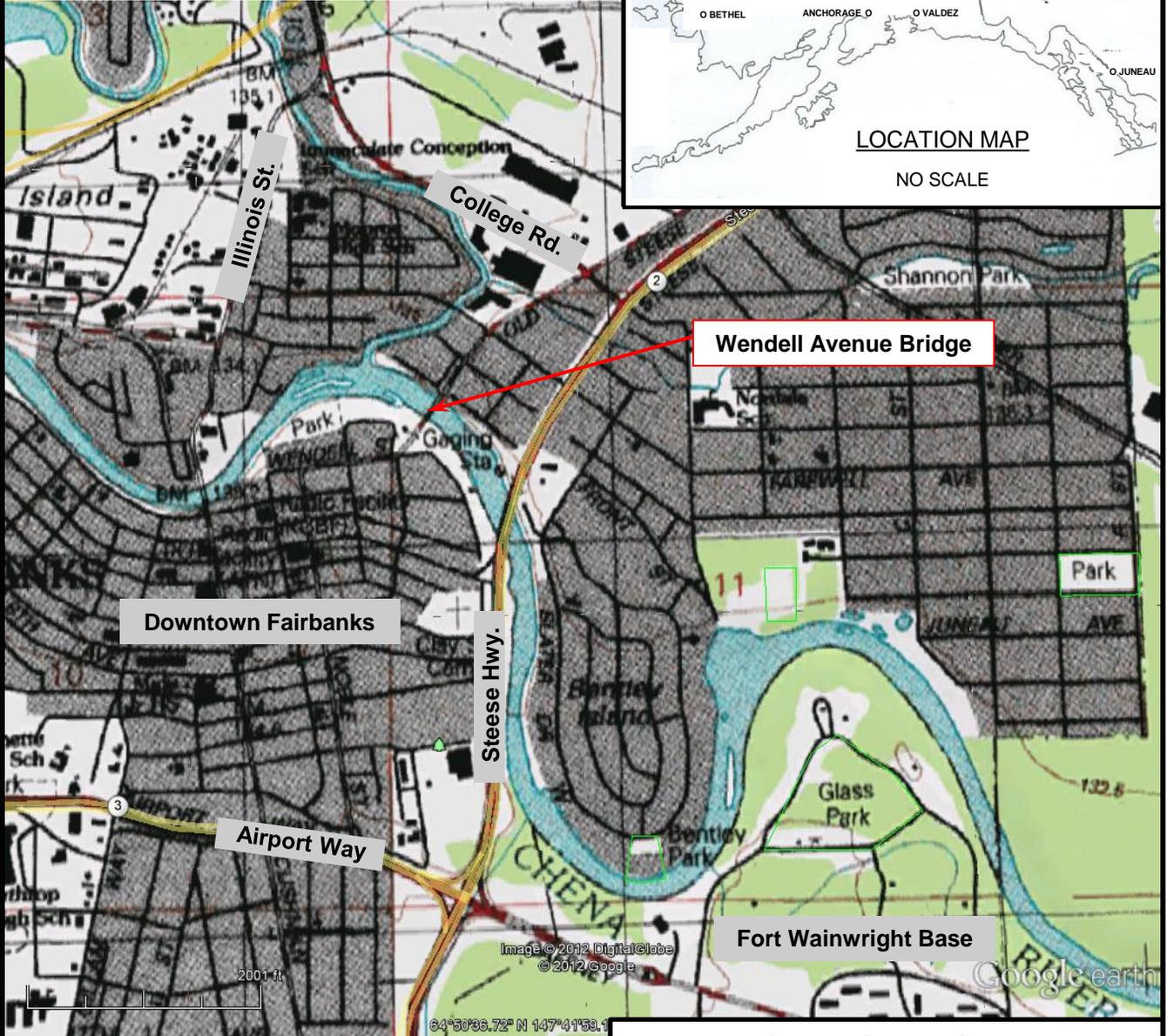
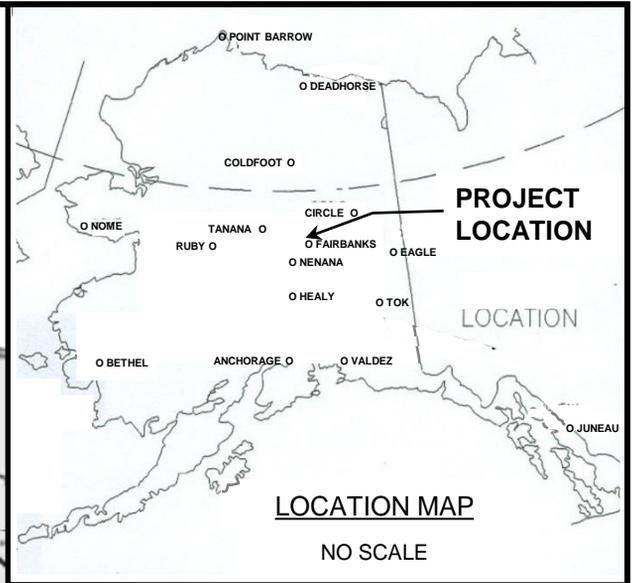
1. There would be a “use” of land from 4(f) properties. **Not Applicable. Section 4(f) does not apply for this project since the project is entirely State-funded and does not involve the use of Federal Highway Administration or U.S. Department of Transportation funds.**
2. Section 6(f) properties affected by the proposed action. **None.**
3. List agency(s) with jurisdiction: **Not Applicable.**
4. Describe: **Section 4(f) use and 6(f) property conversion does not apply for this project.**

O. Permits and Authorizations

1. USACE, Section 404/10/103: **Yes**
2. USCG, Section 9: **Yes**
3. ADFG, Fish Habitat Permit: **Yes**
4. Flood Hazard: **Yes**
5. ADEC 401: **Yes**
6. ADEC Storm Non-domestic Storm Water Disposal Plan Approval: **Yes**
7. APDES: **Compliance with ADEC’s APDES General Permit for Construction Activities**
8. ADEC Dewatering: **Potential**
9. ADF&G Special Area: **No**



1 inch ~ 1333 feet

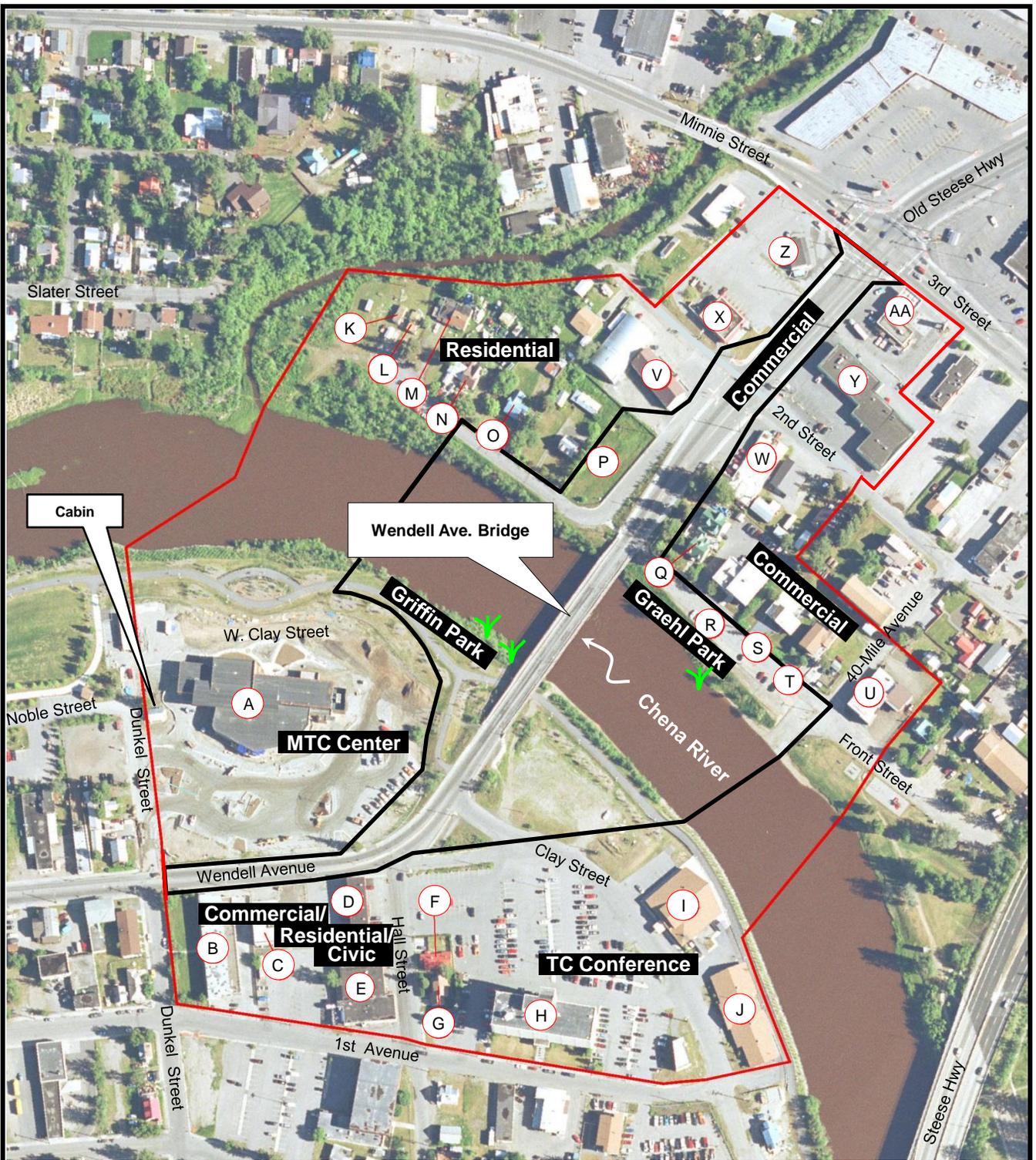


Location and Vicinity Map

T1S, R1W; Section 11
USGS Fairbanks D2
Fairbanks Meridian

Latitude 64°50'46.84" N
Longitude -147°40'30.27" W (WGS 84)

STATE OF ALASKA Department of Transportation and Public Facilities Northern Region	
Wendell Avenue Bridge 63291	
Fairbanks, Alaska	
DATE: 6/5/13	Figure 1



PROJECT AERIAL MAP

-  Surrounding Land Use Area
-  Potential Project Work Area
-  Individual Properties (Keyed to Figure 3 List)
-  Wetlands

STATE OF ALASKA Department of Transportation and Public Facilities Northern Region	
Wendell Avenue Bridge 63291	
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Table of Individual Properties in Surrounding Area Keyed to Figure 2

	STREET ADDRESS	YEAR BUILT	OWNER	BUSINESS	BUILDING TYPE
A	101 Dunkel Street	2008	City of Fairbanks	Morris Thompson Cultural & Visitors Center	Civic
B	141 Dunkel Street	1968	Olson, Claire	Blevins Condominiums	Residential/Apartments
C	225 Wendell Avenue	2007	Stapp, Brenda & Stapp, Gary	Gary L. Stapp Attorney at Law	Commercial
D	60 Hall Street	1975	McKinley Forward LLC	Adult Learning Center	Civic
E	200 First Avenue	1969	Masson, Robert	Eagles Lodge (Former)	Civic
F	149 Hall Street	1924	Macdonald, Sean	N/A	Residential
G	155 Hall Street	1959	Paun, Aileen	N/A	Residential
H	122 First Avenue	1990	Tanana Chiefs Conference Inc	Chief Peter John Tribal Building	Civic
I	109 Clay Street	1998	Tanana Chiefs Conference Inc	Chena Bingo	Commercial
J	111 Clay Street	1998	Tanana Chiefs Conference Inc	David Salmon Tribal Hall	Civic
K	102 Front Street	1940	Sukakpak Inc	N/A	Residential
L	106 Front Street	1933	Sukakpak Inc	N/A	Residential
M	110 Front Street	1952	Sukakpak Inc	N/A	Residential
N	120 Front Street	1956	Sukakpak Inc	N/A	Residential
O	130 Front Street	1956	Presbyterian Hospitality House Inc	N/A	Residential
P	140 Front Street	1956	Presbyterian Hospitality House Inc	N/A	Residential
Q	204 Front Street	1941	Bettisworth, Charles	N/A	Residential
R	212 Front Street	1982	Bettisworth, Charles	Bettisworth North Architects	Commercial
S	222 Front Street	1957	Laughlin, James	Holistic Medical Clinic	Commercial
T	234 Front Street	1955	Roberts, Thomas	Northern Land Use Inc.	Commercial
U	300 Front Street	1962	Perry, James	Pro Music	Commercial
V	160 Old Steese Highway	1944	M & M Ducks Inc.	Play It Again Sports	Commercial
W	157 Old Steese Highway	1955	Olsen Family Investments	Graphic North Printing	Commercial
X	200 Old Steese Highway	1976	Gallo Limited Partnerships	Taco King	Commercial
Y	201 Old Steese Highway	1985	Cole, Richard	Steese Mall	Commercial
Z	230 Old Steese Highway	1966	Napa Dreams LLC	Allstate Insurance	Commercial
AA	205 Third Street	1989	Holiday Alaska Inc.	Holiday Gas Station	Commercial

STATE OF ALASKA	
Department of Transportation and Public Facilities	
Wendell Avenue Bridge	
63291	
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	Figure 3