

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

Steffes Farm )  
(Property Identification Number ) PCB No. 24 -  
23-000-444-00) (Tax Certification)  
)

**NOTICE**

**PLEASE TAKE NOTICE** that I have today filed with the Office of the Clerk of the Pollution Control Board an APPEARANCE and RECOMMENDATION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, copies of which are herewith served upon you.


Dennis Steffes  
Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

Don Brown, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph Street, Suite 11-500  
Chicago, Illinois 60601

**Copies also provided electronically as follows:**

Illinois Department of Revenue  
via email at REV.PropTaxApp@illinois.gov  
101 West Jefferson  
P.O. Box 19033  
Springfield, Illinois 62794

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:   
\_\_\_\_\_  
Gabriel H. Neibergall  
Assistant Counsel  
Division of Legal Counsel

DATED: August 3, 2023

Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
(217) 782-5544

**THIS FILING IS SUBMITTED ON RECYCLED PAPER**

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**


Steffes Farm )  
(Property Identification Number ) PCB No. 24 -  
23-000-444-00) (Tax Certification)  
)

**A P P E A R A N C E**

The undersigned, as one of its attorneys, hereby enters an APPEARANCE on behalf of Respondent, Illinois Environmental Protection Agency.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: \_\_\_\_\_

  
Gabriel H. Neibergall  
Assistant Counsel  
Division of Legal Counsel

DATED: August 3, 2023

Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
(217)782-5544

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

Steffes Farm )  
(Property Identification Number ) PCB No. 24 -  
23-000-444-00) (Tax Certification)  
)

**RECOMMENDATION OF THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY**

The Illinois Environmental Protection Agency ("Illinois EPA") hereby files its Recommendation pursuant to Section 125.204 of the regulations of the Illinois Pollution Control Board ("Board"), 35 Ill. Adm. Code 125.204.

1. On January 9, 2023, the Illinois EPA received a request from Steffes Farm (Log number TC-147353, Exhibit A) for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Ill. Adm. Code 125.204.
2. The facility's address is: Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

The proposed water pollution control facilities in this request are located in the Section 36, Township 27-North, Range 3-East of the 4th PM in Jo Daviess County, at the above street address and consist of the following livestock waste management facilities:

One (1) circular reinforced concrete livestock waste storage tank measuring 125 ft. (diameter) x 12 ft. (height).

These livestock waste management facilities are used to collect, transport and/or store livestock waste prior to cropland application.

3. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2020), and Section 125.200(a) of the Board's regulations, 35 Ill. Adm. Code 125.200(a), define "pollution control facilities" as:

any system, method, construction, device or appliance appurtenant thereto or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: eliminating, preventing, or reducing air or water pollution ...or treating, pretreating, modifying or disposing of any potential solid, liquid or gaseous pollutant which if released without treatment, pretreatment modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property.
4. In order to receive preferential tax treatment as pursuant to 35 ILCS 200/11-5 (2020), pollution control facilities must be certified as such by the Board, 35 ILCS 200/11-20 (2020) and 35 Ill. Adm. Code 125.200(a).
5. Upon receipt of a tax certification application, the Illinois EPA must file a recommendation on the application with the Board, 35 Ill Adm. Code 125.204(a).
6. Based on the information in the application and the purpose of the facility, it is the Illinois EPA's engineering judgment that the described facilities may be considered "pollution control facilities," pursuant to 35 Ill. Adm. Code 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in 35 Ill. Adm. Code 125.200, and are eligible for tax certification from the Board.

WHEREFORE, the Illinois EPA recommends that the Board issue the requested tax certification.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

**THIS FILING SUBMITTED ON RECYCLED PAPER**

By:



Gabriel H. Neibergall  
Assistant Counsel  
Division of Legal Counsel

Dated: August 3, 2023

Illinois Environmental Protection Agency  
1021 North Grand Ave. E.  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
217/782-5544



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

## Memorandum

To: Mike Roubitchek, Division of Legal Counsel

From: Darin E. LeCrone, P.E., Manager, Permit Section, Division of Water Pollution Control, Illinois Environmental Protection Agency

Date:

Re: Steffes Farm - Elizabeth  
Recommendation of Tax Certification  
Log No.: TC-147353  
BOW ID No.: W0858220003  
Property Index Number: 23-000-444-00

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The Bureau of Water received a request on January 9, 2023 from Steffes Farm, having a principal place of business at 5127 East Bethel Road, Elizabeth, IL 60128, for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Il. Adm. Code 125.204. We offer the following recommendation.

The water pollution control facilities in this request include the following:

Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

Section 36, Township 27-North, Range 3-East of the 4th PM in Jo Daviess County.

Livestock waste management facilities consisting of:

One (1) circular reinforced concrete livestock waste storage tank measuring 125 ft. (diameter) x 12 ft. (height).

These livestock waste management facilities are used to collect, transport and/or store livestock wastes prior to cropland application.

These facilities are further described in the enclosed applications and supporting documents.

Based on the information included in this submittal, it is our engineering judgment that the above proposed facilities may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. The Bureau of Water therefore recommends that the Board issue the requested tax certification for these facilities.

If you have any questions regarding the above, please contact Darren Gove at 217/782-0610.

DRG:TC-147353\_Tax Cert Recommendation\_09Jan23.docx

Illinois EPA - Bureau of Water - Division of Pollution Control  
Title 35 Subtitle A Part 125 Tax Certifications  
Illinois EPA Review Notes for:  
**Agency Recommendation of Pollution Control Facilities.**

---

**BOW ID #:** W0858220003

**Project Name:** Steffes Farm

**Date application received:** 1/9/2023

**Reviewer:** DRG

**Log number:** TC-147353

**Legal Description:**

Section 36 Twp: 27-North Range: 3-East PM: 4th

**County:** Jo Daviess

**Facility Contact:** Attn: Matthew Wagner, P.E.,  
709 West Oak Street, 709 West Oak Street  
Lena, Illinois 61048

**Phone:** \_815-275-7642

**Pollution Control Facility Type:**

Cattle/Dairy Livestock Waste Management  
Facility

**Property ID:** 23-000-444-00

**Applicant:** Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

**Facility:** Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

**Date Control Devices installed:** 1/5/2023

**Application Signature by:** Dennis Steffes

**Title:** Owner

Contents of Application: 3 page form, coverage, flow diagram, plat map, 6 pages of diagrams

Is there a pollutant control flow diagram? **Yes**

Is there sufficient diagrams showing the pollution control facilities? **Yes**

**This facility generates the following pollutants and prevents their discharge as indicated:**

Bulk agricultural fertilizer and or pesticide rinsate and spillage is recycled at the facility and/or land applied to crop land.

**Physical description of pollution control facilities that ARE recommended:**

Livestock waste management facilities consisting of:

One (1) circular reinforced concrete livestock waste storage tank measuring 125 ft. (diameter) x 12 ft. (height).

These livestock waste management facilities are used to collect, transport and/or store livestock wastes prior to cropland application.

**Notes:**

The flow diagram indicates slatting through which manure falls into waste pits. According to IPCB case search, Steffes (this applicant) has acquired certification for another similar circular storage structure

Illinois EPA Log #: TC-147353

Page 2 of 2

that receives waste drainage from existing livestock areas, see PCB 16-86. However, there doesn't appear to be any other certifications, for any deep pits under animal feeding areas or otherwise. According to the agent they may apply for additional structures such as the freestall barn at a later time.

**Nothing follows – DRG - (May 16, 2023)**



**Gove, Darren**

---

**From:** Matt Wagner <wagnerconsultag@mediacombb.net>  
**Sent:** Tuesday, May 16, 2023 10:26 AM  
**To:** Gove, Darren  
**Cc:** steffesfarms1992@gmail.com  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

Okay. That sounds good. Thanks.

*Matthew Wagner, P.E.*  
**Wagner Consulting & Agriculture, LLC.**  
**709 West Oak Street**  
**Lena, Illinois 61048**  
**wagnerconsultag@mediacombb.net**  
**Phone: 815-275-7642**

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**From:** Gove, Darren [mailto:Darren.Gove@Illinois.gov]  
**Sent:** Tuesday, May 16, 2023 10:08 AM  
**To:** Matt Wagner  
**Cc:** steffesfarms1992@gmail.com  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

It depends on the primary purpose of the particular components for which certification has been requested. For instance, the flow diagram you provided me mentions slatted flooring. The slatted flooring is considered to have the primary purpose of pollution control. If there are deep pits under the freestall barns, then they are considered pollution control. However, the roof over the freestall barn and its walls are typically not considered pollution control facilities, because their primary purpose is not pollution control.

I will proceed with processing the request for the circular tank. If you want to review the facility for additional certification opportunities and apply later, that can be done. Let me know if you have any questions.

Darren

**From:** Matt Wagner <wagnerconsultag@mediacombb.net>  
**Sent:** Tuesday, May 16, 2023 9:21 AM  
**To:** Gove, Darren <Darren.Gove@Illinois.gov>  
**Cc:** steffesfarms1992@gmail.com  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

Darren,

Attached are the construction drawing for the circular tank. The freestall barn is not part of the application unless the agency has changed the stance on that facility and will allow it to be considered a pollution control device. Thanks.

*Matthew Wagner, P.E.*

**Wagner Consulting & Agriculture, LLC.**  
709 West Oak Street  
Lena, Illinois 61048  
[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)  
Phone: 815-275-7642

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---

**From:** Gove, Darren [<mailto:Darren.Gove@Illinois.gov>]  
**Sent:** Tuesday, May 16, 2023 8:15 AM  
**To:** Matt Wagner  
**Cc:** [steffesfarms1992@gmail.com](mailto:steffesfarms1992@gmail.com)  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

Matt,

Regarding the diagrams you sent, they primarily show details for a freestall barn and are titled "Proposed Freestall Barn". Now the application form and cover letter don't mention the barn whatsoever, they only mention the circular 125' diameter tank. The circular tank is shown but no dimensions are given. If tax certification is being sought only for the circular tank, please provide diagrams that show its dimensions.

If the free stall barn is part of the application, a revised application form that includes the freestyle barn in the description of the pollution control facility must be provided. If not, simply state that the barn is not part of the application so that the public record shows this.

Thank you,

Darren

---

**From:** Matt Wagner <[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)>  
**Sent:** Monday, May 15, 2023 1:42 PM  
**To:** Gove, Darren <[Darren.Gove@Illinois.gov](mailto:Darren.Gove@Illinois.gov)>  
**Cc:** [steffesfarms1992@gmail.com](mailto:steffesfarms1992@gmail.com)  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

Good afternoon Darren,

Attached is the information that you requested. If you need anything else, please let us know. Thanks.

*Matthew Wagner, P.E.*

**Wagner Consulting & Agriculture, LLC.**  
709 West Oak Street  
Lena, Illinois 61048  
[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)  
Phone: 815-275-7642

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**From:** Gove, Darren [<mailto:Darren.Gove@Illinois.gov>]  
**Sent:** Monday, May 15, 2023 10:57 AM  
**To:** Matt Wagner  
**Cc:** [steffesfarms1992@gmail.com](mailto:steffesfarms1992@gmail.com)  
**Subject:** RE: [External] RE: Steffes Farm-Elizabeth

Matt,

I just noticed after printing the form that only pages 1 and 3 of the 3 page form are present. Could you check your file and send me page 2 also. Thanks

Darren

**From:** Matt Wagner <[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)>  
**Sent:** Saturday, May 13, 2023 10:59 AM  
**To:** Gove, Darren <[Darren.Gove@Illinois.gov](mailto:Darren.Gove@Illinois.gov)>  
**Cc:** [steffesfarms1992@gmail.com](mailto:steffesfarms1992@gmail.com)  
**Subject:** [External] RE: Steffes Farm-Elizabeth

Good morning Darren,

Attaches is what was previously sent to the agency. If you need anything else, please let me know. Thanks.

*Matthew Wagner, P.E.*

**Wagner Consulting & Agriculture, LLC.**

**709 West Oak Street**

**Lena, Illinois 61048**

**[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)**

**Phone: 815-275-7642**

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**From:** Gove, Darren [<mailto:Darren.Gove@Illinois.gov>]  
**Sent:** Thursday, May 11, 2023 8:59 AM  
**To:** [wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)  
**Subject:** Steffes Farm-Elizabeth

Good morning,

I left a voice message with you regarding the subject facility for which a tax certification was submitted to the Agency for tax certification review. Apparently the request has been misfiled and cannot be found. I apologize for this error, but we will need it submitted again. You may send it via email to me or through the postal service. Furthermore, the database indicates the original application was submitted in early January. If you have reason to believe that the application was sent in prior to the beginning of 2023, please provide me evidence of the date of submittal.

Thanks,

Darren R. Gove  
Dredge and Fill / Mining Sub-Unit Supervisor  
Permit Section, Division of Water Pollution Control  
Bureau of Water, Illinois EPA

Email address: <mailto:darren.gove@illinois.gov>

Ph. No. 217/782-3362

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# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## Application for Certification (Property Tax Treatment) Pollution Control Facility

ROW: W0858220003

FOR AGENCY USE ONLY			
File Number:	<u>TC-147353</u>	Date Rec'd:	<u>1-9-23</u>
Certification Number:	_____	Date:	_____

Facility Type (check one):  Air  Water

This form is to be used for any application for certification of property tax treatment for a pollution control facility for air or water from the Illinois EPA. Separate applications must be completed for each control facility claimed. Do not mix types (air and water). Where both air and water operations are related, file two applications.

If attachments are needed, record them consecutively on an index sheet.

You may complete this form online, save a copy locally, print, sign and submit it to:

Illinois EPA  
Attention: Al Keller, Permit Section  
Division of Water Pollution Control  
1021 North Grand Avenue East, P.O. Box 19276  
Springfield, IL 62794-9276

### I. Applicant Information:

Company Name:	<u>Steffes Farm</u>	Person to Contact	_____
Person Authorized to Receive Certification:	<u>Dennis Steffes</u>	for Additional Details	<u>Matthew Wagner</u>
Street Address:	<u>5127 East Bethel Road</u>	Street Address:	<u>709 West Oak Street</u>
City:	<u>Elizabeth</u> State: <u>IL</u>	City:	<u>Lena</u> State: <u>IL</u>
Zip:	<u>60128</u> Phone: <u>815-541-4450</u>	Zip:	<u>61048</u> Phone: <u>815-275-7642</u>
Email Address:	<u>steffesfarms1992@gmail.com</u>	Email Address:	<u>wagnerconsultaqa@mediacombb.net</u>

### II. Facility Information:

Facility Location: Quarter Section: 36 Township: 27-North Range: 3-East  
Municipality: Elizabeth Township: Woodbine

Note: A plat map location is requested for facilities located outside of municipal boundaries.

Address: 5127 East Bethel Road City: Elizabeth  
State: IL Zip Code: 60128 County: JoDaviess Book Number: \_\_\_\_\_

Property Index Number: 23-000-444-00

Note: The Property Index Number is the numerical reference used to identify a parcel of real property for assessment and taxation purposes.

### Manufacturing Operations Information:

Nature of Operations Conducted at the Above Location:

<u>Raising and milking dairy cows.</u>
--

### Permit Information:

WPC Construction Permit Number:	<u>N/A</u>	Date Issued:	_____
NPDES Permit Number:	<u>N/A</u>	Date Issued:	_____ Exp. Date: _____
APC Construction Permit Number:	<u>N/A</u>	Date Issued:	_____
APC Operating Permit Number:	<u>N/A</u>	Date Issued:	_____ Exp. Date: _____

Note: Submit copies of all relevant permits issued by local pollution control agencies. (e.g. MSD Construction Permit)

*This Agency is authorized to request this information under 415 ILCS 5/4(b)(2012). Disclosure of this information is voluntary and no penalties will result from the failure to provide the information. However, the absence of the information could prevent your application from being processed or could result in denial of your application.*



**Manufacturing Process Information:**

Please provide information on the manufacturing process and materials on which pollution control facility is used, including each major piece of equipment associated with the pollution control facility (or low sulfur dioxide emission coal fueled device).  
Description of the Process:

N/A

**Materials Used in the Process:**

N/A

**Pollution Control Facility Information:**

Please provide a narrative description of the pollution control facility (or low sulfur dioxide emission coal fueled device), and an explanation of why its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility, as well as a narrative description and a process flow diagram describing the pollution control facility. Include an average analysis of the influent and effluent of the control facility stating the collection efficiency, if applicable.

Describe the Pollution Control Facility (or Low Sulfur Dioxide Emission Coal Fueled Device):

Concrete circular manure storage structure - 125' diameter X 12' tall

Describe the Primary Purpose of the Pollution Control Facility (or Low Sulfur Dioxide Emission Coal Fueled Device):

The concrete circular storage structure provides for waste storage for the manure laden wastewater until the waste is land applied at the appropriate agronomic rates.

Identify the statute or regulation (federal or state), or local ordinance, if any, requiring the installation of the subject pollution control facility (or low sulfur dioxide emission coal fueled device).

The Livestock Management Facilities Act was met and followed in regards to the pollution control device.

**Nature of Contaminants or Pollutants:**

List air contaminants or water pollution substances released as effluents to the manufacturing processes. Also list the final disposal of any contaminants removed from the manufacturing processes.

Contaminant or Pollutant	Material Retained, Captured or Recovered	
	Description	Disposal or Use
Dairy manure	Liquid	Concrete circular tank
Washdown water	Liquid	Concrete circular tank
Milkhouse waste	Liquid	Concrete circular tank

Note: Contaminant or pollutant means that which is removed from the process by the pollution control facility.



Wagner Consulting & Agriculture, LLC.  
709 West Oak Street  
Lena, Illinois 61048  
[wagnerconsultag@mediacombb.net](mailto:wagnerconsultag@mediacombb.net)  
815-275-7642

January 6, 2023

Illinois EPA  
Division of Water Pollution Control  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Attn: Al Keller, Permit Section  
Permit Section

Re: Tax Certification for Livestock Waste Management Facilities

To Al Keller:

On behalf of Steffes farm, we are submitting the tax certification for the recently constructed livestock waste management facility. The facility consists of a circular concrete waste storage structure with a diameter of 125' and height of 12'. We are also including a copy of the as-built construction drawings for the project, plat book, and flow diagram.

If you should have any questions or require additional information, please feel free to call me at 815-275-7642.

Sincerely,

WAGNER CONSULTING & AGRICULTURE, LLC.

BY Matthew Wagner  
Matthew Wagner, P.E.

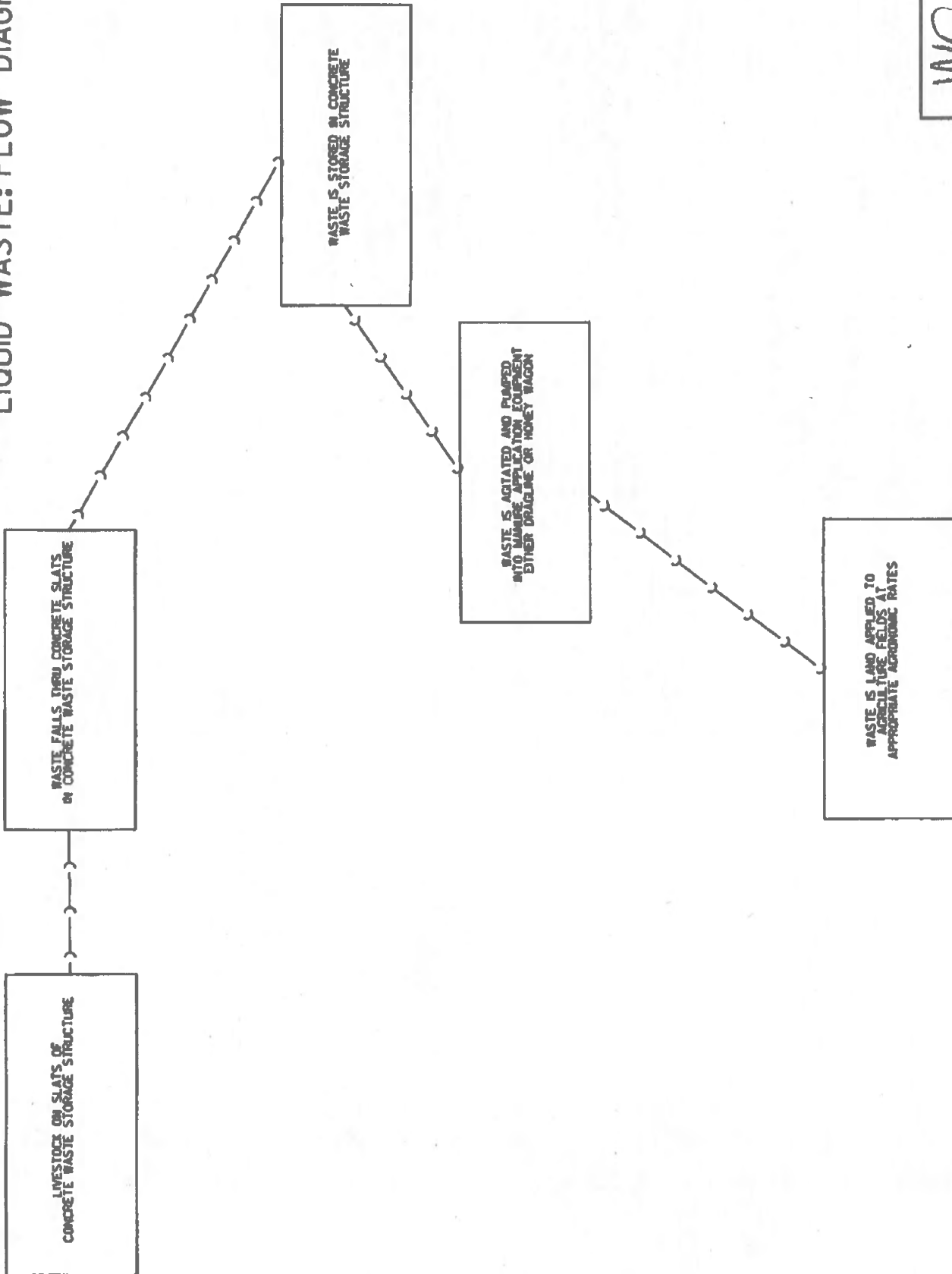
MW:aw

Encl.

cc: Steffes Farm w/ encl.  
File



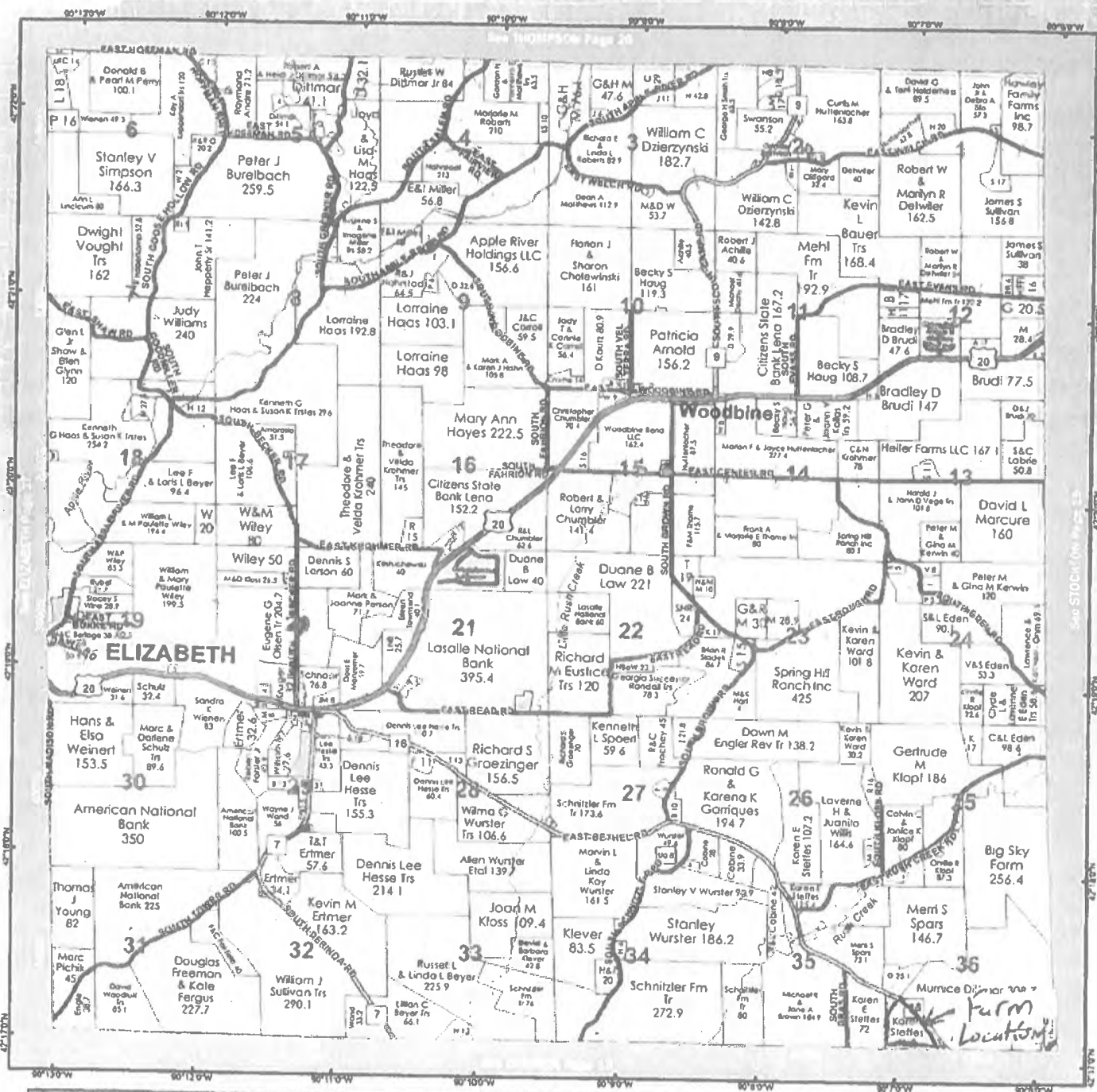
LIQUID WASTE: FLOW DIAGRAM



**WCA**  
WISCONSIN COUNCIL ON WASTE  
100 WEST MAIN STREET  
MILWAUKEE, WI 53233  
414-224-3300  
WWW.WISCONSINCOUNCILONWASTE.ORG



T.27N. - R.3E.



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Rec'd  
5/16/23  
7 pages

# PIPPING CONCRETE INC.

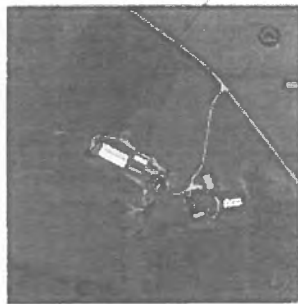
## 125' Ø X 12' WASTE STORAGE TANK

### STEFFES FARM (NON-SENSITIVE SITE)

### TOWN OF WOODBINE, JO DAVIESS COUNTY, IL



PROJECT LOCATION



LOCATION MAP

NOT TO SCALE

#### SHEET INDEX

##### G - GENERAL SHEETS

G1 - TITLE SHEET  
G2 - NOTES

##### S - STRUCTURAL SHEETS

S1 - FOUNDATION PLAN  
S2 - 12' WALL SECTION

##### D - DETAIL SHEETS

D1 - DETAILS  
D2 - DETAILS  
D3 - DETAILS

#### DESIGN STATEMENT

"THE DESIGN IN THIS SUBMITTAL PACKAGE COMPLIES WITH THE NRCS WASTE STORAGE FACILITY STANDARD (CODE 313) & NRCS POND SEALING OR LINING - CONCRETE (CODE 522)"



DATE OF SEAL  
08/18/2022

EXPIRATION DATE  
11/30/2022



TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN ILLINOIS CALL J.U.L.I.E. TOLL FREE 1-800-892-0123

ILLINOIS STATUTE REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NOTE UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND CONTRACTOR SHALL HAVE APPROPRIATE UTILITY MARK EXACT LOCATIONS PRIOR TO CONSTRUCTION

NOTE UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND CONTRACTOR SHALL HAVE APPROPRIATE UTILITY MARK EXACT LOCATIONS PRIOR TO CONSTRUCTION.

PROJECT NO.	081823-1	SCALE	AS SHOWN	DATE	08/18/22
PROJECT DATE	08/18/22	DESIGNED BY	GH	CHECKED BY	GH
DATE					



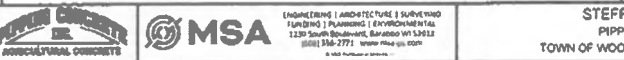
CONCRETE ARCHITECTURE & SURVEYING  
A Division of MSA  
110 South Broadway, Baraboo WI 53913  
(608) 356-2771 www.msa-inc.com

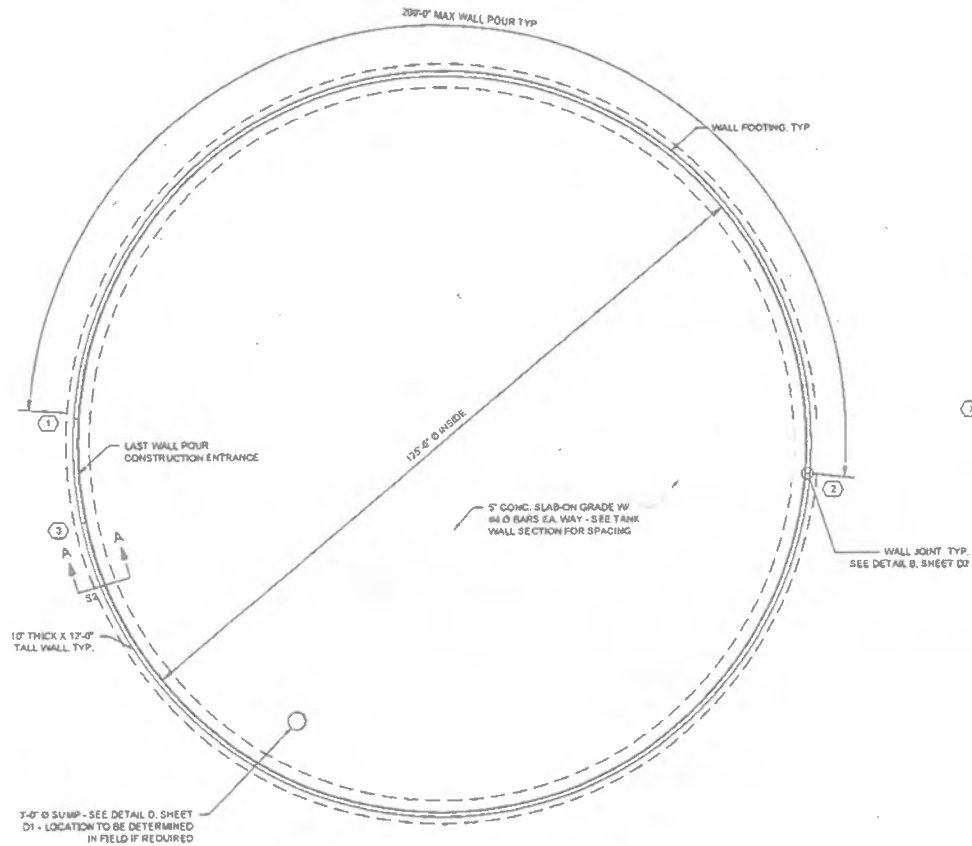
STEFFES FARM 125' X 12'  
PIPPING CONCRETE, INC.  
TOWN OF WOODBINE, JO DAVIESS COUNTY IL

TITLE SHEET

16982042

G1

<p><b>DESIGN STATEMENT</b></p> <p>DESIGN OF STRUCTURE WAS BASED ON REFERENCED DOCUMENTS BELOW AND MEETS THE REQUIREMENTS OF NRCS CODE 313 "WASTE STORAGE FACILITY" NOVEMBER 2016, NRCS CODE 322 "POND SEALING OR LINING - CONCRETE" AUGUST 2016, NRCS CODE 634 "WASTE TRANSFER" OCTOBER 2021, NRCS CODE 311 "WASTE STORAGE FACILITY" NOVEMBER 2016, NRCS CODE 322 "POND SEALING OR LINING - CONCRETE" AUGUST 2016, AND NRCS CODE 634 "WASTE TRANSFER" OCTOBER 2021.</p> <p><b>DESIGN REFERENCES</b></p> <p>NRCS CODE 313 "WASTE STORAGE FACILITY" NOVEMBER 2016          NRCS CODE 322 "POND SEALING OR LINING - CONCRETE" AUGUST 2016          NRCS CODE 634 "WASTE TRANSFER" OCTOBER 2021          BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 308R          GUIDE TO DESIGN OF SLABS-ON-GROUND, ACI 308R          LIVESTOCK WASTE REGULATIONS, IAC TITLE 35          CIRCULAR CONCRETE MANURE TANKS, IRRIG TR-9          PCA CONCRETE FLOORS ON GROUND (2ND EDITION)          "CIRCULAR CONCRETE TANKS WITHOUT PRESTRESSING" BY PCA, 1993</p> <p><b>GENERAL DESIGN LOADS AND ASSUMPTIONS</b></p> <p><b>LOAD CONDITIONS</b></p> <p>TANK TYPE FINISHED BASE-FREETOP</p> <p>INTERNAL PRESSURE FROM MANURE (PER NRCS CODE 313), 65 PSF/FT MANURE, NON-SAID LADEN</p> <p>EXTERNAL PRESSURE FROM BACKFILL, 115 PCF SOIL UNIT WEIGHT + 230 PSF SURCHARGE. SURCHARGE REPRESENTS HEAVY VEHICLE LOADING WITHIN DISTANCE EQUAL TO HEIGHT OF WALL</p> <p>CONDITION 1: 100 PSF/FT SOIL LOAD + 200 PSF/FT LATERAL SURCHARGE - PER NRCS CODE 313 (HEIGHT OF SOIL AT TOP OF WALL WITH EMPTY TANK, ASSUMING UNSATURATED CLAY/SILT BACKFILL)</p> <p>CONDITION 2: 65 PSF/FT MANURE WEIGHT (HEIGHT OF MANURE AT TOP OF WALL WITH NO BACKFILL, ASSUMING NON-SAID LADEN MANURE)</p> <p>MAXIMUM HEIGHT OF BACKFILL AT WALL          0'-0" FROM TOP OF WALL          MINIMUM HEIGHT OF BACKFILL AT WALL          6'-0" ABOVE TOP OF FOOTING</p> <p>ALL CROWNED SOIL BEARING PRESSURE - 1,500 PSF MIN.</p> <p>SLAB-ON-GRADE CAPACITY - STANDARD 5" THICK SLAB 18,800 LBS AXLE LOAD</p> <p><b>CONSTRUCTION INSPECTION PLAN</b></p> <p>PRIOR TO ANY SITEWORK, A PRECONSTRUCTION MEETING SHALL BE CONDUCTED BETWEEN THE OWNER, EXCAVATION CONTRACTOR, TANK CONTRACTOR, CONSTRUCTION INSPECTOR/ENGINEER OF RECORD, SITE ENGINEER, AND THE NRCS/COUNTY LAND CONSERVATION DEPARTMENT.</p> <p>CONCRETE SUPPLIER TO PROVIDE ENGINEER WALL AND FLOOR MIX DESIGNS FOR APPROVAL PRIOR TO POURING SLAB</p> <p>CONSTRUCTION INSPECTOR TO LOCATE ACTUAL WALL AND FLOOR JOINT LOCATIONS ON "AS-BUILT" PLAN RELATIVE TO NORTH ARROW. PROVIDE FINAL COPY OF "AS-BUILT" PLAN TO THE ENGINEER OF RECORD FOR APPROVAL.</p> <p>CONSTRUCTION INSPECTOR MUST BE COMPETENT IN INTERPRETING CONSTRUCTION DOCUMENTS, FAMILIAR WITH TYPE OF CONSTRUCTION, INDEPENDENT AND NOT A DIRECT EMPLOYEE OF CONTRACTOR.</p> <p>CONSTRUCTION INSPECTOR WILL BE RESPONSIBLE FOR AS-BUILT DOCUMENTATION, CONSTRUCTION INSPECTION LOG, AND PHOTOGRAPHS.</p> <p>CONSTRUCTION INSPECTOR TO INSPECT REBAR SIZE, LOCATION, SPACING, AND WATERSTOP LOCATIONS IN FOOTING AND SLAB PRIOR TO CONCRETE POUR. WALL IS TO BE POURED AS INDICATED ON PLAN TO COMPLETE THE TANK.</p> <p>INSPECTED ITEMS SHALL BE AS FOLLOWS</p> <ul style="list-style-type: none"> <li>PROVIDE CONTINUOUS INSPECTION OF CONCRETE PLACEMENT AROUND THE WATERSTOP TO ENSURE CONSOLIDATION.</li> <li>NUMBER AND SPACING OF FOOTING REINFORCING</li> <li>SPACING OF TYPICAL FLOOR SLAB REINFORCING</li> <li>SPACING OF WALL DOMELS</li> <li>FOOTING WATERSTOP JOINT</li> <li>SLAB WATERSTOPS, IF REQUIRED</li> </ul> <p>CONSTRUCTION INSPECTOR TO INSPECT REBAR SIZE, LOCATION, SPACING, AND WATERSTOP LOCATION IN EACH WALL SECTION PRIOR TO CONCRETE POUR. WALL IS TO BE POURED IN 200 FOOT LONG MAXIMUM SECTIONS TO COMPLETE THE TANK.</p> <p>INSPECTED ITEMS SHALL BE AS FOLLOWS</p> <ul style="list-style-type: none"> <li>CONCRETE PLACEMENT ADJACENT TO ALL WATERSTOP</li> <li>SPACING OF WALL VERTICAL AND HORIZONTAL REINFORCING</li> <li>WALL WATERSTOP AT JOINT AFTER WELDING TO FOOTING WATERSTOP</li> <li>FORM TIE HOLE PLUGS AT INSIDE FACE OF WALL</li> <li>GROUTED FORM TIE HOLES AT OUTSIDE FACE OF WALL</li> </ul> <p><b>TESTING FOR CONCRETE GREATER THAN 4,000 PSI</b></p> <p>ALL CONCRETE WITH REQUIRED COMPRESSIVE STRENGTH ABOVE 4,000 PSI MUST BE TESTED. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PROVIDE FOUR CYLINDERS FOR EACH 200 CU. YD. OR FRACTION THEREOF. PERFORM TESTS ACCORDING TO CONCRETE SECTION 7 - INSPECTION AND TESTING. TEST ONE SPECIMEN AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS.</p>	<p><b>SITEWORK SPECIFICATION</b></p> <p>SITE ENGINEER TO PROVIDE SUBBASE CAPABLE OF PROVIDING ALLOWABLE BEARING CAPACITY NOTED ON WALL SECTIONS OVER ENTIRE FOOTPRINT OF THE ANIMAL WASTE STORAGE TANK. TANK LOCATION IS TO MEET ALL SEPARATION DISTANCES SPECIFIED IN CURRENT 313 AND 322 CODES</p> <p>EXCAVATOR, UNDER THE DIRECTION OF THE SITE ENGINEER, IS TO PROVIDE A COMPACTED GRANULAR BASE BENEATH CONCRETE TANK SLAB. COMPACTED GRANULAR BASE SHALL BE 6" OF CLEAN SAND OR 3" OF CRUSHED STONE WITH FINES.</p> <p><b>BACKFILLING</b></p> <p>ONCE THE CONCRETE IS PROPERLY CURED, BACKFILL CAN BE PLACED AROUND THE TANK, AROUND BACKFILL CONTAINING LARGE ROCKS, HARD OR FROZEN SOIL LUMPS, OR CONSTRUCTION DEBRIS. BACKFILL NO HIGHER THAN 12" FROM THE TOP OF THE WALL EXCEPT AT THE RAMP APRON.</p> <p>BACKFILL MATERIAL MUST BE PLACED FROM THE HEEL OF THE FOOTING AT A 45° ANGLE AWAY FROM THE WALL UNTIL SURFACE ELEVATION IS ENCOUNTERED.</p> <p>GRANULAR BACKFILL MATERIAL INCLUDES GW, GP, GM, GC, SW, SP, AND SM SOILS. CLAY/SILT BACKFILL MATERIAL INCLUDES SM-SC, SC, ML, CL-ML, AND CL SOILS. MH AND CH SOILS ARE NOT PERMITTED TO BE USED AS BACKFILL MATERIAL IF PROPOSED TO BE USED AS BACKFILL. A SPECIAL DESIGN MUST BE USED.</p> <p>ADJACENT TO TANK WITHIN 2 FEET OF TANK, EARTH/FILL SHALL BE PLACED IN 4-INCH LIFTS (PRIOR TO COMPACTION) IN A MANNER ADEQUATE TO PREVENT DAMAGE TO THE STRUCTURE AND TO ALLOW THE STRUCTURE OR PIPE TO GRADUALLY AND UNIFORMLY ASSUME THE BACKFILL LOADS. COMPACTION SHALL BE ACCOMPLISHED BY MEANS OF MANUALLY DIRECTED POWER TAMPERS OR PLATE VIBRATORS OR HAND TAMPING UNLESS OTHERWISE SPECIFIED. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN 2 FEET OF TANK. COMPACTION BY MEANS OF DROP WEIGHTS OPERATING FROM A CRANE OR HOIST OF ANY TYPE WILL NOT BE PERMITTED.</p> <p>THE TANK SITE SHALL BE GRADED TO PROVIDE DRAINAGE ACCORDING TO SITE ENGINEER'S GRADING PLAN</p> <p><b>SOIL BORING REQUIREMENT</b></p> <p>THE OWNER SHALL HIRE GEOTECHNICAL FIRM TO CONDUCT SUBSURFACE INVESTIGATION WHEN</p> <ul style="list-style-type: none"> <li>BUILDING MORE THAN 20% OF THE TANK FLOOR AREA ON FILL DUE TO TANK BEING LOCATED ON SIDE OF HILL</li> </ul> <p>BORINGS SHALL BE TAKEN TO ESTABLISH AMOUNT OF ANTICIPATED DIFFERENTIAL SETTLEMENT THAT MAY OCCUR BETWEEN THE FILL AND NON-FILL AREAS OF THE STRUCTURE. IF DIFFERENTIAL SETTLEMENT IS AN ISSUE, PRE-LOADING OF AREA WITH APPROPRIATE OVERBURDEN MAY BE REQUIRED TO MINIMIZE FUTURE MOVEMENT. GEOTECHNICAL INVESTIGATION SHALL ALSO ESTABLISH AN ALLOWABLE SOIL BEARING PRESSURE FOR WALL FOUNDATIONS</p> <ul style="list-style-type: none"> <li>BORINGS ARE NOT REQUIRED WHEN ENTIRE TANK FOOTPRINT IS BEING UNIFORMLY RAISED ON FILL TO CREATE NECESSARY SEPARATION FROM GROUNDWATER OR BEDROCK.</li> </ul> <p>ESTABLISHING AND MAINTAINING VEGETATION</p> <p>NRCS CODE 342-CRITICAL AREA PLANTING SHALL BE DONE BY OTHERS UNDER DIRECTION OF SITE ENGINEER.</p> <p>NRCS ILLINOIS CONSTRUCTION SPECIFICATION 313hp C, WASTE STORAGE FACILITY CONCRETE SHALL BE USED FOR ALL PLACEMENT OF CONCRETE.</p> <p><b>OPERATION AND MAINTENANCE PLAN</b></p> <p>MAXIMUM HEIGHT OF MANURE IN TANK SHALL BE MAINTAINED BELOW THE MAXIMUM OPERATING LEVEL MARK CAST INTO THE INSIDE WALL OF THE MANURE PIT. IF THE MAXIMUM OPERATING LEVEL IS EXCEEDED, IMPLEMENT CONTINGENCY PLAN IMMEDIATELY.</p> <p>SLAB DESIGN ALLOWS FOR A 16,800 LBS. MAXIMUM VEHICLE AXLE LOAD FOR 5' SLAB.</p> <p>SLAB DESIGN ALLOWS FOR A 20,000 LBS. MAXIMUM VEHICLE AXLE LOAD FOR 5'-1/2" SLAB.</p> <p>FENCING, GUARDRAILS, AND OTHER SAFETY FEATURES SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE INSPECTED &amp; MAINTAINED TO ENSURE SAFE OPERATION OF WASTE STORAGE FACILITY AND PREVENT ACCESS BY HUMANS OR LIVESTOCK.</p> <p><b>OTHER SUGGESTIONS</b></p> <p>FOLLOWING EMPTYING OF THE FACILITY INSPECT THE CONCRETE WALLS AND SLAB FOR SEPARATION OR CRACKING AND REPAIR THEM AS NEEDED</p> <p>INSPECT PUMPS, PIPES, AND VALVES TWICE YEARLY TO ENSURE THEY ARE FUNCTIONAL AND NOT A SAFETY HAZARD.</p> <p><b>CONTINGENCY PLAN</b></p> <p>BEGIN PLANNED CONTINGENCY UTILIZATION OF MANURE BY APPLYING ON FIELDS AT RATES ACCORDING TO 990 NUTRIENT MANAGEMENT PLAN.</p> <p>BE CERTAIN TO AVOID AREAS OF STEEP SLOPES OR SATURATION.</p> <p><b>EMERGENCY RESPONSE PLAN</b></p> <p>HAVE NAME AND PHONE NUMBER OF A LICENSED SEPTIC WASTE HAULER READY AVAILABLE TO FARM PERSONNEL.</p> <p>CALL LICENSED SEPTIC TANK WASTE HAULER TO VACUUM UP SPILLED MANURE INTO VACUUM TANK AND DEPOSIT BACK INTO WASTE STORAGE TANK OR APPLY TO LAND ACCORDING TO 990 NUTRIENT MANAGEMENT PLAN.</p> <p>ASSES THE EXTENT OF THE SPILL AND NOTIFY THE DNR.</p> <p>PROVIDE TEMPORARY EARTHEN BARRIERS TO CONTAIN LIQUID IF REQUIRED, TO STOP LIQUID FROM ENTERING NEARBY WATERWAYS OR STORMWATER SYSTEM. RETURN SPILLED MANURE TO WASTE STORAGE TANK OR APPLY TO LAND ACCORDING TO 990 NUTRIENT MANAGEMENT PLAN.</p> <p>DO REGULAR INSPECTIONS OF PIPES, PUMPS, AND VALVES TO ENSURE PROPER OPERATION AT POTENTIAL SPILL AREAS.</p> <p><b>OWNER AGREEMENT TO O&amp;M PLAN</b></p> <p>SIGNED: _____ DATE: _____</p>	<p><b>CONFINED SPACE ENTRY INTO MANURE TRANSFER SYSTEM</b></p> <p>CONFINED SPACES WHERE HUMAN ENTRY MAY OCCUR SHALL BE DESIGNED AND OPERATED IN COMPLIANCE WITH THE PROVISIONS CONTAINED IN ASABE E9470, MANURE STORAGE SAFETY.</p> <p>POST WARNING SIGNS ON OR NEXT TO ALL CONFINED SPACES. THE SIGNS SHOULD BE STURDY WEATHERPROOF, AND DISPLAY SUCH WORDING AS, "DANGER! CONFINED SPACE. DO NOT ENTER" REGULARLY INSPECT ALL WARNING SIGNS TO MAKE SURE THEY ARE CLEAR, READABLE, AND HAVE NOT BEEN TAMPERED WITH.</p> <p>BE SURE THAT ALL OPENINGS TO CONFINED SPACES ARE APPROPRIATELY COVERED OR BLOCKED OFF. OPENINGS SHOULD BE COVERED WITH SUBSTANTIAL METAL GRILL COVERS. THESE PROVIDE NATURAL VENTILATION, AND HELP PREVENT ACCIDENTAL FALLS OR UNAUTHORIZED ENTRY.</p> <p>IF EMPLOYEES ARE NOT REQUIRED TO ENTER A CONFINED SPACE, LOCK THE OPENING TO PREVENT ENTRY. OBEY ALL WARNING SIGNS ON AND AROUND CONFINED SPACES.</p> <p>AVOID GOING NEAR CONFINED SPACES WHILE SMOKING OR USING ELECTRICAL EQUIPMENT</p> <p>NOTIFY SOMEONE WHO HAS BEEN TRAINED IN CONFINED RESCUE OPERATIONS IF THEY SPOT ANYONE IN TROUBLE IN A CONFINED SPACE.</p> <p>CONFINED SPACES CAN BE DEADLY. IF THE AIR IN THE SPACE IS NOT TESTED BEFORE ENTRY, YOU COULD BE OVERCOME BY PUMES AND PASS OUT OR DIE DUE TO LACK OF OXYGEN, TOXIC GASES, OR AN INABILITY TO ESCAPE QUICKLY ENOUGH. MULTIPLE DEATHS OFTEN OCCUR WHEN ONE PERSON ENTERS THE SPACE, IS OVERCOME, AND OTHERS TRY UNSUCCESSFULLY TO SAVE THE FIRST PERSON.</p> <p>FOLLOWING ARE THE BASIC GUIDELINES FOR CONFINED SPACE ENTRY</p> <ul style="list-style-type: none"> <li>TEST THE ATMOSPHERE FOR OXYGEN, AND FOR LEVELS OF TOXIC AND EXPLOSIVE GASES.</li> <li>IF A DANGEROUS ATMOSPHERE EXISTS, YOU MUST WEAR A SELF-CONTAINED BREATHING APPARATUS. VENTILATE THE AREA AS THOROUGHLY AS POSSIBLE.</li> <li>ALL MECHANICAL AND ELECTRICAL EQUIPMENT MUST BE LOCKED OUT.</li> <li>USE THE "BUDDY" SYSTEM AND WEAR A LIFELINE. SUFFICIENT EQUIPMENT AND MANPOWER MUST BE AVAILABLE. A THIRD PERSON SHOULD BE ON HAND TO SUMMON ASSISTANCE IF NEEDED.</li> <li>ESTABLISH HOW YOU WILL BE COMMUNICATING BEFORE ENTERING THE CONFINED SPACE. THE MEANING OF VERBAL SIGNALS, HAND GESTURES OR TUGGING LINE SIGNALS MUST BE UNDERSTOOD BY THE PEOPLE ON THE OUTSIDE.</li> <li>NEVER RE-ENTER A CONFINED SPACE WITHOUT RE-TESTING AND VENTING THE AREA.</li> </ul> <p><b>EMERGENCY SLAB CRACK REPAIR PLAN</b></p> <p>IN THE EVENT UNINTENTIONAL FLOOR CRACKING OR CRACK INCRORATIONS OCCUR REPAIR THE CRACKS WITH A SIMPSON EPOXY ADHESIVE. THE REPAIR INVOLVES INJECTING LOW-VISCOSITY EPOXY INTO THE CRACKS TO MAKE THEM WATERPROOF. USE "GRAVITY-FEED APPLICATION" WHICH MEANS DISPENSING THE EPOXY VISCOSITY EPOXY ALONG THE CRACK TO FILL IT WITHOUT PRESSURE.</p> <p>IN THE EVENT OF NARROW CRACKS, SIMPSON RECOMMENDS USING TWO BEADS OF CAULK ALONG EACH SIDE OF THE CRACK APPROXIMATELY 1" FROM THE EDGE OF THE CRACK TO WORK AS A RESERVOIR FOR THE EPOXY. ALTERNATIVELY, THE INSTALLER MAY ROUT THE CRACK TO FORM A V-GROOVE. WITH ROUTING, IT IS REQUIRED TO CLEAN THE CRACK WITH COMPRESSED AIR AFTERWARDS AS ROUTING CAN IMPACT REBAR AND DEBRIS INTO THE CRACK AND PREVENT PROPER FLOW OF THE EPOXY.</p>																								
<table border="1"> <tr> <td>PROJECT NO.</td> <td>488284</td> <td>SCALE</td> <td>AS SHOWN</td> <td>NO.</td> <td>01E</td> <td>REVISION</td> <td></td> </tr> <tr> <td>PROJECT DATE</td> <td>08/03/23</td> <td>DIST.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TITLE</td> <td>CONCRETE TANK</td> <td>NO.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	PROJECT NO.	488284	SCALE	AS SHOWN	NO.	01E	REVISION		PROJECT DATE	08/03/23	DIST.						TITLE	CONCRETE TANK	NO.							<p>STEFFES FARM 125' X 12'          PIPPING CONCRETE, INC.          TOWN OF WOODBINE, JO DAVISS COUNTY IL</p> <p>NOTES</p> <p>16962042          02</p>
PROJECT NO.	488284	SCALE	AS SHOWN	NO.	01E	REVISION																				
PROJECT DATE	08/03/23	DIST.																								
TITLE	CONCRETE TANK	NO.																								



-NOTE AFTER PLACING OF CONCRETE IN BASE SEAL JOINT AREA INSURE CONSOLIDATION OF CONCRETE AROUND PLATE DOWELS AND DOWEL BASKET WITH THE USE OF IMMERSION VIBRATOR.  
 -SEE DETAILS A/B ON SHEET D2 FOR ADDITIONAL INFORMATION ON PROPER JOINT INSTALLATION.

(X) DENOTES MINIMUM NUMBER OF WALL JOINTS  
 NOTE: WALL JOINTS SHOWN DO NOT INDICATE EXACT JOINT LOCATION. LOCATION MAY VARY DEPENDING ON WALL POUR LENGTHS.

A  
 S1 125' Ø TANK WITH 12 FT WALLS - FOUNDATION PLAN  
 1" = 30' - 0"

PROJECT NO.	16962042	SCALE	AS SHOWN	SHEET	OF 19	REVISION
PROJECT DATE		DRAWN BY	INT	CHECKED BY	INT	

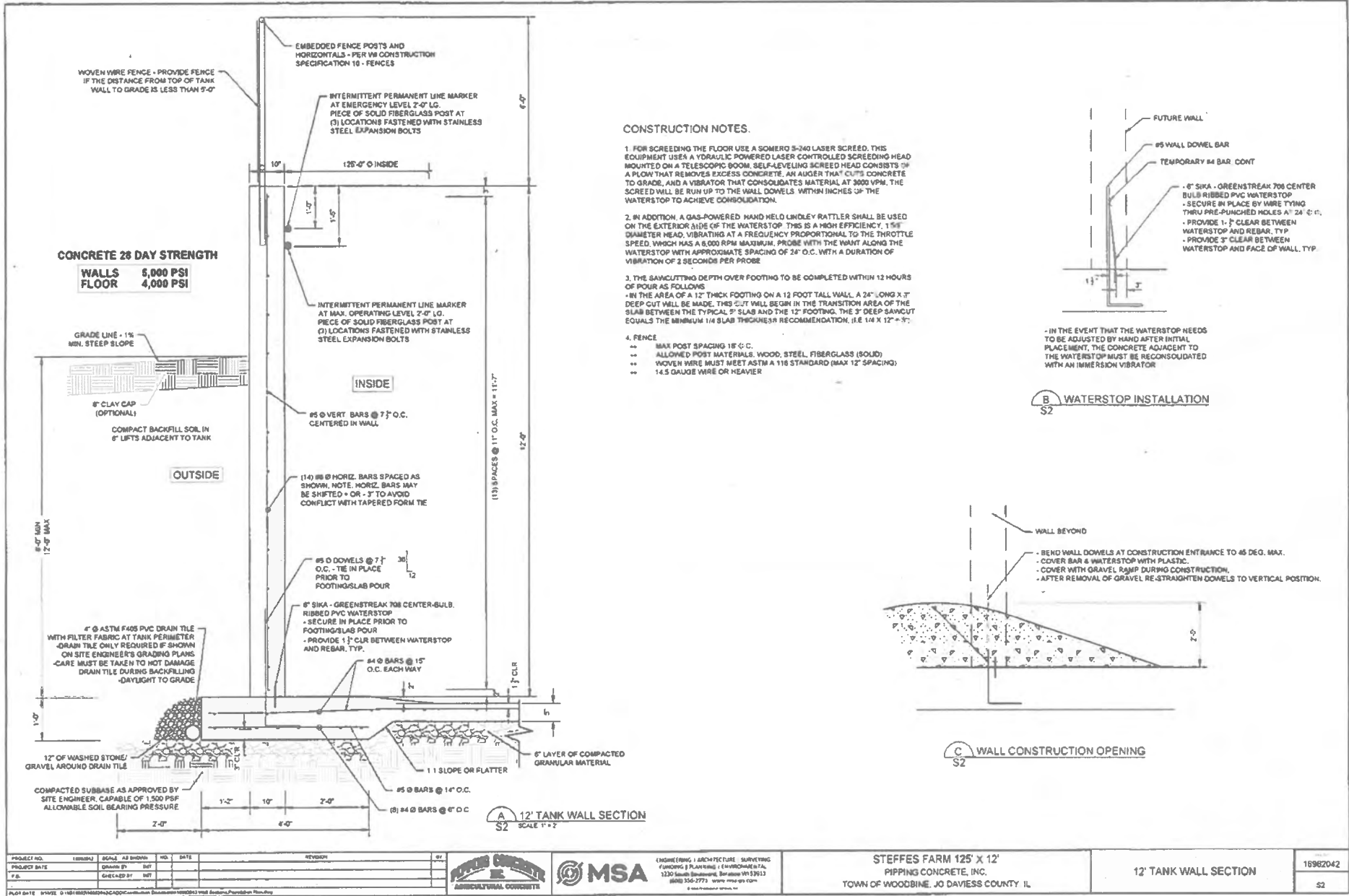


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STEFFES FARM 125' X 12'  
 PIPING CONCRETE, INC.  
 TOWN OF WOODBINE, JO DAVIESS COUNTY IL

FOUNDATION PLAN

16962042  
 S1



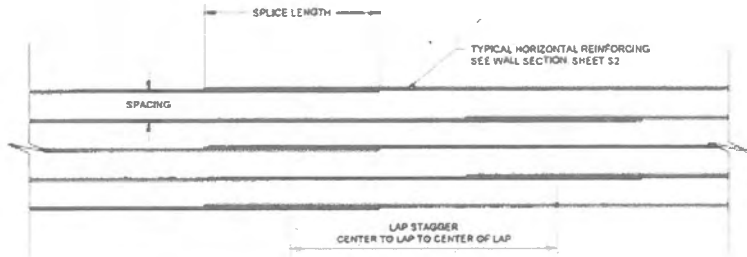
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STEFFES FARM 125' X 12'  
 PIPING CONCRETE, INC.  
 TOWN OF WOODBINE, JO DAVIES COUNTY, IL

12' TANK WALL SECTION  
 19962042  
 S2



BAR SPLICE SCHEDULE	
BAR SIZE	SPLICE LENGTH (in.)
#4Ø	20"
#5Ø	25"
#6Ø	30"
#7Ø	43"
#8Ø	49"

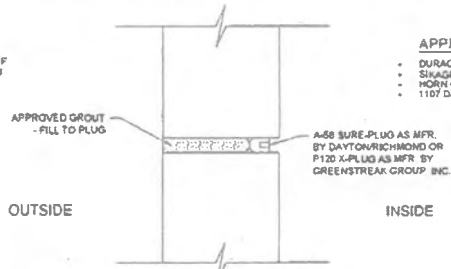
\*LAP STAGGER TO BE GREATER OF 3Ø & SPLICE LENGTH - SEE SCHEDULE ABOVE.

**A** BAR SPLICE LAP  
D1 1/2" SCALE HORIZONTAL WALL REF

**APPROVED SEALANT**  
LEAKMASTER LV-2 BY GREENSTREAK GROUP, INC.

**B** APPROVED SEALANTS  
D1 1/2" SCALE

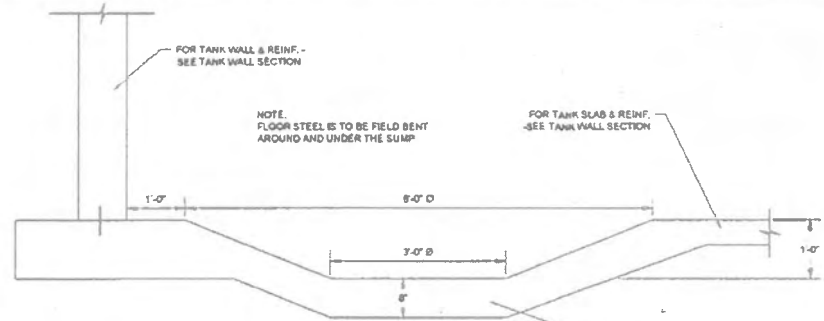
NOTE  
CONTR. HAS OPTION TO APPLY  
TAMMS THIN PATCH OVER GROUT IF  
A COLOR MATCH TO WALL IS REQ'D



**APPROVED GROUTS**

- DURAGROUT BY L&M CHEMICAL
- SIKAGROUT 212 BY SIKA
- HORN GROUT BY TAMMS
- 1107 DAYTON/SUPERIOR ADVANTAGE GROUT

**C** TIE HOLE DETAIL  
D1 SCALE 1" = 1'-0"



**D** TYPICAL SUMP PIT  
D1 1" = 2'-0"

PROJECT NO.	SCALE	AS SHOWN	NO. OF SHEETS	SHEET NO.
10962042	1" = 1'-0"		1	1

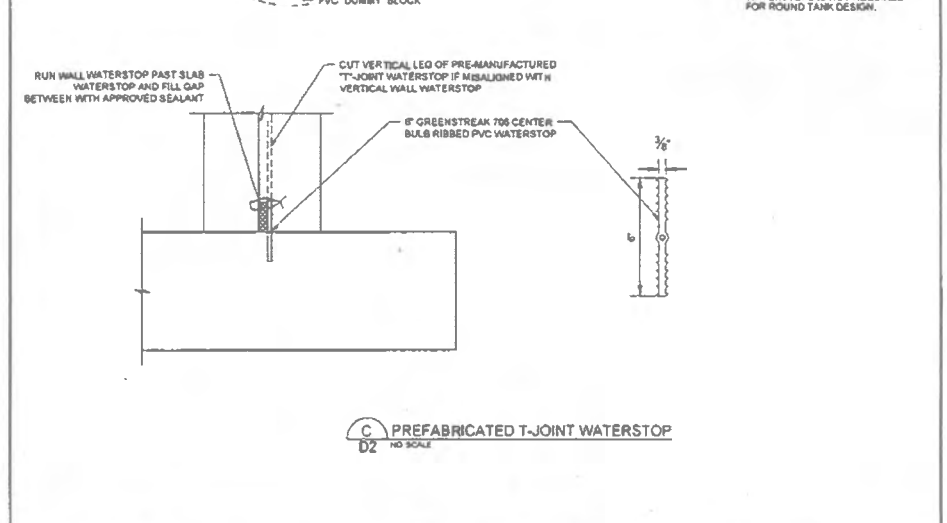
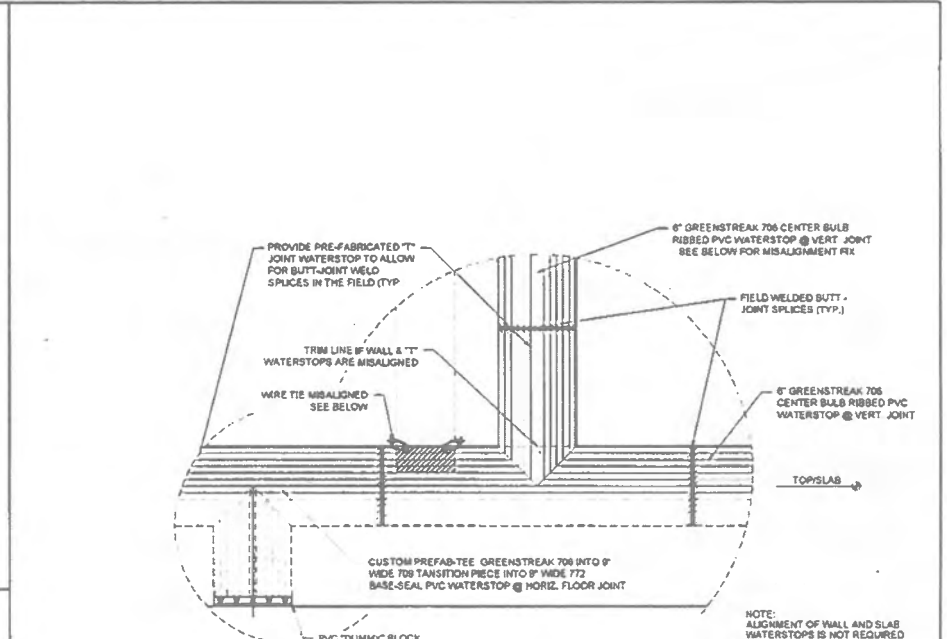
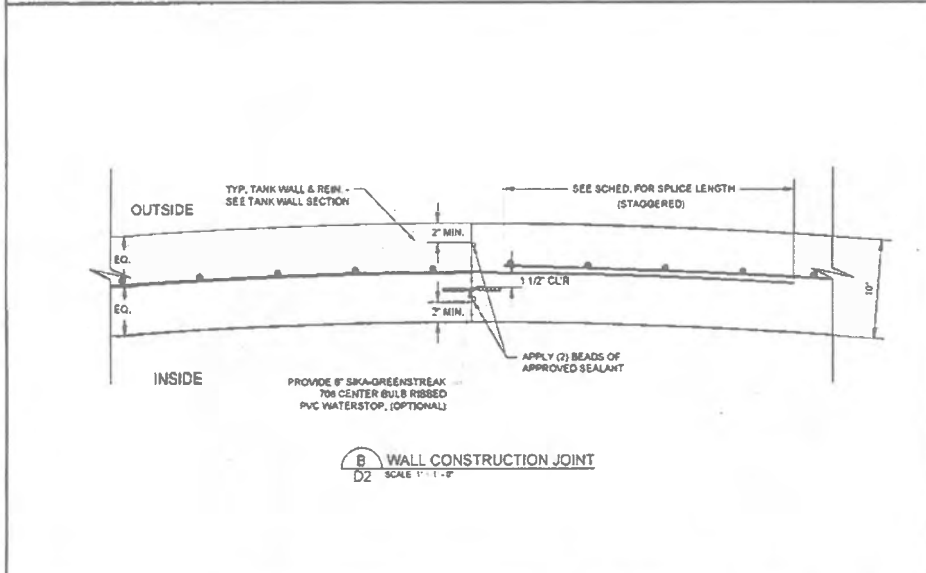
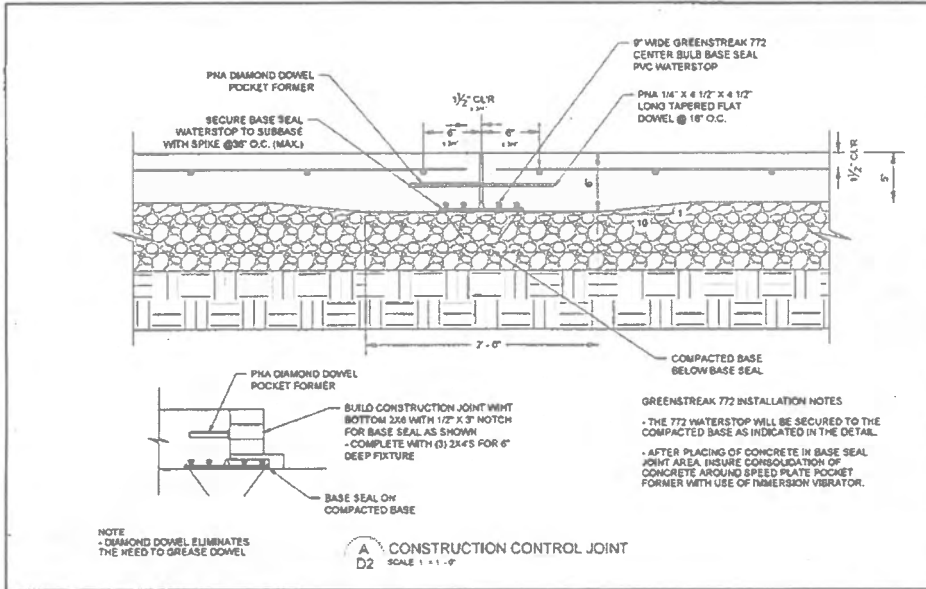


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STEFFES FARM 125' X 12'  
PIPPING CONCRETE, INC.  
TOWN OF WOODBINE, JO DAVIESS COUNTY IL

DETAILS

10962042  
D1



PROJECT NO.	16962042	SCALE	AS SHOWN	NO.	DATE	REVISION	BY
PROJECT DATE		DRAWN BY	PHF				
DESIGNED BY	PHF						



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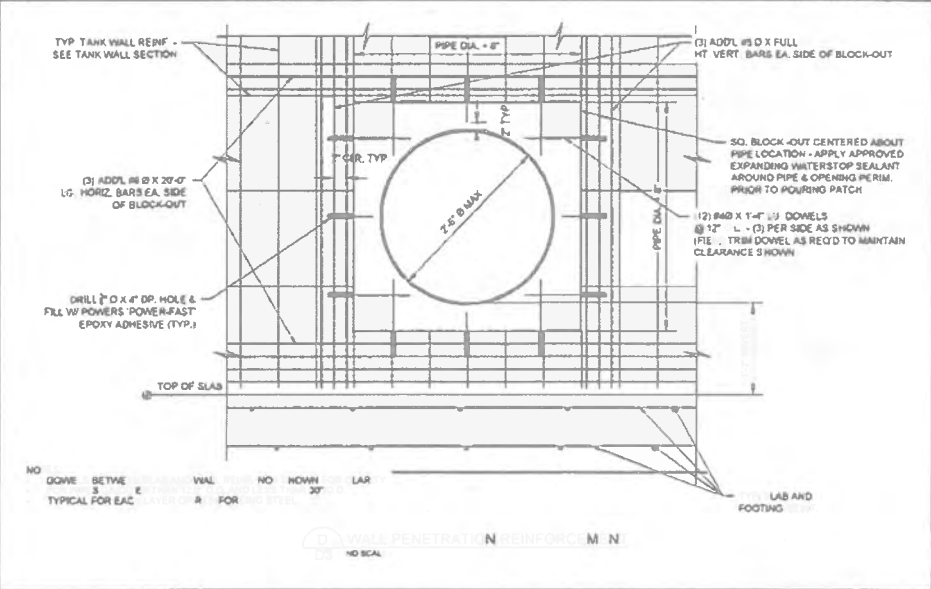
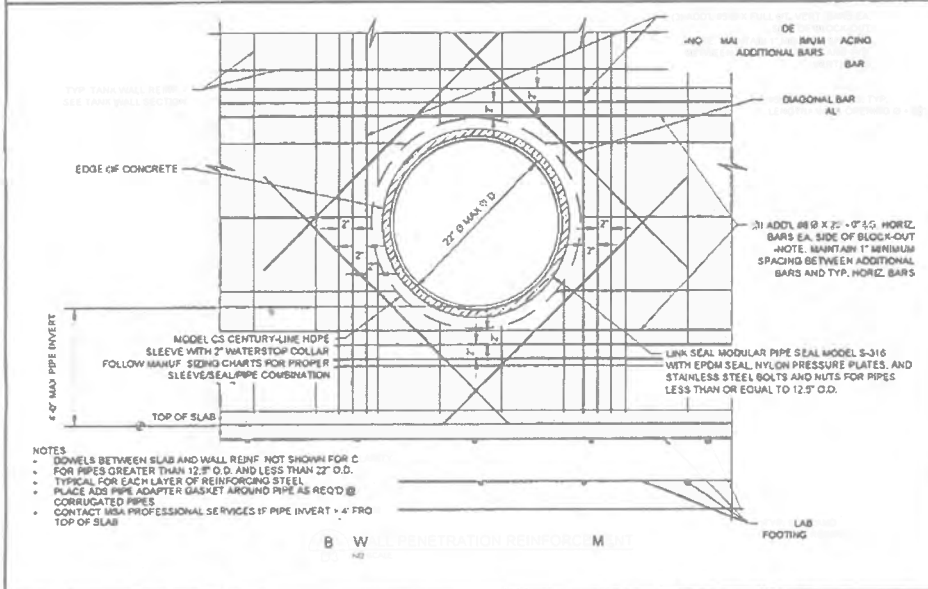
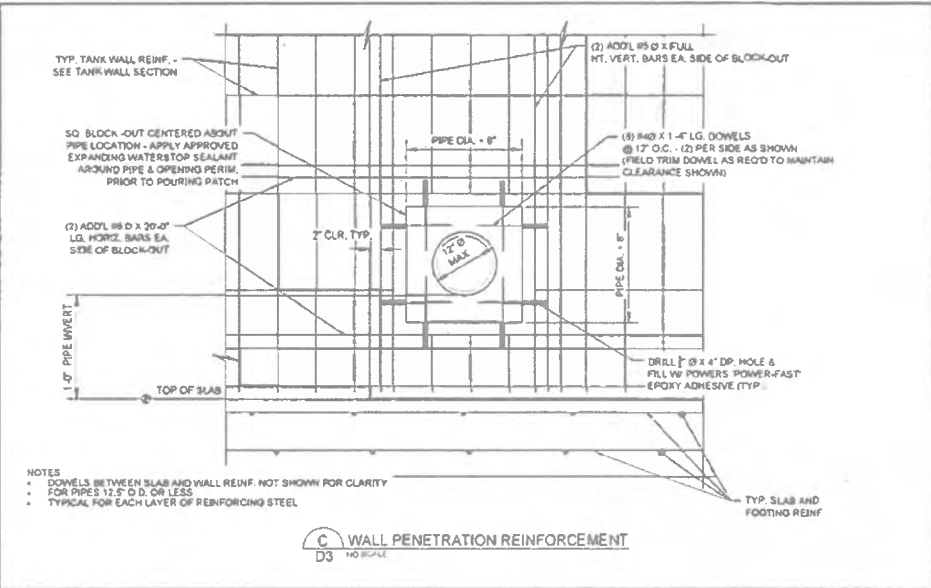
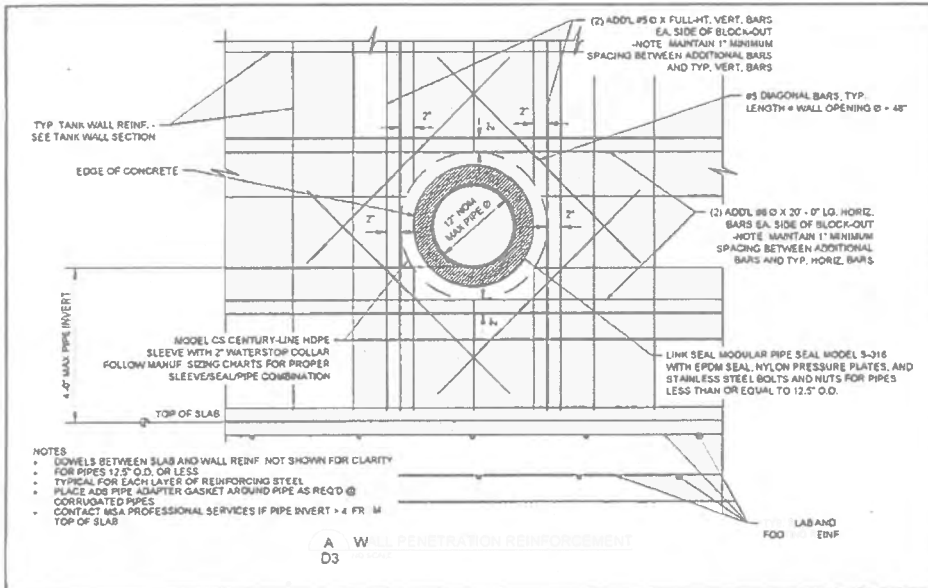
STEFFES FARM 125' X 12'  
PIPPING CONCRETE, INC.  
TOWN OF WOODBINE, JO DAVISS COUNTY, IL

DETAILS

16962042

D2





PROJECT NO.	SCALE	DATE	REVISED	BY	DATE	PROJECT	DATE

MSA PROFESSIONAL SERVICES

STEPPES FARM 125' X 12'

PIPPING CONCRETE, INC

TOWN OF WOODBINE, JO DAVIESS COUNTY IL

DETAILS

16962042

D3

PROPOSED FREESTALL BARN  
 STEFFES FARM  
 ELIZABETH, ILLINOIS  
 NW 1/4 SECTION 35, T27N, R3E, 4TH P.M.

SHEET INDEX

DESCRIPTION	SHEET NO.
COVERSHEET AND LOCATION MAP	1
CIVIL SITE PLAN	2
PLAN VIEW OF FREESTALL BARN	3
SECTION VIEW & DETAILS OF FREESTALL BARN	4
CONCRETE DETAILS	5-6



PROJECT LOCATION MAP

GENERAL NOTES

ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE OF THE WORK. THIS GUARANTEE SHALL INCLUDE ALL DEFECTS IN MATERIALS AND WORKMANSHIP.

THE CONTRACTOR, BY AGREEING TO PERFORM THE WORK, AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER, ENGINEER, ALL AGENTS AND ASSIGNS OF THOSE PARTIES, FROM ALL SUITS AND CLAIMS ARISING OUT OF THE PERFORMANCE OF SAID WORK, AND FURTHER AGREES TO DEFEND OR OTHERWISE PAY ALL LEGAL FEES ARISING OUT OF THE DEFENSE OF SAID PARTIES.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE "APPROVED" ENGINEERING PLANS. THE FULL RESPONSIBILITY FOR KEEPING ALIGNED AND GRADES SHALL REST UPON THE CONTRACTOR.

ALL FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECORDED SHOWING SIZE, LOCATION, AND DEPTH BY CONTRACTOR AND SHALL BE RECONNECTED OR RELOCATED. THE OWNER SHALL BE NOTIFIED IMMEDIATELY.

IF MORE THAN ONE (1) ACRE OF LAND AREA IS TO BE DISTURBED AS PART OF THE CONSTRUCTION OF THE BUILDING, CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING A NOTICE OF INTENT TO CONSTRUCT FOR GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION SITE ACTIVITIES THRU THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. ALSO AS PART OF THIS REQUIREMENT, THE CONTRACTOR SHALL DEVELOP AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN.

ALL DRAINAGE STRUCTURES, INLETS, PIPES, AND ADJACENT ROADWAYS SHALL BE KEPT FREE AND CLEAN OF DIRT AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL NOT SPILL AND LEAVE DIRT ON ADJACENT PAVEMENTS. DIRT IS DEPOSITED ON ADJACENT PAVEMENTS, REMOVE THE DIRT AND CLEAN THE PAVEMENTS AT THE END OF EACH CONSTRUCTION DAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE END OF EACH WORKING DAY. EXCESS EXCAVATED MATERIAL SHALL BE REGRADED THRU THE SITE AND BE REGRADED AND REFINISHED.

THE SUBGRADE OF THE PAVEMENT AND BUILDING AREA SHALL BE FREE OF UNSUITABLE MATERIAL AND BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR SOIL BEARING CAPACITY FOR THE PROPOSED BUILDING DENSITY IS REQUIRED TO MEET A MINIMUM OF 2,500 PSF. ANY ADDITIONAL EXCAVATION TO REMOVE UNSUITABLE MATERIALS FROM THESE AREAS AND GRANULAR MATERIAL REQUIRED TO BRING TO THE APPROPRIATE GRADES SHALL BE INCIDENTAL TO THE PROJECT.

PROPERTY CORNERS THAT ARE ENCOUNTERED SHALL BE PROTECTED UNTIL THEY HAVE BEEN RELOCATED BY A PROFESSIONAL LAND SURVEYOR.

THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL BENCHMARKS PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

ELEVATIONS SHOWN ON THE PLANS REFERENCE U.S.G.S. DATUM.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY EXISTING UTILITIES PRIOR TO EXCAVATION AND SHALL INDICATE AS NECESSARY. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND OBTAINING LOCATION OF EXISTING UTILITIES.

REVISIONS			
NO.	DATE	BY	REMARKS

DRAWN  
M.L.W.  
CHECKED  
A.S.W.  
APPROVED  
M.L.W.



WAGNER CONSULTING & AGRICULTURE  
 709 WEST OAK STREET  
 LENA, ILLINOIS, 61048  
 815-275-7642  
 WAGNERCONSULTAG@MEDIACOMMBB.NET

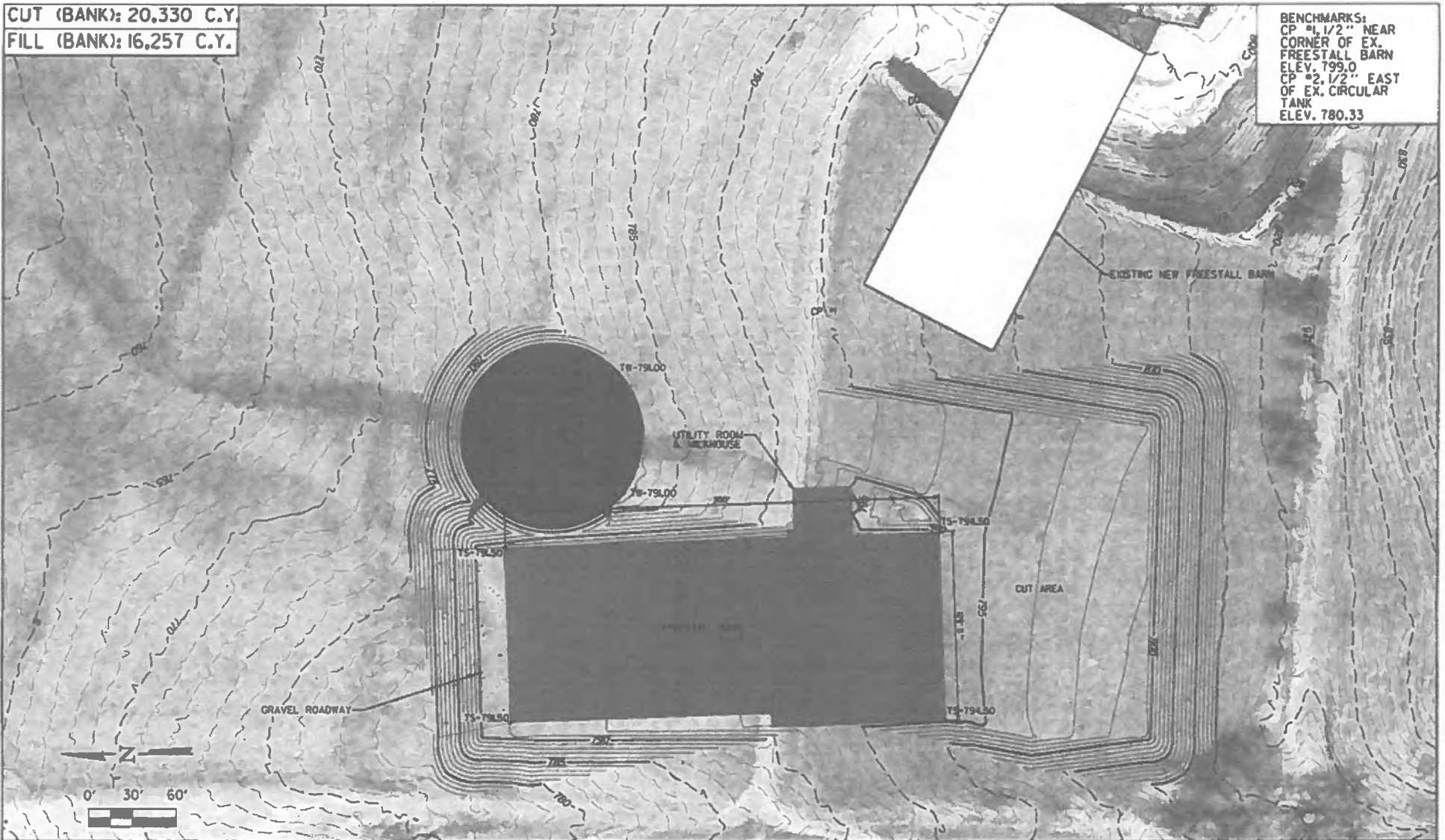
CONTACT JULIE AT 811 OR 800-892-0123  
 With the following:  
 County \_\_\_\_\_  
 City/Township \_\_\_\_\_  
 Sec & 1-4 Sec No \_\_\_\_\_  
 42 HOURS (2 WEEKS) BEFORE YOU DIG

STEFFES FARM  
 5127 E. BETHEL ROAD  
 ELIZABETH, ILLINOIS 61028  
 COVER SHEET AND LOCATION MAP

PROJECT NO.  
5W22  
DATE  
7-07-22  
SHEET NO.  
1  
OF 163 SHEETS

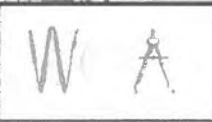
CUT (BANK): 20,330 C.Y.  
 FILL (BANK): 16,257 C.Y.

BENCHMARKS:  
 CP #1 1/2" NEAR  
 CORNER OF EX.  
 FREESTALL BARN  
 ELEV. 799.0  
 CP #2 1/2" EAST  
 OF EX. CIRCULAR  
 TANK  
 ELEV. 780.33



REVISIONS			
NO.	DATE	BY	REMARKS

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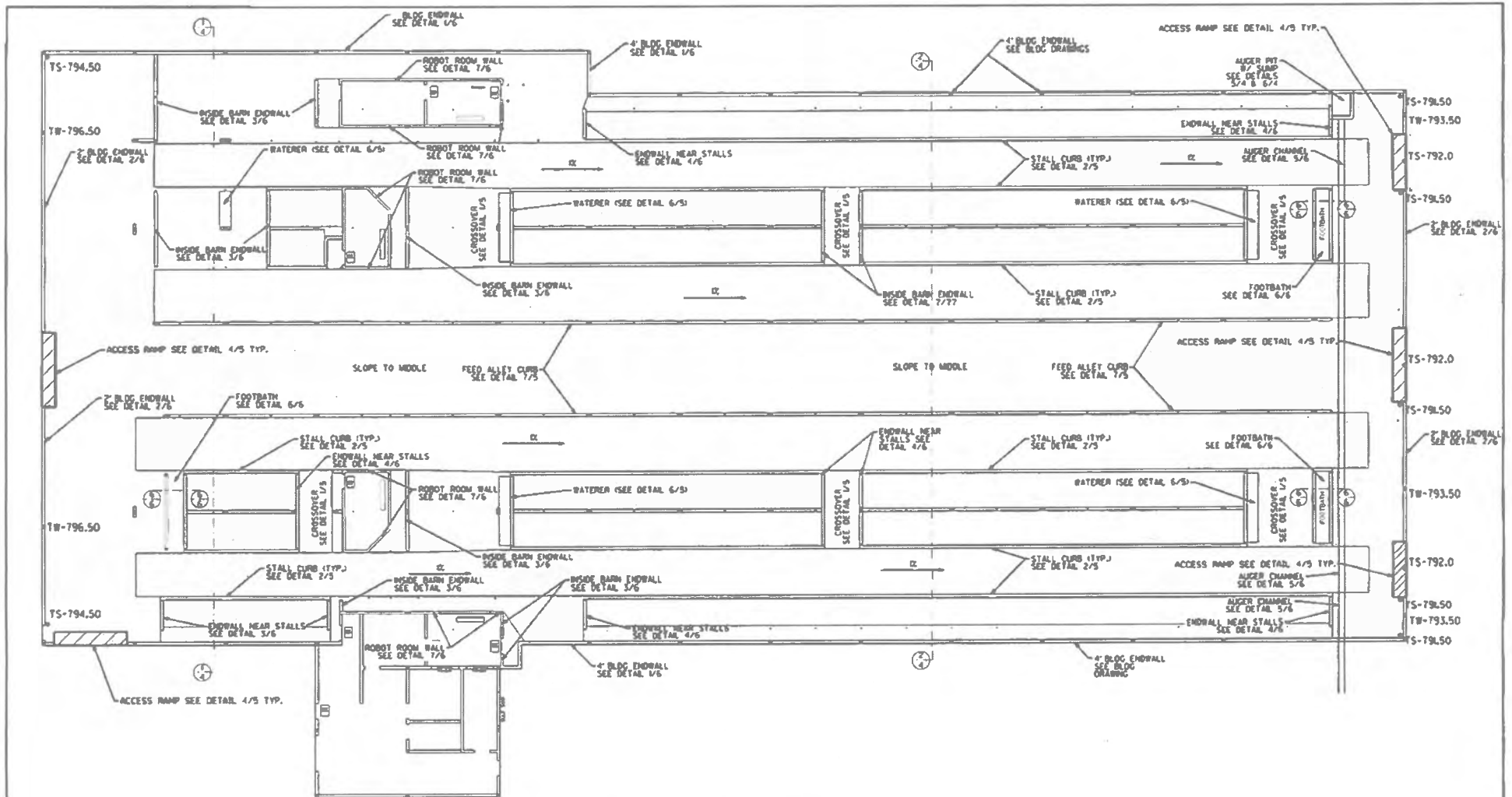


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 815-275-7642  
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CONTACT JULIE AT 811 OR 800-892-0123  
 With the following  
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 City/Township \_\_\_\_\_  
 Sec. & 1/4 Sec. NO. \_\_\_\_\_  
 42 HOURS (7 working days) BEFORE FILING

STEFFES FARM  
 5127 E. BETHEL ROAD  
 ELIZABETH, ILLINOIS  
 CIVIL SITE PLAN



PROJECT NO.  
 5W22  
 DATE  
 7-07-23  
 SHEET NO.  
 2  
 OF 161 SHEETS



1 PLAN VIEW OF FREESTALL BARN  
 3 SCALE 1/8" = 1'-0" X 1/4" NORTH

REVISIONS			
NO.	DATE	BY	REMARKS

DRAWN  
 M.L.W.  
 CHECKED  
 A.S.W.  
 APPROVED  
 M.L.W.

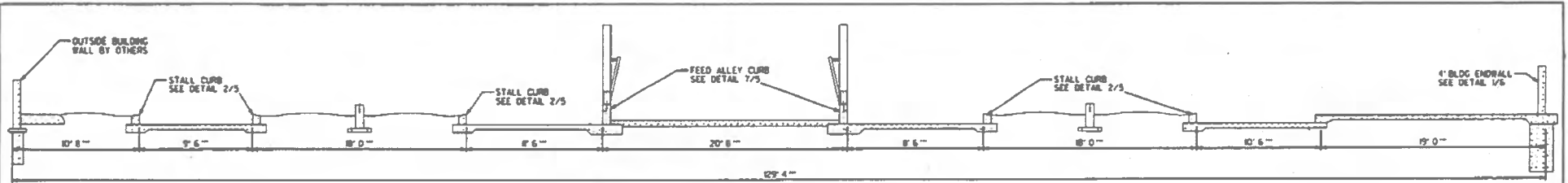



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 700 WEST OAK STREET  
 LENA, ILLINOIS, 6104X  
 815-275-1642  
 WAGNERCONSULTAG@MEDIACOMBB.NET

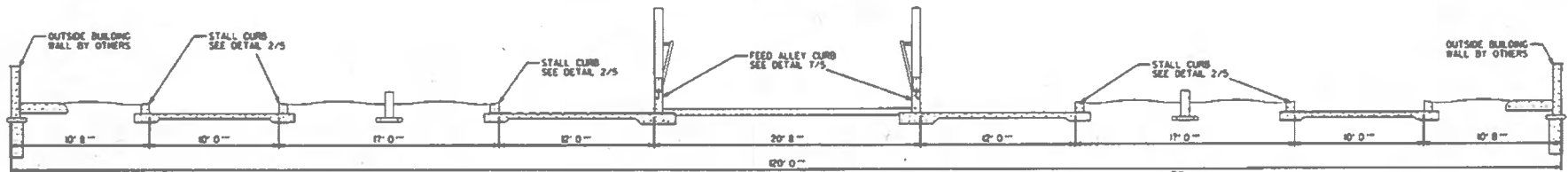
CONTACT JULIE AT 811 OR 800-892-0123  
 With the following:  
 County: \_\_\_\_\_  
 City/Township: \_\_\_\_\_  
 Sec. & 1/4 Sec. No. \_\_\_\_\_  
 48 HOURS (2 working days) BEFORE FILING

STEFFES FARM  
 5127 E. BETHEL ROAD  
 ELIZABETH, ILLINOIS 61028  
 PLAN VIEW OF FREESTALL BARN

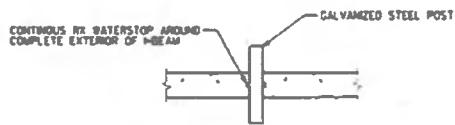
PROJECT NO.	5W22
DATE	7-07-22
SHEET NO.	3
OF 161 SHEETS	



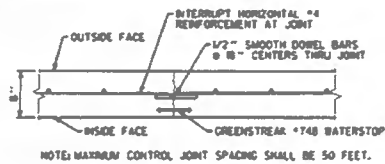
1 PROFILE SECTION AT BEDPACK AREA  
4 SCALE 1/8" = 1'



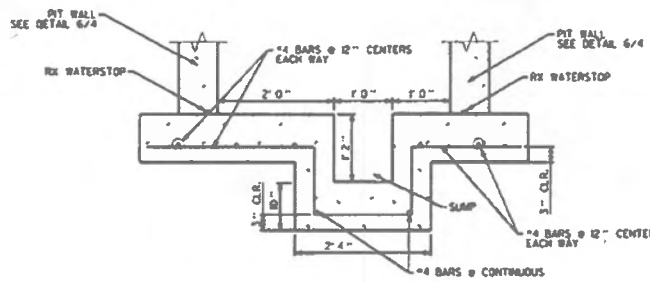
2 PROFILE SECTION THRU FREESTALLS  
4 SCALE 1/8" = 1'



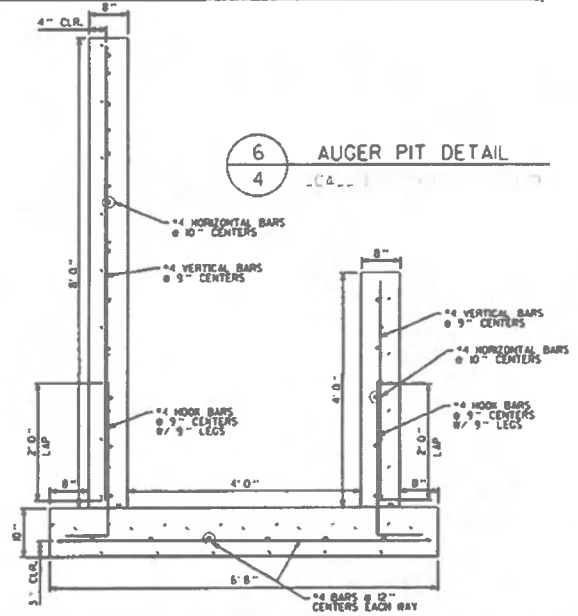
3 TYP. POST PENETRATION DETAIL  
4 NO SCALE



4 CURB/WALL CONTROL JOINT  
4 SCALE 1/2" = 1'



5 SUMP DETAIL  
4 SCALE 1/2" = 1' @ 11" x 17"



6 AUGER PIT DETAIL  
4

REVISIONS			
NO.	DATE	BY	REMARKS

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CHECKED  
A.S.W.  
APPROVED  
M.L.W.



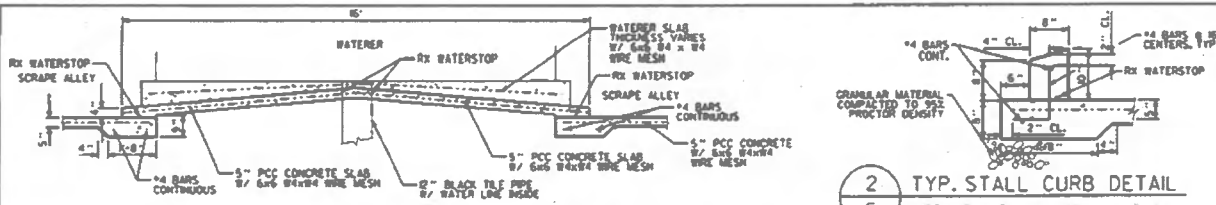
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709 WEST OAK STREET  
LENA, ILLINOIS, 61048  
815-275-7642  
WAGNERCONSULTAGG@MEDIACOMBB.NET

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WITH THE FOLLOWING:  
County: \_\_\_\_\_  
City: \_\_\_\_\_  
Site # 112 City No: \_\_\_\_\_  
48 HOURS (2 working days) BEFORE YOU DIG

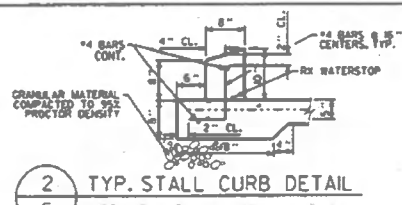
STEFFES FARM  
5127 E. BETHEL ROAD  
ELIZABETH, ILLINOIS 61028

SECTION VIEW & DETAILS OF FREESTALL BARN

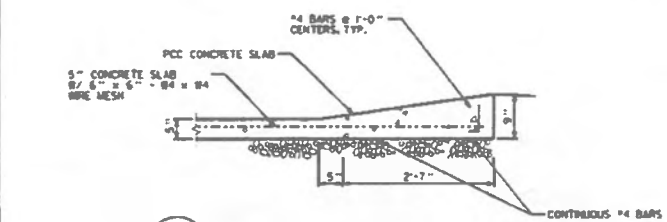
PROJECT NO.  
5W27  
DATE  
7/07/23  
SHEET NO.  
4  
OF 163 SHEETS



1 TYPICAL WATERER DETAIL  
5 SCALE 1/4" = 1' (11" X 17")

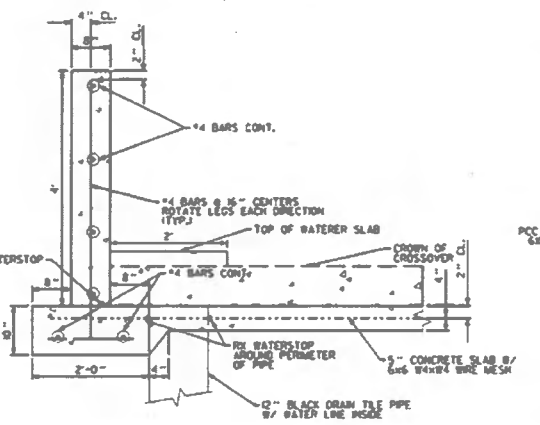


2 TYP. STALL CURB DETAIL  
5 SCALE 1/2" = 1' (11" X 17")

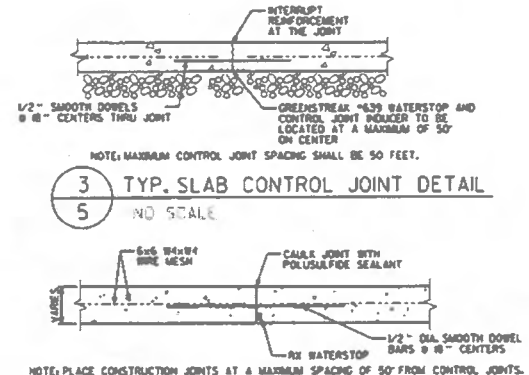


3 TYP. SLAB CONTROL JOINT DETAIL  
5 NO SCALE

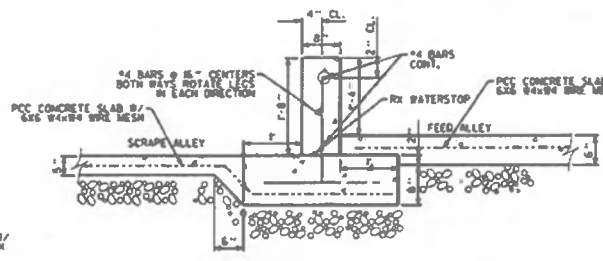
4 ACCESS RAMP DETAIL  
5 SCALE 1/2" = 1' (11" X 17")



6 WATERER DETAIL  
5 SCALE 1/2" = 1' (11" X 17")



5 TYP. SLAB CONSTRUCTION JOINT DETAIL  
5 NO SCALE



7 FREESTALL CURB DETAIL  
5 SCALE 1/2" = 1' (11" X 17")

**CONCRETE SPECIFICATIONS**

THE FOLLOWING TECHNICAL SPECIFICATIONS SHALL BE FOLLOWED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY, COMPLETENESS, AND COMPLIANCE STATUS OF THE FINAL INSTALLATION. STANDARDS OF THE FOLLOWING ASSOCIATIONS OR ORGANIZATIONS SHALL BE FOLLOWED AND APPLY AS MINIMUM REQUIREMENTS:

- ACI AMERICAN CONCRETE INSTITUTE
- ASTM AMERICAN SOCIETY OF TESTING METHODS
- CRSI CONCRETE REINFORCING STEEL INSTITUTE
- MWPS MIDWEST PLAN SERVICE, INC.

- 1.0 GENERAL REQUIREMENT
- A. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE ACI 110-02 SPECIFICATIONS AND MIDWEST PLAN SERVICE, INC.
  - B. CONCRETE CONTRACTOR IS ACCOUNTABLE FOR ASSURING THAT ALL NECESSARY INSTALLATIONS ARE COMPLETED PRIOR TO EACH POUR (i.e. GROUNDING, PLUMBING, FASTENERS, AND STEEL).
  - C. SUBSOIL OR COMPACTED SUBBASE SHALL BE CAPABLE OF SUPPORTING A DESIGN LOADING OF 2,500 PSF.
  - D. ALL GRANULAR SUBBASE SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MODIFIED PROCTOR.
  - E. CORRECT OVER EXCAVATED AREAS WITH GRANULAR SUBBASE MATERIAL.

- 1.1 CONCRETE MIXES
- A. ALL CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
  - B. ALL CONCRETE SHALL BE AIR ENTRAINED 4% ± 1% UNLESS OTHERWISE SPECIFIED.
  - C. ALL CONCRETE SHALL HAVE A SLUMP OF 1 TO 5 INCHES UNLESS PRE-APPROVED BY ENGINEER.

- 1.2 CONCRETE REINFORCING
- A. REINFORCING STEEL BARS
1. ALL REINFORCING BARS TO BE ASTM A615 GRADE #4.
  2. WHERE USED, DOWNLAPS SHALL BE SPACED WITH VERTICAL REINFORCEMENT, UNLESS OTHERWISE SPECIFIED.
  3. ALL LAP LENGTHS TO BE A MINIMUM OF 12 INCHES. ALL SPECIFIED LAP LENGTHS ARE SHOWN AS MINIMUMS.
  4. ALL STEEL BAR REINFORCING COVER WILL CONFORM TO ASTM A1181.
  5. ALL STEEL SHALL BE PLACED, TIED, AND PROPERLY SUPPORTED PRIOR TO THE PLACEMENT OF THE CONCRETE.
- B. REINFORCING WIRE FABRIC
1. ALL WELDED WIRE FABRIC (W-W-F) WILL CONFORM TO ASTM A1181.
  2. ALL STEEL WELDED WIRE FABRIC REINFORCING COVER SHALL CONFORM TO THE MIDWEST PLAN SERVICE, INC.

- 1.3 PLACING CONCRETE
- A. ENSURE REINFORCEMENT, INSERTS AND EMBEDDED ITEMS ARE NOT DISTURBED DURING CONCRETE PLACEMENT.
  - B. PLACE CONCRETE WITH THE AID OF MECHANICAL VIBRATORS OF APPROVED TYPE. EXCESSIVE VIBRATION SHALL BE USED TO CAUSE ALL CONCRETE TO FLOW OR SETTLE READILY INTO PLACE. VIBRATORS MUST NOT BE ALLOWED TO TOUCH REINFORCEMENT, EMBEDDED ITEMS, PARTIALLY SET CONCRETE, OR USED TO TRANSFER CONCRETE TO FORMS.
  - C. CONTROL JOINTS SHALL BE REQUIRED AT A MAXIMUM SPACING OF 90 FEET O.C. FOR FLOORS AND AT 100 FEET O.C. FOR WALLS.

- 1.4 WATERSTOPS
- A. ALL FOLD JOINTS OR AREAS OF TWO DIFFERENT POURES WHERE MANURE MAY CONTACT CONCRETE SHALL BE WATERSTOPPED WITH RA WATERSTOP OR GREENSTREAK WATERSTOP PRODUCTS (AS SHOWN ON CONSTRUCTION DRAWINGS).
  - B. ALL WATERSTOP LOCATIONS WILL BE REQUIRED AS PER PLANS.
  - C. ALL WATERSTOPS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

REVISIONS			
NO.	DATE	BY	REMARKS

DRAWN: M.L.W.  
 CHECKED:   
 A.S.W.  
 APPROVED:   
 M.L.W.

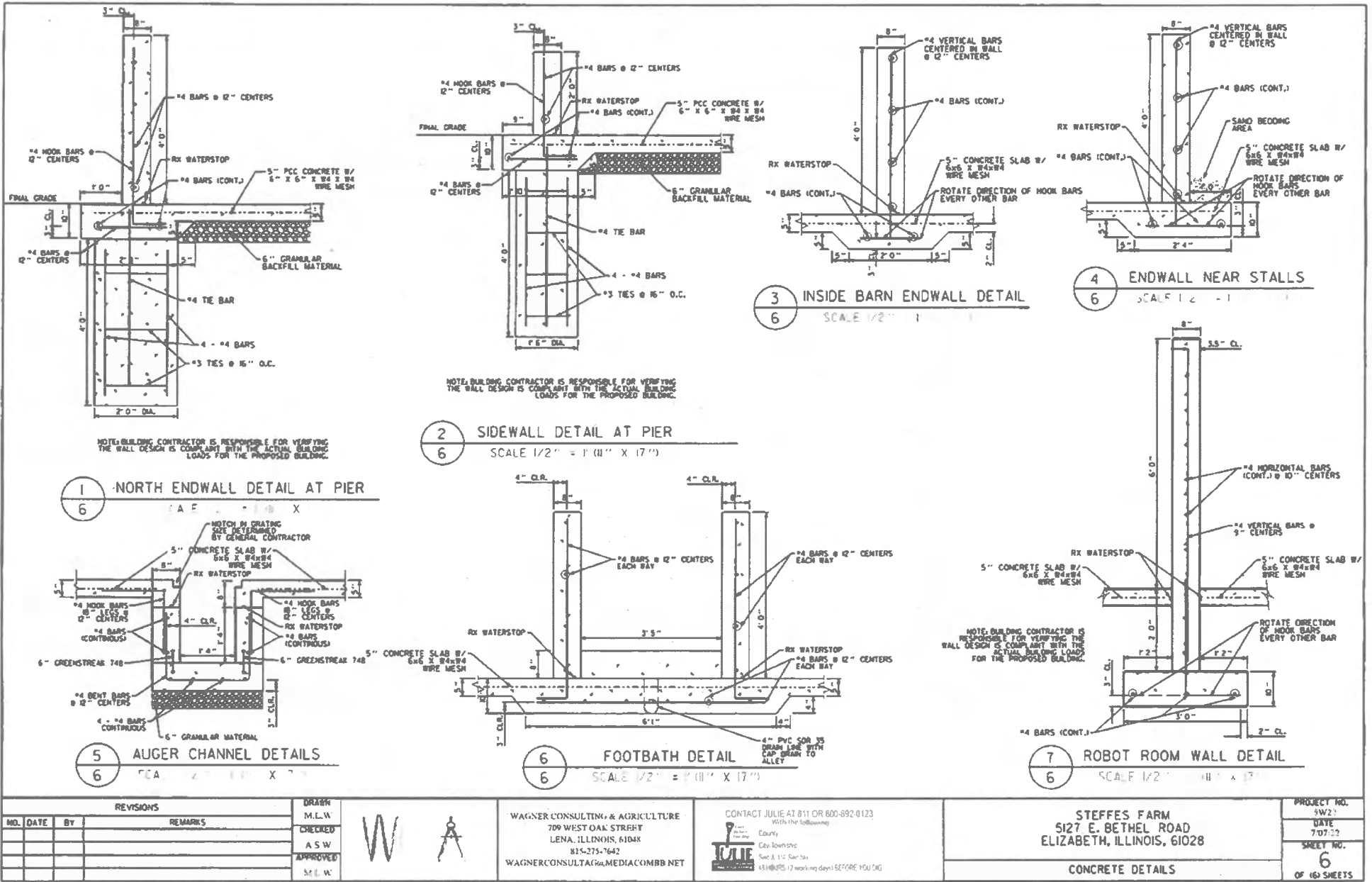
WAGNER CONSULTING & AGRICULTURE  
 709 WEST OAK STREET  
 LENA, ILLINOIS, 61048  
 815-375-7642  
 WAGNERCONSULTING@MEDIACOMMB.NET

CONTACT JULIE AT 811 OR 800-892-0123  
 With the following:  
  
 County: \_\_\_\_\_  
 City/Township: \_\_\_\_\_  
 Sec. & 1/4 Section: \_\_\_\_\_  
 48 HOURS (2 working days) BEFORE YOU DIG

STEFFES FARM  
 5127 E. BETHEL ROAD  
 ELIZABETH, ILLINOIS, 61028  
 CONCRETE DETAILS

PROJECT NO.	5W22
DATE	7/07/23
SHEET NO.	5
OF 63 SHEETS	





REVISIONS			
NO.	DATE	BY	REMARKS

DRAWN: M.L.W.  
 CHECKED: A.S.W.  
 APPROVED: M.L.W.

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 709 WEST OAK STREET  
 LENA, ILLINOIS, 61048  
 815-275-7642  
 WAGNERCONSULTING@MEDIACOMMB.NET

CONTACT JULIE AT 811 OR 800-892-0123  
 With the following:  
  
 TULIE  
 Clay Township  
 Sec A 112 Sec 3a  
 4318@IPS (7 working days) SECURE YOU DOG

STEFFES FARM  
 5127 E. BETHEL ROAD  
 ELIZABETH, ILLINOIS, 61028  
 CONCRETE DETAILS

PROJECT NO.	3W21
DATE	7/07/22
SHEET NO.	6
OF 160 SHEETS	

STATE OF ILLINOIS  
COUNTY OF SANGAMON

)  
)  
)  
)  
)

**CERTIFICATE OF SERVICE**

I, the undersigned attorney at law, hereby certify that I have served on the date of August 3, 2023, the attached **NOTICE**, **APPEARANCE** and **RECOMMENDATION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**, upon the following persons by causing to be mailed a true copy thereof in an envelope duly addressed, bearing proper first class postage, and deposited in the United States mail at Springfield, Illinois:

Dennis Steffes  
Steffes Farm  
5127 East Bethel Road  
Elizabeth, IL 60128

**Copies also provided electronically as follows:**

Illinois Department of Revenue  
via email at REV.PropTaxApp@illinois.gov  
101 West Jefferson  
P.O. Box 19033  
Springfield, Illinois 62794

**[Electronic Filing]**

Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph Street, Suite. 11-500  
Chicago, Illinois 60601

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

/s/ Gabriel H. Neibergall  
Assistant Counsel  
Division of Legal Counsel  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
217.782.5544  
217.782.9143 (TDD)