

*Submitted on March 19 2024*



**Part 2 – Technical Requirements**

Application under the Agricultural Operation Practices Act for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

<b>NRCB USE ONLY</b>	Application number <u>RA24011</u>	Legal land description <u>SW 28-32-28 W4M</u>
<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Registration <input type="checkbox"/> Authorization <input type="checkbox"/> Amendment		

**APPLICATION DISCLOSURE**

This information is collected under the authority of the Agricultural Operation Practices Act (AOPA), and is subject to the provisions of the Freedom of Information and Protection of Privacy Act. This information is public unless the NRCB grants a written request that certain sections remain private.

**Any construction prior to obtaining an NRCB permit is an offence and is subject to enforcement action, including prosecution.**

I, the applicant, or applicant's agent, have read and understand the statements above, and I acknowledge that the information provided in this application is true to the best of my knowledge.

March 18, 2024  
Date of signing  
Bertens Holsteins Ltd.  
Corporate name (if applicable)

Signature  
Ad. Bertens  
Print name

**GENERAL INFORMATION REQUIREMENTS**

**Proposed facilities:** list all proposed confined feeding operation facilities and their dimensions. Indicate whether any of the proposed facilities are additions to existing facilities. (attach additional pages if needed)

Proposed facilities	Dimensions (m) (length, width, and depth)
1. <u>Freestall Barn.</u> Extension to the existing freestall barn	<u>433' x 145'</u> 132 m x 44.2 m
2. <u>Heifer shelter.</u>	<u>384' x 40'</u>
3. <u>Manure Storage.</u>	<u>80' x 140'</u>

**Existing facilities:** list ALL existing confined feeding operation facilities and their dimensions

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
<u>See permit RA20035.</u>		

**NRCB USE ONLY**

Confirmed, existing CFO





## Part 2 – Technical Requirements



Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

### DECLARATION AND ACKNOWLEDGMENT OF APPLICANT CONCERNING WATER ACT LICENCE

Issued by Alberta Environment and Protected Areas (EPA) for a confined feeding operation (CFO)

Date and sign one of the following four options

#### OPTION 1: Applying through the NRCB for both the AOPA permit and the Water Act licence

I **DO** want my water licence application coupled to my AOPA permit application.

Signed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Signature of Applicant or Agent

#### OPTION 2: Processing the AOPA permit and Water Act licence separately

1. I (we) acknowledge that the CFO will need a new water licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. I (we) request that the NRCB process the AOPA application **independently** of EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant the *Water Act* licence application.
5. I (we) acknowledge that any such construction or livestock populating will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water licence application number(s) \_\_\_\_\_

Signed this 25 day of March, 2024.

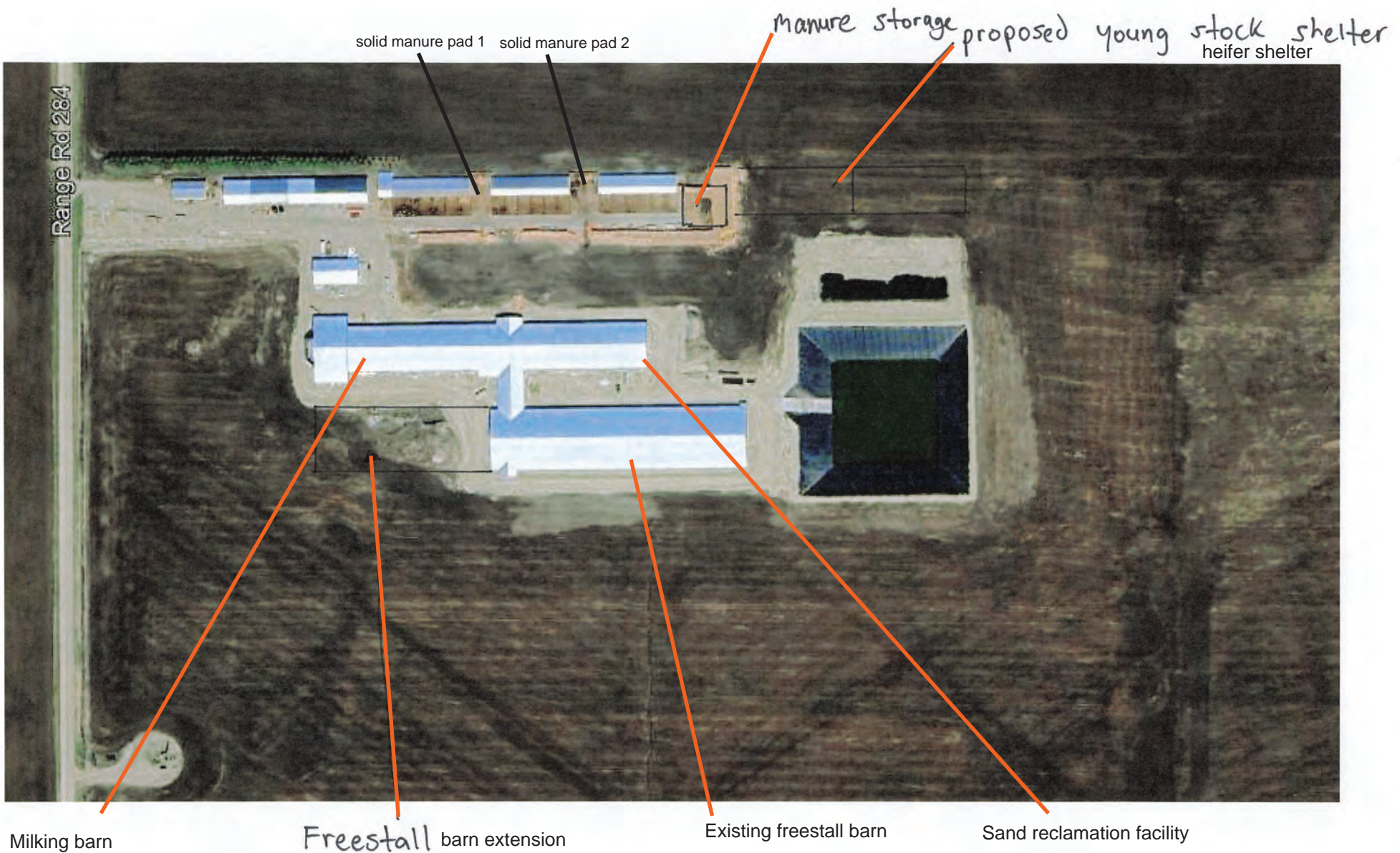
\_\_\_\_\_  
Signature of Applicant or Agent

#### OPTION 3: Additional water licence not required

1. I (we) declare that the CFO will not need a new licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. **Provide:** Water license number(s) or water conveyance agreement details \_\_\_\_\_

Signed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Signature of Applicant or Agent



Range Rd 284

solid manure pad 1 solid manure pad 2

manure storage proposed young stock shelter heifer shelter

Milking barn

Freestall barn extension

Existing freestall barn

Sand reclamation facility

# Part 2 – Technical Requirements

Application under the Agricultural Operation Practices Act for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

## GENERAL ENVIRONMENTAL INFORMATION

(complete this section for the worst case of the existing facility which is the closest to water bodies or water wells and for each of the proposed facilities)

Facility description / name (as indicated on site plan)

Existing: Synthetic Lagoon

Proposed 1: Freestol barn

Proposed 2: Heifer Shelter

Proposed 3: manure storage

Facility and environmental risk information		Facilities				NRCB USE ONLY	
		Existing	Proposed 1	Proposed 2	Proposed 3	Meets requirements	Comments
Flood plain information	What is the elevation of the floor of the lowest manure storage or collection facility above the 1:25 year flood plain or the highest known flood level?	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Not in flood plain
	Surface water information	How many springs are within 100 m of the manure storage facility or manure collection area?	0	0	0	0	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption
	How many water wells are within 100 m of the manure storage facility or manure collection area?	0	0	0	0	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	None within 100 m
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	> 100 m	> 800 m	> 800 m	> 800 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Creek 645 m to the West
Groundwater information	What is the depth to the water table?		> 7.5 m	> 7.5	> 7.5 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Confirmed per RA20035
	What is the depth to the groundwater resource/aquifer you draw water from?	21 m	21 m	21 m	21 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	9.1 m sandstone

Additional information (attach supporting information, e.g. borehole logs, records, etc. you consider relevant to your application)

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

**NRCB USE ONLY**  
**ENVIRONMENTAL RISK SCREENING INFORMATION**

ERST for **proposed** facilities

Facility	Groundwater score	Surface water score	File number
Freestall barn, feedlot pens, manure pad.	See DS RA24011,	application meets AOPA technical requirements	

ERST for **existing** facilities

Facility	Groundwater score	Surface water score	File number
Freestall barn	Low	Low	RA20035
Synthetic Lagoon	Low	Low	RA20035
Milking barn	Low	Low	RA20035
Loose housing barn	Low	Low	RA20035
Solid manure storage pad	Low	Low	RA20035
Feedlot pens	Low	Low	RA20035

ERST related comments:

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

**NRCB USE ONLY**

**WATER WELL AND SURFACE WATER INFORMATION**

Well IDs:                              ID 253956                                        ID 2089395                              \_\_\_\_\_

          ID 258249                              \_\_\_\_\_

Surface water related concerns from directly affected parties or referral agencies:                     YES  NO

Groundwater related concerns from directly affected parties or referral agencies:                     YES  NO

**Water wells**                     N/A

If applicable, exemption for 100 m distance requirements applied:     YES     NO                    Condition required:     YES     NO

**Surface water**                     N/A

If applicable, exemption for 30 m distance requirements applied:     YES     NO                    Condition required:     YES     NO

**Water Well Exemption Screening Tool**                     N/A

Water Well ID	Preliminary Screening Score	Secondary Screening Score	Facility

**Groundwater or surface water related comments:**





# Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 2089395  
GoA Well Tag No. A4324  
Drilling Company Well ID  
Date Report Received 2021/11/19

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

Well Identification and Location										Measurement in Metric		
Owner Name		Address				Town		Province		Country	Postal Code	
BERTENS HOLSTEINS		P.O. BOX 19 RR4 SITE 9				OLDS		ALBERTA		CANADA	T4H 1T8	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description			
	5	28	32	28	4							
Measured from Boundary of						GPS Coordinates in Decimal Degrees (NAD 83)				Elevation		
_____ m from						Latitude <u>51.772477</u> Longitude <u>-113.924844</u>				_____ 980.00 m		
_____ m from						How Location Obtained				How Elevation Obtained		
						Differential corrected handheld GPS 5-10m				Differential corrected handheld GPS 5-10m		

Drilling Information	
Method of Drilling Rotary - Air	Type of Work New Well
Proposed Well Use Stock	

Formation Log			Measurement in Metric		Yield Test Summary			Measurement in Metric			
Depth from ground level (m)	Water Bearing	Lithology Description	Recommended Pump Rate	159.11 L/min	Test Date	Water Removal Rate (L/min)	Static Water Level (m)				
6.71		Brown Sandy Clay & Rocks	2021/10/18	227.30	2021/10/18	227.30	15.15				
7.01		Gray Shale									
8.23		Gray Fine Grained Sandstone									
19.81		Gray Shale									
22.86		Gray Siltstone									
28.35		Light Gray Shale									
32.92	Yes	Gray Medium Grained Sandstone									
33.53		Gray Shale									
					Well Completion			Measurement in Metric			
					Total Depth Drilled	Finished Well Depth	Start Date	End Date			
					33.53 m	33.53 m	2021/10/18	2021/10/18			
					Borehole						
					Diameter (cm)	From (m)	To (m)				
					15.56	0.00	27.13				
					13.02	27.13	33.53				
					Surface Casing (if applicable)		Well Casing/Liner				
					Steel	Plastic					
					Size OD :	16.83 cm	Size OD :	11.43 cm			
					Wall Thickness :	0.478 cm	Wall Thickness :	0.544 cm			
					Bottom at :	12.19 m	Top at :	8.23 m			
										Bottom at :	33.53 m
					Perforations						
					From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)		
					27.43	33.53	0.051	7.62	2.54		
					Performed by Machine						
					Annular Seal Bentonite Slurry						
					Placed from 0.00 m to 27.13 m						
					Amount 4.00 Bags						
					Other Seals						
					Type	At (m)					
					Drive Shoe	12.19					
					Shale Trap	27.13					
					Shale Trap	26.82					
					Screen Type						
					Size OD :	_____ cm					
					From (m)	To (m)	Slot Size (cm)				
					Attachment _____						
					Top Fittings _____			Bottom Fittings _____			
					Pack						
					Type _____	Grain Size <sup>1</sup> _____					
					Amount _____						

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well MICHAEL SCHMIDT	Certification No 90316A
Company Name DARCYS DRILLING SERVICES LTD.	Copy of Well report provided to owner Yes
	Date approval holder signed 2021/11/12



# Water Well Drilling Report

**View in Imperial** **Export to Excel**

GIC Well ID 2089395  
GoA Well Tag No. A4324  
Drilling Company Well ID  
Date Report Received 2021/11/19

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

Well Identification and Location										Measurement in Metric		
Owner Name BERTENS HOLSTEINS		Address P.O. BOX 19 RR4 SITE 9				Town OLDS		Province ALBERTA		Country CANADA		Postal Code T4H 1T8
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description			
	5	28	32	28	4							
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					Elevation		
_____ m from					Latitude <u>51.772477</u> Longitude <u>-113.924844</u>					<u>980.00 m</u>		
_____ m from					How Location Obtained					How Elevation Obtained		
					Differential corrected handheld GPS 5-10m					Differential corrected handheld GPS 5-10m		

Additional Information										Measurement in Metric		
Distance From Top of Casing to Ground Level					<u>55.88 cm</u>							
Is Artesian Flow					Is Flow Control Installed							
Rate _____ L/min					Describe _____							
Recommended Pump Rate					<u>159.11 /L/min</u>		Pump Installed		Depth		m	
Recommended Pump Intake Depth (From TOC)					<u>25.91 m</u>		Type		Make		H.P.	
					Model (Output Rating)							
Did you Encounter Saline Water (>4000 ppm TDS)					Depth		m		Well Disinfected Upon Completion <b>Yes</b>			
Remedial Action Taken					Gas		Depth		m		Geophysical Log Taken	
					Submitted to ESRD							
Additional Comments on Well					Sample Collected for Potability				Submitted to ESRD			
ADDITIONAL 2 PAILS OF PELLETS AND 2 BAGS OF CHIPS USED IN ANNULAR SEAL 2GPG HARD												

Yield Test			Taken From Top of Casing		Measurement in Metric	
Test Date	Start Time	Static Water Level	Depth to water level			
2021/10/18	6:00 PM	15.15 m	Pumping (m)	Elapsed Time	Recovery (m)	
				Minutes:Sec		
<b>Method of Water Removal</b>				1:00	15.32	
Type <u>Air</u>				2:00	15.24	
Removal Rate <u>227.30 L/min</u>				3:00	15.20	
Depth Withdrawn From <u>30.48 m</u>				4:00	15.18	
				5:00	15.17	
				6:00	15.17	
				7:00	15.16	
				8:00	15.16	
				9:00	15.16	
				10:00	15.15	
				20:00	15.15	
				120:00	15.15	
If water removal period was < 2 hours, explain why						

Water Diverted for Drilling			
Water Source	Amount Taken	Diversion Date & Time	
TOWN OF PONOKA	5455.31 L	2021/10/17 6:00 PM	

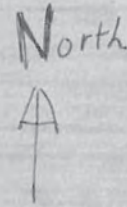
Contractor Certification			
Name of Journeyman responsible for drilling/construction of well		Certification No	
MICHAEL SCHMIDT		90316A	
Company Name		Copy of Well report provided to owner	
DARCY'S DRILLING SERVICES LTD.		Yes	
		Date approval holder signed	
		2021/11/12	

# Bertens 3 Dairy Project

Write a description for your map.

## Legend

□ Untitled Polygon



Owned.  
Bertens Holsteins Ltd.

Bertens  
Holsteins

NW 28-32-28-W4

284

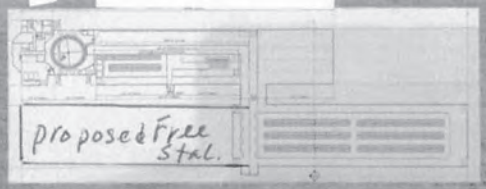
Water well.

>50' From Property  
boundaries  
manure storage North and East.

proposed young  
Stock  
Shelter.

Bertens  
Holsteins

Water  
Well.



proposed Free  
Stal.

Existing  
lagoon.

SW 28-32-28-W4

Google Earth

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Image © 2020 CNES / Airbus



400 m

Page 9 of 25

## Part 2 – Technical Requirements

Application under the Agricultural Operation Practices Act for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

### DISTANCE OF ANY MANURE STORAGE FACILITY (EXISTING OR PROPOSED) TO NEIGHBOURING RESIDENCES

Neighbour name(s) (owner Richardson Bros.)	Legal land description	Distance (m)	NRCB USE ONLY				
			Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	Meets regulations
① Jared Giles.	NE 29-32-28-W4.	685 m.	Ag	1	675 m	Yes	Yes with waiver
② Leach Farms.	NW 27-32-28-W4.	>1000 m	Ag	1	1026 m	N/A	Yes
③ Viney.	SW 33-32-28-W4.	>1000 m	Ag	1	1025 m	N/A	Yes
	NW 22-32-28 W4		CR	2	1505 m	N/A	Yes

### LAND BASE FOR MANURE AND COMPOST APPLICATION (complete only if an increase in livestock or manure production will occur)

Name of land owner(s)*	Legal land description	Usable area** (ha)	Soil zone ***	NRCB USE ONLY	
				Usable area (ha)	Agreement attached (if required)
Venneman	SW 29-32-28-W4.	160	B. Black		Yes
See seeding plan. 2024.		2833	B		Yes
See attachment manure spreading agreement.					Yes
Venneman.	NW 20-32-28-W4.	125	B		Yes
ML Dodd/Venneman.	NE 25-32-29-W4.	155	B.		Yes
Total				1806 ha with all	agreements and owned below.

total. 3273 More agreements below

\* If you are **not** the registered landowner, you must attach copies of land use agreements signed by all landowners.

\*\* Available manure spreading area (excluding setback areas from residences, common bodies of water, water wells, etc. as identified in Agdex 096-5 Manure Spreading Regulations)

\*\*\* Brown, dark brown, black, grey wooded, or irrigated

**Additional information (attach any additional information as required)**

Applicant has provided adequate land base with agreements attached.



MDS

Operator/operation name: Bertens Holsteins Ltd.

Address: [Redacted] Postal Code: [Redacted]

Legal land location of confined feeding operation: SW. 28-32-28-W4

I have requested the residence owner(s) named below to waive the required minimum distance separation (MDS) to their residence for the Agricultural Operation Practices Act (AOPA) permit application identified above. In making this request, I have provided the owner(s) with an opportunity to review my permit application and a copy of the Natural Resources Conservation Board (NRCB) Fact Sheet "Minimum Distance Separation (MDS) Waivers" available on the NRCB website at www.nrcb.ca. I have also explained:

- The MDS requirement set out in section 3 of the Standards and Administration Regulation of AOPA. I have advised the owner(s) that section 3(6)(a) of the Standards and Administration Regulation allows this requirement to be waived by the owners of residences, if they agree in writing to grant a waiver;
- That my proposed development does not meet the required MDS to the owner's residence; and,
- That this waiver applies only to this application as described. An increase in livestock capacity, annual manure production, level of odour production, change to the site plan or change to a facility that would increase the MDS would require a new waiver.

Following is a summary of the proposed development:

- The current scope of my confined feeding operation (CFO), including the type, number, and category of livestock, if any, is:  
700 Milk cows plus associated dry cows and replacement and 1250 Beef finishers.
- My application for a new AOPA permit proposes the following changes to the existing livestock category, type and/or capacity at my CFO:  
addition of 700 Milk cows plus associated dry cows and replacements
- The proposed new CFO facility(ies), or changes to the existing CFO facilities, including manure storage, manure storage volume and any other pertinent details, if any, are (attach a site layout plan if available):  
See part 11

I the applicant understand that the waiver is not valid unless ALL registered owners of the residence sign this document.

Permit Applicant: [Redacted] Date: April 10 2024

\* Residence owner(s) to initial: [Redacted]

# Minimum Distance Separation (MDS) Waiver (declaration)

## Residence owner(s) information

ALL Names on land title: Richardson Bros (old) Ltd

Legal land location of residence(s): NE 29-32-28-W7

Telephone number(s): [REDACTED] Email address(es): [REDACTED]

Address(es) and Postal code(s): ?

*! Please note that personal contact information is for NRCB use ONLY and not publicly released*

I am/we are the legal landowner(s) of a residence(s) located at the above noted legal land location/address:

- o I/we have read the NRCB Fact Sheet "Minimum Distance Separation (MDS) Waivers";
- o I/we have discussed this application with the applicant and understand its potential impacts to our residence(s);
- o I/we understand that the application does not meet the MDS requirement to my/our residence(s), under the *Agricultural Operation Practices Act (AOPA)*;
- o I/we understand that this waiver is not valid unless signed by ALL parties identified on the land title as owners;
- o I/we are not obligated to waive the MDS requirement to our residence(s);
- o I/we understand that if I/we choose to waive the MDS requirement, I/we can revoke the waiver, by providing written notice to the NRCB approval officer, as set out in the "Minimum Distance Separation (MDS) Waivers" Fact Sheet; and
- o I/we understand that this waiver is a public document.

Having considered my/our rights, I/we hereby waive the MDS requirement to my/our residence, with respect to application number RA 20025.

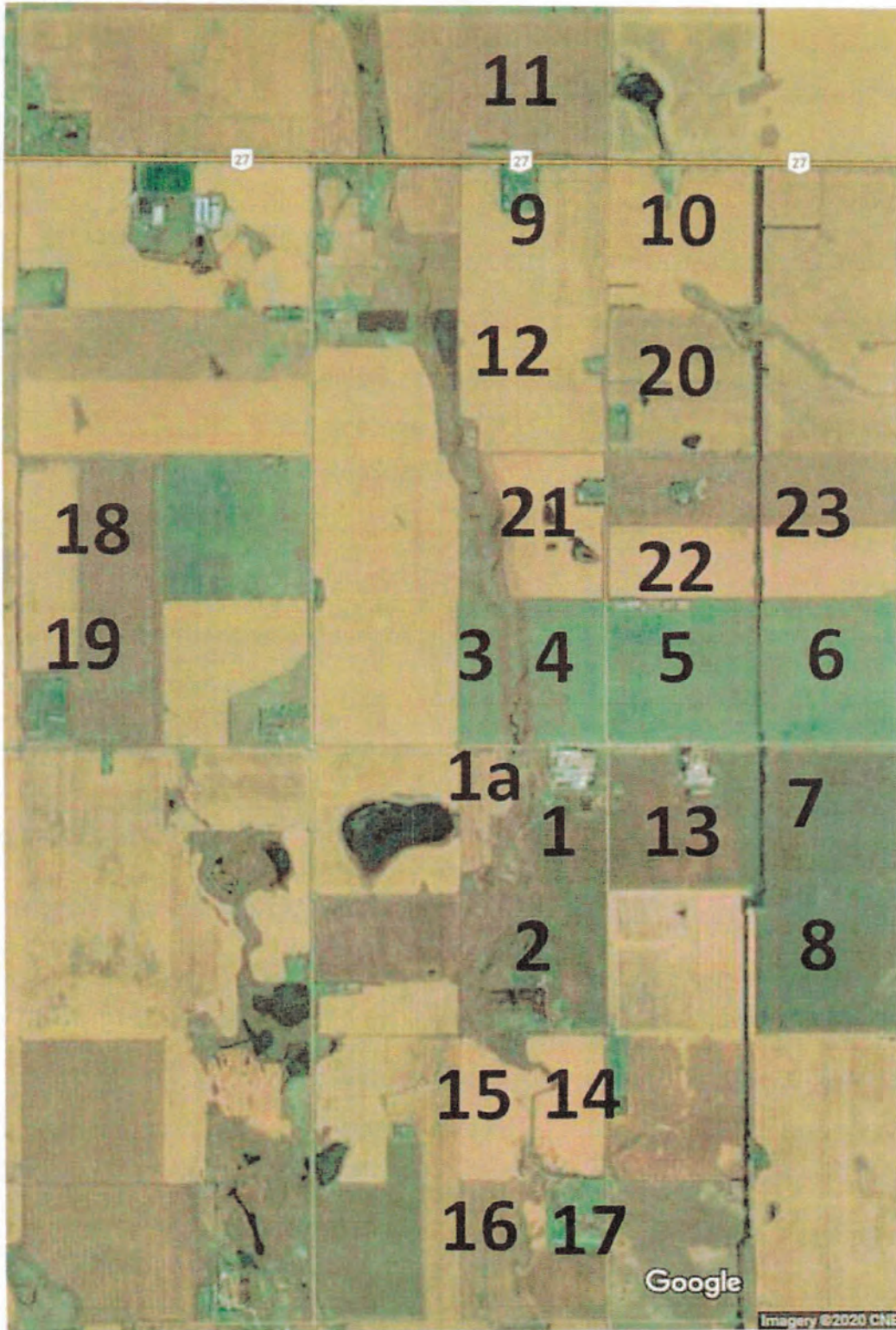
\* [REDACTED] \_\_\_\_\_  
Signatures of all residence owner(s) on title

Frank Richardson  
Printed names of all residence owner(s) on title

Date: April 10 2024

# Bertens Holsteins Ltd

Ad & Anja Bertens





# Bertens Holsteins Ltd- Seeding Plan 2024

- 1. NE 20-32-28 40 acres BARLEY 50 acres Pasture 20 acres Yard
- 1a. NE 20-32-28 50 acres BARLEY
- 2. SE 20-32-28 90 acres BARLEY 60 acres Pasture 10 acres Yard
- 3. SE 29-32-28 46 acres CANOLA Pioneer 34 acres Pasture
- 4. SE 29-32-28 80 acres Corn
- 5. SW 28-32-28 130 acres Corn 30 acres Yard
- 6. SE 28-32-28 160 acres Corn
- 7. NE 21-32-28 160 acres Alfalfa
- 8. SE 21-32-28 160 acres Alfalfa
- 9. NE 32-32-28 143 acres Corn 17 acres Yard
- 10. NW 33-32-28 160 acres CANOLA Pioneer
- 11. SE 5-32-28 160 acres BARLEY
- 12. SE 32-32-28 157 acres Corn
- 13. NW 21-32-28 140 acres Alfalfa 19 acres Yard
- 14. NE 17-32-28 80 acres CANOLA 5 acres Pasture
- 15. NE 17-32-28 75 acres CANOLA
- 16. SE 17-32-28 80 acres CANOLA
- 17. SE 17-32-28 49 acres GRASS
- 18. NW 30-32-28 157 acres WHEAT 3 acres Yard
- 19. SW 30-32-28 130 acres WHEAT
- 20. SW 33-32-28 153 acres CORN
- 21. NE 29-32-28 124 acres Corn 30 acres Pasture.
- 22. NW 28-32-28 149 acres BARLEY 10 acres Yard
- 23. NE 28-32-28 160 acres BARLEY

2033.

**Manure Spreading Agreement**

This agreement is between Bertensholsteins Ltd, manure producer, and

Venneman / M L Dodd Manure receiver.

Length of agreement: This agreement is valid for a time period of 3  
(minimum of three years)


Legal land location	Soil type <sup>1</sup>	Acres suitable for manure spreading <sup>2</sup>
SW 29-32-28-W4	#1 160	Yes
NW 20-32-28-W4	#1 125	Yes
NE 25-32-29-W4	#1 155	Yes

<sup>1</sup> Soil type choices: Dark brown and brown, Grey wooded, Black, Irrigated.


<sup>2</sup> Land within required setbacks from water bodies, water wells, residences, etc. is not to be included.

Other comments:

Manure producer (confined Feeding Operation ) Legal Land Location SW 28-32-28-W4

Apr 9/24  Ad Bertens  
Date of signing Signature Print name Corporate name(if appl)

**Manure Receiver – Landowner(s)<sup>3</sup>**

Apr 9/24  Anthony Venneman M L Dodd Stock Farm  
Date of signing Signature Print name Corporate name(if appl)

\_\_\_\_\_  
Date of signing Signature Print name Corporate name(if appl)

<sup>3</sup> All registered owners of land, or authorized signing authorities must sign.

**Manure Spreading Agreement**

This agreement is between Bertens Holsteins Ltd., manure producer, and

R and E Speelman Ltd manure receiver.

Length of agreement: This agreement is valid for a time period of 2015. Dec 31.  
(minimum of one year)

Legal land location	Soil type <sup>1</sup>	Acres suitable for manure spreading <sup>2</sup>
NE SE NW SW 1-33-28-W4	Black.	555 acre
NE SE NW, SW 12-33-28-W4	Black.	638 acre
		1193 acres

<sup>1</sup> Soil type choices: Dark brown and brown, Grey wooded, Black, Irrigated.

<sup>2</sup> Land within required setbacks from water bodies, water wells, residences, etc. is not to be included.

Other comments:

Manure producer (Confined Feeding Operation ) Legal Land Location SW 28-32-28-W4.

Dec. 3 2014.

Date of signing



Signature

Ad Bertens

Print name

Bertens Holsteins Ltd

Corporate name(if appl)

Manure Receiver – Landowner(s)<sup>3</sup>

Dec 3 2014

Date of signing



Signature

Edward Speelman

Print name

R and E Speelman LTD

Corporate name(if appl)

\_\_\_\_\_

Date of signing

\_\_\_\_\_

Signature

\_\_\_\_\_

Print name

\_\_\_\_\_

Corporate name(if appl)

<sup>3</sup> All registered owners of land, or authorized signing authorities must sign.

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

## NRCB USE ONLY

### MINIMUM DISTANCE SEPARATION

Methods used to determine distance (if applicable): Google earth

Margin of error (if applicable): N/A

Requirements (m): Category 1: 765 m Category 2: 1,020 m Category 3: 1,274 m Category 4: 2,039

Technology factor:  YES  NO

Expansion factor:  YES  NO

MDS related concerns from directly affected parties or referral agencies:  YES  NO

### LAND BASE FOR MANURE AND COMPOST APPLICATION

Land base required: 1397 ha Applicant has provided adequate land base.

Land base listed: 1806 ha

Area not suitable: unsuitable removed

Available area 1806 ha

Requirement met:  YES  NO

Land spreading agreements required:  YES  NO

Manure management plan:  YES  NO

If yes, plan is attached:

### PLANS

Submitted and attached construction plans:  YES  NO

Submitted aerial photos:  YES  NO

Submitted photos:  YES  NO

### GRANDFATHERING

Already completed:  YES  NO  N/A

If already completed, see Decision RA06013

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

**NRCB USE ONLY**

**ALL SIGNATURES IN FILE**

YES  NO

**DATES OF APPROVAL OFFICER SITE VISITS**

May 24, 2024	

**CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES**

Date deeming letters sent: January 21, 2025

Municipality: Mountain View County

letter sent       response received       written/email       verbal       no comments received

**Alberta Health Services:**  N/A

letter sent       response received       written/email       verbal       no comments received

**Alberta Environment and Parks:**  N/A

letter sent       response received       written/email       verbal       no comments received

**Alberta Transportation:**  N/A

letter sent       response received       written/email       verbal       no comments received

**Alberta Regulatory Services:**  N/A

letter sent       response received       written/email       verbal       no comments received

Trans-Northern Pipelines Ltd.,  
Other: \_\_\_\_\_  N/A

letter sent       response received       written/email       verbal       no comments received

Crossroads Gas Co-op Ltd., Fortis Alberta Inc.  
Conoco Phillips Canada  
Other: \_\_\_\_\_  N/A

letter sent       response received       written/email       verbal       no comments received

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

## SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner

(complete a copy of this section for **EACH** barn, feedlot, and storage facility for solid manure, composting materials, or compost with a concrete liner)

- Facility description / name (as indicated on site plan)
1. manure storage
  2. heifer shelter

### Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	<b>NRCB USE ONLY</b> Estimated storage capacity (m <sup>3</sup> )
1.	140 42.7 m	80 24.4 m	0	
2.	384 117 m	40 12.2 m	0	

TOTAL CAPACITY

Adequate storage for solid manure on site

I plan to use a short-term solid manure storage (STMS) as part of my manure storage and handling plan for this CFO. The AOPA requirements for STMS are set out in the NRCB [Short-Term Solid Manure Storage Requirements Fact Sheet](#).

### Surface water control systems

Describe the run-on and runoff control system  
All concrete and walls around. Shelter over heifer area

### Liner protection

Describe how the physical integrity of the liner will be maintained  
Monitor for cracks, repair as needed

**NRCB USE ONLY**  
Requirements met:  YES  NO

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

## SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner (cont.)

### Concrete liner details

Concrete thickness 6"	Method of sulphate protection: Type 50 or similar
Concrete strength 30 MPA	Concrete reinforcement size and spacing 18" O/C

Concrete requirements can be found in Technical Guideline Agdex 096-93

Guideline minimums:  
Solid manure: 25MPa (D)  
Solid manure (wet): 30MPa (C)  
Method of sulphate protection:  
Type 50 or Type 10 with fly ash or equivalent

### NRCB USE ONLY

Requirements met:  YES  NO  
Condition required:  YES  NO  
Report attached:  YES  NO

### Additional information *(attach as required)*

#### NRCB USE ONLY

Nine month manure storage volume requirements met  YES  YES With STMS  NO

Depth to water table: >7.5 m Requirements met:  YES  NO

Depth to Uppermost groundwater resource: 9.1 m Requirements met:  YES  NO

ERST completed:  see ERST page for details

Facilities meet AOPA technical requirements: see DS RA24011

#### Surface water control systems

Requirements met:  YES  NO Details/comments:

#### Concrete liner details

Applicant to provide documentation confirming concrete information

Leakage detection system required:  YES  NO If yes, please explain why.

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

## LIQUID MANURE COLLECTION AND/OR STORAGE: In-barn - Concrete liner

(complete a copy of this section for **EACH** proposed in-barn liquid manure storage facility with a concrete liner)

Facility description / name (as indicated on site plan)

1. freestall barn
2. \_\_\_\_\_
3. \_\_\_\_\_

**Manure storage capacity** (use one row in the table for **EACH** in-barn storage. Attach additional pages if you require more rows)

	Length (m)	Width (m)	Total depth (m)	Depth below ground level (m)	<b>NRCB USE ONLY</b> Calculated storage capacity (m <sup>3</sup> )
1.	433'	145'	8' (cross over pit)	8'	
2.					
3.					

Existing cross over pit constructed for last barn this proposed portion will use the existing pit. TOTAL CAPACITY Adequate storage available

### Concrete liner details

Scrape alleys or unslatted portions of barn floors (if applicable)	Concrete thickness 6"		Method of sulphate protection Type 50 or similar		
	Concrete strength 32 MPA		Concrete reinforcement size and spacing 18" O/C		
In-barn manure pit floors	Concrete thickness 6"		Method of sulphate protection Type 50 or Similar		
	Concrete strength 32 MPA		Concrete reinforcement size and spacing 18" O/C		
In-barn manure pit walls	Concrete thickness 8"		Method of sulphate protection Type 50 or similar		
	Concrete strength 32 MPA	Horizontal reinforcement size and spacing 18" O/C	Vertical reinforcement size and spacing 18" O/C		



## Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

### LIQUID MANURE COLLECTION AND/OR STORAGE: In-barn - Concrete liner (cont.)

Describe how the joints at the junction of the pit walls, pit floors and any other joints will be sealed  
**Sika Flex or similar**

---

Describe sealing practices for piping, etc. that penetrates the liner  
**Sika flex and grout**

**Concrete requirements can be found in Technical Guideline Agdex 096-93**  
*Guideline minimums:*  
 Solid manure: 25MPa (D)  
 Solid manure (wet): 30MPa (C)  
 Liquid manure: 32MPa (B)  
 Category A is required to be engineered  
 Method of sulphate protection:  
 Type 50 or Type 10 with fly ash or equivalent

**NRCB USE ONLY**

Requirements met:  YES  NO  
 Condition required:  YES  NO

**Additional information**

**NRCB USE ONLY**

Liquid manure storage volume calculator attached:  YES  NO

Depth to water table:           >7.5 m           Requirements met:  YES  NO

Depth to uppermost groundwater resource:           9.1 m           Requirements met:  YES  NO

ERST completed:  see ERST page for details

**Concrete liner requirements**

Leakage detection system required:  YES  NO If yes, please explain why

# Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

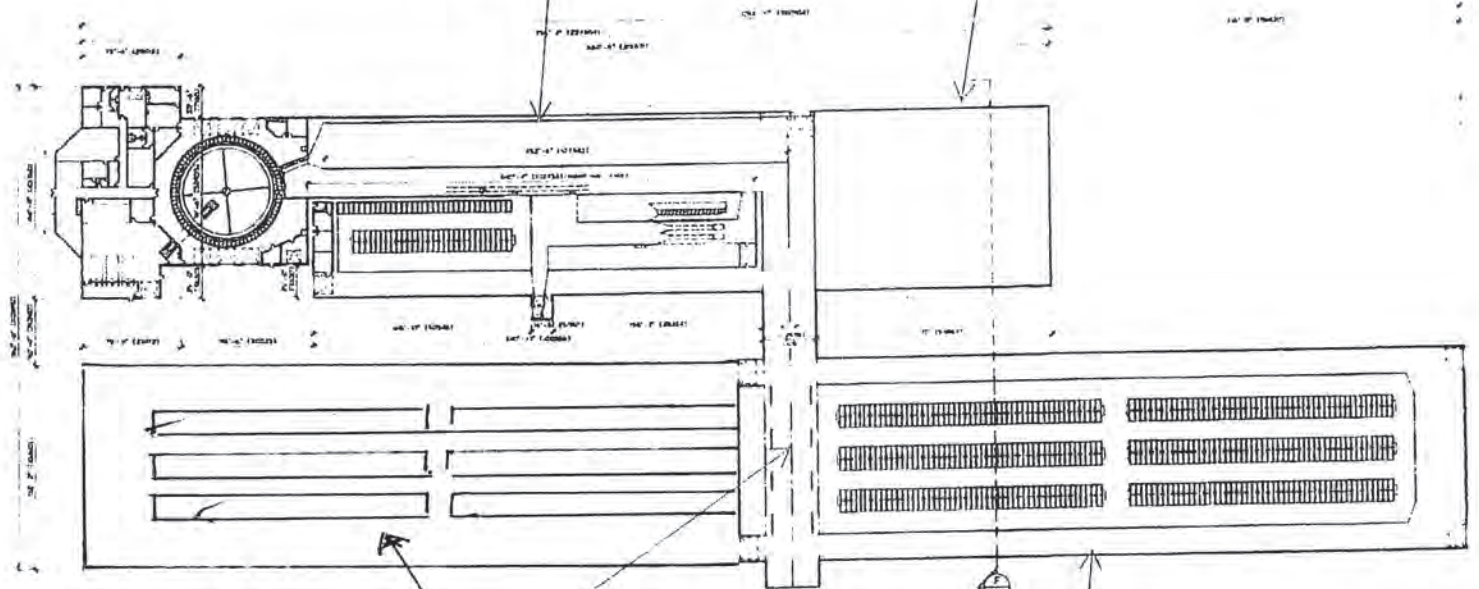
<b>NRCB USE ONLY</b>	
<b>LIQUID MANURE STORAGE VOLUME CALCULATOR (if applicable)</b>	
<b>Facility 1</b>	
Name / description existing dairy barn pit	Capacity 180 m3
<b>Facility 2</b>	
Name / description Synthetic Lagoon	Capacity 44,441 m3
<b>Facility 3</b>	
Name / description	Capacity
<b>Facility 4</b>	
Name / description	Capacity
<b>TOTAL CAPACITY</b>	
	44,621 m3
<b>REQUIRED 9 MONTH STORAGE CAPACITY</b>	
	37,800 m3
<b>MEETS THE REQUIREMENTS FOR A MINIMUM OF 9 MONTHS STORAGE</b>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

READ ALL DIMENSIONS, DO NOT SCALE FROM DRAWING

North  
▲

Milking barn and  
parlour holding  
area

Sand reclamation  
facility



OVERALL LAYOUT  
MAY 2011

Transfer alley

proposed  
Freestall Barn

Freestall barn

REVISIONS	
1	ISSUED FOR PERMIT
2	ISSUED FOR CONSTRUCTION
3	ISSUED FOR CONSTRUCTION
4	ISSUED FOR CONSTRUCTION
5	ISSUED FOR CONSTRUCTION
6	ISSUED FOR CONSTRUCTION
7	ISSUED FOR CONSTRUCTION
8	ISSUED FOR CONSTRUCTION
9	ISSUED FOR CONSTRUCTION
10	ISSUED FOR CONSTRUCTION

**PRELIMINARY  
NOT FOR CONSTRUCTION**

PROJECT NUMBER	1001
DATE	2011
DESIGNER	COGNIDYN
CHECKER	COGNIDYN
DATE	2011
PAGE	16 OF 31

**COGNIDYN  
ENGINEERING  
& DESIGN**

**BERTENS HOLSTENS LTD.  
DAIRY BARN COMPLEX**

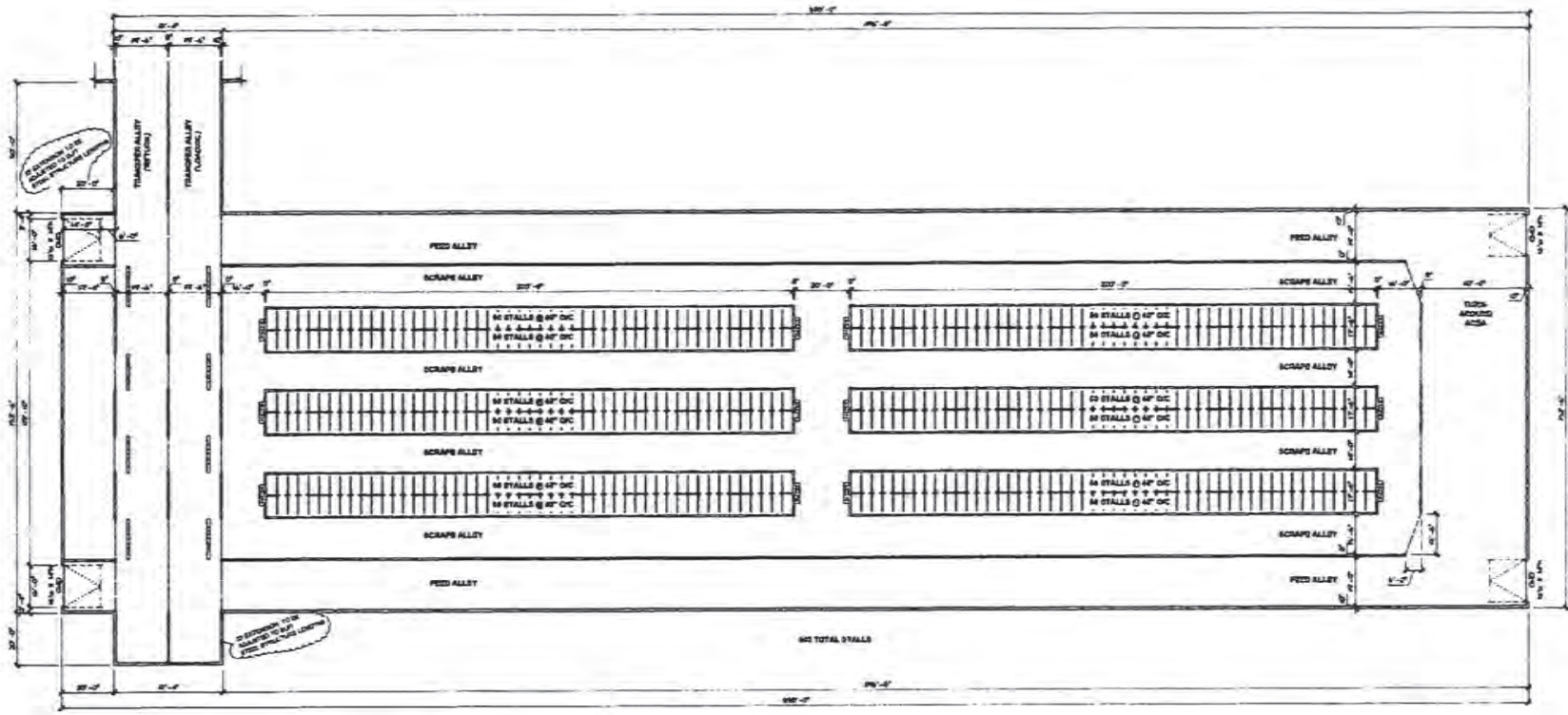
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Note: All dimensions and notes shall be in accordance with the applicable code and standards. All dimensions and notes shall be in accordance with the applicable code and standards.

READ ALL DIMENSIONS, DO NOT SCALE FROM DRAWING.

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**LIVESTOCK BARN**  
 SCALE: 3/8" = 1'-0"  
**FLOOR PLAN**

REVISIONS	
1	ISSUED FOR PERMIT
2	ISSUED FOR PERMIT
3	ISSUED FOR PERMIT
4	ISSUED FOR PERMIT
5	ISSUED FOR PERMIT
6	ISSUED FOR PERMIT
7	ISSUED FOR PERMIT
8	ISSUED FOR PERMIT
9	ISSUED FOR PERMIT
10	ISSUED FOR PERMIT

PRELIMINARY  
 NOT FOR CONSTRUCTION

**COGNIDYN**  
**ENGINEERING & DESIGN**

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 Website: www.cognidyn.com

PROJECT:  
**BEYENS HOLDINGS LTD.**  
**DAIRY BARN COMPLEX**

CLIENT:  
**BEYENS HOLDINGS LTD.**

DATE:  
**10/15/2014**

DRAWING NO.:  
**A2.4**

SHEET NO. OF 15