INLAND FOUNDATION ENGINEERING, INC.

Consulting Ge	Division of Environmental Health Services				
wn	Percolation Report		EHS REF#		
February 24, 2021 Project No. S168-182	DESIGN RATE: 58 square feet per This rate applies to: \[\subseteq \text{Location(s)} \] where tested	er 100 gallons septic tank capacity	✓Seepage pits		
Attention: Mr. Tony Finaldi STK ARCHITECTURE, INC.	☐ Replacement only Additional requirements: ☐ Maintain septic tank minimum ☐ Maintain disposal area minimum		Limited to:		
42095 Zevo Drive, Suite A15	New construction requires perc tes	t Clearance from	RWQCB		
Temecula, California 92590	CONSTRUCTION DETAILS SUBJECT TO BUILDING AND SAFETY APPROVA				
	Design Rate Issued By: Ivy Saguan		Date: 05/13/2021		

Re: Revised Percolation Testing and On-Site Wastewater Treatment System (OWTS) Design Proposed Rancho Yard Building San Bernardino County Public Works Department: 12158 Baseline Road, Rancho Cucamonga, California Assessor Parcel No. 1089-031-39

Dear Mr. Finaldi:

Transmitted herewith are the results of percolation testing performed at the referenced site. The purpose of this study was to evaluate the feasibility of an on-site wastewater treatment system (OWTS) for the proposed Rancho Yard building. The testing was performed in accordance with the current requirements of the County of San Bernardino Department of Public Health, Division of Environmental Health Services (DEHS). We make no other warranty, either express or implied. Our field investigation was performed by a certified engineering geologist. An experienced staff geologist performed the actual percolation testing. The investigation and testing was performed under the supervision of Allen D. Evans, a registered civil and geotechnical engineer.

The following references were provided for use for this project:

- Project plans entitled "San Bernardino County Public Works Department Public Works Department: Rancho Yard New Building, Project No. 1010-0692, 12158 Baseline Road, Rancho Cucamonga, CA 91739", dated July 2020, prepared by STK Architecture, Inc.
- Revised Plumbing Plan, Sheet PO.1, Plumbing Legend Notes & Schedules, dated September 2020, prepared by Design West Engineering.
- Report entitled "Geotechnical Investigation, Proposed Public Works Yard Improvements (CIP-19-050), 12158 Baseline Road, Rancho Cucamonga, California", dated March 8, 2019, prepared by Geocon West, Inc.

1. DESCRIPTION OF SITE AND OF PROPOSAL:

1.1 Date/individual that was notified of testing: Boring excavation for seepage pit testing took place on January 19, 2021. Seepage pit testing was performed on January 20, 2021.

1.2 *Prepared for:* Client: STK Architecture, Inc.

Address: 42095 Zevo Drive, Suite A15

Address: Temecula, California

Phone: 951-377-6009

Public Works Department Rancho Yard is located at 12158 Baseline Road in the City of Rancho Cucamonga, California. The Assessor Parcel No. for the subject site is 1089-031-39. The site rests in the southwesterly portion of Section 32, Township 1 North, Range 6 West, S.B.B.&M. The site coordinates are ± 34.1236°N / -117.5395°W (WGS 84). The site is bounded to the west by a storage yard, to the east by a shopping center and Day Creek Boulevard, to the north by the Pacific Electric Bike Trail, and to the south by Baseline Road. The location of the proposed building and OWTS are shown on the vicinity map below (Figure 1).



Figure 1: USGS Topographic Map, Guasti 7.5' Quadrangle, and Aerial Photograph (2018)

1.4 Proposed Development:

We understand the proposed construction will consist of a ±3,300 square foot metal structure to be located near the center portion of the existing San Bernardino County Public Works Department Rancho Yard facility. On-site sewage disposal for this facility will consist of a conventional septic tank and seepage pits, located to the south of the proposed building. At the present time, the proposed OWTS site is in use as a paved parking area.

1.5 Description of Site and Surroundings:

- a.) Topography: The topography of the site is relatively planar with a very slight gradient to the south. Based on the referenced USGS topographic map, the elevation of the site is ±1,338' above mean seal level (msl).
- b.) Water Courses: There are no perennial or ephemeral stream courses within 200 feet of the proposed disposal system.
- c.) Vegetation Type and Density: The site is currently in use as a paved parking lot. No vegetation is present in the vicinity of the proposed OWTS.
- d.) Existing Structures: Currently, the Rancho Yard facility is occupied by single-story maintenance buildings and is in use as a storage yard. There are no existing structures in the near vicinity of the proposed OTWS.
- e.) Existing Wells or Abandoned Wells on or within 600 feet of the proposed disposal area: Based on our research, no water supply wells are known to exist within 600 feet of the proposed septic system.
- f.) Rock Outcroppings: No rock outcroppings were observed in the area of the proposed OWTS.

g.) Probable Depth to Historic Groundwater: Groundwater was not encountered in either of the borings which extended to a maximum depth of approximately 50 feet. According to the Watermaster Support Service Fall 2019 Cooperative Well Measuring Program, a recently monitored well (State Well 01N06W30F001), located approximately 1.5 miles northwest of the subject site, was monitored on October 24, 2018. At that time, the measured depth to groundwater was 561 feet below the existing ground surface. According to the State of California Department of Water Resources Data Library, State Well No. 01S07W14L001S, located approximately 1.5 miles southwest of the subject site, was monitored on November 25, 2019. At that time, the depth to groundwater was 443 feet.

Based on the groundwater data reviewed, the depth to groundwater below the project site is more than 400 feet.

- h.) Any Other Features That May Affect Sewage Disposal:
 None known.
- i.) Grading: We understand that site grading will be limited to preparation of the new building pad. No grading is planned in the vicinity of the proposed OWTS.

2. **EQUIPMENT:**

- 2.1 The following equipment was used during our percolation testing study:
 - a.) Truck mounted drill rig with an 8-inch, hollow stem auger (CME-75)
 - b.) 600-gallon water trailer
 - c.) 2.5" diameter hose with nozzle
 - d.) Tape measure
 - e.) Water level meter
 - f.) 3" perforated PVC pipe
 - g.) Gravel
 - h.) Watch

- 3.1 Locations of Borings and Percolation Tests: Borings were located in the general area of the proposed subsurface sewage disposal system (south of proposed new building). The locations were selected at the site by representatives of STK Architecture and this firm. The locations of the borings are shown on the Plot Plan (Figure A-4).
- 3.2 Soil Characteristics of the Subject Site: Soil characteristics of the site are favorable for subsurface sewage disposal. There was no visible evidence of shallow groundwater or impervious soil or bedrock. Testing was consistent with observed conditions.
- 3.3 Number of Exploratory Borings: Two exploratory borings were drilled to depths of 40 and 50 feet beneath the existing ground surface.
 - 3.3.1) Boring Results: Materials below the anticipated inlet depth of the proposed seepage pits consisted of alluvial deposits generally classified as fine- to coarse poorly graded sand with gravel and cobbles (SP), gravel with sand and cobbles (GW), and silty sand (SM). Although not encountered, boulders are common in these type of alluvial deposits and may be encountered during drilling of the seepage pits. The alluvial materials encountered were slightly moist to moist and medium dense to dense. No groundwater or reduction-oxidation mottling was observed within the exploratory test borings. See attached boring logs (Figure Nos. A-2 and A-3) for more details.
- Minimum Number of Tests for Seepage Pits: A minimum of two percolation test holes were required for this investigation. Two percolation test holes were tested on the subject site.
 - 3.4.1) Percolation Testing Procedure: Exploratory borings B-01 and B-02 were drilled to depths of 50 feet and 40 feet, respectively, with hole diameters of 8 inches. Boring B-01 was backfilled to a depth of 40 feet prior to testing. Percolation testing for the seepage pits was performed in

general accordance with the guidelines and regulations of the County of San Bernardino Division of Environmental Health Services. The falling head percolation test procedure was used. A 3-inch diameter perforated pipe was installed in each of the borings. Gravel was then placed around the pipes to prohibit caving during testing. Corrections were made for gravel packing the test holes. Each hole was presoaked on the day of drilling (January 19, 2021). Testing commenced the following day. The 3-inch pipes were filled with water to the ground surface and the level was read after 30 minutes with a water level meter and then recorded. The pipes were then refilled to the initial level and the process was repeated for 6 hours. In the final hour, the water level was not refilled but was still read and recorded.

3.4.2) Percolation Test Results: Seepage rates were determined in general accordance with San Bernardino County DEHS requirements. Measured field data was used to calculate the seepage rates, including a gravel correction factor, using the following equation:

$$Q = \frac{\Delta d \times D \times 9}{(d_b - L_{ave}) \times \Delta t} \times Gravel\ Correction\ Factor$$

Where.

 $\Delta d = d_f - d_i$ (ft)

D = diameter of boring hole (ft)

 $d_b = depth to water bottom (ft)$

 L_{ave} = average wetted depth = $d_b - (d_i + d_f)/2$

 $\Delta t = time increment (hr)$

d_i = initial level (ft)

d_f = final level (ft)

Gravel Correction Factor = 0.40

Q = gallons of sewage per square foot per day $(gal/ft^2/day)$

This testing indicated satisfactory percolation rates in all tests. A summary of the testing is shown in Table 1. Detailed percolation test results are appended.

Table 1: Percolation rates from seepage pit tests

Test No.	Depth to bottom of test hole (ft.)	USCS Soil Classification	Percolation Rate (gal/ft²/day)
B-01	40	SP, GW, SM	1.7
B-02	40.	SP, SM	3.6

A design percolation rate of 1.7 gallons per square feet per day is recommended for the project as a conservative measure based on the slower rates encountered in the final 30 minutes of testing. See field test data (Figure Nos. A-6 and A-7) and General Discussion (Section 7) for more details.

4. DISCUSSION OF RESULTS:

- 4.1 Uniformity of Soil: Our observation of the subsurface material indicates that the upper ±26 to 32 feet of the soil profile consists of fine to coarse poorly graded sand with gravel (SP) and gravel with sand (GW). Some difficulty in drilling the exploratory borings was encountered due to the density of the soil and presence of gravels and cobbles encountered. Below these deposits, fine to medium silty sand (SM) in a medium dense to dense condition was encountered to the bottoms of the borings. No groundwater or oxidation-reduction mottling was observed within our borings.
- 4.2 Sources of Variability or Error: There were no known sources of error.
- 4.3 Interpretation of Results: Based on the results of percolation testing in the area proposed for the seepage pits, the subject site is believed to be acceptable for installation of an on-site sewage disposal system that conforms to San Bernardino County DEHS requirements.

5. **DESIGN**:

- 5.1 General Criteria: The seepage pit disposal system for the site should be designed and constructed in accordance with San Bernardino County DEHS criteria and applicable portion of the Uniform Plumbing Code.
- Conversion of Percolation Rates To Design Rates: Fixture
 Units provided by the design team were used to evaluate the
 minimum septic system capacity at this site. Based on the
 referenced project plans and discussions with STK, the
 planned fixture units for the new building are shown below:

Table 2: Fixture Units

Fixture	No. of Fixture		Fixture Units 0
	Fixtures	Units/Fixture	
Water Closets	2	4	8
Lavatories	2	1	2
Two Compartment Sink	1	2	2
Service Sink	2	3	6
Floor Drain	2	2	4
Floor Sink	1	2	2
Safety Shower / Wash Station	1	2	2
Total Fixture Units			28

For 28 fixture units, a minimum septic tank capacity of 1,500 gallons is required per the 2016 California Plumbing Code, Table H 201.1(1). However, based on discussions with STK Architects, Inc., we understand the County plans to install a larger OWTS system with a 2,500 gallon septic tank.

Based on the results of our percolation testing a design percolation rate of 1.7 gallons per square foot of sidewall per day (gal/ft^2/day) should be used for the septic system design. For a 2,500 gallon septic tank, a minimum of 78.2 vertical feet of seepage pit is required for 6-foot diameter seepage pits. This corresponds to a system utilizing three 6-ft. diameter seepage pits with 27 feet below the inlet.

6. PLOT PER CURRENTLY ADOPTED UNIFORM PLUMBING CODE:

A conceptual septic system plot plan is presented on Figure A-5.

7. GENERAL DISCUSSION AND CONCLUSIONS OR RECOMMENDATIONS:

On the basis of the percolation testing and subsequent analysis, the use of seepage pits as a method of subsurface sewage effluent disposal will be feasible for the subject property. Our test results indicate seepage rates for the final 30 minutes of the testing of 1.7 gal/ft²/day for B-01 and 3.6 gal/ft²/day for B-02. Therefore, we recommend the use of the minimum seepage rate of 1.7 gallons per square foot per day for design as a conservative measure. For this project, we recommend that three (3) six-foot diameter seepage pits be installed to a depth of 27 feet below the inlet. A 100 percent expansion area is also shown on the plot plan.

The findings and recommendations provided in this report are based upon an interpolation of subsurface conditions between test and boring locations. The data obtained from the various points of observation and testing may only be representative of the condition at those specific locations. Therefore, conditions may be encountered during construction that appears to be different than those indicated herein. We cannot assume any responsibility for such unforeseen conditions, but should be notified if they occur in order to determine the necessity of revising our recommendations.

It has been our pleasure to be of service to you on this project. If there are any questions, please contact our office.

Respectfully,

INLAND FOUNDATION ENGINEERING, INC.

Daniel R. Line P.G., C.E.G.

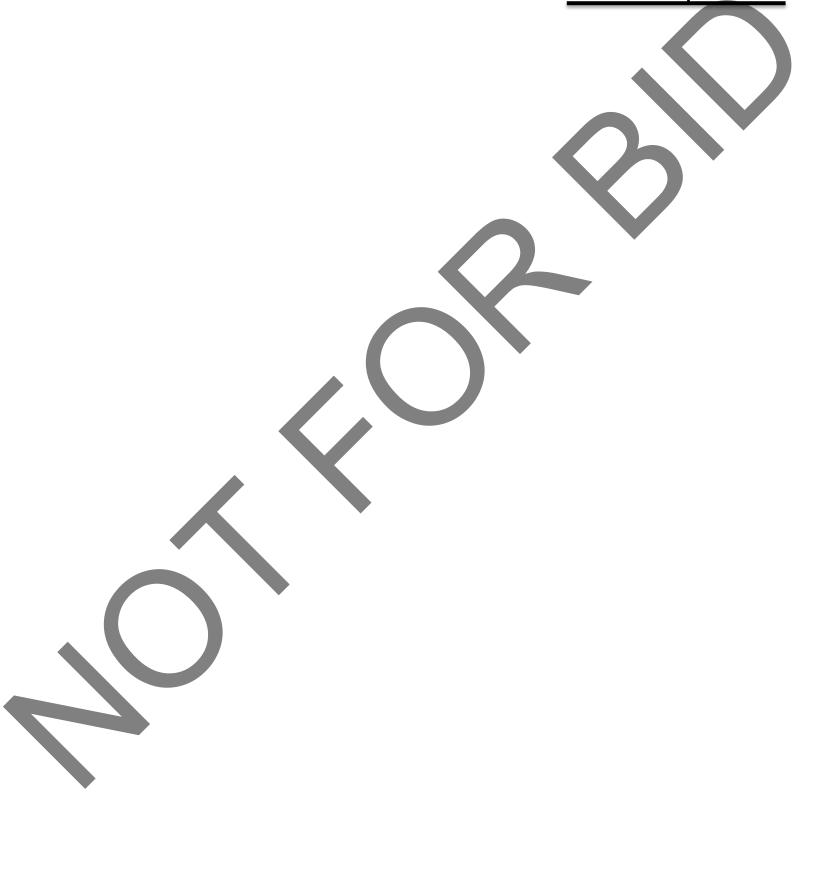
Principal Geologist

Allen D. Evans, P.E.

Principal

DRL:ADE:es

Distribution: Addressee



		UNIFIED S	OIL CL	ASSIFICAT	TION SYSTEM (ASTM D2487)
	PRIMARY DIVISIONS		GROU	P SYMBOLS	SECONDARY DIVISIONS
SER	CLEAN GRAVELS		GW		WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS MORE THAN HALF OF MATERIALS IS LARGER THAN #200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN #4 SIEVE	(LESS THAN) 5% FINES	GP	=	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
SOILS	GRA MORE ILF OF FRACT ARGE #4 S	GRAVEL WITH	GM	#] # #	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
COARSE GRAINED SOILS IN HALF OF MATERIALS I: THAN #200 SIEVE SIZE	H HA	FINES	GC		CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
SE GR LF OF	S SE	CLEAN SANDS (LESS	SW	売店 売店 売店	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
COAR AN HAI	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN #4 SIEVE	THAN) 5% FINES	SP		POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
ZE TH	SAN MORE I.F OF FRACT MALLE #4 S	SANDS WITH	SM		SILTY SANDS, SAND-SILT MIXTURES
MOF	HA - IS	FINES	SC		CLAYEY SANDS, SAND-CLAY MIXTURES
SIS	SILTS AND CLAYS CLAYS LIQUID LIMIT IS IS LESS THAN 50		ML		INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS
S ERIALS			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
D SOIL MATE	SI		OL	## ##	ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY
FINE GRAINED SOILS THAN HALF OF MATERIALS IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS CLAYS LIQUID LIMIT IS GREATER THAN 50		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS
INE GI HAN H, SMA #200			СН		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
MORE TI			ОН		ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
Σ Σ	HIGHLY ORGANIC SOILS		PT	<u>v</u> v	PEAT, MUCK AND OTHER HIGHLY ORGANIC SOILS
NAL	SANDSTONES		SS		
MATIO	SILTSTONES		SH	*	
TYPICAL FORMATIONAL MATERIALS	CLAYSTONES		cs		
PICAI M,	LIMESTONI	ES	LS		
Ė	SHALE		SL		

CONSISTENCY CRITERIA BASES ON FIELD TESTS

RELATIVE DENSITY - COARSE - GRAIN SOIL

RELATIVE DENSITY	SPT * (# BLOWS/FT)	RELATIVE DENSITY (%)
VERY LOOSE	<4	0-15
LOOSE	4-10	15-35
MEDIUM DENSE	10-30	35-65
DENSE	30-50	65-85
VERY DENSE	>50	85-100

CONSISTENCY -	
FINE-GRAIN SOIL	
	_

CONSISTENCY – FINE-GRAIN SOIL		TORVANE	POCKET ** PENETROMETER	
CONSISTENCY	SPT* (# BLOWS/FT)	UNDRAINED SHEAR STRENGTH (tsf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	
Very Soft <2		<0.13	<0.25	
Soft 2-4		0.13-0.25	0.25-0.5	
Medium Stiff	4-8	0.25-0.5	0.5-1.0	
Stiff	8-15	0.5-1.0	1.0-2.0	
Very Stiff	15-30	1.0-2.0	2.0-4.0	
Hard	>30	>2.0	>4.0	
		CEMEN	TATION	

- * NUMBER OF BLOWS OF 140 POUND HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1 3/8 INCH I.D.) SPLIT BARREL SAMPLER (ASTM -1586 STANDARD PENETRATION TEST)
- ** UNCONFINED COMPRESSIVE STRENGTH IN TONS/SQ.FT. READ FROM POCKET PENETROMETER

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp but no visible water
WET	Visible free water, usually soil is below water table

CEMENTATION

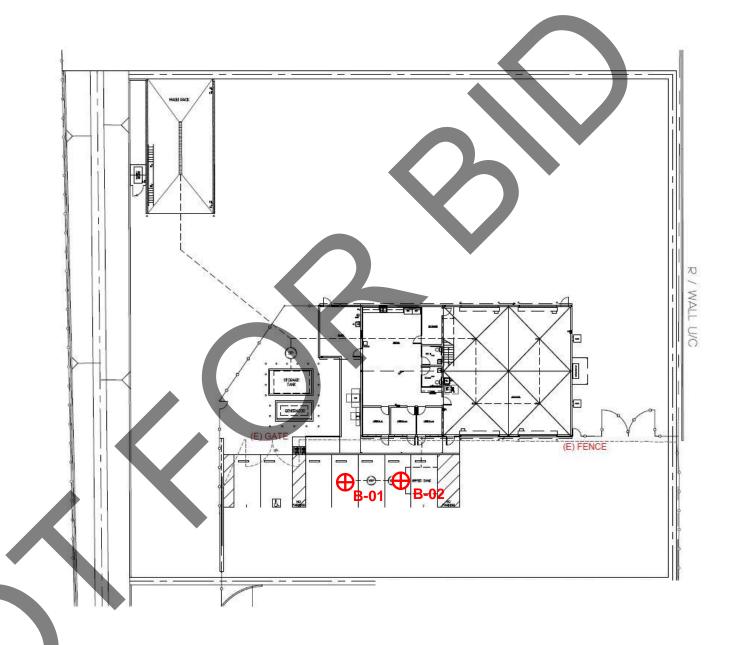
DESCRIPTION	FIELD TEST
Weakly	Crumbled or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

		LOG OF E	ORING B-0)1			
DRILLING RIG DRILLING METHOD LOGGED BY GROUND ELEVATIO	Rotary Auger KC	OATE DRILLED	1/19/21	HAM HAM	MER TYPE MER WEIGHT MER DROP ING DIAMETER	30-inches	
O DEPTH (ft) U.S.C.S. GRAPHIC LOG	SUMMARY Of This summary applies only Subsurface conditions may with the passage of time. The encountered and is represed at a derived from laboratory	differ at other locati ne data presented is ntative of interpreta	e boring and at the ons and may chan s a simplification of tions made during	time of drilling. ge at this location actual conditions drilling. Contrastin	VE S MPLE	BLOW COUNTS/6" MOISTURE (%)	DRY UNIT WT. (pcf)
1 2 3 4 5 6 7 7 8 SP 9 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ASPHALT CONCRETE, (POORLY GRADED SANI cobbles, olive-brown, slig GRAVEL WITH SAND, fir to moist, dense, diffculty	D with GRAVEL ghtly moist, dens	se, difficulty dri	lling.	AU		
21	SILTY SAND, fine- to me medium dense to dense.	dium, with grave	el, yellowish-br	own, moist,	AU		
38 39 40 41 5M 42 43 45 46 47 48 49 50 50				-			
	End of boring at 50 feet.	No groundwate	r encountered.				
Est. 1978	Inland Founda	ition _{PROJE}	ECT NAME ECT LOCATION I	STK Architectur SB County Rand 12158 Baseline Rancho Cucamo S168-182	cho Yard Road		FIGURE NO

		LOG OF B	ORING B-	02			
DRILLING RIG DRILLING METHOD LOGGED BY GROUND ELEVATION	Rotary Auger KC	ATE DRILLED	1/19/21	HAM	MER TYPE MER WEIGHT MER DROP ING DIAMETE	Auto-Tri 140-lb. 30-inches	es
	This summary applies only a Subsurface conditions may with the passage of time. The encountered and is represer data derived from laboratory ASPHALT CONCRETE, (3)	3.5 inches)			BULK SAMPLE DRIVE SAMPLE SAMPLE TYPE	COUNTS/6"	DRX UNIT WT.
2	POORLY GRADED SAND cobbles, olive-brown, slig	htly moist- to mo	fine- to coars	se, with lifficulty drilling.	AU		
27 28 29 30 31 32 33 SM 35 36 37 38 39 40	SILTY SAND, fine- to meddense to dense. End of Boring at 40 feet.				AU		
Est. 1978	្ត Inland Founda ខ្គុ Engineering, l	nc.	CT NAME CT LOCATION CT NUMBER	STK Architectur SB County Rand 12158 Baseline I Rancho Cucamor S168-182	cho Yard Road		FIGURE NO

SITE PLAN





Recipies for the control of the cont

Vicinity Map

Base Map: Site Plan, 12158 Baseline Road, Rancho Cucamonga, CA, dated July, 2020, prepared by Engineering Resources of Southern California

Approximate Location of Exploratory Boring & Percolation test

INLAND FOUNDATION ENGINEERING, INC.
Consulting Geotechnical Engineers and Geologists
www.inlandfoundation.com
(951) 654-1555

A-4	Percolation Testing SB Public Works Rancho Yard Building Rancho Cucamonga, California				
	Drawn By: KC	Project No. S168-182			
	Scale: 1"=±40'	Date: Jan. 2021			

ONSITE WASTEWATER TREATMENT SYSTEM DESIGN

San Bernardino County Public Works Rancho Yard - New Building

PREPARED FOR: STK ARCHITECTS

42095 Zevo Drive, Suite A15 Temecula, California 92590

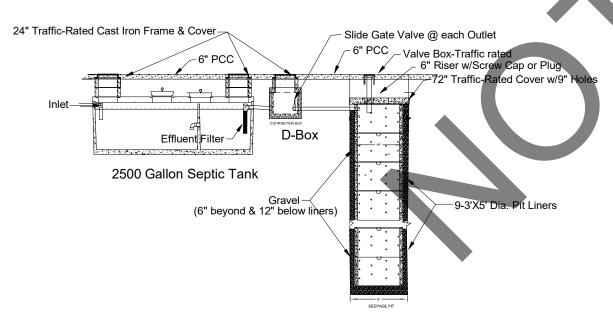
(951) 296-9110

PROPERTY DESCRIPTION: 12158 Baseline Road

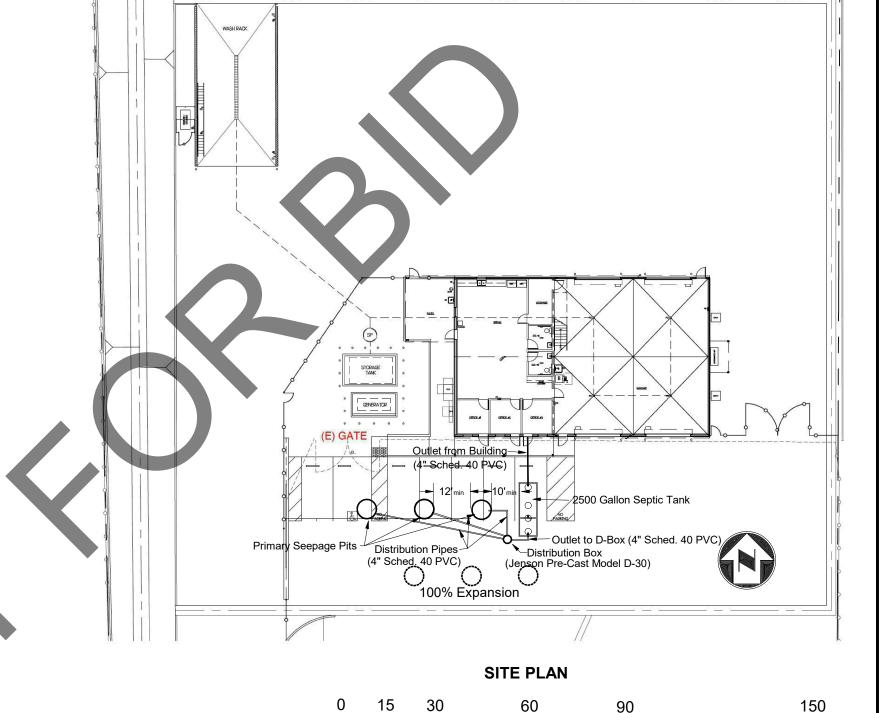
Rancho Cucamonga, California



VICINITY MAP



SEPTIC TANK, DISTRIBUTION BOX, SEEPAGE PIT - TYPICAL PROFILE



FIXTURE UNITS: SEPTIC TANK CAPACITY: NUMBER OF SEEPAGE PITS:

SEEPAGE PIT DIAMETER: SEEPAGE PIT DEPTH:

PERCOLATION RATE:

1.7 Gallons/Square Foot/Day

28

2500 Gallons

3 6 Feet

27 Feet Below Inlet

INLAND FOUNDATION ENGINEERING, INC, 1310 South Santa Fe Avenue San Jacinto, California

(951) 654-1555 FAX (951) 654-0551

1" = 30'

1

Drawn By: L. Strahm Project No. S168-182

Scale: As Shown Date:February 2021

PERCOLATION TEST DATA SHEET - INFILTRATION TESTING

Project: Ranche Yard	Project No.:	5168-182	Date: - 1	10-21			
Test Hole No.: B-61	Tested By:	K.C.					
Depth of Test Hole D _T : 40 USCS Soil Classification:							
Test Hole Dimens		6"×46"	Length	Width			
Diameter (if round)= %	Sides (if red	ctangular) =					
Sandy Soil Criteria Test*							
				Greater			

Marial No.	Start Time	Stop Time	Time Interval, (min.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Change in Water Level	Greater than or Equal to 6"? (Y/N)
1	11:68:52	11:38:52	30	97	17.71	12.6	NA
2	11:40:46	12:10:46	30	-0	22.4	176	NA

^{*}If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

1/20			∆t Time	D _o Initial Depth to	D _f Final Depth to	∆D Change in Water	Percolation
Trial No.	Start Time	Stop Time	Interval, (min.)	Water (in.)	Water (in.) FT	Level (in.) TT	Rate (min./in.)
1	_	9:2212	30	0.0	16,951	16,95	
2	9:24:26	9:54:28	30	0.0	14,4	14.4	/
3	9:55:41	10:25:41	30	0.0	13.6	13.61	
4	10:27:04	10:57:64	30	0.0	13,1"	13.1	
5	11:01:45	11:31:45	30	0.0	131	13.0	
6	11137:62	12:02:52	30	0,0	11.8	11.8'	
7	12:04135	12:34:55	30	0,0	16.4	10.41	
8	12.35:56	1:65:56	30	0.6	10.25	10,251	
9	1:07.54	1;37:54	30	0.0	10.25	10,25	
10	1:38:40	21,08:40	30	0,0	10 25	10,25	
11	21.12:05	2:42:05	05	4,0	14.0	10.0'	
12	2:42:05	31.12:05	30	14.0	70.5	6.51	
13							
14							
15							

in before gravel pack was placed: 35%

PERCOLATION TEST DATA SHEET - INFILTRATION TESTING

PERCULATION TEST DATA SHEET - INFILTRATION TESTING										
Project:	Project: Kandro Yasi Project No.: 5168-182 Date: 1-21-21									
Test Hole No.: B-67. Tested By: V.C.										
Depth of Test Hole D _T : 40 USCS Soil Classification:										
							Width			
Diameter	(if round)=		Sides (if rec	tangular) =	<u> </u>					
Sandy Soil Criteria Test*										
1/19 Trial No.	Start Time	Stop Time	Time Interval, (min.)	Initial Depth to Water (in:)	Final Depth to Water (in .)	Chang in Wat Leve	ter Equal to 6"?			
1	12140124	1:10:24	30	0	25,6	251	NIA			
2	1:12:13	1:42:13	30	0	20,4	20,0	NIA			
3										
*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".										

1/20	Start	Stop	∆t Time Interval,	D₀ Initial Depth to Water	D _f Final Depth to Water	∆D Change in Water Level	Percolation Rate
Trial No.	Time	Time	(min.)	(in:)FT	(in.)	(in:) F((min./in.)
1	8:57:15	9:27:15	30	0,0	23,7	23,7	
2	9:30:04	10:00:04	30	6.0.	19,65	18.65	
3	10:02:10	10:37:11	30	0,0	18.6	18,6	
4	10:35:28	11:05:28	30	0.0	13,85	18.85	
5	11:07:24	11:37:24	30	0.0	13.6	18,6	
6	11:39:07	17:09:07	30	0.0	18.6	18.6	
7	1211112	12:41:12	30	6,0	18.7	187	
8	12:43:35	11.13:35	30	0.0	18.6	18.6	
9	1:15:21	1:45:21	30	0.0	19.05	19.05	
10	1:47:21	2:17:21	30	0,0	19.05	19.05	
11	2122:53	2:52:53	30	4.0	20.	20,1	
12	2152153	3:,22:53	30	20.1	29.6	29.6	
13							
14							
15							
COMMEN	TS:	1 2	ell c	o ttled	11011	11 1	

COMMENTS: Gravel Pack settled 1'2". 11 ft caved
I'n before gravel pack was placed. 27,5%

GRADING PLANS

I of 3 - PRECISE GRADING PLAN - INDEX SHEET

2 of 3 - PRECISE GRADING PLAN 3 of 3 - PRECISE GRADING PLAN

SEPTIC SYSTEM

D-I - SEPTIC SYSTEM

<u>LANDSCAPE</u>

- L-I PLANTING PLAN L-2 - IRRIGATION PLAN
- L-3 PLANTING AND IRRIGATION DETAILS AND SPECIFICATIONS

<u>ARCHITECTURAL</u>

- AI.O REFERENCE SITE PLAN & DETAILS
- AI.I ENLARGED SITE PLANS & DETAILS
- Al.2 SITE DETAILS
- Al.3 SITE DETAILS
- Al.4 SITE DETAILS
- A2.I FLOOR PLANS & DETAILS
- A2.3 SCHEDULES & DETAILS
- A2.5 REFLECTED CEILING PLANS
- A2.6 ROOF PLAN, SECTIONS & DETAILS
- A3.2 EXTERIOR ELEVATIONS & DETAILS A4.I - INTERIOR ELEVATIONS & DETAILS
- A5.I INTERIOR ELEVATIONS & DETAILS

PLUMBING

- PO.I PLUMBING LEGEND NOTES & SCHEDULES
- PO.2 PLUMBING TITLE 24 COMPLIANCE DOCUMENTS
- PI.I PLUMBING GROUND LEVEL
- PI.2 PLUMBING GROUND & MEZZANINE LEVELS
- PI.3 PLUMBING OVERALL & ENLARGED SITE PLANS
- P2.I PLUMBING DETAILS
- P2.2 DUPLEX PUMP STATION & PUMP CUTSHEETS

<u>MECHANICAL</u>

- MO.I MECHANICAL LEGEND NOTES & SCHEDULES
- MO.2 MECHANICAL ENERGY COMPLIANCE DOCUMENTS
- MO.3 MECHANICAL ENERGY COMPLIANCE DOCUMENTS
- MI.I MECHANICAL GROUND & MEZZANINE LEVELS M2.I - MECHANICAL DETAILS

ELECTRICAL

- EO.I ELECTRICAL LEGENDS AND NOTES
- FAO.I FIRE ALARM LEGENDS AND NOTES FAO.2 - FIRE ALARM RISER DIAGRAM
- EO.2 LUMINAIRE SCHEDULE
- EO.3 LIGHTING CONTROL LAYOUT
- EO.4 LIGHTING CONTROL DETAILS
- EO.5 SINGLE LINE DIAGRAM
- EO.6 TITLE 24 COMPLIANCE DOCUMENTS (PRESCRIPTIVE) EO.7 - TITLE 24 COMPLIANCE DOCUMENTS (PRESCRIPTIVE)
- ELECTRICAL DEMOLITION AND REMODEL UTILITY SITE PLANS
- ELECTRICAL REMODEL SITE PLAN
- ELECTRICAL SITE PHOTOMETRY PLAN
- POWER AND SIGNAL GROUND AND MEZZANINE LEVELS
- LIGHTING GROUND AND MEZZANINE LEVELS
- ELECTRICAL INTERIOR PHOTOMETRY & EGRESS PLAN
- ENLARGED ELECTRICAL PLANS E5.I - ELECTRICAL DETAILS

SAN BERNARDINO COUNTY PUBLIC WORKS DEPARTMENT: RANCHO YARD NEW BUILDING

PROJECT # 1010-0692 CIP # 19-050 CAFM # ETIOOX

12158 BASELINE ROAD RANCHO CUCAMONGA, CA 91739

THE GENERAL BUILDING CONTRACTOR SHALL SUBMIT TO THE COUNTY OF SAN BERNARDINO DESIGN & CONSTRUCTION DEPARTMENT THE FOLLOWING DOCUMENTS FOR REVIEW AND APPROVAL PRIOR TO OBTAINING BUILDING PERMIT

- PROVIDE PROJECT SIGN PER SPECIFICATIONS
- 2. COMPLY W/ C.B.C. SECTION 3303.7 "PEDESTRIAN PROTECTION" DURING CONSTRUCTION. GENERAL CONTRACTOR TO PROVIDE ALL BACKING/FRAMING AS NECESSARY FOR LIGHTS, SIGNS, GRAB BAR, ETC.
- DEFERRED SUBMITTAL / SEPARATE PERMITS THE FOLLOWING ARE UNDER DEFERRED SUBMITTAL/SEPARATE PERMITS (TO BE OBTAINED BY THE GENERAL CONTRACTOR):
- PREFABRICATED METAL SHOP BUILDING & COMPONENTS
- SITE CMU WALL / RETAINING WALL

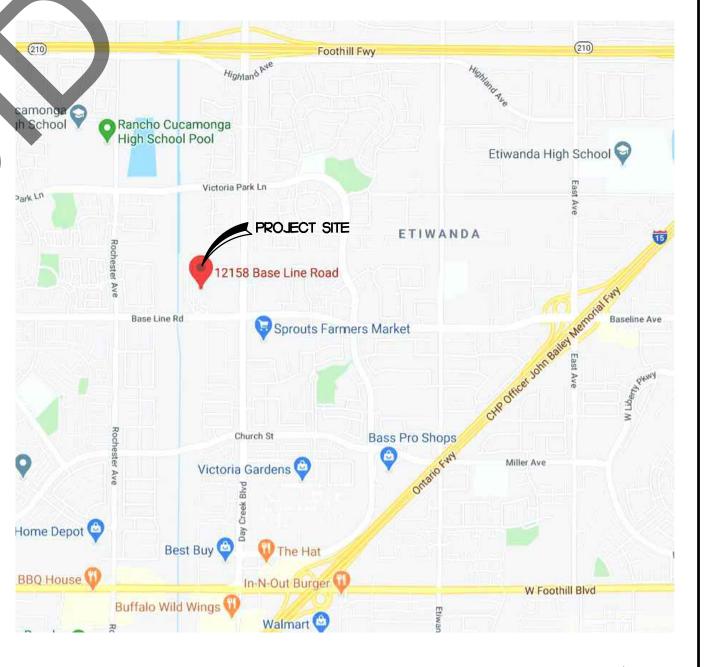
SUBMITTAL DOCUMENTS (PLANS & CALCULATIONS) FOR DEFERRED ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

- ELECTRICAL CONDUITS IN COMMERCIAL BUILDINGS TO BE BURIED 6" BELOW CONCRETE SLAB, [TMCC | 5,04,050(C)]
- VERTICAL GLAZING SHALL HAVE U-FACTORS PER NFRC 100-SB OR DEFAULT VALUES PER APPENDIX I OR ACM MANUAL, [CEC EXCEPTION TO II6(A) 2]
- REQUIRED SPECIAL INSPECTIONS
- THE FOLLOWING SPECIAL INSPECTIONS PER 2016 C.B.C. ARE REQUIRED:
- -- STRUCTURAL CONCRETE OVER 2,500 P.S.I. -- FIELD WELDING.
- -- HIGH-STRENGTH BOLTS. -- EXPANSION EPOXY ANCHORS.
- NO HAZARDOUS MATERIALS ARE TO BE STORED OR USED WITHIN THE BUILDING WHICH EXCEED THE QUANTITIES IN U.B.C. TABLES 3-D & 3-E.
- 9. PROVIDE A CONSTRUCTION WASTE MANAGEMENT PLAN AND DOCUMENTATION WHICH COMPLIES WITH CGBC 5.408.2, REDUCE CONSTRUCTION WASTE BY RECYCLING OR SALVAGING FOR RE-USE A MINIMUM OF 50% OF CONSTRUCTION AND DEMOLITION DEBRIS, OR MEET LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE, WHICHEVER IS MORE STRINGENT, CGBC 5.408.3
- 10. THE FACILITY SHALL REMAIN IN OPERATION AT ALL TIMES.
- A. THE IMPROVEMENTS SHALL BE STAGED TO ALLOW INGRESS & EGRESS AT ALL TIMES.
- B. THE WORK ON THE EXTERIOR SHALL BE MADE AS DUST FREE & ODOR FREE AS POSSIBLE AND SHALL NOT PREVENT THE STAFF FROM THEIR REGULAR OPERATIONS.
- C. CONTRACTOR SHALL SUBMIT IN WRITING A WRITTEN METHOD OF PROCEDURE AT THE PRE-CONSTRUCTION MEETING ADDRESSING THE ABOVE CONCERNS.
- GENERAL CONTRACTOR TO PROVIDE TEMPORARY SAFETY BARRIER OR FENCING FOR THE DURATION OF THE PROJECT AS REQUIRED AT NO ADDED COST TO THE OWNER.
- GENERAL CONTRACTOR SHALL ENGINEER & CONSTRUCT ALL FOUNDATIONS REQUIRED BY THE PRE-FABRICATED METAL BUILDING COMPANY, CONTRACTOR SHALL PROVIDE ENGINEERED & WET STAMPED SHOP DRAWINGS FOR THE ENTIRE STRUCTURE, INCLUDING THE FOUNDATIONS & MEZZANINE.

ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF SECTION 2602 AND 707 OF

ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, OR WEATHERSTRIPPED. SITE CONSTRUCTED DOORS, WINDOWS AND SKYLIGHTS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHER STRIPPED (EXCEPT FOR UNFRAMED GLASS DOORS AND FIRE DOORS)

MANUFACTURED DOORS AND WINDOWS INSTALLED SHALL HAVE AIR INFILTRATION RATES CERTIFIED BY THE MANUFACTURER PER 2-53169(a)I. AFTER JULY I, 1993, MANUFACTURED FENESTRATION PRODUCTS MUST BE LABELED FOR U-VALUE ACCORDING TO NFRC PROCEDURES. ALSO ALL OVERHEAD DOORS OF APPARATUS ROOM, PROVIDE CERTIFICATES OF COMPLIANCE FOR DOORS, WINDOWS & INSULATION.



REDLANDS, CA 92373 (909) 890-1255

PROJECT TEAM

LANDSCAPE ARCHITECT ALHAMBRA GROUP VINCE DI DONATO 41635 ENTERPRISE CIRCLE N., STE. C TEMECULA, CA 92590 (951) 296-6802

(951) 296-6803 FAX

<u>OWNER</u>

SAN BERNARDINO COUNTY

ARCHITECTURE AND ENGINEERING DEPT. DANI FOX - PROJECT MANAGER III

385 N. ARROWHEAD AVE., THIRD FLOOR

SAN BERNARDINO, CA 92415 PHONE: (909) 387-5000

ARCHITECTURAL

STK ARCHITECTURE, INC.

TONY FINALDI, ARCHITECT 42095 ZEVO DR., SUITE AI5 TEMECULA, CA 92590

PHONE: (951) 296-9110

FAX: (951) 296-6079

<u>CIVIL ENGINEER</u>

ERSC REDLANDS LOCATION MATT BRUDIN, P.E. / PRINCIPA

1861 W REDLANDS BLVD.

(909) 890-0995 FAX

MPE ENGINEER

DESIGN WEST ENGINEERING ADRIAN JACQUEZ 1845 BUSINESS CENTER DR., SUITE 215 SAN BERNARDINO, CA 92408 PHONE: (909) 890-3700 FAX: (909) 890-3770

SAN BERNARDINO, CA 92415 THE COUNTY PUBLIC WORKS DEPARTMENT WISHES TO EXPAND ITS

- I. A NEW 3,200 SF TWO-BAY SERVICE BUILDING WITH MEZZANINE LEVEL WITH STAIR ACCESS, COMPLETE WITH HVAC SYTEM THAT
- SERVES OFFICES & CONFERENCE/BREAK ROOM
- INSTALLATION OF EMERGENCY BACKUP GENERATOR.

EXISTING CORPORATE YARD TO INCLUDE THE FOLLOWING:

- PAVING OF THE DRIVEWAY AND PARKING AREA.
- PARKING LOT LIGHTING. 5. FINISH MASONRY BLOCK WALL WITH SECURITY FENCING &
- EXTEND BLOCK WALL AROUND PROPERTY AND INSTALL SECURITY ENHANCEMENTS (BARBED WIRE) TO TOP OF FENCE. 6. INSTALL CLARIFIER FOR FACILITY AND WASH RACK.
- PROVIDE AUTOMATION TO LIGHTING FACILITY IS 24-7 RESPONSE LOCATION AND WILL REQUIRE APPROPRIATE AUTOMATION.
- 8. INSTALL SECURITY CAMERA SYSTEM. 9. PROVIDE OVERHEAD/PATIO ON THE SIDE OF BUILDING FOR BREAKS/CREW EATING SPACE,
- 10. UPGRADE SEWER SYSTEM: TIE TO SEWER MAIN. - DEMO / ABANDON EXISTING SEPTIC SYSTEM.
- PROVIDE RV CONNECTION FOR SERVING PORTABLE TOILETS. UPGRADE/EXPAND POWER SERVICE TO +400 AMP. 12. UPGRADE WATER LINE INTO THE FACILITY.
- 13. INSTALL COMMUNICATION FIBER OPTIC SYSTEM.
- 14. INSTALL CLARIFIER AND WASH RACK.

RANCHO CUCAMONGA, CA 91739

INFORMATION:

SHEET INFORMATION:

PLOT DATE:

DRAWING NAME:

STK PROJECT NO.: 374-134-20

AS NOTED

FEBRUARY 2021

ISSUE INFORMATION:

CONSULTANT:

PROJECT ADMINISTERED BY

COUNTY OF

SAN BERNARDINO

REAL ESTATE SERVICES

DEPARTMENT -

PROJECT MANAGEMENT

DIVISION

385 N. ARROWHEAD AVE

PUBLIC WORKS

DEPARTMENT:

RANCHO YARD NEW

BUILDING

PROJECT # 1010-0692

CIP # 19-050

CAFM # ETIOOX

12158 BASE LINE ROAD

PROJECT NAME:

TITLE 24 MANDATORY MEASURES PROJECT DESCRIPTION **VICINITY MAP** N.T.S.

TOTAL PARKING PROVIDED: 7 STALLS

STANDARD: 6 STALLS

ACCESSIBLE REQUIRED: 1 STALL ACCESSIBLE PROVIDED: I STALL

1089-031-13-0000 OCCUPANCY GROUP = BI TYPE OF CONSTRUCTION = V-B SPRINKLERED (?) = NO = 24'-2" BASIC ALLOWABLE FLOOR AREA = 7,000 S.F.

ASSESSOR'S PARCEL NUMBERS:

ACTUAL FLOOR AREA = 1,550 S.F. < 7,000 S.F. (OK)

1089-031-39-0000

OCCUPANCY GROUP TYPE OF CONSTRUCTION = V-B SPRINKLERED (?) = NO STORIES = 24'-2" BASIC ALLOWABLE FLOOR AREA = 17,500 S.F. FIRST FLOOR AREA = 2,450 S.F. SECOND FLOOR MEZZANINE AREA = 1,550 S.F. = 4,000 S.F. < 17,500 F.S. (OK) ACTUAL FLOOR AREA

TOTAL FLOOR AREA = <u>4.000 SF.</u> LIST OF APPLICABLE CODES

(2018 INTERNATIONAL BUILDING CODE)

ALL WORK SHALL COMPLY WITH CURRENTLY ADOPTED: 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2018 NATIONAL ELECTRICAL CODE)

2019 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2018 UNIFORM MECHANICAL CODE)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

2019 CALIFORNIA ENERGY CODE

2019 CALIFORNIA FIRE CODE AMERICANS WITH DISABILITIES ACT 1990 WITH 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND 2010 REVISIONS TO TITLE II

TITLE SHEET

SHEET INDEX NOTES TO GENERAL CONTRACTOR

PARKING TABULATION

LEGAL DESCRIPTION

CODE ANALYSIS

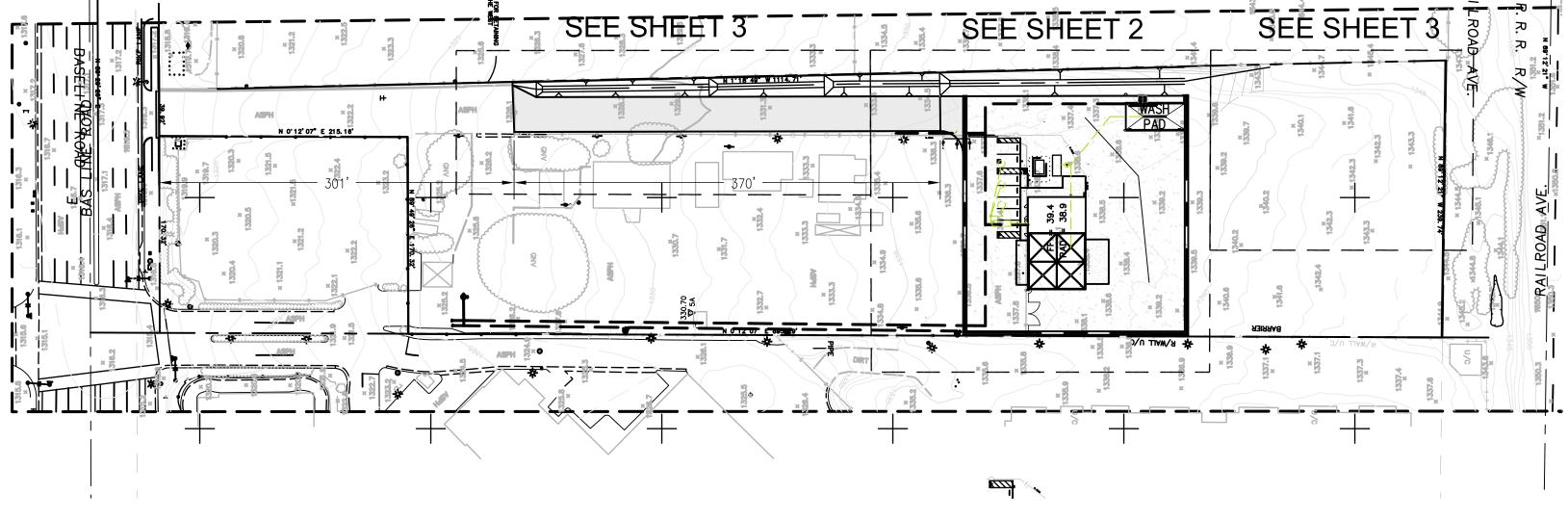
GRADING NOTES

- 1. A grading permit shall be obtained from the City and the grading inspector shall be notified 24 hours prior to the start of any grading.
- 2. Clearing and grubbing, including removal of existing structure, footings, foundations, rubble, trees and root systems, other vegetation, debris, etc., shall be completed to the satisfaction of the Geotechnical Engineer prior to the start of grading operations.
- 3. Excavation shall then be completed as shown on the approved plans.
- 4. If exporting 50 cubic yards or more of soil, the applicant shall provide the location where the soil is to be deposited along with a letter of acceptance form the property owner prior to grading plan approval. If the site is located within the City of Rancho Cucamonga, a stockpile plan and permit are required.
- 5. The exposed soils shall then be inspected by the Geotechnical Engineer. Additional over excavation shall be made in accordance with the Geotechnical Engineer's recommendation and as contained in the Soils Report.
- 6. The exposed soils shall then be scarified to a minimum depth of 6 inches, brought to proper moisture content and compacted to at least 90% of the maximum density, as determined by Appendix Section J107.5 of the latest California Building Code. Equivalent compaction can be obtained by methods specified by the Geotechnical Engineer.
- 7. Prior to importing soil, the grading contractor shall notify the Geotechnical Engineer not less than 72 hours in advance, so that each proposed import source can be sampled, tested, and approved prior to delivery for use on the site.
- 8. Proper **compaction** for the entire project including the backfill of utility trenches, etc. shall be verified by the Geotechnical Engineer. He shall prepare a compaction report, which shall be submitted to and approved by the City prior to the issuance of a building permit.
- 9. Pad certification for elevation of all pads within the project shall be submitted to the Building Inspector prior to any concrete pouring. Pad certification can be by either one approved blackline-as-built grading and drainage plan or in letter format showing the design and as-built pad elevations shown on the approved grading and drainage plan. Either shall be sealed by a Civil Engineer licensed in the State of California.
- 10. Certificates of final lot grading are to be submitted the Engineering Services Department prior to final building inspection.
- 11. Final approval includes the construction of all improvements shown on the approved plan, including drainage facilities, drainage patterns, walls, curbs, asphalt pavement, buildings, etc. All items shall be constructed to the line and grade shown on the approved plans.
- 12. An as-graded grading plan and certification of compliance shall be submitted to the Engineering Services Department prior to release of grading bond and prior to final grading inspection. The permittee shall provide a copy of as-built plans to the City for a permanent record at the end of the approved grading work.
- 13. A Certificate of Occupancy (C of O) and /or final electrical clearance for any building will not be released until all grading, drainage WQMP (Water Quality Management Plan) Best Management Practices) improvements are completed and approved by the City. In addition, the Engineer's As-Built Certificate must be wet signed and sealed on the WQMP BMP Exhibit. Three sets of exhibits must be submitted to the City Engineer, or designee, for review. The City of Rancho Cucamonga will submit one original to the State Water Board and will submit a second set to the West Valley Mosquito and Vector Control District.

B. RELATED REQUIREMENTS:

- 1. The City only approves the Engineering Design in scope and not in detail on these plans. The City does not verify construction quantities on these plans. Approval of the plans are for permit purposes only and shall not prevent the city form requiring correction of errors in the plans where such errors are subsequently found to be in violation of any law, ordinance, health, safety, or other design issues. City acceptance of plans does not relieve the developer from responsibilities from the correction of errors and omissions discovered during construction.
- 2. All Concrete (PCC) water carrying devices with slopes less than 0.5% shall be water tested prior to final inspection and acceptance. Any residual ponding in evidence at time of inspection shall be cause for removal and replacement.
- 3. Debris, mud, silt, etc. shall not be deposited on public or other property at any time during construction. Any such deposition shall be removed immediately by the Contractor.
- 4. All drainage protective devices such as swales, interceptor ditches, pipes, protective berms, barrier walls, concrete channels, or other measures designed to protect adjacent buildings or property form storm runoff must be completed prior to building construction.

PRECISE GRADING PLAN SAN BERNARDINO FLOOD CONTROL APN 1089-03-13 & 39





TOPOGRAPHY

JD COLE & ASSOCIATES, INC. LAND SURVEYING 11056RAMONA ST, YUCAIPA, CA 92399 PHONE: (909) 797-2074

OWNER/DEVELOPER

FLOOD CONTROL DISTRICT 825 E. 3rd SREET SAN BERNARDINO, CA 92415 **CONTACT ERWIN FOGERSON** PHONE: (909) 387-7963

SAN BERNARDINO COUNTY

SITE DATA

GROSS ACREAGE= 250,257 S.F (5.7 ACRES) AREA OF DISTURBANCE =45,570 S.F (1.05 ACRES)

ARCHITECT

STK ARCHITECTS, INC. 42095 ZEVO DR., A-15 TEMECULA, CA 92590 CONTACT: J. SAENG NAMVONG PHONE: (951) 296-9110

CIVIL ENGINEER

ENGINEERING RESOURCES OF SOUTHERN CALIFORNIA, INC. 1861 W. REDLANDS BLVD. REDLANDS, CA 92373 **CONTACT MATT BRUDIN** PHONE: (909) 890-1255

SOILS ENGINEER

GEOCON WEST, INC. 2015 W. PARK AVE., SUITE 1 REDLANDS, CA 92373 CONTACT: JOHN STAPLETON PHONE: (909) 894-2175 REFERENCE REPORT:

PREPARED MARCH 8, 2019

GAS

SEMPRA ENERGY 13525 12TH STREET CHINO, CA PHONE: (909) 613-

ELECTRIC

ROSEMEAD, CA 91770

PHONE: (800) 655-4555

SO. CALIFORNIA EDISON

2244 WALNUT GROVE AVENUE

WATER/ SEWER FIBER OPTICS

CUCAMONGA VALLEY WATER DISTRICT 10440 ASHFORD ST. RANCHO CUCAMONGA, CA 91730 **CONTACT ED HILLS**

PHONE: (909) 987-2591

SPRINT TRANSMISSION DEPTARTMENT 202 SYCAMORE AVENUE.

RIALTO, CA 92376 CONTACT MATT BRUDIN PHONE: (909) 873-8022

BASIS OF BEARINGS

WEST LINE - SECTION 32 N 0d 12' 05" E

TELEPHONE

870 MOUNTAIN AVENUI UPLAND, CA 9178 PHONE: (909) 608-12

BENCH MARK SENCHMARK NUMBER: 10054

LEGAL

DESCRIPTION

APN: 1089-031-13 & 39

RAW CUT /

NOT TO SCALE

FILL QUANTITIES 1450 CU. YDS. 1450 CU. YDS.

NOTE SEE ARCHITECTURAL AND LANDSCAPE ARCHITECTS PLANS FOR FENCE AND GATE

_ACCESSIBLE PARKING SIGN

EXISTING FENCE

PROTECT IN PLACE

VARIES 13.5' - 25'

CROSS GUTTER DETAIL

MOUNT SIGNS W/ (2) $\frac{5}{16}$ " DIA. CARRAIGE BOLTS W/ PEENED

2" GALVANIZED STEEL POST -

1. SIGN SHALL BE REFLECTORIZED. PROVIDE PORCELAIN ON STEEL

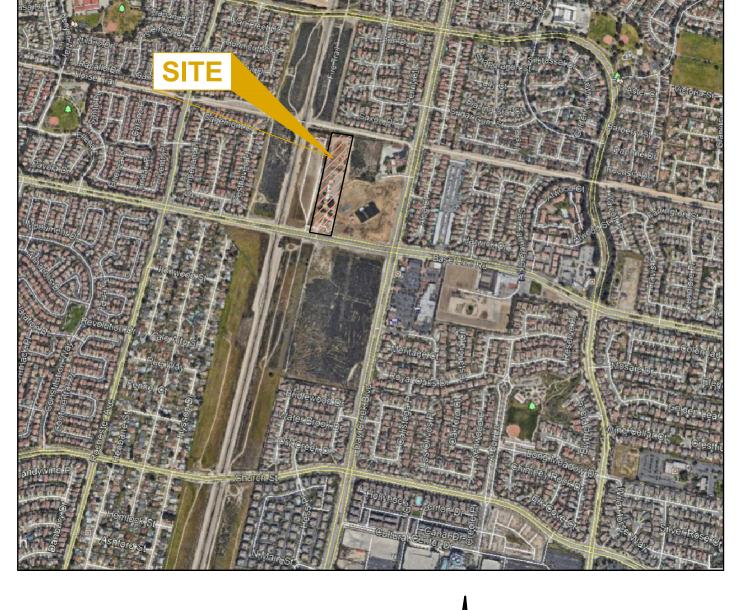
2. ALL LETTER & SYMBOLS SHALL BE WHITE AND BACKGROUND SHALL BE

NOT TO SCALE

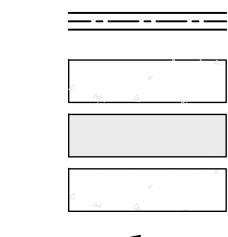
NOTE:

" WIDE WHITE BORDER-

NOT TO SCALE



RATED GRATE OR EQUAL



PRECISE GRADING PLAN **COUNTY YARD**

SHEET NO.:

SHEET 1 OF 3

COUNTY OF

DEPARTMENT -

DIVISION

BUILDING

CIP # 19-050

CAFM # ETIOOX

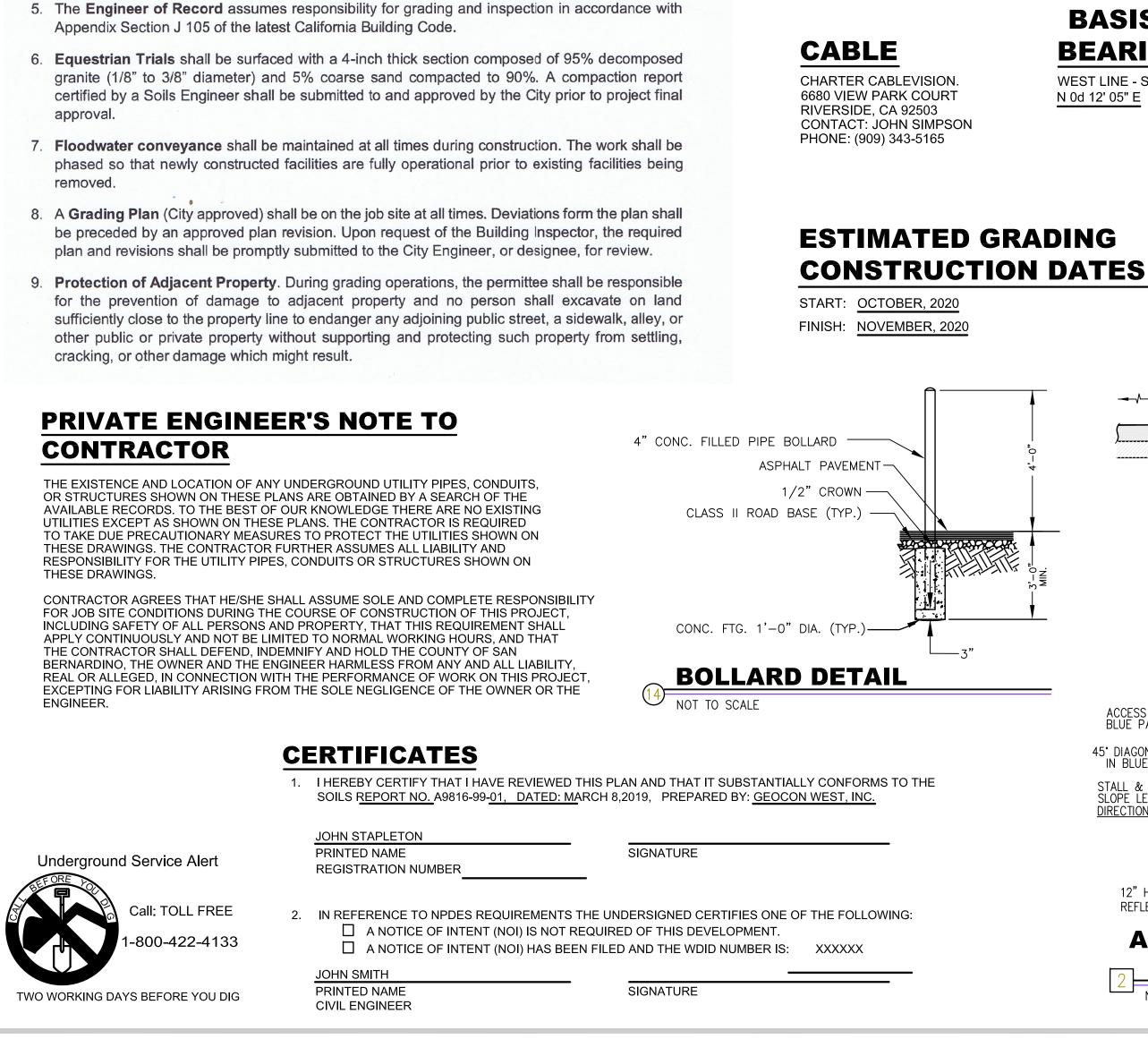
CA 91739

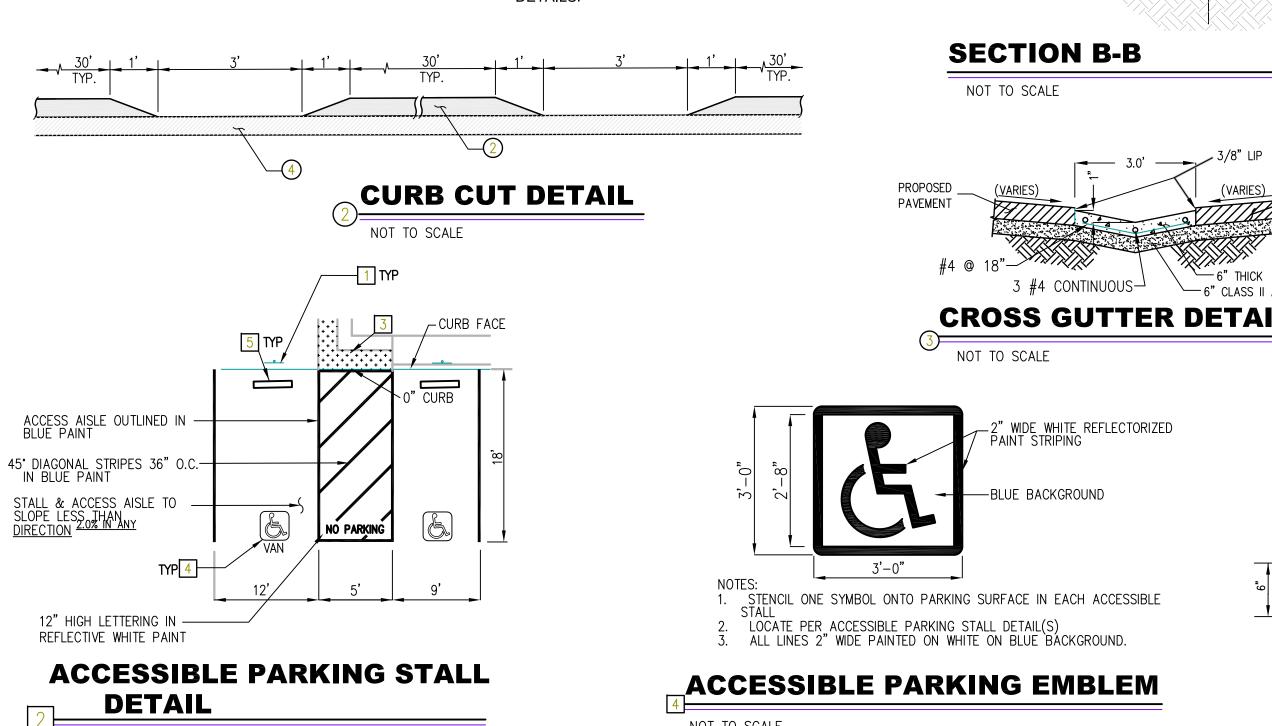
INFORMATION:

AS NOTED

FEBRUARY 2021

Exp. 3/31/22

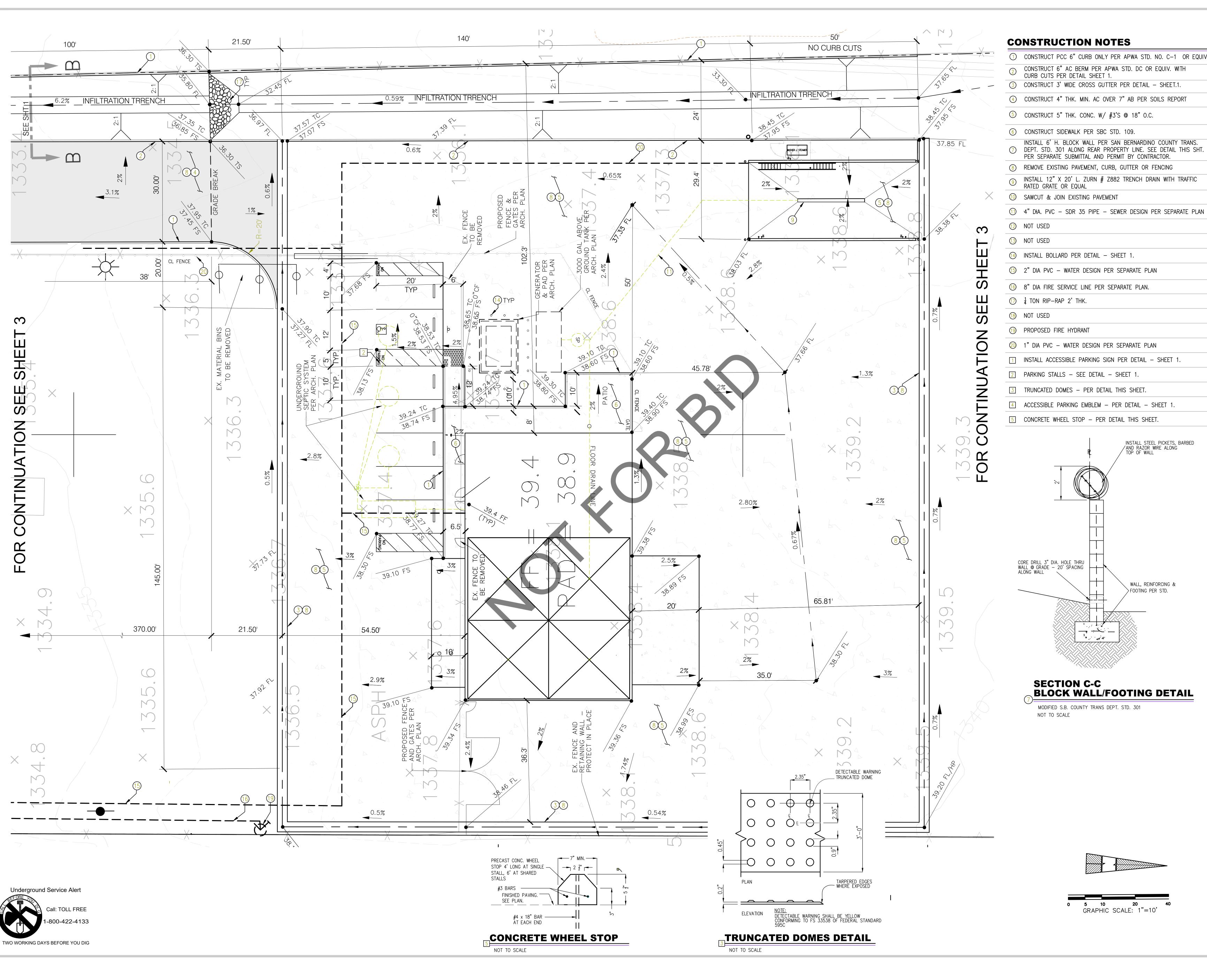






SECTION A-A

NOT TO SCALE

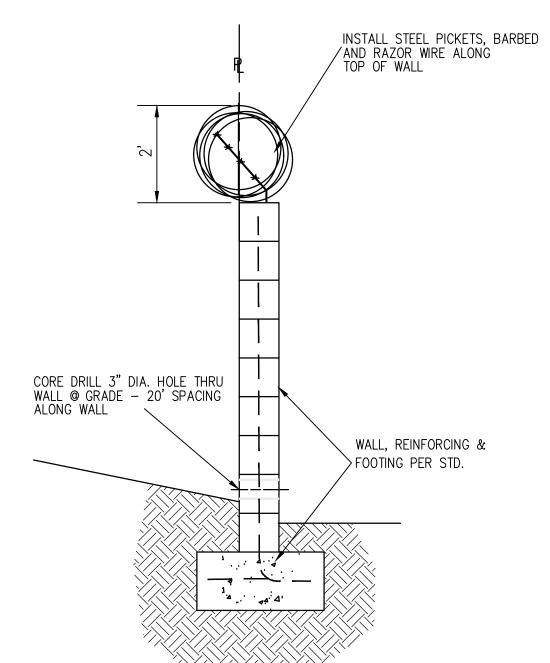


- ONSTRUCT PCC 6" CURB ONLY PER APWA STD. NO. C-1 OR EQUIV.
- CONSTRUCT 6" AC BERM PER APWA STD. DC OR EQUIV. WITH CURB CUTS PER DETAIL SHEET 1.

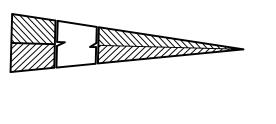
- INSTALL 6' H. BLOCK WALL PER SAN BERNARDINO COUNTY TRANS.
- 8 REMOVE EXISTING PAVEMENT, CURB, GUTTER OR FENCING

- 4" DIA. PVC SDR 35 PIPE SEWER DESIGN PER SEPARATE PLAN

- 1" DIA PVC WATER DESIGN PER SEPARATE PLAN
- 1 INSTALL ACCESSIBLE PARKING SIGN PER DETAIL SHEET 1.



BLOCK WALL/FOOTING DETAIL







CONSULTANT:

Engineering Resources of Southern Ca

1861 W. Redlands Blvd, Bldg 7 Redlands, Ca. 92373 P: (909) 890-1255 F: (909) 890-0995

COUNTY OF SAN BERNARDINO REAL ESTATE SERVICES DEPARTMENT -PROJECT MANAGEMENT DIVISION

PROJECT ADMINISTERED BY:

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

PUBLIC WORKS DEPARTMENT: RANCHO YARD NEW

BUILDING

PROJECT # 1010-0692 CIP # 19-050 CAFM # ETIOOX

12158 BASELINE ROAD RANCHO CUCAMONGA,

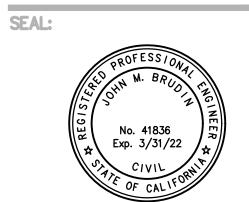
CA 91739

ISSUE INFORMATION:							
DATE:	INFORMATION:						

SHEET INFORMATION:

STK PROJECT NO.: 374-134-2 SCALE: AS NOTE DATE: FEBRUARY 202 PLOT DATE:

DRAWING NAME:

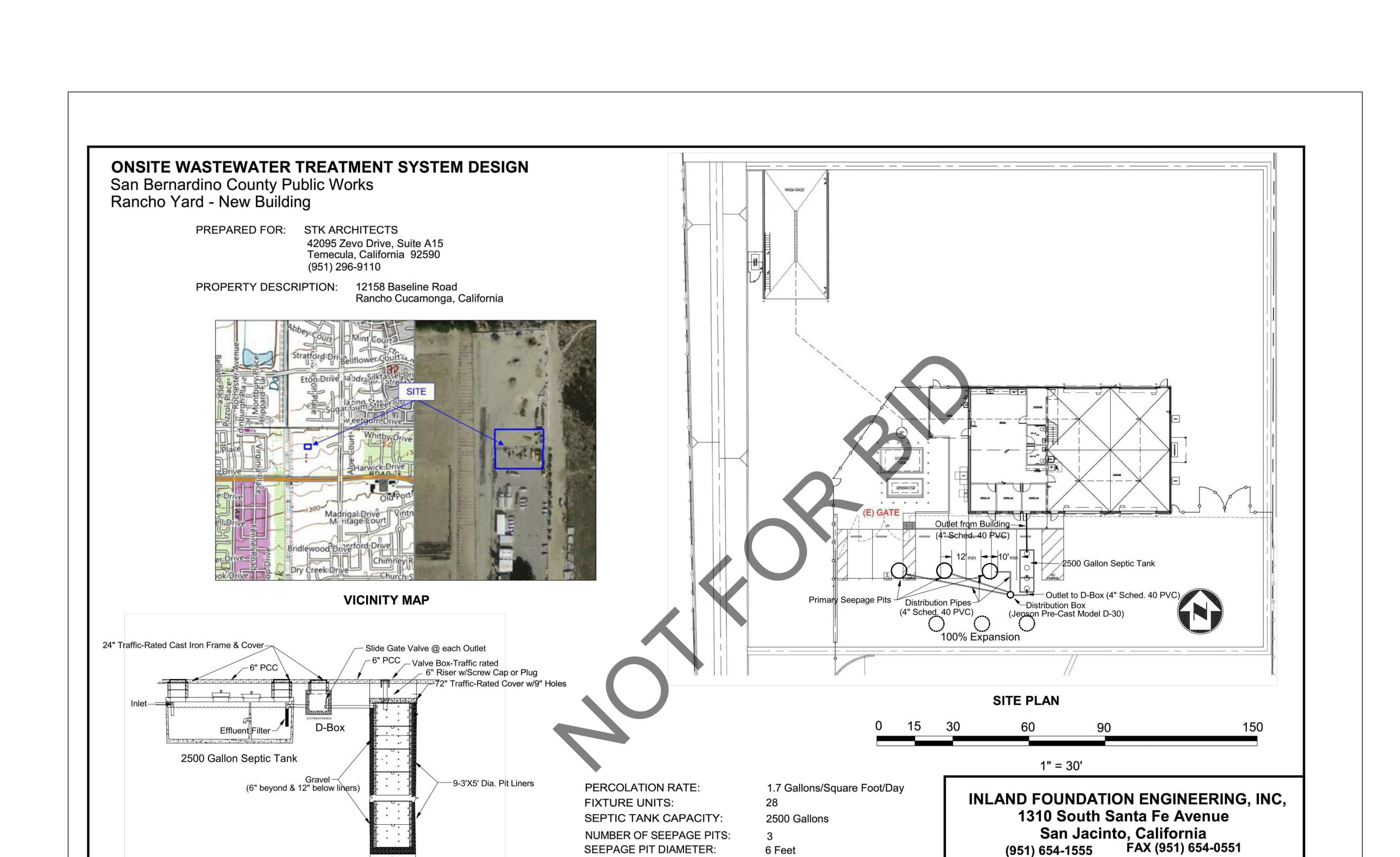


SHEET TITLE:

PRECISE GRADING PLAN COUNTY YARD

SHEET NO .:

SHEET 2 OF 3



NOTE: PLEASE REFER TO THE SEEPAGE PERC REPORT DATED FEBRUARY 24, 2021 FOR A COMPLETE SEPTIC SYSTEM DESIGN REQUIREMENTS

6 Feet

27 Feet Below Inlet

SEEPAGE PIT DIAMETER:

SEEPAGE PIT DEPTH:

SEPTIC TANK, DISTRIBUTION BOX, SEEPAGE PIT - TYPICAL PROFILE

(951) 654-1555

Project No. S168-182

Date:February 2021

Drawn By: L. Strahm

Scale: As Shown

42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780 Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY: **COUNTY OF** SAN BERNARDINO REAL ESTATE SERVICES DEPARTMENT -PROJECT MANAGEMENT DIVISION

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

PUBLIC WORKS DEPARTMENT: RANCHO YARD NEW BUILDING

PROJECT # 1010-0692 CIP # 19-050

CAFM # ETIOOX

12158 BASE LINE ROAD RANCHO CUCAMONGA, CA 91739

ISSUE INFORMATION: DATE: INFORMATION:

SHEET INFORMATION:

STK PROJECT NO.: 374-134-20 AS NOTED FEBRUARY 2021 PLOT DATE: DRAWING NAME:

SEPTIC SYSTEM



OWTS REVIEW - OFFICIAL INSPECTION REPORT

FACILITY NAME COUNTY OF SA B	ERNARDINO-FLOO	D CONTROL (PUBL	Not Specified	INSPECTOR Ivy Saguan	DATE 4/7/2021	
LOCATION 12158 BASELINE	RD, RANCHO CUCA	MONGA, CA 91739	PERMIT EXPIRATION	IDENTIFIER: None SERVICE: 025 - PLAN REVIEW		
TIME IN 12:28 PM	TIME OUT 1:40 PM	Not Specified	RELATED ID SR0100710	PE 4108	RESULT: 03 - CORRECTIVE ACTION: 61 - PLAN REVIEW	ACTION / NO FOLLOW UP RE WAITING ON CUSTOMER

OWTS REVIEW - Commercial Dylpmnt Perc Test Review

Based on an inspection this day, the items marked below identify the violation(s) in operation or facilities which must be corrected. Failure to correct listed violation(s) prior to the designated compliance date may necessitate an additional inspection to be billed at the hourly rate as provided in the San Bernardino County Code, Schedule of Fees.

Administrative Order to Show Cause (OSC): The Permittee has the right to a hearing if requested in writing within 15 calendar days of receipt of this notice, to show cause why the permit to operate should not be suspended or revoked; otherwise the right to a hearing shall be deemed waived.

See the following pages for the code sections and general requirements that correspond to each violation listed below.

41P983 PERC - Rejected - Resubmittal Required

△ CRITICAL △

Compliance Date: Not Specified

Not In Compliance

Violation Reference - SBCC - SBC Policy

Inspector Comments: Resubmit Percolation Test Report with the following correction indicated in this report review. Initial resubmission requires no fee. However, all subsequent resubmissions will require a resubmission fee according to the current Fee Schedule.

Violation Description: The percolation report cannot be approved as submitted. Corrections and resubmittal are required along with the current resubmittal fee. If additional testing is required, DEHS will need to be notified 48 hours in advance.

41K001 Plan - Commercial - Fixture Unit Count and Estimated Daily Flow

Compliance Date: Not Specified

Not In Compliance

Inspector Comments: Provide occupancy information/calculations in estimated wastewater flow for the project according to the California Plumbing Code Table H 201.1(2)

Reference - CCR 24 - Appendix H, Section 2.1

Description: The septic tank size shall be based on the number of fixture units or the estimated daily flow based on the type of business, whichever is greater. Refer to 2013 CPC Table H 2.1 and H 2.1(1). Calculations for the fixture unit count and estimated daily flow shall be provided with the plot plan.

41K060 Plan - Sewer Will Not Serve Letter

Compliance Date: Not Specified

Inspector Comments: Please provide a will not serve sewer from the local sewer purveyor.

Not In Compliance

Reference - SBCC - 84.21.030, 83.09

Description: A sewer will not serve letter shall be provided from the local sewer purveyor. The letter shall mention the parcel for which the private sewage disposal system is being proposed as well as the distance to the nearest sewer connection. Any parcel within 200 feet of sewer service will be required to connect and the plot plan will not be approved. The 200 foot sewer connection requirement will be increased by 100 feet for each additional lot being proposed.

Overall Inspection Comments

No summary comments have been made for this inspection.

Total # of Images: 0

5290 - OBSERVATION OIR - ver18.11.06 DA1573885 4/7/2021 1:43:29PM Page 1 of 1

ONSITE WASTEWATER TREATMENT SYSTEM DESIGN

San Bernardino County Public Works Rancho Yard - New Building

> PREPARED FOR: STK ARCHITECTS

> > 42095 Zevo Drive, Suite A15 Temecula, California 92590

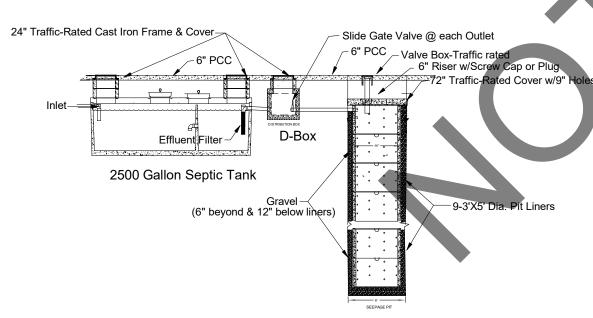
(951) 296-9110

PROPERTY DESCRIPTION: 12158 Baseline Road

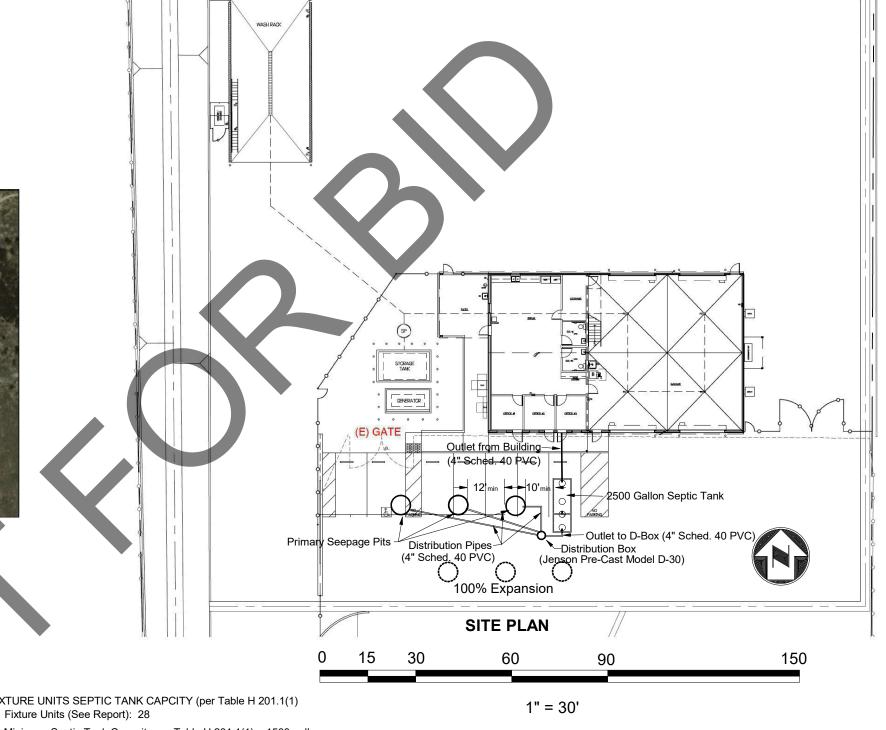
Rancho Cucamonga, California



VICINITY MAP



SEPTIC TANK, DISTRIBUTION BOX, SEEPAGE PIT - TYPICAL PROFILE



FIXTURE UNITS SEPTIC TANK CAPCITY (per Table H 201.1(1)

Minimum Septic Tank Capacity per Table H 201.1(1) = 1500 gallons

FLOW RATE DETERMINATION (Table H 201.1(2)

No. of Employees; 16

Gals/Employee: 25

Daily Flow = 25 gals/person X 16 people = 400 gals/day

Minimum Septic Tank Capacity per Table H 201.1(2) = 400 gals. X 1.5 = 600 gallons

DESIGN SEPTIC TANK CAPACITY: 2500 Gallons

PERCOLATION RATE: 1.7 Gallons/Square Foot/Day

NUMBER OF SEEPAGE PITS: 3 SEEPAGE PIT DIAMETER: 6 Feet SEEPAGE PIT DEPTH: 27 Feet Below Inlet

INLAND FOUNDATION ENGINEERING, INC,

1310 South Santa Fe Avenue San Jacinto, California

(951) 654-1555

FAX (951) 654-0551

Drawn By: L. Strahm Project No. S168-182 Date:February 2021
(Rev. 4/21) Scale: As Shown



10440 Ashford Street, Rancho Cucamonga, CA 91730-2799 P.O. Box 638, Rancho Cucamonga, CA 91729-0638 (909) 987-2591 Fax (909) 476-8032

John Bosler Secretary / General Manager/CEO

November 10, 2020

County of San Bernardino Environmental Health Department 385 N Arrowhead Avenue #2 San Bernardino, CA 92415

Re: Availability of Water and Sewer Service 12158 Baseline Road

Rancho Cucamonga, CA

To Whom It May Concern:

You are hereby advised that 12158 Baseline Road is located within the service area of the Cucamonga Valley Water District.

We have reviewed the above location and have determined that the District has an adequate supply of water available to meet the needs of this location, including minimum fire flow requirements as established by the Rancho Cucamonga Fire District. However, the District does not currently serve sewer adjacent to this address. The nearest sewer main is over 700' from this location.

Following the receipt of appropriate application, arrangements can be made for the installation of facilities required to meet the needs of the development and furnish public water and sewer utility service to the development in accordance with the District's policies, rules, regulations, and rate ordinances.

If you have any questions or need further information, please contact me.

Sincerely,

CUCAMONGA VALLEY WATER DISTRICT

Ted Munson Jr.

Lead Engineering Technician