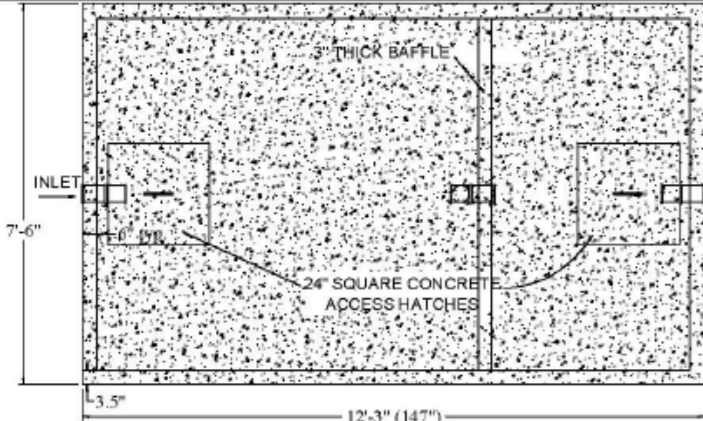
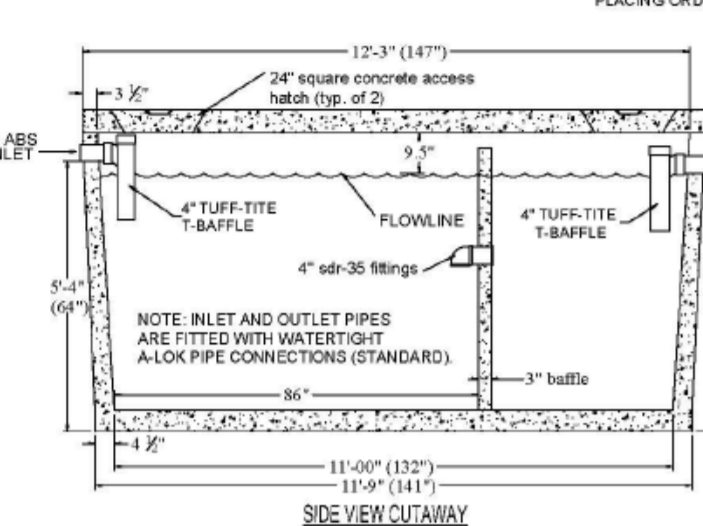


**SEPTIC TANK:**



NOTE: THE TANK CAN BE CAST WITH ORCINO RISER ADAPTERS (24" OR 30") INSTEAD OF CONCRETE FLUES. PLEASE ASK FOR DETAILS WHEN PLACING ORDER.



DON CHAPIN PRE-CAST  
2735 BOLSA RD.  
HOLLISTER, CA 95023  
(831) 630-1042  
(831) 630-5763

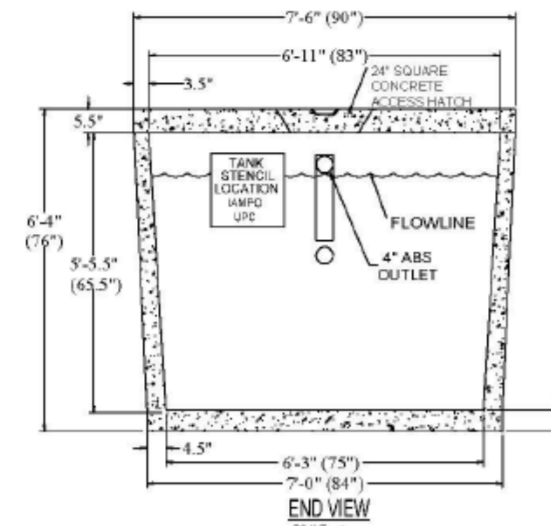
PRE-CAST CONCRETE SEAMLESS  
SEPTIC TANK  
CAPACITY 2500 GALLONS  
MODEL IPS2500



3/13/09

**NOTES:**

- EXCAVATION SPECIFICATIONS:  
LENGTH 14'-0"  
WIDTH 9'-0"  
DEPTH BELOW INLET 5'-4"
- DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN WHERE NECESSARY TO CONFIRM DESIGN CRITERIA.
- CERTIFIED ENGINEERING IS AVAILABLE UPON REQUEST.
- THIS IS ALSO AVAILABLE AS AN HDPE RATED ASSEMBLY.
- INTEGRAL T-CP TO BODY DESIGN.



PRE-CAST CONCRETE SEAMLESS  
SEPTIC TANK  
CAPACITY 2500 GALLONS  
MODEL IPS2500



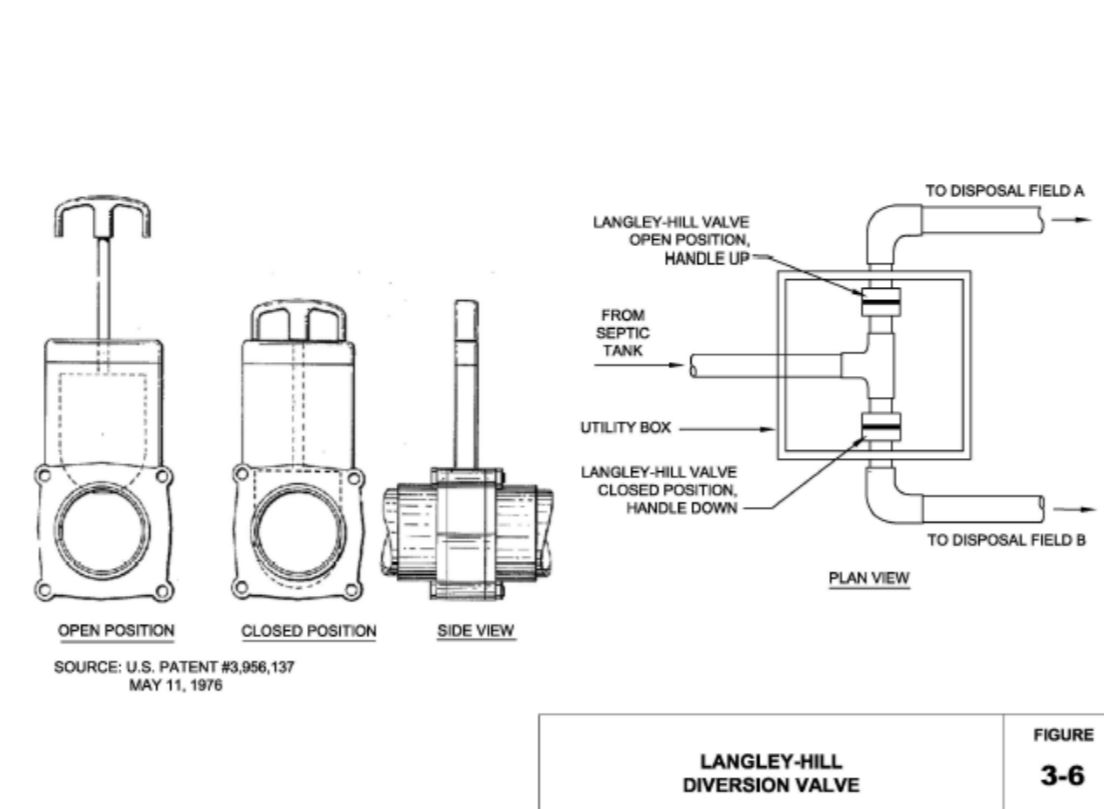
3/13/09

**EFFLUENT FILTER:**



EF-6 1500 gpd

**DIVERTER VALVE:**



LANGLEY-HILL DIVERSION VALVE

**INFILTRATIVE AREA CALCULATIONS & SPECIFICATIONS**

TYPE OF SEPTIC SYSTEM: Conventional Gravity Flow with Infiltration Chambers & Cover Fill	
<b>DESIGN CALCULATIONS:</b>	<b>DRAINFIELD TRENCH SPECIFICATIONS:</b>
Average Percolation Rate : 14 MPI (HOLES 1-7)	Drainfield Dimensions: 3 ft width x 1.5 ft depth
Design Application Rate: 0.74 gal/sq. ft./day	Cover Fill Depth: 1.0 ft
Peak Wastewater Flow: 1,050 gpd (5BR NEW + 3BR FUTURE)	Slope in Drainfield Area: FLAT (less than 1%)
Req. Infiltrative Area: 1,419 ft <sup>2</sup> (950 gpd/0.74 gpd/ft <sup>2</sup> )	Horizontal Drainfield Spacing: 6 ft o.c. (minimum)
Infiltrative Area per Linear Ft Trench: 4 sq. ft.	GW Below Trench: 9.5 ft (Hydrogeologist's Report)
Trench Length (each side DV) : 355 ft (1,419 ft <sup>2</sup> /4 ft/ft <sup>2</sup> )	Required Depth to GW: 8 ft
Reduced length for chambers: 249 ft (355 - 0.3x355)	

Elevations, Pipe Runs & Slopes			
Features Listed in Order of Gravity Fill // Invert Elevations of Pipes are Shown			
Feature	Invert Elevation (ft)	Pipe Length to Feature (ft)	Slope of Pipe Run (%)
Septic Tank Inlet	308.38	-	-
Septic Tank Outlet	308.13	-	-
D-Box Inlet	307.80	32	1.0
D-Box Outlet	307.63	-	-
Drainfield Chamber Inlet	307.33	30	1.0

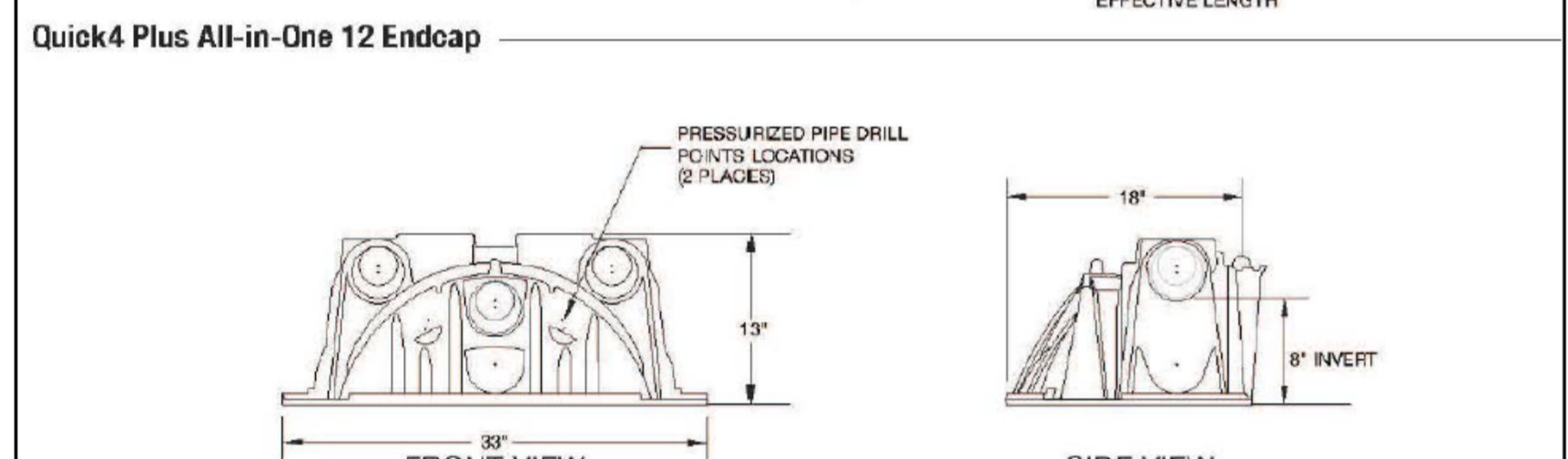
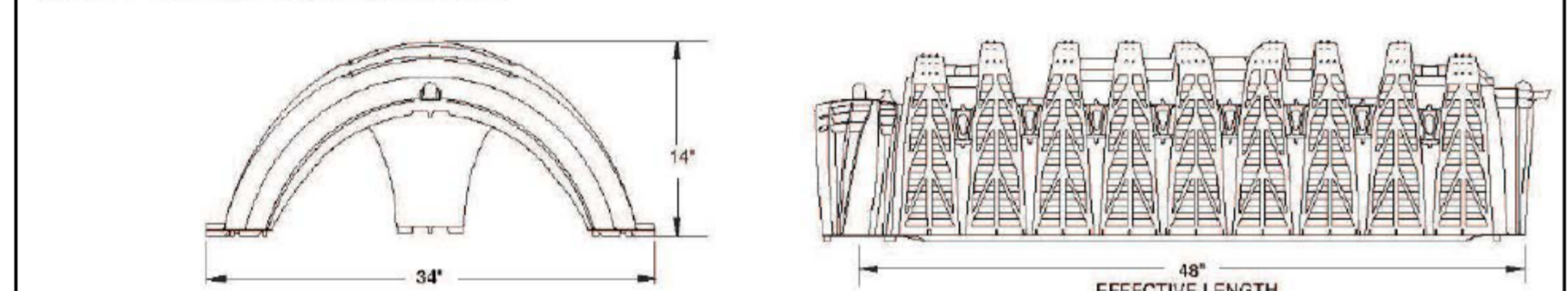
**PROJECT SCOPE & RATIONALE:**

This project is to construct a new 5 BR residence. The new septic system is sized for future expansion (up to 3 BR ADU). A conventional septic system was selected due to ground slope less than 20%, acceptable separation to the highest seasonal groundwater documented in the attached hydro-geologist's report, and favorable percolation rates.

Cover fill is specified for the design due to soil characteristics that include increasing gravel and sand with depth. Testing done initially at 2.5 ft depth resulted in poor percolation rates less than 6 MPI w/ several failing holes.

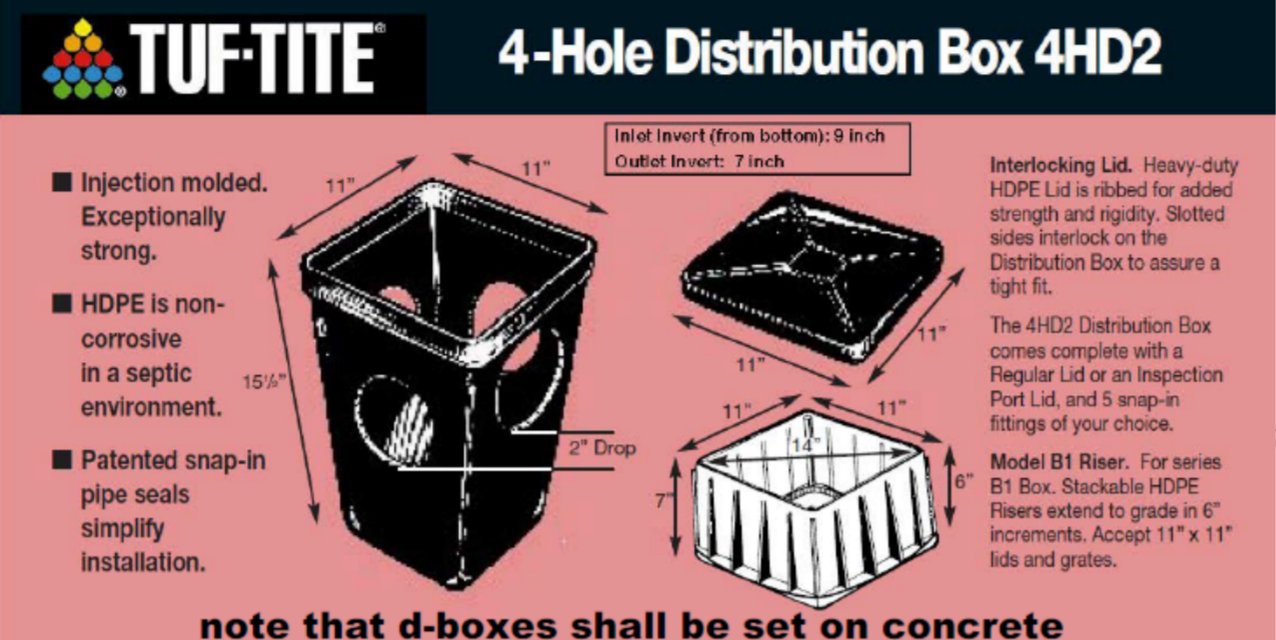
The soil horizon in the top 18" of soil resulted in a more favorable average rate, likely due to the higher percentage of clay and silt. This more favorable soil stratum is expected to provide more effective treatment for disposal of the septic effluent to soil.

**DRAINFIELD CHAMBERS:**



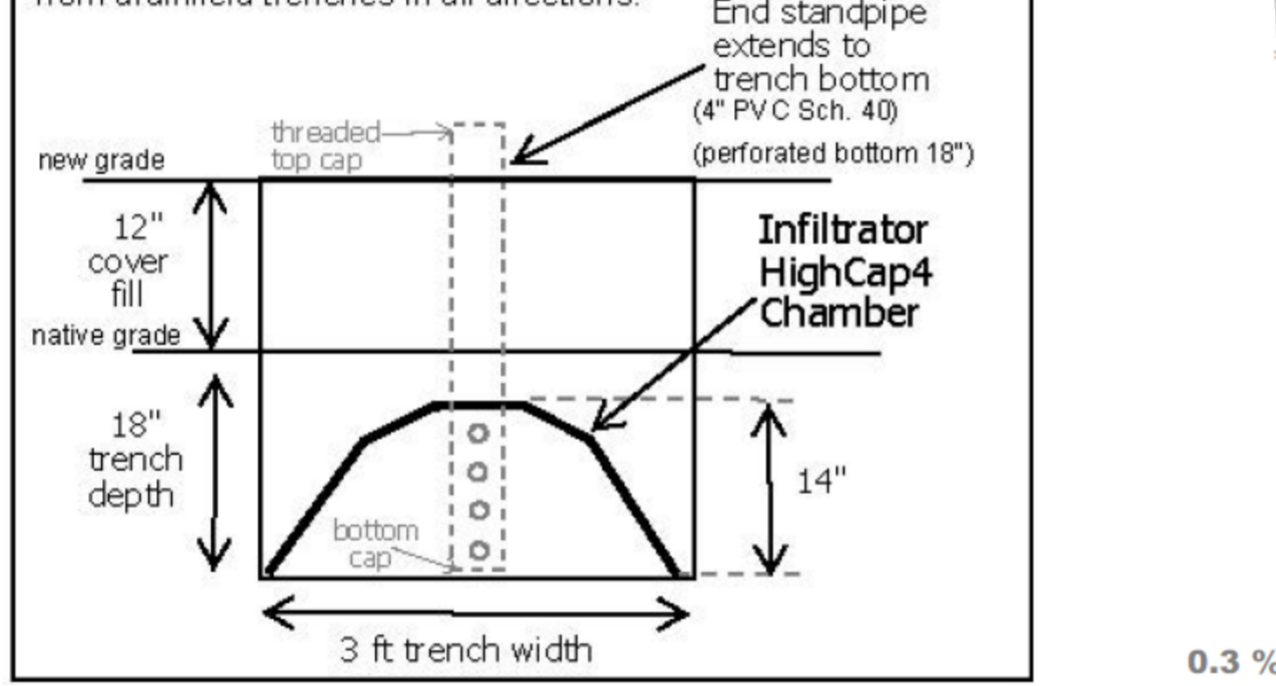
INFLTRATOR®  
www.infiltrator.com

**DISTRIBUTION BOX (2):**



note that d-boxes shall be set on concrete

**DRAINFIELD TRENCH:**  
INFILTRATOR TRENCH DIAGRAM: (not to scale)  
Cover fill must extend minimum 10 ft from drainfield trenches in all directions.



**GEOCONSULTANTS, INC. LOGS:**

Depth (feet)	Description
0 - 5.5	Gravel, silty and sandy, with cobbles, loose, dry, brown (GM)
5.5 - 10.5	Clay, gravelly, grading to clayey gravel, damp, tan (CL-GC)
10.5 - 15.0	Slight, sandy, with cobbles, loose, only slight clay matrix, damp to slightly moist, becoming wet at depth of 14.0 feet, dark brown (GM-GC)

County of Santa Clara - Department of Environmental Health  
SOIL PERCOLATION TEST RECORDED MEASUREMENTS (Electronic Version by Chris Day, R.E.H.S.)

OWNER/APPLICANT:	SR#	DATE	PLN FILE #	LOT #
Son Nguyen	867081	10/15/21	2021-07-048	10

HOLE #	DEPTH	PERCOLATION RATE (MPI)
1	18"	14
2	18"	10
3	18"	10
4	18"	10
5	18"	10
6	18"	10
7	18"	10

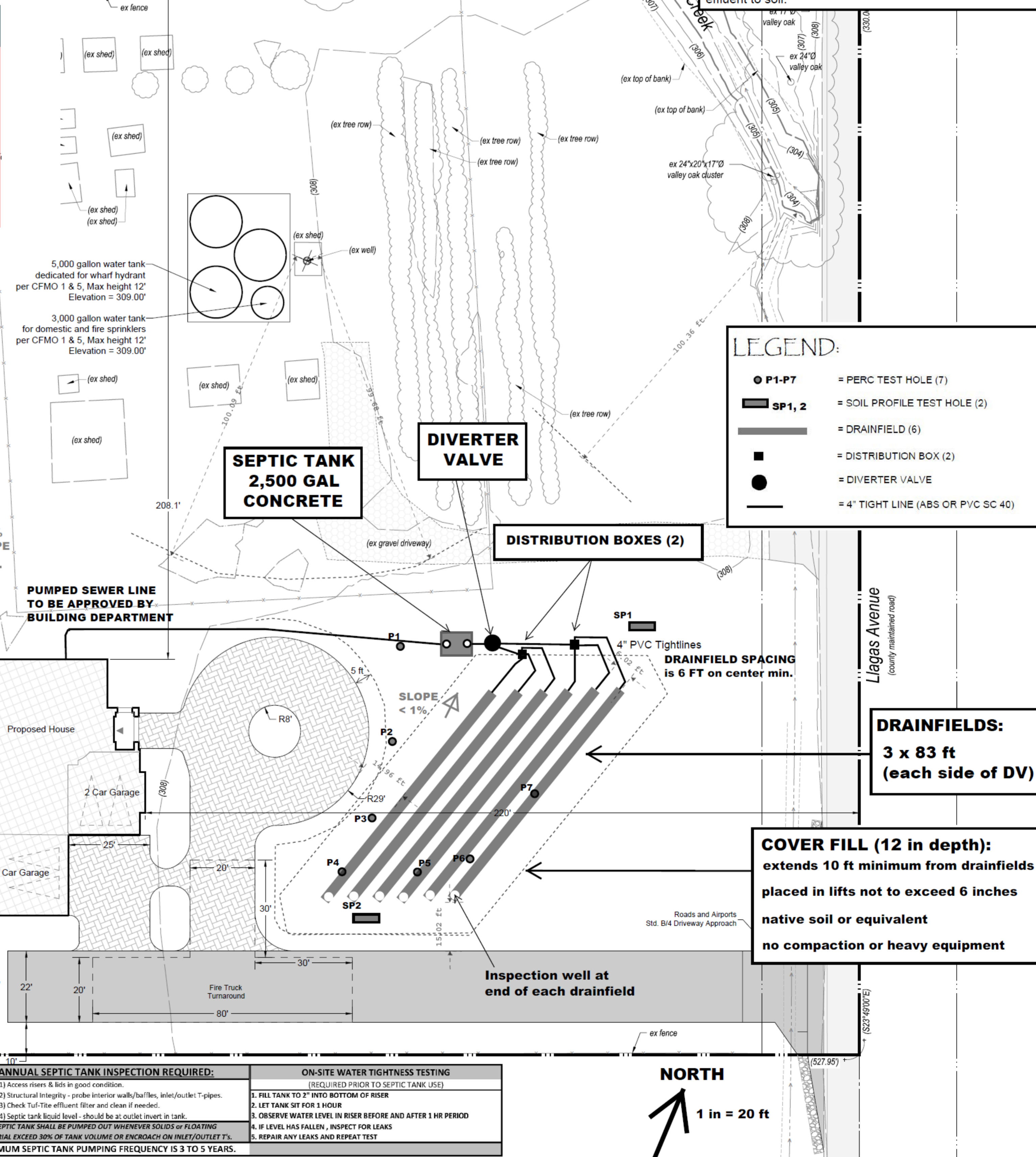
**SOIL PROFILE RESULTS CONVENTIONAL SYSTEMS**

SR#	DATE OF INSPECTION	OWNER
867081	10/15/21	Son Nguyen & Eileen Pham

APN #: 8625-07-048

CONDUCTED BY: Chris Day

CHECKED BY: Peter Torres



**LEGEND:**

- P1-P7 = PERC TEST HOLE (7)
- SP1, 2 = SOIL PROFILE TEST HOLE (2)
- (Shaded Area) = DRAINFIELD (6)
- (Square) = DISTRIBUTION BOX (2)
- (Circle) = DIVERTER VALVE
- (Line) = 4" TIGHT LINE (ABS OR PVC SC 40)

**DRAINFIELDS:**  
3 x 83 ft (each side of DV)

**COVER FILL (12 in depth):**  
extends 10 ft minimum from drainfields placed in lifts not to exceed 6 inches native soil or equivalent no compaction or heavy equipment

ANNUAL SEPTIC TANK INSPECTION REQUIRED:	ON-SITE WATER TIGHTNESS TESTING
1) Access risers & lids in good condition.	(REQUIRED PRIOR TO SEPTIC TANK USE)
2) Structural Integrity - probe interior walls/baffles, inlet/outlet T-pipes.	1. FILL TANK TO 2" INTO BOTTOM OF RISER
3) Check Tuf-Tite effluent filter and clean if needed.	2. LET TANK SIT FOR 1 HOUR
4) Septic tank liquid level - should be at outlet invert in tank.	3. OBSERVE WATER LEVEL IN RISER BEFORE AND AFTER 1 HR PERIOD
	4. IF LEVEL HAS FALLEN, INSPECT FOR LEAKS
	5. REPAIR ANY LEAKS AND REPEAT TEST

Property on Liagas Ave., San Martin CA 95046  
APN 825-07-048  
CONVENTIONAL SEPTIC SYSTEM DESIGN (To Serve Planned 5 BR House and Future 3 BR ADU)  
OWTS 1  
SITE PLAN  
OWNER: Son & Eileen Nguyen  
Tel. 408-799-1813  
Email: trungson@gmail.com  
PLANNED BY: Christopher Day, R.E.H.S.  
P.O. Box 26, Redwood City, CA 94064  
REV 1:  
REV 2: