MAY 2 2 2023

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

**A**

Permit Number H5002543

# Onsite Wastewater Treatment System Permit Application

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

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

**PLEASE PRINT OR TYPE**

**A. Onsite System Location**

Address* 9470 Firth Rd (no rural route) City Firth, NE Zip 68358

Legal Description S 26 T7 R7 Tekolste Investments Add. 1 Lot A

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

PID 1426403001000 *Approx. Address (If to be determined)

**B. Owner**

Name Rodney Tekolste Signature

Address 10300 Firth Rd City/State/Zip Firth, NE 68358

Home Phone Work Phone

**C. Certified Installer**

Name: Braxton Sedlacek Signature

Address 11185 E St Hwy 41 City/State/Zip Adams, NE 68301

Work Phone 402-988-8425

**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 6

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**

**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 5-22-23 Amount Paid $460 on

Received By JAD Cash/Check No. 2648

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

Form A Updated: 4/15

Lincoln-Lancaster County Health Department (LLCHD)
Environmental Public Health Division
3131 "O" Street • Lincoln, NE 68510-1514
Phone: 402-441-8643

**B**

Permit Number:

# Onsite Wastewater Treatment System
## Soil Evaluation Report

PLEASE PRINT OR TYPE

### Onsite System Location

Address 9470 Firth Rd (no rural route) City Firth, NE, Zip 68358

Owner Rodney Tekolste Address 10300 Firth Rd Firth, NE 68358

Date of Tests 4-14-23 to 4-15-23 Weather: Precipitation 0" Temperature 75°

### 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 | | | 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 | 36" | 4-14 | 9am | 4-15 | 8am | 4-15 | 8am | 6 | 4-15 | 8:30 | 30 | 1" | 60 mpi |
| 2 | 36" | " | " | " | " | " | " | 6 | " | " | " | 1" | 60 mpi |
| 3 | 36" | " | " | " | " | " | " | 6 | " | " | " | 1" | 60 mpi |
| 4 | 32" | " | " | " | " | " | " | 6 | " | " | " | 5/8" | 48 mpi |
| 5 | 32" | " | " | " | " | " | " | 6 | " | " | " | 5/8" | 48 mpi |
| 6 | 32" | " | " | " | " | " | " | 6 | " | " | " | 5/8" | |
| | | | | | | | | 6 | | | | | |
| | | | | | | | | 6 | | | | | |

### Person Conducting Percolation Test

Name: Brandon Sadlacek
Phone: 402-988-8425
Address 11185 E State Hwy 41
Adams, NE 68301

Sum of Percolation Rates: 324
Average of Rates: 54mpi
Rate Used for Calculation: 51-60 mpi

Soil type (NRCS Maps/Other)
Groundwater Depth 10'+

**DO NOT WRITE BELOW THIS LINE**

### Reviewing Action

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

Signature of Reviewing Official Date

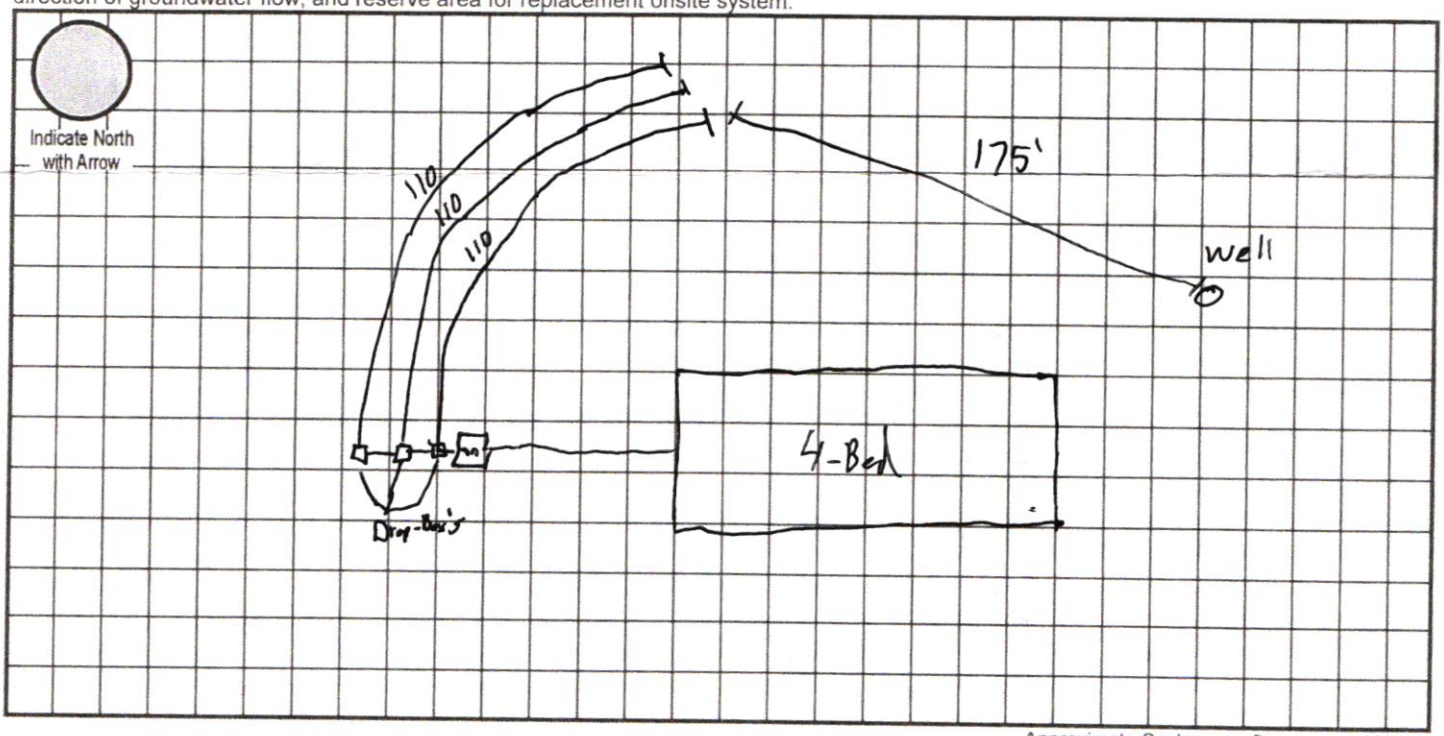
**Lincoln-Lancaster County Health Department**
Environmental Public Health Division
3131 O Street • Lincoln NE 68510-1514
Phone: 402-441-8643

**C**

Permit Number

# Onsite Wastewater Treatment System
# Preliminary Plan Specification

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




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

## A. Onsite System Location

Address (no rural route) 9470 Firth Rd City Firth NE, Zip 68358

## B. Proposed Septic Tank/s

Septic Tank Cap. 2000 gals Tank Material: ☒ Concrete ☐ Plastic ☐ Other _____ ☐ Lagoon (Max. Seepage 1/8"/day)

## C. Reserve Area for Replacement Onsite System

☒ Drainfield Absorption Area (percolation test required) ☐ Lagoon

## D. Drainfield Absorption System

Percolation Rate 54 (min/inch = mpi) No. of Bedrooms 4 Soil Type _____ Land Slope _____ %

☒ Trench ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) Total square feet of drainfield 1485 Sq. Ft.

Total length of laterals 330 Type of Distribution: ☐ Perforated Pipe ☐ Half-Round ☐ Chambers ☒ Other EZ-Flow

No. of Absorption Trenches 3 Width 36" No. of Drop Boxes 3 Distribution Box _____

No. of Absorption Beds _____ Width _____ No. of Distribution Lines per Bed _____

Installer _____ Date: 5-18-23

Updated 2/18

**Lincoln-Lancaster County Health Department**
**Environmental Public Health Division (402) 441-8027**
**3131 O Street Lincoln, Nebraska 68510-1514**

**ON-SITE WASTE WATER SYSTEM**
**CONSTRUCTION - INSTALLATION PERMIT**
**No. HS002543**

**System Type:** Standard

**Situs:** No Site Address Specified

Issued: 5/24/2023

Expires: 5/24/2024

**Description:** TEKOLSTE INVESTMENTS ADDITION, Lot 1

**Owner:** TEKOLSTE, RODNEY R & MARY JEAN
10300 FIRTH RD
FIRTH, NE 68358

Patricia D. Lopez

Patricia D. Lopez, RN, MSN, 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.

Patricia D. Lopez

Patricia D. Lopez, RN, MSN
Health Director

BRANDON SEDLACEK
11185 E STATE HWY 41
ADAMS, NE 68301

MAY 2 2 2023

SCANNED

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

**A**

Permit Number H5002543

# Onsite Wastewater Treatment System Permit Application

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

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

**PLEASE PRINT OR TYPE**

**A. Onsite System Location**

Address* 9470 Firth Rd (no rural route) City Firth NE Zip 68358

Legal Description S 26 T7 R7 Tekolste Investments Add. 1 (1/4 1/4 Section Township Range Subdivison Addition Block Lot)

PID 1426403001000 *Approx. Address (If to be determined)

**B. Owner**

Name Rodney Tekolste Signature

Address 10300 Firth Rd City/State/Zip Firth, NE 68358

Home Phone Work Phone

**C. Certified Installer**

Name: Braxton Sedlacek Signature

Address 11185 E St Hwy 41 City/State/Zip Adams, NE 68301

Work Phone 402-988-8425

**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 Garbage Grinder? ☒ Yes ☐ No Total Acres 6.46

☐ 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**

**1. Health Department**

Site visits 6/6/23 DC Date rec'd 5/24/23 Date frwd 5/24/23

ACTION ☒ Approved ☐ Disapproved Signature

Comments

**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 6/7/23

***Business Office Use Only***

Date Received 5-22-23 Amount Paid $460.00

Received By JAD Cash/Check No. 2648

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

Form A Updated: 4/15

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

Exhibit 5

Permit Number: HS 002543

# Onsite Wastewater Treatment System

## Inspection Sheet

Date 6/7/23 Legal Description _____
¼ ¼ Section/Township/Range

**Onsite System Location**

Address (no rural route) 9470 Fish City _____

Owner _____ Address _____

**Mark One:** ❑ Dwelling ❑ Non-dwelling

❑ New System ❑ Alteration [❑ Tank Only ❑ Trench Only] ❑ Lateral Only

❑ Temporary modification (Describe problem causing discharge and reason for temporary modification): _____

_____

**Drainfield Absorption System:**

❑ Lateral ❑ Bed ❑ Non-standard (engineer-designed and NDEQ approved) ❑ Holding Tank ❑ Trench

Total square feet of drainfield 1485 Sq. Ft. Tank Size 2,000 gals

Total length of laterals 330' Type of Distribution: ❑ Chamber ❑ Perforated Pipe ☒ Other (describe) E2 flow

No. of Absorption Laterals 3 Width 4.5 factor No. of Drop Boxes _____ Distribution Box _____

Leveling Method Used Laser

**Setbacks (Check the Boxes Below if the Required Setback has been Satisfied):**

| Distance From | Private Well | Public Well | Surface Water | Ground water | Pressure Water Lines | Property Lines |
|---|---|---|---|---|---|---|
| Tank (ft) | 50 ❑ | 500 ❑ | 50 ❑ | NA ❑ | 10 ❑ | 5 ❑ |
| Field (ft) | 100 ❑ | 500 ❑ | 50 ❑ | 4 ❑ | 25 ❑ | 5 ❑ |

**Geographical Coordinates to 6 Decimals:**

Tank _____ NA

Lateral #1 _____ Lateral #3 _____

Lateral #2 _____ Lateral #4 _____

**Comments:**

Inspections prior to Final Approval
Initial DS Date 6/6/23

Follow-Up _____ Date _____

Follow-Up _____ Date _____

**Installation Final Written Approval**
By Doug Rhea

Date 6/7/23

**Field Note Drawing (See Reverse Side):**

**Lincoln-Lancaster County Health Department**
Environmental Public Health Division
3131 O Street • Lincoln NE 68510-1514
Phone: 402-441-8643

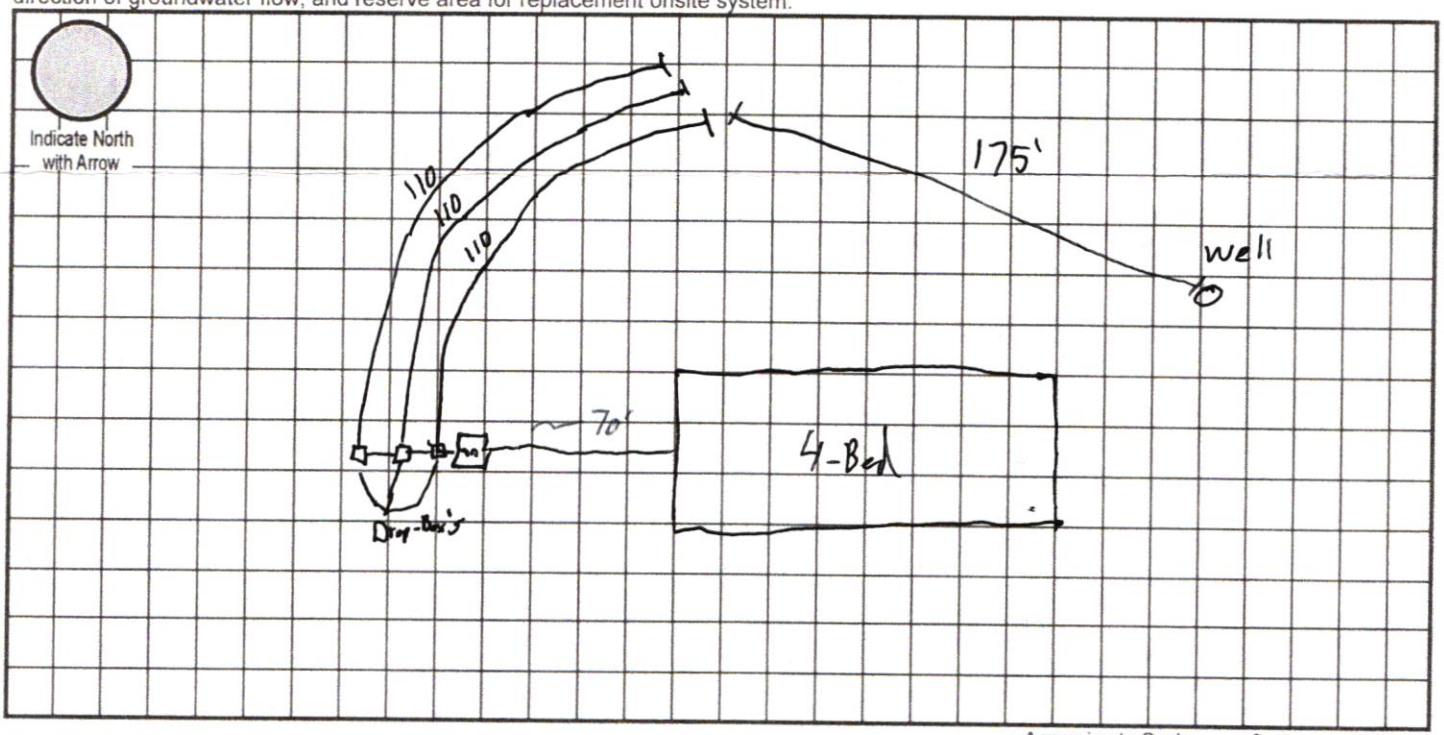
SCANNED

As Built
C D

Permit Number

# Onsite Wastewater Treatment System
# Preliminary Plan Specification

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




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

## A. Onsite System Location

Address (no rural route) 9470 Firth Rd City Firth NE, Zip 68358

## B. Proposed Septic Tank/s

Septic Tank Cap. 2000 gals Tank Material: ☒ Concrete ☐ Plastic ☐ Other _____ ☐ Lagoon (Max. Seepage 1/8"/day)

## C. Reserve Area for Replacement Onsite System

☒ Drainfield Absorption Area (percolation test required) ☐ Lagoon

## D. Drainfield Absorption System

Percolation Rate 54 (min/inch = mpi) No. of Bedrooms 4 Soil Type _____ Land Slope _____ %

☒ Trench ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) Total square feet of drainfield 1485 Sq. Ft.

Total length of laterals 330 Type of Distribution: ☐ Perforated Pipe ☐ Half-Round ☐ Chambers ☒ Other EZ-Flow

No. of Absorption Trenches 3 Width 36" No. of Drop Boxes 3 Distribution Box _____

No. of Absorption Beds _____ Width _____ No. of Distribution Lines per Bed _____

Installer _____ Date: 5-18-23

Updated 2/18

## Nate C. Hartman

**From:** Village of Firth Clerk <villageoffirth@windstream.net>
**Sent:** Tuesday, May 23, 2023 9:36 AM
**To:** Nate C. Hartman
**Subject:** Tekolste - 9470 Firth Rd
**Attachments:** BFE-10112022-6643-BFD-26-07-07E.pdf

Hi Nate:
The Village of Firth approved a building permit for 9470 Firth Road on October 24, 2022. Attached is the BFE designation for this parcel.
Let me know if you need anything else.
Thanks ~

*Jill Hoefler*
*Municipal Clerk*
*Village of Firth*
PO Box 38
Firth, NE 68358
(402)791-5544 - office
(402)560-5767 – cell

***ELECTED OFFICIALS: A "Reply to All" on this e-mail could lead to violations of the Nebraska Open Meetings Act. Please reply only to the sender.***

NEBRASKA
DEPT. OF NATURAL RESOURCES

# Base Flood Elevation Determination




## Section 26-07-07E
## Village of Firth
## Lancaster County

**Valid: 10/11/2022**
**until Superseded**
**Effective FIRM dated: 4/16/2013**

- BFE -- NAVD88
- Section
- Community
- Approximate Dam Flood Pool

**Effective Flood Zones**

- 1% Annual Chance
- 0.2% Annual Chance

**Flood Awareness Area**

- 1% Annual Chance
- 0.2% Annual Chance

N

0 400 800 1,600 Feet

*Please see page 2 for the Use and Limitations of this BFE Determination*

*This BFE was determined by:*

NEBRASKA
DEPT. OF NATURAL RESOURCES

# Base Flood Elevation Determination




## Section 26-07-07E
## Village of Firth
## Lancaster County

**Valid: 10/11/2022**
**until Superseded**
**Effective FIRM dated: 4/16/2013**

- BFE -- NAVD88
- Section
- Community
- Approximate Dam Flood Pool

**Effective Flood Zones**

- 1% Annual Chance
- 0.2% Annual Chance

**Flood Awareness Area**

- 1% Annual Chance
- 0.2% Annual Chance

N

0 400 800 1,600 Feet

*Please see page 2 for the Use and Limitations of this BFE Determination*

*This BFE was determined by:*

**BFE Determination Use and Limitations**

NEBRASKA
DEPT. OF NATURAL RESOURCES

**Nebraska Statutes:**

Nebraska Department of Natural Resources (NeDNR) provides BFE Determinations to local officials for the purpose of administrating floodplain management programs within their jurisdictions. Nebraska State Statute 31-1017 (4) and (6) more specifically say for Floodplain Management Regulations, and defines Floodplain Management Regulations in 31-1012 as "Flood plain management regulations shall mean and include zoning ordinances, subdivision regulations, building codes and other applications of the police power which are authorized by law to secure safety from floods and provide for the reasonable and prudent use of flood plains".

**NeDNR BFE Determination Process:**

Currently, NeDNR provides BFE Determinations for FEMA Zone A special flood hazard areas and NeDNR flood awareness areas. BFE Determinations for FEMA Zone AE special flood hazard areas must be determined from the Flood Insurance Study (FIS) tables and profiles using the Flood Insurance Rate Map (FIRM) as reference. NeDNR will be available for technical assistance in these areas.

NeDNR uses the best available data and basic engineering methods to determine BFEs in FEMA Zone A special flood hazard areas and NeDNR flood awareness areas. This typically involves a regression analysis to compute hydrology and a normal depth calculation to develop water surface elevations for the 1-percent annual chance event. Basic engineering methods are established using bare earth topographic data; meaning structures are not considered and field survey is not conducted for use in the analysis.

**Acceptable uses:**

- Letter of Map Amendments (LOMAs) on existing structures,
- Elevation Certificates on existing structures, and
- Permitting of new structures, although NeDNR recommends that a professional engineer perform a site-specific analysis for all new development.

**Unacceptable uses:**

- Design of developments greater than 5 acres or 50 lots (44 CFR 60.3) and
- Hydraulic structure design.

**Community Responsibility:**

Communities are responsible for maintaining records of the cumulative effect of proposed development (44 CFR 60.3(c )(10)).

**BFE Determination Valid Dates:**

The valid dates provided on BFE Determinations are the maximum validation period for the determinations and do not mean they are valid for that entire period. BFE Determinations can be superseded at any time. All future determinations will say Valid from XX/XX/XXXX until superseded to remind users to check on the validity of a BFE before its use.

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

D

Permit Number: 4500 2543

# Onsite Wastewater Treatment System
## As-Built Description and Drawing

Type of Onsite Wastewater System: ☐ Lagoon (Skip to Back Page) ☒ Subsurface Septic ☐ Mound

### Onsite Wastewater System Location

Address or Legal Description or Parcel Identification Number (PID) 9470 Firth Rd Firth, NE

Owner: Rodney TeKolste Address 10300 Firth Rd Firth, NE

### A. Wastewater Piping

1. Material: PVC Diameter: 4 in.
2. Distance between dwelling and septic tank: 130 ft.

### B. Septic Tank

1. Material Concrete
2. Capacity: 2000
3. Depth to top of tank, below unfinished grade: 18 in.
4. Distance to:
   Well 225 ft.
   Pressure line 150 ft
   Property Line 180 ft.
   Foundation 130 ft.

### C Distribution Box or Drop Box

Distance **and** Direction from septic tank: 8 ft. W

### D. Drainfield/Absorption Field

☒ Trench ☐ Bed

1. Type: ☐ Perforated Pipe ☐ Chamberless ☒ Other EZ-Flow
   Material brand and inside width of Chamberless: EZ-Flow 36"
2. Number of Laterals: 3
3. Length of each lataral (linear): ft. 110 ft. 110 ft. 110 ft. _____
4. Drainfield size: 1485 sq. ft.
5. Distance to:
   Well 250 ft.
   Pressure line 150 ft.
   Property line 50 ft.
   Depth of Groundwater +10'

Was the Onsite Wastewater System covered prior to LLCHD inspection? ☐ Yes ☒ No

If Yes, the Certified Professional must sign below for final approval:

I swear and affirm that the system complies with Lincoln Municipal Code (LMC) 24.38 and/or County Resolution R-13-0062 requirements and that the information and documentation submitted are true and accurate.

Certified Professional Signature: Brian Dale Date: 7-5-23

**Complete As-Built drawing on the back of this form.**

Rodney TeKolste
9470 Firth Rd
Firth, NE

