



MINNEHAHA COUNTY ON-SITE WASTEWATER TREATMENT SITE EVALUATION WORKSHEET Form #1

Land Owner _____

Legal Description _____

Type of Structure (check one): Residence Commercial Industrial Accessory Building Other _____

If Residence:

- No. of bedrooms (include both planned and potential)
- Total sq. ft. of residence (finished and unfinished area)
- Sq. ft. of residence per bedroom
- Water Use Appliances (number of each appliance planned for house)
Automatic Washer Dishwasher Garbage Disposal
Hot Tub or Spa Water Softener Self Cleaning Humidifier in Furnace
- Type I or Type II house
Type I (sq. ft. of residence per bedroom is 800 or higher, or 4 or more water use appliances are planned)
Type II (sq.ft. of residence per bedroom is less than 800 or less than 4 water use appliances planned)

Existing Land Slope Percentage _____

Is site in Water Source Protection District yes no

Private well? yes no Depth of well casing _____

SOIL BORING

The locations of all percolation test holes and the soil boring hole shall be noted on the site plan on the reverse of the system design worksheet.

Date Hole Made _____ Method of Digging Hole _____

Soil Data From Test Hole:

Table with 3 columns: depth, inches; soil texture; soil color. Includes four rows of blank lines for data entry.

Bottom of boring at _____ feet.

Standing water table: Present in hole no yes, present at _____ inches of depth, _____ hours after boring.

Bedrock: Present in hole no yes, at _____ inches of depth

Mottled soil: Present in hole no yes, at _____ inches of depth

I, the undersigned, do affirm that I am a certified septic installer, that all the above information and the attached percolation test data is correct, and that the soil boring and perc test data is representative of the soils over the whole of the wastewater treatment site.

Installer Signature: _____ date _____

Installer Company: _____



PERCOLATION TEST LOG SHEET

Hole # **1** Date test hole was prepared _____

Depth of hole bottom _____ inches Diameter of hole _____ inches

Percolation test conducted by _____

Method of digging holes _____ Method of scratching sidewalls _____

Date/Time of initial water filling _____

Depth of pea gravel in hole bottom: _____ inches

TIME	INTERVAL (minutes)	WATER DEPTH	WATER DROP (fraction)	WATER DROP (decimal)	PERC RATE CALCULATION (time divided by drop in decimals)			
					Time) Drop (decimal)	÷ Perc Rate	
Begin					_____	_____	_____	A
End					_____	_____	_____	
Begin					_____	_____	_____	B
End					_____	_____	_____	
Begin					_____	_____	_____	C
End					_____	_____	_____	
Begin					_____	_____	_____	D
End					_____	_____	_____	
Begin					_____	_____	_____	E
End					_____	_____	_____	
Begin					_____	_____	_____	F
End					_____	_____	_____	
Begin					_____	_____	_____	G
End					_____	_____	_____	
Begin					_____	_____	_____	H
End					_____	_____	_____	

decimal conversions: 1/8 = 0.13 1/4 = 0.25 3/8 = 0.38 2 = 0.5 5/8 = 0.63 3/4 = 0.75 7/8 = 0.88

Ten Percent Calculation*

(No more than 10% difference between the largest and smallest readings when averaging to find perc. rate for hole.)

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">A, B, C</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of A, B, C</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of A, B, C</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	A, B, C	-))	Largest of A, B, C	x	0.10)	Largest of A, B, C				<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">B, C, D</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of B, C, D</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of B, C, D</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	B, C, D	-))	Largest of B, C, D	x	0.10)	Largest of B, C, D			
A, B, C	-))																						
Largest of A, B, C	x	0.10)																						
Largest of A, B, C																									
B, C, D	-))																						
Largest of B, C, D	x	0.10)																						
Largest of B, C, D																									
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">C, D, E</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of C, D, E</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of C, D, E</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	C, D, E	-))	Largest of C, D, E	x	0.10)	Largest of C, D, E				<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">D, E, F</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of D, E, F</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of D, E, F</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	D, E, F	-))	Largest of D, E, F	x	0.10)	Largest of D, E, F			
C, D, E	-))																						
Largest of C, D, E	x	0.10)																						
Largest of C, D, E																									
D, E, F	-))																						
Largest of D, E, F	x	0.10)																						
Largest of D, E, F																									
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">E, F, G</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of E, F, G</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of E, F, G</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	E, F, G	-))	Largest of E, F, G	x	0.10)	Largest of E, F, G				<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;">F, G, H</td> <td style="width: 5%; border: none;">-</td> <td style="width: 5%; border: none;">)</td> <td style="width: 5%; border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of F, G, H</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> <td style="border: none;">)</td> </tr> <tr> <td style="border: none;">Largest of F, G, H</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	F, G, H	-))	Largest of F, G, H	x	0.10)	Largest of F, G, H			
E, F, G	-))																						
Largest of E, F, G	x	0.10)																						
Largest of E, F, G																									
F, G, H	-))																						
Largest of F, G, H	x	0.10)																						
Largest of F, G, H																									

* If the top number in each set of boxes is larger than the bottom number then take another reading. When the top number is equal or smaller than the bottom number then average the last three readings to compute the average perc rate for the hole.

Average percolation rate for this hole = _____



PERCOLATION TEST LOG SHEET

Hole # **2** Date test hole was prepared _____

Depth of hole bottom _____ inches Diameter of hole _____ inches

Percolation test conducted by _____

Method of digging holes _____ Method of scratching sidewalls _____

Date/Time of initial water filling _____

Depth of pea gravel in hole bottom: _____ inches

TIME	INTERVAL (minutes)	WATER DEPTH	WATER DROP (fraction)	WATER DROP (decimal)	PERC RATE CALCULATION (time divided by drop in decimals)			
					Time) Drop (decimal)	÷ Perc Rate	
Begin								A
End								
Begin								B
End								
Begin								C
End								
Begin								D
End								
Begin								E
End								
Begin								F
End								
Begin								G
End								
Begin								H
End								

decimal conversions: 1/8 = 0.13 1/4 = 0.25 3/8 = 0.38 2 = 0.5 5/8 = 0.63 3/4 = 0.75 7/8 = 0.88

Ten Percent Calculation*

(No more than 10% difference between the largest and smallest readings when averaging to find perc. rate for hole.)

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">A, B, C</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of A, B, C</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of A, B, C</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of A, B, C</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	A, B, C	-	↗	Largest of A, B, C	x	0.10	Smallest of A, B, C	x	0.10	Largest of A, B, C	x	0.10	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">B, C, D</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of B, C, D</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of B, C, D</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of B, C, D</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	B, C, D	-	↗	Largest of B, C, D	x	0.10	Smallest of B, C, D	x	0.10	Largest of B, C, D	x	0.10
A, B, C	-	↗																							
Largest of A, B, C	x	0.10																							
Smallest of A, B, C	x	0.10																							
Largest of A, B, C	x	0.10																							
B, C, D	-	↗																							
Largest of B, C, D	x	0.10																							
Smallest of B, C, D	x	0.10																							
Largest of B, C, D	x	0.10																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">C, D, E</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of C, D, E</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of C, D, E</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of C, D, E</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	C, D, E	-	↗	Largest of C, D, E	x	0.10	Smallest of C, D, E	x	0.10	Largest of C, D, E	x	0.10	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">D, E, F</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of D, E, F</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of D, E, F</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of D, E, F</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	D, E, F	-	↗	Largest of D, E, F	x	0.10	Smallest of D, E, F	x	0.10	Largest of D, E, F	x	0.10
C, D, E	-	↗																							
Largest of C, D, E	x	0.10																							
Smallest of C, D, E	x	0.10																							
Largest of C, D, E	x	0.10																							
D, E, F	-	↗																							
Largest of D, E, F	x	0.10																							
Smallest of D, E, F	x	0.10																							
Largest of D, E, F	x	0.10																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">E, F, G</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of E, F, G</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of E, F, G</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of E, F, G</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	E, F, G	-	↗	Largest of E, F, G	x	0.10	Smallest of E, F, G	x	0.10	Largest of E, F, G	x	0.10	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">F, G, H</td> <td style="border: none;">-</td> <td style="border: none;">↗</td> </tr> <tr> <td style="border: none;">Largest of F, G, H</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Smallest of F, G, H</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> <tr> <td style="border: none;">Largest of F, G, H</td> <td style="border: none;">x</td> <td style="border: none;">0.10</td> </tr> </table>	F, G, H	-	↗	Largest of F, G, H	x	0.10	Smallest of F, G, H	x	0.10	Largest of F, G, H	x	0.10
E, F, G	-	↗																							
Largest of E, F, G	x	0.10																							
Smallest of E, F, G	x	0.10																							
Largest of E, F, G	x	0.10																							
F, G, H	-	↗																							
Largest of F, G, H	x	0.10																							
Smallest of F, G, H	x	0.10																							
Largest of F, G, H	x	0.10																							

* If the top number in each set of boxes is larger than the bottom number then take another reading. When the top number is equal or smaller than the bottom number then average the last three readings to compute the average perc rate for the hole.

Average percolation rate for this hole = _____



PERCOLATION TEST LOG SHEET

Hole # **3** Date test hole was prepared _____

Depth of hole bottom _____ inches Diameter of hole _____ inches

Percolation test conducted by _____

Method of digging holes _____ Method of scratching sidewalls _____

Date/Time of initial water filling _____

Depth of pea gravel in hole bottom: _____ inches

TIME	INTERVAL (minutes)	WATER DEPTH	WATER DROP (fraction)	WATER DROP (decimal)	PERC RATE CALCULATION (time divided by drop in decimals)			
					Time) Drop (decimal)	÷ Perc Rate	
Begin					_____	_____	_____	A
End					_____	_____	_____	
Begin					_____	_____	_____	B
End					_____	_____	_____	
Begin					_____	_____	_____	C
End					_____	_____	_____	
Begin					_____	_____	_____	D
End					_____	_____	_____	
Begin					_____	_____	_____	E
End					_____	_____	_____	
Begin					_____	_____	_____	F
End					_____	_____	_____	
Begin					_____	_____	_____	G
End					_____	_____	_____	
Begin					_____	_____	_____	H
End					_____	_____	_____	

decimal conversions: 1/8 = 0.13 1/4 = 0.25 3/8 = 0.38 2 = 0.5 5/8 = 0.63 3/4 = 0.75 7/8 = 0.88

Ten Percent Calculation*

(No more than 10% difference between the largest and smallest readings when averaging to find perc. rate for hole.)

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">A, B, C</td> <td style="width: 50%; border-bottom: 1px solid black;">-</td> <td style="width: 50%; border-bottom: 1px solid black;">Largest of A, B, C</td> <td style="width: 50%; border-bottom: 1px solid black;">Smallest of A, B, C</td> <td style="width: 50%; border-bottom: 1px solid black;">x</td> <td style="width: 50%; border-bottom: 1px solid black;">0.10</td> <td style="width: 50%; border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of A, B, C</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;">C, D, E</td> <td style="border-bottom: 1px solid black;">-</td> <td style="border-bottom: 1px solid black;">Largest of C, D, E</td> <td style="border-bottom: 1px solid black;">Smallest of C, D, E</td> <td style="border-bottom: 1px solid black;">x</td> <td style="border-bottom: 1px solid black;">0.10</td> <td style="border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of C, D, E</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;">E, F, G</td> <td style="border-bottom: 1px solid black;">-</td> <td style="border-bottom: 1px solid black;">Largest of E, F, G</td> <td style="border-bottom: 1px solid black;">Smallest of E, F, G</td> <td style="border-bottom: 1px solid black;">x</td> <td style="border-bottom: 1px solid black;">0.10</td> <td style="border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of E, F, G</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	A, B, C	-	Largest of A, B, C	Smallest of A, B, C	x	0.10	÷	Largest of A, B, C							C, D, E	-	Largest of C, D, E	Smallest of C, D, E	x	0.10	÷	Largest of C, D, E							E, F, G	-	Largest of E, F, G	Smallest of E, F, G	x	0.10	÷	Largest of E, F, G							<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">B, C, D</td> <td style="width: 50%; border-bottom: 1px solid black;">-</td> <td style="width: 50%; border-bottom: 1px solid black;">Largest of B, C, D</td> <td style="width: 50%; border-bottom: 1px solid black;">Smallest of B, C, D</td> <td style="width: 50%; border-bottom: 1px solid black;">x</td> <td style="width: 50%; border-bottom: 1px solid black;">0.10</td> <td style="width: 50%; border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of B, C, D</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;">D, E, F</td> <td style="border-bottom: 1px solid black;">-</td> <td style="border-bottom: 1px solid black;">Largest of D, E, F</td> <td style="border-bottom: 1px solid black;">Smallest of D, E, F</td> <td style="border-bottom: 1px solid black;">x</td> <td style="border-bottom: 1px solid black;">0.10</td> <td style="border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of D, E, F</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;">F, G, H</td> <td style="border-bottom: 1px solid black;">-</td> <td style="border-bottom: 1px solid black;">Largest of F, G, H</td> <td style="border-bottom: 1px solid black;">Smallest of F, G, H</td> <td style="border-bottom: 1px solid black;">x</td> <td style="border-bottom: 1px solid black;">0.10</td> <td style="border-bottom: 1px solid black;">÷</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Largest of F, G, H</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	B, C, D	-	Largest of B, C, D	Smallest of B, C, D	x	0.10	÷	Largest of B, C, D							D, E, F	-	Largest of D, E, F	Smallest of D, E, F	x	0.10	÷	Largest of D, E, F							F, G, H	-	Largest of F, G, H	Smallest of F, G, H	x	0.10	÷	Largest of F, G, H						
A, B, C	-	Largest of A, B, C	Smallest of A, B, C	x	0.10	÷																																																																															
Largest of A, B, C																																																																																					
C, D, E	-	Largest of C, D, E	Smallest of C, D, E	x	0.10	÷																																																																															
Largest of C, D, E																																																																																					
E, F, G	-	Largest of E, F, G	Smallest of E, F, G	x	0.10	÷																																																																															
Largest of E, F, G																																																																																					
B, C, D	-	Largest of B, C, D	Smallest of B, C, D	x	0.10	÷																																																																															
Largest of B, C, D																																																																																					
D, E, F	-	Largest of D, E, F	Smallest of D, E, F	x	0.10	÷																																																																															
Largest of D, E, F																																																																																					
F, G, H	-	Largest of F, G, H	Smallest of F, G, H	x	0.10	÷																																																																															
Largest of F, G, H																																																																																					

* If the top number in each set of boxes is larger than the bottom number then take another reading. When the top number is equal or smaller than the bottom number then average the last three readings to compute the average perc rate for the hole.

Average percolation rate for this hole = _____

Average Site Percolation Rate (average the readings from all three holes).

(_____ + _____ + _____) ÷ 3 = _____



MINNEHAHA COUNTY ON-SITE WASTEWATER TREATMENT SYSTEM DESIGN WORKSHEET

Form #2

WASTEWATER FLOW

A. Estimated _____ gpd (see Table 4-1)
 measured _____ x 1.5 = _____ gpd

SEPTIC TANK VOLUME

B. _____ gallons (see Table 5-1)

SOILS (site evaluation data)

C. Depth to restricting layer = _____ feet
 D. Maximum depth of system (C-4 ft. = _____ feet)
 E. Percolation rate _____ mpi
 F. Soil sizing factor _____ sq ft/gpd (see Table 7-1)

TRENCH BOTTOM AREA

G. For trenches with 6 inches of rock below the pipe:
 $A \times F = ____ \times ____ = ____ \text{ sq ft of bottom area, or}$
 H. For trenches with 12 inches of rock below the pipe:
 $A \times F \times 0.8 = ____ \times ____ \times 0.8 = ____ \text{ sq ft, or}$
 I. For trenches with 18 inches of rock below the pipe:
 $A \times F \times 0.66 = ____ \times ____ \times 0.66 = ____ \text{ sq ft, or}$
 J. For trenches with 24 inches of rock below the pipe:
 $A \times F \times 0.6 = ____ \times ____ \times 0.6 = ____ \text{ sq ft}$

DISTRIBUTION

(Check one based on slope)
 Bed _____ (less than 6% slope)
 Trenches
 _____ Interconnecting pipes (level to slightly sloping)
 _____ Drop boxes (any slope)
 _____ Distribution box (level to slightly sloping)

TRENCH LENGTH

K. Select trench width = _____ ft
 L. Divide bottom area by trench width (G,H,I, or K)
 _____) _____ = _____ lineal feet

TRENCH SPACING

M. Distance of undisturbed soil between trenches (min. of 6 ft)
 _____ feet

Table 4-1
Estimated Residential Wastewater Flows in Gallons per day (gpd)

Number of Bedrooms	Type I House	Type II House
2	300	240
3	450	360
4	600	480
5	750	600
6	900	720
7	1050	840
8	1200	960

Table 5-1
Minimum Septic Tank Capacities (in gallons)

Number of Bedrooms	Minimum Liquid Capacity	Minimum Liquid Capacity w/ garbage disposal
2	1000	1200
3	1000	1200
4	1250	1500
5	1500	1800
6	1750	2100
7	2000	2400
8	2250	2700

Table 7-1
Soil Characteristics and Sizing Factors for Absorption Systems

Perc rate in m.p.i.	Soil texture	Sq.Ft. per gallons per day
1-5.9	Sand	see section 7.02
6-15.9	Sandy Loam	1.27
16-30.9	Loam	1.67
31-45.9	Silt Loam	2.00
46-55.9	Clay Loam	2.50
56-60	Clay	see section 7.03

SITE PLAN (Use other side)

1. Show any lakes, streams, wetlands, etc.
2. Show pertinent property boundaries, right-of-way, easements
3. Show location of house, garage, driveway, and all other improvements, existing or proposed
4. Show location and layout of sewage treatment system
5. Show location of water supply well(s)
6. Dimension all set backs and separation distances
7. Show locations of percolation holes and soil data hole



MINNEHAHA
COUNTY

Map of System Layout

Include a map of your system or draw your own map.

A large rectangular area filled with a grid of small squares, intended for drawing a map or system layout. The grid is composed of dashed lines.