

# SSDS Location Table 1

Technical Standards Section II  
pg. 14-15

Connecticut Department of Public Health  
Keeping Connecticut Healthy


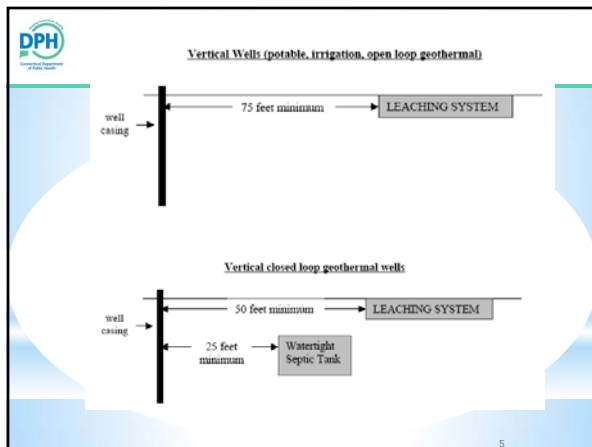
**Table 1** pg. 14-15

- \*Distances required between items and the subsurface sewage disposal system
- \*Piping associated with the sewage disposal system are either exempt from these requirements or have reduced setback distance requirements
- \*Measured horizontally except for non-vertical geo-exchange bore holes

Item	Separating Distance	Special Provisions
A. Water supply well (potable, open loop geothermal, irrigation, spring with required withdrawal rate in gallons per minute (GPM): 0-10 GPM 10 to 50 GPM 50 GPM	75 150 200	Distance from a water supply well to a leaching system shall be doubled if the receiving soil percolation rate is faster than 15 minutes per inch and the bottom of the leaching system is less than 8 feet above bedrock.
B. Building sewer	30	See Item G for buildings with groundwater control drains.
C. Open watercourse	50	For lots in existence prior to 6/16/82 that are not on a public water supply watershed, the distance shall be reduced to not less than 25 feet. In coastal areas, the Coastal Jurisdiction Line shall be considered the open watercourse limit, unless site specific information on high tide elevation on a property establishes the open watercourse limit.
D. Public water supply reservoir	100	
E. Solid piping for the conveyance of surface or groundwater drainage	25	Distance to tight pipe (See Table 1) shall be reduced to 5 feet as long as the pipe excavation is not backfilled with fine grained material (FDM).
F. Storm water structure (e.g., catch basins, manholes)	25	Distance to sewage tank shall be reduced to 10 feet if storm water structure is watertight and constructed with rubber joint seal and watertight pipe connection such as (ASTM C575). Storm water structures shall not be designed to collect groundwater (See Item G).
G. Groundwater drain (e.g., curtain, foundation, sump) Up-gradient or on side Down-gradient	25 25 <sup>1</sup>	No drain shall be constructed near a sewage system for the purpose of collecting partly treated sewage regardless of the distance. 1. Distance to sewage tank shall be reduced to 25 feet if tank is verified to be watertight.
H. Storm water infiltration system (SWIS) Single-family residential building lots Other lots (e.g., commercial, multi-family)	50 <sup>2</sup> 25 <sup>1,3</sup>	Distance shall be reduced to 25 feet to sewage tank. 1. Distance shall be reduced to 25 feet to a leaching system if M.L.S.S is not applicable or the SWIS is not up-gradient or down-gradient. Distances may be further reduced to 10 feet for minor SWIS (e.g., rain gardens) with the approval from the DPH if demonstrated that the leaching system or sewage tank shall not be adversely impacted. 2. Distance shall be reduced to 50 feet to a leaching system if M.L.S.S is not applicable or the SWIS is not up-gradient or down-gradient, as with the approval from the DPH if demonstrated that the leaching system or sewage tank shall not be adversely impacted. 3. The DPH may require increased distances or an engineered assessment on the operation of the leaching system if localized groundwater intruding in a concern.
I. Top of embankment (i.e., fill package around perimeter of leaching system)	30	See Figure 13. Distances do not apply to sewer tank.
J. Property line Up-gradient and on sides Down-gradient	15 <sup>1</sup> 25 <sup>1</sup>	Distance to sewage tank and remote leaching area shall be reduced to 10 feet. 1. Distance shall be reduced to 10 feet if the top of the leaching system is below original grade, gradient rights from affected property owner are secured, or retaining wall with an affidavit (See Section VII A for retaining wall provisions). 2. Separating distance between the leaching system and down-gradient property line shall be reduced to 15 feet if M.L.S.S is not applicable or on the groundwater table line, further reduction may be allowed as stated in Item A if other condition exist.
K. Water Piping Pressure (e.g., potable, irrigation) Water supply system	10 <sup>1</sup> 25 <sup>1</sup>	1. Water line trench excavations less than 25 feet from leaching system shall not be backfilled with FDM. 2. Distance between water service pipe and sewage tank shall be reduced to 25 feet if tank is verified to be watertight.
L. Below ground remaining roof	25	See Item G for down-gradient pipes with groundwater control drains.
M. Above ground remaining roof	30	Exclude but not exempt on deck.
N. Accessory structure	30	Distance to structure within 100 feet, first and second findings shall be reduced to 5 feet. See Item G of drain provided.

**Table 1**

- \*Item A - water supply wells (potable, open loop geothermal, irrigation, spring)
- \*75, 150 or 200 feet depending on withdrawal rate of well
- \*Doubled separating distances only applies to leaching system not to septic tanks

**DPH Table 1**

- \*Item B: Building served
- \*10 feet from buildings not equipped with ground water control drains (foundation drain)
- \*Includes sewage tanks and leaching system

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**DPH Table 1**

- \*Item C: Open watercourse
  - \*50 feet
  - \*Reduced to 25 feet if lot was created prior to 8/16/82 and not located on a public water supply watershed
- \*Item D: Public water supply reservoir
  - \*100 feet

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**DPH Table 1**

- \*Item E: Solid pipe for the conveyance of surface or groundwater drainage
- \*25 feet
- \*Pipe can be installed as close as 5 feet if tight pipe with rubber gasketed joints selected from Table 3 (not backfilled with free draining material)

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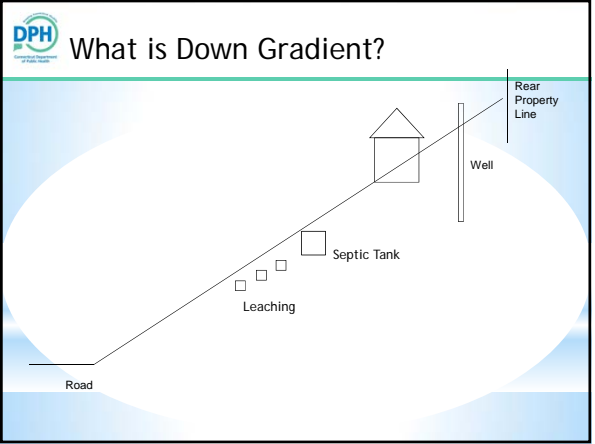
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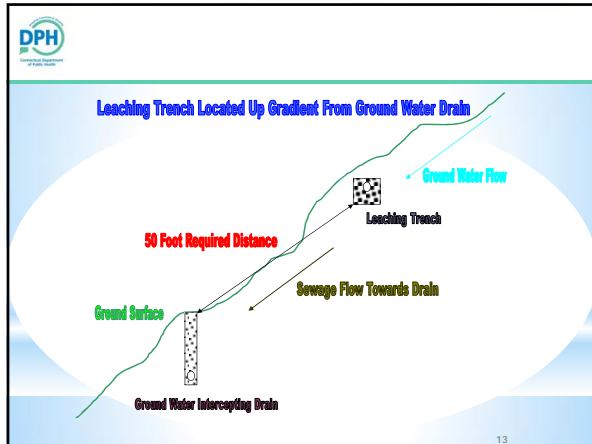
- \*Item F: Storm water structure (e.g. catch basins)
- \*25 feet
- \*Distance shall be reduced to 10 feet to sewage tank if watertight and constructed with rubber joint seals (e.g. ASTM C 923)
- \*Shall not be designed to collect groundwater

**DPH Table 1**

- ❖ Item G: Groundwater drains (foundation, footing, curtain)
  - 25 feet up gradient or on side
  - 50 feet down gradient

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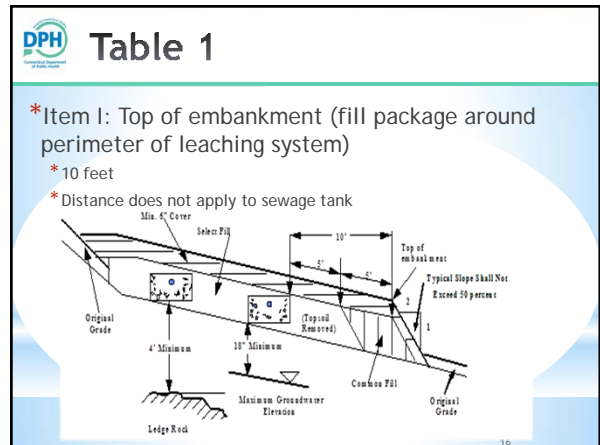


**Table 1**

- \*Item H: Storm water infiltration systems (SWIS) (e.g., infiltration, retention)
- \*Sewage tanks reduced to 25 feet
- \*Single family residential building lots
  - \* 50 feet but can be reduced to 25 feet if MLSS not applicable or not located up or down gradient
  - \* 10 feet for minor storm water infiltration systems (rain gardens)

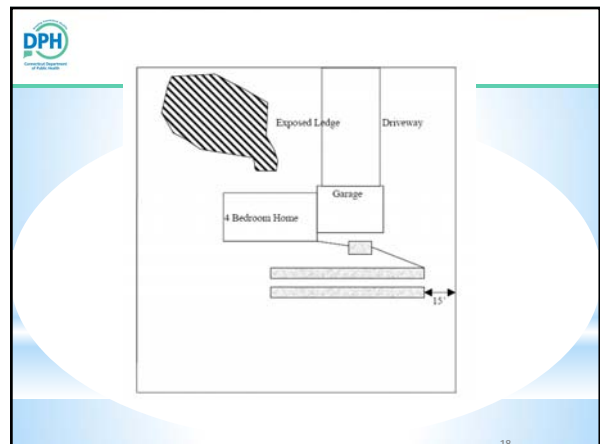
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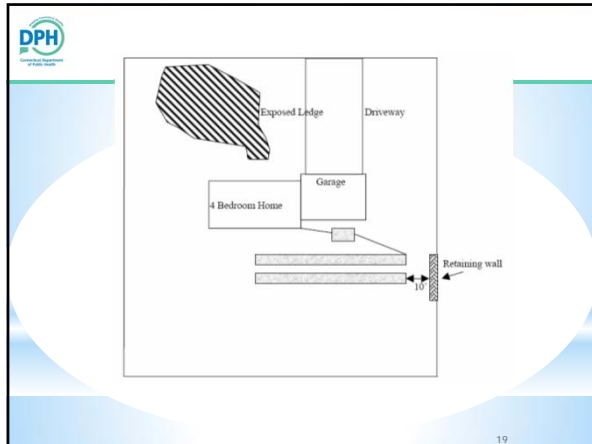
- \*Item H: SWIS - Other lots (e.g., commercial, multi-family)
  - \* 75 feet but can be reduced to 50 feet if MLSS not applicable or not located up or down gradient
  - \* Local director of health may further increase distances if localized groundwater mounding is a concern



**Table 1**

- \*Item J: Property Line
  - \* 15 feet to up gradient and side property lines
  - \* Reduced to 10 feet if leaching system is below original grade or grading rights from affected property owner are secured or retaining walls are utilized (when leaching system in select fill)
  - \* 25 feet to down gradient property lines when MLSS is applicable





**DPH Table 1**

- \*Item K: Water piping (e.g., potable or irrigation)
  - \*10 feet (no backfilling with free draining material)
  - \*75 feet to water supply suction pipe (25 feet to sewage tank if verified watertight)
- \*Item L: Below ground swimming pool
  - \*25 feet (if pool equipped with subsurface drain and is down gradient see item G)
- \*Item M: Above ground pool and hot tubs (except on decks)
  - \*10 feet

**DPH Table 1**

- \*Item N: Accessory structure
  - \*10 feet
  - \*No full frost wall footing reduced to 5 feet
- \*Item O: Utility service trench
  - \*5 feet (not backfilled with free draining material)
- \*Item P: Buried fuel tanks
  - \*25 feet unless not located down gradient then 10 feet is acceptable

**DPH Table 1**

- \*Item Q: Water treatment wastewater (WTW) dispersal structure
  - \*10 feet to sewage tank
  - \*25 feet if small discharge system (<150 GPD)
  - \*50 feet if medium discharge system (150-500 GPD)
  - \*75 feet if large discharge system (>500 GPD)
  - \*Distances can be reduced to 10 feet if MLSS is not applicable or not located up or down gradient

**DPH Table 1**

**DPH Table 1**

- \*Item R: (Closed loop Geothermal Systems)
  - \*50 feet to bore hole & trench unless not located down gradient then 25 feet is acceptable
  - \*10 feet to geothermal piping to bore hole / trench
  - \*Distance to sewage tank shall be reduced to 25 feet
  - \*Geothermal piping excavations shall not be backfilled with free draining material if located less than 25 feet to sewage disposal system

## DPH Vertical Closed Loop Systems

Heat Pump

Water Flow

Depth 150-200 ft

Vertical Loop System

## DPH Horizontal Closed Loop Systems

## DPH Open Loop Systems

Open Loop Systems

Well

Leaching System

## DPH Table 1

- \*Item S: Grade cuts or soil disturbance down gradient of leaching system
- \*50 feet where bleed-out from cut is a concern
- \*Reduction allowed if design engineer demonstrates that the cut/soil disturbance preserves the leaching system's receiving soil

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## DPH Section II Location of Septic System

Note: Drawing not to scale

Property line

Side Property line

Groundwater Drain

Footing Drain

House Building served

Deck

Accessory Structure

Septic Tank

Leaching System

Well

Watercourse

Open Watercourse

Above Ground Pool

Pool

Tight Pipe (5' Min. from system)

Surface or GW drain piping

25' Min.

75'

10' Min.

50' Min. (New Lot)

5' Min.

10' Min.

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## DPH Record Plan or As-built

- \*After system installed a record plan or as-built drawing must be prepared by the installer unless Local Health requires an engineered as-built
- \*Building sewer exit location
- \*Tank cleanouts
- \*Distribution boxes and access ports
- \*Leaching row ends

AS BUILT

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**DPH As-Built**

- \* Locates the system and components as installed
- \* Could differ slightly from the plan
- \* Must be accurate
- \* Scale Plan
  - \* Drawn to a particular scale, i.e., 1" = 10'
- \* Tie Plan
  - \* Uses fixed points to identify a distance

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**SEPTIC SYSTEM AS-BUILT**

Distances:  
 AC=42'  
 BC=20'  
 AD=48'  
 BD=25'

3-45' LONG x 2' WIDE x 2' DEEP LEACHING TRENCHES WITH 100% EXPANSION BETWEEN TRENCHES.

Tie Plan

Fixed points

ELEVATIONS	
SILL	=130.37
BLDG OUT	=127.00
SEPTIC TANK IN	=126.69
SEPTIC TANK OUT	=126.49
D-BOX IN	=125.57
D-BOX OUT	=125.39
TRENCH 1 BEGIN	=125.30
TRENCH 3 BEGIN	=125.30
TRENCH 1 END	=125.04
TRENCH 2 END	=125.04
TRENCH 3 END	=125.04

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Distances in feet:  
 AC=42  
 BC=20  
 AD=48  
 BD=25

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**DPH AS-BUILT**

ROAD

WELL

100 ft

(Treasure Map)

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**DPH Plan Adherence**

- \* The licensed installer is responsible for installing the system in accordance with the approved plan
- \* Any deviations from approved plan due to unforeseen site conditions must be reported by the licensed installer to the local health department and, if applicable, the design engineer

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**DPH System Abandonment**

- \* Eliminate danger of system components from collapsing
- \* Property owner is responsible
- \* Proper abandonment procedure
  - \* Pump
  - \* Crush
  - \* Backfill

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## Benchmarks



- \* A point of reference for a measurement
- \* Usually set by the engineer in a permanent location such as the top of a catch basin or building foundation (nail in tree is not recommended)
- \* Plans prepared by a Professional Engineer must have vertical and horizontal controls
- \* Field staking is acceptable
- \* Plans must have accurate topography

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The following pictures (and a few others in the presentation) have been provided by Andrew Colman of Wastewater Services.



An extensive photo gallery can be found on their website.

<http://www.wastewaterllc.com>



