



**Richmond Green Preliminary Natural Site
Assessment: CPAG Pre-Application number: PE2020-
02273**

City of Calgary – Real Estate Development Services (REDS)

Type of Document:

PNAS REV 1

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A handwritten signature in blue ink, appearing to read 'JGillespie', is written over a horizontal line.

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1 Purpose

On Behalf of the City of Calgary – Real Estate Development Services (RE&DS), retained EXP Services Ltd (EXP) to complete a Preliminary Natural Site Assessment for the Richmond Green Redevelopment Application (PE2020-02273). The site is located at 3435 Crowchild Trail SW (Appendix A: Figure 1 and 2).

The land use application proposes to designate the site Mixed-Use General (MU-1). The MU-1 land-use district allows for residential development with the potential to include commercial uses in a mixed-use built form. The anticipated type of development on the site is intended to be a mix of townhouses and apartments with potentially local level residential uses at grade of the residential buildings.

Construction start and end dates are not known at this time but RE&DS expects a future purchaser would start construction in the next 2-3 years.

While the redevelopment application covers only the far northwestern parcel, Calgary Parks requested a larger area be covered by the PNSA. The PNSA follows the requirements set out in the City of Calgary Biophysical Impact Assessment Framework (City of Calgary 2010).

Onsite fieldwork was not completed as part of this assessment.

2 Methods

The following databases and sources were reviewed:

- Imagery from Google earth and the City of Calgary (2020a);
- Listing of Historic Resources (GOA 2020a);
- City of Calgary Open Data (2020b);
- Alberta Soil Information Viewer (GOA 2020b);
- Alberta Merged Wetland Index (GOA 2020c);
- ACIMS (GOA 2020d);
- Environmentally Significant Areas in Alberta (Fiera Biological Consulting 2014);
- Surficial Geology of Alberta (Fenton et. Al 2013);
- General Nesting Periods for Migratory Birds in Canada (GOC 2014);
- Fish and Wildlife Mapping Tool (AEP 2020a); and
- OneStop Mapping Tool (AEP 2020b).

3 Checklist

The following checklist outlines the major findings of the PNAS.

PROJECT/ACTIVITY TYPE(S)	The Project area is within Richmond Green Park, which includes three baseball diamonds, a tennis court, a parking lot, municipal works depot and the (now closed) Richmond Green Golf Course.		
OWNERSHIP	<input type="checkbox"/> Crown easement/lease/license	<input checked="" type="checkbox"/> Freehold	<input type="checkbox"/> Company-owned/existing
LAND CONDITION	<input type="checkbox"/> Cultivated <input type="checkbox"/> Pasture <input type="checkbox"/> Wooded <input type="checkbox"/> Native or Naturalized <input type="checkbox"/> Provincial Crown <input type="checkbox"/> Federal Crown <input type="checkbox"/> Special Areas Board <input checked="" type="checkbox"/> Other: Developed Potential for existing contamination: A Phase 1 and Phase 2 ESA are underway for the site.		
TOPOGRAPHY, SOILS AND EROSION	Sloping from west to east. Soils are ZDL (miscellaneous disturbed soils) (GOA 2020b)		
WATERCOURSES, WATERBODIES AND WETLANDS	Waterbodies w/in 100m: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Waterbodies w/in project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Watercourses w/in 100m: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Watercourses w/in project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Wetland w/in 100m: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Wetlands w/in project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Needs to be confirmed in the field Applications that May Be Required: <input type="checkbox"/> Water Act <input type="checkbox"/> Public Lands Act Determination <input type="checkbox"/> Code of Practice Notification <input type="checkbox"/> Other: Click here to enter text. <input checked="" type="checkbox"/> None		
WILDLIFE AND WILDLIFE SENSITIVITIES	There are many trees which provide nesting bird habitat. <input type="checkbox"/> Grizzly Bear Zones Watercourses <input type="checkbox"/> Trumpeter Swan Waterbodies & <input type="checkbox"/> Key Wildlife & Biodiversity Areas <input type="checkbox"/> Caribou Range <input checked="" type="checkbox"/> Sharp-Tailed Grouse Survey and Leks and Buffers <input type="checkbox"/> Piping Plover Waterbodies <input type="checkbox"/> Sensitive Amphibian Range <input checked="" type="checkbox"/> Sensitive Raptor Range <input type="checkbox"/> Fescue Grassland <input type="checkbox"/> Colonial Nesting Birds <input type="checkbox"/> Grassland & Parkland Natural Region <input type="checkbox"/> Special Access Zone <input type="checkbox"/> Other Sensitive Species: Click here to enter text. <input type="checkbox"/> Integrated Regional Plan: Click here to enter text. Applications that May Be Required: <input type="checkbox"/> SARA Permit <input type="checkbox"/> Other: Click here to enter text. <input checked="" type="checkbox"/> None Database results: <input checked="" type="checkbox"/> FWMIT Date: Jan 7, 2021 Findings: Nothing with 100 m <input checked="" type="checkbox"/> ACIM Date: Jan 7, 2021 Findings: Nothing with 100 m		
VEGETATION	No results from ACIM. Vegetation is largely manicured grass and planted trees. Invasive species are likely.		

HISTORIC RESOURCES	<input checked="" type="checkbox"/> HRV/Heritage Screening Date: Jan 7, 2021 Findings: Clearance under the Act was obtained in September 2019 (HRA Number 4835-19-0067-001). It should be noted that HRV 1 lands make up the southern portion of the project area. These are associated with Currie Barracks. The project is subject to Section 31 of the Act, requiring that should historic resources be encountered during any phase of the project, work must stop and it must be reported to the Heritage Division immediately.	
RECOMMENDED SURVEYS	<input type="checkbox"/> Wetlands <input type="checkbox"/> Aquatic/Fisheries <input type="checkbox"/> Watercourse/waterbody <input checked="" type="checkbox"/> Wildlife/Habitat Survey stripping and grading <input checked="" type="checkbox"/> Pre-Construction Survey stripping. <input checked="" type="checkbox"/> Vegetation/Weeds stripping. <input type="checkbox"/> Soil <input type="checkbox"/> Soil Pathogens <input type="checkbox"/> Site Assessment <input type="checkbox"/> Other: Click here to enter text.	Timing: Click here to enter text. Timing: Click here to enter text. Timing: Click here to enter text. Timing: Breeding bird and bat survey should occur before Timing: wildlife sweep should occur before tree removal or Timing: invasive species should be documented before Timing: Click here to enter text. Timing: Click here to enter text. Timing: Click here to enter text. Timing: Click here to enter text.
OTHER NOTES	There are several City-owned trees in the project area. There are no City of Calgary recorded streams, wetlands, or other waterbodies within 100 m of the project area.	

4 Discussion

The project area is characterized by a City Park, including baseball fields on the west end, a golf course on the east end which was abandoned in 2019, and an Operations Work Centre on the south. Based on historical imagery (City of Calgary 2020a) the site appears to have been a large dugout/cistern until development of the park sometime after 1950.

It is in the Parkland Natural sub-region and region (AEP 2020b). There are no provincial environmentally significant areas within the project area (Fiera Biological Consulting 2014). The bedrock geology is characterized by glaciolacustrine sediments that are fine-grained (Fenton 2013).

4.1 Waterbodies

There are no waterbodies on or within 100 m of the site (GOA 2020c; City of Calgary 2020).

4.2 Wildlife

The site is within shape tail grouse survey area (AEP 2020b), however, the site has no suitable habitat. It is within sensitive raptor range (AEP 2020b). A search of FWMIT (AEP 2020a) found no species recorded within 1 km of the site (Appendix B). The presence of large trees suggests raptor and other breeding bird nests are possible. Additionally, large and older trees can be suitable habitat for bats.

The abandoned golf course could provide grazing habitat for ungulates, although the site is not connected to any obvious wildlife corridors.

4.3 Vegetation

A review of the Alberta Conservation Information Management System (ACMIS) found no sensitive or non-sensitive species within 3 km of the site. Based on imagery review the site is largely manicured grasses and planted trees. It is likely there are significant invasive species.

There are a large number of city-owned trees in the area (Appendix A, Figure 1; City of Calgary 2020).

4.4 Historical Resources

Clearance under the *Historical Resources Act* was obtained in September 2019 (HRA Number 4835-19-0067-001). The southern portion of the project, in LSDs 15 and 16 of 6-24-1 W5M, is listed as HRV 1 as per the Listing of Historic Resources (GOA 2020a). This is the most sensitive listing indicating a Provincial Historic Resource. The listing is due to Currie Barracks which contains several significant historic buildings.

The project is subject to Section 31 of the Act, requiring that should historic resources be encountered during any phase of the project, work must stop and it must be reported to the Heritage Division immediately.

4.5 Contamination

A Phase I and Phase II Environmental Site Assessment is being prepared by Thurber Engineering Ltd. and will be included with the Outline Plan submission under separate cover. (pers. comm. Mike Carnegie).

5 Potential Impacts

Table 1

Element	Interaction	Description	Significance	Type	Adverse Effect
Topography	yes	grading	low	Local changes to topography	no
Hydrography	no	n/a	n/a	n/a	n/a
Aquatic Resources	no	n/a	n/a	n/a	n/a
Geology	yes	grading	low	Impacts to surficial geology	no
Soils	yes	grading	Low	Soils already disturbed	no
Vegetation	yes	Stripping and grading	medium	Potential removal of established trees	yes
Wildlife	yes	Stripping and grading	medium	Removal or trees and reclaimed grassland at golf course could remove some nest/niche sites	yes
Fish	no	n/a	n/a	n/a	n/a
Species at Risk	no	Stripping and grading	medium	While Species at Risk were not noted in the background search, removal or trees and reclaimed grassland at golf course could remove some nest/niche sites	no, if nest sweep is conducted 7 days prior to construction.

Element	Interaction	Description	Significance	Type	Adverse Effect
Species of Special Status	no	Stripping and grading	medium	While Species of Special Status were not noted in the background search, removal or trees and reclaimed grassland at golf course could remove some nest/niche sites	no, if nest sweep is conducted 7 days prior to construction.
Historical	no	Stripping and grading	n/a	other than incidental finds covered by Section 31	No, assuming Section 31 is followed.
Land Use	yes	Rezoning and development	low	Loss of City Park area	yes

6 Recommendations

Given the presence of a significant number of trees, a nest search and bat habitat assessments should occur prior to tree removal or stripping and grading. Additionally, should clearing and stripping occur during the breeding bird season, from April to August (GOC 2014), a wildlife sweep should be conducted to locate active nest/niche sites. If found, appropriate timing or setback mitigation should be employed. This will ensure compliance with the *Alberta Wildlife Act* (GOA 2000), *Species at Risk Act* (GOC 2002) and *Migratory Bird Convention Act* (GOC 1994).

A Scoped BIA is not recommended as per City of Calgary guidelines (2010).

7 References

7.1 Literature Cited

AEP (Alberta Environment and Parks). 2020a. *Fish and Wildlife Management Information System FWMIS) Internet Mapping Tool (FWIMT)*. [Online]. Available from:

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AEP 2020b. *OneStop Mapping Tool*. <https://eas.alberta.ca/onestop/>

City of Calgary. 2010. *Biophysical Impact Assessment Framework*. Parks and Urban Development Institute.

City of Calgary 2020a. *City of Calgary Aerial Imagery*. <https://maps.calgary.ca/CalgaryImagery/>

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Fiera Biological Consulting (2014). *Environmentally Significant Areas in Alberta: 2014 Update Final Report*. Prepared for the Government of Alberta, Edmonton.

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GOA. 2000a. *Restricted Listing of Historic Resources*. Archaeological Survey.

GOA. 2000b. *Alberta Soil Information Viewer*. <https://www.alberta.ca/alberta-soil-information-viewer.aspx>

GOA 2020c. *Alberta Merged Wetland Inventory*. Digital Data.

GOA. 2000. *Wildlife Act (RSA 2000, c. W-10)*. Alberta Queen's Printer. Edmonton, Alberta.

GOA. 2020d. *Alberta Conservation Information Management System*.

<https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/>

GOC 2002. *Species at Risk Act (S.C. 2002, c. 29)*. Current to March 31, 2015. Last amended on February 26, 2015. Minister of Justice. Ottawa, Ontario.

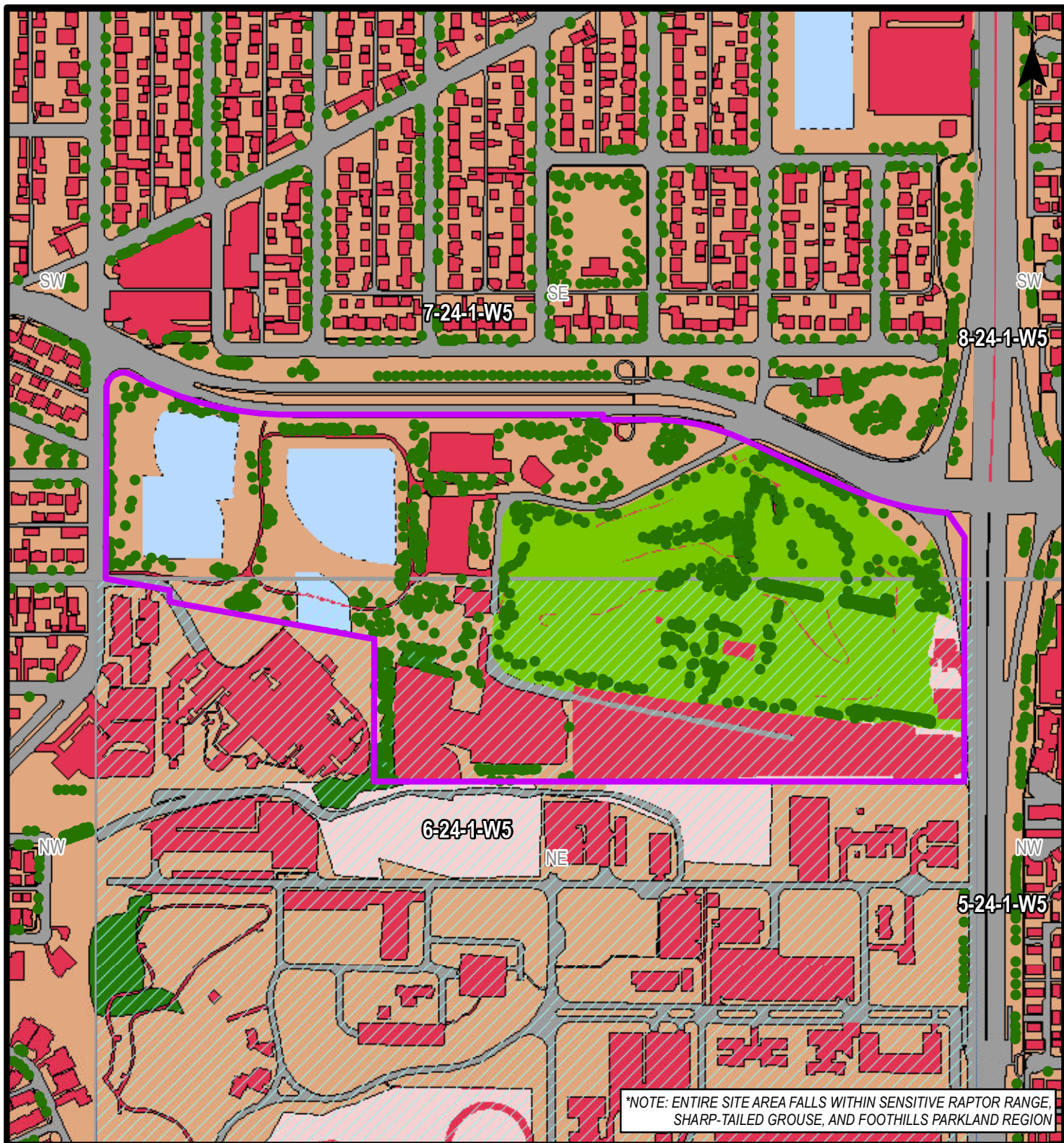
GOC 1994. *Migratory Birds Convention Act (S.C. 1994, c. 22)*. Department of Justice. Ottawa, Ontario.

GOC. 2014. *General Nesting Periods for Migratory Birds in Canada*. <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html>

7.2 Communications

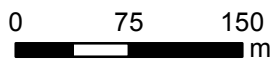
2021. Mike Carnegie. Email sent on March 1, 2021.

Appendix A - Figures



*NOTE: ENTIRE SITE AREA FALLS WITHIN SENSITIVE RAPTOR RANGE, SHARP-TAILED GROUSE, AND FOOTHILLS PARKLAND REGION

Scale



LEGEND

- RICHMOND GREEN STUDY BOUNDARY
- CALGARY PUBLIC TREES
- HRV 1
- CITY WIDE LAND COVER CATAGORY
- BUILDING/HARD SURFACE
- CONSTRUCTION
- TREED AREA
- GOLFCOURSE
- MANICURED
- ROADS/RAILLINES
- SPORTFACILITY

Richmond Green
PNAS Area

Figure 1

March 2021
Richmond Green PNAS Area





Scale

0 75 150
m



LEGEND

 RICHMOND GREEN STUDY BOUNDARY

Aerial Image of
Richmond Green
PNAS Area

Figure 2

March 2021
Richmond Green PNAS Area

Appendix B - FWMIT

Fish and Wildlife Internet Mapping Tool (FWIMT)

(source database: Fish and Wildlife Management Information System (FWMIS))

Species Summary Report

Report Date: 06-Jan-2021 14:26

Species present within the current extent

Fish Inventory

Wildlife Inventory

Stocked Inventory

No Species Found in Search Extent

No Species Found in Search Extent

Buffer Extent

Centroid (X,Y)

Projection

Centroid (Qtr Sec Twp Rng Mer)

Radius or Dimensions

561382, 5650537

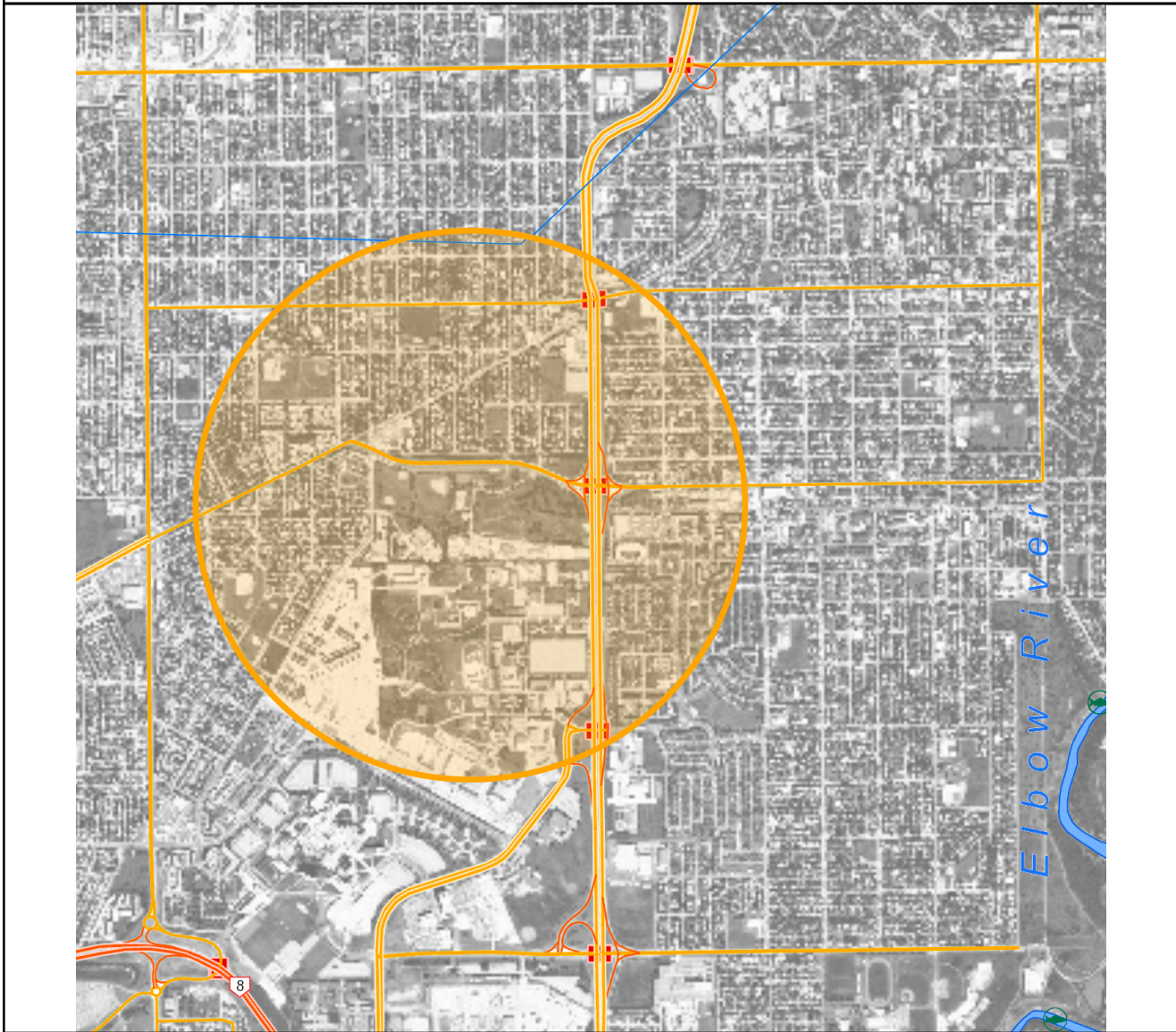
10-TM AEP Forest

SE 7 24 1 5

1 kilometers

Contact Information

For contact information, please visit:
<https://www.alberta.ca/fisheries-and-wildlife-management-contacts.aspx>



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