

Application for Amendment

Application under the *Agricultural Operation Practices Act* to amend a permit for a confined feeding operation, manure collection area and/or manure storage facility(ies). ("Permit" means an NRCB-issued or grandfathered approval, registration, or authorization, including a grandfathered municipal development permit.)

NRCB USE ONLY NRCB Application number Date Stamp <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Registration <input type="checkbox"/> Authorization	NRCB APPLICATION 04 MAY 23 RECEIVED
LA21053XA	

CONTACT INFORMATION

Applicant Information		
Name: Cody Schooten	Corporate Name (if applicable) John Schooten and Sons Custom Feedyard Ltd	
Address: Box 148		
City/Town: Diamond City	Province: Alberta	Postal Code: T0K 0T0
Agent consent (if applicable) I, _____, hereby give consent for _____ (name of applicant) (name of agent and company) to act on my behalf or as my agent for this application. Signed this ____ day of _____, 20____. _____ Signature <div style="text-align: right; margin-right: 50px;"><i>of Applicant</i></div>		

LOCATION OF DEVELOPMENT

Which permit do you wish to amend? (List permit number and issuing agency.)	LA21053 NRCB
Legal Land Description(s)	S ½ 8-21-24 W4M N ½ 5-21-24 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 herein and acknowledge that the information provided in this application is true to the best of my knowledge.

May 3rd 2023
[Signature]

Date of signing Signature

John Schooten: Sons Custom Feedyard LTD

Cody Schooten

Corporate name (if applicable) Print name

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Application for Amendment – contd.



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AMENDMENT INFORMATION REQUIREMENTS

Instructions:

For each part of your permit that you would like amended, please detail what change you would like made and why, and how your proposed change will meet the AOPA requirements. You may attach additional pages to this form to provide this information.

Please note that an approval officer may require a page (or pages) of the Part 2 application forms to be completed as part of this application for amendment, depending on what changes are proposed.

Applying to change the dimensions of the catch basin to 177 meters long x 67meters wide x 3.29 meters deep.

The purpose for the change is to increase depth of the catch basin to help facilitate better drainage from pens into the catch basin.

See attached Agriculture and Irrigation Catch Basin Dimension Calculator confirming catch basin volume (minus freeboard) meets AOPA standard of estimated runoff.

See attached Part 2 NRCB Runoff control technical requirements document.

See attached email confirming WSP opinion that the clay identified at the base of the catch basin meets the AOPA requirements for catch basins.



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Application under the

Part 2 – Technical Requirements

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

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. Effluent pond** _____ **2.**

3. _____

Determination of runoff area

80 pens 80m x 65m
6400m x 65m = 416,000 m ²

Catch basin capacity

	Length (m)	Width (m)	Total depth (m)	Depth below ground level (m)	Slope run:rise			NRCB USE ONLY Calculated storage capacity (excl. 0.5 m freeboard) (m ³)
					Inside end walls	Inside side walls	Outside walls	
1.	177	67	3.29	8	3:1	3:1	3:1	
2.								
3.								
							L CITY	

Naturally occurring protective layer details

Thickness of naturally occurring protective layer	18.2 _____ (m)	Provide details (as required) Please see attached email report from WSP confirming naturally occurring liner thickness.	
Soil texture	_____ % sand	_____ % silt	_____ % clay
Hydraulic conductivity - naturally occurring protective layer	Depth and type of soil tested	Hydraulic conductivity (cm/s) 4.4E-07	Describe test standard used Modified falling head
Technical Guideline Agdex 09 differs per facility include add	gn and management requirements can be found in	NRCB USE ONLY Requirements met: <input type="checkbox"/> YES <input type="checkbox"/> NO Condition required: <input type="checkbox"/> YES <input type="checkbox"/> NO Report attached: <input type="checkbox"/> YES <input type="checkbox"/> NO	



Schooten Farms <schootenandsons@gmail.com>

Schooten Feedlot - Confirmation of Soils Data

Lobbezoo, John <john.lobbezoo@wsp.com>

Tue, Apr 18, 2023 at 6:02 PM

To: "cody@schootenandsons.com" <cody@schootenandsons.com>

Cody,

This email is provided in response to concerns related to the as-built dimensions and elevations of the new catch basin associated with the new Schooten-Mossleigh Feedlot expansion. As indicated by the Dennis Dirtworx survey information, it is understood that the base of the constructed catch basin is at 8.0m below the original ground level at test hole SC28-21.

As outlined in WSP's (i.e. Wood's) report BX30492 dated May 20, 2021, the soil permeability at test well SC28-21 was tested from 5.7m to 9.2m depth. Of this 3.5m test length, 1.2m of the tested clay would extend below the base of the 8.0m excavated depth of the catch basin.

The results of the testing indicated a permeability, k , of 6.6×10^{-8} cm/s, and so the 1.2m of material extending from the base of the catch basin downward works out to an equivalent of 18.2 m of soil having a permeability of 1×10^{-6} cm/sec (the reference standard in AOPA). This 18.2m equivalent thickness is substantially more than the AOPA requirement of 5 m for catch basins, as indicated in Section 9.5-6 of the AOPA. It is also worthwhile to note that soil log for test hole SC2-21 describes that the clay down to 10.5m was also consistent with the soils tested, indicating that there is a 2.5m thick layer of clay (i.e., naturally occurring protective layer) from the base of the catch basin, and this 2.5m thick layer of clay at the tested permeability of 6.6×10^{-8} cm/s represents a calculated 38m of equivalent protective clay layer thickness below the base of the constructed catch basin. Accordingly, based on the results of the geotechnical site review and the catch basin elevation data provided by Dennis Dirtworks for the new catch basin, it's WSP opinion that the clay identified at the base of the catch basin meets the AOPA requirements for catch basins.

If you have any questions with this, don't hesitate to call or email.

Regards,

JL

**John Lobbezoo, P.Eng.**

Associate Engineer, Lethbridge Area GEM Lead

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WSP E&I Canada Limited

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wsp.com

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Catch Basin Dimension Calculator

For more information on runoff control catch basin design consideration including liner options, catch basin protection, etc., check out the catch basin [factsheet](#).

Name

Land Location

Estimating Runoff Potential

Area	Length (m)	Width (m)	Paved?	Area (m ²)
1	6400	65	NO <input type="checkbox"/>	416000.00
Total Area				416000.00

Estimation of water runoff to be collected in the catch basin:

24336 m³
 859418 ft³
 5353169 Imp. Gal

Calculating Catch Basin Volume:

Construction Dimensions	Storage Dimensions
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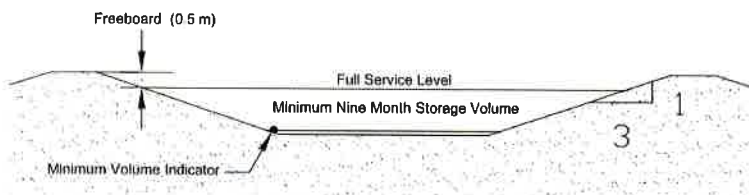
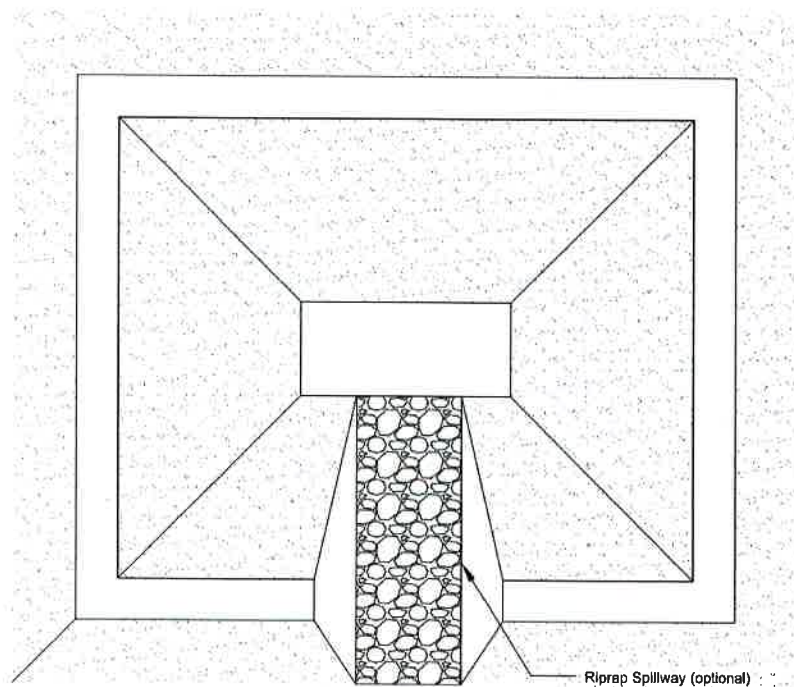
Length (m):	177	174.0
Width (m):	67	64.0
Depth (m):	3.29	2.79

Evacuation Capacity:

31520 m³
 1113118 ft³
 6933425 Imp. Gal

Catch basin volume (minus freeboard):

25772 m³
 910130 ft³
 5669047 Imp. Gal



Comparing Catch Basin Volume versus Runoff Potential:

Runoff potential: 24336 m³

Catch basin volume: 25772 m³

The catch basin dimensions meet the design requirements in AOPA