

Improvement Plans for Vista del Mar School Wastewater Improvements

9467 San Julian Rd, Gaviota, CA 93117

SCOPE OF WORK

DEMOLITION OF AN EXISTING ABOVE GROUND MECHANICAL PACKAGE WASTEWATER TREATMENT PLANT AND INSTALLATION OF A 10,000 GALLON SEPTIC TANK WITH (6) 6 FT. DIAMETER, 40 FT. DEEP SEEPAGE PITS AND APPURTENANT UNDERGROUND FORCEMAIN PIPELINES TO EACH SEEPAGE PIT.

EXISTING FACILITIES SHOWN ON THIS PLAN ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATION OF EXISTING FACILITIES AND NOTIFY ENGINEER IN ADVANCE OF ANY POTENTIAL CONFLICTS PRIOR TO COMMENCEMENT OF WORK.

ELECTRICAL WORK ASSOCIATED WITH THIS PROJECT WILL BE PROVIDED UNDER SEPARATE PERMIT.

GENERAL NOTES:

- THESE PLANS ARE PART OF A SET OF CONTRACT DOCUMENTS AND SHALL NOT BE CONSIDERED THE SOLE SOURCE OF CONSTRUCTION INFORMATION. ALL ROAD CONSTRUCTION WORK SHALL CONFORM TO SANTA BARBARA COUNTY PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED CONTRACT DOCUMENTS FOR THIS PROJECT ON THE SITE AT ALL TIMES AND SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE DURING THE COURSE OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ENGINEER AND OWNER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, OR THIRD PARTY IN VIOLATION OF THE LAW OR IN TRESPASS. THE CONTRACTOR SHALL PRACTICE SAFETY AT ALL TIMES AND SHALL FURNISH, ERECT, AND MAINTAIN, SUCH FENCES, BARRICADES, LIGHTS, AND SIGNS NECESSARY TO GIVE ADEQUATE PROTECTION TO THE PUBLIC AT ALL TIMES.
- INFORMATION PERTAINING TO EXISTING UNDERGROUND FACILITIES IS BASED ON RECORD INFORMATION AND IS AS SHOWN FOR INFORMATIONAL PURPOSES ONLY. UNDERGROUND FEATURES SHOWN IN PLAN VIEW ON THE PLANS ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT, AND MAY NOT APPEAR IN PROFILE OR SECTIONS VIEWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL AGENCIES INVOLVED AND SHALL LOCATE ALL FACILITIES PRIOR TO EXCAVATION IN ANY AREA. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA), TOLL FREE AT 811 FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTINUALLY REVIEW JOB SITE CONDITIONS. CONDITIONS REQUIRING CONSTRUCTION DIFFERENT FROM THAT SHOWN ON THE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED CONSTRUCTION.
- THESE DRAWINGS REPRESENT THE FINISHED CONDITION AND UNLESS OTHERWISE INDICATED, THEY DO NOT SHOW THE METHOD OF CONSTRUCTION.
- ALL IMPROVEMENTS SHOWN OR INDICATED ON THESE DRAWINGS ARE TO BE CONSTRUCTED AND/OR INSTALLED BY THE CONTRACTOR IN THIS PROJECT, UNLESS THEY ARE CALLED OUT AS: "EXISTING", "FUTURE", "NIC", "NOT A PART" OR HAVE SOME OTHER EXCLUDING NOTATION.
- CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK WHICH IS CONSTRUCTED.
- THE ENGINEER OF WORK SHALL PERFORM PERIODIC REVIEWS OF COMPLETED WORK TO DETERMINE CONFORMANCE WITH THE APPROVED PLANS. CONTRACTOR SHALL CORRECT ANY DIFFERENCES FOUND BY SUCH SURVEY AND WILL PROVIDE ALL CONTRACTOR'S RECORDS KEPT DURING THE COURSE OF CONSTRUCTION TO THE ENGINEER OF WORK FOR PREPARATION OF RECORD DRAWINGS.
- OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS AND STANDARDS SHALL BE OBSERVED AT THE JOB SITE AT ALL TIMES.
- CONTRACTOR SHALL ORGANIZE A PRE-CONSTRUCTION MEETING PRIOR TO COMMENCEMENT OF WORK. THE MEETING SHALL INCLUDE (AT A MINIMUM) THE OWNER/REPRESENTATIVE, CONTRACTORS, ENGINEER OF WORK, SOILS ENGINEER, PERTINENT UTILITY COMPANIES, AND COUNTY STAFF. THIS MEETING IS REQUIRED WITH THE INSPECTOR AND THE PURPOSE OF MEETING IS TO REVIEW THE INSPECTION PROCEDURES, REPORTS REQUIRED, FREQUENCY OF INSPECTIONS AND SPECIAL INSPECTION REQUIRED FOR THE PROJECT.
- DO NOT SCALE DRAWINGS. IF DIMENSIONAL QUESTIONS OCCUR, CONSULT WITH THE CIVIL ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND PROVIDE BRACING DURING CONSTRUCTION TO SUPPORT ALL LOADS TO WHICH STRUCTURES MAY BE SUBJECTED.

CONSTRUCTION NOTES:

- PRIOR TO THE START OF EARTHWORK OPERATIONS, ALL EXISTING HAZARDS SUCH AS ACTIVE UTILITY SERVICES, IRRIGATION LINES, ETC. SHALL BE LOCATED AND SECURED OR REMOVED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES SHALL DEPEND UPON THEIR DEPTH AND LOCATIONS, AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE APPLICABLE BUILDING STANDARDS REQUIREMENTS.
- ALL IMPROVEMENTS NOT INTENDED TO REMAIN SHALL BE REMOVED FROM THE SITE PRIOR TO THE START OF ANY EARTHWORK OPERATION.
- ALL VEGETATION AND MISCELLANEOUS SURFACE DEBRIS SHALL BE REMOVED, PILED OR OTHERWISE DISPOSED OF, TO THE EXTENT THAT THE AREAS PROPOSED FOR DEVELOPMENT SHALL HAVE A NEAT APPEARANCE AND ARE SUITABLE FOR GRADING.
- THE SITE WILL REQUIRE ONLY SLIGHT GRADING SINCE IT IS RELATIVELY LEVEL.
- WORK TO BE PERFORMED DURING PERIOD OF EXTENDED SCHOOL INACTIVITY (EG. CHRISTMAS VACATION, EASTER VACATION, SUMMER BREAK), CONTRACTOR TO PROVIDE PORTABLE, TEMPORARY RESTROOMS FOR INCIDENTAL USE BY SCHOOL STAFF IN ADDITION TO PORTABLE RESTROOMS FOR CONSTRUCTION STAFF.

UTILITY TRENCHES

- UNLESS OTHERWISE RECOMMENDED, UTILITY TRENCHES ADJACENT TO FOUNDATIONS SHOULD NOT BE EXCAVATED WITHIN THE ZONE OF INFLUENCE OF SHALLOW FOUNDATIONS.
- UTILITIES THAT MUST PASS BENEATH A FOUNDATION SHOULD BE PLACED WITH PROPERLY COMPACTED UTILITY TRENCH BACKFILL, AND THE FOUNDATION SHOULD BE DESIGNED TO SPAN THE TRENCH.
- A SELECT, NONCORROSIVE, GRANULAR, EASILY COMPACTED MATERIAL SHOULD BE USED AS BEDDING AND SHADING IMMEDIATELY AROUND UTILITIES. TRENCH BACKFILL ABOVE THE SELECT MATERIAL CAN CONSIST OF SITE SOILS, CRUSHED BEDROCK OR IMPORTED NONEXPANSIVE MATERIALS. TRENCH BACKFILL IN BUILDING AREAS, VEHICLE FLATWORK, OR PAVEMENT AREAS SHOULD MATCH THE THICKNESS OF THE NONEXPANSIVE MATERIAL OR AGGREGATE BASE BELOW THE FLATWORK.
- THE RECOMMENDATIONS OF THIS SECTION ARE MINIMUMS ONLY, AND MAY BE SUPERSEDED BY THE REQUIREMENTS OF THE CLIENT, PIPE MANUFACTURERS, UTILITY COMPANIES, OR THE GOVERNING JURISDICTION BASED UPON SOIL CORROSIVITY OR OTHER FACTORS.

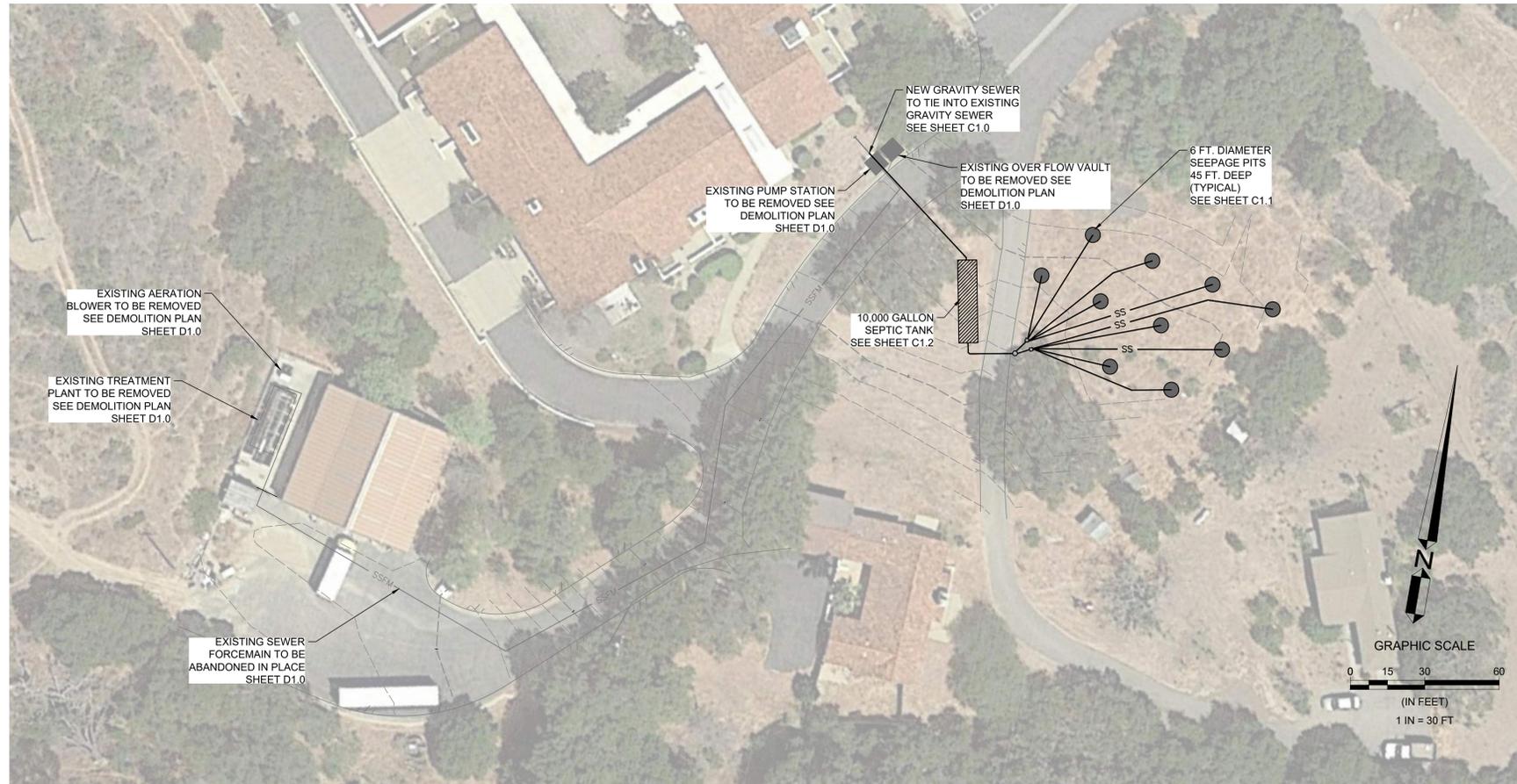
DRAINAGE AND MAINTENANCE

- UNPAVED GROUND SURFACES SHOULD BE GRADED DURING CONSTRUCTION AND, PER SECTION 1804.3 OF THE CBC, SHOULD BE FINISH GRADED TO DIRECT SURFACE RUNOFF AWAY FROM FOUNDATIONS, SLOPES, AND OTHER IMPROVEMENTS AT A MINIMUM 5 PERCENT GRADE FOR A MINIMUM DISTANCE OF 10 FEET. IF THIS IS NOT PRACTICABLE DUE TO TERRAIN, SURFACE IMPROVEMENTS, PROXIMITY OF PROPERTY LINES, ETC., SWALES WITH IMPROVED SURFACES, AREA DRAINS, OR OTHER DRAINAGE FEATURES SHOULD BE PROVIDED TO DIVERT DRAINAGE AWAY FROM THESE AREAS.
- FINISHED SURFACES SHOULD BE SLOPED TO FREELY DRAIN TOWARD APPROPRIATE DRAINAGE FACILITIES. WATER SHOULD NOT BE ALLOWED TO STAND OR POND ON OR ADJACENT TO FOUNDATIONS.



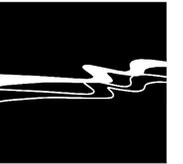
PROJECT LOCATION
NTS

Sheet Number	Sheet Title
G1.0	Cover and Notes
G2.0	Percolation Test Report
G2.1	Percolation Test Report Soil Borings
V1.0	Topographic Survey
D1.0	Demolition Plan
D1.1	Demolition Plan
C1.0	Site Layout
C1.1	Seepage Pit & Septic Tank Details
C2.0	Standard Details
C2.1	Standard Details



1 Project Overview

Scale: 1"=30'



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Vista del Mar Union School District
Wastewater Improvements
Cover and Notes

JOB #: 1389-0002
DESIGNERS: SJ
DRAWN BY: LL
DATE: 09-04-2020

DRAWING NO.

G1.0

1 OF 10 SHEETS

Rev.	Date	Description of Revisions	By
	09-04-2020	ISSUED FOR REVIEW	LL



2049 Preisker Lane, Suite E | Santa Maria, CA 93454 | Ph: 805.928.2991 | www.earthsystems.com

March 23, 2020

FILE NO.: 303655-002

Mr. Randall Haggard, Superintendent
Vista Del Mar School District
9467 San Julian Road
Gaviota, California 93117

PROJECT: VISTA DE LAS CRUCES SCHOOL, 9467 SAN JULIAN ROAD
GAVIOTA AREA OF SANTA BARBARA COUNTY, CALIFORNIA

SUBJECT: Results of Percolation Testing for Dry Wells

REF: 1) Proposal for Percolation Testing for Dry Wells, Vista de las Cruces School, 9467 San Julian Road, Gaviota Area of Santa Barbara County, California, by Earth Systems Pacific, dated February 10, 2020, Doc. No. 2002-018.PRP

2) Percolation Testing Report, Vista de Las Cruces School, 9467 San Julian Road, Gaviota area of Santa Barbara County, California, by Earth Systems Pacific, dated January 14, 2020

3) Percolation Testing Report, Vista de Las Cruces School, 9467 San Julian Road, Gaviota area of Santa Barbara County, California, by Earth Systems Pacific, dated July 3, 2017

Dear Mr. Haggard:

In accordance with the authorization of the above referenced proposal, presented herein are the results of the percolation testing performed for dry wells for effluent disposal at the Vista de Las Cruces School. The campus is located at 9467 San Julian Road in the Gaviota Area of Santa Barbara County, California. Percolation tests (designated A through H and I through N) were previously completed at the site as reported in References 2 and 3. Accordingly, the percolation test borings for this current phase of work were numbered sequentially, as Borings O and P.

The purpose of this phase of percolation testing was to develop a preliminary understanding of the deep percolation characteristics of the soils and bedrock. Our findings are presented herein for use by others in determining the suitability and design of the dry wells at the school.



Vista de Las Cruces School

March 23, 2020

Field Investigation

On March 2, 2020, two percolation test borings (designated O and P) were drilled at the site to depths ranging from approximately 40 to 45 feet below the existing ground surface (bgs). The borings were drilled with a Mobile Drill Model B-53 drill rig equipped with a 6-inch diameter hollow stem auger. The percolation test boring locations are shown on the attached Percolation Test Location Map.

Soils encountered in the percolation test borings were categorized and logged in general accordance with the Unified Soil Classification System and ASTM D2488-17. Where bedrock was encountered, its properties were described based upon observation of the spoils and the effort required to drill into the bedrock. The boring logs are presented in Appendix A, along with a Boring Log Legend. In reviewing the boring logs and legend, the reader should recognize that the legend is intended as a guideline only, and there are a number of conditions that may influence the characteristics observed during drilling. These include, but are not limited to, the presence of cobbles or boulders, cementation, variations in soil moisture, presence of groundwater, and other factors. Consequently, the logger must exercise judgment in interpreting soil and bedrock characteristics, possibly resulting in soil or bedrock descriptions that vary from the legend.

General Subsurface Profile

The general subsurface profile observed in the borings consisted of a layer of surficial sand and clay soils overlying sandstone bedrock of the Gaviota formation. The sands were in a slightly moist to moist condition and had a medium dense to dense consistency. The clays were moist and medium stiff to stiff. The sandstone was moist with a very soft to soft consistency.

Seepage was encountered in the borings at depths ranging from 39 to 40 feet bgs. The seepage in the borings was monitored until the water level stabilized. After approximately 1 hour, the water level initially stabilized at approximately 36 feet bgs in percolation test boring O and 38 feet in percolation test boring P; however, all the water drained away after the water was shut off and the borings were left open overnight during percolation testing. Please refer to the attached boring logs for a more complete description of the subsurface conditions.



Vista de Las Cruces School

March 23, 2020

Percolation Testing

After drilling the percolation test borings, a perforated polyvinyl chloride (PVC) pipe was placed in the center of each boring. The annular spaces around the outside of the PVC pipes were then filled with gravel to reduce caving of the boring walls during the percolation testing. Percolation testing was initiated by filling the borings with water to approximately 1 to 3 feet bgs and maintaining a relatively constant level or head of water for a period of approximately 4 hours. Then we turned the water off and allowed the water level to drop overnight for a period of 14 hours. The following morning when we returned to resume testing, both of the percolation test borings had drained completely. We then refilled the borings and maintained a relatively constant head of water at approximately 5 feet bgs for a final period of approximately 6 hours.

Water used in the percolation testing was supplied from nearby hose bibs onsite, and float valves were utilized to control the water flow as necessary to keep the water from overflowing onto the surrounding ground surface. A calibrated flow meter was used to measure the volume of water introduced into the respective percolation test borings over the testing period. After the completion of the percolation testing, the perforated pipes were removed and the boreholes were backfilled with drill cuttings and bentonite chips.

Test Results

	Percolation Test Designation	
	Boring O	Boring P
Depth of Percolation Test Boring	40 feet	45 feet
Volume of water added during initial 4-hour constant head portion of test	180 gallons Water at 1ft bgs	336 gallons Water at 3ft bgs
Falling head portion of test	Drop of 10.1 ft after 1 hour; Empty after 14 hours	Drop of 19.2 ft after 1 hour; Empty after 14 hours
Volume of water added during final 6-hour constant head portion of test	154 gallons Water at 5ft bgs	319 gallons Water at 5ft bgs



Vista de Las Cruces School

March 23, 2020

The test results indicate the volume of water that was added during the constant head portion of the test and the drop in water elevation during the falling head portion of the test at the specific location and under specific conditions. Please note that evaluation of the results as they pertain to location, sizing, and design of the effluent disposal systems are the responsibility of others. Sound engineering judgment should be exercised in the design of the system, and extrapolating the test results for other conditions or locations.

If there are any questions concerning this letter, please do not hesitate to contact the undersigned.

Sincerely,
Earth Systems Pacific

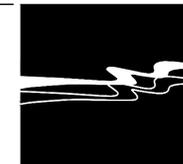
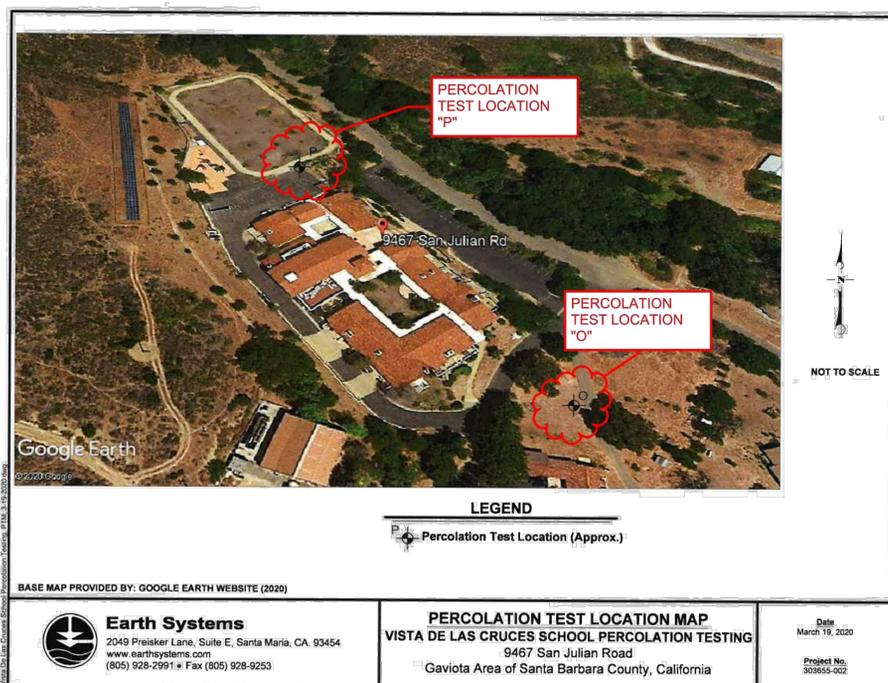
Phillip Madrid, PE
Project Engineer



Attachments: Percolation Test Location Map
Percolation Test Boring Logs
Boring Log Legend

E-copy to: Ms. Julie Avniti
Ms. Shannon Jessica, Wallace Group

Doc. No.: 2003-028.LTR/n



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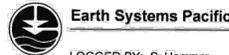
Vista del Mar Union School District
Wastewater Improvements
Percolation Test Report

Vista del Mar Union School District
Wastewater Improvements
Percolation Test Report

JOB #: 1389-0002
DESIGNERS: SJ
DRAWN BY: LL
DATE: 09-04-2020
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G2.0
2 OF 10 SHEETS

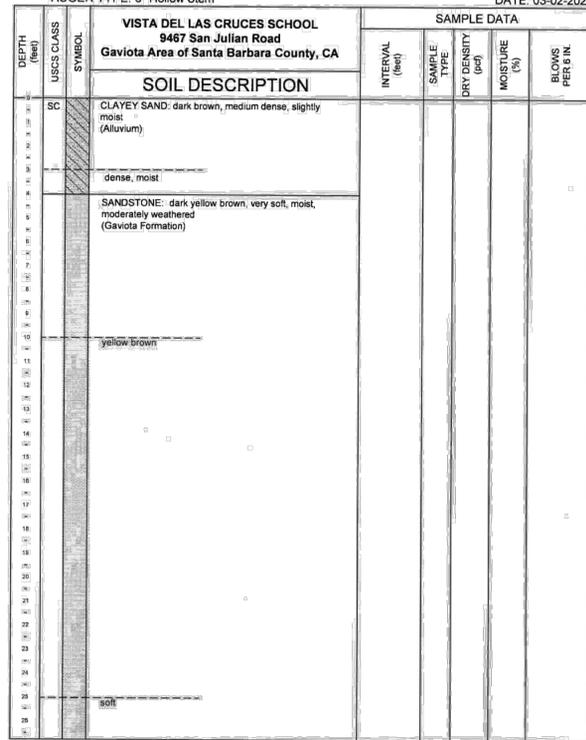
Rev.	Date	Description of Revisions	By
△	09-04-2020	ISSUED FOR REVIEW	LL



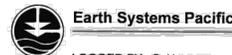
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LOGGED BY: S. Hemmer
 DRILL RIG: Mobile B-53
 AUGER TYPE: 6" Hollow Stem

Boring No. 0
 PAGE 1 OF 2
 JOB NO.: 303655-002
 DATE: 03-02-2020



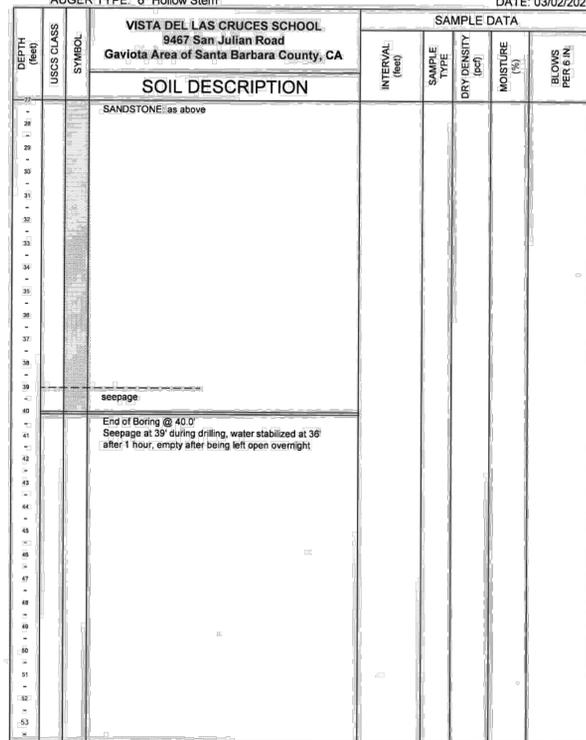
LEGEND: Ring Sample, Grab Sample, Shelby Tube Sample, SPT
 NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



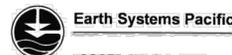
Earth Systems Pacific

LOGGED BY: S. Hemmer
 DRILL RIG: Mobile B-53
 AUGER TYPE: 6" Hollow Stem

Boring No. 0
 PAGE 2 OF 2
 JOB NO.: 303655-002
 DATE: 03/02/2020



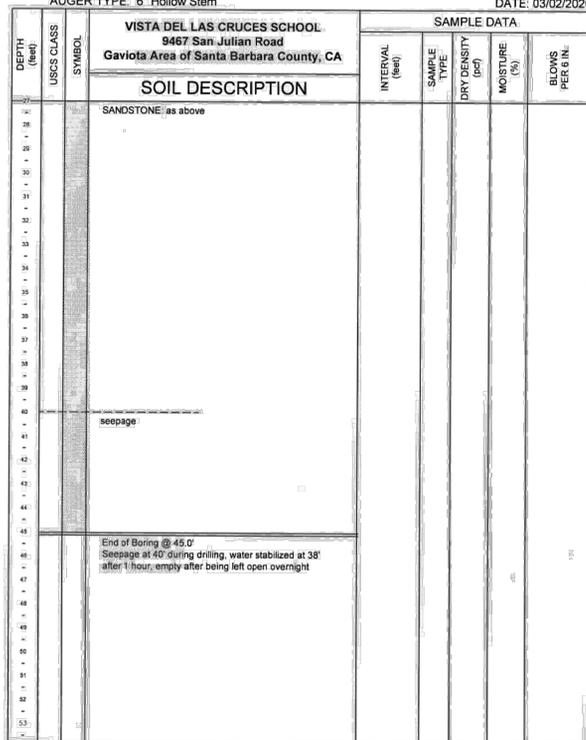
LEGEND: Ring Sample, Grab Sample, Shelby Tube Sample, SPT
 NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



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LOGGED BY: S. Hemmer
 DRILL RIG: Mobile B-53
 AUGER TYPE: 6" Hollow Stem

Boring No. P
 PAGE 2 OF 2
 JOB NO.: 303655-002
 DATE: 03/02/2020



LEGEND: Ring Sample, Grab Sample, Shelby Tube Sample, SPT
 NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific		UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)	
MAJOR DIVISIONS	GROUP SYMBOL	TYPICAL DESCRIPTIONS	GRAPHIC SYMBOL
COARSE GRAINED SOILS	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	[Symbol]
	GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	[Symbol]
	GM	SILTY GRAVELS, GRAVEL-SAND SILT MIXTURES, NON-PLASTIC FINES	[Symbol]
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES, PLASTIC FINES	[Symbol]
	SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	[Symbol]
	SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES	[Symbol]
	SM	SILTY SANDS, SAND-SILT MIXTURES, NON-PLASTIC FINES	[Symbol]
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES, PLASTIC FINES	[Symbol]
	ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	[Symbol]
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	[Symbol]
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	[Symbol]	
MH	INORGANIC SILTS, MICACIOUS OR DIATOMACEOUS FINE SANDS OR SILTY SOILS, ELASTIC SILTS	[Symbol]	
CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	[Symbol]	
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	[Symbol]	
PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	[Symbol]	

OBSERVED MOISTURE CONDITION				
DRY	SLIGHTLY MOIST	MOIST	VERY MOIST	WET (SATURATED)
CONSISTENCY				
COARSE GRAINED SOILS		FINE GRAINED SOILS		
SPT BLOWS/FOOT	CA SAMPLER	DESCRIPTIVE TERM	SPT BLOWS/FOOT	CA SAMPLER
0-16	0-2	LOOSE	0-3	0-3
17-30	3-4	MEDIUM DENSE	4-7	4-7
31-50	5-8	DENSE	8-13	8-13
OVER 50	9-15	VERY DENSE	14-30	14-30
			16-30	26-30
			OVER 30	OVER 50

GRAIN SIZES							
U.S. STANDARD SERIES SIEVE	CLEAR SQUARE SIEVE OPENING						
# 200	# 40	# 10	# 4	3/4"	3"	12"	
SILT & CLAY	FINE	MEDIUM	COARSE	FINE	COARSE	COBBLES	BOULDERS

TYPICAL BEDROCK HARDNESS	
MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
EXTREMELY HARD	CORE, FRAGMENT, OR EXPOSURE CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK, CAN ONLY BE CHIPPED WITH REPEATED HEAVY HAMMER BLOWS
VERY HARD	CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK, CORE OR FRAGMENT BREAKS WITH REPEATED HEAVY HAMMER BLOWS
HARD	CAN BE SCRATCHED WITH KNIFE OR SHARP PICK WITH DIFFICULTY (HEAVY PRESSURE); HEAVY HAMMER BLOW REQUIRED TO BREAK SPECIMEN
MODERATELY HARD	CAN BE GROOVED OR GROUDED DEEPLY BY KNIFE OR SHARP PICK WITH MODERATE OR HEAVY PRESSURE; CORE FRAGMENT BREAKS WITH LIGHT TO MODERATE MANUAL PRESSURE
SOFT	CAN BE GROOVED OR GROUDED EASILY BY KNIFE OR SHARP PICK WITH LIGHT PRESSURE; CAN BE SCRATCHED WITH FINGERNAIL, BREAKS WITH LIGHT TO MODERATE MANUAL PRESSURE
VERY SOFT	CAN BE READILY INDENTED, GROOVED OR GROUDED WITH FINGERNAIL, OR CARVED WITH KNIFE; BREAKS WITH LIGHT MANUAL PRESSURE

TYPICAL BEDROCK WEATHERING	
MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
FRESH	NO DISCOLORATION, NOT OXIDIZED
SLIGHTLY WEATHERED	DISCOLORATION OR OXIDATION IS LIMITED TO SURFACE OF, OR SHORT DISTANCE FROM, FRACTURES; SOME FELDSPAR CRYSTALS ARE DISOLVED
MODERATELY WEATHERED	DISCOLORATION OR OXIDATION EXTENDS FROM FRACTURES, USUALLY THROUGHOUT; Fe-Mn MINERALS ARE DISOLVED; FELDSPAR CRYSTALS ARE CLOUDY
INTENSELY WEATHERED	DISCOLORATION OR OXIDATION THROUGHOUT; FELDSPAR AND Fe-Mn MINERALS ARE ALTERED TO CLAY TO SOME EXTENT; OR CHEMICAL ALTERATION PRODUCES A SILT DISAGGREGATION
DECOMPOSED	DISCOLORATION OR OXIDATION THROUGHOUT; RESISTANT MINERALS SUCH AS QUARTZ MAY BE UNALTERED; FELDSPAR AND Fe-Mn MINERALS ARE COMPLETELY ALTERED TO CLAY



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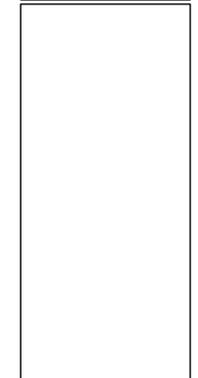
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Vista del Mar Union School District
 Wastewater Improvements
 Percolation Test Report Soil Borings

JOB #: 1389-0002
 DESIGNERS: SJ
 DRAWN BY: LL
 DATE: 09-04-2020

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G2.1
 3 OF 10 SHEETS

Rev.	Date	Description of Revisions	By
△	09-04-2020	ISSUED FOR REVIEW	LL



Topographic Survey

of a portion of the Vista Del Mar School

9467 San Julian Road
Gaviota, CA 93117

APN 083-590-014

This topographic survey was prepared by me or under my direction in conformance with the requirements of the Professional Land Surveyor's Act this in May, 2020, utilizing a mixture of GPS and Robotic collection methods. Elevations are based on the NAVD88 datum determined by GPS observation. Control Points 1 and 2 are a nail and shiner in the asphalt parking area. Control Point 3 is a spike set behind the curb.

Jon McKellar
PLS 7578



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Santa Maria, CA 93457
805-680-1895 bus.
jon@jonmckellar.com
<http://www.jonmckellar.com>



REFERENCE NOTES:	
DESCRIPTION	
1	ABANDON EXISTING TREATMENT PLANT IN PLACE. DRILL 1" DIAMETER HOLES EVERY 2 FT. ON CENTER AROUND THE BOTTOM, AS NEAR THE BOTTOM OF THE TANKAGE AS POSSIBLE.
2	DRY UTILITY (ELECTRICAL) DEMOLITION PLAN TO BE PREPARED BY ELECTRICAL CONTRACTOR UNDER SEPARATE PERMIT. SEE SHEET D1.1 FOR PHOTOGRAPHS.
3	EXISTING GRAVITY SEWER - PROTECT IN PLACE.
4	CRACK THROUGH BOTTOM OF EXISTING LIFT STATION WET WELL. FILL WET WELL WITH CLEAN SAND UP TO THE INVERT OF THE EXISTING INLET SEWER. CONTRACTOR TO REMOVE AND DISPOSE OF REMAINING LIQUID AND SOLID WASTE PRIOR TO CRACKING THROUGH BOTTOM. REMOVE AND DISPOSE OF ALL PIPING AND PUMPS.
5	CRACK THROUGH BOTTOM OF EXISTING OVERFLOW VAULT. FILL VAULT COMPLETELY WITH CLEAN SAND. CONTRACTOR TO REMOVE AND DISPOSE OF REMAINING LIQUID AND SOLID WASTE PRIOR TO CRACKING THROUGH BOTTOM. EXCAVATED AREA TO BE BACKFILLED WITH LOCAL NATIVE MATERIAL FROM SITE.
6	REMOVE EXISTING SEWER FORCE MAIN AS NECESSARY FOR INSTALLATION OF NEW SEPTIC SYSTEM. PLUG EXISTING SEWER FORCE MAIN AT POINT OF CUT. CONCRETE PLUG TO EXTEND INTO EXISTING FORCE MAIN A MINIMUM OF 12". CONTRACTOR TO COMPLETELY FLUSH THE FORCE MAIN WITH CLEAN WATER, THEN COMPLETELY DRAIN THE PIPE PRIOR TO CUTTING AND PLUGGING.
7	LOCATION AS SHOWN IS APPROXIMATE. CONTRACTOR TO HAND DIG AND/OR POT-HOLE AS NECESSARY TO LOCATE.



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1 Existing Treatment Plant Demolition Plan Scale: 1"=5'

2 Existing Pump Station Demolition Plan Scale: 1"=5'

Vista del Mar Union School District
 Wastewater Improvements
 Demolition Plan

JOB #: 1389-0002
 DESIGNERS: SJ
 DRAWN BY: LL
 DATE: 09-04-2020

DRAWING NO.
D1.0
 5 OF 10 SHEETS

Rev.	Date	Description of Revisions	By
A	09-04-2020	ISSUED FOR REVIEW	LL



1 Existing Treatment Plant and Surroundings NOT TO SCALE



2 Existing Pump Station and Surroundings NOT TO SCALE



3 Existing Pump Station and Surroundings NOT TO SCALE

REFERENCE NOTES:	
DESCRIPTION	
1	ABANDON EXISTING TREATMENT PLANT IN PLACE. DRILL 1" DIAMETER HOLES EVERY 2 FT. ON CENTER AROUND THE BOTTOM, AS NEAR THE BOTTOM OF THE TANKAGE AS POSSIBLE.
2	DRY UTILITY (ELECTRICAL) DEMOLITION PLAN TO BE PREPARED BY ELECTRICAL CONTRACTOR UNDER SEPARATE PERMIT.
3	CRACK THROUGH BOTTOM OF EXISTING LIFT STATION WET WELL. FILL WET WELL WITH CLEAN SAND UP TO THE INVERT OF THE EXISTING INLET SEWER. CONTRACTOR TO REMOVE AND DISPOSE OF REMAINING LIQUID AND SOLID WASTE PRIOR TO FILLING CARCKING THROUGH BOTTOM. REMOVE AND DISPOSE OF ALL PIPING AND PUMPS.
4	SAW CUT THROUGH CURB, GUTTER AND ASPHALY AS NECESSARY TO INSTALL NEW SEPTIC SYSTEM.
5	REMOVE EXISTING DAVIT CRANE.



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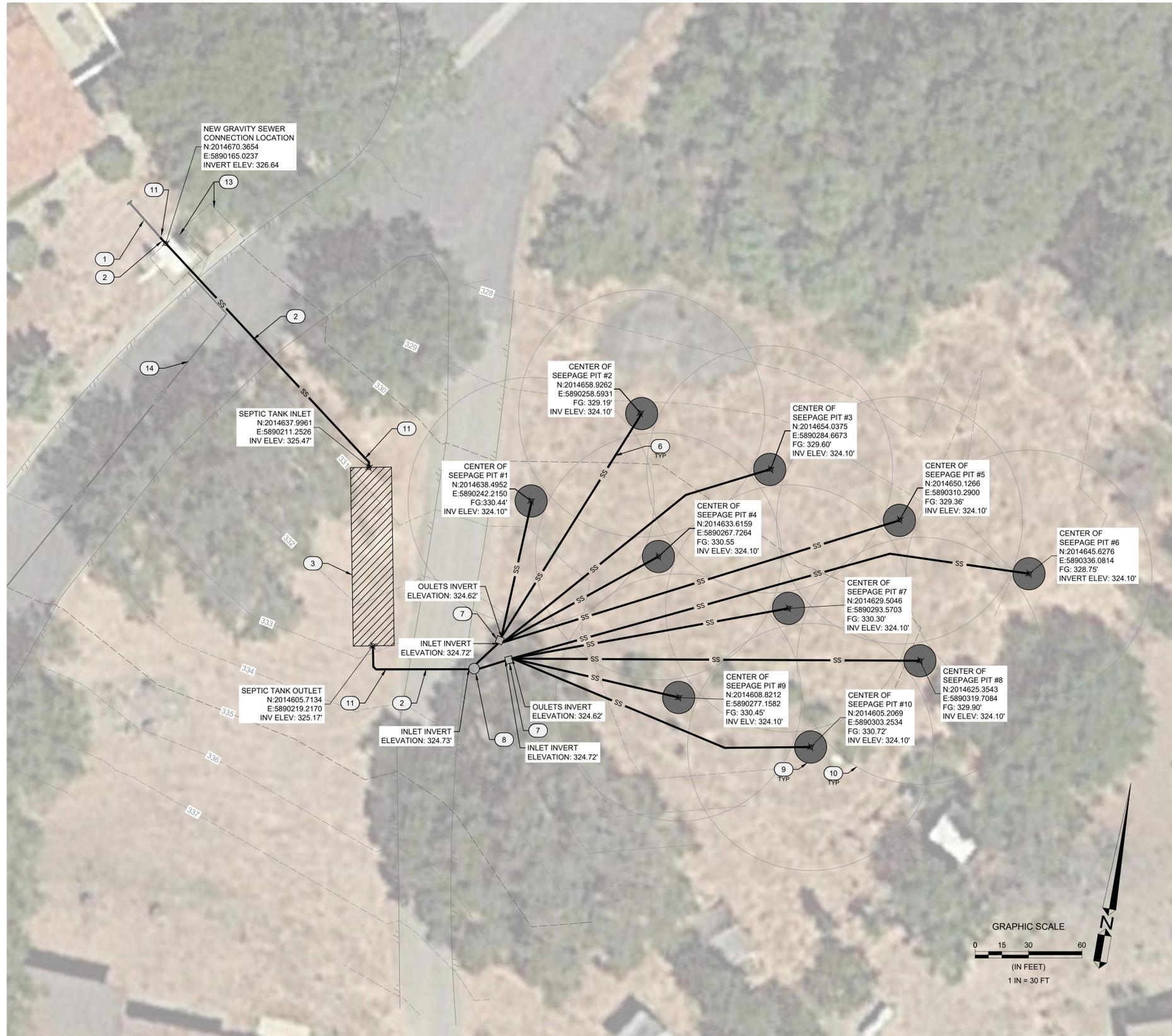
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Vista del Mar Union School District
 Wastewater Improvements
 Demolition Plan

JOB #: 1389-0002
 DESIGNERS: SJ
 DRAWN BY: LL
 DATE: 09-04-2020

DRAWING NO.
D1.1
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Rev.	Date	Description of Revisions	By
△	09-04-2020	ISSUED FOR REVIEW	LL



3 Seepage Pit & Utility Layout

Scale: 1"=30'

REFERENCE NOTES:	
DESCRIPTION	
1	EXISTING 4" SDR35 INFLUENT GRAVITY SEWER.
2	NEW 4" SDR 35 GRAVITY SEWER INSTALLED PER TRENCH DETAIL 1.0 SHEET C2.0. TO BE CONNECTED TO EXISTING INFULENT GRAVITY SEWER USING FLEXIBLE COUPLING. WHERE CROSSING BENEATH ASPHALT DRIVE INSTALL GRAVITY SEWER SEE DETAIL 2 SHEET C2.0 FOR TRENCH SECTION. WHERE CROSSING BENEATH CURB AND GUTTER RETURN CURBE AND CUTTER TO PRE-PROJECT CONDITION OR BETTER. SEE DETAIL 4 SHEET C2.0 FOR CURB AND GUTTER DETAILS.
3	10,000 GALLON CONCRETE SEPTIC TANK, SEE DETAILS 6 AND 7 SHEET C1.1. FOLLOW MANUFACTURERS GUIDELINES FOR SEPTIC TANK, RISER AND LID INSTALLATION AS WELL AS FOR PIPE CONNECTIONS. INSTALL GRADE RINGS SUCH THAT EACH ACCESS LID ARE NO GREATER THAN 12" BELOW FINISHED GRADE AND NO MORE THAN 3" ABOVE FINISHED GRADE.
4	CORE THROUGH EXISTING LIFT STATION WET WELL TO INSTALL NEW 4" SDR 35 GRAVITY SEWER. USE FLEXIBLE COUPLER TO CONNECT TO NEW PIPE SEGMENT ONCE SEWER IS THROUGH WET WELL WALL.
5	FULLY SUPPORT NEW 4" SDR 35 GRAVITY SEWER WITH SAND AFTER INSTALLING THROUGH EXISTING LIFT STATION WET WELL.
6	3" SDR35 SEWER. INSTALLED WITH A MINIMUM OF 3 FT. COVER, WITH POSITIVE DRAINAGE TO SEEPAGE PITS. SEE DETAIL 1 SHEET C2.0.
7	DISTRIBUTION BOX INSTALLED WITH RISERS TO MATCH EXISTING GRADE - SEE DETAIL 4 SHEET C1.1.
8	3-WAY BALL VALVE. INSTALLED WITH RISER AND COVER TO FINISHED GRADE. SEE DETAIL 5 SHEET C1.1
9	SEEPAGE PIT - SEE DETAILS 1, 2, AND 3 SHEET C1.1
10	20 FT. CLEARANCE RADIUS FROM PIT SIDEWALLS
11	SANITARY SEWER CLEANOUT. SEE DETAIL 3 SHEET C2.0.
12	NOT USED
13	EXISTING LIFT STATION AND OVERFLOW TANK TO HAVE BOTTOM CRACKED THROUGH. SEE SHEETS D1.0 AND D1.1.
14	EXISTING LIFT STATION FORCEMAIN TO BE REMOVED AS NECESSARY. SEE SHEET D1.0.

Proposed Wastewater Disposal via Seepage Pits

Flow Estimate	
Design School Population	140 people
Wastewater Generation	20 gallons/person/day
Residential Property (3 bedrooms)	375 gallons/day
Flowrate	3,175 gallons/day

Percolation Testing Results	
Location "O"	
Bore Hole Diameter	6 inches
Bore Depth	40 feet
Area of test hole	54.95 square feet
Volume of water per 6 hours	154 gallons

Seepage Pit Design	
Absorptive Capacity Pit "O"	1000-8000 gpd
Allowable seepage pit application rate ²	0.8 gpd/sf
Required Disposal Area	3,968.8 square feet
Area of One Seepage Pit ¹	753.6 square feet
Number of wells required	5

Number of wells proposed 100% system	5 wells ¹
Number of wells proposed 200% system	5 wells

¹ 6 foot diameter, 40 foot effective depth (45' deep well with invert at 5' below surface)

² Application rate per Santa Barbara County Code 18C-5(B)(2)

Septic Tank Size

3 Times Peak Daily Flow
9,525 Gallon Capacity required

Install 10,000 gallon buried septic tank - Midstate, Jensen, Xerxes



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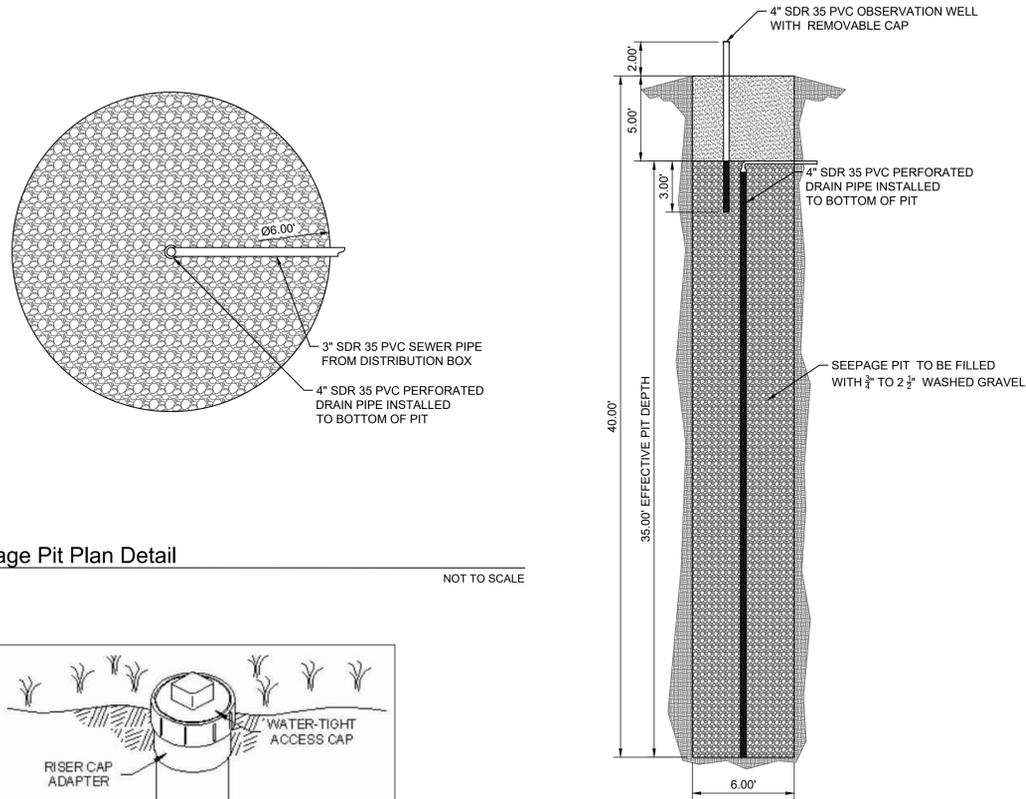
Vista del Mar Union School District
Wastewater Improvements
Site Layout

JOB #: 1389-0002
DESIGNERS: SJ
DRAWN BY: LL
DATE: 09-04-2020

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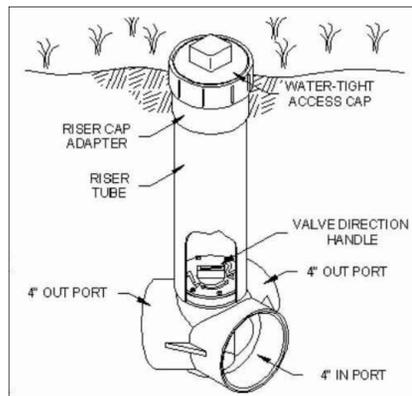
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A	09-04-2020	ISSUED FOR REVIEW	LL



1 Seepage Pit Plan Detail

NOT TO SCALE



5 3-WAY VALVE AND RISER WITH CAP

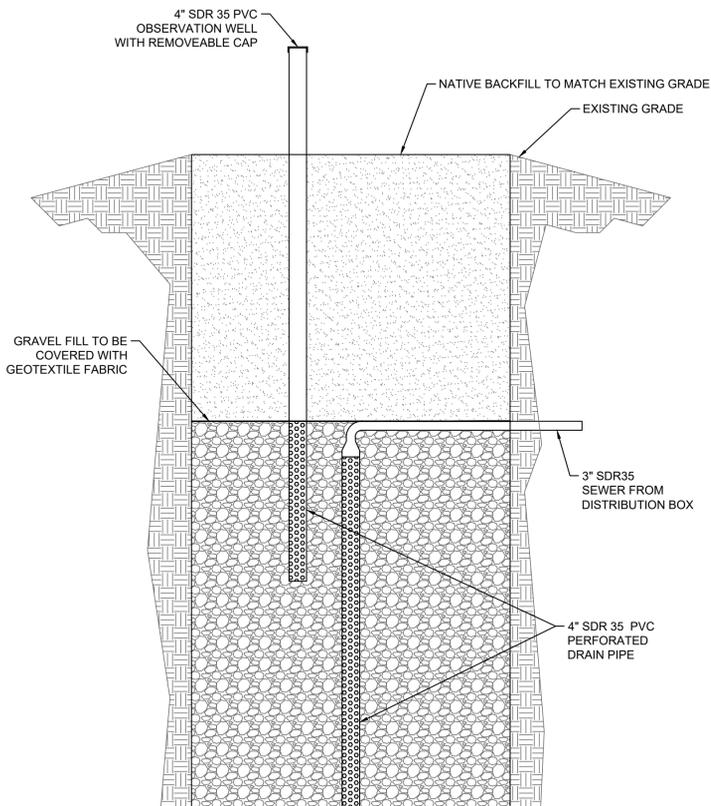
NOT TO SCALE

2 Seepage Pit Section

Scale: 1"-5"

3 Seepage Pit Section Detail

NOT TO SCALE



4 DISTRIBUTION BOX

NOT TO SCALE



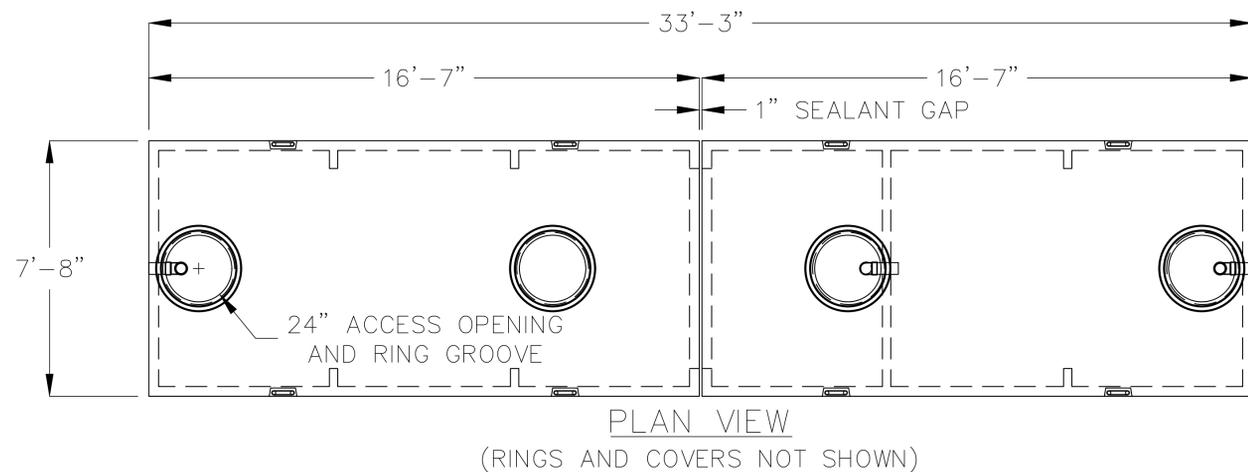
INSTALLATION IS JUST THIS SIMPLE

1. Position the Distribution Box on level virgin soil. Do not place box on a concrete slab.
2. Install the inlet pipe and outlet pipes. Be sure the bottoms of all pipes rest on virgin soil.
3. Level the Distribution Box and all pipes as needed.
4. Backfill the pipes to within two feet of the Distribution Box. Recheck the level of the box, then backfill up to the top lid ridge.
5. Install and adjust Tuf-Tite Speed Levelers.
6. Place lid on the Distribution Box and finish backfilling.

Choice of Fittings
 S-35 Pipe Seal, for:
 ■ Sewer and Drain SDR 35 ■ ASTM 3034
 ■ Thin Wall ■ 1500 Lb. Crush
 S-40 Pipe Seal, for:
 ■ Schedule 40
 ■ 4" Corrugated P-10 Plug, for unused holes

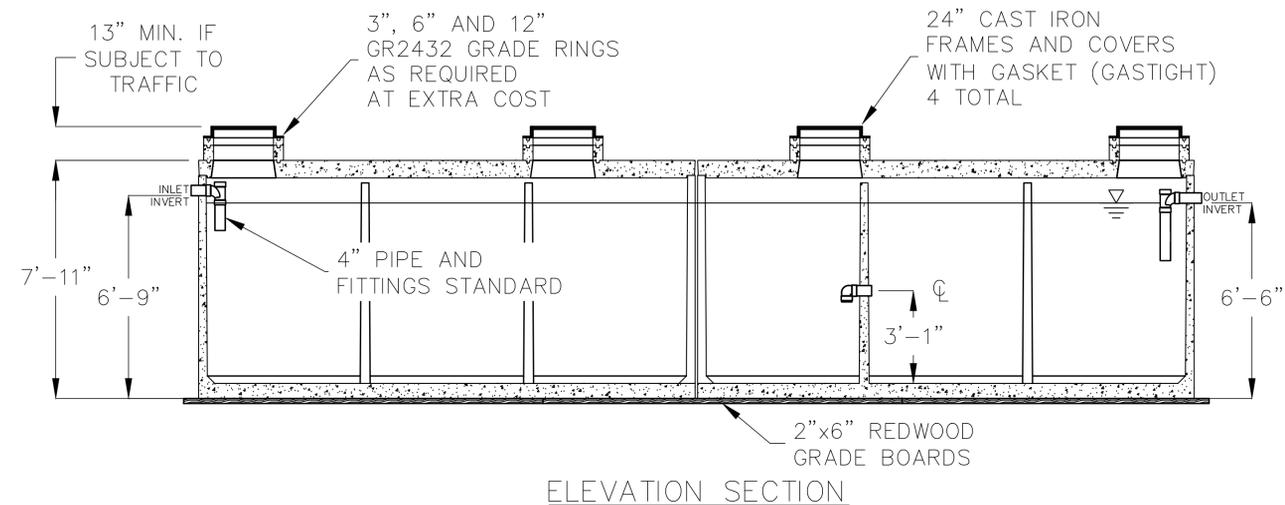
Tuf-Tite Speed Levelers™
 Control the flow of effluent from the Distribution Box. Simply insert a Speed Leveler into each outlet pipe. Rotate each Speed Leveler so the flow is distributed as desired. Available for 3" or 4" PVC pipe.

Versatile Options
 Drain Grate. Black 16" x 16" HDPE grate. ADA compliant. Can be affixed to Box or Riser with 4 stainless corner screws.
 Riser. Stackable 16" x 16" HDPE Riser provides 6" elevation to the Box or Riser. Ribbed for added rigidity.



6 10,000 Gallon Concrete Septic Tank Plan View

NOT TO SCALE



7 10,000 Gallon Concrete Septic Tank Plan View

NOT TO SCALE



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Vista del Mar Union School District
 Wastewater Improvements
 Seepage Pit & Septic Tank Details

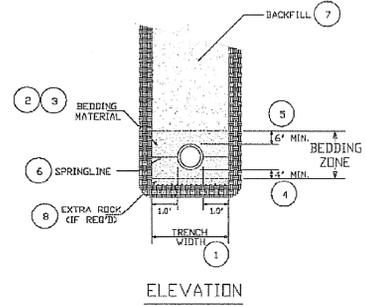
JOB #: 1389-0002
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 DRAWN BY: LL
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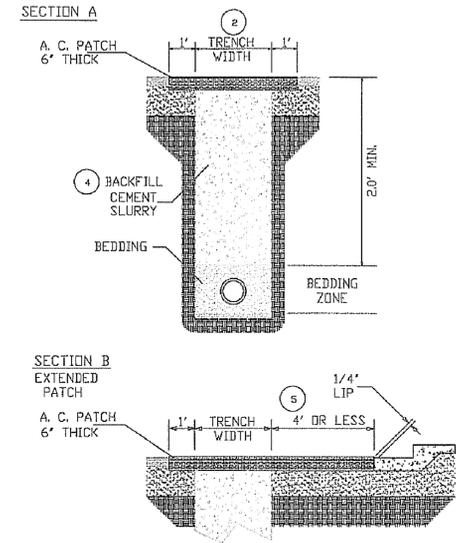
NOTES: (REFER TO 2-010 FOR ADDITIONAL NOTES)

- TRENCH WIDTH SHALL BE SUFFICIENT TO FULLY ENCLOSE THE PIPE AND ALLOW COMPACTION TESTING AT THE SPRING LINE.
- BEDDING MATERIAL FOR UTILITY TRENCHES SHALL MEET THE STANDARDS OF THE UTILITY COMPANY INVOLVED.
- BEDDING MATERIAL FOR HDPE, RCP AND CMP SHALL FOLLOW THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE COMPACTED TO 95% RELATIVE COMPACTION. FILL MUST BE PLACED IN LIFTS NO LARGER THAN 8" TO FACILITATE COMPACTION. FOR CMP PIPE, THE BEDDING MATERIAL SHALL BE TESTED FOR A NEUTRAL pH.
- THE THICKNESS OF THE LAYER OF BEDDING UNDER THE PIPE SHALL BE AT LEAST 4" OR 10% OF THE PIPE DIAMETER, WHICHEVER IS LARGER.
- BEDDING MATERIAL SHALL COMPLETELY COVER THE PIPE TO A MINIMUM HEIGHT OF 6" AFTER COMPACTION.
- CARE MUST BE TAKEN TO PLACE THE BEDDING EVENLY UNDER THE LENGTH OF THE PIPE TO ASSURE ADEQUATE SUPPORT. COMPACTION TESTING IS REQUIRED AT THE SPRINGLINE OF THE PIPE WHEN SAND IS USED AS BEDDING MATERIAL.
- BACKFILL MATERIAL SHALL MEET THE REQUIREMENTS OF SBCCO STD 2-030 AND 2-040
- SEE NOTE 2 ON 2-010



NOTES: (REFER TO 2-010 FOR ADDITIONAL NOTES)

- ALL TRENCH WORK ON EXISTING PAVED ROADS SHALL COMPLY WITH THIS STANDARD.
- PAVEMENT SHALL BE SAW CUT 2' WIDER THAN THE WIDTH OF THE TRENCH PRIOR TO EXCAVATION. RECUT MAY BE NEEDED WHERE TRENCH EDGE IS NOT SOLID AS DETERMINED BY THE COUNTY ENGINEER.
- BEDDING DETAILS SHALL COMPLY WITH SBCCO STD 2-020.
- BACKFILL MATERIAL UNDER EXISTING ROADS SHALL BE SLURRY CEMENT MEETING CALTRANS STANDARD SPECIFICATIONS, SECTION 19, FOR MATERIALS AND SHALL BE MIXED WITH 1 SACK OF CEMENT PER CUBIC YARD.
- IF THE EDGE OF THE TRENCH IS WITHIN 4' OF THE EXISTING EDGE OF PAVEMENT (EP), THE SAWCUT SHALL BE MADE AT THE EP OR GUTTER AS SHOWN IN SECTION B.



COUNTY OF SANTA BARBARA, CA - DEPARTMENT OF PUBLIC WORKS - TRANSPORTATION		APPROVED BY:
2-020	PIPE BEDDING DETAILS	<i>[Signature]</i> 1/1/2011 DIRECTOR OF PUBLIC WORKS DATE
REVISION DATES		

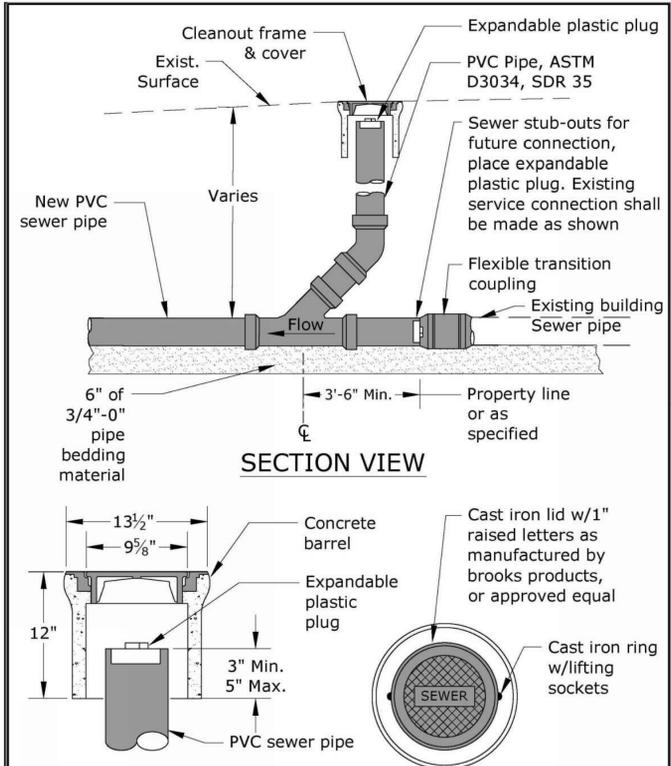
COUNTY OF SANTA BARBARA, CA - DEPARTMENT OF PUBLIC WORKS - TRANSPORTATION		APPROVED BY:
2-030	TRENCHES FOR EXISTING PAVED ROADS	<i>[Signature]</i> 1/1/2011 DIRECTOR OF PUBLIC WORKS DATE
REVISION BOX		

1 Santa Barbara County Trench in Un-paved Area Detail

Scale: NTS

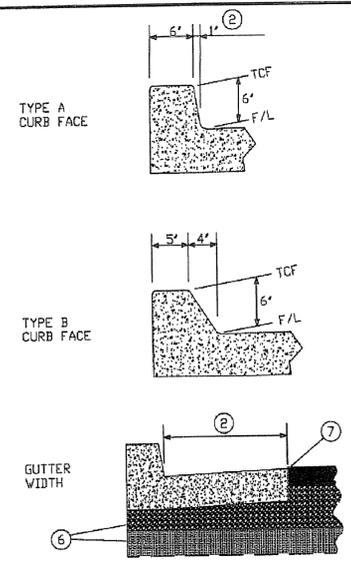
2 Santa Barbara County Trench in Existing Paved Road Detail

Scale: NTS



NOTES: (REFER TO 4-010 FOR ADDITIONAL NOTES)

- FOR CURING, FINISHING, AND CLEANING, SEE THE CURRENT CALTRANS STANDARD SPECIFICATIONS, SECTION 90.
- CURB AND GUTTER SHAPES AND RADII ARE SPECIFIED IN THE CALTRANS STANDARD PLANS FOR TYPES A AND B. THE TYPE A FACE IS MODIFIED FOR A STEEPER BATTER AS SHOWN. THE STANDARD WIDTH OF GUTTER IS 18" FOR RESIDENTIAL STREETS AND 24" FOR MAJOR ROADS. FOR REPAIR AND REPLACEMENT PROJECTS, THE EXISTING WIDTH SHALL GOVERN. GUTTER CROSS-SLOPES SHALL BE 5% MAXIMUM.
- 1/2" EXPANSION JOINTS SHALL BE PLACED AT VAULTS, DROP INLETS, CURB RETURNS, AND EVERY 200' OF RUN. EXPANSION PAPER SHALL CONFORM TO THE CALTRANS STANDARD SPECIFICATIONS.
- WEAKENED-PLANE JOINTS SHALL BE MADE NO GREATER THAN 10' APART.
- WHEN THE CURB IS EXTRUDED, THE EXTRUDING MACHINE MUST BE CAPABLE OF PLACING CONCRETE IN ACCORDANCE WITH THE CALTRANS STANDARD SPECIFICATIONS.
- SUBGRADE DEPTH AND COMPACTION SHALL CONFORM TO NOTES 4 AND 5 OF 4-010.
- PAVING SHALL LEAVE AN ASPHALT LIP 1/4" MAX. ABOVE THE TOP OF THE CONCRETE GUTTER AS MEASURED AFTER COMPACTION.



COUNTY OF SANTA BARBARA, CA - DEPARTMENT OF PUBLIC WORKS - TRANSPORTATION		APPROVED BY:
4-030	CURBS AND GUTTERS	<i>[Signature]</i> 1/1/2011 DIRECTOR OF PUBLIC WORKS DATE
REVISION DATES		

4 Santa Barbara County Curb and Gutter Detail

Scale: NTS

3 Sanitary Sewer Cleanout Detail

NOT TO SCALE



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Vista del Mar Union School District
Wastewater Improvements
Standard Details

JOB #: 1389-0002
DESIGNERS: SJ
DRAWN BY: LL
DATE: 09-04-2020

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C2.0
11 OF 10 SHEETS

Rev.	Date	Description of Revisions	By
	09-04-2020	ISSUED FOR REVIEW	LL

(REFER TO 1-010 FOR ADDITIONAL NOTES)

1. FOR SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE CLASS, COMPONENTS, AND PROCEDURES FOR MIXING, POURING, FINISHING, CURING, & CLEANING, REFER TO CALTRANS STANDARD SPECIFICATIONS, SECTION 90.
2. UNLESS OTHERWISE SPECIFIED, ALL CONCRETE SHALL BE CALTRANS CLASS 2 WITH 25% FLY-ASH CONCRETE WITH A LIGHT BROOM FINISH.
3. THE MINIMUM FALL FOR ALL GUTTERS ON STREETS AND CUL-DE-SACS IS 0.5%.
4. FOR SPECIFICATIONS FOR CLASS 2 BASE AND CLASS 4 SUBBASE, REFER TO SECTIONS 25 AND 26 OF THE CALTRANS STANDARD SPECIFICATIONS.
5. A 6" LAYER OF CLASS 2 BASE SHALL BE PLACED AND COMPACTED TO 95% OF MAXIMUM DENSITY.
6. EXPANSION JOINTS SHALL BE PROVIDED WITH CALTRANS APPROVED FILLER PAPER 1/2" THICK.
7. WEAKENED-PLANE JOINTS SHALL BE TOOLED FOR A DEEP GROOVE 1/3 OF THE THICKNESS OF THE CONCRETE.
8. WHERE CALLED FOR, SCORELINES SHALL BE TOOLED WITH A 1/4" DEEP GROOVE.
9. FOR ALL ASPHALT DIKES, REFER TO CALTRANS STANDARD PLANS.

COUNTY OF SANTA BARBARA, CA - DEPARTMENT OF PUBLIC WORKS - TRANSPORTATION		APPROVED BY:	
4-010	CURB AND DRIVEWAY GENERAL NOTES		1/1/2011
	REVISION DATES	DIRECTOR OF PUBLIC WORKS	DATE

(REFER TO 1-010 FOR ADDITIONAL NOTES)

1. CAL-OSHA AND OSHA CONSTRUCTION SAFETY ORDERS FOR TRENCH REQUIREMENTS SHALL BE MET FOR ALL TRENCH OPERATIONS.
2. TRENCHES SHALL BE EXCAVATED DEEP ENOUGH TO ASSURE AT LEAST 25' OF COVER FOR THE UNDERGROUND FACILITY. OVER-EXCAVATION MAY BE REQUIRED TO ACHIEVE A STABLE, EVEN FLOOR IN THE TRENCH, AND EXTRA BEDDING MATERIAL PLACED TO PROVIDE A SUITABLE FOUNDATION FOR THE FACILITY.
3. ALL TRENCH BEDDING MATERIAL SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS, SECTION 19-3.
4. NO PONDING, JETTING, OR FLOODING IS PERMITTED UNDER EXISTING ROADS, IN OTHER AREAS, SUCH METHODS MUST BE APPROVED BY THE COUNTY ENGINEER.
5. ALL UTILITIES SHALL BE INSPECTED, TESTED, AND VERIFIED TO THE COUNTY ENGINEER PRIOR TO PLACEMENT OF TRENCH BACKFILL. STREET IMPROVEMENT PLANS SHALL BE SIGNED BY THE UTILITY COMPANIES AND THE COUNTY FIRE DEPARTMENT.
6. WHERE A TRENCH CROSSES UNDER AN EXISTING UTILITY, THE CONTRACTOR MUST PROVIDE ADEQUATE SUPPORT AND AVOID ANY DISTURBANCE OF THE UTILITY. BACKFILLING MUST INCLUDE PREPARING A NEW BED FOR THE EXISTING UTILITY AND PERFORMING COMPACTION TESTS.
7. MAXIMUM DENSITY AND OPTIMUM MOISTURE TESTS MUST BE MADE FOR ALL BACKFILL AND BEDDING MATERIALS EXCEPT CEMENT SLURRY OR 3/4" WASHED CRUSHED ROCK.
8. FOR TRENCHES LESS THAN 6.0' DEEP AS MEASURED FROM FINISHED GRADE TO FLOOR, ONE COMPACTION TEST SHALL BE MADE FOR EACH 50' OF TRENCH. TESTS SHALL BE MADE AT VARIOUS DEPTHS OF BACKFILL.
9. FOR TRENCHES 6.0' OR MORE DEEP AS MEASURED FROM FINISHED GRADE TO FLOOR, TWO COMPACTION TESTS SHALL BE MADE FOR EACH 50' OF TRENCH. TESTS SHALL BE MADE AT VARIOUS DEPTHS OF BACKFILL.
10. EVERY LATERAL UTILITY TRENCH SHALL BE TESTED FOR COMPACTION AT THE SAME SCHEDULE AS THE MAIN TRENCH.
11. PAVING MATERIAL SHALL BE ASPHALTIC CONCRETE PER 1-010, NOTE 16. IT SHALL BE 6" THICK AFTER COMPACTION.
12. ASPHALT PAVING SHALL BE RESTORED WITH A 'FOG' SEAL IN CONFORMANCE WITH COUNTY SPECIFICATIONS FOR ITS 'FOG' SEAL PROGRAM OF CURRENT DATE. FOG SEALING SHALL EITHER BE: A) BONDED FOR AND COMPLETED AFTER SIX MONTHS AND PRIOR TO ONE YEAR FROM THE START OF THE WARRANTY PERIOD, OR B) A PAYMENT SHALL BE MADE TO THE COUNTY BASED ON THE COUNTY'S COST TO PERFORM THE FOG SEAL PLUS 15% FOR ADMINISTRATION AND INSPECTION. PAYMENT SHALL BE MADE PRIOR TO THE ENCROACHMENT PERMIT ISSUANCE.
13. WHERE ASPHALT IS SHOWING SIGNS OF DAMAGE OR WEAR, THE COUNTY ENGINEER MAY REQUIRE A TYPE II SLURRY SEAL INSTEAD OF 'FOG' SEAL.

COUNTY OF SANTA BARBARA, CA - DEPARTMENT OF PUBLIC WORKS - TRANSPORTATION		APPROVED BY:	
2-010	GENERAL TRENCH NOTES		1/1/2011
	REVISION BOX	DIRECTOR OF PUBLIC WORKS	DATE

1 Santa Barbara County Additional Curb and Gutter Notes Scale: NTS

2 Santa Barbara County Additional Trench Notes Scale: NTS

1. COUNTY STANDARD PLANS AND SPECIFICATIONS SHALL INCLUDE THE CURRENT VERSIONS OF CALTRANS STANDARD PLANS AND SPECIFICATIONS AND APWA STANDARD PLANS AND SPECIFICATIONS FOR SOUTHERN CALIFORNIA. IF THERE IS A CONFLICT BETWEEN THESE STANDARD PLANS AND SPECIFICATIONS, THE COUNTY STANDARD DETAILS SHALL GOVERN ON COUNTY ROADS. CALTRANS PLANS SHALL HAVE PRECEDENCE OVER APWA PLANS UNLESS SPECIFICALLY STATED OTHERWISE.
2. CONSTRUCTION PLANS SHALL BE PREPARED IN ACCORDANCE WITH DEPARTMENT OF PUBLIC WORKS ENGINEERING DESIGN STANDARDS OR CURRENT CALTRANS STANDARD PLANS AND SPECIFICATIONS.
3. COMMENCEMENT OF CONSTRUCTION SHALL NOT BE AUTHORIZED UNTIL SUCH TIME THAT THE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE DIRECTOR OF PUBLIC WORKS AND AN ENCROACHMENT PERMIT HAS BEEN ISSUED. THE "DIRECTOR OF PUBLIC WORKS" SHALL BE INTERPRETED TO MEAN THE DIRECTOR OR HIS DESIGNATED REPRESENTATIVE(S) REFERRED TO HERE AS THE COUNTY ENGINEER.
4. INSPECTION BY THE COUNTY ENGINEER SHALL BE REQUESTED BY THE CONTRACTOR IMMEDIATELY PRIOR TO COMMENCING AND IMMEDIATELY AFTER COMPLETING EACH PHASE OF CONSTRUCTION.
5. UNLESS PRIOR AUTHORIZATION HAS BEEN GRANTED BY THE COUNTY ENGINEER, ALL VERTICAL DATUM SHALL BE BASED ON NAVD 88 DATUM, AND HORIZONTAL COORDINATES BASED ON NAD 83 DATUM.
6. THE STANDARD TEST FOR MAXIMUM DENSITY AND OPTIMUM MOISTURE CONTENT SHALL BE ASTM D 1557 (CURRENT VERSION) METHOD "A", "B", OR "C". FIELD TEST FOR IN PLACE DENSITY AND MOISTURE CONTENT SHALL BE ASTM D 2922 AND D 3017 (CURRENT VERSIONS). TEST METHOD "C" MAY BE MODIFIED TO ALLOW THE USE OF CALIFORNIA TEST METHOD 370 FOR DETERMINING MOISTURE CONTENT OF MINERAL AGGREGATE USING MICROWAVE OVENS.
7. WATER FOR COMPACTION AND DUST CONTROL SHALL BE MADE AVAILABLE BY THE CONTRACTOR. DUST AND EROSION CONTROL ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AS DIRECTED BY THE COUNTY ENGINEER.
8. AN EROSION & SEDIMENT CONTROL PLAN OR A STORM WATER POLLUTION PREVENTION PLAN SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE COUNTY ENGINEER IN ACCORDANCE WITH THE COUNTY GRADING CODE (CHAPTER 14 SBCC) OR WITH THE STATE CONSTRUCTION GENERAL PERMIT FOR DISCHARGES OF STORM WATER AS APPLICABLE.
9. TRENCH BEDDING AND BACKFILL FOR ALL STORM DRAINS, CULVERTS, AND UTILITY TRENCHING SHALL COMPLY WITH THE DETAILS OF SECTION 2.
10. ALL DRAINAGE FACILITIES SHALL COMPLY WITH THE STANDARDS OF SECTION 3.
11. ALL CURBS AND DRIVEWAYS SHALL COMPLY WITH THE STANDARDS OF SECTION 4.
12. ALL SIDEWALKS & RAMPS SHALL COMPLY WITH THE STANDARDS OF SECTION 5.
13. ALL ROAD PROFILES AND STRUCTURAL SECTIONS SHALL COMPLY WITH THE STANDARDS OF SECTION 6.
14. STREET NAME SIGNS, BARRICADES, TRAFFIC CONTROL AND TRAFFIC WARNING SIGNS SHALL BE PLACED IN ACCORDANCE WITH SECTION 7 OF THESE STANDARD DETAILS AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, ALL OF CURRENT DATE.

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15. UTILITIES CONSTRUCTED UNDERGROUND SHALL BE STUBBED OUT TO THE PROPERTY LINES AT EACH LOT, AT EACH TRACT LINE, AND AT THE END OF SUB STREETS OR THROUGH STREETS UNDER CONSTRUCTION. TRENCHES SHALL BE BACKFILLED, TESTED FOR COMPACTION, LEAK-TESTED, AND INSPECTED BY THE UTILITY COMPANY AND THE COUNTY ENGINEER BEFORE BASE, PAVING, AND OTHER PERMANENT SURFACE CONSTRUCTION MAY COMMENCE.
16. ASPHALTIC CONCRETE USED FOR PAVING AND A. C. DIKES SHALL BE MADE WITH A PERFORMANCE-GRADE ASPHALT AND AGGREGATE SORTED TO CALTRANS STANDARD SPECIFICATIONS, SECTION 39. THE MIX DESIGN SHALL BE APPROVED BY THE COUNTY ENGINEER PRIOR TO PLACEMENT. THE CALTRANS SPECIFICATIONS FOR MIXING, HAULING, SPREADING, AND COMPACTION SHALL BE STRICTLY FOLLOWED.
17. OVERLAY SECTIONS SHALL CONSIST OF 1/2" MAX AGGREGATE WITH MEDIUM GRADING. ASPHALT EMULSION SHALL BE APPLIED UNDER PAVEMENT REINFORCING FABRIC WHERE FABRIC IS SPECIFIED.

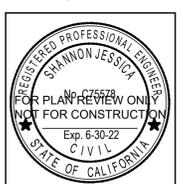
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3 Santa Barbara County General Street Specifications Scale: NTS

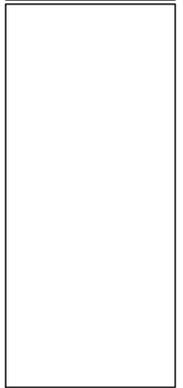
4 Santa Barbara County Additional Trench Notes Scale: NTS



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 CIVIL AND TRANSPORTATION ENGINEERING
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Vista del Mar Union School District
 Wastewater Improvements
 Standard Details

JOB #:	1389-0002
DESIGNERS:	SJ
DRAWN BY:	LL
DATE:	09-04-2020
DRAWING NO.	
C2.1	
12 OF 10 SHEETS	

Rev.	Date	Description of Revisions	By