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	LA24045	NE 20-8-20 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.

October 18/24
Date of signing

[redacted]
Signature

Corporate name (if applicable)

Rose Niedermier
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)
Feedlot Pens (east)	35 m x 115 m
Feedlot Row (west)	31 m x 96 m
Catch Basin (east)	33 m x 13 m x 2 m
Catch Basin (west)	29 m x 13 x 2 m

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

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Historic livestock pens	80 m x 95 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**

New feedlot pens will replace old lilvestock pens.
Old livestock barn will be removed.
Install new feedbunk and cattle alley

Construction completion date for proposed facilities Dec 1, 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**
n/a			

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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: _____ **Proposed 1:** Feedlot Pens

Proposed 2: Catch basin (west) **Proposed 3:** Catch basin (east)

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	
Surface water information	How many springs are within 100 m of the manure storage facility or manure collection area?		0	0	0	☐ YES ☐ NO ☐ YES with exemption	
	How many water wells are within 100 m of the manure storage facility or manure collection area?		0	0	0	☐ YES ☐ NO ☐ YES with exemption	
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)		2800m	2800m	2800m	☐ YES ☐ NO ☐ YES with exemption	
Groundwater information	What is the depth to the water table?		>10m	>10m	>10m	☐ YES ☐ NO ☐ YES with exemption	
	What is the depth to the groundwater resource/aquifer you draw water from?		>10m	>10m	>10 m	☐ YES ☐ NO ☐ YES with exemption	

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

See attached geotechnical and drilling report from John Lobbezoo and Chilako Drilling

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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**
Murray Fry	NW 20-8-20W4M	560m					
David Schapansky	NW 21-8-20W4M	150m					
Marcus Schapansky	SW 21-8-20W4M	560m					
Steve Gulyas	SE 20-8-20W4M	470m					

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)**
Rose Niedermier	Section 29-8-20W4M	600 acres	Irrigated		
			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)

Minimum Distance Separation (MDS) Waiver (declaration)

Residence owner(s) information

ALL Names on land title: David & Sharlene Schapansky

Legal land location of residence(s): NW-21-08-20 W4

Telephone number(s)[1]: [redacted] Email address(es)[1]: [redacted]

Address(es)[1] and Postal code(s)[1]: 83069 Range Rd 204 Lethbridge County, AB T1J 5N7

[1] ***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:

- I/we have read the NRCB Fact Sheet "Minimum Distance Separation (MDS) Waivers";
- I/we have discussed this application with the applicant and understand its potential impacts to our residence(s);
- I/we understand that the application **does not** meet the MDS requirement to my/our residence(s), under the *Agricultural Operation Practices Act* (AOPA);
- **I/we understand that this waiver is not valid unless signed by ALL parties identified on the land title as owners;**
- **I/we are not obligated to waive the MDS requirement to our residence(s)**;
- 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
- 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 _____.

[redacted] [redacted]

Signatures of **all** residence owner(s) on title

David Schapansky Sharlene Schapansky

Printed names of **all** residence owner(s) on title

Date: October 9, 2024

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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)

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 18 day of October, 2024. _____ [redacted]
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

Last updated September 11, 2023

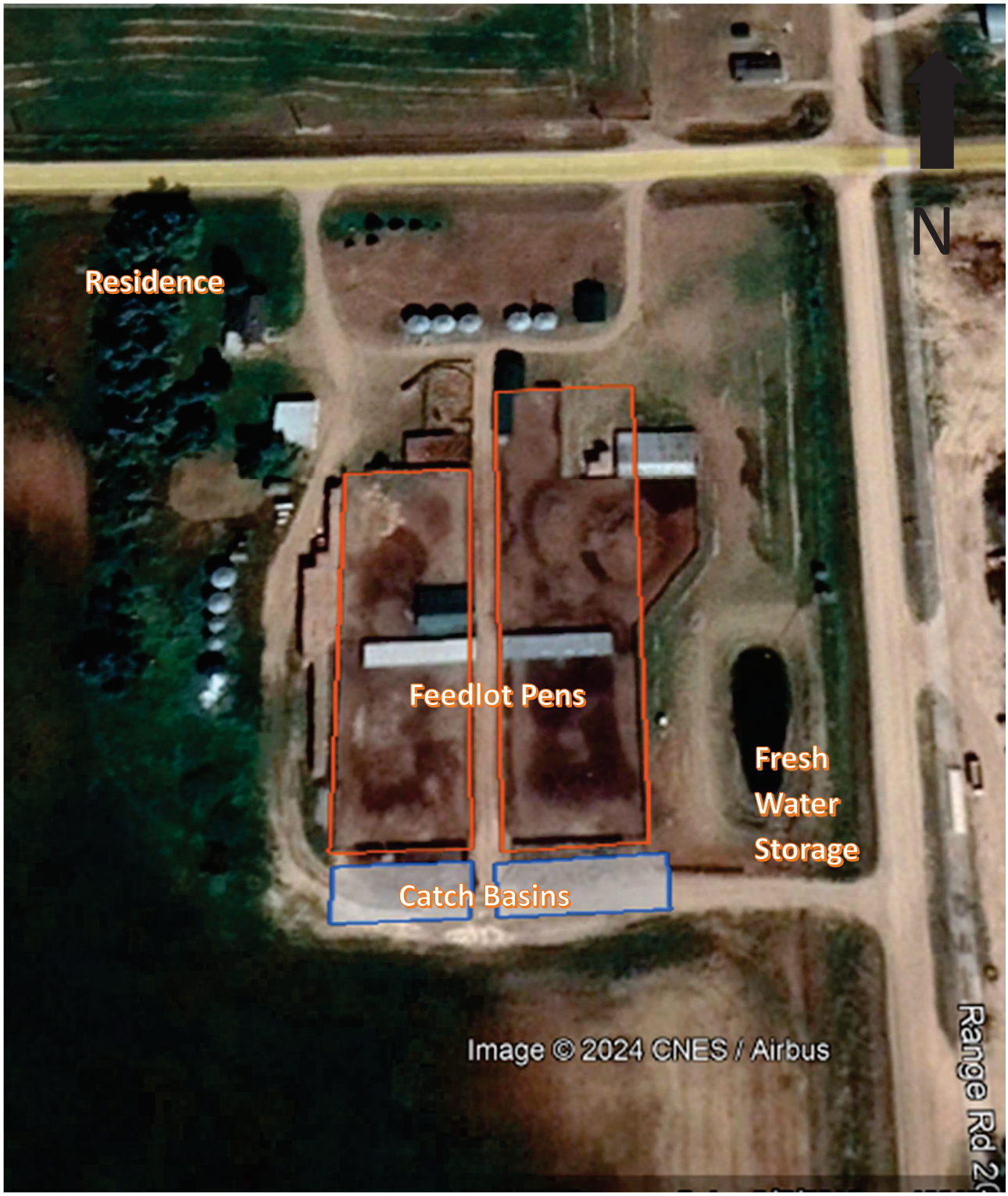

Figure 1 – Niedermier Feedlot Application – Site Map

Figure 2 – Niedermier Feedlot Application - Area Map with residences (yellow star)

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SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Naturally occurring protective layer

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

Facility description / name *(as indicated on site plan)*

1. Feedlot pens

2. _____

Manure storage capacity

	Length (m)	Width (m)	Depth below ground level (m)	**NRCB USE ONLY** Estimated storage capacity (m^3)
1.	35	115	0	
2.	31	96	0	
			TOTAL CAPACITY	

☐ 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

Pens runoff will be directed into the catchbasin to the south of the pens

Naturally occurring protective layer details

Thickness of naturally occurring protective layer	3.5 (m)	Provide details (as required) See borehole CF5-24	
Soil texture	41.9 % sand	25.1 % silt	33 % clay
Hydraulic conductivity - naturally occurring protective layer	Depth and type of soil tested 6.5 - 8.0 m bgs	Hydraulic conductivity (cm/s) 3.6 x 10-8 cm/s	Describe test standard used In-situ permability test

Additional information *(attach copies of soil test reports)*

See attached geotechnical report from John Lobbezoo Consulting for additional information

NRCB USE ONLY

Requirements met: ☐ YES ☐ NO

Condition required: ☐ YES ☐ NO

Report attached: ☐ YES ☐ NO

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RUNOFF CONTROL CATCH BASIN: Naturally occurring protective layer

*(complete a copy of this section for **EACH proposed** runoff control catch basin with a naturally occurring protective layer)*

Facility description / name *(as indicated on site plan)*

1. Catch Basin (west)
2. Catch Basin (east)
3. _____

Determination of runoff area

Provide a plan and show how you calculated the area contributing to runoff for each catch basin

See attached catch basin calculations for both structures (west and east)

Catch basin capacity

	Length (m)	Width (m)	Total depth (m)	Depth below ground level (m)	Slope run:rise			NRCB USE ONLY
					Inside end walls	Inside side walls	Outside walls	Calculated storage capacity (excl. 0.5 m freeboard) (m^3)
1.	33	13	2	2	1:3	1:3	n/a	
2.	29	13	2	2	1:3	1:3	n/a	
3.								
							TOTAL CAPACITY	

Naturally occurring protective layer details

Thickness of naturally occurring protective layer	3.5 (m)	Provide details (as required) See borehole CF5-24	
Soil texture	41.9 % sand	25.1 % silt	33 % clay
Hydraulic conductivity - naturally occurring protective layer	Depth and type of soil tested 6.5 - 8.0 m bgs	Hydraulic conductivity (cm/s) 3.6 x 10-8 cm/s	Describe test standard used In-situ permability test

Catch Basin – Design and management requirements can be found in Technical Guideline Agdex 096-101

If soil info differs per facility include additional soils page.

NRCB USE ONLY

Requirements met: ☐ YES ☐ NO

Condition required: ☐ YES ☐ NO

Report attached: ☐ YES ☐ NO

Catch Basin Dimensions Calculator

Construction Dimensions of Catch Basin

Size of Catch Basin	Metric		English Units: Capacity of Catch Basin	
Length*[4]	33.0	m	108.27	Feet
Width*[4]	13.0	m	42.65	Feet
Total Depth*[4]	2.0	m	6.56	Feet
Water Depth	1.50	m	4.92	Feet
End Slope*[4]	3	run:rise	3	run:rise
Side Slope*[4]	3	run:rise	3	run:rise
Length of Bottom	21.0			
Width of Bottom	1.0			
Total Capacity @ top of Bank	**402**	**m^3**	**14,196**	**ft^3**
			88,428	**Imp. Gal.**

* Only cells in blue can be changed.

Storage Volume of Catch Basin at Design Capacity (without freeboard)			Volume at Freeboard	
Length (Top of liquid level)	30.0	m	98.43	Feet
Width (Top of liquid level)	10.0	m	32.81	Feet
Depth	2.0	m	6.56	Feet
Water Depth	1.50	m	4.92	Feet
End Slope	3	run:rise	3	run:rise
Side Slope	3	run:rise	3	run:rise
Total Volume@ freeboard depth	**221**	**m^3**	**7,787**	**ft^3**
			48,503	**Imp. Gal.**
Surface Area of Liquid Manure	**300**	**m^2**	**3,229**	**ft^2**

Name[1]	Niedermier - CB (east)		
Land Location[1]	1-1-4-W5		
Area[2]	Length (m)	Width (m)	Area (m^2)
1	35	115	4,025
2			0
3			0
4			0
5			0
	Total Area		4,025

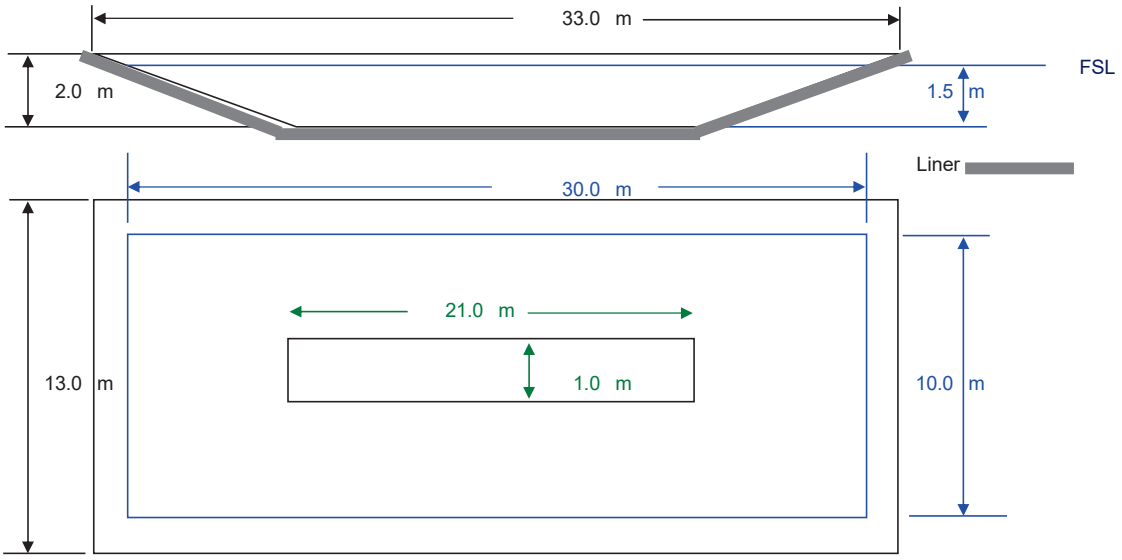
Select Town[3]
Coaldale 85
Design Rainfall 85 mm

Catch Basin	Length (m)	Width (m)	Area (m^2)
1	33	13	429

Catch Basin Design Volume

205 m^3 **7,249 ft^3**
45,154 Imp. Gal.

** Storage volume should be same or slightly greater than design storage volume.



Lines in Black - Catch basin dimension
Lines in Blue - full level

NTS - Not Drawn To Scale

Catch Basin Dimensions Calculator

Construction Dimensions of Catch Basin

Size of Catch Basin	Metric		English Units: Capacity of Catch Basin	
Length*[4]	29.0	m	95.14	Feet
Width*[4]	13.0	m	42.65	Feet
Total Depth*[4]	2.0	m	6.56	Feet
Water Depth	1.50	m	4.92	Feet
End Slope*[4]	3	run:rise	3	run:rise
Side Slope*[4]	3	run:rise	3	run:rise
Length of Bottom	17.0			
Width of Bottom	1.0			
Total Capacity @ top of Bank	**346**	**m^3**	**12,219**	**ft^3**
			76,109	**Imp. Gal.**

* Only cells in blue can be changed.

Storage Volume of Catch Basin at Design Capacity (without freeboard)			Volume at Freeboard	
Length (Top of liquid level)	26.0	m	85.30	Feet
Width (Top of liquid level)	10.0	m	32.81	Feet
Depth	2.0	m	6.56	Feet
Water Depth	1.50	m	4.92	Feet
End Slope	3	run:rise	3	run:rise
Side Slope	3	run:rise	3	run:rise
Total Volume@ freeboard depth	**188**	**m^3**	**6,622**	**ft^3**
			41,244	**Imp. Gal.**
Surface Area of Liquid Manure	**260**	**m^2**	**2,799**	**ft^2**

Name[1]: Niedermier - CB (west)

Land Location[1]: 1-1-4-W5

Area[2]	Length (m)	Width (m)	Area (m^2)
1	31	96	2,976
2			0
3			0
4			0
5			0
	Total Area		2,976

Select Town[3]: Coaldale 85

Design Rainfall: 85 mm

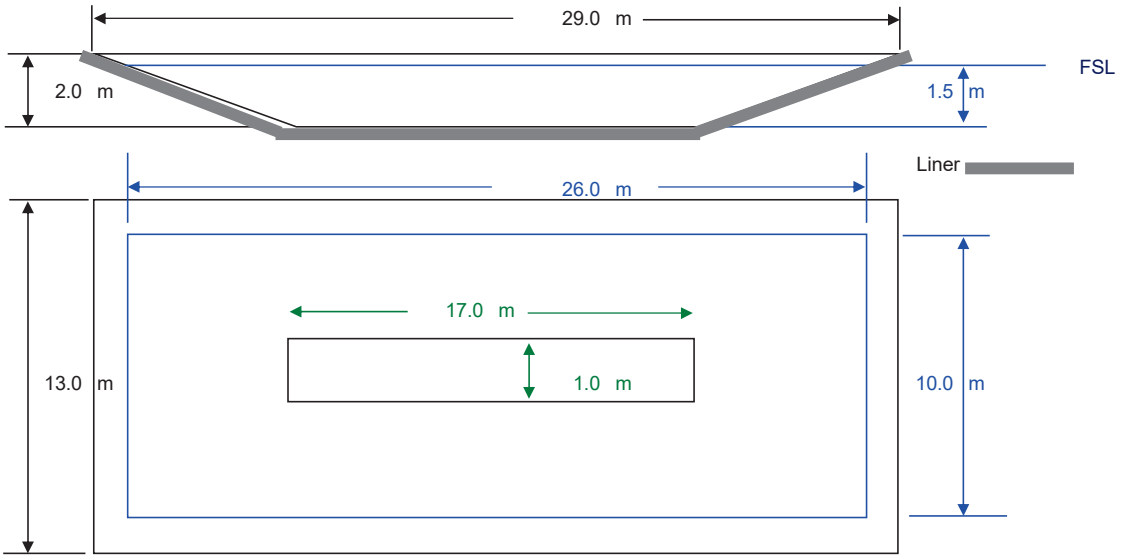
Catch Basin	Length (m)	Width (m)	Area (m^2)
1	29	13	377

Catch Basin Design Volume

152 m^3 **5,360 ft^3**

33,386 Imp. Gal.

** Storage volume should be same or slightly greater than design storage volume.



Lines in Black - Catch basin dimension

Lines in Blue - full level

NTS - Not Drawn To Scale