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

**ON-SITE WASTE WATER SYSTEM**
**CONSTRUCTION - INSTALLATION PERMIT**
**No. HS000767**

**System Type:** Standard

**Situs:** No Site Address Specified

Issued: 6/19/2013

Expires: 6/19/2014

**Description:** FOUR STONES ADDITION, BLOCK 1, Lot 2

**Owner:** MCMILLAN, MICHAEL JAMES & HEIDI LYNNE
18669 U ST
OMAHA, NE 68135

Judith A Halstead
Judith A. Halstead, MS, Health Director

Dear Applicant:

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

GAGNER CONSTRUCTION
4810 W. CLAIRE AVE
LINCOLN, NE 68523-9324

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

SCANNED

**A**

Permit Number H5000767

# 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 20525 SW Deertrack CR. (no rural route) City _____, NE Zip _____

Legal Description 4 (1/4) 7 (1/4) 6 (Section) Four Stone (Township) _____ (Range) _____ (Subdivison) 1 (Addition) 2 (Block) _____ (Lot)

PID _____

## B. Owner

Name URBAN HOMES Signature _____

Address _____ City/State/Zip _____

Home Phone _____ Work Phone _____

## C. Certified Installer

Name: Mel Gagner Signature Melvin Gagner

Address 4810 W Claire Ave City/State/Zip Lincoln Ne 68523

Work Phone 402 432 5698

## 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 Whirlpool Bathtub? ☒ Yes ☐ No Total Acres 3.74

Garbage Grinder? ☒ 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. 02-30

**1. Health Department**

Site visits _____ Date rec'd 6/14/13 Date frwd 6/14/13

Comments _____

ACTION ☐ Approved ☐ Disapproved Signature _____

**2. Supt. Bldg. Insp. or Village Clerk**

Comments _____ Date rec'd 6-14-13 Date frwd 6-14-13

ACTION ☒ Approved ☐ Disapproved Signature _____

**3. City or County Engineer**

Comments Comply with 2012 Flood Plain requirements Date rec'd 6-14-2013 Date frwd 6-14-2013

ACTION ☐ Approved ☐ Disapproved Signature _____

**Installation Final Written Approval**

By _____

Date 12/19/13

***Business Office Use Only***

Date Received 6-18-13 Amount Paid $355.-

Received By B. Hall Cash/Check No. 7210

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

Form A Updated: 1/13

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

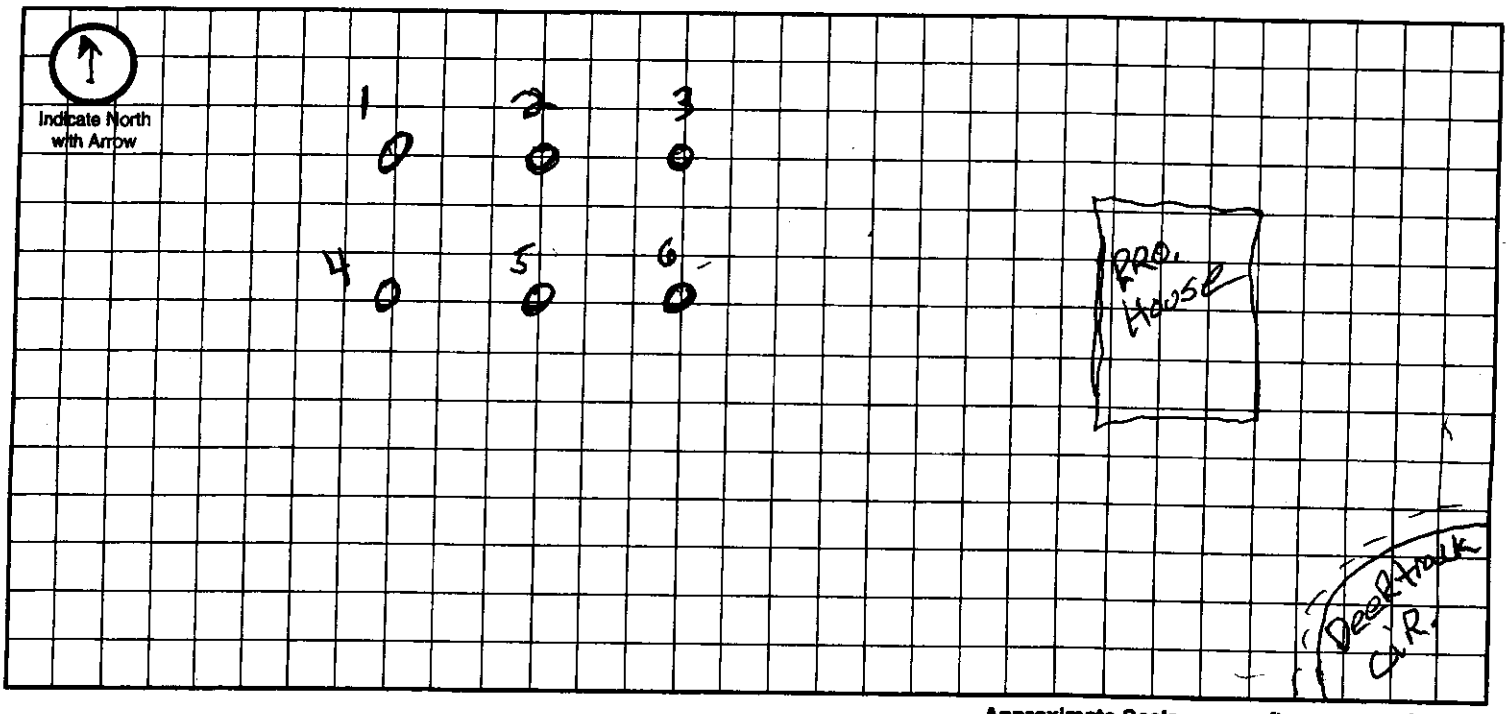
**C**

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) 20525 SW Deertrail City _____ NE, Zip _____

## B. Proposed Septic Tank/s

Septic Tank Cap. 1750 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_____ (min/inch = mpi) No. of Bedrooms_____ Soil Type_____ Land Slope_____%

☐ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield_____sq.ft.

Total length of laterals 350' Type of distribution: ☐ Perforated pipe ☐ Half-Round ☒ Chamber ☐ Other

No. of absorption trenches 3 Width 4' No. of drop boxes_____ Distrubtion Box_____

No. of absorption beds_____ 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 _____

Installer Melvin Gagner Date 6-9-13

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

**B**

Permit Number:

# Onsite Wastewater Treatment System
## Soil Evaluation Report

**PLEASE PRINT OR TYPE**

### Onsite System Location

Address 20525 SW Deertrack Cir, (no rural route) City _____ NE, Zip _____

Owner _____ Address _____

Date of Tests 6-7-13 to 6-9-13 Weather: Precipitation 0 Temperature 75°

### Percolation Test Data Table

| A. | B. | C. D. E. F. Saturation/Swelling Time | | | | G. H. I. J. K. Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr | | | | | 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) | Initial Water Lev (in.) | Date (Mo/Da) | Time (Hr/Min) | Elapsed Time Interval | Water Level Drop (in) | Percolation Rates (Min/in = mpi) |
| 1 | 32 | 6-7 | 8:00 | 6-8 | 9:00 | 6-8 | 9:30 | 6 | 6-8 | 10:00 | 30 min | 1/2 | 60 |
| 2 | 30 | " | 8:05 | " | " | " | " | 6 | " | " | " | 5/8 | 48 |
| 3 | 34 | " | 8:10 | " | " | " | " | 6 | " | " | " | 5/8 | 48 |
| 4 | 34 | " | 8:15 | " | " | " | " | 6 | " | " | " | 1/2 | 60 |
| 5 | 32 | " | 8:20 | " | " | " | " | 6 | " | " | " | 1/2 | 60 |
| 6 | 34 | " | 8:25 | " | " | " | " | 6 | " | " | " | 5/8 | 48 |
| | | | | | | | | 6 | | | | | |
| | | | | | | | | 6 | | | | | |

### Person Conducting Percolation Test

Name: Mel Gagner
Phone: 402 432 5698
Address 4810 W Claire Ave
Lincoln NE 68523

Sum of Percolation Rates: 324
Average of Rates: 54
Rate Used for Calculation: 54

Soil type (NRCS Maps/Other) 7418 Morrill Clay Loam
Groundwater Depth Over 4'

***DO NOT WRITE BELOW THIS LINE***

### Reviewing Action

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

Signature of Reviewing Official _____ Date _____

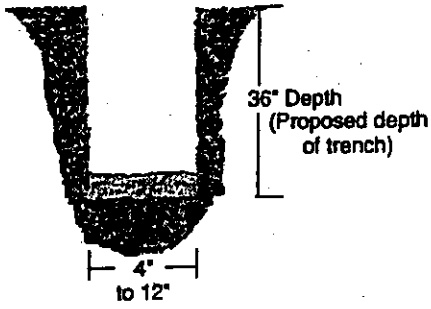
## READ THOROUGHLY

### DIAGRAM OF PERCOLATION TEST PROCEDURE

Finished Grade or Natural Ground Level

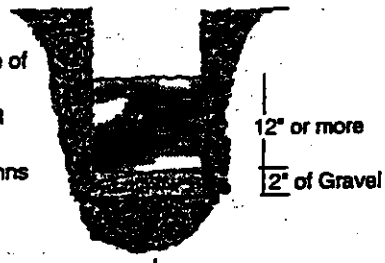
I. Size, Number, and Location or Test Holes

- 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)

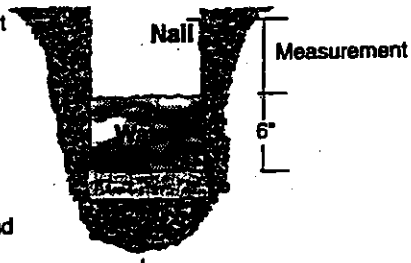
- A. Fill hole with 12" or more of water.
- B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
- C. Record on Form B columns a thru f.




24 Hours Later

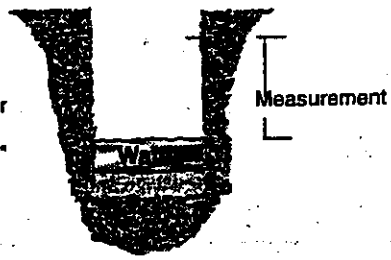
III. Percolation-rate Measurement **(refer to instructions 5a, 5b, or 5c.)**

- 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.

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

**A**

Permit Number H5000767

# 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 20525 SW Deertrack CR City _____, NE Zip _____
(no rural route)

Legal Description 4 / 7 / 6 Four Stone 1 2
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID _____

## B. Owner

Name URBAN HOMES Signature _____

Address _____ City/State/Zip _____

Home Phone _____ Work Phone _____

## C. Certified Installer

Name: Mel Gagner Signature Melvin Gagner

Address 4810 W Claire Ave City/State/Zip Lincoln Ne 68523

Work Phone 402 432 5698

## 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 Whirlpool Bathtub? ☒ Yes ☐ No Total Acres 3.74
Garbage Grinder? ☒ 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. 02-30

**1. Health Department**
Site visits _____
Comments _____
Date rec'd 6/14/13
Date frwd 6/14/13
ACTION ☐ Approved ☐ Disapproved
Signature _____

**2. Supt. Bldg. Insp. or Village Clerk**
Comments _____
Date rec'd 6-14-13
Date frwd 6-14-13
ACTION ☒ Approved ☐ Disapproved
Signature Jared Stark

**3. City or County Engineer**
Comments Comply with 24.07 Floodplain requirements
Date rec'd 6-14-2013
Date frwd 6-14-2013
ACTION ☐ Approved ☐ Disapproved
Signature Kenneth D. Schroeder

**Installation Final Written Approval**
By _____
Date _____

***Business Office Use Only***
Date Received 6-18-13 Amount Paid $355.-
Received By B. Hall Cash/Check No. 7210

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

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

**A**

Permit Number HS000767

# 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 20525 SW Deertrack CR City _____, NE Zip _____
(no rural route)

Legal Description 4 7 6 Four Stone 1 2
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID _____

## B. Owner

Name URBAN HOMES Signature _____

Address _____ City/State/Zip _____

Home Phone _____ Work Phone _____

## C. Certified Installer

Name: Mel Gagner Signature Melvin Gagner

Address 4210 W White Ave City/State/Zip Lincoln NE 68523

Work Phone 402 432 5698

## 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 Whirlpool Bathtub? ☒ Yes ☐ No Total Acres 3.74
Garbage Grinder? ☒ 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. 02-30

**1. Health Department**
Site visits _____
Comments _____
Date rec'd 6/12/13
Date frwd 6/14/13
**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 County meets the Health requirements
Date rec'd 6-10-2013
Date frwd 6-14-2013
**ACTION** ☒ Approved ☐ Disapproved
Signature _____

**Installation Final Written Approval**
By _____
Date _____

***Business Office Use Only***
Date Received 6/18/13 Amount Paid $355.-
Received By B. Hall Cash/Check No. 7210

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