



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT

PREPARED FOR

**THE RURAL MUNICIPALITY
OF GREY**

COMBCROFT INC.

NW 1/4 11-8-6 WPM

TRC 12-098

June 29, 2023

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 and Climate (EC)

- 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

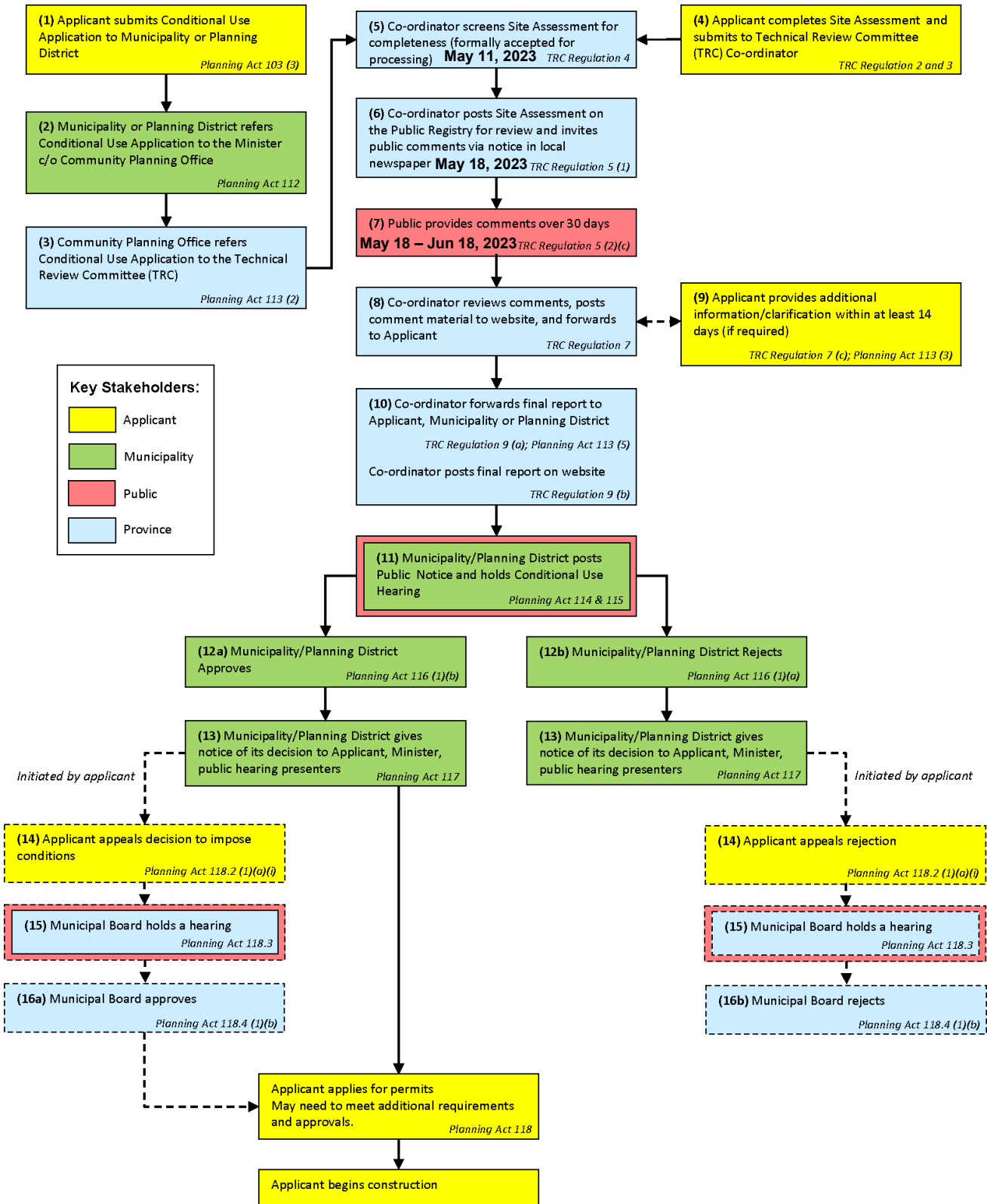
Purpose of TRC Reports

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)



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

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

Applicant: Combcroft Inc.

Site Location: NW ¼ 11-8-6 WPM. Refer to map below.

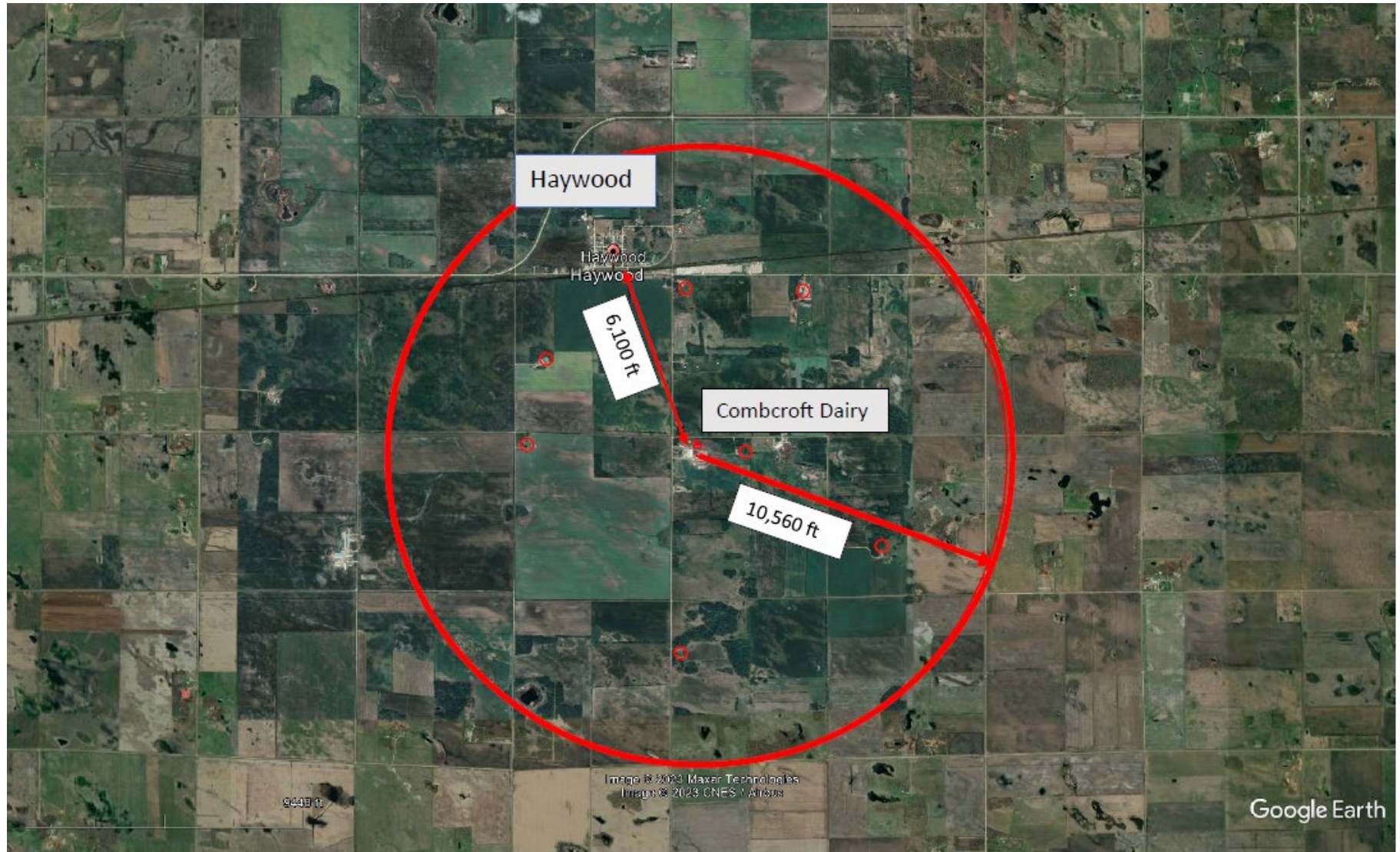
Proposal: To expand an existing dairy operation by increasing the number of mature cows (lactating and dry) from 255 (510 Animal Units) to 400 (800 Animal Units).

This will involve the following:

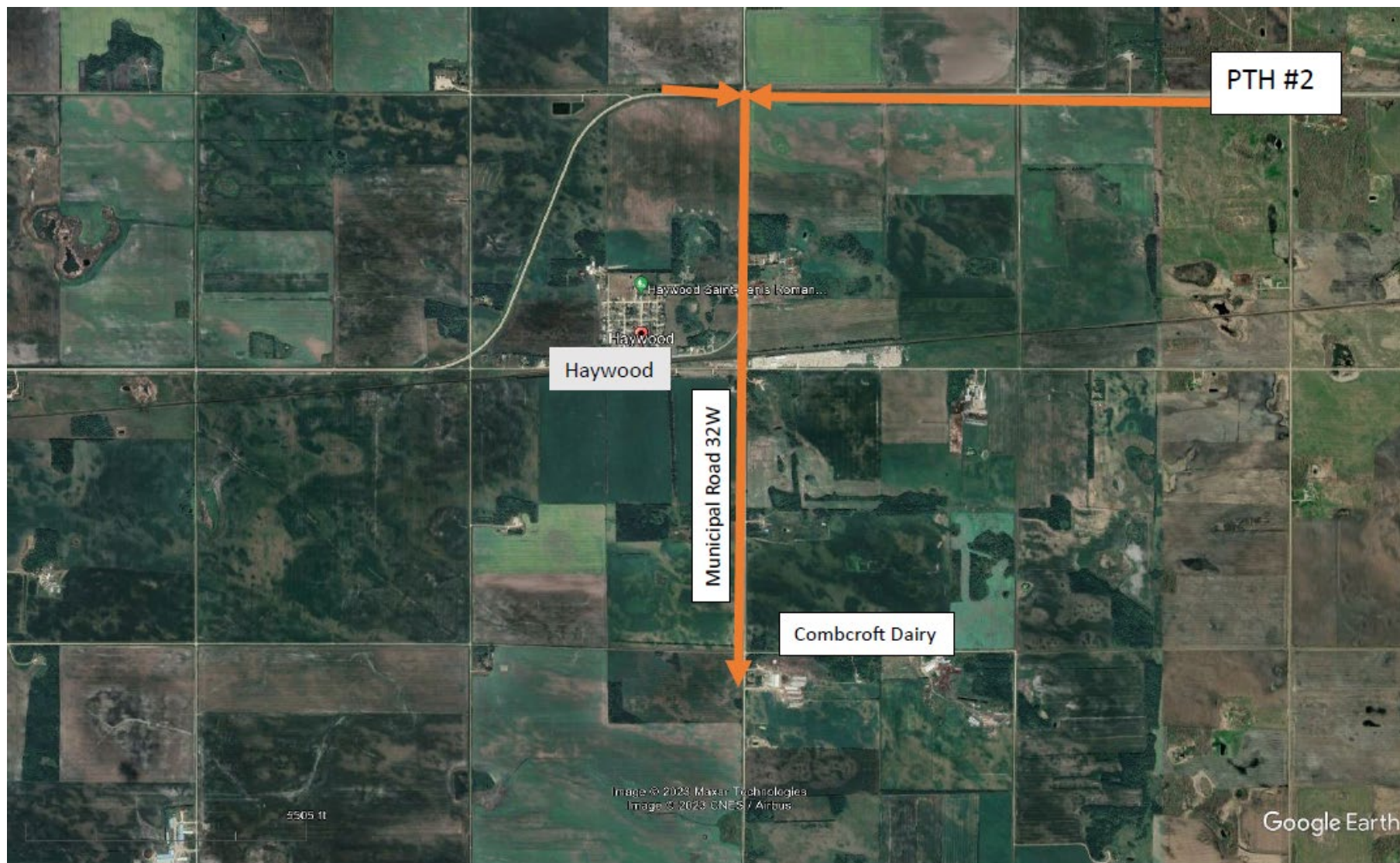
- Reuse an existing enclosed barn and an existing pole shed
- Build a new pole shed and enclosed barn
- Steel tank and field manure storage
- Estimated daily water use of 21,600 imperial gallons from an existing well
- Composting mortalities
- Truck haul routes as shown in map below



Combcroft Dairy – Site Plan

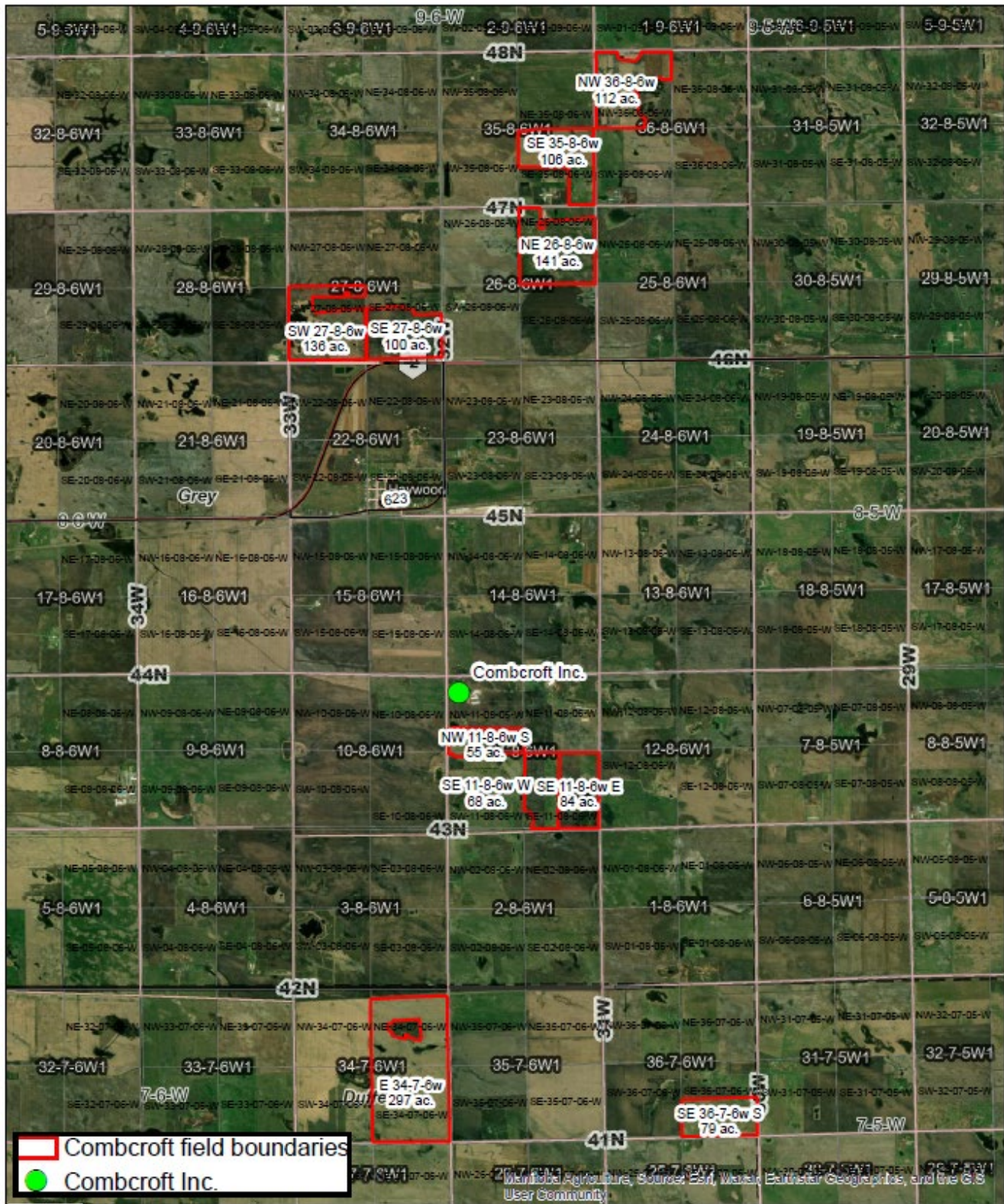


Two Mile Radius From Combcroft Dairy



Combcroft Dairy Truck Route

Combcroft Inc Spread Fields - March, 2023



C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.				
Item No.	Provincial Requirements	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	Combcroft Inc is currently seeking Conditional Use approval to expand their dairy operation to 400 mature cows (800 AU).	AGR
3	Project clearly defined as:	X	The proposed animal confinement facility is not regulated under the Livestock Manure and Mortalities Management Regulation.	EC
	800 AU animal confinement facility / confined livestock area	X	The proposal will result in the construction of a new pole shed and an enclosed heifer and dry cow barn. Both the proposed pole shed and heifer and dry cow barn are in excess of 6,458 sq. ft. (600 sq.m). Therefore, a building permit will be required from the Inspection and Technical Services Branch (Municipal Relations) under Manitoba Regulation 5/2017 https://www.gov.mb.ca/labour/its/bldg_codes/permits_and_inspections.html	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	The identified existing and proposed buildings and structures meet the required setbacks in the “AG” Zone based on the site assessment plan.	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	EC
6	Identified suitable water source: Existing Wells and a water consumption rate of 21,600 imperial gallons per day	X	Combcroft Inc. has submitted an application to obtain a Water Rights Licence.	EC

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
7	Proposed project site meets development plan, zoning by-law	X	<p><i>The Planning Act</i> requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations.</p> <p><i>The Planning Act</i> 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.</p> <p>Designation The proposed livestock operation, located in the NW 11-08-6 WPM in the RM of Grey, is designated Agriculture Policy Area ('Grey-St. Claude Planning District' Development Plan By-law No. 2/99) and the proposal complies with Development Policies 1.3.5.1-17 (Livestock Policies).</p> <p>Note: Development Plan Amendment By-law No. 3/08 was approved on October 6, 2009 to allow existing operations to expand beyond 300 AU within the Agriculture Policy Area as a Conditional Use.</p> <p>Zoning The proposed site is zoned "AG" Agricultural General (R.M. of Grey Zoning By-law No.5-03) and has a minimum site area requirement of 80 acres with a minimum site width requirement of 1000 feet.</p> <p>The proposed project complies with the R.M. of Grey Zoning By-law.</p>	MR

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The proposal identifies that the water use for the proposed livestock operation is from the existing well at NW 11-8-6W. The provincial water well database contains information for a well associated with the proposed livestock operation. The proposal indicates no abandoned wells present on the site or spread fields, however the provincial water well database indicates that there are wells present within the proposed spread field locations at SE 35-8-6W and SE 36-7-6W. The accuracy of the well location and its status in the database is not known or reported wrong. Most of these wells are plotting within a section. Therefore, it is expected from the proponent to make an attempt to identify these wells and if any of these wells are in use then a minimum buffer as outlined in regulations must be maintained during spreading. The wells 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 and Climate.</p> <p>Information on well sealing and well sealing reports are available from MB Environment and Climate (204-945-6959) or: https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html. 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. If the proponent confirm that a reasonable effort has been made and no well(s) was located on land that has been identified for spreading then no further actions are required.</p> <p>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.</p>	EC
9	Identified suitable manure storage methods	X	<p>The applicant will modify or expand an existing manure storage. Under the Livestock Manure and Mortalities Management Regulation, the applicant must obtain a permit from Environment and Climate to modify or expand the storage. Once in operation the applicant must:</p> <ul style="list-style-type: none"> • Ensure there is sufficient capacity to store all manure through the winter. • Maintain the structural integrity of the storage. • Operate the storage so that it does not pollute surface water, ground water or soil. 	EC

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
10	Identified acceptable manure application methods	X	<p>Under the Livestock Manure and Mortalities Management Regulation, the applicant must:</p> <ul style="list-style-type: none"> • Operate with an annual manure management plan which includes: <ul style="list-style-type: none"> • Manure type, volume, and nutrient values • Spread field location and soil class • Soil tests showing nitrogen and phosphorus levels • Crops to be grown • Manure application rate • Ensure manure does not pollute groundwater, soil or escape the operation's boundaries. • Follow requirements for the land application of manure, including nitrogen limits and phosphorus thresholds. 	EC
11	Mortalities disposal methods identified as: <u>Composting</u>	X	<p>The applicant will compost mortalities. Under the Livestock Manure and Mortalities Management Regulation, the applicant must:</p> <ul style="list-style-type: none"> • Ensure the composting does not pollute surface water, groundwater, or soil. • Locate the composting site at least 100 m from any surface watercourse, well, or the operation's boundaries. • Ensure the composting facilities and process are acceptable to the director. 	EC
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	The applicant has indicated that all setback distances meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation.	EC
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	Proposed project site is not within a designated flood area or otherwise at risk of flooding. The spread field on S ½ 27-8-6W is bordered by Elm Creek, which is a Provincial Waterway. If any work will be taking place within the right-of-way of Elm Creek, Provincial Waterway Authorization must be obtained prior to work taking place.	MTI

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
14	Proposed acceptable odour control measures	X	Combcroft Inc has indicated that there are existing shelterbelts. Also, dairy manure tends to crust on the surface of stored liquid manure which reduces odours from the liquid manure storage facility. 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
		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. Note: There appears to be an existing shelterbelt surrounding the proposed new barn.	MR
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The required land base for Combcroft Inc is 1131 acres. Combcroft Inc has satisfied the land requirement by demonstrating that they have access to 1178 suitable acres. Additional details can be found in the appendix.	AGR
		X	Under the Livestock Manure and Mortalities Management Regulation, manure spreading must meet setback distances to all surface watercourse and groundwater features.	EC
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	The applicant has indicated that no spread fields are located within the Red River Valley Special Management Area or any other regularly inundated area.	EC
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	The operation is designated Agricultural Policy Area (Development Plan 2/99) and complies with Livestock policies 1.3.5.1-1.3.5.17. The proposed site is zoned "AG" Agricultural General Zone. The spread fields meet the minimum zoning by-law requirements in the "AG" zone for the earthen manure storage facility and animal confinement facility set back requirements to a residence/dwelling and designated area.	MR

Provincial Technical Overview of TRC 12-098 – Combcroft Inc.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
18	Proposed acceptable manure transportation methods: Tanker and Solid Spreader	X	No comment from the department.	EC
			Please be advised that any structures placed within the controlled area of PTH 2 or any Provincial Road (PR) or Provincial Trunk Highway (PTH) within this area (125 feet from the edge of the right-of-way) requires a permit. The contact is Erica Paulo at 431-338-9897 or Erica.Paulo@gov.mb.ca . The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of the above noted highways requires permission from our regional office in Steinbach. Please contact the Regional Planning Technologist, Rob Fender at (204) 346-6266 or Rob.Fender@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 the above noted highways (125 feet from the edge of the right-of-way).	MTI
19	Identified suitable trucking routes and access points	X	The proposed trucking route utilizes Municipal Rd 32W to PTH 2. We have no concerns.	MTI
20	Identified proposed trucking routes – local roads	X	The proposed site is accessed by municipal road 32W, two miles south from PTH 2. 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
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 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 and Climate (EC); Transportation and Infrastructure (MTI); Municipal Relations (MR)

D. PUBLIC COMMENTS AND DISPOSITIONS

No public comments for this application.

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(2) 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 Portage 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) publish the notice of hearing in one issue of a newspaper with a general circulation in the planning district or municipality or, when there is no newspaper with a general circulation in the area, post the notice in the office of the planning district or municipality and at least two other public places in the district or municipality; and
 - c) 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, total animal units and expiration date (as per Planning Act section 110(1)) 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 Portage Community Planning Office), and
 - c) every person who made representation at the hearing.
4. Council is welcome to contact Manitoba Environment 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 <i>Community Planning and Development Branch</i>	204-945-1143
Petra Loro	Agriculture	Livestock Environment Specialist <i>Land Use and Ecosystem Resilience Branch</i>	204-918-0325
Colin Murray	Natural Resources and Northern Development	Information Manager- Manitoba Conservation Data Centre <i>Fish and Wildlife Branch, Natural Resources and Northern Development</i>	204-945-3077
Richard Balog	Environment and Climate	Manure Management Plan Coordinator <i>Environmental Approvals Branch</i>	204-945-3078
Jeff DiNella	Transportation and Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664

Appendix

Land Use and Ecosystem Resilience Branch – Manitoba Agriculture (AGR)

In areas of lower livestock intensity such as the RM of Grey, 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 dairy cows were used to estimate nutrient excretion for Combcroft Inc. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Grey 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. Soils must be below 60 ppm Olsen P to be considered suitable. Detailed soil survey is available in the area to determine the agriculture capability of the land. The land is primarily Classes 3 and 4 with some areas of class 5. The most significant limitations in the area are lack of moisture (M) and wetness (W), typical of wet sands.

The required land base for Combcroft Inc is 1131 acres. Combcroft Inc has satisfied the land requirement by demonstrating that they have access to 1178 suitable acres.

Water Science and Watershed Management Branch – Environment and Climate (EC)

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 spring and fall by either partial injection or broadcast and incorporated within 48 hours. Spring application generally will have a reduced risk of nutrient loss to surface waters when compared to fall applications. Broadcast with incorporation will reduce the risk to surface water when compared to broadcast only application methods.

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. Incorporation is a practice which reduces N loss when compared to broadcast only application method.

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, 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 RMs of Grey and Dufferin, 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 1537 acres may be required for the operation. The proponent has identified 1178 acres with suitable soil test for manure application at this time. Application to meet crop N requirements is estimated to use 1131 acres. Application at 2 times the crop removal of P is estimated to use 769 acres (1537 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.