

## **TECHNICAL REVIEW COMMITTEE**

## A TECHNICAL REVIEW REPORT PREPARED FOR

# THE MUNICIPALITY OF KILLARNEY-TURTLE MOUNTAIN

## HYLIFE – CROWN ROYAL NURSERY 2

SE 1/4 33-03-16 WPM

TRC 12-091

**April 20, 2022** 

#### A. INTRODUCTION – THE TEAM

The Technical Review Committee (TRC) is supported by the following department personnel:

#### Agriculture (AGR)

- Agricultural Engineer
- Business Development Specialist
- Veterinarians
- Livestock Environment Specialist
- Nutrient Management Specialist

#### Natural Resources and Northern Development (NRND)

- Crown Lands Manager
- Fish Habitat Specialist
- Habitat Mitigation Biologist

#### Environment, Climate and Parks (ECP)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist
- Land-Water Specialist
- Groundwater Specialist

#### Manitoba Transportation and Infrastructure (MTI)

- Senior Development Review Technologist
- Senior Flood Protection Planning Officer

#### Municipal Relations (MR)

Community Planners

And any other specialist or department that may have an interest, which may be consulted during the process.

#### THE TECHNICAL REVIEW COMMITTEE (TRC) REPORT

#### Purpose of TRC Reports

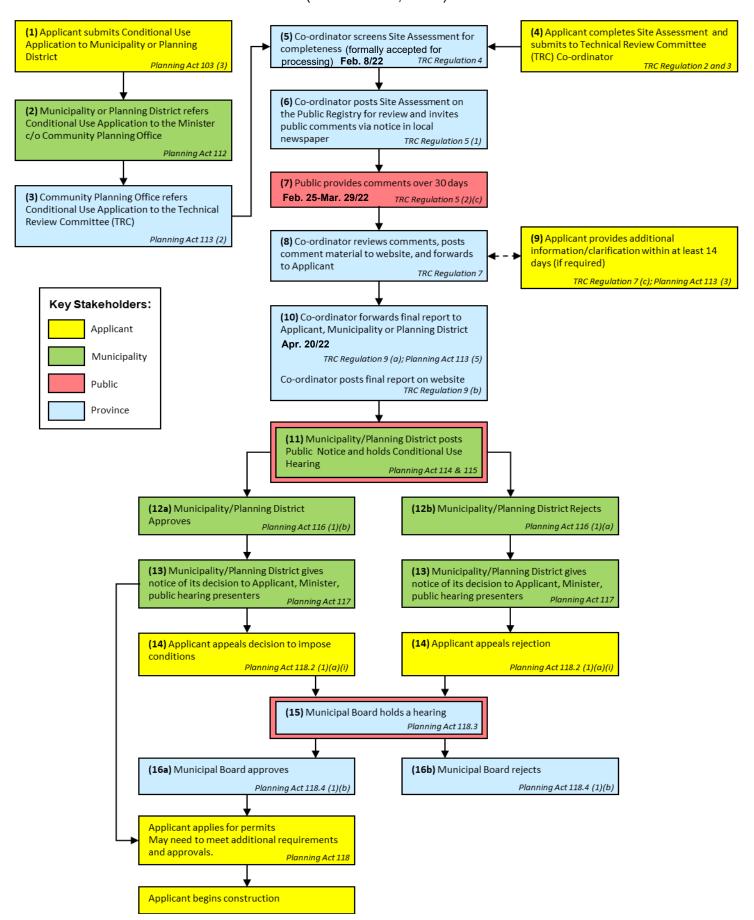
To provide objective, credible, technically-based assessments that:

- a) Enable municipal councils or planning districts to make informed Conditional Use Permit decisions;
- b) Create a common stakeholder understanding of a livestock proposal, potential impacts and related regulatory requirements and safeguards;
- c) Provide a vehicle/forum that enables the sharing of public concerns and proponent responses;
- d) Offer recommendations to both municipal councils, planning districts and proponents; and
- e) Represents the fulfillment of the TRC's role as per 116(1)(b)(i) of *The Planning Act* to determine, based on available information, that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measure and safeguards.

Should the municipal council provide conditional approval of the proposal, the project proponent may be required to obtain various permits and licenses from the province to address in greater detail environmental aspects of the proposal. As of November 1, 2019, a proponent may appeal a municipal council's rejection of their application or appeal a condition imposed related to municipal council's approval. Appeals are made to the Municipal Board.

## **Livestock Technical Review Process**

(November 1, 2019)



Hylife - Crown Royal Nursery 2 (TRC 12-091)

## **B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION**

Further information can be found at <a href="https://www.gov.mb.ca/mr/livestock/public registries.html">https://www.gov.mb.ca/mr/livestock/public registries.html</a>

**Applicant:** Hylife

**Site Location:** SE ½ 33-03-16 WPM. Refer to map below.

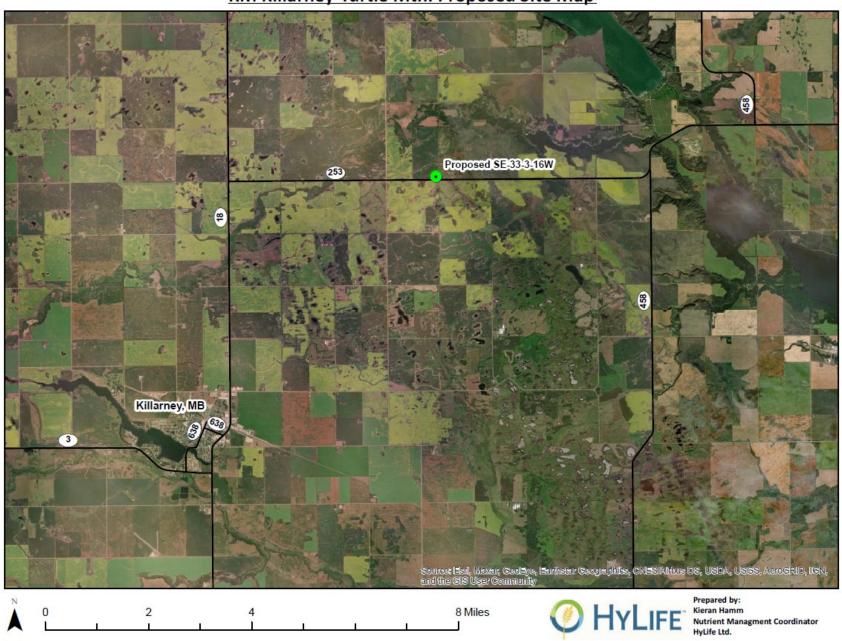
**Proposal:** To establish a pig operation involving 18,000 Weanlings, Nursery (594 Animal Units).

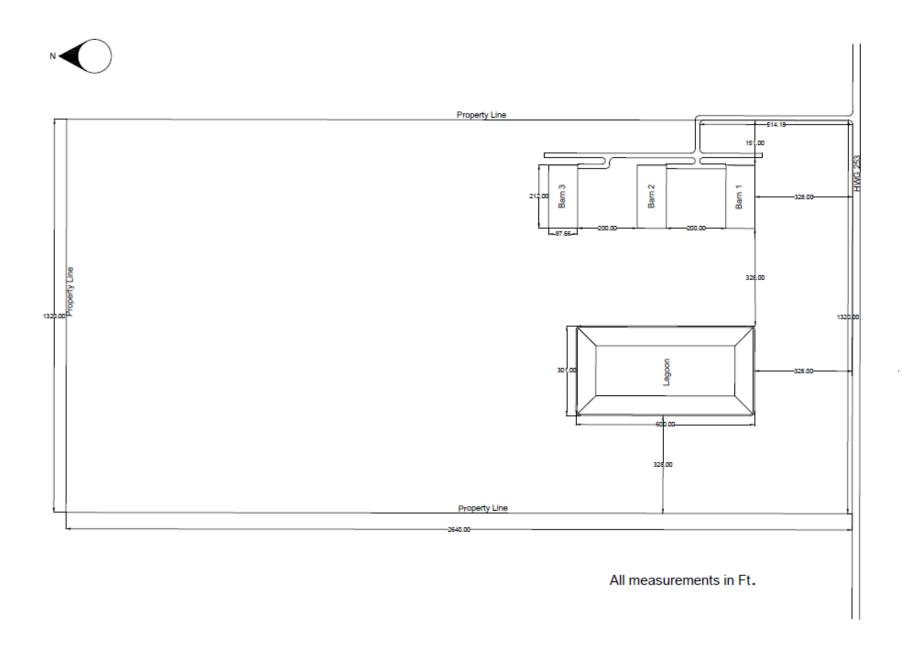
This will involve the following:

Construction of three new barns.

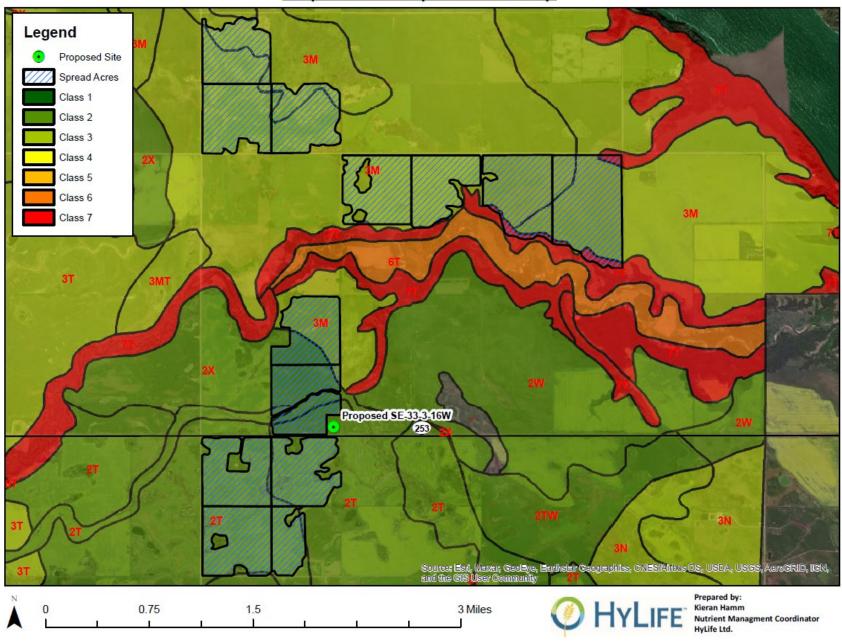
- Earthen manure storage.
- Consuming a maximum of 19,800 imperial gallons of water per day from a proposed well.
- · Rendering mortalities.
- Truck haul routes as shown in map below.

## RM Killarney-Turtle Mtn. Proposed SIte Map

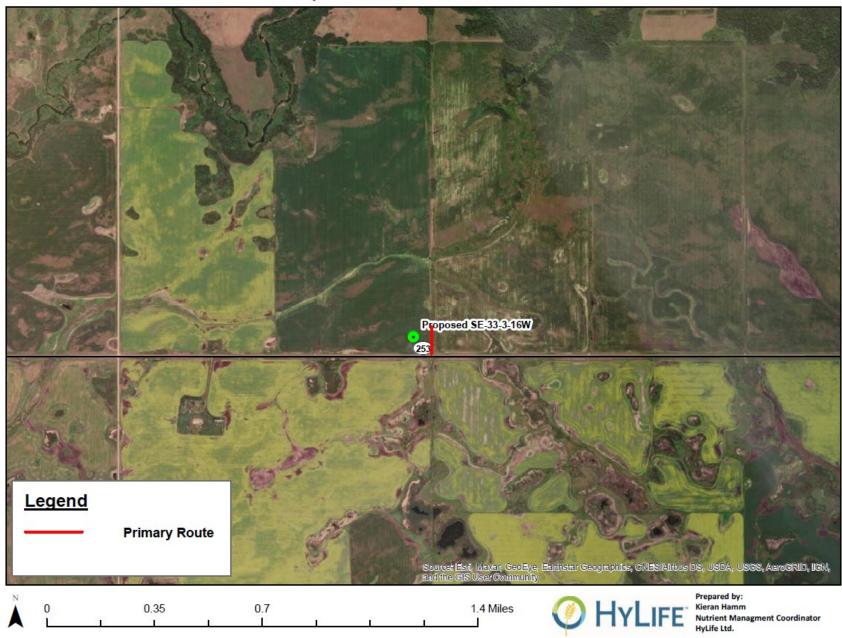




## **Proposed Site - Spread Field Map**



## **Proposed Site - Truck Haul Route**



## **C. SITE ASSESSMENT OVERVIEW**

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	Х	Technical Review Committee Regulation 119/2011 requires an applicant to submit a completed site assessment.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	х	HyLife Crown Royal is currently seeking Conditional Use approval to build an 18,000 head nursery operation. This is equivalent to 594 animal units (AU).	AGR
	Project clearly defined as:	Х	18,000 Weanlings, Nursery (594 Animal Units).	ECP
3	animal confinement facility	Х	Three (3) weanling, nursery barns (each being 20,704 sq/ft in size) holding a combined 594 animal units (18,000 head) along with a single cell earthen manure lagoon.	MR
4	Identified all existing and proposed buildings and structures and related separation distances	х	Proposed livestock confinement and earthen manure storage facilities meet Municipality of Killarney-Turtle Mountain Zoning By-law No. 2-2016 minimum required separation requirements between unrelated residences and designated areas and the facilities of this proposed newly siting livestock operation.	MR
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	x	Project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	ECP
6	Identified suitable water source: Proposed well and a water consumption rate of 19,800 imperial gallons per day	X	Based on the water consumption information provided, this proponent is required to apply for a Water Rights Licence under The Water Rights Act. An application can be submitted via our online portal – <a href="https://www.manitoba.ca/waterlicensingportal.">www.manitoba.ca/waterlicensingportal.</a> Authorization is required prior to any well being drilled to supply this project.	ECP

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
	Proposed project site meets development plan,		The Planning Act requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations.	
7	zoning by-law		The Planning Act requires municipalities to issue development permits for any development on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not meet the separation distances or setbacks requires Council approval and a public process to vary those requirements.	
		×	<b>Designation</b> The proposed livestock operation, located in the SE ½ 33-03-16WPM in the Municipality of Killarney-Turtle, is designated RURAL AREA (Municipality of Killarney-Turtle Mountain Development Plan By-law No. 3-2016) and the proposal complies with Development Policies PART 3, 3.3.3 (Livestock Policies).	MR

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields		The proposal identifies that the water use for the proposed livestock operation is from a proposed new well at SE33-3-16W. The proposal indicates no abandoned wells present on the site or spread fields, however the provincial water well database indicates a well present within the proposed spread field locations at 28-3-16W. The well is plotting in a middle of the section and the accuracy of a well location is not known. If a well is in use then a minimum buffer as outlined in regulations must be maintained during spreading. The well should be located and properly sealed if still present and not in use and a sealed well report must be filed with the Groundwater Management Section of MB Environment, Climate and Parks. Information on well sealing and well sealing reports are available from MB Environment, Climate and Parks (204-945-6959) or: <a href="https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html">https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html</a> . A well drilling professional should seal all but the most basic wells. A list of currently licensed well drilling professionals can also be accessed from the above web page.	ECP
			For a proposed new well, The Well Standards Regulation under the <i>Groundwater and Water Well Act</i> ( <a href="https://web2.gov.mb.ca/laws/statutes/ccsm/g110e.php">https://web2.gov.mb.ca/laws/statutes/ccsm/g110e.php</a> ) should be consulted. The regulation requires a minimum 100 metre separation distance between a well and a confined livestock areas or manure storage facilities.	
			During manure spreading, the set back distances to all groundwater features as prescribed under the Environment Act Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.	
9	Identified suitable manure storage methods	X	A permit to construct the proposed manure storage facility must be obtained, prior to initiating any of the construction work, in accordance with the Livestock Manure and Mortalities Management Regulation. An application for a permit to construct the manure storage facility must be submitted to Environmental Approval Branch of Environment Climate and Parks ( <a href="mailto:EABDirector@gov.mb.ca">EABDirector@gov.mb.ca</a> ). Design guidelines and application forms are available at: <a href="mailto:https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html">https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html</a> .	ECP
10	Identified acceptable manure application methods	Х	The proponent must submit and adhere to a manure management plan approved for the facility per the Livestock Manure and Mortalities Management Regulation (MR 42/98).	ЕСР
11	Mortalities disposal methods identified: Rendering	Х	The proponent has indicated that mortalities for the hog operation will be rendered. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	ЕСР

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	Х	The proponent indicated all setback distances meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation MR 42/98.	ECP
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	х	This area is not within a designated flood area and there is no known risk of flooding.	МТІ
14	Proposed acceptable odour control measures	×	The proponent has indicated that a shelterbelt will be established. Should odour become a problem for neighbouring residents, there is a complaints process under The Farm Practices Protection Act. A person who is disturbed by any odour, noise, dust, smoke or other disturbance resulting from an agricultural operation may make a complaint, in writing, to the Manitoba Farm Industry Board. The Act is intended to provide for a quicker, less expensive and more effective way than lawsuits to resolve nuisance complaints about farm practices. It may create an understanding of the nature and circumstances of an agricultural operation, as well as bring about changes to the mutual benefit of all concerned, without the confrontation and the expense of the courts.	AGR
		Х	A three row shelterbelt around all three (3) of the animal housing facilities and earthen manure storage is proposed.	MR
	Proposed sufficient and suitable land for manure spreading	×	The required land base for Crown Royal is 925 acres. Crown Royal has exceeded the land requirement by demonstrating that they have access to 1874 suitable acres. Additional details are in the Appendix.	AGR
15	with minimum setbacks from water sources	X	During manure spreading, setback distances to all groundwater and surface water features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.	ЕСР
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	The proponent has indicated that no spread fields are located within the Red River Valley Special Management Area or any other regularly inundated area.	

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
17	Proposed spread fields that meet development plan and zoning by-law requirements	х	All lands identified for manure spreading are designated "RURAL AREA" and zoned "AG" Agricultural General Zone. Said land use designation and municipal zoning district (above) allow spreading of manure associated with newly siting and/or expanding livestock operations.	MR
	Proposed acceptable manure transportation methods		The transport of livestock manure is subject to Section 9 of the Livestock Manure and Mortalities Management Regulation. The proponent has indicated a dragline will be used for liquid manure from the existing hog operation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	ECP
18		X	Please be advised that any structures placed within the controlled area of PTH 18 or any Provincial Truck Highway (PTH) or any Provincial Road (PR) (125 feet from the edge of the highway right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 583-2433 or Sheena.Delrosario@gov.mb.ca. The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PTH 18 or any PTH or PR requires permission from our regional office in Brandon. Please contact the Regional Planning Technologist, Brian Hickman at (204) 726-6822 or Brian.Hickman@gov.mb.ca. In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PTH 18 or any PTH and PR (125 feet from the edge of the right-of-way).	МТІ
19	Identified suitable trucking routes and access points		The primary proposed truck haul route will utilize an existing connection onto PR 253 We don't anticipate a significant increase in use.	МТІ
20	Identified proposed trucking routes – local roads	x	The proposed site is accessed by PR No. 253.  As per Section 116(2) of <i>The Planning Act</i> , municipalities as a condition of approval may require proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.	MR

Iten No		Confirmed	Related Provincial Safeguards	Dept.
21	Known rare species will not be impacted on new sites/lands	X	The information provided in the assessment suggest that there will not be any conflicts with species protected under the <i>Endangered Species and Ecosystems Act</i> and/or <i>Species at Risk Act</i> , or designated as rare or uncommon by the Manitoba Conservation Data Centre (MBCDC). This review is based on existing data known to the MBCDC of the Wildlife and Fisheries Branch at the time of the review. These data are dependent on the research and observations of our scientists and reflects our current state of knowledge. An absence of data does not confirm the absence of any rare or endangered species. Many areas of the province have never been thoroughly surveyed, however, and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should, therefore, not be regarded as a final statement on the occurrence of any species of concern. All future observations of rare or endangered species made by the proponent should be reported to the MBCDC for further review.	NRND

**Provincial Departments:** Agriculture (AGR); Environment, Climate and Parks (ECP); Transportation and Infrastructure (MTI); Municipal Relations (MR)

## D. PUBLIC COMMENTS AND DISPOSITIONS

Public Comment Summary				
Dorian Olver West of the site	Commenter has the following reasons for their support:  • Support for job opportunities the operation brings to the community  • Manure will improve fertility and decrease reliance on synthetic fertilizer  • Claims smell of other barns near their home only smell 10 days of the year and does not decrease property value or quality of life  • Support for Canadian agriculture  • Supports the standards and regulations of Canadian operations			
Derek Dyck	Commenter has the following reasons for their opposition:  • Concerns with proximity to water tributaries and community well			
Michael and Brooke Peters 2 miles SW of the site	Commenter has the following reasons for their support:  • Manure will improve fertility  • Community support through purchasing of grain and feed  • Increase trucking jobs for transport of feed and livestock  • Increase in entry level jobs and opportunity for career growth  • Support for tax revenue collected			
Trevor and Kendall Kinsey SE 1/4 28-3-16	Commenter has the following reasons for their opposition:  Concerns with foreign corporations operating in rural communities  Concerns with environmental degradations  Concerns with contamination of aquifers, lakes, and rivers  Concerns with the impact of the operation on water availability  Concerns with decrease in property value  Concerns with limited information provided  Concerns with odour and lack of impact of shelter belt on smell  Concerns with gravelling and maintaining roads  Concerns with air quality			
Lyall Franck Killarney, MB	Commenter has the following reasons for their opposition:  • Concerns with another barn in the area			
Brittany Ariss Ferris	Commenter has the following reasons for their opposition:      Concerns with odour     Concerns with increase in traffic     Concerns with property value			
Chris Strange 2 ¼ miles south of site	Commenter presents the following concerns:			
Lea Todd	Commenter presents the following concerns:			
Taralyn Skrabek	Commenter has the following reasons for their opposition:			

Paul McLeod	Commenter has the following reasons for their opposition:  Concerns with additional odour on top of odour from existing operations  Concerns with property values  Concerns with impact of traffic on HWY 253 and HWY 5  Concerns with odour,  Concerns with contamination of water and land  Concerns with compliance and enforcement of approval conditions
Charles and Arla Boyd Killarney, MB	Commenter presents the following concerns:
Pauline Brown	Commenter is generally opposed to the operation.
Tracy Thompson	Commenter presents the following concerns:
Anonymous	Commenter has the following reasons for their opposition:  Concerns with proximity to Killarney  Concerns with the ability of the road infrastructure (B-Level Road) to sustain heavy truck traffic  Concerns with foreign ownership of the operation
Billie Jo Shewfelt	Commenter has the following reasons for their opposition:  Concerns with proximity to Pembina River Watershed  Concerns with negative impact of pollution on lakes downstream of the operation such as Pelican Lake and Rock Lake  Concerns with economic impact of lake pollution
Todd Shewfelt	Commenter has the following reasons for their opposition:  Concerns with proximity to Pembina River Watershed  Concerns with negative impact of pollution on lakes downstream of the operation such as Pelican Lake and Rock Lake  Concerns with economic impact of lake pollution
Holly Flanagan Killarney, MB	Commenter has the following reasons for their opposition:  Concerns with number of existing hog barns in the area  Concerns with proximity to water sources
Kevin Moore SE 36-3-16	Commenter has the following reasons for their opposition:      Concerns with number of existing hog barns in the area     Concerns with odour     Concerns with proximity to Pembina River     Concerns with proximity to community well
Anonymous	Commenter has the following reasons for their opposition:  • Concerns with proximity to Pembina River and inlet to Pelican Lake
Vanessa Ives Pleasant Valley, MB	Commenter has the following reasons for their opposition:  Concerns with odour  Concerns with increased traffic  Concerns with decrease in property values
Monty and Maria Morrow Pleasant Valley, MB	Commenter has the following reasons for their opposition:      Concern with odour from this operation and other existing hog operations     Concerns with air quality     Concerns with health of area residents

	Concerns with enjoyment of property, lake, golf course, RV Park, and Moon
	Light Canopies  Concerns with decrease in market value of property  Concerns with deterioration of HWY 253 and increase in heavy truck use without extensive reconstruction
Brian Munroe Ninette, MB Pelican Lake	Commenter has the following reasons for their opposition:  • Concerns with pollution of Pelican Lake and surrounding waterways
Christine	Commenter has the following reasons for their opposition:      Concerns with odour     Concerns with contamination of well and lake
Rhonda Beare	Commenter has the following reasons for their opposition:      Concerns with proximity to Pembina River and contamination of Pelican Lake      Concerns with the side effect of pollution on the recreational area of Pelican Lake
Carla Thompson NE 11-04-16	Commenter has the following reasons for their opposition:      Concerns with proximity to Pembina River and contamination of Pelican Lake     Concerns with quality of road infrastructure and impact of heavy trucks     Concerns with air pollution
Aubrey Yule 4 miles east of site	Commenter has the following reasons for their opposition:  • Concerns with odour and air quality
Leona Beau	Commenter has the following reasons for their opposition:  • Concerns with number of existing barns in the area  • Concerns with odour and health effects of poor air quality
Noilah Oddleifson NE 21-3-16	Commenter has the following reasons for their support:  Increase in jobs for the community  Use of manure and sustainable farming
Daniel Peters NE 21-3-16	Commenter has the following reasons for their support:  Increase in jobs for the community  Use of manure and sustainable farming
Grant Rigby Killarney, MB	Commenter has the following reasons for their opposition:
Ralph and Linda Shewfelt Pelican Lake, MB	Commenter has the following reasons for their opposition:  • Concerns with runoff in to Pembina River and contamination of Pelican Lake
Terry and Christine Jefferies Balmy Beach, MB	Commenter is generally opposed to the operation.
Aaron Jeske	Commenter has the following reasons for their opposition:  • Concerned with proximity to waterway that connects to Pelican Lake

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at: <a href="https://www.gov.mb.ca/mr/livestock/public\_registries.html">https://www.gov.mb.ca/mr/livestock/public\_registries.html</a>. See Appendix B for the proponent's response to the public comments.

#### E. CONCLUSIONS AND RECOMMENDATIONS

#### Conclusion

The information contained in the Site Assessment submitted by the proponent generally meets provincial requirements. In addition, based on available information it has been determined that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards.

#### **Recommended Actions to Council**

- 1. As per Section 114(1) of *The Planning Act*, at least 14 days before the date of the hearing, Council must:
  - a) send notice of the hearing to
    - i. the applicant,
    - ii. the Minister (c/o the Brandon Community Planning Office),
    - iii. all adjacent planning districts and municipalities, and
    - iv. every owner of property located within three kilometres of the site of the proposed livestock operation, even if the property is located outside the boundaries of the planning district or municipality;

and

- b) post a copy of the notice of hearing on the affected property in accordance with Section 170 of *The Planning Act*.
- 2. Council should specify the type(s) of operation, legal land location, number of animals in each livestock category and total animal units in its Conditional Use Order.
- 3. As per Section 117 of *The Planning Act*, Council must send a copy of its Conditional Use Order to
  - a) the applicant,
  - b) the Minister (c/o the Brandon Community Planning Office), and
  - c) every person who made representation at the hearing.
- 4. Councils are requested to include in their resolution and/or Conditional Use Order, notification that the applicant may appeal council's decision to reject the application or appeal a condition imposed by council related to its approval as per Section 118.2 of *The Planning Act*.
  - As per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board in respect of a large-scale livestock operation:
    - (i) a decision to reject the application,
    - (ii) a decision to impose conditions.
- 5. As per Section 118, no development or expansion of a livestock operation that is the subject of an application under this Division may take place until
  - (a) the application is approved and the applicant complies, or agrees to comply, with any condition imposed on the approval under this Division; and
  - (b) the applicant obtains every approval, including any permit or licence, required under an Act, regulation or by-law in respect of the proposed operation or expansion, and complies with, or agrees to comply with, any condition attached to the approval.

6. Council is welcome to contact Manitoba Conservation and Climate, Environmental Approvals Branch or Regional Environmental Compliance and Enforcement staff with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) including compliance and enforcement issues.

## **Recommended Actions to Proponent**

- 1. That any additional measures identified through subsequent provincial licencing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.
- 2. That as per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board:
  - (i) a decision to reject the application,
  - (ii) a decision to impose any condition on the approval.

## F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title Branch	Contact
Erin McCleery Municipal Relations		Manager, Winnipeg Office Community Planning and Development Branch	204-945-1143
Petra Loro	Agriculture	Livestock Environment Specialist  Land Use and Ecosystem Resilience Branch	204-918-0325
Barsha Sagan	Environment, Climate and Parks	Environmental Engineer Environmental Approvals Branch	204-795-7175
Jeff DiNella	Transportation and Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	204-945-2664

## Appendix A

### Land Use and Ecosystem Resilience Branch – Agriculture

Crown Royal has met the land requirements for 18,000 nursery pigs (594 AU) as follows:

In areas of lower livestock intensity such as the RM of Killarney-Turtle Mountain, it is currently the Province of Manitoba's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future.

Typical, modern feeding practices for pig production were used to estimate nutrient excretion for Crown Royal. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for Risk Area 2 were used to estimate crop nitrogen uptake and phosphorus removal rates for the crop rotation specified in the proposal.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the lands with soil tests were below 60 ppm Olsen P, as required to be considered suitable. Semi-detailed soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is primarily Class 2 and 3 with some areas of Class 5. The limitations include wetness (W), lack of moisture (M), slope (T) and inundation (I).

The required land base for Crown Royal is 925 acres. Crown Royal has exceeded the land requirement by demonstrating that they have access to 1874 suitable acres.

#### Water Science and Watershed Management Branch – Environment, Climate and Parks

Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2001).

The proponent is planning to apply manure in fall. Liquid manure will be applied using partial injection which reduces the risk to surface water when compared to surface broadcast alone.

For most crops, manure contains an excess of phosphorus (P) compared to nitrogen (N) and as a result, application at N-based rates causes a buildup of soil P. Practices which reduce N losses from the manure improve the N:P ratio in the manure and help slow P buildup when manure is applied at N-based rates. The proponent is planning to apply liquid manure with partial injection which will reduce N losses compared to broadcast application.

The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. Setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface and groundwater.

Manitoba has included phosphorus as a nutrient by which fertilizer application through manure, synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. Many agricultural soils in Manitoba, especially areas with low livestock intensity (such as the RM of Killarney-Turtle Mountain), are considered phosphorus deficient and therefore, manure is an ideal fertilizer to support

crop production. However, manure application can increase soil phosphorus over time and other spread fields may need to be added to prevent excessive soil phosphorus build up. As excess phosphorus levels build up in soils, greater losses occur to surface and ground water. It should be noted that Olsen soil-test phosphorus levels of 60 ppm are well above phosphorus needs for most crops (over 20 ppm is usually considered agronomically very high). In areas of lower livestock intensity such as the RM of Killarney-Turtle Mountain, it is currently the Province of Manitoba's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future for long-term sustainability. To remain environmentally sustainable over a long-term planning horizon of 25 years or more the proponent acknowledges that 1,850 acres may be required for the operation. The proponent has identified 1,874 acres for manure application at this time. Application to meet crop N requirements is estimated to use 728 acres. Application at 2 times the crop removal of P is estimated to use 925 acres (1,850 acres is estimated to achieve P balance [phosphorus removal equal to phosphorus application] with current crop choices and yield potential).

As phosphorus levels build up in soils, the concentration of phosphorus in runoff to surface waters increases. It is important to rotate manure application across all spread fields and whenever possible focus manure applications on fields with low Olsen-P soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

During manure spreading, setback distances to all groundwater features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.

## Appendix B – Proponent Response



April 5, 2022

Technical Review Co-ordination Unit Municipal Relations, Room 604 - 800 Portage Avenue, Winnipeg, MB, R3G 0N4

Attn: Erin McCleery, TRC Coordinator

Re: File Nos. TRC -12-091 (Crown Royal Nursery 2)

HyLife would like to acknowledge the concerns raised by residents regarding our proposed Crown Royal Nursery pork production operation on SE-33-03-16-WPM in the Municipality of Killarney-Turtle Mountain. We respect their views and thank them for their time to comment in the Technical Review Committee's (TRC) public review process. In acknowledgement of the potential for public concerns related to this and other proposed developments in the municipality of Killarney-Turtle Mountain, HyLife hosted a virtual open house to inform the public of our proposed growth in the area. We felt it important to reach out to the general public prior to making any formal application to the Municipality to better understand the concerns of local residents.

## HyLife - Our Company and our Proposed Crown Royal Nursery Project

Our company's Manitoba roots date back to some 25 years when two farm families, Janzen and Vielfaure joined together to form what is now HyLife. Today, we are a vertically integrated pork producer that is headquartered in La Broquerie, Manitoba. The majority of our farm and associated operations are located in rural Manitoba.

We manage our integrated operations from "Farms to Foods" within 2 divisions. Our HyLife Farms operations oversee the raising of hogs, including genetics and production, manufacturing and supply of feed, transportation, manure nutrient management and support services. Our HyLife Foods operation oversees the manufacturing, marketing and distribution of quality pork products to both domestic and international markets.





## Government Regulations, Monitoring & Enforcement

In Manitoba, a livestock producer must meet stringent development requirements and undergo a rigorous and complex development review and approval process. This process includes a mandatory provincial government technical review, public reviews, a formal public hearing and various provincial and local council approvals.

In particular, the livestock operation proposal must meet the requirements of The Planning Act, The Groundwater Protection Act, The Environment Act, (Livestock Manure and Mortalities Management Regulation) and The Water Protection Act (Nutrient Management Regulation) as well as other Provincial Acts and regulatory requirements depending on the nature and location of the proposed project.

Strict government requirements based on good science, good land use planning, professional engineering design and construction, and on-going government monitoring and enforcement protects our natural resources, the environment and the public interest.

## Rural Area and Agricultural Zoning

The proposed 80-acre site is located in an area that is designated as "AGRICULTURE GENERAL ZONE" in The Killarney-Turtle Mountain Municipal Zoning By-Law No. 2-2016 adopted in 2016. This By-law received extensive community review and was approved by local Municipal Council and the Province of Manitoba as the overall land use planning and development guiding document for the Killarney-Turtle Mountain Community.

Within the zoning by-law, specifically for the rural areas in the former RM of Roblin, specific overall objective is:

Support and strengthen the agricultural industry in the Municipality of Killarney - Turtle Mountain and to provide flexibility and opportunity for farm operators to engage in a wide variety of agricultural uses and farming practices including livestock operations; protect the agricultural industry and its land resources in recognition of agriculture's contribution to the economy, rural lifestyle and character of the Municipality of Killarney - Turtle Mountain; and provide opportunities under the Conditional Use process to diversify land uses within the agricultural area to include agro-related commercial or industrial enterprises.

HyLife has carefully chosen the proposed site as it is located in the "Agriculture General Zone" and is characterized by open agricultural land and is in line with the intent set out in the Zoning By-Law. This farmland would receive manure nutrient fertilizer from the proposed operation to sustainably grow crops. Our pork production operation bio-security requirements coupled with the practical requirement for a sustainable land base to spread manure nutrients ensures the appropriate distribution of livestock operations within agricultural areas.





Local zoning and provincial regulations require minimum separation distances for the facility from property boundaries, single residences, designated land uses, wells and watercourses and designated crown lands. The proposal meets every zoning requirement and in many circumstances, exceeds the minimum separation distance requirements of both the barn and manure storage facility. This proposal exceeds the minimum setback distance from residences.

#### **Odour Control**

At HyLife, we utilize a multi pronged approach to assist in minimizing odour and potential impacts on area neighbours. This initial step is carefully selecting appropriate sites in the agricultural area that will meet or exceed all local and Provincial setback distance requirements.

HyLife employs considerable focus on the in-barn environment to maintain cleanliness and hygiene with efficient barn design and current technology to maintain a comfortable barn temperature and airflow. The barn design employed at this facility will be a deep pit design that eliminates the use of an earthen manure storage at the site and utilizes concrete storages beneath the animals for storing manure. These design considerations help to keep the in-barn production of odor to a minimum, creates a positive living and working environment for our livestock and staff, and as mentioned, eliminates the requirement of having an earthen manure storage facility on-site.

Outside, we will utilize a 3 row multi-species vegetated shelterbelt around the production facility. This will not only improve the aesthetic appearance of the site, it will also create greater lift to better dissipate and diffuse odours.

With respect to manure nutrient application, our plan is to apply manure in the fall post harvest. Manure nutrient application will be done on an anticipated 3-year rotational basis. Manure nutrients will be applied in accordance with all applicable environmental regulations and utilize industry leading technologies. Application will also employ equipment designed to incorporate manure during the application process increasing liquid absorption and reducing odour.

Our manure management plans are prepared by certified manure management planners and licensed manure applicators. Application equipment is equipped with GPS technology and manure nutrients are applied at agronomic rates in accordance with all regulations. Manure management activities are governed and enforced by Manitoba Environment, Climate and Parks.

Collectively, these in-barn and outside environmental measures and manure management practices will reduce odour from our proposed operation. Neighbours can be assured that HyLife will make best efforts to address all reasonable concerns brought to its attention. We value our reputation as a good corporate citizen in the communities in which we operate.

Water Quality - Protection of Surface Water and Groundwater





The proposed development is located within the Pembina River Watershed. It is located outside of the provincially designated Red River Special Management Area that requires special flood risk mitigation measures to protect from flooding and ground and surface water pollution.

As in all cases, provincial regulations regulate all activities that have the potential to contaminate both surface and groundwater supply. Besides livestock operations, this includes urban development of cities, municipal (earthen) sewage lagoons and other treatment systems, gas stations, refuse disposal sites, many types of heavy industry, rural residential subdivisions and individual residential septic fields.

Surface and groundwater protection is provided by means of multi-layered regulations and monitoring and enforcement system. This includes location, design and construction of Professionally Engineered manure storage facilities, certification of manure applicators, strict annual soil testing, and regulating the methods and rate of fertilizer application. Provincial regulation strictly prohibits the application of manure near wells, surface watercourses or over potential aquifer recharge areas (gravel deposits, bedrock outcrops, sinkholes, etc.) The proposed development meets or exceeds all required setbacks from surface watercourses.

#### Manure Storage Safety

An earthen manure storage (EMS) is proposed to contain the manure from this operation. Such storage is common and an accepted method for storing and treating liquid manure. Additionally, they are used by almost every municipality and community in Manitoba to safely store and treat human waste.

Earthen manure storages have been regulated by the Province of Manitoba since 1995. A permit to construct an EMS requires a detailed geotechnical assessment of soils; a design prepared by a professional engineer; review of the design and all relevant information by Manitoba Environment, Climate and Parks prior to issuing the permit; site supervision of the construction by the responsible engineer and finally certification of the storage by the engineer when the work is completed.

The above process is required for all manure storages constructed in Manitoba.

Since the legislation was enacted in 1995 numerous hog, poultry and dairy storages have been constructed in the Province of Manitoba. This program is among the strongest legislation in North America and has an excellent record of providing safe containment of livestock manure.

As previously mentioned, setbacks are required from surface watercourses and the proposed EMS meets all setback requirements.

The design and construction standards enforced by the Province of Manitoba ensure that manure storages are designed, constructed and maintained to protect surface and groundwater resources. The Province conducts inspections and audits of manure storages during and after construction to ensure the structural integrity is being maintained. Any storages found to have experienced damage or deterioration are





required to implement repairs, managed by professional engineers, to ensure the repairs and changes are done utilizing accepted engineering principles and practices.

## Land Base Required to Recycle Crop Nutrients

Nutrients contained in the manure will be utilized as organic fertilizer for crop production. The organic material contained in the manure acts as a soil amendment by improving soil tilth, fertility, and water retention. Over time, increased soil organic matter content also builds a better and more stable soil structure less prone to erosion.

The manure will be applied as a fertilizer at agronomically accepted rates that will meet crop nutrient requirements. An annual manure management plan must be filed with Manitoba Environment, Climate and Parks prior to application of manure to fields. HyLife conducts soil testing to determine crop nutrient requirements and monitor soil nutrient residual values to ensure they are maintained within regulatory limits. The manure application rate is calculated using reasonable target yields, crop nutrient uptake, residual soil nutrient values and manure nutrient levels. Soil and manure nutrient contents are analysed annually.

As the manure management plans are filed with the Province annually, should a build-up of nutrients begin to occur, the Province would be alerted and require changes in the operation's manure management practices.

The land base required to sustainably support this proposed hog operation has been identified in the assessment filed with the Provincial Technical Review Committee (TRC). In fact, the manure agreements that have been signed with area producers exceed the required spread acres.

Area farmers have long realized that the manure nutrients are a valuable resource and provides a long term, sustainable crop fertilizer product. Demand for manure nutrients has increased exponentially over the past number of years as it is considered a valuable and sometimes preferred alternative for crop fertilization.

## Water Consumption & Sustainable Water Supply

A new well will be developed for the Crown Royal Nursery 2 operation.

Prior to the development of a water supply that exceeds 5,500 gallons per day, a Water Rights License must be obtained through ManitobaEnvironment, Climate and Parks . The license process includes the assessment of the proposed use on the aquifer and other uses. Manitoba Environment, Climate and Parks establishes withdrawal rates that ensure existing users water supply will not be impacted by the new development. The local aquifer is expected to sustain all current uses as well as the proposed development without any concern.





All developments requiring a Water Rights License must comply with the annual groundwater withdrawal limit set by Manitoba Environment, Climate and Parks Water Licensing Branch.

#### Traffic

There will be additional traffic daily to the proposed development with the addition of 3 new staff for the proposed Crown Royal Nursery operation. There will also be an addition of 2-3 feed trucks and 4-6 livestock trucks per week. Truck schedules are sequenced to ensure efficient traffic movement to avoid congestion within and outside of our operations.

Traffic will use PR 18 and PR 253 which are provincial roads maintained and under the jurisdiction of Manitoba Infrastructure.

## **Quality of Life and Property Values**

We respect that existing rural-non-farm residents have chosen to reside in a designated Agricultural General Zone where Agriculture and livestock developments are existing or could be expected to develop in the future. As such, farm activity including crop and livestock production, fertilizer application, farm traffic, noise and farm related odours are to be expected in an agricultural area.

We believe that with mutual understanding and respect, we can both co-exist within the area and be good neighbours.

HyLife has and will continue to be a community partner in rural Manitoba and a contributor to growth and prosperity in a sustainable manner. HyLife is confident that this development is representative of these attributes and our commitment to the sustainable, positive growth within the community.

HyLife, once again would like to thank all individuals who provided comments and appreciate the opportunity to provide a response. We respect the views and opinions of all individuals and hope we have sufficiently addressed the questions and concerns that were brought forward.

Regards,

Sheldon Stott, Senior Director of Corporate Sustainability HyLife Ltd.

