



Williamson County
Department of Sewage Disposal Management

Soil Pedon Description Form

Project Title: _____

Date of Evaluation: _____

Soil Consultant (Evaluator): _____

Map/Parcel (GIS#): _____

Soil Consultant Signature: _____

Staff QC (Evaluator): _____

Pit Number: _____

Location (Grid Point/Grid Box Ctr/N-E): _____

MLRA (Circle one): 122 or 123

Soil Map Unit (Series): _____

Parent Material: _____

Particle Size Control Section: _____

Depth to Groundwater: _____

Free, Seasonal High, Perched (circle one)

Slope (%): _____

Notes (landscape/geomorphic component, etc): _____

	Horizon	Depth (inches)	Bound. Distinct.	Color (moist)	Soil Texture	Soil Structure			Consistence (moist)	Redox			Roots		Soil Horizon Notes
						grade	size	shape		Abund.	Type	Color	Abund.	Size	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

This box is reserved for WCDSDM office use only.

This Soil Pedon Description Form has been reviewed for completeness and accuracy; and is hereby by:

Approved / Disapproved (circle one)

Assigned Drip hydraulic loading rate associated with this pit profile description: _____ gpd / ft² (per Table S39-2)

Reason for disapproval (if applicable): _____ () This soil unit does not qualify for Drip system use (check if applicable)

Staff soil scientist (reviewed by): _____

Signature: _____

Date: _____



Williamson County
Department of Sewage Disposal Management
Instructions & Other Miscellaneous Information

Soil Pedon Description Form

Refer to *Section 39, Subsection A* of the current Williamson County *Regulations Governing On-Site Sewage Disposal Systems* for all detailed information regarding the site and soil requirements for Drip systems in Williamson County.

- Design and installation of Drip systems shall be based on the most restrictive naturally occurring soil horizon to a depth of 20-inches.
- An Extra-High Intensity soil map shall be required for all Drip systems.
- Profile descriptions establishing the texture and structure (*i.e.* , grade and shape) shall be required for each mapped soil unit considered for Drip system use.
- Each soil pit evaluation shall be conducted by the soil consultant responsible for the Extra-High Intensity soil map & shall be done under the direct on-site supervision of a Department staff soil scientist.
- The soil profile shall be described to a depth of thirty-six (36) inches or to rock or fragipan, whichever is shallower.
- There shall be a minimum of two (2) pits per acre, with at least one pit in any soil unit intended for potential use.
- Prior to excavation, the exact location of each individual soil pit shall be agreed upon by both the private soil consultant & the Department staff soil scientist.
- The size of the soil pit shall be three (3) feet wide, three (3) feet deep and a maximum of five (5) feet long.
- Once the soil pit evaluation is completed, the pit shall be carefully backfilled with the excavated spoil material so as to minimize disturbance of the site.
- The private soil consultant shall accurately plot the location of each soil pit on a copy of the approved soil map and shall label each pit appropriately.
- The soil pedon descriptions of each pit shall be logged on to the page 1 of this form.review and approval.
- A separate form shall be used for each soil pit, shall be filled out in its entirety and shall be submitted to the Department for review and approval.
- The Department staff soil scientist shall review each individual pit profile description form for completeness and accuracy; and approve or disapprove it. If found unsatisfactory, it will be returned to the private soil consultant for correction and re-submittal.
- The Department staff soil scientist shall evaluate & interpret the soil pedon data and then assign a corresponding hydraulic loading rate for that associated soil unit or denote that the soil unit does not qualify for Drip system use. The private soil consultant shall not assign the corresponding hydraulic loading rate on the pit profile description form.
- Soil pit profile description forms are not valid for system design purposes unless they have been approved by the Department.
- Soil pit profile description forms shall have an expiration date effective three (3) years from their approval date.
- Soils with horizons containing chroma 2 (or less) redoximorphic depletions due to wetness < 24 inches from the surface shall not be considered suitable for drip dispersal in W.C.
- Slope classes for Drip systems: 0-9%; 10-20%; 20-30%; 30-35% >35%; Slopes >35% shall be considered unsuitable for Drip systems in W.C.
- For sites with slopes >25% percent & up to 35%, a special investigation shall be conducted to determine: depth to rock, kind of rock & particle size class designation to a depth of 6-ft or to hard rock, whichever is shallower.
- For all sites with slopes >25% percent & up to 35%, a geotechnical engineer shall evaluate the site, identify the location, character, & extent of any slippage soil areas present, and prepare a report outlining any special design recommendations for proper drainage and construction of the Drip system to ensure slope stability.

Legend (of abbreviations shown on the front of this form): MLRA = Major Land Resource Area

QC = Quality Control

Bound. Distinct. = Boundary Distinctness

Abund. = Abundance

NOTE: All standard abbreviations used in filling out this form shall comply with the latest version of the *Field Book for Describing and Sampling Soils* (Soil Survey Staff, USDA NRCS)

WCDSMD accepts only the original *Soil Pedon Description Form* with color Williamson County seal & original signatures. No photocopies, e-mailed copies nor faxed copies will be accepted.