

LANDS OF ANDRADE
CONVENTIONAL SEWAGE DISPOSAL SYSTEM

RICHMOND AVENUE, MORGAN HILL, CALIFORNIA
APN: 712-18-017

GENERAL NOTES

1. NEW 1,500 GALLON SEPTIC TANKS ARE TO BE INSTALLED, ONE EACH FOR THE ACCESSORY DWELLING UNIT, WITH RISERS TO BE INSTALLED TO GRADE AND THE TANKS ARE TO BE WATER-TIGHT TESTED PRIOR TO APPROVAL.
2. NEW 1,500 GALLON PUMP TANKS WITHOUT BAFFLES ARE TO BE INSTALLED, ONE EACH FOR THE MAIN RESIDENCE AND FOR THE ACCESSORY DWELLING UNIT, WITH RISERS TO BE INSTALLED TO GRADE AND THE TANKS ARE TO BE WATER-TIGHT TESTED PRIOR TO APPROVAL.
3. TWO GRAN FIELDS, EACH 100% OF THE TOTAL SIZE REQUIRED SHALL BE INSTALLED AND INTERCONNECTED WITH AN APPROVED DIVERSION VALVE. THE VALVE MUST BE CAPABLE OF DIRECTING THE SEPTIC TANK EFFLUENT TO ONE DRAIN FIELD AT A TIME.
4. DRAINLINE PIPES SHALL BE OF APPROVED, PERFORATED PIPE, AT LEAST FOUR (4) INCHES IN DIAMETER.
5. THE TIGHTLINE, FROM THE SEPTIC TANKS TO THE DIVERSION VALVE MUST BE 48S OR SCHEDULE 40 PVC JOINED WITH GLUE, CEMENT, OR ELASTOMETRIC SEAL, TO BE WATER-TIGHT.
6. THE DRAINLINE TRENCH BOTTOM MUST BE LEVEL. THE TRENCHES MUST BE 24 INCHES WIDE AND THE TRENCH DEPTH MUST BE A MAXIMUM 3 FEET TO A MINIMUM OF 2 1/2 FEET.
7. A MINIMUM OF 12 INCHES OF CLEAN, WASHED 3/4 TO 2 1/2 INCH DRAINROCK MUST BE PLACED BENEATH THE DRAINPIPE AND FILLED AROUND AND OVER THE PIPE BY AT LEAST TWO (2) INCHES.
8. THE DRAINROCK MUST BE COVERED WITH FILTER FABRIC TO PREVENT CLOGGING THE ROCK WITH EARTH PRIOR TO BACKFILLING THE TRENCH.

NOTES TO OWNER, CONTRACTOR, & OTHERS

1. INSTALLATION OF THIS DESIGN WILL REQUIRE A MINIMUM OF ONE SITE REVIEW BY THE ENGINEER DURING CONSTRUCTION. ADDITIONAL REVIEWS MAY BE REQUIRED DEPENDING ON THE ABILITY OF THE CONTRACTOR TO COMPLETE THE SYSTEM IN A TIMELY MANNER AND PER PLAN. ALL FIELD REVIEWS WILL BE BILLED TO THE OWNER.
2. ADDITIONALLY, THE SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH REQUIRES A LETTER OF DESIGN COMPLIANCE, ISSUED BY THE ENGINEER, ASSESSING DESIGN COMPLIANCE. THIS LETTER IS PREPARED AND SENT TO THE COUNTY DEPARTMENT OF CONSTRUCTION AND SATISFACTION OF ALL OUTSTANDING INVOICES DUE TO THE ENGINEER.
3. SUBSURFACE CONDITIONS MAY BE COMPLEX AND MAY DIFFER FROM THOSE INDICATED BY SURFACE FEATURES OR AS ENCOUNTERED AT PERCOLATION TEST HOLE OR PROFILE TRENCH LOCATIONS. THEREFORE, ROCK OR OTHER VARIATIONS IN SUBSURFACE CONDITIONS NOT INDICATED IN REPORTS OR SHOWN ON THIS PLAN COULD BE ENCOUNTERED. ASSOCIATED TERRA CONSULTANTS SHOULD BE NOTICED IMMEDIATELY IF ANY ADVERSE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION. ANY SUCH CONDITIONS MAY BE TAKEN TO MODIFY THIS PLAN AND/OR THE SYSTEM HEREIN DESIGNED.
4. THIS PLAN AND DESIGN IS BASED ON CURRENT STANDARDS AND TECHNICAL DATA REQUIREMENTS OF THE SANTA CLARA COUNTY PLANNING DEPARTMENT. COMPLIANCE WITH CURRENT COUNTY CODES, STANDARD, AND REQUIREMENTS IS NOT A GUARANTEE OF WARRANTY, EITHER EXPRESSED OR IMPLIED, OF SEPTIC SYSTEM FUNCTION OR PERFORMANCE OF THE SYSTEM.
5. ASSOCIATED TERRA CONSULTANTS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNLAWFUL CHANGES TO OR USE OF THESE PLANS OR ANY CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY ASSOCIATED TERRA CONSULTANTS. IN ADDITION, THE ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE FUNCTION OF ANY OF THE SYSTEM COMPONENTS MANUFACTURED/DESIGNED BY OTHERS.
6. THE CONSTRUCTION CONTRACTOR AGREES IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE/SHE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT MUST BE PROTECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPERLY CONDUCTED PERCOLATION TESTS AND FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL EXEMPT FROM ANY AND ALL LIABILITY IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
7. PRINTS OF THESE PLANS USED IN CONSTRUCTION MUST HAVE A "WET" STAMP OF APPROVAL APPLIED BY THE SANTA CLARA COUNTY PLANNING DEPARTMENT TO INDICATE THAT A PERMIT TO INSTALL THE SEPTIC SYSTEM HAS BEEN GRANTED. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR CONSTRUCTION DONE WITHOUT PERMITS OR THE COUNTY APPROVED PLANS).
8. THE SITE EXHIBITS ASSOCIATED WITH THE PRODUCTION OF THESE PLANS DOES NOT REPRESENT A BOUNDARY DETERMINATION OR COMPLETE TOPOGRAPHIC SURVEY OF THE SITE. ONLY MAPPING WITHIN THE IMMEDIATE VICINITY OF THE PROPOSED SYSTEM HAS BEEN VERIFIED BY THIS OFFICE. PROPERTY LINES SHOWN IN THESE EXHIBITS ARE FOR GENERAL REFERENCE ONLY. ANY USE OF THESE PLANS OTHER THAN FOR INSTALLATION OF THE PROPOSED SEPTIC SYSTEM IS A THE RISK OF THE DEVELOPER.
9. SHOULD TREE ROOT ZONE BE IMPACTED, IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSULT WITH A QUALIFIED ARBORIST TO DETERMINE THE APPROPRIATE COURSE OF ACTION.

PROJECT CONTACT INFORMATION

DESIGNER INFORMATION OWNER INFORMATION

ASSOCIATED TERRA CONSULTANTS, INC.
1725 DELL AVENUE
CAMPBELL, CALIFORNIA 95008
(408) 866-1067
OFFICE@ATERRACON.COM

EDGAR ANDRADE
269 MOONPARK DRIVE
HOLLISTER, CALIFORNIA 95023
BAYAREAHVACS@GMAIL.COM
(408) 550-5155

CONSTRAINTS & DESIGN CRITERIA

- THIS DESIGN IS FOR TWO INDEPENDENT CONVENTIONAL SYSTEMS PROPOSED TO SERVE A FIVE (5) BEDROOM PRIMARY RESIDENCE AND A THREE (3) BEDROOM ACCESSORY DWELLING UNIT AND A ONE (1) BEDROOM JUNIOR ACCESSORY DWELLING UNIT AT RICHMOND DRIVE, APN: 712-18-017, SANTA CLARA COUNTY, CALIFORNIA.
1. THE PROPOSED SYSTEM IS DESIGNED WITH A WASTEWATER FLOW OF 450 GALLONS PER DAY (GPD) PER COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH GUIDELINES.
2. SOIL PROFILES DID NOT EXHIBIT ANY EVIDENCE OF SEASONALLY HIGH GROUNDWATER CONDITIONS. SEASONALLY HIGH GROUNDWATER IS ESTIMATED TO OCCUR AT GREATER THAN FIVE (5) FEET BELOW GRADE. GROUNDWATER WAS NOT DETECTED.
3. NO SPRINGS OR WATERCOURSES ARE SITUATED WITHIN 50 FEET OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM (OWTS).
4. NO WELLS ARE SITUATED WITHIN 100 FEET OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM (OWTS).
5. THIS SITE IS SERVED BY A PRIVATE WELL.

EROSION AND SEDIMENT CONTROL

1. PREPARE EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF THE CCB AND THE SANTA CLARA COUNTY CODE.
2. DURING THE RAINY SEASON, OCTOBER 15 TO APRIL 15, EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE.
3. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
4. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED ON THE SITE. IF QUESTIONS REGARDING THE COUNTY SPECIFIED BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL CALL ASSOCIATED TERRA CONSULTANTS.
5. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE AND AFTER STORM EVENTS.
6. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MAY RESULT IN RESPONSE TO FIELD CONDITIONS.
7. ENTRANCES TO SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY R.O.W. SHALL BE DISPOSED OF AS THEY OCCUR.
8. EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES SUCH AS ROLL-ON BARRIERS AND SILT FENCES SHALL BE KETED INTO THE SOILS AND INSTALLED ON COUNTOUR.
9. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE AFTER GRADING. GROUND SHALL BE COMPLETELY COVERED.
10. STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS.
11. SOIL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE RUNOFF.
12. SOLID WASTE AND CONSTRUCTION MATERIALS SHALL BE PLACED IN DESIGNATED COLLECTION AREAS AND DISPOSED OF AT APPROVED DISPOSAL SITES.
13. ALL UNDERGROUND BOXES REQUIRE INSTALLATION OF COPPER-RESISTANT BARRIERS.
14. NO FOUNDATION AND/OR DRIVEWAY CUTS AND NO SURFACE OR SUB-SURFACE DRAINS ARE TO BE LOCATED WITHIN 50 FT DOWN SLOPE OR LATERALLY OF THE SPOUTS AWAY FROM LEACHFIELD.

SYSTEM DESIGN CRITERIA

AVERAGE PERCOLATION RATE: 44.93 MPI

APPLICATION RATE: .46 GPD/SQ FT²

EFFECTIVE INFILTRATION AREA: 4 SQ FT

WASTEWATER FLOW

5 BEDROOM RESIDENCE	600
3 BEDROOM ADU	450
1 BEDROOM JUNIOR ADU	150
TOTAL GALLONS PER DAY:	1200

L = Trench length
Q = Wastewater flow
R = Application rate
A = Effective infiltration area

$L = Q/(R \cdot A)$

$L = 1200 / (.46 \cdot 4)$

L = 652 LF

Two dispersal fields, primary (A) and secondary (B), of 652 LF and 652 LF, total 1304 LF.

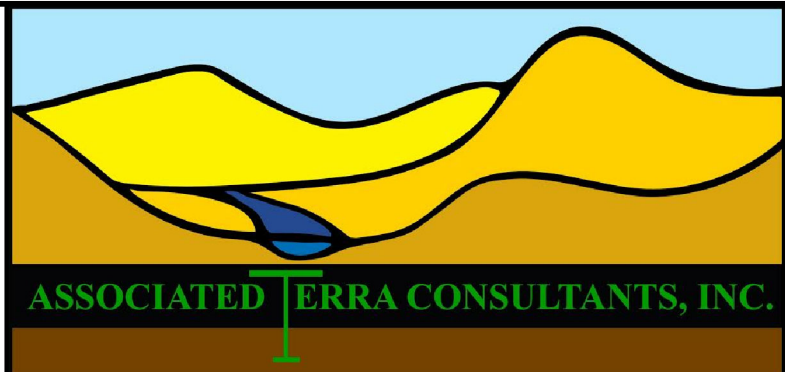
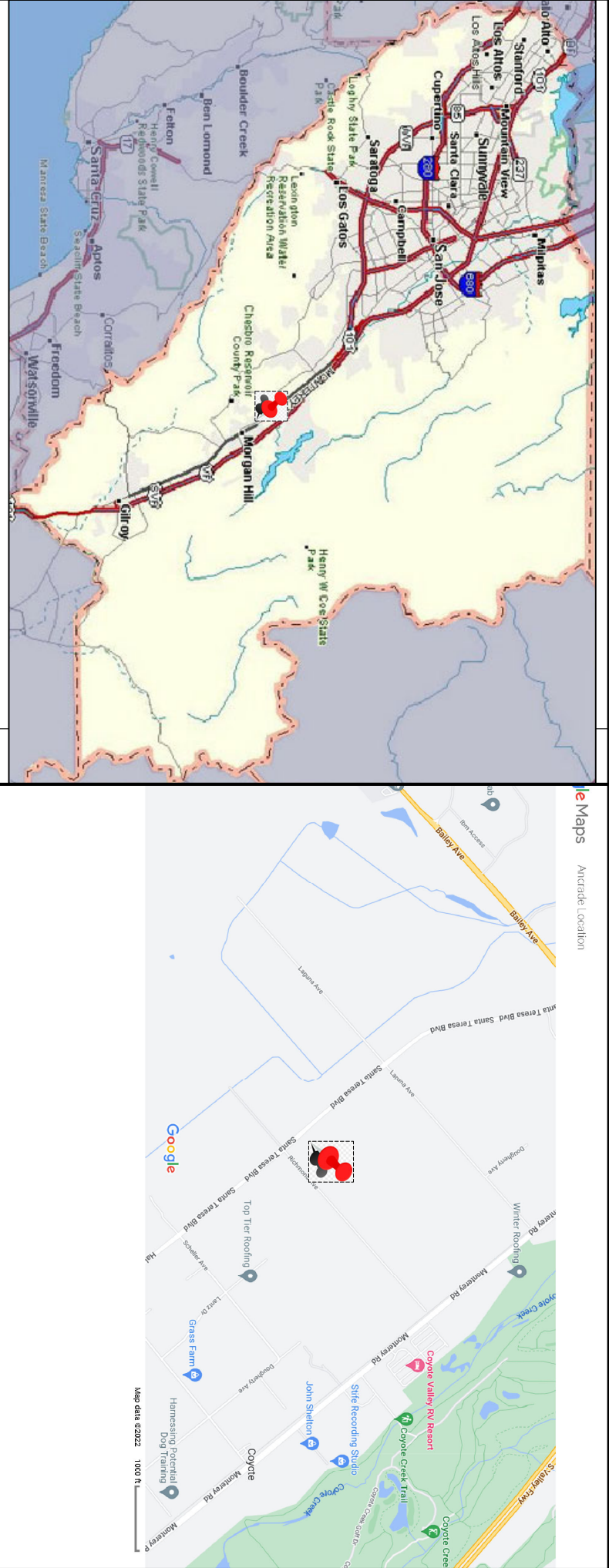
STAGES TO BE INSPECTED

CONTRACTOR IS REQUIRED TO HAVE ENGINEER AND/OR SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH PRESENT TO OBSERVE INSPECTIONS AT THE FOLLOWING STAGES. FAILURE TO REQUEST THESE INSPECTIONS WILL BE AT THE CONTRACTOR HAVING TO UN-EARTH AND RE-DO THE WORK. THE ENGINEER MUST ISSUE AN INSPECTION REPORT TO THE COUNTY PRIOR TO ACCEPTANCE OF THE SYSTEM BY THE COUNTY. THE CONTRACTOR SHALL GIVE 48-HOUR ADVANCE NOTICE TO THE ENGINEER FOR ANY OF THESE INSPECTIONS:

- INSPECTIONS BY ENGINEER ONLY
1. INSPECTION OF IMPORTED MATERIALS.
 2. CHECKING THE LAYOUT, LINE AND GRADE, STAKES.
- INSPECTIONS BY SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH REVIEW STAFF
3. SEPTIC & SUMP TANK WATER TIGHTNESS TEST.
 4. FINAL INSPECTION.

SHEET INDEX

SHEET 1 SEPTIC SYSTEM NOTES
SHEET 2 SEPTIC SYSTEM DETAILS
SHEET 3 SEPTIC SYSTEM PLAN
SHEET 4 SEPTIC SYSTEM PLAN
SHEET 5 ARCHITECTURAL PLANS



ASSOCIATED TERRA CONSULTANTS, Inc.

Engineering Geology / Soils Engineering /
Hydrogeology / Septic Testing and Design

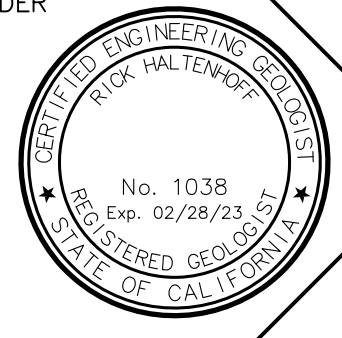
1725 DELL AVENUE
CAMPBELL, CA 95008

TEL (408) 866-1067
OFFICE@ATERRACON.COM

DRN: DD
CHK: RH
JOB #: 278861
DATE: 06/01/22
EHH: SR0867272

THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF EDGAR ANDRADE IN OCTOBER, 2021.

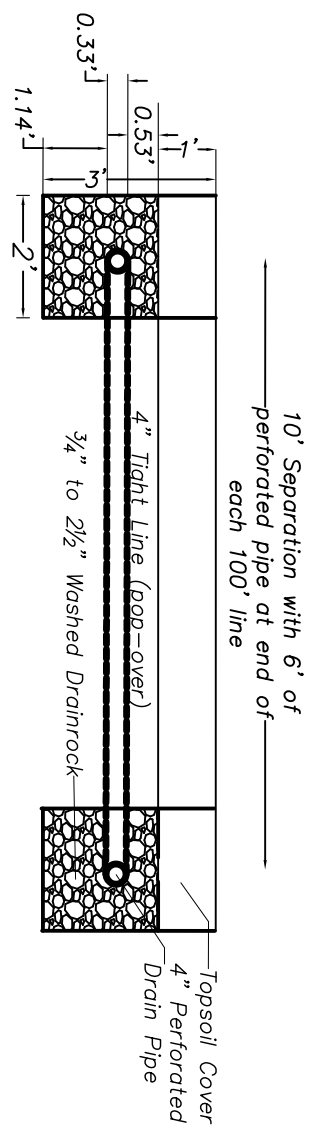
RICK HALTENHOFF C.E.G. 1038



LANDS OF ANDRADE
SEPTIC SYSTEM NOTES

RICHMOND AVENUE
MORGAN HILL, CALIFORNIA

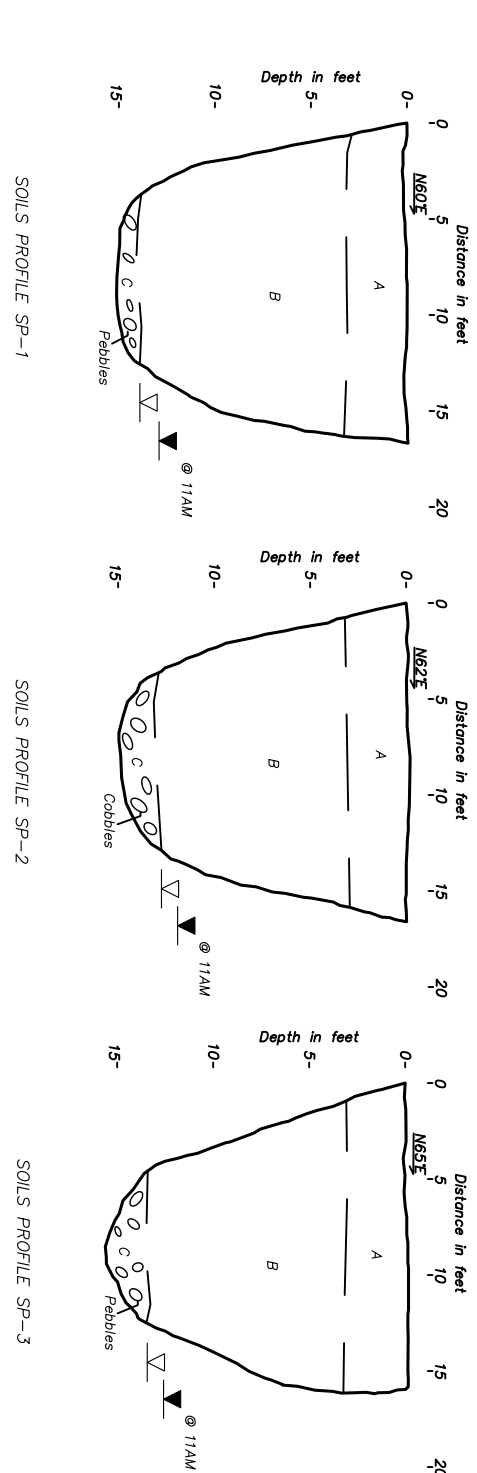
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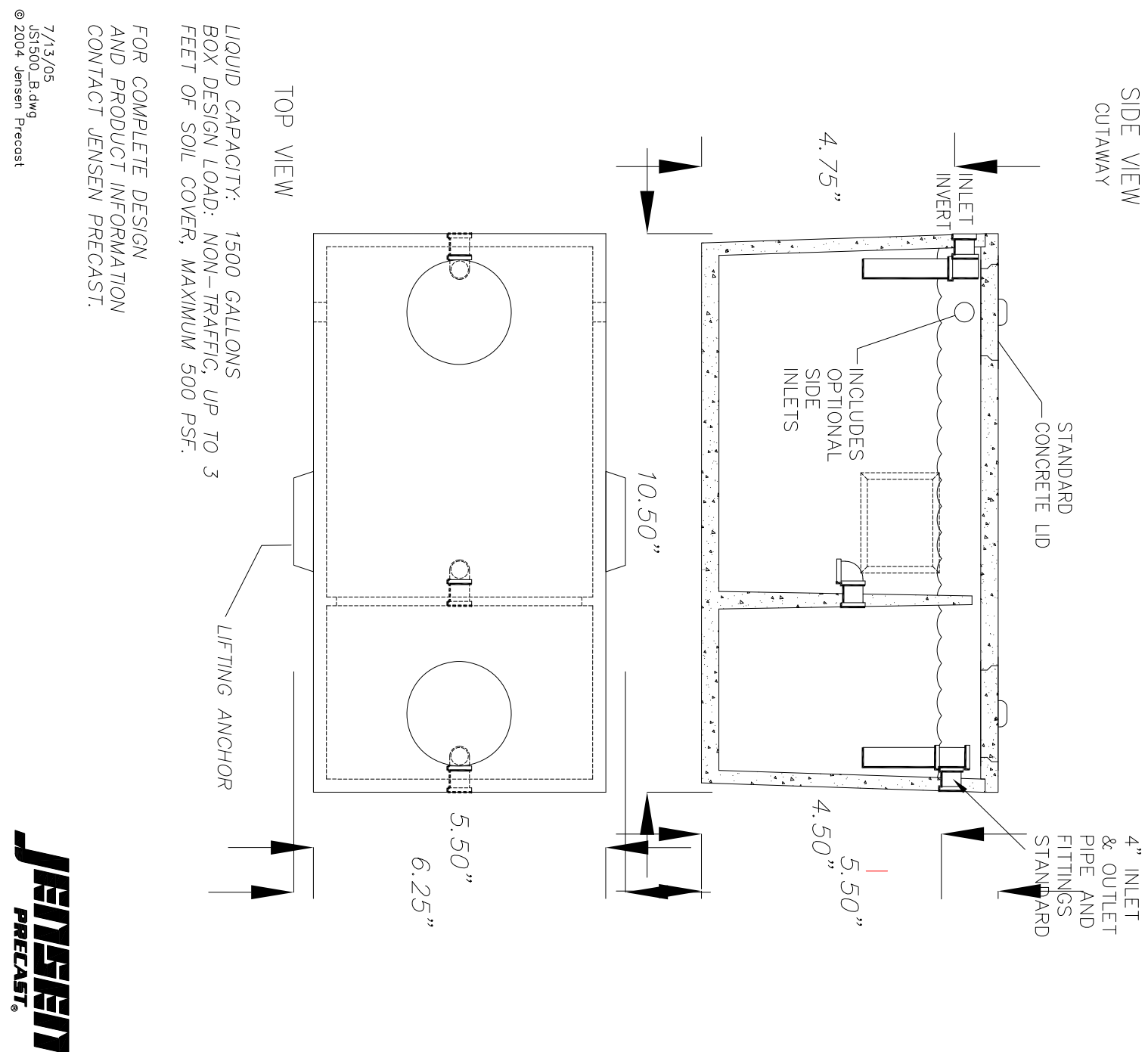
2 LEACH LINE TABLE

SEPTIC FIELD LAYOUT			
LINE LABEL	LENGTH (FT) FIELD A	LINE LABEL	LENGTH (FT) FIELD B
A1	100	B1	100
A2	100	B2	100
A3	100	B3	100
A4	100	B4	100
A5	100	B5	100
A6	100	B6	100
A7	6	B7	6
A8	6	B8	6
A9	6	B9	6
A10	6	B10	6
A11	6	B11	6
A12	6	B12	6
A13	6	B13	6
A14	6	B14	6
A15	6	B15	6
TOTAL	654	TOTAL	654

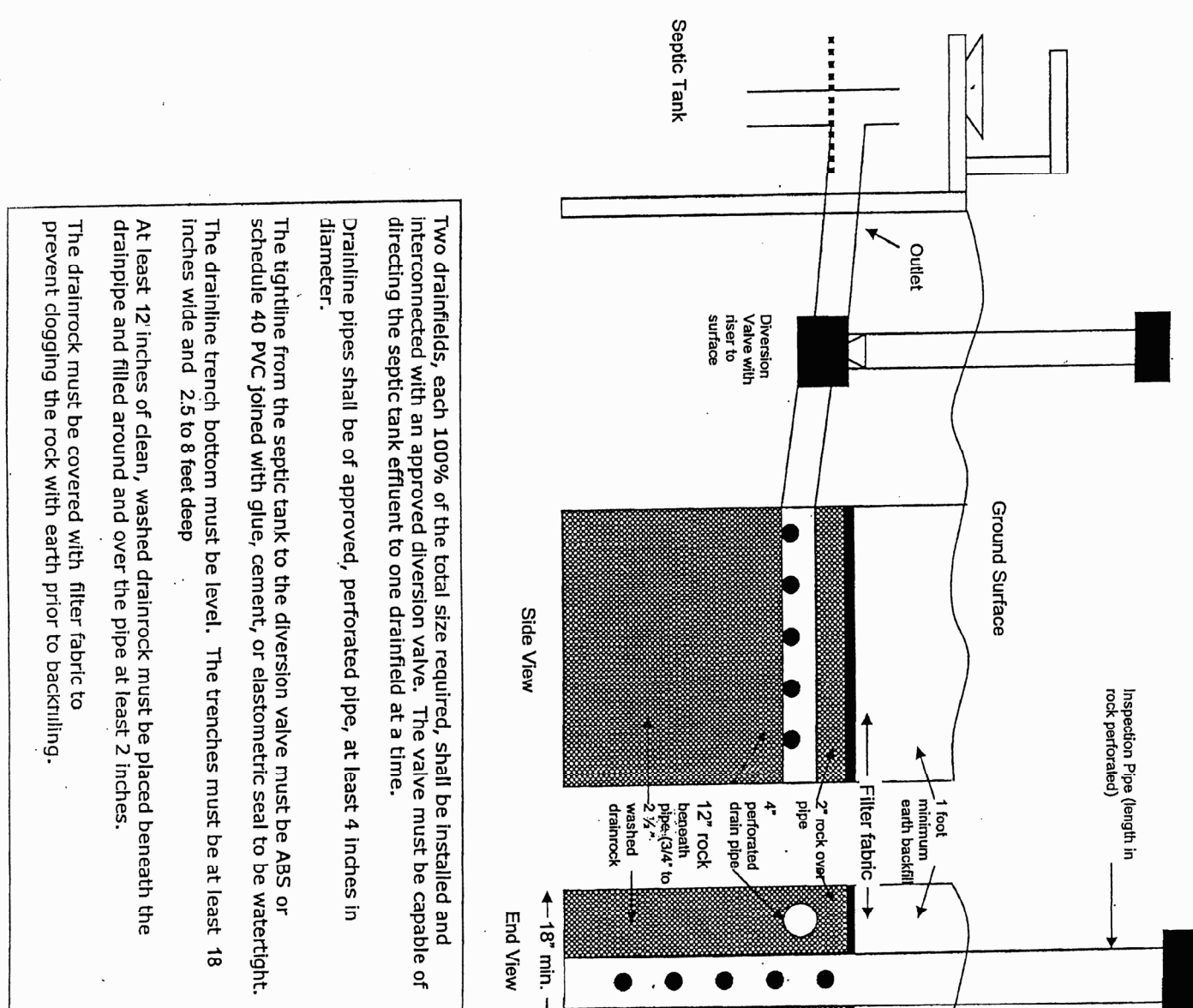
5 SOILS PROFILES



1 SEPTIC TANK



4 DRAINLINE DETAIL



6 PERCOLATION TESTING RESULTS

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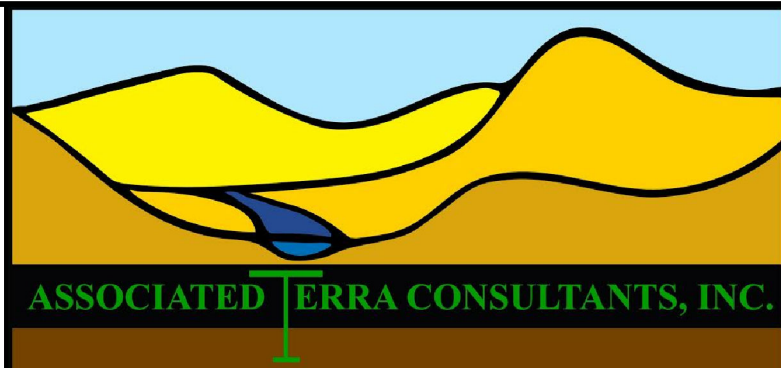
Subject: VERIFICATION OF VALIDITY OF PERCOLATION TEST
APN: 712-18-017
Richmond Avenue, Santa Clara County, California

Dear Mr. Andrade:

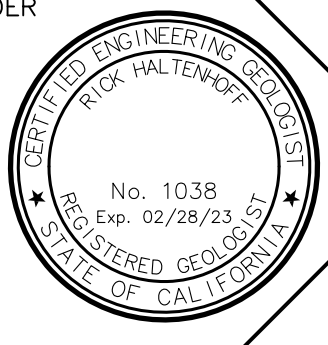
We are pleased to have been of service to you at this time. Please do not hesitate to call us if you have any questions regarding this project, or if we can be of any other service. Thank you.

Very truly yours,
ASSOCIATED TERRA CONSULTANTS, Inc.

Nicole H. Duarte
Project Engineering Geologist



THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF EDGAR ANDRADE IN OCTOBER, 2021.





GRAPHIC SCALE

(IN FEET)

1 inch = 20 ft.