Technical Document LA25021

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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

NRCB USE ONLY	Application number	Legal land description
☒ Approval ☐ Registration ☐ Authorization ☐ Amendment	LA25021	NE 7-26-3 W4M

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 3 2025
Date of signing

[redacted]
Signature

Acadia Colony Farming Co.
Corporate name (if applicable)

Ben Entz
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)
Layer Barn (addition to current Layer Barn) (108.2 m x 30.5 m, total dimensions)	355 x 100 (total dimensions)
AO Comment: Layer barn addition is 72.2 m x 15.3 m. Applicant has listed the dimensions of the layer barn with the addition, for the proposed final dimensions.	

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

Existing facilities		Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Pullet Barn	(67.1 m x 14.6 m)	220 x 48	74 m x 14.6 m
Dry Sow Barn	(143.9 m x 14.0 m)	472 x 46	114 m x 14.0 m
Farrow & Nursery Barn	(106.7 m x 18.9 m)	350 x 62	112 m x 20 m

NRCB USE ONLY

AO Comment: Applicant listed dimensions in feet.

Last updated September 11, 2023

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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

Existing facilities continued	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Grower + Finisher Barn (150.9 m x 23.8 m)	495 x 78	154 m x 24.3 m
Dairy Barn (67.1 m x 30.5 m)	220 x 100	49 m x 32 m
Calf Barn with pens (45.7 m x 12.2 m)	150 x 40	62 m x 13 m + 39 m x 25 m
Cow Shelter with pens 61.0 m x 12.2 m)	200 x 40	61 m x 12.2 m + 113 m x 105 m
Macdonda Barn (48.8 m x 11.0 m)	160 x 36	34 m x 12.1 m
Dairy Lagoon (EMS) (61.0 m x 21.3 m)	200 x 70 x 12	94 m x 44 m x 3.7 m deep
Hog Lagoon (EMS) (121.9 m x 30.5 m)	400 x 100 x 15	70.5 m x 32 m x 4.6 m deep + 200 m x 32 m x 4.6 m deep
~~His + Hers Lagoon~~ (two-cells)	~~200 x 60~~	
Multi Barn (Swine) (48.8 m x 21.9 m)	160 x 72	54.4 m x 21.9 m
Dairy Dry Cow Corrals (Pens)	130 m x 130 m	Confirmed

Last updated September 11, 2023

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If a new facility is replacing an old facility, please explain what will happen to the old facility and when. ☐ N/A

We are adding to a existing Barn

Construction completion date for proposed facilities Jan 30, 2027

Additional information

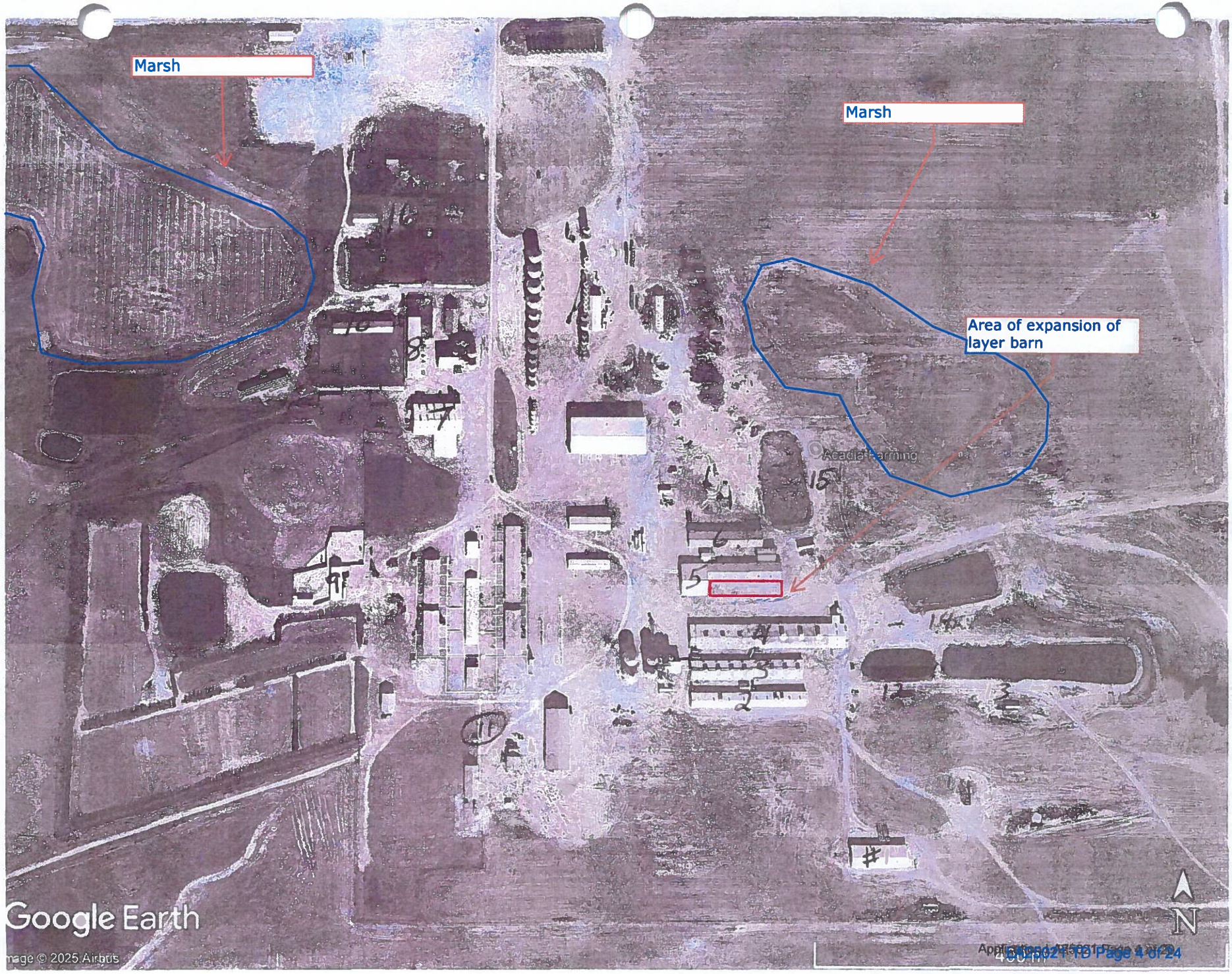
AO Comment: In a conversation with the applicant on April 15th, they clarified that the numbers that were proposed in their Part 1 application were the correct livestock numbers they are proposing for this application, with the exception of the chicken broilers. The applicant made an error when filling out the Part 2 application. The livestock numbers in the table below are corrected for the livestock the applicant is proposing. They are proposing 2,000 chicken broilers at this site, rather than 2,500 chicken broilers that was proposed in the Part 1. Also, there was a miscommunication about the total swine farrow to finish numbers at this site. The 60 swine farrow to finish that was added is a part of the 600 swine farrow to finish, not in addition.

Livestock numbers: Complete only if livestock numbers are different from what was identified in the Part 1 application. Note: if livestock numbers increase in your Part 2 application, a new Part 1 application must be submitted which may result in a loss of priority for minimum distance separation (MDS).

Livestock category and type (Available in the Schedule 2 of the Part 2 Matters Regulation)	**Permitted number**	**Proposed increase or decrease in number (if applicable)**	**Total**
Milking Cows	~~100~~ 60	~~0~~ 40	100
Chicken Layers	~~15444~~ 14,500	~~33516~~ 34,460	48960
Chicken Pullets	~~23000~~ 22,000	0	~~23000~~ 22,000
Swine Farrow to Finish	~~600~~ 650	~~0~~ -50	600
Turkeys	100	0	100
Ducks	~~300~~ 400	0	~~300~~ 400
Geese	~~200~~ 100	0	~~200~~ 100
Broiler Chickens	2000	0	2000
~~Swine Multi Barn Farrow to Finish~~	~~60~~	~~0~~	~~60~~

Last updated September 11, 2023

AO Comment: CFO was grandfathered for 14,500 chicken layers in Authorization LA03032A. Applicant is proposing to increase from 14,500 chicken layers to 48,960 chicken layers.


Marsh
Marsh
Area of expansion of layer barn
Acadia Farming
Google Earth
Image © 2025 Airbus
N

1. Muiti Barn (Hogs)
2. Dry Sow Barn
3. Farrow Barn
4. Finisher Barn
5. Chicken Barn (Layer barn)
6. Pullet Barn
7. Dairy Barn
8. Calf Barn with pens
9. Duck + ~~Goose~~ Barn (Macdonald Barn)
10. Close up's Cows + Heifer Barn with pens (Cow shelter with pens)
11. Water Wells
12. Lagoon Hogs (EMS)
13. Lagoon Hogs (EMS)
14. His + Hers
15. Dairy Lagoon (EMS)
16. Dairy Dry Cow Corrals (Pens)

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 ____ day of _____, 20____. _____

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 3 day of March, 2025. [redacted]

Signature of Applicant or Agent

Last updated September 11, 2023

AO Comment: Applicant indicated they only have two water wells on site (ID #'s 1270053 and 175738) and all other wells have been abandoned/decommissioned.

Alberta
ENVIRONMENTAL PROTECTION

INTERIM LICENCE

Pursuant to the
WATER RESOURCES ACT

№ 20843

Acadia Hutterian Brethren
Box 210
Oyen, Alberta
T0J 2J0

File No. 18460-2

Priority No. 1978-04-04-07

having complied with the applicable provisions of the Water Resources Act and the Regulations is authorized as soon as right-of-way is obtained:

A. To construct works as shown on plans and reports filed, approved and identified in departmental records as:

18460-1 Water Source Well Plan

B. To divert and use water as specified and described subject to the following terms and conditions:

PURPOSE: Agricultural (Stockwatering)

SOURCE OF SUPPLY: Aquifer

GROSS DIVERSION: Up to 19 acre-feet (5.3 million Canadian gallons) per annum consisting of:

1. Estimated Consumptive Use: 5.3 million gallons
2. Estimated Losses: NIL
3. Estimated Return Flow: NIL

POINT OF DIVERSION	WELL NUMBER	PRODUCTION INTERVAL	MAXIMUM PUMP RATE	MAXIMUM ANNUAL DIVERSION
16-18-26-3-4	78-04-04-07	180' - 190'	25 Cgpm	5.3 mCg

(North Wells) Pig Barn Well (South Well)

Construction must be complete by (constructed)

1995 12 05
Dated at Edmonton

[redacted]
Head, Ground Water Rights Branch

WR2 (August 93)

AO Comment: Water well used for watering livestock.

Alberta

Water Well Drilling Report

View in Metric | Export to Excel

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.

GIC Well ID 175738
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1982/09/10

GOWN ID

Well Identification and Location

Measurement in Imperial

Owner Name	Address	Town	Province	Country	Postal Code
ACADIA COLONY	P.O. BOX 218 OYEN				

Location	1/4 or LSD	SEC	TWP	RGE	W of M/R	Lot	Block	Plan	Additional Description
	SE	7	28	3	4				

Measured from Boundary of
ft from
ft from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 51.201339 Longitude -110.498234
How Location Obtained
Map

Elevation ft
How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Rotary

Proposed Well Use
Domestic & Stock

Type of Work
New Well

Formation Log

Measurement in Imperial

Depth from ground level (ft)	Water Bearing	Lithology Description
54.00		Brown Sandy Clay
57.00		Sand
83.00		Blue Clay
155.00		Brown Clay
255.00		Soft Shale
277.00		Soft Sandstone
281.00		Shale
295.00		Sandstone
362.00		Shale
363.00		Sandstone
383.00		Shale
387.00		Sandstone
395.00		Shale
406.00		Sandstone
408.00		Shale
415.00		Sandstone & Shale Ledges
423.00		Sandstone
431.00		Shale & Sandstone Ledges
441.00		Shale
443.00		Sandstone
465.00		Shale
505.00		Shale
525.00	Yes	Water Bearing Sandstone
540.00		Shale

Stinker

Yield Test Summary

Measurement in Imperial

Recommended Pump Rate 12.00 Igpm

Test Date	Water Removal Rate (Igpm)	Static Water Level (ft)
1982/08/18	10.00	138.00

Well Completion

Measurement in Imperial

Total Depth Drilled	Finished Well Depth	Start Date	End Date
540.00 ft		1982/08/01	1982/08/18

Borehole

Diameter (in)	From (ft)	To (ft)
0.00	0.00	540.00

Surface Casing (if applicable)
Size OD: 0.00 in
Wall Thickness: 0.000 in
Bottom at: 0.00 ft

Well Casing/Liner
Steel
Size OD: 5.56 in
Wall Thickness: 0.188 in
Top at: 0.00 ft
Bottom at: 525.00 ft

Perforations

From (ft)	To (ft)	Diameter or Slot Width(in)	Slot Length (in)	Hole or Slot Interval(in)
495.00	525.00	0.000		0.00

Perforated by Unknown

Annular Seal Driven
Placed from 0.00 ft to 470.00 ft
Amount

Other Seals

Type	At (ft)

Screen Type
Size OD 0.00 in

From (ft)	To (ft)	Slot Size (in)

Attachment
Top Fittings
Bottom Fittings

Pack
Type
Grain Size
Amount 0.00

Contractor Certification

UNKNOWN NA DRILLER

V&M DRILLING CO. LTD.

Certification No
1

Copy of Well report provided to owner | Date approval holder signed

Printed on 10/24/2024 10:21:14 AM

Alberta Water Well Drilling Report

View in Metric | Export to Excel

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.

GIC Well ID 175736
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1982/09/10

GOWN ID

Well Identification and Location — Measurement in Imperial

Owner Name	Address	Town	Province	Country	Postal Code
ACADIA COLONY	P.O. BOX 210 OYEN				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	7	26	3	4				

Measured from Boundary of
ft from
ft from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 51.201339 Longitude -110.406234
How Location Obtained
Map

Elevation ft
How Elevation Obtained
Not Obtained

Additional Information — Measurement in Imperial

Distance From Top of Casing to Ground Level in
Is Artesian Flow
Rate igpm
Is Flow Control Installed
Describe

Recommended Pump Rate 12.00 igpm
Recommended Pump Intake Depth (From TOC) 400.00 ft
Pump Installed
Type
Depth ft
Make
H.P
Model (Output Rating)

Did you Encounter Saline Water (>4000 ppm TDS)
Depth ft
Gas
Depth ft
Well Disinfected Upon Completion
Geophysical Log Taken
Submitted to ESRD
Remedial Action Taken
Sample Collected for Potability
Submitted to ESRD

Additional Comments on Well
DRILLER REPORTS SOFT WATER.

Yield Test — Measurement in Imperial

Test Date	Start Time	Static Water Level
1982/08/19	12:00 AM	138.00 ft

Taken From Ground Level
Depth to water level

Pumping (ft)	Elapsed Time Minutes:Sec	Recovery (ft)

Method of Water Removal
Type Bailer & Pump
Removal Rate 10.00 igpm
Depth Withdrawn From 400.00 ft

If water removal period was < 2 hours, explain why:

Water Diverted for Drilling

Water Source	Amount Taken	Diversion Date & Time
	ig	

Contractor Certification

UNKNOWN NA DRILLER
M&M DRILLING CO. LTD.

Certification No
1
Copy of Well report provided to owner
Date approval holder signed

Printed on 10/24/2024 10:21:14 AM

AO Comment: Water well used for domestic purposes.

Water Well Drilling Report

View in Metric | Export to Excel

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GOWN ID

GIC Well ID 1270053
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

Well Identification and Location

Measurement in Imperial

Owner Name	Address	Town	Province	Country	Postal Code
ACADIA HUTTERIAN BRETHREN	P.O. BOX 210	OYEN	ALBERTA	CA	T0J 2J0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	10	7	26	3	4				

Measured from Boundary of
ft from
ft from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 51.206000 Longitude -110.410167
How Location Obtained
Hand held autonomous GPS 20-30m

Elevation ft
How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Drilled

Proposed Well Use
Domestic

Type of Work
Reconditioned

Formation Log

Measurement in Imperial

Depth from ground level (ft)	Water Bearing	Lithology Description
59.00		Brown Till
80.00		Gray Till
85.00		Gray Carbonaceous Clay
130.00		Brown Clay
147.00		Brownish Yellow Sandy Clay
268.00		Gray Shale
278.00		Gray Siltstone
304.00		See Comments Sandstone
310.00		Light Brown Shale
334.00		Dark Brown Carbonaceous Shale
380.00		Greenish Gray Shale
398.00		Sandy Shale
428.00		Silty Sandstone
434.00		Light Brown Shale
441.00		See Comments Sandstone
448.00		Light Gray Shale
460.00		Gray Shale

Yield Test Summary

Measurement in Imperial

Recommended Pump Rate 5.00 igpm

Test Date	Water Removal Rate (igpm)	Static Water Level (ft)
1999/05/05	5.00	157.32

Well Completion

Measurement in Imperial

Total Depth Drilled	Finished Well Depth	Start Date	End Date
460.00 ft		1999/04/27	1999/05/05

Borehole

Diameter (in)	From (ft)	To (ft)

Surface Casing (If applicable)
Plastic
Size OD : 5.56 in
Wall Thickness : 0.390 in
Bottom at : 433.00 ft

Well Casing/Liner
Unknown
Size OD : in
Wall Thickness : in
Top at : ft
Bottom at : ft

Perforations

From (ft)	To (ft)	Diameter or Slot Width(in)	Slot Length (in)	Hole or Slot Interval(in)

Perforated by Unknown

Annular Seal Bentonite Chips/Tablets
Placed from 15.00 ft to 300.00 ft
Amount

Other Seals

Type	At (ft)

Screen Type Stainless Steel
Size OD : 3.00 in

From (ft)	To (ft)	Slot Size (in)
433.00	443.00	0.015

Attachment Attached To Casing
Top Fittings Threaded
Bottom Fittings Washdown

Pack
Type Silica Sand
Grain Size 20-40
Amount 1100.00 Pounds

Contractor Certification

Name of Journeyman responsible for drilling/construction of well
GERALD TOPILKA

Company Name
ELK POINT DRILLING CORP.

Certification No
3490AD

Copy of Well report provided to owner

Date approval holder signed

Printed on 3/6/2025 2:39:41 PM

Water Well Drilling Report

View in Metric | Export to Excel

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.

GIC Well ID 1270053
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

GOWN ID

Well Identification and Location

Measurement in Imperial

Owner Name	Address	Town	Province	Country	Postal Code
ACADIA HUTTERIAN BRETHREN	P.O. BOX 210	OYEN	ALBERTA	CA	T0J 2J0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	10	7	26	3	4				

Measured from Boundary of
ft from
ft from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 51.206000 Longitude -110.410167
How Location Obtained: Hand held autonomous GPS 20-30m

Elevation ft
How Elevation Obtained: Not Obtained

Additional Information

Measurement in Imperial

Distance From Top of Casing to Ground Level: in
Is Artesian Flow
Rate: igpm
Is Flow Control Installed
Describe

Recommended Pump Rate: 5.00 igpm
Recommended Pump Intake Depth (From TOC): 410.01 ft
Pump Installed: Yes
Type
Depth: ft
Make: GOULDS
5GS10412
H.P.: 1
Model (Output Rating)

Did you Encounter Saline Water (>4000 ppm TDS)
Depth: ft
Gas
Depth: ft
Remedial Action Taken
Well Disinfected Upon Completion
Geophysical Log Taken: Electric
Submitted to ESRD: Electric
Sample Collected for Potability
Submitted to ESRD

Additional Comments on Well
304 278' TO 304' SANDSTONE, VERY FINE, TAKES WATER,434' TO 441' SANDSTONE, GREY, .007-.01,

Yield Test

Taken From Ground Level
Depth to water level

Measurement in Imperial

Test Date	Start Time	Static Water Level
1999/05/05	12:00 AM	157.32 ft

Method of Water Removal
Type: Pump
Removal Rate: 5.00 igpm
Depth Withdrawn From: 400.00 ft

If water removal period was < 2 hours, explain why

Pumping (ft)	Elapsed Time Minutes:Sec	Recovery (ft)
157.35	0:00	
166.18	0:30	314.70
169.52	1:00	311.91
176.12	2:00	306.56
181.82	3:00	301.31
187.70	4:00	296.26
192.85	5:00	291.40
197.57	6:00	285.07
207.22	8:00	278.31
216.24	10:00	270.21
223.39	12:00	263.19
233.30	15:00	253.58
247.61	20:00	239.90
255.97	25:00	228.61
268.57	30:00	219.23
282.81	40:00	205.18
292.88	50:00	195.34
301.28	60:00	188.42
308.92	80:00	179.50
314.34	100:00	174.74
317.95	120:00	171.85

Water Diverted for Drilling

Water Source	Amount Taken	Diversion Date & Time
	ig	

Contractor Certification

Name of Journeyman responsible for drilling/construction of well: GERALD TOPILKA
Certification No: 3490AD
Company Name: ELK POINT DRILLING CORP.
Copy of Well report provided to owner
Date approval holder signed

Printed on 3/6/2025 2:39:41 PM

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NRCB USE ONLY

WATER WELL AND SURFACE WATER INFORMATION

Well IDs: 175738 1270053 _____

_____ _____ _____

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:

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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: Lagoon Dairy **Proposed 1:** Layer Barn

Proposed 2: _____ **Proposed 3:** _____

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?	☑ >1 m ☐ ≤ 1 m	☑ >1 m ☐ ≤ 1 m	☐ >1 m ☐ ≤ 1 m	☐ > 1 m ☐ ≤ 1 m	☑ YES ☐ NO ☐ YES with exemption	Not in a known flood plain
Surface water information	How many springs are within 100 m of the manure storage facility or manure collection area?	0	0			☑ YES ☐ NO ☐ YES with exemption	None observed on site
	How many water wells are within 100 m of the manure storage facility or manure collection area?	0	0			☑ YES ☐ NO ☐ YES with exemption	187 m from WW ID #'s 1270053 & 175735 to macdonald barn (closest CFO facility)
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	400 m	380 m			☑ YES ☐ NO ☐ YES with exemption	Marsh 90 m East of dairy EMS; marsh 30 m West of cow shelter & pens/dairy dry cow pens; marsh is >100 m from layer barn expansion
Groundwater information	What is the depth to the water table?		20 m			☑ YES ☐ NO ☐ YES with exemption	No drill logs on record. Water table estimated to be at 20 m
	What is the depth to the groundwater resource/aquifer you draw water from?	121 m				☑ YES ☐ NO ☐ YES with exemption	UGR 132 m below grade in WW ID# 1270053

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

NRCB USE ONLY

ENVIRONMENTAL RISK SCREENING INFORMATION

ERST for **proposed** facilities

Facility	Groundwater score	Surface water score	File number
Layer barn expansion	Low	Low	LA25021

ERST for **existing** facilities

Facility	Groundwater score	Surface water score	File number
Dairy EMS	Low	Low	LA25021
Cow shelter with pens	Low	Low	LA25021
Dairy dry cow pens	Low	Low	LA25021

ERST related comments:

AO Comment: The dairy ems, cow shelter with pens, and dairy dry cow pens appear to be the CFO's highest risk facilities and were the only facilities scored with the ERST. As these facilities are found to pose a low potential risk to groundwater and surface water, the other existing facilities are presumed to pose a low risk to both groundwater and surface water.

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NRCB Natural Resources Conservation Board

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

			NRCB USE ONLY				
Neighbour name(s)	**Legal land description**	**Distance (m)**	**Zoning (LUB) category**	**MDS category (1-4)**	**Distance (m)**	**Waiver attached (if required)**	**Meets regulations**
Jeffery Stammers	SE 13-26-4-W4	1200 m	Agriculture	1	845	N/A	Yes
[redacted]		[redacted]					
[redacted]							
Jason Aaron Dillabaugh	NE 34-25-3-W4	5000 m	Agriculture	1	5,760	N/A	Yes

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

				NRCB USE ONLY	
Name of land owner(s)*	**Legal land description**	**Usable area** (ha)**	**Soil zone *****	**Usable area (ha)**	**Agreement attached (if required)**
H.B. of Acadia Colony	Sec 6-T26-R3-W4	635	Sandy loam	607.4 acres	N/A
H.B. of Acadia Colony	Sec 5-T26-R3-W4	640	Sandy loam	636.3 acres	N/A
H.B. of Acadia Colony	Sec 8-T26-R3-W4	631	Sandy loam	611 acres	N/A
H.B. of Acadia Colony	Sec 17-T26-R3-W4	630	Sandy loam	551.5 acres	N/A
H.B. of Acadia Colony	Sec 31-T26-R3-W4	625	Sandy loam	409.7 acres	N/A
			Total	2815.9 acres	

* 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)

AO Comment: Land base is listed in acres and applicant has only brown/dark brown soil.

Name
Address
Legal Land
Location

Acadia Colony Farming Co.

MDS Spreadsheet based on 2006 AOPA Regulations

Category of Livestock	Type of Livestock	Factor A	Technology Factor	MU	LSU Factor		LSU
Feedlot Animals	Beef Cows/Finishers (900+ lbs)	0.700	0.700	0.910	0.4459		-
	Beef Feeders (450 - 900 lbs)	0.700	0.700	0.500	0.2450		-
	Beef Feeder Calves (<550 lbs)	0.700	0.700	0.275	0.1348		-
	Horses - PMU	0.650	0.700	1.000	0.4550		-
	Horses - Feeders > 750 lbs	0.650	0.700	1.000	0.4550		-
	Horses - Foals < 750 lbs	0.650	0.700	0.300	0.1365		-
	Mules	0.600	0.700	1.000	0.4200		-
	Donkeys	0.600	0.700	0.670	0.2814		-
	Bison	0.800	0.700	1.000	0.4200		-
	Other						-
Dairy (*count lactating cows only)	Free Stall – Lactating Cows with all associated dries, heifers, and calves*	0.800	1.100	2.000	1.7600		176.0
	Free Stall – Lactating Cows with Dry Cows only*	0.800	1.100	1.640	1.4432		-
	Free Stall – Lactating Cows only	0.800	1.100	1.400	1.2320		-
	Tie Stall – Lactating Cows only	0.800	1.000	1.400	1.1200		-
	Loose Housing – Lactating Cows only	0.800	1.000	1.400	1.1200		-
	Dry Cow	0.800	0.700	1.000	0.5600		-
	Replacements – Bred Heifers (Breeding to Calving)	0.800	0.700	0.875	0.4900		-
	Replacements - Growing Heifers (350 lbs to breeding)	0.800	0.700	0.525	0.2940		-
	Calves (< 350 lbs)	0.800	0.700	0.200	0.1120		-
	Other						-
Swine Liquid (*count sows only)	Farrow to finish *	2.000	1.100	1.780	3.9160		2,349.6
	Farrow to wean *	2.000	1.100	0.670	1.4740		-
	Farrow only *	2.000	1.100	0.530	1.1660		-
	Feeders/Boars	2.000	1.100	0.200	0.4400		-
	Growers/Roasters	2.000	1.100	0.118	0.2600		-
	Weaners	2.000	1.100	0.055	0.1210		-
	Other						-
Swine Solid (*Count sows only)	Farrow to finish *	2.000	0.800	1.780	2.8480		-
	Farrow to wean *	2.000	0.800	0.670	1.0720		-
	Farrow only *	2.000	0.800	0.530	0.8480		-
	Feeders/Boars	2.000	0.800	0.200	0.3200		-
	Growers/Roasters	2.000	0.800	0.118	0.1888		-
	Weaners	2.000	0.800	0.055	0.0880		-
	Other						-
Poultry	Chicken - Breeders - Solid	1.000	0.700	0.010	0.0070		-
	Chicken - Layers - Liquid (includes associated pullets)	2.000	1.100	0.008	0.0176		-
	Chicken - Layers - (Belt Cage)	2.000	0.700	0.008	0.0112		548.4
	Chicken - Layers - (Deep Pit)	2.000	0.700	0.008	0.0112		-
	Chicken - Pullets/Broilers	1.000	0.700	0.002	0.0014		34.3
	Turkey - Toms/Breeders	1.000	0.700	0.020	0.0140		-
	Turkey - Hens (light)	1.000	0.700	0.013	0.0091		-
	Turkey - Broilers	1.000	0.700	0.010	0.0070		0.7
	Ducks	1.000	0.700	0.010	0.0070		2.8
	Geese	1.000	0.700	0.020	0.0140		1.4
	Other						-
Sheep and Goats	Sheep - Ewes/Rams	0.600	0.700	0.200	0.0840		-
	Sheep - Ewes with lambs	0.600	0.700	0.250	0.1050		-
	Sheep - Lambs	0.600	0.700	0.050	0.0210		-
	Sheep - Feeders	0.600	0.700	0.100	0.0420		-
	Goats - Meat/Milk (per Ewe)	0.700	0.700	0.170	0.0833		-
	Goats - Nannies/Billies	0.700	0.700	0.140	0.0686		-
	Goats - Feeders	0.700	0.700	0.077	0.0377		-
	Other						-
Cervid	Elk	0.600	0.700	0.600	0.2520		-
	Deer	0.600	0.700	0.200	0.0840		-
	Other						-
Wild Boar	Feeders	2.000	0.800	0.140	0.2240		-
	Sow (farrowing)	2.000	0.800	0.371	0.5936		-
	Other						-
					Total		3,113.2

For New Operations

Dispersion Factor: 1

Category	Odour Objective	Distance Feet	Distance Metres
1	41.04	2,536	773
2	54.72	3,382	1,031
3	68.4	4,227	1,288
4	109.44	6,764	2,062

For Expanding Operations

Dispersion Factor: 1
Expansion Factor: 0.77

Category	Odour Objective	Distance Feet	Distance Metres
1	41.04	1,953	595
2	54.72	2,604	794
3	68.40	3,255	992
4	109.44	5,208	1,587

Name Acadia Colony Farming Co.
Address 0
Legal Land
Location 0

Landbase Requirements (hectares) based on 2006 AOPA requirements

Category of Livestock	Type of Livestock	Number of Animals	Dark Brown & Brown (ha)	Grey Wooded (ha)	Black (ha)	Irrigated (ha)
Feedlot Animals	Cows/Finishers (900+ lbs)	0.0	0.0	0.0	0.0	0.0
	Feeders (450 - 900 lbs)	0.0	0.0	0.0	0.0	0.0
	Feeder Calves (<550 lbs)	0.0	0.0	0.0	0.0	0.0
	Horses - PMU	0.0	0.0	0.0	0.0	0.0
	Horses - Feeders > 750 lbs	0.0	0.0	0.0	0.0	0.0
	Horses - Foals < 750 lbs	0.0	0.0	0.0	0.0	0.0
	Mules	0.0	0.0	0.0	0.0	0.0
	Donkeys	0.0	0.0	0.0	0.0	0.0
	Bison	0.0	0.0	0.0	0.0	0.0
		0.0				
Dairy (*count lactating cows only)	Free Stall – Lactating Cows with all associated dries, heifers, and calves*	100.0	148.5	123.7	92.8	74.2
	Free Stall – Lactating Cows with Dry Cows only *	0.0	0.0	0.0	0.0	0.0
	Free Stall – Lactating Cows only*	0.0	0.0	0.0	0.0	0.0
	Tie Stall – Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Loose Housing – Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Solid manure)	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Liquid manure)	0.0	0.0	0.0	0.0	0.0
	Replacements – Bred Heifers (Breeding to Calving)	0.0	0.0	0.0	0.0	0.0
	Replacements - Growing Heifers (350 lbs to breeding)	0.0	0.0	0.0	0.0	0.0
	Calves (< 350 lbs)	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Liquid (*count sows only)	Farrow to finish *	600.0	401.0	334.2	250.7	200.5
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	0.0	0.0	0.0	0.0	0.0
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Solid (*Count sows only)	Farrow to finish *	0.0	0.0	0.0	0.0	0.0
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	0.0	0.0	0.0	0.0	0.0
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Poultry	Chicken - Breeders - Solid	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - Liquid (includes associated pullets)	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - (Belt Cage)	48960.0	269.3	225.2	166.5	137.1
	Chicken - Layers - (Deep Pit)	0.0	0.0	0.0	0.0	0.0
	Chicken - Pullets/Broilers	24500.0	79.6	66.4	49.7	39.9
	Turkey - Toms/Breeders	0.0	0.0	0.0	0.0	0.0
	Turkey - Hens (light)	0.0	0.0	0.0	0.0	0.0
	Turkey - Broilers	100.0	0.5	0.4	0.3	0.3
	Ducks	400.0	0.6	0.5	0.4	0.3
	Geese	100.0	0.3	0.3	0.2	0.2
		0.0				
Goats and Sheep	Sheep - Ewes/Rams	0.0	0.0	0.0	0.0	0.0
	Sheep - Ewes with lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Feeders	0.0	0.0	0.0	0.0	0.0
	Goats - Meat/Milk (per Ewe)	0.0	0.0	0.0	0.0	0.0
	Goats - Nannies/Billies	0.0	0.0	0.0	0.0	0.0
	Goats - Feeders	0.0	0.0	0.0	0.0	0.0
		0.0				
Cervid	Elk	0.0	0.0	0.0	0.0	0.0
	Deer	0.0	0.0	0.0	0.0	0.0
		0.0				
Wild Boar	Feeders	0.0	0.0	0.0	0.0	0.0
	Sow (farrowing)	0.0	0.0	0.0	0.0	0.0
		0.0				
	Total Hectares		900	750.7	560.6	452.5
	Total Acres		2,224	1855.1	1385.3	1118.1

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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): +/- 5 m

Requirements (m): Category 1: 773 Category 2: 1,031 Category 3: 1,288 Category 4: 2,062

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: 2,224 acres brown/dark brown

Land base listed: 3,161 acres brown/dark brown

Area not suitable: 345.1 acres brown/dark brown

Available area 2,815.9 acres brown/dark brown 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 Partially completed in Authorizations LA03032/LA03032A

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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. Layer Barn
2. _____

Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	NRCB USE ONLY Estimated storage capacity (m^3)
1.	108.2 ~~100 m~~	30.5 ~~30 m~~	0	
2.				
			TOTAL CAPACITY	Sufficient capacity

AO Comment: Applicant is proposing to build a 72.2 m x 15.3 m addition to existing layer barn and has listed the final dimensions.

☑ 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

Barn Has a Roof
(No Run off)

Liner protection

Describe how the physical integrity of the liner will be maintained

Maintain Cracks
With Sikaflex

NRCB USE ONLY

Requirements met: ☑ YES ☐ NO

Last updated February 26, 2021

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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	Method of sulphate protection:
6 inches	Type 50
Concrete strength	**Concrete reinforcement size and spacing**
30 mpa	10mm rebar on 12 inch spacing

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: Estimated at 20 m below grade — Requirements met: ☑ YES ☐ NO

Depth to Uppermost groundwater resource: 132 m below grade — Requirements met: ☑ YES ☐ NO

ERST completed: ☑ see ERST page for details

Surface water control systems

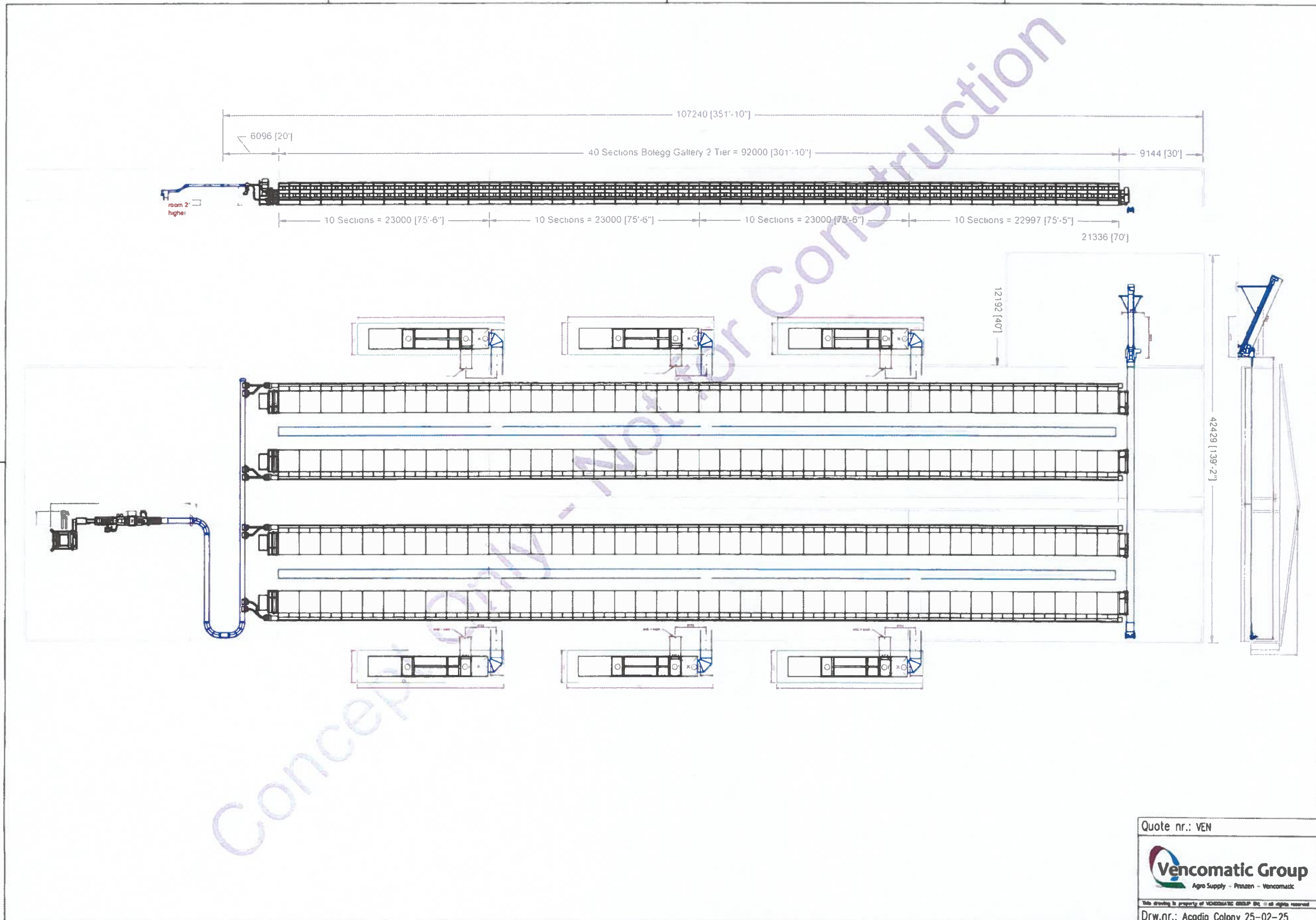
Requirements met: ☑ YES ☐ NO Details/comments:

Concrete liner details

A condition is included in this permit requiring the applicant to provide proof that the concrete will meet the specifications for category D (solid manure - dry) as outlined in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas".

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

AO Com[illegible]t: Proposed construction plans for the layer barn with the addition



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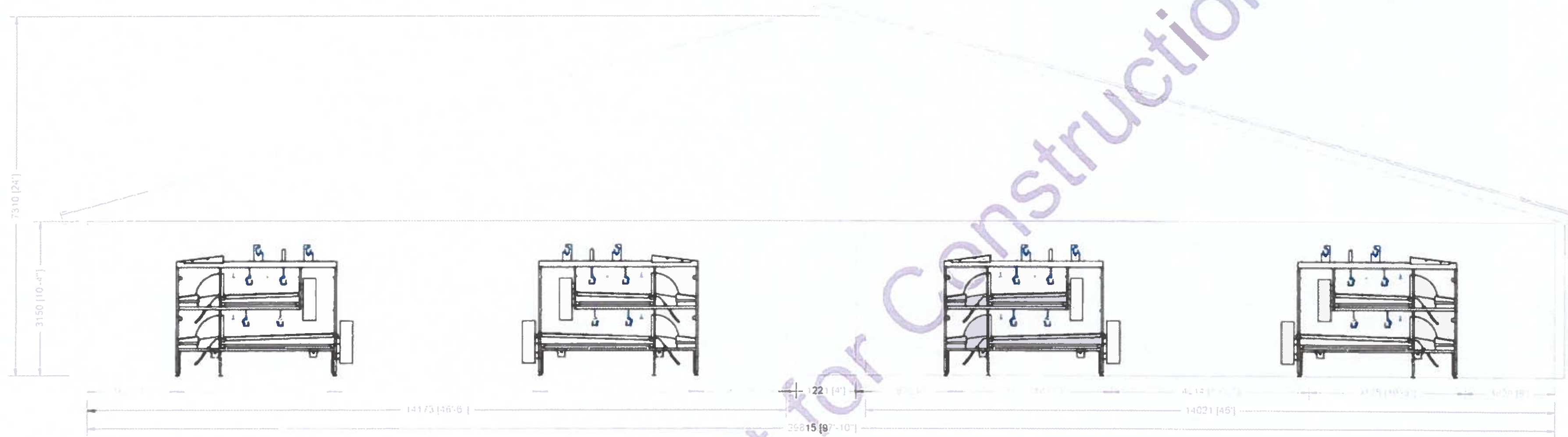

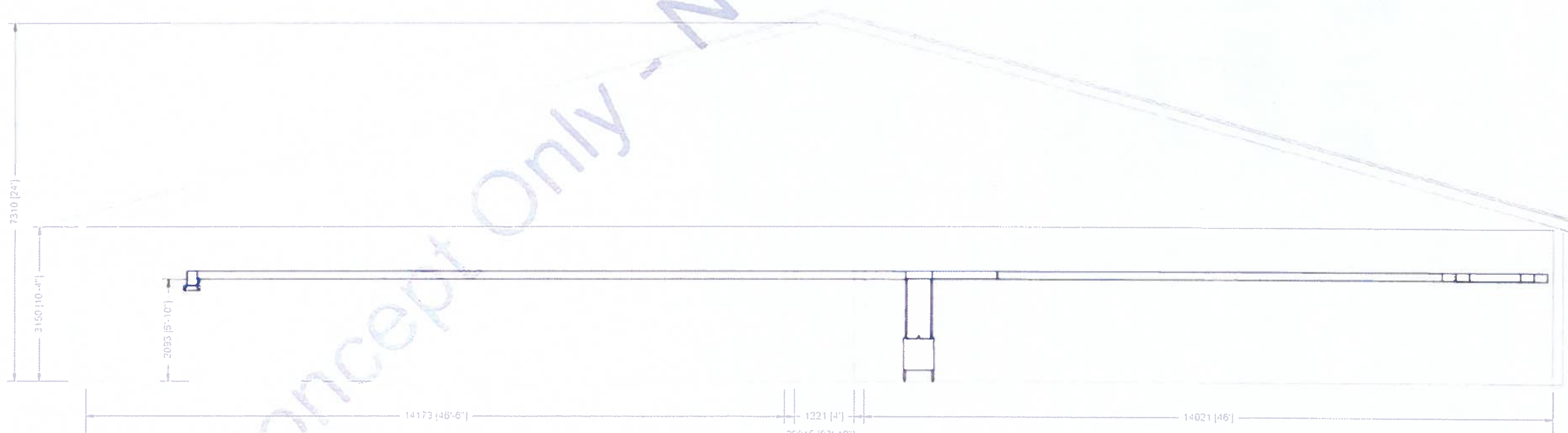

Quote nr.: VEN

Vencomatic Group
Agro Supply - Prinzen - Vencomatic

Drw.nr.: Acadia Colony 25-02-25

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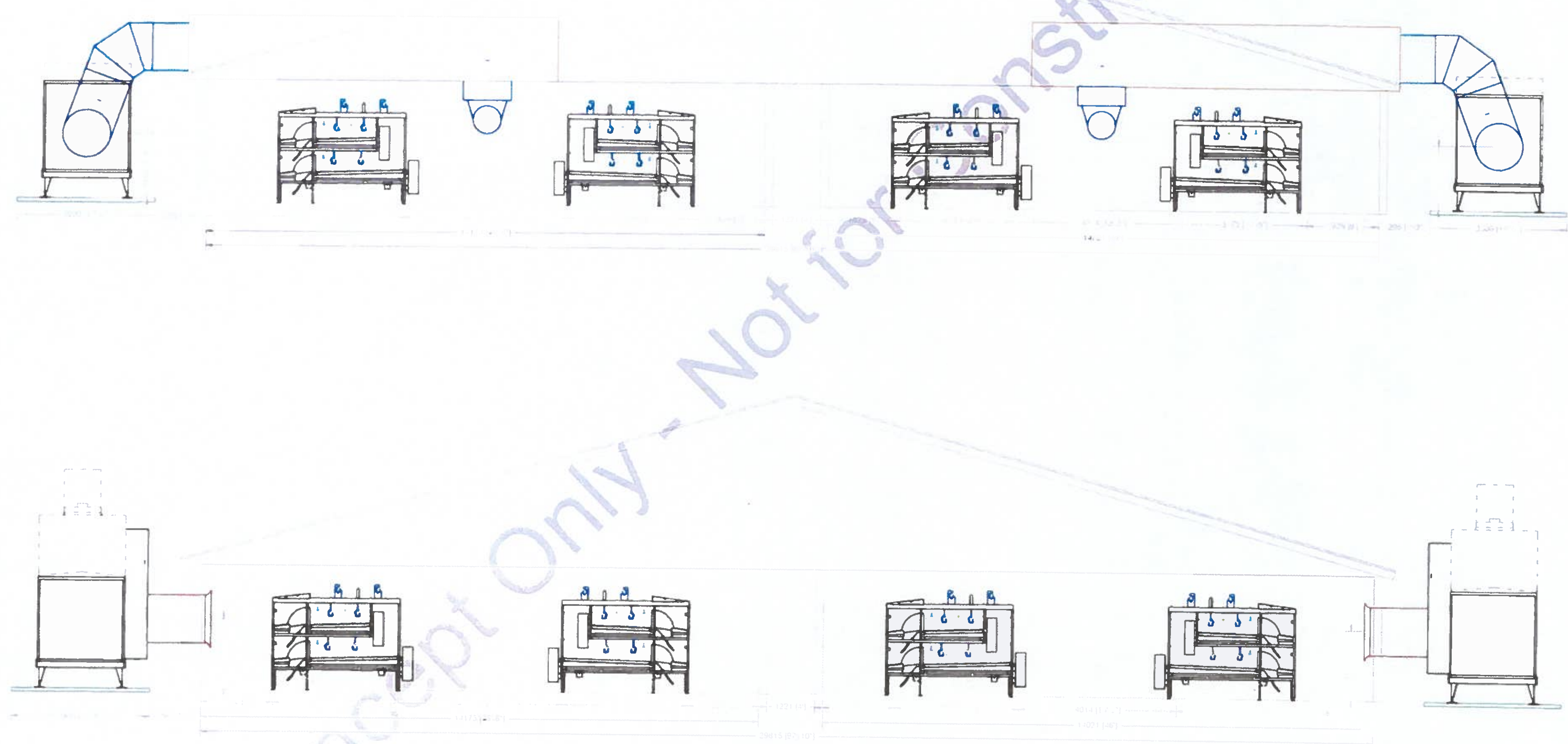

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Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

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

January 27, 2025	

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: April 1, 2025

Municipality: MD of Acadia

☑ 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

Other: Special Areas No. 3, TC Energy (NGTL GP Ltd.) ☐ N/A

☑ letter sent ☑ response received ☑ written/email ☐ verbal ☐ no comments received

Other: Canadian Utilities Ltd., Dry Country Gas Coop Ltd., Henry Kroeger Regional Water Services Commission ☐ N/A

☑ letter sent ☐ response received ☐ written/email ☐ verbal ☑ no comments received

Xerox® AltaLink® C8145 Color MFP SMTP Transfer Report

Job Status: FAILED

Job canceled by user.

Job Information

Device Name:	Xerox AltaLink C8145 \(AA:5C:C1\)
Submission Date:	05/13/25
Submission Time:	11:58 AM
Images Scanned:	4
Size:	390311
Attachment Name:	Scanned from a Xerox Multifunction Printer.pdf
Format:	Image-Only PDF
Encrypted E-mail:	No

SMTP Server

Address:	nrcb-ca.mail.protection.outlook.com:25

Message Settings:

Subject:	Scanned from a Xerox Multifunction ...
From:	administrator@nrcb.ca
Reply To:	administrator@nrcb.ca
To:	

1. kailee.davis@nrcb.ca