

GOVERNANCE AND PRIORITIES COMMITTEE AGENDA

Monday, April 14, 2025 at 12:05 p.m.

Chair: Mayor R. Alty,

Councillor S. Arden-Smith, Councillor G. Cochrane, Councillor R. Fequet, Councillor B. Hendriksen, Councillor C. McGurk, Councillor T. McLennan, Councillor S. Payne, and Councillor R. Warburton.

<u>Item</u> <u>Description</u>

1. Opening Statement:

The City of Yellowknife acknowledges that we are located in Chief Drygeese territory. From time immemorial, it has been the traditional land of the Yellowknives Dene First Nation. We respect the histories, languages, and cultures of all other Indigenous Peoples including the North Slave Métis, and all First Nations, Métis, and Inuit whose presence continues to enrich our vibrant community.

- 2. Approval of the agenda.
- 3. Disclosure of conflict of interest and the general nature thereof.
- 4. A presentation from InterGroup Consultants Ltd. regarding the Water Rate Review.

ANNEX A

5. A memorandum regarding whether to proceed with the creation of a new Area Development Plan for Lot 32, Block 568, Plan 4452 in Kam Lake; and whether to amend Community Plan Bylaw No. 5007, to redesignate a portion of Lot 32, Block 568 from Engle Industrial Business District to Kam Lake.

IN CAMERA

ANNEX B

6. A memorandum regarding whether to appoint members to serve on the Community Advisory Board on Homelessness.



MEMORANDUM TO COMMITTEE

COMMITTEE: Governance and Priorities

DATE: April 14, 2025

DEPARTMENT: Planning and Development

ISSUE: Whether to amend Community Plan By-law No. 5007, to redesignate a portion of

Lot 32, Block 568 from Engle Industrial Business District to Kam Lake; and, whether to proceed with the creation of a new Area Development Plan for Lot 32, Block

568, Plan 4452 in Kam Lake.

RECOMMENDATION:

That Council direct Administration to:

- 1. Amend Community Plan By-law No. 5007, to redesignate a portion of Lot 32, Block 568 from Engle Industrial Business District to Kam Lake; and
- 2. Design a new area development plan for Lot 32, Block 568, Plan 4452 in Kam Lake.

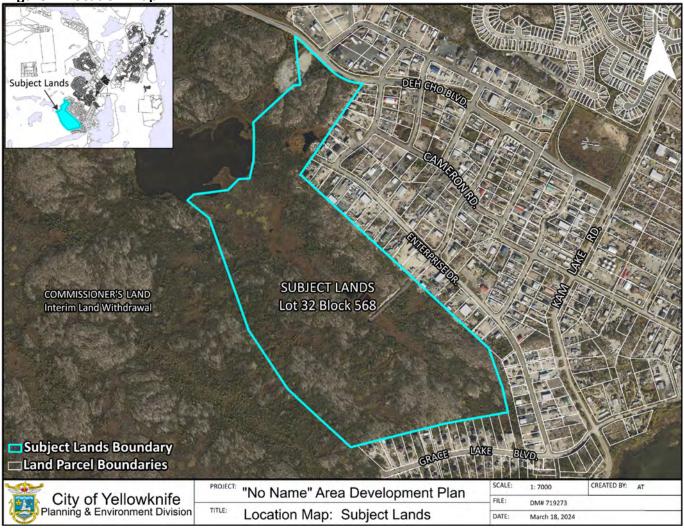
BACKGROUND:

Lot 32, Block 568, Plan 4452 ("the subject land") is an approximately 68.1-hectare parcel of undeveloped, city-owned land. Community Plan By-law No. 5007, which came into effect on July 27, 2020, designates that the lands southwest of Enterprise Drive present an opportunity to accommodate future light industrial development (Section 5.4.3). See Figure 1.

On March 25, 2024, Council heard a presentation from the Director of Planning and Development, outlining that public consultation, a Market Review, and a Servicing Review would be conducted. The public consultation and Market Review have now been completed; the Servicing Review will proceed as part of an Area Development Plan.

The Public Engagement Report and Market Study have now been finalized and are provided to Council for review and consideration for the development of an Area Development Plan of the subject land (Attachments 1 and 2).

Figure 1: Location Map



COUNCIL STRATEGIC DIRECTION/RESOLUTION/POLICY

Strategic Direction #1	People First
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Focus Area 1.1 Reconciliation

Reconciliation Continuing to nurture positive and respectful relations with

Indigenous governments, organizations and peoples

Strategic Direction #3: Sustainable Future

Focus Area 3.1 Resilient Future

Enhancing Yellowknife as a great place to live, visit, work and play now and

into the future.

Focus Area 3.2 <u>Growth Readiness</u>

Ensuring land development supports economic readiness and community

priorities.

Focus Area 3.3

Robust Economy

Doing our part to stimulate and amplify economic development opportunities.

APPLICABLE LEGISLATION, BY-LAWS, STUDIES, PLANS:

- 1. Cities, Towns and Villages Act S.N.W.T. 2003, c.22;
- 2. Community Planning and Development Act S.N.W.T. 2011,c.22;
- 3. Community Plan By-law No. 5007;
- 4. Zoning By-law No. 5045, as amended;
- 5. Land Administration By-law No. 5078; and
- 6. City of Yellowknife Development & Design Standards Manual (2022).

CONSIDERATIONS:

Public Engagement Summary Report

Public engagement took place in spring and early summer of 2024. The Public Engagement Summary Report (Attachments 1) highlights business interest in larger lots and improved infrastructure, with a preference for clear land-use policies that support commercial and light industrial growth. Participants identified land demand assessment for the intended use as a key concern. While some questioned the need to expand light industrial areas in Kam Lake, there was broad agreement that an updated market demand review should guide future development of the land.

A market study to assess the demand for light industrial and commercial land was recommended in the Public Engagement Summary Report, aligning with best practices for similar developments. The Planning and Development Department moved forward with a market demand analysis, awarding a contract to a consulting firm in the fall of 2024.

Market Study

The Market Study (Attachment 2) demonstrates that there will be sustained demand for light industrial, commercial, and agricultural land in Yellowknife over the next 20 years. The analysis identifies a shortage of available lots for businesses requiring large parcels, staging areas, and logistical support. Additionally, the study suggests strategic land allocations to accommodate growing interests in emerging industries such as commercial agriculture and horticulture.

Key Findings:

- Forecasted demand for approximately 611,000 square feet of floor space for targeted land use categories (NAICS industry categories) over the next 20 years, requiring 108 gross acres (44 hectares) of land.
- The highest demand is projected in the construction sector (447,000 sq ft on 51 acres), followed by manufacturing and warehousing (162,500 sq ft on 37 acres), and agriculture (90,000 sq ft on 21 acres).
- Self-storage facilities also present a small demand opportunity (20,000 sq ft).
- Future development should align with existing industrial intensification trends, focusing on light industrial, commercial, and agriculture uses.

The Market Study conclusions support the creation of an Area Development Plan to ensure that growth is coordinated, demand-driven, and aligned with long-term economic objectives for the city.

Area Development Plan

Area Development Plans ('ADPs') are long-term planning policy documents that set out a development vision for specific geographical areas and put in place policies and guidelines that work to achieve the vision. The implementation of ADPs is regulated by the Community Planning and Development Act ("the Act"). ADPs illustrate and provide policies regarding subdivision, land uses, densities, essential services and facilities, road layouts and circulation, pedestrian movements, the phasing of development, as well as other elements as identified by the City. ADPs are required to follow the objectives and policies set out in the corresponding land use designation(s) in which they exist.

The adoption of the ADP will follow the process outlined in the *Community Planning and Development Act*.

Community Plan By-law No. 5007

The Community Plan (the 'Plan') sets out a vision, goals and policies for the future growth and development of Yellowknife over the next 20 years.

The subject lands are designated as Kam Lake for the southern portion, totaling 59.8 hectares, while the northern portion, covering 8.29 hectares, is designated as Engle Industrial Business District. Kam Lake is a light industrial and commercial area, historically the City's main industrial hub. The area lacks residential amenities and is characterized by uses such as outdoor storage and warehousing. Some parcels have accessory dwellings, but residential uses are secondary to the principal industrial and commercial activities on-site.

Zoning By-law No. 5045, as amended

The subject lands are currently zoned "GM – Growth Management". The purpose of the GM zone is to control and regulate land use so that future development may proceed in an orderly and well-planned manner. Once the ADP is adopted, the Zoning By-law will be amended to conform to the policies of the Community Plan as well as the new Area Development Plan.

Financial Considerations

The majority of costs related to planning, surveys, acquiring, developing, and disposing of municipal lands or installation of servicing infrastructure may be funded by the Land Development Fund. Recovery of all expenditures is accounted for in the sale of land in accordance with the Land Administration Bylaw No. 5078 and outlined in the marketing plan for the development.

Site Servicing and Infrastructure Constraints

The proposed development area is greenfield land, meaning it currently lacks municipal infrastructure and will rely on trucked water and sewage services. This servicing model presents several challenges that must be carefully considered before proceeding with development.

Fire protection in the area will be limited, presenting risks to emergency response and public safety. As part of the overall feasibility assessment for development, these risks must be thoroughly evaluated. Consultation with Public Safety and Public Works and Engineering will include considerations for fire

protection, wildland fire protection, fuel breaks, and emergency response. Future planning will need to incorporate fire suppression alternatives and appropriate mitigation strategies to address these risks.

These servicing constraints highlight potential long-term land use planning challenges to sustain a well-serviced, resilient, and cost-effective development. Addressing these issues upfront will be essential in determining the viability of development and ensuring that future growth aligns with sound planning principles and municipal priorities.

ALTERNATIVES TO RECCOMENDATION:

That Council direct Administration to not proceed with the creation of a new Area Development Plan for Lot 32, Block 568, Plan 4452 in Kam Lake, at this time.

RATIONALE:

Adequate supply of light industrial and commercial lands for current and future businesses is critical for Yellowknife's sustainable economic growth and development. The Market Study confirms sustained demand for light industrial, commercial, and agricultural development over the next 20 years. Through public engagement, local businesses have expressed a need for larger lots, improved infrastructure, and better access to serviced industrial land, which the existing supply of land cannot accommodate. The Market Study projects over 611,000 square feet of new floor space will be required, reinforcing the need for new subdivision and servicing plans.

The Community Plan identifies this area as appropriate for future light industrial and commercial expansion. Proceeding with the creation of an ADP will allow for strategic land-use planning, ensuring efficient infrastructure development, cost-effective servicing, and compatibility with surrounding land uses. The new ADP is expected to support business expansion and long-term economic development opportunities.

ATTACHMENTS:

- 1. Public Engagement Summary Report and Appendices (DM#781857);
- 2. Market Study (DM#790258); and
- Presentation (DM#791214).

Prepared: March 7, 2025; AT Reviewed: March 10, 2025; CW



CITY OF YELLOWKNIFE

Kam Lake Area Development Plan Public Engagement Summary Report

The engagement activities described in this document were facilitated by Dillon Consulting Limited (Dillon), a third-party organization. As part of the scope of work, Dillon reviewed and summarized the results. The findings and conclusions in this document reflect Dillon's independent assessment and analysis.



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21-036 - RFP Document

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Executive Summary

The City of Yellowknife is in the preliminary stages of creating an Area Development Plan for the area Southwest of Enterprise Drive (herein referred to as the 'Subject Lands') seen on Figure 1 below.

Figure 1: Location Map of Subject Lands



The purpose of this report is to summarize feedback from preliminary public engagement activities and recommend next steps for the development of the Subject Lands in Yellowknife, identified for potential light industrial development. This initiative aligns with the Community Plan By-law No. 5007 Section 5.4.3, which identifies that there is an opportunity to subdivide the land southwest of Enterprise Drive for future light industrial activities and that the development and subdivision of the land has been identified as a priority.



Key Engagement Insights

Land Demand Analysis

Participants questioned the necessity of developing new light industrial areas, advocating instead for utilizing existing zones like the Engle Business District. They called for thorough land demand assessments to provide documented evidence to support the need for more development in Kam Lake.

Transparency and Trust

A recurring theme was the need for transparency and trust. Past promises to preserve the area as greenspace were highlighted, with frustration expressed over broken commitments and mishandling of issues such as firebreaks and water management. Improved transparency in consultation and planning processes was strongly recommended.

Enforcement of Bylaws

There was significant concern about the lack of enforcement of existing bylaws, which has undermined community trust. Examples of unchecked illegal activities were cited, emphasizing the need for stringent enforcement before pursuing new developments.

Community Engagement

Residents stressed the importance of meaningful community engagement and up-to-date studies on land demand, especially post-2018. The current survey was criticized by some individuals for bias toward light industrial uses, prompting suggestions to include more diverse options like residential and recreational land uses in future planning.

Recommendations

This report provides recommendations for moving forward on the Area Development Plan for the Subject Lands, including:

- Conduct geotechnical and market studies to assess land suitability and market needs;
- Evaluate wildfire protection, traffic impacts, and drainage to ensure comprehensive planning;
- Implement mitigation measures like buffers to reduce nuisances (noise, dust, odours);
- Improve bylaw enforcement to rebuild community trust;
- Conduct additional community engagement, particularly with the business community to better understand their land development needs;
- Ensure ongoing, meaningful community involvement and transparency in planning;
- Preserve environmental and recreational spaces, notably around the Kam Lake and Grace Lake areas.



Conclusion

The feedback highlights a strong desire for the City to prioritize transparency, effective enforcement, and community-centric planning for the Subject Lands. Respecting previous commitments, maintaining environmental quality, and basing new developments on clear, documented demand are essential to gaining community support and trust.



Introduction

Purpose

1.0

The purpose of this report is to:

- Provide a summary of the feedback from the preliminary public engagement activities;
- Highlight opportunities and challenges that should be addressed; and
- Recommend next steps for the development of the Subject Lands.

What is an Area Development Plan?

An Area Development Plan is a strategic framework designed to guide the growth and development of a specific geographic area. It is a guiding document that helps coordinate efforts and how decisions are made to achieve long-term development goals. Area Development Plans are typically created through a collaborative process involving planners, government officials, community leaders, and residents. The primary goal of an area development plan is to create a cohesive and sustainable vision for the future that balances the needs of residents, businesses, and the environment.

Key components of an Area Development Plan may include:

- Land Use Designations Designating specific areas for residential, commercial, industrial, recreational, and agricultural uses to ensure balanced development;
- Infrastructure Planning Planning for essential services such as water supply, sewage systems, electricity, and telecommunications to support current and future needs;
- Transportation Planning Developing efficient transportation networks, including roads, public transit, bike lanes, and pedestrian pathways, to improve connectivity and reduce congestion;
- Housing Strategies Addressing the need for affordable and diverse housing options to accommodate different population segments;
- Economic Development Identifying opportunities to attract and retain businesses, create jobs, and stimulate economic growth;
- Environmental Sustainability Implementing measures to protect natural resources, reduce pollution, and promote green spaces and sustainable practices; and,
- Community Services Ensuring access to essential services such as healthcare, education, public safety, and recreational facilities.

Background and Context

The City of Yellowknife's Community Plan (the 'Plan') By-law No. 5007 came into effect on July 27, 2020. The Plan provides a policy framework that sets out a vision for the future growth and development of Yellowknife over the next 20 years. One of the outcomes of the Plan was recognition of the need for the City to develop additional lands to accommodate future growth and development.



To accomplish this, the City worked with consultants and the public to identify areas appropriate for this growth. Section 5.4.3 of the Plan identifies that the Subject Lands were identified as an area that could provide an opportunity to accommodate future light industrial demand.

The Subject Lands are bounded by Enterprise Drive to the northeast, Grace Lake Boulevard to the south, and Commissioner's Land to the west, which make up an undeveloped 68.1 hectare parcel on Lot 32 Block 568 (See Figure 1). The undeveloped lands currently consist of a mix of rock, trees, vegetation, and water. The site can currently be accessed via three City-owned parcels:

- 1. Lot ROAD, Plan 1991;
- 2. Lot ROAD R5, Block 534, Plan 4452; and,
- 3. Lot 22, Block 534, Plan 4452.

However, the accesses are undeveloped.

The Community Plan designates the Subject Lands as Kam Lake. Kam Lake is intended as an area that supports the production and sale of goods and services in the City. Historically the primary industrial area of the City, Kam Lake was not designed to accommodate residential uses and related amenities such as parks, sidewalks or piped water and sewer services. The primary land use activities for lands designated as Kam Lake include a mix of light industrial and commercial activities with some parcels having accessory dwelling units that are intended to support the primary light industrial or commercial uses. The industrial nature of the area means that lots tend to be designed to accommodate uses that are not compatible with sensitive land use development (residential, institutional). These uses typically generate nuisances such as noise, vibrations, odours, emissions, and other potentially negative impacts that are not compatible with residential development. The Community Plan identifies that going forward, Kam Lake is intended to remain a low intensity industrial and commercial area with wider street widths and road shoulders, allowing for the safe and efficient movement of large vehicles and equipment.

Objectives of Engagement

1.1

The purpose of the engagement process is to open conversations with residents and businesses about the future of the Subject Lands.

For the creation of the Area Development Plan, the following goals and objectives were identified:

Awareness & Understanding

- Raise broad awareness of the Area Development Plan process and opportunities for
- Commit to communicating clearly, concisely, openly, and proactively;
- Build a shared understanding of what the Area Development Plan will look like 'on the ground'; and,
- Provide information required to stimulate constructive and meaningful input.



Opportunity & Input

- Ensure meaningful engagement opportunities are provided for stakeholders early;
- Actively listen and record stakeholder feedback and use this information to inform Area Development Plan policies; and,
- Build strong relationships between stakeholders and decision-makers to foster collaboration and cooperation.

Process & Accountability

- Ensure Area Development Plan progress information is easily accessible and transparent for all stakeholders;
- Provide feedback throughout the process;
- Keep updates clear and to the point; and,
- Demonstrate how feedback that is received influenced the approach to the Area Development Plan.

Engagement Methods

1.2

Public & Stakeholder Engagement

Three methods were used for public and stakeholder engagement:

- 1. Survey The City launched a public survey on the PlaceSpeak platform on May 28th, 2024. The survey closed on June 17th, 2024. The survey consisted of ten questions. A summary of the survey results can be found in Section 2.2.
- 2. Focus Groups The City facilitated two focus group sessions. The first session, on June 5th, 2024, was intended for residents of the Grace Lake Residential Estate Zone. The second session, on June 6th, 2024, was intended for business owners in Kam Lake and the Yellowknife Chamber of Commerce.
- 3. Website The City posted information about the Area Development Plan on its website on a page titled, "New Area Development Plan (Kam Lake)". The page linked to the online survey and there was also an email where residents could ask questions and provide feedback directly to the Planning and Environment Department website. Interested parties could also subscribe to the page to get updates.

Indigenous Engagement

The City reached out to the Yellowknives Dene First Nation (YKDFN) and North Slave Metis Alliance (NSMA). The YKDFN declined to meet but asked to be kept informed about the project as it progresses. The NSMA formally met with the City on July 25th, 2024. A summary of the feedback from NSMA can be found in Section 2.4.



Scope and Limitations

Each of the public engagement activities had limits as detailed below:

Online Survey

1.3

- **Selection Bias** The survey was voluntary and non-representative of the general population. Therefore, participants self-select, which results in a non-representative sample. Those who chose to participate may have stronger opinions or more interest in the topic than the general population.
- Access Issues Not everyone has equal access to the internet or digital devices, excluding certain demographic groups such as the elderly, low-income individuals, or those without reliable internet access.
- Interpretation of Questions Without clarification, participants may have misinterpreted survey questions, affecting the reliability of the results. More specifically, this may be an issue for residents that do not have familiarity with the City's Community Plan or Zoning Bylaw and how those documents are created and implemented. This could include new residents and residents that are less engaged in municipal governance issues.

Focus Group Sessions

- Small Sample Size The focus groups involved a limited number of participants, which may not fully represent the views of individuals that were unable or chose not to attend. Only landowners in the Kam Lake Zone and Grace Lake Residential Estate Zone were invited to the focus group sessions.
- Scheduling Constraints Only those who were available at the scheduled times could participate, which may have excluded people with other commitments like work or childcare. Only two evening in-person focus group sessions were available.
- Lack of Business Community Input The second of the two focus group sessions was intended for business owners in Kam Lake. A few businesses were represented in the second group session. However, there were fewer businesses than expected at the focus group session and as a result the quantity and diversity of feedback from the business community is limited.

Emailed Feedback Based on Website Information

- Engagement Level The passive nature of this activity may result in low participation rates. People might not take the time to read the information and provide feedback.
- Access Issues Like online surveys, those without internet access or digital literacy are excluded, limiting the diversity of feedback.
- Response Quality There is no guarantee of the depth or quality of feedback, as responses may be brief and lacking in detail.



Overlap of Respondents in Engagement Activities

It should be noted that some individuals took part in all engagement activities (survey, focus group, and emailed feedback) so there is some overlap in responses. Therefore, the feedback from the engagement should not be interpreted as having entirely distinct unique responses between the public engagement activities.

Each of the engagement methods has its own strengths and can be effective in certain contexts. This is why multiple engagement methods were employed. However, the feedback from the initial public engagement activities should not be interpreted as representative of all Yellowknife residents. Nonetheless, a number of key opportunities and challenges were identified, and these challenges and opportunities should be more fully explored through additional public engagement as the project progresses.



Engagement Summary and Analysis

This section provides a summary and analysis of the feedback from the public engagement activities. Each public engagement activity had varying levels of participation from the public.

The online public survey had the most participation with 93 completed responses. The focus group sessions had a total of 14 attendees with some attendees participating in both sessions. 9 emails were received from City residents with respect to this project. Some of the emailed comments were from individuals that also participated in the online survey and focus group sessions.

Focus Group Sessions 2.1

2.0

Focus group sessions were held on Wednesday, June 5th (Session 1) and Thursday, June 6th (Session 2) 2024 from 7:00pm-8:30pm at City Hall. The first session was intended for Grace Lake residents and the second session was intended for business owners and residents of Kam Lake as well as the Yellowknife Chamber of Commerce.

Both sessions were facilitated by a Community Planner from Dillon Consulting and two City of Yellowknife planning staff. A brief PowerPoint presentation was given before each session to provide some context on the Subject Lands followed by a discussion period where participants were asked to give feedback on what kind of development they thought would be appropriate for the area. Seven individuals attended Session 1 and nine individuals attended Session 2. Some individuals attended both sessions.

All individuals in Session 1 were residents of the Grace Lake neighbourhood. Individuals in Session 2 were a mix of residents from Grace Lake and Kam Lake.

Summary of Feedback from Session 1 2.1.1

The comments from Session 1 reflect a range of concerns and questions raised by attendees regarding the demand for additional development in Kam Lake.

Demand for Light Industrial and Commercial Land

Attendees suggested that additional demand for light industrial development could be accommodated in the Engle Business District. Attendees questioned why rezoning within Engle itself is not considered instead of expanding into new areas, indicating a preference for minimal disturbance to the Subject Lands.



The need for proper land demand assessment was emphasized by attendees, with requests for documented evidence of industrial and commercial demand. Questions were raised about why development is being proposed in the Kam Lake area instead of other locations, pointing to issues with land acquisition by the City and the impact this has on residents. The introduction of residential uses in the survey options was also suggested.

Transparency and Trust

Several concerns revolved around transparency and trust, highlighting past commitments by the City Council that suggested the area would remain undeveloped, preserving it as greenspace with recreational significance, such as a snowmobile trails and ski trails. The attendees expressed frustration over the handling of firebreaks and water management concerns, noting a lack of satisfactory responses from the City. They asked for more transparency in the consultation report and planning processes to ensure community trust and involvement.

Environmental and Recreational Concerns

Environmental and recreational concerns were also prevalent, with many attendees advocating for the preservation and expansion of trails and ensuring industrial activities do not negatively impact Grace Lake, a popular swimming and fishing area. Buffers and separation between different land uses are seen as necessary to maintain quality of life and mitigate nuisances such as dust, noise, traffic, vibrations, and odours.

Development Preferences

Some attendees expressed a desire to commence development from the north along Deh Cho Boulevard and seek clarity on the City's plan for firebreaks and other land management issues, including questions about Con Mine and the Interim Land Withdrawal Area. Attendees expressed that they wanted to be kept informed and involved in ongoing planning processes, emphasizing the importance of community consultation and meaningful input.

Other Comments

Lastly, the popularity of residential estate type of development in Grace Lake was noted. Overall, there was a strong sentiment that any new development should proceed only if there is confirmed demand and should respect previous commitments and community needs.



Summary of Feedback from Session 2 2.1.2

The comments from Session 2 reflect a broad range of concerns about proposed development and land use in Kam Lake and Yellowknife more generally, particularly referencing firebreaks, greenspace, bylaw enforcement, and community needs.

Firebreak and Land Use

There is significant concern about the designation and impact of the firebreak in the Kam Lake and Grace Lake area on future development. Clarification was sought on whether the firebreak itself is considered a specific land use category, potentially labeled as infrastructure, and if it restricts future development. Questions were raised about who is responsible for reviewing and discussing the implications of the firebreak, with suggestions that the Government of the Northwest Territories (GNWT) should be involved, especially if private land was affected during its creation.

Land Use Designations and Greenspace

Attendees expressed the need for clear definitions and distinctions between the Kam Lake Designation in the Community Plan and the Kam Lake zone in the Zoning Bylaw. There is a strong desire for additional greenhouses and the preservation and expansion of greenspaces, particularly behind Talethelei and Grace Lake. Suggestions include parks and dog walking trails, and concerns were raised about a resident who has built a fence on City land.

Enforcement Issues

There is widespread dissatisfaction with the City's enforcement of existing regulations, affecting trust in any new developments. Examples of past enforcement failures, such as the illegal operation of a campsite and noncompliance in Kam Lake, underscore the community's concerns. Residents believe that without stringent enforcement, new developments should not proceed. The importance of enforcement ties into various comments about maintaining the pristine nature of Grace Lake and ensuring agricultural uses are appropriately managed.

Community Needs and Demand Assessment

A recurring theme was the need for thorough land demand studies before any new development proceeds. Residents argue that changes since the 2018 community plan analysis, including the pandemic, necessitate updated assessments to determine current demand. Several comments suggested developing existing City-owned land first, such as in Engle, rather than developing new areas. There was also a suggestion to create a new and lower tax class for agricultural uses in order to incentivize more agricultural development.



Survey and Community Involvement

There was some criticism about the questions in the online survey, with claims that it lacks neutrality and forces respondents toward selecting light industrial options. Some attendees suggested developing a new survey with more land use options such as residential and recreational uses that are not currently listed as permitted uses in the Kam Lake zone. Ongoing involvement and follow-up with the community are seen as crucial to maintaining trust and ensuring that future development truly reflects community needs and desires.

Other Comments

2.2

Additional comments highlighted varied issues such as concerns about arsenic reports affecting land, the need for appropriate buffers depending on adjacent land uses, and skepticism about the perceived demand for new development. The overarching sentiment is a call for transparency, effective enforcement, and meaningful community engagement throughout the planning and development process.

Online Survey Summary

From May 28th to June 17th, 2024, members of the public were invited to share their thoughts on the new Subject Lands through a survey hosted on the platform PlaceSpeak. The survey was ten questions long. In total, the survey received 93 complete responses. The questions were intended to learn about each survey respondent's interest in the Kam Lake area and their perspectives on future development in the Subject Lands.

Location of Survey Respondents

Most survey respondents, 52%, live or have a business in Yellowknife but not in the Kam Lake or Grace Lake areas, with 35% living or having a business in Kam Lake and 17% in Grace Lake.

Which area of Yellowknife do you live or have a business in? Please select all that apply. In Yellowknife, outside the Grace Lake and Kam Lake areas Kam Lake

0

20

30

40

10

Grace Lake

Figure 2: Location of Survey Respondents

60

50

Connection to Subject Lands

Further, the largest interest in the area being considered for development are residents in another part of Yellowknife, at 52%. The next most popular connection to the area was residents of Kam Lake area. The two least common connections to the area being considered were employees in the Kam Lake area and landowners in the Grace Lake area.

What is your connection to the area being considered for development? Please select all that apply Resident in another part of Yellowknife Interested future business owner Customer in the Kam Lake Area Employee in the Kam Lake Area Business Owner in the Kam Lake Area Land Owner in the Grace Lake Area Land Owner in the Kam Lake Area Resident in the Grace Lake Area Resident in the Kam Lake Area 30 10 20 40 50 60

Figure 3: Connection to Area Being Considered for Development

The uses of the Kam Lake area which respondents were found to frequent most were:

- Living in the Kam Lake (and Grace Lake) area;
- Conducting business / employment;
- Recreation (e.g. hiking, skiing, snowmobiling); and,
- Customer / Shopping / visiting commercial businesses.

Most Supported and Opposed Uses in Subject Lands

Given that the new development area is contemplated as commercial / light industrial in the Community Plan, survey respondents were provided with the 36 permitted uses in the commercial / light industrial zone and asked which of these they would support, and which they would not support in the new development area. Table 1 below shows the most supported and opposed uses for the Subject Lands.

Table 1: Most Supported and Most Opposed Uses for Subject Lands

Five Most Supported Uses	Five Most Opposed Uses
Urban Agriculture, Community	Automobile Wrecker Facility
Convenience Store	Kennels
Urban Agriculture, Commercial	Float Plane Base
Food and Beverage Service	Card Lock Facility
Animal Services	Work Camp



^{*}Note that survey respondents could select more than one option

Figures showing the levels of support from survey respondents for each of the 36 permitted uses can be found in Appendix D.

Further, respondents were asked which other uses and development they would like to see in the area being considered. Answers which frequently repeated were:

- Residential:
- Mixed-use residential / commercial;
- Commercial, especially a convenience store; and,
- Green space, recreational space, walking-trails.

Other less common suggested uses were:

- Dog park;
- Junk storage;
- Northern lights observatory;
- Wood pellet and wood chip storage;
- Plant nursery; and,
- Tiny home community, and campground.

<u>Preferred Uses in the Area Development Plan</u>

The area under consideration is in the Kam Lake Community Plan designation and will be a new zone within this designation. Respondents were asked which of the aspects from the existing Kam Lake area they would like to see incorporated into the new Area Development Plan, and which aspects they would not like to see included.

Aspects of Kam Lake which respondents said they would like to see included in the Area Development Plan include:

- Residential housing, including work / live accommodations;
- Commercial / light industrial;
- Water bodies proximate to developed areas; and,
- Paved roads

Aspects of Kam Lake which respondents said they would not like to see included in the Area Development Plan include:

- Dog kennels, sled dogs;
- Industrial sprawl;
- Inaccessibility, including lack of sidewalks and bike routes;
- Many respondents note that Kam Lake is unpleasant, even just to pass through, and this should not continue in a new light commercial / industrial area;
- Don't continue the narrow streets; and,
- Some existing Kam Lake businesses are loud. These types of uses should not be permitted.



Other Survey Comments

Other comments received in the survey were that the project should not take too long, there should be opportunities for businesses to purchase larger lots, adjacent landowners should get the first option to buy additional properties, the timing of the proposed new development should be shared with the public, and that it is a mistake to ring the city with industrial development, limiting potential future residential development.

Table 2 below provides a selection of direct quotes from the survey showing the diversity of opinions on development of the Subject Lands:

Table 2: Selection of Comments from Online Survey

Responses when asked to share feedback about the proposed development in the area

- "I'm opposed to developing the area"
- "Hope it is done in a reasonable timeline, unlike most other projects"
- "This is an opportunity for people/business to own larger lots and to develop business. It would be nice to maintain trees and greenery (that take limited intervention as water is trucked in Kam Lake)"
- "Make it less like Kam Lake now, we don't need more industrial mess"
- "Make it business and housing friendly. Allow landowners to use their land as they need so long as they abide by the zoning and city by laws. Less complications on residential/mixed use"
- "The area development needs to respect and maintain existing uses related to snowmobiling, dog sledding, pet and vet services."
- "Fine tune the zoning to avoid the mess we have in kam lake Work with existing kam lake property owners to better develop what we have."
- "It's good to see the City considering more land for development, the lack of piped city infrastructure is a concern due to cost and ongoing O&M costs. We should be looking at areas that can easily be connected to municipal services"
- "Reasonable buffer zones between different zoning types will be key to mitigating conflicts between neighbors. Specifically, Grace Lake and the adjoining lands in this proposed area."
- "Regardless of what ends up being developed, I would like there to be some sort of bylaw upheld stating the area had to be kept clean and tidy and somewhat esthetically pleasing as most spaces that are currently out there are in complete disarray and a bit of an eyesore"
- "With current wildfire concerns could more permanent recreational zones acting as firebreaks be incorporated along the edges of the zone?"
- "Very much not interested in more generic gravel lots on where existing march vegetations and bird nesting grounds currently exist"



Email Comments

2.3

Various comments were received by email. Many of these comments reflect strong opposition to further development in the Kam Lake area, particularly near Grace Lake. Residents emphasized that Grace Lake was marketed and purchased for its quiet, pristine, and natural setting, and they are concerned that expansion of industrial activities will disrupt this environment, bringing noise, pollution, and reducing property values. It was suggested to seek alternatives for commercial expansion, such as utilizing Engle Business Park or vacant areas elsewhere. The city's past planning processes were criticized for a lack of transparency and broken promises, which has led to distrust. Additionally, there are concerns about neglected downtown development, with a request for the city to focus on revitalizing vacant lots to combat crime and social disorder before undertaking new projects elsewhere. Lastly, some residents felt that the PlaceSpeak survey was biased and believe a green space would be the best use for maintaining the quality of life in their neighborhood.

Some support for the proposed new development area was also received, including someone's suggestion that caretakers' residences continue to be permitted in the new development area.

Common Themes 2.4

The feedback from the public engagement activities highlights several common themes and significant community concerns regarding the proposed development in the Subject Lands.

Land Demand Analysis

One of the central issues is the demand for additional light industrial and commercial land. Many participants suggested that such development should be concentrated in existing areas like the Engle Business District rather than expanding into new zones. There was a strong emphasis on the need for a proper land demand assessment, with calls for documented evidence to justify further development. Questions were also raised about why the development is proposed specifically in Kam Lake, suggesting that the City should consider using its current land holdings more efficiently.

Transparency and Trust

A recurring theme is the need for transparency and trust. Past promises by the City Council to preserve the area as greenspace have led to frustration over the current proposals. Many attendees expressed significant concerns about how well the City has handled previous issues, such as firebreaks and water management, and called for more transparency in the consultation and planning processes. There was also a call to maintain the environmental and recreational quality of the area, particularly around Grace Lake, advocating for the preservation and even the expansion of trails.



Bylaw Enforcement

Another significant concern is the lack of enforcement of existing bylaws and regulations. Residents expressed dissatisfaction with the City's enforcement track record, noting examples of illegal activities and noncompliance that have gone unchecked. This lack of enforcement has eroded trust in the City's ability to manage new developments properly. Many residents believe that without strict enforcement, new developments should not proceed.

Meaningful Community Engagement

Community needs and desires were another major topic, with many attendees calling for more meaningful community engagement and consultation. The need for updated demand studies was emphasized, particularly given changes since the last community plan analysis in 2018. There were also criticisms of the existing survey used to gather public input, which many felt was biased towards light industrial uses. Various residents suggested more diverse land use options, including residential and recreational uses, and stressed the importance of reflecting the community's true needs and desires in any future development plans.



Indigenous Engagement

The City attempted to meet with the North Slave Metis Alliance (NSMA) and the Yellowknives Dene First Nation (YKDFN) to better understand their interests and/or concerns about development of the Subject Lands.

Meeting with NSMA 3.1

3.0

City staff from the planning department met with the North Slave Metis Alliance (NSMA) on July 25th, 2024 to better understand their interests in the Subject Lands.

NSMA stated that they are willing and interested in working with the City on this project. They expressed their interest in being informed and involved in the project from start to finish. To inform and learn from all interested NSMA members, they suggested that City staff conduct an information session with NSMA members in the future as the project progresses.

NSMA's offices are in Kam Lake. They are interested in potentially purchasing more land to expand in the Kam Lake area and would be interested in opportunities to buy a parcel from the city if the area is further developed as commercial / light industrial, especially if land was available to them at a discounted rate.

YKDFN Correspondence 3.2

The land to the west of the Subject Lands is withdrawn land as part of the ongoing Akaitcho Process. YKDFN was contacted to see if they were interested in a one-on-one meeting to better understand their interests in the Subject Lands and how future development may impact their interests for the withdrawn land to the west.

At this time, YKDFN did not feel the need to meet. However, they asked to be kept informed about the progress on the Area Development Plan and they may be interested in meeting in the future as discussions about the Subject Lands evolve.



Opportunities, Challenges and Recommendations

4.0

Based on the feedback from the public engagement activities, several opportunities and challenges were identified that will require more study and examination prior to developing an Area Development Plan for the Subject Lands. Table 3 below provides a list of the opportunities and challenges identified as well as recommendations that should be considered before developing an Area Development Plan for the Subject Lands.

Table 3: Area Development Plan Opportunities, Challenges and Recommendations

Opportunities and Challenges	Recommendation
Geotechnical suitability of land for development is unknown.	A geotechnical study should be completed to determine suitability of land for development
There is uncertainty about the market demand for more developable land in the area.	A market study should be conducted to determine the market needs for developable land and the types of land uses that are currently unmet with existing land supply.
The Subject Lands are in the urban/wildland interface. Recent work on fire breaks in the area may be affected by development of the Subject Lands.	A better understanding of required wildfire protection measures in the area is required prior to development of an Area Development Plan.
Traffic impacts on existing road network.	A traffic study should be conducted to determine how new development may impact the existing road network and traffic flow.
Wetland and drainage protection	Consider a drainage study to ensure proper drainage and protection of existing watercourses.
Potential for noise, dust, vibration, odours, and other nuisances impacting nearby residents	Consider mitigation measures such as buffers to reduce nuisance impacts
Enforcement of existing bylaws in Kam Lake	Improve enforcement of existing bylaws and regulations to regain community trust
Lack of significant input from existing business owners in Kam Lake	Provide additional targeted public engagement opportunities with the business community
Meaningful community engagement	Ensure continuous, meaningful community involvement and follow-up throughout the planning and development processes of the Area Development Plan.
Environmental and recreational quality	Preserve and expand trails and ensure that industrial activities are balanced with environmental and recreational considerations.



Conclusion

5.0

Overall, the feedback indicates a strong desire for the City to prioritize transparency, enforcement, and community-centric planning in any new developments. The emphasis is on respecting previous commitments, preserving environmental and recreational spaces, and ensuring that any new development is based on a clear and demonstrated demand.



Appendices

Α	Focus Group Session Photos
В	Comments sent to place speak or planning and environment email without identifying info
C	Formal Letter from Bush Order Provisions
D	Survey Responses - Permitted Uses
E	Kam Lake Area Development Plan
F	Tank Farm and FOL Proximity
G	Other Lands
Н	21-036 - RFP Document
1	GLNA Letter - Charlsey White

Appendix A

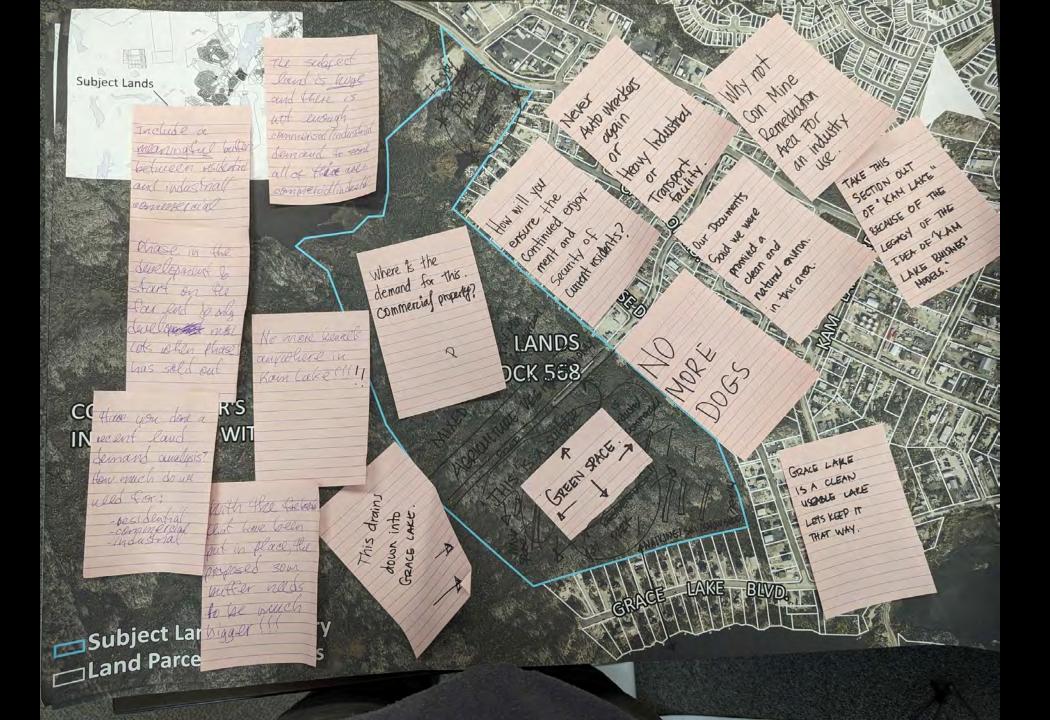
Focus Group Session Photos



Focus Group Session Photos

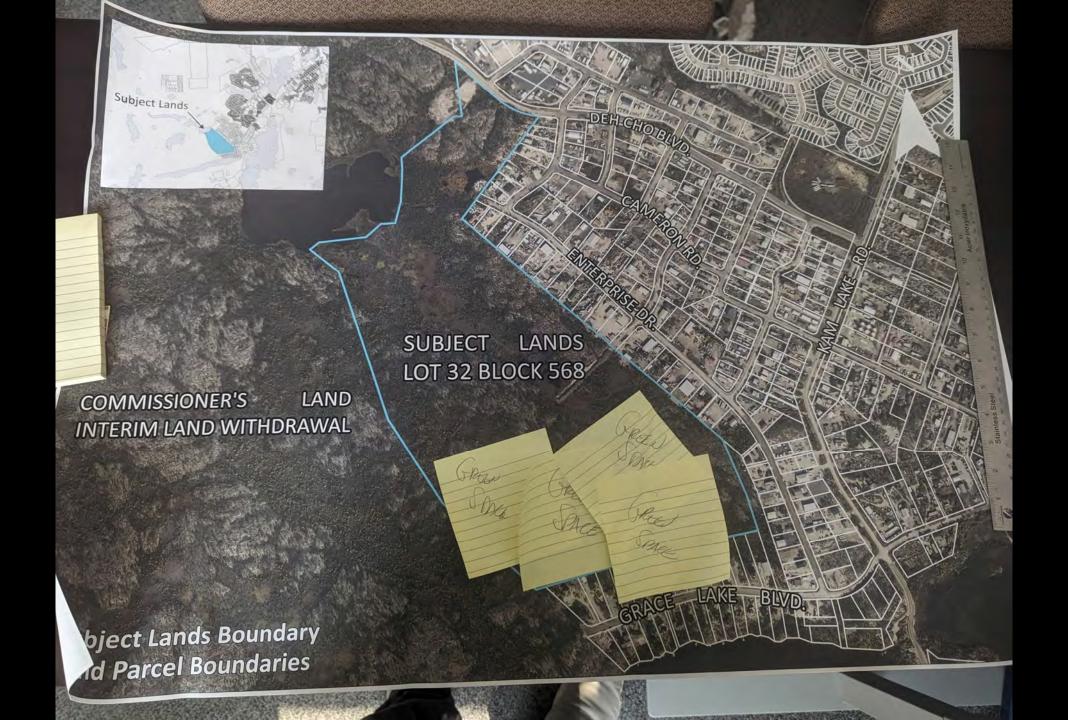
June 6th and June 7th, 2024





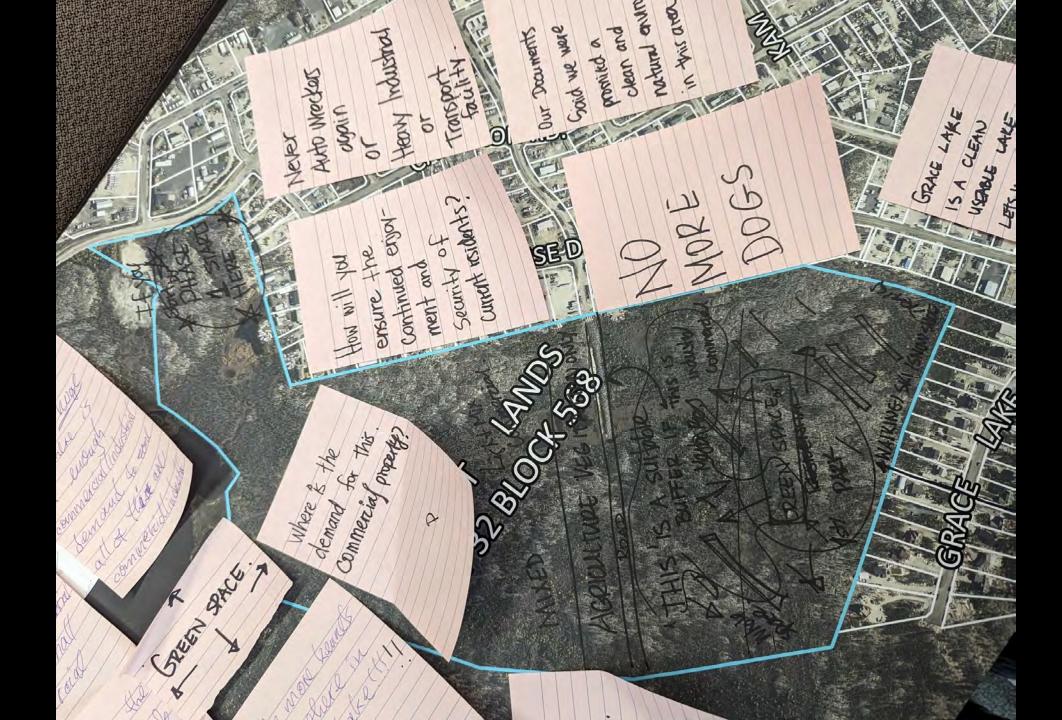
-How are fire breaks Idealt - Amenities for existing residents - Enforcement of current regulations is an issue Consider existing soil conditions to determine what types of uses are appropriate - Encourage more commercial agriculture -Maintain trail network - Buffer blu Grace Lake + ADP - Different permitted uses for different areas of ADP (Zones) - For the community - Tax class for agriculture

Social Economic Environment



- Consider phasing from North to South - Consider new name for ADP -Limit discretionary uses June 5th Focus Group

June 5th Focus Group



Trace Lake JUNE 5th Focus Group Buffer b/w uses in Grace Lake & Kam Lake ADP - Light pollution from adjacent Not supportive of heavy industrial, autorious Consider drainage from ADP to Grace Lk. and existing development -Preserve existing recreational trails + Connect to City trail system -Compatible dev't w/ adjacent uses

Appendix B

Comments Sent to Place Speak or Planning and Environment Division Email



Table B1: Emailed Comments and Comments from PlaceSpeak Survey Discussion

#	Comment
1.	No more development in Kam Lake. For more commercial development eagle park is now established and could be expanded for that use. There are multiple areas to develop new residential subdivisions around the city. Not a good idea to place another residential subdivision beside an industrial park.
2.	Please keep with the allowance of a caretaker's residence if owners want one.
3.	Hello
	I see that the city is seeking input on an Area Development Plan for Kam Lake.
	This made me wonder if there is an Area Development Plan for the downtown?
	As a taxpayer and resident of the downtown core for 30+ years I am quite concerned about its current status and what the city is doing to develop, attract investment and encourage people to live and work downtown.
	I am opposed to blasting and developing tin can hill to house a university and further developing Kam Lake, until there is a plan and active development on the vacant and derelict lots downtown.
	When lots sit empty, and people refuse to come downtown, crime, vagrancy and filth are quick to fill the space.
	I welcome the opportunity to learn what the city is doing about its downtown and am willing to meet and contribute to solutions
	I look forward to hearing from you.
4.	Hello
	Thanks for the meeting last night, it was appreciated.
	As a follow up to some of our comments I've attached just a few of the documents we referenced.
	 The 21-036 RFP, this is the RFP the City slipped out to public tender with no consultation whatsoever. Luckily, this was found quickly and the city immediately retracted it. Please note the drawing on page 13 that Vic in Planning & Lands produced and included in the RFP.
	• Email response from Mayor Alty to Emery Paquin regarding his May 6, 2021, email response to the RFP. Her response we the RFP " was inadvertently released prematurely given there is more planning work that needs to be undertaken".

The detail in the RFP and the fact its implausible for the City to put together a package like this and say it got inadvertently released is very hard for the neighbourhood to swallow. This is the root of the distrust and lack of faith in your department (it does have to be said that the earliest residents were already disappointed with the City that they didn't follow up with other items promised to these early adopters such as sidewalks, trails, floating walk-ways etc.). Based on my discussion with a councilor at the time... he was well aware of the RFP and appeared very pleased it was released. We should have gone to the press with this but decided cooler heads would prevail and began a respectful and unified effort to reach the city with our concerns.... which mostly went unnoticed.

Also attached.

- Grace Lake Neighbourhood Association Letter to Charlsey and all of the City Councilors at the time, if I recall correct Charlsey did not respond and would not respond to our request to meet and discuss.
- "Other Lands" attached asking why these areas are not suitable?
- "Tank Farm and FOL Proximity" trying to understand why the City is so set against caretaker residents in Engle?

In summary, the residents of Grace Lake Blvd were sold a dream of secluded Pristine Nature, Panoramic Views, Estate Style lots with access to Nature, to only find it being secretly undermined by the City.

Leaving the meeting last night, it was poignant to hear one of the longtime Grace Lake Blvd residents say his family lived on Dagenais for 25 years and they never had a conflict or discussion with the City and/or Planning and Lands, in contrast since the earliest days of Grace Lake Blvd it feels to them like a constant battle dealing with the City breaking promises. This is not how long-time residents choosing to retire and continue living in Yellowknife should feel. This toxicity will chase people away.

Thanks again for the meeting last night, it was very much appreciated.











Tank Farm and FOI 222 GLB Proximity.pdf

Tank Farm and FOL Other Lands.pdf
Proximity pdf

21-036 - RFP Document (1).pdf

#	Comment
5.	Please find attached our comments and suggestions to Planning and Environment as you move forward with consultations on an Area Development Plan for the parcel of land located north of the Grace Lake residential area. As original homeowners in the Grace Lake North sub-division, maintaining the quiet, natural setting adjacent to our neighbourhood is extremely important to us, and one of the main reasons we remain invested in the neighbourhood. I am confident you got a good sense of this importance during the recent focus group meetings. Thank you for the opportunity to present our views and trust these will be represented in Planning and Environment's report on public consultations. Kam Lake Area Devel Plan_000082.p
6.	I do not want any commercial or residential developments in the proposed area(s). Not all the Engle lots are sold or developed yet, that area is more suited for commercial properties.
7.	Thank you again for the opportunity to provide input during the Kam Lake Focus Group earlier this month.
	Please find attached a document outlining our feedback for the ADP for the Kam Lake Growth Area.
	Should you require more input, we'd gladly participate.
	Untitled attachment 00011.pg
8.	To whom it may concern,
	This email is in reference to the "Kam Lake extension area" behind the homes on Grace Lake.
	My husband and I live at XXX Grace Lake. This extension area will directly affect us and the other residents on Grace Lake.
	We were going to fill out the survey on "Placespeak", however the survey only gave us options to pick from current business that are in Kam Lake. We are not in favor of any of the business that are currently in Kam Lake to be right behind our home. From the city website, "Kam Lake Industrial Park allows activities and development that does not integrate well with residential streetscapes and neighborhoods". If this is the case, then why would the city plan to expand the industrial area so close to some of the nicest properties and most expensive homes in Yellowknife?

Also, we were told in one of the city meetings that this area is actually "Growth Development" and they were seeking ideas from the residents as to what we would like to see in this area. We are wondering why in the survey do you only include businesses currently in Kam Lake? Why not have options for the residents to choose from like "green space" or "parks"?

Grace Lake was sold by the city as an area to have a "dream home in a quiet, pristine and natural setting" with "immediate access to the outdoors and water recreation". It was advertised under the guise of an estate/country style residential area. This is the reason people on Grace Lake invested a lot of money to build homes and live in this area. Not sure how choosing from any of the businesses in that are currently in Kam Lake will create this "quiet, pristine and natural setting". The only way to maintain a "pristine and natural setting" would be to re-zone this area as a green space. This would be the only way to protect the residents from noise, light, and air pollution. It would also protect the homes and Grace Lake from potential run off from the industrial area. We've already seen what "run-off" has done to the other lakes in and around Yellowknife, Kam Lake included.

Currently we have "immediate access to the outdoors" as the city described this area would be. We use the area behind our home to access the skidoo trails in the winter. There is a trail that can be used to access Grace Lake, and other lakes and trails in the area. That area is also used by many for walk/hiking both in summer and winter. With the proposed development by the city, we would no longer have access to the trails behind our homes for recreational use. This would not just affect us living in Grace Lake but all the other residents in Yellowknife that use this area as well.

During the first night at the City meeting there were a couple of parcels of land shown in and around Engle Industrial park. It was asked if these areas could be used if there is a need for more "light industrial" lots. I think the argument was that they would be too close to the tank farm or that they would have to be 're-zoned'. For us living in Grace Lake and Kam Lake, we already live closer to Petro Canada and Blue Wave then those other two parcels of land would be to the tank farm in Engle. To me, and many others, it makes sense to keep "industrial" like activities together instead of trying to mix them with residential areas like Grace Lake.

It was also asked in the meeting if there is a need for more "light industrial" lots. There was no real answer on this. In fact, there was not one person, on both nights, that was saying that they were interested in this area to purchase a lot. Is there actually a need for more "light industrial" lots? If there is, why can't Kam Lake extend north towards Engle and keep all types of industrial activities together?

	The biggest concern for us is that we bought a house in Grace Lake because we wanted a little more space then was offered in town. We were looking at living out on Ingraham Trail, but decided on Grace Lake for the convenience of having more space but being close work. We bought knowing where Kam Lake was and that we would only have to drive through it to get to our home.
	There is no other way to say it, Kam Lake is a mess. Anyone who has driven though it knows it is a mess and for an industrial area it makes sense that it looks the way it does. If we wanted to live in Kam Lake, we would have purchased a home in Kam Lake. We bought our home in Grace Lake because of the area. For the most part it is quiet, and we have access to the lake and outdoor trails for now. We do find in the winter months that we hear the refrigerator trucks on Enterprise Drive running all day/night. Some days they sound like they are right in our backyard, and they are approximately 500 meters away from our home. We don't complain about this because we bought our home knowing what was on Enterprise Drive. Had we known that the city may want to extend Kam Lake to behind our homes in the future we would have considered purchasing a home elsewhere. Since Grace Lake was originally advertised as 'quiet' and 'pristine' we never thought this would happen or even be considered by the city.
	The other problem that we now see with the proposed development is that our trees on our lot were cut down to create a fire break last August. If this area behind us is to be developed, we will now see all the activities that are happening back there. Again, we bought our home in Grace Lake knowing what was in Kam Lake. We drive though Kam Lake to get to our home. I think everyone is feeling the same way that we don't want to see the eyesore that is Kam Lake in our residential area.
9.	The survey was biased, thus will only yield biased results. For a residential area such as this one, grace lake boulevard, it is essential to keep the area a greenspace. It is completely illogical to develop an industrial area right next to it; the property values would plummet, and in addition the community has no need and will not benefit from this development. I respectfully ask you take heed of this email, because it resonates with what me and the other members of the community feel.
10.	A Strip Mall with multiple stores to support the area would be a good idea for the area. Keep in mind that this area should be protection from forest fires as it was all cut down and cleared for that purpose, Leaving the buffer zone at the back of Grace Lake Residential as suggested in the previous meetings at the City of Yellowknife would be a good idea and to even extend on the buffer area to help with fire protection if needed.
11.	More people are moving to this area, and they need essential amenities like parks, grocery stores, & transit.
12.	I hope this area will be developed as another residential area so that future homeowners will have a chance to live in a decent dwelling rather than renting in moldy apartments. This might be an area where another supermarket, children's playground or community arena can be built or a shopping mall for Costco, Ikea or even Home Depot.

Table B2: Other Responses

#	Respondent	Response
1.	Naka Power	Hello, Naka Power (Yellowknife) is in support of the new development. But please include Naka
		early in the design stage.

Table B3: No Response

#	Respondent	Response
1.	Yellowknife Education District No.1	N/A
2.	Yellowknife Catholic Schools	N/A
3.	WB Water Services	N/A
4.	Kavanaugh Bros Ltd.	N/A

Appendix C

Formal Letter from Bush Order Provisions Commenter 7 - See Table B1 in Appendix B





City of Yellowknife,
Planning and Development Department

June 13, 2024

To Whom It May Concern:

Thank you for giving residents and business owners of Yellowknife the opportunity to weigh in on the Area Development Plan for the area west of Enterprise Drive in Kam Lake.

Our business and home are located at 180 Enterprise Drive, where we work primarily in the agriculture sector (outdoor and greenhouse growing), as well as food manufacturing (wholesale bakery).

Over the past 5-years of owning this property we have brought in a significant amount of soil to the leveled crush property that was created and experienced many hurtles and barriers of starting an agriculture focused business within the City of Yellowknife.

Additionally in 2018, through public forums and through involvement in the Yellowknife Chamber of Commerce we participated in the development of the City of Yellowknife Community Plan. Since then, Yellowknife has seen the economic landscape completely change due to the future closure of the diamond mines, stalled mineral exploration, decrease in tourism due to COVID-19, the increase in living costs due to supply chain issues and overall global downturn, and threat of wildfire across the Northwest Territories.

With this knowledge, and looking at future planning of our business, we have outlined several key components to contribute to the Area Development Plan.

1. Keep as Greenspace

The area in question is currently greenspace that is used recreationally not only by residents of Grace Lake, but also by residents of the Kam Lake area, who might live where they work. This area has become a haven for those on this side of Yellowknife to escape into nature just steps from their doors, much like that of Old Town, Niven, and Con.

Secondly to this point, should development proceed the newly constructed fire break that runs parallel to Enterprise Drive from Grace Lake to an unnamed lake would be rendered useless as it would no longer provide adequate distance to protect properties



and infrastructure should a wildfire approach Yellowknife from the South, which is the most likely case.

2. First Right of Refusal

In the case of some businesses that may need or want to expand to adjacent lots, first right of refusal should be given to those properties that border this growth area, should any development proceed.

For example, for those in agriculture where infrastructure such as water holding tanks, irrigation lines, pumps, and ground equipment are used it would make more business sense to expand a connecting property rather than expand onto another separate one. The case could also be made for a business that offers dog boarding.

More personally, those who have had properties backing onto the current greenspace have long enjoyed the vistas and natural landscapes of this area. Those property owners should be given the opportunity to preserve those perks.

3. Agriculture Specific Property Development

If development of all or some of this area were to proceed we would advocate heavily that a portion be planned for agriculture uses specifically. This should mean any lots developed in a defined area would be assessed as agriculture for taxation purposes.

By planning for agriculture uses and taxation it would remove barriers for existing businesses looking to expand as well as encourage new entrance into the sector.

Figure 1 below outlines a proposed area that we believe would be ideal for potential agriculture uses given the reduced amount of exposed rock.





Figure 1

4. Define Agriculture Uses

It would be beneficial to further define "Urban Agriculture, Commercial" within the City of Yellowknife Zoning By-Law, adopted in 2022. Further definitions of "agriculture uses" should be identified to encourage more uses and monitor future development.

For example, "commercial greenhouse gardens, or nurseries" should be further defined as "horticulture uses, including the operation of cultivating crops, nurseries and commercial greenhouses, with a limited number of small livestock". Where as "facilities for the keeping of small animals include hens, ducks, quail, rabbits, goats and pigs..." should be redefined as "commercial facilities for the primary use of animals include hens, ducks, quail, rabbits, goats and pigs..."

This would help in the planning of this area by mitigating future conflict of potential noise and smell issues within specific neighbourhoods.



5. Discouragement of Light-Industrial Development

While we would rather this area not be developed at all, kept as a greenspace, or developed into a recreational/agriculture area, should development happen we would discourage any Light-Industrial Development.

Currently the Engle Business District is zoned for industrial uses and with remaining properties available and the case for additional properties in that area, no further Light-Industrial uses should be made available in this proposed Growth Development Area.

We believe this area, if developed, should be directly related to the improvement of the lives of the residents of Yellowknife. Either through additional public greenspace, growing or raising of local food, or through increased small businesses that are public facing and customer based.

6. Divide the Growth Development Area into Zones

Should development happen, which it shouldn't, it would be advantageous if the entirety of the area be divided into zones that might best meet the needs of residents of the area, resident of all of Yellowknife, and future development.

- Figure 2 identifies an area that could be suited for commercial and light-industrial development because of its access from DehCho Boulevard.
- Figure 3 identifies an area that could be best suited for agriculture uses, due to the lack of exposed rock and potential drainage. The area was leveled of trees and shrubs in 2023 making it an ideal area for future horticultural development.
- Figure 4 identifies greenspace that is currently parallel with the firebreak. It would be ideal to keep this area as a buffer from the firebreak and the residents of Grace Lake.
- Figure 5 identifies an area that should be kept as additional greenspace to buffer Grace Lake residential neighbourhood from any future development.
- Figure 6 identifies an area on the south end of Enterprise Drive that could be suitable for additional commercial lot due to the available exposed rock and accesses through a Nahanni Drive expansion roadway.





Figure 2



Figure 3





Figure 4

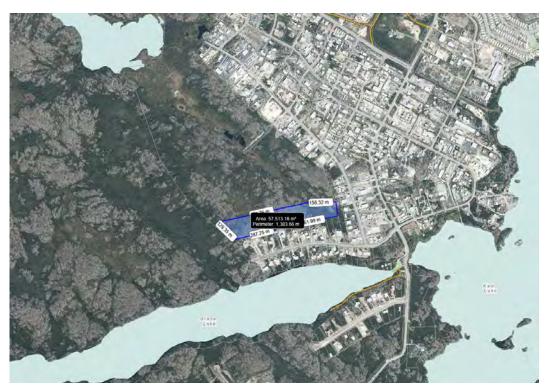


Figure 5





Figure 6

7. Potential Commercial Lots

As pointed out in *Figure 2* and *Figure 6* above, should there be a demand for additional commercial lots in addition to agriculture lots, these two areas would be ideal.

Figure 2 identifies an exposed rock area that would be easily accessible via Dehcho Boulevard where an access road is already available.

Figure 6 identifies an area on the south end of Enterprise Drive with access via an extension to Nahanni Drive.

Diversion of Accommodation Camps

Any new commercial/light-industrial areas should be restricted to prevent any additional accommodation camps in Kam Lake. While a need for accommodation camps may be needed by private businesses, these camps do not provide any benefit to the residents of Yellowknife. We firmly believe that should any development happen in this area, it should be focused on resident-facing development.



Thank you for taking the time to review our feedback regarding the initial research for the Area Development Plan for the Kam Lake Growth Area.

We look forward to our continued involvement in the process.

Sincerely,

Kyle Thomas, Co-Owner

Marie Auger-Thomas, Co-Owner

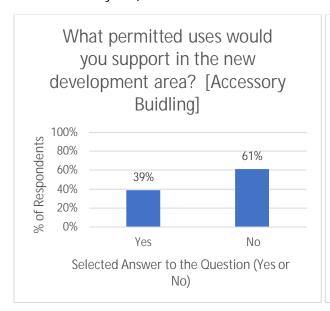
Appendix D

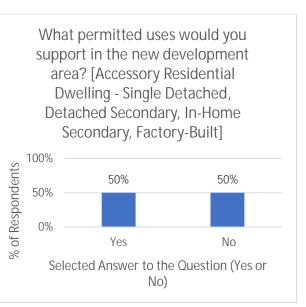
Survey Responses - Permitted Uses

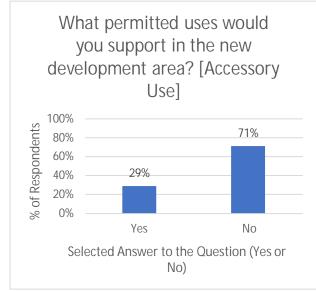


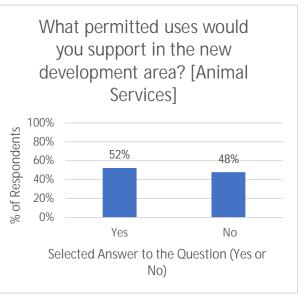
Responses to survey questions about what permitted uses respondents would support in the new development area.

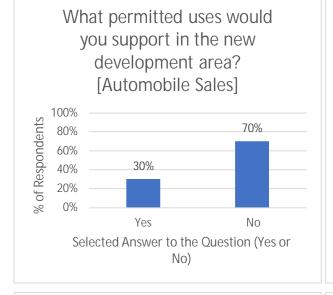
This area is designated as Kam Lake by the City of Yellowknife's Community Plan. What permitted uses would you support in the new development area? Please select all that apply. You can use the list included in the Resource Section or see Zoning By-law No. 5045 for the definition of each use (from page 4 to 30 of the By-law):

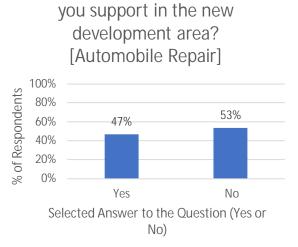


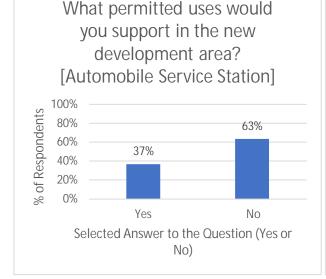


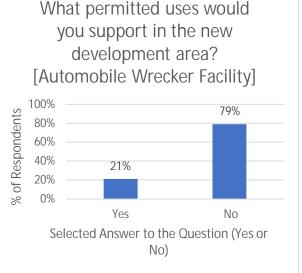


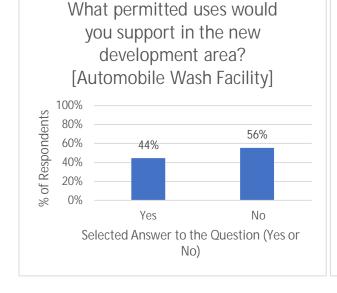


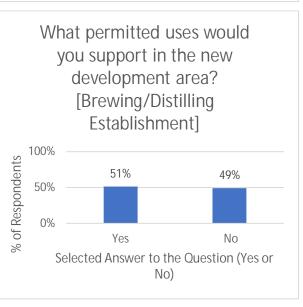


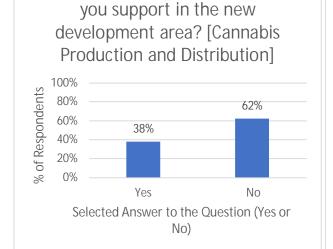


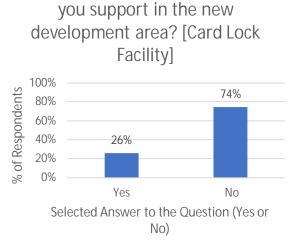


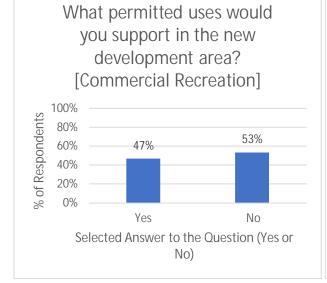


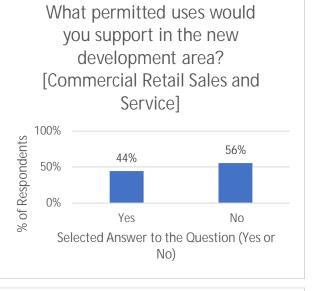


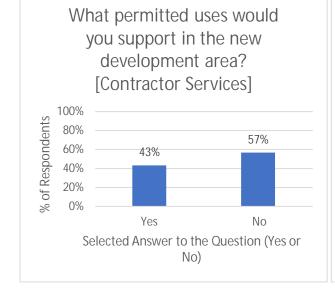


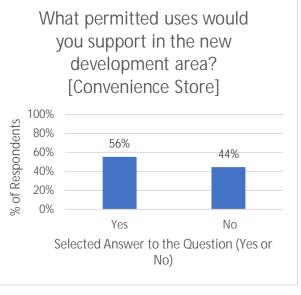


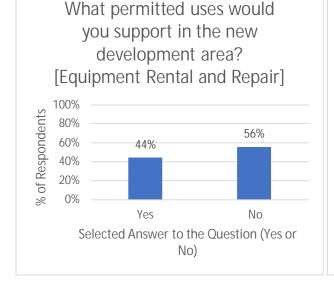




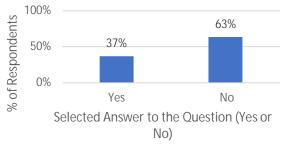


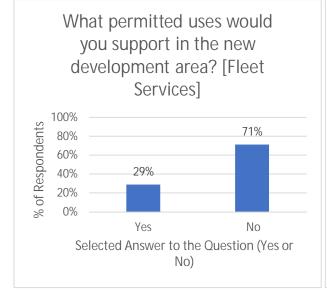


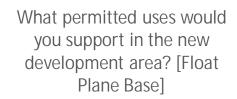


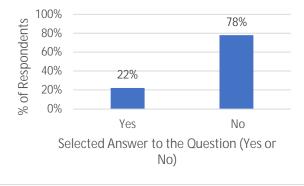


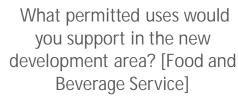


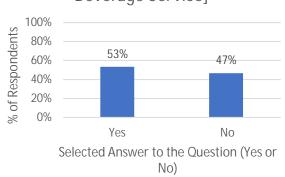




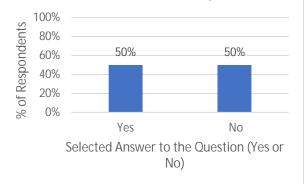


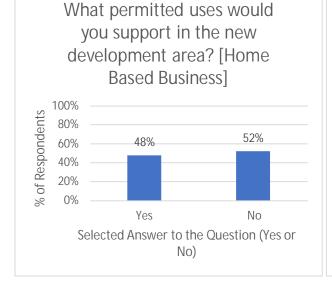


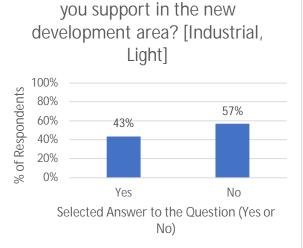


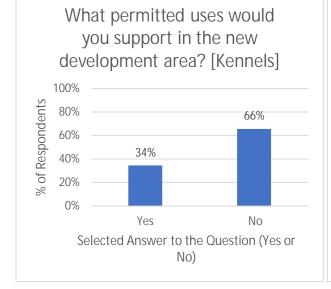


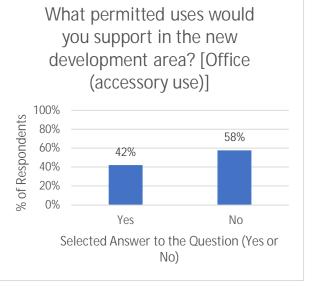
What permitted uses would you support in the new development area? [Food Production Facility]

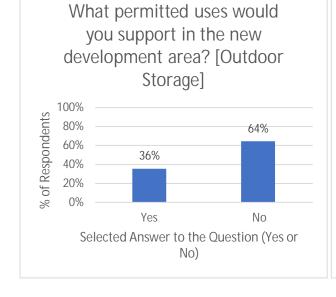


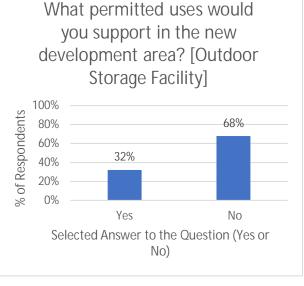


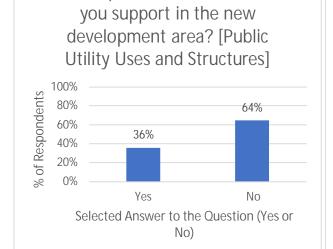


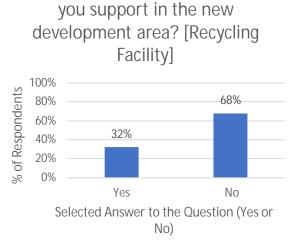


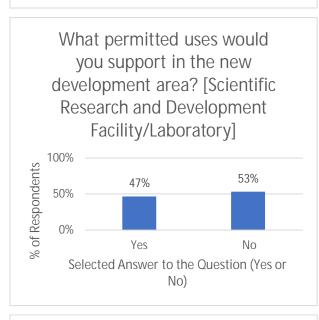


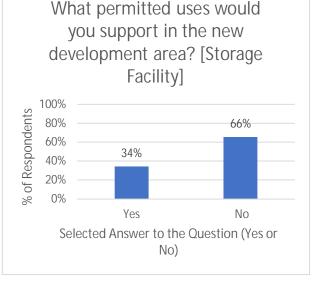


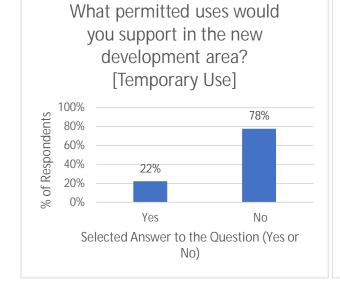


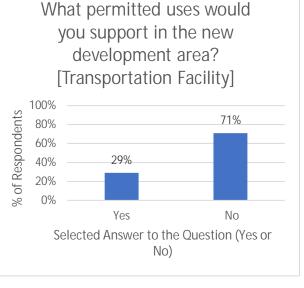


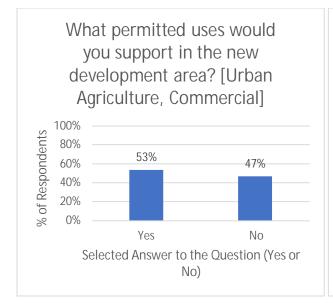


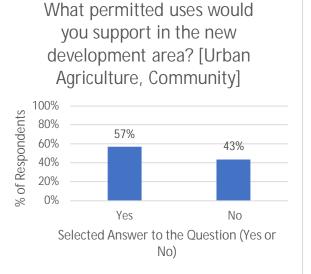


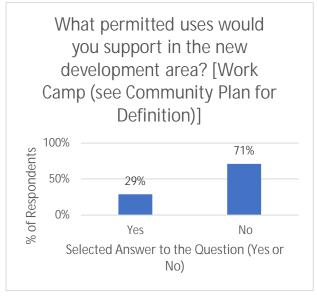






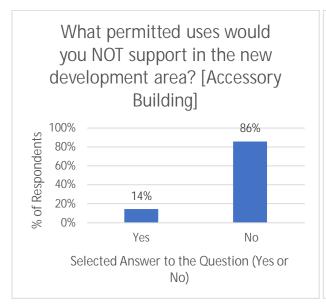


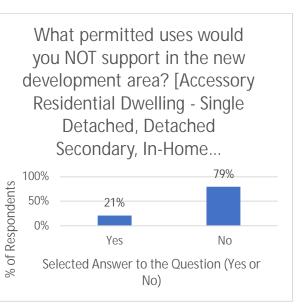


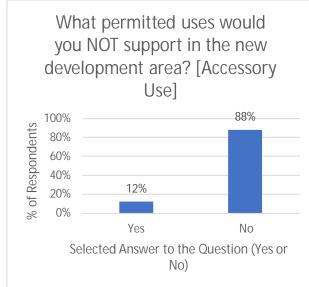


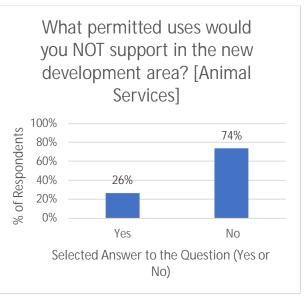
Responses to survey questions about what permitted uses respondents would not support in the new development area.

What permitted uses would you NOT support in the new development area? Please select all that apply. You can use the list included in the Resource Section or see Zoning By-law No. 5045 for the definition of each use (from page 4 to 30 of the By-law):

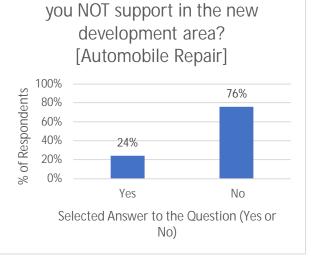


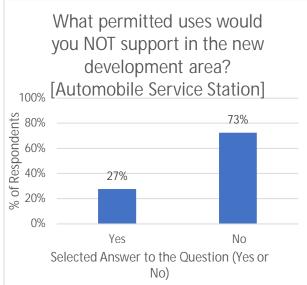


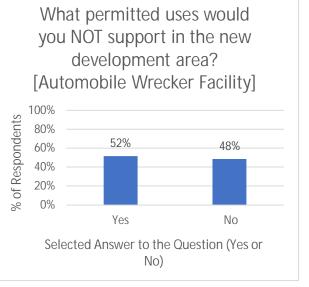


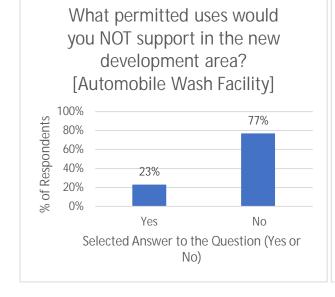


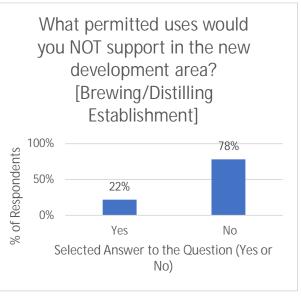


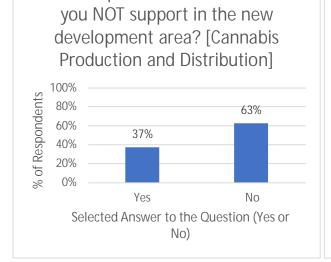


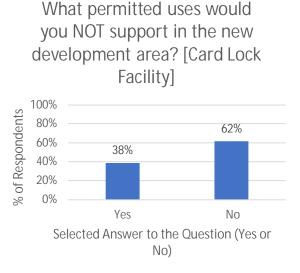


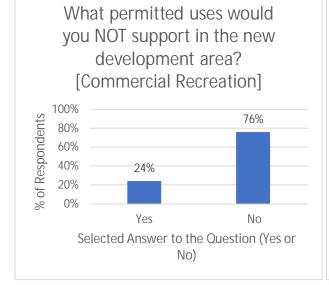


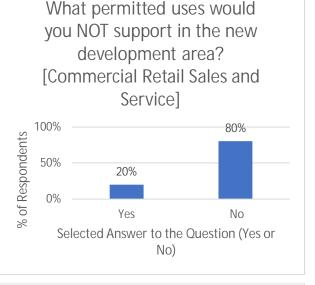








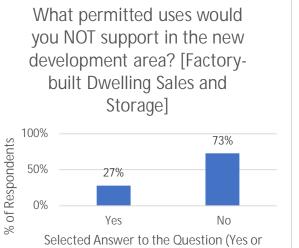




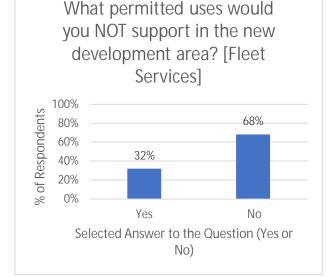


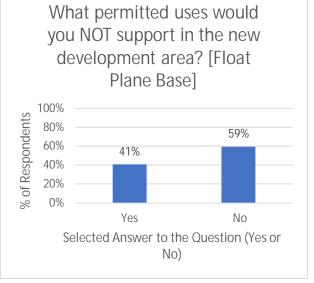


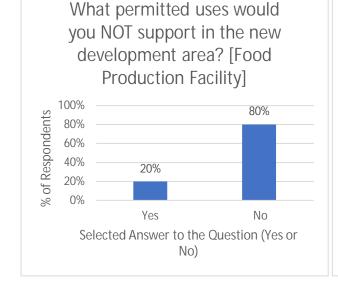


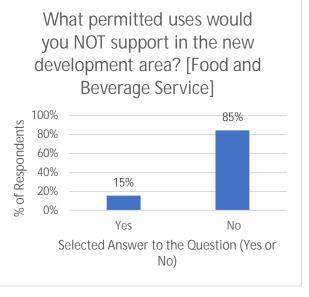


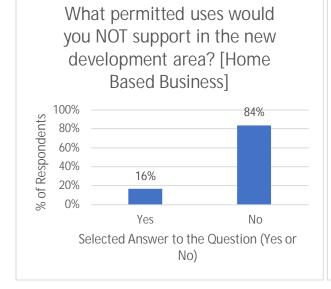
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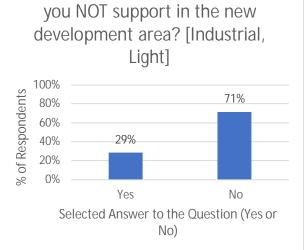


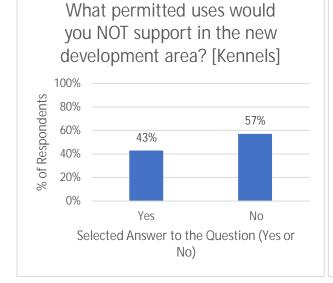


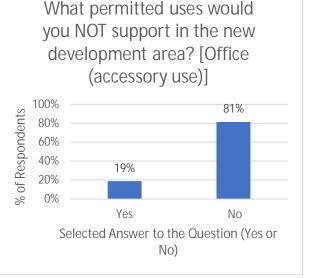


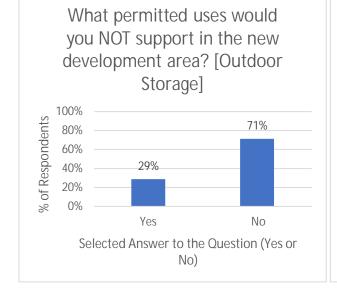


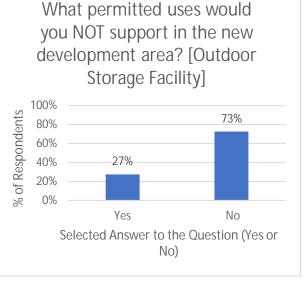


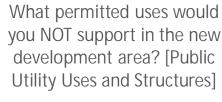


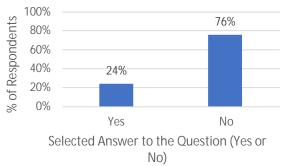




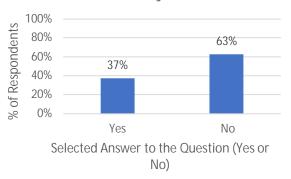




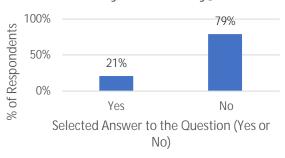




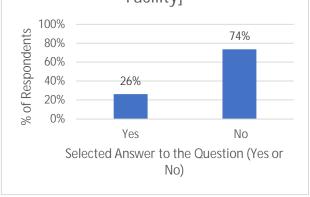
What permitted uses would you NOT support in the new development area? [Recycling Facility]



What permitted uses would you NOT support in the new development area? [Scientific Research and Development Facility/Laboratory]

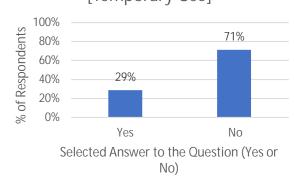


What permitted uses would you NOT support in the new development area? [Storage Facility]



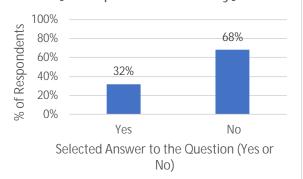
What permitted uses would you NOT support in the new development area?

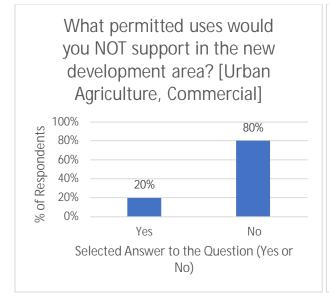
[Temporary Use]

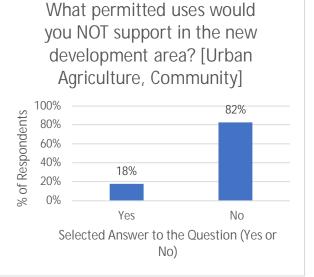


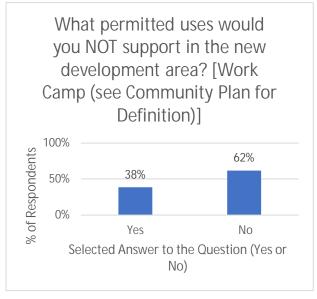
What permitted uses would you NOT support in the new development area?

[Transportation Facility]









Appendix E

Letter submitted by Commenter 5 - See Table B1 in Appendix B



The Yellowknife Community Plan establishes the general goal of reducing land use conflicts by limiting and mitigating incompatible land uses and incorporates the concept of buffers or setbacks as a means of achieving this goal.

When the Grace Lake North sub-division was developed and marketed by the City in 2013, the lots were described as being larger-than-normal providing an opportunity to build homes in a quiet, natural setting with active recreational activities available in the area north of the sub-division. This was the vision for the area expressed by the City and one we believe represents a good faith agreement with residents that still exists today.

It is not disputed that commercial/light industrial land must be made available where the need exists. Relying on a five-year old needs assessment is not however, satisfactory demonstration of a continuing need, especially given the impacts COVID has had on Yellowknife's business community along with the planned closure of the Diavik mine. The City of Yellowknife should undertake a new land-use needs assessment, particularly as it applies to commercial and light industrial lands, prior to proceeding with the development of a Kam Lake Area Development Plan.

During the June 6, 2024 Focus Group meeting, City planners acknowledged that bias has inadvertently been built into the Kam Lake Place Speak survey. Specifically, question #4 asks participants to identify what permitted uses they would support within the designated Kam Lake area: Lot 32, Block 568. Permitted uses that are not already listed through the Community Plan for Kam Lake, such as green space, trails (walking, biking, snowmobiling) and wildfire breaks are not listed as options although the area is currently designated as Growth Development, a designation that permit such uses as public parks. As a result, significant bias is introduced into the survey as it presumes the final commercial/light industrial zoning. The current survey should be withdrawn, the collected responses not considered and the survey re-launched without any apparent bias. Alternatively, the consultation report that is presented to Council should explicitly acknowledge the presence of bias in the survey design.

If the City demonstrates through a new needs assessment that demand exists for additional commercial and light industrial designated lands, then vacant and undeveloped land in the existing Engle Business District should be re-zoned to allow commercial and light industrial use. Only after land within the Engle Business District is fully subscribed should Lot 32, Block 568 be considered for development.

Once the Engle Business District has been fully subscribed, Lot 32, Block 568 development should proceed using a phased approach starting from the northern-most area adjacent to Deh Cho Boulevard. Primary access would be from Deh Cho Boulevard and an extension to Enterprise Drive.

The current Area Development Planning process should continue. Any eventual Plan should incorporate:

A significant and effective buffer or green space between the Grace Lake residential
zone and any commercial or light industrial development. The buffer should contain
the area immediately north of the Grace Lake residential zone extending northwest to a

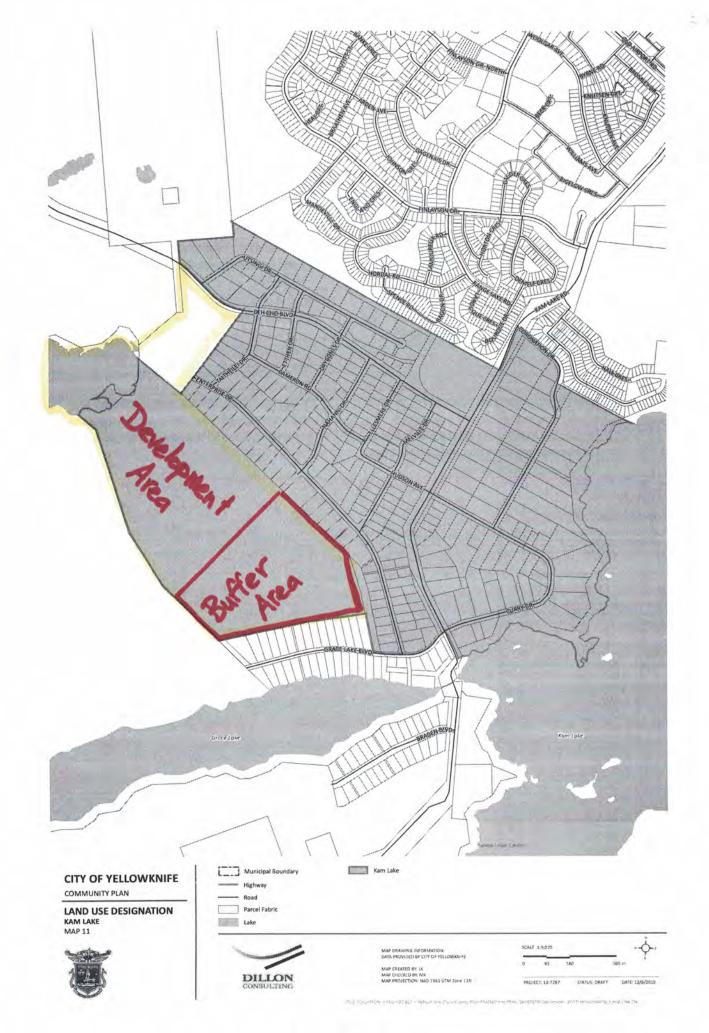
- line drawn parallel to the 'unauthorized access road' from Enterprise Drive to the southeast boundary of Lot 32, Block 568. Refer to the attached map.
- The Area Development Plan should incorporate the existing wildfire breaks
 constructed during the summer of 2023 as a permitted use. The Community Plan and
 Zoning By-law should be amended to enable the designation of this permitted use, if
 necessary.
- The wildfire break should not be included as part of the designated buffer located north of the Grace Lake residential zone as the break would be a designated use.
- Surface drainage from any permitted commercial or light industrial development must be controlled and directed so that it does not enter into Grace Lake.

The following Community Plan amendments should also be considered as part of the current planning process:

- The listing of 'Discretionary Uses' for the Kam Lake area should be revised to remove 'Automobile wrecker, Heavy Industry and Transportation Facility'. These uses are clearly not commercial or light industrial in nature and should never be considered a discretionary use suitable for Kam Lake.
- The 'Permitted Use' described as Commercial Agriculture should be revised to
 explicitly exclude intensive small livestock operations (i.e. pigs, poultry) for the purpose
 of limiting harmful drainage and controlling offensive odours.



June 11, 2024



Appendix F

Tank Farm and FOL Proximity Document Submitted by Commenter 4 - See Table B1 in Appendix B



TRYING TO UNDERSTAND WHY LIGHT INDUSTRIAL WITH CARE-TAKERS RESIDENCE ARE NOT ALLOWED IN ENGLE?

HUNDREDS OF PEOPLE ON AND NEAR KAM LAKE ROAD AND CURRY DRIVE LIVE IN MUCH CLOSER PROXIMITY TO BULK FUEL STORAGE TANKS THAN POTENTIAL LANDS IN ENGLE DO!

CURRY DRIVE AND KAM LAKE ROAD BULK STATIONS ARE SMALLER BUT ALSO STORE GASOLINE AND DO NOT HAVE FIRE SUPRESSION. THESE FACILITIES ARE OLD.

THE ENGLE BULK FUEL STOAGE FACILITY DOES NOT CONTAIN GASOLINE AND <u>DOES HAVE</u> FIRE SUPRESSION ON EVERY TANK.

IF THE FOL SITE IS A "BLAST ZONE", PARKER PARK AND FINLAYSON ARE CLOSER TO IT THAN OPTIONAL LAND IN ENGLE SOUTH.

DISTANCE TO TANK FARM FACILITIES - PROPOSED KAM LAKE EXPANSION

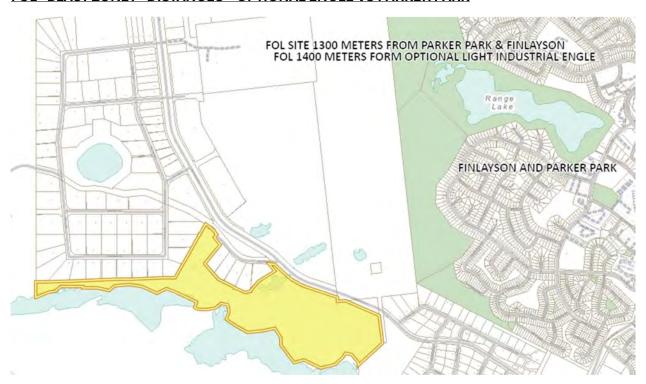


DISTANCE TO TANK FARM FACILITIES - OPTIONAL ENGLE PROPERTIES





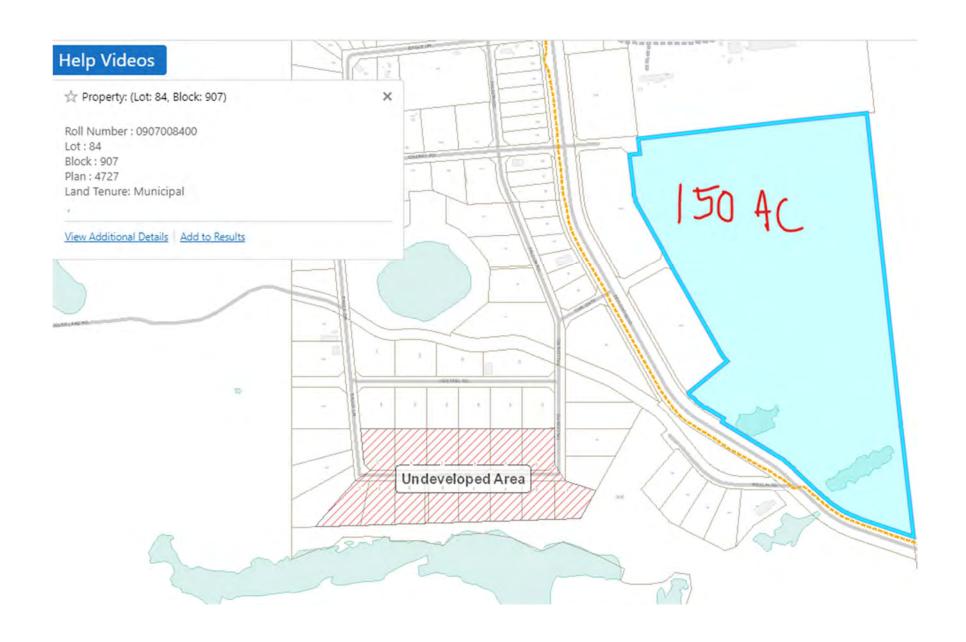
FOL "BLAST ZONE?" DISTANCES – OPTIONAL ENGLE VS PARKER PARK

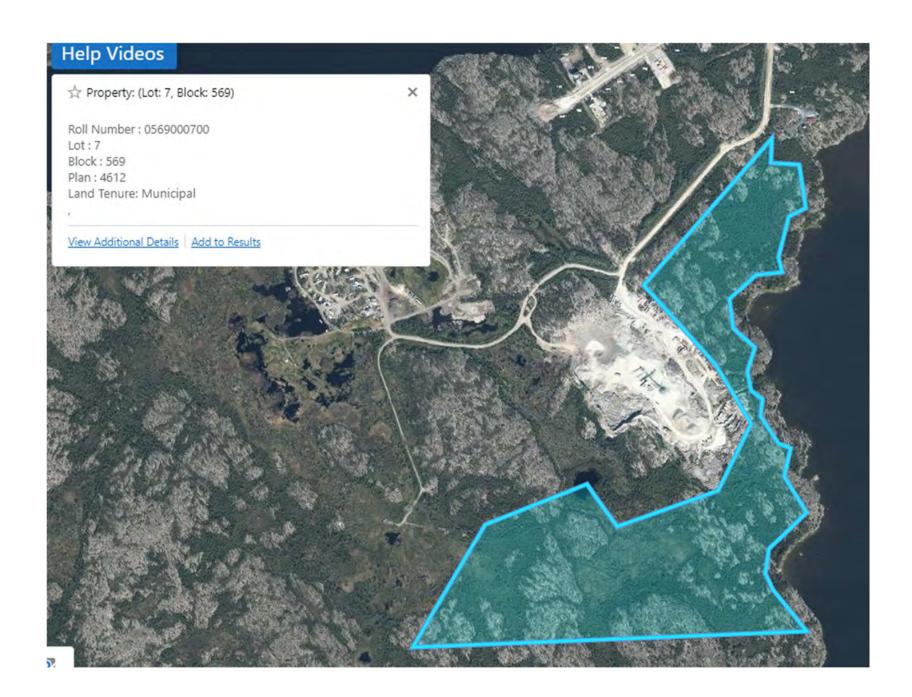


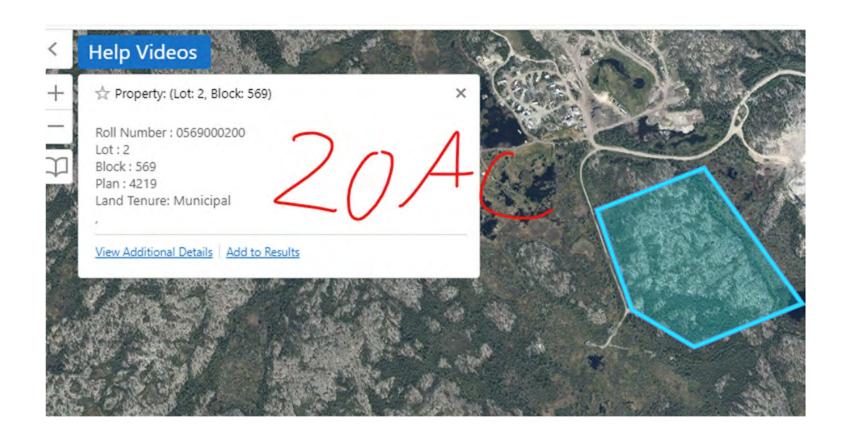
Appendix G

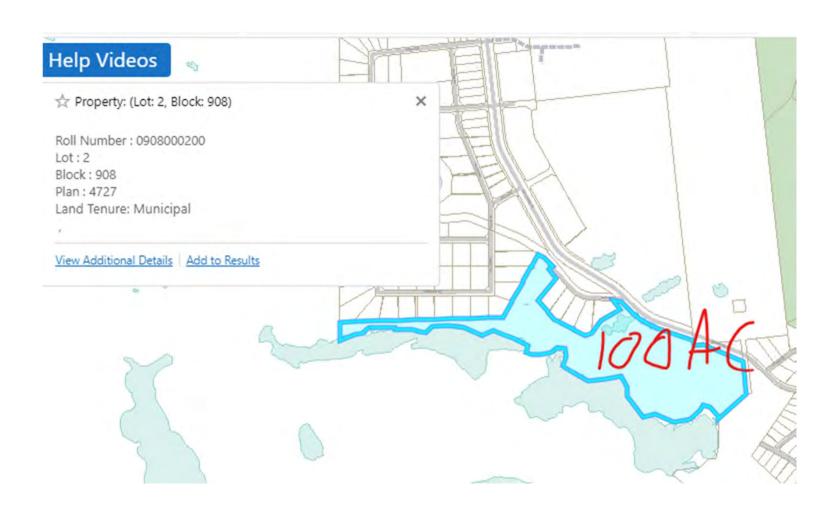
Other Lands Document Submitted by Commenter 4 - See Table B1 in Appendix B















Appendix H

21 - 036 - RFP Document Submitted by Commenter 4 - See Table B1 in Appendix B





REQUEST FOR PROPOSALS

Competition #: 21-036 – Kam Lake Industrial Expansion – Engineering Services

Published Date: April 30, 2021

Procurement Representative: Clem Hand – Manager, Corporate Services & Risk Management

chand@yellowknife.ca

The City of Yellowknife is accepting **ELECTRONIC BID SUBMISSIONS ONLY**, which must be received prior to the submission deadline of 3:00:00 pm local time on May 21, 2021.

The City will not accept submissions via fax, email or hard copy.

Communication Note:

It is recommended that Bidders add noreply@bidsandtenders.ca and dailybids@bidsandtenders.ca to their "safe senders" list, and monitor their Spam/Junk filters to ensure that they do not miss automatically generated messages sent out by the Bidding System that relate to this bid opportunity.

Submissions must be received by the deadline outlined above, electronically, through the Bidding System. The closing time and date shall be determined by the Bidding System's web clock. Late submissions are not permitted by the Bidding System.

Proponents are cautioned that the timing of the submission is based on when the proposal is <u>received</u> by the Bidding System, <u>not</u> when a proposal is submitted by a proponent. As the proposal transmission can be delayed due to file transfer size, transmission speed, etc., it is recommended that proponents allow sufficient time to upload their submission and attachment(s) (if applicable) and to resolve any issues that may arise.

This tender consists of the following sections:

- Part 1 Instructions to Bidders
- Part 2 Terms of Reference
- Part 3 Architectural & Engineering Contract Terms & Conditions

The City of Yellowknife has moved to a fully integrated online eProcurement Tool (bids&tenders™) which allows vendors to view, register and submit bids entirely online in one quick, easy and convenient location. Bid submissions will be received online only, through the bidding system.

There are no fees or charges for accessing or downloading City of Yellowknife opportunities on bids&tenders™

In order to bid on City of Yellowknife competitions, all bidders must provide a copy of a current and valid City of Yellowknife Business License. A copy of an application form does not satisfy this mandatory requirement.

Requirements:

- All proponents shall have a bidding system vendor account and be registered as a plan taker for
 this bid opportunity. Registering as a plan taker will enable the proponent to download the bid
 document (without the watermark "Preview" on them), to receive Addenda/Addendum email
 notifications, to download Addenda and to submit their bid electronically through the Bidding
 System.
 - a. Proponents interested in this opportunity are invited to create a free bidding system vendor account at https://yellowknife.bidsandtender.ca and click on the "Create Account" button. To register as a plan taker, click on the "Register for this Bid" button.
 - b. The opportunity can, however, be previewed with a watermark on it (only PDF's) without creating an account.
 - c. The link below provides a guide on how to create a vendor account: https://www.youtube.com/watch?v=l-yARhc47zA
 - d. <u>Please note that any Bid(s) received from a proponent that is not registered as a plan</u> taker for this competition will be disqualified.
- **2.** All Questions related to this bid are to be submitted to the City's representative through the bidding system **only** by clicking on the "Submit a Question" button for this bid opportunity.
 - a. Questions regarding this opportunity must not be submitted to the City via any other method.
 - b. Answers to the questions received will be provided either directly to the proponent or via an addendum to all proponents, through the Bids & Tenders System. Information obtained from any source other than the City through the Bids & Tenders system is unofficial and must not be relied upon as part of this competition.
 - c. Questions received after the 'Deadline for Questions' will be addressed if time permits.

- **3.** After a bid is submitted, the bidding system will send a confirmation email to the proponent advising that their bid was submitted successfully. If you do not receive a confirmation email, contact bids&tenders support at support@bidsandtenders.ca. Late bids will not be accepted.
- **4.** After a bid is submitted, the bidding system will send a confirmation email to the proponent advising that their bid was submitted successfully. If you do not receive a confirmation email, contact bids&tenders support at support@bidsandtenders.ca. Late bids will not be accepted.
- 5. Proponents must complete the online forms and upload required documentation (if any), in PDF format. If a proponent needs to upload more than one (1) document per category, the documents should be combined into a single PDF file.

6. Addenda

- a. Addendum/Addenda, if required, issued by the procurement representative shall form part of the bid document. Bidders shall acknowledge receipt of any addenda when submitting their bid through the bidding system. Bidders shall check a box for each addendum/addenda and any applicable attachments that have been issued before a bidder can complete their bid submission online.
- b. All addenda will be issued through the bidding system. The City will attempt to issue any/all addenda a minimum of (7) days prior to the submission deadline.
- c. In the event an addendum is issued within the seven (7) days prior to the closing time and date, it may include an extension of the closing time and date.
- d. Bidders are encouraged to submit their bids during the final seven (7) days of the competition, as most/all addenda will have been issued prior to the final week. If a bidder submits their bid prior to this or at any time prior to the bid closing and an addendum/addenda is issued by the City, the bidding system shall <u>WITHDRAW</u> their bid submission and change their bid submission to an <u>INCOMPLETE STATUS</u> (Not accepted by the City) and the withdrawn bid can be viewed by the bidder in the <u>"MY BIDS"</u> section of the bidding system. The bidder is solely responsible to:
 - Make any required adjustments to their bid; and
 - Acknowledge the addendum/addenda; and
 - Ensure the re-submitted bid is **RECEIVED** by the bidding system no later than the bid submission dead line.
- 7. Documents shall be in PDF format only (also no zip files). In addition, do not upload video or audio files. You may state a web address link in your submission or upload a document stating the web link for the evaluation committee to view and/or listen to your video and/or audio information.
- **8.** Documents shall not have a security password, as the City will not be able to access the file.
- 9. It is the intent of the City to evaluate all proposals and select a successful bidder within one

week of the submission deadline.

- a. All bidders will be contacted via e-mail regarding the decision of the evaluation committee.
- **10.** Proponents are cautioned that the timing of their submission is based on when the bid is **received** by the system, **not** when a bid is submitted by the proponent. Bid transmission can be delayed in an "Internet Traffic Jam" due to file transfer size, transmission speed, etc.
- **11.** The City recommends that proponents allow sufficient time to upload their submission and attachment(s) (if applicable) and to resolve any issues that may arise. The submission deadline shall be determined by the City's bidding system web clock.
- **12.** It is a condition of the bid documents received that each bid is irrevocable and continues open to acceptance for a period of up to 90 days after the closing date and time and may be accepted at any time within that period of time whether or not a bid has been previously accepted.
- 13. The proponent, by submitting a bid, agrees that it will not claim damages in excess of an amount equivalent to the reasonable costs incurred by the proponent in preparing its bid for matters relating to the agreement or in respect of the competitive process, and the proponent, by submitting a bid, waives any claim for loss of profits if no agreement is made with the proponent.
- **14.** The City will issue a contract to the successful proponent the contract terms and conditions are attached.
- **15.** The City has the right to cancel this competition at any time and to reissue it for any reason whatsoever without incurring any liability, and no proponent will have any claim against the City as a consequence.
- **16.** The City will not accept any conditions or reservations, customary or otherwise, subject to which the proponent may purport to sell, or to deliver services other than those stated in this competition.
- **17.** Submissions will be evaluated according to the City's purchasing practices and individual line prices will be treated in strict confidence.
- **18.** The City reserves the right to reject bids on the basis of a proponent's past performance, financial capabilities and completion or delivery schedule.

Instructions specific to 'Requests for Proposals'

(The following instructions apply specifically to Request for Proposal competitions)

1. For Requests for Proposals, proponents may request a debriefing after receipt of a notification of the outcome of the procurement process. All debrief sessions will take place via telephone. All requests must be in writing to Clem Hand,

<u>chand@yellowknife.ca</u> and must be made within fourteen (14) days of such notification. The intent of the debriefing information session is to aid the proponent in presenting a better proposal in subsequent procurement opportunities. Any debriefing provided is not for the purpose of providing an opportunity to challenge the procurement process or its outcome.

- 2. For Requests for Proposals, each rating is confidential, pursuant to provisions found in the Access to Information Act, and only the total rating for each proposal and the contract value of the successful proposal shall be released. However, if there are significant differences, the City may discuss a proponent's ranking, referencing the average of the category in question.
- **3.** The City reserves the right to short-list proponents. Proponents who are short-listed may be requested to make a formal presentation. Such presentations shall be made at the sole cost of the proponent.
- **4.** For Requests for Proposals, the City is not bound to accept the proposal that provides for the lowest cost or price to the City, nor any proposal of those submitted.
- **5.** If a contract is to be awarded as a result of this competition, it shall be made to a proponent that is responsive and responsible and whose bid will give the greatest value based on quality, service, and costs.
- **6.** The City may accept any proposal or alternative proposal, in whole or in part, which is deemed to be most favorable in the interests of the City.
- **7.** The City may, at its sole discretion, elect not to accept any proposal submitted and may proceed to acquire the requirements in such other manner as it so chooses.
- **8.** The City may, but shall not be obligated to, waive any defect, irregularity, mistake, insufficiency or non-compliance in any proposal, if, in the opinion of the City acting reasonably, such defect, irregularity, mistake, insufficiency or non-compliance is minor or otherwise not material to the proposal.
- **9.** The City reserves the right to negotiate with one or more proponents and ultimately enter into a contract upon the same or different terms and conditions as contemplated by the request for proposals.
- 10. Proposals submitted shall be final and may not be altered by subsequent offering, discussions or commitments without the consent of the City. Further descriptions, clarifications, filling in the gaps or expanding upon a proposal may be requested by the City.
- **11.** The final section of this RFP document details the City's contract terms and conditions. The City of Yellowknife does not negotiate these terms and conditions, but will offer clarification when necessary. Submission of your bid confirms your acceptance of the

contract terms and conditions in the event that you are deemed to be the successful bidder.

12. Bids which are qualified or based upon conditions placed by the Proponent may be eliminated from the competition as part of the Administrative Review process. The City may, in its absolute discretion, deem a conditional or qualified bid to be non-responsive and refuse to consider it.

File: 21-036

1 OVERVIEW

The City of Yellowknife is seeking proposals for professional engineering services to complete the design and administer the construction of the Kam Lake Industrial Expansion. The Kam Lake Industrial Expansion is a proposed industrial subdivision on a majority-portion of Lot 32, Block 568, Plan 4452, southwest of Enterprise Drive. At full build-out, it will cover 52 hectares of new industrial land. A concept plan with preliminary lot layout and road locations is attached. Phase 1 construction is anticipated to occur in early 2022.

Engineering Services are to include:

- Preliminary Engineering for the entire subdivision
- Detailed Design for or the entire subdivision
- Tendering Services for the first phase of construction
- Contract Administration for the first phase of construction
- Construction services for the first phase of construction, including full time resident engineering (based on 550 hours)
- Post construction services for the first phase of construction.

2 SCOPE OF WORK

Work included under this contract will include final design of the lot layout and a grading plan that works in conjunction with the overall drainage patterns for the area. Roadways are to be left graveled upon completion, but intended to accommodate pavement at full lot build out. Storm-water management is expected to be open ditch. Design should consider and incorporate the following key points.

- Physical development constraints range from marsh lands, treed areas, peat, and rock outcrops. Subdivision design should consider and be influenced by the geotechnical constraints of the site; cut and fill opportunities should be identified; and the costs associated with backfilling low-lying or wet areas should be estimated. A 4,000 cu.m. stockpile of rock boulders is available on-site for subdivision construction, or alternatively, the rock stockpile must be removed from the site as part of design and construction.
- The proposed subdivision consists of the majority of Lot 32, Block 568, Plan 4452, as demonstrated on the attached concept subdivision plan. The southeastern boundary of the subdivision is located adjacent the Grace Lake North development. Subdivision design must include a 30 m minimum buffer between industrial and residential properties. The northwestern boundary of the subdivision is still undefined and should be finalized once geotechnical conditions in this area are understood.
- Protection of environmentally sensitive areas and water bodies should be a key design consideration.
 Wetland areas shall be delineated and identified in the subdivision as areas to be zoned NP Nature Preservation.
- A key component of subdivision design are the points of vehicular access from the existing road network.
 Emergency and Fire Services are housed at the corner of Kam Lake Road and Old Airport Road and subdivision access should consider best transportation design practices and direct routing for minimizing emergency response times. Four potential access points have been identified and consideration should

be given to the pros and cons of implementing any and all points. Consideration should also be given to any alternative points of access not currently identified. As demonstrated on the concept subdivision plan, potential access points may be developed at the following locations:

(i) The northwest end of Enterprise Drive. The Enterprise access point is subject to confirmation of suitable geotechnical conditions.

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- (ii) The south end of Nahanni Drive. If considered as an access point, the existing 100 m Nahanni Drive access point from Enterprise Drive should be verified that it has been constructed to the City's road standard. If deficiencies are noted, design and implementation measures to bring the road up to City Standard should be provided.
- (iii) The south end of Melville Drive through Lot 2 Block 534 Plan 1991.
- (iv) Access via Kam Lake Road through Lot 23, Block 531, Plan 4435 and then across Enterprise Drive and through a portion of Lot 20 Block 531 Plan 3990. A substantial material cut would be required on Lot 23 for this to be a viable option.
- A subdivision drainage plan shall be provided which considers both the natural and existing drainage patterns of the area, wetland complexes and the City's existing Storm-Water Management Plan. A concept 12 m wide drainage system right-of-way is outlined from the northwest to southeast areas of the subdivision and should be investigated and determined if necessary.
- The concept subdivision suggests approximately 105 lots at full build-out. Lot sizes should strive to meet the target market of 2,200 2,500 sq. m. Outside limits of 2,000 to 5,000 sq. m. are acceptable subject to subdivision design constraints.
- Recommended construction phasing should be provided with each of the three phases consisting of approximately 35 lots.
- The rear property lines and corners of new proposed lots adjacent to the existing Enterprise Drive properties should match against the latest legal survey plan where possible.
- The anticipated construction of Phase 1 will occur early in 2022.
- The allotted budget to perform the requested engineering services outlined in Section 1 is \$170,000.00.
- Preparation of an Area Development Plan bylaw, implementation of corresponding zoning for the subdivision, preparation of a marketing plan, and any necessary land transactions to support subdivision construction will be completed by City Staff.

All work is to be done to the City's servicing standards (currently being updated) and as outlined by the Public Works and Engineering Department.

Engineering Services shall include as a minimum:

2.1 Preliminary Engineering

- Coordinate meetings with City Personnel.
- Gather available information (i.e. topographical survey, geotechnical investigation, previous consultant's reports, etc.)

- Contact Northland Utilities and Northwestel to determine their infrastructure needs and installation timing to service the subdivision.
- Present options (if applicable).
- Prepare initial cost estimates.
- Include the above into a pre-design report for City approval prior to detailed design.

2.2 Detailed Design

- Prepare contract drawings.
- Prepare contract specifications and quantities for unit price tender forms.
- Prepare pre-tender construction estimates.
- Submit conceptual design and 95% contract drawings and specifications to the City for review.
- Submit draft contract document package for City review.
- Prepare final (stamped) contract document package for tender. City standard symbols shall be used.

2.3 Public Consultation

• Public consultation may be required depending on requirements from Council. There will be a maximum upset limit of 40 hours for public consultation for this project.

2.4 Tendering Services

- Provide City with necessary information for the preparation of Public Tender for advertisement.
- Provide information to bidders.
- Check, analyse and make recommendations on the awarding of a construction contract.
- Assemble and arrange documents for appropriate signatures.

2.5 Contract Administration

- Coordinate, chair and document minutes at schedule construction meetings.
- Prepare and submit construction progress payment certificates each month or as agreed upon with contractor with a recommendation for payment.
- Interpret contract documents and administer contract.
- Review Contractor traffic and safety plans for conformance with City requirements.
- Coordinate warranty and completion inspections with City and contractor.
- Help prepare public notifications.
- Prepare status reports that identify uncommitted funds in the contract

2.6 Construction Services

- The interested proponents must estimate the time required for all construction services and provide
 costs associated to each phase of the project. It is expected that a full time resident inspector will be
 required for this project, which typically requires a minimum of 550 hours per construction season.
 However, it will be up to each consultant to assess the work and allocate resources as required by the
 project.
- Confirm preliminary site investigation and obtain further site information.
- Full time resident inspector who must
 - o be a qualified engineer or engineering technician experienced in construction of this nature, who is a competent surveyor;
 - o act as the City's representative on site; and

- o monitor the Contractor to ensure the City's safety requirements are met.
- Quantity survey measurement.
- Ongoing materials testing, density tests, etc. as required.
- Weekly status reports.
- Available for liaison with City representatives.
- All Record Information is to be obtained and recorded by the resident inspector. (i.e. elevation and location of mains, utility structures, duct work, existing utilities, existing features, etc.). City standard symbols shall be used.

2.7 Post Construction Services

- Provide accurate record drawings in both PDF and AutoCAD formats.
- All record drawings shall be stamped by a Professional Engineer registered in the NWT.
- Liaison between contractor and City for any warranty problems.

3 SCHEDULE

Submissions must be received at City Hall before 3:00 p.m. MDT on Friday, May 21, 2021. It is the intent of the City to evaluate all proposals and to select a successful proponent by Thursday, May 27, 2021.

4 PROPOSAL ELEMENTS

Proponents are requested to submit their proposal with the following submittal elements:

- **4.1** Full name, address, telephone number and contact e-mail of the submitting office of the Consultant and, where applicable, the name, address, telephone number and contact e-mail of any branch office, affiliate or sub-consultant(s) that will be involved in the project.
- **4.2** A statement of corporate experience, including affiliates or sub-consultant(s). Identify experience in the provision of similar services and include a list of current clients with contact information for a minimum of three clients.
- 4.3 List of the Project Team and the key professionals assigned to this project including CVs of all team members. Identify their relevant experience, experience within the current organization, qualifications and respective duties in coordination with this project. Include any affiliates or sub-consultant(s) and a statement of their responsibilities, experience and expected involvement. Your proposal must contain the following endorsement:

"Identified Key Project Team Members shall only be replaced with written approval of the City's Project Leader."

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- **4.4** Work plan and schedule.
- **4.5** A schedule of hourly charge out rates for all personnel used on the project.
- **4.6** Any other information that may enhance your submission, especially which pertains to similar projects completed by the proponent.

5 EVALUATION CRITERIA

Proposals meeting all the submittal elements will be further assessed against the following criteria. The relative weighting for each criterion is also given.

5.1 **Project Team (30%):**

This section should include all team members and should detail their qualifications and roles in this project, as well as emphasize past relevant experience on similar projects.

5.2 Methodology (30%):

The consultants should detail the proposed methodology to achieve the project objectives. The consultant should demonstrate his/her understanding of the work involved by addressing the following factors: objectives, client input, meeting, schedules, budget, concerns, significant events or activities.

5.3 Fees (25%):

The consultant shall submit a proposal based on a time fee basis which shall include estimates of proposed hours of work, rates and expenses. The City is requesting an <u>upset limit</u> for this work based on estimates for each item as described in Section 2. Fees should include a preliminary engineering report, detailed design, tendering services, contract administration, construction services and post construction services. Contract administration and construction services can be considered as one item, however the fees associated with this item must list what is included in the upset fee (i.e. number of inspections anticipated, hours for inspections, etc.) Scope changes during the project may require the upset limit to be increased or decreased. Project budget is set at \$170,000. Proposals received within budget will receive a minimum of 7 points out of 10.

5.4 Project Schedule (10%):

The anticipated construction start date for the first phase of the development is mid-June 2022. The design, tendering, and award process must be complete by this date. Each proponent must submit their own schedule based on this approximate date and should schedule project milestones with this in mind. Each proponent should allow enough time for City review of deliverables as well as take into account other influences to schedule.

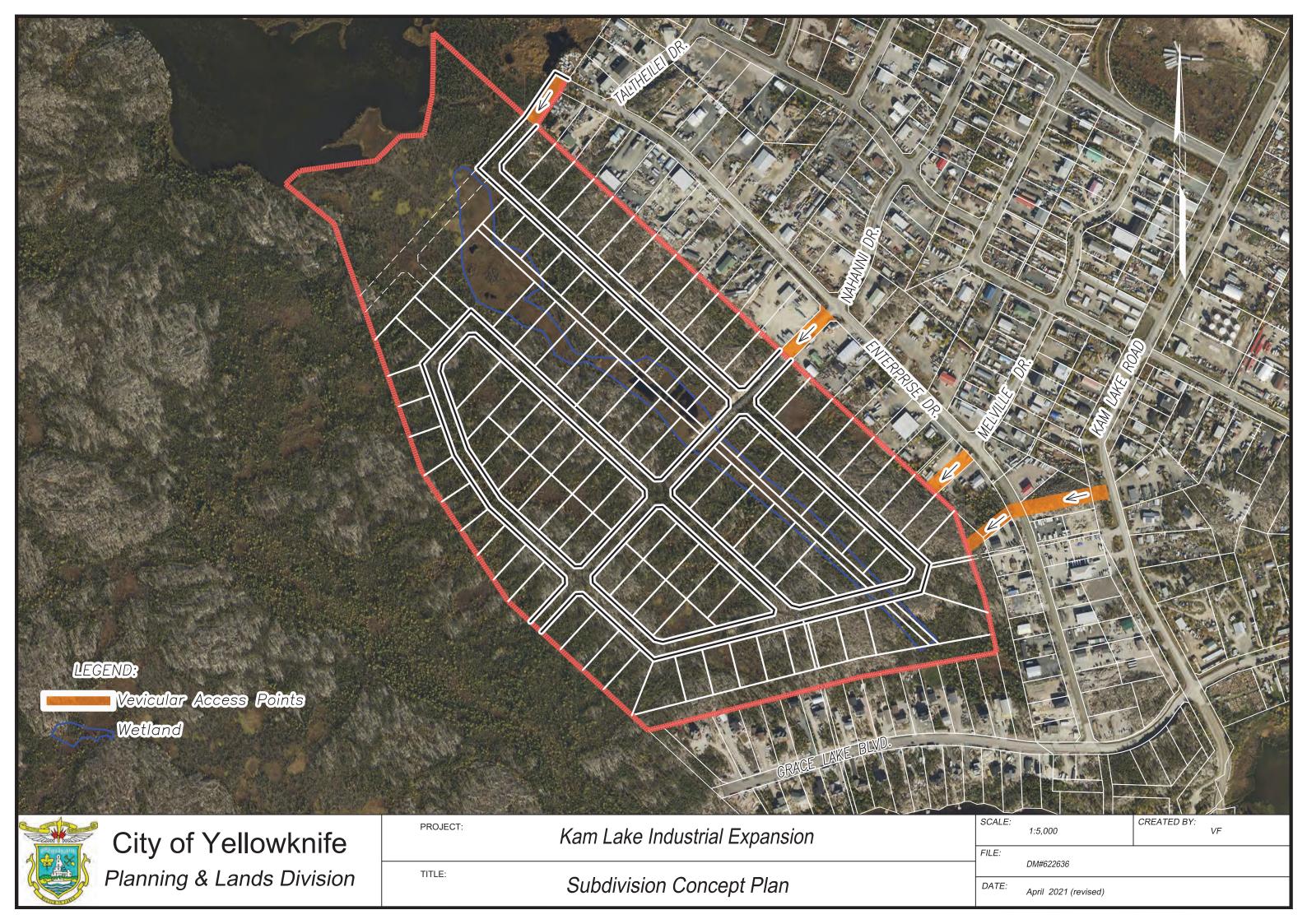
5.5 Benefit to Local Economy (5%)

The City always attempts to ensure the local economy benefits from our projects. Provide detail how your submission will benefit Yellowknife and local business.

Proposals will be evaluated and ranked according to the outline below. The evaluation will be based on a 0 to 10 scale. The score of each criterion will be determined by multiplying the criteria weight by the rating. The sum of all scores will be the total score.

Rating	Description
9-10	Exceeds expectations; Proponent clearly understands the requirement, excellent probability of success.
7-8	Somewhat exceeds expectations; Proponent has a very good understanding of the requirement, very good probability of success.
5-6	Meets expectations; Proponent has good understanding of requirement, good probability of success.
3-4	Somewhat meets expectations; minor weakness or deficiencies, Proponent understands the requirement, fair probability of success.
1-2	Does not meet expectations or demonstrate understanding of the requirements, low probability of success.
0	Lack of response or complete misunderstanding of the requirements, no probability of success.

The City reserves the exclusive right to determine the qualitative aspects of all proposals relative to the evaluation criteria.



TERMS AND CONDITIONS FOR THE

PROVISION OF

ENGINEERING AND/OR ARCHITECTURAL SERVICES

City of Yellowknife Revised: October 2018

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1.0 GENERAL PROVISIONS

1.1 **Definitions**

Terms in this Agreement shall, unless stated otherwise, have the same meaning as those in the City of Yellowknife General Conditions of the Contract for Construction, current as the date of this Agreement. The following terms, whenever used in the Agreement Documents, shall mean:

- (a) "Adjustment": a change in either the Contract Price or the Contract Time, or both, in accordance with the applicable provisions of the Contract Documents;
- (b) "Agreement": the undertaking by the City and the Engineer to perform their respective duties and discharge their obligations as set out herein;
- (c) "Agreement Documents": the documents referred to in the Memorandum of Agreement;
- (d) "Arbitrator": the person appointed under TC 8.2;
- (e) "City": the City of Yellowknife as represented by the City Administrator, the Director of Public Works and Engineering or any person authorized by them to act on their behalf;
- (f) "Claim":
 - a demand or assertion by the City or the Contractor seeking an interpretation of Contract terms, an Adjustment, or other relief with respect to the terms of the Contract;
 - (ii) other disputes and matters in question between the City and the Contractor arising out of or relating to the Contract, and/or
 - (iii) allegations by the City or the Contractor of errors or omissions on the part of the Engineer;
- (g) "Class A Estimate": a detailed estimate prepared by the Engineer, based on final drawings and specifications which is used to evaluate tenders;
- (h) "Class B Estimate": an estimate, prepared by the Engineer after site investigations and studies have been completed and the major systems defined, based on the Project Brief and preliminary design and used for obtaining approvals, budgetary control and design cost control;
- (i) "Class C Estimate": an estimate, prepared by the Engineer with limited site information, based on probable conditions affecting the project, representing the summation of all identifiable project elemental costs and used for program planning, to establish a more specific definition of the City's needs and to obtain preliminary approval;

- (j) "Completion Date": the date of Substantial Completion of the Work, as certified by the Engineer;
- (k) "Construction Budget": the City's estimated Construction Cost, including contingencies for cost increases;
- (I) "Construction Cost": the Contract Price for all elements of the Work designed or specified by the Engineer. Where there is no Contract Price for all or part of the Project, the Construction Cost shall be the estimated cost at current market rates as determined by the Engineer and agreed to by the City. Construction Cost does not include the compensation of the Engineer and the Subconsultants, and other costs such as the cost of the land and rights-of-way;
- (m) "Construction Contract": the Contract between the City and the Contractor for the provision of labour, materials and equipment for the execution of the Work by the Contractor;
- (n) "Contract": the undertaking by the parties to perform their respective duties and discharge their obligations as set out in the Contract Documents;
- (o) "Contract Documents": the documents referred to in the Memorandum of Agreement between the City and the Contractor;
- (p) "Contractor": the party identified in the Articles of Agreement between the City and the Contractor;
- (q) "day": a calendar day;
- (r) **"Engineer":** the Architect or Engineer as designated in the Memorandum of Agreement between the City and Engineer;
- (s) **"Final Completion":** when the Work has been performed in accordance with the Contract Documents, as certified by the Engineer;
- (t) "General Conditions": the General Conditions of the Contract for Construction between the City and the Contractor;
- (u) "Laws and Regulations": any and all applicable laws, rules, regulations, by-laws, codes and orders of any and all government bodies, agencies, authorities and courts, and
- (v) "Memorandum of Agreement": the executed Memorandum of Agreement between the City and the Engineer;
- (w) "Project": the total construction of which the Work to be performed under the Contract may be the whole or a part;

- (x) "Project Brief": a document describing in sufficient detail the services to be provided to permit the design to proceed; it may include general project information, content plan, time plan, cost plan and design data, specifically related to the Project;
- (y) "Project Requirements": instructions and directions in writing, which may include data, documents, plans, drawings, specifications, tendering procedures and pretender addenda provided by the City concerning the Project, its administration, time and cost limits and may include the Project Brief;
- (z) "Scope Change": changes to the scope of the Services to be performed by the Engineer, as approved by the City, in accordance with this Agreement;
- (aa) "Services": the totality of all labour, materials, equipment and disbursements used or incorporated into the Project by the Engineer pursuant to the Agreement;
- (bb) "Site": the land or actual place designated in the Contract Documents for the performance of the Work;
- (cc) **"Subconsultant":** a person, firm or corporation to whom the Engineer has subcontracted the whole or any part of the Services;
- (dd) "Subcontractor": a party having a contract with the Contractor for the performance of any part of the Work;
- (ee) "Substantial Completion": when the Work has progressed to the point where, in the opinion of the Engineer as evidenced by the certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the intended purpose;
- (ff) "TC": a reference to a clause in these terms and conditions of Agreement;
- (gg) "Work": all or any part of the construction and services required by the Contract Documents, including all labour, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract;

1.2 **Documents**

- (a) All surveys, reports, drawings, calculations, designs, plans, specifications and other data, information and material collected, including computer disks and printouts, compiled, drawn and produced, pursuant to the Agreement are the property of the City and the copyright of this material shall belong to the City.
- (b) Any information given by the City to the Engineer in performing the Services in accordance with the Agreement shall be treated as privileged and confidential, both during and after the completion of the Services.

- (c) In the event of conflicts between the Agreement Documents, the following shall apply:
 - (i) documents of later date shall govern over earlier documents of the same classification;
 - (ii) the terms and conditions shall govern over the Engineer's proposal;
 - (iii) supplementary terms and conditions shall govern over the terms and conditions, and
 - (iv) the Memorandum of Agreement shall govern over all documents.

1.3 Notices

- (a) Where a notice is required by the Agreement to be given in writing, it may be delivered personally to the party or delivered or sent by mail or facsimile transmission to the party's address set out in the Memorandum of Agreement or to its office at or near the Site.
- (b) Notwithstanding the above, each party shall use the most expeditious method of giving the written notice or communication.
- (c) A written notice or communication sent by mail shall be deemed to have been received ten days from the date of posting. Whenever a notice or communication is sent by facsimile transmission, acknowledgement from the receiving party must be given to the other party that the notice or communication has in fact been received, for it to be effective; this acknowledgement may be made verbally, in person or by telephone. If no such acknowledgement is given, it shall be deemed to have been received ten days from the date of posting of the original document.

1.4 Rights and Remedies

- (a) No implied terms or obligations of any kind by or on behalf of the City shall arise from anything in the Agreement Documents and the express covenants and agreements therein contained and made by the City are the only covenants and agreements upon which any rights against the City are to be founded.
- (b) Any failure by the City to enforce or to require the strict performance of any of the provisions of the Agreement shall not, in any way, constitute a waiver of those provisions and affect or impair those provisions or any right the City has at any time to avail itself of any remedies it may have for any breach of these provisions or to require Services to be performed in accordance with the Agreement.

1.5 Assignment

The Agreement, or any part of it, or any benefit or interest in it, shall not be assigned by either party without the prior written consent of the other party.

1.6 Applicable Law

This Agreement shall be deemed to have been made in the Northwest Territories and shall be governed by and interpreted in accordance with the laws of the Northwest Territories.

1.7 Engineer Independent of City

The City and Engineer hereby agree and acknowledge that the Engineer is not an employee of the City but provides services pursuant to this Agreement as an independent party and nothing in this Agreement or the provision of Services pursuant thereto shall be deemed to create any other relationship between the City and the Engineer.

2.0 CITY'S OBLIGATIONS

2.1 Payment

Subject to any other provision in the Contract Documents, the City shall make payments to the Engineer at the times and in the manner set out in TC 5.0.

2.2 **Project Information**

- (a) The City shall provide the Engineer with the Project Requirements.
- (b) The City shall promptly provide written decisions, instructions, acceptances and other relevant information required by the Engineer to enable the Engineer to perform the Services.
- (c) If tenders are to be called, the City shall arrange, with the assistance of the Engineer as required, for such tenders, assemble and issue the tender documents, receive bids and award the Construction Contract.

3.0 ENGINEER'S OBLIGATIONS

3.1 **General Obligation**

In the course of completing the Services, the Engineer is to employ a level of care, skill and diligence normally provided in the performance of such Services and in respect of projects of a similar nature.

3.2 **Project Team**

In the course of completing the Services, the Engineer shall not replace, remove or add any member to their project team, as outlined in the Engineer's Proposal in Appendix A, unless approval from the City is given in advance of the change.

3.3 Contractor Safety Monitoring

In the course of completing the Services, the Engineer is to monitor the Contractor(s) to ensure compliance with the City's safety requirements. This includes performing site

inspections, reviewing frequency and quality of toolbox meetings and ensuring equipment maintenance records are current and available on site. The Engineer is to immediately notify the City of any incident or condition that requires the cessation of work.

3.4 Basic Services

The Engineer's Basic Services consist of the six phases described in TC 3.2 (a) to (f) and include any other services described in the supplementary conditions, if any, which are designated as part of the basic services.

(a) **During the schematic design phase:**

- the Engineer shall study the Project Requirements furnished by the City, review its understanding of such requirements with the City and advise the City of the need for any further information and data, including surveys, borings, soundings and soil reports;
- (ii) the Engineer shall complete a pre-design survey of the project area(s). The survey shall be done by a competent surveyor and shall include utilities, driveways, road grades, sidewalks, curbs, power and communication infrastructure, and any other important features within the project area;
- (iii) the Engineer shall provide a preliminary evaluation of the Project and a Class C Estimate, and furnish a proposed Project schedule in a format acceptable to the City;
- (iv) based on the mutually agreed upon schedule and budget, the Engineer shall review with the City alternative approaches to design and construction of the Project;
- (v) the Engineer shall prepare, for approval by the City, schematic/preliminary design documents consisting of drawings and other documents appropriate to the size of the Project illustrating the scale and relationship of Project components;
- (vi) the Engineer shall review the schematic design documents and the Class C Estimate with the City and obtain written approval of the schematic design and estimate from the City prior to commencement of the design development phase, and
- (vii) all designs and specifications must be completed in accordance with engineering and industry standards.

(b) During the design development phase:

(i) based on the approved schematic design documents and the approved budget, the Engineer shall prepare, for approval by the City, design development documents consisting of drawings, outline specifications and other documents appropriate to the size of the Project to fix and describe the size and character of the entire Project as to architectural, structural,

- mechanical and electrical systems, materials and such other elements as may be appropriate;
- (ii) the Engineer shall assist the City in obtaining preliminary approvals from authorities having jurisdiction, including any requirements of the City itself;
- (iii) the Engineer shall prepare a Class B Estimate, and
- (iv) the Engineer shall review the design development documents and Class B Estimate with the City and obtain written approval of the design from the City prior to commencement of the construction document phase.

(c) During the construction document phase:

- (i) based on the approved design development documents, the Engineer shall prepare Construction Contract Documents consisting of drawings and specifications setting out in detail the requirements for construction of the Project;
- (ii) the Engineer shall, at the City's request, review with the City the plans and specifications when they are fifty, seventy-five and one hundred percent complete, and obtain written approvals from the City at each review stage prior to further work being performed;
- (iii) the Engineer shall revise the cost estimate to reflect changes in the design, the tender date or market conditions and submit a Class A Estimate following the final review with the City, and
- (iv) the Engineer shall assist in obtaining final approvals from authorities having jurisdiction over the project as noted in the design development phase.

(d) During the bidding or negotiation phase:

- (i) the Engineer shall assist the City in obtaining bids or proposals, and
- (ii) the Engineer shall review any tenders or proposals that are submitted to verify their completeness and make a recommendation for the award of the Construction Contract.

(e) During the construction phase:

- (i) the Engineer shall administer the Construction Contract in accordance with the Construction Contract Documents and this provision;
- (ii) the Engineer shall conduct inspections at intervals appropriate to the stage of construction reasonably necessary to enable it to determine if the Work is proceeding in general accordance with the Construction Contract Documents. However, the Engineer shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work, unless otherwise stipulated in the Agreement. On the basis of

- such on-site observations, the Engineer shall keep the City informed of the progress and quality of the Work, and shall endeavour to guard the City against defects and deficiencies in the Work of the Contractor;
- (iii) the Engineer shall not have control or charge of the Work and shall not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the Work, nor will he be responsible for the acts or omissions of the Contractor, Subcontractors or any other persons performing any part of the Work;
- (iv) the Engineer shall at all times have access to the Work wherever it is in preparation or progress;
- (v) the Engineer shall determine the amounts owing to the Contractor based on observations at the Site and on evaluation of the Contractor's applications for payment, and shall issue in a timely manner, certificates for payment as provided in the Construction Contract Documents;
- (vi) the issuance of a certificate for payment shall constitute a representation by the Engineer to the City, based on the Engineer's observations at the Site and the data comprising the Contractor's application for payment, that the Work has progressed to the point indicated and that to the best of the Engineer's knowledge, information and belief, the quality of the Work is in accordance with the Construction Contract Documents and the Contractor is entitled to payment in the amount certified. Such certification is subject to continuing evaluation of the Work as it progresses, for general conformance with the Construction Contract Documents, to the results of any subsequent tests required by or performed under the Construction Contract Documents correctable prior to completion, and to any specific qualifications stated in the certificate for payment;
- (vii) the Engineer shall render interpretations necessary for the proper execution or progress of the Work with reasonable promptness on the written request of the City and shall render written decisions within a reasonable time on all Claims, when so requested by the City;
- (viii) interpretations and decisions of the Engineer shall be consistent with the intent of and reasonably inferable from the Construction Contract Documents and shall be in written or graphic form;
- (ix) the Engineer and its Subconsultants shall, when requested to do so by the City, join in arbitration proceedings under the Construction Contract, and shall cooperate fully with the Referee and the Arbitrator when called upon to provide information and/or assistance. Subconsultants are handled under TC 3.7;
- (x) the Engineer shall notify the City of all work which does not conform to the Construction Contract Documents, and make recommendations as to

whether or not said work should be rejected. Whenever, in the Engineer's opinion, it is necessary or advisable, the Engineer may request that special inspection or testing of the work be performed, whether or not such work is fabricated, installed or completed;

- (xi) the Engineer shall review or take other appropriate action with reasonable promptness, upon the Contractor's submittals such as shop drawings, product data and samples, for the purpose of determining conformance with the design concept of the Project and with the requirements and intent of the Construction Contract Documents;
- (xii) the Engineer shall prepare change orders and other project documentation required for the City's review, approval or execution, in accordance with the Construction Contract Documents;
- (xiii) the Engineer shall supply all engineering equipment normally associated with work of this nature, including but not limited to slump cones, thermometers, transits, levels, chains, tapes, rods and range poles. Specialized equipment may be purchased or leased by the Engineer on a reimbursable basis, following prior approval by the City. Purchased equipment shall become the property of the City at the conclusion of the Project;
- (xiv) the Engineer shall co-ordinate project meetings with the Contractor and his Subcontractors when necessary and attend all such meetings, unless otherwise advised, and report the results of each to the City with copies of the minutes for each meeting;
- (xv) in the absence of other directions from the City, the Engineer shall submit weekly reports on the progress of the Work;
- (xvi) the Engineer shall prepare deficiency lists and project safety records, and advise the City of work to be done in order to complete the Project, and prepare certificates of Substantial Completion in accordance with the provisions of the Construction Contract. The Engineer shall carry out further inspections necessary to ensure that all deficiencies are rectified and prepare the certificate of Final Completion for approval by the City;
- (xvii) the Engineer shall make every effort to ensure that all operating manuals, warranties, guarantees and instructions are provided to the City as specified in the Construction Contract Documents, and
- (xviii) the Engineer shall ensure that the City is informed, with adequate notice of all quality control testing completed by the Contractor. This will allow scheduling of quality assurance testing by the City.

(f) During the post construction phase:

- (i) the Engineer will assess any reported defects or deficiencies arising during the warranty period as specified in the Construction Contract and when requested, inspect the work with the City prior to the expiry of that period. The Engineer shall issue, on behalf of the City, the necessary instructions to the Contractor if work is required to correct such defects or deficiencies, and
- (ii) the Engineer will prepare a set of reproducible record drawings showing changes in the work made during construction, based on marked up prints, drawings and other data furnished by the Contractor to the Engineer. Such drawings are to be labeled "Record Drawings", dated and signed by the Engineer.

3.5 Additional Services

- (a) The following services are not included in basic services unless so identified elsewhere in this Agreement:
 - (i) if the City requests continuous representation at the Site, the Engineer shall provide one or more project representatives to assist the Engineer in carrying out such responsibilities. Such project representatives shall be selected, employed and directed by the Engineer as approved by the City. The duties, responsibilities and limitations of authority of such project representatives shall be as mutually agreed between the City and the Engineer;
 - (ii) providing consultation concerning replacement of any work damaged by fire or other similar cause during construction, and furnishing services as may be required in connection with the replacement of such work;
 - (iii) providing services made necessary by the default of the Contractor under the Construction Contract;
 - (iv) providing services after expiry of the warranty period;
 - (v) providing translation to a language other than the English language;
 - (vi) when requested by the City, providing a perspective presentation drawing or model for use by the City;
 - (vii) preparing change orders to the Construction Contract which are not implemented;
 - (viii) providing calculations which establish the optimum insulation values, life cycle costs and pay-back periods for energy related systems and components;

- (ix) providing pre-design services such as soil investigation analysis;
- (x) preparing and providing operations and maintenance manuals, and
- (xi) providing any other services not otherwise included in this Agreement.
- (b) The above services shall be provided only if authorized or confirmed in writing by the City prior to any work being done. They shall be paid for by the City as provided in this Agreement, in addition to the compensation for basic services.

3.6 **Legal Requirements**

- (a) The Engineer shall ensure that the performance of Services complies with all relevant legislation, including all codes, bylaws and regulations.
- (b) The Engineer shall apply and pay for all necessary permits or licenses required for the execution of its Services.
- (c) The Engineer shall, at all times, observe the provisions of the Labour Standards Act and all other statutes in force from time to time in the Northwest Territories pertaining to the Engineer's employment.

3.7 **Subconsultants**

- (a) Neither the whole nor any part of this Agreement may be subcontracted by the Engineer without the prior written approval of the City. The firms proposed to be used as Subconsultants for these services must also be approved by the City.
- (b) Every Subconsultant agreement entered into by the Engineer shall adopt all of the terms and conditions of this Agreement that are of general application.
- (c) Neither a Subconsultant nor the City's approval to a Subconsultant shall be construed so as to relieve the Engineer from any obligation under this Agreement or to impose liability upon the City.

3.8 Effect of Approvals

No acceptance or approval by the City, whether express or implied, shall be deemed to relieve the Engineer of his professional or technical responsibility for the plans, drawings, calculations or other material prepared or assembled by the Engineer.

3.9 Records To Be Kept By Engineer

- (a) The Engineer shall:
 - maintain complete records of the estimated and actual costs of his Services, together with all contracts, correspondence, invoices, receipts and vouchers relating thereto;

- (ii) make all records and material available for audit and inspection by the City or by persons acting on behalf of the City when requested;
- (iii) allow any of the persons referred to above to make copies of and to take extracts from any of the records and material referred to herein, and
- (iv) furnish any person referred to herein with any information they may require from time to time in connection with such records and material.
- (b) The records maintained by the Engineer referred to above shall be keep intact by the Engineer until the expiration of three (3) years after the date that a certificate of Final Completion has been issued to the Contractor or until the expiration of such other period of time as the City may direct.

3.10 Errors and Omissions

Notwithstanding any other provision of this Agreement, no fee payment will be made by the City for Services performed by the Engineer to remedy errors or omissions for which the Engineer is responsible.

3.11 Local and Northern Labour

The Engineer shall employ and use as much local and/or northern labour in the performance of its Services, as is reasonable in the circumstances.

3.12 **Certification**

- (a) If requested by the City, the Engineer shall furnish proof of compliance with the Northwest Territories' Engineering and Geoscience Professions Act and the requirements of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG). Architects must furnish proof of professional standing in a Canadian Provincial organization. The Engineer shall maintain a current City of Yellowknife Business License.
- (b) All plans, reports or similar documents prepared by an Engineer, Geologist or Geophysicist shall bear a professional seal.

3.13 Engineer's Estimates

- (a) If at any time, the Engineer considers that costs will exceed the Project Budget, he shall immediately advise the City with written substantiation. If, in the opinion of the City, the excess is due to design, or matters under the control of or reasonably foreseeable by the Engineer, the City may require the Engineer, at its expense, and at no additional cost to the City, to do everything by way of revision of design to bring the cost within the Project Budget.
- (b) If the lowest tender for the Project exceeds the latest approved estimate of construction, the City shall:

- (i) give written approval of an increase in the Project Budget;
- (ii) authorize re-tendering or renegotiating of the Project within a reasonable time;
- (iii) if the Project is abandoned, terminate in accordance with TC 9.2, or
- (iv) cooperate in revising the Project scope and quantity as required to reduce the Construction Cost.
- (c) If the city chooses to proceed under TC 3.11 (b) (iv), the Engineer, without additional charge, shall modify the Contract Documents as necessary to comply with the revised Project Budget.
- (d) If the bidding or negotiation phase has not commenced within three months after the Engineer submits the Construction Contract Documents to the City, any estimate of Construction Cost may be adjusted to reflect any change in the general level of prices in the construction industry between the date of submission of the Construction Contract Documents to the City and the date on which the bids are sought. The cost to adjust such estimate shall be considered an additional service.

4.0 FEES AND REIMBURSABLE EXPENSES

4.1 Engineer's Proposal

Payment for Services shall be computed in accordance with the Engineer's proposal which forms part of the Agreement Documents or in accordance with TC 4.2 to 4.4.

4.2 **Payment For Basic Services**

- (a) Where applicable, fees for basic services as described in TC 3.2 shall be computed on the basis of any one, or combination of the following:
 - (i) a stipulated sum fee of \$ N/A;
 - (ii) a time rate fee calculated on the basis of payroll costs + N/A %;
 - (iii) Selected payment basis:

As outlined in Engineer's Proposal

Maximum Contract Value =

\$XXXXXXX.XX plus GST

- (iv) a percentage of Construction Cost calculated as follows:
 - (1) For architectural agreements, fees shall be calculated according to the current (based on the date of this Agreement) "Recommended Conditions of Engagement and Schedule of Professional Fees" as published by the Alberta Association of Architects; or alternatively in accordance with: N/A

- (2) For engineering agreements, fees shall be calculated according to the current (based on the date this Agreement) guideline of Consultant Fees for General Engineering Assignments as published by the Association of Professional Engineers, Geologists and Geophysicists of Alberta; or alternatively in accordance with: N/A
- (3) Fees for both architectural and engineering services shall be calculated based on the Engineer's estimate of the Construction Cost until the Construction Contract is established. Fees will then be based on a predetermined percentage of the Construction Cost. Adjustment of the fee to take into account change orders issued under the Construction Contract shall be made at the time the certificate of Substantial Completion is issued. N/A.
- (b) Payroll costs are defined as the direct salaries of all the Engineer's personnel engaged on the project, and the portion of the costs of their mandatory and customary contributions and benefits related thereto, such as employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions and similar contributions and benefits. Payroll costs are subject to annual review; any increases must have the prior written approval of the City.
- (c) Traveling time authorized by the City during normal working hours shall be chargeable as time worked. Authorized traveling time outside of normal working hours shall be chargeable up to a maximum of three hours per day. However, not more than eight hours in any one day shall be claimed for time spent in traveling.
- (d) Progress payments shall be made on a monthly, or mutually agreed basis. Where compensation is based on a stipulated sum or percentage of Construction Cost, monthly payments shall be made for each of the phases described in 3.2, equal to the following percentages:

Schematic Design Phase	%
Design Development Phase	%
Construction Document Phase	%
Bidding or Negotiation Phase	%
Construction Phase	%
Post Construction Phase	%

4.3 **Payment For Additional Services**

In addition to the fees for services referred to in 4.1, the City will pay the Engineer for additional Services, as specified in 3.3 as authorized by the City as follows:

4.4 Payment For Reimbursable Expenses

- (a) Reimbursable expenses, or disbursements, include actual expenditures made by the Engineer and his employees in the interests of the Project. These expenses must have the prior approval of the City.
- (b) Reimbursable expenses shall be computed as a multiple of 1.05 times the amounts expended by the Engineer. The Engineer shall provide the City with copies of all invoices for reimbursement.
- (c) Reimbursable expenses shall include the following:
 - (i) reproduction of plans, drawings, specifications and other documents, excluding reproductions for the Engineer's use;
 - (ii) travel and accommodation costs, approved by the City, shall be paid in accordance with current market rates;
 - (iii) long distance telephone calls, telex, telegrams, courier service, electronic conveyances and postage;
 - (iv) living expenses for personnel where authorized by the City for out-of-town travel;
 - (v) equipment and vehicle rental costs, subject to prior approval by the City;
 - (vi) all taxes or levies in the nature of a business transfer tax, value-added tax or sales tax, but not an income tax, that are imposed against the Engineer by any federal, provincial, territorial or local governmental authority upon or with respect to all professional services rendered by the Engineer, and
 - (vii) other expenses as noted herein:

All reimbursable disbursements will be in accordance with Engineer's Proposal in Appendix A.

5.0 PAYMENT TO ENGINEER

5.1 Amount Payable - General

Subject to any other provisions of this Agreement, the City shall pay the Engineer at the times, in the manner and for the amounts hereinafter set out, and the Engineer shall accept that amount as payment in full satisfaction for everything furnished and done by it in respect of the Services to which the payment relates.

5.2 Time of Payment

- (a) The Engineer shall, in all cases, deliver on a monthly basis or as specified by the City, in respect of that payment period, a written progress claim that sufficiently describes any part of the Services that have been completed.
- (b) The City shall, not later than ten days after receipt of a progress claim referred to above, issue a progress report, a copy of which the City will give to the Engineer, which indicates the value of the part of the Services described in the progress claim which, in the City's opinion, is in accordance with this Agreement and was not included in any other progress report. The progress report referred to herein may take the form of an endorsement of the Engineer's progress claim.
- (c) Subject to TC 5.4, the Engineer shall be paid within thirty days after receipt and registration of its progress claim.

5.3 **Payment Not Binding**

(a) Neither a progress report referred to in 5.2 nor any payment made by the City pursuant to the Agreement shall be construed as an admission by the City that the Services or any part thereof are complete, are satisfactory, or are in accordance with the Agreement.

5.4 **Delay in Making Payment**

- (a) Delay by the City in making payments when they are due pursuant to this provision shall not be a breach of the Agreement by the City.
- (b) Unless otherwise stated in the Agreement, when the City delays in making a payment that is due pursuant to this clause, the Engineer shall be entitled to receive simple interest on the amount that is overdue commencing thirty days after the day that it becomes overdue, up to and including the date that the payment is made, at the prime lending rate of the main banker of the City.

5.5 Right of Set-Off

Without limiting any right of set-off or deduction given or implied by law or elsewhere in the Agreement, the City may set-off any amount payable to the City by the Engineer against any amount payable to the Engineer under this Agreement.

5.6 Claims Against And Obligations of the Engineer

- (a) The Engineer shall discharge all its lawful obligations and shall satisfy all lawful claims against it arising out of the performance of the Services at least as often as the Agreement requires the City to pay the Engineer.
- (b) The City may, in its absolute discretion, in order to discharge lawful obligations of and satisfy lawful claims against the Engineer or its Subconsultants, arising out of the performance of the Services, pay any amount that is due and payable to the

Engineer pursuant to the Agreement, directly to the obligees of and the claimants against, the Engineer or its Subconsultants. When the parties involved in the claim are in agreement on the validity and amount of the claim, the City may treat this as a lawful claim.

- (c) Where no agreement is reached between the parties as referred to above, the City may withhold payment, without any obligation to pay interest, until the validity and amount of the claim is established by legal proceeding. The City may, in its absolute discretion, bring the matter before the Supreme Court of the Northwest Territories by way of Interpleader, and shall dispose of the funds withheld in accordance with the direction of the Court.
- (d) A payment made pursuant to this provision is, to the extent of the payment, a discharge of the City's liability to the Engineer under the Agreement and may be deducted from an amount payable to the Engineer under the Agreement.

6.0 TIME

- (a) The dates and time limits stated in the Agreement are of the essence of the Agreement.
- (b) The Engineer shall submit a detailed schedule suitable to the Project for the performance of the Services and shall adhere to the schedule approved by the City. This schedule is to include commencement and completion dates for the Project. If a change in the approved schedule becomes necessary, the Engineer shall submit a report to the City and obtain approval for any change therein.

7.0 SCOPE CHANGES

7.1 Requested Changes

The Engineer shall, upon the City's written request, make any required changes in the design of the Project, notwithstanding the City's previous approval, and advise the City of any effect on the schedule, budget and other implications of the Scope Change. Nothing done by the Engineer to remedy design errors or other problems attributable to shortcomings of the Engineer, including persons consulted, employed or supervised by the Engineer, shall entitle the Engineer to additional fees.

7.2 **Payment for Changes**

If the City requires changes in design or revisions after approval of the Construction Documents for reasons other than design and cost factors within the control of the Engineer, the City will pay the Engineer a further amount, in respect of the additional work, to be negotiated between the parties.

8.0 DISPUTE RESOLUTION

8.1 **Notice of Dispute**

In the event of a disagreement regarding any aspect of the Engineer's Services or any instructions given under the Agreement, the Engineer may give notice of its dispute in writing to the City requesting a decision. Such notice shall be delivered to the City within fourteen days of the event giving rise to the disagreement or receipt of the instructions. Pending such decision, the Engineer shall continue to perform the Services in accordance with the instructions of the City, who shall give its decision in writing to the Engineer within thirty days of receiving the said notice. In the event that the Engineer is dissatisfied with the decision, he shall continue to perform the Services and may within 14 days' receipt of the decision, submit a written request to the City Administrator to review the matter in dispute. The City Administrator and the Engineer may appoint a mutually acceptable person to mediate in the dispute.

8.2 **Arbitration**

- (a) In the event a dispute arising between the parties has not been resolved pursuant to TC 8.1, such dispute shall be referred to a single Arbitrator, in accordance with the Arbitration Act of the Northwest Territories, subject to the following provisions:
 - (i) the party referring the dispute for arbitration shall notify the other party in writing of its intention to refer the matter, within thirty days of a decision rendered in accordance with TC 8.1;
 - (ii) the terms of reference for arbitration shall be those areas of dispute referred to in the initial notice which remain in dispute;
 - (iii) the City and the Engineer shall, within fifteen days of the establishment of the terms of reference, appoint a single arbitrator to deal with the dispute;
 - (iv) within sixty days of the appointment of the arbitrator, or such further period as may be agreed upon by the parties, the arbitrator shall resolve all matters in dispute in accordance with the terms of reference;
 - (v) the decision of the arbitrator shall be final and binding upon the parties who covenant that their disputes shall be so decided by arbitration alone and not by recourse to any court by way of action at law, and
 - (vi) the costs of the arbitrator shall be borne by each party as specified by the arbitrator.
- (b) Unless instructed otherwise in writing by the City, the Engineer shall continue to carry out the Services during any arbitration proceedings.

9.0 SUSPENSION AND TERMINATION

9.1 Suspension of Services

- (a) The City may require the Engineer to suspend performance of the Agreement for a specified or unspecified period by giving written notice of suspension to the Engineer.
- (b) During the period of suspension the Engineer shall minimize their payroll costs and operating expenses and within ten days' receipt of the notice of suspension, deliver to the City a schedule of net expenses in respect of which they claim to be reimbursed. The City will give due consideration to the claim and will make such payment as seems in the opinion of the City to compensate the Engineer for reasonable costs and expenses incurred during the period of suspension.
- (c) If the period of suspension is sixty days or less, the Engineer shall, upon the expiration of that period, resume the performance of the Agreement.
- (d) If the period of suspension is more than sixty days, and if the City and the Engineer agree that the performance of the Agreement will be continued by the Engineer, the Engineer shall resume performance of the Agreement subject to any terms and conditions agreed upon by the City and the Engineer. If agreement cannot be reached to continue the Agreement, the notice of suspension shall be deemed to be a notice of termination.
- (e) When requested by the City, the Engineer is to continue to perform the Services whenever strikes, lockouts or other labour disputes occur. The City is not obligated to pay for any additional costs which are not properly substantiated which may be borne by the Engineer as a consequence of strikes, lockouts or other labour disputes.

9.2 **Termination of Agreement**

- (a) The City may terminate this Agreement at any time by giving a written notice of termination to the Engineer. When a written notice is received by the Engineer, the Engineer shall, subject to any conditions stipulated in the notice, forthwith cease all operations in performance of the Agreement.
- (b) If the City terminates the Agreement because of default by the Engineer, the insolvency of or the commission of an act of bankruptcy by the Engineer, the Engineer shall be liable to and upon demand therefore, pay to the City an amount equal to all loss and damage suffered by the City by reason of the non-completion of the Services by the Engineer. If the Engineer fails to pay for such loss or damage on demand, the City shall be entitled to deduct the same from any payments due and payable to the Engineer. Termination hereunder does not operate so as to relieve or discharge the Engineer from any obligation under the Agreement or imposed upon it by law in respect to the Services or any portion thereof which have been completed.

- (c) In the event of termination, the City will pay, and the Engineer will accept, in full settlement of all claims, an amount calculated under the terms of the Agreement specified for that phase or a proportionate part thereof based on the Services performed, together with such further amount as will, in the opinion of the City, compensate the Engineer for reasonable expenses continuing after the date of termination.
- (d) Unless otherwise stated herein, the Engineer's Services shall be considered complete after the one year warranty period expires or whenever corrections required of the Contractor at the end of this period are completed, or after the certificate of Final Completion is issued, whichever is the later.
- (e) It is further agreed, and the Engineer acknowledges, that in the event of termination, the Engineer shall, unless otherwise instructed, deliver to the City a reproducible copy of all Project documents used by the Engineer or prepared by the Engineer in a format acceptable to the City.

10.0 INDEMNIFICATION AND INSURANCE

10.1 Indemnification

The Engineer shall indemnify and save harmless the City and all agents, officers, servants and employees of the City from and against all claims, losses, damages, costs, actions and other proceedings, made, sustained, brought or prosecuted in any manner based upon, occasioned by or attributable to any injury, infringement, including infringement of any intellectual property rights, or damage arising from any negligent act or omission of the Engineer, their servants or agents or persons for whom they had assumed responsibility in the performance or purported performance of their services under the Agreement.

10.2 Limitation of Liability

The total amount of all claims the City may have against the Engineer under this Agreement, or arising from the performance or non-performance of the Services under any theory of law, including but not limited to claims for negligence, negligent misrepresentation, and breach of contract, will be limited to the lesser of the fees payable pursuant to this Agreement or the amount of any professional liability insurance the Engineer may have available at the time such claims are made.

In no event will the Engineer be liable for indirect or consequential damages including, without limitation, loss of use or loss of profits.

10.3 Insurance

(a) The Engineer shall, at its own expense, maintain the following insurance policies in respect of the Agreement unless otherwise stipulated:

Comprehensive General Liability \$2,000,000

Professional Liability - Aggregate Limit \$1,000,000

Per Claim Limit \$500,000

- (b) The policies specified herein shall be maintained continuously for the duration of this Agreement in a form acceptable to the City and in accordance with the Insurance Act of the Northwest Territories.
- (c) Within fourteen days' execution of the Agreement, the Engineer shall deliver to the City a Certificate of Insurance, indicating the limits of the Engineer's insurance policies and expiry dates.

Appendix I

Email Attachment Submitted by Commenter 4 - See Table B1 in Appendix B





gracelakeneighbourhood@hotmail.com

Ms. Charlsey White Director, Planning and Development City of Yellowknife 4807 52 Street P.O. Box 580 Yellowknife, NT X1A 2N4

May 19, 2021

Dear Ms. White,

We would like to welcome you to Yellowknife and your new position at the City. We hope you come to enjoy living in Yellowknife as much as we do.

As you may be aware, the City of Yellowknife updated its Community Plan in 2019 following an extensive public consultation process. Several residents of the Grace Lake North neighbourhood participated in those consultations and identified the need for visibility, noise and light buffers and barriers wherever residential neighbourhoods exist adjacent to industrial operations. During a November 12, 2019 meeting of the Priorities and Governance Committee, Councillors expressed support for the concept but deferred further discussions to when new zoning and development schemes are considered for designated areas. The Community Plan, which incorporates the general objective of buffering and visual barriers, was adopted by Council in December 2019.

A few weeks ago, we became aware of a Request for Proposal in which the City sought engineering services to complete the design of the Kam Lake Industrial Expansion and administer its construction. The area being proposed is located immediately adjacent to the existing Grace Lake residential neighbourhood. Several residents subsequently reached out to City Council seeking clarification over the lack of consultation with respect to the proposed expansion. We were then, advised by Mayor Alty that the Request for Proposal had been cancelled as it was inadvertently released, given there is more planning work that needs to be undertaken, including development of a Kam Lake Industrial Expansion Development Scheme and Zoning Bylaw amendment, along with opportunities for community engagement.

The Grace Lake subdivision was established in 2013. At the time, the City of Yellowknife described the larger-than-normal residential properties as being opportunities to build homes in a quiet, pristine natural setting located along the shores of Grace Lake, including additional opportunities for active recreation parks to the north of the subdivision in the designated growth reserve area. We feel that the vision is a good faith agreement between two parties and if the City would like to change that vision it needs to engage in discussions with us specifically. Many long-term city residents and business owners seized the opportunity and invested significant personal and financial resources into what has become a unique and quiet family-orientated neighbourhood.

Grace Lake residents generally support economic development and the concept of the Kam Lake Industrial Expansion. However, we are concerned by the suggestion that the proposed minimal green space between the new commercial and light industrial developments and the existing Grace Lake residential neighbourhood is sufficient. We believe this is inconsistent with the original concept of the Grace Lake residential sub-division that was conveyed to potential

purchasers by the City when the properties were being sold, that being a quiet, pristine natural setting with a panoramic view, located along the shores of Grace Lake. We also believe it is inconsistent with several key planning and development objectives outlined in the Community Plan as they relate to avoiding conflicts, safety issues, buffering and visual barriers.

We would appreciate an early opportunity to meet with you and your planning staff to discuss the proposed Kam Lake Industrial Expansion, the status of the Zoning bylaw, while seeking alternatives to the currently proposed buffer. Our objective is not to stop the proposed expansion but to ensure effective planning measures and mechanisms are in place that will enable the existing Grace Lake residential and proposed Kam Lake light industrial and commercial land uses to co-exist while also ensuring previous commitments from the City are taken into consideration.

We look forward to hearing back from you on the important matter.

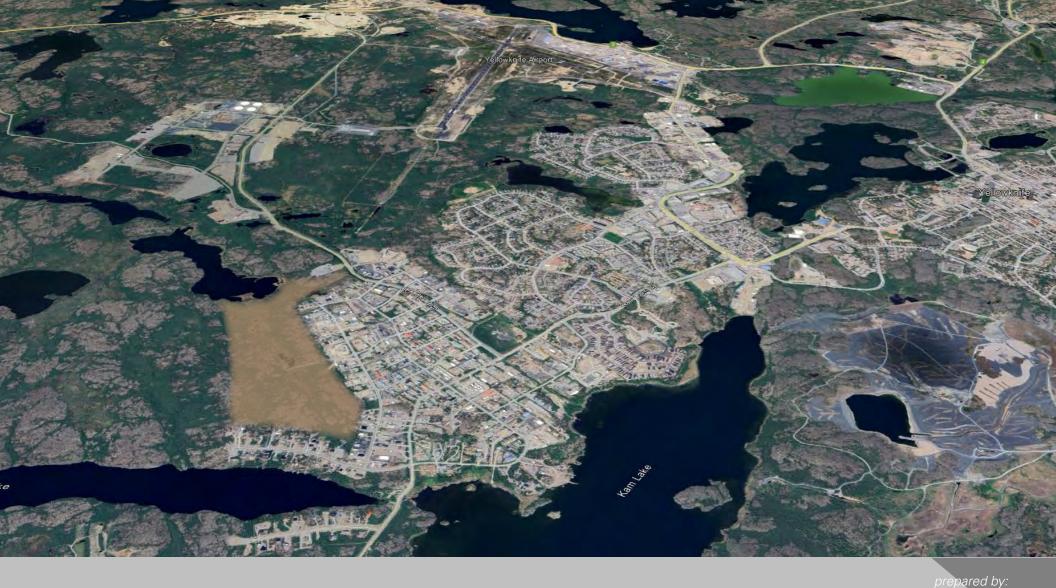
Yours sincerely,

Shane Langlois

Grace Lake Neighbourhood Association (application pending) 222 Grace Lake Blvd. Yellowknife NT X1A 0G5 867-444-0137

Copy:

Rebecca Alty, Mayor All Councillors Joanne Kelly, Member GLN Assoc. Emery Paquin, Member GLN Assoc. Barbara Paquin, Member GLN Assoc. Monte Kehler, Member GLN Assoc. Alison Brown, Member GLN Assoc. Mark Henry, Member GLN Assoc.



Kam Lake Market Study Final Report

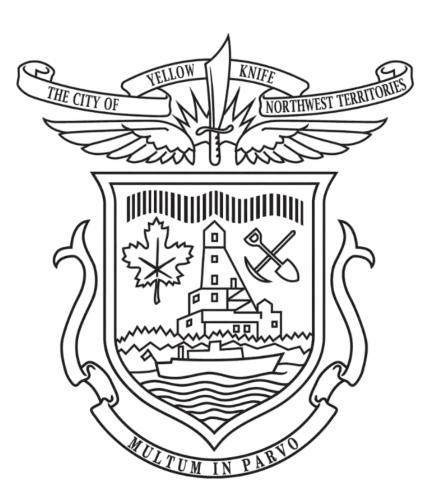


prepared for:



We recognize that The City of Yellowknife is located in Chief Drygeese territory. From time immemorial, it has been the traditional land of the Yellowknives Dene First Nation. We respect the histories, languages, and cultures of all other Indigenous Peoples including the North Slave Métis, and all First Nations, Métis, and Inuit whose presence continues to enrich our vibrant community. Our team is grounded in creating safe spaces that are respectful of the land and environment. We acknowledge the spirit and intent of the Treaties and traditional lands of Indigenous peoples.

Our Team is committed to advancing the Truth and Reconciliation commission of Canada Calls to Action. Through partnerships with orders of government, education systems, organizations, businesses, and individuals, we will collectively create a better place for all for many generations to come.



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Preface

FBM Planning Ltd. ("FBM") was commissioned by the City of Yellowknife in collaboration with Dillon Consulting Ltd. (Dillon) to prepare a Market Study for the Kam Lake Industrial Study Area. This study was carried out from November 2024 through February 2025. On-the-ground fieldwork, conducted in November, included a site visit and documentation of the existing industrial composition in the city.

FBM reviewed a range of statistical information including Statistics Canada Census, Population Estimates, and Labour Market Survey data; and various city background information as well as data from FBM's own extensive project research. Additional statistical data was obtained through FBM's third-party data service, Manifold Data Mining Inc.

To further support this analysis, Dillon Consulting out of their Yellowknife office provided market intelligence and Class-D level costing estimates for full option buildout (using current dollars). A "Class D" level civil engineering cost refers to a preliminary cost estimate, typically made during the Conceptual Design Phase, with a high degree of uncertainty and accuracy in the range of +/-20% - 30%. Due to the limited design details available at this stage, the cost estimates in this study are considered appropriate for high-level feasibility and initial budgeting.

Dillon also provided valuable insights into community engagement that took place in Spring/Summer 2024. Dillon was previously retained to compile and analyze community and business feedback during the first phase of public consultation for the development under consideration.

Forecast models used in this study are intended to provide a reference for planning purposes. Demand forecasts are based on "market-driven" methodologies that take into account historic patterns of growth, population growth, employment, and labour growth to project future conditions. Because they are based on past trends, even the most rigorous forecasts can be disrupted by unforeseen changes.

At the time of writing, there is significant uncertainty surrounding international trade between the United States and Canada. As with recessionary economics, the impacts of increased tariffs or a realignment of global trade are difficult to predict and therefore not factored into the market-driven demand forecast presented in this report. However, trade disputes are just one example of external factors that can affect forecasts. Government policy changes, technological innovation, and societal shifts can all create unpredictable outcomes which may positively or negatively impact demand. The projections in this report therefore represent a baseline scenario based on the best information available at the time of writing. Future users may wish to evaluate the potential impacts of emerging circumstances against this baseline.

It is noted that actual population and labour force numbers will vary over the course of the next 20 years. FBM and its partners do not warrant that any estimates contained within the study will be achieved over the identified time horizons but that they have been prepared conscientiously and objectively on the basis of information obtained during the course of this study.

This analysis was conducted by FBM and Dillon as objective and independent parties. As is customary in an assignment of this type, neither our name nor the material submitted may be included in a prospectus, or part of any printed material, or used in offerings or representations in connection with the sale of securities or participation interest to the public, without the expressed permission of the City of Yellowknife or FBM.

FBM | Dillon Consulting

2025

Executive Summary

Study Process

The study was informed by a public engagement exercise carried out in 2024, which identified prominent themes of public interest, including a desire among stakeholders for a thorough land demand assessment to help establish the need for, and potential character of, any potential future development in the Kam Lake area.

The City of Yellowknife subsequently commissioned FBM Planning and Dillon Consulting to carry out a market study and market demand and supply analysis. The Study Team examined data from third-party sources to gain an understanding of population, demographic, labour force, employment, and income characteristics.

The Study Team also performed desktop research to understand the City of Yellowknife's economic and community plans and general economic outlook, with reference to territorial, national, and international industrial trends.

In order to project market demand, three different forecasting methods were employed, from which a weighted average demand figure was derived. From this, the Study Team estimated the approximate additional floor area that the Kam Lake study area could absorb over the next 20 years, along with the associated land requirements (based on typical site coverage for this style of development).

Demand was forecasted for a selection of uses considered to be compatible with the Kam Lake study area, including a subset of light industrial, commercial, and agricultural uses (collectively, the "targeted uses"), and excluding heavy industry, which the Engle industrial area is intended to accommodate. Demand forecasts were then applied to a land allocation and absorption strategy which in turn informed the development of two conceptual layout plans.

Key Findings

Projections indicate that Yellowknife's population will continue to grow at a more conservative rate reaching an estimate of 26,339 by 2034, an increase of 2,710 at an average annual rate of growth of 1.1% per annum or a total growth of 11.5%. A growing population and workforce

in Yellowknife, combined with higher-than-average household incomes, has several key implications for employment growth in the city and more specifically for the Kam Lake Study Area.

Economic Expansion and Job Creation – As Yellowknife grows, demand for goods and services will also rise. This drives economic growth, particularly in sectors like retail, healthcare, education, and construction. Higher household incomes mean residents have greater purchasing power, fueling local businesses and creating new opportunities for employment across various industries.

Labour Market Pressures – While job growth is positive, a rising population also intensifies demand for skilled and unskilled workers. Public administration, healthcare, and retail—already among the top employers in Yellowknife—may struggle to fill positions if workforce growth does not keep pace with job creation.

Infrastructure and Housing Demand – Higher household incomes suggest financial stability, but they can also drive up housing costs. If supply does not meet demand, affordability may become a concern, making it harder for lower-income workers to live in the city.

Potential for Diversification – While Yellowknife's economy has traditionally relied on public administration and resource-based industries, a growing, high-income population could foster diversification into new industries like agribusiness or cold climate research and technology.

Demand

As Yellowknife looks toward the next 10 to 25 years, its economic landscape will need to evolve with the growth of several key clusters. These clusters will not only support existing industries but also attract new downstream industries that can benefit from proximity to resources, infrastructure, and local expertise.

The Study Team sought to forecast demand for certain "targeted uses" deemed compatible with the Kam Lake study area given its

geographic context and present-day positioning. Through an evaluation of the current market and emerging trends, and results of past public engagement, Kam Lake is deemed compatible with the following broad North American Industry Classification System (NAICS) categories:

- Agriculture forestry, fishing & hunting (11)
- Retail Trade (44-45)
- Arts, entertainment and recreation (71)
- Accommodation and food services (72)
- Other Services (81)
- Construction (23)
- Professional, scientific and technical services (54)
- Manufacturing (31-33)
- Wholesale Trade (41)
- Transportation & Warehousing (48-49)

These targeted uses were grouped into clustered industry segments, with heavy industry intentionally excluded (refer to Table below). Using a weighted average of multiple methodologies for quantifying industrial demand, approximately 611,000 sf of new gross floor area for the target NAICS industries could be reasonably supported over the next 20 years in the Kam Lake Study Area. An additional 20,000 sf of floor area is

CLUSTERED INDUSTRY SEGMENT	Total Floor Area Demand for Kam Lake (sf)	Estimated Kam Lake Land Needs (acres)			
Agriculture	90,204	20.7			
Heavy Industry	0	0.0			
Commercial	29,973	2.3			
Construction	334,741	38.4			
Manufacturing & Warehousing	156,621	36.0			
Self Storage	20,058	2.3			
TOTAL	631,598	99.7			

forecasted for self storage bringing the total to approximately 631,600 sf. Based on a floor area ratio (FAR) or typical site coverage of 0.15 for the average of all land use typologies and reflecting the likelihood that future land in Kam Lake will likely mirror past patterns of development, demand could reasonably support 99.7 acres (38 ha) of net land (i.e. excluding roads and estimated wetlands).

Accordingly, a refinement of the broad sector opportunities reveals that by 2044 Construction businesses would account for the largest share of demand allocation at just under 335,000 sf of building space on 38.4 ac (15.1 ha). Next, Manufacturing & Warehousing comprising a variety of sizes and formats would occupy over 156,600 sf of space on 36 ac (14.6 ha) plus an additional 20,000 sf for a self storage facility(ies). Agriculture, while in its infancy as an industry is considered a future growth segment for which an estimated 90,000 sf on almost 21 ac (8.5 ha) could be required. The final segment, commercial, would be comprised of supporting smaller businesses and is forecasted to require 2.3 ac (0.93 ha) and just under 30,000 sf for floor area.

Recommendations

Recommendations for moving forward on the Area Development Plan for the Study Area include the following:

- · Conduct geotechnical studies to assess land suitability;
- Evaluate wildfire protection, environmental impacts, traffic impacts, and drainage to ensure comprehensive planning;
- Implement mitigation measures to adjacent properties, such as buffers to reduce nuisances (noise, dust, odours);
- Conduct additional engagement, particularly with the local business community to better understand their unique needs; and,
- Ensure ongoing, meaningful community involvement and transparency in planning.



COMMISSIONER'S LAND Interim Land Withdrawal

☐Subject Lands Boundary ☐Land Parcel Boundaries SUBJECT LANDS Lot 32 Block 568 DEH CHO BLVD.

Section 1.0

Introduction



1.1 Summary of Public Engagement Exercise

A preliminary public engagement exercise was held in 2024 to collect community feedback and recommend next steps for the development of the Subject Lands, identified for potential light industrial development. The engagement process resulted in prominent themes that inform this study, outlined in brief below.

Land Demand Analysis – Participants questioned the necessity of developing new light industrial areas, advocating instead for utilizing existing zones such as the Engle Business District. They called for thorough land demand assessments to provide documented evidence to support the need for more development in Kam Lake.

Transparency and Trust – A recurring theme was the need for transparency and trust. Past promises to preserve the area as greenspace were highlighted, with frustration expressed over broken commitments and mishandling of issues such as firebreaks and water management. Improved transparency in consultation and planning processes was strongly recommended.

Bylaw Enforcement – There was significant concern about the lack of enforcement of existing bylaws, which has undermined community trust. Examples of unchecked illegal activities were cited, emphasizing the need for stringent enforcement before pursuing new developments.

Community Engagement

Residents stressed the importance of meaningful community engagement and up-to-date studies on land demand, especially post-2018. The current survey was criticized by some individuals for bias toward light industrial uses, prompting suggestions to include more diverse land uses like residential and recreational in future planning.

This report provides recommendations for moving forward on the planning of the Subject Lands, including:

- 1. Conduct geotechnical and market studies to assess land suitability and market needs;
- 2. Evaluate wildfire protection, traffic impacts, and drainage to ensure comprehensive planning;
- 3. Implement mitigation measures like buffers to reduce nuisances (noise, dust, odours);
- 4. Improve bylaw enforcement to rebuild community trust;
- 5. Conduct additional engagement, particularly with the business community to better understand their land development needs;
- 6. Ensure ongoing, meaningful community involvement and transparency in planning; and,
- 7. Preserve environmental and recreational spaces, notably around the Kam Lake and Grace Lake areas.

Conclusion

The feedback highlights a strong desire for respect for previous commitments, maintaining environmental quality, and basing new developments on clear, documented demand to gain community support and trust.

1.2 Scope of Study

FBM Planning Ltd. ("FBM") and Dillon Consulting Limited ("Dillon") was commissioned by the City of Yellowknife to prepare a Market Study for the Kam Lake Industrial Study Area, as contextually shown in **Figure 1-1**. The Study Area is bounded by Enterprise Drive to the northeast, Grace Lake Boulevard to the south, and Commissioner's Land (part of the Interim land Withdrawal) to the west.

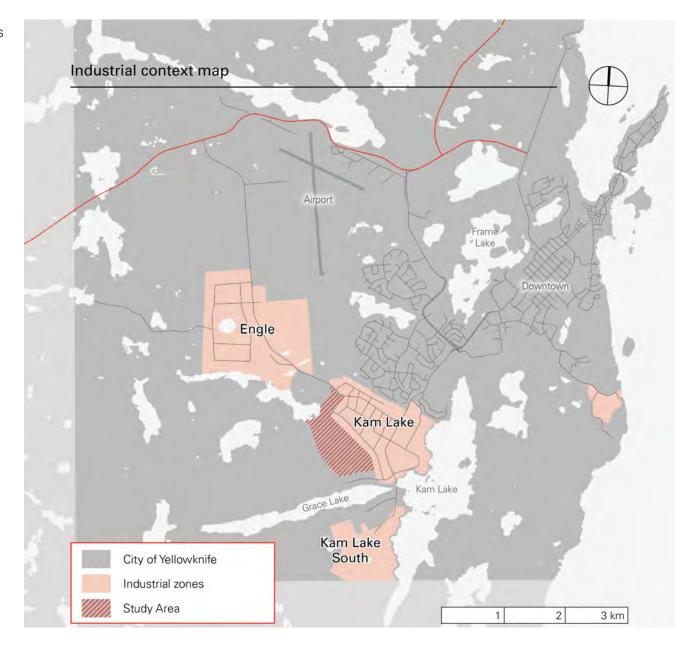
The Study Area largely falls within the "Kam Lake" designation,

although the northern portion of the site is part of the "Engle Business District" (City of Yellowknife Community Plan, 2020, p. 20). The City of Yellowknife's Community Plan By-law No. 5007(Community Plan) sets out planning and development objectives for each of the land use designations. The "Kam Lake" land use designation, applying to approximately 88 per cent of the Study Area, covers what had formerly been Yellowknife's main industrial area, but has now transitioned to primarily light industrial and "quasi-commercial" uses, as well as some accessory residential use.

According to the Community Plan, Kam Lake is intended for "larger-scale commercial and light industrial operations such as warehouses, large commercial show rooms, outdoor storage, and agriculture activities" but not new heavy industry land uses, which must locate in the Engle Business District or other areas designated for heavy industrial land use. "Residential uses as accessory to commercial operations" and "artisanal manufacturing activity" will also be accommodated in the area.

In Spring/Summer 2024, Dillon Consulting (Dillon) conducted public engagement to raise awareness and understanding about planning underway for the Kam Lake area and to provide meaningful engagement opportunities. A key insight from this exercise was the desire for a land demand assessment to understand the need for greater development in the Kam Lake Area.

Figure 1-1 Yellowknife Industrial Districts *Source: City of Yellowknife, FBM*



In November 2024, FBM Planning Limited and Dillon were commissioned by the City of Yellowknife to carry out the Kam Lake Market Study. The study includes a market analysis of the local light industrial and commercial business environment and a market demand and supply analysis. Together the analysis informs a conceptual site planning exercise and preliminary cost analysis of potential development scenarios. Based on the above analyses, this study aims to propose strategic recommendations for further development of the Kam Lake Study Area. The study was carried out in late 2024 and early 2025.

1.3 Resources

As part of the Market Study, FBM reviewed a range of demographic and community information including Statistics Canada Census, Population Estimates, and Labour Market Survey data; Manifold Data Mining, and other pertinent City of Yellowknife policies and reports. Most notably, these include the City's Land Use Bylaw, Economic Development Strategy 2020 - 2024, GROW Yellowknife Food and Agriculture Strategy, Development & Design Standards Manual 2022 and the Kam Lake Engagement Report 2024.

From a commercial and industrial market perspective, the project team reviewed available real estate listings, as available from the following companies to understand current market inventories as part of the background research: Coldwell Banker, ReMax and Century 21.

1.4 Report Structure

This report contains the following sections:

Section 1 – Introduction: Introduces the study scope, methodology and resources.

Section 2 – Population & Employment Growth: Provides a summary of historical and future population and employment growth forecasts.

Section 3 – Current & Future Trends: Provides a market context for industrial inventory and supporting research of industrial and commercial development trends, to establish baseline empirical data for demand forecasting.

Section 4 – Demand Forecasts: Quantifies future light industrial demand for Kam Lake identifying future forecasts for floorspace and land requirements.

Section 5 – Land Use Allocation & Absorption Scenarios: Presents a visual representation and summary of future land use allocation and absorption to support growth within the Study Area. Presents two concept options for the development of Kam Lake along with supporting cost estimates for its potential development.



Section 2.0

Population & Employment Growth



2.1 Introduction

As part of the Market Study, the project team reviewed demographic and employment information for the Yellowknife Census Subdivision (CSD) as sourced to the following and presented in **Tables 2-1 and 2-2**:

- Statistics Canada Census Data from 2016 through to 2021
- Manifold Data Mining Inc. Demographic Data, Vintage 2024

2.2 Population Forecast

The 2016 Federal Census estimated Yellowknife's population at 18,884. As documented in **Table 2-1**, the current estimated population for the Yellowknife CSD (2024) is 23,629, representing a 25.1% increase since 2016.

Forecasts over the next 10-years estimate that Yellowknife's population will continue to grow at a more conservative rate reaching an estimate of 26,339 by 2034, an increase of 2,710 at an average annual rate of growth of 1.1% per annum or a total growth of 11.5%.

2.3 Labour Force & Employment

In 2016 there were 12,546 people in the labour force in Yellowknife. This grew to 15,063 by 2024 according to Manifold Data Mining estimates as shown in **Table 2-2**.

Key sectors of Yellowknife's economy, accounting for approximately 50% of the jobs in the region, are:

• Public Administration: 30.3%

Health Care and Social Assistance: 10.7%

Retail Trade: 8.9%

Other notable sectors include:

- Transportation, Warehousing, and Utilities: 7.1%
- Professional, scientific, and technical services: 5.7
- Educational Service: 6.4%
- Mining Quarrying and Oil & Gas Extraction: 4.8% Construction: 4.5%

In terms of specific occupations, the distribution of employment in Yellowknife is highlighted by the following:

- Education, law and social, community and government services: 21.8%
- Sales and service occupations: 20.2%
- Business, finance, and administration occupations: 19.6%

2.4 Household Income

The current 2024 estimated average household income in Yellowknife is approximately \$187,179 which is approximately 60% higher than the national average which sits at approximately \$116,827.

2.5 Conclusion

A growing population and workforce in Yellowknife, combined with higher-than-average household incomes, has several key implications for employment growth in the city and more specifically for the Kam Lake Study Area.

Economic Expansion and Job Creation

As Yellowknife grows, albeit conservatively and the workforce expands into new areas, demand for goods and services will also rise. This drives economic growth, particularly in sectors like retail, healthcare, education, and construction. Higher household incomes mean residents have greater purchasing power, fueling local businesses and creating new opportunities for employment across various industries.

Labour Market Pressures

While job growth is positive, a rising population also intensifies demand for skilled and unskilled workers. Public administration, healthcare, and retail—already among the top employers in Yellowknife—may struggle to fill positions if workforce growth does not keep pace with job creation. Employers may need to offer higher wages, better benefits, and improved working conditions to attract and retain workers, potentially increasing operational costs.

Infrastructure and Housing Demand

Higher household incomes suggest financial stability, but they can also drive up housing costs. If supply does not meet demand, affordability may become a concern, making it harder for lower-income workers to live in the city. This could create recruitment challenges for industries reliant on lower-wage jobs, such as retail and service sectors. Conversely, there may be opportunities within Kam Lake to include some form of housing among light industrial uses by way of live-work industrial formats.

Potential for Diversification

While Yellowknife's economy has traditionally relied on public administration and resource-based industries, particularly mining, a growing, high-income population could foster diversification into new industries like agribusiness or cold climate research and technology. Increased disposable income may support sectors like tourism, technology, and professional services, creating opportunities for new businesses and further employment expansion into an area like Kam Lake that is more compatible with industries that have a "softer" land use impact.

Table 2-1 Yellowknife Demographic Attributes Summary 2024 *Source: Manifold Data Mining Inc 2024 and Statistics Canada)*

Demographic Attribute	CSD/CY (61060) Yellowknife, N	IT
SUMMARY	value	percent
Total population	23,629	
Total population age 15 and over	19,381	
Total number of private households	8,713	
Average number of persons in private households	2.65	
Total population in private households	23.083	
Total number of census families in private households	6,296	
Average number of persons per census family	2.99	
Total population in families	18,831	
Total number of labour force age 15 and over	15,219	
Land area (square km)	103.37	
Inhabited area (square km)	95.17	
POPULATION AGE	00.17	
Population age 0-14	4,248	17.98%
Population age 15-24	3,080	13.03%
Population age 25-34	4,001	16.93%
Population age 35-44	3,944	16.69%
Population age 45-54	3,308	14.00%
Population age 55-64	2,926	12.38%
Population age 65+	2,123	8.99%
EDUCATION		
Total population aged 15 years and over by highest certificate, diploma, or degree	19,388	
No certificate, diploma, or degree	2,740	14.13%
High school diploma or equivalent	5,247	27.06%
Post-secondary certificate, diploma, or degree	11,401	58.80%
Postsecondary certificate or diploma below bachelor level	5,137	26.50%
Apprenticeship or trades certificate or diploma	1,230	6.34%
College, CEGEP or other non-university certificate or diploma	3,279	16.91%
University certificate or diploma below bachelor level	627	3.23%
University certificate, diploma, or degree at bachelor level or above	6,264	32.31%
Bachelor's degree	4,094	21.12%
INCOME		
Average family income \$	\$210,063.00	
Average household income \$	\$187,179.00	
Average income population age 15 and over (\$)	\$88,969.00	
Population with income Under \$10,000 (including loss)	1,101	5.68%
Population with income \$10,000 to \$19,999	1,176	6.07%
Population with income \$20,000 to \$29,999	1,373	7.08%
Population with income \$30,000 to \$39,999	1,457	7.52%
Population with income \$40,000 to \$49,999	1,371	7.07%
Population with income \$50,000 to \$59,999	1,319	6.80%
Population with income \$60,000 to \$69,999	1,187	6.12%
Population with income \$70,000 to \$79,999	1,220	6.29%
Population with income \$80,000 to \$89,999	1,213	6.26%
Population with income \$90,000 to \$99,999	1,209	6.24%
Population with income \$100,000 and over	6,656	34.33%
Population with income \$100,000 to \$149,999	3,004	15.49%
Population with income \$150,000 and over	3,652	18.84%

Table 2-1 Continued Yellowknife Demographic Attributes Summary 2024 Source: Manifold Data Mining Inc 2024 and Statistics Canada

Demographic Attribute	CSD/CY (6106023) Yellowknife, NT			
	value	percent		
PROJECTIONS				
Annual population growth in the period: Next 3 years		1.20%		
Annual household growth in the period: Next 3 years		1.30%		
Annual family growth in the period: Next 3 years		1.21%		
Annual population growth in the period: Next 5 years		1.18%		
Annual household growth in the period: Next 5 years		1.29%		
Annual family growth in the period: Next 5 years		1.19%		
Annual population growth in the period: 5 to 10 years from current year		1.00%		
Annual household growth in the period: 5 to 10 years from current year		1.12%		
Annual family growth in the period: 5 to 10 years from current year		1.01%		
POPULATION GROWTH				
Current year total population	23,629			
3-Year Projections - Total population	24,492			
5-Year Projections - Total population	25,062			
10-Year Projections - Total population	26,339			
HOUSEHOLD GROWTH				
Current year total number of households	8,713			
3-Year Projections - Total number of households	9,056			
5-Year Projections - Total number of households	9,288			
10-Year Projections - Total number of households	9,819			
FAMILY GROWTH				
Current year total number of census families	6,296			
3-Year Projections - Total number of census families	6,528			
5-Year Projections - Total number of census families	6,681			
10-Year Projections - Total number of census families	7,023			
HOUSEHOLD INCOME GROWTH				
Current year average household income	\$187,179.00			
3-Year Projections - Average household income	\$202,177.00			
5-Year Projections - Average household income	\$222,982.00			
10-Year Projections - Average household income	\$255,229.00			

Table 2-2 Yellowknife Labour Force & Occupations Summary 2024 Source: Manifold Data Mining Inc 2024 and Statistics Canada

Attribute	CSD/CY (610 Yellowknife	-
	value	percen
LABOUR FORCE ACTIVITY - TOTAL		
Total population 15+ years	19,388	
In the labour force	15,219	78.5%
Employed	14,735	76.0%
Unemployed	484	2.5%
Not in the labour force	4,169	21.5%
Participation rate (%)		78.5%
Employment rate (%)		76.0%
Unemployment rate (%)		3.2%
LABOUR FORCE INDUSTRY	1= 010	
Total labour force population aged 15+ years - North American Industry Classification System (NAICS)	15,219	1.00
Industry - not applicable	156	1.0%
All industries	15,062	99.0%
11 Agriculture, forestry, fishing, and hunting	33	0.2%
21 Mining, quarrying, and oil and gas extraction	723	4.89
22 Utilities 23 Construction	78	0.5%
	680 151	4.5%
31-33 Manufacturing 41 Wholesale trade	218	1.0%
44-45 Retail trade	1,356	8.9%
48-49 Transportation and warehousing	1,077	7.1%
51 Information and cultural industries	314	2.1%
51 militation and cultural industries 52 Finance and insurance	224	1.5%
53 Real estate and rental and leasing	112	0.7%
53 Near estate and rental and leasing 54 Professional, scientific, and technical services	868	5.7%
55 Management of companies and enterprises	0	0.0%
56 Administrative and support, waste management and remediation services	540	3.6%
61 Educational services	971	6.4%
62 Health care and social assistance	1,632	10.7%
71 Arts, entertainment, and recreation	191	1.3%
77 Accommodation and food services	871	5.7%
81 Other services (except public administration)	418	2.8%
91 Public administration	4,605	30.3%
OCCUPATION	4,003	30.57
Total labour force 15 years and over by occupation	15,219	
Occupation - not applicable	156	1.0%
All occupations	15,062	99.0%
0 Management occupations	278	1.8%
	2,982	19.6%
1 Business, finance, and administration occupations		8.5%
2 Natural and applied sciences and related occupations	1,288	
3 Health occupations	940	6.29
4 Occupations in education, law and social, community and government services	3,324	21.89
5 Occupations in art, culture, recreation, and sport	374	2.5%
6 Sales and service occupations	3,068	20.29
7 Trades, transport and equipment operators and related occupations	2,361	15.5%
8 Natural resources, agriculture, and related production occupations	300	2.0%
9 Occupations in manufacturing and utilities	148	1.0



Section 3.0

Current & Future Trends



3.1 Introduction

Yellowknife serves as a hub for a number of economic activities, including mining, government services, transportation, communications, education, health, tourism, and commerce. Historically, the city's economy was anchored in gold mining, with a subsequent shift towards diamond mining in the late 1990s. In recent years, public administration has become a significant employer, accounting for over a quarter of the workforce. Other notable sectors include retail trade, health care and social assistance, and transportation.

3.2 Economic Outlook

On February 6, 2025 the provincial government released its "Economic Review for 2025-2026". In this document it was observed that the NWT economy is experiencing a contraction due to the closure of its large-scale diamond mines, which have been the primary economic drivers for the past three decades. This decline is leading to reduced economic output, fewer exports, and decreased private-sector investment. Despite these challenges, household and consumer spending is projected to increase, supported by strong resident employment, rising wages, and falling inflation. The economy is transitioning away from large resource extraction projects, but smaller mining and exploration projects, a rebounding tourism sector, and a stable government sector are expected to provide continued economic opportunities for which Kam Lake could be a benefactor.

Although at least two of the territory's three diamond mines are slated to close by 2030, mining may find a new niche in ongoing research and exploration for gold and lithium. While these and other rare earth elements will take time, the economic outlook entails a shifting of priorities to other economic development opportunities and

sectors such as agriculture and food processing (aka agribusinesses), renewable energy and environmental services and other supporting and downstream industries.

Agriculture & Food Processing: Initiatives such as the Yellowknife Food and Agriculture Strategy aim to enhance community and commercial opportunities in the urban food and agriculture system, promoting local food production and processing.

Renewable Energy and Environmental Services: With a global shift towards sustainability, there is potential for growth in renewable energy projects and environmental remediation services, particularly related to mining activities.

As Yellowknife looks toward the next 10 to 25 years, its economic landscape will need to evolve with the growth of several key clusters. These clusters will not only support existing industries but also attract new downstream industries that can benefit from proximity to resources, infrastructure, and local expertise. Below is a breakdown of these clusters and the types of businesses that could be drawn to the city and Kam Lake, along with their space and land requirements.

Examples of downstream industries include, but are not limited to:

- Mine remediation & environmental services
- Geosciences
- Wind Energy
- Battery Storage and microgrids
- Cold climate green building technology
- Extreme weather engineering & materials science
- Arctic vehicles research

- Climate change research
- Commercial fishing
- Tourism & motion pictures (i.e. small indoor film studios)

Yellowknife's economy is poised for diversification, with opportunities in mining, renewable energy, tourism, logistics, and arctic technology. By strategically allocating the Kam Lake future industrial lands and supporting emerging industries with the right infrastructure, zoning policies, and possibly investment incentives, the city may be able to attract new businesses and further promote its role as the northern "arctic" economic powerhouse.

3.3 Background Document Review

City of Yellowknife Community Plan (2020) By-law No.5007

Adopted in July 2020, the City of Yellowknife's Community Plan is intended to guide the growth and development of the city over a period of 20 years. Map 2 of the Community Plan outlines land use designations for all areas within the City's municipal boundary.

The Study Area for the purpose of this assignment largely falls within the "Kam Lake" designation, although the northern portion of the site is part of the "Engle Industrial Business District" (City of Yellowknife Community Plan, 2020, p. 20).

Kam Lake planning and development objectives

The Community Plan sets out planning and development objectives for each of the land use designations. The "Kam Lake" land use designation, applying to approximately 88 per cent of the Study Area, covers what was Yellowknife's main industrial area, now home mainly to light industrial and "quasi-commercial" uses, as well as some accessory residential use.

Land use – According to the Community Plan, Kam Lake is intended for "larger-scale commercial and light industrial operations such as warehouses, large commercial show rooms, outdoor storage, and agriculture activities" but not new heavy industry land uses, which must locate in the Engle Business District or other areas designated

for heavy industrial land use. "Residential uses as accessory to commercial operations" and "artisanal manufacturing activity" will also be accommodated in the area.

Transportation – The transportation network in Kam Lake should accommodate large motor vehicles to support industrial activity. Site design should consider response times of emergency services.

Environmental design – Development should include stormwater and drainage management in accordance with the Zoning By-law. Landscaping and aesthetic quality should be improved through visual separation and buffering. Landscaping should be considered with Fire Smart principles in mind.

Engle Industrial Business District

The northernmost portion of the Study Area, amounting to around 12 per cent of the site, is part of the Engle Industrial Business District, which is intended for "a variety of general industrial and business industrial uses". However, it falls outside the area governed by the Engle Business District Phase 2 Area Development Plan.

The main difference between the planning objectives for Engle and those of Kam Lake is that heavy industrial uses are to be directed to Engle, while new heavy industry is not permitted in Kam Lake. Because the portion of the Study Area falling within the Engle district abuts the light industrial uses of Kam Lake, which contain accessory residential units, we recommend that heavy industry be directed to other areas of Engle.

Development and Design Standards Manual (2022)

The City of Yellowknife's Development and Design Standards manual explains development procedures and defines the minimum acceptable design standards for urban infrastructure such as roads and services. The consultants have referred to this document for high-level design guidance over the course of developing conceptual layout plans for the Kam Lake study area.

Roadway design standards are set out in Chapter 3. The minimum road right-of-way for industrial areas is 20 metres for local roads and 30

metres for arterial roads. Table 3-2 sets out geometric design standards for different types of roads including the maximum gradient (7% for local roads), minimum paved width (11 metres for local roads), and minimum intersection spacing (60 metres for local roads) (Development and Design Standards, 2022, p. 12).

No sidewalks are required in industrial areas (Development and Design Standards, 2022, p. 17), however the presence of some multi-use paths in the Kam Lake area made active transportation a consideration during the concept design stage of this assignment. According to page 19 of the Development and Design Standards, the City of Yellowknife encourages "bikeways, walking trails, and multi-use pathways" in all new developments.

Economic Development Strategy 2020–2024 (2020)

The City of Yellowknife's Economic Development Strategy (EDS) was adopted in 2020 and covered the five-year period from 2020 to 2024. The plan is created on the premise that the City of Yellowknife will "act with a sense of urgency in promoting economic development" in line with Council's aim to grow and diversify the local economy. The stated short-term goal of the strategy is to mitigate the impact of the impending closure of diamond mines, which are expected to lead to job losses. The longer-term aim of the strategy is to "create a more diversified and integrated economy in Yellowknife", for instance by growing the tourism and cultural sectors, promoting the city as a centre for education and research, and by further developing the city as a "supply hub for a wide range of products and services" (Economic Development Strategy 2020–2024, 2020, p. 15).

Of relevance to this assignment, the EDS aims to "increase access to lands for development" in order to help create a positive climate for business and investment. It identifies various "key economic sectors" that the EDS aims to support, including the mineral industry, the tourism sector, cold-weather testing, and agriculture/food. The EDS aims to capture benefits associated with the mineral industry in both the Northwest Territories and Nunavut and develop the agriculture and food sector by facilitating urban agriculture and encouraging the development of local markets and commercial producers (Economic Development Strategy 2020–2024, 2020, p. 18). The City of Yellowknife also aims

to champion the establishment of a university capable of drawing students from around Canada and internationally.

The EDS identifies a scarcity of vacant, developable land in Yellowknife as a potential hindrance to economic development, and to that end, proposes to work with the territorial government to improve access to developable land. This scarcity of vacant, developable land means that the Study Area under this assignment, which is already owned by the municipal government, is comparatively well positioned to accommodate business growth in the near term.

The current EDS timeline is now complete as of 2024. Therefore, while some strategies still maintain relevance, it is expected that a new EDS for the period 2025 to 2030 is likely underway and soon to be published and this document will likely emphasize further industrial diversification in response to the mine closures. This Kam Lake Market Study may contribute to the development or implementation actions in the updated EDS.

GROW: Yellowknife Food and Agriculture Strategy (2019)

The Yellowknife Food and Agriculture Strategy, or GROW for short, aims to increase agriculture activity (both community and commercial) in the city by setting out a plan. The strategy aims to achieve the following vision: "A just and sustainable food system in Yellowknife is rooted in a healthy community, where everyone has access to adequate and affordable nutritious food; more food is grown and harvested locally; and food production policies and infrastructure are in place to support an economically viable, diverse, and ecologically sustainable local food system."

Of particular relevance to this assignment, the strategy aims to support urban agriculture and related activities in part by incorporating urban agriculture into the land-use bylaws, and by "increasing opportunities for commercial greenhouses and enclosed growing systems". There is opportunity for the Kam Lake area to accommodate the growth of both the agricultural sector and related industries, such as agricultural supply, food processing and distribution.

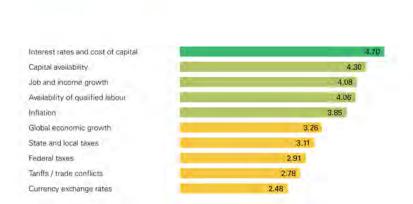
Figure 3-1 ULI & PwC Emerging Trends in Real Estate Survey Findings

Source: Urban Land Institute & Pricewaterhouse Coopers Emerging Trends in Real Estate, 2024)

Importance of issues for real estate in 2024 Economic / financial issues

5 = Great importance

1 = No importance



Importance of issues for real estate in 2024 Real estate / development issues



Importance of issues for real estate in 2024 Social / political issues

5 = Great importance

1 = No importance

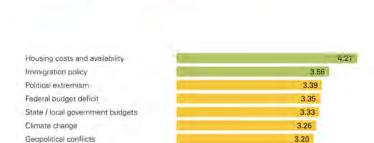
Income inequality

Epidemics / pandemics

Higher education costs

Diversity and inclusion

Threat of terrorism



3.00

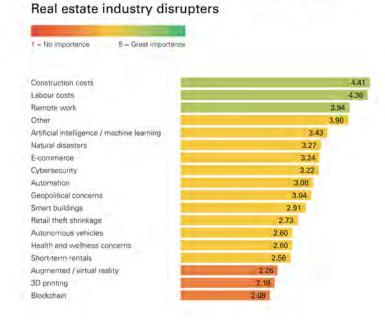
2,99

2.90

2.65

2.64

Importance of issues for real estate in 2024



Kam Lake Public Engagement (2024)

In 2024, public engagement was carried out to engage with residents and business owners about the future preferred land uses of the Study Area. The key groups engaged included residents of Grace Lake, business owners in Kam Lake and the Yellowknife Chamber of Commerce, the Yellowknives Dene First Nations, the North Slave Metis Nation and the general public. The recommendations from the engagement include: conducting market studies to assess demand, evaluate wildfire protection, traffic impact and drainage as part of the comprehensive planning, implement mitigations to reduce nuisances, improve bylaw enforcement, conduct additional community engagement, continue to involve the community and preserve environmental and recreational spaces in the area.

This assignment satisfies the request that a land demand analysis be completed to provide documented evidence to support the need for more development in Kam Lake. The overall engagement provided valuable insights on areas for focus when considering the analysis and proposed recommendations in the concept plans.

3.4 North American Real Estate Outlook (2024)

A recent publication by The Urban Land Institute (ULI) and PricewaterhouseCooper's (PwC) in 2023 titled "Emerging Trends in Real Estate 2024" provided a provided an outlook on real estate investment and development trends, real estate finance and capital markets, property sectors, metropolitan areas, and other real estate issues throughout the United States and Canada.

Although the content presented in **Figures 3-1** is from a US perspective, the trends nonetheless resonate with the Canadian market and to some degree Yellowknife. ULI and PwC researchers personally interviewed about 600 individuals, and survey responses were received from almost 1,260 individuals, whose company affiliations were broken down as follows:

 Private property owner or commercial/multifamily real estate developer - 37%

- Real estate advisory, service firm, or asset manager 19%
- Private equity real estate investor 12%
- Homebuilder or residential land developer 6%
- Bank or other lender 5%
- Construction/construction services/architecture firm 4%
- Investment manager 4%
- REIT or publicly listed real estate property company 2%
- Private REIT or non-traded real estate property company 2%
- Other entity 7%

As it relates to the Kam Lake Market Study, the sentiments conveyed suggest a recovering market that is resilient, but must deal with specific challenges around housing affordability, immigration, interest rates, jobs and income growth and construction labour and costs. All of these factors can have impacts on forecasts.

Many of these factors are likely to persist over the near term, but as with most real estate and economic cycles they will normalize. Consequently, forecasts for population growth and resulting demand for housing as well as industrial and commercial development will follow and likely exhibit periods of peaks and valleys over the forecast horizon.

While Yellowknife differs from other metro or remote markets in North America, the overall sentiments ring true as it relates to the industry expectations and realities of the development industry.

3.5 Industrial Market Conditions

The role of the market conditions evaluation is not to examine current market data in great detail, but rather understand the general market baseline conditions a essential modeling inputs (i.e. labour, inventory, vacancy and absorption, if and as available).

Figure 3-2 Yellowknife Top 10 Industries by NAICS Code

Source: Statistics Canada

Yellowknife's Top 10 Industries by NAICS Code

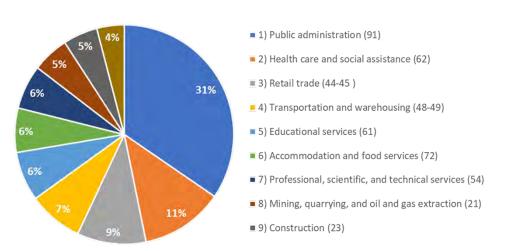
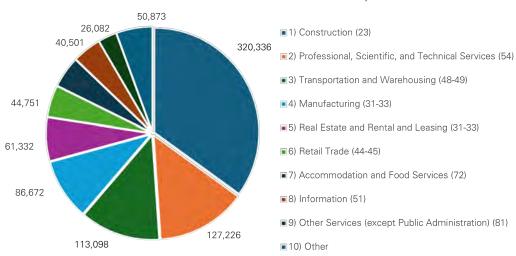


Figure 3-3 Kam Lake Industrial Floor Area (sf) by NAICS Code

Source: Statistics Canada





Labour Force

Areas of relative strengths for Yellowknife, where the labour force is of a higher concentration than the national average are Public Administration (30.26% vs 6.21% of the labour force), Mining, Quarrying, and Oil and Gas extraction (4.75% vs 1.17% of labour force), and Transportation and Warehousing (7.08% vs 5.08% of the labour force). These are unsurprising for a Territorial capital with a large mining industry and strong need for logistics for importing and exporting goods and materials and for delivery of goods to communities across the Territory.

With a planned closure of the Diavik diamond mine, the City of Yellowknife is focusing on ensuring continued economic prosperity – of which the Kam Lake Industrial Area expansion represents one component. Areas where Yellowknife is significantly underweight, implying an opportunity for import substitution include Agriculture, Forestry, Fishing, and Hunting (0.22% vs 2.26%) and Manufacturing (0.99% vs 8.05%). One quickly growing area is in greenhouse agriculture which grew by 54.8% between 2016-2021 in the Yukon and the Northwest Territories (Statistics Canada). Projecting the future growth of this industry is difficult due to small size of the nascent industry and the lack of detailed data.

Existing Kam Lake Industrial Area

The industrial economy of the Kam Lake Industrial Area is distinguished from the overall City of Yellowknife industrial economy by it's relatively higher concentration of construction industry and construction industry adjacent businesses. Contractor, Electricians, General Contractors, Glazier's, Heavy Equipment, Home & Garden, Insulators, Locksmiths, Manufacturers, Rental and Storage Services, and Trucking and Hauling, are found in a higher concentration in the Kam Lake Industrial Area. This points to an economic advantage referred to as a "localization economy" in which businesses benefit by

being located near other firms within their industry. Other industrial businesses that are found in higher concentrations in Kam Lake are Automotive and Autobody shops, Kennels, and Pet Care.

In total, an approximately 25% of the City of Yellowknife's industrial and industrial adjacent businesses are located within the Kam Lake Area, representing 198 Industrial and adjacent businesses and ~86,000 sq m of floor area. When grouped by their relevant NAICS code, the businesses show a clear construction industry cluster with 70% of businesses falling under NAICS Codes 23, 54, 48-49, and 31-33.

Lot sizes in Kam Lake typically range between 0.5 - 2 acres, as opposed to larger lot sizes of in Engels Business Park which are typically larger than 2.5 acres. Kam Lake therefore has a higher development density than Engels, a fact which is borne out by a significantly higher price per acre in Kam Lake. This may be in part explained by Kam Lake zoning which allows for residential dwellings which are accessory to an established industrial or commercial use. This has anecdotally driven the demand for land in Kam Lake by small business owners who wish take advantage of the economic benefits of locating their home on the same property as their business.

Engle Business District

In contrast to the Kam Lake Industrial Area, the Engle Business District specializes in heavier industrial uses including businesses such as Northtech Drilling, Midnight Petroleum, and Superior Propane. The Phase 2 expansion of this area began in 2017 and as of February 2025, 72/92 lots within the Engle Business District had been sold. Lot sizes in Engle Business District tend to be larger than those in Kam Lake with most lots greater than 2.5 acres in size with some lots over 15 acres in size.

Engle Business District is designed for heavier industrial uses due to its remoteness from residential uses, strong transportation access to the airport and Highway No.3. It is less suitable for agricultural and retail commercial uses do to the conflict with heavy industrial uses. Recognizing this potential, the City of Yellowknife offers a relocation incentive program under which relocated industrial businesses may

receive a 5-year diminishing tax benefit.

Industrial Inventory Estimate

From FBM's on-the-ground fieldwork combined with supplemental desktop research investigating the various industrial and business park areas including an assessment of the current business types/industries, an approximate inventory for the city's inventory was developed as summarized in the following:

Kam Lake - 925,700 sf comprising 198 businesses

Other Nodes - 2,711,600 sf comprising 580 businesses

Total Inventory - 3.6 million sf (2024 est) comprising 778 businesses

Estimated Vacancy - 2.5% (2024 est)

In addition to the standard industrial inventory, a tabulation of the city's current self storage composition was also undertaken. **Table 3-1 and Figure 3-4** document the locations and composition of the various self storage facilities in Kam Lake. The current locations clearly shows that Kam Lake is a dominant location for self storage facilities and while other locations in the city may be desirable, the proximity to others in Kam Lake suggests a high degree of compatibility for expansion.

The resulting tabulation revealed an inventory estimate of 118,981 sf of self storage building floorspace and an average facility size of 10,816 sf. Overall this equates to a self storage space per capita ratio of 5.0.

By comparison, according to data from the 2023 Self Storage Almanac, the Canadian average self storage space per capita ratio is 2.5, though this covers larger urban markets. A comparison to comparable markets to Yellowknife, such as Montana (10.7), North Dakota (6.5) and Colorado (7.3) reveals an average of approximately 7 sf per capita, which is likely more contextually appropriate to Yellowknife.

Figure 3-4 Yellowknife Industrial Nodes Source: FBM and City of Yellowknife, 2024)

Table 3-1 Yellowknife Self Storage Facility Inventory Source: FBM 2024 & Self Storage Almanac 2023

Self Storage Facility

Yellowknife Storage

Container Mart

AAA Self Storage

Polar Bear Storage

Polar Bear Storage

Polar Bear Storage

AVERAGE

Population (City)

Space per capita

TOTAL

Best Movers

Pack Rat

Diamond Mini-Storage

Kam Lake Mini Storage

Building Area

6,888 sf

12,109 sf

8,352 sf

9,203 sf

12,357 sf

10,548 sf

6,242 sf

3,423 sf

4,230 sf

8,815 sf

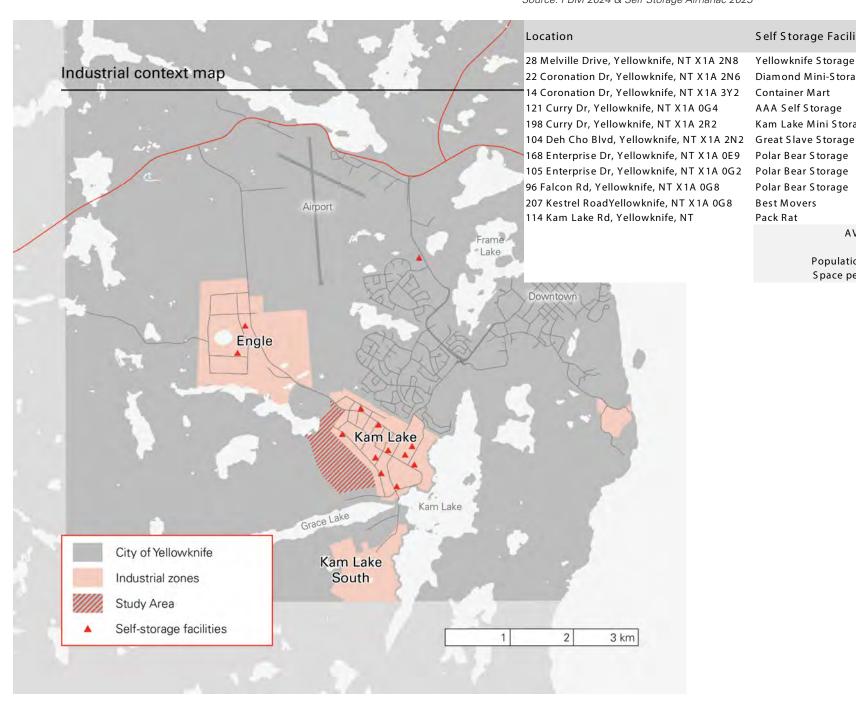
36,814 sf

10,816 sf

5.0 sf

118,981 sf

23,629



3.6 Industrial-Commercial Tends & Best Practices

The following is intended to provide some trends context for the future development formats and typologies that could evolve as part of Kam Lake's growth and the compatible land uses therein.

3.6.1 Industrial & Business Park Trends

Unlike retail trends which have a tendency to shift more frequently in response to evolving consumer patterns, industrial and business park trends have a greater propensity to stand the test of time, though there are advancements that result in more flexible use and reuse of buildings as well as a desire to become more efficient with their land use.

The average floor area ratio (FAR) or site coverage ratio for industrial land uses can vary significantly depending on factors such as local zoning regulations, land use policies, and the specific needs of the industrial activities in a given area. However, a common range for industrial FAR or site coverage ratio falls between 0.15 to 1.5 depending on the locational context and tenant use/industry.

In some cases, industrial developments might have a higher FAR or site coverage ratio, especially in areas where land is scarce or expensive, and there's a need to maximize space efficiency. Conversely, in areas where there are concerns about environmental impact, infrastructure limitations, or community preferences for open space, the FAR or site coverage ratio might be lower.

The following content represents a summary of FBM's research (in cooperation with Dalhousie University) on broader, prevailing industrial trends. The following synopsis explores some of the relevant trends to help illustrate the role of planning, community and economic developments in supporting sustainable and innovative developments in locales similar to the context of Yellowknife.

Built form has been changing in response to current industrial and commercial trends. One of the key shifts is the trend toward using innovative facilities as a tool to enhance the concept of sustainability. By taking advantage of the most innovative technology and integrating natural green features like natural trails and vegetation, these

facilities become central locations for efficient and environmentally conscious manufacturing. These facilities also offer stable employment opportunities while acting as a hub for high-level academic research. These mega facilities also offer a sense of the continuous process of manufacturing. For example, one facility can be a place for food harvesting, production, and manufacturing.

Agritech & Agribusiness

Agribusiness is an emerging trend in recent industrial markets in Canada. Agribusiness is different from "agriculture" in the sense that it "comprises all of the steps through which a given commodity has to go in order to reach the consumer's plate" (FASKEN 2022). Agribusiness offers three key components: agricultural input, production and the processing-manufacturing sectors (Climate Smart Agriculture Youth Network). In other words, agribusiness oversees the entire process of agricultural practices, from harvesting to reaching out to consumers through shipping and manufacturing. Agribusiness is an important trend to watch as commercial and industrial developments have been expanding to suburban, rural, and urban fringe areas in response to rapid economic and population growth. Along with the wider range of roles, what differentiates agribusiness from agriculture is the reliance on advanced technology (Dentons, Agribusiness in Canada). Advanced technology and efficient data collection are critical in sustaining this rapidly growing industry. Artificial Intelligence (AI) has been playing a prominent role in expanding agribusiness. Agribusiness sectors have been taking advantage of AI for data analysis and modeling to "gather data on details from soil health to weather, disease, and pest mitigation" (Calgary Economic Development). This helps agribusiness owners to offer consistent and efficient food production. Alberta has been the leading province for agribusiness. One of the factors that encourage the growth of agribusiness is that Alberta is "the fastestgrowing adopter of digital transformative technologies" (Calgary Economic Development).

The City's Community Plan highlighted opportunities to accommodate emerging industries including agriculture on larger lots in Kam Lake. Exploring opportunities for agribusiness aligns with the objective of the Yellowknife Food and Agriculture Opportunities Analysis, aimed at enhancing the City's local food security (Urban Food Strategies, 2019).

Sustainable Manufacturing: toward efficient & centralized land use

Sustainable manufacturing can be defined as "the creation of manufactured products through economically-sound processes that minimize negative environmental impacts while conserving energy and natural resources" (EPA 2023). Sustainable manufacturing can be applicable to all sizes of business and all sectors because it improves "operational efficiency by reducing costs and waste". By pursuing this vision of sustainable manufacturing, companies can also "protect and strengthen brand and reputation and build public trust" (EPA 2023). Collectively, sustainable manufacturing has been gaining popularity among companies that aim to convey a strong message to the public that they are committed to protecting natural resources.

Adding a sustainability lens to manufacturing is relevant in Kam Lake with an anticipated increase in manufacturing sector. There is a growing demand to be more conscious of the impacts of development on the environment, in response to customers' increased awareness of climate change and associated crises such as extreme weather, wildfires and drought.

There is a growing demand to be more conscious of the impacts of development on the environment, in response to customers' increased awareness of the environmental crisis such as extreme weather and sea level rise. The United States Environmental Protection Agency (EPA) defines "sustainable manufacturing" as "the creation of manufactured products through economically-sound processes that minimize negative environmental impacts while conserving energy and natural resources" (n.d.). Sustainable manufacturing is beneficial to all sizes of business and all sectors because it improves "operational efficiency by reducing costs and waste" (EPA, n.d.). Moreover, this article highlights that by pursuing this vision of sustainable manufacturing, companies can "protect and strengthen brand and reputation and build public trust" (EPA). Collectively, sustainable manufacturing has been gaining popularity among companies that aim to convey a strong message to the public that they are committed to protecting the natural resources and conscious to the surrounding community environment.

Both the agribusiness and sustainable manufacturing examples highlight the need to recognize the roles that advanced technology can play in supporting sustainable and innovative industrial activities.

Warehousing and Storage

Like many industrial sectors, attracting and retaining employees has been critical in the warehousing and distribution sector. Since the pandemic, there has been a growing interest towards enhancing designs of industrial warehousing and distribution facilities to support the health and wellbeing of employees (NAIOP Research Foundation). Given the proximity to Yellowknife Highway 3, the City of Yellowknife can further position itself as a hub for distribution and warehousing by offering an attractive workplace environment.

Distribution facilities are often located in remote communities due to the size of the facilities and zoning regulations, hindering workers from accessing restaurants and services during work hours. Locating distribution facilities near transportation corridors and existing amenities can contribute to supporting employees' health and well-being, which in turn can result in increased productivity of the industry.

Live-Work Units

Live-work units are an integrated mode of space design, which "combines your workspace with your living quarters so you essentially work from home but with a dedicated section for your office" (CHRON. 2020). In this type of workspace, "the living space may also be alongside the commercial space, behind it or above it" (CHRON, 2020). Live-work units are most prevalent and compatible with traditional commercial or residential zoning, but examples are becoming more applicable in light industrial contexts where compatibility of uses may exist, but it is not without challenges. These challenges include possible limitations for businesses in what would otherwise be compatible locations and the concept of creating less appealing and equitable residential areas for residents where affordability may be better, but the adjacencies and amenities may not be as beneficial. Industrial live-work options work best when there are communities with an abundance of industrial-zoned land so that issues of use, safety and occupant compatibility are mitigated.

Flex Facilities

Flex facilities are "flexible" for three major reasons: 1) the flexibility of uses, 2) flexibility of tenant agreements, and 3) the flexibility of spaces. Flex facilities have been gaining popularity among business owners who need to manage their budget due to the market's unpredictable nature. "Canadian Flexible Workspace and Co-working" by Colliers Canada (2019) demonstrated the growing demand for flex spaces especially in the context of "post-pandemic" market. Flex spaces can offer short-term contracts "ranging from one month to three years" (Demetree Real Estates, n.d.). The short-term contracts allow small business owners to rent a space at a low cost, offering a low-risk investment from their end. This is also beneficial for property owners because it will reduce the time when the space is vacant, meaning that property owners can gain more consistent profit from tenants.

Role of Industrial and Business Parks: Coexistence with Nearby Residential Areas

Industrial and business parks offer a vital role in enhancing a sense of community, creating spaces for outdoor activities and interactions among business workers and the general public. Business parks (also known as "office parks") have been a popular feature of a neighbourhood, especially in the suburban context (Market Business News, n.d.). Located near a series of office buildings, the general intent of business parks was to improve the quality of life for office workers by creating an outdoor space with green or passive elements. However, the article by Market Business News also demonstrates that business parks have also caused suburbanization because business parks typically require larger amounts of land, which makes them less feasible in urban centres. The distance from the urban core and a lack of public transit to these business parks have also caused issues including more auto-dependency and a lack of community integration (Market Business News, n.d.) Illustrating the importance of transit and connectivity.

However, business parks can be also beneficial for business owners because these parks can be central locations for local shops and cafes, creating a vibrant and competitive environment for business owners and researchers to "test and improve new technologies, services, and tomorrow's business concepts" (Siamesebox Consulting, n.d.).

Eco-Industrial Parks

An eco-industrial park (EIP) can be defined as: "an earmarked area for industrial use at a suitable site that ensures sustainability through the integration of social, economic and environmental quality aspects into its siting, planning, operations, management and decommissioning" (UNIDO Eco-Industrial Handbook, 2017). Eco-industrial parks often feature several ecological and innovative design features, namely green energy systems, on-site solar generators, and efficient ventilation systems. Another component of eco-industrial parks is the consideration for more efficient use of land and operation of costs. In more urban locations or in some areas, smaller geographically constrained communities where land is at a premium, such consideration could include vertical or multi-storey buildings with green roofs or living walls, while providing a format for multiple businesses to share overall building operational costs and property taxes.

Along with business parks, eco-industrial parks have also been an emerging feature. Unlike business parks, eco-industrial parks primarily offer spaces for industrial facilities, featuring green energy systems and efficient water management systems. Eco-Industrial Parks support the idea of connecting industrial parks and public lives so that the park can be part of the complex, integrated system of the community. Another component of eco-industrial parks is the consideration for more efficient use of land. In more urban locations or in some areas, smaller geographically constrained communities where land is at a premium, such consideration could include vertical or multi-storey buildings with green roofs or living walls, while providing a format for multiple businesses to share overall building operational costs and property taxes.

As Kam Lake looks toward innovative industrial development options, purpose built eco-industrial parks present a unique opportunity to balance economic development and environmental objectives.

Multi-Tenant Industrial Facilities

Multi-tenant buildings have been gaining attention in industrial markets across North America. In multi-tenant facilities, growing businesses can expand into an additional available unit within the same property or at the same industrial complex without the need to relocate. By serving as a shared hub for industrial activities, multi-tenant industrial facilities can also be affordable, cost-effective spaces for small and medium-sized enterprises. Multi-tenant industrial facilities can also support the growing interest toward economic diversification. Designed to house tenants across varying industries, multi-tenant facilities offer greater flexibility in response to the needs of the market.

Industrial Clustering

Industrial clusters are typically defined as "geographic areas that comprise co-located companies representing either a single or multiple industries" (Accenture, 2021). Industrial clustering offers both economic and environmental benefits. Research by Indiana University highlights that industry cluster is "a strategy to improve overall business environment conditions, by upgrading skills, access to finance and infrastructure, by streamlining government rules and regulations, by supporting local demand, and by being open to foreign investment and competition" (Indiana University, Industry Cluster and Economic Development, 2015). From an environmental perspective, industrial clustering can generate a more efficient energy network. Energy sources such as hydrogen can be co-located and shared among tenants, which helps to save investment for long-distance infrastructure (World Economic Forum, 2020).

The Community Plan for the City of Yellowknife highlighted the aim of "[improving] energy efficiency of land development" by "encouraging mixing of uses". By exploring opportunities to develop multi-tenant facilities and/or industrial clusters, the City could strategically locate industrial uses and taking advantage of existing developable parcels and infrastructure.

3.6.2 Industrial & Business Park Formats & Typologies

While this section has highlighted some of more evolving trends, Kam Lake benefits from an opportunity to provide a range of development formats and typologies to meet demand forecasts over the next 15 to 20 years for a growing population and evolving labour force.

Based on the market overview, economic context, community engagement, and trends & best practices, optimal and compatible development typologies have been established for Kam Lake. The development formats and typologies do not give an exhaustive list of every development typology, but rather provides a framework of typical guidelines for trending industrial or business park development. These development typology guidelines include typical size, floor area ratio (FAR), and end-user tenants by sector. FARs exhibited in the development formats & typologies are based on the current conditions as well as industry trends and as such future recommended FARs follow standards of similar development contexts from end-user tenants.

Table 3-2 provides a detailed depiction of the wide array of light industrial development formats and typologies (in no particular order) that could be part of Yellowknife's overall growth strategy as well as specifically for Kam Lake. These include the following:

- Warehouse/Distribution Facilities & Fulfillment Centres
- Micro-fulfillment Centres (MFC)
- Manufacturing & Assembly Facilities
- Advanced Manufacturing
- Research & Development
- Flex Facilities and Office Showroom/Multi-Tenant
- Eco-Industrial Parks
- Agribusiness

Table 3-2 Industrial Development Formats & Typologies

	Typical Land Area			
Industrial Format	Site Coverage (FAR) Number of Storeys Typical Lot Sizes	Typical Dimensions	Miscellaneous Building Requirements/Comments	Target Sector End Users & Miscellaneous Site Selection Considerations
Warehouse/Distribution Facilities & Fulfillment Centres	10 to 50 acres 0.4 to 0.7 (lower for freight forwarding) 1 Storey (with internal mezzanines) 5 to 10 acres	100,000 to 1,000,000 sf most between 100,000 to 500,000 sf up to 500 ft depths Rectangular configuration best	Screening required for loading docks and truck parking areas Security such as fencing, gates and guard facilities High land consumption along with needs for trailer storage Easy access and location critical attributes: rail access a plus for certain types of uses Loading Docks, truck space	Target Sector End Users Logistics and Distribution Hubs Bulk Warehouses Freiaht Forwarding, Pacel Integrators and E-Fulfillment - Heavy Cargo & Remote Delivery Services: Expansion of trucking, air freight, and ice road logistics for northern communities.
		Avg building size by Category Last Touch - 110,000 sf City - 150,000 sf	Address material handing for "just-in-time" storeage Rise of e-commerce means that outside the building there is more demand for truck and trailer parking, as well as dedicated areas for truck staging, parking and loading Even higher bays are becoming common in distribution centres for mezzanine and multilevel picking and parking Custom-built storage spaces	Miscellaneous Heated and Unheated General Warehouses - space for bulk, rack and bin storage, packing, shipping Refrigerated Warehouses - preserve quality of perishable goods. Includes freeze & chill space and Contolled Humidity Warehouses - constructed with vapor barriers to contain humidity.
		Multi-Market - 325,000 sf Gateway - 370,000 sf		Value-Added Food Processing IT Sectors, Business Centres
Micro-fulfillment Centres (MFC)	<10 acres 0.5 to 0.7 1 Storey (with internal mezzanines) 1 to 2 acres	3,000 to 20,000 sf up to 100 ft depths repurposing spaces within stores (e.g. Back-of-House)	Highly automated using Automated Storage & Retrieval System (ASRS) like a full distribution centre but on a more targeted and smaller scale for efficiency and hyper-expedience Part of omni-channel system that depends on humans and robotics for supply chain MFCs have experienced 80% annual growth between 2018 and 2021, and globally are expected to grow sixfold in 2021.	Target Sector End Users Capable of serving multiple categories - grocery, drug stores and general merchandise Box format retailers Miscellaneous Key is to be located near the consumers, whether attached to an existing grocery store or other to For urban sites, can reduce square footage needed for product by 25% because of proximity and Can be co-housed inside an existing store or placed in a smaller warehouse space in an urban loc Benefits of MFCs is lower overhead costs, enhanced agility and faster last-mile delivery
Manufacturing & Assembly Facilities	2 to 65 acres 0.3 to 0.4 1 Storey (with internal mezzanines) 2 to 4 acres	100,000 to 500,000 sf most between 100,000 to 250,000 sf up to 150 ft depths Rectangular configuration best	Emphasis on landscaping Tvpically 70% of building for warehousing and 30% for office functions on second level Large interior column spacing Smaller than typical single tenant and multi-tenant warehouse buildings Increasingly becoming 'Smart Buildings' - AKA automated or intelligent buildings Can include sustainable design materials and elements (ex. solar panel, renewable energy)	Target Sector End Users Electric vehicle battery cell manufacturing facility Manufacturing industries which use plastics as an input Value-Added Food Processing Window and Door Manufacturing Pharmaceutical Manufacturing (can be single floor, two floor or mutiple floor facilities) Plastics Manufacturing Green Building Products Manufacturing Agri-Chemical Manufacturing Agri-Chemical Manufacturing Agricultural Equipment Assembly
				Miscellaneous Typically co-located with cluster specialization including suppliers Often owner-occupied
Advanced Manufacturing	2 to 25 acres 0.4 to 0.5 1 to 2 storey with either mezzanines or full second level	Small facilities- 10,000 to 50,000 sf (specialized products, niche markets or prototype production) Medium facilities; 50,000 to 200,000 sf (mass produced products requireing advanced automation and production lines) Large facilities: 200,000 sf to > 1m sf (high-volume production for industries such as automotive, aerospace and electronicis	Depending on segment, can be large water consumers, so servicing capacity with Municipal Water is critical In addition to square footage, advanced manufacturing facilities may vary in terms of ceiling height, specialized areas for different stages of production, and office space for research and development. Additionally, advanced manufacturing often involves the use of state-of-the-art technology such as robotics, IoT, and AI, which can influence the layout and design of the facility.	Target Sector End Users Cold climate research & Technology Extreme Weather Engineering & Materials Science: Companies specializing in cold-resistant infrastructure and materials. Autonomous Vehicles & Drones for Arctic Operations: Development and testing of self-driving vehicles and drones for remote deliveries and exploration. Battery Storage & Microgrid Solutions for companies specializing in grid stabilization for remote areas using innovative energy storage. Cold Climate Green Building Technology using research and production of energy-efficient housing suited for Arctic conditions.
Research & Development	5 to 40 acres	30,000 to 100,000 sf	Greater open space and amenities on site	Target Sector End Users
позвания проченоринени	10.3 to 0.7+ 1 to 3 Storeys 5 to 20 acres	100 to 200 ft depths Square configuration best Multiple buildings common	Distinctive design features such as extensive use of glass Less truck access needed due to lower volume of truck traffic Proximity to University/Intellectural Capital as labour force is critical "Smart Buildings" - AKA automated or intelligent buildings	BioMedical, Pharmaceutical, Wet & Dry Labs, Medical Equipment & Technology Academic, Corporate or Government Labs Agritech Businesses Energy Generation/Storage Innovation Arctic Technology Prototyping and testing sites: Outdoor environments for cold-weather trials of new technologies. Miscollaneous Proximity to University/Intellectual Capital Accessibility for workers is critical (Example: Transit)

 Table 3-2 (Continued)
 Industrial Development Formats & Typologies

Industrial Format	Typical Land Area Site Coverage (FAR) Number of Storeys Typical Lot Sizes	Typical Dimensions	Miscellaneous Building Requirements/Comments	Target Sector End Users & Miscellaneous Site Selection Considerations
Flex Facilities	5 to 40 acres 0.15 to 0.35 1 to 2 Storeys 2 to 10 acres	20,000 to 100,000 sf up to 125 ft depths Rectangular configuration best	Curb appeal through building design in a quasi campus-like setting Trades often need yard space Often speculative multi-tenant product with potential for end-user ownership	Target Sector End Users Manufacturing and Specialty Warehousing/Storage Wholesale and Textiles, Wood and Paper Products Contractors, light industrial fabricators, and mechanics Motor Vehicle Repair, Construction, Printing Gymnastics, Martial Arts, Fitness Centres, Climbing Walls, Children's Activity Centres Green Energy Generation/Storage Facilities Utility System Construction/Fulfillment Centres Miscellaneous Ratio of Office Space to Warehouse is changing in favour of more office space
				("Flex Tech")
Office Showroom/Multi-Tenant	1 to 20 acres 0.25 to 0.50 1 to 2 Storeys 1 to 5 acres 1 with divisible space, with mezzanine	30,000 to 100,000 sf 60 to 100 ft depths up to 10 units Rectangular Configuration best L and U-Shaped also	Quasi-commercial and mixed land uses / "Industrial Retail Centre" Customer access in front and truck access in rear Traffic intermixed when units are back to back Comprehensive signage program and unifying entrance design	Target Sector End Users Building Trade Contractors & Construction, Cabinet Makers Specialty F&B Suppliers and Caterers Interrelated (e.g. Kitchen, Bath, Plumbing, Electrical, Mouldings, Doors) Restaurants/Cafés Contractors, light industrial fabricators, and mechanics offices Miscellaneous Increasing opportunity in urban areas to be included in vertical mixed-use developments
Eco-Industrial Park	5 acres to several hundred or thousand acres 0.10 to 0.50 typically 1 storey	s Small facilities-10,000 to 50,000 sf (light manufacturing, small R&D and service-oriented businesses) Medium to Large facilities; 50,000 to 200,000 sf (combination of manufacturing, warehousing) Very Large facilities: >200,000 sf (renewable energy generation, waste recycling, industrial greenhouses)	The design will need to encourage companies to collaborate and generate the flow of "physical exchange of materials, energy, water and by-products, thereby fostering inclusive and sustainable development" Strong emphasis on connectivity (implementing sidewalks, enhancing connections with the existing public transit systems)	Target Sector End Users Manufacturing / Processing Sectors Energy and Technology Industrial Greenhousees Miscellaneous Water needs Concerns for light pollution if near to urban residential areas
Amiliarainaa	Crop Farms 20 - 200 acres	Food Processing - 10,000 - 50,000 sf	Superclusters: where companies, academic institutions, and non-profit organizations	Terret Sector End Hearn
Agribusiness	Crop Farms 20 - 200 acres Commercial Farms 1,000 + acres Larger variability in land needs depending on the scale of the business and its specific focus within the agricultural sector 0.10 to 0.20 typically 1 storey	Warehouse Storage - 10,000 to 100,000 sf		Target Sector End Users Digital Technology (genomics, processing, and information technology) Food Retail and Services Wholesale Agro-technology - Precision agricultural technology, agri-tech startups Industrial greenhouses Equipment Manufacturers & Arctic Technology



Section 4.0

Demand Forecasts



4.1 Introduction

This section provides an overview of forecasted demand for a targeted subset of light industrial, commercial, and agricultural uses (collectively, "targeted uses" outlined in Section 5.0) chosen for likely compatibility with the Study Area, and estimates the future supportable development in terms of floorspace and land.

Referring to **Figure 4-1**, three (3) different methods were used to forecast the demand for floorspace and land for the targeted uses in the Kam Lake Study Area. These include an examination of 1) total employable labour force or working age population, 2) employment by industry (NAICS) and 3) application of current space per capita ratio against future total population growth.

Each of these singular methods produces its own forecast, but to most accurately and realistically ensure sound market-driven forecasts, each methodology is blended together to determine a weighted average. It is important to acknowledge the role that labour and population growth play in attracting demand, since growth cannot occur if the requisite labour force, skilled or otherwise to support a business does not exist.

Upon quantifying future floorspace demand for the applicable land use, estimates of industry standard FAR are applied based on the target sectors and typologies likely to be developed over time. By applying an FAR, the amount of potential gross land area (i.e. excluding roads and infrastructure etc) needed over time is derived.

Note: For the anticipated FAR a factor of .15 has been used even though the overall average for similar uses typically falls in the range of .10 to .30. Given the nature of future development in the city, and looking at how other comparable markets have developed over recent

Figure 4-1 Demand Methodology Inputs

Source: FBM



years, a figure of 0.15 has been applied.

4.2 Targeted Uses Demand Forecast

1) Labour Force Approach

The first approach to forecasting demanded floorspace examines future population growth, particularly those people in the labour force (15+ years) cohorts.

This is particularly important given the young, aspirational demographic and the commensurate effect on the workforce and associated workplaces. **Appendix Table A** detail this analysis. Unlike office and retail, the targeted uses are almost always accommodated in physical form in dedicated and zoned formats and spaces, though there is a trend towards mixed-industrial and live-work industrial in urban centres in-transition.

Method 1 indicates cumulative support for just under 685,000 sf (683,089) of new floorspace for the targeted uses in the market over the next 20 years by 2044 assuming that Kam Lake garners a market share of 75% of citywide demand. (**Table 4-1**).

2) Employment by Sector Forecast Approach

A second approach examines a historic employment growth in industrial categories as sourced to Statistics Canada and forecast with assumptions based on the estimated growth of Yellowknife for the respective business sectors. In this approach, employment projections were made for specific NAICS sectors. These projections were then applied against typical space needs per employee, per business sector (measured as sf per employee). **Appendix Table B** details this analysis.

Method 2 indicates cumulative support for just under 537,000 sf (536,912) of new floorspace for the targeted uses in the market over the next 20 years by 2044 assuming that Kam Lake garners a market

share of 75% of citywide demand. (Table 4-1).

3) Per Capita Population Growth

A per capita ratio is yet another reasonable input that is statistically based on the Kam Lake Area's actual inventory measured against its actual population. Currently, this ratio is estimated to be 150 sf per capita. Since development in the Kam Lake Study Area over the next 20 years is likely, the same per capita figure was applied against the forecast population growth.

Method 3 indicates cumulative support for just under 615,000 sf (614,533 sf) of new floorspace for the targeted uses over the next 20 years (by 2044) assuming that Kam Lake garners a market share of 75% of citywide demand. (**Table 4-1**).

Summary Weighted Average

Since no one methodology is prudent and market economies can impact factors such as employment or labour, a weighted average of all three (3) methodologies was used to reasonably estimate future demand. On this basis, approximately 611,000 sf of new gross floor area for the targeted uses could be reasonably supported over the next 20 years in the Kam Lake Study Area. (**Table 4-1**).

Based on a floor area ratio (FAR) or typical site coverage of 0.15 for the average of all targeted typologies and reflecting the likelihood that future land in Kam Lake will likely mirror past patterns of development, demand could reasonably support 108 gross ac (44 ha) or 94 ac (38 ha) of net land (i.e. excluding roads and estimated wetlands).

Together, this weighted average approach was used to provide a baseline floor space and acreage demand for the NAICS industry segment based forecast described in Section 5.

Table 4-1 Weighted Average Demand Forecast for Targeted Uses

(Source: Manifold Data Mining Inc. & FBM)

Forecast Model	Projected Average Annual Growth	Projected Total Growth over nex 20-yrs
Employment Growth Forecast (sf)	26,846	536,912
Labour Force Growth (sf)	34,154	683,089
Per Capita Population Growth	30,727	614,533
Blended Average (sf/yr) / Total	30,576	611,511
Current Avg Site Coverage Ratio		0.15
Avg Industry Standard Site Coverage Ratio		0.15
Gross Land Area Required (acres)		107.6
Gross Land Area Required (hectares)		43.6
Net Land Area Required (acres)		93.6
Net Land Area Required (hectares)		37.9

4.3 Self Storage Demand Opportunity

According to industry data, the self-storage market has doubled in the past 10-years in Canada. Many factors have all contributed to this growth. In fact, a CBC news article (April 2, 2018) highlighted that the demand for self-storage is being driven by "6-Ds":

- Downsizing;
- Death:
- Divorce;
- Displacement;
- Disaster; and
- Density.

Local inventory

Eleven (11) self-storage facilities were recorded within the city. Of these, a majority are located in the Kam Lake area. The self-storage facilities average 10,816 sf in size and total almost 119,000 sf resulting in an average per capita space ratio of 5.0.

Supportable square footage

Most residential users are homeowners including single-family, apartment, condo and mobile home dwellers which comprise 65% to 80% of self-storage tenants. Business and commercial tenants traditionally comprise 20% to 35% of the Canadian self-storage market and form an ever-increasing segment.

The overall self-storage supply per capita in Canada averages 2.5 sf while the US averages an estimated 8.3 sf of self-storage space per capita. Based on the current inventory identified in Yellowknife, the current self-storage supply is calculated as 5.0 sf.

To provide some comparable examples to Yellowknife, the following markets are documented as a precursor to testing future reasonable demand in Kam Lake:

- Montana (10.7 sf)
- Colorado (7.3 sf)
- North Dakota (6.5 sf)

In combination with population growth and the fact that many residents have storage needs for quads, snowmobiles, and other recreation vehicles, it is reasonable to opine that the supportable square footage per capita will continue.

By looking at the Canadian average as well as the former comparable benchmarks, a ratio of 7.0 sf was applied against the growing population to estimate a total supportable floorspace in the trade area of approximately 40,116 sf by the 2044.

Since this figure is the total supportable floorspace, a market share of 50% was applied that takes into account the possibility that Engle Business Park could attract some of this demand. However, specific to Kam Lake the market share recognizes the strong locational attributes of the site in estimating a realistic floorspace estimate at Kam Lake of 20,058 sf on an estimated 2.3 ac (0.93 ha) by 2044 (**Table 4-2**). This amount of floorspace could be achieved with two (2) self storage facilities if the current average size of 10,018 is maintained.

Table 4-2 Self Storage Demand Forecast

Growth Using City of Yellowknife

(Source: FBM & Self Storage Almanac)

Population Growth Forecasts	2024	2029	2034	2039	2044
City population Incremental New Population Growth Cumulative New Population Growth	23,629	25,062 287 1,433	26,339 261 2,710	27,808 300 4,179	29,360 317 5,731
City population	23,629				
Canadian Average Self Storage Ratio sf/capita	2.5				
United States Average Self Storage Ratio sf/capita Comparables to Yellowknife:	8.3				
Montana (10.7 sf), Colorado (7.3 sf), North Dakota (6.5) Target Yellowknife Average Self Storage Space Ratio (Current) sf/capita	7.0				
Cumulative New Self Storage Facility Demand (sf) Kam Lake Market Share of Cumulative New Demand Kam Lake Cumulative Demand (sf) Kam Lake Cumulative Demand (acres)		3,583 75% 2,687 0.3	6,775 75% 5,081 0.6	10,449 75% 7,836 0.9	14,32 7 75% 10,74 9
SCENARIO 2: Using TARGET Self Storage Space Ratio					
Communications Name Calif Character Facility Democrat (af)		10,031	18,970	29,256	40.444
Cumulative New Self Storage Facility Demand (St)			,	,	40,116
Cumulative New Self Storage Facility Demand (sf) Kam Lake Market Share of Cumulative New Demand		50%	50%	50%	40,11 6
		50% 5,016	50% 9,485	50% 14,628	-



Section 5.0

Land Use Allocation & Absorption Scenarios



5.1 Introduction

This final section of the Kam Lake Market Study applies the findings and forecasts developed to present a land allocation and absorption strategy to inform the optimal conceptual land use plan options and phasing program over the next 20 years.

5.2 Land Allocation Criteria

Through an evaluation of the current market and emerging trends, Kam Lake is compatible with the following future light industrial/commercial planning and land use consideration:

- Existing Industrial intensification
- Specialized manufacturing
- Eco-industrial
- Value-added agriculture/agri-tech/agribusiness
- Green businesses
- Circular economy
- Alternative energy production/ energy transition

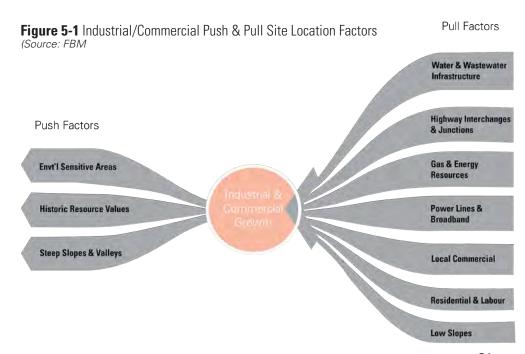
Each of these elements have been considered in the positioning and allocation of future demand. Additionally, and more specifically for light industrial land uses this study applied industry-recognized site location criteria that informed and added a further layer of analysis. These factors have been incorporated into the land use allocation and positioning, and include, but are not limited to:

- Servicing limitations of the area
- Local and regional road networks including future access/egress points

- Proximity to adjacent/surrounding industrial and residential uses
- Mixing of uses (commercial-live work-light industrial)
- Land availability and environment suitability

Figure 5-1 visually depicts the latter criteria by using typical push & pull considerations to illustrate those broad criteria that are most often front-and-centre for determining the optimal allocation of future land use demand.

With these as factors, compatible industry sectors premised around clustered growth have been identified as complementary wand realistic for future long-term growth and planning in the Kam Lake Study Area.



5.3 Economic Clusters & Sector Target Opportunities

The next step in the Market Study process is to refine the overall demand forecast into potential target or compatible economic clusters and sector land use opportunities. To do this, the project team aggregated the twenty (20) major NAICS categories into five (5) industry-specific clusters as identified in **Tables 5-1 and 5-2** as *Agriculture, Heavy Industry, Commercial, Construction & Technical Trades, and Manufacturing & Warehousing.* To recognize public engagement and environmental sensitivities, the industry cluster comprising Heavy Industrial is excluded from any land use allocation at Kam Lake. A summary of the forecasted demand by clustered industry segment is provided in **Figure 5-1.**

Table 5-1 Kam Lake Industry Cluster Demand Summary at Buildout 2044 (Source: FBM)

CLUSTERED INDUSTRY SEGMENT	Total Floor Area Demand for Kam Lake (sf)	Estimated Kam Lake Land Needs (acres)
Agriculture	90,204	20.7
Heavy Industry	0	0.0
Commercial	29,973	2.3
Construction	334,741	38.4
Manufacturing & Warehousing	156,621	36.0
Self Storage	20,058	2.3
TOTAL	631,598	99.7

Table 5-2 outlines the detailed approach to the demand allocation whereby each industry segment has been given an estimated annual average employment growth forecast over the next 20 years. Using the forecasted employment growth, an industry average employment ratio (measured as sf per employee) was applied to the employment growth to yield an estimated future floorspace. The final step applied typical site coverage or FAR figures to the various sectors to determine the reasonable land requirements. It should be noted that this method relies on employment data and does not consider work accommodations or work camps incidental to said

employment. Therefore workers accommodations are not included in the scope of this forecast.

5.4 Absorption Summary

To set the stage for the development and land use allocations in the concept plans, the previous clusters and target sector opportunities were further broken down into five (5) phases that could support a likely pattern of land absorption as summarized in **Table 5-2**.

In **Phase 1**, given the market need to diversify over the next 5 years, initial absorption would be focused on existing, proven market segments like Manufacturing & Warehousing and Construction & Technical Trades with a total absorption across all sectors for just over 117,000 sf requiring an estimated 18.1 ac (7.3 ha) or an average annual absorption of 3.6 ac (1.5 ha). This absorption would allow the Kam Lake development area to start small with one access road in and out, thereby keeping infrastructure costs lower.

Phase 2 would start to see the gradual introduction of Agriculture or Agribusiness uses with small to mid size facilities totalling just under 10,000 sf. Overall, Phase 2 would have an average land absorption of 5.0 ac (2 ha) per year.

Phase 3 which would have the largest phased area at 37.7 acres over years 9 to 14 of the development timeline. This phase could see almost 54,122 sf of building space for Agribusiness. Concurrently, Construction and Manufacturing sectors will continue to absorb a large share of growth where the overall average land absorption would be around 6.3 ac (2.6 ha) per year.

Phase 4 would be a smaller development area of only 11 acres, focused on smaller owner-occupier industries but no Agribusiness with an average land absorption of 3.9 acres per year.

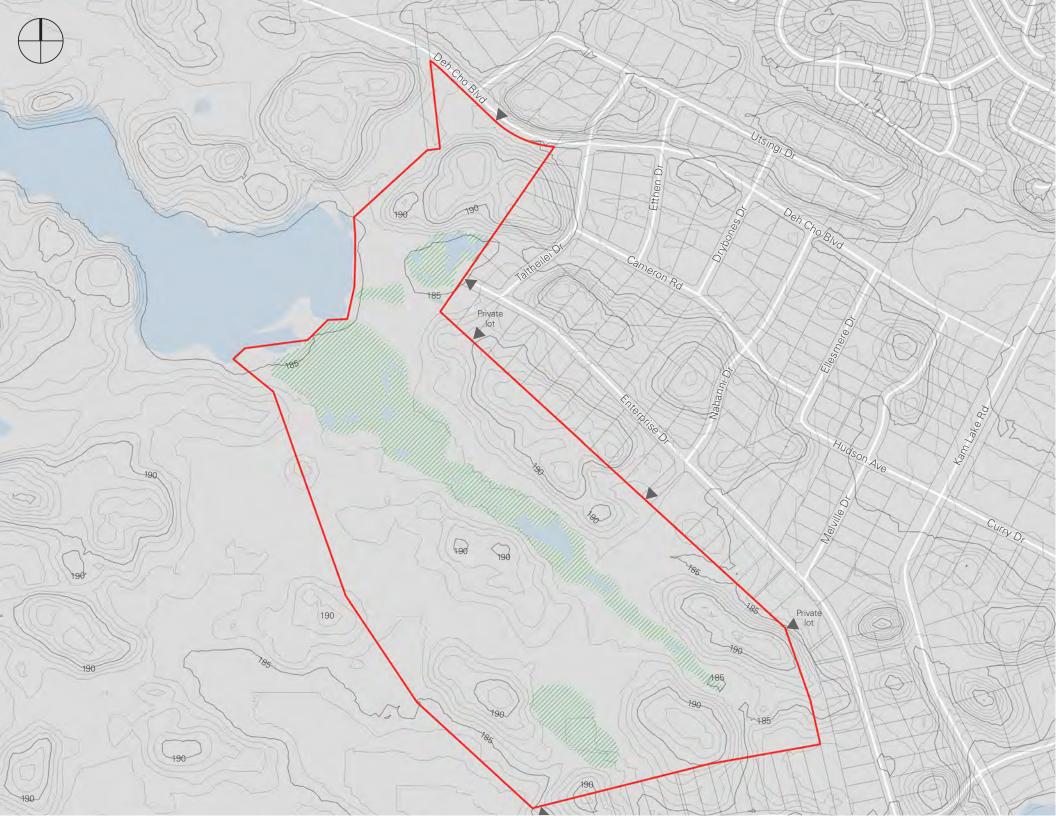
The final **Phase 5** of development and demand absorption would be in years 18 to 20 with a further growth accommodating Agribusinesses and other supporting light industrial businesses to round out and complete the Kam Lake Development Are for a total of 99.7 ac (40.3 ha) of net developable demand.

Table 5-2 Kam Lake Detailed Industry Cluster Segments at Buildout 2044 (Source: FBM)

BROAD NAICS CATEGORY	CLUSTERED INDUSTRY SEGMENT	2024 Employment	Growth Forecast	2044 Employment	2044 Forecasted Growth	Average Floorspace Employee to Floor Area Ratio	Total Floor Area Demand for Kam Lake	Estimated Site Coverage	Estimated Kam Lake Land Needs (acres)
Agriculture, forestry, fishing & hunting	Agriculture	33	2.0%	49	16	7,500	90,204	0.10	20.7
Mining and oil and gas extracton	Heavy Industry	723	0.5%	799	76	2,500	0	0.10	0.0
Utilities	Heavy Industry	78	1.0%	95	17	2,500	0	0.10	0.0
Administrative and support & waste	Heavy Industry	540	1.0%	659	119	2,500	0		0.0
Retail Trade	Commercial	1,356	1.0%	1,655	299	500	14,929	0.30	1.1
Information and cultural industries	Commercial	314	0.3%	330	16	250	0	0.30	0.0
Finance and insurance	Commercial	224	0.5%	247	23	250	0	0.30	0.0
Real estate and rental and leasing	Commercial	112	0.5%	124	12	250	0	0.30	0.0
Management of companies and enterprises	Commercial	1	1.0%	1	0	250	0	0.30	0.0
Arts, entertainment and recreation	Commercial	191	1.0%	233	42	750	3,154	0.30	0.2
Accommodation and food services	Commercial	871	1.0%	1,063	192	500	9,589	0.30	0.7
Other services	Commercial	418	1.0%	510	92	500	2,301	0.30	0.2
Construction	Construction & Technical Trades	680	1.0%	830	150	1,500	168,445	0.20	19.3
Professional, scientific and technical services	Construction & Technical Trades	868	2.5%	1,422	554	500	166,296	0.20	19.1
Educational services	Institutional	971	1.0%	1,185	214	250	0	0.20	0.0
Health care and social assistance	Institutional	1,632	1.0%	1,991	359	250	0	0.20	0.0
Public administration	Institutional	4,605	1.0%	5,619	1,014	250	0	0.20	0.0
Manufacturing	Manufacturing & Warehousing	151	1.0%	184	33	1,500	37,405	0.10	8.6
Wholesale Trade	Manufacturing & Warehousing	218	1.0%	266	48	1,500	54,002	0.10	12.4
Transportation and warehousing	Manufacturing & Warehousing	1,077	1.0%	1,314	237	1,375	65,215	0.10	15.0
Total / Average		15,063	1.4%	18,577	3,514	664	611,540	0.14	97.4

Table 5-3 Kam Lake Industry Clusters Absorption and Phasing Timeline (Source: FBM)

			Phase Years 1		Phas Years 6	_	Phase Years 9		Phase Years 15		Phase Years 18	
CLUSTERED INDUSTRY SEGMENT	Total Demand for Kam Lake (sf)	Estimated land needs (acres)	Forecast Floorspace (sf)	Forecast land needs (acres)								
Agriculture	90,204	20.7	0	0.0	9,020	2.1	54,122	12.4	0	0.0	27,061	6.2
Commercial	29,973	2.3	5,995	0.5	4,496	0.3	8,992	0.7	5,995	0.5	4,496	0.3
Construction & Technical	334,741	38.4	63,601	7.3	56,906	6.5	107,117	12.3	53,559	6.1	53,559	6.1
Manufacturing & Warehousing	156,621	36.0	37,589	8.6	26,626	6.1	48,553	11.1	21,927	5.0	21,927	5.0
Self Storage Facilities	20,058	2.3	10,029	1.2			10,029	1.2				
TOTAL	631,598	99.7	117,214	18.1	97,048	15.1	228,813	37.7	81,480	11.6	107,043	17.7
	Avg Annua	l Absorption	23,443	3.6	32,349	5.0	38,136	6.3	27,160	3.9	35,681	5.9



5.5 Conceptual Plans

Building upon the market demand for the various target sector land uses, three (3) preliminary conceptual site layout diagrams were developed showing preliminary road layouts, possible parcel configurations, access and egress arrangements, and overall connectivity and context with existing adjacent land uses. These were presented for discussion with city staff in January 2025. All three concepts aimed to provide adequate site access, a range of lot sizes, and flexibility in terms of phasing and relationship to wetlands and topography (refer to **Appendix Figure 1**). They differ in terms of road layout, number of road access points, proportion of lot sizes, environmental impact, and interface with surrounding developments (in particular, residential land use at Grace Lake North).

Concept 1 was a "lighter touch" concept with a relatively lower impact on wetland areas. Two road accesses would be provided, one an extension of Nahanni Drive, the other a new intersection with Deh Cho Boulevard. This concept incorporated a 30-metre undeveloped "buffer area" along the southern boundary of the Study Area, next to the residential lots of Grace Lake North. Concept 1 creates approximately 101 ac (40.9 ha) of industrial land.

Concept 2 introduced a third road access to the Study Area, taking the form of an extension of Enterprise Drive, while maintaining the two road accesses in Concept 1. Concept 2 increases the provision of industrial land to 116 ac (46.9 ha) by reducing the Grace Lake North buffer zone to 15 metres, and using low-lying/wetland area for development.

Concept 3 provided the most industrial land at approximately 123 ac (49.8 ha). However, it achieved this by proposing the use of around 5 to 6 acres outside the Study Area on government-owned land near Deh Cho Boulevard, mainly in order to improve the road design at the northern end of the site. Concept 3 includes three road access points, but the Enterprise Drive entrance included in Concept 2 was replaced by an extension of Taltheilei Drive through the large wetland area in the centre of the Study Area, resulting in the elimination of one cul-de-sac.

Each of the three preliminary concepts was evaluated across a range

of site attributes as summarized in **Table 5-4**. Additional feedback from city staff enabled refinements to the conceptual layouts (Concepts 1-3), into two preferred Concept Layout Plans (Concepts A & B), outlined in **Appendix Figures 3 and 4**.

5.6 Districting Strategy

A guiding framework for developing the concept plans, was a high-level districting strategy as shown in **Appendix Figure 2** in which the broad land uses within the Study Area are identified based on their compatibility and sensitivity to adjacent land uses. For example, the concept of lower intensity live-work industrial would not only provide opportunities for additional housing opportunities, but the "residential" element would be more compatible with existing residential in the south/southeast portion of Kam Lake.

Similarly, larger uses may benefit from land on the west side of Kam Lake, leaving smaller owner-occupier and smaller lot uses to cluster with

Table 5-4 Preliminary Concept Options Evaluation Matrix

(Source: FBM)			
Concept Options Evaluation Matrix	CONCEPT OPTION 1	CONCEPT OPTION 2	CONCEPT OPTION 3
Environmental Preservation/Protection	High	Medium	Low
Net Developable Area	Low	Medium	High
Trails & Mobility Connectivity	High	High	High
Taxable Revenue Potential	Medium	Medium	High
Development Cost Favourability	Medium	Medium	Low
Adjacent Properties Compatibility	High	High	High
Emergency Management Preparedness	Medium	Medium	Low
Vehicle Access & Circulation	Medium	Medium	High

existing businesses and promote economic synergies in the Kam Lake industrial area.

The overall "amenity" and preservation of wetlands and/or sensitive lands creates an opportunity for strong active transportation as well as seasonal ATV or snowmobile trails to and within Kam Lake.

The industry types that could be compatible with Kam Lake are detailed in **Appendix Table C** and are based on the 3 or 4 digit NAICS codes. The purpose of these tables is to illustrate the wide range of business opportunities that could be drawn to Kam Lake as it develops over the next 20 years.

5.7 Concept A

The Concept A presented in **Appendix Figure 3** is a combination of the preliminary Concepts 1 and 2. It includes a 15-metre buffer area adjacent to Grace Lake North, three road access points, and a relatively lighter impact on wetland areas. The three road accesses could be built on municipally owned land, avoiding the need for land acquisition.

Concept A results in approximately 110 ac (44.5 ha) of new industrial land.

5.8 Concept B

The Concept B as presented in **Appendix Figure 4** combines elements of preliminary Concepts 1, 2 and 3. It includes a 15-metre buffer area with Grace Lake North (like Concept 1), an extension of Taltheilei Drive across the central wetland area (like Concept 3), and "double-loading" of industrial lots along "Northern Street" (like Concept 2). The extension of Taltheilei Drive would result in improved access and a better road layout, but would require some acquisition of private property along Enterprise Drive.

Concept B results in approximately 113 ac (45.7 ha) of new industrial land.

Overall phasing for both concept options would likely require 5 phases premised on floorspace and land absorption as follows:

Years 1 to 5	23,443 sf and 3.6 ac of annual absorption
Years 6 to 8	32,349 sf and 5.0 ac of annual absorption
Years 9 to 14	38,136 sf and 6.3 ac of annual absorption
Years 15 to 17	27,160 sf and 3.9 ac of annual absorption
Years 18 to 20	35,681 sf and 5.9 ac of annual absorption

Any remaining acreage is assumed to be absorbed beyond the 20-year forecast.

5.9 Class D Cost Estimates

To provide a high level estimate for construction of the Concept Plans, Class D cost estimates were completed for Concept A and Concept B based on a Grading Plan shown in **Appendix Figures 5 and 6** and summarized in **Tables 5-5 and 5-6.** Class D Cost Estimates are rounded to the nearest thousand dollars, do not reflect phasing and assume a full buildout which is not likely. Further development of costing is recommended when development phasing is finalized. Note: All quantities and costs must be confirmed with a contractor and are subject to the following assumptions:

- 1. All cut material will require blasting
- 2. All fill material will be imported backfill
- 3. Right-of-way (ROW) width = 24 m (79 ft), road width = 11 m (36 ft)
- 4. The ROW/road crosses the wetland area for both options. Concept B will require additional wetland removal over the area of the lots. The wetland removal is assumed to be excavated up to 1.5m for both options.
- 5. Site mobilization and demobilization is an estimate
- 6. Lot blasting has not been included, however lot grading has been accounted for.
- 7. Sub-grade excavation of 0.6 m (2 ft) across the entire ROW area
- 8. The proposed sites need to be visually checked to confirm ground information (water bodies, marshes etc.).
- 9. A per lot cost estimate was used to calculate electrical costs. A quote from the local electrical utility is advised.

- 10. Tree clearing is assumed for the entire right-of-way. Assumed that the area is lightly forested
- 11. Culvert pricing was included however a drainage plan is required for a more accurate estimate
- 12. This is a Class D estimate all quantities and cost will need to be confirmed with a contractor.
- 13. A land survey and geotechnical survey of the lands is required for a more accurate cost estimate.
- 14. 10% Engineering, 50% contingency, and 5% GST have been added to total costs for each Concept Option A and B
- 15. Asphalt, sidewalk, or curb and gutter have not been considered in either Concept Option A or B

Concept A

The analysis of Class D Cost Estimates reveal that Concept A could cost an estimated \$10.5 million (in current dollars) to create the necessary road and services infrastructure to enable development as shown in

Table 5-5 Kam Lake Class D Cost Estimate - Draft Final Concept Plan A (Source: Dillon Consulting)

Concept Plan Option A - Kam Lake Estimate

Item	Total Cost
Site Preparation	\$75,000
Roadway	\$4,556,000
Wetland Removal	\$470,000
Drainage	\$356,000
Electrical Infrastructure	\$790,000
Subtotal	\$6,247,000
Engineering (10%)	\$624,700
Contingency (50%)	\$3,123,500
Sub-total with Engineering and Contingency	\$9,995,200
GST (5%)	\$499,760
Total	\$10,494,960

Appendix Figure 5.

Concept B

The analysis of Class D Cost Estimates reveal that Concept B could cost an estimated \$12.1 million (in current dollars) to create the necessary road and services infrastructure to enable development as shown in **Appendix Figure 6**. Development in Concept B includes an additional road and wetland removal to traverse the identified wetland and create a full internal loop road.

5.10 Phasing Strategy

The overall phasing strategy for Kam Lake summarized in **Table 5-7** shows the smallest development phase in the initial years 1 to 5. Doing so will allow the development to kick start with a smaller area and also only require one major access/egress point into the area, thereby keeping

Table 5-6 Kam Lake Class D Cost Estimate - Draft Final Concept Plan B (Source: Dillon Consulting)

Concept Plan Option B - Kam Lake Estimate

Concept Flair Option B Rain Lake	Littlato
Item	Total Cost
Site Preparation	\$75,000
Roadway	\$4,712,000
Wetland Removal	\$1,240,000
Drainage	\$378,000
Electrical Infrastructure	\$770,000
Subtotal	\$7,175,000
Engineering (10%)	\$717,500
Contingency (50%)	\$3,587,500
Sub-total with Engineering and Contingency	\$11,480,000
GST (5%)	\$574,000
Total	\$12,054,000

development and infrastructure costs at a lower level.

With Phase 2 being an equally smaller development, the ongoing justification for a second access point would be supported by the growth of businesses along the initial main road through Kam Lake.

Phases 1 and 2 are intended to be the catalyst for future development where the project ramps up and can justify the costs necessary to add new roads and multiple access/egress points to ensure adequate vehicle mobility as well as protective services responses and public works maintenance. Phases 1 and 2 ultimately should support the introduction of the largest land development area in Phase 3 with supporting internal "loop" road configuration.

Table 5-7 Kam Lake Phasing Timeline (Source: FBM)

Manufacturing & Warehousing

Self Storage Facilities

TOTAL

	Phase 1 Years 1 to 5		Phase 2 Years 6 to 8	
	Forecast Floorspace	Forecast land	Forecast Floorspace	Forecast land
	(sf)	(acres)	(sf)	(acres)
Agriculture	0	0.0	9,020	2.1
Commercial	5,995	0.5	4,496	0.3
Construction & Technical Trades	63,601	7.3	56,906	6.5

37,589

10.029

117,214

8.6

1.2

17.5

26,626

97.048

0

6.1

0.0

15.1

	Phase 3 Years 9 to 11		Phase 4 Years 12 to 15	
	Forecast	Forecast	Forecast	Forecast
	Floorspace	land	Floorspace	land
	(sf)	(acres)	(sf)	(acres)
Agriculture	54,122	12.4	0	0.0
Commercial	8,992	0.7	5,995	0.5
Construction & Technical Trades	107,117	12.3	53,559	6.1
Manufacturing & Warehousing	48,553	11.1	21,927	5.0
Self Storage Facilities	10,029	1.2	0	0.0
TOTAL	228,813	37.7	81,480	11.6

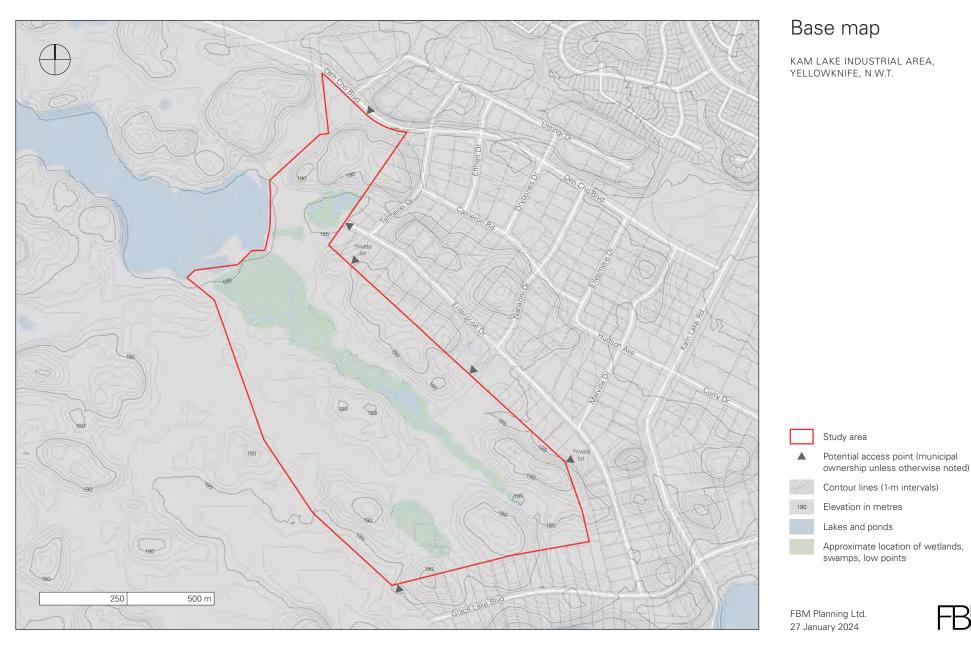
	Phase 5 Years 15 to 20		
	Forecast	Forecast	
	Floorspace	land	
	(sf)	(acres)	
Agriculture	27,061	6.2	
Commercial	4,496	0.3	
Construction & Technical Trades	53,559	6.1	
Manufacturing & Warehousing	21,927	5.0	
Self Storage Facilities	0	0.0	
TOTAL	107,043	17.7	

Kam Lake

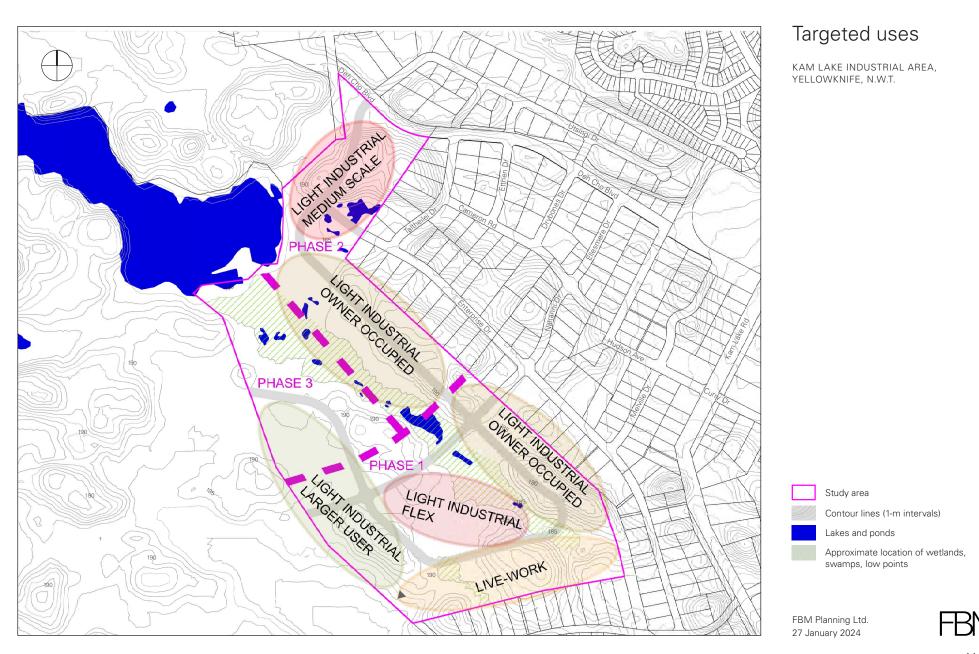
Market Study Final Report

Appendices

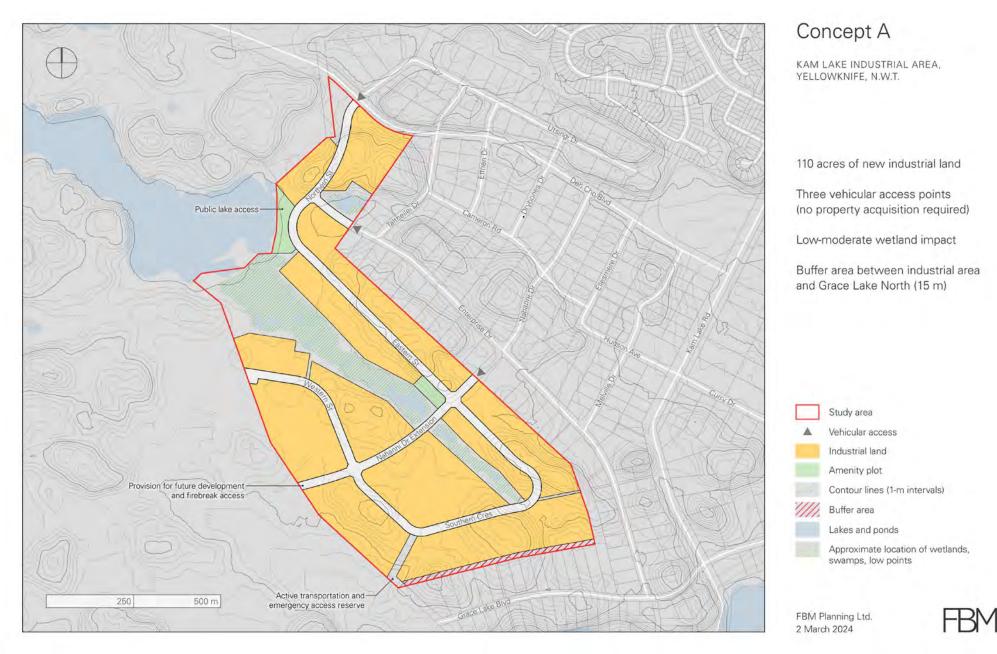
Appendix Figure 1 Kam Lake Study Area Topographic Base Map with Potential Access Points (Source: FBM & Dillon Consulting)



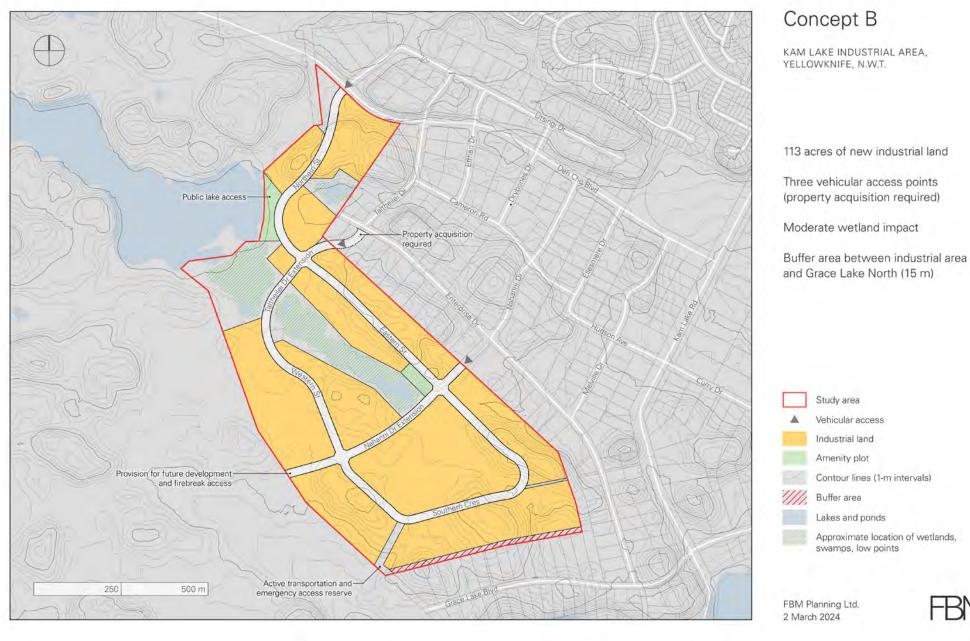
Appendix Figure 2 Kam Lake Study Area Potential Districting Strategy "Bubble Diagram" (Source: FBM & Dillon Consulting)



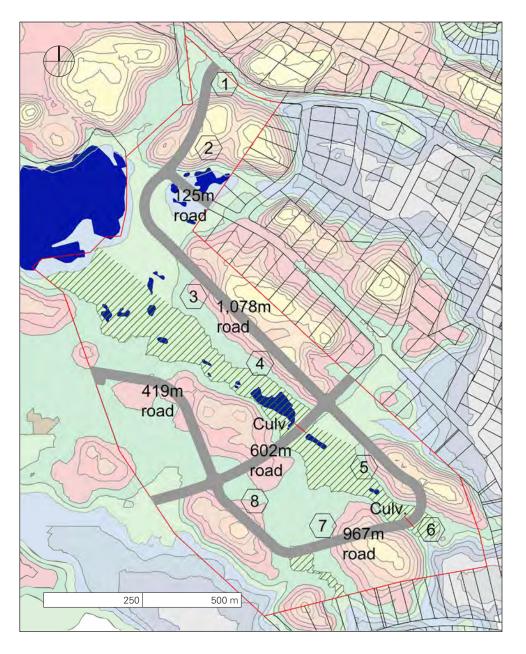
Appendix Figure 3 Kam Lake Study Area Concept A (Source: FBM & Dillon Consulting)



Appendix Figure 4 Kam Lake Study Area Concept B (Source: FBM & Dillon Consulting)



Appendix Figure 5 Kam Lake Study Area Grading Plan For Class D Cost Estimating - Concept A (Source: FBM & Dillon Consulting)



Grading plan – Concept A

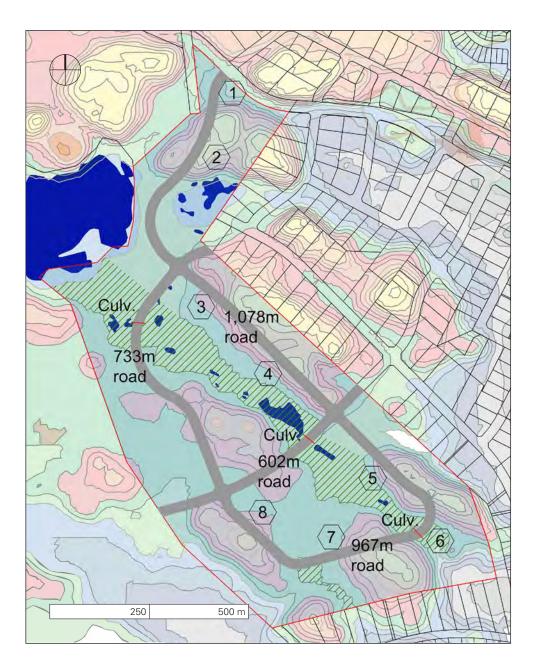
KAM LAKE INDUSTRIAL AREA, YELLOWKNIFE, N.W.T.

Nota	ole slopes				
$\langle 1 \rangle$	6 m rise, 120 m, net 6,336 m³ of fill				
2	6 m descent, 120 m, net 4,320 m³ of fill				
(3)	5 m rise, 295 m, no net cut or fill				
$\langle 4 \rangle$	4 m net rise, 295 m, net 3,770 m³ of cut				
(5)	5 m rise, 150 m, net 1,500 m³ of fill				
<u>(6)</u>	5 m dip and rise, 192 m, net 14,880 m³ of fill (or bridge)				
$\overline{\langle 7 \rangle}$	5 m descent, 100 m, net 2,700 m³ of fill				
(8)	2 m rise and dip, 150 m, no net cut or fill				

Municipal right of way					
WIDTH	24 metres				
AREA	78,580 m ²				
Roadways					
WIDTH	11 metres				
SURFACE AREA	36,358 m²				
Culverts					
NUMBER	2				

FBM

Appendix Figure 6 Kam Lake Study Area Grading Plan For Class D Cost Estimating — Concept B (Source: FBM & Dillon Consulting)



Grading plan - Concept B

KAM LAKE INDUSTRIAL AREA, YELLOWKNIFE, N.W.T.

Nota	table slopes					
1	6 m rise, 120 m, net 6,336 m³ of fill					
2	6 m descent, 120 m, net 4,320 m³ of fill					
(3)	5 m rise, 295 m, no net cut or fill					
4	4 m net rise, 295 m, net 3,770 m³ of cut					
(5)	5 m rise, 150 m, net 1,500 m³ of fill					
6	5 m dip and rise, 192 m, net 14,880 m³ of fill (or bridge)					
7	5 m descent, 100 m, net 2,700 m³ of fill					
(8)	2 m rise and dip, 150 m, no net cut or fill					

Municipal righ	Municipal right of way					
WIDTH	24 metres					
AREA	81,900 m ²					
Roadways						
WIDTH	11 metres					
SURFACE AREA	38,502 m ²					
Culverts						
NUMBER	3					
	•					

FBM Planning Ltd. 19 February 2024



APPENDIX TABLE A Kam Lake Study Industrial Demand by Labour Force Growth (Source: FBM & Manifold Data Mining Inc.)

Yellowknife CMA									
Scenario	2024	2025	2026	2027	2028	2029	2034	2039	2044
	23,629	23,913	24,201	24,492	24,775	25,062	26,339	27,681	29,092
Yellowknife CMA									
Scenario	2024	2025	2026	2027	2028	2029	2034	2039	2044
% aged 15+	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%
Yellowknife CMA									
Scenario	2024	2025	2026	2027	2028	2029	2034	2039	2044
	19,388	19,621	19,857	20,096	20,329	20,564	21,612	22,713	23,870
2024 Industrial Market Condition Yellowknife CMA	ns		2 (27 222						
Current Industrial Inventory Current Industrial Square Foot pe	or canita		3,637,332 153.9						
Current Industrial Vacancy Rate	ет сарна		2.5%						
Occupied Industrial Inventory			3,546,398						
Occupied Square Foot per Emplo	oyable Reside	ent	182.9						
"Balanced" Industrial Vacancy Ra	ite		5%						
"Balanced" Industrial Occupied Ir	nventory		3,455,465						
Absorption Required to Support	New Constru	uction	-90,933						
Projected Cumulative Occupied I	Industrial Sp	ace							
	2024	2025	2026	2027	2028	2029	2034	2039	2044
		3,589,058	3,632,231	3,675,923	3,718,452	3,761,473	3,953,133	4,154,560	4,366,250
Cumulative New Industrial Space	e Demand								
	2024	2025	2026	2027	2028	2029	2034	2039	2044
		133,593	176,766	220,458	262,987	306,008	497,668	699,095	910,785
Kam Lake Market Share of Cumu	ulativo Nove I	Industrial Chas	Domand						
Name Lake Market Share of Cumt	liative New i 2024	industriai 5 paci 2025	e Demand 2026	2027	2028	2029	2034	2039	2044
75%	2021	100,195	132,574	165,344	197,240	229,506	373,251	524,321	683,089
		•							

Source: Statistics Canada, Manifold Data Mining Inc., and FBM Ltd.

APPENDIX TABLE B Kam Lake Study Area Industrial Demand by Employment Category (Source: FBM, Statistics Canada & Manifold Data Mining Inc.)

Agriculture, forestry, fishing & hunting Agriculture, forestry, fishing & hunting Mining and oil and gas extraction 835 Utilities 65 Construction 620 Manufacturing 130 Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 1920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	2024 33 723 78 680 151 218 1,356 1,077 314 224 112 868 1 540 971	1.4% -2.0% 2.6% 1.3% 2.2% 3.2% 1.9% -2.3% -3.1% -7.3% 0.0% 3.0% 3.6%	95% 95% 95% 95% 95% 95% 5% 25% 0% 10% 20%	31 687 74 646 143 207 68 1,023 79 0 11 174 0 378	2.0% 0.5% 1.0% 1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 1.0%	2024 32 690 75 652 145 209 68 1,033 79 0 11 178 0 382	2029 35 708 79 686 152 220 72 1,086 80 0 12 201 0 401	2034 39 726 83 721 160 231 76 1,141 81 0 12 228 0 422	2039 43 744 87 757 168 243 80 1,200 82 0 12 258 0 443	2044 48 763 91 796 177 255 84 1,261 83 0 12 292 0 466
Mining and oil and gas extraction 835 Utilities 65 Construction 620 Manufacturing 130 Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	723 78 680 151 218 1,356 1,077 314 224 112 868 1 540	-2.0% 2.6% 1.3% 2.2% 3.2% 1.9% 2.3% -2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	95% 95% 95% 95% 95% 5% 95% 25% 0% 10% 20%	687 74 646 143 207 68 1,023 79 0 11 174 0 378	0.5% 1.0% 1.0% 1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 1.0% 1.0%	690 75 652 145 209 68 1,033 79 0 11 178	708 79 686 152 220 72 1,086 80 0 12 201	726 83 721 160 231 76 1,141 81 0 12 228	744 87 757 168 243 80 1,200 82 0 12 258	763 91 796 177 255 84 1,261 83 0 12 292
Utilities 65 Construction 620 Manufacturing 130 Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	78 680 151 218 1,356 1,077 314 224 112 868 1 540	2.6% 1.3% 2.2% 3.2% 1.9% 2.3% -2.3% -3.1% -7.3% 0.0%	95% 95% 95% 95% 5% 95% 25% 0% 10% 20% 10%	74 646 143 207 68 1,023 79 0 11 174 0	1.0% 1.0% 1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 1.0% 1.0%	75 652 145 209 68 1,033 79 0 11 178	79 686 152 220 72 1,086 80 0 12 201	83 721 160 231 76 1,141 81 0 12 228	87 757 168 243 80 1,200 82 0 12 258	91 796 177 255 84 1,261 83 0 12 292
Construction 620 Manufacturing 130 Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	680 151 218 1,356 1,077 314 224 112 868 1 540	1.3% 2.2% 3.2% 1.9% 2.3% -2.3% -3.1% -7.3% 0.0% 3.0%	95% 95% 95% 5% 95% 25% 0% 10% 20% 10%	646 143 207 68 1,023 79 0 11 174 0	1.0% 1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 2.5% 1.0%	652 145 209 68 1,033 79 0 11 178	686 152 220 72 1,086 80 0 12 201	721 160 231 76 1,141 81 0 12 228	757 168 243 80 1,200 82 0 12 258	796 177 255 84 1,261 83 0 12 292
Manufacturing 130 Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	151 218 1,356 1,077 314 224 112 868 1 540	2.2% 3.2% 1.9% 2.3% -2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	95% 95% 5% 95% 25% 0% 10% 20% 10%	143 207 68 1,023 79 0 11 174 0	1.0% 1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 1.0%	145 209 68 1,033 79 0 11 178	152 220 72 1,086 80 0 12 201	160 231 76 1,141 81 0 12 228	168 243 80 1,200 82 0 12 258	177 255 84 1,261 83 0 12 292
Wholesale Trade 175 Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	218 1,356 1,077 314 224 112 868 1 540 971	3.2% 1.9% 2.3% -2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	95% 5% 95% 25% 0% 10% 20% 10%	207 68 1,023 79 0 11 174 0	1.0% 1.0% 1.0% 0.3% 0.5% 0.5% 2.5% 1.0%	209 68 1,033 79 0 11 178	220 72 1,086 80 0 12 201	231 76 1,141 81 0 12 228	243 80 1,200 82 0 12 258	255 84 1,261 83 0 12 292
Retail Trade 1,185 Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	1,356 1,077 314 224 112 868 1 540	1.9% 2.3% -2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	5% 95% 25% 0% 10% 20% 10%	68 1,023 79 0 11 174 0 378	1.0% 1.0% 0.3% 0.5% 0.5% 2.5% 1.0%	68 1,033 79 0 11 178	72 1,086 80 0 12 201	76 1,141 81 0 12 228	80 1,200 82 0 12 258	84 1,261 83 0 12 292
Transportation and warehousing 920 Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	1,077 314 224 112 868 1 540	2.3% -2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	95% 25% 0% 10% 20% 10% 70%	1,023 79 0 11 174 0 378	1.0% 0.3% 0.5% 0.5% 2.5% 1.0%	1,033 79 0 11 178	1,086 80 0 12 201	1,141 81 0 12 228	1,200 82 0 12 258	1,261 83 0 12 292
Information and cultural industries 370 Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	314 224 112 868 1 540 971	-2.3% -3.1% -7.3% 2.7% 0.0% 3.0%	25% 0% 10% 20% 10% 70%	79 0 11 174 0 378	0.3% 0.5% 0.5% 2.5% 1.0%	79 0 11 178 0	80 0 12 201 0	81 0 12 228 0	82 0 12 258 0	83 0 12 292 0
Finance and insurance 280 Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	224 112 868 1 540 971	-3.1% -7.3% 2.7% 0.0% 3.0%	0% 10% 20% 10% 70%	0 11 174 0 378	0.5% 0.5% 2.5% 1.0%	0 11 178 0	0 12 201 0	0 12 228 0	0 12 258 0	0 12 292 0
Real estate and rental and leasing 190 Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	112 868 1 540 971	-7.3% 2.7% 0.0% 3.0%	10% 20% 10% 70%	11 174 0 378	0.5% 2.5% 1.0%	11 178 0	12 201 0	12 228 0	12 258 0	12 292 0
Professional, scientific and technical services 720 Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	868 1 540 971	2.7% 0.0% 3.0%	20% 10% 70%	174 0 378	2.5% 1.0% 1.0%	178 0	201	228 0	258 0	292 0
Management of companies and enterprises 1 Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	1 540 971	0.0%	10% 70%	0 378	1.0% 1.0%	0	0	0	0	0
Administrative and support & waste management 440 Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	540 971	3.0%	70%	378	1.0%					
Educational services 760 Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	971					382	401	422	443	466
Health care and social assistance 1,130 Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce		3.6%	10%	97						
Arts, entertainment and recreation 155 Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce					1.0%	98	103	108	114	120
Accommodation and food services 730 Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	1,632	5.4%	5%	82	1.0%	82	87	91	96	101
Other services 490 Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	191	3.0%	10%	19	1.0%	19	20	21	22	24
Public administration 3,320 Total Workforce 12,546 Total Industrial-Related Workforce	871	2.6%	10%	87	1.0%	88	92	97	102	107
Total Workforce 12,546 Total Industrial-Related Workforce	418	-2.2%	30%	125	1.0%	127	133	140	147	155
Total Industrial-Related Workforce	4,605	4.8%	5%	230	1.0%	233	244	257	270	284
	15,063	2.6%								
Net New Industrial-Reated Workforce	4,162		28%	4,162	1.0%	4,202	4,411	4,633	4,868	5,116
						40	43	45	48	51
Estimated Floorspace Ratio per Worker	750					750	750	750	750	750
Total Industrial Related Floorspace (sq.ft)	2,000,000					2,030,342	2,187,288	2,353,412	2,529,371	2,715,883
Annual New Industrial Space Demand (sq.ft)						30,342	32,103	33,990	36,012	38,183
Total New Industrial Space Demand (sq.ft)						30,342	187,288	353,412	529,371	715,883
Market Share of New Industrial Space Demand					75%	75%	75%	75%	75%	75%
Share of New Industrial Space (sq.ft)						22,757	140,466	265,059	397,028	536,912

Source: Statistics Canada, Manifold Data Mining Inc. and FBM Ltd.

APPENDIX TABLE C Kam Lake Study Area Compatible Target Industry Sectors (Source: FBM)

2-Digit NAICS Code	3- or 4- Digit NAICS Code	NAICS Code Sector Description Kam Lake Compatible Industry Sectors
11		Agriculture, forestry, fishing and hunting
	1111	
	1112	
	1113	O .
	1113	
	1119	!
	1121	Cattle ranching and farming
	1122	
	1123	, 001
	1124	
	1125	
	1129	
	1141	
	1142	
	1151	
	1152	
0.1	1153	
21		Mining, quarrying, and oil and gas extraction
22		Utilities
23		Construction
	2381	, ,
	2382	U 1 1
	2383	
	2389	Other specialty trade contractors

2-Digit NAICS Code	3- or 4- Digit NAICS Code	NAICS Code Sector Description Kam Lake Compatible Industry Sectors				
31-33		Manufacturing				
	311	Food manufacturing				
	312	Beverage and tobacco product manufacturing				
	313					
	314	Textile product mills				
	315					
	316	•				
	321					
	322					
	323					
	324					
	325					
	326					
	327	· · · · · · · · · · · · · · · · · · ·				
	331					
	332					
	333					
	334					
	335					
	336					
	337					
	339	Miscellaneous manufacturing				
41		Wholesale trade				
	411					
	412	Petroleum and petroleum products merchant wholesalers				
	413	Food, beverage and tobacco merchant wholesalers				
	414					
	415					
	416					
	417					
	418					
	419	Business-to-business electronic markets, and agents and brokers				

$\textbf{APPENDIX TABLE C} \ \mathsf{Kam \ Lake \ Study \ Area \ Compatible \ Target \ Industry \ Sectors \ - \ Continued}$

(Source: FBM)

2-Digit NAICS Code	3- or 4- Digit NAICS Code	NAICS Code Sector Description Kam Lake Comp	atible Industry Sectors
44-45		Retail trade	
48-49		Transportation and warehousing	
	4841	1 General freight trucking	
	4842		
	4884		
	4885	3 1	
	4889		
	4921		
	4922	o ,	
	4931	o o	
51		Information and cultural industries	
52		Finance and insurance	
53		Real estate and rental and leasing	
	5321		
	5322	- G	
	5323		
	5324	, , , , , ,	ental and leasing
54	- 111	Professional, scientific and technical services	
	5411	O .	·
	5412	5, 11, , 15, 17	ervices
	5413	, 9 9	
	5414	1 3	
	5415	1 7	
	5416	g ,	es
	5417 5410		
	5418 5410	J. 1	
	5419	Other professional, scientific and technical services	

2-Digit NAICS Code	3- or 4- Digit NAICS Code	NAICS Code Sector Description Kam Lake Compatible Industry Sectors
55		Management of companies and enterprises
56		Administrative and support, waste management and remediation services
	5611	
	5612	
	5613	1 /
	5614	
	5615	·
	5616	
	5617	
	5619	
61		Educational services
62		Health care and social assistance
71		Arts, entertainment and recreation
72		Accommodation and food services
80	0111	Other services (except public administration)
	8111	
	8112	
	8113	, , , , , , , , , , , , , , , , , , , ,
	8114	•
91		Public administration

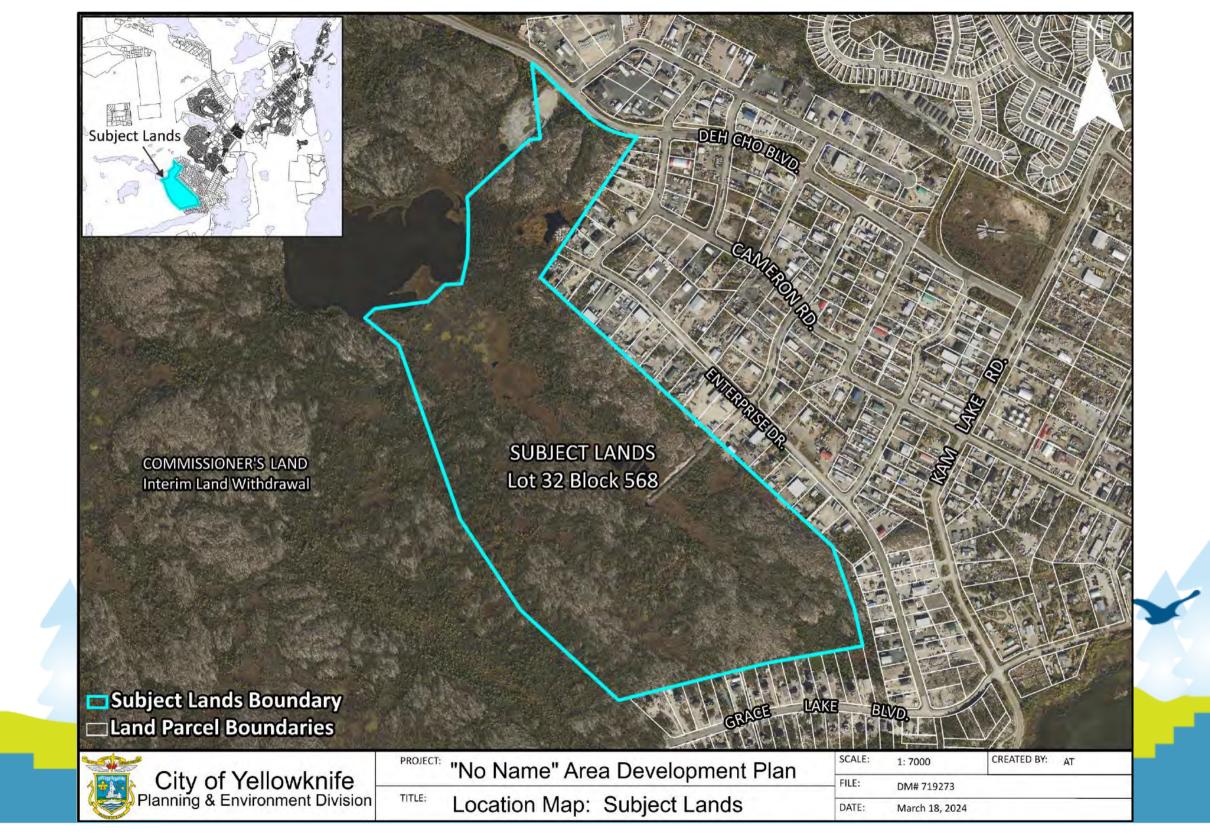
FBM



Proposed Area Development Plan

(Kam Lake)







Process

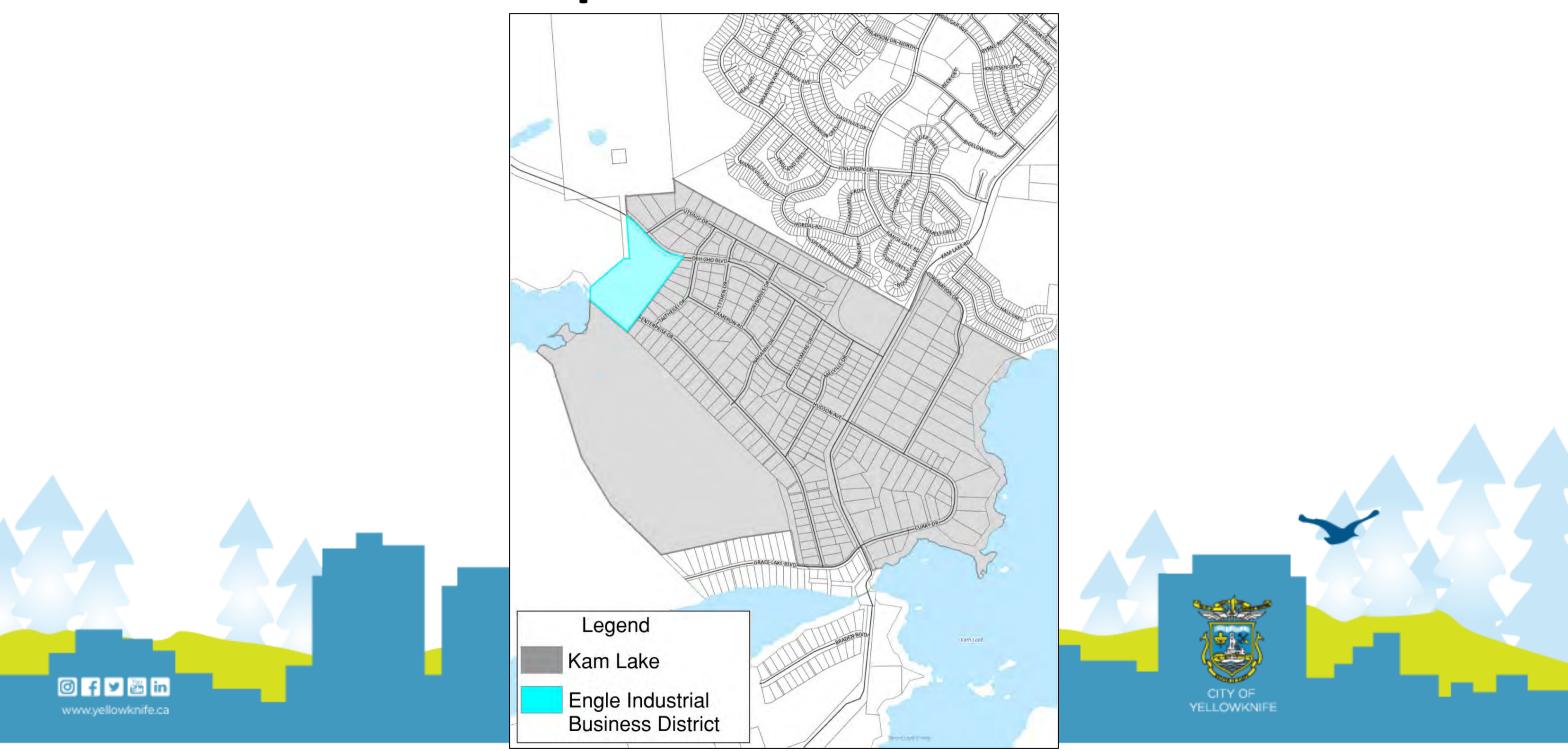
- Completed:
 - ✓ Preliminary Public Consultation
 - ✓ Market Report

- O Next Steps:
 - Community Plan Amendment
 - Area Development Plan
 - Zoning
 - Subdivision
 - Marketing Plan
 - Sale of land





Proposed Amendment



Area Development Plan

- Land Use & Policy Alignment
- Infrastructure & Servicing Review
- Environmental& Impact Review
- Development of Concept Plans
- Public Consultation on Concept Plans
- Drafting & Refinement of the ADP
- Regulatory Approvals
- Implementation & Phasing





Thank you Questions?





MEMORANDUM TO COMMITTEE

COMMITTEE: Governance and Priorities

DATE: April 14, 2025

DEPARTMENT: Administration

ISSUE: Whether to appoint members to serve on the Community Advisory Board on

Homelessness.

RECOMMENDATION:

That Council appoint the following members to serve on the Community Advisory Board on Homelessness (CAB) commencing April 29, 2025 and ending April 28, 2027:

Name	Representing
	One (1) representative who has lived experience of homelessness
	One (1) representative from Indigenous Peoples and organizations,
	Friendship Centres or Indigenous housing organizations
	One (1) representative from a Yellowknife Business

BACKGROUND:

There are vacancies on the Community Advisory Board on Homelessness for: One (1) representative who has lived experience of homelessness; One (1) representative from Indigenous organizations; One (1) representative from Veterans Affair Canada or veterans serving organizations; and One (1) representative from a Yellowknife Business.

It is the practice of the City of Yellowknife to advertise all vacancies for boards and committees. The City has advertised vacancies on the Community Advisory Board (CAB) on Homelessness in the Capital Update, the City's website and social media sites.

COUNCIL POLICY / RESOLUTION OR GOAL:

Council Goal #1 People First.

Motion #0459-96, as amended by #0460-96, #0462-96 and #0273-09:

"The following policy be adopted with respect to appointments to municipal boards and committees:

- The maximum consecutive years that an individual may serve on any one board or committee is six.
- ii) Individuals who have served the maximum six-year period on one municipal board or committee shall be eligible to be appointed to another board or committee.
- iii) No individual shall be precluded from serving concurrent terms on more than one municipal board or committee.
- iv) Notwithstanding that an individual appointee has served less than six years on a particular board or committee, Council may, after the expiration of the first or subsequent terms of that appointee, advertise for applicants to fill a vacancy on that board or committee.
- v) Notwithstanding clause (i.) of this policy, should the City receive no applications to fill a vacancy on any particular board or committee, the six year maximum limitation may, at the discretion of City Council, be waived.
- vi) Should the City receive no applications to fill a vacancy on any particular board or committee, City Council may appoint a member of the public at their discretion.

APPLICABLE LEGISLATION, BY-LAWS, STUDIES, PLANS:

Council Procedures By-law No. 4975, as amended.

CONSIDERATIONS:

Legislation

Section 122 of Council Procedures By-law No. 4975 states:

Special Committees of Council

- 120. Where Council deems it necessary to establish a special committee to investigate and consider any matter, Council shall:
 - (1) name the committee;
 - (2) establish terms of reference;
 - (3) appoint members to it;
 - (4) establish the term of appointment of members;
 - (5) establish requirements for reporting to Council or a standing committee; and
 - (6) allocate any necessary budget or other resources to it.

Procedural Considerations

All appointments to Special Committees must be approved by Council.

The composition of the Committee was structured so that various segments of the community are represented.

ALTERNATIVES TO RECOMMENDATION:

No viable alternative has been identified.

RATIONALE:

The Committee members will assist the City in an advisory capacity regarding homelessness issues within the municipal boundaries of the City of Yellowknife. Appointing a full complement of Members will ensure that the work of the committee is completed in a timely fashion.

ATTACHMENTS:

None

Prepared: March 31, 2025; SJ/