

# Technical Document LA24024



## 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	Legal land description
	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Registration <input type="checkbox"/> Authorization <input type="checkbox"/> Amendment	<u>LA24024</u>

### 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.

May 22/2024

Date of signing

New Elm Hutterian Brethren

Corporate name (if applicable)

Signature

Sam Entz

Print name

### GENERAL INFORMATION REQUIREMENTS

<b>Proposed facilities:</b> 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)
Renovate and build onto barn to increase capacity . (see below)	57.22 m X 13.10 m
Manure load out attached to pullet barn	9.75 m X 16.15 m
AO comment: the dimensions of the existing barn (old layer barn) do not change. New Elm proposed to change the liner to accommodate the raising of pullets in that barn	

<b>Existing facilities:</b> list ALL existing confined feeding operation facilities and their dimensions		
Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
See next page		

<b>NRCB USE ONLY</b>
All facilities confirmed with location and dimensions

**Existing permitted facilities**

LA17026	Layer barn – 80.5 m x 26.3 m Attached manure storage – 13.7 m x 21.3 m
LA14032	Quarantine barn – 16 m x 2.5 m
LA05018A	Hog barn load out – 38 m x 14 m
LA03007	Liquid manure steel storage
Grandfathered facilities	Dairy barn – 60 m x 20 m 4 dry cow pens with shed – 43 m x 40 m Feedlot with shed – 130 m x 75 m Catch Basin – 50 m x 12 m x 2.7 m deep 4 Hog barns (feeder: 70 m x 16 m; feeder 40 m x 16 m; farrow: 50 m x 16 m; dry sow: 30 m x 16 m) Broiler barn – 45 m x 12 m Layer barn – 45 m x 12 m (now pullet barn to be renovated. Actual dimensions are 57.22 m x 13.1 m)

See previous page

Approval LA21041 also permitted the construction of a new dairy barn (126.2 m x 45.7 m), a solid manure storage pad (91.4 m x 106.7 m), and a calf barn (33.52 m x 13.1 m)

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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

Construction completion date for proposed facilities Dec 31 2025

**Additional information**

**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
Dairy (plus associated livestock)	160	0	160
Beef finishers	900	0	900
Sow farrow to finish	225	0	225
Chicken layers	35,000	0	35,000
Chicken broilers	800	0	800
Ducks	800	0	800
Geese	60	0	60
AO comment: New Elm Colony is proposing an increase in chicken pullet numbers from 3,200 to 21,400			

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### 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 ID118722

AO comment: New Elm Colony provided a copy of their water licenses (on file)

Signed this 22 day of May, 2024.

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

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### **OPTION 4: Uncertain if *Water Act* licence is needed; acknowledgement of risk (for existing CFOs only)**

1. At this time, I (we) do not know whether a new water licence is needed from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. If a new *Water Act* licence is needed, 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 additional 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 my *Water Act* licence application, if a new water licence is needed.
5. I (we) acknowledge that any such construction or livestock increase 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 license number(s) or water conveyance agreement details \_\_\_\_\_

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

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

W

Randg Road  
222



South

Dairy

Pullet Barn

Old Layer

Layer barn

Hogs

North

Creek

East

Creek

Township  
Road  
42A

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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: As indicated (pullet barn renovation)

~~Proposed 1~~ ~~Proposed 2~~ ~~Proposed 3~~ Existing: Dairy barn

Proposed 2: \_\_\_\_\_

Proposed 3: \_\_\_\_\_

Facility and environmental risk information	Facilities			NRCB USE ONLY		
	Existing	Proposed 1	Proposed 2	Proposed 3	Meets requirements	Comments
<b>Flood plain information</b> 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 type="checkbox"/> > 1 m <input checked="" type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	All facilities are 1 m above the high water mark
<b>Surface water information</b> How many springs are within 100 m of the manure storage facility or manure collection area?	None	none			<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	none observed during site visit or in EPA database
<b>Surface water information</b> How many water wells are within 100 m of the manure storage facility or manure collection area?	None				<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	none observed during site visit or in EPA database
<b>Groundwater information</b> What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	234.21M per google	260 m			<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	confirmed (unnamed creek)
<b>Groundwater information</b> What is the depth to the water table?	4 m Estimated	4 m			<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	> 4 m (not encountered during construction of in barn-pit of dairy barn (4 m))
<b>Groundwater information</b> What is the depth to the groundwater resource/aquifer you draw water from?	33.53 m ID118722				<input checked="" type="checkbox"/> YES <input type="checkbox"/> YES with exemption	33.53 m below ground ID118722

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

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<b>NRCB USE ONLY</b> <b>ENVIRONMENTAL RISK SCREENING INFORMATION</b>			
<b>ERST for <u>proposed</u> facilities</b>		<b>See Decision Summary</b>	
Facility	Groundwater score	Surface water score	File number
<b>ERST for <u>existing</u> facilities</b>			
Facility	Groundwater score	Surface water score	File number
all facilities were assessed in conjunction with Approval LA14032 in 2014 and were determined to pose a low risk to surface water and groundwater			
<b>ERST related comments:</b>			



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**NRCB USE ONLY**  
**WATER WELL AND SURFACE WATER INFORMATION**

Well IDs: water well ID0118721 and 0118722 Not within 400 m of any MSF/MCA

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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

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**Groundwater or surface water related comments:**

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## 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
John Hetesi	NE 27-4-22 W4	1.5 miles	Ag	1	3.4 km		yes
Rockport Colony	NE 18-4-23	2.5 miles	Ag	1	4 km		yes
Schneider Farms	NE 26-4-22	2 miles	Ag	1	3.6		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)
Existing permanent storage pad	SE-15-4-22-W4M			See analysis on following page	
				Total	

\* 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)**

Land Location	Acres	Soil Zone	Land Owner
Sec. 3-4-22-W4	640	DB	New Elm Colony
Sec. 4-4-22-W4	640	DB	New Elm Colony
Sec. 5-4-22-W4	640	DB	New Elm Colony
Sec. 10-4-22- 4	640	DB	New Elm Colony
Sec. 11-4-22-W4	640	DB	New Elm Colony
Sec. 12-4-22-W4	640	DB	New Elm Colony

I = Irrigated acres

Total Irrigated acres = 3840 (1555ha)

AO comment: An analysis of available manure spreading lands was done in conjunction with Approval LA17026 (page 12 ff of Technical Document LA17026) and came to the following conclusion: due to applicable setbacks from common bodies of water a subtraction of approximately 1000 acres would be appropriate. The total available land base for manure spreading is therefore 2840 acres.

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## NRCB USE ONLY

### MINIMUM DISTANCE SEPARATION

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

Margin of error (if applicable): +/- 4 m

Requirements (m): Category 1: 657 m Category 2: 876 m Category 3: 1095 m Category 4: 1752 m

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: 950 acres irrigated or 1892 acres brown dry

Land base listed: 3840 acres irrigated

Area not suitable: ~1000 acres

Available area: 2840 acres irrigated 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 LA17026

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**NRCB USE ONLY**

**ALL SIGNATURES IN FILE**  YES  NO

**DATES OF APPROVAL OFFICER SITE VISITS**

May 22, 2024	

**CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES**

Date deeming letters sent: June 6, 2024

**Municipality:** Cardston County

letter sent       response received       written/email       verbal       no comments received

**Alberta Health Services:** NA

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:** Magrath Irrigation district  N/A

letter sent       response received       written/email       verbal       no comments received

**Other:** Chief Mountain Gas Coop, Fortis Alberta  N/A

letter sent       response received       written/email       verbal       no comments received

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## 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.** Pullet barn (Existing facility, existing liner will be replaced)  
**2.** Manure load out \_\_\_\_\_

### 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.	55.16 m	13.10 m	0	AO comment: liner will be replaced (see page 1)
2.	9.75 m	16.15 m	0	
TOTAL CAPACITY				9 month storage

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

Dry manure in barn under roof

### Liner protection

Describe how the physical integrity of the liner will be maintained

Sikaflex if crack will form

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

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

### Concrete liner details

Concrete thickness 6 in	Method of sulphate protection: Type 50
Concrete strength 32 mpa	Concrete reinforcement size and spacing 12 to 14 in on center 12 mm

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: > 4 m below ground level Requirements met:  YES  NO  
Depth to Uppermost groundwater resource: > 33 m below ground level Requirements met:  YES  NO  
ERST completed:  see ERST page for details

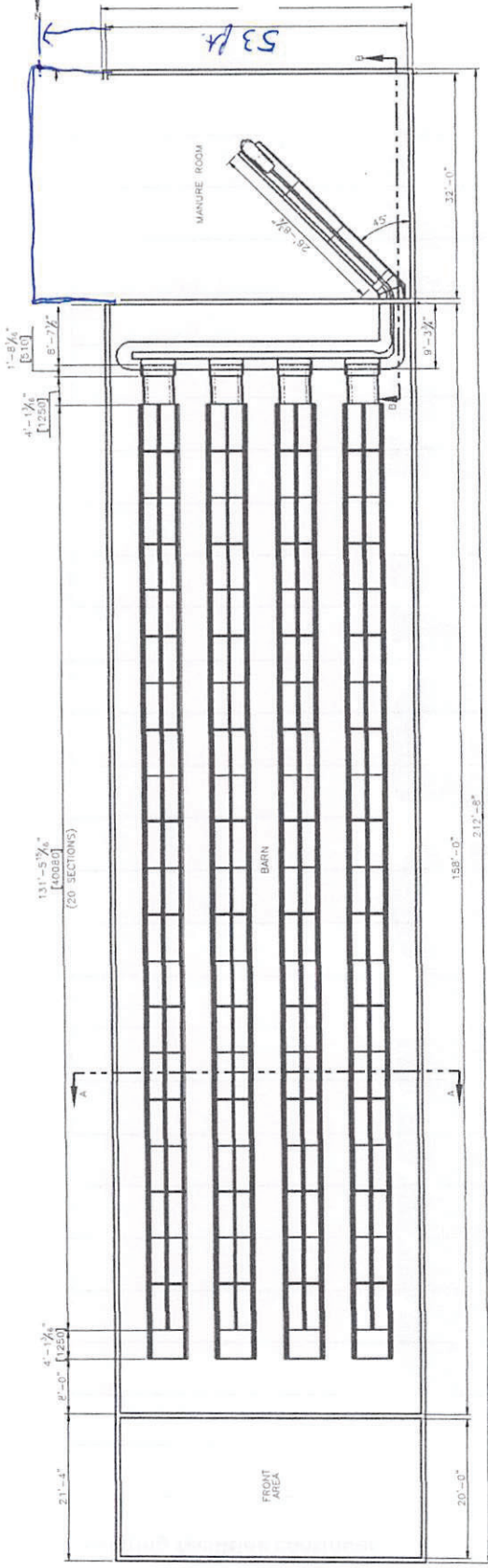
#### Surface water control systems

Requirements met:  YES  NO Details/comments:

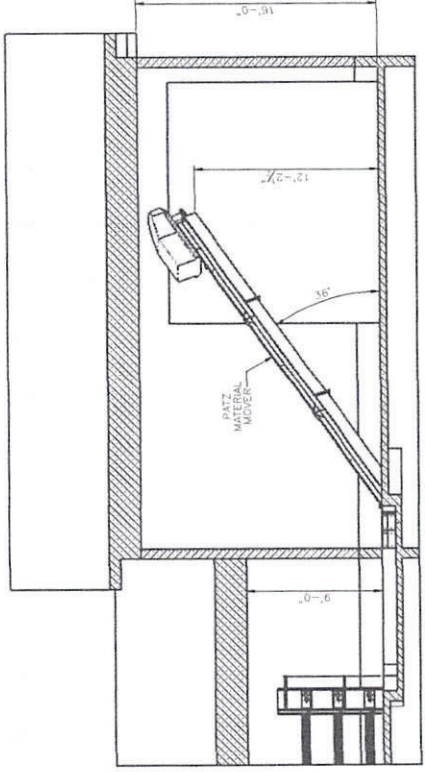
#### Concrete liner details

Condition will be included requiring proof that concrete specs have been met

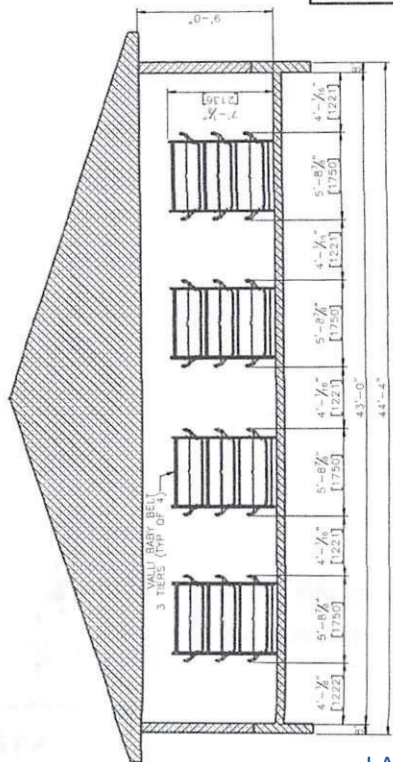
Leakage detection system required:  YES  NO If yes, please explain why.



PLAN VIEW



SECTION B-B  
SCALE: 1/4" = 1'-0"



SECTION A-A  
SCALE: 1/4" = 1'-0"

CLIENT: NEW ELM COLONY  
MAGRATH, ALBERTA

PROJECT TITLE: PULLEY BARN

SCALE: 1/8" = 1'-0"

DATE: APR/2/24

DESIGNER: D.B.S.

DRAWN BY: TT

CHECKED BY: 1 OF 1

REVISION: A

**DENNER FARM SERVICES**

66-3711 HWY 12 LACOMBE AB T0C 2G0

TEL: 403-263-2889 FAX: 403-263-8879

PROPERTY RIGHTS: THE CLIENT'S SOLE PROPERTY AND NOT BE SUBJECT TO ANY RIGHTS OF THIRD PARTIES. DENNER FARM SERVICES AND ITS EMPLOYEES SHALL NOT BE LIABLE FOR CONSTRUCTION UNLESS ORDERED BY AN ENGINEER.

NO.	DATE	BY (ENR)	DESCRIPTION

ENGINEERING: \_\_\_\_\_

STAMP: \_\_\_\_\_