MAR 20 2014

DocuSign Envelope ID: 5E6CEB7E-47C5-492A-86EA-888596FEA9FD

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

A

Permit Number
#S 000878

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 20505 Sw Hollow Ct (no rural route) City Martell, NE Zip 68404

Legal Description ____ Four Stones Addition 1 6
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID 07-04-101-0006-000

B. Owner

Name Sean & Cheryl Howard Signature Sean Howard Cheryl Howard

Address 4231 Old Cheney Rd Apt. 19 City/State/Zip Lincoln, NE 68516

Home Phone 402 423 6509 Work Phone ____

C. Certified Installer

Name: Lloyd Jakoubek, Raymond Contracting Inc Signature Lloyd Jakoubek for Lloyd

Address 13800 NW 70th St City/State/Zip Raymond, NE 68428

Work Phone 402-780-6009 or 402-783-2463

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 5 Whirlpool Bathtub? ☐ Yes ☒ No Total Acres 3.02
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 ____ ACTION ☐ Approved ☐ Disapproved
Date frwd ____ Signature ____
Comments ____

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

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

Installation Final Written Approval
By ____
Date ____

Business Office Use Only
Date Received 3/20/14 Amount Paid 365.00
Received By SB Cash/Check No. 8334

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

Form A Updated: 1/13

DocuSign Envelope ID: 5E6CEB7E-47C5-492A-86EA-888596FEA9FD

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

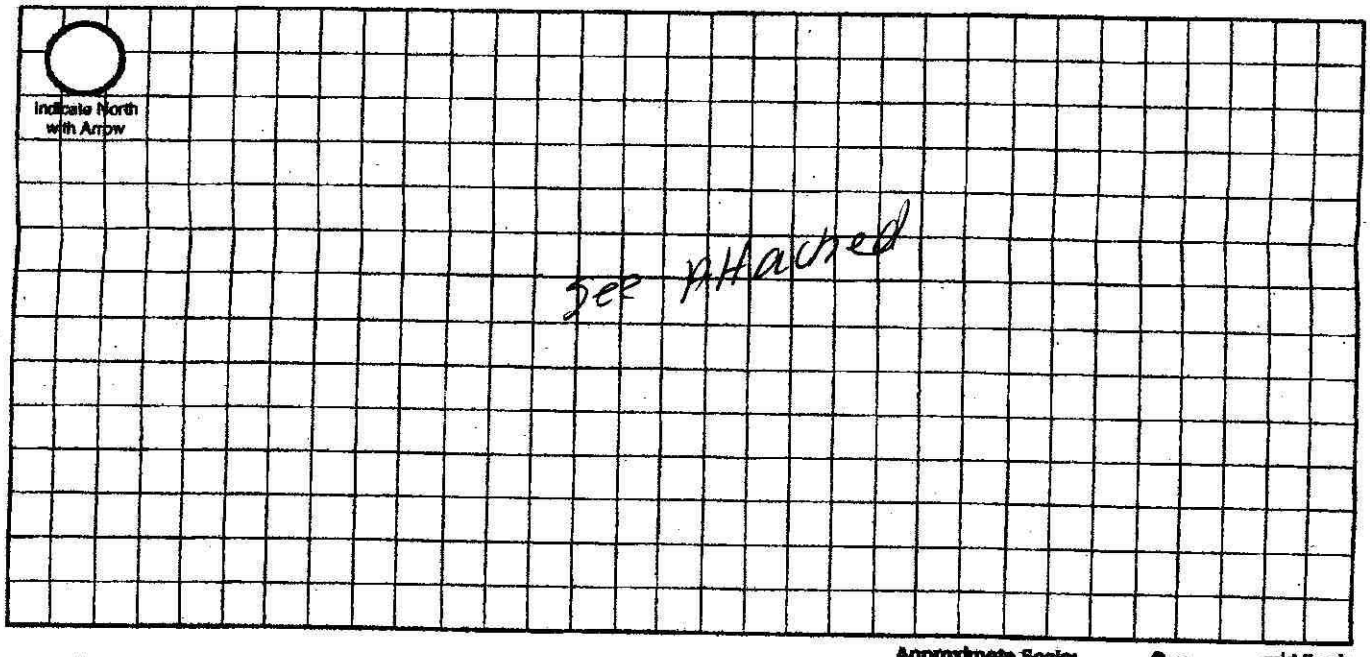
C

Permit Number: HS000878

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) 21505 Sw Hollow Ct City Martell NE, Zip 68404

B. Proposed Septic Tank/s

Septic Tank Cap._____ 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_____ Type of distribution: ☐ Perforated pipe ☐ Half-Round ☐ Chamber ☐ Other

No. of absorption trenches_____ Width_____ 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 Signed by:

Home Building Contractor Anatoliy Rybak Date 3/18/14

Installer _____ Date 3/19/14

FB04D3FE10D6498...

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. HS000878

System Type: Lagoon

Situs: 20505 SW HOLLOW CT, RURAL, NE

Issued: 3/21/2014

Expires: 3/21/2015

Description:

Owner:

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

RAYMOND CONTRACTING
13800 NW 70TH ST
RAYMOND, NE 68428

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

B

Permit Number: H5000878

Onsite Wastewater Treatment System

Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 20505 SW Hollow Ct (no rural route) City Markell NE, Zip 68404

Owner Sean & Cheryl Howard Address 4731 Old Cheney Rd #19 Lincoln NE 68516

Date of Tests 4/8/14 to 4/9/14 Weather: Precipitation 0 Temperature 65°

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	23	4/8	2:30p	4/8	4:30p	4/9	4:32p	6	4/9	5:00p	30	1/2	60
2	37	"	"	"	"	"	"	6	"	"	"	9/16	53
3	23	"	"	"	"	"	"	6	"	"	"	1	30
4	34	"	"	"	"	"	"	6	"	"	"	11/16	44
5	21	"	"	"	"	"	"	6	"	"	"	5/8	48
6	22	"	"	"	"	"	"	6	"	"	"	1/2	60
								6					
								6					

Person Conducting Percolation Test

Name: Terri Jakowski, Raymond Contracting

Phone: 402-783-2163 or 402-890-3870

Address 13800 NW 70th St

Raymond NE 68428 C1198

Soil type (NRCS Maps/Other) SCL

Groundwater Depth >6.7'

Sum of Percolation Rates: 295

Average of Rates: 49

Rate Used for Calculation: 60 (20 mpi variance)

DO NOT WRITE BELOW THIS LINE

Reviewing Action

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

Signature of Reviewing Official _____ Date _____

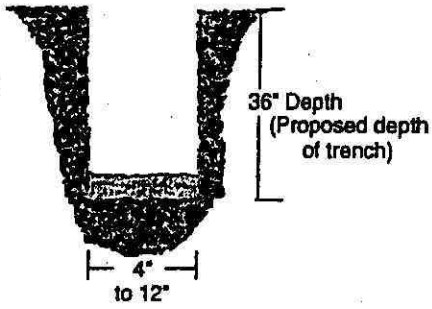
READ THOROUGHLY

DIAGRAM OF PERCOLATION TEST PROCEDURE

Finished Grade or Natural Ground Level

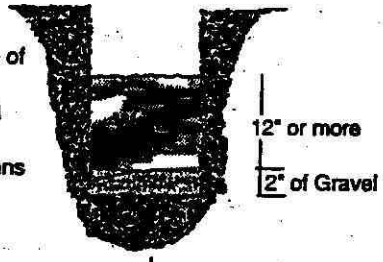
I. Size, Number, and Location or Test Holes

- 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)

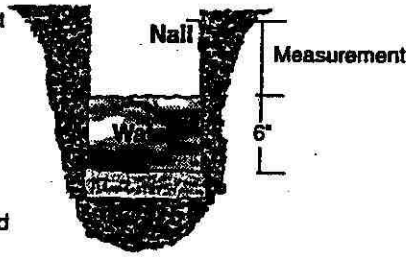
- A. Fill hole with 12" or more of water.
- B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
- C. Record on Form B columns a thru f.



24 Hours Later

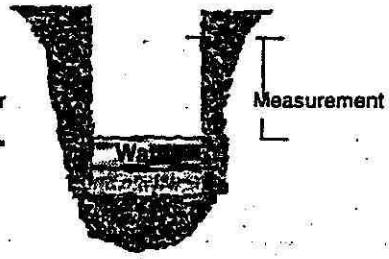
III. Percolation-rate Measurement **(refer to instructions 5a, 5b, or 5c.)**

- 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.** Percola tests shall be made in 6 or more separate holes which shall be spaced uniformly ove proposed lateral field site.
2. **Type of test hole.** Dig or bore a hole 3 deep with a diameter of 4 to 12 inches. (To s time, labor and the volume of water required test, a 4-inch auger hole is recommended)
3. **Preparation of the test hole.** Scratch roughen any smeared spots on the sides of hole with a knife blade or sharp pointed ins ment to provide a natural soil interface which water may percolate. Remove all lo material from the hole. Add 2 inches of gr to protect the bottom from scouring when w is poured into the hole.
4. **Saturation and swelling of the soil.** Fill hole with clear water to a depth of 12 inches more above the gravel and maintain this wa level at least 4 hours and preferably overni The accuracy and true value of the percolat data depends on thorough saturation and sw ing of the soil.
5. **Percolation-rate measurement.** Percolati rate measurements shall be made 24 hou after starting the saturation and swelling proc dure described above. Record results on t front of this form and complete all calculatio
   a. If water remains in the test hole after t overnight swelling period, adjust the dep to approximately 6 inches over the grav From a fixed reference point, measure t drop in water level over a 30 minute peri to the nearest 1/8 of an inch. This drop used to calculate the percolation rate.
   b. If no water remains in the test hole after t overnight swelling period, add clear wat to bring the depth to approximately 6 inc es over the gravel. From a fixed poi measure the drop in water level to t nearest 1/8 of an inch at 30-minute inte vals for 4 hours. Refill to the 6 inch lev over the gravel as often as necessar The drop that occurs during the final 3 minutes is used to calculate the percol tion rate.
   c. In sandy soils (or other soils in which t first 6 inches of water seeps away in le than 30 minutes after the overnight swe ing period) the time interval between mea surements shall be 10 minutes instead 30 minutes and the test run for 1 hou instead of 4 hours. The drop that occu during the final 10 minutes is used t calculate the percolation rate.
6. **Record the test results and complete a calculations on the front of this form.** Th average of the percolation rates calculated fo all holes in the last 30 (10) minutes will normall be the rate used for calculations to size th system. ***Exceptions are the use of the grea est percolation rate when rates vary mor than 20 min/in between holes or when othe soil analysis indicates potential percolatio problems.***

LLCHD reserves the right to require additiona testing based on knowledge of soil types, perco lation tests results on nearby properties, or due t concerns with procedures followed. In som situations, LLCHD staff will require and perfor on-site observation of percolation tests.

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

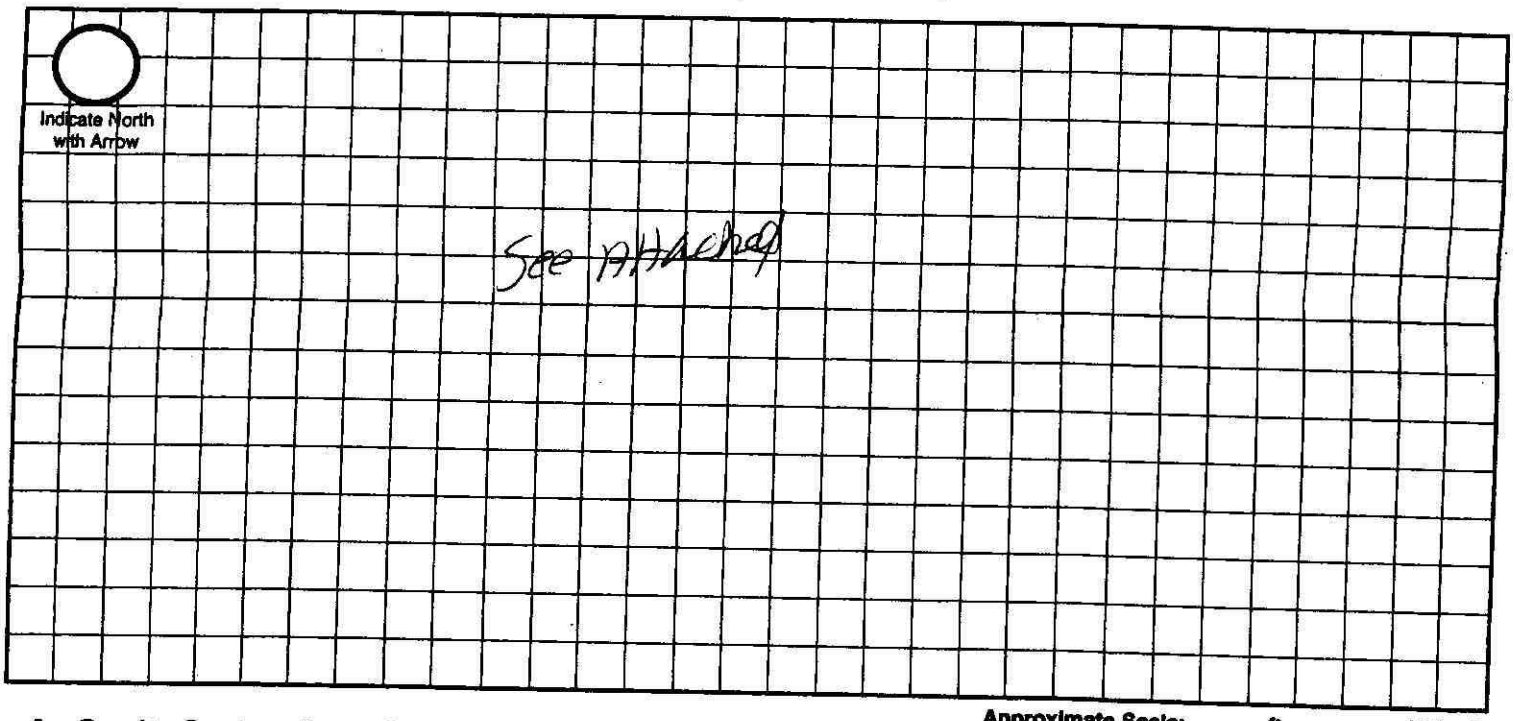
C

Permit Number: HS060878

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) 20505 SW Hollow Ct City Martell NE, Zip 68404

B. Proposed Septic Tank/s

Septic Tank Cap 2,000 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 60 (min/inch = mpi) No. of Bedrooms 5 Soil Type SCL Land Slope 3-6 %

☒ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield 1,760 sq.ft.

Total length of laterals 440' Type of distribution: ☐ Perforated pipe ☐ Half-Round ☒ Chamber ☐ Other

No. of absorption trenches 4 Width 40" No. of drop boxes endcaps 4 Distrubtion Box_____

No. of absorption beds_____ Width_____ No of Distribution lines per bed_____

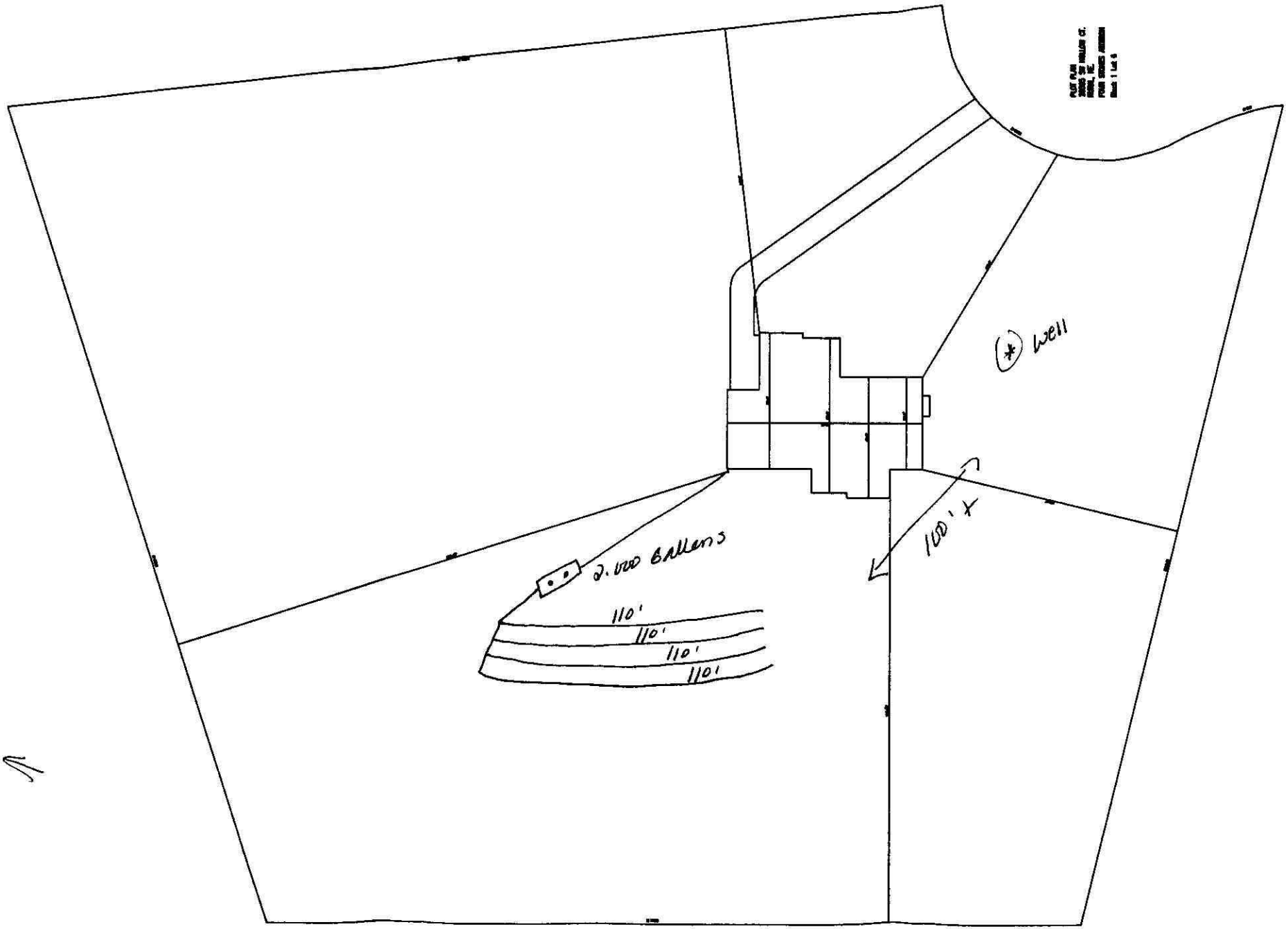
E. Setbacks Check the Boxes Below if the Required Setback has been Satisfied

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 Trent L. Johnson Date 7/15/14


(*) well
2,000 Gallons
110'
110'
110'
110'
100' +

JUL 22 2014

D

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

Permit Number: HS000878

Onsite Wastewater Treatment System

As Built Plans & Specifications

four stones addition

Date July 18, 2014 Legal Description NW (1/4 1/4) 4-7N-6E (Section Township Range) Block 1 Lot 6

Onsite System Location

Address (no rural route) 20505 SW Hollow Ct City Markell NE, Zip 68404

Owner Sean a Cheryl Howard Address 4731 old Cheney rd Apt 19 Lincoln NE 68516

A. Sewer Pipe

1. Material: SDR 26
   Diameter: 4 in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 18" in.
3. Distance between dwelling and septic tank: 84 ft.
4. Number of clean-outs: 2
5. Distances to: well or suction line 50 ft.
   stream 100 ft.
   pressure line 100 ft.
   property line 50 ft.

B. Septic Tank

☐ Label with Manufacturer, address and gallon capacity

1. Material: Concrete
   Number of compartments: one
2. Capacity: 2000 gal.
3. Factory built: ☑ Yes ☐ No
4. Manholes: Over inlet, diameter 24 in.
   Over outlet, diameter 24 in.
   Riser: ☐ above ☐ below grade AT in.
5. Inlet: ☑ baffle ☐ tee ☐ 6" dia. inspection pipe
6. Outlet: ☑ baffle ☐ tee ☐ 6" dia. inspection pipe
7. Depth to top of tank, below unfinished grade: 18-12" in.
8. Distances to: Well or suction line 96 ft.
   Stream 100 ft.
   Pressure line 100 ft.
   Property line 50' ft.

C. ☐ Distribution Box ☐ Drop Boxes

(≥ 12" inspection opening) (removable lid to inspect)

1. Material: Plastic (Switching Box) 4 Endcap
   Number available outlets: 2 per cap
2. Factory built: ☑ Yes ☐ No
3. Distance from septic tank: 12'+9'+9'+9' ft.

D. Drainfield Absorption

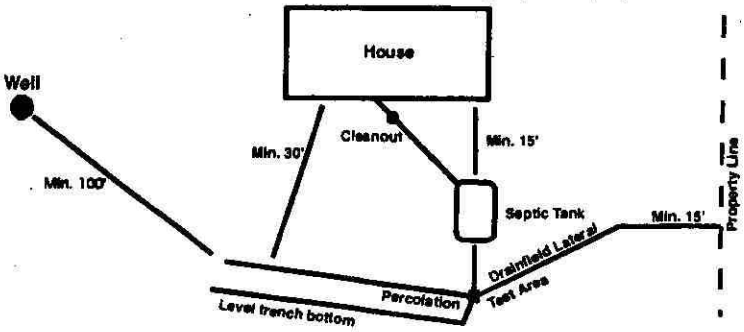
☑ Trench ☐ Bed ☐ Level Bottom

1. Type: ☐ Half rounds ☐ Perforated pipe ☐ Chambers
   Diameter or width: _____
   Number of distribution lines in bed _____
   Material: ☐ fiberglass ☐ plastic ☐ concrete
   ☐ other _____
2. Drainfield Laterals: Number 4 - (2-Zones)
   Length of each line: 110 ft. 110 ft.
   110 ft. 110 ft., _____ ft.
3. Drainfield dimensions: Width 40 ft.
   Distribution Pipe Slope FLAT in/100 ft.
   Average depth 24-32 in
4. Filter material: Soil
   Depth of material 24-32 in.
5. Distances to: Well or suction line 100 ft.
   Pressure line 100 ft.
   Property line 50 ft.
   House or building 100 ft.
   Lake or Stream 100 ft.

Complete As-Built drawing on the back to this form.

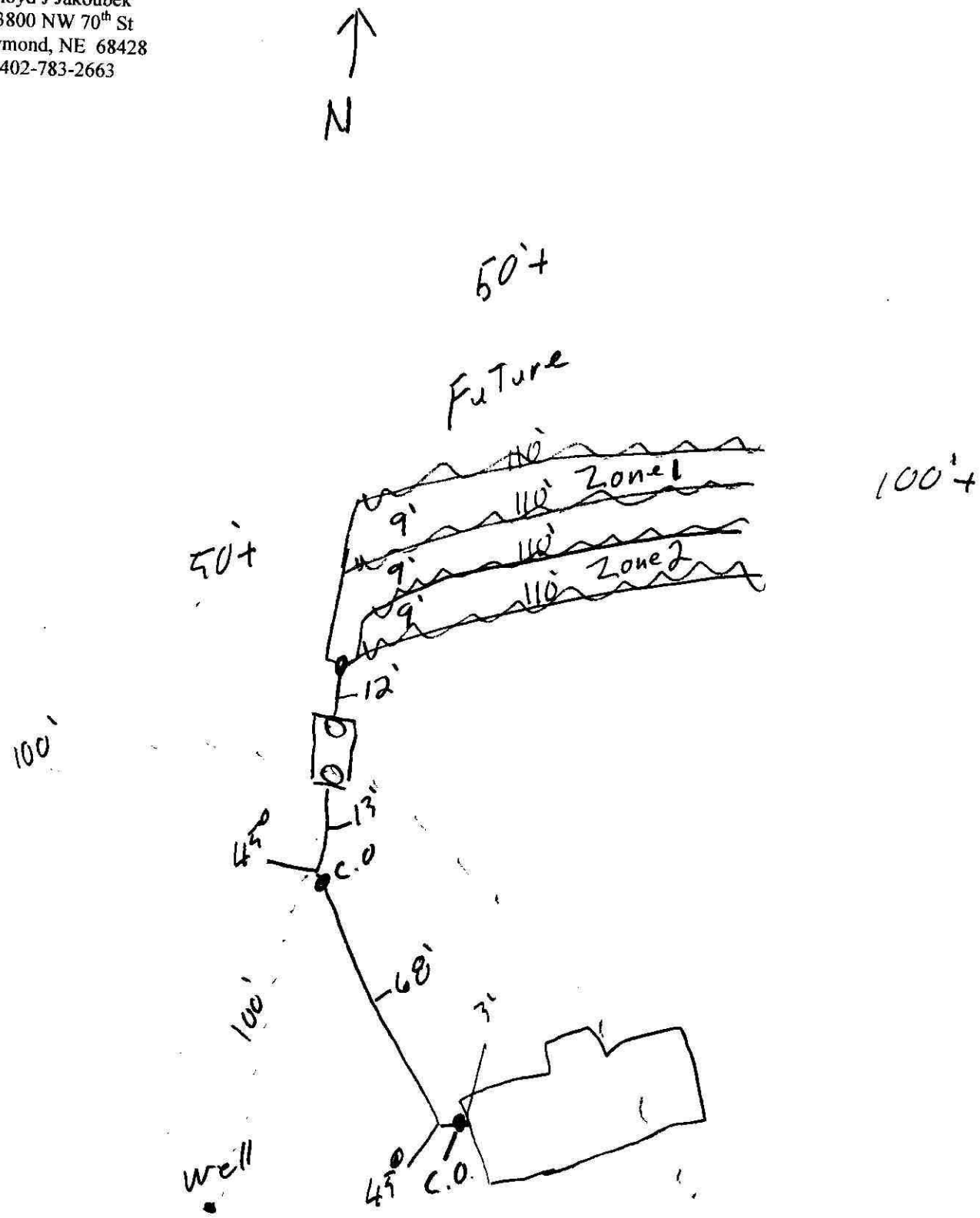
Onsite Wastewater System Design (Example)

Indicate North with Arrow



7/17/2014

Raymond Contracting, Inc.
Lloyd J Jakoubek
13800 NW 70th St
Raymond, NE 68428
402-783-2663



SCANNED

MAR 20 2014

DocuSign Envelope ID: 5E6CEB7E-47C5-492A-86EA-888596FEA9FD

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

A

Permit Number
HS 000878

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 20505 SW Hollow Ct (no rural route) City Martell, NE Zip 68404

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

PID 07-04-101-006-000

B. Owner

Name Sean & Cheryl Howard Signature Sean Howard Cheryl Howard

Address 4231 Old Cheney Rd Apt. 19 City/State/Zip Lincoln, NE 68516

Home Phone 402 423 6509 Work Phone

C. Certified Installer

Name: Lloyd Jakoubek, Raymond Contracting Inc Signature Lloyd J. Jakoubek for Lloyd

Address 13800 NW 70th St City/State/Zip Raymond, NE 68428

Work Phone 402-350-6009 or 402-783-2663

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) 5 (Whirlpool Bathtub?) ☐ Yes ☒ No (Garbage Grinder?) ☒ Yes ☐ No Total Acres 3.02

☐ 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 3/20/14
Date frwd 3/20/14
ACTION ☒ Approved ☐ Disapproved
Signature

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

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

Installation Final Written Approval
By Doug Mrsny
Date 7/2/14

Business Office Use Only
Date Received 3/20/14 Amount Paid 365.00
Received By SB Cash/Check No. 8334

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

Form A Updated: 1/13