

Comal County

OFFICE OF COMAL COUNTY ENGINEER

License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date:

06/06/2019

Permit Number:

108923

Location Description:

155 BARRETT VW

BLANCO, TX 78606

Subdivision:

Forest View North

Unit:

2

Lot:

147

Block: Acreage:

Type of System:

Aerobic

Surface Irrigation

Issued to:

Lisa & Jeffrey Barrett

This license is authorization for the owner to operate and maintain a private facility at the location described in accordance to the rules and regulations for on-site sewerage facilities of Comal County, Texas, and the Texas Commission on Environmental Quality.

The license grants permission to operate the facility. It does not guarantee successful operation. It is the responsibility of the owner to maintain and operate the facility in a satisfactory manner.

Alterations to this permit including, but not limited to:

- Increase in the square feet of living area
- Increase in the number of bedrooms
- A change of use (i.e. residential to commercial)
- Relocation of system components (including the relocation of spray heads)
- Installation of landscaping
- Adding new structures to the system

may require a new permit. It is the responsibility of the owner to apply for a new permit, if applicable.

Inspection and licensing of a facility indicates only that the facility meets certain minimum requirements. It does not impede any governmental entity in taking the proper steps to prevent or control pollution, to abate nuisance, or to protect the public health.

This license to operate is valid for an indefinite period. The holder may transfer it to a succeeding owner, provided the facility has not been remodeled and is functioning properly.

Licensing Authority

Comal County Environmental Health

OS0032485

VIRONMENTAL HEALTH INSPECTOR

ENVIRONMENTAL HEALTH COORDINATOR

OS 0025599

Installer Name: 100001	-19		OSSF installer #: 05 000 543	- 600	5-19	1.1
1st Inspection Date: 5-30	,-,1					gara
Inspector Name: Connor	***************************************	Inspector Name:		North 155 Barrett V		
Permit#: 108923			Address: Forest View North			
Description SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials	Arreset	Chations 285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(ii) 285.30(b)(1)(A)(i)	Notes	1st Insp.	erding.	See Man
ITE AND SOIL CONDITIONS & ETBACK DISTANCES Setback Distances Meet Minimum Standards		285.91(10) 285.30(b)(4) 285.31(d)				
EWER PIPE Proper Type Pipe rom Structure to Disposal System Cast Iron, Ductile Iron, Sch. 40, DR 26)	1	285.32(a)(1)		1		
EWER PIPE Slope from the Sewer o the Tank at least 1/8 Inch Per oot	1	285.32(a)(3)		1		
EWER PIPE Two Way Sanitary - Type Cleanout Properly Installed Add. C/O Every 100' &/or 90 legree bends)	/	285.32(a)(5)		/		
PRETREATMENT Installed (if equired) TCEQ Approved List PRETREATMENT Septic Tank(s) Weet Minimum Requirements		285.32(b)(1)(G)285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(ii) 285.32(b)(1)(E)(ii)(ii) 285.32(b)(1)(E)(iii)(ii)				
PRETREATMENT Grease Interceptors if required for commercial		285.34(d)				

tank set level no leaks operational cover all 6-5-19 Covered SC

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	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	/	285.33(d)(2)(G)(iii)(II)285.3 3(d)(2)(G)(iii)(III)285.33(d)(2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(f)				
40	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed	1	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)		1		
41	APPLICATION AREA Area Installed	/			1		
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						

Covered 6-6-19 JC

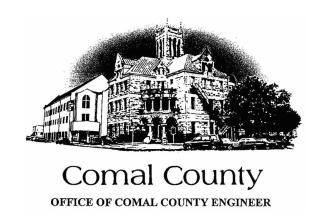
Installer Name: Charles Fore 1st Inspection Date:		2nd Inspection Da	OSSF Installer #: OS 000 5				
		*		3rd Inspection Date:			
Inspector Name:Permit#: /08923		Inspector Name:_	Inspector Name:			ett Vie	
Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.	
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials	/	285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(ii) 285.30(b)(1)(A)(i)		/			
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	1	285.91(10) 285.30(b)(4) 285.31(d)		1			
SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)	/	285.32(a)(1)		/			
SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	/	285.32(a)(3)					
SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	/	285.32(a)(5)		/			
PRETREATMENT Installed (if required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(G)285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(iii)(II) 285.32(b)(1)(E)(iii)(II) 285.32(b)(1)(E)(iii)(II)					
PRETREATMENT Grease Interceptors if required for commercial	in person	285.34(d)	•				

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SPOSAL SYSTEM Pumped fluent SPOSAL SYSTEM Gravelless Pipe SPOSAL SYSTEM Mound		285.33(d)(4) 285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
SPOSAL SYSTEM Pumped fluent SPOSAL SYSTEM Gravelless Pipe SPOSAL SYSTEM Mound		285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
SPOSAL SYSTEM Pumped fluent SPOSAL SYSTEM Gravelless Pipe SPOSAL SYSTEM Mound SPOSAL SYSTEM Other		285.33(a)(1) 285.33(a)(2) 285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
SPOSAL SYSTEM Gravelless Pipe SPOSAL SYSTEM Mound SPOSAL SYSTEM Other		285.33(a)(1) 285.33(a)(2) 285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
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SPOSAL SYSTEM Other						
SPOSAL SYSTEM Other		285.33(a)(3)				
SPOSAL SYSTEM Other						
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		285.33(a)(2)		2		
		285.33(a)(4)				
		285.33(d)(6)				
	/	285.33(c)(4)	aerobie	/		
			J			
RAINFIELD Absorptive Drainline		2.50			Minus III	
PVC						Annual Control of the
4" PVC	2-3000					
RAINFIELD Area Installed						
RAINFIELD Level to within 1 incher 25 feet and within 3 inches wer entire excavation		285.33(b)(1)(A)(v)				
RAINFIELD Excavation Width RAINFIELD Excavation Depth RAINFIELD Excavation Exparation DRAINFIELD Depth of Drous Media RAINFIELD Type of Porous Media						
		285.33(b)(1)(E)			1 3 3 4 5	and a second
RAINFIELD Leaching Chambers						
ates w/Splash Plate, Inspection ort & Closed End Plates in Place eer manufacturers spec.)		285.33(c)(2)				
					part l	
		285.33(d)(1)(C)(i)				
RR	AINFIELD Chambers - Open End ites w/Splash Plate, Inspection rt & Closed End Plates in Place	otextile Fabric in Place AINFIELD Leaching Chambers AINFIELD Chambers - Open End ates w/Splash Plate, Inspection rt & Closed End Plates in Place er manufacturers spec.) W PRESSURE DISPOSAL STEM Adequate Trench Length Width, and Adequate paration Distance between	otextile Fabric in Place AINFIELD Leaching Chambers AINFIELD Chambers - Open End attes w/Splash Plate, Inspection rt & Closed End Plates in Place er manufacturers spec.) W PRESSURE DISPOSAL STEM Adequate Trench Length Width, and Adequate paration Distance between	otextile Fabric in Place AINFIELD Leaching Chambers AINFIELD Chambers - Open End attes w/Splash Plate, Inspection rt & Closed End Plates in Place er manufacturers spec.) W PRESSURE DISPOSAL STEM Adequate Trench Length Width, and Adequate paration Distance between 285.33(b)(1)(E) 285.33(b)(1)(E) 285.33(c)(2)	otextile Fabric in Place AINFIELD Leaching Chambers AINFIELD Chambers - Open End attes w/Splash Plate, Inspection rt & Closed End Plates in Place er manufacturers spec.) W PRESSURE DISPOSAL STEM Adequate Trench Length Width, and Adequate paration Distance between	otextile Fabric in Place AINFIELD Leaching Chambers AINFIELD Chambers - Open End ites w/Splash Plate, Inspection rt & Closed End Plates in Place er manufacturers spec.) W PRESSURE DISPOSAL STEM Adequate Trench Length Width, and Adequate 285.33(d)(1)(C)(i)

No.	Description	Anwser	Citations	Notes	1st insp.	2nd Insp.	3rd Insp.
	SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If SingleTank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(E) 285.91(2) 285.32(b)(1)(F) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii) 285.32(b)(1)(D) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(B) 285.32(b)(1)(A) 285.32(b)(1)(E)(iv)				
9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used	/	285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)		/		
	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
11	SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions		285.38(d) 285.38(e)				
12	SEPTIC TANK Tank Volume Installed						
13	PUMP TANK Volume Installed		×				
	AEROBIC TREATMENT UNIT Size Installed	1			1		
14	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number	/		Truwater 600 Model 3-550	1		
	DISPOSAL SYSTEM Absorptive		285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
16	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
17	DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

io.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
	EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field (1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe (1.25 - 1.5" dia.) & Pipe Holes (3/16 - 1/4" dia. Hole Size) 5 ft. Apart		285.33(b)(3)(A) 285.33(b)(3)(B) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
	AEROBIC TREATMENT UNIT IS Aerobic Unit Installed According to Approved Guidelines.	-	285.32(c)(1)		1		
	AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions	1111			1111		
	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.	1			1		
	PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
37	PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions						
38	PUMP TANK Secondary restraint system provided PUMP TANK Electrical Connections in Approved Junction						

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	1	285.33(d)(2)(G)(iii)(II)285.3 3(d)(2)(G)(iii)(III)285.33(d)(2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)		/		
	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed	1 1 1	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)		/		
41	APPLICATION AREA Area Installed	/			/		
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed	-					



Permit of Authorization to Construct an On-Site Sewage Facility Permit Valid For One Year From Date Issued

Permit Number: 108923

Issued This Date: 05/14/2019

This permit is hereby given to: Lisa & Jeffrey Barrett

To start construction of a private, on-site sewage facility located at:

155 BARRETT VW BLANCO, TX 78606

Subdivision: Forest View North

Unit: 2

Lot: 147

Block:

Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic

Surface Irrigation

This permit gives permission for the construction of the above referenced on-site facility to commence. Installation must be completed by an installer holding a valid registration card from the Texas Commission on Environmental Quality (TCEQ). Installation and inspection must comply with current TCEQ and Comal County requirements.

Call (830) 608-2090 to schedule inspections.



May 7, 2019

Jeffrey & Lisa Barrett 317 Chama Trace Dripping Springs, TX 78620

Re: Street Name Approval Notice

To Whom It May Concern:

Please be advised that Bexar Metro 9-1-1, the United States Postal Service and Comal County Commissioners Court have considered and approved the naming of a private driveway located approximately 500ft west of the intersection of Oakland Dr and Carmel Dr within 78606, Comal County:

Barrett Vw

If you have questions or need further assistance, please let us know.

Sincerely,

Holly Braun

Address Coordinator

Cc:

- Comal Appraisal District
- ❖ Bexar Metro 9-1-1
- United States Postal Service
- **❖** PEC



May 7, 2019

Jeffrey & Lisa Barrett 317 Chama Trace Dripping Springs, TX 78620

Re: Physical Address Change Notice

To Whom It May Concern:

Please be advised the physical address for the following property has been established to replace the address previously assigned. The new physical address assigned to the property is as follows:

Property ID	Legal Description	Previous Address (INVALID)	New Assigned Address (VALID)
			155 BARRETT VW
27220		216 CARMEL DR	BLANCO,
	FOREST VIEW NORTH 2, LOT 147	BLANCO,	TX 78606
27239		TX 78606	171 BARRETT VW
		IA /8000	BLANCO,
			TX 78606

Please ensure any utility services established with the previous address are updated to reflect the current address. Please display this address where it is visible from the road with 6" or larger reflective numbers so emergency personnel can easily locate the property should there be an emergency. Please check with your local post office to verify the correct city and zip code before using the assigned address for mailing purposes. If you receive mail at a post office box, your mailing address will not change.

If you have questions or need further assistance, please let us know.

Sincerely,

Holly Braun

Address Coordinator

Cc:

Comal Appraisal District

United States Postal Service

❖ Bexar Metro 9-1-1

❖ PEC

ADDRESS MAP: BARRETT VW





Legend

Address

Private Road

Street Centerline

Parcel

NOTES:

PROPERTY ID:

27239

LEGAL DESCRIPTION: FOREST VIEW NORTH 2, LOT 147

SCALE: 1 " = 175 '

For information concerning the source of the data, please contact:
Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608 - 2090

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

REVISED

11:08 am, May 14, 2019

COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *

APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Date5/13/201	19		Permit # <u>108923</u>		
Owner Name	Lisa and Jeffrey Barrett	Agent Name	Stephen Jetton		
Mailing Address	s 317 Chama Trace	Agent Address _	2573 Deer Stand Loop		
City, State, Zip Dripping Springs, TX 78620 City, State, Zip San Marcos TX 78666					
Phone #	512-743-4677	Phone #	512-757-1259		
Email	jeffandlisa.barrett@gmail.com	Email _	stephen.jetton@gmail.com		
All corres	spondence should be sent to: Owner Ag	ent 🗵 Both	Method: Mail		
Subdivision Na	me Forest View North 2	Unit	Lot <u>147</u>	Block	
Acreage/Legal	6.2				
Street Name/Ad	ddress 155 Barrett VW	City Blanco	<u> </u>	Zip <u>78606</u>	
Type of Develo	pment:	12			
Single Fai	mily Residential				
Type of Cor	nstruction (House, Mobile, RV, Etc.) Mobile Home	•			
Number of	Bedrooms 3				
Indicate Sq	Ft of Living Area 1216				
Commerci	al or Institutional Facility				
(Planning mat	erials must show adequate land area for doubling the r	equired land needed	for treatment units and disp	osal area)	
Type of Fac	cility			•	
Offices, Fac	ctories, Churches, Schools, Parks, Etc Indicate	– Number Of Occupa	ints		
	s, Lounges, Theaters - Indicate Number of Seats				
	el, Hospital, Nursing Home - Indicate Number of B				
	er/RV Parks - Indicate Number of Spaces				
Miscellaneo					
Estimated Co	ost of Construction: \$ (Struct	ure Only)			
Is any portion	of the proposed OSSF located in the United State	es Army Corps of E	ngineers (USACE) flowa	ge easement?	
☐ Yes 🗵	No (If yes, owner must provide approval from USACE for	proposed OSSF improv	vements within the USACE flow	rage easement)	
Source of Wate	r 🔲 Public 🔀 Private Well				
Are Water Savii	ng Devices Being Utilized Within the Residence?	☐ Yes ⊠ No			
	oplication, I certify that: application and all additional information submitted doe	s not contain any fals	e information and does not	conceal any material	
site/soil evaluat	hereby given to the permitting authority and designated ion and inspection of private sewage facilities at a permit of authorization to construct will not be issue				
-	ounty Flood Damage Prevention Order.	addrage appreciated	with this pormit analization	no appliachta	
- I amirmatively oc	onsent to the online posting/public release of my e-mail			ль арріісавіе.	
	(ph)=5	5-13-	19		
Signature of C	Winer	Date		Page 1 of 2	

* * * COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * * APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN

ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Planning Materials & Site Evaluation as Required Completed By Stephen Sctton
System Description NUWATER 13-550
Size of Septic System Required Based on Planning Materials & Soil Evaluation
Tank Size(s) (Gallons) 600 GPU Absorption/Application Area (Sq Ft) 3925-6
Gallons Per Day (As Per TCEQ Table III)
RECEIVED
Is the property located over the Edwards Recharge Zone? Yes No
(If yes, the planning materials must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.)) MAR 28 2019
Is there an existing TCEQ approved WPAP for the property? Yes No (If yes, the R.S. or P.E. shall certify that the OSSF design complies with all provisions of the existing WPAP.)
(if yes, the N.S. of F.E. shall certify that the OSSF design complies with all provisions of the existing WFAF.)
If there is no existing WPAP, does the proposed development activity require a TCEQ approved WPAP? Yes No
(If yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed WPAP. A Permit to Construct will not be issued for the proposed OSSF until the proposed WPAP has been approved by the appropriate regional office.)
Is the property located over the Edwards Contributing Zone? Yes No
Is there an existing TCEQ approval CZP for the property? Yes No
(If yes, the P.E. or R.S. shall certify that the OSSF design complies with all provisions of the existing CZP.)
If there is no existing CZP, does the proposed development activity require a TCEQ approved CZP? Yes
(If yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to Construct will not be issued for the proposed OSSF until the CZP has been approved by the appropriate regional office.)
Is this property within an incorporated city? Yes No
If yes, indicate the city:
By signing this application, I certify that:
- The information provided above is true and correct to the best of my knowledge I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.
S. A. D. 3-4-19

Date

Signature of Designer

201906009128 03/19/2019 10:33:41 AM 1/1

AFFIDAVIT TO THE PUBLIC

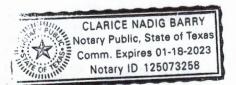
THE COUNTY OF COMAL STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities (OSSF's), this document is filed in the Deed Records of Comal County, Texas.

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (commission) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the commission primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission, under the authority of the TWC and the Texas Health and Safety code, requires owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the commission requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.

warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.	
An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code	
\$285.91(12) will be installed on the property described as (insert legal description):	
FOREST VIEW NORTH 2, LOT 147	MOM
	860000
REC .	EVED
The property is owned by (insert owner's full name): lettre land Derrett	-
MAR 9	8 2019
	0 2010
This OSSF must be covered by a continuous maintenance contract for the first two years. After	
the initial two-year service policy, the owner of an aerobic treatment system for a single family OUNTY	FNGINEE
residence shall either obtain a maintenance contract within 30 days or maintain the system	F14CH4FF
personally.	
the state of the s	
Upon sale or transfer of the above-described property, the permit for the OSSF shall be	
transferred to the buyer or new owner. A copy of the planning materials for the OSSF can be	
obtained from the Comal County Engineer's Office.	
WITNESS BY HAND(S) ON THIS 13 DAY OF FENVIORM , 20 19	
WITNESS BY HAND(S) ON THIS 19 DAY OF FORWARD, 20 1	
3	
Owner(s) signature(s)	
Owner (4) Signature (5)	
SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 13 DAY OF	
Epinam 20 19	



Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
03/19/2019 10:33:41 AM
CHRISTY 1 Page(s)
201906009128

Bobbie Koepp

REVISED

11:08 am, May 14, 2019

Regulatory Authority	Permit/License Number 108923
WASTEWATER TREATMENT FACILITYY	
Block Creek Aerobic Services, LLC	Customer Lisa and Jeffrey Barrett
444 A Old Hwy #9	Site Address 155 Barrett View
Comfort, TX 78013	City Blanco Texas Zip 78606
Off.(830) 995-3189	Mailing Address 317 Chama Trace
Fax. (830) 995-4051	County Comal Map #
	Phone 512-743-4677
I Comment This Winds for Him A management Champing for rafe	Email jeffandlisa.barrett@gmail.com
I. General: This Work for Hire Agreement (hereinafter refe	red to as "Agreement") is entered into by and between
	r referred to as "Customer") and Block Creek Aerobic Service,
LLC. By this agreement, Block Creek Aerobic Service, LI	A and its employees (neremaiter inclusively reletied to as
	ated above, as described herein, and the Customer agrees to fulfill
his/her/their responsibilities, as described herein.	and and an
II. Effective Dates: This Agreement commences on	and end on (initial agreement) or one (1) year (there after). If this is an initial
for a total of two (2) years	Contractor within two (2) business days of the system's first use to
agreement (new instanation), the customer will flow notification is a	eceived by Contractor within ninety (90) days after completion of
installation or where county authority mandates the date of	f commencement will be the date the "License to operate" (Notice of
Approval was issued by the permitting authority. This agr	reement may or may not commence at the same time as any warranty
period of installed equipment, but in no case shall it extend	the specified warranty
III Termination of Agreement: This Agreement may be ter	minated b either party with thirty (30) days written notice for any
reason including for example substantial failure to perfort	n in accordance with its terms, without fault or liability of the
terminating party. If this Agreement is so terminated, Cont	tractor will be paid at the rate of \$75.00 per hour for any work
performed and for which compensation has not been received	red. After the deduction of all outstanding charges, any remaining
monies from prepayment for services will be refunded to c	ustomer within thirty (30) days. Either party terminating this
Agreement for any reason, including non-renewal, shall no	tify in writing the equipment manufacturer and the appropriate
regulatory agency a minimum of thirty (30) days prior to the	ne date of such termination. Nonpayment of any kind shall be
considered breach of contract and a termination of contract	
IV. Services: Contractor will:	
a. Inspect and perform routine upkeep on the On-Site Sewa	age Facility (hereinafter referred to as OSSF) as recommended by the
treatment system manufacturer, and required by state and/o	or local regulation, for a total of three visits to site per year.
b. Provide a written record of visits to the site by means of	an inspection tag attached to or contained in the control panel.
c. Repair or replace, if Contractor has necessary materials	at site, any component of the OSSF to be failing or inoperative during
the course of a routine monitoring visit. If such services ar	re not covered by warranty, and services costs are \$100.00, or
less. Customer hereby authorizes Contractor to perform th	e service and bill Customer for said service. When service costs are
greater than \$100.00, or if contractor does not have necessary	ary supplies at the site. Contractor will notify Customer of required
	ontractor of arrangements to affect repair of system with two (2)
business days after said notification.	1 DOD
d. Provide sample collection and laboratory testing of TSS	and BOD on a yearly basis (confinercial systems only).
e. Forward copies of this Agreement and all reports to the	aled services within forty-eight (48) hours of the date of notification
1. Visit site in response to customer's request for unscricular	otherwise covered by warranty, costs for such unscheduled responses
will be billed to Customer.	oliter wise covered by waiting, books for basis and another and
Will be bliffed to Customer.	responsibility to maintain the disinfection device(s) and provide any
	itial)
V. Electronic Monitoring is not included in this Agreemen	
VI Performance of Agreement: Commencement of perfor	rmance by Contractor under this Agreement is contingent on the
following conditions:	
a. If this is an initial Agreement (new installation):	
i Contractor's receipt of a fully executed original copy or	facsimile of this agreement and all documentation requested by
Contractor	
ii. Contractor's receipt of payment of the wastewater-moni	itoring fee in accordance with the terms as described in Section XIV of
this Agreement.	
b. If this is not an initial Agreement (existing system):	
i. Contractors receipt of a fully executed original copy or f	acsimile of this agreement and all documentation requested by
Contractor.	
ii. Contractor's receipt of payment of the wastewater-mon	itoring fee in accordance with the terms as described in Section XIV of
this Agreement.	21 A A A A A A A A A A A A A A A A A A A
c. If the above conditions are not met, Contractor is not ob	digated to perform any portion of this Agreement.
VII. Customer's Responsibilities: The customer is respon-	sible for each and all of the following:

Not required; X required. The responsibility to maintain the disinfection device(s) and provide any necessRECEIVED chemicals is that of the Customer.

VI. Electronic Monitoring:

Electronic Monitoring is not included in this Agreement.

MAR 28 2019

R

VII. Performance of Agreement:

COLVE Commencement of performance by Contractor under this Agreement is contingent on the following conditions:

a. If this is an initial Agreement (new installation): I. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.

If the above conditions are not met, Contractor is not obligated to perform any portion of this Agreement.

VIII. Customer's Responsibilities:

The customer is responsible for each and all of the following:

- a. Provide all necessary yard or lawn maintenance and removal of all obstacles, including but not limited to dogs and other animals, vehicles, trees, brush, trash, or debris, as needed to allow the OSSF to function properly, and to allow Contractor safe and easy access to all parts of the OSSF.
 - b. Protect equipment from physical damage including but not limited to that damage caused by insects.
- c. Maintain a current license to operate, and abide by the conditions and limitations of that license, and all requirements for and OSSF from the State and/or local regulatory agency, whichever requirements are more stringent, as well as the proprietary system's manufacturer recommendations.
- d. Notify Contactor immediately of any and all alarms, and/or any and all problems with, including failure of,
- e. Provide, upon request by Contractor, water usage records for the OSSF so that the Contractor can perform a proper evaluation of the performance of the OSSF.
- f. Allow for samples at both the inlet and outlet of the OSSF to be obtained by Contractor for the purpose of evaluating the OSSF's performance. If these samples are taken to a laboratory for testing, with the exception of the service provided under Section IV (d) above, Customer agrees to pay Contractor for the sample collection and transportation, portal to portal, at a rate of \$35.00 per hour, plus the associated fees for laboratory testing.
 - g. Prevent the backwash or flushing of water treatment or conditioning equipment from entering the OSSF.
- h. Prevent the condensation from air conditioning or refrigeration units, or the drains of icemakers, from hydraulically overloading the aerobic treatment units. Drain lines may discharge into the surface application pump tank if approved by system designer.
- i. Provide for pumping and cleaning of tanks and treatment units, when and as recommended by Contactor, at Customer's expense.
 - j. Maintain site drainage to prevent adverse effects on the OSSF.
 - k. Pay promptly and fully, all Contractor's fees, bills, or invoices as described herein.

IX. Access by Contractor:

Contractor is hereby granted an easement to the OSSF for the purpose of performing services described herein. Contractor may enter the property during Contractor's normal business hours and/or other reasonable hours without prior notice to Customer to perform the Services and/or repairs described herein. Contractor shall have access to the OSSF electrical and physical components. Tanks and treatment units shall be accessible by means of man ways, or risers and removable covers, for the purpose of evaluation as required by State and/or local rules and the proprietary system manufacturer. It is Customers responsibility to keep lids exposed and accessible at all times.

X. Limit of Liability:

Contractor shall not be held liable for any incidental, consequential, or special damages, or for economic loss due to expense, or for loss of profits or income, or loss of use to Customer, whether in contract tort or any other theory. In no event shall Contractor be liable in an amount exceeding the total Fee for Services amount paid by Customer under this Agreement.

XI. Indemnification:

Customer (whether one or more) shall and does hereby agree to indemnify, hold harmless and defend Contractor and each of its successors, assigns, heirs, legal representatives, devisees, employees, agents and/or counsel (collectively "Indemnitees") from and against any and all liabilities, claims, damages, losses, liens, causes of action, suits, fines, judgments and other expenses (including, but not limited to, attorneys' fees and expenses and costs of investigation), of any kind, nature or description, (hereinafter collectively referred to as "Liabilities") arising out of, caused by, or resulting, in whole or in part, from this Agreement.



THIS INDEMNITIFCATION APPLIES EVEN IF SUCH LIABILITIES ARE CAUSED BY THE CONCURRENT OR CONTRIBUTORY NEGLIGENCE OR BY THE STRICT LIABILITY OF ANY INDEMNITEE.

Customer hereby waives its right of recourse as to any Indemnitee when Indemnification applies, and Customer shall require its insurer(s) to waive its/their right of subrogation to the extent such action is required to render such waiver of subrogation effective. Customer shall be subrogated to Indemnitees with respect to all rights Indemnitees may have against third parties with respect to matters as to which Customer provides indemnity and/or defense to Indemnitees. No Indemnification is provided to Indemnitees when the liability or loss results from (1) the sole responsibility of such Indemnitee; or, (2) the willful misconduct of such Indemnitee. Upon irrevocable acceptance of this Indemnification obligation, Customer, in its sole discretion, shall select and pay counsel to defend Indemnitees of and from any action that is subject to this Indemnification provision. Indemnitees hereby covenant not to compromise or settle any claim or cause of action for which Customer has provided Indemnification without the Consent of Customer.

XII. Severability:

MAR 28 2019

If any provision of the "Proposal and Contract" shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of the "Agreement" is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

XIII. Fee for Services:

The Fee for Services does not include any fees for equipment, material, labor necessary for non-warranty repairs, unscheduled inspections, or Customer requested visits to the site.

XIV. Payment:

Full payment is due upon execution of this Agreement (Required of new Customer). For any other service(s) or repair(s) provided by Contractor the Customer shall pay the invoice(s) for said service(s) or repair(s) within thirty (30) days of the invoice date. The Contractor shall mail all invoices on the date of invoice. All payments not received within thirty (30) days from the invoice date will be subject to a \$29.00 late penalty and a 1.5% per month carrying charge, as well as any reasonable attorney's fees, and all collection and court costs incurred by Contractor in collection of unpaid debt(s). Contractor may terminate contract at any time for nonpayment for services. Any check returned to Contractor for any reason will be assessed a \$30.00 return check fee.

XV. Application or Transfer of payment:

The fees paid for this agreement may be transferred to subsequent property owner(s); however, this Agreement is not transferable. Customer shall advise the subsequent property owner(s) of the State requirement that they sign a replacement agreement authorizing Contractor to perform the herein described Services, and accepting Customer's Responsibilities. This replacement Agreement must be signed and received in Contractor's offices within ten (10) business days of date of transfer of property ownership. Contractor will apply all funds received from Customer first to any past due obligation arising from this Agreement including late fees or penalties, return check fees, and/or charges for services or repairs not paid within thirty (30) days of invoice date. Any remaining monies shall be applied to the funding of the replacement Agreement. The consumption of funds in this manner may cause a reduction in the termination date of effective coverage per this Agreement. See Section IV.

XVI. Entire Agreement:

This agreement contains the entire Agreement of the parties, and there are no other conditions in any other agreement, oral or written.

Block Creek Aerobic Services, LLC

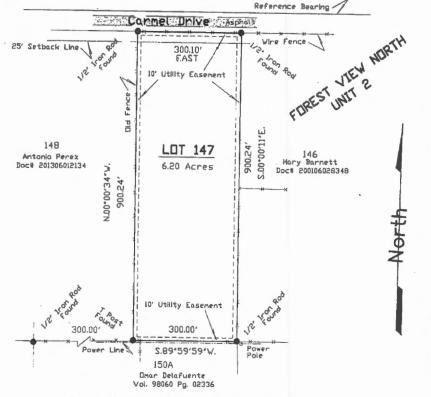
unto 3 sidenstick

Contractor

MC# 0000042 and MC#0000002

Date

2-13-18



SURVEY PLAT

of LOT 147, FOREST VIEW NORTH, UNIT NO. 2, COMAL COUNTY, TEXAS

SCALE 1' = 200' DECEMBER 12, 2017 ==

ADDRESS: 216 CARMEL DRIVE BLANCO, TEXAS 78606

THIS PROPERTY DOES NOT FALL WITHIN THE FEMA 100-YEAR FLOOD PLANE AS SHOWN ON FEMA MAP NO. 48091C0020F DATED SEPT. 2, 2009

I HERE BY CERTIFY THAT THIS SURVEY IS TRUE-AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND IS BASED ON A SURVEY DONE ON THE GROUND, UNDER MY DIRECTION AND SUPERVISION, THIS THE 12TH DAY OF DECEMBER, 2017

FOREST VIEW NORTH, UNIT NO. 2, IS RECORDED IN VOLUME 3, PAGES 72-73, MAP OR PLAT RECORDS OF COMAL COUNTY, TEXAS RESTRICTIVE COVENANTS FILED IN VOLUME 80, PAGE 685, AND VOLUME 116, PAGE 3, DEED RECORDS OF BLANCO COUNTY, TEXAS RIGHT-OF-WAY EASEMENT TO STATE OF TEXAS VOLUME 52, PAGE 223, AND VOLUME 52, PAGE 273, DEED RECORDS OF BLANCO COUNTY, TEXAS EASEMENT TO PEDERNALES ELECTRIC CODP. VOLUME 79, PAGE 89, DEED RECORDS OF BLANCO COUNTY, TEXAS BLANCO COUNTY, TEXAS

Comal Wills Surveying

3200 Puter Creek Road Spring Branch, Texas 78070 (830) 228-5571 chs@gvtc.com

JWN: B. Loftis HK: Bit Loftis Joh # 17987-1 Octa:12/12/2017 FB # 19

RECEIVED

MAR 28 2019

COUN TYFUCINEER Sierra Vista 16x70 approx. 1,120 sq ft 3 Bedrooms - 2 Baths



RECEIVED

MAR 28 2019

COUNTY ENGINEER



Southwest Septic Design

On-Site Sewage Facility Application and Design

Prepared For:

Lisa & Jeffrey Barrett 155 Barrett View Blanco, Texas

Design 2002519

Prepared By:

Stephen F. Jetton Revision 5/8/2019 Registered Professional Sanitarian



Stephen Jetton



Southwest Septic Design

2573 Deer Stand Loop San Marcos, Texas 78666 Hays County

Fax (512) 392-5645 Mobile (512) 757-1259

Design Report
On-Site Sewage facility
Aerobic Wastewater Treatment System
Utilizing Surface Spray Application

OWNER/SITE LOCATION:

Lisa & Jeffrey Barrett 155Barrett View Lot 147, Forrest View North 2 Blanco, Texas

SITE DESCRIPTION & EVALUATION:

A site evaluation indicated class III soils (see attached soil evaluation report). No evidence of shallow groundwater was noted. This property is not within the Edwards Aquifer Recharge Zone, and no recharge features are located within 150 feet of the proposed system. *All portions of this proposed OSSF will maintain at least a 10' separation from all water lines*. According to the Federal Emergency Management Agency Flood Insurance Rate Map, this tract is not within zone A, 100-year Floodplain (see attached site plan). Minimum separation distances as stated in §285 TCEQ, On-Site Sewage Facilities, must be maintained.

WASTEWATER DESIGN FLOW:

This design is for a 1120 sq. ft., 3-bedroom single-family residence utilizing low-flow fixtures. This site is serviced by a private water well. The proposed OSSF will be designed to accommodate **240 gallons per day**, as per TCEQ, On Site Sewage Facilities effective 12-27-2012.

Please Note that this permit will not be valid if final heated square footage exceeds 2499 sq. ft., and/or 3 bedrooms.

AEROBIC TREATMENT SYSTEM DESCRIPTION:

This residence will utilize a Nuwater Aerobic Treatment Plant, Model B-550-PC-400P. A 353-gallon pretreatment/trash tank will precede the 600-gallon per day aerobic treatment tank. Effluent from the aeration tank will flow through a liquid chlorinator (Model NG 300V 200) to a 768-gallon pump tank. The pump tank serves as a chlorine contact chamber and a storage tank prior to the treated/chlorinated effluent being discharged to sprinkler heads. The disposal area will consist of $2-25 ft.~360^{\circ}$ radius patterns. The system is considered a "package system", and will be installed according to manufacturer's instructions.





Design Specification:

Size of Residence	Primary Living Area	1120ft ²
Number of Bedrooms		3
Average Expected Flow		240 GPD
Application Rate	0.064 Gal./ft²/Day	0.064
Minimum Application Area	(GPD)/(0.064 Gal./ft²/Day)	3750.00 ft ²
Actual Application Area	3.14(r²) x number of heads	3925.00 ft ²

System Components:

Trash Tank	353 gallon one-compartment
Aeration Tank	600 gallon per day
Pump Tank	768 gallon

Pump Tank:

Pump Tank gallons per inch: 14.49"

Operating Capacity: 14.49" x 17" = 246.33 operating gallons.

Reserve Capacity: 53" usable depth (53 x 14.49 = 768.00) 768.00 - 449.19 = 318.8 reserve

gallons.

Pump off	13" Above tank floor	188.37 Gallons	
Pump on	14" Above tank floor	202.86 Gallons	
Alarm on	31" Above tank floor	449.19 Gallons	

Combined capacity of pretreatment and aeration tank is 953-gallons. A 768-gallon, single-compartment pump tank allows for a one-third days flow above the alarm-on level.

Pump and Sprinkler Head Requirements:

Pump: Franklin C1 Series Pump, Model 20C1-05P4-2W115 ½ H.P.

Sprinkler Head: Hunter I20-3RV-2.0LA (equipped with anti-siphon nozzles and purple top).

Nozzle #: 3.0 LA (Low angle trajectory, 11 degrees), operating at 25 psi, 25ft. radius and 2.5 GPM flow per sprinkler.

Dosing:

Application Flow Rate 2.5 gpm/head x 2 heads = 5.0

Application Time: 2 doses @ 120 gal/dose / 5.0 gpm = $\sim 24 \text{ min/dose}$





Head Requirements:

Elevation head: 3 (assumed elevation at top of pump 1185 and highest spray head at 1188)

Pressure head: 25 psi x 2.31 ft/psi = 57.75 ft

Friction head: 1" Sch. 40 PVC @ 5.0 gpm = 2.13 ft. (85 x 2.13/100 x 1.2) = 2.17

TDH = 3 ft. + 57.75 ft. + 2.17 ft = 62.92 (within pump curve).

A commercial timer must be set to provide two doses a day, one at 1 a.m. and the other at 4 a.m. An unthreaded sampling valve must also be provided. Under the Texas Administrative Code, §285 On-Site Sewage Facilities, this system must be installed with a night timer, set to spray between the hours of 1 am and 5 am.

Alarm System:

An audio/visual high water alarm will be installed on this system. NuWater control panel (SPI-BIO Model 50B138-AAV-PT) with Timed Control with 24hr timer (Grasslin FM/1 Pin Timer) or equal. The alarm/light will be installed in a high visible location close to the pump tank.

Optional Components:

- 40 PSI Pressure Regulator will be used to maintain the 40 PSI to the sprinkler heads. The installer will consult me or G.P. Equipment when purchasing this device. The pressure reducer will be placed in-line between the pump and the spray heads. Additionally this particular spray head is adjustable to help achieve the required radius.
- Pressure Gauge of not less than 45PSI will be installed to regulate flow to the spray field.

Installation Notes:

- Refer to site plan for component placement and follow manufacturer's instructions for installation of treatment plant and aerator.
- All materials and construction methods are required to conform to the standards for Private Sewage Facility's set forth in the Texas Administrative Code, δ285 On-Site Sewage Facilities.
- The installer must have a current and valid Texas installer certificate, and is required to have at the minimum an Installer II certification.
- The installer must notify designer and regulatory authority at least 48 hours in advance to schedule required inspections to ensure that the system is installed in accordance with the approved plans and specifications.
- The installer may not alter these plans without the approval of the designer.
- Diversion berms will be place when needed to protect irrigation area from excessive runoff.
- All electrical installation must be in compliance with applicable electric codes.
- All outside electrical components must be placed in electrical conduit.
- It is the responsibility of the installer to maintain the minimum setback requirements as stated in §285 for On-Site Sewage Facilities.

Tank Notes:

• The bottom of the excavation for the tanks shall be level and free of large rocks and debris.



- All tanks are to be set level on a layer, with a minimum thickness of 4 inches, of sand, sandy loam, clay loam, or pea gravel.
- Tank excavations must be backfilled with soil or pea gravel that is free of rock larger than ½ inch in diameter. Class IV soils and gravel larger than ½ inch in diameter are not acceptable for use as backfill material. If the top of a septic tank extends above the ground surface, soil may be mounded over the tank to maintain slope to the drain field.
- Risers are required over all tank openings and must extend to the ground surface.
- Risers shall be permanently fastened to the tank lid.
- The riser lid shall screw down and have a lock or weigh 65lbs.
- A secondary plug, cap, netting, etc. shall be provided below the riser lid.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, or to prevent the infiltration of water.
- Tanks must be filled with water for 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8" per foot from house to tank.
- PVC pipe from house to tank must be at least Sch.40 or SDR 26.

Irrigation & Landscaping Notes:

- Irrigation lines shall be 1" Sch.40 PVC. Sleeve any pipe that crosses under any roads or driveways with Sch.40 PVC.
- Purple Pipe must be used for all irrigation lines.
- Supply lines must be buried at least 6" below finished grade.
- If irrigation area does not have established vegetation, a mixture of winter rye and Bermuda grasses will be seeded to establish seasonal vegetation.
- The installer shall notify property owner prior to removal of any trees that may obstruct the operation of the irrigation system.
- All exposed surface rock must be covered with at least 4" of suitable soil
- Vegetation must be established before system is in use.

Additional Notes:

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarms shall be audio/visual and mounted in a place that can be easily seen and heard when the alarms are activated.
- A hose bib must be installed in pump tank at tank inspection port.
- The chlorinator must be constructed to allow a chlorine residual of 1.0 mg/1 in the pump tank for the period of time between scheduled inspections.
- The disinfected effluent must obey the standards as stated in §285, TCEQ, On-Site Sewage Facilities. Approved disinfections methods using chlorinated tablets, must use calcium hypochlorite that is properly labeled for wastewater disinfections.

Maintenance Requirements:

- The applicant must furnish to the regulatory authority a valid maintenance contract with a certified maintenance company before a permit will be issued.
- The maintenance company will verify that the system is operating properly and that they will provide on-going maintenance of the installation.
- The initial contract will be a minimum of 2 years.





- A maintenance contract will authorize the Maintenance Company to maintain and repair the system as needed.
- The owner must continuously maintain a signed written contract with a valid maintenance company and shall submit a copy of the contract to the permitting authority at least 30 days prior to the date service will cease.

Affidavit:

- The applicant must file a certified copy of an affidavit at the County clerk's office and filed in reference to the real property deed on which the surface application system is the be installed.
- The affidavit will state that the property shall not be transferred to a new owner without:
 - (1) The new owner being advised that the property contains a surface application system for wastewater disposal;
 - (2) The permit issued to the previous owner of the property being transferred to the new owner in accordance with §285.20(5) of the TCEQ OSSF Rules, i.e.; the permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon legal sale of the OSSF. The transfer of an OSSF permit under this section shall occur upon actual transfer of the property on which the OSSF is located unless the ownership of the OSSF had been severed from the property.
 - (3) The new owners submitting a valid maintenance contract to the permitting authority.

Operation and Management Notes:

- The OSSF should not be treated as a normal city sewer.
- Water conservation practices should be used at all times. Consult your local authorities for more information.
- Run the dishwasher with a full load whenever possible
- Avoid running water continuously when brushing teeth, washing hands, or cleaning food and utensils.
- Repair any water leaks immediately, such as running toilets or leaky faucets.
- The owner is responsible for cleaning and pumping the septic tank, typically every 2 to 3 years depending on system usage.
- Do not use the toilet to dispose of tissue, feminine hygiene products, trash, cigarettes, etc.
- It is recommended that you do not use the garbage disposal and/ or garbage grinders in the facility serviced by this system.
- Household chemicals should be used in moderation.
- According to §285, no water softener will be allowed to enter the OSSF.
- Chemical additives or the so-called enzymes should not be used during the operation of this system. Some of these additives may even be harmful to the facilities operation.
- Do not build driveways, storage buildings, decks, or other structures over the tank or disposal area
- The OSSF must be protected from coming in contact with vehicular traffic.
- A strong vegetative cover is essential for the proper operation of this system. The property owner is solely responsible for maintaining this vegetation. The irrigation area should be groomed by mowing on a regular basis.
- If you notice a problem with the spray patterns, or any of the alarms are activated, contact your maintenance provider immediately.
- Never place a greater wastewater load on your system than that prescribed by the design of the system (240 gallons per day).



Stephen F. Jetton



*The proposed system has been designed generally following the minimum requirements under TCEQ §285 On Site Sewage Facilities. The site evaluation and subsequent design are based on technical information currently available. The performance of the OSSF is not, and cannot be guaranteed even though all provisions of the Standards have been complied with. If failure should occur, additions to the OSSF may have to be made. In extreme cases a substitute system may be required. By accepting this design, the homeowner/contractor understands the aforementioned conditions, and agrees that the designer will not be liable for any more than the agreed upon design





OSSF SOIL EVALUATION FORM



Owner's Name: Lisa & Jeffrey Barrett

Physical Address: 155 Barrett View

Legal Description: Lot 147, Forest View North 2 - 6.2 acres

Date Performed: 2-27-19 Proposed Excavation Depth: 6"

Requirements:

• At least two soil evaluations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing.

• For subsurface disposal, soil evaluations must be performed to a depth of at least 2-ft. below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.

• Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depths.

Soil Boring Number: 1

Depth (ft.)	Textural Class	Structure (For class III – blocky, platy or massive)	Drainage (Mottles, Water Table)	Restrictive Horizon	Observations
0 0-6" 1 0-6" 2 3 4	III	< 30 % gravel	No signs of Mottling	6"	Class III. No shallow groundwater noted. Not suitable for standard disposal. Aerobic surface irrigation recommended.
5					

Soil Boring Number: 2

Depth (ft.)	Textural Class	Structure (For class III – blocky, platy or massive)	Drainage (Mottles, Water Table)	Restrictive Horizon	Observations
0 0-6" 1 0-6" 2 3 4	III	< 30 % gravel	No signs of Mottling	6"	Class III. No shallow groundwater noted. Not suitable for standard disposal. Aerobic surface irrigation recommended.
5					

Features of Site Area

Presence of 100 year flood zone
Presence of adjacent ponds, streams, water impoundment's
Existing or proposed water well in nearby area
Organized sewage available to lot or tract
Recharge features within 150 feet

STEPHEN F JETTON
3530

I certify that the above statements are true and are based on my own field observations.

Signature of Site evaluator



No

No

Yes

No

No

155 Barrett View Blanco, Texas

REVISED 3:33 pm, May 08, 2019

Lot 147
Forest View North
Unit No. 2
Comal County, Texas

A - 3-Bedroom Single Family Residence (1120 sq. ft.).

B - NuWater Model B-550 Aerobic Treatment Unit.

C - Hunter 20 Ultra, 25' Radius, Sprinkler Head Nozzle 3.0 - 25 PSI

X - Profile Hole

C/O - Two-Way Cleanout

Provide Two-Way Cleanout from House to Tank. 3" or 4" Sch. 40 between House and Tank. Must maintain a minimum of 1/8" per foot of fall between house and tank.

Supply Line: 1" Sch. 40 PVC Purple Pipe

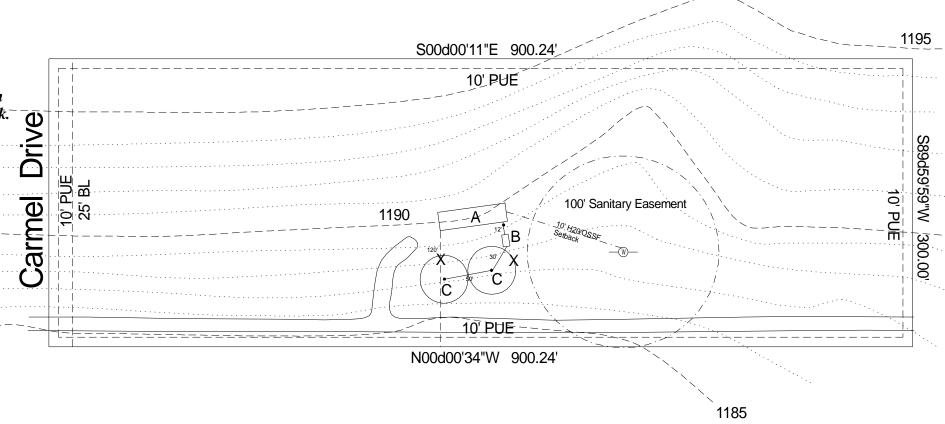
Maintain 10' from all Property Lines. Maintain 10' from all Potable Water Lines.

*Refer to Tank Detail and Design Notes for more Information.

*Plans may vary Slightly based on Conditions Encountered in the Field.

*Trim Trees as Neccessary in Application Area. Trees must maintain at least 10' from Sprinkler Head.

*All Separation and Setback Requirements as Stated in Chapter 285, TCEQ, On-Site Sewage Facilities, must be maintained.



*Flood Plain Note: This property is not within the Regulated Flood Plain. Panel 48209C0237F Dated: 9/2/2005





Scale: 1'' = 100'

*This is not intended to be used as an official survey. All structures and Contour locations are approximate.

REVISED

3:33 pm, May 08, 2019

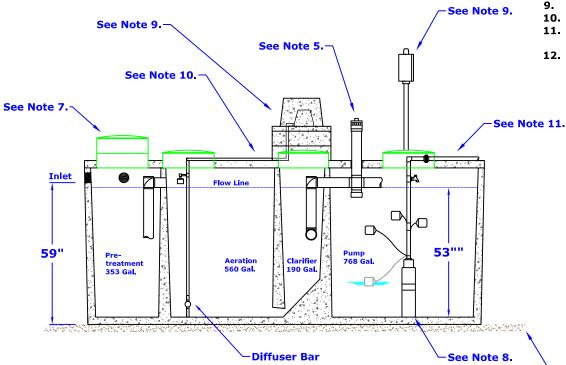
Assembly Details

OSSF



GENERAL NOTES:

- Plant structure material to be precast concrete and steel.
- 2. Maximum burial depth is 30" from slab top to grade.
- 3. Weight = 14,900 lbs.
- Treatment capacity is 600 GPD. Pump compartment set-up for a 360 GPD Flow Rate (4 beedroom, < 4,000 sq/ft living aera). Please specify for additional set-up requirements. BOD Loading = 1.62 lbs. per day.
- Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
- Bio-Robix B-550 Control Center w/ Timer for night spray application. Optional Micro Dose (min/sec)timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle.
- 20" Ø acess riser w/ lid (Typical 4). Optional extension risers available.
- 3. 20 GPM 1/2 HP, high head effluent pump.
- 9. HIBLOW Air Compressor w/ concrete housing.
- 10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
- 11. 1" Sch. 40 PVC pipe to distribution system provided by contractor.
- 12. 4" min. compacted sand or gravel pad by Contractor



DIMENSIONS:

Outside Height: 67"
Outside Width: 63"
Outside Length: 164"

MINIMUM EXCAVATION DIMENSIONS:

Width: 76" Length: 176"

See Note 12.

NuWater B-550 (600 GPD) Aerobic Treatment Plant (Assembled)

Model: B-550-PC-400PT

March, 2012 - Rev 1 By: A.S.

Scale:

* All Dimensions subject to allowable specification

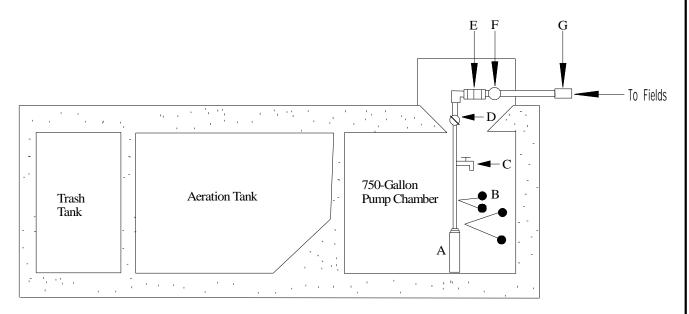
Dwg. #: ADV-B550-3



Advantage Wastewater Solutions IIc. 444 A Old Hwy No 9 Comfort, TX 78013 830-995-3189 fax 830-995-4051

Typical Pump Tank Cross Section

- A -Franklin C1 Series Pump Model 20C1-05PA-2W115 1/2 HP
- **B Wide Angle Mercury Float Switch**
- C Sampling Port
- D Pressure Regulator
- E Quick Disconnect Union
- F 40 PSI Pressure Guage
- G Check Valve



NuWater B-550 (600 GPD) Aerobic Treatment Plant





CET SERIES

C1 SERIES CISTERN PUMPS

Designed for use in gray water / filtered effluent service applications, the C1 Series cisted pump provides high performance and long life in less than ideal water conditions. The C1 Series pump is able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components.

The pump's unique bottom suction design allows for maximum fluid drawdown without compromising durability or overall life, and it does not require the use of a flow induction sleeve. Intended specifically for use in a cistem or tank, C1 Series pumps are suitable for use in agricultural, residential, and commercial installations.

Stephen Jetton

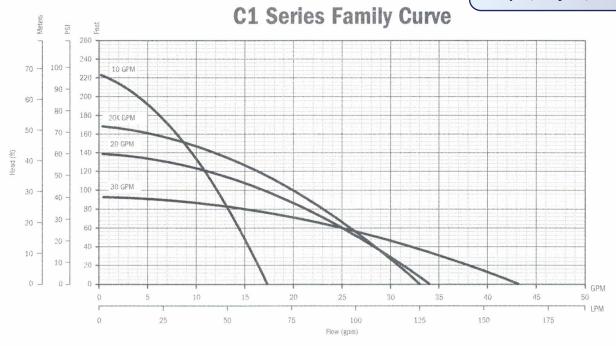




Franklin Electric

REVISED

3:34 pm, May 08, 2019



FEATURES

- Supplied with a removable 5" base for secure and reliable mounting
- Bottom suction design
- Robust thermoplastic discharge head design resists breakage during installation and operation
- Single shell housing design provides a compact unit while ensuring cool and quiet operation
- Hydraulic components molded from high quality engineered thermoplastics
- Optimized hydraulic design allows for increased performance and decreased power usage
- All metal components are made of high grade stainless steel for corrosion resistance
- \blacksquare Available with a high quality 115 V or 230 V, ½ hp motor
- Fluid flows of 10, 20, and 30 gpm, with a max shut-off pressure of over 100 psi
- Heavy duty 600 V 10 foot SJ00W jacketed lead

APPLICATIONS

- Gray water pumping
- Filtered effluent service water pumping
- Water reclamation projects such as pumping from rain catchment basins
- Aeration and other foundation or pond applications
- Agriculture and livestock water pumping

ORDERING INFORMATION

C1 Series Pumps							
GPM	HP	Volts	Stage	Model No.	Order No.	Length (in)	Weight (lbs)
4.0	1/2	115	7	10C1-05P4-2W115	90301005	26	17
10		230	7	10C1-05P4-2W230	90301010	26	17
00		115	5	20C1-05P4-2W115	90302005	25	16
20		230	5	20C1-05P4-2W230	90302010	25	16
oov		115	6	20XC1-05P4-2W115	90302015	26	17
20X		230	6	20XC1-05P4-2W230	90302020	26	17
20		115	4	30C1-05P4-2W115	90303005	25	16
30		230	4	30C1-05P4-2W230	90303010	25	16

Note: All units have 10 foot long SJOOW leads.

Stephen Jetton







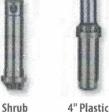
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3:34 pm, May 08, 2019

1-20 Ultra

The rotor with heavy-duty commercial-gra features that's equally at home in a residential setting







Steel





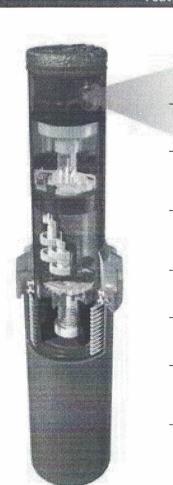
Steel



f you've ever desired the convenience of being able to use just one rotor to cover all of your needs, here it is. Got a small area for which you don't want to create a separate spray zone? Is a portion of your landscape in sandy soil? Is the landscape a mix of shrub zones and expanses of grass? Does one part of the turf require a

higher cut? With all the features on today's I-20 Ultra (most notably its ability to effectively cover a radius range from 17 up to 47 feet) there's a single-sprinkler alternative to stocking a variety of rotors and sprays. With over 20 different nozzle choices, the I-20 Ultra rotor can handle the full range of irrigation needs.

Features & Benefits



Integral rubber cover

Stays put to keep play areas safe

Choice of 22 different nozzles

Allows sprinkler to be custom fitted to all spacings from 17' to 47'

FloStop® Control

Allows stoppage of flow through an individual head while remainder of system is running

Easy arc adjustment (40° - 360°)

Right at the top of the sprinkler

Continuously improved, water-lubricated gear drive

Backed by over a decade of proven reliability

Extra-strong spring

Reliable retraction every time

Drain check valve for up to 10 feet of elevation change

Saves water, reduces liability

22 Nozzles Cover All Needs From 17 To 47 Feet

No need to mix sprays and rotors on a mid-range landscape. The I-20 Ultra boasts one of the widest selections of nozzle choices in a rotary sprinkler, making it the only head you'll need. In addition to the full rack of 8 standard and 4 low angle nozzles included with every I-20 Ultra, Hunter also offers the option of 10 specialty nozzles. Short Distance Nozzles provide the coverage of a spray with all of the benefits of a commercialgrade rotor. Available in three flow rates for an 18' radius and three for a 25' radius, these nozzles will precisely irrigate an area without wasting water beyond the desired throw. And, for systems that deliver water at a quicker rate, high performance can be assured with four High Flow Nozzles (including two low angle) which are specially designed for optimum coverage.

Short Distar

4 Low Anale





Models

I-10 - Shrub

I-20 - 4" Pop-up (10 cm)

I-20-6P - 6" Pop-up (15 cm)

I-20-HP - 12" Pop-up (30 cm)

Dimensions

- Overall height: I-10 - 73/4" (20 cm) 1-20-73/8" (19 cm) 1-20-6P - 9% (25 cm)
- ¾" female inlet NPT
- Exposed diameter: 134" (4 cm)

I-20-HP - 17" (43 cm)

Operating Specifications

- Discharge rate: .9 to 14.8 GPM (0.20 to 3.36 m³/hr; 3.4 to 56.0 l/min)
- Radius: 17' to 47' (5.2 to 14.3 m)
- Recommended pressure range: 40 to 60 PSI (2.8 to 4.1 bars; 275 to 413 kPa)
- Operating pressure range: 20 to 100 PSI (1.4 to 6.9 bars; 137 to 689 kPa)
- Precipitation rates: approximately .4" (10 mm) per hour at 50 PSI (3.4 bars; 344 kPa) for spacing from 18' to 45' (5.5 to 13.7 m)
- Nozzle trajectory: standard - 25° low angle - 13°
- Drain check valve for up to 10' (3.0 m) elevation change

Warranty

5-year exchange, not prorated

Options Available

- Reclaimed water cover
- Stainless steel riser (4" & 6" I-20 only)
- Factory-installed nozzles (Standard and Low Angle only)



I-20 Ultra Nozzles

8 Standard & 4 Low Angle Nozzles (included)

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip	in/hr
1.0	30	30'	0.9	0.19	0.22
	40	31'	1.0	0.20	0.23
	50	31'	1.2	0.24	0.28
	60	32'	1.3	0.24	0.28
1.5	30	32'	1.2	0.23	0.26
	40	33'	1.4	0.25	0.29
	50	34'	1.6	0.27	0.31
	60	34'	1.8	0.30	0.35
2.0	30	32'	1.6	0.30	0.35
	40	34'	1.8	0.30	0.35
	50	36'	2.0	0.30	0.34
	60	36'	2.2	0.33	0.38
3.0	30	34'	2.0	0.33	0.38
	40	36'	2.4	0.36	0.41
	50	38'	2.7	0.36	0.42
	60	38'	2.9	0.39	0.45
3.5	30	34'	2.6	0.43	0.52
	40	38'	3.0	0.40	0.46
	50	40'	3.4	0.41	0.47
	60	40'	3.7	0.45	0.51
4.0	30	37'	3.2	0.45	0.52
	40	39'	3.7	0.47	0.54
	50	41'	4.2	0.48	0.56
	60	42'	4.6	0.50	0.58
6.0	30	35'	4.2	0.66	0.76
	40	40'	4.9	0.59	0.68
	50	43'	5.5	0.57	0.66
	60	44'	6.0	0.60	0.69
8.0	40	41'	6.0	0.69	0.79
	50	44'	6.8	0.68	0.78
	60	45'	7.6	0.72	0.83
	70	47'	8.2	0.71	0.83

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip	in/hr
2.0 LA	30 40 50 60	25' 27' 28' 30'	1.6 1.9 2.1 2.3	0.49 0.50 0.52 0.49	0.57 0.58 0.60 0.57
2.5 LA	30 40 50 60	27' 30' 33' 35'	2.1 2.5 2.8 3.0	0.55 0.53 0.49 0.47	0.64 0.62 0.57 0.54
3.5 LA	30 40 50 60	29' 32' 35' 37'	2.8 3.1 3.5 3.8	0.64 0.58 0.55 0.53	0.74 0.67 0.64 0.62
4.5 LA	30 40 50 60	29' 32' 35' 37'	3.4 3.9 4.4 4.7	0.78 0.73 0.69 0.66	0.90 0.85 0.80 0.76

High Flow Nozzle Rack (Green - Part # 444800)

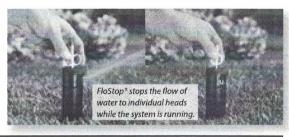
Pressure Radius Flow Prec					in/hr
Vozzle	PSI	ft.	GPM		•
10	40 50 60 70	42' 43' 45' 47'	8.4 9.5 10.5 11.4	0.92 0.99 1.00 0.99	1.06 1.14 1.15 1.15
13	40 50 60 70	43' 44' 45' 47'	10.9 12.3 13.6 14.8	1.13 1.22 1.29 1.29	1.31 1.41 1.49

	Pressure Radius		Flow	Precip in/hr	
Vozzle	PSI	ft.	GPM		A
6.0 LA	30 40 50 60	31' 35' 37' 39'	4.2 5.0 5.8 6.3	0.84 0.79 0.82 0.80	0.97 0.91 0.9 4 0.92
8.0 LA	40 50 60 70	37' 39' 41' 41'	6.7 7.7 8.5 9.2	0.94 0.97 0.97 1.05	1.09 1.13 1.12

Short Radius Nozzle Rack (Black - Part # 466100)

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
.50 SR	30 40 50 60	17' 17' 18' 19'	0.36 0.43 0.50 0.57	0.24 0.29 0.30 0.30	0.28 0.33 0.34 0.35
1.0 SR	30 40 50 60	17' 17' 18' 19'	0.78 0.90 1.0 1.1	0.52 0.60 0.59 0.59	0.60 0.69 0.69 0.68
2.0 SR	30 40 50 60	17' 17' 18' 19'	1.4 1.7 2.0 2.2	0.93 1.13 1.19 1.17	1.08 1.31 1.37 1.35

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip	in/hr
.75 SR	30 40 50 60	23' 24' 25' 26'	0.58 0.68 0.75 0.83	0.21 0.23 0.23 0.24	0.24 0.26 0.27 0.27
1.5 SR	30 40 50 60	23' 24' 25' 26'	1.1 1.3 1.5 1.6	0.40 0.43 0.46 0.46	0.46 0.50 0.53 0.53
3.0 SR	30 40 50 60	23' 24' 25' 26'	2.5 2.7 3.0 3.1	0.91 0.90 0.92 0.88	1.05 1.04 1.07 1.02



SPECIFICATION GUIDE

EXAMPLE: <u>I-20</u> - <u>ADS</u> - <u>3.0</u>

MODEL I-10 = Shrub	FEATURES ADV, 36V, ARV, 3RV
I-20 = 4" Pop-up	ADV, 36V, ADS, 36S, ARV, 3RV, ARS, 3RS, ADJ, 360
I-20-6P = 6" Pop-up	ADV, 36V, ADS, 36S, ARV, 3RV, ARS, 3RS
I-20-HP = 12* Pop-up	ADV, 36V, ARV, 3RV

OPTIONS
XX = Complete Set of Nozzles

1.0 - 8.0 = Factory-Installed Standard Nozzles

2.0 LA - 4.5 LA = Factory-Installed Low Angle Nozzles

KEY TO FEATURES:

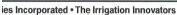
ADJ = Adjustable Arc without Check Valve

Stephon Adusta pot hijo nek Valve

Check Valve c, Stainless Steel Riser, with Check Valve inless Steel Riser, with Check Valve

ARV = Adjustable Arc, Reclaimed Water, with Check Valve 3RV = Full-Circle, Reclaimed Water, with Check Valve ARS = Adjustable Arc, Reclaimed Water, Stainless Steel Riser, with Check Valve

3RS = Full-Circle, Reclaimed Water, Stainless Steel Riser, with Check Valve



Ritzen, Brenda

From: Ritzen, Brenda

Sent: Wednesday, May 8, 2019 3:56 PM

To: 'Jeffrey B' **Subject:** Permit 108923

Attachments: Pages from 108923.pdf

Jeff,

I received the revised planning materials with the requested address correction today. Before I can issue the Permit to Constitute the attached permit application and maintenance contract must be revised to reflect the correct address of 155 Barrett View.

Thank you,

Brenda Ritzen, OS0007722 Environmental Health Coordinator Comal County Engineers Office 195 David Jonas Drive New Braunfels, Texas 78132 830-608-2090 www.cceo.org

* * * COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *

APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN ON-SITE SET ACTUAL NO LICENSE TO OPERATE

Date <u>2/13/2019</u>		VOID		Permit # 168	123
Owner Name	Lisa & Jeffrey Barrett	Ag	ent Name		
Mailing Address	317 Chama Trace	Ag			
City, State, Zip	Dripping Springs, TX 78620				
Phone #	512-749-4677		one#		
Email	jeffandlisa.barrett@gmail.com	Em	nail		
All corres	spondence should be sent to:	Owner Agent	☐ Both	Method: Mail	☐ Email
Subdivision Nar	me Forest View North 2		Jnit	Lot 147	Block
Acreage/Legal	6.2 acres				
Street Name/Ad	idress 216B Carmel Dr		City Blanco	Z	ip <u>78606</u>
Type of Develo	pment:				
Single Far	mily Residential				
Type of Cor	nstruction (House, Mobile, RV, I	Etc.) Mobile Home			DECEMEN
Number of	Bedrooms 3	_			RECEIVED
Indicate Sq	Ft of Living Area 1120	-			MAR 28 2019
☐ Commerci	al or Institutional Facility				
_	erials must show adequate land are	ea for doubling the require	ed land needed for tr		UNTY ENGINEER
	cility				
	ctories, Churches, Schools, Par		per Of Occupants		
	s, Lounges, Theaters - Indicate				
	l, Hospital, Nursing Home - Indi				
	er/RV Parks - Indicate Number				
Miscellaneo				11	
					-
Estimated Co	est of Construction: \$	(Structure O	nly)		
Is any portion	of the proposed OSSF located	in the United States Ar	my Corps of Engir	neers (USACE) flowag	ge easement?
☐ Yes ⊠	No (If yes, owner must provide app	proval from USACE for propo	sed OSSF improveme	nts within the USACE flow	age easement)
Source of Wate	r Public Private Well				
	ng Devices Being Utilized Within	the Residence? 🗵	Yes No		
	oplication, I certify that: application and all additional inform	ation submitted does not	contain any false inf	ormation and does not o	conceal any material
	hereby given to the permitting auth		nts to enter upon the	above described prope	rty for the purpose of
- I understand tha	ion and inspection of private sewag at a permit of authorization to const ounty Flood Damage Prevention O	ruct will not be issued unti	I the Floodplain Adm	ninistrator has performe	d the reviews required
	onsent to the online posting/public r		ess associated with t	his permit application, a	s applicable.
Lon	2125		2-13-1	9	
Signature	owner		Date		Page 1 of 2

WASTEWATER TRE MONITORING AGREEMENT Regulatory Authority ense Number Block Creek Aerobic Services, LLC Site Address 216B 444 A Old Hwy #9 Comfort, TX 78013 City Blanco Zip 78606 hama Trace Mailing Address 317 C Off. (830) 995-3189 Fax. (830) 995-4051 County Map# Phone 512-743-46 berrett@amail.com I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between

I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between

(hereinafter referred to as "Customer") and Block Creek Aerobic Services CEIVED

LLC. By this agreement, Block Creek Aerobic Services, LLC and its employees (hereinafter inclusively referred to as "Contractor") agree to render services at the site address stated above, as described herein, and the Customer agrees to fulfill his/her/their responsibilities, as described herein.

MAR 2 8 2019

II. Effective Date:

This Agreement commences on _______ and ends on _______ COUNTY ENGINEER for a total of two (2) years (initial agreement) or one (1) year (thereafter). If this is an initial agreement (new installation), the Customer shall notify the Contractor within two (2) business days of the system's first use to establish the date of commencement. If no notification is received by Contractor within ninety (90) days after completion of installation or where county authority mandates, the date of commencement will be the date the "License to operate" (Notice of Approval) was issued by the permitting authority. This agreement may or may not commence at the same time as any warranty period of installed equipment, but in no case shall it extend the specified warranty.

III. Termination of Agreement:

This Agreement may be terminated by either party for any reason, including for example, substantial failure of either party to perform in accordance with the terms of this Agreement, without fault or liability of the terminating party. The terminating party must provide written notice to the non-terminating party thirty (30) days prior to the termination of this Agreement. If this Agreement is terminated, Contractor will be paid at the rate of \$75.00 per hour for any work performed and for which compensation has not been received. After the deduction of all outstanding charges, any remaining monies from prepayment for services will be refunded to customer within thirty (30) days of termination of this Agreement. Either party terminating this Agreement for any reason, including non-renewal, shall notify in writing the equipment manufacturer and the appropriate regulatory agency a minimum of thirty (30) days prior to the date of such termination. Nonpayment of any kind shall be considered breach of contract and a termination of contract.

IV. Services:

Contractor will:

a. Inspect and perform routine upker recommended by the treatment system manufavisits to site per year. The list of items checked Aeration including compressor and diffusers, and anything else required as per the manufacturer.



e Facility (hereinafter referred to as OSSF) as tate and/or local regulation, for a total of three the: control panel, Electrical circuits, timer, s safety pans, pump, compressor, sludge levels,

b. Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.

- c. Repair or replace, if Contractor has the necessary materials at site, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and the service(s) cost less than \$100.00, Customer hereby authorizes Contractor to perform the service(s) and bill Customer for said service(s). When service costs are greater than \$100.00, or if contractor does not have the necessary supplies at the site, Contractor will notify Customer of the required service(s) and the associated cost(s). Customer must notify Contractor of arrangements to affect repair of system with in two (2) business days after said notification.
- d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).

e. Forward copies of this Agreement and all reports to the regulatory agency and the Customer.

f. Visit site in response to Customer's request for unscheduled services within forty-eight (48) hours of the date of notification (weekends and holidays excluded) of said request. Unless otherwise covered by warranty, costs for such unscheduled responses will be billed to Customer.

V. Disinfection:

copyright all rights reserved

From: Ritzen, Brenda

Sent: Tuesday, May 7, 2019 2:15 PM

To: 'Jeffrey B' **Subject:** Permit 108923

Attachments: Page from 108923.pdf

Re: 155 Barrett View, Forest View North Unit 2 Lot 147

Application for Permit for Authorization to Construct an On-Site Sewage Facility

Jeff,

The following information is needed:

- 1. Revise the address on the attached permit application to match the newly assigned address.
- 2. The designer must show the test hole locations on the design.
- 3. The designer must revise the planning materials to reflect the newly assigned address.
- 4. Revise as needed and resubmit.

Thank you,

Brenda Ritzen, OS0007722 Environmental Health Coordinator Comal County Engineers Office 195 David Jonas Drive New Braunfels, Texas 78132 830-608-2090 www.cceo.org

From: Jeffrey B <jeffandlisa.barrett@gmail.com>

Sent: Tuesday, May 7, 2019 12:52 PM **To:** Ritzen, Brenda rabbjr@co.comal.tx.us

Subject: Update on Address change for 216 Carmel Dr Blanco

Brenda,

We are checking in to see if you have received anything back from USPS on our address?

Jeff and Lisa Barrett

216 Carmel Dr

Blanco

Sincerely,

From: Sent: To: Subject: Attachments:	Ritzen, Brenda Tuesday, April 9, 2019 4:07 PM 'Jeffrey B' RE: FW: OSSF - 108923 & 108924 Page from 108923.pdf
Lisa,	
	ermit to Construct which would require the addresses be validated prior to the issuance vised item #2 on the attached request must be completed before the Permit to be issued.
Thank you,	
Brenda Ritzen, OS0007722 Environmental Health Coordinate Comal County Engineers Office 195 David Jonas Drive New Braunfels, Texas 78132 830-608-2090 www.cceo.org	or
From: Jeffrey B < jeffandlisa.barre Sent: Friday, April 5, 2019 12:37 I To: Ritzen, Brenda < rabbjr@co.co Cc: Braun, Holly < braunh@co.com Subject: Re: FW: OSSF - 108923 &	PM constant of the property of
	t the permit applications for the septic systems? If so, is there an alternative ermit process and not delay the construction of the 2 septic systems?
Thanks, Lisa	
On Fri, Apr 5, 2019 at 8:48 AM	M Braun, Holly < braunh@co.comal.tx.us > wrote:
Lisa,	
The United States Postal Service	e review can take up to 4-6 weeks, we will keep you informed during the process.

From: Ritzen, Brenda

Sent: Wednesday, April 3, 2019 1:10 PM **To:** 'jeffandlisa.barrett@gmail.com'

Subject: Permit 108923

Attachments: Request_For_Naming_A_Private_Driveway.pdf

Re: Forest View North Unit 2 Lot 147

Application for Permit for Authorization to Construct an On-Site Sewage Facility

Lisa & Jeffrey,

The following information is needed before I can continue processing the referenced permit submittal:

- 1. The address indicated on the permit application is not valid. I have attached an address request form. This form must be completed and returned. Please contact Ms. Holly Braun, Address Coordinator, at 830-608-2090 with any questions pertaining to addressing.
- 2. The designer must indicate the location of the test holes on the design.
- 3. Revise as needed and resubmit.

Thank you,

Brenda Ritzen, OS0007722 Environmental Health Coordinator Comal County Engineers Office 195 David Jonas Drive New Braunfels, Texas 78132 830-608-2090 www.cceo.org

From: Braun, Holly

Sent: Friday, March 29, 2019 9:05 AM **To:** Ritzen, Brenda; Hernandez, Sandra

Subject: OSSF - 108923 & 108924

Attachments: Request_For_Naming_A_Private_Driveway.pdf

Brenda, Sandra,

The address 216B & 216C Carmel Dr referenced on OSSF Permit# 108923 & 108924 are not valid addresses; alphanumeric primary addresses are not assigned within Comal County. Comal County requires a shared driveway serving multiple addressed structures be named by the property owner(s) as to create a named private driveway. The existing address 216 Carmel Dr would require a change of address to reflect the approved private driveway.

To move forward with naming the shared private driveway the property owners must complete the attached form. When the form is returned our office will review the proposed road names and forward to Bexar Metro 9-1-1 and the United States Postal Service for approval. The proposed road name is then submitted to the Comal County Commissioners Court for final approval. After the road has been approved the property owners will receive an approval letter with new address assignments and the Comal County Road Department will install a road name sign at the juncture of the driveway.

Should you have any questions or require additional information, please contact our office at any time.

Sincerely,



Holly Braun
Address Coordinator
Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132
O: 830-608-2090 | F: 830-643-3810
www.cceo.org



Southwest Septic Design

On-Site Sewage Facility Application and Design

Prepared For:

Lisa & Jeffrey Barrett 216B Carmel Drive Blanco, Texas

Design 2002519

VOID

Prepared By:

Stephen F. Jetton _______ Registered Professional Sanitarian

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Southwest Septic Design

2573 Deer Stand Loop San Marcos, Texas 78666 Hays County

Fax (512) 392-5645 Mobile (512) 757-1259

Design Report
On-Site Sewage facility
Aerobic Wastewater Treatment System
Utilizing Surface Spray Application

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OWNER/SITE LOCATION:

Lisa & Jeffrey Barrett 216B Carmel Drive Lot 147, Forrest View North 2 Blanco, Texas

SITE DESCRIPTION & EVALUATION:

A site evaluation indicated class III soils (see attached soil evaluation report). No evidence of shallow groundwater was noted. This property is not within the Edwards Aquifer Recharge Zone, and no recharge features are located within 150 feet of the proposed system. *All portions of this proposed OSSF will maintain at least a 10' separation from all water lines*. According to the Federal Emergency Management Agency Flood Insurance Rate Map, this tract is not within zone A, 100-year Floodplain (see attached site plan). Minimum separation distances as stated in §285 TCEQ, On-Site Sewage Facilities, must be maintained.

WASTEWATER DESIGN FLOW:

This design is for a 1120 sq. ft., 3-bedroom single-family residence utilizing low-flow fixtures. This site is serviced by a private water well. The proposed OSSF will be designed to accommodate **240 gallons per day**, as per TCEQ, On Site Sewage Facilities effective 12-27-2012.

Please Note that this permit will not be valid if final heated square footage exceeds 2499 sq. ft., and/or 3 bedrooms.

AEROBIC TREATMENT SYSTEM DESCRIPTION:

This residence will utilize a Nuwater Aerobic Treatment Plant, Model B-550-PC-400P. A 353-gallon pretreatment/trash tank will precede the 600-gallon per day aerobic treatment tank. Effluent from the aeration tank will flow through a liquid chlorinator (Model NG 300V 200) to a 768-gallon pump tank. The pump tank serves as a chlorine contact chamber and a storage tank prior to the treated/chlorinated effluent being discharged to sprinkler heads. The disposal area will consist of 2-25ft. 360° radius patterns. The system is considered a "package system", and will be installed according to manufacturer's instructions.





Design Specification:

Size of Residence	Primary Living Area	1120ft ²
Number of Bedrooms		3
Average Expected Flow		240 GPD
Application Rate	0.064 Gal./ft²/Day	0.064
Minimum Application Area	(GPD)/(0.064 Gal./ft²/Day)	3750.00 ft ²
Actual Application Area	3.14(r²) x number of heads	3925.00 ft ²

System Components:

Trash Tank	353 gallon one-compartment
Aeration Tank	600 gallon per day
Pump Tank	768 gallon

Pump Tank:

gallons.

Pump Tank gallons per inch: 14.49"

Reserve Capacity: 53" usable depth (53

Operating Capacity: 14.49° x 17° = 246.33 operating gallons.

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68.00 - 449.19 = 318.8 reserve

Pump off	13" Above tank floor	188.37 Gallons	
Pump on	14" Above tank floor	202.86 Gallons	
Alarm on	31" Above tank floor	449.19 Gallons	

Combined capacity of pretreatment and aeration tank is 953-gallons. A 768-gallon, single-compartment pump tank allows for a one-third days flow above the alarm-on level.

Pump and Sprinkler Head Requirements:

Pump: Franklin C1 Series Pump, Model 20C1-05P4-2W115 1/2 H.P.

Sprinkler Head: Hunter I20-3RV-2.0LA (equipped with anti-siphon nozzles and purple top).

Nozzle #: 3.0 LA (Low angle trajectory, 11 degrees), operating at 25 psi, 25ft. radius and 2.5 GPM flow per sprinkler.

Dosing:

Application Flow Rate 2.5 gpm/head x 2 heads = 5.0

Application Time: 2 doses @ 120 gal/dose / 5.0 gpm = \sim 24 min/dose



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Head Requirements:

Elevation head: 3 (assumed elevation at top of pump 1185 and highest spray head at 1188)

Pressure head: 25 psi x 2.31 ft/psi = 57.75 ft

Friction head: 1" Sch. 40 PVC @ $5.0 \text{ gpm} = 2.13 \text{ ft.} (85 \times 2.13/100 \times 1.2) = 2.17$

TDH = 3 ft. + 57.75 ft. + 2.17 ft = 62.92 (within pump curve).

A commercial timer must be set to provide two doses a day, one at 1 a.m. and the other at 4 a.m. An unthreaded sampling valve must also be provided. Under the Texas Administrative Code, §285 On-Site Sewage Facilities, this system must be installed with a night timer, set to spray between the hours of 1 am and 5 am.

Alarm System:

An audio/visual high water alarm will be installed on this system. NuWater control panel (SPI-BIO Model 50B138-AAV-PT) with Timed Control with 24hr timer (Grasslin FM/1 Pin Timer) or equal. The alarm/light will be installed in a high visible location close to the pump tank.

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Optional Components:

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- 40 PSI Pressure Regulator will be used to maintain the 40 PSI to the sprinkler heads. The installer will consult me or G.P. Equipment when purchasing this device. The pressure reducer will be placed in-line between the pump and the spray heads. Additionally this particular spray head is adjustable to help achieve the required radius.
- Pressure Gauge of not less than 45PSI will be installed to regulate flow to the spray field.

Installation Notes:

- Refer to site plan for component placement and follow manufacturer's instructions for installation of treatment plant and aerator.
- All materials and construction methods are required to conform to the standards for Private Sewage Facility's set forth in the Texas Administrative Code, δ285 On-Site Sewage Facilities.
- The installer must have a current and valid Texas installer certificate, and is required to have at the minimum an Installer II certification.
- The installer must notify designer and regulatory authority at least 48 hours in advance to schedule required inspections to ensure that the system is installed in accordance with the approved plans and specifications.
- The installer may not alter these plans without the approval of the designer.
- Diversion berms will be place when needed to protect irrigation area from excessive runoff.
- All electrical installation must be in compliance with applicable electric codes.
- All outside electrical components must be placed in electrical conduit.
- It is the responsibility of the installer to maintain the minimum setback requirements as stated in §285 for On-Site Sewage Facilities.

Tank Notes:

• The bottom of the excavation for the tanks shall be level and free of large rocks and deb

- All tanks are to be set level on a layer, with a miximum thickness of 4 inches, of sand, sandy loam, clay loam, or pea gravel.
- Tank excavations must be backfilled with soil or pea gravel that is free of rock larger than ½ inch in diameter. Class IV soils and gravel larger than ½ inch in diameter are not acceptable for use as backfill material. If the top of a septic tank extends above the ground surface, soil may be mounded over the tank to maintain slope to the drain field.
- Risers are required over all tank openings and must extend to the ground surface.
- Risers shall be permanently fastened to the tank lid.
- The riser lid shall screw down and have a lock or weigh 65lbs.
- A secondary plug, cap, netting, etc. shall be provided below the riser lid.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, or to prevent the infiltration of water.
- Tanks must be filled with water for 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8" per foot from house to tank.
- PVC pipe from house to tank must be at least Sch.40 or SDR 26.

Irrigation & Landscaping Notes:

- Irrigation lines shall be 1" Sch.40 PVC. Sleeve any pipe that crosses under any roads or driveways with Sch.40 PVC.
- Purple Pipe must be used for all irrigation lines.
- Supply lines must be buried at least 6" below finished grade.
- If irrigation area does not have established vegetation, a mixture of winter rye and Bermuda grasses will be seeded to establish season (vegetation.
- The installer shall notify property owner provided any trees that may obstruct the operation of the irrigation system.
- All exposed surface rock must be covered with at teast 4" of suitable soil
- Vegetation must be established before system is in use.

Additional Notes:

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarms shall be audio/visual and mounted in a place that can be easily seen and heard when the alarms are activated.
- A hose bib must be installed in pump tank at tank inspection port.
- The chlorinator must be constructed to allow a chlorine residual of 1.0 mg/1 in the pump tank for the period of time between scheduled inspections.
- The disinfected effluent must obey the standards as stated in §285, TCEQ, On-Site Sewage Facilities. Approved disinfections methods using chlorinated tablets, must use calcium hypochlorite that is properly labeled for wastewater disinfections.

Maintenance Requirements:

 The applicant must furnish to the regulatory authority a valid maintenance contract with a certified maintenance company before a permit will be issued.

• The maintenance company will verify that the system is operating properly and that the provide on-going maintenance of the installation.

• The initial contract will be a minimum of 2 years.



- A maintenance contract will authorize the Maintenance Company to maintain and repair the system as needed.
- The owner must continuously maintain a signed written contract with a valid maintenance company and shall submit a copy of the contract to the permitting authority at least 30 days prior to the date service will cease.

Affidavit:

- The applicant must file a certified copy of an affidavit at the County clerk's office and filed in reference to the real property deed on which the surface application system is the be installed.
- The affidavit will state that the property shall not be transferred to a new owner without:
 - (1) The new owner being advised that the property contains a surface application system for wastewater disposal;
 - (2) The permit issued to the previous owner of the property being transferred to the new owner in accordance with §285.20(5) of the TCEQ OSSF Rules, i.e.; the permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon legal sale of the OSSF. The transfer of an OSSF permit under this section shall occur upon actual transfer of the property on which the OSSF is located unless the ownership of the OSSF had been severed from the property.
 - (3) The new owners submitting a valid maintenance contract to the permitting authority.

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Operation and Management Notes:

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- The OSSF should not be treated as a normal city sewer.
- Water conservation practices should be used at all times. Consult your local authorities for more information.
- Run the dishwasher with a full load v
- Avoid running water continuously wlutensils.

th, washing hands, or cleaning food and

- Repair any water leaks immediately, such as running to lets or leaky faucets.
- The owner is responsible for cleaning and pumping the septic tank, typically every 2 to 3 years depending on system usage.
- Do not use the toilet to dispose of tissue, feminine hygiene products, trash, cigarettes, etc.
- It is recommended that you do not use the garbage disposal and/ or garbage grinders in the facility serviced by this system.
- Household chemicals should be used in moderation.
- According to §285, no water softener will be allowed to enter the OSSF.
- Chemical additives or the so-called enzymes should not be used during the operation of this system. Some of these additives may even be harmful to the facilities operation.
- Do not build driveways, storage buildings, decks, or other structures over the tank or disposal area.
- The OSSF must be protected from coming in contact with vehicular traffic.
- A strong vegetative cover is essential for the proper operation of this system. The property
 owner is solely responsible for maintaining this vegetation. The irrigation area should be
 groomed by mowing on a regular basis.
- If you notice a problem with the spray patterns, or any of the alarms are activated, conta your maintenance provider immediately.
- Never place a greater wastewater load on your system than that prescribed by the design of the system (240 gallons per day).



*The proposed system has been designed generally following the minimum requirements under TCEQ §285 On Site Sewage Facilities. The site evaluation and subsequent design are based on technical information currently available. The performance of the OSSF is not, and cannot be guaranteed even though all provisions of the Standards have been complied with. If failure should occur, additions to the OSSF may have to be made. In extreme cases a substitute system may be required. By accepting this design, the homeowner/contractor understands the aforementioned conditions, and agrees that the designer will not be liable for any more than the agreed upon design

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OSSF SOIL EVALUATION FORM

Owner's Name: Lisa & Jeffrey Bar

Physical Address: 216B Carmel Drive

Legal Description: Lot 147, Forest View North 2 - 6.2 acres

Date Performed: 2-27-19

Proposed Excavation Depth: 6"

Requirements:

At least two soil evaluations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing.

For subsurface disposal, soil evaluations must be performed to a depth of at least 2-ft. below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.

Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depths.

Soil Boring Number: 1

Depth (ft.)	Textural Class	Structure (For class III – blocky, platy or massive)	Drainage (Mottles, Water Table)	Restrictive Horizon	Observations
0 -6"	III	< 30 % gravel	No signs of Mottling	6"	Class III. No shallow groundwater noted. Not suitable for standard disposal. Aerobic
4					surface irrigation recommended.

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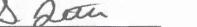
Depth (ft.)	Textural Class	Structure (For class III – blocky, platy or massive)	Orainage (Mottles, Water Table)	Restrictive Horizon	Observations	OUNTY ENGINE
0-6"	III	< 30 % gravel	No signs of Mottling	6"	Class III. No shallow groundwater noted. Not suitable for standard disposal. Aerobic surface irrigation recommended.	

Features of Site Area

Presence of 100 year flood zone	No
Presence of adjacent ponds, streams, water impoundment's	No
Existing or proposed water well in nearby area	Yes
Organized sewage available to lot or tract	No
Recharge features within 150 feet	No

I certify that the above statements are true and are based on my own field observations.

Signature of Site evaluator



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216B Carn VOID

Blanco, VOID

Lot 147 Forest View North Unit No. 2 Comal County, Texas

A - 3-Bedroom Single Family Residence (1120 sq. ft.). B - NuWater Model B-550 Aerobic Treatment Unit.

C - Hunter 20 Ultra, 25' Radius, Sprinkler Head Nozzle 3.0 - 25 PSI

C/O - Two-Way Cleanout

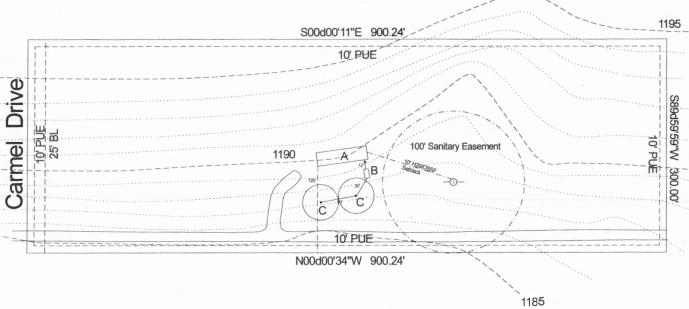
Provide Two-Way Cleanout from House to Tank. 3" or 4" Sch. 40 between House and Tank. Must maintain a minimum of 1/8" per foot of fall between house and tank.

Supply Line: 1" Sch. 40 PVC Purple Pipe

Maintain 10' from all Property Lines. Maintain 10' from all Potable Water Lines.

- *Refer to Tank Detail and Design Notes for more Information.
- *Plans may vary Slightly based on Conditions Encountered in the Field.
- *Trim Trees as Neccessary in Application Area. Trees must maintain at least 10' from Sprinkler Head.
- *All Separation and Setback Requirements as Stated in Chapter 285, TCEQ, On-Site Sewage Facilities, must be maintained.

This is not intended to be used as an official survey. All structures and Contour locations are approximate.



*Flood Plain Note: This the Regulated Flood Plain Dated: 9/2/2005

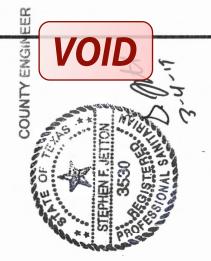


N

Scale: 1'' = 100'

Assembly Details

OSSF



See Note 9.

GENERAL NOTES:

- Plant structure material to be precast concrete and steel.
- 2. Maximum burial depth is 30" from slab top to grade.
- Weight = 14,900 lbs.
- Treatment capacity is 600 GPD. Pump compartment set-up for a 360 GPD Flow Rate (4 beedroom, < 4,000 sq/ft living aera). Please specify for additional set-up requirements. BOD Loading = 1.62 lbs. per day.
- Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
- Bio-Robix B-550 Control Center w/ Timer for night spray application. Optional Micro Dose (min/sec)timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle.
- 20" Ø acess riser w/ lid (Typical 4). Optional extension risers available.
- 20 GPM 1/2 HP, high head effluent pump.
- HIBLOW Air Compressor w/ concrete housing.
- 10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
- 1" Sch. 40 PVC pipe to distribution system provided by contractor.
- 12. 4" min. compacted sand or gravel pad by Contractor

See Note 9. See Note 5. See Note 7. See Note 10. See Note 11. See Note 11. See Note 3. See Note 11. See Note 5. See Note 11. See Note 8.

DIMENSIONS:

Outside Height: 67" Outside Width: 63" Outside Length: 164"

MINIMUM EXCAVATION DIMENSIONS:

Width: 76" Length: 176"

See Note 12.

NuWater B-550 (600 GPD) Aerobic Treatment Plant (Assembled)

Model: B-550-PC-400PT

March, 2012 - Rev 1 By: A.S.

Scale:

All Dimensions subject to allowable specification tolerances.

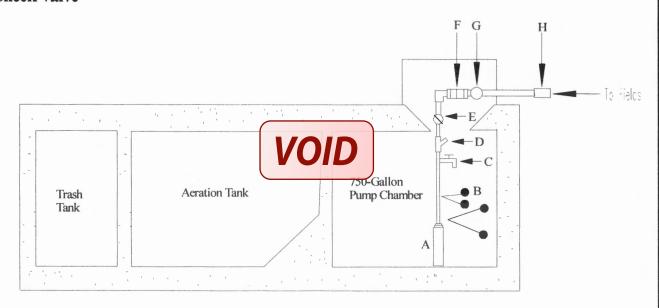
Dwg. #: ADV-B550-3



Advantage Wastewater Solutions IIc. 444 A Old Hwy No 9 Comfort, TX 78013 830-995-3189 fax 830-995-4051

Typical P Cross Section

- A-Franklin C1 Series Pump Model 20C1-05PA-2W115 1/2 HP
- **B Wide Angle Mercury Float Switch**
- C Sampling Port
- D 150 Mesh Filter (Part #12140032)
- **E Pressure Regulator**
- F Quick Disconnect Union
- G-40 PSI Pressure Guage
- H Check Valve



NuWater B-550 (600 GPD) Aerobic Treatment Plant



Not to Scale

PROPLUS GEAR DRIVE VOID



ER SETTING INSTRUCTIONS

SPRINKLER INSTALLATION

TIMESTALL AND BURY

Do not use pipe dope. Thread the sprinkler on the pipe. Bury the sprinkler flush to grade. NOTE: Gear driven sprinklers and pop-up sprays should not be installed on the same watering zone.

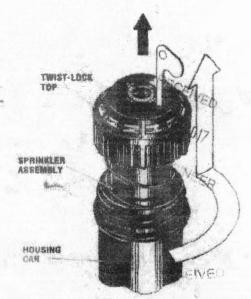
2 INSPECTING THE FILTER

Unscrew the top and lift the complete sprinkler assembly out of the housing can. The filter is located on the bottom of the sprinkler assembly and can easily be pulled out, cleaned and re-installed.

WINTEREZATION TIPS

When using an air compressor to remove water from the system please note the following:

- 1) Do not exceed 30 PSI.
- 2) Always introduce air into the system gradually to avoid air pressure surges. Sudden release of compressed air into the sprinkter can cause damage.
- 3) Each zone should run no longer than 1 minute on air. Sprinklers turn 10 to 12 times faster on air than on water. Over spinning rotors on air can cause damage to the internal components.



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STANDARD NOZZLE PERFORMANCE

						Elang .		
Nozzle	Pressure FSI	Radian R.	Flow GPM	Pres	Sure Sure	Hadisə Meters	Fli	API/H
#2.5 Factory Installed Nozzle	30 40 80 80	38' 39' 40' 41'	2.5 2.8 3.2 3.6	206 275 345 413	2.04 2.72 3.40 4.08	11.6 11.9 12.2 12.5	9.48 10.80 12.11 13.25	57 84 .73 .79
¥0.5	30 40 50 80	28' 29' 29' 30'	0.5 0.7 0.7 0.8	206 275 345 413	2.0 3.0 3.5 4.0	8.5 8.8 8.8 9.1	1.89 2.27 2.65 3.03	.11 .14 .16 .18
10.75	30 40 50 00	20' 30' 31' 32'	0.7 0.8 0.8 1.0	206 275 345 413	2.0 3.0 3.5 4.0	8.8 9.1 9.4 9.8	2.65 3.03 3.41 3.79	18 18 20 23
ø	30 40 50 60	32 33 34	1.3 1.8 1.8 1.8	208 275 345 413	2.0 3.0 3.5 4.0	8.8 10.4 10.7	4.92 5.68 6.05 6.81	.18 .18 .20 .23
n	30 40 50 60	37° 40° 42° 43°	2.4 2.5 3.0 3.3	206 275 345 413	2.0 3.0 3.5 4.0	11.3 12.2 12.8 13.1	9.08 9.46 11.35 12.49	.54 .58 .68 .75
N	30 40 50 80	36' 29' 41' 42'	99 42 74 50	206 275 345 413	2.0 3.0 3.3 4.0	11.8 11.8 12.5 12.8	13.63 15.89 17.41 18.92	.75 .95 1.04 1.13
94	80 40 50 60	43' 44' 46' 49'	5.1 5.6 5.9	208 275 345 413	2.6 3.0 3.5 4.6	13.1 13.4 14.0	16.85 19.30 21.19 22.33	1.16 1.27 1.83
**	40 20 30	43 48 48 49	5.3 6.0 6.3 6.7	206 275 845 413	3.0 3.5 4.0 5.0	10.0 10.0 10.0 10.0	22.83 22.71 23.85 25.35	1.33 1.36 1.43 1.52
		42' 45' 49'	8.5 9.5 10.0	206 275 345	3.5 4.0	12.8 18.7 14.8	30.28 32.12 35.05 97.85	1.87 1.92 2.15

LOW ANGLE NOZZLE PERFORMANIE NEER

		8.				METRIC		
Nozzla	Prossura PSI	Paudius Pi	Flow	Pyp: KPa	esare Bars	Andina Maters	LAN	APRIL
71	30 40 50 60	22' 24' 26' 28'	1.2 1.7 1.8 2.0	207 275 344 413	2.04 2.72 3.40 4.08	8.71 7.32 7.92 8.53	5.40 5.40 8.80 7.56	30
# 3	30 40 50 60	29' 32' 35' 37'	3.0 3.1 3.5 3.8	207 275 344 413	2.04 2.72 3.40 4.08	8.84 9.75 10.67 11.58	11.34 11.72 13.23 14.36	## 77 90 #7
#4	30 40 50 80		3.4 3.9 4.4 4.7	207 278 344 413	2.04 2.72 3.40 4.00	9.45 10.35 11.28 11.58	12.85 14.74 16.63 17.77	.78 .80 1.00 1.07
6	40 50 60 70		8.5 23 8.0 8.6	275 344 413 482	2.72 3.40 4.08 4.76	11.58 12.19 12.80 13.41	24.57 27.59 30.24 32.51	1.68 1.76 1.82 1.95
					real trees	San Trans		

Data represents test results in zero spind for ProPles. Adjust for local conditions. Rugius may be reduced with norse intention screw,



K-RAIN MANUFACTURING CORP.

1640 Australian Avenue Aiviera Beach, FL 33404 USA PH: 1-561-844-1002 / 1-800-735-7246 FAX: 1-561-842-9493 WEB: http://www.krain.com

C K-RASH Manufacturing Corp. 1-58921

VOID



Designed for use in gray water / filtered effluent service applications, the C1 Series distern pump provides high performance and long life in less than ideal water conditions. The C1 Series pump is able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components.

The pump's unique bottom suction design allows for maximum fluid drawdown without compromising durability or overall life, and it does not require the use of a flow induction sleeve. Intended specifically for use in a distern or tank, C1 Series pumps are suitable for use in agricultural, residential, and commercial installations.

STEPHEN F. JETTON
3530
3530
SISTERED
SONAL SAND

CT SERIES

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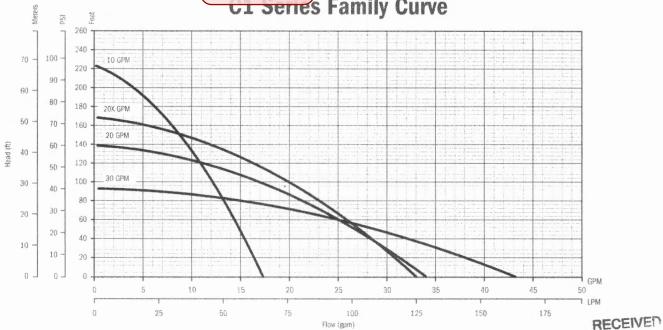
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Franklin Electric

franklinwater.com





FEATURES

Supplied with a removable 5" base for secure and reliable mounting

Bottom suction design

Robust thermoplastic discharge head design resists breakage during installation and operat

Single shell housing design provides a compact unit while ensuring cool and quiet operation

Hydraulic components molded from high quality engineered thermoplastics

Optimized hydraulic design allows for increased performance and decreased power usage

All metal components are made of high grade stainless steel for corrosion resistance

Available with a high quality 115 V or 230 V, ½ hp motor

Fluid flows of 10, 20, and 30 gpm, with a max shut-off pressure of over 100 psi

Heavy duty 600 V 10 foot SJOOW jacketed lead

APPLICATIONS

Gray water pumping

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fluent service water pumping

amation projects such as pumping from rain catchment basins

and other foundation or pond applications

Agriculture and livestock water pumping

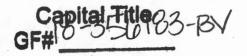


ORDERING INFORMATION

C1 Series Pumps								
GPM	HP	Volts	Stage	Model No.	Order No.	Length (in)	Weight (lbs)	
10		115	7	10C1-05P4-2W115	90301005	26	17	
10		230	7	10C1-05P4-2W230	90301010	26	17	
20		115	5	20C1-05P4-2W115	90302005	25	16	
20	1 /0	230	5	20C1-05P4-2W230	90302010	25	16	
nnv	1/2	115	6	20XC1-05P4-2W115	90302015	26	17	
20X		230	6	20XC1-05P4-2W230	90302020	26	17	
20		115	4	30C1-05P4-2W115	90303005	25	16	
30		230	4	30C1-05P4-2W230	90303010	25	16	

Note: All units have 10 foot long SJOOW leads.





Warranty Deed with Vendor's Lien

Notice of confidentiality rights: If you are a natural person, you may remove or strike any or all of the following information from any instrument that transfers an interest in real property before it is filed for record in the public records: your Social Security number or your driver's license number.

Date: May Q4, 2018

Grantor: Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas

Grantor's Mailing Address: 805 Secretariat Drive, Schertz, Texas 78108

Grantee: Lisa F. Barrett and husband, Jeffrey L. Barrett

Grantee's Mailing Address: 317 Chama Trace, Dripping Spring, Texas 78620

Consideration:

Cash and other good and valuable consideration along with a note of even date executed by Grantee and payable to the order of Lone Star Capital Bank, N.A. in the principal amount of \$60,000.00 (Sixty Thousand and 00/100 Dollars). The note is secured by a first and superior vendor's lien and superior title retained in this deed in favor of Lone Star Capital Bank, N.A. and by a first-lien deed of trust of even date from Grantee to Danny L Buck, trustee.

Property (including any improvements):

Lot 147, Forest View North Unit No. 2, an Addition in Comal County, Texas, according to the Map or Plat recorded in Volume 3, Page 72, Map and Plat Records of Comal County, Texas.

Reservations from Conveyance: None

Exceptions to Conveyance and Warranty:

This conveyance, however, is made and accepted subject to any and all restrictions, encumbrances, easements, covenants and conditions, if any, relating to the hereinabove described property as the same are filed for record in the County Clerk's Office of Comal County, Texas.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the

Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

The vendor's lien against and superior title to the Property are retained until each note described is fully paid according to its terms, at which time this deed will become absolute. The Vendor's Lien and Superior Title herein retained are hereby transferred, assigned, sold and conveyed to Lone Star Capital Bank, N.A. the payee of such Note, and the successors and assigns of such payee.

When the context requires, singular nouns and pronouns include the plural.

MAR 28 2019

EXECUTED this 24 day of May, 2018.

Challe

Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas

Bv:

Kandee Jo Walker, Independent Executor

THE STATE OF

COUNTY OF

e foregoing instrument was acknowledged before t

The foregoing instrument was acknowledged before me on the 24 day of May, 2018 by Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas.

DEANNA N. TALLEY
Notary Public, State of Texas
Comm. Expires 10-12-2019
Notary ID 10232358

AFTER RECORDING, RETURN TO:

Sin chama Track Oripping Springs, TX PREPARED IN THE LAW OFFICE OF Shaddock & Associates, P. C. 2400 N. Dallas Parkway, Ste. 560 Plano, Texas 75093 Filed and Recorded

Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
05/29/2018 09:12:15 AM
LAURA 2 Pages(s)
201806020572



-K

Phone: (830) 995-3189 Fax: (830) 995-4051

To: Lisa & Jeffrey Barrett 155 Barrett View Blanco, TX 78606

Printed:10/8/2019 Site: 155 Barrett View Blanco, TX 78606 (512) 743-4677

Inspection 1 of 6

Installed: 5/15/2019

Permit #: 108923

Agency: Comal County

County: Blanco

Mfg / Brand: Advantage Wastewater LLC - Nu Water

Disposal: Surface Application

Sub:

Treatment Type: Aerobic With Chlorine System S/N: B35556

Warranty End: 5/15/2021 GPS Coordinates - Latitude: 30.01827 Longitude: -98.30467

This counts as a type of "Scheduled Inspection"

Service Type: Scheduled Inspection

Visit Date: 10/8/2019

Time In: 1106am

Out: 1134am

Entered By: Anthony Jesus Soto

Contract Dates: 6/6/2019 - 6/6/2021

Customer ID: 6535

Scheduled Date: 10/6/2019

Method: Grab Technician: Anthony Jesus Soto Maint. Provider: Burt Seidensticker

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational Chlorine Supply: Operational

Chlorine Residual: 0.56mg/L

Sludge Levels

For Tank 1: 11" For Tank 2: 12" For Tank 3: 0"

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good Odor: Good

Alarm: Operational

PSI Pressure: 2.0

Service Completed

CFM: 2.2

- Technician Secured the Tank Lid and/or Riser prior to leaving location. Reset timer. - Cleaned compressor filter. - Secured system in the on position. 0" of scum in pretreatment. Please add bleach to reservoir.

Insp ID #:84324

Provider: Burt Seidensticker

Technician: Authory Jesus Soto

License #: MP0000002

License #: MT0001771

Anthony 80+0

Phone: (830) 995-3189

Fax: (830) 995-4051

To: Lisa & Jeffrey Barrett 155 Barrett View Blanco, TX 78606

Printed:2/10/2020 Site: 155 Barrett View Blanco, TX 78606 (512) 743-4677

Permit #: 108923

Agency: Comail County

County: Elanco

Sub:

Mfg / Branci: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic With Chlorine System S/N: B35556

Disposal: Surface Application

Customer ID: 6535

Contract Dates: 6/6/2019 - 6/6/2021

Scheduled Date: 2/6/2020

Inspection 2 of 6

Installed: 5/15/2019

Warranty End: 5/15/2021 GFS Coordinates - Latitude: 30.01827 Longitude: -98.30467

Service Type: Scheduled Inspection

Visit Date: 2/10/2020

Time In: 2:25pm

Out: 2:45 pm

This counts as a type of "Scheduled Inspection"

Entered By: Jose Luis Ramos

Method: Grab

Technician: Jose Luis Ramos Maint Provider: Rudy Carson

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational Chlorine Supply: Operational

Chlorine Residual: .87

Sludge Levels

For Tank 1: 6' For Tank 2: 0"

For Tank 3: 0"

CFM: 2.8

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good

Odor: Good

Alarm: Operational

PSI Pressure: 3.5

✓ Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. -: Scum in pretreatment is 0". Rest timer. - Cleaned compressor filter. - Secured system in the on position with a lock bolt.

Insp ID #:89652

Comments

Provider: Rudy Carson

Technikiar 1: Jose Luis Ramos

Lionse: #: MT0001770

Expires: 9/30/2022

License#: MIP0002036

Rudy Carson

Phone: (830) 995-3189

Fax: (830) 995-4051

To: Lisa & Jeffrey Barrett 155 Barrett View Blanco, TX 78606

Printed:10/1/2020 Site: 155 Barrett View Blanco, TX 78606 (512) 743-4677

Permit #: 108923

Agency: Comal County

County: Blanco

Sub:

Mfg / Brand: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic With Chlorine System S/N: B35556

Disposal: Surface Application

Customer ID: 6535

Contract Dates: 6/6/2019 - 6/6/2021

Scheduled Date: 10/6/2020

Inspection 4 of 6

Installed: 5/15/2019

Warranty End: 5/15/2021

GPS Coordinates - Latitude: 30.01827 Longitude: -98.30467

Service Type: Scheduled Inspection

Visit Date: 10/1/2020

Time In: 3:50pm

Out: 4:04pm

▼ This counts as a type of "Scheduled Inspection" Entered By: Ronnie W Krampota

Method: Grab

Technician: Ronnie W Krampota

Maint. Provider: Rudy Carson

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational Disinfection Device: Operational

Chlorine Supply: Operational Chlorine Residual: 0.40mg/L

Sludge Levels

For Tank 1: 8 For Tank 2: 12 For Tank 3: 0"

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good Odor: Good

Alarm: Operational

Comments

Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Secured system in the on position with a lock bolt -Checked sprinklers - Reset timer - - Upon arival appeared to be no chlorine in system, Added JUST enough chlorine in system to get residual, IT IS THE HOMEOWNERS RESPONSIBILITY TO KEEP CHLORINE IN THE SYSTEM CHLORINE MUST BE ADDED IMMEDIATELY. - Scum in pretreatment is trace - Please clear grass in spray field so we can inspect your sprinklers properly. Grass needs to be kept down so your sprinklers can spray correctly. Thank you

Insp ID #:99387

Provider: Rudy Carson

Technician: Ronnie W Krampota

License #: MP0002036

License #: MT0001175

Expires: 7/31/2023

Phone: (830) 995-3189

Fax: (830) 995-4051

To: Lisa & Jeffrey Barrett 155 Barrett View Blanco, TX 78606

Printed:6/30/2021 Site: 155 Barrett View Blanco, TX 78606

(512) 743-4677

Permit #: 108923

Customer ID: 6535

Agency: Comal County

Contract Dates: 6/6/2019 - 6/6/2021

Inspection 6 of 6

County: Blanco

Scheduled Date: 6/6/2021

Mfg / Brand: Advantage Wastewater LLC - Nu Water

Installed: 5/15/2019

Treatment Type: Aerobic With Chlorine System S/N: B35556

Warranty End: 5/15/2021

Disposal: Surface Application

GPS Coordinates - Latitude: 30.01827 Longitude: -98.30467

Service Type: Scheduled Inspection

✓ This counts as a type of "Scheduled Inspection" Entered By: Ronnie W Krampota

Visit Date: 6/30/2021 Time In: 3:00pm Out: 3:15pm

Sub:

Method: Grab

Technician: Ronnie W Krampota

Maint, Provider: Rudy Carson

Aerators: Operational

Sludge Levels

Filters: Operational

For Tank 1: 11

Irrigation Pumps: Operational Disinfection Device: Operational For Tank 2: 18

Chlorine Supply: Operational

For Tank 3: 0"

Chlorine Residual: 0.30mg/L

CFM: 3.0

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good Odor: Good

Alarm: Operational

PSI Pressure: 3.7

Comments

✓ Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Secured system in the on position with a lock bolt -Checked sprinklers - Reset timer - Scum in pretreatment is 1" - Cleaned compressor filter - Customer needs to add bleach

nsp ID #:11(826

Rudy Carson

License #: MT0001175

Technician: Ronnie W Krampota

Expires: 7/31/2023

License #: MP0002036

Block Creek Aerobic Services, LLC

444 A Old Hwy No 9 Comfort, TX 78013

Printed:9/20/2024

(830) 995-3189

Permit: 108923

Site: 155 Barrett View, Blanco, TX 78606

Main Phone: 5127434677 Cell Phone: 5124668850

Lisa & Jeffrey Barrett 155 Barrett View Blanco, TX 78606

Agency: Comal County

County: Blanco

System Info: MFG: Advantage Wastewater LLC Brand: Nu Water

Treatment Type: Aerobic With Chlorine

Disposal Type: Surface Application

Customer ID: 6535

Insp ID: 163658

Installed: 5/15/2019

Warranty Expiration: 5/15/2021

System S/N: <u>B35556</u>

Visit Date: 9/19/2024

Entered By: Dalton James Vann

Contract Starts: 6/6/2019

GPS Lat: 30.01827 GPS Long: -98.30467

Scheduled Date:

Time Out: 730

Contract Ends: 6/6/2021

Visit Results

Visit Details

Service Type: Service call

Entered On: 9/19/2024

Method: Grab

License #

Expires

Technician: Dalton James Vann

Provider: Rudy Carson

MT0001113

2/28/2025

MP0002036

11/30/2025

✓ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Supply: Operational Chlorine Residual: 1.6

Sludge Level Tank 1: 16"

Sludge Level Tank 2: 12" Sludge Level Tank 3: 2"

Floats: OP Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Scum in pretreatment is 4" -Cust called about yellow light. Found ripped diaphragms in compressor. Rebuilt AP60 compressor.

Provider:

Rudy Carson

Technician: Dalton James Vann

License: Number: MP0002036 Exp: 11/30/2025

License: Number: MT0001113 Exp: 2/28/2025