LLCHD HS000620

Application to Alter, Extend or Repair an Onsite Wastewater Treatment System

☐ Municipal Code 24.38 ☐ County Resolution Number 02-30

HS000620

The undersigned hereby applies for a permit to: ☐ **ALTER** ☐ **EXTEND** ☑ **REPAIR** an existing wastewater treatment system, complying with appropriate Ordinance or Resolution, as marked above with drawings attached.

1. **Legal description of property:**
   Township 9 Range 6 1/4 ____ 1/4 ____ Section 17
   Block ____ Lot ____ Addition ____
   Parcel ID ____-____-____-____-____ (i.e. 99-99-999-999-999)
   Street Address (no rural route) 2900 w Pleasant Hill Rd.

2. **Property use:** ☑ residential ☐ commercial ☐ other use
   Number of bedrooms 3 Describe ____

3. **Type of Present Individual Disposal System** ☐ septic system ☐ lagoon ☐ other

4. **Description of proposed alteration, extension or repair** To Bring Laterals up to Lancaster County & State Standard spec By Adding 3 Trenches of New lateral

5. **Work to be done by:** ☐ owner ☑ contractor's name Matt Taylor

6. **Estimated project:** a. Repair, replace, or minor extension with a cost less than $400 (no fee required).
   b. Total cost is greater than $400 (Return fee with this application)
   (c) A permit is required if the use, operation, location, or type of system is changed.

Print Name ____ Address 2900 w Pleasant Hill Rd. Phone: 440 - 9900

Applicant Signature (owner or lessee) Chris Sowers

Please contact LLCHD for the permit fee for this application
Fee must be included before the application will be processed. Incomplete information will delay processing

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HEALTH DEPARTMENT USE ONLY

Date received 5/21/12 REVIEW: ☑ Approved ☐ Disapproved By: ____

Site visits
Date ____/____/____ By ____
Date ____/____/____ By ____
Date ____/____/____ By ____

Installation final written approval
Date 5/21/12 By ____

Return application to:
Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 "N" Street, Lincoln, NE 68510
Phone: 441-8643

Business Office Use Only

Received: Date: 5/22/12 Amount 190.00 Check No. 19460 Initials BH

Revised 3-09

5-22-2012 16: 0:55

LLCHD HS000620

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

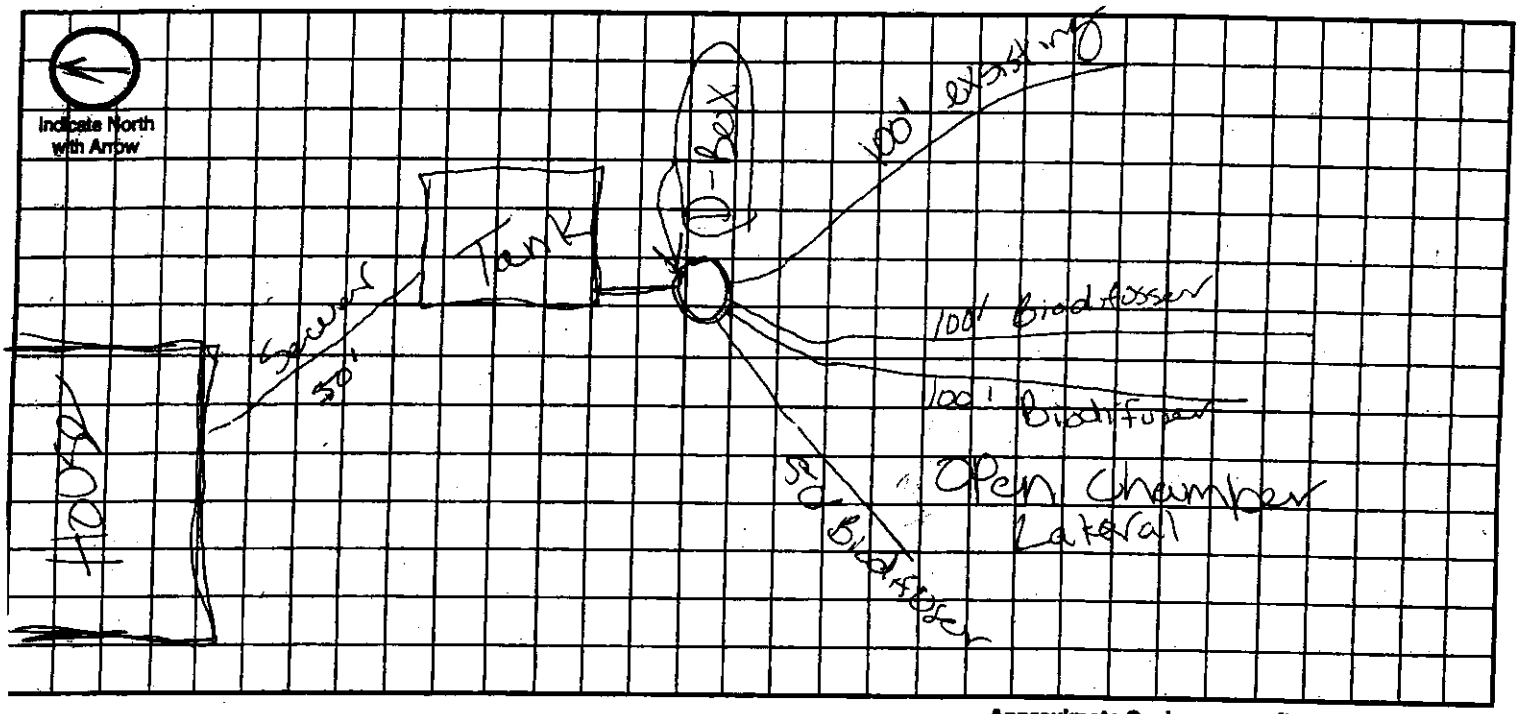
C

Permit Number:

Onsite Wastewater Treatment System

Preliminary Plan Specifications

Draw a plot plan showing onsite system sewer lines, drop of distribution boxes, tank, drainfields, percolation test holes, well, residence, direction of groundwater flow, property lines, and reserve area for replacement onsite system.



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

A. Onsite System Location

Address (no rural route) 2900 W. Pleasant Hill RD. City Lincoln NE, Zip _____

B. Proposed Septic Tank/s

Septic Tank Cap. 1000 gals Tank Material: ☑ Concrete ☐ Plastic ☐ Other_____ ☐ Lagoon(Max. seepage 1/8" per day)

C. Reserve Area for Replacement Onsite System

☑ Drainfield Absorption Area (percolation test required) ☐ Lagoon

D. Drainfield Absorption System

Percolation Rate 45 (min/inch = mpi) No. of Bedrooms 3 Soil Type Wymore Sandy Clay Land Slope _____%

☑ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield 1200 sq.ft.

Total length of laterals ~~1000~~ 300 Ln. Ft. Type of distribution: ☐ Perforated pipe ☒ Half-Round ☑ Chamber ☐ Other

No. of absorption trenches 3 Added Width 4ft. No. of drop boxes Nine Distrubtion Box 1

No. of absorption beds 1 existing lat. Width _____ No of Distribution lines per bed _____

E. 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 ☐	☐

F. Required Signatures

Home Building Contractor _____ Date 5-14-12

Installer _____ Date _____

5-22-2012 16:0:57

190 40

B

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

Permit Number:

Onsite Wastewater Treatment System

Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 2900 w Pleasant Hill Rd. (no rural route) City Lincoln NE, Zip 685

Owner Chris Sowers Address 2900 w Pleasant hill Rd.

Date of Tests 5/8/12 to 5/9/12 Weather: Precipitation avg. Temperature 75° F

Percolation Test Data Table

A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.
		Saturation/Swelling Time				Water Level Drop: Last 30 mins of 4 hr or last 10 mins of 1 hr					Results		
		Start		End		Start		Initial	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 Interval	Water Level Drop (in)	Percolation Rates (Min/in = mpi)
1	42	5/8	12:00pm	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	.75	40
2	42	5/8	12:00pm	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	.75	40
3	42	5/8	12:00pm	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	.75	40
4	42	5/8	12:00pm	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	.5	60
5	42	5/8	12:00	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	.5	60
6	42	5/8	12:00	5/8	4:00pm	5/9	1:30	6	5/9	2:00	30	1	30
								6					
								6					

Person Conducting Percolation Test

Name: Aaron Saunders
Phone: 402-601-1158
Address 2772 S. 35th Lincoln NE
– Witnessed by & verified by Mark Taylor
Soil type (NRCS Maps/Other)
Groundwater Depth

Sum of Percolation Rates: 270
Average of Rates: 45
Rate Used for Calculation: 45

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Comments (Soil type, groundwater, floodplain, etc.)

Signature of Reviewing Official Date

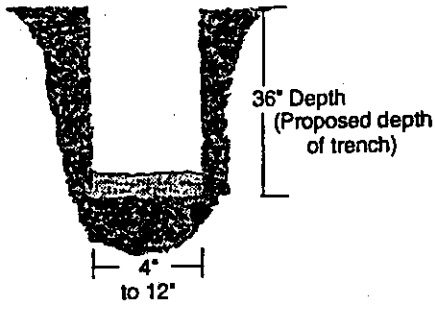
Onsite Form B 12_06

READ THOROUGHLY

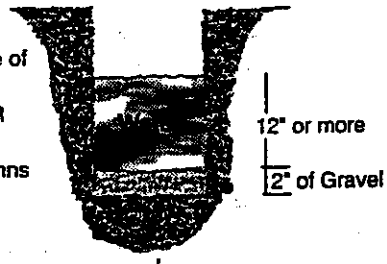
DIAGRAM OF PERCOLATION TEST PROCEDURE

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.

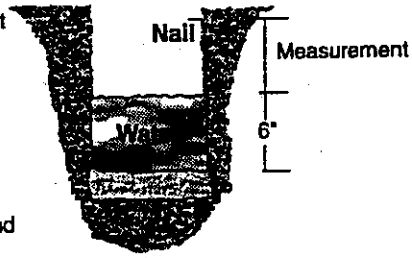


II. Saturation of Soil (Pre-soak)
- A. Fill hole with 12" or more of water.
- B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
- C. Record on Form B columns a thru f.



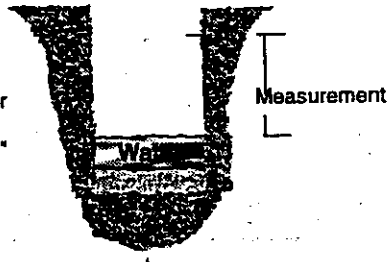
24 Hours Later

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.

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

ON-SITE WASTE WATER SYSTEM
REPAIR PERMIT

No. HS000620

System Type:	STANDARD
Situs:	2900 W PLEASANT HILL RD
Legal Description:	T09N-R06E-S17-2-Lot 7
Owner:	SOWERS, CHRISTOPHER L & REBECC 2900 W PLEASANT HILL RD LINCOLN NE 68523

Permit Fee:	$190.00
Total Fees:	$190.00
Issued:	05/22/2012
Expires	05/22/2013

Judith A Halstead

Judith A. Halstead, MS, Health Director

Dear Applicant:

The above document is your permit to repair an existing On-site Waste Water System at the location listed. Please contact this office once repairs are complete to obtain final approval before use.

Judith A Halstead

Judith A. Halstead, MS
Health Director

TAYLOR DRAIN AND SEWER
2201 SEWELL ST.
LINCOLN NE 68502