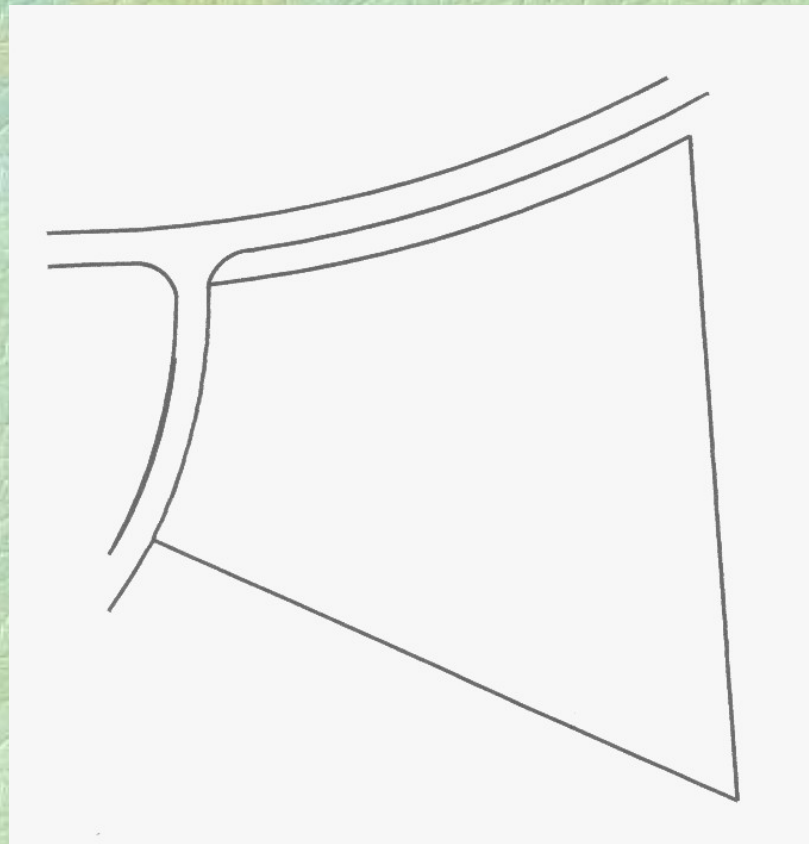
SEPTOLOGY 101

Preparing a property for site evaluation. Things to consider.

First is the property outline

First, the property boundaries are looked at. This property is 2.44 acres. Initially this may seem like a parcel with plenty of room for the septic system.



Next, we consider the property contours and slopes.

Walking the property will show the “lay of the land”. How the site is contoured tells a lot about its drainage.

Property topography is evaluated.

The lot **topography** is one of the most important factors for drainage. Topography is evaluated for:

- **Slope/landform and position**
- **Drainage**
- **Setbacks to waterways**

Remove the well and neighboring all neighboring wells.

Take out all the wells which encroach onto the property. Now the Property begins to get smaller.

Eliminate streams, drainage ways and ponds. Keep a setback.

This drainage swale running thru the property will collect water from the higher ground. We don't want a septic system here.

Avoid swales water moves from the higher areas to lower ground.

This worked up field demonstrates water saturating a swale. This may not be noticeable if tall grass covers this area.

Avoid!

Don’t be fooled by a dry swale.

On a nice day this swale may not appear to be too much of a concern.

After a rain things may be different!

“And a river runs thru it.”

This is what the swale looks like after a rain.

Effects of poor drainage on the septic system.

Wet conditions limit the functioning, treatment and disposal of the wastewater.

Other drainage indications.

Pay attention to what Mother Nature tells us.

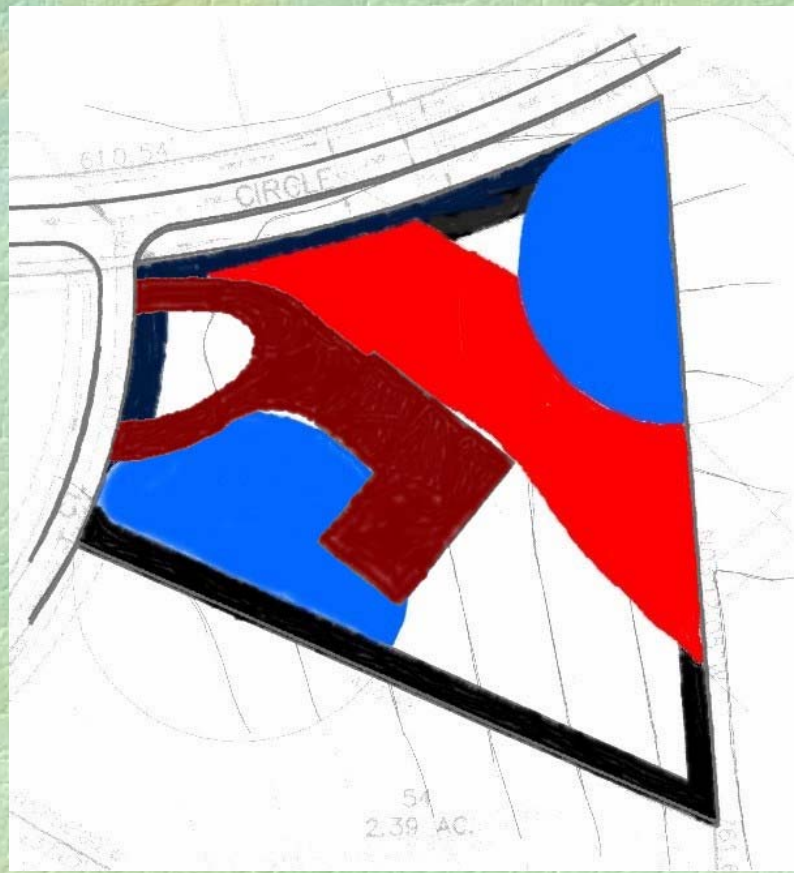
Other conditions are evaluated which indicate drainage and general site suitability. These ant hills are found only in ***wet*** areas.

Native vegetation gives a tip.

Native Vegetation can tell a lot about the drainage conditions of the property. These sedge LOVE water.

Now, add the building envelope.

The final bite out of the property to determine what is really available, is the plan the owner wants to develop. What started out seeming to be a lot of room is now just a corner!



Now, the soil Evaluation.

The soil test pits provided are evaluated for the following:

- Soil texture and color
- Porosity
- Depth and overall drainage capability.

Soil colors are important in the evaluation.

Soil color, texture, and structure will tell much about the drainage and the sewage treatment capability of the site.

Close up of the soil shows the soil e structure and pore development.

Look at the soil up close. The better drained soils have a well developed system of pores which allow water to pass thru.

Tools of the trade.

This Munsell soil color book helps to classify and record soil colors and determine drainage conditions.

Soil colors are a good drainage indicator.

In general, the gray, darker, dull colored soils are more poorly drained.

The richer brown colors are usually better drained soils.

Soil depth is considered.

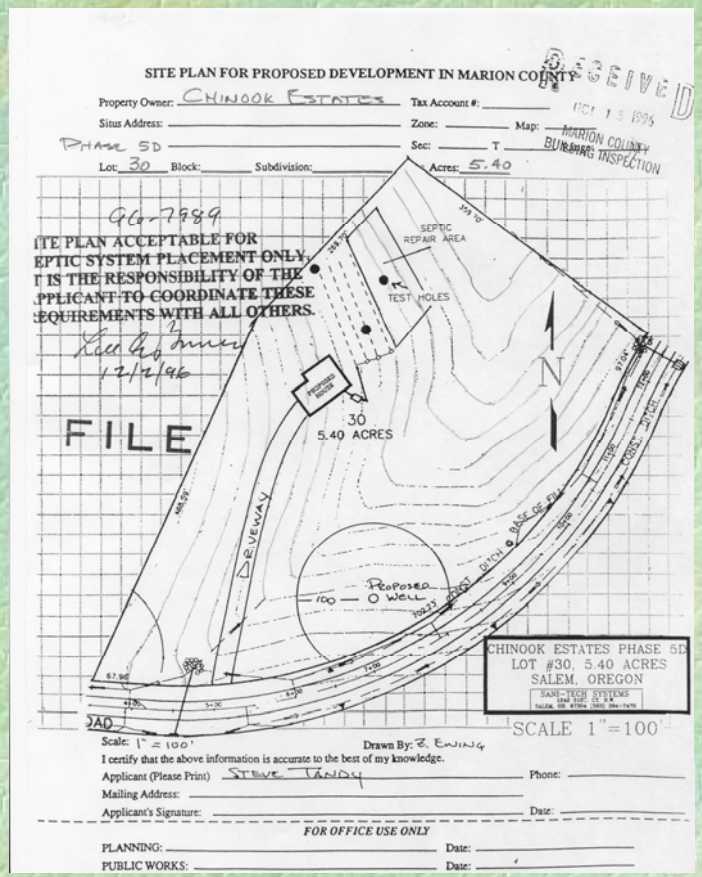
To approve a site for a standard drainfield installation, a minimum of 30” of “effective soil depth” is required. This depth increases with greater slope.

Septic system installation. Do we think it will fit?

Guessing whether there is enough space for the system is not good planning. If there is a question if it will fit or the type of system that will fit, stake it out.

Now, we record what's been approved.

After the test holes have been evaluated, system layout (if required) approved, an accurate record of the plan must be accurately recorded. This file may not be reopened for years.


SITE PLAN FOR PROPOSED DEVELOPMENT IN MARION COUNTY

Property Owner: CHINOOK ESTATES Tax Account #:

Situs Address: Zone: Map:

PHASE 5D Sec: T

Lot: 30 Block: Subdivision: Acres: 5.40

RECEIVED OCT 15 1996 MARION COUNTY BUILDING INSPECTION

GG-7989

SITE PLAN ACCEPTABLE FOR SEPTIC SYSTEM PLACEMENT ONLY. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THESE REQUIREMENTS WITH ALL OTHERS.

12/2/96

FILE

SEPTIC REPAIR AREA

TEST HOLES

PROPOSED HOUSE

30

5.40 ACRES

N

DRIVEWAY

PROPOSED O WELL

CHINOOK ESTATES PHASE 5D
LOT #30, 5.40 ACRES
SALEM, OREGON
SANI-TECH SYSTEMS

SCALE 1"=100'

Scale: 1" = 100' Drawn By: Z. EWING

I certify that the above information is accurate to the best of my knowledge.

Applicant (Please Print) STEVE TANDY Phone:

Mailing Address:

Applicant's Signature: Date:

FOR OFFICE USE ONLY

PLANNING: Date:

PUBLIC WORKS: Date: