

3.0 Description of Livestock Operation

Operation legal name, if other than the owner's name:

Birkland Farms

Operation location (project site)¹:

NE 8-4-5W (refer to Engineering Report)

Rural Municipality (RM):

Thompson

Legal description: quarter, section, township, range, meridian or river lot(s):

NE 8-4-5W

Manitoba Premises Identification Number: **In the process to acquire such number**

Municipal Tax Roll Number(s):

2300

Illustrate the location of the operation (project site) on a map. (See [Location Map](#) for example).

Location Map Attached **Refer to Figure 2 after this page, which also indicates fields for spreading manure**

4.0 Nature of Project²

Please indicate if the proposal is for a new or expanding livestock operation. If the operation is expanding, please identify when the operation was established.

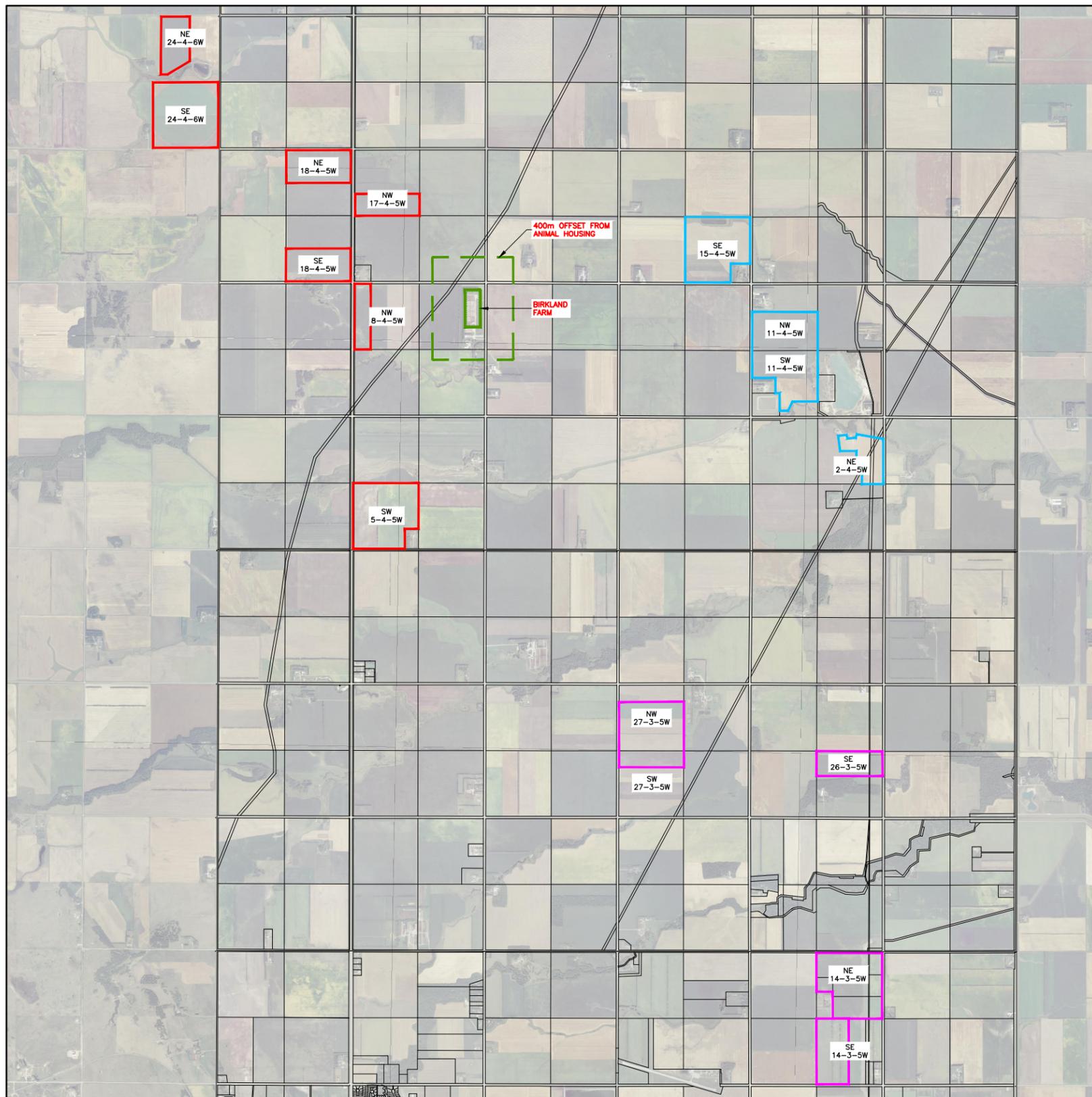
New Operation

Expansion of Existing Operation

Date Established: **1986**

Describe what is being proposed:

To expand feedlot from 2153 animal units to 3461 animal units



- RM OF THOMPSON
- RM OF ROLAND
- RM OF STANLEY

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FIGURE 2

BIRKLAND FARMS
 BOX 879 WINKLER, MB R6W 4A9
 PHONE: (204) 362-3075

BIRKLAND FARMS
 MANURE APPLICATION

Animal Units Calculator

A	B	C	Current Operation		Proposed Operation	
			D	E	F	G
Operation Type	Animal Categories	Animal Units per Head	Current Number of Animals ¹	Current Animal Units	Proposed Number of Animals ²	Proposed Number of Animal Units
Dairy ³	Mature cows (lactating and dry) including associated livestock	2		-		-
	Mature cows (lactating and dry)	1.35		-		-
	Heifers (0 to 3 months)	0.16		-		-
	Heifers (4 to 13 months)	0.41		-		-
	Heifers (> 13 months)	0.87		-		-
	Bulls	1.35		-		-
	Veal calves	0.13		-		-
Beef	Beef cows including associated livestock	1.25		-		-
	Backgrounder	0.5		-		-
	Summer pasture / replacement heifers	0.625		-		-
	Feeder cattle	0.769	2,800	2,153	4,500	3,461
Pigs	Sows - farrow to finish (234-254 lbs)	1.25		-		-
	Sows - farrow to weaning (up to 11 lbs)	0.25		-		-
	Sows - farrow to nursery (51 lbs)	0.313		-		-
	Boars (artificial insemination units)	0.2		-		-
	Weanlings, Nursery (11-51 lbs)	0.033		-		-
	Growers / Finishers (51-249 lbs)	0.143		-		-
Chickens	Broilers	0.005		-		-
	Roasters	0.01		-		-
	Layers	0.0083		-		-
	Pullets	0.0033		-		-
	Broiler breeder pullets	0.0033		-		-
	Broiler breeder hens	0.01		-		-
Turkeys	Broilers	0.01		-		-
	Heavy Toms	0.02		-		-
	Heavy Hens	0.01		-		-
Horses	Mares	1.333		-		-
Sheep	Ewes	0.2		-		-
	Feeder lambs	0.063		-		-
Other Livestock	Type:			-		-
	Type:			-		-
			Total Current:	2,153	Total Proposed:	3,461

Footnotes:

¹ Enter the current number of animals on the farm based on the operation's capacity (animal places) or previous Conditional Use Approval.

² Enter the total number of animals associated with the operation post construction or expansion.

³ There are 2 methods for calculating animal units for dairy (Farm Practices Guidelines for Dairy Producers in Manitoba, 1995). You can enter the total number of mature cows in the milking herd under the "Mature cows (lactating and dry) including associated livestock" category and the animal units will be calculated by multiplying this number by 2. This calculation assumes 85 lactating, 15 dry, 12 heifers (0 to 3 months), 36 heifers (4 to 13 months) and 50 heifers (> 13 months) for an operation with 100 mature cows. "Associated livestock" includes all of the heifer calves and replacement heifers. Alternatively, you can enter animal numbers in the individual categories (mature cows, heifers (0 to 3 months), heifers (4 to 13 months) and heifers (> 13 months)) and they will be summed at the bottom of the table. Bulls and veal calves are always calculated separately.

[For all other livestock or operation types please inquire with the Manitoba Agriculture Contacts](#)



Confined Livestock Area⁵ – means an outdoor, non-grazing area where livestock are confined by fences or other structures, and includes a feedlot, paddock, corral, exercise yard, holding area and hoop structures.

Other (Describe what is being proposed)

Does the operation currently use a confined livestock area:

Yes

If yes, what is the current capacity (livestock places and animal units)? _____

Seventeen (17) Feeding Pens with 2153 Animal Units

To ensure the proposed livestock operation can be built in a way the environment is protected, a permit is required for construction and expansion of confined livestock area(s) for operations with 300 Animal Units or more. Permits are required by the [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98), under [The Environment Act](#).

A permit under the [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98) is not required for an indoor housing area or barn unless there is a manure storage facility within the building (an under barn storage capable of storing manure for 30 days or more).

Note that agricultural buildings such as barns over 600 meters (6,458 sq ft) require a building permit from the Fire Commissioner's Office under *The Building and Mobile Home Act* and the Manitoba Building Code.

Show all existing, proposed buildings and additions to existing buildings on the project site plan. See [Project Site Plan example](#) and the [Project Site Plan Guide](#) for help creating your site plan⁶.

Project Site Plan attached Refer to Engineering Report **Also see next 3 pages**

7.0 Water

7.1 Project Sites Unsuitable for Development

To protect water quality, the [Nutrient Management Regulation](#) (M.R. 62/2008), under *The Water Protection Act*, prohibits the construction or expansion of nutrient generating facilities in Nutrient Management Zone 4 (Agriculture Capability Class 6, 7 and unimproved organic soils) and Nutrient Buffer Zones. Nutrient generating facilities include barns, confined livestock areas and manure storage facilities.

A [Nutrient Buffer Zone](#), as defined in section 3(3) of the regulation, includes areas of land along water bodies such as rivers, lakes, streams and drains.

The proposed indoor housing area, barn, confined livestock area and/or manure storage facility:

will not

be located within Nutrient Management Zone 4 (Class 6, 7 and unimproved organic soils) or any Nutrient Buffer Zone.



KEY PLAN
SCALE = 1:25,000

BIRKLAND FARMS

FEEDLOT EXPANSION

PLAN INDEX

PLAN AND PROFILE

SHEET 01 SITE PLAN

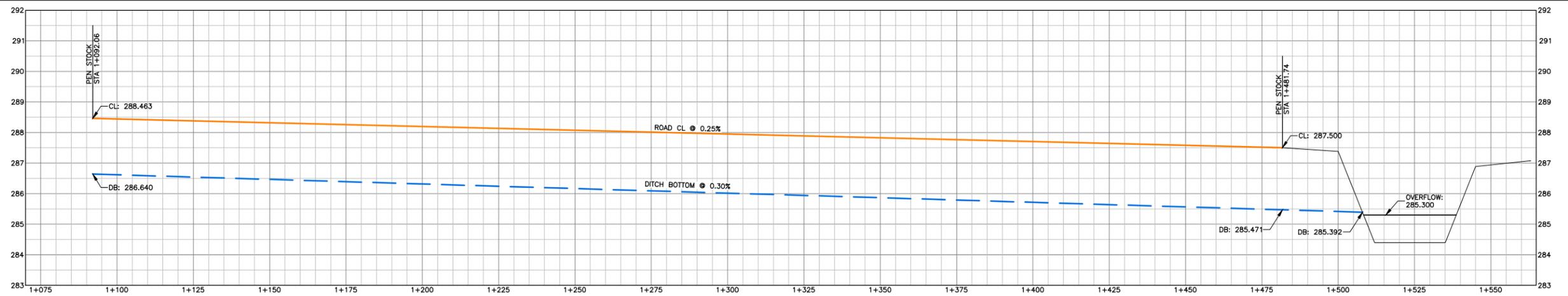
DETAILS

SHEET 02 MISCELLANEOUS DETAILS

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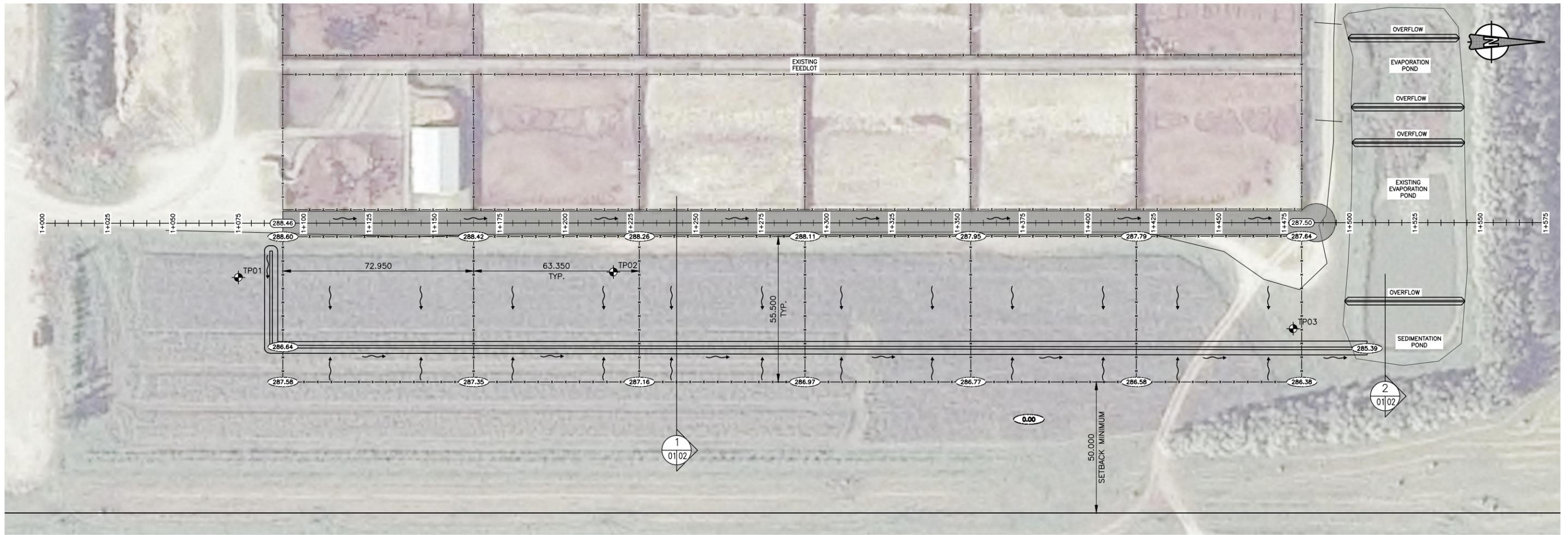
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PROFILE VIEW

HORIZONTAL SCALE = 1:750
 VERTICAL SCALE = 1:75



PLAN VIEW

SCALE = 1:750



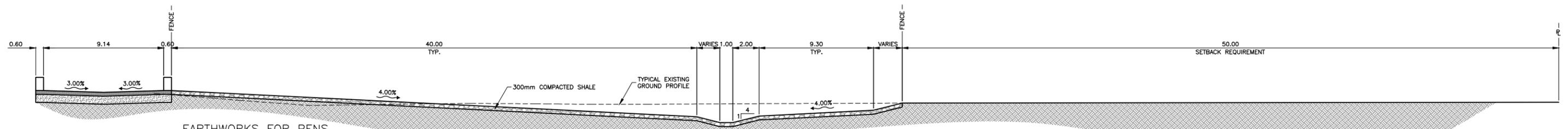
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BIRKLAND FARMS
 BOX 879 WINKLER, MB R6W 4A9
 PHONE: (204) 362-3075

1	REVISION	REVIEW ISSUED FOR	16/07/13
			DATE
PROJECT: BIRKLAND FEEDLOT EXPANSION			
TITLE: SITE PLAN			
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE	SHEET NO: 01
DRAWN BY: NG	DATE: 16/07/04	SCALE: 1:750	DRAWING NO: 048



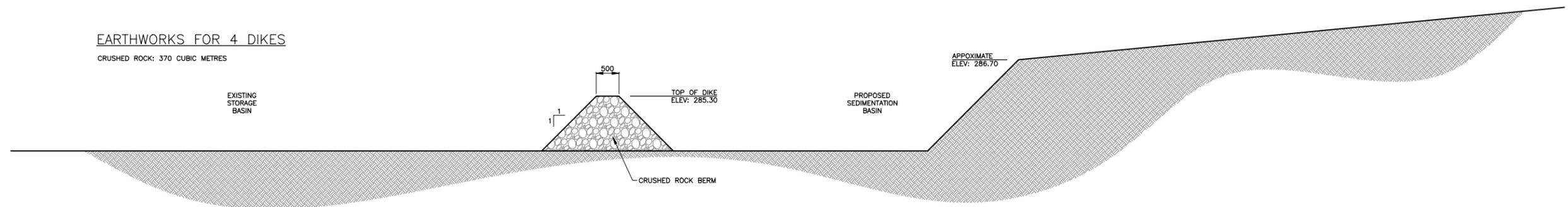
EARTHWORKS FOR PENS

TOPSOIL STRIPPING: 3,250 CUBIC METRES
 SUBGRADE CUT: 6,550 CUBIC METRES
 FILL: 2,450 CUBIC METRES
 NET: SUBGRADE CUT 4,100 CUBIC METRES
 SHALE FILL: 6,500 CUBIC METRES

1 SECTION VIEW
 02/01 SCALE = 1:750

EARTHWORKS FOR 4 DIKES

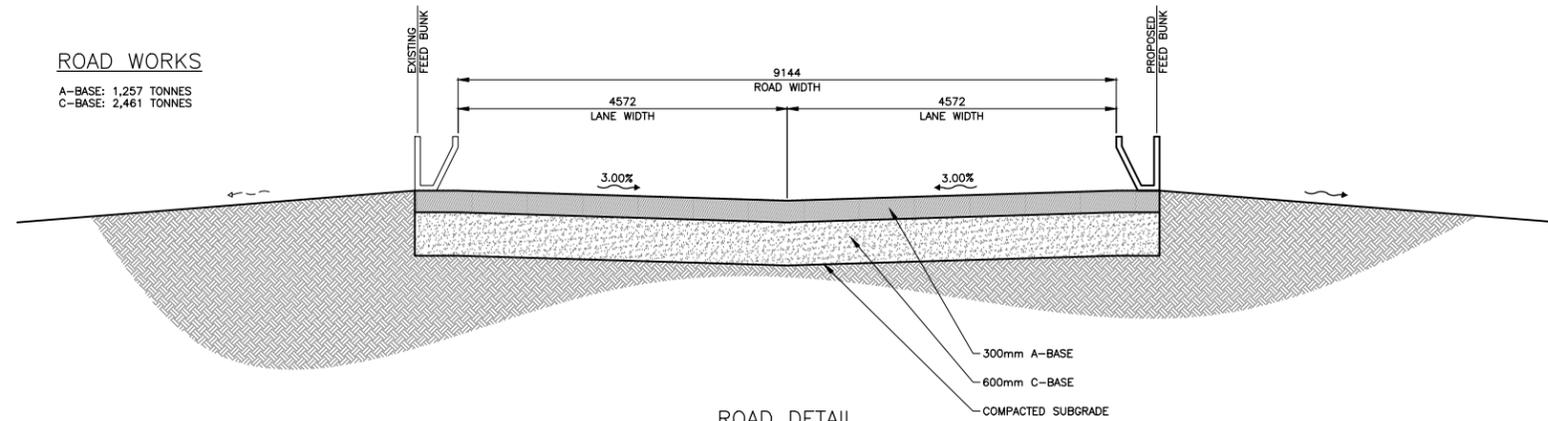
CRUSHED ROCK: 370 CUBIC METRES



2 TYPICAL DIKE SECTION VIEW
 02/01 SCALE = 1:50

ROAD WORKS

A-BASE: 1,257 TONNES
 C-BASE: 2,461 TONNES



ROAD DETAIL

SCALE = 1:50



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1	REVIEW	16/07/13
REVISION	ISSUED FOR	DATE

PROJECT: BIRKLAND FEEDLOT EXPANSION

TITLE: MISCELLANEOUS DETAILS

BIRKLAND FARMS
 BOX 879 WINKLER, MB R6W 4A9
 PHONE: (204) 362-3075

DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE	SHEET NO: 02
DRAWN BY: NG	DATE: 16/07/04	SCALE: AS SHOWN	DRAWING NO: 048

Determine the agriculture capability class(es), including their limitations, of the soils for the project site.

Individuals with GIS mapping software can access information through [Manitoba Land Initiative](#) (MLI) website. In addition, information from MLI can also be viewed on Google Earth. Both the download for Google Earth and the registration for MLI are free.

Click [here](#) for instructions under the MLI website.

7.2 Water Source⁷

To be sustainable, a livestock operation must have access to a sufficient quantity and quality of water for livestock.

Water source for operation:

Existing well

If using an existing well, provide a copy of the water well log⁸ and logs for other wells on the property. Logs can be obtained from Manitoba Sustainable Development by calling (204) 945-6959 in Winnipeg; 1-800-214-6497 toll free.

7.3 Source Water Analysis Reports

Annual [livestock source water quality monitoring reports](#) must be submitted to Manitoba Sustainable Development for any operations of 300 Animal Units or more.

Has the operation submitted an annual source water monitoring report?

No

If yes, please indicate year of last submission: _____

Will livestock have direct access to surface water (not including dugouts)?

No

If yes, identify the name of the surface water feature:

Not Applicable

List any steps that will be taken to prevent direct access of livestock to the water body:

Not Applicable

7.4 Water Requirements

Protecting the interests of domestic users and the environment, in addition to existing licensees, is the intended purpose of the water rights licensing scheme.

In order to protect the sustainability of water sources, all operations using more than 25,000 litres (5,499 imperial gallons) per day must possess a Water Rights License required by the [Water Rights Regulation \(MR 126/87\)](#) under *The Water Rights Act*.

For more information on the Water Rights Licensing process, contact the Water Use Licensing Section at (204) 945-3983 in Winnipeg; 1-800-214-6497 toll free.

Water Use⁹

To calculate the total water use for non-dairy operations, go to the [Water Requirement Calculator](#).

~~For dairy operations, go to the [Dairy Barn Water Requirement Estimator](#).~~

Maximum daily use for the operation: 54,000 IG/day

imperial gallons

Maximum annual use for the operation: 19,710,000 IG

imperial gallons

Water Requirement Calculator attached **See next page**

~~*Dairy Barn Water Requirement Estimator attached*~~

7.5 Groundwater (Contamination Risk Protection)

Improper storage and handling of manure or mortalities increases the risk of contaminating groundwater. Beneficial management practices (BMP), mitigation measures and requirements for the permit process reduce this risk. Soil testing, manure management planning and proper engineering, along with construction and management of manure storage structures, reduce the risk of contaminating groundwater.

All unused or abandoned well(s) on site and spread fields should be properly sealed and a seal well report filed with the Groundwater Management Section of Manitoba Sustainable Development. Information on well sealing is available from Manitoba Sustainable Development at (204) 945-6959 or refer to the [technical information document](#). It is recommended that all but the most basic wells should be sealed by a well drilling professional.

Water Requirement Calculation Table

Livestock	Number	IG/day per animal in winter	IG/day per animal in summer	IG/day (Imperial gallons per day)
Beef/Dairy/Bison				
Feeder/heifer/steer (600 lb.)		5	9	-
Feeder (900 lb.)	4,500	7	12	54,000
Feeder (1250 lb.)		10	15	-
Cow/calf pair		12	15	-
Dry cow		10	12	-
Milking cow		25	30	-
Bison		8	10	-
Horses				
Horses		8	11	-
Hogs				
Sow (Farrow/wean)		6.5		-
Dry Sow/Boar		4		-
Feeder		3		-
Nursery (33 lb.)		2		-
Chickens				
Broilers		0.035		-
Roasters/Pullets		0.04		-
Layers		0.055		-
Breeders		0.07		-
Turkeys				
Turkey Growers		0.13		-
Turkey Heavies		0.16		-
Sheep/Goats				
Sheep/Goats		2		-
Ewes/Does		3		-
Lambs/Kids (90 lb.)		1.6		-
TOTAL (IG/day)				54,000

For beet, dairy, bison and horse enterprises:
 Use summer numbers if appropriate for the operation. Otherwise base projections on winter values.
 Always use the greater of the two values.

Enter this number on page 7 of Application Form.

Other consumption values:

Normal household consumption:
 40-55 IG/day per person or
 (180-250 l/day/person)

Hydrant flow:
 10 imperial GPM (45 l/min)

Unit Conversions		
Total per day	Total per year	Unit
54,000	19,710,000	IG
245,484	89,601,660	litres
0.245	90	cubic decametres (dam ³)

Enter this number on page 7 of Application Form.

Conversion Factor: 1 IGPM = 4.546 l/m

Check off the mitigation measures used for the existing components of the operation that may pose a risk of contamination. Also check off any measures that may be used with the proposed components for this expansion, if applicable:

	Existing	Proposed	Not Applicable
Manure is stored in a storage facility built by permit or is registered by Manitoba Sustainable Development	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Storage includes leak detection system	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Earthen storage has between 400 and 500 days storage	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Steel/concrete tank has between 250 and 500 days storage	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Manure storage facility meets required setbacks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Field storage (solid manure) locations are changed annually	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field storage meets required setbacks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All fields to receive manure are soil tested annually for nitrate-N and Olsen phosphorus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All manure is applied according to a registered manure management plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Licensed commercial manure applicator is used to apply manure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operator applies manure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Abandoned wells have been properly sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other:

7.6 Building in Flood Areas:

The [Livestock Manure and Mortalities Management Regulation](#) prohibits an operator from constructing a manure storage facility within the boundaries of the 100-year flood plain elevation. [Manure storage facilities](#) that are constructed with protection for a flood-water level at least 0.6 meters higher than the 100-year flood water level are exempt.

The [Designated Flood Area Regulation](#) under *The Water Resources Administration Act* requires a Designated Flood Area Permit before a proposed structure (such as a barn) can be built within a Designated Flood Area

The flood protection level for structures located within a Designated Flood Area is the site specific design flood level plus freeboard, as provided by the Hydraulic Forecasting Branch of Manitoba Infrastructure. Contact the Hydrologic Forecasting Branch at (204) 945-2121 in Winnipeg; 1-800-214-6497 toll free, for more information.

The proposed site:

 is not located in a Designated Flood Area: [Upper Red River Valley Designated Flood Area](#) or [Lower Red River Designated Flood Area](#).

Note: At the time of permit issuance, verification is needed to ensure any proposed structure(s) are located within the 100-year flood plain elevation; or at an elevation set by Manitoba Infrastructure.

7.7 Watershed Management Planning

Integrated watershed management planning is a co-operative effort by local residents, stakeholders and governments to create a long term plan to manage water and land-based activities for watersheds.

What are the names of the watershed and sub-watershed where the livestock operation and the fields identified for manure application are located?

Name of watershed(s): Plum - Morris

Name of sub-watershed(s): Not Applicable

Name of Integrated Watershed Management Plan for the proposed project site, if applicable:

For more on Integrated Watershed Management Planning, call Watershed Planning and Programs at (204) 945-7408 in Winnipeg; 1-800-214-6497 toll free.

8.0 Manure

The [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98) sets requirements for the use, management and storage of livestock manure in agricultural operations, to ensure it is handled in an environmentally sound manner. For more information on this, call Manitoba Sustainable Development at (204) 945-4384 in Winnipeg.

Improper storage, handling and/or land application of manure can contaminate water and soil, as well as potentially cause unacceptable odours for neighbours. The following is used to assess the manure management system.

8.1 Manure Type

The type of manure generated and used by the operation influences storage, handling and land application options available.

What type(s) of manure will be generated?

Solid

8.2 Manure Volume or Weight

Manure production can be estimated using the [Manure Production Calculator](#). The sizing of the manure storage is the responsibility of the operator and must be constructed in accordance with the [Livestock Manure and Mortalities Management Regulation](#). Design and construction of a manure storage facility is dependent on the type of structure; earthen manure storage facilities must have between 400 and 500 days capacity, a steel or concrete storage tank must have between 250 and 500 days capacity. This ensures the facility has sufficient capacity eliminating the need for winter application of manure.

What will be the total volume or weight of manure generated annually by the livestock operation?

Liquid volume: _____

AND/OR

Solid volume: _____ **990,000 ft³**

Manure Production Calculator attached **See next page**

8.3 Manure Storage Type and Capacity

The type of storage system used will affect the capacity requirements for the manure storage facility or field storage area.

Is the operation planning to construct, modify or expand a manure storage facility or use an existing manure storage facility?

Construct

Expand

Modify

Use existing

Not applicable

Animal Type (A)	Animal Sub-type (B)	Daily Manure Production				Production Period ² (Days) (G)	Number of Animals ³ (Capacity) (H)	Total Manure Volume (ft ³) (FxGxH)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)	
		References (C)	Manure Type (D)	Default Manure Production (ft ³ /animal/day) (E)	Operation Manure Production ¹ (ft ³ /animal/day) (F)					
Dairy (milking cows ⁴ and associated livestock)	Free Stall	Table 6, pg 59, FPGs for Dairy 1995	Semi-Solid ⁵	3.5				-	0.0	
			Solid	3.4				-		
			Liquid ⁵	3.5				-	0.0	
	Tie Stall		Semi-Solid ⁵	3.6					-	0.0
			Solid	3.5					-	
			Liquid ⁵	3.6					-	0.0
	Loose Housing		Solid	3.0					-	
Milking Parlour Manure and Washwater	Liquid	0.5								
Beef	Beef cows including associated livestock	pg 117, FPGs for Hogs 1998	Solid	1.2				-		
	Backgrounder (200 day)		Solid	0.73				-		
	Summer pasture / replacement heifers		Solid	0.85				-		
	Feeder cattle		Solid	1.1	1.1	200.00	4,500	990,000.00		
Pigs	Sows - farrow to finish (234 - 254 lbs)	MAFRI website, FPGs for Pigs 2007	Liquid	2.3				-	0.0	
	Sows - farrow to wean (up to 11 lbs)		Liquid	0.8				-	0.0	
	Sows - farrow to nursery (51 lbs)		Liquid	1				-	0.0	
	Weanlings, Nursery (11 - 51 lbs)		Liquid	0.1				-	0.0	
	Grower / Finisher (51 - 249 lbs)		Liquid	0.25					-	0.0
Animal Type	Type of Operation	Yearly Manure Production		Production Period ² (Days)	Number of Birds ³ (Capacity)	Total Manure Volume (ft ³) (F/365xGxH)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)			
		Default Manure Production (ft ³ /year/bird space)	Operation Manure Production ¹ (ft ³ /year/bird space)							
Chickens	Broilers . floor ⁶	Table 3, pg 85, FPGs for Poultry 2000		1.23				-		
	Broiler breeder hens ⁷			2.3				-		
	Broiler breeder pullets ⁶			0.99				-		
	Roasters . floor ⁶			1.16				-		
	Layers . cage ⁸			2.33					-	0.0
	Layers . floor ⁷			1.68					-	
	Layers . solid pack ⁹								-	
	Pullets . cage ⁸			0.71					-	0.0
	Pullets . floor ⁶			0.75					-	
Turkeys	Broilers ⁶	Table 3, pg 85, FPGs for Poultry 2000		2.83				-		
	Heavy toms ⁶			5.58				-		
	Heavy hens ⁶			3.32					-	

Sizing of a manure storage facility in accordance with all requirements of the *Livestock Manure and Mortalities Management Regulation (M.R. 42/98)* is the responsibility of the operator.

Instructions and footnotes:

- ¹ ENTER the manure production estimate for your operation. If no estimate is available, use the default value provided in column E. References for default daily and yearly manure production are provided in column C.
- ² ENTER the number of days worth of manure that will be produced. For earthen manure storage facilities the minimum storage requirement is 400 days. For steel and concrete manure storage facilities the minimum storage requirement is
- ³ ENTER the total number of animals or birds that the operation can hold (e.g. barn or feedlot capacity).
- ⁴ Milking cows includes all lactating and dry cows.
- ⁵ Default manure production estimates for semi-solid and liquid dairy manure include manure and washwater from the milking parlour.
- ⁶ 2 inches of wood shavings or 4 inches of straw placed on floor. Manure and litter removed from barn at 25% moisture content, with a density of 20 lb/ft³
- ⁷ One-third litter floor, two-thirds slatted floor. Manure and litter removed from barn at 40% moisture content, with a density of 25 lb/ft³
- ⁸ Manure removed from barn at 90% moisture content with a density of 59 lb/ft³
- ⁹ Poultry operations using litter (solid pack) must provide an estimate of yearly manure production

What type of [manure storage](#) will be used by the operation?

- | | |
|---|--|
| <input type="checkbox"/> Concrete tank(s) manure storage facility | <input type="checkbox"/> Molehill manure storage facility |
| <input type="checkbox"/> Earthen manure storage facility | <input type="checkbox"/> Steel tank(s) manure storage facility |
| <input type="checkbox"/> Engineered solid manure storage facility | <input type="checkbox"/> Under-barn concrete manure storage facility |
| <input checked="" type="checkbox"/> Field storage | |

If the proposed operation or expansion will utilize an existing manure storage facility for the new manure, indicate the construction permit number or facility registration number:

Provide the dimensions of the existing and/or proposed manure storage facilities that will be used to store manure from the proposed operation or expansion. (See [Existing and Proposed Manure Storage Facility Dimensions Table](#).)

Existing and Proposed Manure Storage Facility Dimensions Table attached

If an existing manure storage facility that will be used to store any of the manure from the proposed expansion has a leak detection system (monitoring wells or sump pit), annual sampling and reporting to Manitoba Sustainable Development is required. Has the system been sampled and results submitted to Manitoba Sustainable Development? Yes

No

Not applicable

If yes, please indicate year of last submission: _____

If a manure storage facility is proposed in a geologically sensitive area, a leak detection system may be required.

For more information on obtaining a manure storage facility permit, please contact Manitoba Sustainable Development, Environmental Approvals Branch at (204) 945-5081.

8.4 Odour Control Measures (project site)

Barns and manure storage facilities can be significant sources of livestock odours. The use of manure storage covers and shelterbelts can reduce this, particularly for neighbours in the vicinity of the operation.

What odour control measures are you planning to use?

Manure storage cover:

- Yes No Not Applicable

If yes, type of cover: _____

Shelterbelt planting:

- Yes No Existing shelterbelt

Other measure (specify):

Not Applicable

8.5 Manure Treatment

Pig operations:

Under *The Environment Act*, the director must not issue a permit for the modification, expansion, or construction of a manure storage facility accommodating an increase in the number of animal units for **pigs**, unless the manure is treated using anaerobic digestion or another environmentally sound treatment that is similar to, or better than, anaerobic digestion, according to Manitoba Sustainable Development. Environmentally sound treatment has been defined in the Hog Production Pilot project. For more information on new or expanding hog operations and the requirements of the Hog Production Pilot project, please contact the Manitoba Pork Council.

Under the Hog Production Pilot project, in addition to existing regulatory requirements, new and expanding pig operations must:

- Subject the manure to treatment using anaerobic digestion or mechanical or gravity separation including multi-celled manure storage structures and settling tanks;
- Have access to sufficient suitable land to accommodate all of the phosphorus generated by the operation;
- Maintain soils below 60 ppm Olsen P; and
- Inject or immediately incorporate pig manure on tilled land. Perennial forages, in-season applications and no-till lands are excluded.

New and expanding pig operations should also consider odour control practices.

If this Site Assessment is for a **pig** operation, does your proposal meet all the criteria outline in the Hog Production Pilot Protocol?

Yes

No

If this Site Assessment is for a **pig** operation, have you included a letter from the Manitoba Pork Council under the Hog Production Pilot Protocol?

Yes

No

Letter from Manitoba Pork Council attached (if applicable)

Manure treatment:

Is manure treatment proposed for the operation?

Yes

No

If yes, please describe treatment process, including intended end use of treated manure:

Not Applicable

Some manure treatment systems will trigger the requirement for an Environment Act License depending on the type of treatment or intended use of the treated products. The requirement for a license is determined by Manitoba Sustainable Development during their review of the permit application for the construction, modification or expansion of a manure treatment facility.

If treated manure is directed to a retailer, additional approvals may be required in advance of establishing the treatment process. Producers should note that no discharge or burning of treated manure products is allowed.

Manitoba Sustainable Development may require additional supporting documentation to be completed by the operator with respect to the treatment facility. Please contact (204) 945-4384 to determine what information will be required.

8.6 Manure Application Method

The [Livestock Manure and Mortalities Management Regulation](#) requires the registration of annual manure management plans for new or expanding operations with 300 Animal Units or more.

Does the operation currently file an annual [Manure Management Plan](#) (MMP) with Manitoba Sustainable Development?

- Yes
 No

N/A (new operation or existing operation <300 AU currently)

If yes, please indicate most recent MMP Registration #: 2017-249

Manure application methods and the season in which manure is applied affect odour, nutrient availability, crop response, land base requirements and the risk of water contamination.

Proposed application method:

- Broadcast
 Broadcast and incorporate within 48 hours

Injection

8.7 Land Available for Manure Application

Using the [Manure Application Field Characteristics Table](#) provide the information requested.

Total land available for manure application: 1333 acres

Suitable Land:

Sufficient suitable land must be available for all of the manure generated by the operation that is to be land applied. Suitable land can be owned, leased or under agreement.

Under the [Livestock Manure and Mortalities Management Regulation](#) and the [Nutrient Management Regulation](#), application of nutrients is not permitted on Agriculture Capability Class 6, 7 and unimproved organic soils (Nutrient Management Zone 4) and within Nutrient Buffer Zones. In addition, only fields with less than 60 parts per million (ppm) Olsen phosphorus (P) in the top six inches (15 centimeters) of soil will be considered suitable.

The Nutrient Buffer Zones and manure application setback requirements are outlined in the Nutrient Management Regulation (62/2008) and the Livestock Manure and Mortalities Management Regulation (42/98). They have been consolidated in the [Setback Requirements from Water Features Table](#).

Have the setback areas for all water features been observed and excluded from land base calculations for this operation?

Yes

No

Total suitable area available for manure application: 1333 acres

For all suitable lands, copies of soil test reports that are no more than 12 months old and that demonstrate that soil phosphorus levels are below 60 ppm Olsen P in the top six inches (15 centimeters) of soil must be included with this submission.

Manure Application Field Characteristics Table attached **See next page**

Soil test reports for the required land base for manure application attached **Yes**

8.8 Land Required for Manure Application

Long term land base requirements for manure application are calculated based on estimates of the quantity of nutrients (nitrogen and phosphorus) excreted by livestock and the utilization or removal of nutrients by the proposed crops.

The quantity of nitrogen and phosphorus excreted by the livestock depends on the type, number and size of livestock, the quantity and availability of nitrogen and phosphorus fed to the livestock, the amount retained by the livestock and the amount contained in milk and eggs.

The utilization of nitrogen and removal of phosphorus by crops depends on the crops grown and the historical crop yield averages. (See [Crop Rotation Table](#)). **See 2nd page after this page**

CROP ROTATION TABLE #1

Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake
	P2O5	N	N	Units				P2O5 (lb)	N (lb)	N (lb)
Alfalfa	13.8	58	58	lb/ton	3.228	ton/ac	150	6682	28084	28084
Barley Grain	0.42	0.97	1.39	lb/bu		bu/ac		-	-	-
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac		-	-	-
Canola	1.04	1.93	3.19	lb/bu		bu/ac		-	-	-
Corn Grain	0.44	0.97	1.53	lb/bu		bu/ac		-	-	-
Corn Silage	12.7	31.2	31.2	lb/ton	5.67	tons/ac	452	32548	79961	79961
Dry Edible Beans	1.39	4.17		lb/cwt		cwt/ac		-	-	-
Fababeans	1.79	5.02	8.4	lb/cwt		cwt/ac		-	-	-
Flax	0.65	2.13	2.88	lb/bu		bu/ac		-	-	-
Grass Hay	10	34.2	34.2	lb/ton		tons/ac		-	-	-
Lentils	1.03	3.39	5.08	lb/cwt		cwt/ac		-	-	-
Oats	0.26	0.62	1.07	lb/bu	92.8	bu/ac	160	3860	9206	15887
Pasture (grazed)	10	34.2	34.2	lb/ton	0.5	ton/ac		-	-	-
Peas	0.69	2.34	3.06	lb/bu	24.7	bu/ac	160	2727	9248	12093
Potatoes	0.09	0.32	0.57	lb/cwt	220.24	cwt/ac	311	6165	21918	39042
Rye	0.45	1.06	1.67	lb/bu		bu/ac		-	-	-
Soybeans	0.84	3.87	5.2	lb/bu		bu/ac		-	-	-
Sunflower	1.1	2.8		lb/cwt		cwt/ac		-	-	-
Wheat - Spring	0.59	1.5	2.11	lb/bu	44.9	bu/ac	100	2649	6735	9474
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-
Sub Total							1333	54631	155151	184541
Estimated Average Removal/Uptake (lb/ac)								41.0	116.4	138.4
Additional Acres										
Crop Planned on Additional Acres										
Total Acreage							1333			

CROP ROTATION TABLE #2



A	B	C	D	E
Expected Crops in the Rotation	Acreage	Historical Yield	Units	Source of Yield Information
Total Net Acreage for Manure Application				

- A. List all of the crop(s) to be grown in the rotation on the acreage that will receive manure.
- B. Indicate the average acreage for each crop over the rotation. For example, if there are 720 suitable acres available for manure and approximately 40 these acres will be used to grow canola, enter 288. The total of column B should add up to Total Net Acreage for Manure Application provided in the Manure Application Field Characteristic Table.
- C. Enter the historical yield average for each crop. Long-term yield averages can be determined using MASC data (<http://www.masc.mb.ca/masc.nsf/index.html?OpenPage>) or on-farm yield records. If on-farm yield records are used, please provide copies.
- D. Enter the units for the yields provided (e.g. bu/acre, tons/acre).
- E. Enter the source of the historical yield average provided.

PART 2 of SITE ASSESSMENT - MARCH 14, 2017

Livestock Technical Review
Site Assessment

“Certain Areas”:

The [Livestock Manure and Mortalities Management Regulation](#) requires the proponent demonstrate sufficient land is available, to the satisfaction of the director, in order to implement an appropriate manure management plan before Manitoba Sustainable Development will issue a permit for a manure storage facility or confined livestock area. Sufficient suitable land must be available for the manure nitrogen and phosphorus that will land applied.

“*Certain Areas*” are defined by the [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98) as areas where the amount of phosphorus in the manure produced annually by livestock in an area of not less than 93.24 km² is greater than two times the annual crop removal rate of P₂O₅ in that area.

In “*certain areas*” it is Manitoba Sustainable Development’s policy to consider a manure storage facility permit if the operation can demonstrate it has access to sufficient suitable land, within a reasonable distance¹⁰, to apply manure at a rate equivalent to one times the crop removal rate of phosphorus. In areas which are not considered to be “*certain areas*”, Manitoba Sustainable Development may consider a manure storage facility or confined area permit, subject to all applicable legislation, if the operation demonstrates it has access to sufficient suitable land to apply manure at a rate equivalent to two times the crop removal rate of phosphorus.

Currently the rural municipalities of Hanover and La Broquerie are considered to be “*certain areas*”. A livestock operation is considered to be located within a “*certain area*” if any part of the operation is located within the defined area. This may include, but not limited to, barn(s), confined livestock area(s), field storage location(s), manure storage facility(ies), and/or spread field(s).

Is the livestock operation located in “*certain areas*” (i.e. Hanover or La Broquerie)?

No

Land Base Requirement Calculation:

It is recommended that proponents use Manitoba Agriculture’s Land Base Calculator to calculate the minimum area required for manure application and contact Manitoba Agriculture at (204) 945-3869 in Winnipeg for assistance with the land base calculator prior to submitting their site assessments.

Table 8-1: Land Base Requirements

Total acres required for crop utilization of the manure N^a	1309	acres
Total acres required for two times crop P₂O₅ removal^a	1183	acres
Total acres required for one times crop P₂O₅ removal^{b,c}	2365	acres

^aAll operations must demonstrate sufficient suitable land for crop N utilization and two times crop P₂O₅.

^bDue to high livestock density and reduced land availability for manure application, all livestock operations proposed in “*certain areas*” (i.e. Hanover and La Broquerie) must demonstrate

sufficient suitable land to balance phosphorus over the long-term (one times crop P_2O_5).

^c Under the Hog Production Pilot Project, pig operations must also demonstrate enough land to balance phosphorus over the long-term (one times crop P_2O_5).

- *Crop Rotation Table attached*
- *Manitoba Agriculture's Land Base Calculator attached*

8.9 Land Base Requirement Summary

By comparing the total suitable land available for manure application with the land required for manure application, state whether sufficient suitable land for manure application:

- has been identified to meet nitrogen utilization
- has been identified for two times the crop removal rate of phosphorus

8.10 Long-Term Environmental Sustainability

The Government of Manitoba has included phosphorus as a nutrient by which applications of manure, synthetic fertilizer and municipal waste sludge to agricultural lands may be limited.

Over the short-term for fields with low phosphorus, regulations allow manure to be applied to meet the nitrogen requirements of the crop. This often results in over-application of phosphorus and a build-up of phosphorus in soils. When soil test phosphorus levels reach 60 ppm Olsen P, manure application rates must consider how much phosphorus will be removed in the harvested portion of the crop. At 60 ppm, but less than 120 ppm Olsen P, the amount of phosphorus that can be applied cannot exceed twice (two times) what the crop can remove in order to slow the build-up of soil phosphorus. Once soil test phosphorus levels reach 120 ppm Olsen P, applications of phosphorus are restricted to no more than what the crop can remove (one times) in order to stop further soil test phosphorus build-up. At 180 ppm Olsen P, no additional phosphorus may be applied.

It should be noted that soil-test phosphorus levels of 60 ppm Olsen P or greater are agronomically very high and at these levels most crops will not benefit from additional phosphorus beyond starter phosphorus. As phosphorus levels build up in soils, the concentration of phosphorus in runoff to waterways increases.

Therefore, to remain environmentally sustainable over a long-term planning horizon of 25 years or more, phosphorus applications from applied manure and other nutrient sources such as commercial fertilizers must be balanced with crop removal to avoid further build-up in soils. Consequently, sufficient land must be available in relatively close proximity to the operation so that manure can be applied at no more than one times the crop removal rate.

I acknowledge that up to N.A acres (one times crop P₂O₅ removal from table above) may be required for the long term environmental sustainability of the operation.

9.0 Mortalities (Dead Animal) Disposal

The [Livestock Manure and Mortalities Management Regulation](#) establishes requirements for the use, management and storage of livestock mortalities in agricultural operations. This helps ensure livestock mortalities are handled in an environmentally sound manner. Winter application, between November 10 of one year and April 10 of the following, of composted mortalities is prohibited.

Type of Disposal:

Rendering

Incineration (in approved incinerator only)

Composting

Burial

Does the proposal include a permanent site for composting mortalities?

No

If yes, a permit to construct a manure treatment facility is required if the composting process utilizes a substantial amount of manure (>15% by weight) as a primary substrate. Please contact Manitoba Sustainable Development at (204) 945-5081 for more information.

9.1 Mass Mortalities

A plan for mass mortalities is in place

What steps will be taken in the case of mass mortalities?

Will contact government officials at that time to formulate a plan

10.0 Project Site Description: Land Use Planning Considerations

For assistance contact your [Community and Regional Planning Regional Office](#).

10.1 Development Plan and Zoning Bylaw

The Planning District or Municipal Development Plan and Zoning By-law adopted under [The Planning Act](#), set policy and regulations for the use and development of land. A proposed livestock operation must comply with the requirements of both documents. In the absence of such documents, the [Provincial Planning Regulation](#) under [The Planning Act](#) applies.

10.2 Development Plan

Every Development Plan must contain a livestock operation policy (LOP) that identifies areas where new or expanded livestock operations may be allowed. It must also set general standards for the location and setback of livestock operations. Identifying the Development Plan's land use designation and policies (for the planning district or municipality that affect the site) will help confirm the project site's compliance. The Development Plan designations for the spread fields (if something other than agricultural) will indicate the potential loss of the fields in the future due to possible development.

Table 10-1: Development Plan

Name of Planning District	MSTW
Development Plan by-law number	1-2014
Land use designation of project site	Agriculture
Livestock operation policies – quote supportive policy numbers	2.10 (See next 3 pages)
Other Development Plan policies – quote supportive policy numbers	RM Thompson By-Law No. 3/08 Clause 40.3
Non-supportive Development Plan policies	

- The Development Plan livestock operation policies support the size and location of the proposed operation.
- The Development Plan designations support the long term use of the proposed spread fields.

<p><i>Development Agreements and Letters-of-Credit</i></p>	<p>9) Aggregate extraction operations may be conditional on the proponent entering into a Development Agreement with a municipal council, which agreement that may require the filing of a letter-of-credit to cover the cost of leaving the site in a safe and environmentally stable condition upon the cessation of operations.</p>
--	--

2.10 Livestock Operations Policies

<p><i>Application Requirements</i></p>	<p>1) No person shall develop or expand a livestock operation unless the Municipal Council or delegate has approved the establishment or expansion. The application must be made by the owner of the operation or by a person authorized by the owner and shall be accompanied by the following information:</p> <ul style="list-style-type: none"> a) A detailed description of the proposed operation; b) The corporate identity and proof of property ownership; c) A legal description of the land on which the proposed development is to occur, by lot, block, subdivision and registered plan numbers; d) The owner's (and applicant if different from owner) name, address, signature, and interest in the land; e) A site plan showing the location of any animal housing facilities, manure storage facilities and other agricultural related facilities relative to the boundaries of the site; f) Servicing needs, and; g) The appropriate application fee.
<p><i>Mutual Separation Distances</i></p>	<p>2) Mutual separation distance will be maintained between livestock production operations and residences not accessory to an operation. These separation distances will be established, consistent with provincial minimum setbacks, in the Zoning By-laws of the RM of Stanley and RM of Thompson to aid in mitigating potential land use conflicts and negative environmental impacts. The RM Councils may, pursuant to <i>The Planning Act</i>, vary the separation distance as provided for in their respective zoning by-laws.</p>

<p><i>Restrictions on Livestock Production Operations</i></p>	<p>3) New or expanding livestock production operations shall not be allowed in areas designated Restricted on Maps 2 and 3 as follows:</p> <ul style="list-style-type: none"> a) within Urban Areas, Emerging Communities, Village Areas, and the Stanley Corridor Area, Miami Golf and Country Club, Ski Birch Area, Deerwood Wildlife Management Area, Pembina Valley Wildlife Management Area, Pembina Valley Provincial Park, Wellington Wildlife Management Area, or designated recreation and open space areas; b) in a groundwater pollution sensitivity area or on hazard lands, as identified by the Provincial government unless appropriate measures have been taken to mitigate potential negative impacts, and; c) on soils generally with a dry land agriculture capability rating of Class 6 or 7, or unimproved organic soils based on detailed soil surveys at a minimum scale of 1:50,000 or better.
<p><i>Livestock Limited</i></p>	<p>4) New livestock operations shall be allowed to establish to a maximum of 299 animal units and existing operations may expand beyond 299 animal units subject to conditional use approval in areas designated Livestock Limited on Maps 2 and 3.</p>
<p><i>Livestock Production Operations (LOPs) – Zoning</i></p>	<p>5) The Zoning By-laws of the RM of Stanley and RM of Thompson shall include regulations for the development of livestock production operations in proximity to these areas. The regulations shall identify the following:</p> <ul style="list-style-type: none"> a) the size of the operations, and; b) the separation distances from adjacent non-farm land uses. <p>Existing livestock production operations within these separation distances (see Maps 2 and 3), shall be allowed to continue, subject to non-conforming provisions in the Zoning By-laws of the RM of Stanley and RM of Thompson, but proposed new or expanded operations shall be subject to this policy.</p>
<p><i>Criteria for New or Expansion</i></p>	<p>6) The RM Councils should consider the following criteria when considering proposed new or expanding livestock production operations that require approval of a</p>

conditional use order in their respective Municipalities:

- a) Based on the information provided by the Technical Review Committee (TRC):
 - i. The type (i.e., cattle, hogs, etc.) and size (i.e., the total number of Animal Units, cumulative across the species) of the operation and its location in relation to the neighbouring land uses;
 - ii. Water supply (i.e., its source and consumption levels);
 - iii. The proposed manure storage system (i.e., earthen lagoon, above ground storage tank, etc.);
 - iv. The nature of the land base (i.e., soils, crop practice, proximity to surface water, etc.);
 - v. Provincial guidelines and regulations governing livestock operations.
- b) Reports from appropriate provincial review agencies, including confirmation of construction above the flood control level and proximity of waterbodies such as lakes, rivers, and wetlands;
- c) Local resident concerns and/or support;
- d) The potential impacts generated by the operation on the provincial highway and municipal road systems;
- e) The need for a development agreement to be entered into between the proponent and the Municipal Council dealing with the affected property and any contiguous land owned or leased by the owner, on one or more of the following matters:
 - i. The timing of construction of any proposed building;
 - ii. The control of traffic;
 - iii. The construction or maintenance, at the owner's expense or partly at the owner's expense, of roads, traffic control devices, fencing, landscaping, shelter belts or site drainage works required to service the livestock operation;
 - iv. The payment of a sum of money to the Municipal Council to be used to construct anything mentioned in subclause iii., and;

10.3 Zoning By-law

Identifying the zoning for the project site, the proposed spread fields and the related zoning provisions, helps determine the project’s compliance and the minimum separation distances needed between the operation and property boundaries and other natural features and land uses. The Zoning By-law contains specific regulations that govern location and setback of livestock operations.

Identify the minimum project site requirements stated in the Zoning By-law.

Table 10-2: Zoning By-law

	Project Site Dimensions	Minimum Zoning By-Law Site Requirements
Minimum Site Area	55.03ac	80 acres
Minimum Site Width	2650ft	600'
Minimum Front Yard	50m as per approval	100m
Minimum Side and Rear Yard	164ft	25'

If any project (front, side or rear) yard site dimensions are less than the Zoning By-law minimum, a Variation Order from the Municipality will be required.

10.4 Separation Distances (Zoning By-law or Provincial Planning Regulation)¹¹

Using the proposed size of the operation (see [Animal Units Calculator](#)) and the type of animal housing and manure storage facility, complete the following table.

Indicate the distance from:

- A. earthen manure storage facility OR B. feedlot and
C. animal confinement facility OR D. non-earthen manure storage facility...

Table 10-3: Separation Distances

...to the following land use features (if applicable)	Indicate minimum separation distance required in the Zoning By-law or Provincial Planning Regulation (If applicable) Check appropriate box(es)		If land use feature is less than the minimum separation distance required in the Zoning By-law or Provincial Planning Regulation	
	<input checked="" type="checkbox"/> B	<input checked="" type="checkbox"/> C	Provide actual distance	Provide location or name of feature (e.g. Red River)
Residence/dwelling	400m	400m		
<u>Designated area</u> ¹² (non-agricultural)	2130m	2130m		
Livestock operation	3200m	3200m		
Other significant features/land uses	400m	400m		

In cases where minimum separation distances are not stated in the Zoning By-law or Development Plan, the minimum separation distances in the Provincial Planning Regulation apply. If any separation distance is less than the Zoning By-law minimum, a Variation Order will be required from the Municipality.

Indicate on a Land Use and Spread Field Map (See [Land Use and Spread Field Map Example](#)¹³):

- a) location of the project site, location and ownership of spread fields
- b) land uses and significant features including dwellings
 - i) within a 1 mile radius of the project site
 - ii) within and adjacent to each spread field.

10.5 Buffer Area from Crown Lands

Indicate in the table below if the proposed livestock operation (project site and spread fields) is located **within 1 mile** of any designated parcel of Crown land which would include: Provincial Park, Wildlife Management Area, Ecological Reserve, Provincial Forest, and Wildlife Refuge/Sanctuary. If applicable, also indicate the name of the Designated Crown Land.

Please complete the following table.

Table 10-4: Buffer Areas

Type of Designated Crown Land	Distance from perimeter of Designated Crown Land	Name of Designated Crown Land (e.g. Spruce Woods Provincial Park)
Provincial Park	<input type="checkbox"/> 1 mile or less <input type="checkbox"/> Greater than 1 mile	
Wildlife Management Area	<input type="checkbox"/> 1 mile or less <input type="checkbox"/> Greater than 1 mile	
Ecological Reserve	<input type="checkbox"/> 1 mile or less <input type="checkbox"/> Greater than 1 mile	
Provincial Forest	<input type="checkbox"/> 1 mile or less <input type="checkbox"/> Greater than 1 mile	
Wildlife Refuge/Sanctuary	<input type="checkbox"/> 1 mile or less <input type="checkbox"/> Greater than 1 mile	

If any Crown land parcel is to be utilized as part of the proposed planned works where the proposed works will involve the installation of infrastructure (e.g., pipe/hose) that will be placed on the surface of the land, the appropriate Crown land disposition may be required (e.g., General Permit/Work Permit¹⁴). The proponent is encouraged to contact the Regional Lands Manager with Manitoba Sustainable Development for further discussion. Contact the Crown Lands and Property Agency at <http://clp.gov.mb.ca> or toll free at 1-866-210-9589 or 1-204-239-3510.

10.6 Setback Distances

Use the following table to indicate setback distances, as required under the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#).

Table 10-5: Setback Distances

Feature	Structures	Minimum setback distance required (m)	Actual Setback distance (m)	Provide location or name of feature (e.g. Red River)
Surface watercourses, sinkholes, spring or well	Manure storage facility	100 m	N.A.	
	Field storage	100 m	N.A.	
	Composting site	100 m	N.A.	
	Confined livestock area	100 m	> 100m	
Property Line	Manure storage facility	100 m	N.A.	
	Composting site	100 m	N.A.	
	Confined livestock area	100 m	50m	

If any setback distances have not been met, please provide explanation below:

Refer to RM of Thompson Variation Order No.4/16

hereby attached. **See next page**

THE RURAL MUNICIPALITY OF THOMPSON

UNDER THE PLANNING ACT

VARIATION ORDER

VARIATION ORDER NO. 2/16

WHEREAS Kroeker Farms Ltd., owners of the property legally described as the North East ¼ 8-4-5 WPM, Miami, Manitoba applied to the Council of the Rural Municipality of Thompson to vary the Rural Municipality of Thompson Zoning By-law No.3/08 provided under:

Part 6, Section 94 of *The Planning Act* as it applies to the property in order to vary the established requirements as follows:

From (zoning requirements): to establish and allow the property line distance to 50 meters from 100 meters AND to vary the zoning requirement from 80 acres to 50 acres
- for the purpose of subdividing

And after careful consideration of the application and any representations made for or against the variation sought by the applicant, the Council of the Rural Municipality of Thompson in meeting duly assembled this 24th day of March A.D. 2016

APPROVED the said Variation.

This order shall expire if not acted upon within 12 months of the date of making.



Jody Oakes
Chief Administrative Officer



Brian Callum
Reeve

11.0 Truck Haul Routes and Access Points¹⁵

One consideration with new or expanding livestock operations is the potential impact on existing public roads (municipal and provincial), access and the need for improvements or mitigation. Complete the following table.

Table 11-1: Truck Haul Routes and Access Points

Vehicle Type	Estimated Average Number of Times per Day Accessing		Access from PTH/PR onto site will mainly require a Left or Right Hand Turn Please check one				Access onto PTH/PR from site will mainly require a Left or Right Hand Turn Please check one				
	Provincial Trunk Highway (PTH)	Provincial Road (PR)	Provincial Trunk Highway (PTH)		Provincial Road (PR)		Provincial Trunk Highway (PTH)		Provincial Road (PR)		
			LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
Truck	5	5									
Tractor Trailer	4	4									
Other, specify											

Identify what roads and access points will be used for the proposed operation? (See [Truck Haul Routes and Access Points Map](#) for an example).

Truck Haul Routes and Access Point Map attached **See next page**

12.0 Conservation Data Centre Report

A Conservation Data Centre Report must be requested and the response attached to this site assessment. The request may be submitted electronically at: www.gov.mb.ca/conservation/cdc.

See page after Truck Haul Map

Were rare species identified in the Conservation Data Centre Report?

Yes

No

TRUCK HAUL ROUTES & ACCESS POINTS MAP



Road MB-432

Feedlot Operation

Road 20N

Highway #3

Road 28W

Canadian Fossil Discovery Centre

Morden

City of Morden

Johan Botha

To: Cornie Rempel
Subject: RE: Birkridge feeders

From: Friesen, Chris (SD) <Chris.Friesen@gov.mb.ca>
Date: Fri, Mar 10, 2017 at 8:07 AM
Subject: RE: Birkridge feeders
To: Cornie Rempel <birklandfarm@gmail.com>

Hi Conrad

Apologies for the delayed reply.

Thank you for your information request. I completed a search of the Manitoba Conservation Data Centre's rare species database and found no occurrences at this time for your area of interest.

The information provided in this letter is based on existing data known to the Manitoba Conservation Data Centre at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflect our current state of knowledge. **An absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present;** in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments.

Because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request. Please contact the Manitoba CDC for an update on this natural heritage information if more than six months pass before it is utilized.

Third party requests for products wholly or partially derived from Biotics must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using Biotics data, as follows as: Data developed by the Manitoba Conservation Data Centre; Wildlife & Fisheries Branch, Manitoba Sustainable Development.

This letter is for information purposes only - it does not constitute consent or approval of the proposed project or activity, nor does it negate the need for any permits or approvals required by the Province of Manitoba.

We would be interested in receiving a copy of the results of any field surveys that you may undertake, to update our database with the most current knowledge of the area.

If you have any questions or require further information please contact me directly at (204) 945-7747.

Chris Friesen, Coordinator, Manitoba Conservation Data Centre, 204-945-7747, chris.friesen@gov.mb.ca, <http://www.manitoba.ca/conservation/cdc/>

13.0 Supporting Documents

Check the supporting documents included in this submission:

- Contact Information and Privacy and Publication Notice
- Location Map (shows proposed project within rural municipality)
- Project Site Plan (proposed operation showing current and proposed structures)
- Animal Units Calculator
- Water Requirement Calculator

- Manure Production Calculator

- Manure Application Field Characteristics Table
- Crop Rotation Table
- Recent manure application field soil sample results (Olsen Phosphorus – ppm at 0-6 inch depth)
- Manitoba Agriculture Land Base Calculator

- Land Use and Spread Field Map (location and ownership of operation, location and distance to non-agricultural uses, development plan designation, zoning for project site and spread fields)
- Truck Haul Routes and Access Points Map (with routes and access points on municipal/provincial roads and/or provincial trunk highways)
- Response from the Conservation Data Centre
- Other, please specify:

Engineering Design Report and Stamped Drawings

15.0 Declaration

I do hereby verify that the information contained in the Site Assessment, and all required Supporting Documents, are accurate and complete to my knowledge.

Date: 2016 / 08 / 26
(YYYY/MMM/DD)

Name: Johan Botha, P.Eng.
(Please Print Clearly)

Signature: 

Attached: RM of Thompson By-Law 3/08

- 4) Farm buildings or structures shall be a minimum distance of 30.48 m. (100.00 ft.) from any lot line.
- 5) The keeping of animals on a site:
 - a) shall not be allowed in front of the dwelling unit in the RR: Rural Residential Zoning District; and
 - b) shall not interfere with the use and enjoyment of adjacent land uses.
- 6) For the purposes of this Section of the By-law, the calculation of Animal Units shall be cumulative across the species as determined on the basis of Table 3 in Appendix D, or as determined by the Province of Manitoba.
- 7) A Residential Related Farm can only be developed in conjunction with a Single Family or Farmstead Dwelling.

40.0 Livestock Production Operations

- 1) The regulations of this Section of the By-law shall apply to Livestock Production Operations.

40.1 General

- 1) When considering permit applications for Livestock Production Operations, the Designated Officer and Council shall consider:
 - a) the size of the operation and its location in relation to neighbouring land uses;
 - b) topographical, physical and natural features of the area (i.e. treed, windbreaks, open crop, soil types, water table, etc.);
 - c) the groundwater conditions;
 - d) local resident concerns;
 - e) the proposed water supply and water supply requirements;
 - f) the potential impacts generated by the operation on the Provincial highway and Municipal road systems; and
 - g) Provincial guidelines and regulations.
- 2) Where a Livestock Production Operation is located within 804.65 m. (2,640.00 ft.) of one or more other Livestock Production Operations, and where these operations are owned, operated or controlled by the same person, including a corporation, co-operative, partnership or limited partnership, or where they share common manure storage facilities and raise the where they raise the same type of livestock, they shall be deemed to be one Livestock Production Operation for the purposes of this By-law.
- 3) All new or expanding Livestock Production shall:

- a) meet or exceed all applicable Provincial and Federal government environmental and health regulations in force at the time of the permit application;
- b) obtain a development or building permit from the RM of Thompson prior to any development activity taking place on the site;
- c) meet or exceed any applicable site regulations;
- d) have an adequate land base that is either owned or leased by the proponent to carry out the proposed Livestock Production Operation; and
- e) ensure manure storage facilities must be designed, built and operated in conformity with all relevant Provincial regulations.

40.2 Livestock Production Operations Producing up to and Including 299 Animal Units.

40.2.1 Mutual Separation Regulations

- 1) Except for the dwelling unit of the operator of the Livestock Production Operation, mutual separation distances shall be maintained between Livestock Production Operations and a dwelling unit (including a rural residence) or designated residential or recreational area in accordance with Table 3:

TABLE 3
Mutual Separation Regulations

Size of Livestock Operation in Animal Units	Minimum Separation Distance			
	From Single Residence		From Designated Residential or Recreational Area	
	To Earthen Manure Storage Facility	To Animal Housing Facility and Non-earthen Manure Storage Facility	To Earthen Manure Storage Facility	To Animal Housing Facility and Non-earthen Manure Storage Facility
10 to 100	200.00 m. (656.00 ft.)	100.00 m. (328.00 ft.)	800.00 m. (2,625.00 ft.)	530.00 m. (1,739.00 ft.)
101 to 200	300.00 m. (984.00 ft.)	150.00 m. (492.00 ft.)	1,200.00 m. (3,937.00 ft.)	800.00 m. (2,625.00 ft.)
201 to 299	400.00 m. (1,312.00 ft.)	200.00 m. (656.00 ft.)	1,600.00 m. (5,249.00 ft.)	1,070.00 m. (3,511.00 ft.)

40.3 Livestock Production Operations Producing More Than 299 Animal Units

40.3.1 Mutual Separation Regulations

- 1) Except for the dwelling unit of the operator of the Livestock Production Operation, mutual separation distances shall be maintained between Livestock Production Operations and a dwelling unit (including a rural residence) or designated residential or recreational area in accordance with Table 4:

**TABLE 4
Mutual Separation Regulations**

Size of Livestock Operation in Animal Units	Minimum Separation Distance			
	From Single Residence		From Designated Residential or Recreational Area	
	To Earthen Manure Storage Facility	To Animal Housing Facility and Non-earthen Manure Storage Facility	To Earthen Manure Storage Facility	To Animal Housing Facility and Non-earthen Manure Storage Facility
300 to 400	450.00 m. (1,476.00 ft.)	225.00 m. (738.00 ft.)	1,800.00 m. (5,906.00 ft.)	1,200.00 m. (3,937.00 ft.)
401 to 800	500.00 m. (1,640.00 ft.)	250.00 m. (820.00 ft.)	2,000.00 m. (6,561.00 ft.)	1,330.00 m. (4,364.00 ft.)
801 to 1600	600.00 m. (1,968.00 ft.)	300.00 m. (984.00 ft.)	2,400.00 m. (7,874.00 ft.)	1,600.00 m. (5,249.00 ft.)
1601 to 3200	700.00 m. (2,297.00 ft.)	350.00 m. (1,148.00 ft.)	2,800.00 m. (9,186.00 ft.)	1,870.00 m. (6,135.00 ft.)
3201 to 6400	800.00 m. (2,625.00 ft.)	400.00 m. (1,312.00 ft.)	3,200.00 m. (10,499.00 ft.)	2,130.00 m. (6,988.00 ft.)
6401 to 12800	900.00 m. (2,953.00 ft.)	450.00 m. (1,476.00 ft.)	3,600.00 m. (11,811.00 ft.)	2,400.00 m. (7,874.00 ft.)
12801+	1,000.00 m. (3,281.00 ft.)	500.00 m. (1,640.00 ft.)	4,000.00 m. (13,123.00 ft.)	2,670.00 m. (8,760.00 ft.)

current
expanded

40.4 Development Permit Applications

- 1) For Livestock Production Operations that produce more than 300 Animal Units, in addition to the standard development application submission regulations, the applicant may also be requested to submit the following information:
 - a) a detailed description of the proposed operation;
 - b) the corporate identity and proof of property ownership;
 - c) a legal description of the land on which the proposed development is to occur, by lot, block, subdivision and registered plan numbers;
 - d) the owner's (and applicant if different from owner) name, address, signature and interest in the land;
 - e) a site plan showing the location of housing, storage and other facilities relative to the boundaries of the site;
 - f) servicing needs;

- g) analyses of geology, aquifers, and groundwater supply, soils and soil profiles, crop production/nitrogen/phosphorus utilization, and surface drainage relative to the proposed operation;
- h) a report from the Technical Review Committee indicating whether the proposed Livestock Production Operation complies with the Manitoba Farm Practices Guidelines;
- i) a letter signed by the applicant and agricultural engineer (or other qualified professional) certifying the contents of all information submitted as part of the application; and
- j) the appropriate application fee including public notification costs.

40.5 Animal Units

- 1) For the purposes of this Section of the By-law, the calculation of Animal Units shall be cumulative across the species pursuant to Table 5 in Appendix D, or as determined by the Province of Manitoba.

40.6 Conditional Use Hearing

- 1) Where a conditional use hearing is required, Council will not set a hearing date until all of the development permit application information as specified in Section 44.4 of this By-law has been submitted by the applicant to the Designated Officer.
- 2) Prior to any hearing of an application for a conditional use permit, Council shall give notice of the hearing by regular mail to affected ratepayers in accordance with the *Act*. The notice shall advise affected ratepayers of the date, time and place of the hearing and the intent of the application. The applicant shall be responsible for all public advertising costs.
- 3) An application for a conditional use permit shall be processed and approved or rejected in accordance with the *Act*. If warranted, Council may want to consider imposing development conditions to ensure that the proposed Livestock Production Operation will not negatively impact the community. This could include:
 - a) the protection of a watercourse, or other body of water;
 - b) the nature and frequency of soil testing;
 - c) the regulation for covered manure storage;
 - d) additional buffering measures such as increased yard setbacks;
 - e) specific performance standards dealing with odour control such as the planting of trees or shelterbelts around open storage areas to reduce the movement of air over manure surfaces;
 - f) the construction of a fence around proposed manure storage facilities for safety purposes;

- g) the owner/applicant upgrading certain Municipal services such as roads and ditches;
- h) a letter of credit related to Municipal improvements such as road or drainage works; and
- i) liability insurance protecting the Municipality from any future legal claim relating to the operation of the Livestock Production Operation.
- j) the proponent providing Council or the Designated Officer with a copy of the construction permit for the manure storage facility issued by Manitoba Conservation prior to developing the livestock site.

40.7 Refusal of a Conditional Use Permit

- 1) Council may refuse a conditional use permit for a Livestock Production Operation if, in its opinion, the proposal:
 - a) does not comply with the regulations of this By-law; and/or
 - b) does not comply with applicable provincial regulations.

41.0 Anhydrous Ammonia Facilities

- 1) An Anhydrous Ammonia Facility shall be located at least:
 - a) 1.61 km. (1.00 mile) from the RG: Residential General Zoning District;
 - b) 792.48 m. (2,600.00 ft.) from any Residential, Basic Service and Community, Educational, Recreational and Cultural Service Use Class developments; and
 - c) 100.00 m. (328.08 ft.) from the edge of the rights-of-way of a Provincial Trunk Highway, Provincial Road or Provincial Access Road.

42.0 Small Animal Breeding and Boarding Establishment

A Small Animal Breeding and Boarding Establishment shall comply with the following regulations:

- 1) They shall comply with all applicable Provincial and Municipal animal control and licensing By-laws.
- 2) The Small Animal Breeding and Boarding Establishment shall be carried out by an occupant of the dwelling unit.
- 3) One assistant, who is not a resident of the dwelling unit of the Small Animal Breeding and Boarding Establishment, may operate in and from