

KELLY LAKE PROPOSED HOUSING DEVELOPMENT

**Nikihk Management and Community Development Society
c/o David Nairne + Associates Ltd.**

Prepared by:

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PROJECT DESCRIPTION

Project Location

The Nihik Management and Community Development Society (“Nihik Society”) is proposing an Elders housing development in Kelly Lake, BC.

Kelly Lake is a rural community located within the Peace River Regional District. 2016 and 2021 Census Data states that the population of Kelly Lake is 76, however, community surveys and a housing inventory conducted in 2018 found that there 93 people living in the community. The 2021 census states that there are 27 occupied households in Kelly Lake and a 2020 Housing Needs Assessment found that 30 new homes are needed to meet the community’s affordable housing needs.

The proposed site is located on Kelly Lake Rd., on the north shore of Kelly Lake within PID: 014-638-571. The site is currently forested, therefore, there are no existing buildings or structures on the site. The Housing Development would be adjacent to the Kelly Lake Community Centre, providing access to important resources. The site is owned by the Kelly Lake Community Centre Society.

The site is currently zoned as RR-1 Rural Residential and will require rezoning to R-3 Mobile Home Park Residential. Preliminary discussions with Peace River Regional District planning staff suggest that the site offers good potential for rezoning. Conceptual Plans are included in **Appendix A** and are designed to meet the requirements of R-3 Zoning, as well as the Manufactured Home Parks Bylaw and Lakeshore Development Guidelines.

Further, it is planned to submit a concurrent Subdivision Application. To accommodate the proposed Housing Development, we are looking to subdivide the current lot into three lots (listed as Proposed Lot 1, Proposed Lot 2, and Rem Block B in Figure 1). We are requesting to have dual zoning where Proposed Lot 1 and Proposed Lot 2 would be rezoned to R-3 Mobile Home Park Residential Zone, and Rem Block B would remain zoned as RR-1. Proposed Lot 1 and Proposed Lot 2 will be leased to the Nihik Society by the Kelly Lake Community Centre Society to support the current Housing Development, as well as a potential Phase 2 development.

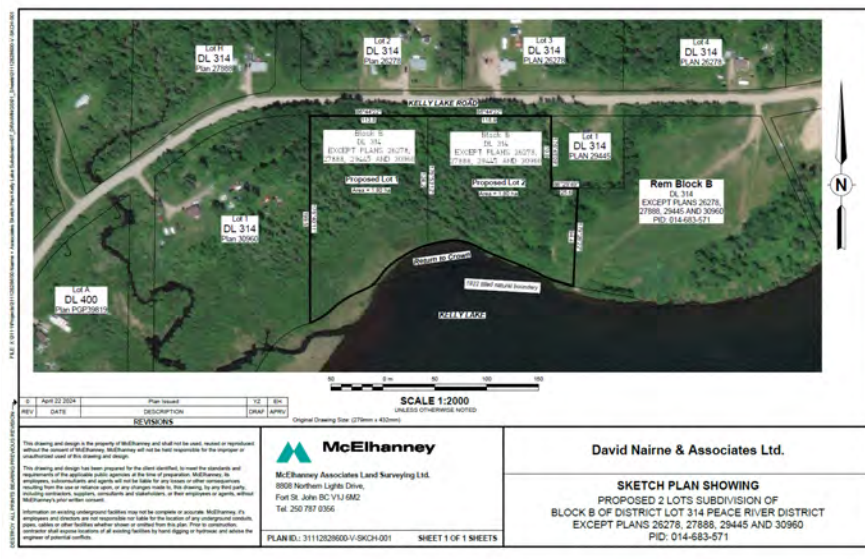


Figure 1: Context of Lot and Proposed Subdivision

The site details are as follows:

Table 1: Site Details

Legal Description	BLOCK B OF DISTRICT LOT 314 PEACE RIVER DISTRICT EXCEPT PLANS 26278, 27888, 29445, 30960 PID: 014-683-571
Role	759-040341.000
Lot Size	7.32 Hectares / 18.10 Acres
Address	Civic Address Not Available
Zoning	RR-1 Rural Residential
Electoral Area	Electoral Area D

Site Investigations

Required technical work and site investigations has been undertaken. Technical work and site investigations completed to date generally support the developability of the site. The work completed to date is summarized below. Full reports are available upon request.

Phase 1 Environmental Site Assessment

In 2020, Enviromarc Services Ltd. was retained to conduct a Phase 1 Environmental Site Assessment ("ESA") to identify areas of existing and potential environmental concerns associated with the proposed site and adjacent properties. The following summarizes the findings of the Phase 1 ESA.

At the time of the ESA I, based on the review of the information collected and the site visit for the purposes of the this report, it was determined that there was little evidence of potential contamination at the subject

property. The subject property was vacant forested land and does not appear to have any historical development. There was no staining or vegetation stress noted on the subject property.

A Phase II ESA is not recommended at this time

Geotechnical Investigation

In 2020, ParklandGEO was retained to perform an initial investigation and provide geotechnical recommendation for the Housing Development. In 2024, ParklandGEO was requested to complete additional field investigation for a expanded site area and provide additional recommendations for deep pile foundations. The following summarizes the findings of the 2024 Geotechnical Investigation.

Overall, the site conditions were considered suitable for the proposed development. The main geotechnical issues at this site include:

- 1. High plastic clay levels were encountered within the near surface soil profile*
- 2. Strip or spread footings founded on medium plastic clay are considered suitable for this building site*
- 3. The foundation conditions are considered suitable for steel screw piles and marginally suitable for bored cast-in-place (CIP) concrete piles.*
- 4. The clay subgrade will provide a relatively low level of subgrade support for pavement and slabs*

Hydrological Investigations

In 2024, Kala Geosciences Ltd. was retained to complete a Groundwater Potential Evaluation (GPE) to explore groundwater as a water source for the Housing Development. The following summarizes the findings of the 2024 GPE:

Kala would anticipate well yields to be in 0.25-0.50 L/s range which leads to challenges for community water system, but satisfies residential demand easily. Groundwater quality is likely to be hard, alkaline and prone to elevated minerals such as iron and/or manganese; but all parameters are easily treatable.

Because of the findings that groundwater was prone to elevated minerals, DNA requested Kala Geosciences Ltd. to undertake further investigations including a 72-hour pumping test. The results and report of this additional investigation will be completed shortly.

Archaeological Overview Assessment

In 2024, Ember Archaeology was retained to complete an Archaeological Overview Assessment (“AOA”) to evaluate the archaeological potential on and surrounding the proposed development site. The following summarizes the findings of the 2024 AOA.

The indications for gentle slopes and slight elevations along the lakeshore, close proximity to a creek outlet, along with the potential for sheltered, level terrain in proximity to a drainage and lake, warrant a rating of high potential for archaeological resources within the project footprint.

Based on these findings, DNA has requested for an Archaeological Impact Assessment (“AIA”) to be conducted. An Archaeology Permit has been filed with the Archaeology Branch. The AIA will be conducted once the ground has thawed.

Project Concept

The objective of this project is to develop 12 housing units in Kelly Lake, intended to serve as long-term Elders housing for Indigenous Elders in the Kelly Lake community. The proposed construction includes 12 one-storey single-detached modular homes, all featuring two-bedroom units.

The proposed housing will offer community-oriented outdoor amenities for residents and their families to enjoy and share with neighbours. A detailed concept plan is included in **Appendix A**, showing the site plan and floor plans for this project.

Conceptual Rendering

Figure 2a



Figure 2b



The project will be owned and operated by the Nikihk Society.

Housing Development Concept

The proposed building design includes 10,200 sqft of floor space spread across 12 single-detached modular homes. In compliance with BC Housing Design and Construction Guidelines, each unit will be approximately 850 sqft. The site will include 16 parking spaces, 12 of which will be for residents, and the remaining 4 spaces will be for visitors and staff. The remaining area is retained for open space to accommodate a communal garden, including a medicine garden for residents. A large setback from the lake, consistent with zoning regulations and guidelines ensures that the development is aligned with Lakeshore Development Guidelines.

Additionally, DNA and the Nikihk Society are in the early stages of discussing the potential of a Phase 2 Housing Development. The potential Phase 2 Development would lie adjacent to the currently proposed Housing Development (Phase 1), located on Proposed Lot 2.

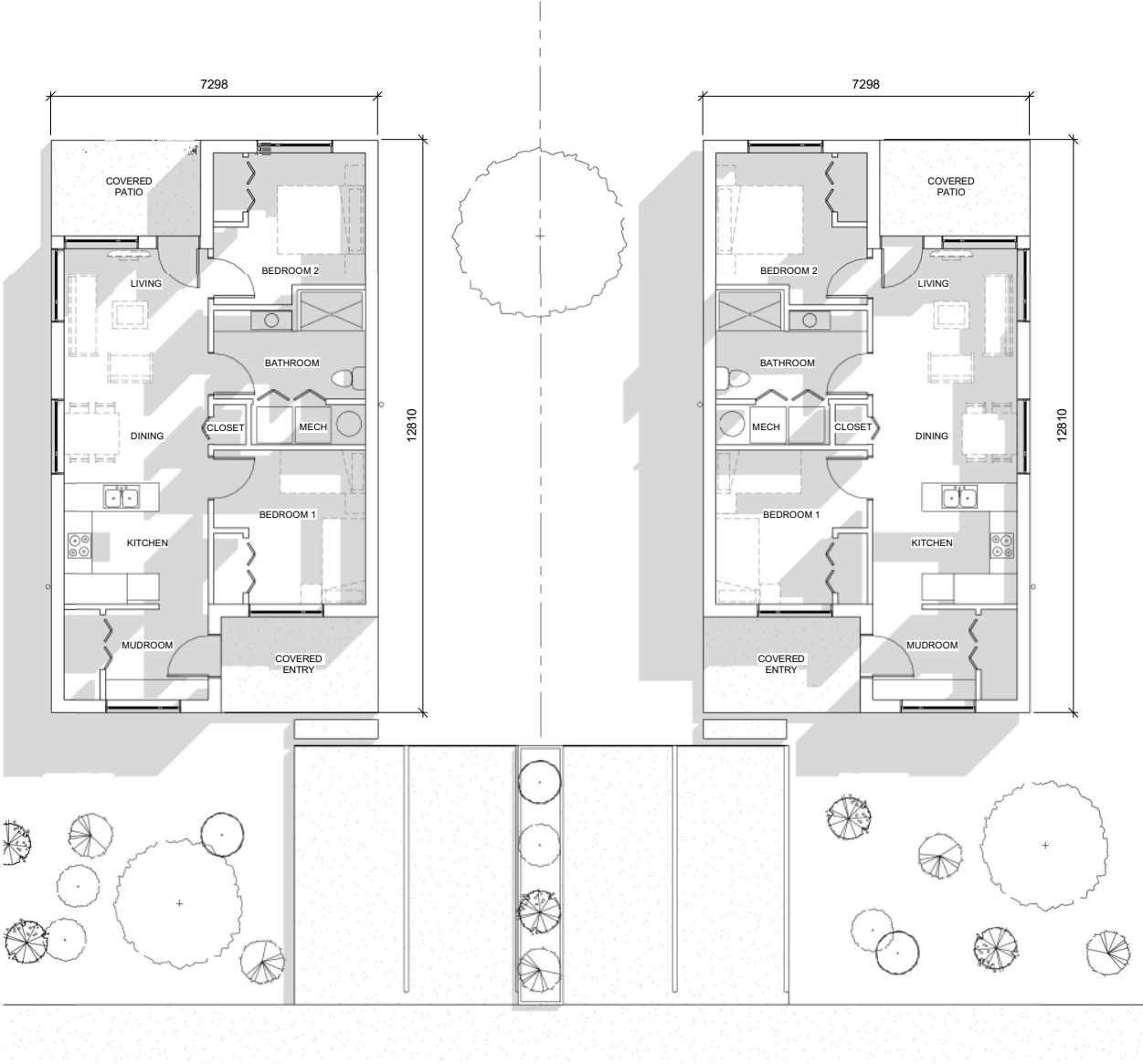
NIKIHK HOUSING

CONCEPT DESIGN PACKAGE



NIKIHK HOUSING

UNIT PLAN



1 FLOOR PLAN
1 : 100

NIKIHK HOUSING

3D VIEW



NIKIHK HOUSING

3D VIEW

