Lincoln-Lancaster County Health Department

ENVIRONMENTAL PUBLIC HEALTH DIVISION

3140 N STREET · LINCOLN, NE 68510-1514

002260

(402) 441-8000

Permit

SEWAGE INSTALLATION
SEPTIC SYSTEM-WILL INSTALL WHATEVER
WITNESSED PERCOLATION TEST INDICATES

Permit # 03380264101

Issued 05/08/03
Expires 11/08/03
Revenue Code 3157

Establishment

BLAKE & ANNE HELLBUSCH
T11N R6E SEC 11 QTR NW
N1/2 OF SE1/4 OF NW
12960 N 1 ST-RAYMOND

FEES: $200.00

Permittee

BLAKE & ANNE HELLBUSCH
4325 N 1 ST
APT 342
LINCOLN NE 68521

TOTAL: $200.00

Bruce D. Dart

Bruce D. Dart, Health Director

EPH COPY

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

A

Permit Number: 033802641O1

Sewage Disposal System

Request for Site Clearance and Permit

Include Form B, Form C and Applicable Fees with this Application.

WILL INSTALL WHATEVER WITNESSED PERCOLATION TEST INDICATES

☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Sewage Disposal System in conformance with appropriate resolution or ordinance, as described herein:

PLEASE PRINT OR TYPE

A. System Location (Indicate correct number and street)

Address 12960 N/ St Street (no rural route) City Raymond NE, Zip 68428

Legal Description N1/2 SE1/4 NW1/4 11 11N R.6.E of the 6th PM 20 I.
1/4 1/4 Section Township Range Subdivision Addition Block Lot

Geographical Location (if known): Longitude _____ Latitude _____

☐ Check if system mail address is not the same as the owner's address

B. Owner

Name Blake + Annette Ilbusch Signature Blake C. Hellbusch Anne M Hellbusch

Address 4375 NIST # 342 City/State/Zip Lincoln NE 68521

☐ Check if owner designed system Home Phone 402-475-2362 Work Phone (Blake) 450-5501

C. Contractor

Name STEVE MACHACEK Company Name M+W CONST

Address P.O. Box 91 City/State/Zip WESTON, NE. 68070

☒ Check if contractor designed system Work Phone 402-642-5788

D. Engineer/Installer ☐ Check and complete if engineer designed system

Designer Name Steve Machacek Firm M+W Construction Work Phone 642-5788

E. This System Will Serve a

☒ Residential Dwelling Number of Bedrooms 4 Is there a Whirlpool Bathtub (YES) NO

☐ Commercial Establishment/Other Facility Specify _____

Design flow in gallons per day _____ Type of Wastewater: ☒ Domestic ☐ Non-Domestic.

DO NOT WRITE BELOW THIS LINE

Approval Process ☐ Municipal Code 24.38 ☒ County Resolution No. 2832

1. **Health Department** Date rec'd 5/8/03 Date frwd 5/19/03 **ACTION** ☒ Approved ☐ Disapproved Signature Jerrold C. Hood
8-28-03 m

2. **Supt. Bldg. Insp. or Village Clerk** Date rec'd 5-19-03 Date frwd 5-19-03 **ACTION** ☒ Approved ☐ Disapproved Signature _____

3. **City or County Engineer** Date rec'd 5/19/03 Date frwd 5/19/03 **ACTION** ☒ Approved ☐ Disapproved Signature _____

Installation Final Written Approval

By Ron Mayer

Date 8-28-03

Business Office Use Only

Date Rec'd 05/08/03

Amt Paid 200.00

Rec'd By _____ Cash/Check No. 1453

FORM 23-100 10-96 White - Health Dept. Yellow - Engineer Pink - Bldg. Inspector

SEC. 11, T11N, R6E

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

Sq. Ft federal

B

Permit Number: 033802641

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

Add ÷6

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street) Raymond

Address 12960 N 1st Street (no rural route) City ~~Lincoln~~ Raymond NE, Zip ~~68428~~ 68428

Owner Blake + Anne Hellbusch Addresss 4325 N 1st #342 Lincoln NE 68521

Soil Type (SCS): _____ Percolation Rate: 22.3 min./inch

Date of Tests 4-26-03 to 4-27-03 Weather: Precipitation 0 Temperature 70°

Percolation Test Data Table

A.	B.	C. D. E. F. Pre-Saturation Period				G. H. I. J. K. Percolation Readings					L. M. N. Results		
		Start		End		Start			End				
Hole No.	Hole Depth (in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time (Min)	Water Level Drop (in)	Percolation Rates (Min/in)
1	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15	30	1"	30MIN/IN
2	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1 1/4"	24MIN/IN
3	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1"	30MIN/IN
4	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1 1/2"	20MIN/IN
5	36in	4/26	9pm	4/27	1pm	4/27	1:15pm		4/27	5:15		2"	15MIN/IN
6	36in	4/26	9pm	4/27	1pm	4/27	1:15pm		4/27	5:15	↓	2"	15MIN/IN

Person Conducting Percolation Tests

Name: Blake Hellbusch

Phone: (402) 475-2362

Address 4325 N 1st Apt #342
Lincoln, NE 68521

Sum of Percolation Rates: 134

Average of Rates: 22.3

Rate Used for Calculation: _____

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks _____

Signature of Reviewing Official _____ Date _____

FORM 23-101 10-96

SEC. 11, T 11N, R6E

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

B

Permit Number: 033802641

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 12960 N 1st Street (no rural route) City Raymond NE, Zip 68428

Owner Blake + Anne Hellbusch Addresss 4325 N 1st #342 Lincoln NE 6852

Soil Type (SCS): _____ Percolation Rate: _____ min./inch

Date of Tests _____ to _____ Weather: Precipitation _____ Temperature _____

Percolation Test Data Table

A.	B.	C. D. E. F. Pre-Saturation Period				G. H. I. J. K. Percolation Readings					L. M. N. Results		
		Start		End		Start			End				
Hole No.	Hole Depth (in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time (Min)	Water Level Drop (in)	Percolation Rates (Min/in)
1	36in	4/26	9pm	4/27	1:00 pm	4/27	1:15pm		4/24	5:15	300	1"	30MIN/IN
2	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1 1/4"	24MIN/IN
3	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1"	30MIN/IN
4	36in	4/26	9pm	4/27	1:00pm	4/27	1:15pm		4/27	5:15		1 1/2"	20MIN/IN
5	36in	4/26	9pm	4/27	1pm	4/27	1:15pm		4/27	5:15		2"	15MIN/IN
6	36in	4/26	9pm	4/27	1pm	4/27	1:15pm		4/27	5:15	↓	2"	15MIN/IN

Person Conducting Percolation Tests

Name: _____

Phone: _____

Address _____

_____

Sum of Percolation Rates: _____

Average of Rates: _____

Rate Used for Calculation: _____

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks Owner agrees to install whatever witnessed perc test indicates. Additional perc test required because test area is in Pawnee glacial till soil.

Signature of Reviewing Official Ken Mayer Date 5-19-03

FORM 23-101 10-96

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
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B

Permit Number: 03802641

Sewage Disposal System

Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 12960 N 1st St. (no rural route) City _____ NE, Zip _____

Owner Blake + Anne Kalbach Addresss _____

Soil Type (SCS): Pawnee soil with enclusions Percolation Rate: _____ min./inch

Date of Tests _____ to _____ Weather: Precipitation clear Temperature 70°F

Percolation Test Data Table

A.	B.	C. D. E. F. Pre-Saturation Period				G. H. I. J. K. Percolation Readings					L. M. N. Results		
		Start		End		Start			End				
Hole No.	Hole Depth (in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time (Min)	Water Level Drop (in)	Percolation Rates (Min/in)
#1 (8" dia)	24"	5-20-03	12:00	5-20-03	4:00	5-21-03	10:30	6"	5-21-03	2:30	30"	1/2	60 mpi
2 (6 1/2-7")	"							"				1	30 mpi
3 (8")	"							"				5/8"	
4 (6 1/2-7")	"							"				15/16"	
5 (8")	"							"				1/2"	
*6 (6 1/2-7")	"							"				7/16"	
#3												1"	
* Used slowest hole of owners for 6th hole (was in the area of better percing soil for hole #6													

Person Conducting Percolation Tests

Name: Ron Marquart (witness + conduct)

Phone: Field staff LLCHD)

Address _____

Sum of Percolation Rates: > 20 mpi

Average of Rates: _____

Rate Used for Calculation: 60 mpi

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks Appears to be a narrow band 100+ ft of sharpsburg enclusion overlaying Pawnee soil. Thus a percing rate for a standard septic system

Signature of Reviewing Official Ron Marquart Date 5-22-03

FORM 23-101 10-96

witnessed by Ron Marquart

Property at 12960 N. 1st st. Blake + Anne Hellbusch
(1st + Waverly Rd, ½ N, on E side) Sec 11, T11N, R6E. Lot 20 I.T.

Saturation/swelling (Presoak) 5-20-03
start at 12:00 AM
Finish at 4:00 PM

standardized (+) { 3 holes dug with 5½" power Auger and peeled side walls to 6½"-7" diameter hole. Holes 24" deep. (Used geotextile liner to support sidewalls) (2" of gravel in bottom of hole)

substandard (+) { 3 holes dug with 8" power Auger + side walls scratched + no liner. Holes 24" deep. (2" gravel in bottom of hole) (No auto-siphon buckets)

Perc test is in Pawnee soil + the 100ft+ wide site of test appears to be in an overlain enclosion. Possibly Sharpsburg.

Land is native prairie + raised about 1" the day before, but holes in the bottom 12" where just below the plastic limit.

At end of 4 hr. presoak, 5 gal siphon buckets filled for overnight swelling.

Perc test on 5-21-03
(by Ron Marenais)

#6 ← #5 ← #4
(~100 ft →)
1 → #2 → #3
tole reading sequence

time → every 30 min

	10:30AM to 11:00AM	11:30	12:00	12:30	1:00	1:30	2:00	2:30
le #1 (+)	13 1/4" (3/8)	13 1/2	[illegible]	13 3/8	13 5/8	14	13	13 1/2
	12 5/8"	13 1/4"	13 1/2	12 7/8"	13 3/8	13 5/8	12 5/8	13
	5/8"	1/4"	1/2"	4/8 (1/2")	2/8 (1/4")	3/8"	3/8"	1/2"
	(6 1/4")		(6 1/2")			(6")	(6")	
#2 (sf)	24 7/16"	24 1/8"	25 1/8" (2/16)	23 13/16	24 3/16	24	23 9/16	23 3/8
	22 7/8" (14/16)	23	23 13/16	22 3/4 (1/16)	23 1/8 (2/16)	23	22 5/8 (10/16)	22 3/8
	9/16"	1 1/8"	1 15/16	1 1/16	1 1/16	1"	15/16	1"
	(6 1/2")	(7")	(6")		(6")	5 3/4"	(6")	
#3 (+)	16 7/8"	17 1/4	16 1/2	15 5/8	16	16 1/2	15 7/8	16 1/2 (4/8)
	16 1/8"	16 2/8"	16"	15"	15 5/8	16	15 1/2 (2/16)	15 7/8
	6/8 (3/4")	5/8"	1/2"	5/8"	3/8"	1/2	5/8"	5/8"
	(6")	(6")	(6 1/2")		(5 3/4")	(6 1/4")	(6")	
#4 (sf)	25 5/8"	25 3/16"	25 8/16"	24 1/8"	24	23	24 5/16	23 13/16
	24 1/8	24	24 2/16	23 1/8	23	22 1/16	23 3/8 (6/16)	22 7/8 14/16
	1 4/8" (2)	1 3/16"	1 3/16"	1"	1"	15/16"	15/16	15/16"
	(6")		(5 1/2")	(6")		6 1/4"	(6")	
#5 (+)	16 1/4	16 3/4	17 3/8	17 3/8	16 3/4 (6/8)	17 1/8	17 5/8	16 5/8
	15 4/4"	16 1/4"	16 1/4" (2/8)	17 2/8	16 1/8	16 3/4	17 1/8	17 1/8
	3/4"	1/2"	1 1/8"	4/8 (1/2")	5/8"	3/8"	4/8 (1/2")	4/8 1/2
	(7")		(5 3/4")	6 1/2"		(6")	(6")	
#6 (sf)	25 1/2"	24 3/4" (12/16)	24 15/16	24 3/8	23 7/8" (14/16)	23 7/16	23 9/16	23 13/16
	24 3/4	24 3/16	24 2/8 (6/16)	23 7/8	23 7/16	23	23 1/8 2/16	23 3/8 6/16
	3/4"	9/16"	9/16"	4/8 (1/2")	7/16"	7/16"	7/16"	7/16"
	(6")		(6 1/4")	(6")		(6")	6"	

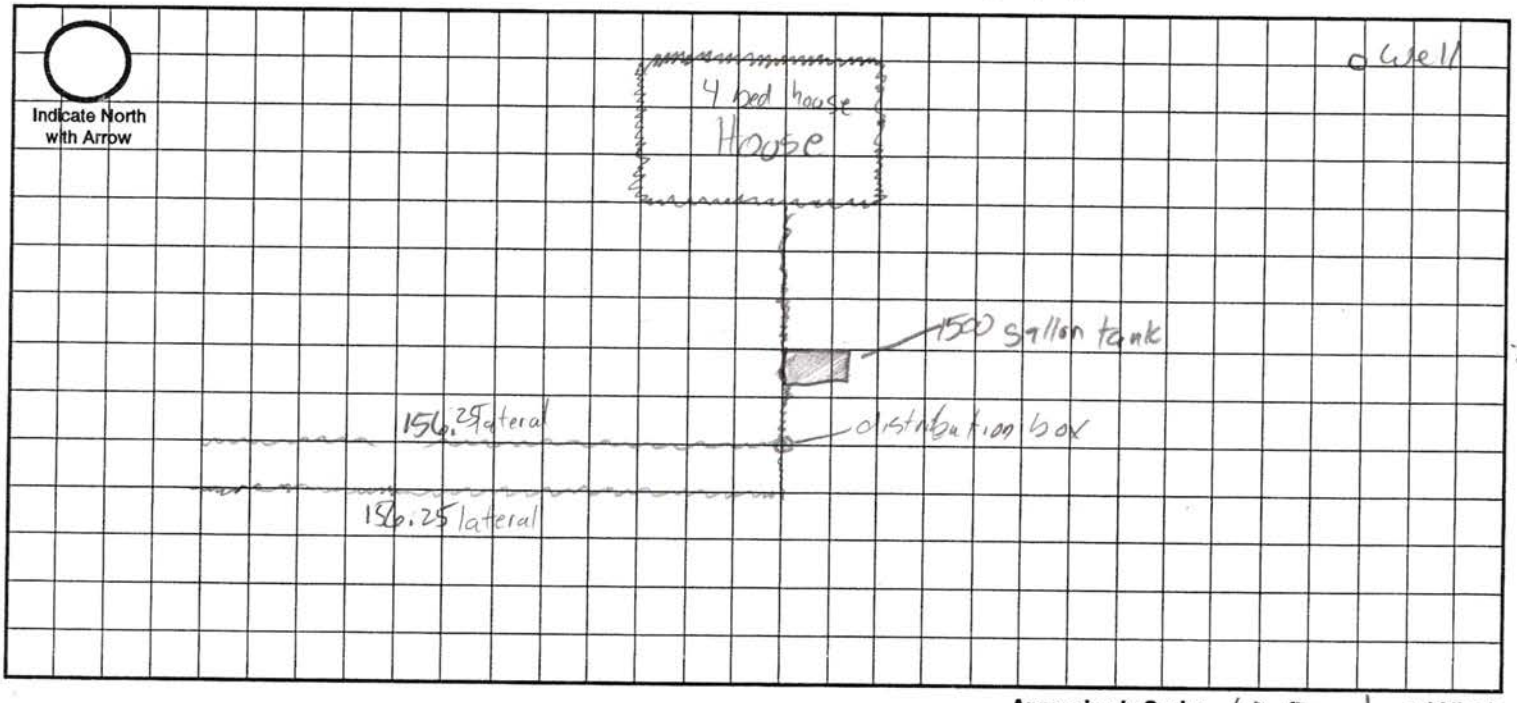
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

C

Permit Number: 033802641

Sewage Disposal System
Preliminary Plan Specifications

Draw a plot plan showing system location, lines, distribution box, tank and laterals, percolation test hole locations, well, residence, compass direction and property lines. Indicate on drawing if residence and well are existing or proposed.



Approximate Scale: 10 ft. = 1 grid line/s

A. System Location (Indicate correct number and street)

Address (no rural route) 12960 N1St Street City Raymond NE, Zip 68428

B. Proposed Septic Tank/s

Drainfield must be installed no deeper than 24"

Tank Material: ☒ Concrete ☐ Plastic ☐ Other

C. Proposed Absorption System (See Form B for Percolation Information)

Percolation Rate ~~23~~ 60 mpi (min. per inch) Soil Type: clay loam mix Land Slope: 4 %

Type of Absorption System: ☐ Trench ☐ Bed ☐ Other gravelless infiltrator

Total Square Feet of Field Required: ~~1250~~ 1400 sq. ft.

Type of Lateral: ☐ Half-Moon ☐ Perforated Pipe ☐ Other Lateral Material: Infiltrator

Capacity of Septic Tank 1500 gals Number of Absorption Beds: Number of Distribution Laterals per Bed

Total Length of Laterals ~~466~~ ft. Number of Trenches 5 Trench Width ~~3~~ 3'

D. Setbacks Check the Boxes Below if the Required Setback has been Satisfied

Distance From	Private Well	Public Well	Surface Water	Gound Water	Pressure Water Lines	Property Lines	Foundations Yours	Foundations Neighbors	All Other Setbacks
Tank (ft)	50 ☐	500 ☐	50 ☐	NA ☐	25 ☐	20 ☐	15 ☐	25 ☐	☐
Field (ft)	100 ☐	500 ☐	50 ☐	4 ☐	30 ☐	20 ☐	30 ☐	40 ☐	☐
Lagoon (ft)	100 ☐	500 ☐	50 ☐	N/A ☐	30 ☐	50 ☐	100 ☐	200 ☐	☐

E. Required Signatures

Home Building Contractor Blake C. Hellbusch Date 5-8-03

Installer Steve Manfreda MFW Const # 0021 Date 5-8-03

(Certified)

FORM 23-102 10-96

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

D

Permit Number:

Sewage Disposal System

As Built Plans & Specifications

Date 8/28/03

System Location (Indicate correct number and street)

Address _____ City _____ NE, Zip _____
(no rural route)

A. Building Sewer

1. Material: PLASTIC SCH40
   Diameter: 4" in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 2' in.
3. Distance between dwelling and septic tank: 51' ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line 108 ft.
   stream _____ ft.
   pressure line 50 ft.
   property line _____ ft.

B. Septic Tank

1. Material: CONCRETE
   Number of compartments: 1
2. Capacity: 1,500 gal.
3. Factory built: ☒ Yes ☐ No
4. Manholes: Over inlet, diameter 24 in.
   Over outlet, diameter 24 in.
   Riser: ☒ above ☐ below grade 4" in.
5. Inlet: ☒ baffle ☐ tee
6. Outlet: ☒ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 12 in.
8. Distances to: Well or suction line 150 ft.
   Stream 150' ft.
   Pressure line 50' ft.
   Property line _____ ft.

C. Distribution Box

1. Material: PLASTIC
   Number available outlets: 3
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 43 ft.

D. Absorption Field

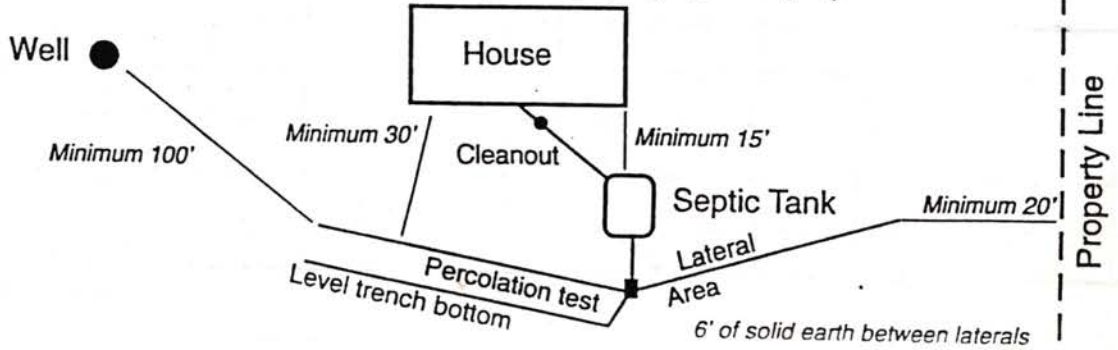
(Provide as-built drawings on back of this form)

1. Type: ☐ Half rounds ☐ Perforated pipe
   Diameter of half round: 36
   or perforated pipe: _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☐ other _____
2. Lateral lines: Number 3
   Length of each line: 125 ft. 125 ft.
   100 ft. _____ ft., _____ ft.
3. Trench dimensions: Width 4 ft.
   Slope 0 in/100 ft.
   Average depth 24 in
4. Filter material: GRAVEL LES
   Depth of material 12 in.
5. Distances to: Well or suction line 108 ft.
   Stream 75 ft.
   Pressure line 50 ft.
   Property line 150 ft.

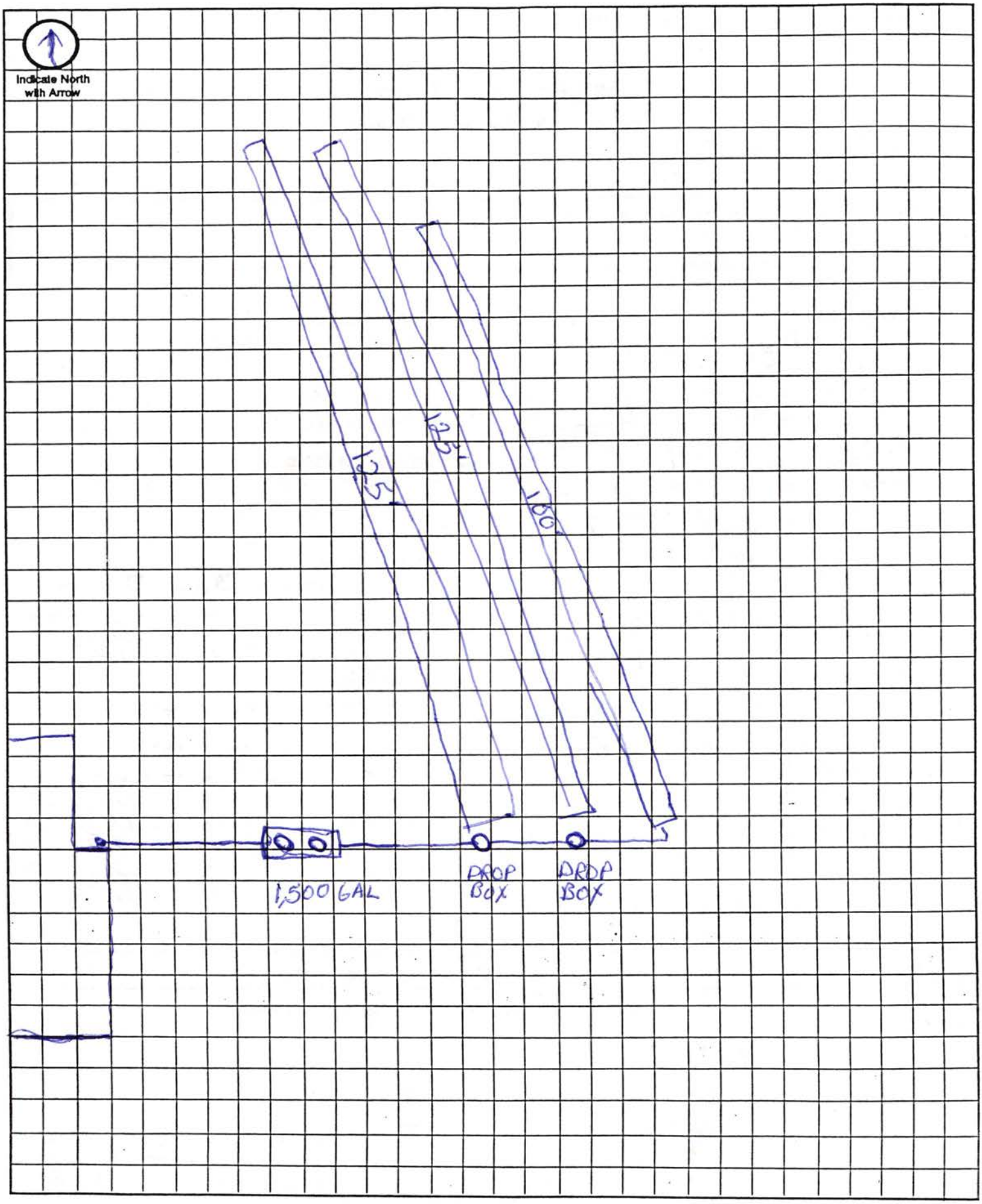
Complete "As Built" drawing on back of this form.

Indicate North with Arrow

Individual Sewage System Design (Example)



As Built Drawing



Approximate Scale: _____ ft. = _____ grid line/s

12960 N. 1st St.

N 1st St.

Perc site

