



ROBERT SERVICE WAY

Planning Study



Prepared for
City of Whitehorse
Planning and Sustainability Services

By **Jane of all Trades**
CONSULTING

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In association with



Randy Lewis
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Acknowledgements:

The Project Team gratefully acknowledges the many individuals who provided their time, information, thoughts and advice to the creation of this report. A list of governments, stakeholder groups, and individuals who participated in the study can be found at the end of this report and in the Robert Service Way Planning Study Background Report.

Executive Summary

Robert Service Way (RSW) is the main arterial road connecting the Alaska Highway to the southern entrance of Downtown Whitehorse. This two/four-lane paved road is the central feature in a 337.85-hectare area – referred to herein as the *Robert Service Way area* – that hosts a variety of physiographic characteristics, land uses, and values.

In preparation for review of the Official Community Plan (OCP) in 2018, the City of Whitehorse commissioned a planning study into the RSW area in February 2017 to bridge any knowledge gaps that had formed since the previous 1997 study and examine the area context for current and potential future land uses.

The RSW area consists primarily of undeveloped Commissioner's and City lands at present, although traces of previous interim and/or gravel extraction activities are present. Much of the area has good to moderate development potential. Various interim uses have a 30+ year history in the area, including a motocross track, mudbog pit and snow dump site. The future plans of Kwanlin Dün First Nation and Ta'an Kwäch'än Council (both of whom own Settlement Lands in the area), Yukon Energy Corporation and its key facilities, and the Erik Nielsen Whitehorse International Airport immediately to the north are among the many variables that could prompt a change to the "status quo".

Stakeholder and public engagement for the study consisted of over 15 interviews, an online survey, social media campaign and numerous "pop-up" appearances in the planning area and Fireweed Market. The City received **476 surveys** in total. Key findings of public outreach included the following:

- **The future of the RSW area** was considered "important" or "very important" to a majority of survey respondents.
- **Views, lack of development, green space, and recreational opportunities** are the most **highly valued** characteristics of the RSW area. Yukon Energy's **liquid natural gas plant** was the most frequently cited **dislike** about the study area, followed by the **"waste" or underutilization of land, traffic, and quarries/asphalt plants**.
- A majority of survey respondents supported future land use policy that promotes a **balance between development and protection of green space and aesthetics**, followed closely by policy promoting **minimal change**.

Study recommendations reflect the public's overall desire to achieve a balance of development and recreational interests in the area versus area-by-area preferences, which were largely recreation-focused.

The Planning Team proposes a policy and zoning direction that involves the gradual transition of interim land uses in the area to "highest and best" uses, selective development, optimization of high value recreation assets (specifically trails and the Robert Service Campground area) via strategic investment and improved connections, maximization of granular resources from active quarry areas, legitimization and limitation of current motorized uses in the area, and the strategic, phased reclamation of the City's Ear Lake quarry leases to provide public recreation opportunities and satisfy City operational needs.

Detailed recommendations are summarized on the facing page/overview map by sub-area.

ROBERT SERVICE CAMPGROUND AREA (pp. 8-9)

The long-term direction for this area should be the protection of its significant ecological, heritage and recreational values. Current OCP designations are appropriate. Future development should be limited to low-impact recreational uses with minimal footprint.

1. Undertake a **facility refurbishment plan** for **Robert Service Campground**. Consider site heritage values, community vs. visitor needs, programming, private sector opportunities, expansion north of ball diamonds.
2. Complete **trail improvements** to BLP, **expand interpretation**, **designate** the trail, and **promote awareness and appreciation of the island** by incorporating it into City events and programming.
3. **Install a pedestrian crosswalk** between the campground and softball diamonds/RSW bus stop.
4. Mark **alternate non-motorized routes** through campground and mark a route from ball diamonds to the **escarpment**.

LOWER BOWL / SNOW DUMP (pp. 10-11)

This area has hosted interim uses for decades. The current OCP designations are still applicable. Over the long-term, the operation of a snow dump may not be the highest and best use of the area. Space-intensive recreation (i.e. sport fields, etc.) would be more suitable for the City parcel. Motorized uses here could be incompatible with future adjacent land uses and should be re-examined if/when those change.

1. Initiate discussions with the Midnight Sun Dirt Riders Association to **formalize use of the mud bog site**.
2. Explore the potential for **relocating the snow dump** to the Ear Lake area over the next 10-15 years.
3. Ensure that the City's use of **Lot 1267 is compatible** with TKC's future potential development of C-28B.
4. Designate and mark **motorized multi-use trail connections** between the motocross track, RSW and Alaska Highway.
5. **Initiate discussions** with airport administration around the envisioned **new light towers**.
6. **Maintain flexibility** to support **creative, community-oriented interim uses** of the area between RSW and the mud bog site.
7. Work with ATCO to **establish an easement** for the distribution lines located in Lot 1267.

UPPER TERRACE / SOUTH OF AIRPORT (pp. 12-13)

The upper terrace presents a rare opportunity to develop with minimal negative impact on visual quality, environment, or recreation. Its current zoning is appropriate but may be unnecessarily restrictive.

1. **Consider the re-designation** of the Government of Yukon portion of the upper terrace area to **mixed use commercial** but **retain environmental protection of the escarpment**;
2. Work with airport administration to **address airport trail erosion** and formalize **trailhead signage and parking** at the southern boundary;
3. Designate and mark **motorized multi-use connections** between the motocross track, RSW and Alaska Highway and consider MMU connections through the Ear Lake area;
4. Maintain minimum **30-metre development buffers** from the top of escarpment and retain trail connectivity;
5. Work with Highways and Public Works to ensure that any future **controlled intersection** at the weigh scales includes a **pedestrian crossing** to facilitate connections to/from Ice Lake Park; and,
6. Construct, designate and mark a sustainably graded **non-motorized connection to/from the escarpment** to Miles Canyon Road and a crosswalk across from Robert Service Campground.

EAR LAKE QUARRIES (pp. 14-15)

Questions about citywide gravel supply and concrete production sites and the objective of maximizing resource extraction in this long disturbed area warrant considering a longer-term horizon for operators. Quarrying activities should not compromise highest and best end uses for lease parcels or Ear Lake.

1. Follow a **sequential process** to support orderly extraction and compliance via **third party compliance inspections, a joint operations and reclamation plan, and a hydrogeological study**.
2. Explore the potential for **utilizing** the entire and/or eastern portion of the **Norcon lease** for a **City snow dump** and/or waste (i.e. brush) disposal site.
3. Consider **future subdivision** of and **right of first refusal** for the western portion of the Norcon lease to adjacent owners, subject to the hydrogeological study and lease compliance.
4. Plan for **commercial recreation** (i.e. campground) and **winter public recreation** as end uses for the ALT lease.
5. As part of the joint reclamation plan, consider **facilitating proposed end uses** by stockpiling silty-clay material, strategic recontouring, and maintaining visual buffer from ALT's lease.

EAR LAKE RECREATION (pp. 16-17)

Ear Lake is an underutilized asset with great potential and longstanding recreation value. While quarries continue to operate, the City should focus on shifting negative user behaviour and site perceptions. A step-by-step approach to modest site enhancements would involve:

1. Installing **gates** to curb vandalism and partying
2. **Cleaning up site**
3. Delineating **parking and site access** at key nodes
4. Constructing, signing, and designating **new trail connections**
5. Subject to hydrogeological study results, considering improvements such as an **enhanced beach and picnic area**
6. Post-quarries, considering a **night sky viewing and tenting area** and **ice skating node**

TRAIL CONNECTIONS (pp. 18-20)

The key is to protect, enhance, and efficiently allocate existing trails, add strategic connections, and leverage future highway corridor improvements from an active transportation standpoint. The area presents an opportunity to designate sections of singletrack (narrow) motorized multi-use (MMU) trails with lesser disruption to other users and cultivate stewardship and responsible use among dirt bikers.

Please refer to the map and legend below for recommended routes.

Current City non-motorized trails

Current City MMU trails

Proposed City non-motorized trails

Proposed/Potential City MMU trails



SUMMARY OF RECOMMENDATIONS

0 190 380Meters

Base Features

Contour - 25m	
River/Stream-Definite	
River/Stream-Indefinite	
Waterbody	
Wetland	
Access	
Highway	
Main Road	
Railway	

Land Use

Marker Beacon Transmission	
Line	
First Nations Settlement Land	
Park/Protected Area	
Land Survey Parcel	

Assessment Features

Study Area	
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DWN BY:

KL

Coordinate System:

NAD 1983 UTM Zone 8N

NTS MAPSHEET:

105D/11

SCALE:

1:10,000

(at original document size of 11" x 17")

EPN:

TBD

DATE

1/22/2018

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1.0 Introduction

Robert Service Way (RSW), formerly referred to as the “South Access”, is the main arterial road connecting the Alaska Highway to the southern entrance of Downtown Whitehorse. This alternating two and four-lane paved road roughly bisects a 337.85-hectare area – herein referred to as the *Robert Service Way (or study) area* - with a diversity of physiographic features, land uses, and values.

Several planning studies have been undertaken in the past for the RSW area, the most recent being a 1997 Area Development Scheme. Since that time, numerous changes to land tenure and use in the area have occurred, including:

- Robert Service Way was reconstructed in 1997/98;
- Both the Kwanlin Dün First Nation and Ta’an Kwäch’än Council signed Final and Self Government Agreements that conferred ownership over two land parcels in the area;
- Planning was undertaken for the western shore of Schwatka Lake in 2015 and the Order in Council for the Chadburn Lake Park Reserve was withdrawn in 2016;
- Yukon Energy Corporation constructed a liquid natural gas storage facility in 2015; and,
- The ten-year lease terms expired for two quarry operators situated in the Ear Lake area in December 2016.

In preparation for review of the Official Community Plan (OCP) in 2018, the City of Whitehorse commissioned a planning study into the RSW area to bridge any knowledge gaps. The objectives of the study were to:

- Assess ecological, wildlife, archaeological, heritage and recreational values;
- Determine the likelihood of contamination issues;
- Explore development and servicing options for the study area;
- Determine a vision for the remediation and recreational use of the Ear and Hobo Lakes area; and,
- Review the existing function and future of the ball diamond and campground area.

The project was carried out in three distinct phases as illustrated below. A comprehensive Background Report was completed in July 2017 to provide a baseline of information prior to public engagement.

The following document contains a summary of information provided in the Background Report but is focused primarily on the final recommendations of the Planning Team. Two stand-alone companion studies were also undertaken for the Background Report: a Phase 1 Environmental Site Assessment and Heritage Resource Overview Assessment (both public and site-sensitive versions).



2.0 Overview of the Study Area

The Robert Service Way (RSW) study area is located within the City of Whitehorse municipal boundaries south of the Downtown. The area is bounded by the Erik Nielsen Whitehorse International Airport to the north, Alaska Highway to the west, Yukon River and/or White Pass and Yukon Route (WPYR) railway to the east, and the Ear Lake area to the south.

Three distinct landscape features delineate the study area as shown on page 4:

- **Yukon River valley bottom** – This includes the fluvial plain of the Yukon River and adjacent channel islands complex, which are home to Robert Service campground. To the west of RSW is a portion of the Yukon River fluvial plain that forms a broad “C” shaped area, or bowl, that is occupied by a City snow dump (seasonally) and Ta’an Kwäch’än Council (TKC) parcel C-28B.
- **The upper terrace/escarpment** – The western portion of the study area is separated from the Yukon River valley bottom by a steep escarpment and occupied by the southerly portion of the airport reserve, Commissioner’s land, and Kwanlin Dün First Nation (KDFN) parcel C-34B.
- **Ear Lake complex** – This complex of kettle-kame terrain comprises the area situated south of RSW and includes Ear and Hobo lakes. Approximately half of the area has been utilized for gravel quarrying since the 1950s.

Photo below: Long radius curve of RSW facing north towards TKC parcel C-28B.



Land Tenure and Uses

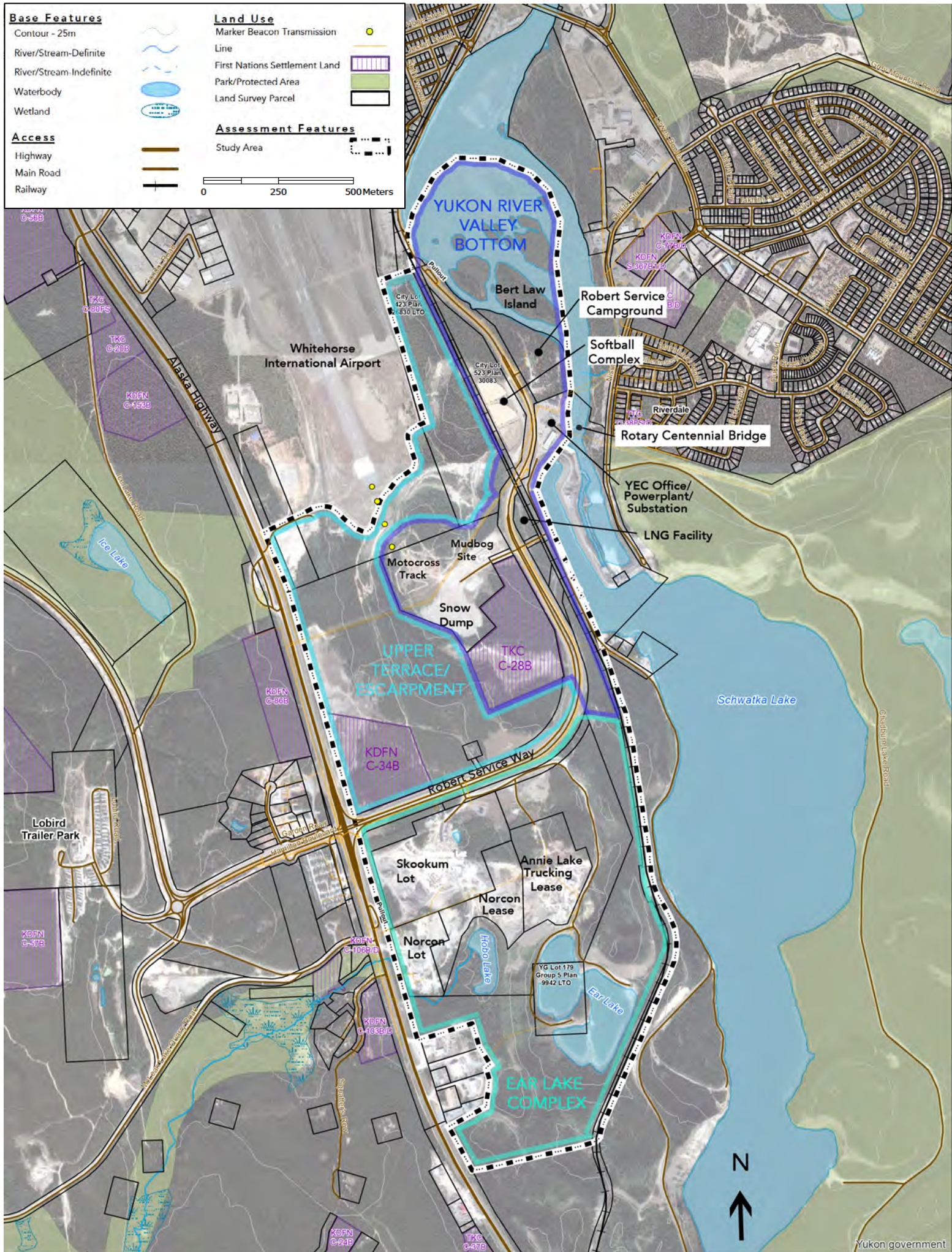
The Government of Yukon (YG) is the predominant landowner, followed by the City of Whitehorse. Land uses include:

Vacant lands - The RSW study area consists of predominantly undeveloped Commissioner’s lands. The KDFN and TKC parcels are also vacant; portions of both were previously cleared and quarried. A small YG parcel encompassing Ear Lake’s peninsula is a former life estate lease.

Industrial/quarry operations - Industrial and quarrying operations occur on two private parcels and two City leases in the Ear Lake area. Skookum Asphalt Ltd. and Norcon Concrete Products Inc. own the private parcels, and Norcon and Annie Lake Trucking Ltd hold the leases.

Recreation infrastructure - Formal recreation nodes include the Millennium Trail, Bert Law Park, Robert Service Campground, the softball complex, motocross track, and a “mud bog” event area. Informal recreation nodes include the Yukon River, Ear Lake and the local network of roads and trails.

Public utilities - The RSW area is home to the Yukon Energy Corporation’s (YEC) Whitehorse Rapids hydroelectric facility, headquarters, and liquid natural gas (LNG) storage facility and generator. The City snow dump is its largest and the only one open to commercial snow removal contractors. YEC has a substation in the vicinity of its power plant, which subsequently feeds into two ATCO power distribution lines that bisect Lot 1267.



3.0 Current Conditions

Geology and Terrain

RSW's three physiographic regions have different geological and terrain characteristics – and accordingly, different development opportunities and constraints. The steep glaciolacustrine escarpment of the Whitehorse valley and kettle-kame features present in the Ear Lake area are the area's predominant landscape features and development constraints.

Much of the valley bottom is deemed suitable for development, with generally level, well-draining sand and gravel near the surface and the water table 2-3 metres below ground. The upper terrace has good to moderate development potential, with undulating topography and high erosion potential of surficial sands posing some challenges.



Photo above: View of the valley bottom and river channel islands from the escarpment

McLean Creek is the predominant up gradient water source, entering the study area from the west and discharging into Hobo Lake, which has no outlet but is presumed to flow eastward to Ear Lake and ultimately Schwatka Lake. The water levels in Ear and Hobo Lakes have fluctuated in the past but have been on a consistent downward trend in recent years due to unknown causes.

Ecology

The RSW area is home to three Environmentally Sensitive Areas (ESAs), two of which are also considered Significant Wildlife Areas. These include:

1. Shallow, sheltered bays, open water, and riparian areas of small lakes, such as Ear and Hobo Lakes;
2. The Riverdale-Yukon River Flats Wildlife Area; and,
3. Steep, exposed silt bluffs below the airport.



Photo above: Water levels have dropped significantly at Ear Lake and the exact cause is unknown.

Ear and Hobo Lakes and surrounding area are considered to have moderate to high environmental sensitivity and provide habitat for waterfowl and semi-aquatic mammals. Most of the islands in the Riverdale-Yukon River Flats Wildlife Area are permanently forested and, during periods of low water, mid-river islands can become exposed gravel bars with willow-alder. Spawning and rearing habitat for Chinook salmon and Arctic grayling exists throughout the islands complex in shallow side channels and along RSW. A small colony of Little Brown Myotis (bats), an endangered species, has been documented along the bluffs below the airport; otherwise, this ESA is not considered significant for wildlife. There are no

known rare plant species within the study area. An ecological model is currently under development between TKC, KDFN, City, and YG; this tool could yield new insights.

Heritage and Archaeology

Several sites within the study area are of particular significance from an archaeological and historical standpoint. The White Pass and Yukon Route (WPYR) is recognized as an International Historic Civil Engineering Landmark. There are three known archaeological sites in the study area. A Heritage Resources Overview Assessment concluded the highest potential for heritage resources is located along ridges and terraces where high, flat terrain breaks to downward slopes and waterfront areas. An archaeological potential model is currently under development between TKC, KDFN, City, and YG; this tool could yield further insight.



Photo above: The WPYR railway on a steep bank section running alongside Ear Lake (note the much higher water level). (Source: Yukon Archives)

Contamination Issues

The Phase 1 Environmental Site Assessment for public lands in the RSW area found that heavy vehicle movements and equipment storage activities associated with the historic quarrying activities, motorized sports, and the snow dump have the potential to result in soil and/or groundwater contamination by heavy metals, fuels, solvents, etc. Of additional potential concern are

various adjoining current and historic land uses, including the Land Treatment Facility on airport lands, quarrying and industrial activities on private parcels near Ear Lake, WPYR and YEC operations, and the decommissioned pipeline on the western side of the Alaska Highway.

Site Servicing

There is no municipal water or wastewater service in the study area at present, although there is a water main on YEC's property. The most favourable option for connection to the City's water system is to create a watermain extension from the corner of Condor Road, south of the airport. Similarly, a sewage connection would ideally tie into the airport. These upgrades would likely be necessitated by future residential development in the Southern Urban Containment Boundary area roughly extending from the south of Copper Ridge to Canyon Creek.

Transportation

The two major roads located within the RSW area are RSW itself and the Alaska Highway. Ear Lake Road is a secondary gravel road that connects to RSW at a signaled intersection. As of early 2018, the Yukon Department of Highways and Public Works has shelved a long-term functional plan for the Alaska Highway through Whitehorse and will focus on priority safety improvements, including the intersection with RSW. The City's Bicycle Network Plan recommends upgrading the currently unseparated bike lanes on RSW due to high traffic volumes and speeds. There is an activated crossing signal at the Alaska Highway intersection.

Power

Yukon Energy Corporation's hydroelectric and LNG facilities are situated in the middle of the planning area. About 1-1.5 megawatts of power capacity are potentially available to service development in the RSW area currently; any power needs beyond this threshold would trigger new upgrades in the \$5 million range.

Key Findings and Themes

- **The future of the RSW area** was considered “important” or “very important” to a majority of survey respondents.
- **Views, lack of development, green space, and recreational opportunities** are the most highly valued characteristics of the RSW area by survey respondents. The area’s close proximity to Downtown was frequently mentioned in relation to the presence of green space, and many respondents spoke to the area’s gateway function and role in forming first impressions for visitors to the city.
- **Yukon Energy’s liquid natural gas (LNG) plant** was the most frequently cited dislike about the study area by survey respondents, followed by the “waste” or underutilization of land, traffic, and quarries/asphalt plants. Traffic concerns related to both congestion and speeding; some singled out the perceived danger of the intersection of RSW with the Alaska Highway.
- A majority of survey respondents (67%) supported future land use policy that promotes a

balance between development and protection of green space and aesthetics, followed closely by policy promoting minimal change (62%). A third policy option to maximize development in the area received 33% support.

- **Recreation was the most supported future land use option** for all of the sub-areas in the RSW corridor. Non-motorized trail use was generally the most supported form of recreational development, but there were expressions of support for a new whitewater slalom course, improvements at Ear Lake, and motorized trail use.
- **Opposition was generally high to future built development** throughout the RSW area, but there was greater acceptance for development in the area immediately south of the airport. There was reasonably strong support for a continuation of current uses in the snow dump/lower bowl area (including the mud bog and motocross amenities). In contrast, just over half of respondents expressed opposition to continued quarrying and industrial operations in the Ear Lake area.



Below: Frequently occurring words used to answer, “What do you dislike and/or value least about the area?”

4.0 Robert Service Campground Area

What We Know

The Robert Service Campground (RSC), Bert Law Park (BLP), and adjacent section of the Millennium Trail (MT) are situated within the Yukon River Flats Wildlife Area, an ecologically rich habitat for birds and aquatic life. The campground area is an important heritage site to local First Nations and its recreational use by non-Indigenous residents dates back to the 1920s.

The campground is owned by the City and has been operated on a lease basis for several decades. The campground receives an estimated 19,000-22,000 visitors to its 68 walk-in tent sites and day use area during its mid-May to end of September season. The site is not connected to municipal services and the washroom building is in need of replacement in the short to medium term. City administration intends to assume operations of the campground in 2018. City staff view the site as an ideal venue for nature-based programming, including summer camps. Providing overnight sites for small recreational vehicles (i.e. campers) by expanding across RSW has also been contemplated.

BLP is accessed from the campground and MT via a bridge. Its infrastructure is limited to a few interpretive signs, a bench, and perimeter singletrack (narrow) trail. Illegal camping on the islands west of the park has been an ongoing issue.

The Yukon Canoe and Kayak Club (YCKC) aims to construct a whitewater slalom course in the Bert Law Island channel through its "Rock the River" project. There is no concrete commitment or timeframe

for this initiative at present and its construction would be contingent on permitting and environmental assessment. Additional parking

Whitehorse Residents Told Us:

"Great location for a campground close to town. Day use area could be...used more for community events."

"The campground is...outdated and needs improvement as well as expansion."

"It should stay just the way it is!"

"Find biking/hiking Bert Law a little creepy – would welcome trail improvements."

"I specifically avoid this campground because of the folks 'living' there."

"Whitewater rec area would be amazing."

would be needed and there is little to no room to accommodate it on the river side of RSW.

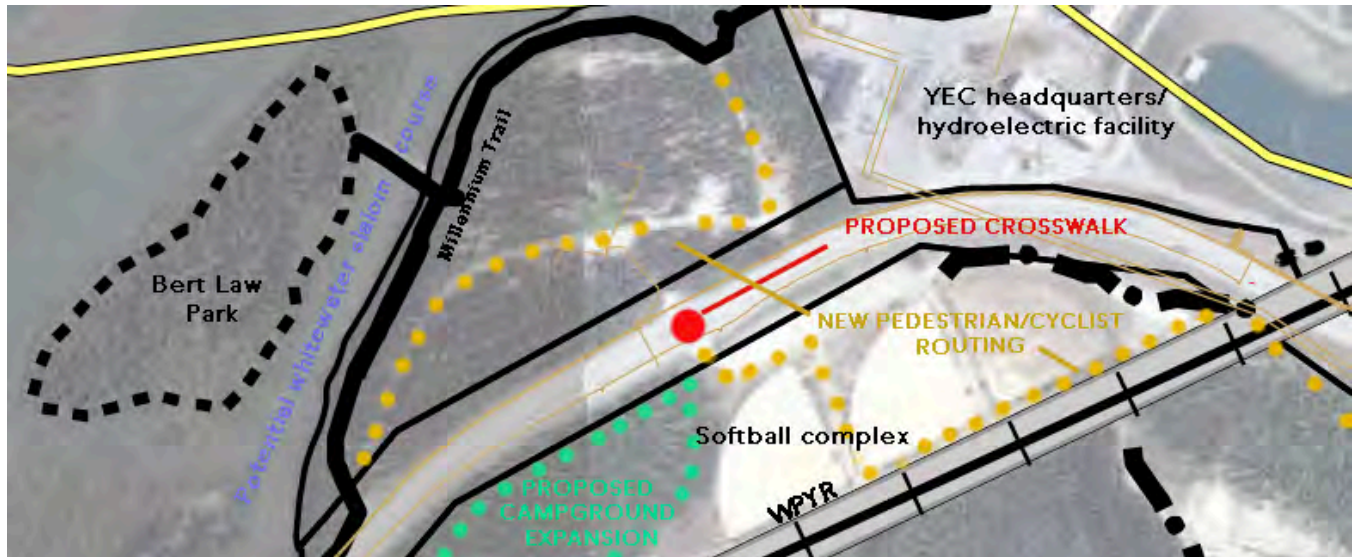
The softball diamonds on the west side of RSW across from the campground access serve about 1100 softball players each spring and summer. About \$200,000 of capital improvements have been made to the facility in recent years by Softball Yukon and a 10-year lease with the City for use of the site was renewed in early 2017.

Pedestrian and bicycle connections between the ball diamond and campground, as well as between the MT, airport escarpment, and Miles Canyon Road (MCR) are limited. There is a transit stop at the ball diamonds. This is currently under review.



What We Heard

- Survey respondents told us they most frequently visited the MT (62% using it “often”). BLP was visited more frequently than the campground day use area.
- **Support** was strongest for **trail improvements to BLP** (72%) and development of a **whitewater slalom course** (65%). Potential campground expansion was supported by 45% and opposed by 32%.



Planning Directions & Recommendations

The long-term planning direction for this portion of the RSW area should be the protection and enhancement of its significant ecological, traditional and recreational values. The **2010 Official Community Plan designation is still appropriate**. Future development should be limited to low-impact recreational uses with a minimal footprint. In addition, the City should:

1. Undertake a **facility refurbishment plan** to identify service provision, programming functions, and infrastructure needs for RSC, with specific consideration for:
 - Showcasing the site’s **interpretive values** and **traditional uses** in cooperation with local First Nation governments;
 - Balancing **day** and **community use** with **visitor needs**;
 2. Complete **trail improvements to BLP**, **expand interpretation**, **designate** the trail, and **promote awareness and appreciation of the island** by incorporating it into City events and programming.
 3. **Install a pedestrian crosswalk** between the campground and softball diamonds/RSW bus stop.
 4. **Mark alternate non-motorized routes through the campground** to bypass a section of RSW and **mark a route** from **ball diamonds** to the **escarpment** (see Sections 6/9).
- City and/or third party and year-round **programming**;
 - **Opportunities** for private sector partners;
 - **Expansion** to serve additional visitors and (possibly) small recreational vehicles; and,
 - Accommodating **parking and/or boat drop-off** for a potential **whitewater slalom** course in the future within the campground day use area.



Photo above: South facing view of the lower bowl area from the airport escarpment, with lower airport light tower, the motocross track and City snow dump area in the cleared area. Schwatzka Lake is visible in the background.

5.0 Lower Bowl/Snow Dump

What We Know

The City's Lot 1267 and Ta'an Kwäch'än Council's (TKC) C-28B currently occupy the C-shaped portion of the Yukon River fluvial plain, located in the middle of the planning area. The site was previously quarried for gravel and used during the construction of the Whitehorse Rapids dam. The area has good development potential.

TKC has no immediate plans to develop their parcel. Yukon Energy Corporation (YEC) has expressed an interest in the ability to pursue potential future energy infrastructure expansion in this area. The City's snow dump, which seasonally occupies the southern half of Lot 1267, is the only disposal site available to commercial snow removal contractors. Any snow dump relocation further from Downtown could compromise efficiency for the City's Infrastructure and Operations division.

Mayor and Council approved a 10-year lease (with 3-month termination clause) to the Yukon Cross Country Motorcycle Association in May 2017, thereby formalizing a longstanding use of a motocross track in the northern portion of Lot 1267. The Midnight Sun Dirt Riders Association has

informally managed a mud bog site in the same parcel for over 30 years and is interested in a more secure tenure and expanding their event offerings. The motocross track also lacks any motorized multi-use trail connections; riders must transport dirt bikes by trailer and/or truck.

There are several constraints to future development of the City's parcel, including the two ATCO distribution lines bisecting it (which currently have no easement and would cost about \$500-\$750,000 to relocate) and the planned installation of an additional three runway light towers directly west of the motocross track. The TKC parcel has an unusual configuration and planned coordination with activities on Lot 1267 could be beneficial. Proximity to the main airport runway largely rules out residential development. City Engineering staff advise that direct access to and from RSW from C-28B should not be considered.

What We Heard

- Survey respondents were most supportive of use of the lower bowl for **parks and recreation** (play fields, etc.) (82%), **community agriculture** (64%), and **continued use for motocross and "mud**

bogging” (51%). Opposition was strongest to built development.

- Continued **City snow dumping** operations **received marginal support** (42%), but almost as many neutral responses (38%). There were negative comments about site aesthetics.
- **43%** of participants **who don’t use the motocross track** expressed **support** for its continued use, **while 30%** expressed **opposition**.

Planning Directions and Recommendations

This area has hosted interim activities for decades, and in the absence of a proposal for a specific end use, a continuation of the status quo is appropriate. The **2010 Official Community Plan designations are still applicable**, and the most likely trigger for a change to the status quo will be development of the TKC parcel in the future. Over the long-term, the continuation of **snow dumping** could **compromise highest and best use** of C-28B and the land use compatibility provisions of TKC’s Self-Government Agreement.

Over the long-term, the **highest and best use** of Lot 1267 is deemed to be **space-intensive recreation** (playing fields, event grounds, etc.) The **close proximity of C-28B to Downtown** suggests a **broad range of land uses**, including mixed use and commercial, for TKC to consider in the future. Such development would ideally maintain and/or enhance corridor aesthetics.

Public support for motorized recreation here is considerably higher than it has been in City trail planning processes in other areas; the continuation of these uses in the future will ultimately depend on their compatibility with new uses that emerge.

In addition, the City should:

1. Initiate discussions with the Midnight Sun Dirt Riders Association to **formalize use of the mud bog site**.

What Whitehorse Residents Told Us:

“Please don’t pollute this access...with big box stores! It sets the...perception of our city.”

“Motocross, mud bog need a place for their events but not (here). Eye sore.”

“I don’t support destructive machine-based “recreating”, though I think the motocross area is a good use and place for that kind of thing – a sacrifice zone.”

“This is a valuable piece of land close to the downtown core which is highly under-used. Snow can melt elsewhere.”

“I think it could be developed into a more interesting recreational space.”

“Industrial and commercial do not belong near our river and campground.”

“Makes sense to use this area as it is already disturbed.”

2. Explore the potential for **relocating the snow dump** to the Ear Lake area over the next 10-15 years (see Section 7).
3. Ensure that the City’s use of **Lot 1267 is compatible with** TKC’s future potential development of **C-28B**.
4. Designate and mark **motorized multi-use trail connections** between the motocross track, RSW and Alaska Highway (see Sections 6/9).
5. **Initiate discussions** with Erik Nielsen Whitehorse International Airport administration around the envisioned **new light towers**.
6. **Maintain flexibility** to support **creative, community-oriented interim uses** of the area between RSW and the mud bog site.
7. Work with ATCO to **establish an easement** for the distribution lines located in Lot 1267.

6.0 Upper Terrace/South of Airport

What We Know

This portion of the planning area includes the steep glaciolacustrine escarpment found throughout the Yukon River valley in Whitehorse, a generally level plain in the south, and undulating topography closer to the airport boundary. The area has good to moderate development potential, although the escarpment itself is considered highly sensitive.

These lands are vacant at present, but the Government of Yukon (YG) parcel has been considered for highway operations. Kwanlin Dün First Nation (KDFN) does not have specific plans for parcel C-34B at present. The 2020 airport master plan envisioned mixed commercial-industrial development to the airport fence; the plan is currently being updated.

Topography and access are the two biggest constraints on development. In order to meet highway safety standards, the only probable access points are from the current Ear Lake Road intersection and across from the weigh scales. Commercial development requiring visibility is further precluded by the significant grade difference between the highway and KDFN and YG parcels; remedying this would require substantial fill. KDFN would likely require a right-of-way through YG land to tie development into the Ear Lake Road intersection.

The airport perimeter trail is well used and valued, but sections of it are very narrow due to erosion and good connections to/from it are limited.

What We Heard

- **Parks and recreation** was the most **strongly supported** option (67%) for future use of this area. **Development** was generally **opposed** – 46% opposed light/clean industrial, 45% opposed “land-intensive commercial” (car

What Whitehorse Residents Said:

“This area has incredible recreational potential...”

“Create an aesthetic corridor leading to Whitehorse, first impression shouldn’t be industrial looking.”

“We already have a large land intensive commercial area...there is absolutely no need for more of this.”

“This is a prime commercial area, completely unused. However, development should consider aesthetics.”

“Creating too much retail or commercial use next to the highway may slowly replace the downtown core and become a “1 strip highway town” (not good).”

dealerships, etc.), and 44% opposed institutional.

- There were **many more neutral responses** to land use options here than for the snow dump area, suggesting that the public may not be as invested in the end use of this site.

Planning Direction and Recommendations

The upper terrace area presents an increasingly rare opportunity to develop with minimal negative impact on visual quality, environment, or recreation. Its **current zoning** as Public Services is **appropriate but may be unnecessarily restrictive**. The City should:

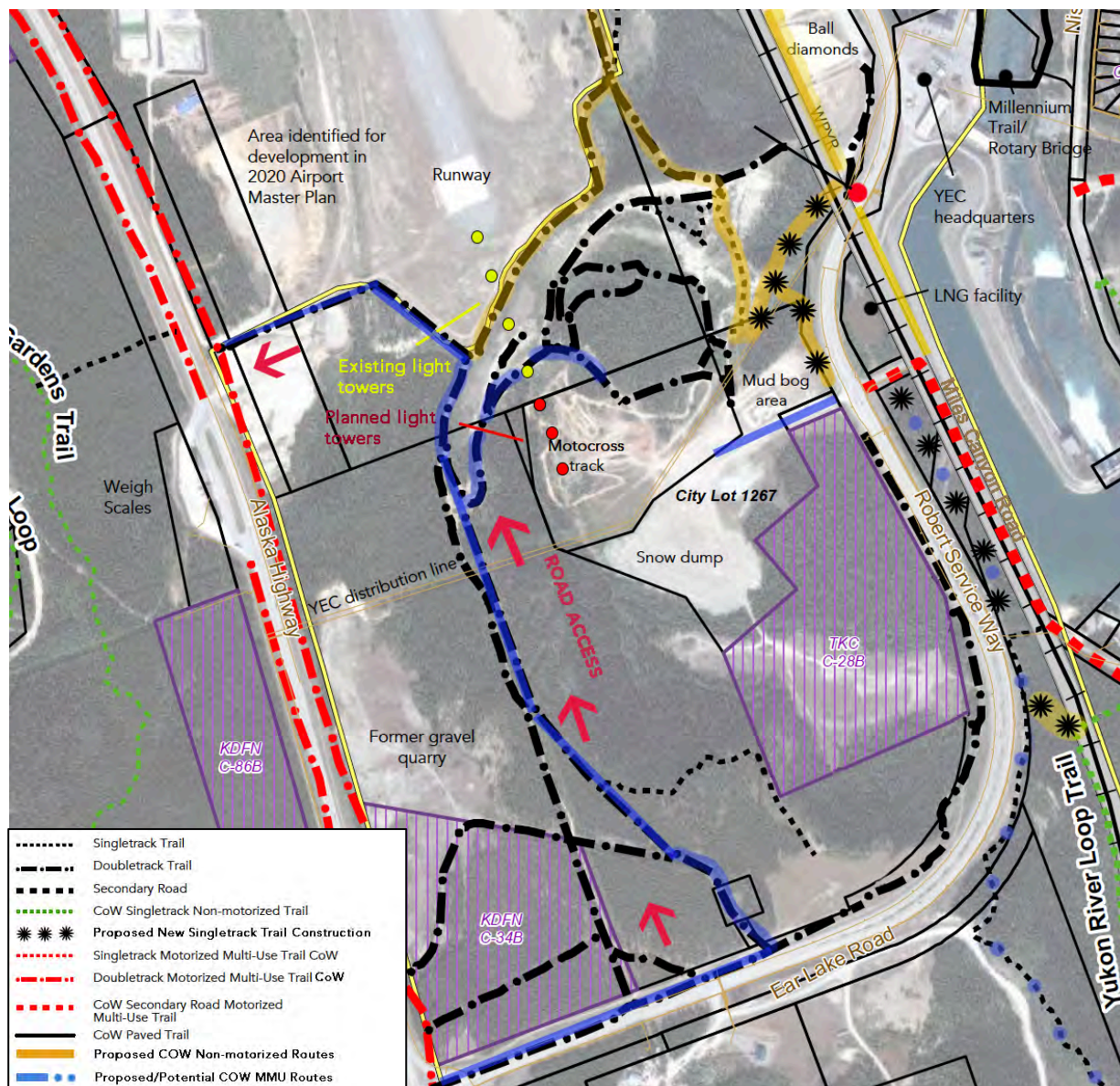
1. **Consider the re-designation** of the Government of Yukon portion of the upper terrace area to **mixed use commercial** but **retain environmental protection** of the **escarpment**

during the upcoming Official Community Plan process;

2. Work with airport administration to **address airport trail erosion** and formalize **trailhead signage and parking** at the southern boundary;
3. Designate and mark **motorized multi-use (MMU) connections** between the motocross track, RSW and Alaska Highway and consider MMU connections through the Ear Lake area (see Section 9);
4. Maintain minimum **30-metre development buffers** from the top of escarpment and retain

trail connectivity;

5. Work with Highways and Public Works to ensure that any future **controlled intersection** at the weigh scales includes a **pedestrian crossing** to facilitate connections to/from Ice Lake Park (see Section 9); and,
6. Construct, designate and mark a sustainably graded **non-motorized connection to/from the escarpment** to Miles Canyon Road and a crosswalk across from Robert Service Campground (see Section 9).



7.0 Ear Lake Quarries

What We Know

Gravel quarrying and industrial activities in the Ear Lake area began in the 1950s and are currently confined to two private parcels (owned by Norcon Enterprises and Skookum Asphalt) and two City leases (to Norcon and Annie Lake Trucking (ALT)).

10-year leases expired in December 2016 and are now renewed on a month-to-month basis. Skookum's property was a former lease sold by the City in 2014; the two other leaseholders are interested in a similar opportunity to purchase. There is non-compliance with lease conditions and there has been little to no coordination around extraction along the shared boundary of the leases.

The operators claim that up to 25 years of operating life remain in some areas of the pits, but verification is needed. These two leases support the territory's only concrete production at present and the combination of clean aggregate, water source, and power is integral. All three operators stressed the difficulty of finding a comparable site within or close to Whitehorse that wouldn't pose other conflicts.

Questions and concerns about the impact of water withdrawal from Hobo and Ear lakes on water quality and lake levels persist and previous studies have recommended a hydrological investigation; to

date, this has not been fully implemented.

What We Heard

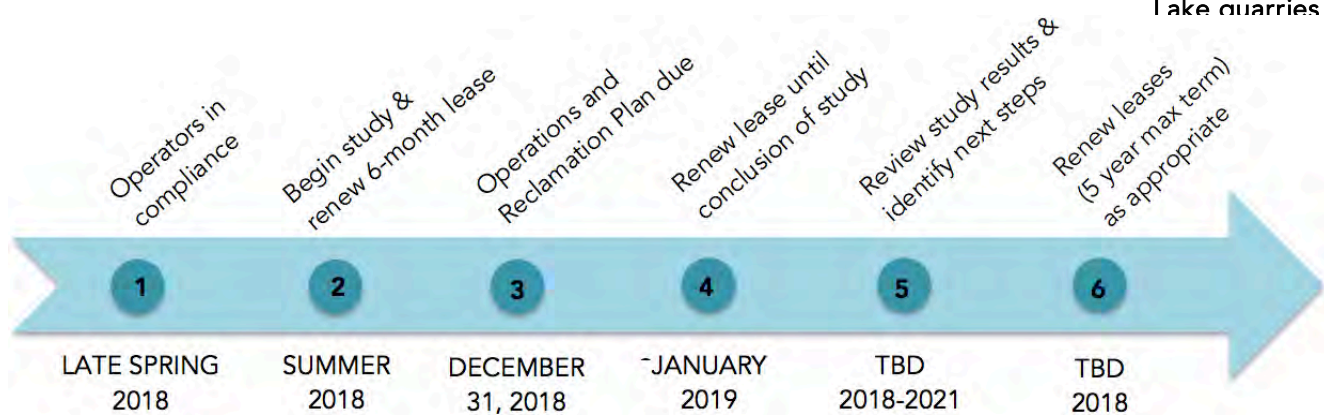
- **Non-motorized recreation** (85%) and **commercial recreation** (63%) were **strongly supported** as future end uses of the ALT lease. **Opposition** was **strongest** to **quarrying** (51%) and **motorized recreation** (41%).

Planning Direction and Recommendations

In the absence of clear answers on the "big picture" of citywide gravel supply and availability of suitable sites for concrete production, providing a longer-term horizon for operators to plan within is prudent. Maximizing resource extraction in this long disturbed area has equal merit. However, continued quarrying activities should not compromise the potential for highest and best end uses for both the lease parcels and Ear Lake.

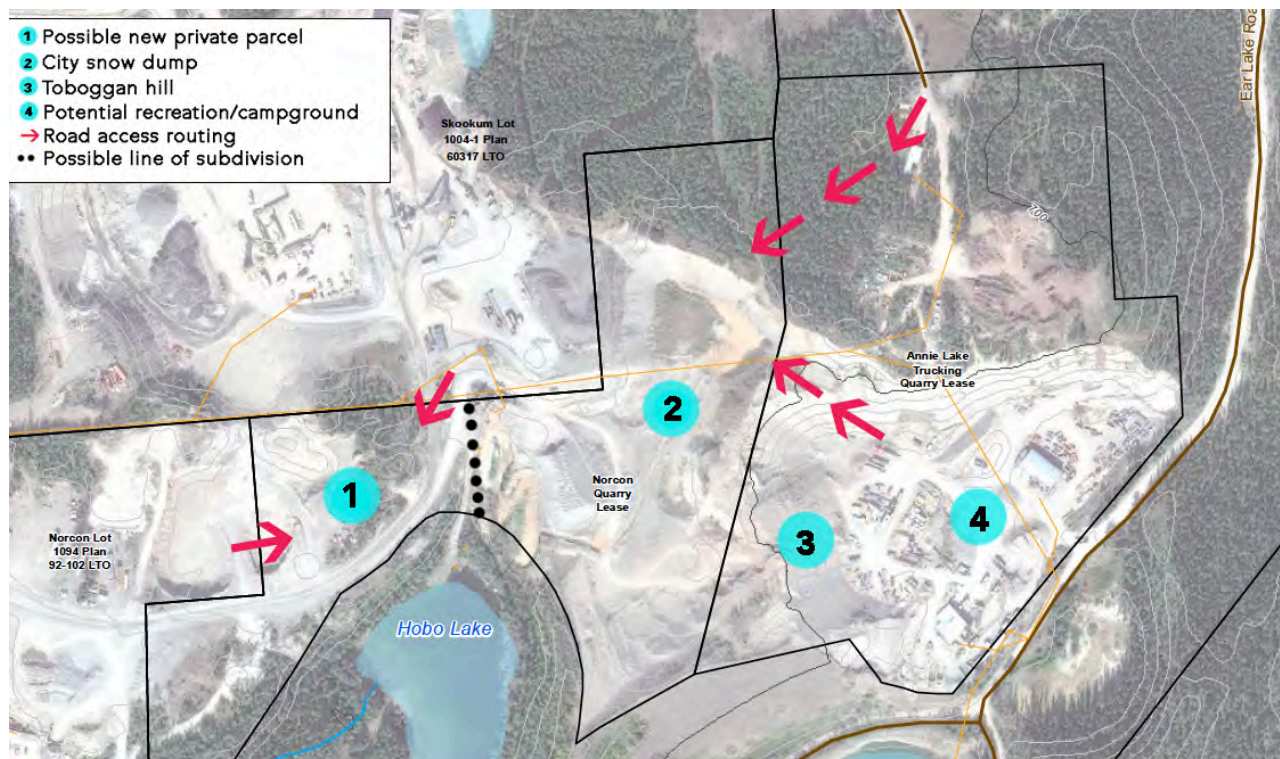
Adjacent industrial uses, noise and visuals pose limits to future uses of the Norcon lease. In contrast, the ALT pit area's close proximity to Ear Lake and visual buffer from the other parcels create unique opportunities.

Below: Process and timeline to address Ear Lake quarries



Quarrying is best viewed as a 10-15 year activity that leverages the shared interests of the City and leaseholders, answers outstanding questions, and facilitates the eventual achievement of highest and best use. Specifically, the City should:

1. Follow a **sequential process** to support orderly extraction and compliance via:
 - **Third party** compliance **inspections**;
 - A **joint operations and reclamation plan** that includes an updated estimate of remaining granular resources, addresses shared boundary extraction and maximizes gravel yield; and,
 - A **hydrogeological study** funded jointly by City/lessees to pinpoint water withdrawal and potential impacts, cause(s) for declining lake levels (and possible mitigation), and maximum pit depth – with initial results incorporated into the joint plan.
2. Explore the potential for **utilizing** the entire and/or eastern portion of the **Norcon lease** for a **snow dump** and/or waste (i.e. brush) disposal site, subject to environmental and regulatory requirements and the protection of Ear and Hobo lakes (and by extension, Schwatka Lake).
3. Consider **future subdivision** of and **right of first refusal** for the western portion of Norcon lease to adjacent owners, subject to the hydrogeological study and lease compliance.
4. Plan for **commercial recreation** (i.e. campground) and **winter public recreation** as end uses for the ALT lease, and include assistance with gates and parking (see Section 8) for Ear Lake as a lease condition for ALT.
5. As part of the joint reclamation plan, consider **facilitating** proposed **end uses** by:
 - Stockpiling silty-clay material (both leases);
 - Retaining the pit floor to terrace road (ALT);
 - Retaining steeper pit faces along the north (Norcon) and northeastern (ALT) boundaries to allow for blowing of stockpiled snow;
 - Retaining much of the flat, open area (ALT); and recontouring of western pit faces; and,
 - Maintaining the visual buffer between ALT's lease and the other developed parcels.



8.0 Ear Lake Recreation

What We Know

Ear Lake has been used as a recreational area since the early 1900s, and Robert Service himself mused about its future as a park in a poem. Ear Lake was once very popular for swimming and picnicking; over the past 20 or so years, its use has declined considerably. This trend is attributed to frequent vandalism and partying at the site, concerns about water pollution, and declining water levels. The site is used by local companies and clubs for paddling instruction, bird watching, and orienteering, but unorganized uses are predominant. There are presently no services at the site.

What We Heard

- Survey participants use **the area "sometimes"** (42%) or **"rarely"** (26%) in summer, and **"never"** or **"rarely"** (77%) in winter. **Activities** included **hiking/walking/ running** (64%), **swimming** (41%), **paddling** (32%), **bird watching** (22%) and orienteering, dirt biking, and snowmobiling (10% each).
- Support** for a **picnic area** and **1-2 marked loop trails** was **strong** (89% and 92%). **Interpretive signage** and an **artificial beach** were also **popular** (73% and 71%).

What Whitehorse Residents Said:

"I would strongly encourage use of this area.... so few swimming lakes near Whitehorse."

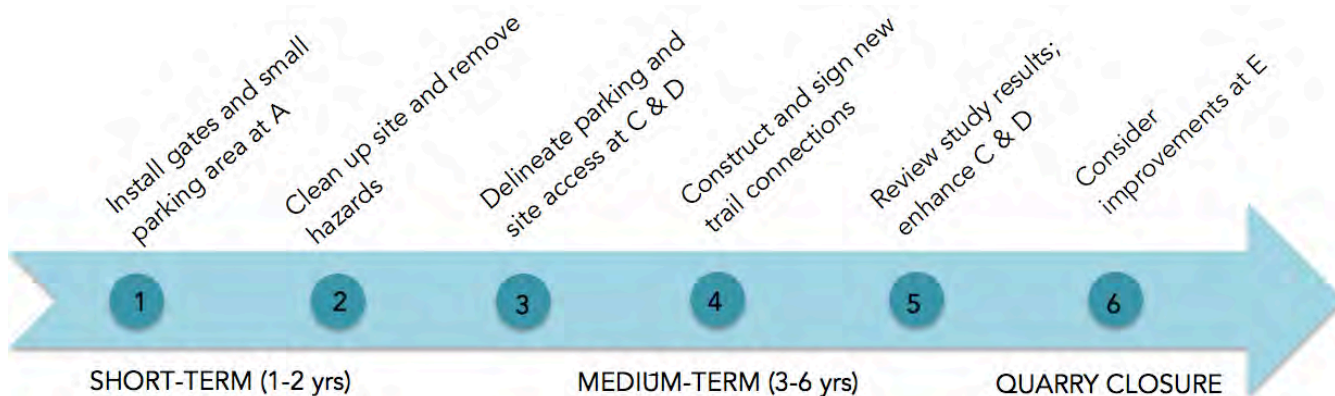
"People don't use Ear Lake anymore because of its rumoured contaminated water... it could be a lovely..recreation area...but it would need some development and promotion."

"Would spend more time (there) if it had enhancements – it's a dirty party place with lots of garbage."

"The area could...ease over-use (elsewhere)."

Planning Direction and Recommendations

Ear Lake is an underutilized asset with great potential. With nearby quarrying and industrial activities likely to continue for the time being, the City should **focus on shifting user behaviour** at and **perceptions** about the site in the interim. The figure below sets out a step-by-step approach that will allow the City to make incremental site interventions, monitor results, and adaptively manage the site.



Above: Process and timeline for Ear Lake recreational enhancements

Proposed Ear Lake site
enhancements include:

Vehicle gates –

Installed at the “Y” intersection and opened/closed on scheduled basis with ALT assistance.

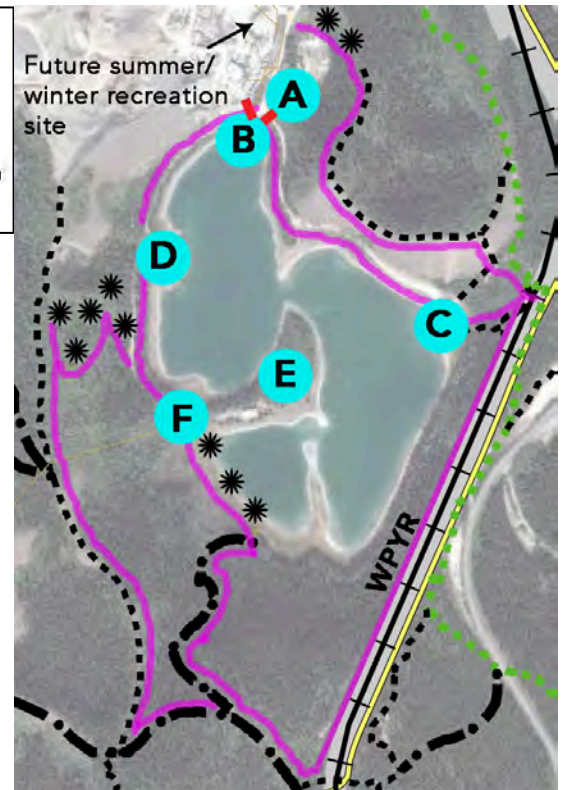
Parking – 4-5 spaces at gates (next to/on ALT settling pond) for “after hours” parking; delineated parking at C and D. Safety on narrow access road into C to be addressed via selective clearing, pull-outs, wireless traffic control, etc.

Trails and interpretation – New singletrack (narrow) trail built to create two loop options. A section of the White Pass railway line would provide optimal route and interpretation. Nearby City trail could be used as alternate. Trailhead kiosk located at C.

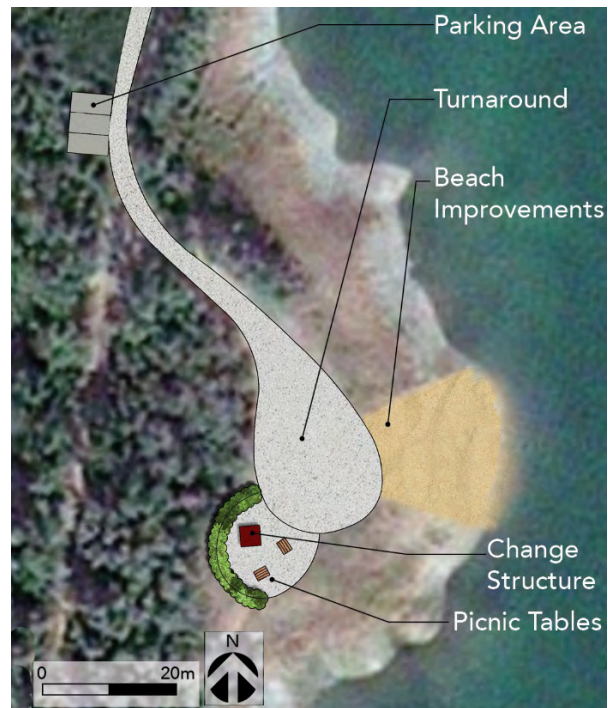
Day use area(s) – Picnic area, change structures, portable toilet, beach enhancements (with Ear Lake, and native plantings at the beach and day use area (C) and primary boat launch/group use site (D).

Ice skating node – Pathway access, signage and benches (B).

Night sky viewing and tenting site – Post quarry reclamation, node E could feature a viewing platform, shelter, controlled fire pit and seating, picnic area, and tent sites, with associated parking/turn-around at F.



Above: Beach and day use area (C)



Above: Primary boat launch/group use area (D)

9.0 Trail Connections

What We Know

The Robert Service Way (RSW) area is home to a wide variety of trails, some of which are among the most highly used in Whitehorse. The paved Millennium Trail (MT) is the city's most used and accessible trail. The airport perimeter trail, (essentially a dirt road) is also well used and showcases some of the best views in the city.

Trail connectivity is compromised throughout the area due to the high and steep escarpment, RSW traffic, Ear Lake industrial activity, and properties such as the Yukon Energy Corporation facilities. Two primary routes connect the escarpment to valley bottom include a sandy road that traverses the northerly extent of the motocross track and a steep, ridgeline doubletrack trail that starts/ends immediately west of the southernmost ball diamond. Neither option works particularly well for connecting to/from the escarpment and two main destinations in the area: Millennium Trail/Robert Service Campground and Miles Canyon Road.

There are no designated motorized multi-use (MMU) connections to or from the motocross track, and dirt bikes must be trailered and/or trucked to the site. Dirt bikers also utilize the track as a staging area and connect to trails that run east of Ear Lake and on to Miles Canyon, including a section of the Yukon River Loop Trail (YRLT) and Yukon River Trail Marathon route. Ear Lake is an Environmentally Sensitive Area. These trails are not currently designated MMU, making this activity illegal.

Trail planning within the municipal boundaries south of RSW/Hamilton Boulevard, including the Ear Lake area, is the mandate of the City's Whitehorse South planning process and a task force comprised of trail organizations and neighbourhood representatives. There has been no trail planning for RSW specifically to date. While not directly in the purview

What Whitehorse Residents Said

"...it's important to legitimize dirt bike use on some trails to avoid conflicts on other trails."

"Trail connections in the area are difficult to use...if I want to cut up from RSW to the escarpment trail, it's a very steep, difficult path to push my bike up."

"Dirt bikes are disruptive for animals and people in the area. There is lots of further out places for dirt bikers."

"People who could consider that area environmentally sensitive will consider every area environmentally sensitive until there are no more places to ride motorized vehicles."

of the Whitehorse South process, the issue of MMU connections to/from the motocross track will be influenced by the recommendations made to Council regarding MMU designations in the Ear Lake and Miles Canyon areas. The Whitehorse South trail planning process is currently on hiatus but is anticipated to resume in Spring 2018 and conclude by the fall.

What We Heard

- Survey respondents indicated the **connection between the Miles Canyon Road (MCR) and MT was the most important** (77%), followed by the connection between the escarpment and Downtown South (72%), airport perimeter trail (71%), and connection between escarpment and MT (67%).
- **45%** of total respondents **supported** designating a **MMU trail** connection through the Ear Lake area and **34% opposed** it. Those who didn't use the motocross track were more divided on the issue, with 40% opposing and 36% supporting.

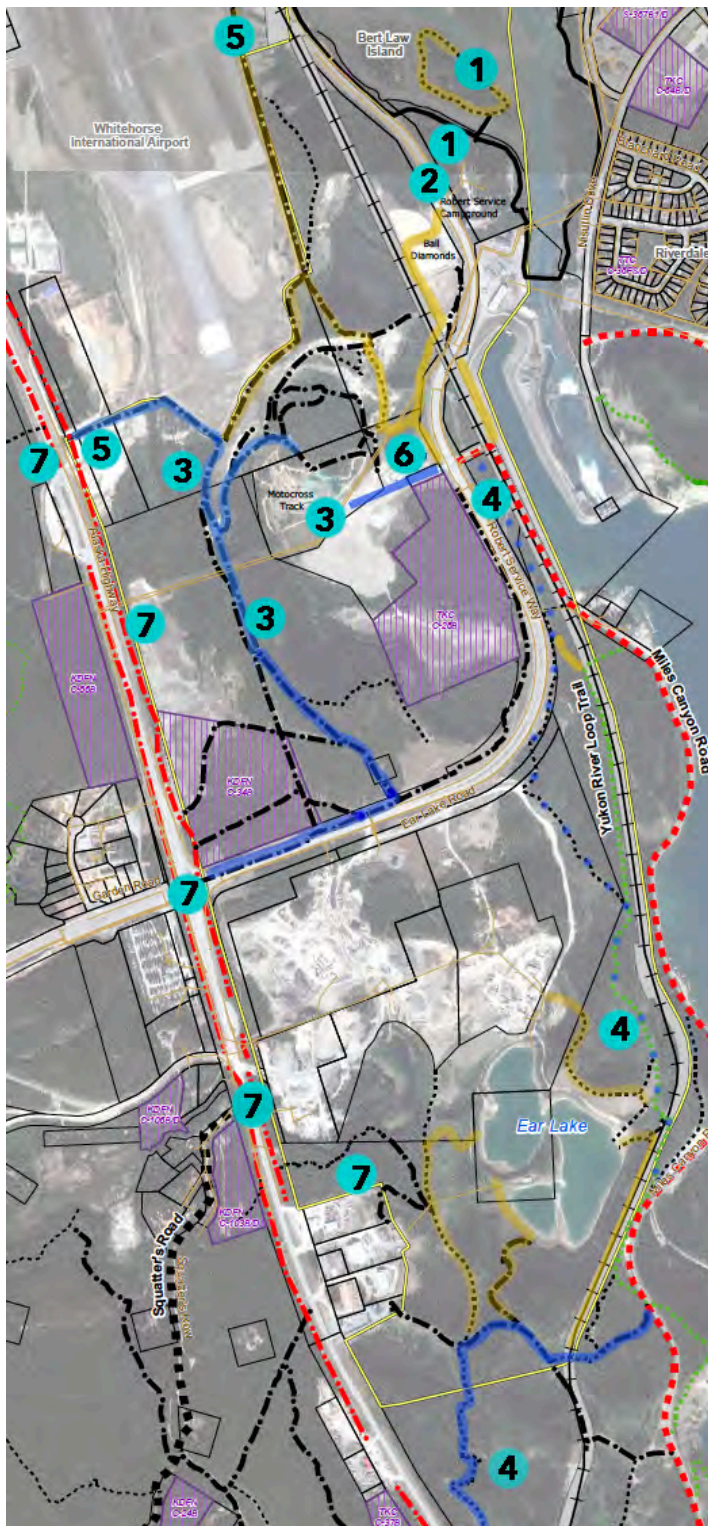
Planning Direction and Recommendations

Aside from driving along RSW, trails are the primary way Whitehorse residents experience the planning area. While the protection of “destination” trails is important, the area’s value for cross-city connections is equally important. This value will further increase should residential development in the Southern Urban Containment Boundary area west of the RSW area occur in the future. The key is to protect, enhance, and efficiently allocate what currently exists and to leverage future road corridor and access improvements to optimize active transportation and recreational opportunities.

Motorized recreation is a divisive issue in Whitehorse and raises difficult questions about site-specific versus broader-scale values and equity and appropriateness of recreational opportunity among user groups. Dirt bike use can pose unique planning challenges as this group values the same types of trails (i.e. narrow “singletrack”) and experiences as many non-motorized users – particularly runners, walkers, and mountain bikers. The East Yukon River (EYR) trail planning process (2012-13) resulted in the formal prohibition of dirt bikers from virtually all of the singletrack trails they had previously used in this area.

Survey responses to potential MMU designation of a singletrack route immediately east of Ear Lake in the RSW study area are notably more supportive than those received for similar concepts during the EYR process. The Whitehorse South trail planning process should consider both site-specific environmental values and the broader issue of recreational opportunity for this user group, particularly given the land area encompassed by the City’s regional parks. There could be an opportunity to designate short sections of singletrack MMU trails with fewer values conflicts (given the absence of nearby residences and industrial activity in the area), cultivate stewardship and responsible etiquette in this user group, and promote sharing among non-motorized and motorized users within a geographically limited area.





To optimize RSW trails, the City should:

1. Complete **trail improvements in Bert Law Park**, **designate** the trail and **improve non-motorized connections between the MT and MCR**.
2. **Install a crosswalk** across RSW at the campground.
3. Designate **MMU routes between the motocross track, RSW and Alaska Highway**. **Install maps and educational signage** at the track.
4. Construct a **new singletrack** section parallel to MCR to connect to the YRLT. **Consider MMU designation** of new connector and singletrack trail immediately west of YRLT during Whitehorse South trail planning.
5. Work with airport administration to **address erosion** of the **airport perimeter trail**, **designate** it, establish a formal **trailhead** and build a **staircase** in Downtown South to create a new connection.
6. Build a sustainably graded **singletrack trail** to connect the **escarpment, RSW crosswalk, and MCR**.
7. Advocate for **new Alaska Highway active transportation crossings** (at airport south fence, RSW intersection, and Squatter's Road area) and **linear multi-use trail** to provide safer connections between local regional parks, residential areas, and the RSW area.

10.0 Other Recommendations

Development Due Diligence

The preceding report focuses primarily on the question of current and future land uses in the Robert Service Way (RSW) area, and how those uses can be optimized. The Phase 1 Environmental Site Assessment, Heritage Resources Overview Assessment (HROA), and desktop ecological assessment that were conducted in support of the RSW planning study provide additional guidance, particularly in the context of site-specific development:

- A visual survey of potential contamination concerns should be undertaken in spring/summer/fall, focusing on the drain/ditch adjacent to the airport, WPYR railway, former quarrying areas on YG land, and the vicinity of the former structures at Ear Lake. Should inspections identify any further evidence of potential contamination, a limited soil sampling program could be warranted;
- A pedestrian survey, and shovel testing if warranted, is recommended for several hundred discrete areas of heritage resource potential lands (about 12.6% of the study area) before any ground disturbing activities be approved to proceed. An additional 10 areas (8.7% of the study area) have potential for Culturally Modified Trees, and a minimum standard of pedestrian survey is recommended for these;
- Avoidance is recommended for the known archaeological sites and the White Pass & Yukon Route (WPYR) corridor. Review of the HROA, and field participation of, KDFN and TKC participants is also recommended and encouraged before any development is approved to proceed;
- Caution should be exercised in design and construction of any enhancements to Ear and Hobo lakes, Bert Law Park and Yukon River areas to avoid disruption to bird or fish habitat. This includes limiting trails on shorelines and avoiding in-stream works or other causes of erosion and sedimentation;
- Referral to and guidance from the Whitehorse Archaeological Potential Model, a joint initiative between Kwanlin Dün First Nation, Ta'an Kwäch'än Council, and City of Whitehorse; and
- Avoid development during critical wildlife sensitivity (i.e., nesting season, denning, spawning, etc.)

Other Initiatives to Watch

Other planning and/or development initiatives and opportunities could impact the RSW area and should be considered during and after the upcoming Official Community Plan update. These include:

- Anticipated safety improvements at the RSW-Alaska Highway intersection by Government of Yukon (YG) and further north in the airport area. Ideally, transportation planning and improvements would capture the myriad of access challenges from the Squatter's Road area through to Range Road south;
- The opportunity for rails-to-trails conversion of the WPYR line from country residential areas through RSW area to Downtown¹;

¹ A trolley between Schwatka Lake and the Downtown has been deemed largely unfeasible.

- The implementation of the City of Whitehorse Bicycle Network Plan and pending update to the City Transit Master Plan;
- The pending Erik Nielsen Whitehorse International Airport 2040 Master Plan; and,
- Anticipated YG long-term capital planning that may prompt reconsideration of the upper terrace area for a new Whitehorse grader station.

List of Participants

Background Report

As part of the preparation of the Background Report, one-on-one interviews were held with the following external groups (listed in alphabetical order):

- Annie Lake Trucking
- ATCO Yukon Electric
- Kwanlin Dün First Nation
- Midnight Sun Dirt Riders Association
- Norcon Enterprises
- Miles Canyon Historical Railway Society
- Robert Service Campground
- Skookum Asphalt
- Softball Yukon
- Ta'an Kwäch'an Council
- Tourism Industry Association of Yukon
- Whitehorse Chamber of Commerce
- Yukon Cross Country Motorcycle Association
- Yukon Transportation Engineering Branch
- Yukon Energy Corporation

Information was also received via phone and e-mail from the following external organizations:

- White Pass and Yukon Route Railway
- Yukon Canoe and Kayak Club
- Yukon Department of Community Services
- Yukon Department of Environment

Once the Background Report was publicly released, additional comments were received by the following individuals and organizations (listed in alphabetical order):

- Jonathan Kerr (Morrison Hershfield)
- Peter Long (Whitehorse Walks)
- Yukon Department of Environment
- Yukon Land Management Branch
- Planning and Sustainability Services

Draft Final Report

In addition to internal City review, comments were received from the following individuals and organizations in response to the public release of the draft Final Report (listed in alphabetical order):

- Active Trails Whitehorse Association
- Doug Gonder (Norcope Enterprises)
- Dorothy Lebel
- Ta'an Kwäch'än Council
- Peter Long (Whitehorse Walks)