



## Environmental Health Division

Community Development Department  
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# Onsite Wastewater Permitting Process

Update: April 28, 2022

Permitting onsite wastewater systems for new construction is a two-step process, beginning with a Site and Soils Evaluation and concluding with an Onsite Wastewater System Construction Permit. Each of these two steps is tracked by Environmental Health with a separate permit number.

Permitting repairs made to onsite wastewater systems is a one-step process, whereby the Site and Soils Evaluation Permit and Construction Permit are combined and tracked by Environmental Health with a single, combined permit number.

## Part 1. Site and Soil Evaluation

**Site evaluations are required for approval of all parcel and subdivision maps and for construction of on-site wastewater systems and system repairs.**

### A. Application

Site Evaluation applications can only be accepted when the application is complete and includes the following information:

- All portions of the application form are completed and legible
- Dimensional site plan that includes location of soil test holes in relationship to property boundaries and landmarks as necessary in accordance with plot plan checklist (see attached).
- Signature of the applicant or authorized agent
- Fees as specified in county code

### B. Internal Routing Review

The application and site plan are routed through the Planning Division and the Public Works Department in an internal review process that generally takes 4-6 weeks.

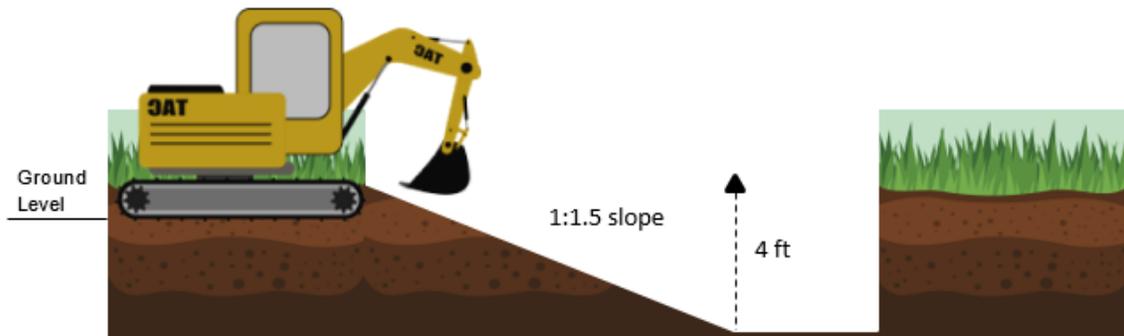
### C. Scheduling the Site and Soils Evaluation

- The application is routed to Environmental Health upon completion of the internal routing review and Environmental Health contacts the applicant to let the applicant know that an inspection can now be scheduled.

- The applicant arranges with the excavation contractor to provide the soil test holes needed.
- Site inspections need to be scheduled for Monday, Wednesday, or Friday and Environmental Health requires two weeks advanced notification. The applicant call in to the Community Development Department’s inspection line, (209) 533-5992, with the preferred date and time.

**D. Soil Test Hole Excavation and Site Evaluation**

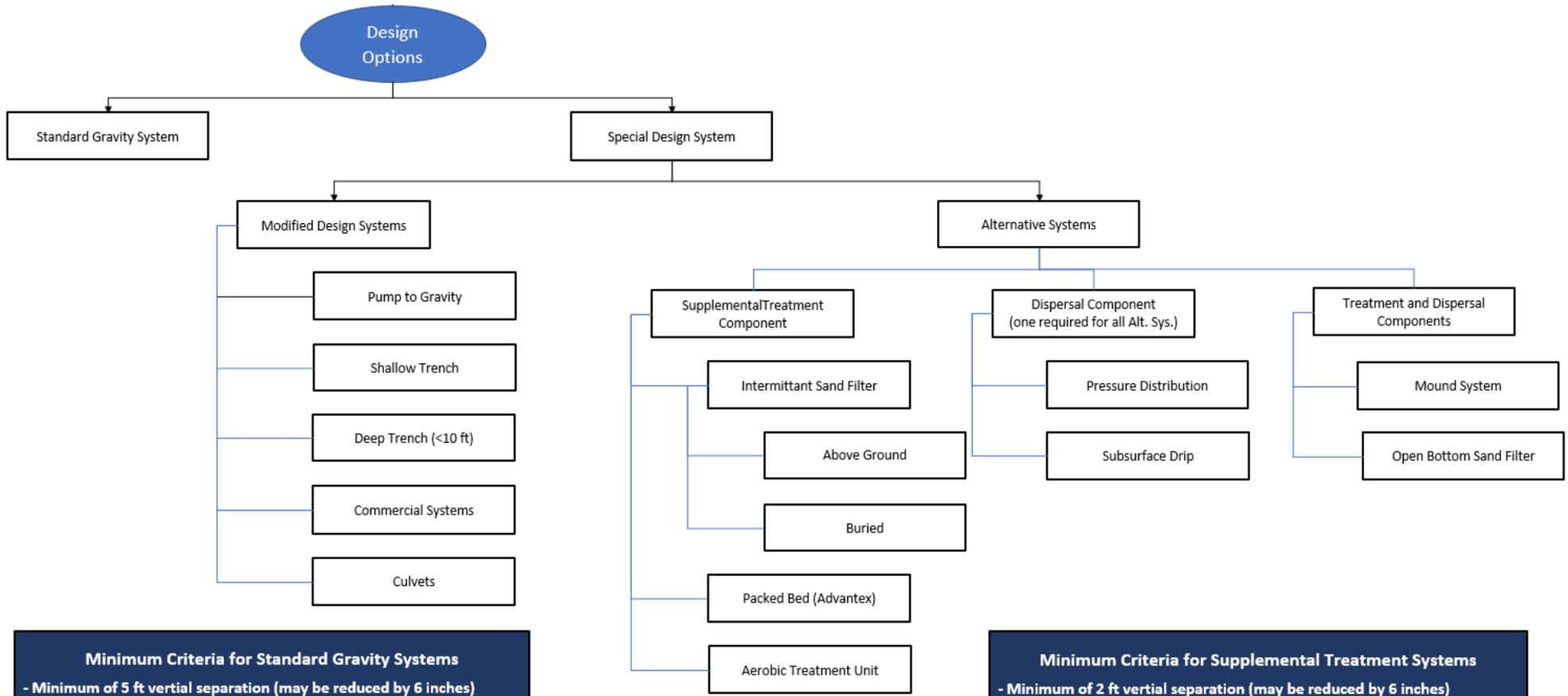
- Unless otherwise specified, a minimum of two test holes will be required for each parcel, one in the area proposed for the primary dispersal field and one in the area proposed for future replacement of the dispersal field in case of system failure. During the evaluation, additional test holes may be needed to adequately characterize site conditions.
- The holes need to be excavated by a backhoe to Cal-OSHA standards. The test holes must be 3 feet wide, 4 feet deep, and long enough for an entrance ramp that must be no steeper than 1 foot vertical to 1.5 foot horizontal. The toe of the spoils pile must be 2 feet away from the test hole.
- Once the 4 foot deep test holes have been excavated and inspected, the inspector will exit the hole, and the hole will be dug to a depth of at least 8 feet so that the inspector can verify the depth of useable soil that is useable for wastewater treatment and disposal. Onsite wastewater system design options are based in part on the depth of useable soil.



**E. Site and Soil Evaluation Report**

Based on site conditions identified during the evaluation, Environmental Health will determine whether the parcel is suitable for a Standard Gravity System or whether a Special Design System designed by a Qualified Professional will be required.

Design options are summarized on the following page.



**Minimum Criteria for Standard Gravity Systems**

- Minimum of 5 ft vertical separation (may be reduced by 6 inches)
- 30% slope or less with no excavated benches for the system
- 100% reserve area for repair
- System not installed in SiCL, SiC, or C
- 6-120 MPI percolation rate if tested

**Minimum Criteria for Supplemental Treatment Systems**

- Minimum of 2 ft vertical separation (may be reduced by 6 inches)
- 30% slope or less with no excavated benches for the system
- 100% reserve area for repair
- <6-600 MPI percolation rate if tested
- Up to 20% reduction in absorption area

<b>Minimum Horizontal Setback Distances for Sewage Systems</b>			
<b>Type of Setback</b>	<b>Building Sewer</b>	<b>Septic Tank</b>	<b>Disposal Field</b>
Building or Structures <b>(A)</b>	2'	5'	8'
Property Line Adjoining Private Property	Clear	5'	5'
Private Water Wells	50' <b>(B)</b>	50'	100'
Public Water Wells	50'	150'	150'
Lakes/reservoirs where use is or may be intended as a domestic water source	50'	50'	200'
Streams, irrigation ditches, springs, or other perennial water courses or impoundments			
Category 1 Drainage Course	10'	10'	25'
Ephemeral Stream <b>(C)</b>	25'	25'	50'
Intermittent Stream <b>(C)</b>	25'	25'	75'
Perennial Stream <b>(D)</b>	50'	50'	100'
Impaired Water Body <b>(E)</b>	50'	600'	600'
Surface Water Body Drinking Water Supplies <b>(F)</b>	50'	50'	200-400'
Trees over 24" in diameter	-	10'	-
Disposal Field	-	5'	5' <b>(G)</b>
Domestic Water Line	1' <b>(H)</b>	5'	10'
Distribution Box	-	4'	4'
Driveway or Parking Area	-	Clear	Clear
Pressure Public Water Main	10'	10'	10'
Cut bank or Fill bank When Facility Above Bank	10'	10'	4xH <b>(I)</b>
Domestic Water Supply Canal (Above)	50'	50'	100'
Domestic Water Supply Canal (Below)	10'	10'	25'

(A) Including porches and steps whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways and similar structures or appurtenances.

(B) All nonmetallic drainage piping shall clear domestic water supply wells by at least fifty feet. This distance may be reduced to not less than twenty-five feet when the drainage piping is constructed of materials approved for use within a building.

(C) As measured from the apparent edge of channel.

(D) As measured from the high water mark which would result from a ten-year frequency flood.

(E) For parcels created prior to May 13, 2018, OWTS may be located within 600 feet of an impaired water body if the proposed system meets the requirements set forth in the LAMP Advanced Protection Management Program.

- (F) Where the effluent dispersal system is within the catchment of a public water system's surface water intake point and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies and the dispersal system is located:
  - a. Within 1,200 feet from a public water system's surface water intake point, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake, or flowing water body.
  - b. More than 1,200 feet but less than 2,500 feet from a public water system's intake point, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake, or flowing water body.
- (G) Minimum spacing between trenches or leaching beds shall be five feet plus two feet for each additional foot of depth in excess of one and one-half feet below the bottom of the drain line.
- (H) Building sewers or drainage piping of clay or materials that are not approved for use within a building shall not be run or laid in the same trench as the water pipes unless the following requirements are met:
  - a. The bottom of the water pipe, at points, shall be not less than 12 inches (305 mm) above the top of the sewer or drain line.
  - b. The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a clear horizontal distance of not less than 12 inches (305 mm) from the sewer or drain line.
  - c. Water pipes crossing sewer or drainage piping constructed of clay or materials that are not approved for use within a building shall be laid not less than 12 inches (305 mm) above the sewer or drainpipe.
- (I) Four times the height of the bank, measured from the top edge of the bank. Maximum setback is thirty-five feet from top of bank.

## Part 2. Onsite Wastewater System Construction Permit

Once a Site and Soils Evaluation has been completed, the customer can apply for a permit to construct their onsite wastewater system. If the permit is needed for a system repair, however, no additional permit application is required.

The Site and Soils Evaluation will typically determine whether the parcel can accommodate a Standard Gravity System or need a Special Design System to address site constraints, such as shallow groundwater, shallow hardpan, excessive slopes.

The following has two sections: Section One describes the permitting process for Standard Gravity Systems. Section Two describes the permitting process for Special Design Systems.

### Section One. Standard Gravity System Permitting Process

Note: Standard Gravity Systems can be designed by the property owner, licensed contractor, or Qualified Professional. Environmental Health strongly recommends that a licensed contractor or Qualified Professional design standard gravity systems, and that the systems be installed by a licensed contractor with experience in septic system construction and familiarity with county requirements.

#### A. Application

- Applicant (prop owner, contractor, or Qualified Professional) submits at front counter:
  - ***Land Development Application and Indemnification Agreement***
  - 2 copies of plot plan and design
- Routing through Planning and Public Works only if proposed system is NOT in the area reviewed for the ***Site and Soils Evaluation***

#### B. Design Review and Permit Issuance

- EH reviews the design for compliance with county code and guidelines, completes an ***Inspection Card*** indicating the design has been approved, marks “approved” in Trakit, scans the design, and routes both copies of the design to the Admin Tech
- Admin Tech marks “issued” in Trakit and sends the two sets of plans to applicant along with an ***Inspection Card***

#### C. System Construction and Final Approval

- Licensed contractor (preferably) constructs the system, following the approved design, and:
  - Completes 24-hour water tightness test verifying that the septic tank does not leak

- Contacts the **Inspection Line** (209-533-5992) for an **Open-Trench Inspection**, only if one was specifically required by Environmental Health
- Contacts the **Inspection Line** for an **Open-Install Inspection** prior to covering the system
- Leaves a **Septic Tank Water Tightness Certification, As-Built Drawing** and **Inspection Card** in a zip-locked bag on the septic tank to be picked up by the Environmental Health inspector (Note: Although these items can be submitted later, following this non-manded step will greatly expedite Final Approval of the system)
- Environmental Health, after inspecting the system and receiving the items referenced above, will complete the **Inspection Card** and mail it to the applicant with the **As-Built Drawing** stamped “Approved” as verification that the system installation has Final Approval.

## Section Two. Special Design System Permitting Process

Note: Special Design Systems need to be designed by a Qualified Professional. Environmental Health strongly recommends that the systems be installed by a licensed contractor with experience in septic system construction and familiarity with county requirements, especially if an Alternative System is designed.

### A. Application

- Applicant (prop owner, contractor, or Qualified Professional) submits at front counter:
  - **Land Development Application and Indemnification Agreement**
  - 2 copies of plot plan and design
- Routing through Planning and Public Works only if proposed system is NOT in the area reviewed for the **Site and Soils Evaluation**

### B. Design Review and Permit Issuance

- **Initial EH Review**

EH reviews the design for compliance with county code and guidelines, completes and sends to the Qualified Provider a **Property Owner OM&M Authorization** letter for signature by the property owner, and files the design in the “pending” rack in the plan check room awaiting return of the **Property Owner OM&M Authorization** letter

- **Completed EH Review**

(Upon receipt of the signed **Property Owner OM&M Authorization** letter)

EH completes an **Inspection Card** indicating the design has been approved, marks “approved” in Trakit, scans the design, and routes both copies of the design to the Admin Tech

- Admin Tech marks “Issued” in Trakit and sends the two sets of plans to applicant along with an **Inspection Card**

### C. System Construction and Final Approval

- Licensed contractor constructs the system, and:
  - Completes 24-hour water tightness test verifying that the septic tank does not leak
  - Contacts the **Inspection Line** (209-533-5992) for an **Open-Trench Inspection**, (unless the inspection is waived by Environmental Health)
  - Contacts the **Inspection Line** for an **Open-Install Inspection** prior to covering the system
  - Contacts the **Inspection Line** for a **Final Inspection** that also needs to be attended by the Licensed Consultant, Qualified Professional, Licensed Contractor, and OM&M Qualified Service Provider
  - Provides a **Septic Tank Water Tightness Certification, As-Built Drawing** and **Inspection Card** in a zip-locked bag on the septic tank to be picked up by the Environmental Health inspector (Note: Although these items can be submitted later, following this non-manded step will greatly expedite Final Approval of the system)
- Qualified Professional completes and submits to EH the **Certification Letter**, verifying the system was installed according to the approved design
- OM&M Qualified Service Provider provides EH with a copy of the **Service Contract** with the property owner and a copy of the Qualified Service Provider **Start-Up Report**
- Environmental Health, after inspecting the system and receiving the items referenced above from the Licensed Contractor and the Qualified Professional:
  - Completes the **Inspection Card** and mail it to the applicant as verification that the system installation has Final Approval
  - Completes and routes **OM&M NOA** to the Clerk-Recorder’s Office



**Tuolumne County Community Development Department  
Additions/Accessory Structure and  
Environmental Health Land Use Projects**

**PLOT PLAN CHECKLIST**

(209) 533-5633

**LIMITED TO 500 Sq. Ft. ADDITION AND ACCESSORY BUILDING PROJECTS**

**PLEASE NOTE: PLANS WILL NOT BE ACCEPTED IF INFORMATION IS  
MISSING FROM THE PLOT PLANS**

**\*\*\* Proper Scale Must Be Shown \*\*\***

**A. FORMAT**

- 1. Paper size minimum 8½"x11", maximum 24"x36" (submit 3 copies).
- 2. North arrow, **ENGINEER'S** scale, dimensions of property lines, and vicinity map.
- 3. Slopes: amount and direction (% of slope) *if not on an existing pad*.
- 4. Driveways to roads, parking areas, roads, and road easement widths (if modified, include turnouts, turning bulbs, and road grade parking). (If modified, show surface type, width, and slope of all driveways and parking areas.)
- 5. All easements including drainage easements (DE's), drainage protection areas (DPA's), open space zoning, and defensible space.
- 6. Drainage courses, rivers, creeks, streams, ponds, lakes, reservoirs, and water ditches with appropriate sanitary setbacks.
- 7. Show all new site grading, drainage features, and demonstrate erosion control measures.
- 8. Lot size (acreage).
- 9. Trench detail for septic systems.

**B. OWNER/LOT IDENTIFICATION**

- 1. Name, address, and phone number of owner and applicant.
- 2. Assessor's parcel number.
- 3. Street, address, and boundary monuments (pin locations) relevant to the location of the proposed project.
- 4. Show location where address will be posted on plot plan.

**C. DEVELOPMENT: EXISTING & PROPOSED**

- 1. Dimensions of all propose improvements.
- 2. Setbacks from proposed structures to property lines that are shown, centerline of road, right of way (if applicable), and edge of pavement (if closer than 15' from front property line).
- 3. All existing structures and improvements (including wells, lift-stations, propane systems, septic systems, expansion areas, and sewer lines). Show setbacks to these items.
- 4. Square footage of new construction.
- 5. Show encroachment details if adjoining a publicly maintained road (limits of paving, curve returns, drainage improvements).

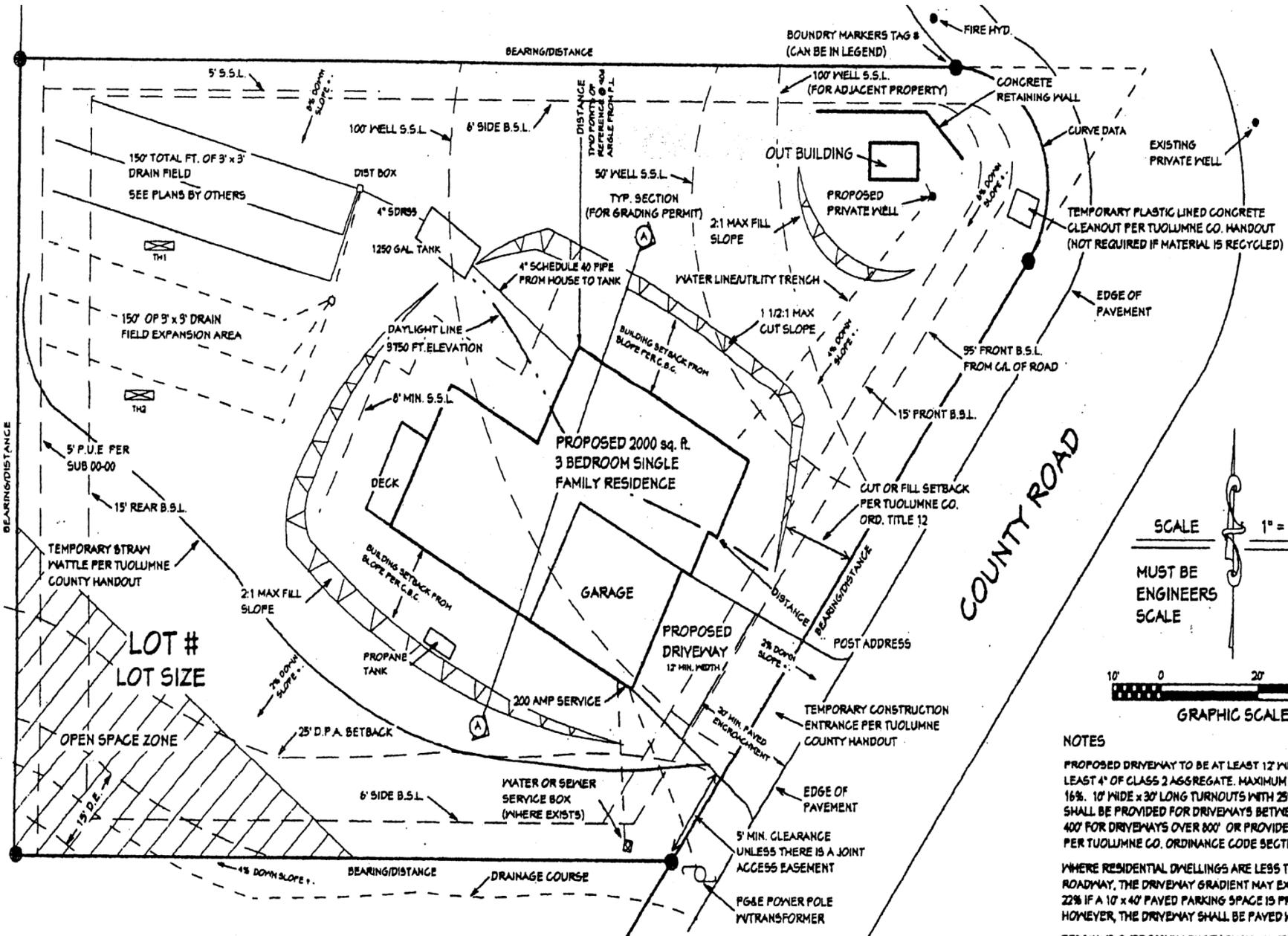
**D. ADDITIONAL INFORMATION FOR GRADING REVIEW**

- 1. Details of grading proposed within 35' of leach field or expansion area and any planned or existing cuts, fills, or excavations for driveways, basements, or foundations.
- 2. Show the location of cut and fill on site. Include "daylight" lines and cut/fill slopes.
- 3. Show how much dirt will be cut and filled in cubic yards.
- 4. Show distances from the proposed structure and cuts/fills to existing drainage courses or streams.

**Reviewed and Submitted (Owner / Contractor):** \_\_\_\_\_

**Owner / Contractor Phone Number:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Plot Plan Received By:** \_\_\_\_\_ **Date:** \_\_\_\_\_



SCALE 1" = 20'

MUST BE ENGINEERS SCALE



**NOTES**

PROPOSED DRIVEWAY TO BE AT LEAST 12' WIDE WITH A BASE OF AT LEAST 4" OF CLASS 2 AGGREGATE. MAXIMUM GRADIENT SHALL BE 16%. 10' WIDE x 30' LONG TURNOUTS WITH 25' TAPERS AT EACH END SHALL BE PROVIDED FOR DRIVEWAYS BETWEEN 150' & 800'. EVERY 400' FOR DRIVEWAYS OVER 800' OR PROVIDE AN 18' WIDE DRIVEWAY PER TUOLUMNE CO. ORDINANCE CODE SECTION 11.12.060

WHERE RESIDENTIAL DWELLINGS ARE LESS THAN 150' FROM THE ROADWAY, THE DRIVEWAY GRADIENT MAY EXCEED 16% TO A MAXIMUM OF 22% IF A 10' x 40' PAVED PARKING SPACE IS PROVIDED @ ROAD GRADE. HOWEVER, THE DRIVEWAY SHALL BE PAVED WITH ASPHALT OR CONCRETE. DRIVEWAYS OVER 300' IN LENGTH SHALL HAVE A TURNING BULB OR A CIRCULAR DRIVEWAY WITH A MIN. OUTSIDE RADIUS OF 40' WITHIN 50' OF BUILDING SITE AS REQUIRED PER TUOLUMNE CO. ORDINANCE CODE 11.12.000

PROVISIONS SHALL BE MADE FOR THE CONTROL & DRAINAGE OF SURFACE WATER AROUND ALL BUILDINGS. 5% MIN. FOR 10'

SUBMIT TO THE STATE WATER RESOURCES CONTROL BOARD PERMITTING UNIT, A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT (CALIFORNIA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR CONSTRUCTION RELATED STORM WATER DISCHARGE) FOR THE DISTURBANCE OF ONE ACRE OR MORE.

ALL EXPOSED CUT & FILL SLOPES SHALL BE SEEDED & PROTECTED WITH STRAW PER TUOLUMNE COUNTY HANDOUT

**LEGEND & NOTES**

- P.U.E. - PUBLIC UTILITIES EASEMENT
- D.P.A. - DRAINAGE PROTECTION AREA
- B.S.L. - BUILDING SETBACK LINE
- S.S.L. - SANITARY SETBACK LINE
- D.E. - DRAINAGE EASEMENT
- [Symbol] SEPTIC TEST TRENCH
- [Symbol] 3/4" IRON PIPE W/ PLASTIC LUG L.S. 0000 PER SUB 00-00

**REQUIRED INFORMATION**

- |                  |                         |
|------------------|-------------------------|
| PROPERTY OWNER   | ASSESSORS PARCEL NUMBER |
| ADDRESS          | SUBDIVISION             |
| TELEPHONE NUMBER | NAME                    |
|                  | UNIT NUMBER             |
| CONTACT/AGENT    | LOT NUMBER              |
| ADDRESS          | OR PARCEL MAP NUMBER    |
| TELEPHONE NUMBER | LOT SIZE                |
| VICINITY MAP     |                         |