



# OCP AMENDMENT APPLICATION

PHASE 1: A PORTION OF THE WHITEHORSE UPPER  
TANK FARM

CITY OF WHITEHORSE  
PLANNING & SUSTAINABILITY SERVICES

NOVEMBER 4<sup>TH</sup>, 2019





**PREPARED FOR:**

**PS SIDHU TRUCKING**

Attention:

Will Shewen, Project Manager  
Shewen Management Consulting  
Whitehorse, YT

**PREPARED BY:**

**3Pikas**

NorthLight Innovation Centre  
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**SUBMITTED TO:**

**CITY OF WHITEHORSE**

Attention:

Mike Ellis, Senior Planner  
Planning & Sustainability Services  
Whitehorse, YT





November 4<sup>th</sup>, 2019

Mike Ellis  
Senior Planner  
City of Whitehorse  
Planning & Sustainability Services  
2121 2nd Ave.  
Whitehorse, YT  
Y1A 1C2

**RE: OCP AMENDMENT APPLICATION – A PORTION OF THE WHITEHORSE UPPER TANK FARM (PHASE 1)**

Dear Mr. Ellis,

On behalf of 46447 Yukon Inc., I would like to request that a portion of the Whitehorse Upper Tank Farm property (known as Phase 1) be re-designated as Mixed-Use Commercial / Industrial. The following report provides a description of the proposed development and offers a rational for the re-designation.

I would be happy to follow up with you, answer any questions, and elaborate further on any aspect of this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Simon Lapointe".

Simon Lapointe, RPP, MCIP  
3PIKAS

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# 1 INTRODUCTION

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3Pikas on behalf of 46447 Yukon Inc. is requesting an Official Community Plan (OCP) amendment to allow for a portion of the Whitehorse Upper Tank Farm property to be re-designated as Mixed-Use Commercial / Industrial. The overall development of the Whitehorse Upper Tank Farm property is expected to occur in 4 phases. At full build out, the overall development will create a supply of not only commercial lots but also urban residential housing opportunities. This application is intended to support the re-designation of the southeast portion of the Whitehorse Upper Tank Farm, known as Tank Farm Phase 1.

## 1.1 PROPERTY INFORMATION

As shown in Figure 1, Phase 1 consists of the southeast portion of the Whitehorse Upper Tank Farm property. The area encompasses approximately 73,180.3m<sup>2</sup> (~18 acres) of undeveloped industrial land located immediately adjacent to the full serviced Wasson Place commercial / industrial subdivision. It is comprised of Lot 429, Group 804, Plan 51614 CLSR YT.

## 1.2 PROPERTY OWNER

46447 Yukon Inc. is the legal owner of the property and PS Sidhu Trucking is the developer for the project. 3Pikas was retained to prepare the OCP amendment application package for review by the Planning & Sustainability Services, City of Whitehorse.

## 1.3 CONTACT

For this application, please use the following contact:

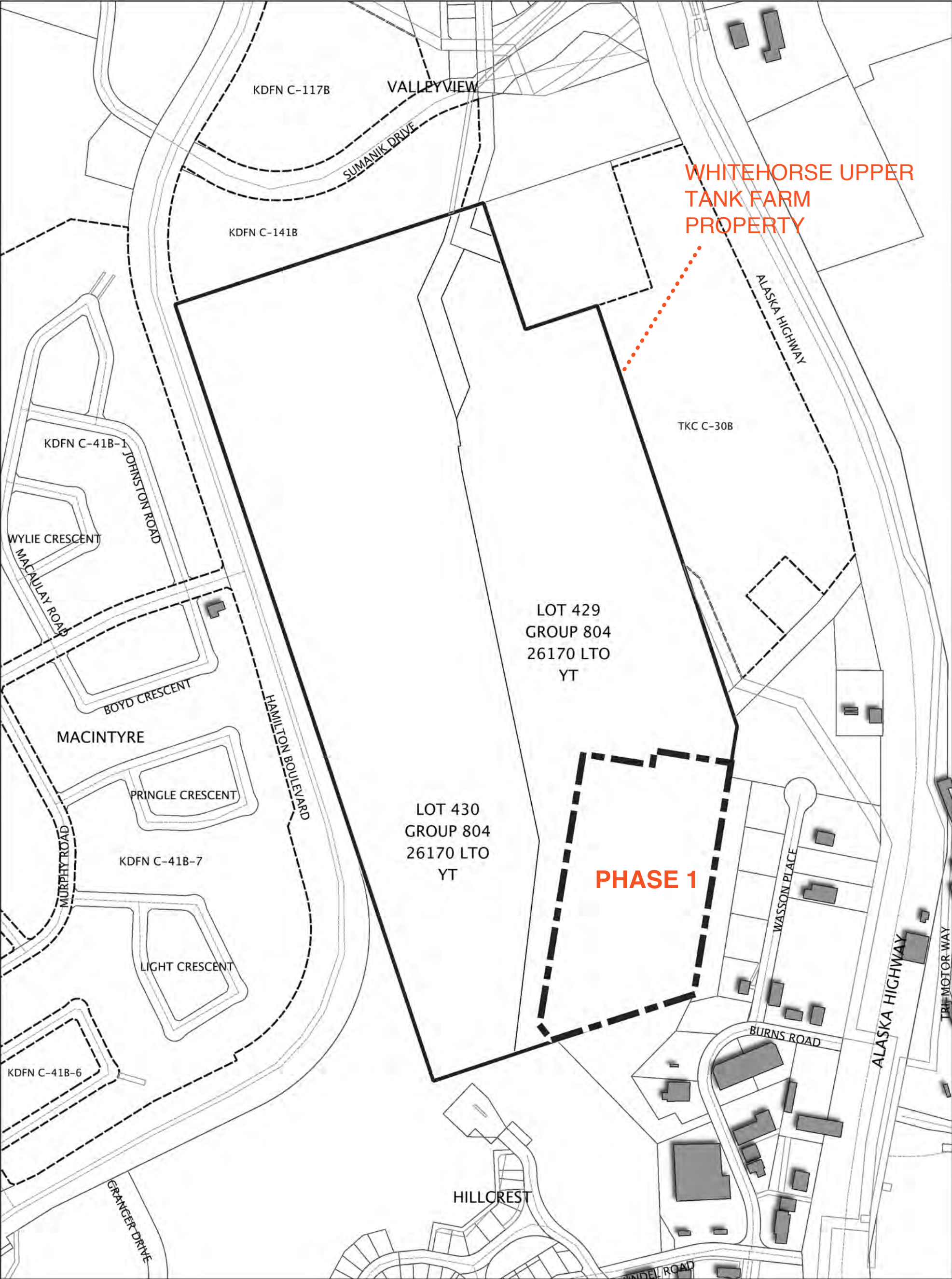
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1 (867) 332-1864  
[simon@3pikas.com](mailto:simon@3pikas.com)

## 1.4 CURRENT OCP DESIGNATION & ZONING

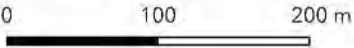
The current OCP designation and zoning consist of: Urban Residential and Future Planning.

LAND USE DESIGNATION / ZONING	
LAND USE DESIGNATION	Residential – Urban
ZONING	Future Planning (FP)





WHITEHORSE UPPER TANK FARM | PHASE 1  
+ figure 1 | location





## 2 SITE DESCRIPTION

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### 2.1 TOPOGRAPHY

This 18-acre (73,180.3m<sup>2</sup>) parcel is comprised of a sand and gravel bench overlying fine-grained glacial lake deposits. It is un-vegetated and free of organics due to extensive excavation work completed to remove contaminated soils.

A depression runs in a north-to-south axis along the west side of Phase 1. This existing depression is a key natural feature. It acts as a natural buffer and transition zone between Phase 1 (Mixed-Use Commercial) and Future Phases of the Whitehorse Upper Tank Farm (Urban Residential). It also provides a natural storm drainage system for the future urban residential area.

To the east, a steep gravel embankment, approximately 12 metres high, runs north-to-south bordering the property along Wasson Place. The slope is between 22-30%. To the south, another steep slope drops down to the Midnight Sun Courier-Loomis Express property located along Burns Road.



SAND & GRAVEL BENCH LOOKING TOWARDS WASSON PLACE.

### 2.2 SURFACE / GROUND WATER

There is no surface water on the property and runoff is generally absorbed directly into the ground. According to Golder Associates, the groundwater flow direction curves towards the east and discharges towards Baxter's Gulch.

## 2.3 ADJACENT LAND USES

Evidence of industrial use and gravel extraction in the area dates back to the mid-1960s. Today, adjacent land uses include mixed-use commercial, industrial, highway commercial, and a greenspace. As shown in the image below, Phase 1 is bordered by an existing 30-metre buffer zoned Greenbelt Buffer (PG). Wasson Place, a mixed-use commercial / industrial subdivision, is located immediately east of the Greenbelt Buffer (PG). The former gravel pit was redeveloped in 2008 into a full-service commercial / industrial subdivision. It is located directly across the highway from the Airport property.

A Pipeline Right-of-Way is located north of the Whitehorse Upper Tank Farm property. The former pipeline originally ran from the Upper Whitehorse Tank Farm to the airport and was decommissioned in 1996 by Phoenix Environmental Ltd. It is positioned between Wasson Place and the Salvation Army Ark Correctional centre.



LOOKING EAST ONTO WASSON PLACE.

As shown in the image below, the Fuel Yukon property is zoned as Highway Commercial and is located directly across from the Pacific Northwest Moving & Storage Company (zoned Mixed-Use Commercial / Industrial) and directly across the highway from the Erik Nielsen Whitehorse



International Airport. Yukon government Department of the Environment is located southeast of Phase 1.



**LOOKING SOUTHEAST TOWARDS GOVERNMENT OF YUKON, DEPARTMENT OF ENVIRONMENT.**

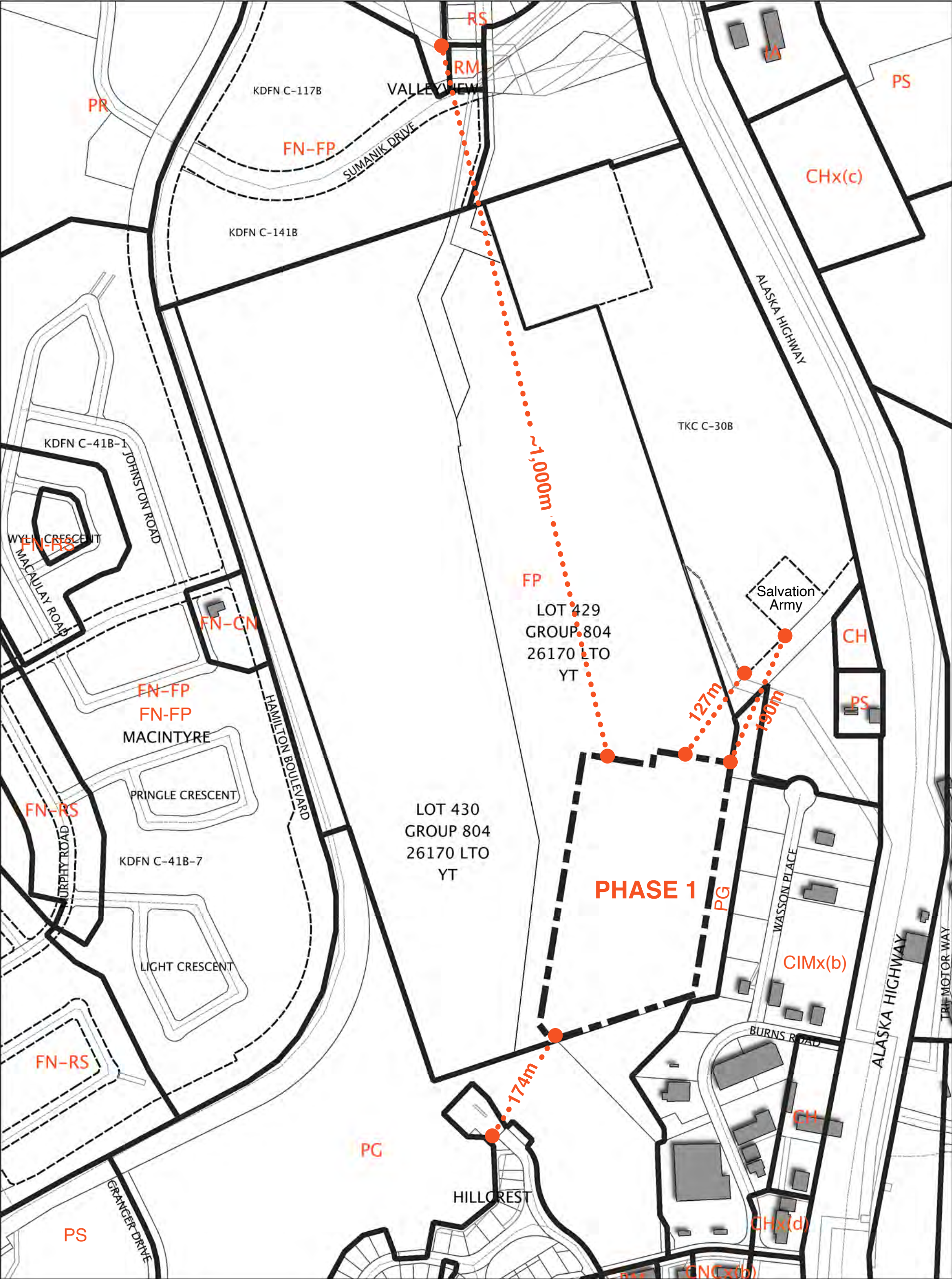
As shown on Figure 2, the Ta'an Kwäch'än Council Parcel (C-30B) is located approximately 127m north of Phase 1. The Salvation Army Ark Correctional centre is located approximately 190m northeast of Phase 1. While the nearest property in Valleyview is approximately 1km north, the nearest property in Hillcrest is approximately 175m south of Phase 1.

## 2.4 SITE REMEDIATION

Remediation work on the Whitehorse Upper Tank Farm, consisting primarily of excavation of contaminated soil, began in the 1990s and continued up to 2001 by which point near-surface contamination was entirely cleaned up. The remediation of the soil and groundwater was required to standards of the Yukon Government Contaminated Sites Regulations as well as Site Specific Remediation Standards agreed to by all interveners and the National Energy Board (NEB). In 2009, the property was released by NEB as meeting the Plan of Remediation for industrial usage. Environment Yukon formally designated the Former Whitehorse Upper Tank Farm property as a contaminated site on January 5, 2011. The designation gave the government greater oversight of remediation activities. Golder Associates put together a plan to remediate the property.

The Whitehorse Upper Tank Farm Phase 1 area has now been remediated following the Yukon Contaminated Sites Regulation. Since then, 46447 Yukon Inc. has submitted a Certificate of Compliance to the Minister of Environment (Government of Yukon) to remove the contaminated site designation for Phase 1.



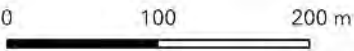


WHITEHORSE UPPER TANK FARM | PHASE 1

+ figure 2 | zoning & proximity to adjacent land uses



scale: 1:5,000





# 3 DEVELOPMENT CONCEPT

## 3.1 BACKGROUND

In 2012, 46447 Yukon Inc. hired Golder Associates to put together a series of extensive community workshops. The goal of the workshops was to gather input from stakeholders and the public on the future of the entire Whitehorse Upper Tank Farm property. The consulting team spent three days meeting with community and stakeholder groups including adjacent property owners, representatives from the Ta'an Kwäch'än Council, Kwanlin Dün First Nation, Government of Yukon, City of Whitehorse, Hillcrest and Valley View Community Associations, the Yukon Conservation Society, Whitehorse Walks, the Anti-Poverty Coalition, and the general public. Together the group created a vision and identified planning / design principles for the future development.

The extensive community engagement resulted in a preferred preliminary conceptual neighbourhood plan (Figure 3 below). The preferred plan proposed a housing mix composed of single detached, medium, and high density. It identified the southeastern portion of the property as a mixed-use commercial area. The plan proposed to excavate an area of the property down to the elevation of the existing mixed-commercial area on Burns Road.

The preferred plan was consistent with the feedback received from the community and stakeholder groups with interconnected network of trails, ample natural open space, pedestrian / transit-friendly streets, and high-quality public amenities.

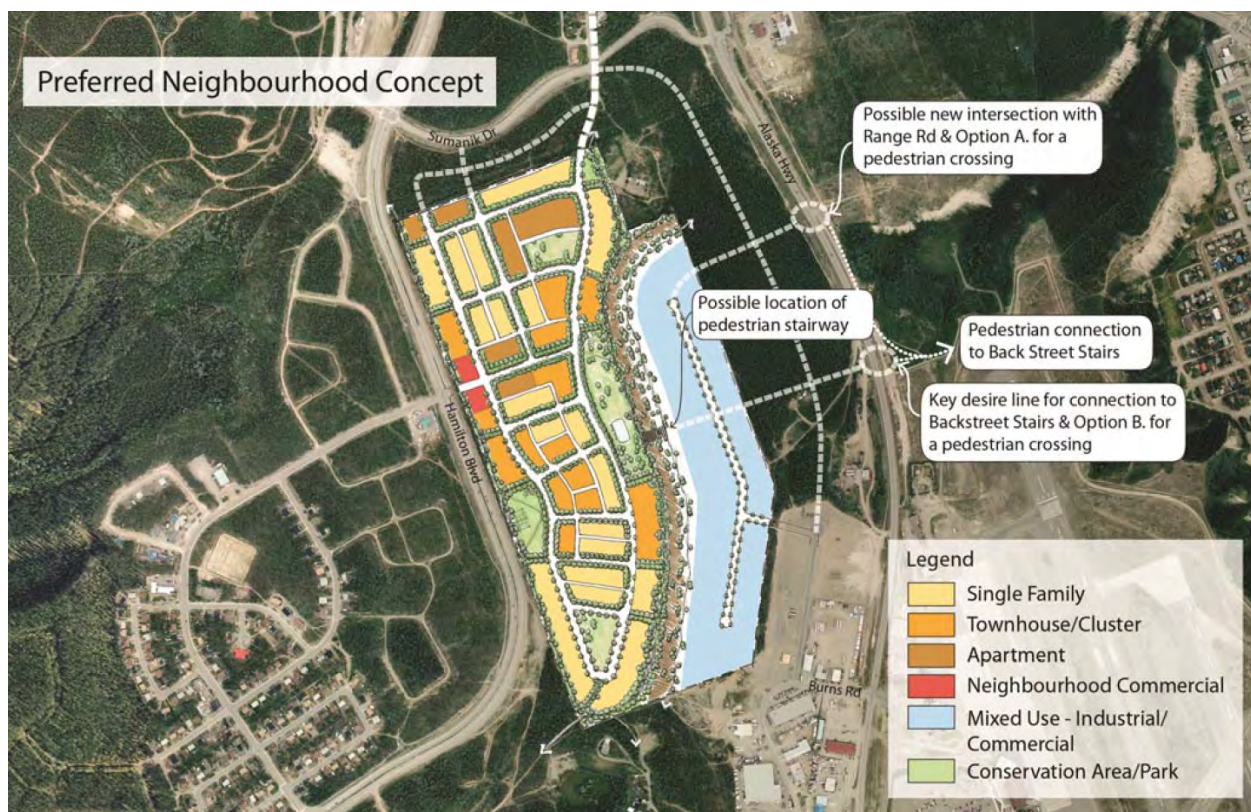


FIGURE 3. 2012 PREFERRED NEIGHBOURHOOD CONCEPT PLAN.



## 3.2 PROPOSED DEVELOPMENT CONCEPT

The proposed OCP designation consists of Mixed-Use Commercial / Industrial. The appropriate zoning along with associated development controls will be determined during the re-zoning application process.

Associated Engineering was retained to create a lot layout for Phase 1. This proposed development is intended to create a full-service subdivision. The proposed development is not only a logical extension of the current adjacent industrial / commercial land uses, but it also conforms with the adjacent zoning and maintains the industrial character of the area.

As shown in Figure 4, the proposed development would create capacity for approximately 13 commercial lots by 2020. The lots vary in size and frontage, from approximately 3,721m<sup>2</sup> to 4,589m<sup>2</sup> (~0.9 to 1.3 acres) and frontage from 50m to 100m wide.

The goal is to attract high quality commercial interests generating lower than usual environmental noise levels in order to provide a transition zone between the existing Wasson Place subdivision and Future Phases of the Whitehorse Upper Tank Farm (urban residential area). A special modification could be applied to the CIM zoning to restrict the use to commercial interests such as storage space, above ground floor offices, retail services, and warehouse sales-oriented services.

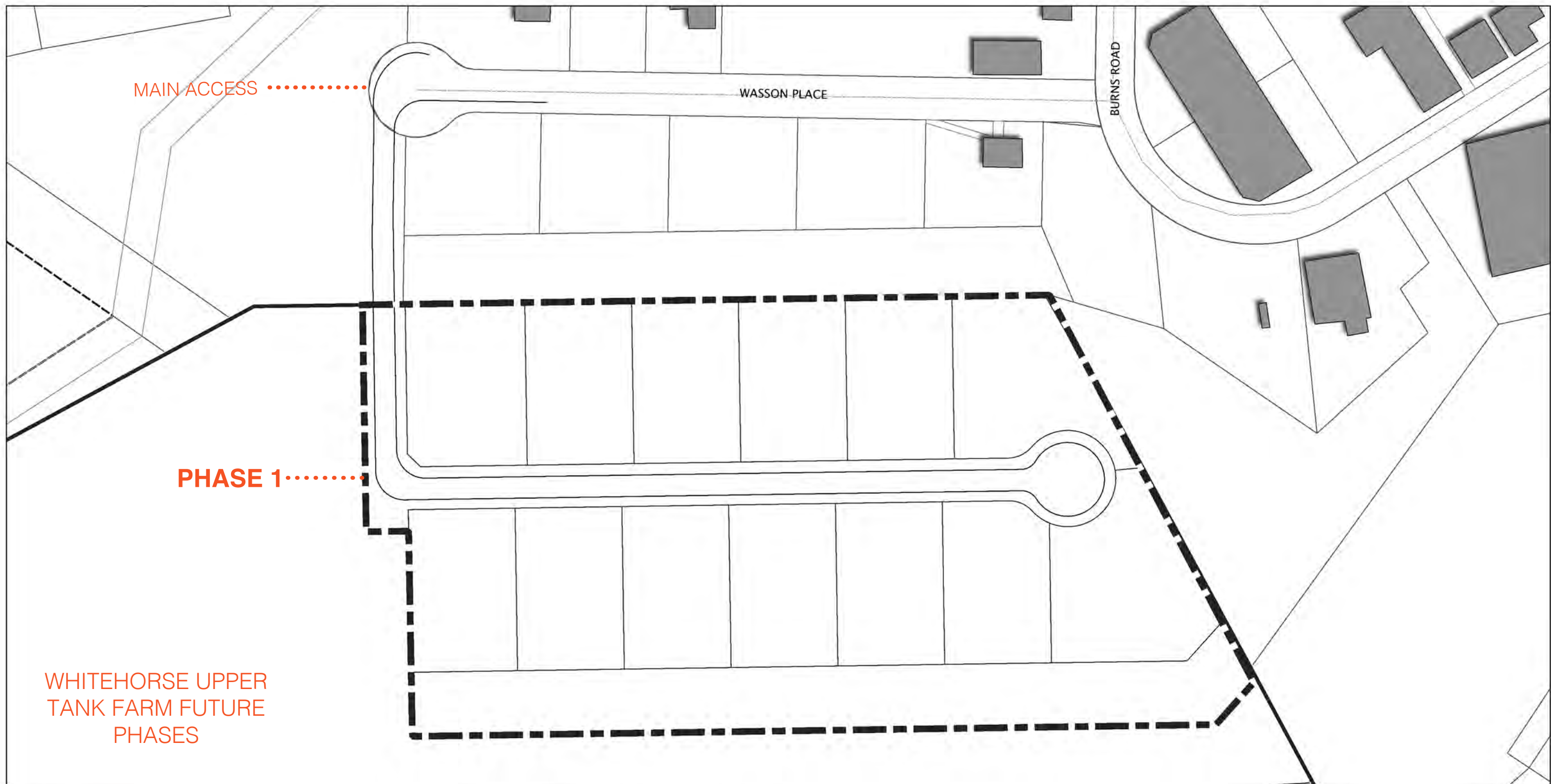
This proposed development would include a buffer and public green space, which would run north-to-south along the top of the escarpment and act as a transition zone between the proposed development and Future Phases. The buffer would vary in width and elevation from approximately 57m wide (southwest corner of Phase 1) to 120m wide (northwest corner of Phase 1) and approximately 12 metres in elevation.

### 3.2.1 ROAD SERVICING

The proposed development includes approximately 496m of new roads, including one new connection to Wasson Place. Approximately 5,732m<sup>2</sup> (~1.4 acres) of new road alignment would be created as a result of this project. The proposed lot road alignment requires a significant drop in the existing grade of Phase 1, to facilitate a gradual transition in slope from Wasson Place Road (east of Phase 1) up toward Hamilton Boulevard (west of the Whitehorse Upper Tank Farm property). The suggested road width is approximately 10m within a 20m right-of-way.

### 3.2.2 SERVICING

Power, telephone, sewer, and water service tie-in are readily accessible at Burns Road and can be extended into Phase 1. Buried electrical and telephone infrastructure would be accessible to each lot and would be available along the proposed road right-of-way or within required servicing easements.



WHITEHORSE UPPER  
TANK FARM FUTURE  
PHASES



## WHITEHORSE UPPER TANK FARM | PHASE 1

+ figure 4 | site plan

0 100 200 m



scale: 1:1,750

### 3.3 BUFFER

As per the 2012 preferred concept prepared by Golder Associates, the green space buffer retained as much of the existing tree canopy as possible buffer and included a pedestrian pathway (Figure 5). Planning for Future Phases (Urban Residential area) will further investigate design elements and potential options for the green space buffer.

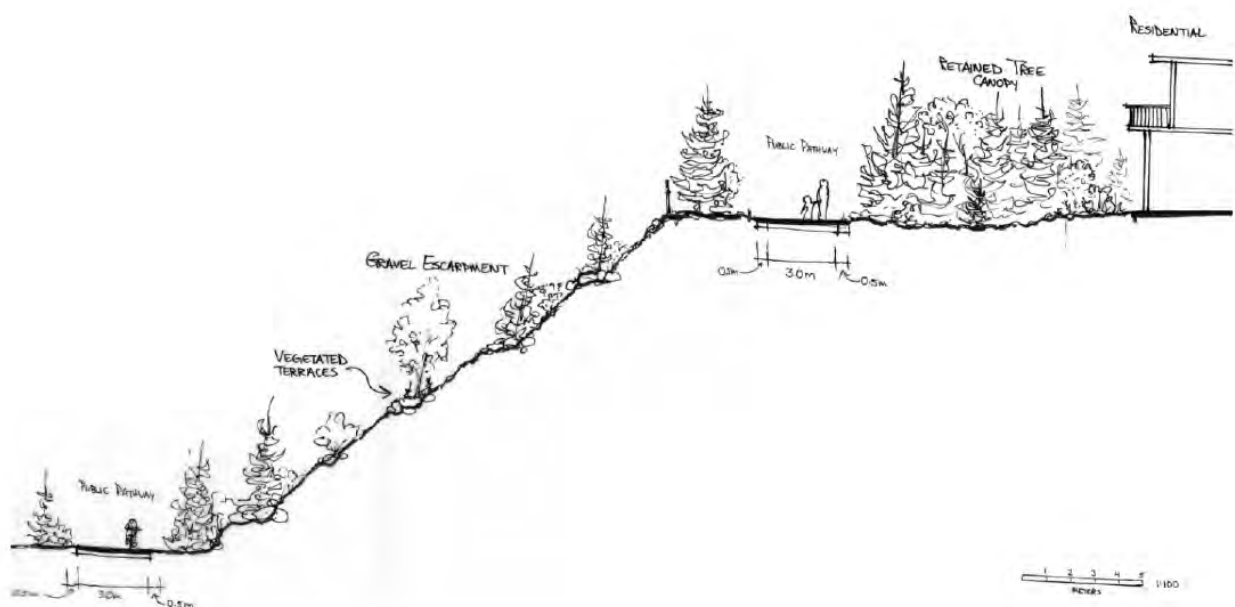


FIGURE 5. 2012 GREENWAY OPTION SEPARATING PHASE 1 FROM FUTURE PHASES.

### 3.4 GEOTECHNICAL CONDITIONS

Golder Associates provided preliminary input on the soil conditions and general geotechnical suitability. Based on the current geological information and previous drilling works, the initial assessment is that Phase 1 is considered to be geotechnically suitable for the proposed development.

According to Golder Associates, Morrison and Klassen (1980) indicated that a series of glacial lake deposits composed of finely layered silt overlies bedrock and overlying the glacial silt is a sequence of alluvial terrace sand and gravel deposits. Drilling and excavation work done by Golder Associates in the southeast portion of the Whitehorse Upper Tank Farm property showed that the upper 15 metres of surficial materials consist of compact to dense granular deposits of sand, gravel, and cobbles with relatively low silt content. Groundwater levels in these deposits suggest that the materials are relatively well-drained. Golder Associates recommended that a further geotechnical investigation should be performed to confirm suitable foundation designs for the proposed structures.

### 3.5 PROPOSED ACTIVITIES

The excavation required to access areas of contamination has already removed all vegetation as well as large amounts of material from the slope and bench in Phase 1. This leaves the slope prone to erosion and unsuitable to buildings and infrastructure. The proposed work would lower the top of the bench to near the grade of the adjacent lots on Wasson Place. The grade differential between Phases 1 and Future Phases will be addressed through lot grading, and a vegetated slope on the West side of Phase 1. The excavated materials would serve as construction materials for this phase as well as future phases.

The excavation work requires heavy equipment such as scrapers, bulldozers, and excavators. Access would be provided from within the Whitehorse Upper Tank Farm, and all excavation would be stockpiled on-site using existing access roads on the Whitehorse Upper Tank Farm property. The materials would then be stockpiled on a prepared site on the northwest portion of the property (Figure 6), where it would be processed into various aggregates and utilized as materials for the subdivision development. Processing would use the maximum amount of aggregate on site and minimize the need for off-site disposal or import of material, reducing trips and potential impacts on the transportation network.

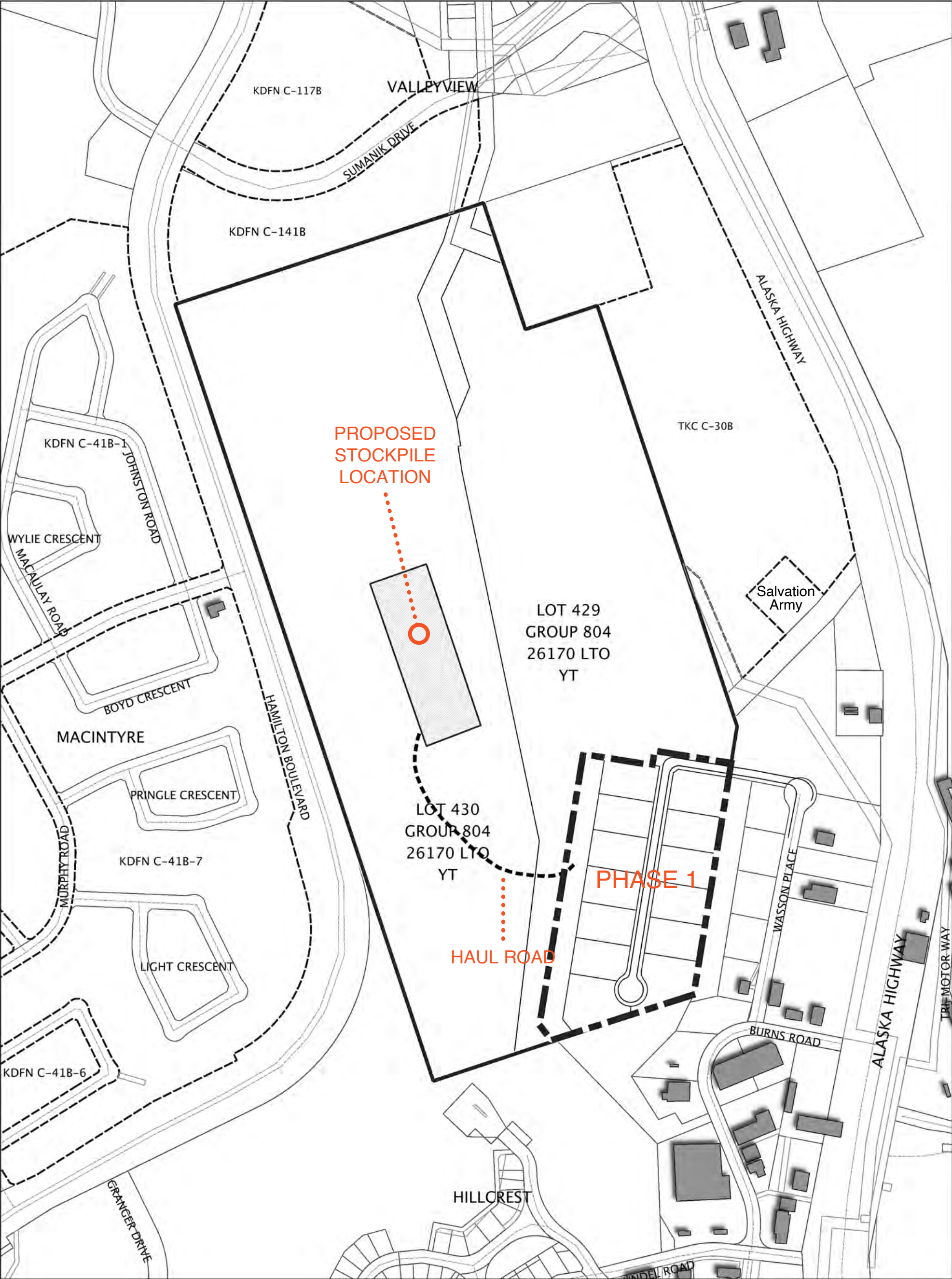
The estimated quantity of excavated material is approximately 750,000 cubic metres. This material would be used through development for site grading / drainage, road construction, underground utilities, and lot grading. Excess and waste material would be hauled off-site. The estimated duration of excavation to stockpile activities is approximately 60 days and construction activities are typically limited to hours between 7 am to 7 pm.

Future Phases will require additional materials. Without detailed design and further geotechnical testing, it is too early to accurately estimate quantities. Nonetheless, using Whistle Bend as the standard, 5,000 linear metres of roads with a 15m Right-of-Way at a 1.7m depth would result in 130,000 m<sup>3</sup> of gravel for road structure. Lot grading, fill of existing excavations, surface drainage, pipe bedding, and access (crossings of valley in centre of property) would likely require an additional 260,000 m<sup>3</sup>. As such, Future Phases could require as much as 400,000 m<sup>3</sup> of materials. Adding the vacant infill site located between the Tank Farm and Elijah Smith School would further increase the overall material requirements.

Noise would not be significantly higher than current and past operations (last 5 years). For example, the excavation work to remove the contamination from the site visible from Wasson place (southern bench) removed approximately 40,000 m<sup>3</sup> from the bench last summer. Previous on-site excavation has resulted in similar quantities being moved and remedial work has been occurring in the same area. While the quantities may appear to be high, the activities would not significantly differ from previous operations. As excavation work proceeds, the bank of the excavation would act as a further buffer to sound travelling in the direction of residential areas, so the noise levels should actually be less than noise produced during 2018 and 2019 operations.

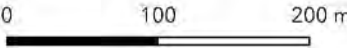
The noise generated during Phase 1 would be less than the current noise level in Whistle Bend. This phase requires no compaction equipment and very little “reverse driving” meaning no major vibrations or back-up beepers. There would be no increased vehicle traffic as all of the work would continue to place on Whitehorse Upper Tank Farm property. Best Management Practices (BMPs) would continue to be applied for dust suppression in order to minimize air born particulates.





# WHITEHORSE UPPER TANK FARM | PHASE 1

+ figure 6 | stockpile location & haul





## 4 REASONS FOR OCP AMENDMENT

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### 4.1 SUPPLY & DEMAND

The proposed development meets an existing demand and will generate a stream of long-term property and business tax revenue for the City of Whitehorse. As vacant land supply continues to diminish, the inventory of adequately sized commercial and industrial properties becomes smaller and more scattered. Based on the current inventory and estimated demand, it is anticipated that the supply of available commercial and industrial lands will be substantially depleted.

The City of Whitehorse is currently undertaking a study of commercial and industrial lands, located outside of the downtown core. The purpose is to help inform the Whitehorse 2040 process for reviewing and updating the OCP. The objectives of the study include: 1) Assessing future demand for commercial and industrial lands, and 2) Identify land use and policy options to ensure the supply of commercial and industrial lands can meet future demand and needs.

The preliminary results of an online survey conducted by the Planning & Sustainability Services show that 45.16% of the respondents believe that the City should develop new commercial areas, and 70.97% responded that the City should provide more full-serviced commercial / industrial land.

The City of Whitehorse, Planning & Sustainability Services, held 3 focus group meetings with property owners and businesses located in CH-Highway Commercial, CIM-Mixed-Use Commercial / Industrial, IS-Service Industrial, and IH-Heavy Industrial zones.

Highlights from the sessions include the following topics:

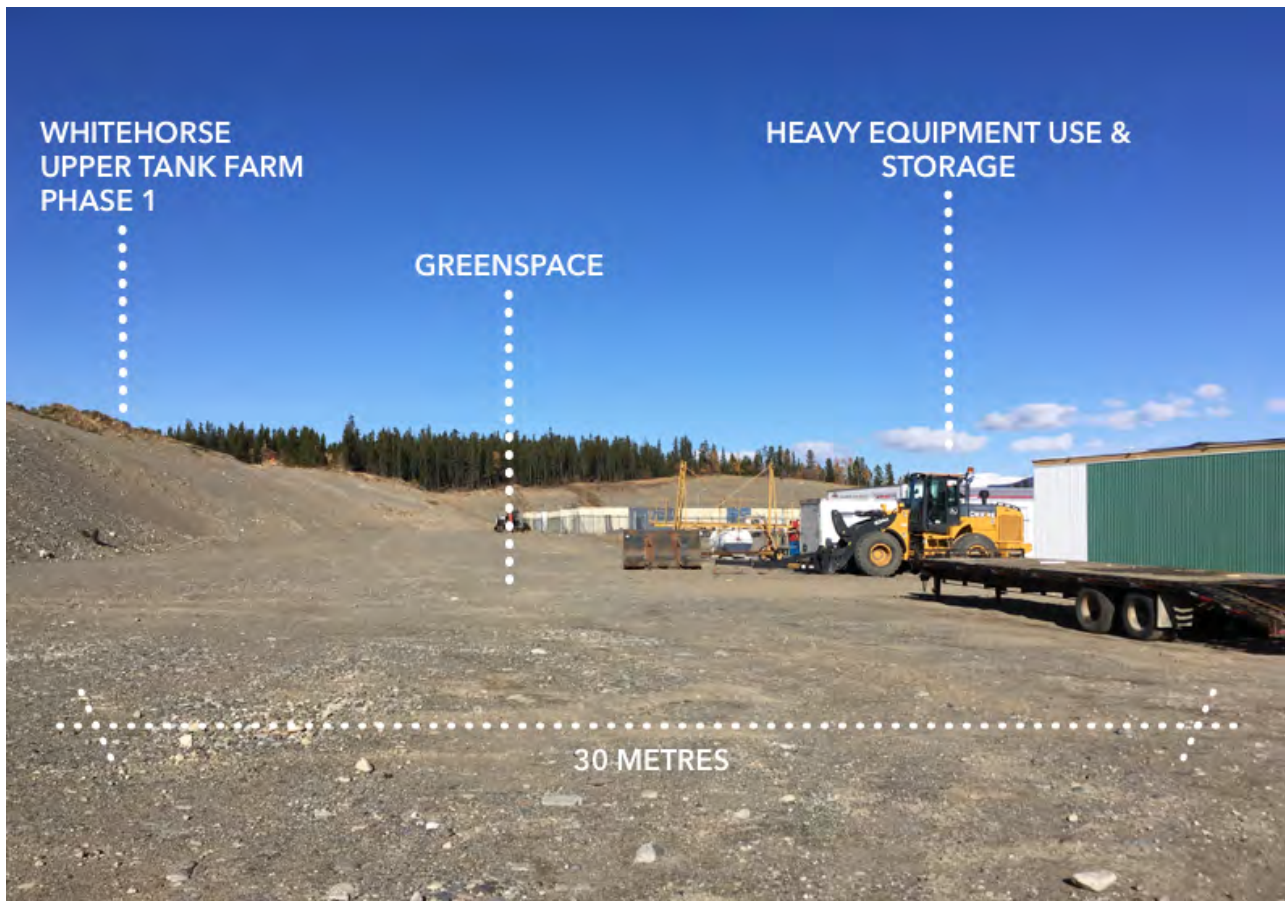
- Land scarcity leads owners to rezone in order to get what they need.
- New industrial lands are needed and would generate employment.
- Quarry lands should be viewed as sites for future industrial lands.
- Shortage in land availability.

Some participants suggested that keeping the cost of land down should be a top City of Whitehorse priority. This could be achieved through the provision of an appropriate industrial / commercial lot supply.

## 4.2 INCOMPATIBLE ADJACENT LAND USE

Airborne particulates and other emissions created by the adjacent commercial / industrial land uses, in addition to being offensive and unpleasant, could have significant adverse effects on human and environmental health of adjacent residential properties. The utilization of land for the bulk storage of heavy equipment and materials increases noise levels and vibration and creates negative impacts that can be offensive to surrounding land uses, mainly residential.

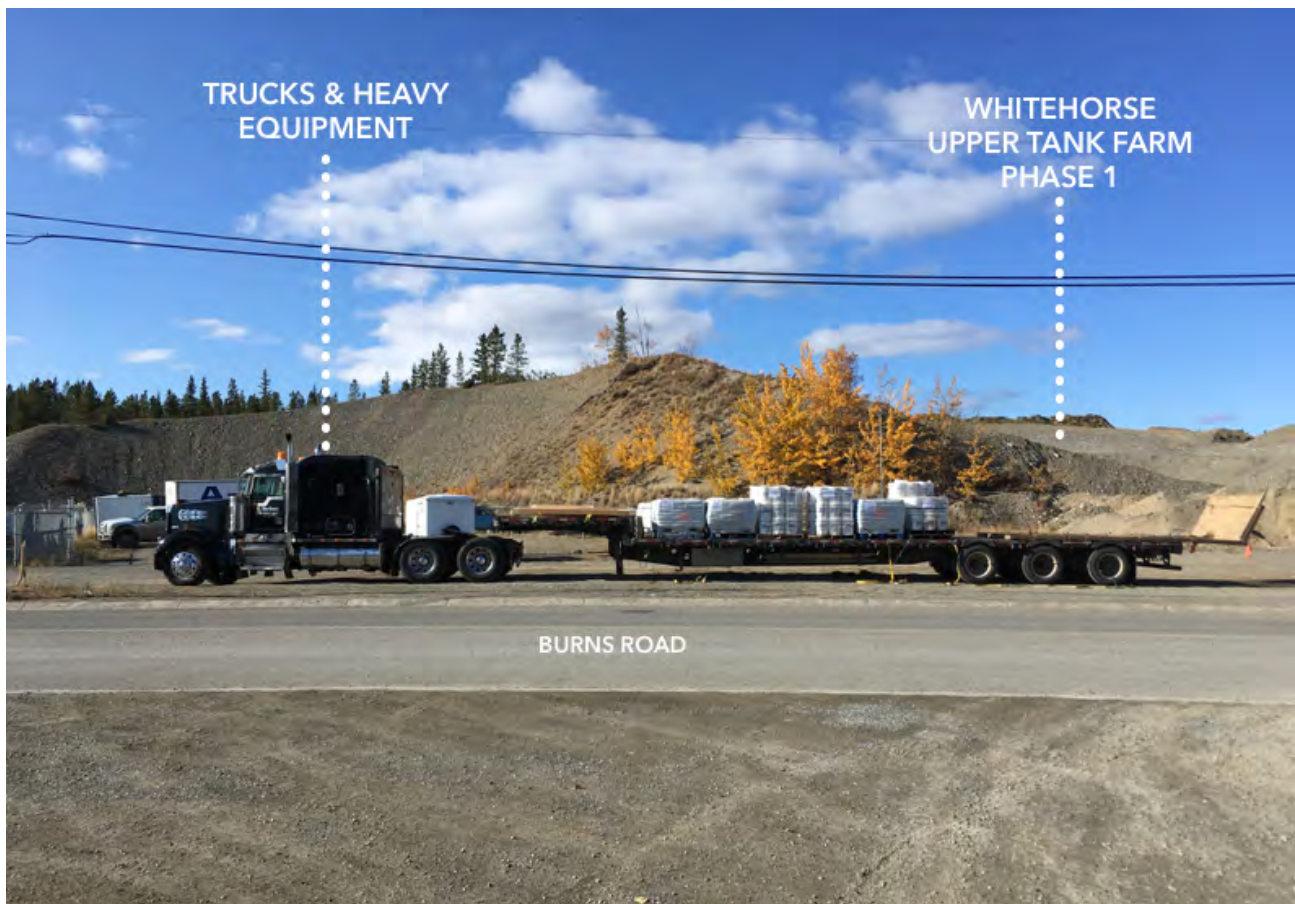
Adjacent Wasson Place and Burns Road areas land uses are characterized by large lots with the provision of the full range of commercial / industrial amenities. The built form of the surrounding area expresses a typical shop / storage facility with oversized buildings, sizable structures, and an outsized supply of storage space. Adjacent businesses such as the Pacific Northwest Freight Systems and Listers Marine necessitate both inside and outside bulk storage space for heavy machinery, equipment, materials, and supplies (image below). The use of industrialized grade materials produces a manufacturing / industrial, architectural expression is ill-suited for residential use.



**HEAVY MACHINERY PARKED ALONG THE GREENBELT BUFFER.**

The street pattern is characteristic of a typical commercial / industrial area. In contrast to an urban residential area with a fine-grained public street network that encourages pedestrian and transit use, the streets are wide and oriented towards large vehicle traffic. As shown in the image below, transport trucks frequently park on Burns Road and travel through the area while a large quantity of heavy equipment and supplies are often stored at the back of the properties located along the edge of the existing Greenbelt buffer.

Land in the vicinity of the airport should be considered as a priority target for accommodating future commercial and industrial growth. The Alaska Highway right-of-way and the Erik Nielsen Whitehorse International Airport create high levels of noise and light pollution. Proximity to transportation infrastructure and the airport is vitally important for logistics and commercial related activities – not residential use.



**TRUCKS PARKED ALONG BURNS ROAD, ~60M FROM THE PROPOSED PHASE 1.**

### 4.2.1 FUTURE PHASES

Work on a Master Plan for Future Phases is currently underway. The Master Plan will be used to examine options for creating a vibrant urban residential neighbourhood and to examine the planning and design options to ensure that the future development is functional, attractive, and compatible with the surrounding area. The vision for Phase 2 and 3 is for highly walkable and transit-oriented neighbourhood offering a range of housing options and amenities to accommodate a diverse population.

The scope of work could be extended to investigate the development potential of a vacant infill site located between the Tank Farm and Elijah Smith School (currently zoned PG). It could also investigate relationship to other neighbouring properties including the Ta'an Kwäch'än Council and Kwanlin Dün parcels, potentially delivering significant economies of scale to all parties. Government of Yukon could also leverage this exercise to investigate the option of developing a vacant lot on the south side of Phase 1. The vacant lot (currently zone PG) could provide a supply of gravel to Highways and Public Works.

## 4.3 CLOSURE

The current OCP Designation consists of Residential – Urban. However, the historical evolution of the area has been shaped by a pattern of commercial and industrial activities and land uses that are unsuitable for residential development.

Adverse effects stemming from industrial sites on neighbouring residential properties and value are well known and thoroughly documented. Residential uses within proximity of commercial and industrial areas can create serious land use conflicts and have negative impacts on land values. More importantly, industrial activities located near residential properties can destabilize existing commercial and industrial users.

The City's supply of commercial and industrial land is low. Residential land is also in short supply and housing costs are on the rise. Whistle Bend has failed to meet the City's housing target, even as the numbers of lots supplied are on the rise. This project has the potential to help the City satisfy the immediate need for commercial / industrial land and achieve its growth target.

The Whitehorse Upper Tank Farm property has the potential to become a prime transit-oriented neighbourhood. Cities around the country are eager to reap the environmental, economic, and social benefits of infill developments and are going as far as changing regulations and policies to encourage and facilitate developments like this one. The Whitehorse Upper Tank Farm is key to meeting the growing demand for urban residential housing near transit, downtown, and other amenities.

However, development on Future Phases involves a high level of risks as well as significant resources and upfront capital investments to finance the infrastructure costs required to provide access to utilities, streets, and other public facilities. By offsetting high upfront capital costs, Phase 1 will help make Future Phases a reality.