



TECHNICAL REVIEW COMMITTEE

**A TECHNICAL REVIEW REPORT
PREPARED FOR**

**THE 23 WEST
PLANNING DISTRICT**

HYLIFE SHIRAZ NURSURY

NW ¼ 10-06-14 WPM

TRC 12-055

April 28, 2020

A. INTRODUCTION – THE TEAM

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

Agriculture and Resource Development (ARD)

- Aggregate Resource Planner
- Agricultural Engineer
- Business Development Specialist
- Crown Lands Manager
- Fish Habitat Specialist
- Groundwater Specialist
- Habitat Mitigation and Wildlife Land Specialist
- Land-Water Specialist
- Livestock Environment Specialist
- Nutrient Management Specialist
- Veterinarians

Conservation and Climate (CC)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist

Infrastructure (MI)

- GIS Analyst, Water Management and Structures Division
- Senior Development Review Technologist

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

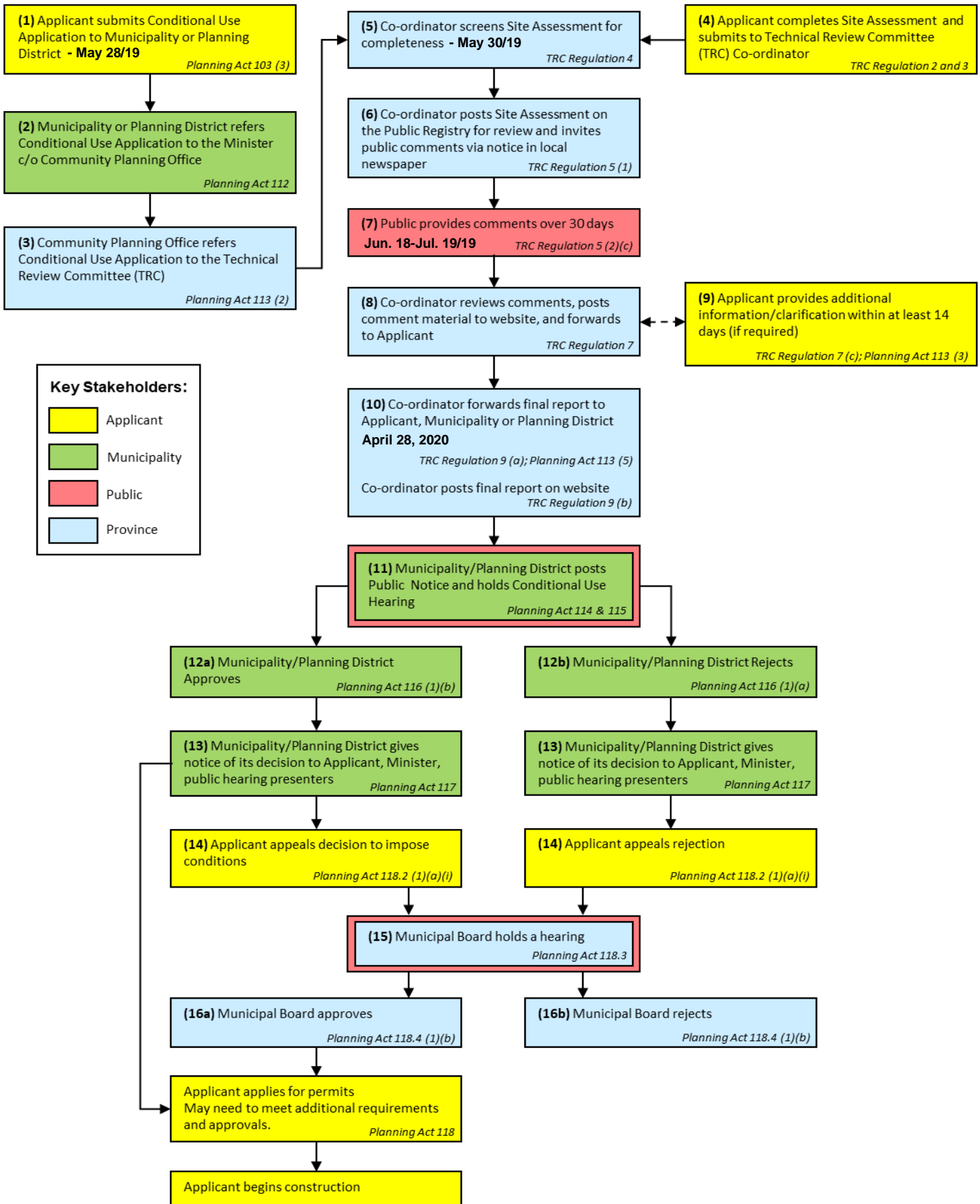
Purpose of TRC Reports

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 planning district 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 planning district's rejection of their application or appeal a condition imposed related to the planning district's approval. Appeals are made to the Municipal Board.

Livestock Technical Review Process (November 1, 2019)



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

Further information can be found at https://www.gov.mb.ca/mr/livestock/public_registries.html

Applicant: HyLife Shiraz Nursery

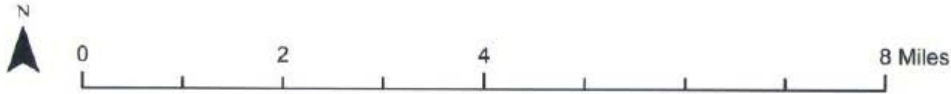
Site Location: NW ¼ 10-06-14 WPM. Refer to map below.

Proposal: To establish a pig operation with 24,000 Weanlings, Nursery, 11-51 lbs (792 animal units).

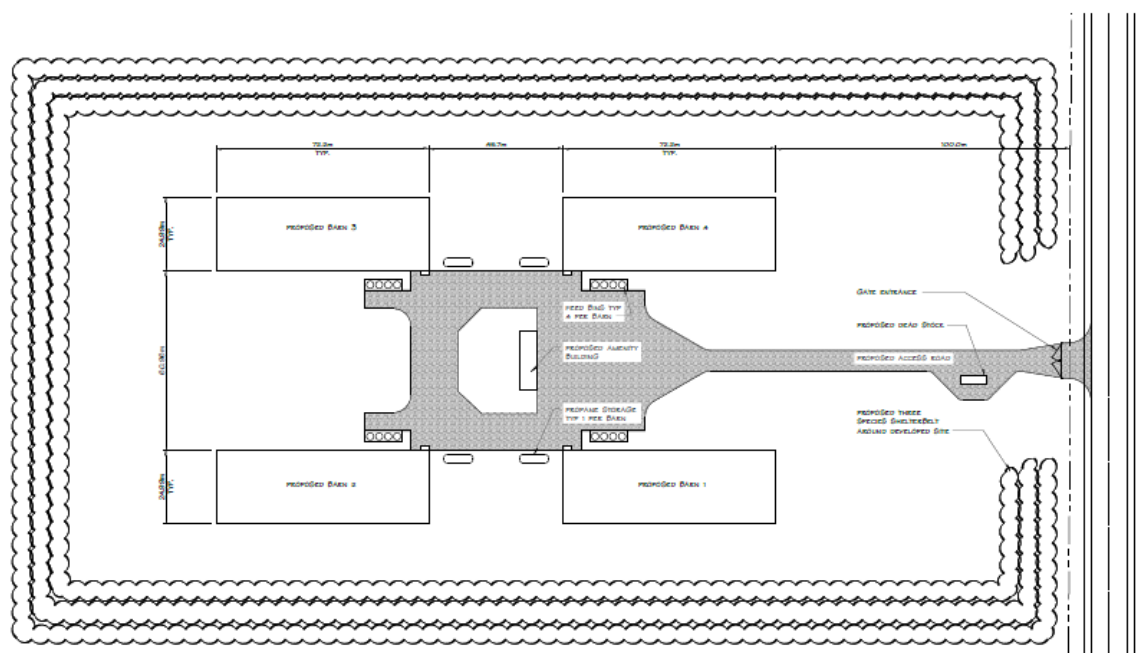
This will involve the following:

- Construction of four barns
- Under-barn deep pit concrete manure storage (original proposal proposed an earthen manure storage structure)
- Consuming a maximum of 26,400 imperial gallons of water per day from a proposed well.
- Rendering mortalities
- Truck haul routes as shown in map below

RM of Argyle - Proposed Site



 Prepared by:
Kieran Hamm
Nutrient Management Coordinator
HyLife Ltd.



SITE LAYOUT

SITE DEVELOPMENT - GENERAL SITE	
ITEM	SYMBOL
PROPERTY LINE	---

PRESENTATION DRAWING

DATE	DESCRIPTION	INITIALS
02/26/2020	CONCEPT DRAWING, ISSUED FOR REVIEW	RDW

PRINTED DATE: 2/26/2020 4:05:33 PM

ENGINEER'S SEAL



CLIENT
HYLIFE LTD.
 BOX 100
 LA BROUQUERIE, MB.
 R0A 0W0

PROJECT TITLE
2020 DEEP PIT NURSERY BARNs
 PROJECT LOCATION
 PROJECT NUMBER: **pre2020**

NOTE TO CONTRACTOR:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES.

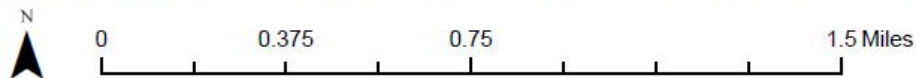
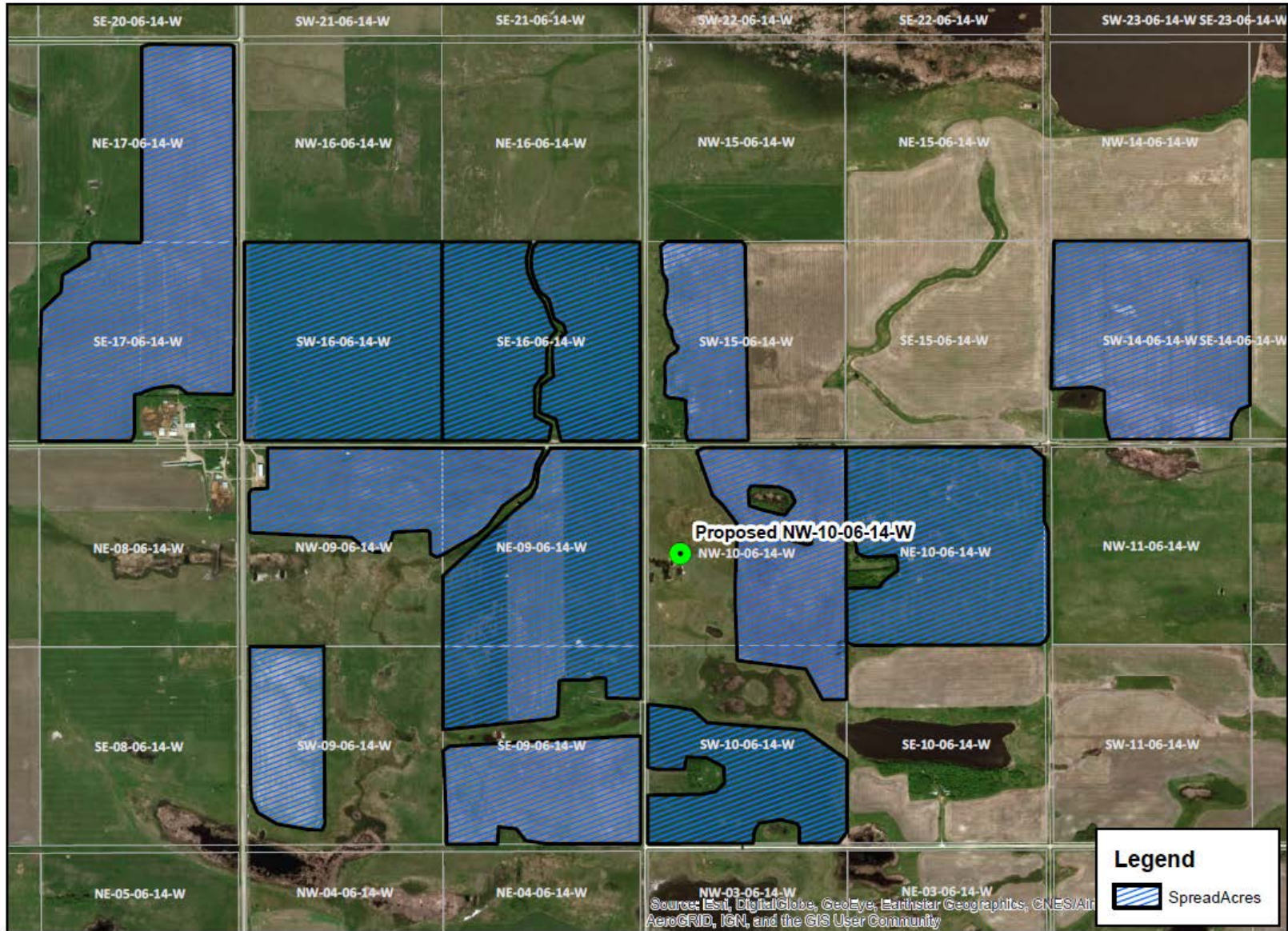
DESIGNED:
 DATE: FEB/2020

COORDINATOR:
 SCALE: AS NOTED
 SHEET PATH:
SITE LAYOUT

C1
 REV: RDW



Proposed Site [NW-10-6-14W] - Spread Acres



Prepared by:
 Kieran Hamm
 Nutrient Management Coordinator
 HyLife Ltd.

C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-055 HyLife Shiraz				
Item No.	Item Provided by Project Proponent	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete Site Assessment	X	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	X	HyLife Shiraz Nursery is seeking approval to develop a 24,000 nursery pig operation which is equivalent to 792 animal units.	ARD ¹
3	Clearly defined the project as an animal confinement facility	X	Each of the barns being proposed is in excess of 6,458 sq. ft. (600 sq.m) and will therefore require a building permit from the Office of the Fire Commissioner under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code.	MR
4	Proposed Project Site Physical Suitability Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	X	According to semi-detailed (1:50,000) soil survey, the proposed HyLife Shiraz nursery operation is located on land that is mapped as Agriculture Capability Class 2 (prime agricultural land). No person shall construct, install, site, locate, expand or modify a manure storage facility in Nutrient Management Zone N4 or in a Nutrient Buffer Zone according to the Nutrient Management Regulation (M.R. 62/2008) under <i>The Water Protection Act</i> . The project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone.	ARD ²
5	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	This site is not within a Designated Flood Area and there is no known flood risk at this location.	MI
6	Proposed project site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown land	X	The distance of the project exceeds 1 mile from any parcel of Crown land which would include a provincial park, Wildlife Management Area, ecological reserve, provincial forest, and wildlife refuge or sanctuary. The Lands Branch has no objection to the proposal.	ARD
7	Identified all existing and proposed buildings and structures and related separation distances	X	All buildings and structures identified in the site assessment report are in conformance with setbacks from the 23 West Planning District Zoning By-law No.19 (Front Yard 38 metres; Side Yard 7.6 metres; Rear Yard 7.6 metres).	MR

¹ Agri-Resource Branch

² Agri-Resource Branch, Water Science and Watershed Management Branch

Provincial Technical Overview of TRC 12-055 HyLife Shiraz

Item No.	Item Provided by Project Proponent	Confirmed	Related Provincial Safeguards	Dept.
8	Identified 52,800 imperial gallons/day required for proposed operation	X	<p>This project proposal has noted an estimated water usage that will exceed 25,000 litres per day. As with all such operations using more than 25,000 litres (5,499 imp gal) per day, the proponent must obtain a Water Rights Licence under <i>The Water Rights Act</i>, Water Rights Regulation (M.R. 126/87).</p> <p>The proponent has submitted an application to construct a well and divert groundwater, and a Groundwater Exploration Permit has been issued for this project. The proponent is currently in good standing with the Water Use Licensing Section.</p>	CC
9	Proposed measures to meet storage and application regulations for manure	X	<p>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 (MR 42/98). An application for a permit to construct the manure storage must be submitted to Environmental Approval Branch of Conservation and Climate (EABDirector@gov.mb.ca). Design guidelines and application forms are available at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html.</p> <p>The proponent must submit and adhere to a manure management plan approved for the facility as per the Livestock Manure and Mortalities Management Regulation (MR 42/98).</p>	CC
10	Proposed project site with suitable mortalities disposal methods (rendering)	X	<p>The proponent has indicated that mortalities will be dealt with by rendering. Rendering mortalities must be completed in accordance with section 15.1 of the Livestock Manure and Mortalities Management Regulation (MR 42/98).</p> <p>Conservation and Climate will be notified in the event of mass mortalities and disposal will then be managed by removal to an approved commercial landfill site.</p>	CC
11	Proposed project site with acceptable odour control measures	X	<p>The proponent has indicated that shelterbelts will be established. Should odour become a problem for neighbouring residents, there is a complaints process under <i>The Farm Practices Protection Act</i>. 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.</p>	ARD ³

³ Agri-Resource Branch

Provincial Technical Overview of TRC 12-055 HyLife Shiraz

Item No.	Item Provided by Project Proponent	Confirmed	Related Provincial Safeguards	Dept.
		X	Section 116(1) of <i>The Planning Act</i> allows municipal councils to require a manure storage cover and the planting of a shelter belt as a condition of approval.	MR
12	Proposed project site that meets development plan and zoning by-law requirements	X	The proposed project appears to meet the policies of the 23 West Planning District Development Plan and the mutual setback distances in the 23 West Planning District Zoning By-law No. 19. 250 metres from a non-earthen manure storage to a residence; 1,330 metres to a designated area. Section 42(2) of <i>The Planning Act</i> requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations.	MR
13	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The proposed HyLife Shiraz Nursery operation has met the land requirements for 24,000 nursery pigs. Additional information is provided in Appendix A.	ARD⁴
14	Proposed spread fields with sufficient minimum setbacks from natural features (water sources etc.)	X	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.	ARD⁵
15	Identified any unsealed abandoned wells on the project site or spread fields	X	The provincial water well database does not show any wells on the proposed property. However, if there are unused water wells on the site or spread fields then these must be properly sealed. A sealed well report must be filed with the Groundwater Management Section of Sustainable Development for each well sealed. Information on well sealing and the sealed well report are available from Sustainable Development (204-945-6959) or: https://www.gov.mb.ca/sd/water/groundwater/wells_groundwater/index.html . All but the most basic wells should be sealed by a well drilling professional. A list of currently licensed well drilling professionals can also be accessed from the above web page. All groundwater features, including water wells, should be given as a minimum, the buffer outlined in the regulations during manure application.	ARD⁶

⁴ Agri-Resource Branch

⁵ Water Science and Watershed Management Branch

⁶ Water Science and Watershed Management Branch

Provincial Technical Overview of TRC 12-055 HyLife Shiraz

Item No.	Item Provided by Project Proponent	Confirmed	Related Provincial Safeguards	Dept.
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	Proposed spread fields are not located within the Red River Valley Special Management Area and are not subject to frequent flooding or inundation.	CC
17	Proposed spread fields that have been secured by spread agreements	X	The proponent has indicated that all of the land for manure application is under agreement with local producers.	ARD
18	Proposed spread fields that meet development plan and zoning by-law requirements	X	Appears to be consistent with 23 West Planning District Development Plan and 23 West Planning District Zoning by-law. Policies and provision are very general in nature and require the operator to provide information on land for manure spreading/disposal.	MR
19	Proposed acceptable manure transportation methods	X	The transport of livestock manure is subject to Section 9 of the Livestock Manure and Mortalities Management Regulation. The proponent has indicated dragline as means of transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	CC
		X	Please be advised that any structures placed within the controlled area of PTH 5 and PTH 23 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 945-3457 or Sheena.DelRosario@gov.mb.ca . The placement of temporary drag lines or any other temporary machinery/equipment for manure application within this right-of-way 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 5 and PTH 23 (125 feet from the edge of the right-of-way).	MI
20	Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	X	The proposed truck haul route utilizes an existing municipal road connecting onto PTH 5. We do not anticipate a substantial increase in use.	MI

Provincial Technical Overview of TRC 12-055 HyLife Shiraz

Item No.	Item Provided by Project Proponent	Confirmed	Related Provincial Safeguards	Dept.
21	Proposed trucking routes – local roads	X	Travel is proposed on road 32 north for ½ a mile and then south on PR 5. This appears to be consistent with 23 West Planning District Development Plan Policies (supportive policies – 2.3.8.6&7). As per Section 116(2) of <i>The Planning Act</i> , the Planning District Board, 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
22	Confirmed that no rare species are impacted on new sites/lands	X	The Conservation Data Centre Report indicates that no species listed under the provincial <i>Endangered Species and Ecosystems Act</i> , the federal <i>Species at Risk Act</i> , or classed as at-risk according to internationally recognized standards, have been documented in the project area.	ARD ⁷

Provincial Departments: Agriculture and Resource Development (ARD), Conservation and Climate (CC), Infrastructure (MI), Municipal Relations (MR)

⁷ Wildlife and Fisheries Branch

D. PUBLIC COMMENTS AND DISPOSITIONS

Based on the original proposal, submitted May 28, 2019, the June 18 – July 19, 2019 public commenting period generated the following responses:

- 29 Individually written and submitted letters containing 39 signatures,
- 15 group letters containing a total of 380 signatures, and
- 1 petition containing a total of 802 signatures.

Of these submissions/signatures, one was in favour; the remaining expressed concerns or opposition to the proposed operation.

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at: https://www.gov.mb.ca/mr/livestock/public_registries.html.

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 the Planning District Board

1. As per Section 114(1) of *The Planning Act*, at least 14 days before the date of the hearing, the 23 West Planning District Board 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. The Board 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*, the Board 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. As per Section 118.2(2)(b), an applicant may appeal the following decisions of the Planning District Board to the Municipal Board:

for an application for approval of a conditional use made in respect of a large-scale livestock operation,

 - (i) a decision to reject the application,
 - (ii) a decision to impose conditions.
5. The Board is requested to include in their resolution and/or Conditional Use Order, notification that the applicant may appeal the Board's decision to reject the application or appeal a condition imposed by the Board related to its approval as per Section 118.2 of *The Planning Act*.

The Board 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 as per Section 118.2(2)(b), an applicant may appeal the following decisions of the Planning District Board to the Municipal Board:
 - (i) a decision to reject the application,
 - (ii) a decision to impose any condition on the approval.
2. 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.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title <i>Branch</i>	Contact
Don Malinowski	Municipal Relations	Senior Planner <i>Community Planning Branch</i>	204-945-8353
Petra Loro	Agriculture and Resource Development	Livestock Environment Specialist <i>Agri-Resource Branch</i>	204-918-0325
Shannon Beattie	Conservation and Climate	Policy Analyst <i>Legislation, Policy and Coordination Branch</i>	204-792-6269
Jeff DiNella	Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664

Appendix A

Agriculture and Resource Development

Agri-Resources Branch:

The proposed HyLife Shiraz Nursery operation has met the land requirements for 24,000 nursery pigs, as follows:

In areas of lower livestock intensity such as the RM of Argyle, 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 and could be brought into the HyLife Shiraz Nursery manure management plan to balance phosphorus with crop removal, should it be necessary in the future.

In order to determine the land requirements for the proposed operation, nitrogen and phosphorus excretion by 24,000 grower-finisher pigs is compared to nitrogen utilization and phosphorus removal by the proposed crops to be grown. The calculation takes into consideration typical, modern feeding practices for pig production and realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Argyle.

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 predominantly Class 2 and 3 (prime agricultural land). The limitations include slope (T), wetness (W), droughtiness (M) and salinity (N).

The proposed HyLife Shiraz Nursery operation is required to demonstrate that they have access to at least 1,312 acres of suitable land for manure application. They have demonstrated that they have access to 1,450 suitable acres for manure application.

Water Science and Watershed Management Branch:

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 2002).

Injection of manure at appropriate rates poses lower environmental risk than other manure application methods. For perennial forages like alfalfa, true injection is only possible prior to establishment. For established forages, applications between first and second cut will generally pose the lowest risk of losses to surface water and applications to frozen or snow covered soils or just prior to freeze up in fall pose the greatest risk.

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 use a covered manure storage which has lower N losses than an uncovered storage and also apply the liquid manure with injection where possible which will reduce N losses compared to broadcast methods.

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. To remain environmentally sustainable over a long-term planning horizon of 25 years or more, the proponent must be able to balance phosphorus inputs from applied manure and other nutrient sources such as commercial fertilizers with crop removal rates to avoid further build-up in soils. Consequently, sufficient land base must be available such that manure can be applied at no more than 1 times crop P removal rates (P balance). For long-term planning purposes, the proponent needs to have sufficient land available to ensure that manure can be applied at 1 times

crop P removal. The proponent acknowledges that 1,782 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 1,450 acres for manure application. Application to meet crop N requirements is estimated to use 1,312 acres. Application at 2 times the crop removal of P is estimated to use 891 acres 1,782 acres is estimated to achieve P balance 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).

The soil test reports indicate elevated soil salinity on SE 9-6-14 W1. Saline areas generally have reduced yields and are therefore prone to nutrient buildup when manure (or fertilizer) is applied at the same rate as more productive parts of the field. Saline areas that are less productive should be monitored for nutrient buildup.

The proponent is proposing a new production well on the property at NW of Section 10-6-14W. For the proposed new well, the Well Standards Regulation under The Groundwater and Water Well Act (<https://web2.gov.mb.ca/laws/statutes/ccsm/g110e.php>) requires a 100 metre separation distance between newly constructed wells, confined livestock areas and manure storage facilities.

Appendix B – Proponent Response



HyLIFE™

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March 30, 2020

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

Attn: Don Malinowski, TRC Coordinator

Re: File Nos. TRC -12-055 (Shiraz Nursery)

HyLife would like to acknowledge the concerns raised by residents regarding our proposed Shiraz Nursery pork production operation on NW-10-06-14W in the Municipality of Argyle. 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 Argyle, HyLife hosted an 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 Province to better understand the concerns of local residents.

HyLife - Our Company and our Proposed Shiraz 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 "AGRICULTURAL GENERAL" in The 23 West Planning District Zoning By-Law No. 19 adopted in 2015. 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 Argyle Community.

Zoning By-Law No. 19 states:

The "AG" Agricultural General Zone is hereby established in this Zoning By-law and is intended to:

- *Support and strengthen the agricultural industry in the 23 West Planning District and to provide flexibility and opportunity for farm operators to engage in a variety of agricultural uses and farming practices; and*
- *Protect the agricultural industry and its land resources in recognition of agriculture's contribution to the economy, lifestyle and character of the 23 West Planning District.*
- *Provide opportunities under the Conditional Use process to diversify land uses within the agricultural area to include agri-related commercial or industrial enterprises.*

HyLife has carefully chosen the proposed site as it is located in the "Agricultural 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 facilities. This proposal exceeds the minimum setback distance from residences.





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Odour Control

At HyLife, we utilize a multi pronged approach to assist in minimizing odour and potential impacts on area neighbours. The 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 odour 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, but will create greater lift to better dissipate and diffuse odours.

With respect to manure nutrient application, our plan is to apply manure in the spring before seeding and in the fall, post harvest. Manure nutrient application will be done on an anticipated 2-3-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 Conservation and Climate.

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 Souris River/Whitewater Lake sub-watershed of the Assiniboine 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

A deep pit manure storage facility has been proposed to contain manure from this operation. Such storage is a common and accepted method for storing liquid manure throughout the livestock industry.

Deep pit manure storages have been regulated by the Province of Manitoba since 1995. A permit to construct a concrete manure storage requires a detailed geotechnical assessment of soils; a design prepared by a professional engineer; review of the design and all relevant information by Manitoba Conservation and Climate 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. This 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 concrete manure storage 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 Sustainable Development 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 Shiraz Nursery operation.

Prior to the development of a water supply that exceeds 5,500 gallons per day, a Water Rights License must be obtained through Manitoba Conservation and Climate. The license process includes the assessment of the proposed use on the aquifer and other uses. Manitoba Conservation and Climate 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. The water source for this facility will not be drawn from the fully allocated Assiniboine Delta Aquifer and an alternate groundwater source will be utilized to support this operation.

All developments requiring a Water Rights License must comply with the annual groundwater withdrawal limit set by Manitoba Conservation and Climate's Water Licensing Branch.



Traffic

There will be additional traffic daily to the proposed development with the addition of 4 new staff for the proposed Shiraz Nursery operation. There will also be an addition of 3-4 feed trucks and 6-8 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 5 which is provincial highway maintained and under the jurisdiction of Manitoba Infrastructure as well as municipal road 32N for 1 mile. Impact on municipal road infrastructure will be limited to this municipal road for the majority of the farm traffic.

Quality of Life and Property Values

We respect that existing rural-non-farm residents have chosen to reside in a designated Agricultural General area 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.