LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT

3140 "N" STREET
NON TRANSFERABLE

ENVIRONMENTAL HEALTH DIVISION
Lincoln, NE 68510-1514
PERMIT

(402) 441-8000

Permit

SEWAGE INSTALLATION
SEPTIC SYSTEM

No. 98380171301

Issued 01/13/98
Expires 07/13/98
Revenue Code 3157

Establishment

KEN KUSZAK
T9N R6E SEC 15
LARSEN 1ST ADDN BLK 2 LOT 1
6800 SW 9 ST

FEES: $150.00

Permittee

KEN KUSZAK
1531 DODGE ST
LINCOLN NE 68521-1935

TOTAL $150.00

Issued By Gregg Wright MO
M. Jane Ford
Health Director

5870

THIS LICENSE OR PERMIT IS ISSUED SUBJECT TO REVOCATION AS PROVIDED BY LAW "POST IN A PROMINENT PLACE"

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

A

Permit Number:

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 6800 SW 9th City Lincoln NE, Zip 68523
(no rural route)

Legal Description Larsen 1st Addition Block 2 Lot 1
1/4 15 9N 6E Subdivision Addition Block 2 Lot 1
1/4 Section Township Range

Geographical Location (if known): Longitude _____ Latitude _____

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

B. Owner

Name Ken Kuzak Signature Ken Kuzak

Address 1531 Dodge City/State/Zip Lincoln Ne 68521

☐ Check if owner designed system Home Phone 476-2974 Work Phone 441-7076

C. Contractor

Name John Strohmyer Company Name Excavating Inc.

Address 6667 NW 48 City/State/Zip Lincoln Ne 68524

☒ Check if contractor designed system Work Phone 430 6023 (Stan)

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

Designer Name Jeffery N Schoenack PE 1/12/98 Firm Outback Design Work Phone 402-478-5388

E. This System Will Serve a

☒ Residential Dwelling Number of Bedrooms 2 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 1/13/98 Date frwd 1/13/98	**ACTION** ☒ Approved ☐ Disapproved Signature Jerrold C. Hood	
2. **Supt. Bldg. Insp. or Village Clerk**	Date rec'd 1/13/98 Date frwd 1/13/98	**ACTION** ☒ Approved ☐ Disapproved Signature	
3. **City or County Engineer**	Date rec'd 1-13-98 Date frwd 1-13-98	**ACTION** ☒ Approved ☐ Disapproved Signature	

5/19/98 Experimental system, need drawing D.C.H.

Installation Final Written Approval (PROVISIONAL)

By Jerrold C. Hood R.E.H.S.

Date MAY 27, 1998

Business Office Use Only

Date Rec'd 01/13/98
Amt Paid 150.00
Rec'd By ____ ~~Cash~~/Check No. 9024

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

5 bed 4 wide 120

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

B

Permit Number:

H. 476-2974
W. 441-7076

Sewage Disposal System
Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 6500 S.W. 9th (no rural route) City _____ NE, Zip _____

Owner Ken Kuszak Address 1531 Dodge Lincoln NE. 68521

Soil Type (SCS): clay loam (WYMORE) Percolation Rate: _____ min./inch

Date of Tests 12/2/97 to 12/3/97 Weather: Precipitation wet Temperature 34°

1997

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	24	12/2/97	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	3/4	40MIN/IN
2	22	12/2/97	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	3/4	40MIN/IN
3	24	12/2/97	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	1 1/8	27MIN/IN
4	26	12/2	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	1	30MIN/IN
5	20	12/2	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	3/4	40MIN/IN
6	24	12/2	10:00	12/3	10:00	12/3	1:00	6	12/3	1:30	30	1 1/8	27MIN/IN

Person Conducting Percolation Tests

Name: John Stalmeyer
Phone: 430-6023
Address 6667 W. Wood 48th
Lincoln NE 68524

Sum of Percolation Rates: _____
Average of Rates: 34 MIN/IN
Rate Used for Calculation: _____

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks _____

Signature of Reviewing Official Lorrold C. Hood, R.E.H.S. Date JANUARY 13, 1998

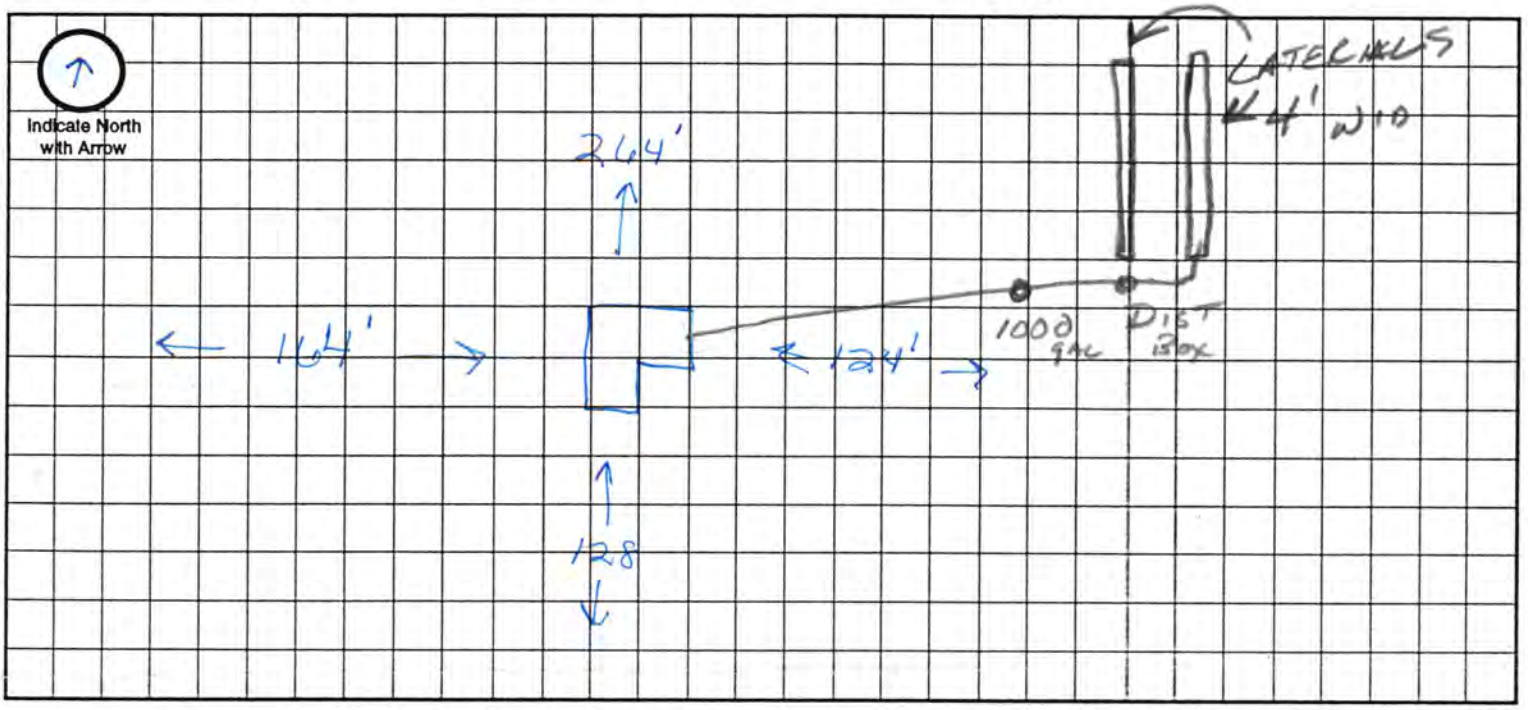
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

C

Permit Number:

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) 6800 SW 9th City Lincoln NE, Zip 68523

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: 532 sq. ft.

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

Capacity of Septic Tank 1000 gals Number of Absorption Beds: 2 Number of Distribution Laterals per Bed _____

Total Length of Laterals 133 ft. Number of Trenches _____ Trench Width 4

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 _____ Date 1-12-98

Installer _____ Date 1-12-98

FORM 23-102 10-96

Septic System Design

FOR

Ken Kuszak
6800 SW 9th
Lincoln, NE

Designed By:

Jeffery N Schoeneck PE
J.S. Engineering & Const Inc
PO Box 601, Arlington, NE
(402)-478-5366

PROFESSIONAL AGRICULTURAL ENGINEER
JEFFERY N. SCHOENECK
E-8000
STATE OF NEBRASKA

4/27/98

N

30' SCALE

Well

164' To prop Line

264' to prop Line

House

Elev 100.0
@ Top of Pilaster

1200 gal min Septic Tank

Elect Line

4" SDR-35 min

Typical EQ-36 Infiltrator Gravelless Chambers (4 laterals x 75' Long)

Slope = 2%

4" Header Pipe (To be installed level)

12'

Prop Line

Section E-E

2'

24"

Elev 95.65

18"

9' 9' 9'

(Laterals to be installed Level & Same Elevations)

Critical Elevations:	
@ Pilaster	100.0
@ Septic Tank Inlet	97.85
@ Septic Tank Outlet	97.65
@ Lateral Trench Bottoms	95.65
@ Header Pipe	96.65

Pollution Control Project

APPROVED

May 8, 1998

PERMIT NUMBER _____
APPROVED BY SML
DATE APPROVED 5/5/98

FORM B

APPLICATION FOR CONSTRUCTION / OPERATING PERMIT FOR A SEPTIC SYSTEM

(PLEASE PRINT OR TYPE)

A. Owner Information: ☐ Check here if owner designed system

Owner: Ken Kuszak (Name) — 6800 SW 9th St (Street, P.O. Box, or Route) — Lincoln (City)

Owner: Ken Kuszak (Signature) — NE (State) — 68521 (Zip) — 476-2974 (Phone (Home)) — 441-7076 (Work)

B. Contractor Information: ☐ Check here if contractor designed system

Contractor: Outback Design (Name) — (Company Name)

PO Box 610 (Street, P.O. Box, or Route) — Arlington, NE (City) — (State) — (Zip) — (Phone (Work))

C. Engineer Information: ☒ Check and complete if engineer designed system

Designer: Jeffery N Schoeneck PE (Name) — JS Engineering & Const, Inc (Firm) — (402)-478-5366 (Phone (Work))

D. System Location:

Legal Description: ____ (1/4) of ____ (1/4) — 15 (Section) — T9N (Township) — R6E (Range) — Larson (Subdivision) — 2 (Block) — 1 (Lot)

County: Lancaster — Is a County Permit Required: ☒ Yes ☐ No

☒ Check here if system mailing address is not the same as the owners and complete mailing information

System mailing Address: 1531 Dodge St (Street, P.O. Box, or Route) — Lincoln (City) — NE (State) — 68521 (Zip)

E. This System Will Serve A:

☒ Dwelling

Number of Bedrooms: 3

Is There a Whirlpool Bathtub: ☐ Yes ☐ No

☐ Establishment (name) _____

Design Flow in Gallons per day: _____

Type of Wastewater: ☐ Domestic ☐ Non-Domestic

F. Septic Tanks:

Number of Tanks in Series: 1 — Tank Size (gallons): 1200 min (1st) — (2nd) — (3rd) — (4th) — (5th)

Tank Material: ☒ Concrete ☐ Plastic ☐ Other _____

G. Absorption system: (See Attachment C for Percolation Information)

Percolation Rate: 34 (min. per inch) — Soil Type: Clay loam — Land Slope: 2 %

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

Total Square Feet of Field Required: 825 (ft. sq.) Propose 900sq ft

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

Number of Trenches: 3 — Number of Absorption Beds: _____

Trench Width: 2ft EQ-36 — Number of Distribution Laterals per Bed: _____

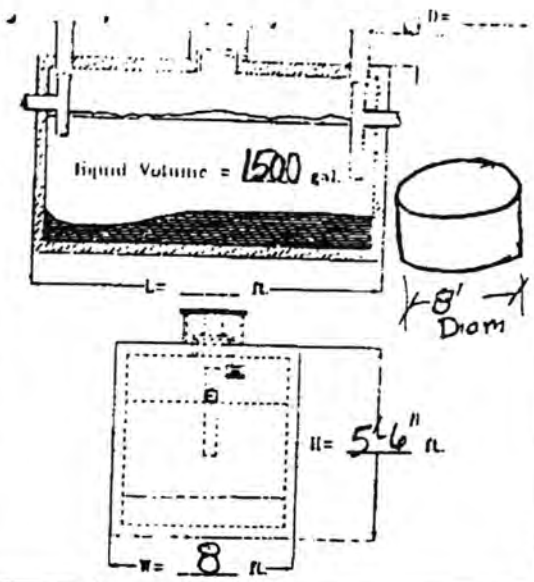
H. Setbacks: Check the Boxes Below If the Required Setback Has Been Satisfied:

Distance From	Private Well	Public Well	Surface Water	Ground Water	Pressure Water lines	Property Lines	Foundations Yours	Foundations Neighbors	All Other Setbacks
Tank (ft)	50 ☒	500 ☒	50 ☒	NA ☒	10 ☒	10 ☒	15 ☒	25 ☒	☐
Field (ft)	100 ☒	500 ☒	50 ☒	4 ☒	25 ☒	10 ☒	30 ☒	40 ☒	☐

(REVISED)

COMPLETE SECTIONS I & J AND IF NECESSARY SECTION K FOR SUBDIVISIONS

I. SEPTIC TANK DIMENSIONS



KEY

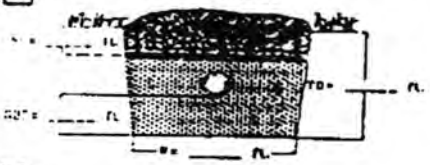
SC= SOIL COVER, TD= TRENCH DEPTH, W= WIDTH
GBM= GRAVEL BELOW HALF MOON, L= TANK DEPTH
GBP = GRAVEL BELOW PIPE, H= TANK HEIGHT,
D= DEPTH OF COVER

J. [illegible] THE APPROPRIATE ABSORPTION [illegible] IN THE BLANKS

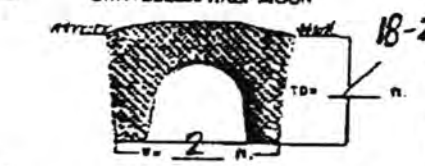
☐ TRENCH IN GRAVEL



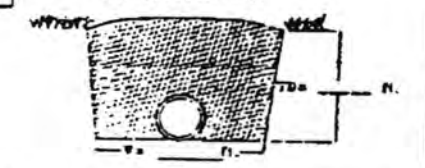
☐ PIPE IN GRAVEL



☒ GRAVELLESS HALF MOON



☐ GRAVELLESS PIPE

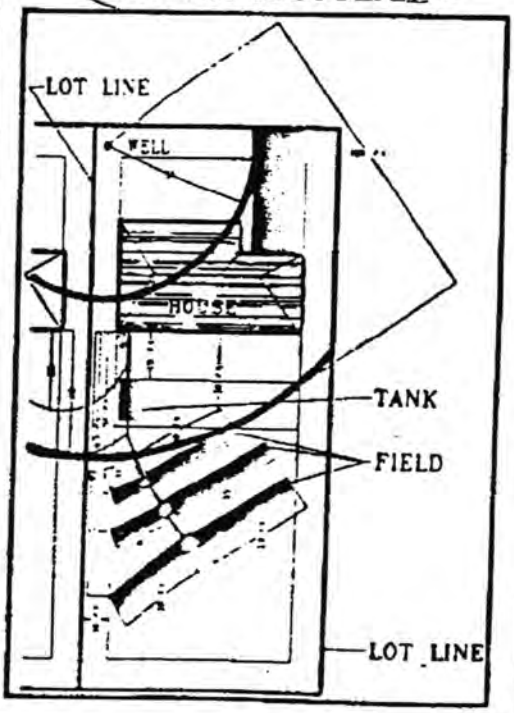


☐ OTHER Include Drawing

K. Complete Adjacent Lot Worksheet for All Wells and Water Lines Within The Reporting Distance in Chapter 5

NORTHWEST	NORTH	NORTHEAST
DISTANCE IN FEET FROM: TANK / FIELD	DISTANCE IN FEET FROM: TANK / FIELD	DISTANCE IN FEET FROM: TANK / FIELD
WELL: >200 / >100	WELL: >200 / >200	WELL: >200 / >100
WATER LINES: >100 / >100	WATER LINES: >100 / >100	WATER LINES: >100 / >100
WEST	PROPOSED SEPTIC SYSTEM INSTALLATION	**EAST**
DISTANCE IN FEET FROM: TANK / FIELD		DISTANCE IN FEET FROM: TANK / FIELD
WELL: >200 / >200		WELL: >200 / >200
WATER LINES: >100 / >100		WATER LINES: >100 / >100
SOUTHWEST	**SOUTH**	**SOUTHEAST**
DISTANCE IN FEET FROM: TANK / FIELD	DISTANCE IN FEET FROM: TANK / FIELD	DISTANCE IN FEET FROM: TANK / FIELD
WELL: >200 / >200	WELL: >200 / >200	WELL: >200 / >200
WATER LINES: >100 / >100	WATER LINES: >100 / >100	WATER LINES: >100 / >100

EXAMPLE PLOT PLAN



Documents Required:

- Completed Form B application
- Directions to the lot with site map
- Dimensioned plot plan (See Example)
- Completed percolation test data (see attachment C)
- Dimensioned drawing showing profile view of septic system and slope of terrain
- All information must be submitted to the Department of Environmental Quality. Show applicant's name, address and phone number on each submitted page

Send Documents to:

Department of Environmental Quality
Ground Water Section
1200 N Street, Suite 400
P O Box 98922
Lincoln, Nebraska 68509-8922

Owner
Location
Installer
Designer

On-Site Wastewater Treatment Worksheet For Standard Lateral Field For Dwellings

1. Enter Percolation Rate = 34 min/in

2. Enter Number of Bedrooms. = 3

3. Select ft² for the percolation rate and number of bedrooms from table A: = 825 ft². → propose 900

TABLE A

Square Feet of Drain Field Trench Required for Standard Single Family Dwelling

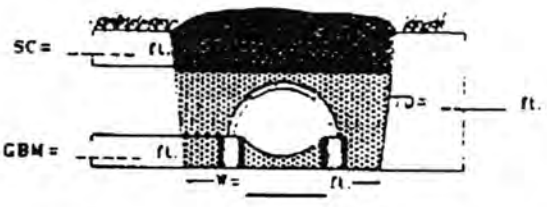
Perc Rate in minutes per inch	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom	6 Bedroom	7 Bedroom	8 Bedroom	9 Bedroom
<1	Systems must be designed by a qualified individual or professional engineer. Construction Permit Needed								
1-10	165	330	495	660	825	990	1155	1320	1485
11-20	210	420	630	840	1050	1260	1470	1680	1890
21-30	250	500	750	1000	1250	1500	1750	2000	2250
31-40	275	550	825	1100	1375	1650	1925	2200	2475
41-50	330	660	990	1320	1650	1980	2310	2640	2970
51-60	350	700	1050	1400	1750	2100	2450	2800	3150
>60	Systems must be designed by a qualified individual or professional engineer. Construction Permit Needed								

4. Available trench length (100 ft Max.): = 100 ft.

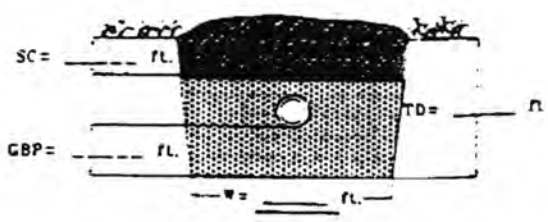
5. Divide needed ft² from line 3 by trench length available from line 4. 900 (line 3) ÷ 100 (line 4) = 9 ft. = answer line 5

6. Trench width that will be used: = 3ft EQ ft (5 ft. Max.) (2' using Infiltrator EQ-36)

7. To get Number of trenches divide line 5 by line 6: 9 (line 5) ÷ 3 (line 6) = 3 (line 7)



SC = soil cover
GBM = gravel below half-moon
GBP = gravel below pipe
TD = total depth
W = trench width



SETBACKS: Check the Boxes Below if the Required Setback from the Lateral Field Has Been Satisfied.

Distance From	Private Wells	Public Wells	Surface Water	Trench to Ground Water	Pressure Water Lines	Property Lines	Foundation Yours	Foundation Neighbor	All Other Setbacks
Field ( ) ft.	100 ☒	500 ☒	50 ☒	4 ☒	25 ☒	10 ☒	30 ☒	40 ☒	☒

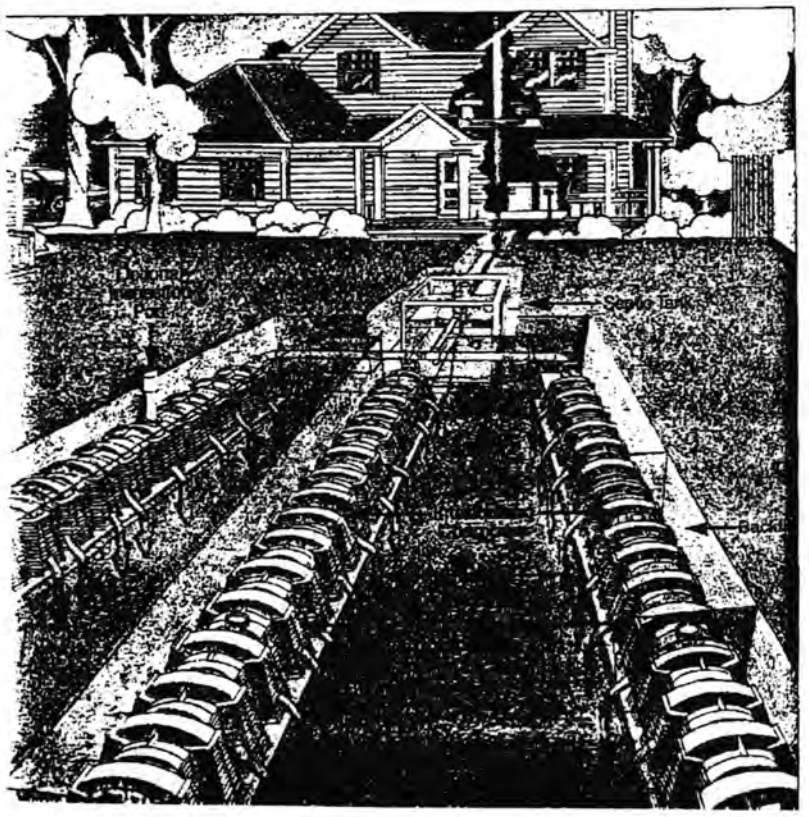
Equalizer 36 chambers are 38% more effective than a same-length 36" stone and pipe system.

The Equalizer 36 chamber is a direct replacement for old-fashioned stone and pipe leachfields installed in 3-foot wide trenches. You dig exactly the same length of trench as usual, then install Equalizer 36 chambers in less than half the time of a labor-intensive stone and pipe job. It's that simple.

System efficiency.
When you install the patented Equalizer 36 chambers, you actually get 38% more system in the same space! That's because the Equalizer 36 chamber has 38% more infiltrative capacity built in foot-per-foot than a conventional leachfield of the same size. That means more peace of mind for you, the homeowner, and the environment. The secret is in the engineered chamber design.

SideWinder® sidewall.
The Equalizer 36 chamber features the patented SideWinder sidewall. This unique design has over twice the leaching sidewall area below the invert than what exists in a same-length stone and pipe system. The chamber's louvers wind continuously around its sidewall, offering maximum infiltration.

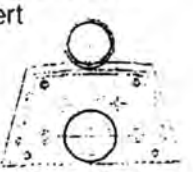

SideWinder Sidewall



The Equalizer 36 chamber also features a completely open chamber bottom which provides over twice the effective downward infiltration of a conventional system, where stone restricts the movement of effluent into the soil. Leaching chambers are a tested and proven technology with over 400,000 systems installed over the past 20 years.

The SideWinder sidewall and the open-bottom chamber work together to provide a leaching system that is 38% more efficient than a 3-foot conventional installation of the same length.

End plate options.
There are two Equalizer 36 end plates available to meet different system inlet designs: the raised invert end plate and the standard invert end plate. The raised end plate is most often used. Its invert is located 10.15" up from the bottom of the trench (for a typical 4" SDR 35 pipe). The standard end plate's invert is 5.4" off the ground and is ideal when the depth of the trench is restricted due to a high water table, rock, or some other limiting factor. An internal splash plate is built into each end plate design.


Raised Invert


Standard Invert

Polyolefin construction.
Infiltrator chambers are molded of PolyTuff™, a proprietary blend of polyolefin plastic that includes recycled resins and is formulated for optimum strength and chemical resistance. It's impervious to wastewater constituents and is stabilized to resist ultraviolet rays. Infiltrator chambers are manufactured using an exclusive patented process to assure consistent high quality. These combined factors make Infiltrator chambers the toughest, most reliable chambers in the industry.

AASHTO H-10 load rating.
Equalizer 36 chambers have been structurally tested by a registered professional engineer. The chambers are available with an AASHTO rating of H-10 (16,000 lb/axle with 12" of compacted cover) for typical septic use.

Nominal chamber specifications.

Size (W x L x H)	22" x 100" x 12"
Weight	33 lb
Storage	63 gal/8.5 ft³