

Final Report

Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Form 3400-189A (R 05/16)

Page 1 of 3

NOTICE: This document is required under s. 281.65, Wis. Stats., and chs. NR 153 and 154, Wis. Adm. Code. A final project report must be submitted as part of the final reimbursement request. Personally identifiable information contained in this form will be used for determining reimbursement eligibility in the Targeted Runoff Management and Notice of Discharge Grant Programs and will not be used for any other purpose.

INSTRUCTIONS: Send the completed, electronic copy of this form and all attachments to the Department of Natural Resources (DNR) Region Nonpoint Source Coordinator. Please read all instructions prior to completion.

Grant Type							
Select Grant Type Small Scale Non Total Maximum Daily Load (TMDL)							
Project Name & Location							
Project Name Ron Biese Manure Storage							
Grant Number TRC08000Y17				Governmental Unit Name Calumet County			
County Calumet		Watershed Name South Branch Manitowoc			12-Digit HUC 040301010402		
Project Contact Name Anthony Real		Phone Number (920) 849-1442			E-mail Address reali.anthony@co.calumet.wi.us		
<input type="checkbox"/> For a project with multiple site locations, an aerial photo map is attached with each site location labeled.							

Site Location - 1							
Name of Cost-Share Recipient Ronald J. & Kay L. Biese					Animal Units 474	Nearest Receiving Waterbody Stony Brook WBIC 81500	
Township 18	Range 19	E / W E	Section 347	Quarter	Quarter/Quarter	Latitude 44.0344	Longitude -88.2444
Compliance Requirements - 1							
Chs. NR 151 or 243 Wis. Adm. Code Notice Type NR 151		Notice letter attached <input checked="" type="checkbox"/>		Compliance achieved? If no, explain in site information <input checked="" type="radio"/> Yes <input type="radio"/> No		Compliance determination letter attached <input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Attached is a copy of the written statement the County provided to the landowner and cost-share recipient of the landowner's obligation to maintain compliance with performance standards & prohibitions on cropland and livestock facilities addressed by the cost-share agreement. Compliance at these sites must be maintained in perpetuity regardless of future cost sharing. The County has also placed a copy of this written statement in the County files.							

Summary of Results - 1							
Best Management Practice Installed	Quantity	Unit of Measure	Performance Standard/Prohibition Addressed	Total Installation Cost	Phosphorus lbs/yr	Nitrogen lbs/yr	Sediment Tons/yr
Manure Storage Systems	1	No.	Code(s) 6	\$580,639.00			
Manure Storage System Closure	1	No.	Code(s) 5	\$17,310.00	467.4	1012.7	

Site Location Attachment - 1	
Check the box if the required information for the site is attached:	
<input checked="" type="checkbox"/> Photos of pre-and post-implementation of BMP(s)	<input checked="" type="checkbox"/> Load reduction modeling documents
<input checked="" type="checkbox"/> Aerial photo map of site with BMPs labeled	<input type="checkbox"/> Water quality monitoring results/summary, if applicable

Site Information - 1
<p><i>Narrative space will expand to fit</i></p> <p>The objective of the project was to abandon an existing manure storage (constructed in 1995) which was determined to be out of compliance with current standards and poses a risk to groundwater resources. The landowner chose to construct a Pipping concrete manure structure which meets current manure storage technical standards. The structure was constructed above ground and included a ramp that can be utilized to run equipment into the structure to remove</p>

Final Report

Agricultural Targeted Runoff Management &
Notice of Discharge Grant Programs
Form 3400-189A (R 05/16)

Page 2 of 3

accumulated manure solids. Inspection was carried out by NRCS as well as Excel Engineering. Certification of the siting of the structure meeting NRCS technical standard 313 - Waste Storage was done by Amy Moore P.E. of NRCS and certification of the concrete structural components meeting NRCS technical standard 313 was done by Jim Todd P.E. of Excel Engineering. Certification statements are attached to this report.

The existing earthen manure storage structure was emptied, scraped out and soils investigations were conducted to ensure all contamination below the liner was removed. During the investigation it was determined that groundwater elevations were, in fact, just below the liner, not meeting standards and posing a potential groundwater contamination risk. The liner material that showed signs of contamination was removed and the storage structure was filled in and abandoned according to technical standards. The storage abandonment was certified as meeting NRCS technical standards 360 - Waste Facility Closure by Andy Berndt of NRCS. Calculations were conducted for seepage loss of manure from the abandoned manure pit to waters of the state based on numbers provided in Part 651 of the Agricultural Waste Management Field Handbook. According to the handbook and in consultation with Drew Zelle, Engineering Specialist with DATCP the seepage rate for this manure pit was 77,891 gallons per year based on the estimate of 485 gallons per acre, per day. See attached documentation.

The second objective to this project was to ensure that Ron Biese was following his nutrient management and that he was carrying the proper land base. Two formal meetings were conducted with Ron to discuss manure spreading habits, soil test levels, land base concerns and overall compliance with NRCS technical standard 590 - Nutrient Management. The first meeting was on 4/8/2016 (prior to grant application) and the discussion centered on soil test levels and land base concerns. Biese indicated that he understood the concerns with his land base and was in the process of working with other producers to acquire more land with nutrient needs.

The second meeting occurred on 2/16/2018 and centered on the karst topography in the area and the new targeted standards that may be adopted soon. Biese had demonstrated a increase in his land base when his nutrient management plan was submitted to our department and his plan showed compliance with the current 590 standard at the time. Overall this was a successful project and has met the objectives outlined in the grant application.

☒ DNR may use this site as a success story to meet state and federal reporting needs.

Additional Project Information and/or Comments

Narrative space will expand to fit

Grantee Certification

A responsible government official (authorized signatory) must authorize and date the final report form prior to submittal to DNR.

I certify that, to the best of my knowledge, the project is complete and the information contained in this final report and attachments are correct and true.

Name of Authorized Government Official

Title of Authorized Government Official

Date

John M. Romanish

County Administrator

4-13-18

Wisconsin Department of Natural Resources
Bureau of Watershed Management (WT/3)
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921
dnr.wi.gov

Final Report

Agricultural Targeted Runoff Management &
Notice of Discharge Grant Programs

Form 3400-189A (R 05/16)

Page 3 of 3

For DNR Use Only

☒ Received complete reports with all attachments

☒ Practices implemented were consistent with the grant agreement

Comments about this project:

None

Name of Region Nonpoint Source Coordinator

Erin Carviou

Date

04/19/2018

Send the Final Report and attachments to the Community Financial Assistance Grants Manager and to the Runoff Management Grant Coordinator. Keep a printed copy for the Region file.



NR 151 Compliance Notice - 1

CALUMET COU]
LAND & WATER CONS Ron Biese Manure Storage
DEPARTMENT
206 COURT STREET
CHILTON, WI 53014-1198

CHILTON: (920) 849-1442
 APPLETON/SHERWOOD: (920) 989-2700

FAX: (920) 849-1481
 WEBSITE: www.co.calumet.wi.us

March 18, 2016

Ron Biese
 N4054 Long Rd.
 Chilton, WI 53014

Dear Mr. Biese,

I am writing in regard to your existing manure storage structure located at N4054 Long Rd. This manure storage was installed in 1995. Over the past year site and soils investigations have taken place for the purposes of constructing a new manure storage structure on your farm. The soils investigations have indicated that the existing pit bottom may sit close to bedrock elevations and within subsurface saturation levels.

Soils investigations taken in 2015 within 100' and 175' of the pit show bedrock elevations above the bottom elevation of the manure pit as well as show subsurface saturation above the bottom elevation of the manure pit. These factors indicate a potential for groundwater contamination.

In addition to the potential for groundwater contamination from the manure pit itself there has also been a concern regarding manure levels in the pit throughout the year as well as the need to spread manure during the winter months in an area that is known to be vulnerable to groundwater contamination.

The existing manure storage does not meet current NRCS standards. Given that the storage is 21 years old it may be nearing the end of its functional life span. Normal agitation and pumping activities have likely deteriorated the clay liner over time. Due to these facts it is reasonable to believe that due to the karst topography and groundwater susceptibility in the area that the manure storage has the potential to pose a hazard to groundwater quality. Wisconsin Administrative Code 151.05 (4) states.....

4) EXISTING FACILITIES. (a) Manure storage facilities in existence as of October 1, 2002, that pose an imminent threat to public health, fish and aquatic life, or groundwater shall be upgraded, replaced, or abandoned in accordance with this section.

(b) Levels of materials in storage facilities may not exceed the margin of safety level

Section 18-106 of the Calumet County Code of Ordinances, Manure Storage and Runoff Management requires that all landowners shall implement conservation practices that achieve compliance with performance standards and prohibitions in Wisconsin Administrative Code NR 151.02 through 151.08 as amended. Therefore you are currently in violation of County Code.

Section 18-120 (a) requires that we follow the cost-share requirements, notification requirements, and compliance periods listed in Wisconsin Administrative Codes NR 151.09, NR 151.095, ATCP 50.08, ATCP 50.40, and ATCP 50.54. We are in the process of applying for cost-share grants to assist you in installing the needed practices.

Calumet County will apply for a DNR Targeted Runoff Management (TRM) Grant which will pay up to \$150,000 or 70% of the costs of replacing the manure storage, whichever is less. In addition, Calumet County is willing to assist with exploring other cost-share options for the manure storage construction as well as abandoning the existing structure.

If we are successful in obtaining the sufficient funds to meet the cost-share requirements in Wisconsin Administrative Code, you will be expected to abandon and replace the existing manure storage with a structure that meets current standards therefore bringing your operation into compliance

We are looking forward to working with you to help you achieve full compliance with these performance standards and prohibitions. We may be contacting you in the coming weeks to obtain information that may be required for the TRM grant application.

Thank you for your consideration of this matter

Sincerely,

A handwritten signature in black ink, appearing to read "Anthony Reali", with a horizontal line extending to the right.

Anthony Reali
County Conservationist



**CALUMET COUNTY
LAND & WATER CONSERVATION
DEPARTMENT
206 COURT STREET
CHILTON, WI 53014-1198**

CHILTON: (920) 849-1442

APPLETON/SHERWOOD: (920) 989-2700

FAX: (920) 849-1481

WEBSITE: www.co.calumet.wi.us

March 8, 2018

Ronald J. & Kay L. Biese
N4054 Long Rd.
Chilton, WI 53014

Ronald and Kay,

This letter is being written in regards to the Targeted Runoff Management (TRM) Grant TRC08000Y17 Project name: Ron Biese Manure Storage.

This written statement is to inform you that with the installation of the new manure storage system, the abandonment of the old manure storage system, other onsite management practices on this site along with nutrient management on all associated cropland you are in compliance with the state NR151 Agricultural performance standards and prohibitions on the facilities addressed by this TRM grant and its associated Cost Share Agreement (CSA). Specifically you are now in compliance with the following performance standard.....

Wisconsin Administrative Code 151.05 (4) states.....

4) EXISTING FACILITIES. (a) Manure storage facilities in existence as of October 1, 2002, that pose an imminent threat to public health, fish and aquatic life, or groundwater shall be upgraded, replaced, or abandoned in accordance with this section.

(b) Levels of materials in storage facilities may not exceed the margin of safety level

This is also to inform you that it is your obligation to stay in compliance with the state NR151 Agricultural performance standards and prohibitions on the properties addressed by this TRM grant and its associated CSA. Failure to do so would violate the grant, the CSA, and state law.

Please keep in mind the conditions of your cost-share agreement 2017-TRM01 as follows....

1) Due to an adequate amount of storage capacity being provided through this grant as well as other funding sources, the landowner/operator shall not apply manure during frozen and saturated soil conditions or at times that may create an unnecessary risk of nutrient and/or pathogen runoff/loss.

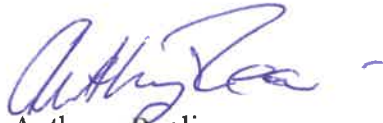
2) Calumet County will review landowner/operator's Nutrient Management Plan (NMP) yearly to ensure compliance with the NRCS 590 Nutrient Management practice standard. Landowner/operator will, at the County's request attend NMP review meetings with County staff to ensure proper plan implementation.

3) Prior to grant reimbursement, landowner/operator will demonstrate full compliance with NR 151 agricultural performance standards and will be required to stay in compliance with said standards regardless of the availability of cost-share funds.

4) The landowner/operator shall comply with the provided Operation and Maintenance Plan (O & M) for the practices installed. A copy of the O & M will be kept on file at the Calumet County Land & Water Conservation Department.

Please contact our office at (920) 849-1442 if you have any questions.

Sincerely,



Anthony Reali
County Conservationist
Calumet County Land & Water Conservation Department

1.) Suspected erosion of the clay liner of pit due to agitation activities



2.) Liner erosion – different angle

Ron Biese Manure Storage



3.) Stones in field with shallow bedrock near existing manure pit location

Ron Biese Manure Storage





STORAGE FACILITY FOUNDATION PREPARATION



STORAGE FACILITY FOUNDATION PREPARATION



ACCESS RD INSTALLATION



STORAGE FACILITY FOUNDATION PREPARATION



STORAGE FACILITY FOUNDATION PREPARATION



STORAGE FACILITY FOUNDATION PREPARATION



STORAGE FACILITY FOUNDATION PREPARATION



WATERSTOP







ACCESS RAMP CONSTRUCTION – READY FOR CONCRETE



WALL BACKFILL IN PROGRESS



RAMP COMPLETE



TRANSFER PIPE



TRANSFER PIPE INSTALLATION





TRANSFER PIPE AT MANURE STORAGE WITH CLEANOUT AND KNIFE VALVE



MANURE STORAGE ABANDONMENT – WASTE REMOVED



WASTE STORAGE ABANDONMENT – EXISTING CLAY LINER <1.0' SEPARATION



WASTE STORAGE ABANDONMENT – WATER SEEPING UP THROUGH LINER



WASTE STORAGE ABANDONMENT – STORAGE FACILITY FILLED

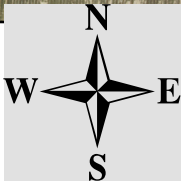
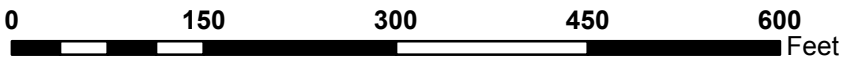




Ron Biese TRM Grant Project
Govt. Lot 347, T-18-N, R-19-E, Town of Stockbridge
Calumet County, WI



1 inch = 150 feet



Anthony Reali

From: Zelle, Drew D - DATCP <Drew.Zelle@wisconsin.gov>
Sent: Wednesday, March 28, 2018 6:29 AM
To: Anthony Reali
Subject: FW: Attached Image
Attachments: 0798_001.pdf

**** This message was sent from an external source. ONLY open attachments or click on links from known senders. ****

Tony,

See attached regarding seepage rates. Notice table 10D-7 and the circled paragraph. I do not think that 485 gallons per acre per day is out of line for a seepage rate.

Call if questions,

Drew

From: DATCPEnigma@wisconsin.gov [mailto:DATCPEnigma@wisconsin.gov]
Sent: Wednesday, March 28, 2018 6:25 AM
To: Zelle, Drew D - DATCP <Drew.Zelle@wisconsin.gov>
Subject: Attached Image

To convert the computed specific discharge in the example into units of gallons per acre per day and cubic inches per square inch per day (in/d), use conversion factors given in table 10D-6.

- 0.02 foot per day $\times 325,829 \approx 6,500$ gallons per acre per day
- 0.02 foot per day $\times 12 = 0.24$ cubic inch per square inch per day

A variety of guidelines have been used and regulatory requirements stated for specific discharge. Usually, guidelines require the specific discharge for a given waste storage structure to be no higher than a stated value. The following example demonstrates the unit seepage that will result from a typical size animal waste storage lagoon or storage pond with 2 feet of either very good natural soil or a very well constructed, 2-foot-thick clay liner in the bottom of the lagoon. A practical lower limit for the assumed permeability of a compacted clay or a very good natural liner is a coefficient of permeability equal to 5×10^{-8} centimeters per second. This is based on considerable literature on field and laboratory tests for compacted clay liners used in sanitary landfills.

The specific discharge for this ideal condition follows, assuming:

- The pond has a liquid depth of 15 feet.
- The site is underlain by 2 feet of soil (either a natural layer or a constructed clay liner) that has a coefficient of permeability of 5×10^{-8} centimeters per second
- Compute the specific discharge, v . First, the coefficient of permeability is converted to units of feet per day by multiplying the given units of centimeters per second by 2,835. Then,

$$k = (1 \times 10^{-6} \text{ cm/s}) \times 2,835 = 0.002835 \text{ ft/d}$$

Then, the specific discharge v is computed as follows:

$$\begin{aligned} v &= k \times \frac{H+d}{d} \\ &= 1.42 \times 10^{-4} \text{ ft/d} \times \frac{15 \text{ ft} + 2 \text{ ft}}{2 \text{ ft}} \\ &\approx 0.0012 \text{ ft}^3/\text{ft}^2/\text{d} \\ &\approx 0.0012 \text{ ft/d} \end{aligned}$$

Converting this into units of gallons per acre per day:

$$0.0012 \text{ ft/d} \times 325,829 \approx 393 \text{ gal/acre/d}$$

Table 10D-7 lists typical specific discharge values used by State regulatory agencies. Requirements vary from State to State. Individual designers may regard minimum requirements as too permissive. Some States permit a designer to assume that the initial computed seepage rate will be reduced in the future by an order of magnitude by taking credit for a reduction in permeability resulting from manure sealing. Although the State or local regulations should be used in design for a specific site, the NRCS no longer recommends assuming that manure sealing will result in one order of magnitude reduction. A more conservative assumption described previously allows an initial seepage rate of 5,000 gallons per acre per day, which for the assumed typical site dimensions of 9 feet of liquid and 1 foot thickness of liner, assumes a one half order of magnitude reduction.

Design of compacted clay liners

If a site does not have a sufficient thickness of *in situ* low permeability soil horizons to limit seepage to an acceptably low value, a clay liner may be required. Some State regulations may also require a constructed clay liner regardless of the nature of the *in situ* soils at a site. Regulations sometimes require a specific thickness of a compacted soil with a documented permeability of a given value. An example of this is a State requirement that a waste storage pond must have in the bottom and sides of the pond at least 2 feet of compacted clay with a documented coefficient of permeability of 1×10^{-7} centimeters per second.

Table 10D-7 Typical requirement for specific discharge used by State regulatory agencies

Example specific discharge value	Equivalent value in gallons per acre per day
$1/56 \text{ in}^3/\text{in}^2/\text{d}$	485
$1/8 \text{ in}^3/\text{in}^2/\text{d}$	3,394
$1/4 \text{ in}^3/\text{in}^2/\text{d}$	6,788
$1 \times 10^{-6} \text{ cm}^3/\text{cm}^2/\text{s}$	924

- Bon Base Manure Pit Seepage Calcs

- Manure Pit Dimensions

- Bottom = 110' x 80'

- Depth = 11'

- S:S = 2:1

- Top Inside = 154' x 124'

- 19096 Ft^2 or 0.44 ac.

- Seepage Rate = 485 gallons per acre, per day

- $485 \times 0.44 = 213.4 \text{ gal/day}$

- $213.4 \text{ gal/day} \times 365 = 77891 \text{ gal/yr.}$

77,891 gal / Yr. Seepage

P Rate = 6 lbs per 1000 gallons - Book Values

$77,891 / 1000 = 77.9 \times 6 \text{ lbs} = 467.4 \text{ lbs/yr.}$

N Rate = 13 lbs per 1000 gallons - Book Values

$77,891 / 1000 = 77.9 \times 13 \text{ lbs} = 1012.7 \text{ lbs/yr.}$

Anthony Reali

From: Amanda Kleiber
Sent: Tuesday, April 10, 2018 3:57 PM
To: Anthony Reali
Subject: Biese manure analysis

I looked at Ron's 2016 & 2017 NMP and no manure samples were taken.
Crop consultant used book values.

Source		2017
Dry Pack	Production (Tons)	132
	Used (Tons)	132
	Analysis Date	-
	Analysis (N/Ninc/Ninj-P2O5-K2O)	2/3/3-3-6
	Dry Matter (%)	33
	Total Value	0.00
Liquid Pit Dairy slurry	Production (Gallons)	3,123,600
	Used (Gallons)	3,123,600
	Analysis Date	2016-11-11
	Analysis (N/Ninc/Ninj-P2O5-K2O)	8/10/13-6-21
	Dry Matter (%)	12
	Total Value	0.00

Estimated Livestock Manure Production For 2017

Amanda Kleiber

Land Resource Specialist
Calumet County Land & Water Conservation Dept
206 Court Street
Chilton, WI 53014
(920) 849-1493 ext. 2403
Amanda.Kleiber@calumetcounty.org

N, Incorporated, Injected, P
lbs/1000 gallons
N = 13
P = 6

SnapPlus Manure Production Estimator Report

Crop Year	2016	Prepared for: Floyd and Ron Biese attn:Matrk Matthias W2468 Co E Chilton, 53014
Reported For	Floyd and Ron Biese	
Printed	2016-05-10	
Plan Completion/Update Date	2016-05-10	
SnapPlus Version 14.1 built on 2015-03-04		Prepared by: Country Visions Cop W2468 Co E Chilton, 54220 920-849-9213,920-418-4996, mmatthias@cvccoop.com
C:\SnapPlus2\MySnapPlusData\Ron Biese.snapDb		

Nutrient Source Summary for 2016

		Values are for First Year Available Nutrients in lb/ton or lb/1000 gallons								Volumes are in Tons or Gallons						Value of Applied Nutrients in \$ (based on commerical fertilizer costs in \$/lb)			
Source Name	Type	N	N Inc	N Inj	P	K	S	DM	Volume	Volume Applied	Volume Remain	Fall	Winter	Spring	Summer	N	P2O5	K2O	S
Dry Pack	Dairy, solid	2.0	3.0	3.0	3.0	6.0	1.0	33	373	373	0	187	0	0	187	0	0	0	0
Liquid Pit Dairy slurry	Dairy, slurry	7.0	10.0	12.0	6.0	17.0	1.0	6	2,684,600	2,684,600	0	1,201,000	0	1,112,600	371,000	0	0	0	0
Total Solid:									373	373	0	Total Values				0	0	0	0
Total Liquid:									2,684,600	2,684,600	0								

Estimated Livestock Manure Production

Animal Type	# Of animals	Total No. Of Days	% Collected As Solid	% Collected As Liquid	Yearly Tons	Yearly Gallons
Dairy Dry Cows 1000 lbs	0	365	100	0	0	0
Dairy Dry Cows 1200 lbs	0	365	100	0	0	0
Dairy Heifer 1000 lbs	0	365	100	0	0	0
Dairy Lactating Cows 1000 lbs	0	365	100	0	0	0
Dairy Lactating Cows 1200 lbs	0	365	100	0	0	0
Dairy Dry Cows 1400 lbs	20	365	0	100	0	182,500

PIPPING CONCRETE
INC.
BRANDON, WI

Ron Biese
N4054 Long Rd.
Chilton, WI 53014

SHEET INDEX

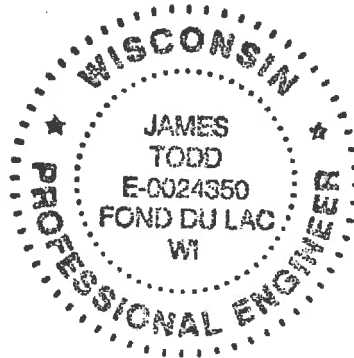
- 1. COMPLIANCE STATEMENT**
 - *Signed and Stamped Compliance Statement*
- 2. MIX DESIGN & BATCH TICKETS**
 - *Mix Designs*
 - *Batch Tickets provided to Pipping Concrete*
 - *Cylinder Test Results*
 - *Reinforcement Chemical & Physical Test Report*
- 3. ACCESSORY DATA**
 - *Dayton Richmond A-58 Wall Plug*
 - *McCreath Laboratories Test Data*
 - *White Water Wax Curing Compound*
 - *Leak Master Sealer*
 - *Dayton Superior Advantage Grout*
- 4. AS-BUILT CONSTRUCTION DOCUMENTS**
 - *Copy of Operation & Maintenance Plan*
 - *11" x 17" – Tank "As-Built Documents"*
- 5. PHOTOGRAPHS OF REBAR LOCATION AND SPACING PRIOR TO CONCRETE POURS & POUR LOG**
 - *Excel Engineering provided digital photographs*
 - *Pour Log*

1. COMPLIANCE STATEMENT

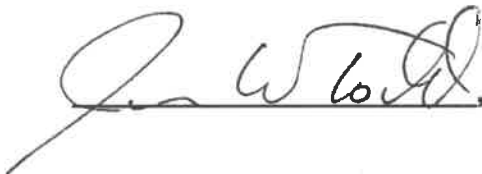
- ***Signed and Stamped Compliance Statement***

Compliance Statement:

"To the best of my professional knowledge, judgment, and belief, the Ron Giese manure storage tank has been designed and installed in compliance with the construction drawings and specifications and meets the NRCS Waste Storage Facility Standard (Codes 313) criteria for fabricated structures."



Signature:

A handwritten signature in black ink, appearing to read "Jim Todd", written over a horizontal line.

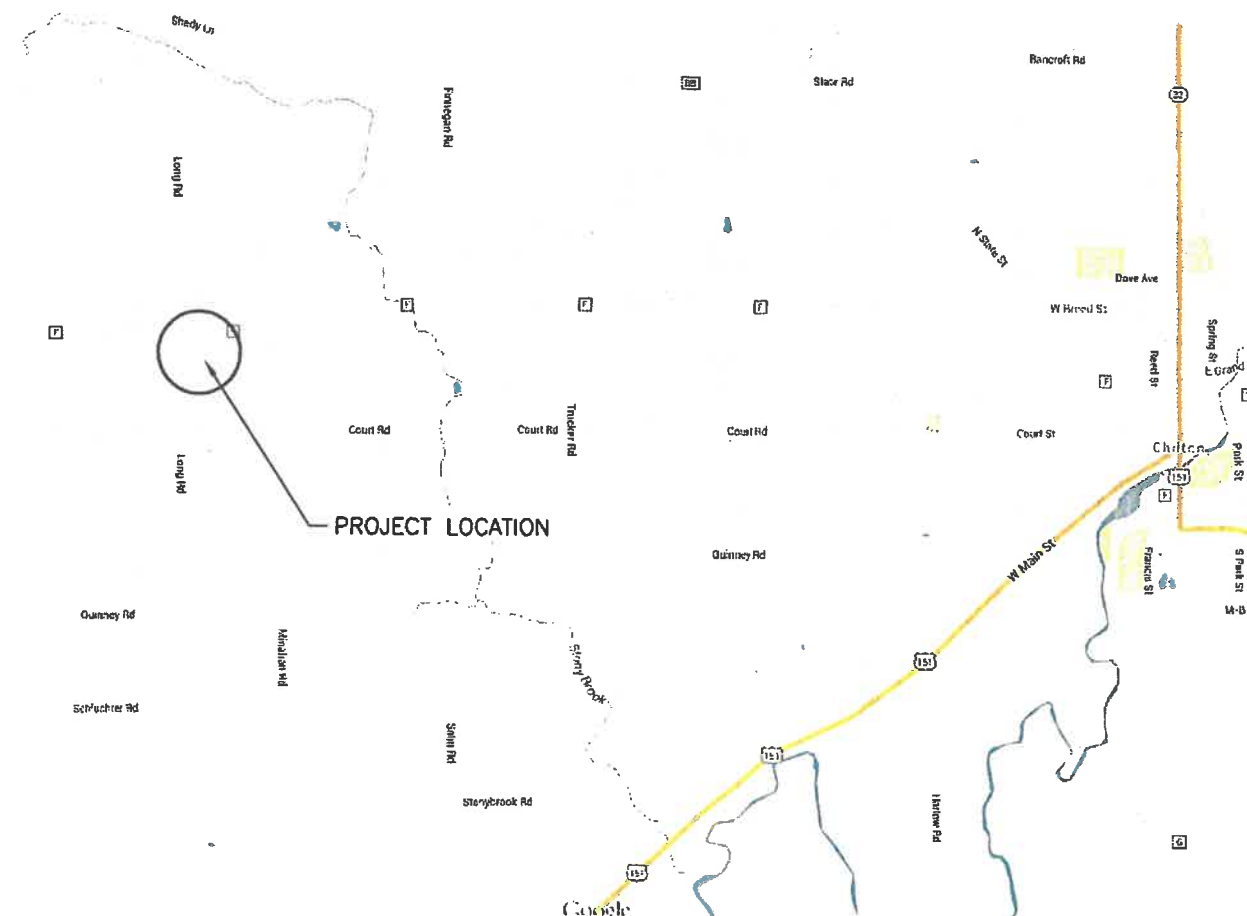
Date 11-21-17

Jim Todd, P.E.

Excel Engineering, Inc.

RON BIESE MANURE STORAGE FACILITY SITING PLANS

Location Map
T18, R19, Section 16



AS BUILT
WASTE TRANSFER - 634, ACCESS RD - 560,
AND WASTE FACILITY CLOSURE - 360
INSTALLED PER NRCS STD + SPECS
Andy Berndt 12/5/17
Waste Storage Facility - 313
Installed per NRCS standards
and specifications.
Ang & Me 2-8-2018

PRACTICE Manure Storage-313, Access Road-560, Waste Facility Closure-360, Waste Transfer-634

LANDOWNER RON BIESE

LANDOWNER PHONE NUMBER (920)418-5931

COUNTY CALUMET

FIELD OFFICE CHILTON TELEPHONE NO. 920-629-7314

BENCH MARK DESCRIPTIONS

KOSSUTH W GPS - CONCRETE MONUMENT WITH BRASS CAP
LOCATED ON NORTH SIDE OF HILLCREST RD, EAST OF COUNTY T
MANITOWOC COUNTY COORDINATES - NAD83 (HARN), WI-12A GEIOD
339137.35 N
196854.7 E
852.20' ELEV

* ONSITE CONTROL WILL BE PROVIDED PRIOR TO CONSTRUCTION COMMENCEMENT.

LEGEND

EXISTING CONTOUR — 90 —
PROPOSED CONTOUR - MINOR — 90 —
PROPOSED CONTOUR - MAJOR — 90 —

NOTICE TO LANDOWNERS AND EXCAVATORS

Any representation made by the USDA, Natural Resources Conservation Service, or the CALUMET County LCD, as to the approximate location or nonexistence of above or under ground hazards does not relieve the owner of the property or the excavator that is hired to complete construction, from notifying Diggers Hotline of the pending construction. You will be liable for damages resulting from construction activities.
Call Diggers Hotline! Ticket Number _____

CONSTRUCTION DRAWINGS AND SPECIFICATIONS ACCEPTANCE

I have reviewed and understand the construction plans and specifications and agree to complete the work accordingly. Failure to meet these plans and specifications may jeopardize any continued NRCS technical assistance or program cost sharing applied for. I understand that it is my responsibility to secure all necessary permits and licenses, and to complete the work in accordance with all local, state, and federal laws. Modification of these construction plans or specifications must be approved by the NRCS before installation. I assume all responsibility for negotiations and contract agreements with the construction contractors.

Checked: Ang & Me

Date: 12-1-2016

Approved: Ang & Me

Date: 12-1-2016

Designed: ANDY BERNDT

Date: 11/30/16

Signed: Randy Biese

Date: 12-1-2016

Construction Approved: _____

Date: _____

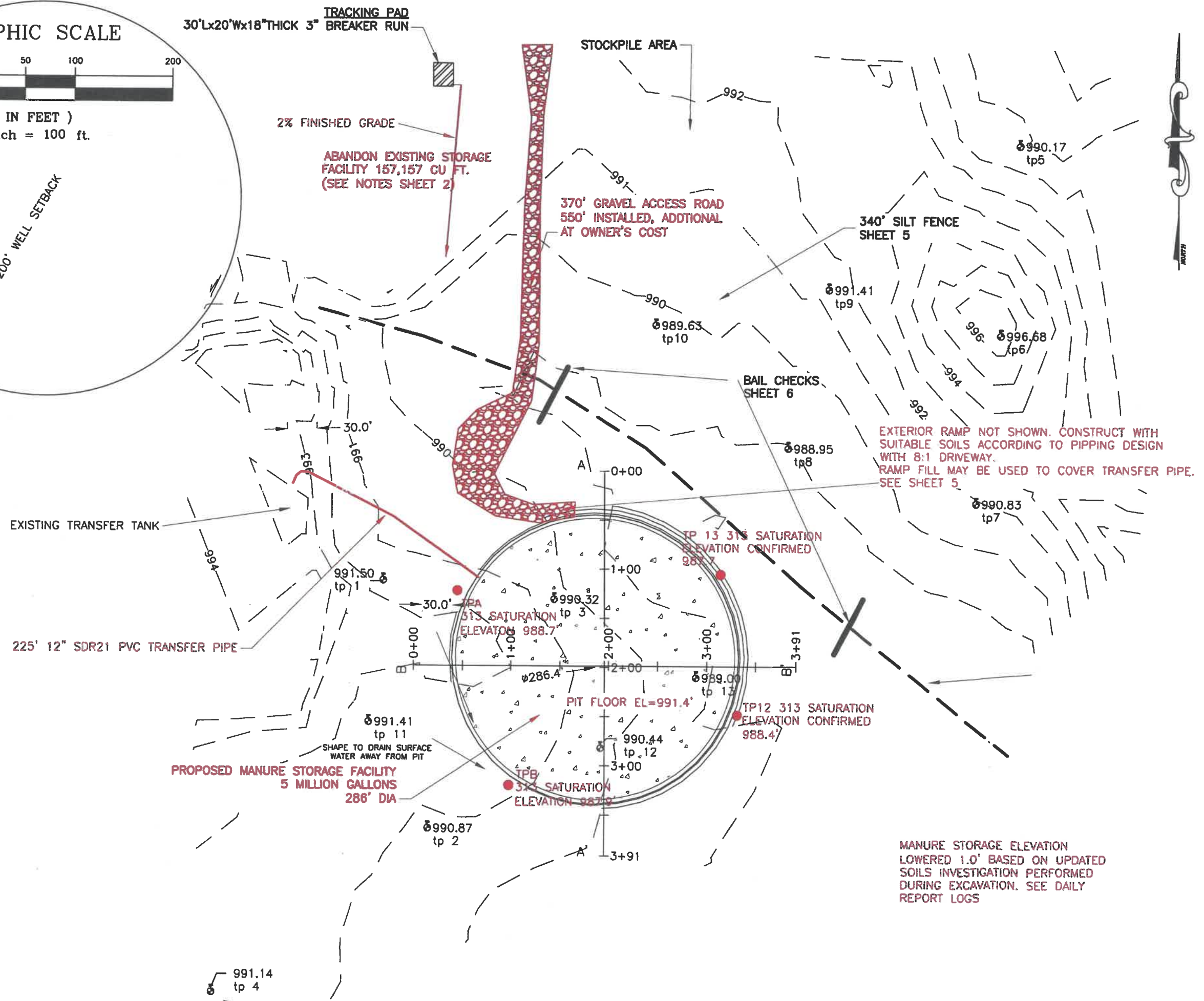
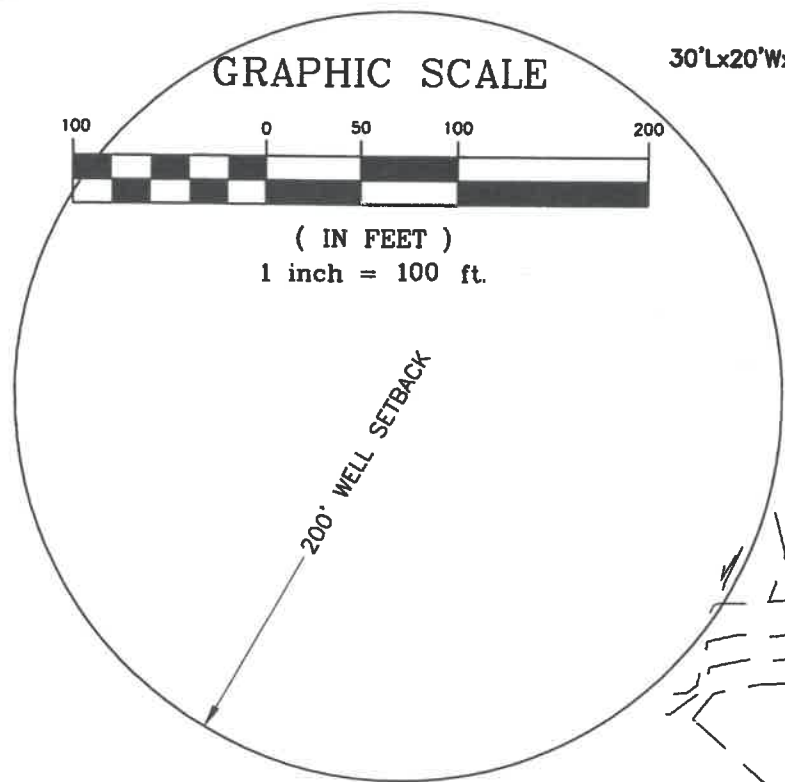
Job Approval Class 560-II 313-V 360-IV 634-III


Date 11/30/16
Designed ACB
Drawn _____
Checked _____
Approved _____

OWNER: RON BIESE
COUNTY: CALUMET

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

Drawing Name
WI-006
Date
10/2006



Date	11/30/11
Designed	ACB
Drawn	
Checked	
Approved	
PLAN VIEW	
OWNER:	RON BIESE
COUNTY:	CALUMET
 Natural Resources Conservation Service United States Department of Agriculture	
Drawing Name	WI-006
Date	10/2006
Sheet 3 of 10	

Animal Unit Calculation Worksheet
Form 3400-025A (R 3/2012)

The Current Animal Unit Calculation Worksheet must be filled out separately for the "main" site and each site which are owned or operated by your farm for the purposes of housing animals associated with your operation. The site name, for which you are filling this worksheet out, must be provided below and correlate with Form 3400-025 Site Information (Section II).

Current Animal Unit Calculation Numbers							
Name of Site: <u>Bon Biese</u> <u>2/23/18</u>							
Animal Type	I. Mixed Animal Units			II. Non-mixed Animal Units			
	b. Equiv. factor	c. Current Number	d. No. of AUs	e. Equiv. factor	f. Current Number	g. No. of AUs	
Example - Broilers (non-liquid manure):	0.005 x	150,000	= 750	0.008 x	150,000	= 1200	
Dairy/Beef Calves (under 400 lbs)	0.20 x	75	= 15	Fed numbers in this column comply with 40 CFR s. 122.23			
Dairy Cattle	Milking & Dry Cows	1.40 x	310	= 434	1.43 x	310	= 443.3
	Heifers (800 lbs to 1200 lbs)	1.10 x	12	= 13.2			
	Heifers (400 lbs to 800 lbs)	0.60 x	20	= 12	1.00 x	22	= 22
Beef	Steers or Cows (400 lbs to market)	1.00 x		=			
	Bulls (each)	1.40 x		=	1.00 x		=
Veal Calves		0.50 x		=	1.00 x		=
Swine	Pigs (up to 55 lbs)	0.10 x		=	0.10 x		=
	Pigs (55 lbs to market)	0.40 x		=			
	Sows (each)	0.40 x		=			
	Boars (each)	0.50 x		=	0.40 x		=
Chickens	Layers (each) -non-liquid manure system	0.01 x		=	0.0123 x		=
	Broilers/Pullets (each) -non-liquid manure system	0.005 x		=	0.008 x		=
	Per Bird -liquid manure system	0.033 x		=	0.0333 x		=
Ducks	Ducks (each) -liquid manure system	0.2 x		=	0.2 x		=
	Ducks (each) -non-liquid manure system	0.01 x		=	0.0333 x		=
Turkeys (each)		0.018 x		=	0.018 x		=
Sheep (each)		0.1 x		=	0.1 x		=
Horses (each)		2 x		=	2 x		=
Total Animal Units:		Total Mixed Animal Units = (add all rows above) 474.2			Total Non-Mixed Animal Units = (Enter the single highest number from any row above; DO NOT add the totals) 443.3		

☐ Check here if there are no proposed increases in animal numbers at this site within the next five years.