B

OCT 12 2011

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

Permit Number:

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 5300 Waverly Rd (no rural route) City Lincoln NE, Zip 68514

Owner Integrated Life Choices Address ATTN William Abrams P.O. Box 80738 Lincoln, Ne 68501

Soil Type (SCS): Silty Clay loam Percolation Rate: Used 21-30 min./inch

Date of Tests 10-4-11 to 10-5-11 Weather: Precipitation No Temperature 80°

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	48	10-4	100	10-4	500	10-5	900	6	10-5	100	30	3½	9
2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	4	7.5
3												2¾	11
4												4	7.5
5												2¾	11
6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	3	10

Person Conducting Percolation Tests

Name: Kurt Vlieg

Phone: 402-525-6681

Address 4620 W Mary Lou Ln Lincoln, Ne 68528

Sum of Percolation Rates: 56

Average of Rates: 9.3

Rate Used for Calculation: Used 21-30 mpi

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks _____

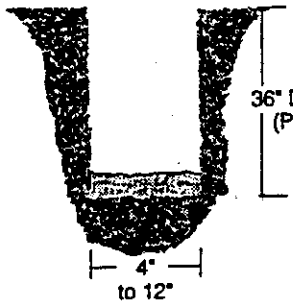
Signature of Reviewing Official _____ Date _____

READ THOROUGHLY

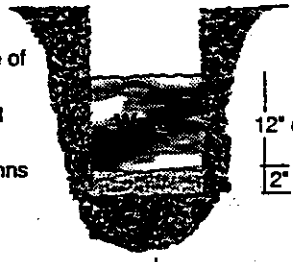
DIAGRAM OF PERCOLATION TEST PROCEDURE

Finished Grade or Natural Ground Level

I. Size, Number, and Location or Test Holes
   - A. Dig six or more holes spaced uniformly over proposed lateral field site.
   - B. Scratch smeared spots on sides of hole.
   - C. Remove loose material from hole.
   - D. Add 2" of gravel to hole.

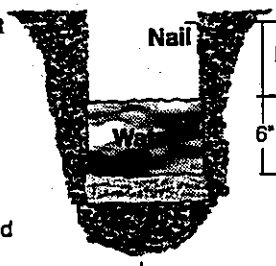


II. Saturation of Soil (Pre-soak)
   - A. Fill hole with 12" or more of water.
   - B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
   - C. Record on Form B columns a thru f.



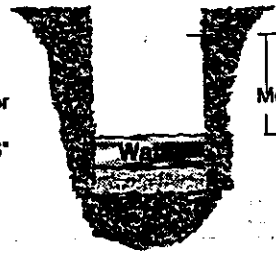
24 Hours Later

III. Percolation-rate Measurement **(refer to instructions 5a, 5b, or 5c.)**
   - A. Add 6" of water.
   - B. Measure from fixed reference point (nail) to water.
   - C. Record measurement and time on front of Form B.



½ hour later (30 minutes)

   - D. 30 minutes later remeasure and record time.
   - E. If water will be too low for another reading 30 minutes later, adjust to 6" of water and remeasure and record time.



   - F. Continue for 3½ hours taking readings every 30 minutes.
   - G. Last 30 minute reading is used in filling out Form B. Record date, time, intervals and water level drops in column g thru m.

Instructions

1. **Number and location of tests.** Percolation tests shall be made in 6 or more separate test holes which shall be spaced uniformly over the proposed lateral field site.
2. **Type of test hole.** Dig or bore a hole 3 feet deep with a diameter of 4 to 12 inches. (To save time, labor and the volume of water required per test, a 4-inch auger hole is recommended).
3. **Preparation of the test hole.** Scratch or roughen any smeared spots on the sides of the hole with a knife blade or sharp pointed instrument to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of gravel to protect the bottom from scouring when water is poured into the hole.
4. **Saturation and swelling of the soil.** Fill the hole with clear water to a depth of 12 inches or more above the gravel and maintain this water level at least 4 hours and preferably overnight. The accuracy and true value of the percolation data depends on thorough saturation and swelling of the soil.
5. **Percolation-rate measurement.** Percolation-rate measurements shall be made 24 hours after starting the saturation and swelling procedure described above. Record results on the front of this form and complete all calculations.
   a. If water remains in the test hole after the overnight swelling period, adjust the depth to approximately 6 inches over the gravel. From a fixed reference point, measure the drop in water level over a 30 minute period to the nearest 1/8 of an inch. This drop is used to calculate the percolation rate.
   b. If no water remains in the test hole after the overnight swelling period, add clear water to bring the depth to approximately 6 inches over the gravel. From a fixed point, measure the drop in water level to the nearest 1/8 of an inch at 30-minute intervals for 4 hours. Refill to the 6 inch level over the gravel as often as necessary. The drop that occurs during the final 30 minutes is used to calculate the percolation rate.
   c. In sandy soils (or other soils in which the first 6 inches of water seeps away in less than 30 minutes after the overnight swelling period) the time interval between measurements shall be 10 minutes instead of 30 minutes and the test run for 1 hour instead of 4 hours. The drop that occurs during the final 10 minutes is used to calculate the percolation rate.
6. **Record the test results and complete all calculations on the front of this form.** The average of the percolation rates calculated for all holes in the last 30 (10) minutes will normally be the rate used for calculations to size the system. ***Exceptions are the use of the greatest percolation rate when rates vary more than 20 min/in between holes or when other soil analysis indicates potential percolation problems.***

LLCHD reserves the right to require additional testing based on knowledge of soil types, percolation tests results on nearby properties, or due to concerns with procedures followed. In some situations, LLCHD staff will require and perform on-site observation of percolation tests.

OCT 12 2011

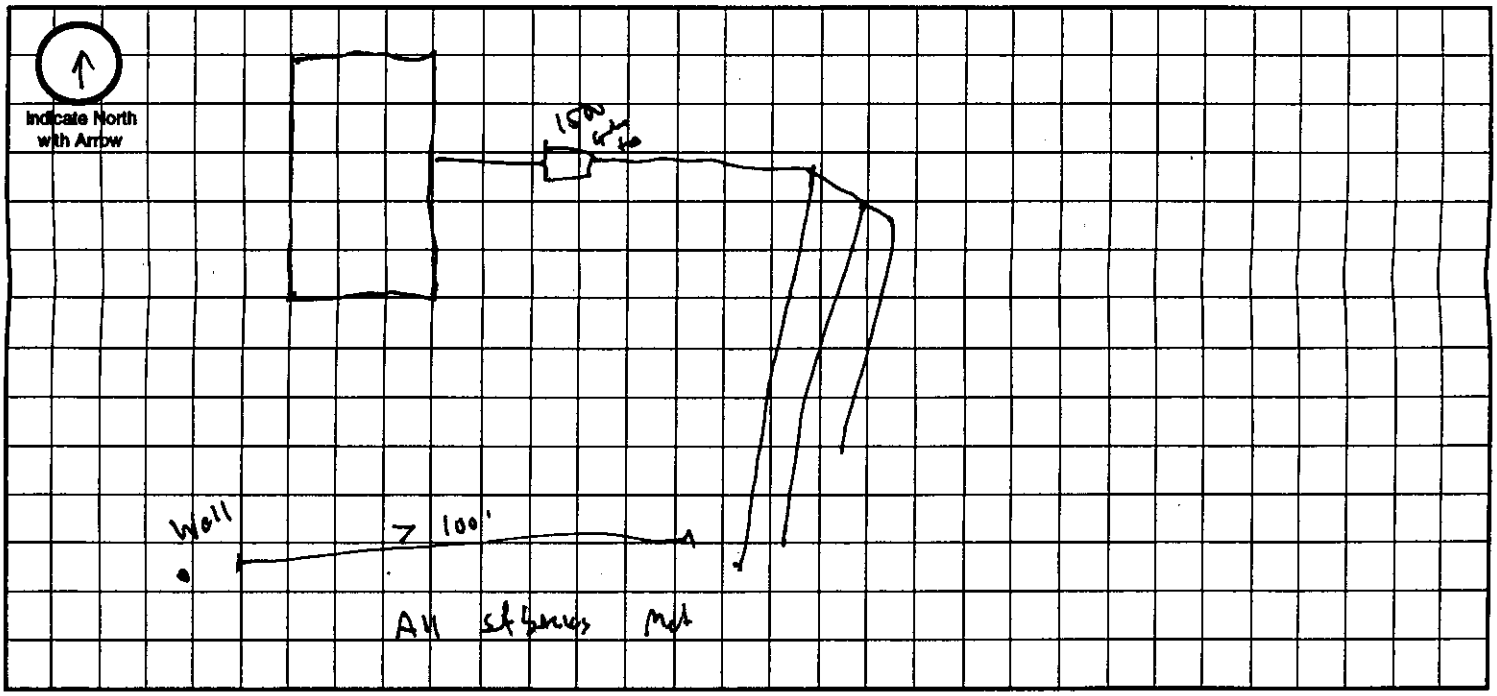
C

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

Permit Number:

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) 5300 Warrick Rd City Lincoln NE, Zip 68514

B. Proposed Septic Tank/s

Tank Material: ☒ Concrete ☐ Plastic ☐ Other

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

Percolation Rate 31-40 (min. per inch) Soil Type: Silty Clay loam Land Slope: 4 %

Type of Absorption System: ☒ Trench ☐ Bed ☐ Other

Total Square Feet of Field Required: 840 sq. ft. Use 1000

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

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

Total Length of Laterals 250 ft. Number of Trenches 3 Trench Width 36"

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 Date

Installer Date 10-10-11

LLCHD HS000555

OCT 12 2011

A

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

Permit Number HS000585

Onsite Wastewater Treatment System
Request for Site Clearance and Permit

Include Form B and C. Submit correct fee with this Application

3 acres or more required for: ☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Wastewater Treatment System in conformance with appropriate regulations.

PLEASE PRINT OR TYPE

A. Onsite System Location

Address 5300 Waverly Rd (no rural route) City Lincoln, NE Zip 68514

Legal Description 8 11 7 22 SE
(1/4 1/4 Section Township Range Subdivison Addition Block Lot)

Geographical Location (if known): Lat/Long: PID 3.84 Acres

B. Owner

Name Integrated Life Choices Inc Signature ATTN William Arrants

Address P.O. Box 80728 City/State/Zip Lincoln/Ne/68501

Home Phone 450-6266 Work Phone

C. Certified Installer

Name: Knox Virgil Signature

Address 4620 W Mary Lovisa Ln City/State/Zip Lincoln/Ne/68528

Work Phone 402-525-6681

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:

Designer Name Firm Work Phone

E. This system will serve a

☒ Residential Dwelling Number of Bedrooms 4 Is there a Whirlpool Bathtub? ☐ Yes ☒ No Total Acres 3.84

☐ Commercial Establishment/Other Facility Specify Design flow in gallons per day

Type of Wastewater ☑ Domestic ☐ Non-Domestic Well Permit Applied for ☐ Yes ☐ No ☒ Not Applicable

DO NOT WRITE BELOW THIS LINE

Approval Process ☐ Municipal Code 24.38 ☑ County Resolution No. 02-30

1. Health Department Date rec'd 10/17/11 **ACTION** ☐ Approved ☐ Disapproved
Site visits Date frwd 10/17/11 Signature

2. Supt. Bldg. Insp. or Village Clerk Date rec'd **ACTION** ☐ Approved ☐ Disapproved
Comments Date frwd Signature

3. City or County Engineer Date rec'd **ACTION** ☐ Approved ☐ Disapproved
Comments Date frwd Signature

Installation Final Written Approval
By

Date

Business Office Use Only
Date Received 10-17-11 Amount Paid 345.00
Received By BH Cash/Check No. 2553

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 5/10

10-20-2011 14:27:39

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3140 N Street Lincoln, NE 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT

No. HS000555

System Type: STANDARD

Situs:

Legal Description: T11N-R07E-S08-Lot 22

Owner: INTEGRATED LIFE CHOICES INC

LINCOLN NE
68501

Permit Fee:	$345.00
Variance Fee:	$0.00
Extension Fee:	$0.00
Total Fees:	$345.00
Issued:	10/17/2011
Expires:	10/16/2012

Judith A Halstead

Judith A. Halstead, MS, Health Director

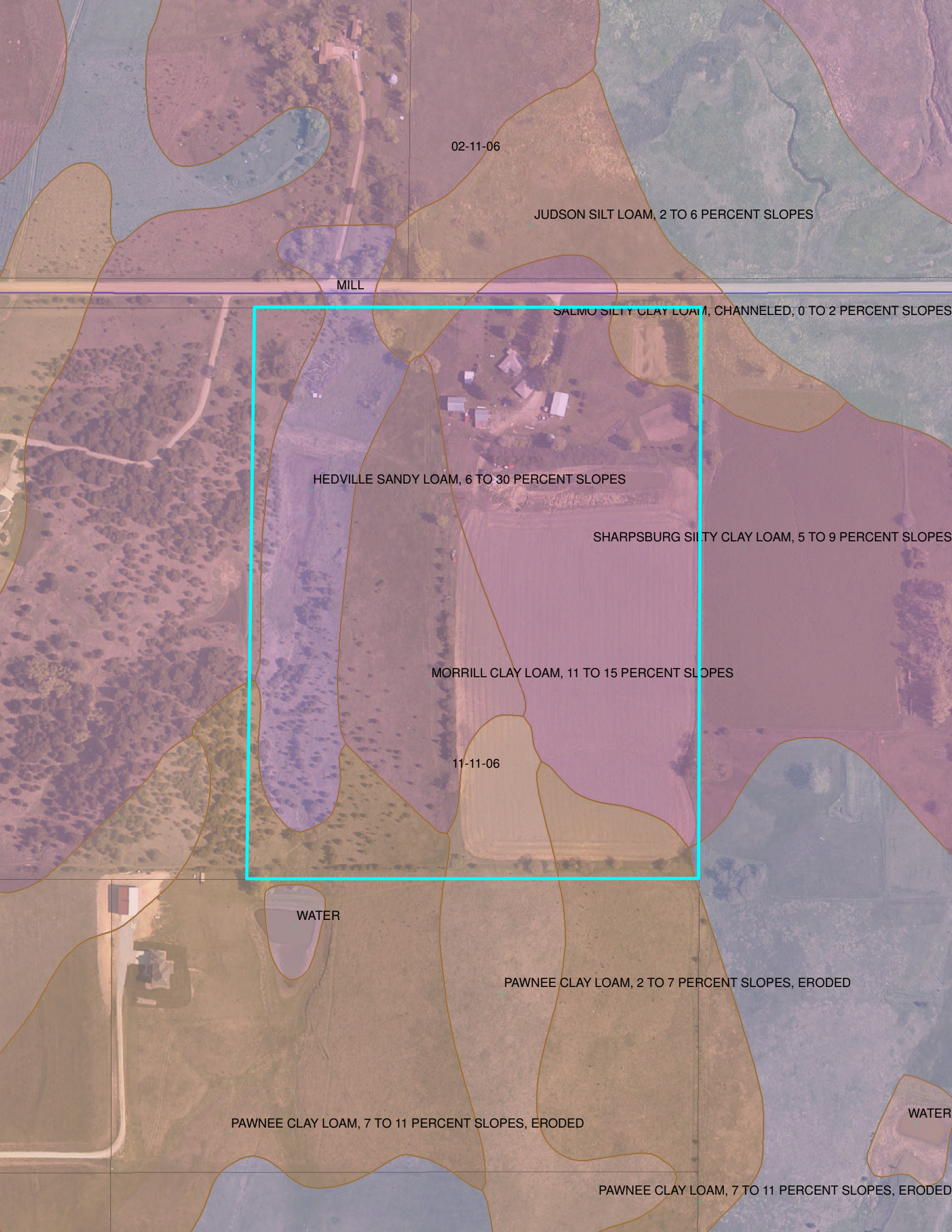
On-site Waste System Permit Holder:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Judith A Halstead

Judith A. Halstead, MS
Health Director

KURT T VIRGIL
4620 W MARY LOUISE LN
LINCOLN NE 68528


02-11-06
JUDSON SILT LOAM, 2 TO 6 PERCENT SLOPES
MILL
SALMO SILTY CLAY LOAM, CHANNELED, 0 TO 2 PERCENT SLOPES
HEDVILLE SANDY LOAM, 6 TO 30 PERCENT SLOPES
SHARPSBURG SILTY CLAY LOAM, 5 TO 9 PERCENT SLOPES
MORRILL CLAY LOAM, 11 TO 15 PERCENT SLOPES
11-11-06
WATER
PAWNEE CLAY LOAM, 2 TO 7 PERCENT SLOPES, ERODED
PAWNEE CLAY LOAM, 7 TO 11 PERCENT SLOPES, ERODED
WATER
PAWNEE CLAY LOAM, 7 TO 11 PERCENT SLOPES, ERODED

OCT 12 2011

SCANNED

A

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

Permit Number 450005555

Onsite Wastewater Treatment System
Request for Site Clearance and Permit

Include Form B and C. Submit correct fee with this Application

3 acres or more required for: ☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Wastewater Treatment System in conformance with appropriate regulations.

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Legal Description 8 11 7 22 SE

1/4 1/4 Section Township Range Subdivison Addition Block Lot

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Approval Process ☐ Municipal Code 24.38 ☐ County Resolution No. 02-30

1. Health Department
Site visits
Date rec'd 10/17/11
Date frwd 10/17/11
ACTION ☐ Approved ☐ Disapproved
Signature

2. Supt. Bldg. Insp. or Village Clerk
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

3. City or County Engineer
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

Installation Final Written Approval
By
Date 10/17/11

Business Office Use Only
Date Received 10-17-11 Amount Paid 345.00
Received By BM Cash/Check No. 2553

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 5/10

NOV 04 2011

D

Permit Number:

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

Sewage Disposal System

As Built Plans & Specifications

Date 11-2-11

System Location (Indicate correct number and street)

Address 5300 Waverly Rd (no rural route) City Lincoln NE, Zip 68501

A. Building Sewer

1. Material: PVC
   Diameter: 4 in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 36 in.
3. Distance between dwelling and septic tank: 45 ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line > 100 ft.
   stream > 50 ft.
   pressure line > 25 ft.
   property line > 20 ft.

B. Septic Tank

1. Material: Concrete
   Number of compartments: 1
2. Capacity: 1500 gal.
3. Factory built: ☑ Yes ☐ No
4. Manholes: Over inlet, diameter 24 in.
   Over outlet, diameter 24 in.
   Riser: ☒ above ☐ below grade 6 in.
5. Inlet: ☒ baffle ☐ tee
6. Outlet: ☒ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 36 in.
8. Distances to: Well or suction line > 100 ft.
   Stream > 50 ft.
   Pressure line > 25 ft.
   Property line > 20 ft.

C. Distribution Box

1. Material: NA
   Number available outlets: _____
2. Factory built: ☐ Yes ☐ No
3. Distance from septic tank: _____ ft.

D. Absorption Field

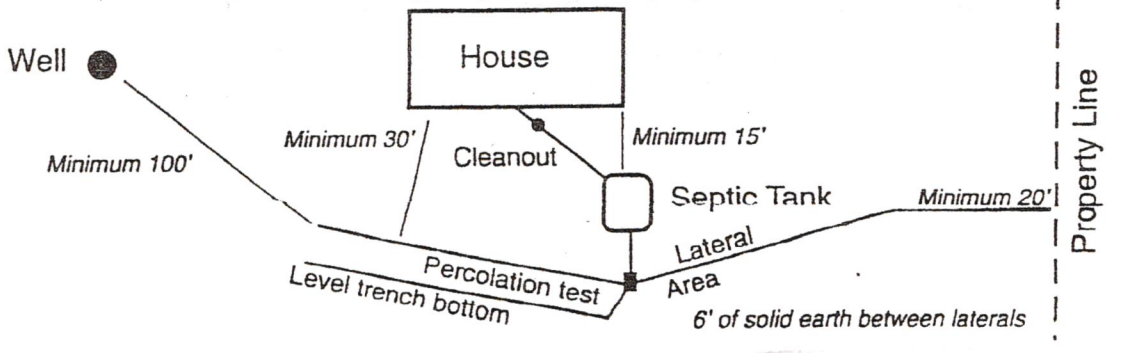
(Provide as-built drawings on back of this form)

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: 100 ft. 100 ft.
   52 ft. _____ ft., _____ ft.
3. Trench dimensions: Width 3 ft.
   Slope 0 in/100 ft.
   Average depth 48 in
4. Filter material: NA
   Depth of material – in.
5. Distances to: Well or suction line > 100 ft.
   Stream > 50 ft.
   Pressure line > 25 ft.
   Property line > 20 ft.

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

Indicate North with Arrow

Individual Sewage System Design (Example)



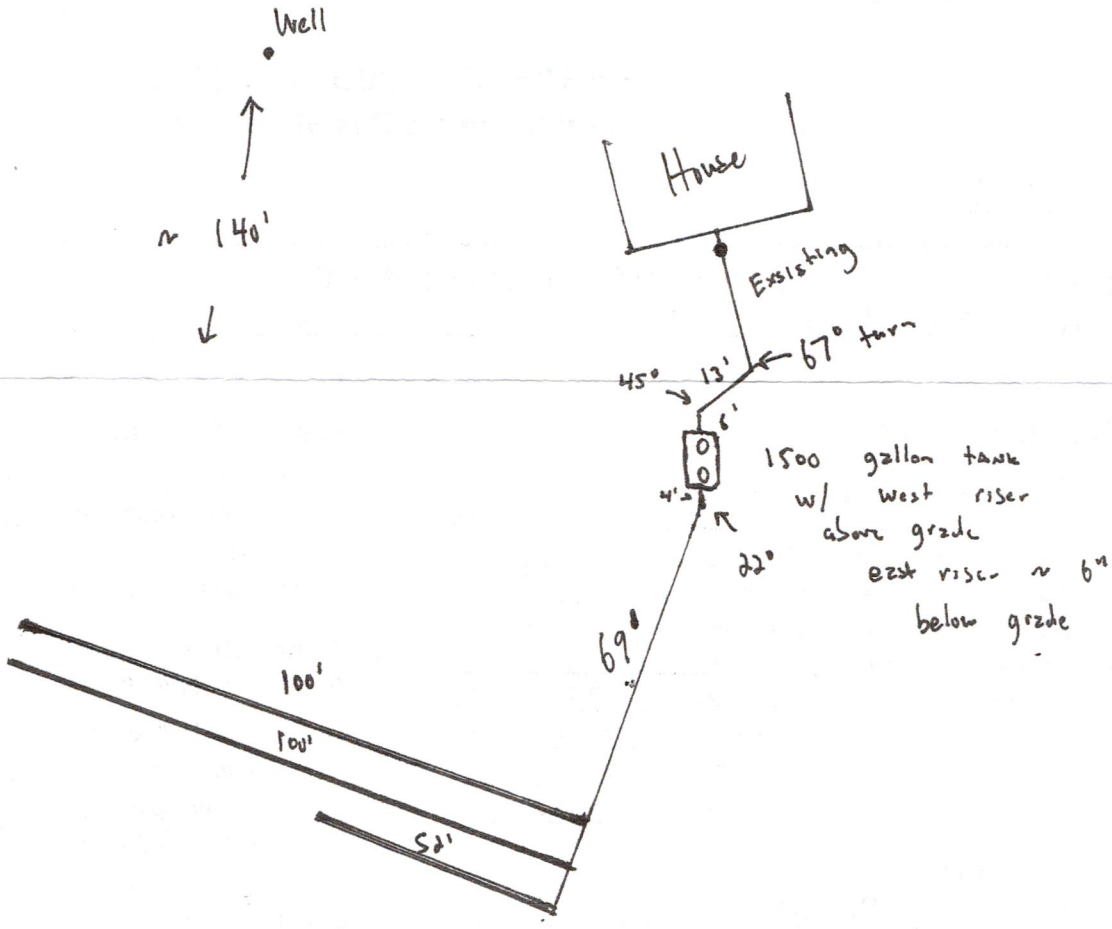
FORM 23-103 10-96

Septic Info
5300 Waverly Rd

Completed 10-24-11

N →

⟷ = 10 ft



total 252 feet lateral
~ 4' deep ~ 3' soil
Cover