Lincoln-Lancaster County Health Department

ENVIRONMENTAL HEALTH DIVISION
3140 N STREET · LINCOLN, NE 68510-1514 (402) 441-8000

Permit

SEWAGE INSTALLATION
LAGOON

Permit # 00380220801

Issued 07/05/00
Expires 01/05/01
Revenue Code 3157

Establishment

DON & JANNELLA ABBEY
T9N R5E SEC 13 QTR SE
TIMBERLINE ESTS-1ST BLK 2 LOT 1
5810 PINE KNOT DR

FEES: $150.00

Permitee

DON & JANNELLA ABBEY
4650 EAGLE RIDGE RD
LINCOLN NE 68516-3025

TOTAL: $150.00

Leon F. Vinci, MPH, Health Director

• POST IN A PROMINENT PLACE • NOT TRANSFERABLE

013472

JUN 2 0 2000
JUL 3 2000

A

Per Jerry Hood. Letter dated

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

Permit Number: 00380220 8

Sewage Disposal System

Request for Site Clearance and Permit

Include Form B, Form C and Applicable Fees with this Application.

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

The undersigned hereby requests site clearance and permit to construct a Sewage Disposal System in conformance with appropriate resolution or ordinance, as described herein:

PLEASE PRINT OR TYPE

A. System Location (Indicate correct number and street)

Address 5810 Pine Knot Dr. City Lincoln NE, Zip
(no rural route)

Legal Description SE¼ Sec. 13 Twsh. 9 N Rge 5 E 6th P.M. Timberline Estates 1st Add 2 Blk 21
1/4 1/4 Section Township Range Subdivision Addition Block Lot

Geographical Location (if known): Longitude Latitude

☐ Check if system mail address is not the same as the owner's address

B. Owner

Name Don & Jannella Abbey Signature Don Abbey & Jannella Abbey

Address 4650 Eagle Ridge Rd. City/State/Zip Lincoln

☒ Check if owner designed system Home Phone 420-5183 Work Phone

C. Contractor

Name Regal Building Systems Company Name

Address 2610 Park Blvd. City/State/Zip Lincoln NE 68502

☐ Check if contractor designed system Work Phone 435-3550

D. Engineer/Installer ☐ Check and complete if engineer designed system

Designer Name Firm Work Phone

E. This System Will Serve a

☒ Residential Dwelling Number of Bedrooms 1 Upstairs 2 potential - Unfinished basement. Is there a Whirlpool Bathtub 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. 2832

1. **Health Department**	Date rec'd 7/5/00 Date frwd 7/5/00	**ACTION** ☒ Approved ☐ Disapproved Signature Jerrold C. Hood	
2. **Supt. Bldg. Insp. or Village Clerk**	Date rec'd 7/5/00 Date frwd 7/5/00	**ACTION** ☒ Approved ☐ Disapproved Signature	
3. **City or County Engineer**	Date rec'd 7/5/00 Date frwd 7/5/00	**ACTION** ☒ Approved ☐ Disapproved Signature Chase Baker	

7/27 Inspected sewer line + lagoon fence + drawing needed 10/11/00 Changed to engineered system

Installation Final Written Approval

By Doug Arnold

Date 4/30/01

Business Office Use Only
Date Rec'd 7/5/00
Amt Paid 150.00
Rec'd By CW Cash/Check No. 14874

FORM 23-100 10-96 White - Health Dept. Yellow - Engineer Pink - Bldg. Inspector

Abbey

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

B

Permit Number:

Sewage Disposal System
Soil Absorption Test Data Report
Annex to Application

Timberline Est.

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 5810 Pine Knot Dr (no rural route) City Denton NE, Zip 68339

Owner Don Abbey Addresss

Soil Type (SCS): Percolation Rate: min./inch

Date of Tests 12-13 to 12-14-98 Weather: Precipitation Temperature

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	31"	12-13	1:00	12-14	7:30	12-14	10:30	11 3/4	12-14	11:00	30	1/8	240
2								11 1/2				3/8	80
3								11 1/4				1/8	240
4								14 5/8				1/8	240
5								10 7/8				1/8	240
6								17 1/2				1/2	60
7								13 1/4				1/2	60
8								15 1/8				1/8	240

Person Conducting Percolation Tests

Name: Larry Schwarek Trenching
Phone: 489-7294
Address 8200 old Cheney Rd.

Sum of Percolation Rates:
Average of Rates:
Rate Used for Calculation: 240 min/in

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks NOT ACCEPTABLE FOR TRADITIONAL ABSORPTION SYSTEMS

Signature of Reviewing Official Date 10-6-00

M 23-101 10-96

Abbey, Don & Jannella

JUL 7 2000 C JUN 20 2000

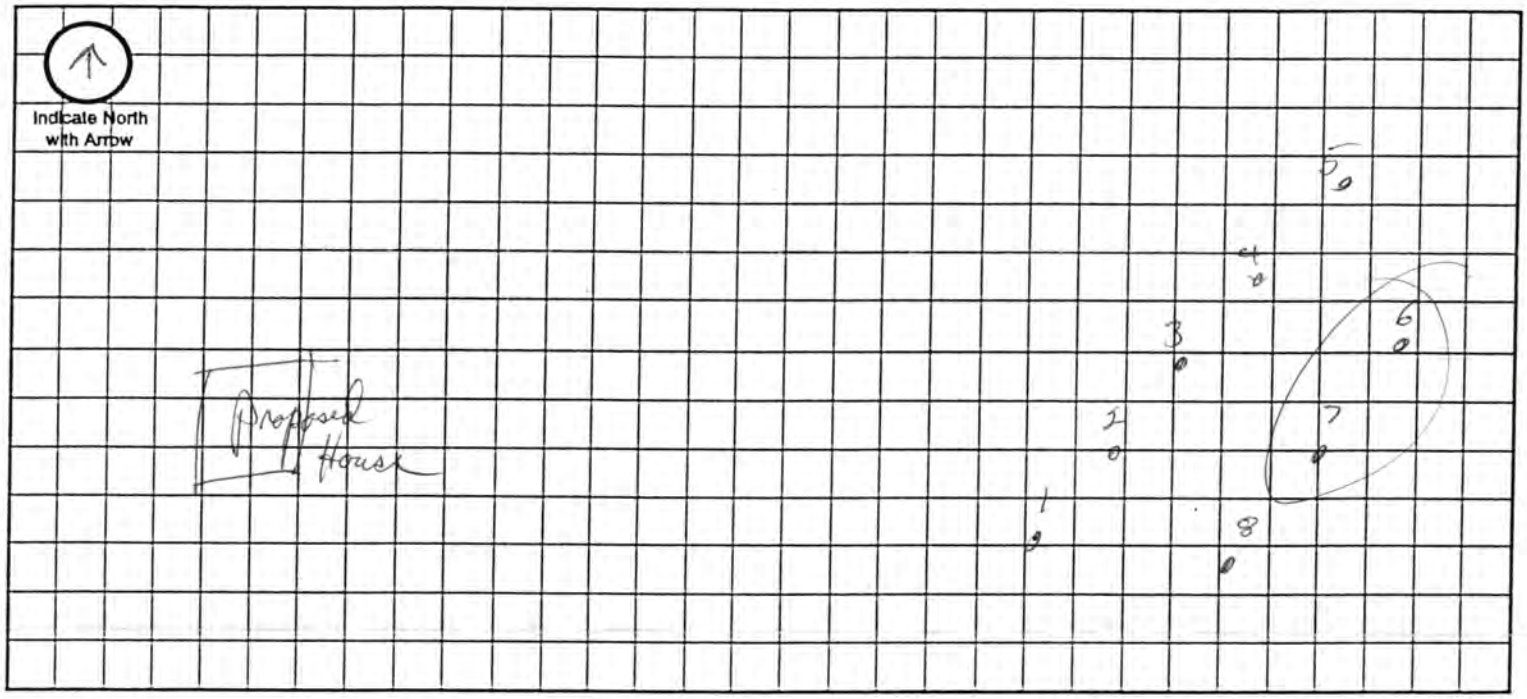
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

Permit Number: 00380220B

Timberline East

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: _____ ft. = _____ grid line/s

A. System Location (Indicate correct number and street)

Address (no rural route) _____ City _____ NE, Zip _____

B. Proposed Septic Tank/s

Tank Material: ☑ Concrete ☐ Plastic ☐ Other _____

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

Percolation Rate _____ (min. per inch) Soil Type: _____ Land Slope: _____ %

Type of Absorption System: ☐ Trench ☐ Bed ☐ Other _____

Total Square Feet of Field Required: _____ sq. ft.

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

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

Total Length of Laterals _____ ft. Number of Trenches _____ Trench Width _____

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 Regal Building Systems Dan Klein Date 6-30-00

Installer Kerry Schwanke 489-7294 Date 4-26-99

FORM 23-102 10-96

OCT 1 2 2000

D

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

Permit Number:

Sewage Disposal System

As Built Plans & Specifications

Date 10-11-00

System Location (Indicate correct number and street)

Address 5810 Pine Knot (no rural route) City _____ NE, Zip _____

A. Building Sewer

1. Material: Class 160
   Diameter: 4 in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: _____ in.
3. Distance between dwelling and septic tank: 107 ft.
4. Number of clean-outs: 3
5. Distances to: well or suction line _____ ft.
   stream _____ ft.
   pressure line _____ ft.
   property line _____ ft.

B. Septic Tank

1. Material: precast
   Number of compartments: _____
2. Capacity: 1250 gal.
3. Factory built: ☒ Yes ☐ No
4. Manholes: Over inlet, diameter _____ in.
   Over outlet, diameter _____ in.
   Riser: ☐ above ☐ below grade 2 in.
5. Inlet: ☐ baffle ☐ tee
6. Outlet: ☐ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 29 in.
8. Distances to: Well or suction line _____ ft.
   Stream _____ ft.
   Pressure line _____ ft.
   Property line _____ ft.

C. Distribution Box

1. Material: 3 Drop box
   Number available outlets: 12-12-12
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: plastic ft.

D. Absorption Field

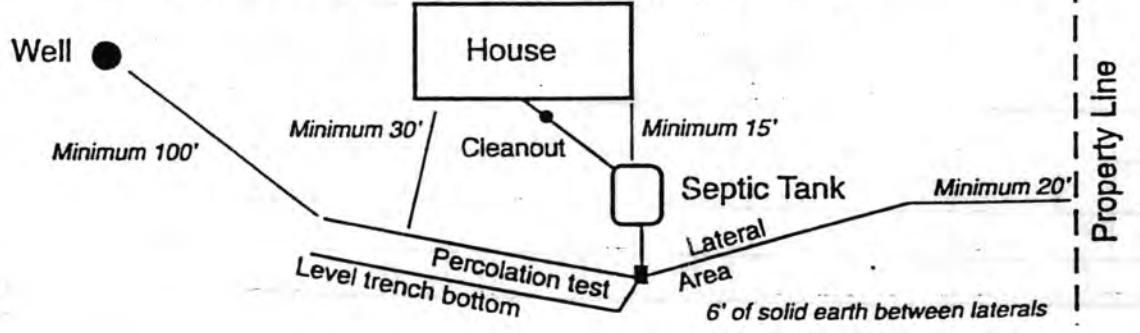
(Provide as-built drawings on back of this form)

1. Type: ☐ Half rounds ☐ Perforated pipe
   Diameter of half round: _____
   or perforated pipe: _____
   Material: ☐ fiberglass ☐ plastic ☐ concrete
   ☐ other _____
2. Lateral lines: Number 4
   Length of each line: 102 ft. 102 ft.
   85 ft. 78 ft., _____ ft.
3. Trench dimensions: Width 5 ft.
   Slope _____ in/100 ft.
   Average depth 36 in
4. Filter material: Sand
   Depth of material 20 in.
5. Distances to: Well or suction line _____ ft.
   Stream _____ ft.
   Pressure line _____ ft.
   Property line _____ ft.

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

Indicate North with Arrow

Individual Sewage System Design (Example)



EVAPOTRANSPIRATION/ABSORPTION SYSTEM DESIGN

Owner:	Don and Janella Abbey
Legal:	**Lot 1, Block 2 of Timberline Estates First Addition (SE 1/4 Sec13 T9N R5E Lancaster Co.)**
Designer:	JJW

Step #	Function	Description	Value
1	***Enter Value***	Number of Bedrooms	4
		Design Flow (gpd)	600
2	***Enter Value***	Percolation Rate (min/inch)	240
		Evaporation Loss (gal/ft^2/day) constant = 0.0135	0.0135
		Allowable Absorption (gal/ft^2/day)	0.32
		Total Losses (gal/ft^2/day)	0.34
		Required Area (ft^2)	1784
		Infiltrator Base Area (ft^2)	446
		Required # of Chambers	43
3	***Enter Value***	Number of Trenches	4
		Number of Chambers per Trench	10.7
		Length of Trenches (ft)	89.2
		Total Storage Volume (gal)	6878

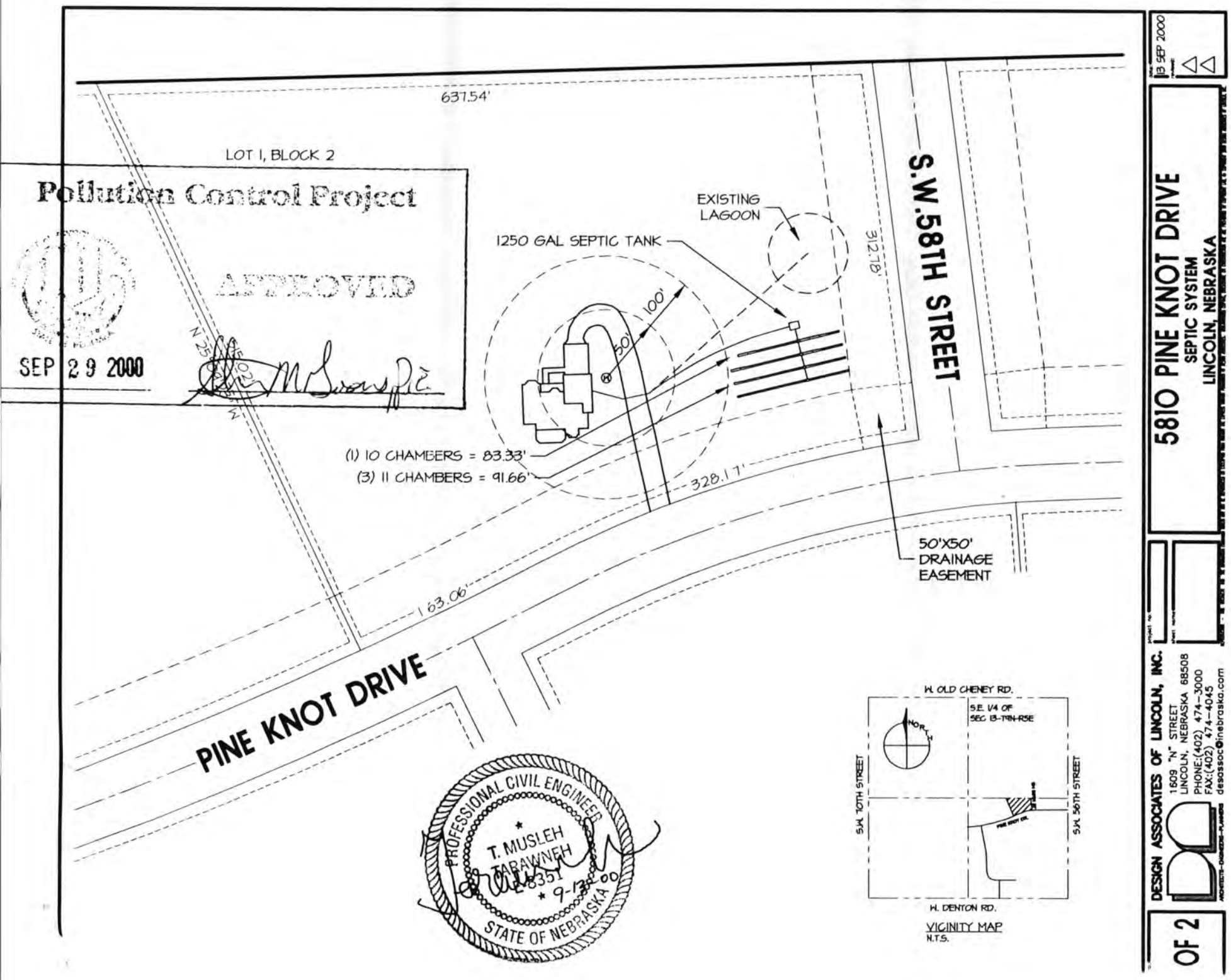
NOTES:

1. The Contractor shall excavate an inspection pit to confirm that a 4 feet separation can be maintained from any seasonal water table or impermeable clay or rock layer.

2. It is recommended that a water meter be installed on the water supply so that the owner can monitor their water use and ensure that no more than 600 gallons per day are being used.

3. It may be necessary to adjust the orientation of the trenches so that the minimum (1.5 foot) and maximum (5 feet) depths are not exceeded.





5810 PINE KNOT DRIVE

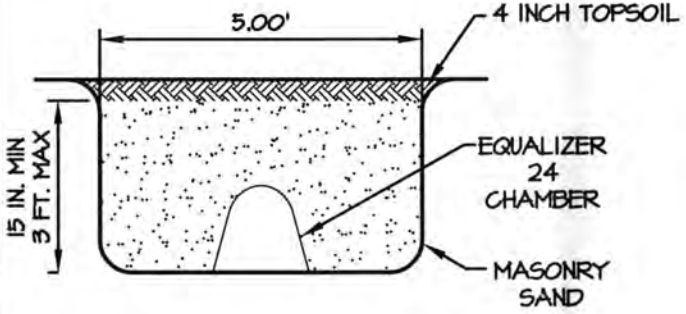
SEPTIC SYSTEM

LINCOLN, NEBRASKA

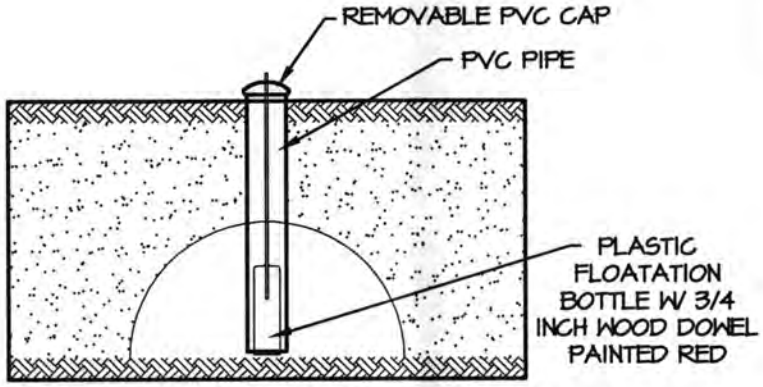
13 SEP 2000

DESIGN ASSOCIATES OF LINCOLN, INC.
1609 "N" STREET
LINCOLN, NEBRASKA 68508
PHONE:(402) 474-3000
FAX:(402) 474-4045
desassoc@inebraska.com

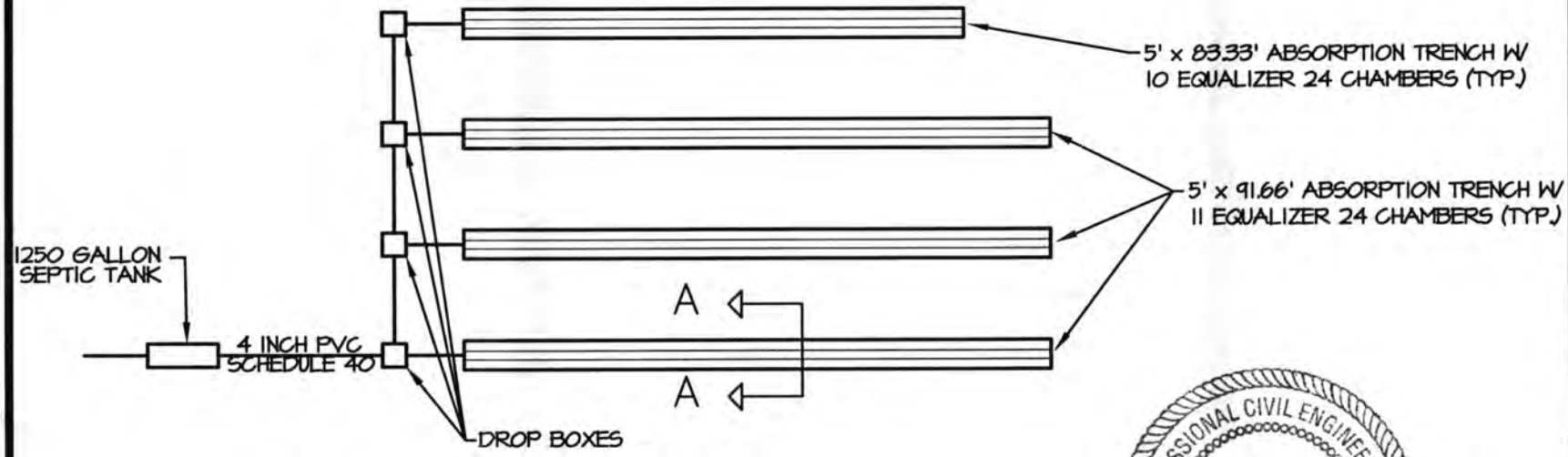
OF 2



SECTION A - A
NTS



HIGH WATER INDICATOR (REQ.)
NTS



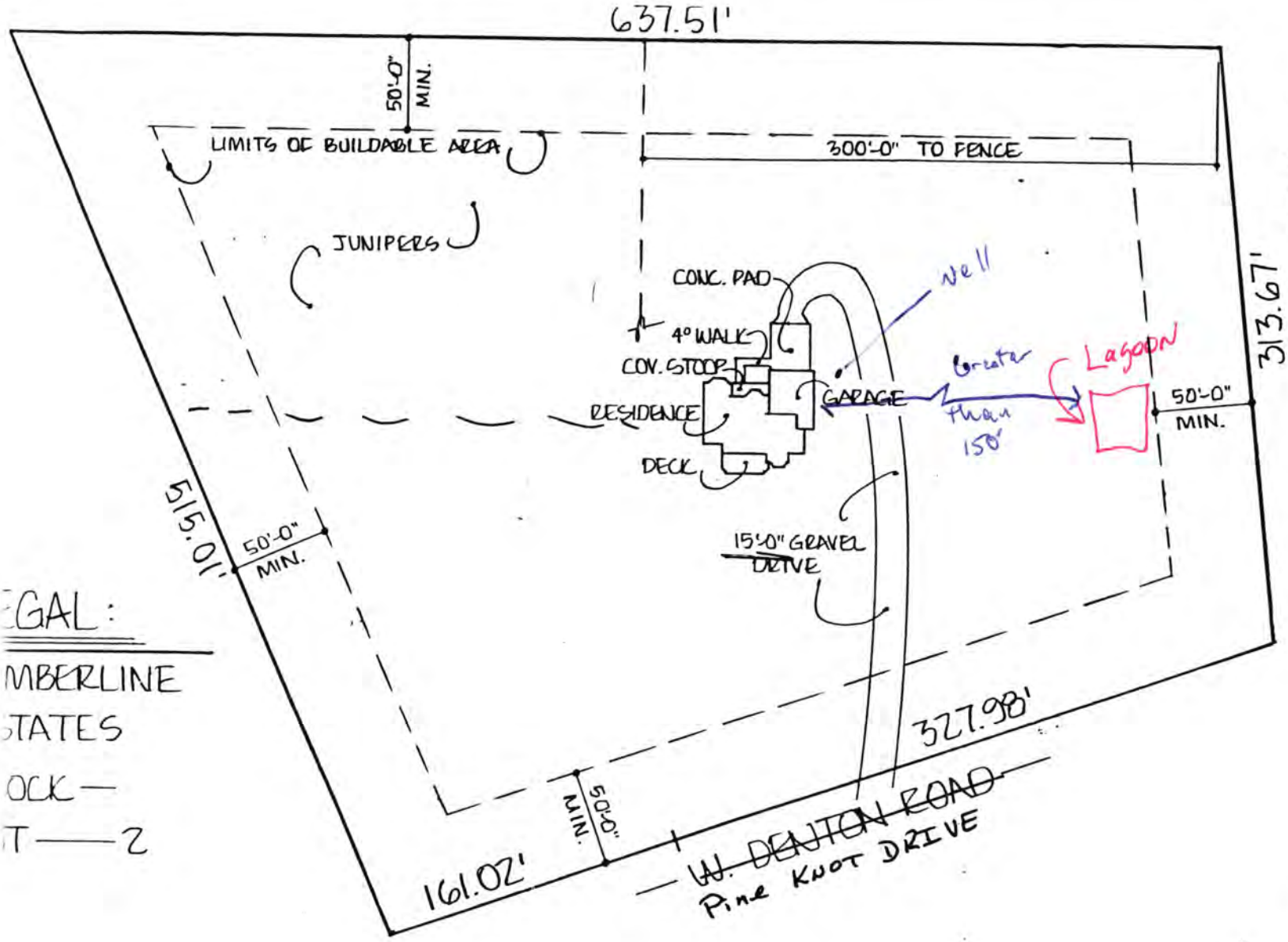
ABSORBTION TRENCH PLAN
NTS

PROFESSIONAL CIVIL ENGINEER
T. MUSLEH
TARAWNEH
*9-17-00
STATE OF NEBRASKA

3 SEP 2000

5810 PINE KNOT DRIVE
SEPTIC SYSTEM
LINCOLN, NEBRASKA

DESIGN ASSOCIATES OF LINCOLN, INC.
ARCHITECTS · ENGINEERS · PLANNERS
1609 "N" STREET
LINCOLN, NEBRASKA 68508
PHONE:(402) 474-3000
FAX:(402) 474-4045
desassoc@inebraska.com



EGAL:

MBERLINE

STATES

OCK—

T——2

NOTE:

BUILDING MAY BE LOCATED ANYWHERE WITHIN LIMITS OF BUILDABLE AREA.

PLOT PLAN

SCALE: 1"=80'-0"

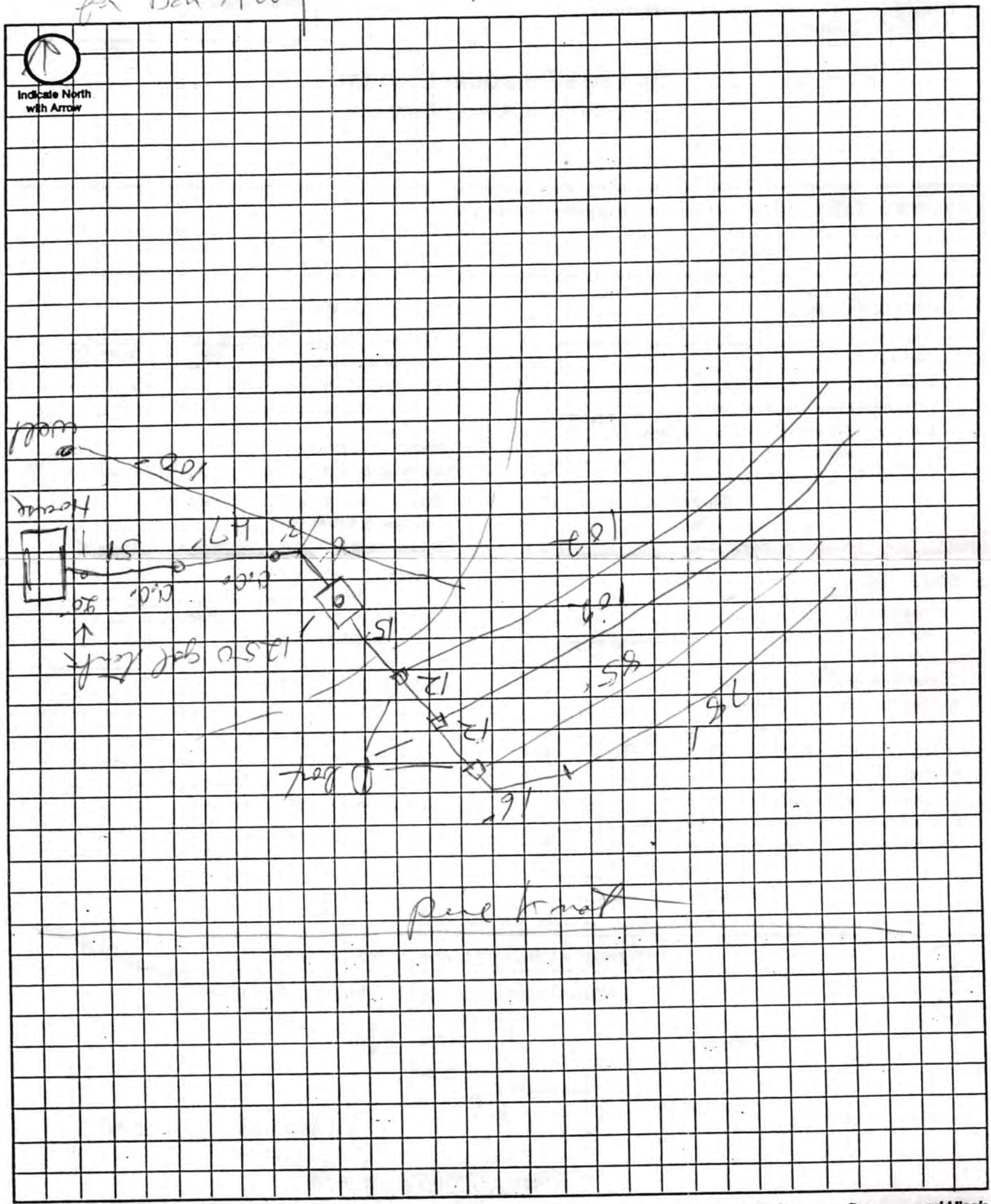
DON ABBEY RESIDENCE

NV INC.
NEW VENTURES
Custom home design
Lincolnshire Square
1610 South 70th Street, Suite 101
Lincoln, NE 68506
483-1988

NV05699

As Built Drawing

by Larry Schwarck
for Don Abby
10-11-00



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