

NOTES:

WASTEWATER DESIGN FLOW IS 1253 GPD. BASED ON PROPOSED 6 BEDROOM MAIN HOUSE (675 GPD) A 2 BEDROOM ADU (300 GPD) AND A WINERY (278 GPD)

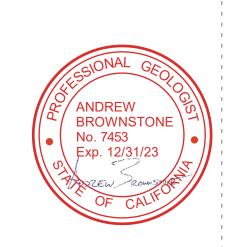
MAIN DWELLING

- 1) 4" ABS GRAVITY SEWER LINE WITH MINIMUM 2% GRADIENT AND 2-WAY CLEANOUTS SPACED 50' APART MIN.
- 2 2,000 GALLON CONCRETE, PINNACLE-STYLE CHAPIN SEPTIC TANK WITH 24" ORENCO RISERS AND OSI EFFLUENT FILTER (MODEL: FTS0444-36V) TO SERVE MAIN DWELLING
- 3 1,500 GALLON CONCRETE, PINNACLE-STYLE CHAPIN PUMP DOSE TANK WITH PF1005 DISCHARGE PUMP TO SERVE MAIN DWELLING
- (4) 1,500 GALLON CONCRETE, PINNACLE-STYLE CHAPIN SEPTIC TANK WITH 24" ORENCO RISERS AND OSI EFFLUENT FILTER (MODEL: FTS0444-36V) TO SERVE ADU
- (5) 1,000 GALLON CONCRETE, PINNACLE-STYLE CHAPIN PUMP DOSE TANK WITH PF1005 DISCHARGE PUMP TO SERVE ADU
- 6 TWO MVP CONTROL PANELS WITH LOGO SCREENS AND 110 OUTLET. REQUIRE ONE 10 AMP 120 VOLT CIRCUIT AND ONE 20 AMP 120 VOLT CIRCUIT (MODEL: MVP-S1DM)
- 7 GRAVITIY FLOW DISTRIBUTION BOX
- 8 BULL RUN VALVE (SEE DETAIL)
- 9 POLYLOK FLOW DIVIDER 2X (SEE DETAIL)

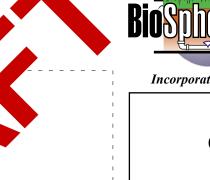
- 10) PRIMARY AND SECONDARY DRAINFIELDS, EACH CONSISTING OF 420 LF OF TRENCH (105) QUICK4 HIGH-CAPACITY INFILTRATOR CHAMBERS) WITH A TOTAL DEPTH OF 4 FT AND 4" INSPECTION RISERS (TYP.) ON EACH END OF TRENCH. TOTAL: 840 LF TRENCH / 210 INFILTRATOR CHAMBERS
- 11 REDUNDANT OVERFLOW/RELIEF (POP-OVER) LINE 4X

IMPORTANT! SPECIFIED WASTEWATER DRAINFIELD DISPERSAL AREAS SHALL BE FENCED OFF PRIOR TO ANY SITE DEVELOPMENT IN ORDER TO PROHIBIT ANY GRADING EQUIPMENT OR STAGING OF MATERIALS IN THESE AREAS. IT IS IMPORTANT THAT THE NATURAL SOIL CONDITIONS IN THESE AREAS BE PRESERVED FOR PROPER FUNCTION OF THE SHALLOW SOIL DISCHARGE SYSTEM. DO NOT ALLOW SOILS IN THESE AREAS TO BE COMPACTED. DO NOT ROUTE UTILITY TRENCHES THROUGH THE PROPOSED DRAINFIELDS. ALL STORMWATER LINES, INLETS/OUTLETS AND DRAINAGEWAYS SHALL MAINTAIN THE REQUIRED DEH SETBACKS TO THE PROPOSED DRAINFIELDS.

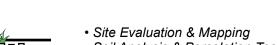
ALL BUILDING PLANS PREPARED FOR THE PROJECT SHOULD INCLUDE THIS NOTE.



ADU



COUNTY E.H. ACCEPTANCE/APPROVAL STAM



Site Evaluation & Mapping Soil Analysis & Percolation Testing

1315 King Street Santa Cruz, CA 95060 • New Development, Upgrade & Repairs Tel: (831) 430-9116 www.biosphere-consulting.com

Alternative Wastewater System Design

ONSITE WASTEWATER TREATMENT SYSTEM **DESIGN PLAN**

Projec	et Location:	W Edmundson, Morg	gan Hill, California	a 95037 [San	ita Clara County]				
Prope	rty Owner:	Jim Hartigan							
Mailing Address: 16428 Peacock Lane, Los Gatos, California 95032									
Owne	r Phone #:	(408) 768-9343	email: jim@hartigan.net						
Date: 01/06/23 By: David Quinn / Andrew Brownstone									
REVISION	N:		Job No.: 22002	APN: 767-19-035	1 OF 3				

PROJECT DESCRIPTION

A conventional onsite pump up wastewater system with gravity flow to infiltrator trenches is proposed to serve a proposed 6 bedroom dwelling, a proposed 2 bedroom ADU and a proposed winery located on W Edmundson, Morgan Hill, in Santa Clara

CONSTRAINTS & DESIGN CRITERIA

- The proposed system is sized to serve a 6 bedroom dwelling, a 2 bedroom ADU and a winery with a total combined design wastewater flow of 1,253 gallons per day (gpd) per County DEH guidelines.
- Soil profiles did not exhibit any evidence of seasonally high groundwater conditions. Seasonally high groundwater was measured to be 14' below grade.
- No wells, springs or watercourses are situated within 100' of the proposed Onsite Wastewater Treatment System

DRAINFIELD SIZING CALCULATIONS

(P) 6 BEDROOM MAIN DWELLING = 675 GPD (P) 2 BEDROOM ADU = 300 GPD (P) WINERY = 278 GPD TOTAL DESIGN FLOW = 1253 GPD AVG ADJ STABILIZED PERC RATE = 13 MPI 13 MPI = 0.75 GAL/SF APPLICATION RATE $1,253 \text{ GPD} \div .75 \text{ GPD/SF} = 1,671 \text{ SF}$ 1,671 SF ÷ 4 SF/LF = 418 LF OF TRENCH REQUIRED 420 LF = 105 INFILTRATOR CHAMBERS 420 LF (PRIMARY) + 420 LF (SECONDARY) = 840 LF OF TRENCH 105 INFILTRATORS (PRIMARY) + 105 INFILTRATORS (SECONDARY) = 210 INFILTRATORS TOTA PRIMARY AND SECONDARY DRAINFIELDS, EACH CONSISTING OF 420 LF OF TRENCH (105 QUICK4 HIGH-CAPACITY INFILTRATOR CHAMBERS) WITH A TOTAL DEPTH OF 4 FT AND 4" INSPECTION RISERS (TYP.) ON EACH END OF

SPECIFICATIONS

1. Building Sewer Lines, & Proposed Processing Tank

- 1.1. A 4" ABS building sewer line shall be installed to convey all raw sewage from dwelling and ADU to the septic tank. All gravity sewer piping must maintain a minimum 2% continuous gradient. All wastewater including graywater shall be discharged to the septic tank.
 - 1.2. Locate a 2-way, 4" ABS cleanout fittings on the building sewer to facilitate snaking and line locations.
- 1.3. A 2,000 gallon and a 1,500 gallon, watertight, concrete, pinnacle style tank from Chapin, are specified for use as septic tanks. The tanks shall have 24" diameter OSI access risers with fiberglass, bolt-down lids (brown). The tanks shall be installed according to the manufacturers guidelines.
- 1.4. The tank holes shall be excavated so that the tanks sit level. Install the access risers with a watertight joint using the adhesives supplied by manufacturer. Access riser lids shall be brown unless otherwise requested.
- 1.5. Install the tank inlet fittings with a watertight joint. Cap off or use a test plug on these fittings and fill the tanks with clean water 2" above the joint between the riser and the tank top. Repair any leaks.
- 1.6. Obtain a watertight tank inspection by EH and the designer or distributor with 24 hours notice to each.
- 1.7. Install an OSI Effluent Filter (Model: FTS0444-36V) at tank outlets. 2. Discharge Pump Tank and Filtrate Pumping

TOTAL: 840 LF TRENCH / 210 INFILTRATOR CHAMBERS

EACH TRENCH SHALL HAVE A TOTAL DEPTH OF 4 FEET (SEE DETAIL)

TRENCHES SHALL BE SPACED 6 FEET FROM CENTER TO CENTER

- 2.1. A 1,500 gallon and 1,000 gallon watertight, concrete, pinnacle style Chapin pump tank shall be installed adjacent to their
- 2.2. The pump tanks shall be installed according to the manufacturer's instructions including anti-floatation specifications and
- 2.3. The tank holes shall be excavated so that the tanks sit level. Install the access risers with a watertight joint using the adhesives supplied by manufacturer. Access riser lids shall be brown unless otherwise requested.
- 2.4. Install the tank inlet fittings with a watertight joint. Cap off or use a test plug on these fittings and fill the tank
- with clean water 2" above the joint between the riser and the tank top. Repair any leaks. 2.5. Obtain a watertight tank inspection by EH and the designer or distributor with 24 hours notice to each.
- 2.6. Install the pumps and float trees according to the instructions provided by manufacturer/dealer.
- 2.7. A PF1005 lift pump with EasyPak Pump Package vaults shall be installed in their respective pump tanks.

3. Effluent Distribution and Dispersal Trenches 3.1. A gravity flow distribution box, a Bull Run valve and two Polylok Flow dividers shall be installed to divert effluent flow

- between the eight proposed trenches as shown on the plan. 3.2. 4" ABS or SCH 40 PVC tightline shall be used to make gravity flow connections between the septic tank and the
- drainfield trenches. All gravity lines shall maintain a continuous 2% min. gradient. 3.3. A primary and secondary leachfield shall each consist of a total of 105 Quick4 Plus High-Capacity Infiltrator Chambers
- 3.4. Dispersal trenches shall each have a total depth of 4 feet, shall be installed in the general location shown on the plan. The
- floor of each trench shall be level and sidewalls scarified. 3.5. Trenches shall be spaced at least 3 feet from edge to edge.
- 3.6. A 4" ABS inspection riser with tight cap shall be installed at both ends of each trench and shall extend a minimum of 12" above grade or remain accessible by means of a 10" round valve box to grade.
- 3.7. Installer shall assure that surface drainage is directed away from the proposed septic tank and dispersal trenches.

4.1. All piping shall be installed to conform to requirements in the current California Plumbing Code.

4.2. The house sewer pipe to the septic tank shall be constructed of 4" ABS and shall include a 2-way clean out

fitting near dwelling as shown on the plan. 5. Installer Qualifications and Responsibilities

- 5.1. The system installer shall be licensed by the State of California, Department of Consumer Affairs, to install septic systems.
- 5.2. All piping shall conform to the current edition of the California Plumbing Code.
- 5.3. The installer shall be responsible for locating any property lines, underground utilities or piping. Any damage to these facilities shall be the responsibility of the installer.
- 5.4. For tree setback requirements, refer to the Santa Clara County Ordinance C-16 Tree Preservation and Revision. 5.5. The appropriate Environmental Health Office or Specialist must be notified by the installation contractor at least 48-
- hours prior to starting construction and for each required inspection: Main Office (1555 Berger Drive, Suite 300, San Jose) 408-918-3400 or South County Office (80 Highland Ave, San Martin) 408-918-3400

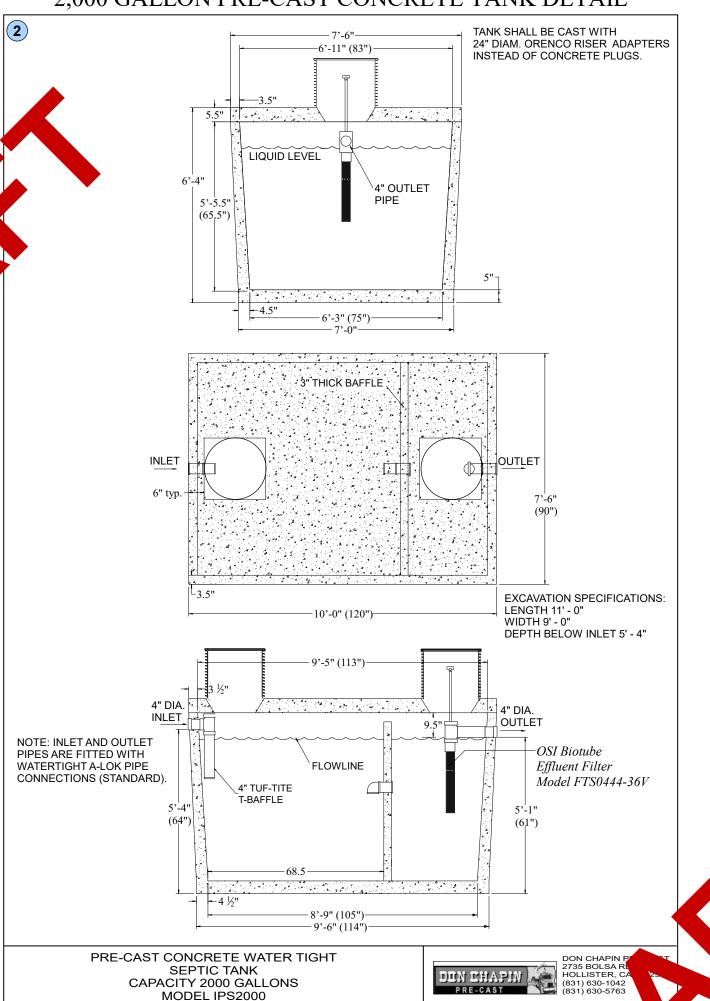
Electrical Work 6.1. The MVP control panel shall be installed in the location shown on the map with the bottom of the panel box at 51" from the ground surface.

- 6.2. One, 10 amp, 120V electrical circuit and one, 20 amp, 120V electrical circuit shall be extended to the MVP panel in a single conduit. Underground circuits in separate conduits shall be installed from the panel to the recirculation pump and
- 6.3. All work shall conform to the California Electrical Code and the contractor shall be responsible for obtaining any electrical permits required.

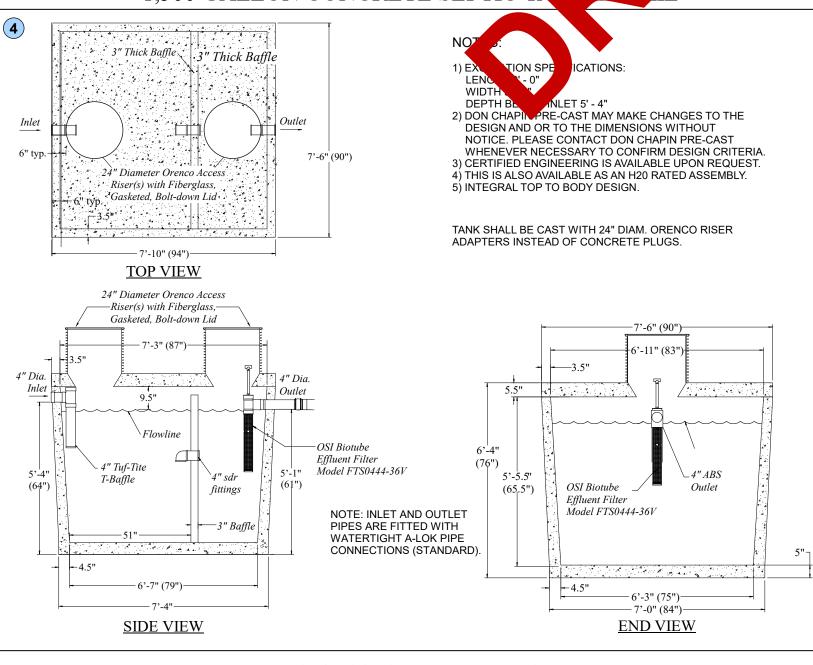
. Site Clean up and Erosion Control Measures

- 7.1. All excavated areas shall be smoothed and all construction debris shall be removed from the site. 7.2. All disturbed soils shall be seeded and mulched. Erosion Control Mix seed shall be used at the coverage recommended on
- the package for all disturbed soil.
- 7.3. Straw shall be used to cover all disturbed soil.
- 7.4. PER DIVISION C12, CHAPTER III OF THE COUNTY CODE (Sec. C12-513. Temporary erosion control.)
- "The permittee and any person(s) doing, causing or directing the grading shall install and maintain all precautionary measures necessary to protect adjacent watercourses and public or private property from damage by erosion, flooding, or deposition of mud or debris originating from the site. Precautionary measures must include provisions of properly designed erosion prevention and sediment control measures, so that downstream properties are not affected by upstream erosion or sediment transport by stormwater."

2,000 GALLON PRE-CAST CONCRETE TANK DETAIL



1,500 GALLON CONCRETE SEPTIC TA

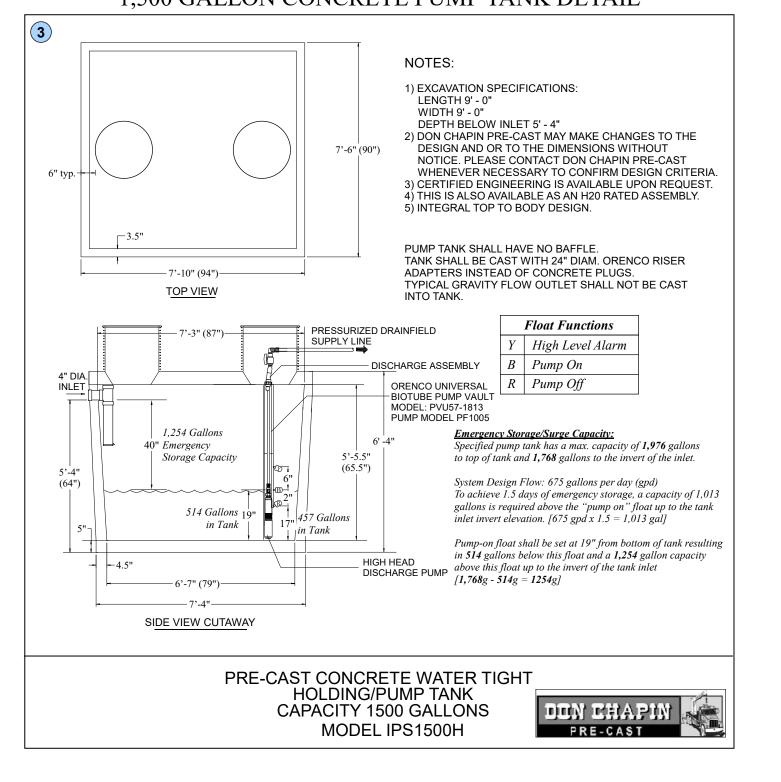


PRE-CAST CONCRETE WATER TIGHT SEPTIC TANK CAPACITY 1500 GALLONS MODEL IPS1500



ANDREW BROWNSTON No. 7453 Exp. 12/31/23

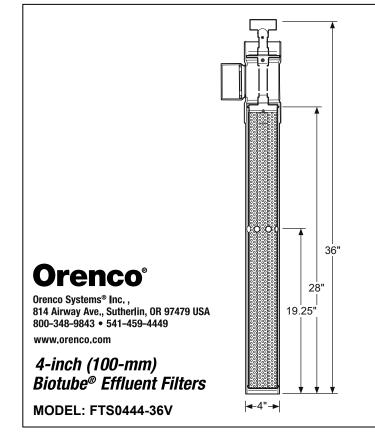
1,500 GALLON CONCRETE PUMP TANK DETAIL



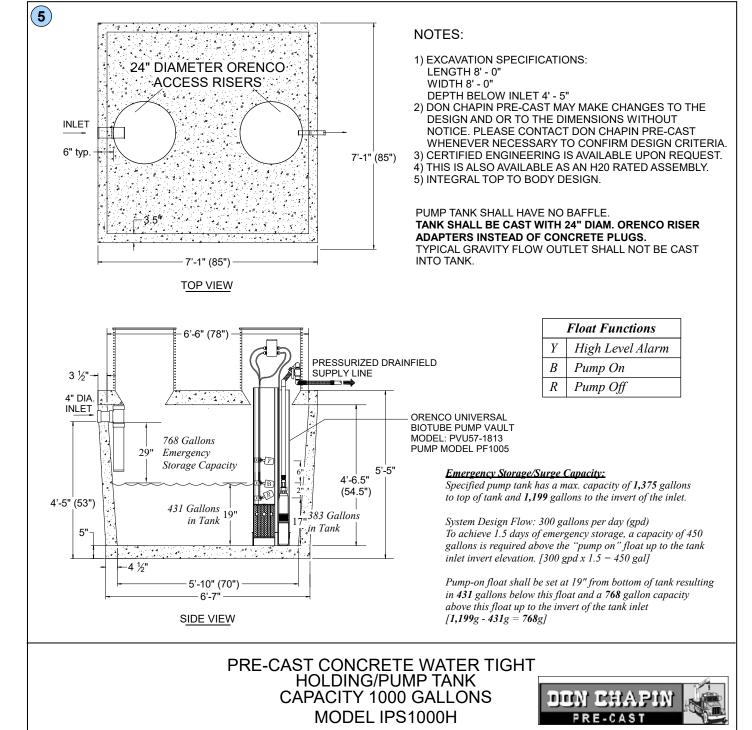
SYSTEM OPERATION AND MAINTENANCE

- The owner should read and operate the system according to the AdvanTexTM & Geoflow operation and maintenance literature.
- Orenco requires biannual maintenance servicing of the AdvanTexTM by a qualified technician.
 - County Environmental Health will issue an OWTS Annual Operating Permit and requires that the property owner maintain a system service agreement/contract with a qualified third-party service provider. This requirement will be placed on the title deed for the property.
- The drip fields shall be automatically flushed one zone at a time every 12 months at a minimum. This is done by the control panel software. No drip zone should be left dormant (un-dosed) for more than a few weeks at a
- The treatment tank is alive with important microorganisms. Do not add any materials (paint thinner, paint, motor oil, unused medicine, etc.) that may disrupt the biologic treatment process. The primary tank should be pumped when the total of the scum/sludge thickness is greater than 1/3 of the total liquid level depth.
- DO NOT ROUTE WATER SOFTENER BACKFLUSH DISCHARGE TO TREATMENT SYSTEM! This discharge may be routed directly to a drainfield trench or an approved dispersal field.
- Repair all plumbing leaks (especially toilet leaks) promptly.

EFFLUENT FILTER DETAIL



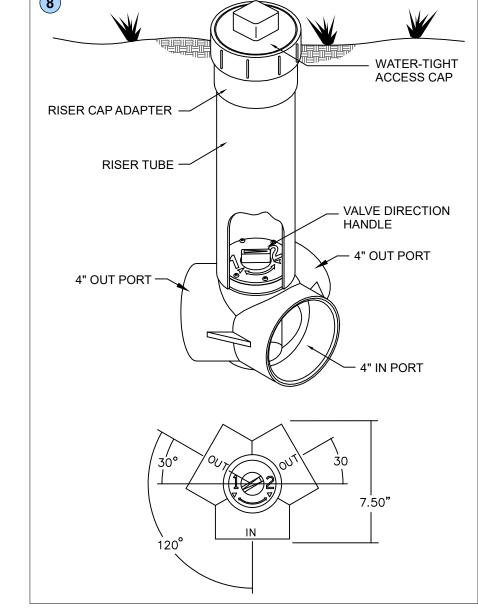
NOTES:



COUNTY E.H. ACCEPTANCE/APPROVAL STAM

1,000 GALLON CONCRETE PUMP TANK DETAIL

BULL RUN DIVERSION VALVE DETAIL





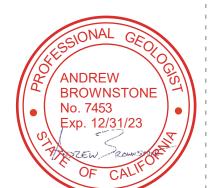
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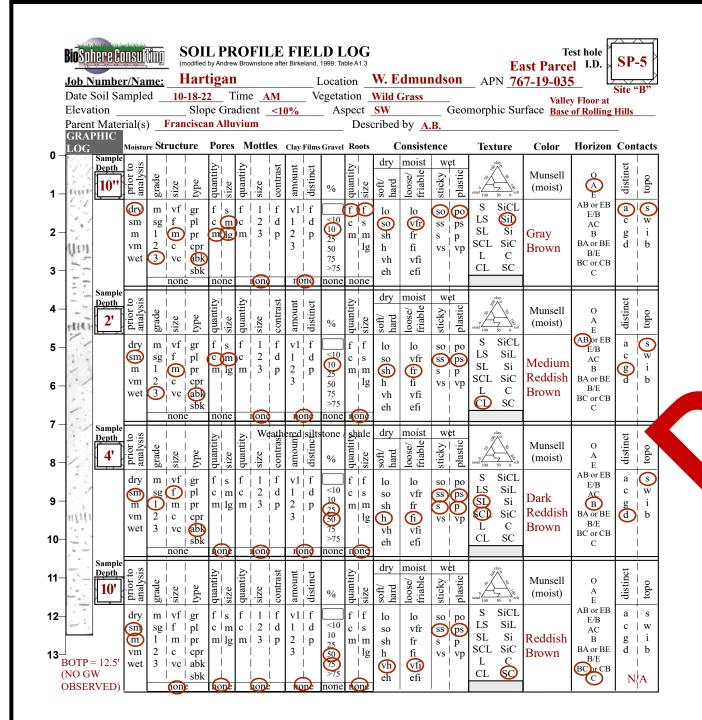
1315 King Street Santa Cruz, CA 95060 Tel: (831) 430-9116 www.biosphere-consulting.com

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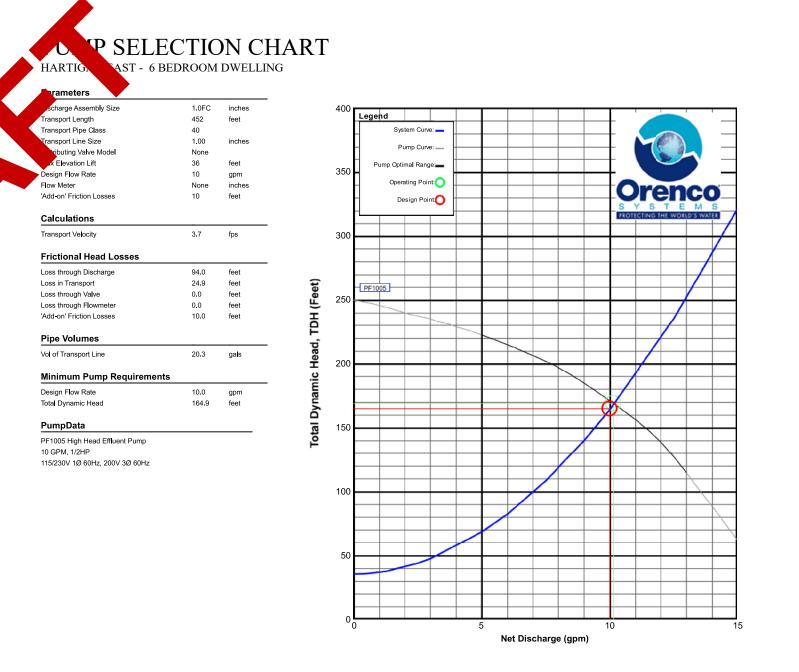
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2-		dry sm		vf f	gr pl	f s		1 1 2	f d	v1 1	f d	<10	f f	lo so	lo vfr	SO SS	po ps	S SiCL LS SIL	Verigated	AB or EB E/B AC	a c
	BOTP = 12' (NO GW	m	1	m	pr	m lg				2	p	10 25	m m	sh	fr	S	ps	SL Si	Reddish	В	g
	(NO GW OBSERVEI	vm	2	c	cpr				1	3	1	50	lg	h	fi	vs	vp	SCL/ SiC	Brown and Tan	BA or BE B/E	d

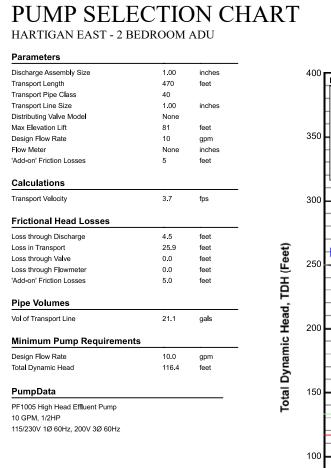
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	Soil Sa					2 Tin		p	M				n –		Grass	nuson	_ AFN _/	37-19-03	<u> </u>	Site '
	ation	шрк		10		e Gr								N/A		— Geo	morphic Su	rface Spir	e of Ridg	e Cre
	nt Mate	rial(s)	Sand	lston	e		_				_			d by A		•			
	APHIC		St.	rneti	ıro	Pores	. N	[att]	oe.	CI.	F2*1	<u> </u>	Doot		Consist	onao	Toutum	Color	Horizon	Con
LOC	Sample	_	re Sti	ucti			, 14	lotti		Ė		Gravei		dry	1	_	Texture	Color	TIOTIZON	Т
	Depth 1'	prior to analysis	grade	size	type	quantity size	quantity	size	contrast	amount	distinct	%	quantity		<u>, o</u>	sticky s	sand 100 50 0 silt	Munsell (moist)	A A	distinct
2-2	X	sm m vm wet	m sg 1 2	vf	gr pl pr cpr	f s c m	f c	1 2	f d p		f d p	25 50 75	f f c s m m	so sh sh vh	lo vfr fr fi vfi	so po ss ps s p vs vp	SL Si SCL SiC L C	Medium To Dark Brown	I B	a c g d
3={\} \{\}				none	sbk	none		ione		no	ne	>75 none	none	eh	efi		CL SC		С	
1-5	Sample Depth 2'	prior to analysis	grade	size	type	quantity _	quantity	size	contrast	amount	distinct	%	quantity size	dry /Jos	<u>~ e</u>	sticky applastic	sand 100 50 0 silt	Munsell (moist)	O A E	distinct
BOT (NO	P = 4.3	dry sm	m sg	vf f	gr gr pl	f s	f c	1 2	f d	v1 1	f d	<10 10	f f	lo	lo	so po	LS SIL	Medium	AB or EB E/B AC	c
	GW ERVED)	m vm wet	2 3	m c vc	pr cpr abk	m lg		3	p	2 3	p 	25) 50 75 >75	m m	\sim	fr fi vfi efi	s p vs vp	SD Si SCL SiC L C CL SC	Reddish Brown	[(B)	g
				non	e	none		rone		10	ne	none	none							<u> </u>
	Sample Depth	prior to analysis	grade	size	type	quantity 	quantity	size	contrast	amount	distinct	%	quantity size	dry/yos/	~ e	sticky a	sand 100 50 0 silt	Munsell (moist)	O A E	distinct
		dry	_	vf		$f \mid s$	f	1	f		f		$f \mid f$	lo	lo	so po	S SiCL		AB or EB E/B	a
		sm	sg	f	pl	c m	С	2	d	1	d	<10 10	c s	so	vfr	ss ps	LS SiL	Verigated	AC	c
		m vm		m c	pr cpr	m lg	m	3	p	3	p	25	m n lg	_	fr	s p	SCL SiC	Reddish Brown	B BA or BE	g d
		wet			abk	li			 			75	1	vh	vfi	VS I VP	L C	and Tan	BC r CB	
				non	sbk	ton		ione		10	ne	>75 none	none	eh	efi		CL SC Gravely	1	C	
	Sample	- 10				.						nome	$\overline{}$	1	moist	wet	clay			=
	Depth 4'	prior to analysis	grade	size	type	quantity size	quantity	size	contrast	amount	distinct	%	quantity size	/tjos	~ <u>o</u>	sticky :	sand 100 50 0 silt	Munsell (moist)	O A E	distinct
		dry		vf		$f \mid s$		1		v1	f	<10	f f	lo	lo	(so) (po	S SiCK		AB or EB E/B	a c
		sm m	sg 1	l f l m	pl pr	c m m le			l d l p	1 2	a p	10	c s	so sh	vfr fr	ss ps	SL Si	Verigated Reddish	AC B	g
		vm	2		cpr	ع ا	1		· r	3	· r′	25	111		fi	vs vp	SCL/SiC	Brown	BA or BE	

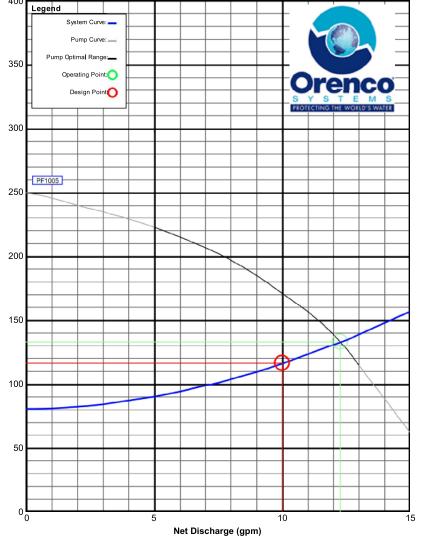
	BioSphere Co	nneul	Allman	S	SOI	L]	PR	(O)	FΠ	L E	FI	EL	D L	.00	Ţ							Te	est hole		_
	- C - V - V	V V		- `	nodified Tar 1	•			wnston	e afte	r Birke		1999; Ta			Edn	111 m	nde/	an	4 D		ast Parce 57-19-035		SP	-6
	Job Number Date Soil Sa								- A	М								lust)II	_ AP	N _/6	0/-19-03	<u> </u>	Site '	B "
	Elevation	pic	_	10-											SW				Geor	norpl	nic Su	rface Base	of Rollin	g Hil	lls
	Parent Mate	rial(s) _]	Mixe	ed M	etai	mor	ph	ic Fi	and	cisca	ın		De	scribe	ed by									
	GRAPHIC LOG	Moistu	re St	ructi	ure	Po	res	M	lottl	es	Clay	Films	Gravel	Root	s	Cons	iste	nce		Tex	ture	Color	Horizon	Con	tact
0 -	Sample Depth	prior to analysis	e e			ıtity		ntity		rast	unt	inct		ntity	dry	-		we		\$:lay	Munsell	0	distinct	
1-	mi 10"	prie	grade	size	type	quantity	size	quantity	size	contrasi	amount	distinct	%	quantity	soft/	loose/	fria	sticky	plastic	sand 100	50 0 silt	(moist)	A		topo
2 -		sm m vm wet	m sg 1 2	vf f m c	gr pl pr cpr		s m lg	f c m	1 2 3	f d p	v1 1 2 3	f d p	\$\begin{array}{c} \leq 10 \\ 10 \\ 25 \\ 50 \\ 75 \end{array}\$	f f c s m n	So	fr fi	fp	ss s vs	ps p vp	S LS SL SCL L	SiCL Si Si SiC C	Moderate Reddish Brown	AB or EB E/B AC B BA or BE B/E BC or CB	a c g d	s w i b
3 -	In a said		_	none	sbk	no	ne	1	ione		no	ne	>75 none	non	eh		- 1	 		CL	SC		C		
4 -	Sample Depth 2'	prior to	grade	size	type	quantity		quantity	size	contrast	amount	distinct		quantity	dr	-		sticky		sand Sign	hay B	Munsell (moist)	O A	distinct	topo
5 -	3	dry sm m	m sg 1	vf f	gr pl pr	f c	s	f c m	1 2 3	f d p	v1 1 2	f d p	<10 10 25	f f f m n	lo	lo) fr	so	ро	S LS SL	SiCL SiL Si	Moderate	E AB or EB E/B AC B	a c g	s W
6 -	50	vm wet	3	vc	cpr able sbk	no	ne		rone		3	 	50 75 >75 none	lone	g h vh eh	fi v	fi	vs	-	SCL L CD Gra	SiC C SC vely	Reddish Brown	BA or BE B/E BC or CB C	d	b
7 -	Sample	s				ý		y	We	ath	ered	silts	tone /	shal	e dr	/ mo		W¢	et	· ·	:lay			+;	=
8 -	Depth 4'	prior to analysis	grade		 -	quantity		quantity	size	contras	amonu	distinc	%	quanti	soft/	-	friable	sticky	plastic	sand 100	50 0 silt	Munsell (moist)	O A E AB or EB	distinct	topo
9 -	3	sm m vm	$\frac{sg}{1}$		p pr cpr		m	f c m	1 2 3	f d p	v1 1 2 3	f d p	<10 10 25 50	f f c s m n 1	so n sh g	fi	fr	s vs	p	S LS (SI) L	SiCL SiL Si SiC C	Verrigated Reddish Brown To Gray Brown	E/B AC B BA or BE	a c g d	S W i b
10-	4	wet	3	none	abk sbk e	100	ne	1	one		10	ne	75 >75 none	non	vh eh		- 1	 		CL	SC vely	Giuy Diewii	BC or CB	N	/ A
11-	Sample Depth 8'	prior to analysis	grade	size	type	quantity	size	quantity	size	contrast	amount	distinct	%	quantity	dry og dry	-		sticky &	plastic #	sand 100	slay 50 0 silt	Munsell (moist)	O A E	distinct	 topo
	BOTP = 12' (NO GW OBSERVED)	sm m vm	2	f m c	cpr	f c m	m	f c m	2	f d p	v1 1 2 3		<10 10 25 50	f f c s m n	lo so n sh g h	lo v: fir	fir	so s	po ps p vp	S LS SD CO	SiCL SiL Si SiC	Verrigated Reddish Brown To	AB or EB E/B AC B BA or BE B/E	a c g d	s w i b
,	OBSEKVED)	wet	3	vc	abk sbk	ho	ne	1	on	 ;	1 60	ne	75) >75 none	non	vh eh			 		L CL Gra	C SC vely	Gray Brown	BC or CB	N	A

BioSph		0 0 ,		(m	odified	by And	rew Bro		ne afte	er Birke	land, 1	1999; Ta	DG ble A1.3	17 10 J	l				est Parc		SP	-8
Job N					lart													_ APN <u>_7(</u>	67-19-03 ⁴	1	Site '	"D"
Date S				10	<u>-18-</u> Slor	22 26 G	11m radi	e <u>A</u>	M	00/	- Ve	geta م	tion _	Wild NW	l Grass		eor	norphic Su	rface Base	of Pollin	a Hil	le.
Parent							iaui	- -	<u> </u>	U%o_		- AS			by A		COL	norpine se	mace <u>base</u>	OI KOIIII	g 1111	15
GRAP	HIC													ciioca	. Uy <u>A</u> .	.D.					_	
LOG		Moistu	re Sti	ructi	ıre	Por	es N	Iottl	es	Clay l	Films	Gravel	Roots		Consiste	ence		Texture	Color	Horizon	Con	tac
	Sample Depth	prior to analysis	grade	size	type	quantity	quantity	ize – size	contrast	amount 	distinct	%	quantity 	soft/ hard hard	loose/ friable	sticky	plastic	clay	Munsell (moist)	o A	distinct	
imo	<u> </u>	dry sm m	m sg	vf	gr pl	f s c i	f n c	1 2	f d p	v1 1 2		10 25	f f s m m	lo so sh	lo vfn		po ps p	S SiCL LS SiD SL Si	Light	AB or EB E/B AC B	a c g	S
11111		vm wet	$\frac{2}{3}$	C	cpr abk sbk	non	e	 	 	3 no:	ne	50 75 >75 none	lg	h vh eh	fi vfi efi		vp	SCL SiC L C CL SC	Gray Brown	BA or BE B/E BC or CB		
	Sample	S					Ţ	_					$\overline{}$	dry	moist	wet	Ħ	clay				
-/	Depth 2'	prior to analysis	grade	size 	type	quantity	quantity	ize –	contrast	amount — — —	distinct	%	quantity zize	soft/ hard	loose/ friable		plastic	sand 100 50 0 silt	Munsel (mo	O A E	:0	Ç
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47		m vm wet	$\frac{1}{2}$	m c vc	pr cpr abk sbk	m 1	g m	3	p 	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	p	25 50 75 >75	m m lg	sh h vh eh	fi fi vfi efi	vs v	vp	SiC SiC CL SC	Dark Brown	BA or B/E BC or CB	4	t
minu				none		non	e	ione		10	ne	none	ione	CII	CII		_			С		
	Sample Depth	prior to analysis	grade	size	type	quantity	quantity	size	contrast	amount — — —	distinct	%	quantity size	soft/ hard	loose/ friable si	sticky the	plastic	sand 100 50 0 silt	Munsell (moist)	O A E	distinct	000
		dry sm m	m	vf f	gr pl	f s c r m l	f n c	1 2	f d p	v1 1		<10 10	f f c s m m	lo so sh	lo Vfr fr	so 1	po ps	S SiCL LS SiL SL Si	Medium	AB or EB E/B AC B	a c g	V
Je., Muo		vm wet	2	c vc	cpr				P 	3	Р	25) 30) 75 >75	lg lg L		fi vfi efi	vs	p vp	CL SiC	Reddish Brown	BA or BE B/E BC or CB	ð	t
X				none		non	E	ion		10	ne	none	none				=					Ĺ
	Sample Depth	prior to analysis	grade	size	type	quantity	quantity	size	contrast	amount 	distinct	%	quantity size	soft/ hard chap	loose/ friable	sticky .	plastic	sand 100 50 a silt	Munsell (moist)	O A E	distinct	1000
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		vm		c l		m 1	g m	3	p 	3	p	25 50	m m lg		fr fi		p vp	SCL SiC	Reddish	BA or BE	d	l b
OTP @	12.2'	wet		vc				i I _	 	ا ا		75 >75	's	vh eh	vfi efi	"	יף	L C	Brown	B/E BC or CB		İ I



COUNTY E.H. ACCEPTANCE/APPROVAL STAM





SOIL PERCOLAT	ΓΙΟΝ SUMMARY	TABLE	10/25	5/22	EAS	T		_
Percolation Hole (PH)		PH-11	PH-12	PH-13	PH-14	PH-15	PH-16	l
Depth		4.10'	4.00'	4.15'	4.00	4.02'	4.00'	l
tabilized MPI	R	5.10	5.60	21.50	97.20	8.60	3.30	l
Adjusted Stabilized MPI	$R_1 = R \times 1.4$	7.14	7.84	30.10	136.08	12.04	4.62	
vg. Adj. Stabilized MPI	$R_2=(\sum R_1)/$ #Holes							1





Site Evaluation & Mapping
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New Development, Upgrade & Repairs
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1315 King Street Santa Cruz, CA 95060 **Tel: (831) 430-9116** www.biosphere-consulting.com

Alternative Wastewater System Design

ONSITE WASTEWATER TREATMENT SYSTEM **DESIGN PLAN**

Proje	ct Location:	W Edmundson, Morg	gan Hill, California	a 95037 [San	nta Clara County]
Prope	rty Owner:	Jim Hartigan			
Mailir	ng Address:	16428 Peacock Lane	, Los Gatos, Califo	ornia 95032	
Owne	r Phone #:	(408) 768-9343			email: jim@hartigan.net
Date:	01/06/23	By: David Quinn / A	ndrew Brownstone	;	Sheet:
REVISION	V:		Job No.: 22002	APN: 767-19-035	3 OF 3