

MINOR CANNABINOID HEMP AND CANNABIS MICRO-CULTIVATION, MICRO-PROCESSING & AGRICULTURAL RESEARCH CENTRE

2469 BEDELL ROAD, MUNICIPALITY OF NORTH GRENVILLE

PLANNING RATIONALE

Project No.: CCO-26-0392



Prepared for:

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1.0 Introduction and Purpose

This Planning Rationale supports an application to amend the Municipality of North Grenville Comprehensive Zoning By-law No. 50-12, for lands municipally known as **2469 Bedell Road, Kemptville, Ontario, K0G 1J0** (the “Subject Lands”). The Subject Lands are currently zoned **Rural – Special Exception (RU-67)** under By-law 69-22, which established site-specific development standards (yards, height, vegetative buffer, shipping containers) to support an agricultural research centre use for a hemp cultivation and processing facility.

Pre-application consultation discussions were held between Dr. Jamie Ghossein and the Municipality of North Grenville on many occasions, including with Ms. Amy Martin, Director of Planning & Development on February 06, 2026 to discuss the proposal and confirm the complete application requirements for a zoning by-law amendment application.

This Planning Rationale will demonstrate that the rezoning of the subject land to permit a minor cannabinoid hemp and cannabis micro-cultivation, micro-processing and agricultural research center represents good planning.

The Subject Lands are currently used for the operations of **Cannabis Orchards Inc.**, an industrial hemp-focused research and development operation focused on delivering novel non-intoxicating cannabinoids for therapeutic purposes to patients, researchers and consumers in Canada and abroad. The company holds a **Health Canada Industrial Hemp** and **Health Canada Cannabis Research Licence** on the property, supporting controlled research activities related to cultivar development and cannabinoid research under Health Canada oversight.

Under Health Canada’s framework, industrial hemp is a class of *Cannabis sativa* that is distinguished by its very low THC concentration, specifically, cultivars that contain no more than 0.3% (w/w) THC in the flowering heads and leaves. Whereas “cannabis” more broadly refers to *Cannabis sativa* and its products that may contain higher levels of THC and are regulated accordingly. Even when the majority of plants cultivated on the subject lands meet the industrial hemp threshold ($\leq 0.3\%$ total THC), these plants are still regulated as cannabis and must be cultivated, processed, distributed, or sold under the appropriate industrial hemp licensing pathway to ensure compliant handling, recordkeeping, and movement through the legal supply chain given they are in the early development stages and have not yet been registered as an approved industrial hemp crop. The proposed work focuses on hemp-origin, minor-cannabinoid *Cannabis sativa* cultivars, including lines rich in CBDV, CBGV, THCV, CBC, and CBG, which for the majority are selected and managed to remain within the industrial hemp THC limit while supporting research, agronomic optimization, and downstream processing of non-intoxicating cannabinoid profiles.

The Applicant seeks to rezone the Subject Lands from **RU-67** to a new **Rural – Special Exception (RU-XX)** to:

1. **retain** all existing RU-67 site-specific standards; and
2. add permissions for **cannabis micro-cultivation, cannabis micro-processing, and cannabis research**, including a site-specific exception to allow:

- **outdoor micro-cultivation** where federally licensed (which is otherwise prohibited for micro uses in the Zoning By-law), and
- a reduced **Sensitive Land Use setback** of **20 m** for micro-cultivation/micro-processing buildings/structures and the fenced cultivation area (instead of the general 150 m / 300 m standards).

This rezoning is a **minor, site-specific alignment exercise** intended to harmonize municipal land-use permissions with **existing low-impact rural operations**. There is a demonstrated history of compliance with existing ongoing operations for over 4 years, and no complaints have been received to the municipality regarding activities undergone on the subject lands. Additionally, the existing operations will see very minimal change in both activities or impact to neighbouring properties, with licensing and development plans aimed at expanding on permissions for processing or sale on plants already being cultivated on the subject lands.

2.0 The Applicant and Operational Context

Cannabis Orchards Inc. is a research-driven agricultural operation focused on **minor cannabinoids** with health-related research applications. The Applicant's work emphasizes **non-intoxicating or low-THC cultivars** (e.g., CBG, CBDV and other minor cannabinoids), including supply of plant-derived materials used for research and clinical trials.

The key planning point is that the proposed Zoning By-law Amendment does **not** introduce a high-intensity retail or high-odour recreational cannabis use. Rather, it allows a controlled **micro-scale**, federally regulated use to:

- continue and expand research and development activities; and
- **lawfully commercialize research outputs that would otherwise be destroyed due to limitations of industrial hemp variety registration pathways. The same cultivation activities are already taking place, the proposal allows to commercialize or further process the crop rather than destroying it after cultivation.**

In practical terms: the same lands can already support similar agronomic cultivation under existing hemp and cannabis research licenses; the rezoning allows micro-licensing so the work can translate into regulated processing and distribution without materially changing the rural character or generating new impacts to neighbouring uses.

3.0 Site Description and Surrounding Land Uses

3.1 Subject Lands

The subject land is known municipally as 2469 Bedell Road and is in the Municipality of North Grenville, within the United Counties of Leeds and Grenville. The subject land is described legally as Part of Lot 24, Concession 4, Geographic Township of Oxford, now in the Municipality of North Grenville, and further described as Part 2 on Plan 15R-10707 and has been assigned PIN 681210069.

The subject land is located on the north side of Bedell Road, immediately south of the Canadian Pacific Railway and west of a jog in Bedell Road (Figure 1). The subject land has an area of +/- 59,349 square metres (+/-14.6 acres) and has frontage of +/- 500 metres on Bedell Road. There are 2 existing buildings on the property (building 1 and 2) which are currently licensed as part of a Health Canada industrial hemp and Cannabis Research License (see Appendix A for Health Canada licenses, and Appendix B for current site plans). There is also a 5 acre open agricultural field which is tile drained and used to cultivate industrial hemp.



Figure 1: Location of Subject Land (Source: North Grenville Zoning By-law Mapping Tool)

The subject land is located within the rural portion of the Municipality of North Grenville, which is characterized by a rural, natural landscape. Uses within the rural area include but are not limited to a variety of agricultural uses, both residential and non-residential rural uses, open natural spaces, and small settlement areas in the form of hamlets.

Located to the north of the subject land is the (active) Canadian Pacific Railway, with agricultural and wooded land beyond. Portions of the agricultural and wooded lands form part of the Kemptville Campus. To the northwest of the subject land is a rural lot subdivision with the

Kemptville Creek beyond. Situated east of the subject land is a vacant parcel is a single detached residential dwelling (currently owned by Dr. Jamie Ghossein) with the hamlet of Bedell beyond. South of the subject land are several rural residential dwellings with wooded land and mineral extraction preservation lands beyond. Located to the west of the subject land are rural residential and agricultural uses. Please see Figure 2: Surrounding Land Uses for details pertaining to the existing land uses in the vicinity.



Figure 2: Surrounding Land Uses (Source: RVCA GIS Mapping Portal)

The Subject Lands front onto **Bedell Road** and is completely surrounded in a rural context. The property includes:

- existing buildings associated with agricultural operations and research (including “Buildings 1 and 2”);
- open field area suitable for outdoor cultivation; and
- established tree lines and vegetative buffering along portions of the road frontage and property edges.

Figure 3 – Road frontage and rural context (photo)

View along Bedell Road showing rural road character and minimal urban development.



Figure 2 – Primary entrance/access gate (photo)

Existing gated entrance and field access from Bedell Road.



Figure 3 – Existing vegetative buffer and screening (photo)

Established treeline/vegetation contributing to visual and wind screening.



Figure 4 – Second entrance/access point (photo)

Secondary entrance location (existing), demonstrating access flexibility without requiring new driveways.



3.2 Surrounding Land Uses and “Sensitive Land Uses”

Surrounding lands are predominantly rural, including rural residential dwellings. These dwellings are “Sensitive Land Uses” under the Zoning By-law definition.

The Applicant notes that the closest sensitive receptor (land situated at an address containing a residential dwelling) is approximately **50 m** from the nearest proposed micro-related area, and the requested 20 m setback standard provides a margin while enabling functional siting on a rural lot.

Figure 5 – Distance to Nearest Sensitive Land Use

Figure 5. Aerial image illustrating the approximate separation distance (~50.5 m) between the closest licensed building on the Subject Lands (2469 Bedell Road) and the nearest Sensitive Land Use (residential dwelling) located on a neighbouring rural property. This figure demonstrates that the nearest sensitive receptor is approximately 50 m from the existing licensed building footprint, providing a clear buffer above the proposed 20 m site-specific setback standard requested for Cannabis Micro-Cultivation and Cannabis Micro-Processing uses.



4.0 Existing Approvals and Regulatory Context

4.1 Existing Municipal Zoning Framework (RU-67)

The Subject Lands are currently zoned RU-67, with site-specific standards that the Applicant proposes to carry forward unchanged into RU-XX. These include (among others): reduced yard setbacks in defined areas, a maximum height of 15.5 m for non-residential buildings, a required vegetative buffer along the south and east property lines, and permission for up to two shipping containers.

4.2 Federal “Micro” Licensing Framework

The “micro” framework is regulated by federal requirements and limits.

- **Micro-cultivation surface area limit:** Federal regulations require the licence holder to delineate a surface area that does not exceed **800 m²** for micro-cultivation.
- **Micro-processing possession limit:** Federal guidance/regulatory streamlining materials describe micro-processing as permitting possession of up to **2,400 kg of dried cannabis equivalent in a calendar year**.

These federal constraints are important land-use compatibility tools as they inherently prevent the proposal from becoming a large industrial-scale operation under the “micro” category.

5.0 Description of the Proposed Development

The proposal consists of three related components:

5.1 Existing “Building 1” – Add micro-cultivation (small area) and continue research/hemp activities

Building 1 will continue to support existing industrial hemp and cannabis research functions, with the addition of a limited micro-cultivation area (0.7 acres) to support controlled R&D and small-scale production consistent with federal micro-cultivation licensing.

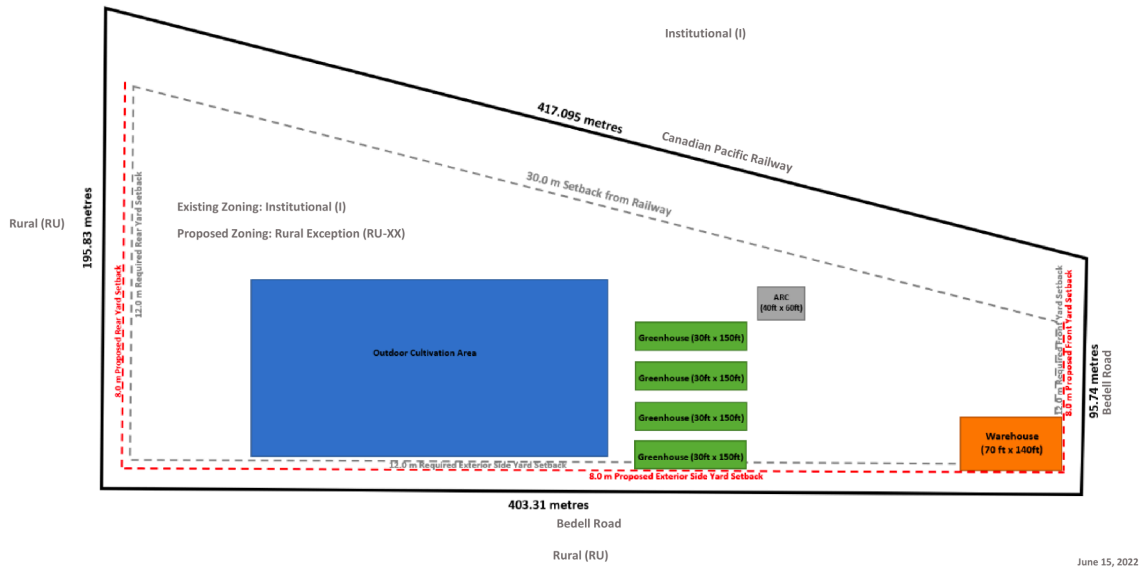
5.2 New Building – Micro-processing + micro-cultivation + research/hemp support functions

A new building is proposed to house an agricultural research centre which permits micro-processing functions and related operational rooms. Detailed internal room programming will be finalized through Health Canada compliance planning by True Standard Consulting, but the intent is that the building accommodates micro-processing activities consistent with micro-processing licensing. Building and floor plans are attached in **Appendix C**.

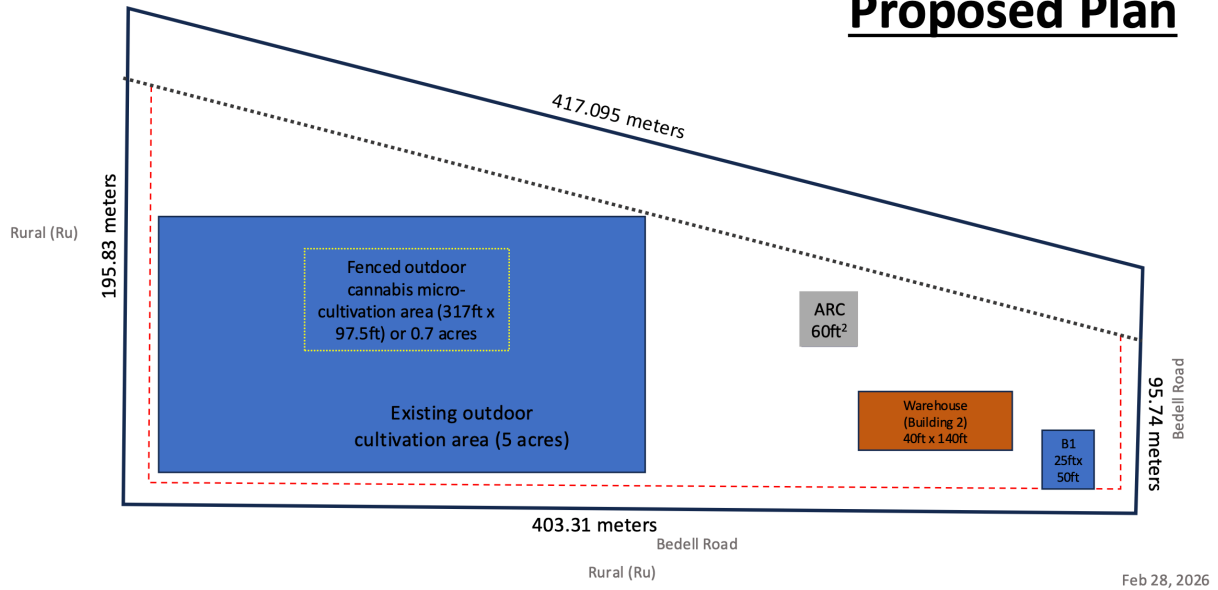
5.3 Outdoor Micro-cultivation Area – approximately 1 acre

An outdoor cultivation area of approximately *1 acre (currently planned at 0.7 acres)* with secure fencing and controlled access, as required for federally regulated cultivation activities will be confirmed at Site Plan stage. The Applicant’s intent is that outdoor cultivation is limited to what is authorized under the micro-cultivation licence framework (including the 800 m² surface area limit) and associated site-specific licence conditions. See Figure 6 for Concept Plan. The concept plan is attached in **Appendix D**, and preliminary plans for the micro-cultivation license is attached in **Appendix E**.

Figure 6: extract from current concept plan, demonstrating previous approved plan above, and proposed plan below.



Proposed Plan



6.0 Zoning By-law Analysis and Required Relief

6.1 General Provisions that constrain the proposal

North Grenville's Zoning By-law contains two key constraints for micro operations:

1. **Micro uses must be enclosed, and outdoor cultivation is prohibited**

The Zoning By-law states that all activities for cannabis micro-production/micro-cultivation must occur within an enclosed building and that **no outdoor cultivation, production, or storage is permitted.**

2. **Sensitive Land Use setbacks (150 m / 300 m)**

The Zoning By-law sets a minimum separation from a Sensitive Land Use of **150 m** (with air treatment control) or **300 m** (without) for cannabis production/processing and similarly applies these standards to cannabis micro uses.

6.2 Requested Site-Specific Exceptions (RU-XX)

The proposed rezoning to **Rural – Special Exception (RU-XX)** will retain the existing RU-67 standards applicable to the Subject Lands and introduce the following site-specific permissions and relief:

A) Additional permitted uses

The RU-XX zone will add permissions for:

- **Cannabis Micro-Cultivation** (including limited indoor micro-cultivation within an existing building);
- **Cannabis Micro-Processing** within a proposed new building; and
- **Cannabis and Industrial Hemp Research** as a permitted use on the Subject Lands (including research-related cultivation/processing activities authorized through Health Canada licensing).

B) Site-specific relief / exceptions

The RU-XX zone will also provide site-specific relief to:

1. **Permit outdoor micro-cultivation**, where federally licensed, within a defined fenced area on the Subject Lands (notwithstanding the general prohibition on outdoor cultivation for micro uses in the Zoning By-law).
2. **Reduce the Sensitive Land Use setback to 20 metres for Cannabis Micro-Cultivation and Cannabis Micro-Processing**, including the fenced cultivation area and associated buildings/structures (notwithstanding the general 150 m / 300 m separation standards).

This relief is requested because the proposal is micro-scale, located in a rural setting, supported by existing vegetative buffering and screening, generates minimal traffic relative to typical rural agricultural operations, and reflects a demonstrated history of low-impact operations on the Subject Lands.

7.0 Compatibility and Impact Assessment

7.1 Land-use compatibility and rural character

- The Subject Lands are rural and already accommodate agricultural/research-related uses through RU-67.
- The proposal does not introduce urban-level intensity; it is constrained by federal micro limits and is physically screened by existing vegetation and rural setbacks.
- No retail sales are proposed as part of the land-use concept; distribution/shipping occurs as needed at a low frequency (approximately one shipment/month).

7.2 Odour and air quality

- **Indoor:** Indoor cultivation areas are limited in scale and supported by ventilation/filtration (e.g., HRV with filters). As a result, odour is anticipated to be **negligible beyond the property boundary**, consistent with the Zoning By-law intent that cannabis-related operations employ air treatment measures so that odour is not detectable off-site. No change to odour versus current operations is expected.
- **Outdoor:** Outdoor micro-cultivation is proposed in a rural agricultural context where field cultivation already occurs. The site benefits from **existing treelines and vegetative buffers** that provide screening and help dissipate any localized odour (refer to the attached photos/figures). The Applicant's operations are focused on **minor cannabinoid research and development** rather than large-scale, high-THC, terpene-intensive cultivation; accordingly, the proposal is not expected to result in a material change to odour conditions compared to existing permitted activities on the Subject Lands.

7.3 Sensitive land uses and setbacks

- The nearest Sensitive Land Use (rural residential dwelling) is approximately **50 m** away; the requested 20 m standard provides separation while allowing functional site planning.
- A nearby comparator in the Municipality is **Growtown Cannabis (formerly Fleurish Cannabis)** located at **2725 Leeds and Grenville Rd 20, Kemptville, ON K0G 1J0**. This facility has operated within the local rural context and demonstrates that cannabis-related uses can be accommodated without requiring large separation distances in every circumstance. Based on the Applicant's review of publicly available aerial imagery and site context, the Growtown Cannabis site is located **in the range of less than 15 m** from the nearest Sensitive Land Use (residential dwelling). Accordingly, the requested site-specific setback of **20 m** for cannabis micro-cultivation and micro-processing at 2469 Bedell Road would **not introduce a new precedent** for proximity to sensitive receptors in the area; rather, it reflects an established local context while maintaining an additional margin of separation.

7.4 Visual Impact and Screening

The attached site photographs included in this report demonstrate that the Subject Lands are situated along a rural road frontage characterized by substantial open space and low-density development. The photos also confirm the presence of established tree lines and vegetation that provide effective visual screening from the public realm and contribute to maintaining the rural character of the area.

The existing **RU-67** provisions already require vegetative buffers along defined property edges, and these standards will be carried forward through the proposed RU-XX zoning.

7.5 Noise

Noise impacts are not expected to increase materially as a result of the proposed amendment. Activities on the Subject Lands will remain similar in nature to existing rural operations. Micro-processing activities will occur indoors within a modest building envelope, and outdoor cultivation activities will be seasonal and limited in scope. Any mechanical equipment associated with the proposed buildings will be typical of small-scale rural/agricultural facilities and is not anticipated to generate off-site nuisance impacts.

7.6 Traffic and Access

- The Subject Lands are served by **two existing entrances** (east and south), which will remain unchanged.
- No road widening, new access points, or major grading works are proposed as part of this Zoning By-law Amendment.
- Shipping and receiving activity is expected to remain **low** (approximately **one shipment per month**), comparable to existing operations, and is not anticipated to materially increase traffic on Bedell Road.

7.7 Servicing and Stormwater

- Servicing will continue to be provided through private well and septic systems.
- No municipal servicing is required.
- No major stormwater works are anticipated at this stage; any minor drainage considerations or site grading details would be addressed through Site Plan Control at a future stage, if required.

7.8 Safety and Security

Cannabis micro-licensing requires a secure operational approach. The proposal contemplates:

- controlled access to the site and licensed areas,
- secure fencing for the outdoor cultivation area, and

- security measures consistent with federal requirements and the operational planning supported by **True Standard Consulting**.

Detailed security elements (e.g., fencing specifications, controlled access points, monitoring) will be further refined through the federal licensing process and, where applicable, at the Site Plan Control stage.

8.0 Natural Environment Considerations

An Environmental Screening (Wetlands) memorandum was prepared by **McIntosh Perry Consulting Engineers Ltd.** (dated **May 14, 2021**) for the subject lands. The memorandum concludes that **there are no wetland communities within the subject land.**

The memorandum further notes that:

- desktop screening did not identify watercourses or waterbodies within or adjacent to the study area,
- the area is outside RVCA regulated areas (based on the mapping review), and
- field screening observations informed the conclusion using an OWES-informed approach.

The proposed amendment is not predicated on wetland disturbance.

9.0 Planning Policy Framework

The proposed Zoning By-law Amendment is consistent with typical rural planning directions as it:

- supports rural employment and innovation through small-scale, value-added agricultural and research activity;
- relies on private servicing, appropriate for rural areas;
- maintains compatibility through existing screening, limited traffic generation, and micro-scale regulatory frameworks; and
- does not introduce retail uses or urban intensification.

The proposal is also consistent with the broader intent of maintaining rural character while permitting diversified rural economic activity, particularly where the site already supports agricultural research operations through an existing rural special exception zone.

Conclusion

The requested rezoning of **2469 Bedell Road** from **RU-67** to **RU-XX** represents a **minor, site-specific zoning refinement** that:

- preserves all existing RU-67 standards (yards, height, vegetative buffers, temporary containers);
- permits cannabis micro-cultivation, micro-processing, and cannabis research in a manner constrained by federal “micro” thresholds (including the **800 m²** micro-cultivation surface area limit and the **2,400 kg/year** micro-processing possession framework as applicable under federal licensing);
- enables **outdoor micro-cultivation** where federally licensed, by site-specific exception, notwithstanding the general prohibition on outdoor cultivation for micro uses in the Zoning By-law;
- replaces the general **150 m / 300 m** Sensitive Land Use setback requirements with a **20 m** standard for cannabis micro-cultivation and micro-processing (including the fenced cultivation area), reflecting the actual site context and existing buffering with a comparator in the same municipality;
- and is supported by environmental screening evidence indicating **no wetland communities** within the subject lands.

On this basis, the proposed amendment is appropriate, maintains compatibility with surrounding rural uses, and represents good planning for a rural innovation and research use with limited impacts.

Appendices and Figures Checklist

Figures

Figure 1 – Location of Subject Lands

Key map showing 2469 Bedell Road within the Municipality of North Grenville. *(Source: North Grenville Zoning By-law Mapping Tool)*

Figure 2 – Surrounding Land Uses

Aerial/context mapping showing surrounding rural land uses in the vicinity of the Subject Lands. *(Source: RVCA GIS Mapping Portal)*

Figure 3 – Road Frontage and Rural Context (Photo)

View along Bedell Road illustrating the rural road character and low-density development context.

Figure 4 – Primary Entrance / Access Gate (Photo)

Existing gated entrance and field access from Bedell Road.

Figure 5 – Distance to Nearest Sensitive Land Use

Aerial image illustrating the approximate separation distance (~50.5 m) between the closest licensed building footprint on the Subject Lands (2469 Bedell Road) and the nearest Sensitive Land Use (a rural residential dwelling) on a neighbouring property. This figure demonstrates that the nearest sensitive receptor is approximately 50 m from the existing licensed building area, providing a clear buffer above the proposed 20 m site-specific setback requested for Cannabis Micro-Cultivation and Cannabis Micro-Processing uses.

Figure 6 – Existing Vegetative Buffer and Screening (Photo)

Established treeline/vegetation contributing to visual screening and wind buffering along portions of the property.

Figure 7 – Secondary Entrance / Access Point (Photo)

Secondary entrance location (existing), demonstrating access flexibility without requiring new driveways.

Figure 8 – Concept Plan / Preliminary Site Plan

Concept plan showing existing and proposed buildings, fenced outdoor micro-cultivation area, access points, and key separation/setback relationships. *(Full plan provided in Appendix D.)*

Appendices

Appendix A – Health Canada Licences and Authorizations

Copies of current Health Canada authorizations supporting on-site activities (e.g., Industrial Hemp licence/authorization and Cannabis Research licence), and any related federal documentation relevant to the proposed micro-licensing pathway (if available).

Appendix B – Existing Site Plans / Current Conditions

Existing site plan(s) showing current buildings (“Building 1” and “Building 2”), existing licensed areas, entrances/access points, and current outdoor cultivation field areas.

Appendix C – Proposed New Building Plans (Architectural Set)

Preliminary architectural drawings for the proposed new building (micro-processing + micro-cultivation + research/hemp support functions), including floor plans and any available elevations.

Appendix D – Concept Plan (Full Size)

Full-size concept plan referenced in Figure 8, including proposed building locations, fenced outdoor micro-cultivation area, and setback/sensitive land use relationship exhibit(s) as applicable.

Appendix E – Draft Zoning By-law Amendment (RU-XX)

Draft site-specific zoning provisions to rezone the Subject Lands from RU-67 to RU-XX, including permissions for micro-cultivation/micro-processing/research, outdoor micro-cultivation where federally licensed, and the proposed 20 m Sensitive Land Use setback.

Appendix F – Micro-Cultivation Canopy & Site Layout (Plans by True Standard Consulting)

Appendix F provides the **micro-cultivation building layout** and **micro-cultivation site plan** for Cannabis Orchards, including the **total canopy areas** and key equipment/security elements.