

GENERAL NOTES

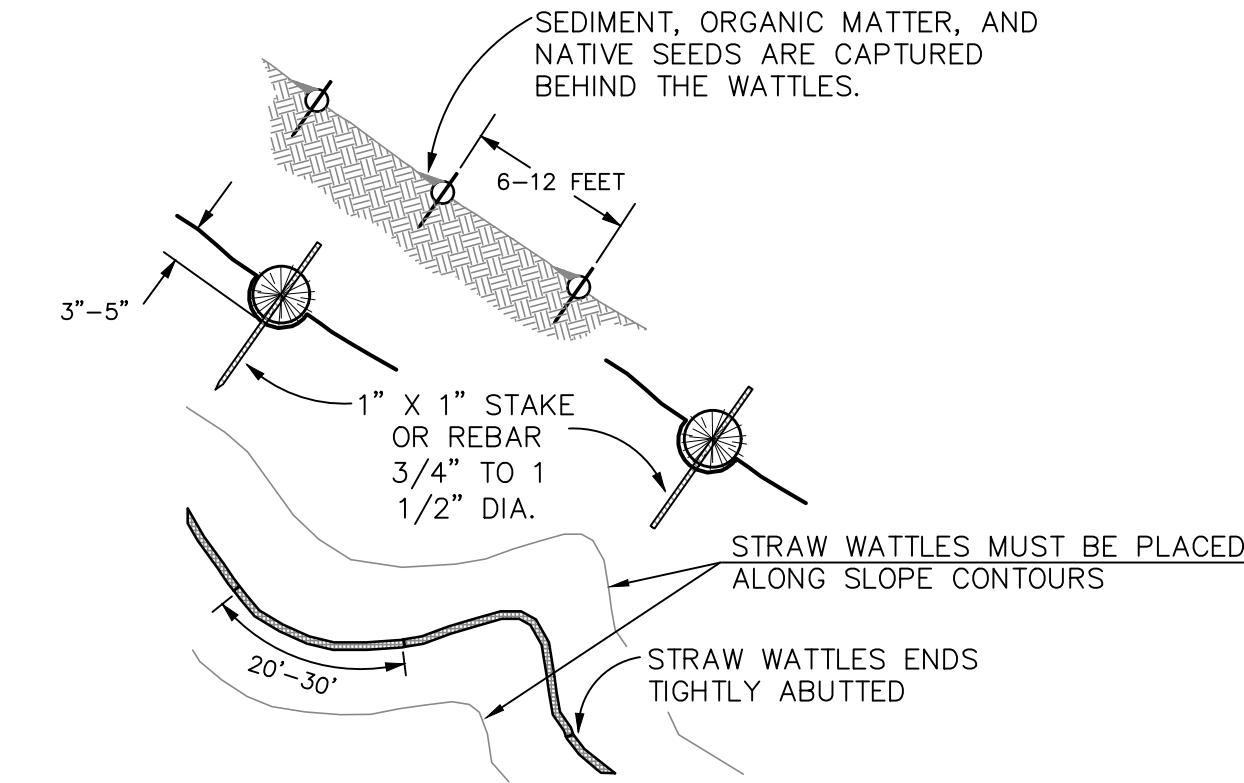
- Low flow toilets (1.6 gal. Max.) are required in all bathrooms and lavatories.
- Water service lines to observe all setbacks required by the Sonoma County Permit and Resource Management Department.
- Contours shown are based on field work performed by Adobe Associates, Inc. on October 6, 1993. Contour interval is two (2) foot, datum assumed.
- No foundation and/or driveway cuts, and no surface or sub-surface drains are to be located within 50 feet downslope or laterally of the primary or expansion/repair area of any leach field. Direct downsloputs away from leach field.
- The boundary information shown is per record information and is not the result of a survey by Adobe Associates, Inc.
- Any proposed change to house design or location is to be approved by Adobe Associates, Inc. and the Sonoma County Permit and Resource Management Department Environmental Health Specialist for compatibility with the septic system.
- Removal of trees within any proposed fill area is required. Trees allowed to remain in the fill area may be damaged or destroyed by the deleterious effects of the fill soil.

CONSTRUCTION NOTES

- Contractor to give Adobe Associates, Inc. (707-541-2300) and the Sonoma County Permit and Resource Management Department (PRMD), (707-565-3551) 48 hours notice for inspection.
- Leave ends of leach lines exposed for inspection, and open inspection points at 50' maximum intervals. PRMD and engineer inspectors may request visual inspection of any point in trench, at their option.
- Smeared or compacted trench sides shall be scarified to a depth of one inch, and the loose material removed before placing the drain rock in the trench.
- Watertight cap or seal to be placed at the end of each leach line.
- The IAPMO approved concrete septic tank shall be set level in the excavation with a recommended earth cover of 12 inches minimum.
- The trench bottom and total length of line shall be level and placed with the aid of transit or level.
- The perforated pipe shall be 3" (inside diameter) styrene, or approved plastic or any other approved material. Perforations shall be 5/8" in size and placed down in the trench.
- The connection between the septic tank and the first distribution box shall be of schedule 40 ABS, cast iron pipe or any other material approved for a house sewer connection.
- Contractor shall be responsible for discovery and avoidance of all underground utilities.
- Any alteration to the approved plans must be approved by the engineer prior to construction.
- System installation shall not be attempted during winter months when the potential for sidewall compaction and smearing can occur. Obtain engineer's and PRMD's approval before proceeding with construction during winter months.
- Engineer is to be notified immediately of any adverse conditions discovered during the construction such as impermeable soil layer, springs, ground water, etc.
- Distribution boxes shall be built on a level prepared surface in natural or compacted soil.
- All materials and workmanship shall conform with County of Sonoma standards and requirements, including building, plumbing and electrical codes.
- This sewage disposal system has been designed to accommodate a peak daily flow of 120 gallons per bedroom, and a long term average daily flow of 60 gallons per bedroom. Water conservation measures will be necessary to maintain these water usage limits.
- Minimum clearance from any existing or proposed structure to any septic tank shall be 5' unless greater clearance is required by others.
- Minimum clearance from any roadway or parking area to any septic tank shall be 5' unless greater clearance is required by others.

CONCRETE SEPTIC TANK NOTES

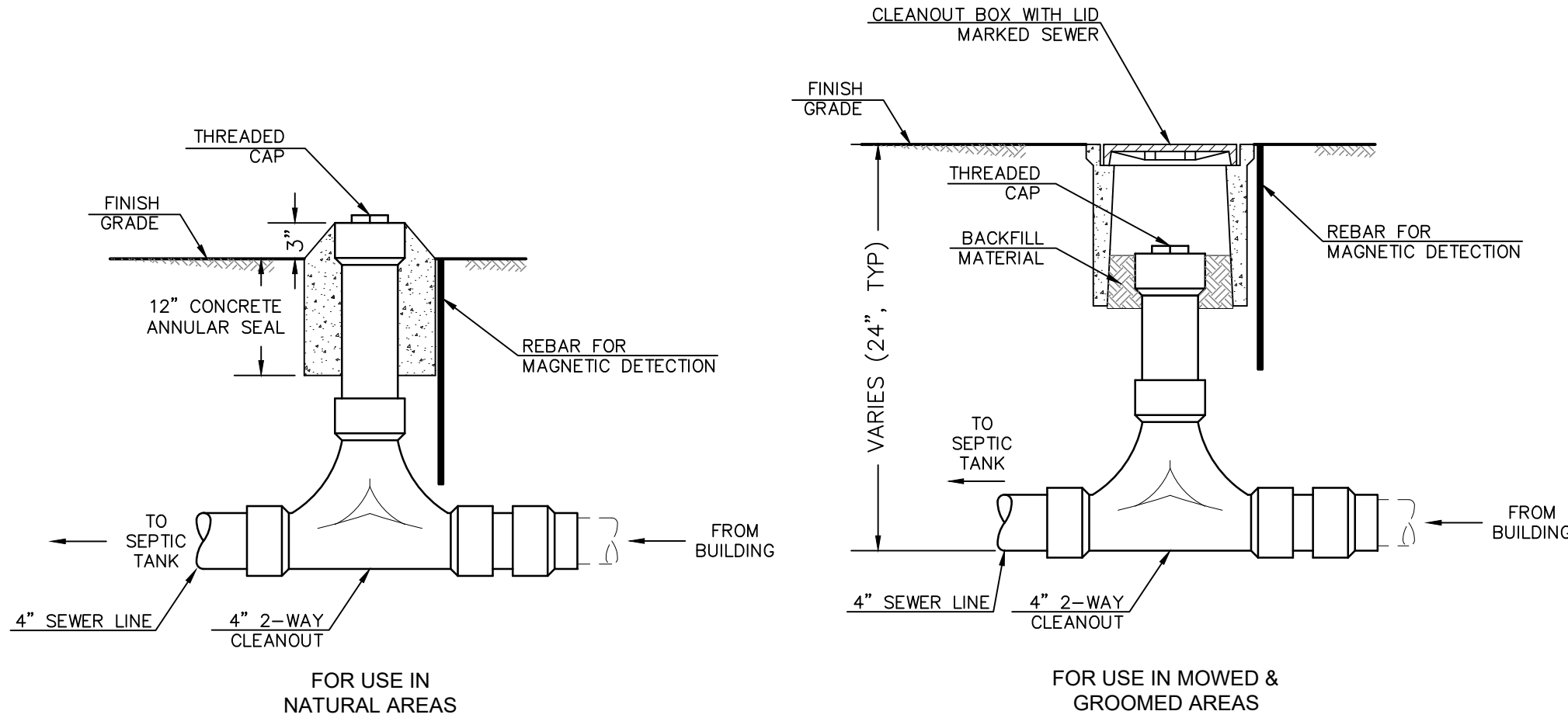
- Seal interior of septic tank with Thoroseal or equal. Seal all joints with mastic. Seal precast concrete joints with Ramnek or equal.
- Pipes through holes in the septic tank or riser must be sealed with gas-tight compression connectors or waterproof sealant or precast into septic tank.
- Tank and riser joint shall be sealed and made water tight with non-shrink grout overlaid with Xypex or Thoroseal.
- The septic tank shall be IAPMO listed. Water tightness test is required by the Sonoma County Permit and Resource Management Department. The water tightness test consists of filling the tank 2 inches into the risers with clear water.
- The tank shall be considered adequately water tight if there is no measurable fall of water in the tank in 1/2 hour.



- NOTES:
- STRAW WATTLES ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.
 - STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET & RILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.
 - STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH. 3" - 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

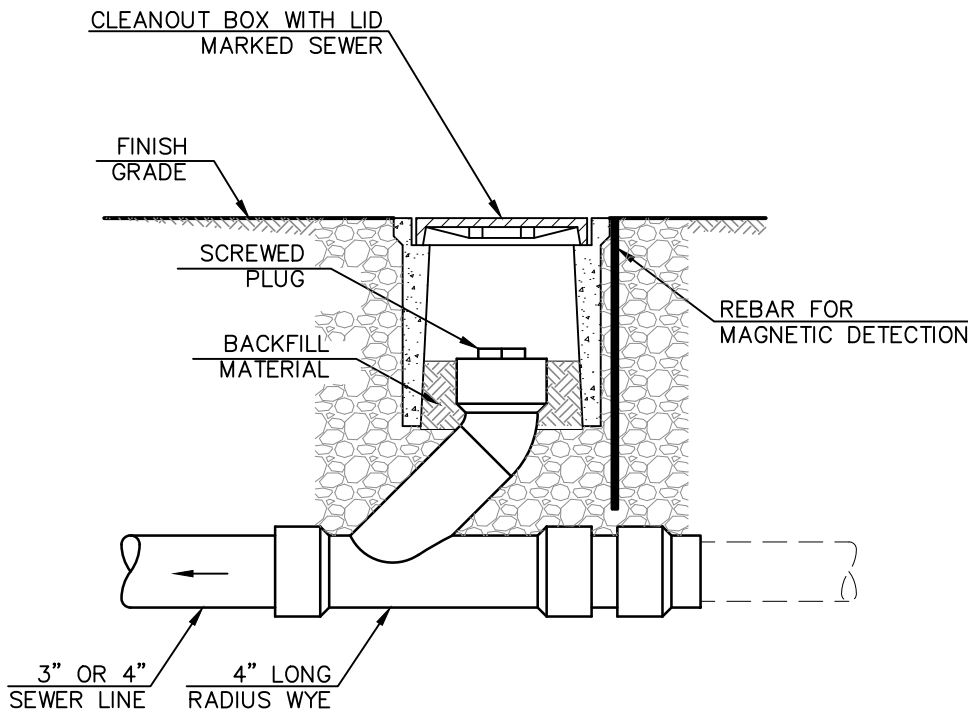
STRAW WATTLE CHECK DAM

NTS



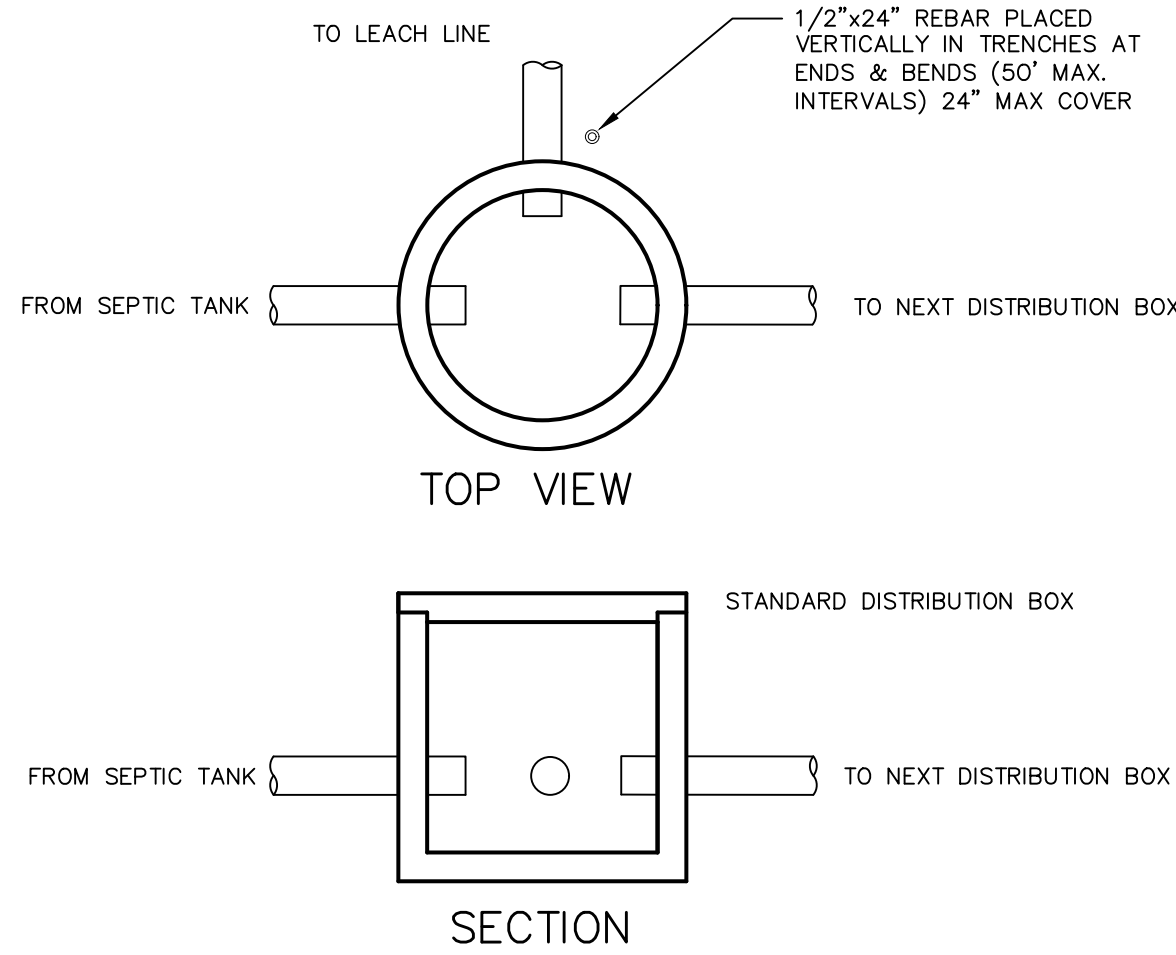
TWO-WAY GRAVITY CLEANOUT DETAIL

NTS



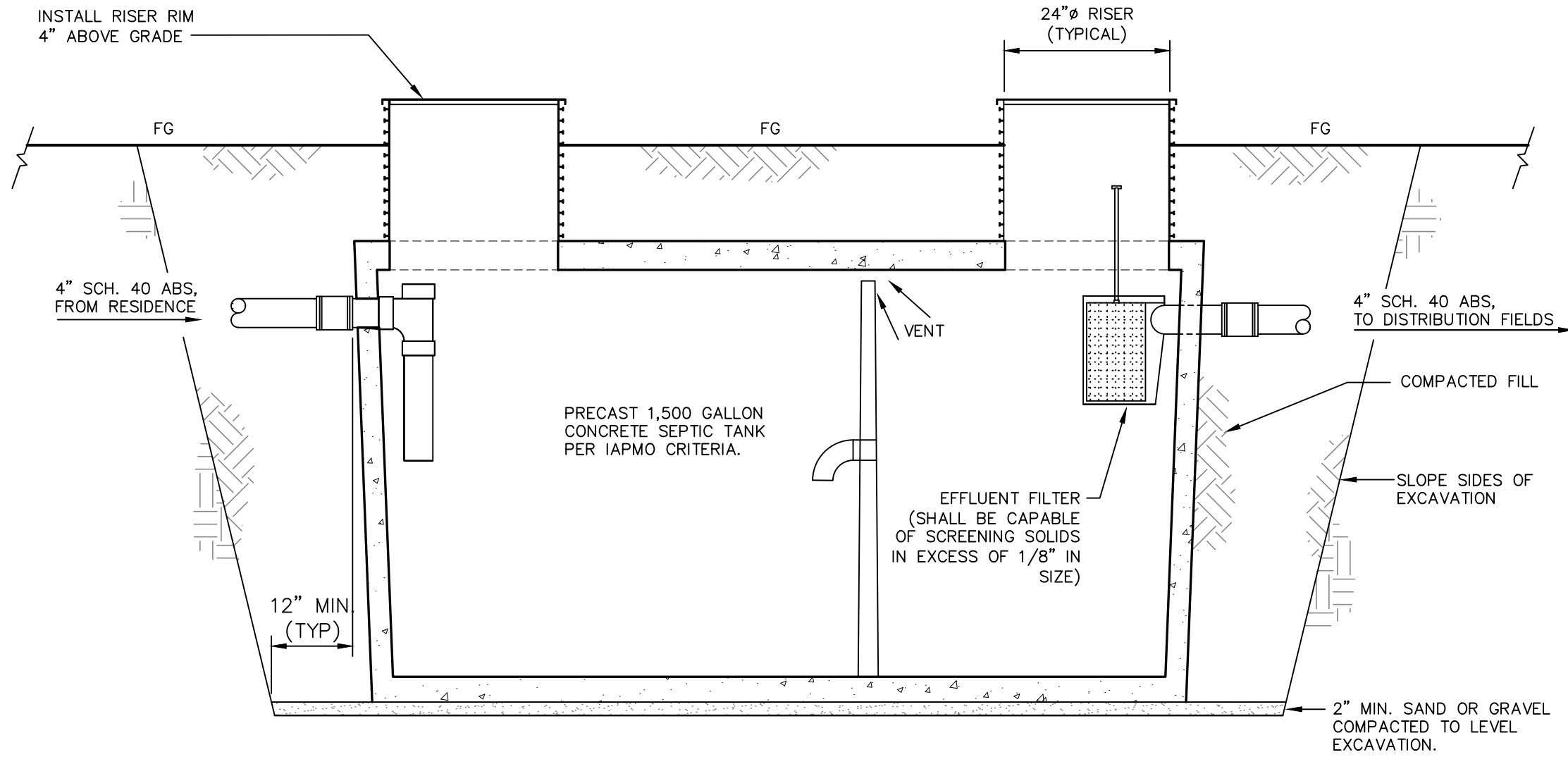
ONE-WAY GRAVITY CLEANOUT DETAIL

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DISTRIBUTION BOX DETAIL

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1,500 GALLON CONCRETE SEPTIC TANK

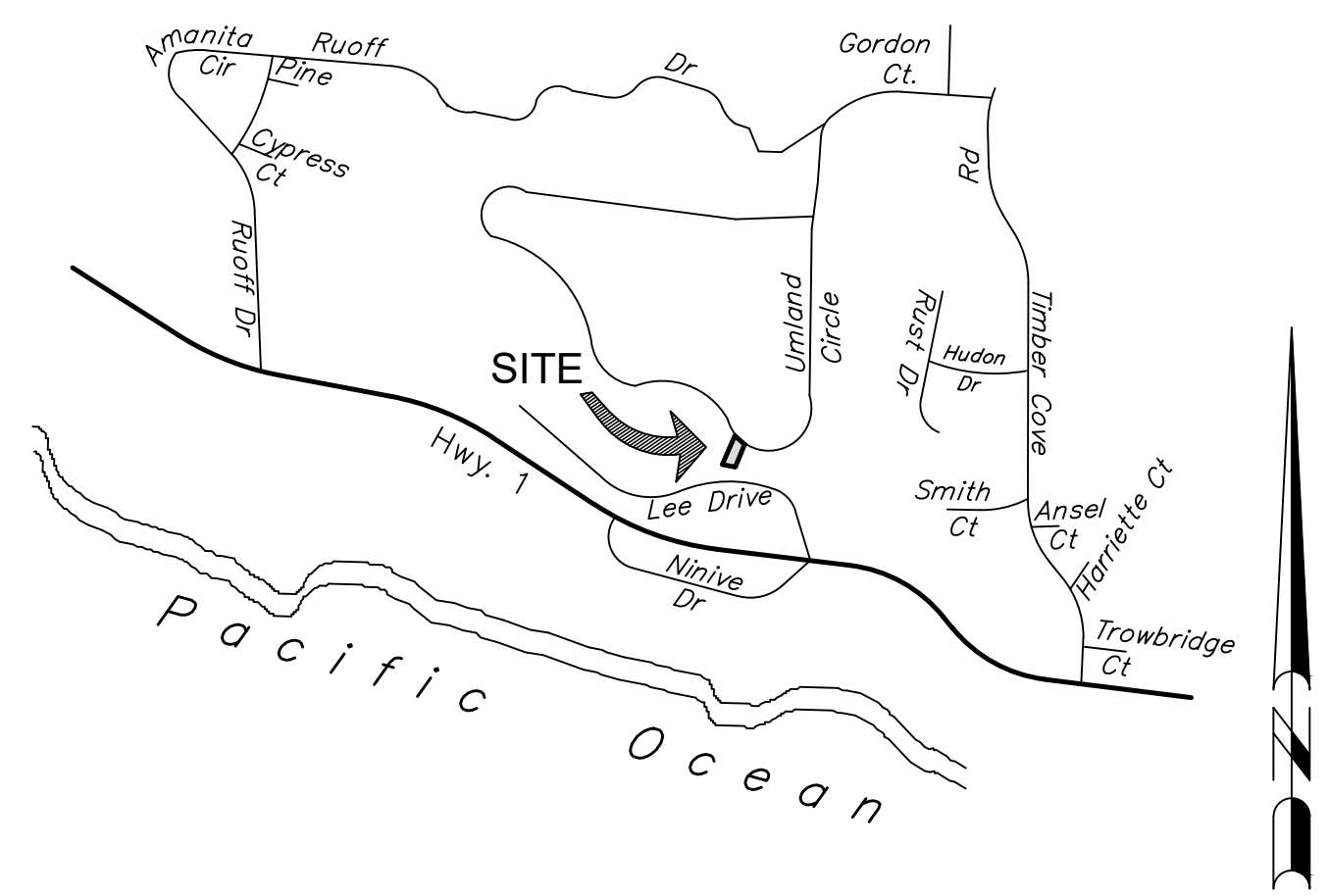
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STANDARD TYPE SEWAGE DISPOSAL SYSTEM

22188 Umland Circle

Jenner, California

APN 109-420-037



LOCATION MAP

NOT TO SCALE

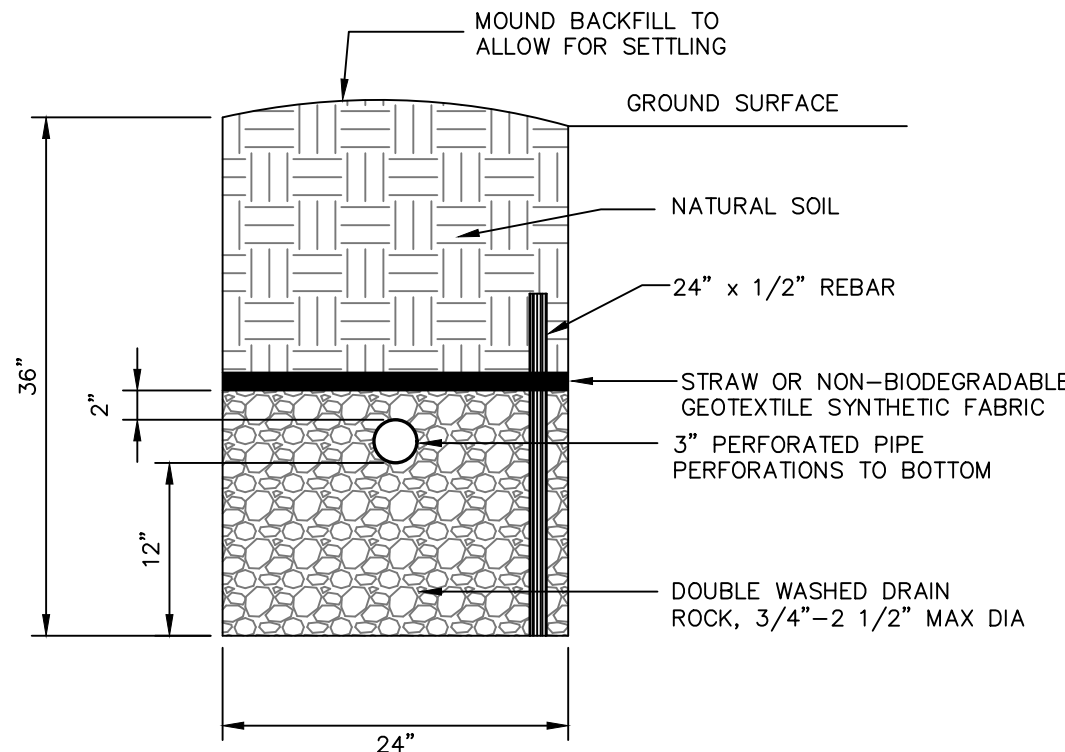
OWNER INFO

ERIK KUHRMAN
3620 IDAHO DRIVE,
SANTA ROSA, CA 95405

SHEET INDEX

- TITLE SHEET
- SEPTIC SYSTEM PLAN

Tank Size	1,500GAL
Leach Trench	
Length	171'
Width	24"
Depth	36"
Rock	12"



LEACH LINE TRENCH DETAIL

NTS

Revisions	Description	Date	No.

adobe associates, inc.
civil engineering / land surveying / wastewater
1220 N. Dutton Ave., Santa Rosa, CA 95401
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Website: www.adobeinc.com
"A Service You Can Count On!"

STANDARD TYPE PRIVATE SEWAGE DISPOSAL SYSTEM COVER SHEET

22188 Umland Circle
Jenner, California
APN 109-420-037

Gregory M. Schram, RCE 73540
My License Expires 12/31/2026

PROFESSIONAL ENGINEER
GREGORY M. SCHRAM
No. 73540
Exp. 12/31/2026
CIVIL
UP CALL
REGISTERED

Scale:	AS SHOWN
Date:	December 16, 2024
Design by:	GMS
Drawn by:	JMO
Checked by:	GMS
Sheet	W1
of 2 Sheets	
Job No. 21205	

DESIGN CRITERIA:

DESIGN PURPOSE
THE PURPOSE OF THIS PROJECT IS TO PROVIDE SEPTIC DISPOSAL CAPACITY FOR A PROPOSED ONE-BEDROOM RESIDENCE ON THE PARCEL LOCATED AT 22188 UMLAND CIRCLE IN JENNER (APN 109-420-037). THE PROPOSED SYSTEM IS A STANDARD SYSTEM. THE PROPOSED DESIGN MEETS ALL CURRENT SONOMA COUNTY OWTS STANDARDS.

SITE REVIEW:
A SITE REVIEW WAS CONDUCTED BY ADOBE ASSOCIATES, INC., WITH A SONOMA COUNTY PERMIT & RESOURCE MANAGEMENT DEPARTMENT REPRESENTATIVE ON NOVEMBER 11, 1992 (SEV92-0123).

PERCOLATION TEST:
A PERCOLATION TEST WAS CONDUCTED ON NOVEMBER 18, 1992 BY ADOBE ASSOCIATES, INC. (SEV92-1017).
AVERAGE MINUTES PER INCH: = 46 (MPI) MINUTES PER INCH, @ 36"-48" DEPTH
CORRESPONDING SOIL LOADING RATE (SAR): = 0.443 GAL./S.F./ DAY
AVERAGE GROUND SLOPE: = 28%

PRIMARY SYSTEM DESIGN:
(1 BEDROOMS)(120 GALLONS PER DAY/BEDROOM) = 120 GPD TOTAL WASTEWATER LOAD.
(120 GPD)/(0.443 GAL/SF/DAY)/(2 SQ FT/LF) = 136 LINEAR FEET (100%) TOTAL PRIMARY DISPOSAL FIELD REQUIRED.
171 LINEAR FEET PRIMARY DISPOSAL FIELD SHOWN.
(TO BE CONSTRUCTED)

RESERVE SYSTEM DESIGN:
136 LINEAL FEET (100%) RESERVE DISPOSAL FIELD REQUIRED.
180 LINEAL FEET TOTAL RESERVE DISPOSAL FIELD SHOWN.
(NOT TO BE CONSTRUCTED)

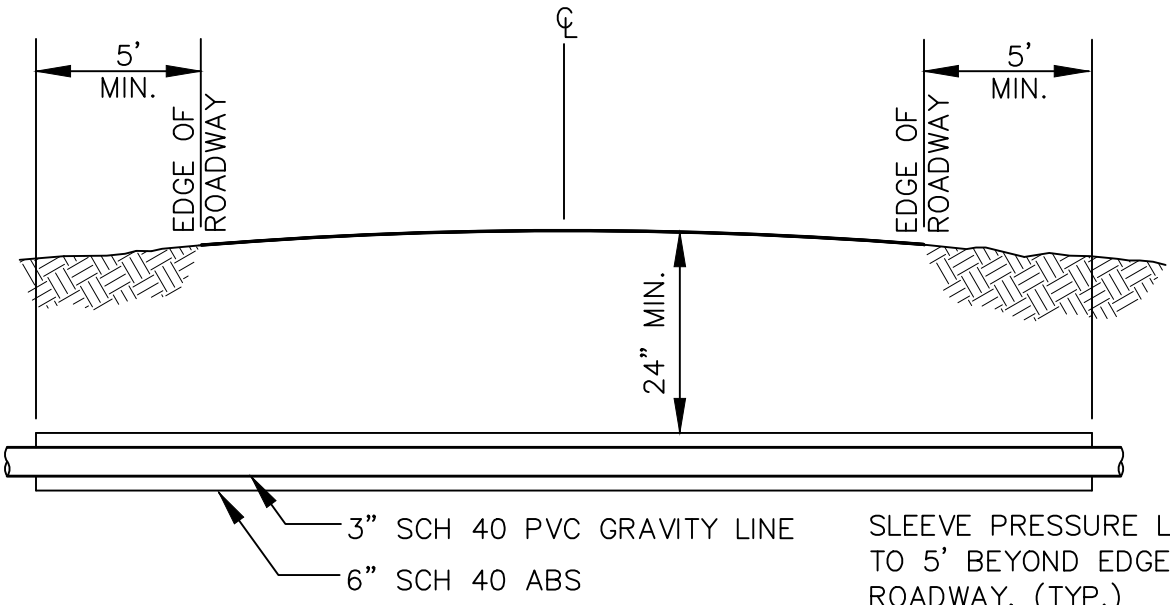
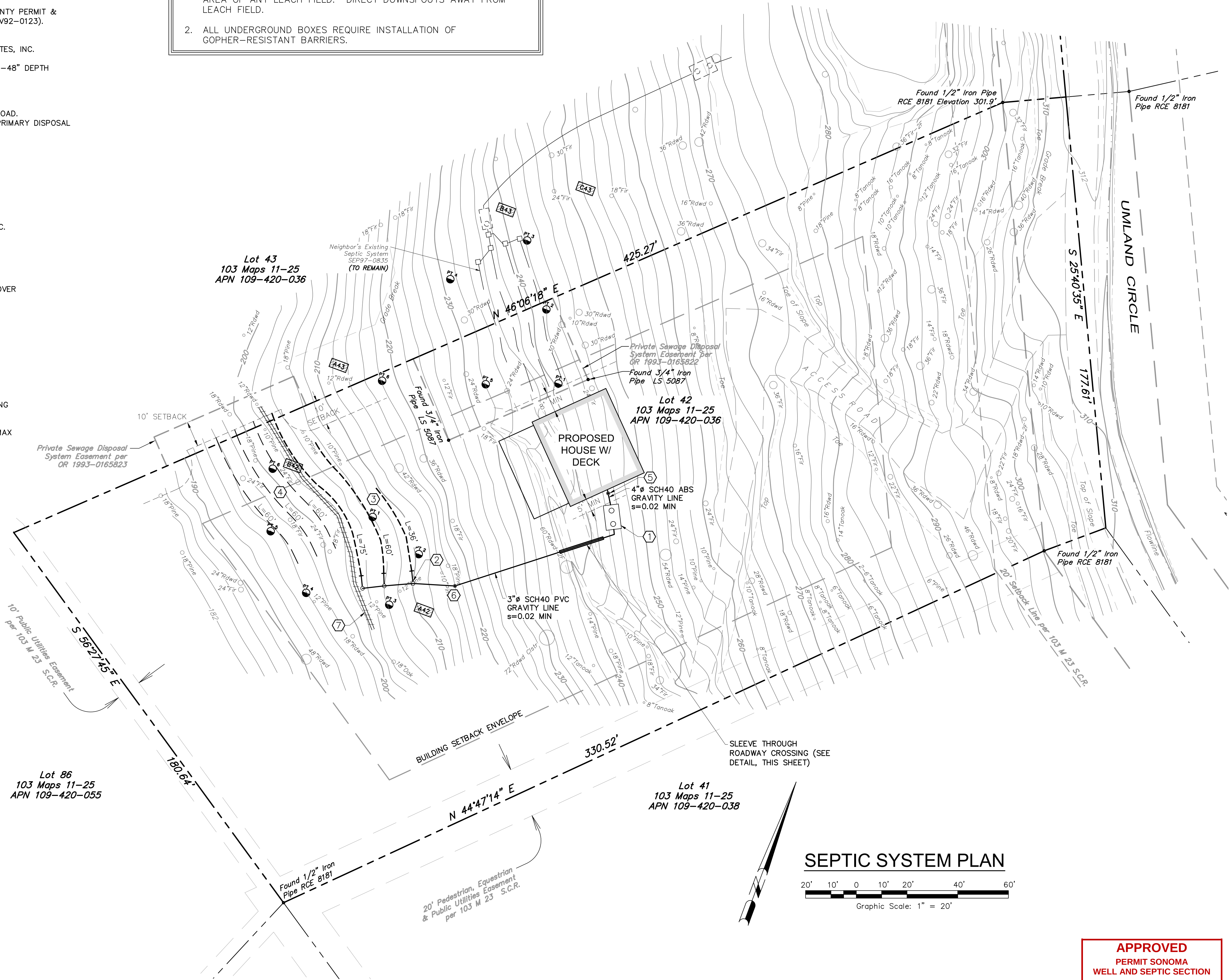
DISPOSAL FIELD TRENCH DESIGN:
36" DEEP X 24" WIDE, WITH 12" GRAVEL BELOW LEACHLINE LATERAL, SPACED 8' O.C.
(2 SQ FT/LF TRENCH SIDEWALL)

LEGEND

- ① 1,500 GALLON (IAPMO APPROVED) CONCRETE SEPTIC TANK WITH 24"Ø RISERS OVER BOTH PORTS; INSTALL EFFLUENT FILTER AT OUTLET (SEE DETAIL, SHEET W1)
- ② DISTRIBUTION BOX AND 5 FEET OF 3"Ø SCH 40, PVC SOLID PIPE, TYP (SEE DETAIL, SHEET W1)
- ③ PRIMARY SANITARY SEWAGE DISPOSAL FIELD LOCATION, (TO BE CONSTRUCTED) (SEE LEACHLINE TRENCH DETAIL, SHEET W1)
- ④ RESERVE SANITARY SEWAGE DISPOSAL FIELD LOCATION, (NOT TO BE CONSTRUCTED)
- ⑤ TWO-WAY GRAVITY TYPE SANITARY SEWER CLEANOUT; INSTALL 2' FROM BUILDING EXTERIOR WALL (SEE DETAIL, SHEET W1)
- ⑥ ONE-WAY GRAVITY TYPE CLEANOUT; INSTALL AT ANGLE POINTS AND AT 100' MAX INTERVALS ON GRAVITY LINE (SEE DETAIL, SHEET W1)
- ⑦ STRAW WATTLE CHECK DAM (SEE DETAIL, SHEET W1)
- ⊗ SOIL PROFILE HOLE
- PERCOLATION TEST

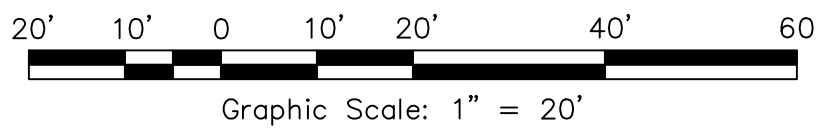
NOTES

- NO FOUNDATION AND/OR DRIVEWAY CUTS, AND NO SURFACE OR SUB-SURFACE DRAINS ARE TO BE LOCATED WITHIN 50 FEET DOWNSLOPE OR LATERALLY OF THE PRIMARY OR EXPANSION/REPAIR AREA OF ANY LEACH FIELD. DIRECT DOWNSPOUTS AWAY FROM LEACH FIELD.
- ALL UNDERGROUND BOXES REQUIRE INSTALLATION OF GOPHER-RESISTANT BARRIERS.



ROADWAY CROSSING DETAIL

SEPTIC SYSTEM PLAN



APPROVED
PERMIT SONOMA
WELL AND SEPTIC SECTION
APPROVED BY Erick Medina
DATE May 1, 2025
PERMIT # SEP24-0351

adobe associates, inc.

civil engineering | land surveying | wastewater

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*A Service You Can Count On!

PROFESSIONAL ENGINEER

Gregory M. Schram

No. 73540

Exp. 12/31/2026

REGISTERED CIVIL ENGINEER

OF CALIF.

STANDARD TYPE PRIVATE

SEWAGE DISPOSAL SYSTEM

SEPTIC SYSTEM PLAN

Jenner, California

22188 Umland Circle

APN 109-420-037

Scale: AS SHOWN

Date: December 16, 2024

Design by: GMS

Drawn by: JMO

Checked by: GMS

Sheet

W2

of 2 Sheets

Job No. 21205