COMAL COUNTY

ENGINEER'S OFFICE

License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date: **03/20/2020** Permit Number: **108450**

Location Description: 2719 GLENN DR
CANYON LAKE, TX 78133

Subdivision: Astro Hills
Unit: 1
Lot: 103
Block:
Acreage:

Type of System: Aerobic
Drip Irrigation

Issued to: Jarrett & Kayla Ott

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

James F Connor L
ENVIRONMENTAL HEALTH INSPECTOR

OS0032485

ENVIRONMENTAL HEALTH COORDINATOR

OS0007722

Comal County Environmental Health
OSSF Inspection Sheet

Installer Name: Countryside OSSF Installer #: OS0002929

1st Inspection Date: 12/17/18 2nd Inspection Date: 12/16/19 3rd Inspection Date: 2/13/2020

Inspector Name: mike T. Inspector Name: mike T. Inspector Name: CONNOR

Permit#: 108450 Address: Astno Hills / 2719 Glenn Dr. 3/20/20

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	FINAL Insp.
1	**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 ok- need to fill in on side of house.	12/16/19		
2	**SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards**	✓	285.91(10) 285.30(b)(4) 285.31(d)				
3	SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)	✓	285.32(a)(1)				
4	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	✓	285.32(a)(3)				
5	SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	✓	285.32(a)(5)				
6	**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)(B) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(D) 285.32(b)(1)(E) 285.32(b)(1)(A) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(i) 285.32(b)(1)(E)(ii)(I)				
7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)				

MT- 12/17/18
site OK.

MT- 12/16/19
Tank setg Leveled only
Tanks in front of garage door.
Has 8' wide concrete walk on side of House. Need Revised Plan on tank location.

2/13/2020 JC OPERATIONAL. COVER. TANK GOOD.

Comal County Environmental Health
OSSF Inspection Sheet

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
8	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)(I) 285.32(b)(1)(E)(i) 285.32(b)(1)(D) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(i) 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	12-16-19	285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
10	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						
14	**AEROBIC TREATMENT UNIT Size Installed**			600			
15	**AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number**			Clearstream			
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo-transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

Comal County Environmental Health
OSSF Inspection Sheet

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
19	**DISPOSAL SYSTEM Drip Irrigation**	X	**285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)**	OPERATIONAL			X
20	DISPOSAL SYSTEM Soil Substitution		285.33(d)(4)				
21	**DISPOSAL SYSTEM Pumped Effluent**		**285.33(a)(4) 285.33(a)(3) 285.33(a)(1)**				
22	DISPOSAL SYSTEM Gravelless Pipe		285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
23	**DISPOSAL SYSTEM Mound**		**285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(4)**				
24	DISPOSAL SYSTEM Other (describe) (Approved Design)		285.33(d)(6) 285.33(c)(4)				
25	**DRAINFIELD Absorptive Drainline 3" PVC or 4" PVC**						
26	**DRAINFIELD Area Installed**						
27	**DRAINFIELD Level to within 1 inch per 25 feet and within 3 inches over entire excavation**		**285.33(b)(1)(A)(v)**				
28	**DRAINFIELD Excavation Width DRAINFIELD Excavation Depth DRAINFIELD Excavation Separation DRAINFIELD Depth of Porous Media DRAINFIELD Type of Porous Media**						
29	**DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place**		**285.33(b)(1)(E)**				
30	**DRAINFIELD Leaching Chambers DRAINFIELD Chambers - Open End Plates w/Splash Plate, Inspection Port & Closed End Plates in Place (per manufacturers spec.)**		**285.33(c)(2)**				
31	LOW PRESSURE DISPOSAL SYSTEM Adequate Trench Length & Width, and Adequate Separation Distance between Trenches		285.33(d)(1)(C)(i)				

Comal County Environmental Health
OSSF Inspection Sheet

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd I
32	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)(A) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
33	**AEROBIC TREATMENT UNIT Is Aerobic Unit Installed According to Approved Guidelines.**	X	**285.32(c)(1)**		X		
34	**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**	X X X X			X X X X		
35	**AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.**	X			X		
36	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						

39	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried	X					X

Comal County Environmental Health
OSSF Inspection Sheet

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	X	285.33(d)(2)(G)(iii)(II)285.33(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)				X
41	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	X	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)				X
42	APPLICATION AREA Area Installed	X					X
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						

REVISED
9:50 am, Dec 31, 2018

REVISED
8:37 am, Dec 28, 2018

Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

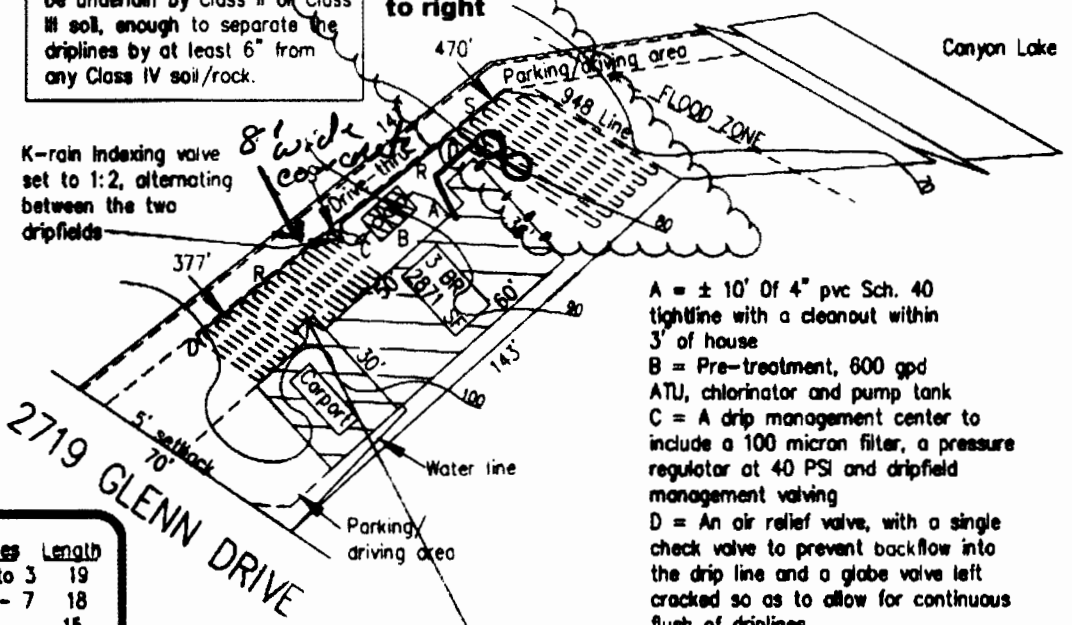
Lines	Length
1-8	44
9	40
10 - 11	39
Total:	470'

OTT RESIDENCE
25 OCTOBER 2018
Revision of 28 Dec 2018

North
1" = 40'

NOTE: The entire dripfield shall be underlain by Class II or Class III soil, enough to separate the driplines by at least 6" from any Class IV soil/rock.

Lines numbered from left to right



A = ± 10' Of 4" pvc Sch. 40 tightline with a cleanout within 3' of house
B = Pre-treatment, 600 gpd ATU, chlorinator and pump tank
C = A drip management center to include a 100 micron filter, a pressure regulator at 40 PSI and dripfield management valving
D = An air relief valve, with a single check valve to prevent backflow into the drip line and a globe valve left cracked so as to allow for continuous flush of driplines
S = 1" pvc Sch. 40 supply line
R 1" pvc Sch. 40 return line bringing un-used effluent back to the management center whic will be directed back to the pre-treatment tank of the ATU

Lines	Length
1 to 3	19
4 - 7	18
8	15
9	14
10 & 11	13
12 - 16	18
17 - 22	17
Total:	377

Lines counted from front to back, 22 lines in total.

Dripfield: Side section = 377' (alternated by a K-rain indexing valve)
Rear section = 470'
Total length = 847'

Note: The contractor may make field adjustments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

Lines numbered from left to right

Lot 103
Astro Hills
Unit 1

STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED
PROFESSIONAL SANITARIAN
RS 004

Comal County

OFFICE OF COMAL COUNTY ENGINEER

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

Permit Number: 108450

Issued This Date: 12/31/2018

This permit is hereby given to: Jarrett & Kayla Ott

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

2719 GLENN DR
CANYON LAKE, TX 78133

Subdivision: Astro Hills
Unit: 1
Lot: 103
Block:
Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Drip 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.

Comal County Environmental Health
OSSF Inspection Sheet

Installer Name:_____ OSSF Installer #:_____

1st Inspection Date: 12/17/18 2nd Inspection Date:_____ 3rd Inspection Date:_____

Inspector Name: mike T. Inspector Name:_____ Inspector Name:_____

Permit#: 108450 Address: Astro Hills / 2719 Glenn Dr.

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3	SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)		285.32(a)(1)				
4	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot		285.32(a)(3)				
5	SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)		285.32(a)(5)				
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7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)				

MT- 12/17/18
site OK.

Comal County Environmental Health
OSSF Inspection Sheet

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9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
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16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
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26	DRAINFIELD Area Installed						
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39	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried						

Comal County Environmental Health
OSSF Inspection Sheet

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42	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						

REVISED
8:53 am, Dec 26, 2018

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

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

Date 12/1/18 Permit # 10450

Owner Name	Jarrett & Kayla Ott	Agent Name	Frank Aguirre
Mailing Address	710 Dimaggio Dr	Agent Address	16159 Old Stable Rd San Antonio, Texas 78247-4490
City, State, Zip	Midland, Tx, 79706	City, State, Zip	
Phone #	432-770-5273	Phone #	210-275-7866
Email	kjoproperties@outlook.com	Email	frankaeptic45@gmail.com

All correspondence should be sent to: ☒ Owner ☑ Agent ☑ Both

Subdivision Name Astro Hills Unit 1 Lot 103 Block —

Acreage/Legal 1.066

Street Name/Address 2719 Glenn Dr City Canyon Lake Zip 78133

Type of Development:

☒ Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) House

Number of Bedrooms 3

Indicate Sq Ft of Living Area 2671

RECEIVED
DEC 06 2018
COUNTY ENGINEER

☐ Commercial or Institutional Facility

(Planning materials must show adequate land area for doubling the required land needed for treatment & disposal area)

Type of Facility

Offices, Factories, Churches, Schools, Parks, Etc. - Indicate Number Of Occupants

Restaurants, Lounges, Theaters - Indicate Number of Seats

Hotel, Motel, Hospital, Nursing Home - Indicate Number of Beds

Travel Trailer/RV Parks - Indicate Number of Spaces

Miscellaneous

Estimated Cost of Construction: $390,341.01 (Structure Only)

Is any portion of the proposed OSSF located in the United States Army Corps of Engineers (USACE) flowage easement?

☐ Yes ☒ No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

Source of Water ☒ Public ☐ Private Well

Are Water Saving Devices Being Utilized Within the Residence? ☒ Yes ☐ No

By signing this application, I certify that:

- The completed application and all additional information submitted does not contain any false information and does not conceal any material facts.
- Authorization is hereby given to the permitting authority and designated agents to enter upon the above described property for the purpose of site/soil evaluation and inspection of private sewage facilities.
- I understand that a permit of authorization to construct will not be issued until the Floodplain Administrator has performed the reviews required by the Comal County Flood Damage Prevention Order.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

JM Ott
Signature of Owner

12/1/18
Date

195 David Jones Dr., New Braunfels, Texas 78132-3760 (830) 608-2090 Fax (830) 608-2079

* * * 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 FRANK AGUIRRE *

System Description ATU w/ DRIP

Size of Septic System Required Based on Planning Materials & Soil Evaluation 847 CF =

Tank Size(s) (Gallons) 600 Absorption/Application Area (Sq Ft) 1694 SF

Gallons Per Day (As Per TCEQ Table III) 300

(Sites generating more than 5000 gallons per day are required to obtain a permit through TCEQ.)

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.))

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 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 ☐ No

(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: _____

* 210 275 7866
FRANKSEPTIC45
@gmail.com

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.

Signature of Designer

25 Oct 10
Date

195 David Jonas Dr., New Braunfels, Texas 78132-3760 (830) 608-2090 Fax (830) 608-2078

ATU affidavit:

201806046071 12/03/2018 09:53:34 AM 1/1

AFFIDAVIT TO THE PUBLIC

THE COUNTY OF Comal, STATE OF TEXAS

CERTIFICATION OF ON-SITE SEWAGE FACILITIES REQUIRING MAINTENANCE

According to the Texas Commission on Environmental Quality (TCEQ) Rules for On-site Sewage Facilities (septic systems), this document is filed in the Deed Records department of Comal County, Texas.

I

The Texas Health & Safety Code, Chap. 366, authorizes TCEQ to regulate OSSF's. Additionally, the Texas Water Code, Para. 5.012 and 5.013, gives TCEQ 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. TCEQ, 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 OSSF's are located on specific pieces of property. To achieve this notice, TCEQ requires a deed recording. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This deed certification is not a representation or warranty by TCEQ of the suitability of this OSSF, nor does it constitute any guarantee by TCEQ that the appropriate OSSF was installed.

II

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code, 285.91 (12) will be installed on the property described as:

2719 Glenn Dr. Canyon Lake, TX 78133

Lot 103, ASTRO HILLS, U-1

The property is owned by: (owner's full name) Jarrett & Kayla Ott

This OSSF must be covered by a continuous maintenance contract. All maintenance on this OSSF must be performed by an approved maintenance company and a signed maintenance contract must be submitted to Comal County or permitting authority within 30 days after the property has been transferred.

The owner will, upon any sale or transfer of the above-described property, request a transfer of the permit for the OSSF to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from Comal County or permitting authority.

WITNESS MY/OUR HAND[S] ON THIS 3rd day of Dec, 2018

Owner

Kayla Ott
Printed name

SWORN TO AND SUBSCRIBED BEFORE ME on this 3rd day of Dec, 2018

REBECCA LANG
Commission # 130421104
My Commission Expires
October 27, 2019

Notary Public, State of Texas
Notary's printed name:
My commission expires:

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
12/03/2018 09:53:34 AM
TERRI 1 Pages(s)
201806046071

Bobbie Koepp

Maintenance agreement:

Countryside *Construction, Inc.*
300 Chapman Parkway, Canyon Lake, TX. 78133
Phone: 830-899-2615 or 1-888-379-3721 Fax: 830-899-6662

Septic System Service Agreement

In consideration of payment for this service contract, we will abide by and agree to its terms and conditions:

Name: Jarrett Ott **Address:** 2719 Glenn Drive
Sub-Div./County: _____ **City, State-Zip:** _____
Permit #: _____ **Model #:** _____ **Serial #:** _____
Phone # : _____

(X) Initial Two Year Service Agreement & Two Year Limited Warranty ( ) One Year Service Agreement

The effective date of this initial maintenance contract shall be the date the License to Operate is issued.
For $_____, a year this contract will be in effect **FROM** _____ **TO** _____ and will provide the following:

Legal Description: _____

A: An inspection/service call every (4) four months which will include: inspection, adjustments and servicing of the mechanical & electrical components as necessary to insure proper function of the system.
B: An effluent quality inspection consisting of a visual check for color, turbidity, scum, overflow and odor.
C: **The property owner is responsible for "purchasing and keeping chlorine"** in the chlorinator, (if applicable). If the chlorine test reveals "No Chlorine" in the system, the property owner may incur an additional cost.
D: If any improper operation is observed (which cannot be corrected at that time) the property owner will be notified immediately of the conditions and the estimated cost.
E: The response time to a complaint by the property owner regarding operation of the system, shall be within "48 hours," from the time of notification.
F: **ANY PARTS, WARRANTY OR NON-WARRANTY, OR FREIGHT CHARGES, LABOR OR SERVICE CALLS DUE NOT PAID FOR REMAIN THE PROPERTY OF COUNTRYSIDE CONSTRUCTION AND COULD RESULT IN REPOSSION OF PARTS BY COUNTRYSIDE CONSTRUCTION.**
G: **THE SIGNING OF THIS SERVICE AGREEMENT AUTHORIZESCOUNTRYSIDE CONSTRUCITON TO ENTER THE PROPERTY TO EXECUTE ALL TERMS OF THIS CONTRACT.**

Countryside Construction, Inc., **will warranty installation** of the septic system to be according to state and county regulations and the designs approved by the county. **HOMEOWNER WILL BE RESPONSIBLE FOR SERVICE CALLS, LABOR AND SHIPPING COSTS ON ANY "WARRANTED PARTS" EXCHANGED DURING WARRANTY.** All other components will be according to manufacture's warranties.
Important: As Countryside Construction, Inc. **cannot control what or how much effluent** goes into this septic system, we **cannot warranty** how the system will function. Refer to manufacturers or installer's instructions, for suggestions on septic operation. This service agreement **does not** cover the cost of **"Service Calls, Labor or Materials** that are required or **parts out of warranty**, the failure to maintain electrical power to the system, **sprinklers that are broken**, leaking, stopped-up or otherwise mal-functioning; or sewage flows exceeding the hydraulic/organic design capabilities and the input of non-biodegradable materials (solvents, grease, oil, paints, etc.), or any usage contrary to the requirements as advised by authorized service representative. Laboratory test work is available at an additional cost. Chlorine, filters, or parts that are out of warranty are available at a reasonable cost.
This contract **does not** include the **pumping of a tank** or of any **compartment of a tank, or settlement of soil on or around any part of the system regardless of reason**:
Violations of the warranty also include: Disconnecting the alarm, restricting ventilation to the aerator, over loading the system above its rated capacity; or flooding by external means. Rodent, insect or Fire Ant damage or any other form of unusual abuse is a violation.
A renewal service contract **should** be **"Activated" (30) thirty days** before **expiration** of existing contract. We will contact property owner prior to expiration of existing contract.

Serviced by: *Countryside Construction Inc.*
Walker Chapman – Installer's Licensee #OS0002929

(X) _____ Print Name (X) Jarrett Ott Date: 10-25-2018
Property Owner Signature

(X) Walker Chapman Date: 10-25-2018 Authorized Service Representative *(revised 10/9/09)*

Site evaluation:
Applicant/site
Name: Jarrett Ott
Location: 2719 Glenn Drive
Date: 25 October 2018
Site Evaluator: Chris Heimann, 209 Clydesdale, Cibolo, Texas 78108, Lic # 32694, Expires 4/20.

Soil Boring/ Backhoe Pit Number 1 Surface Elevation Proposed Depth Elevation

Depth (Feet)	Soil Texture	Texture Class (Ia, Ib, II, III, IV)	% Gravel (Required when Texture Class is II or III)	Observation Notes (Restrictive Horizon, Size of Gravel, Groundwater, Mottling, Fractured Rock, Recent Weather, etc.)
0	2' loam	III IMPORTED	None	Class III
1				
2				
3	2' limestone	IV		
4				
5				
6				

Soil Boring/ Backhoe Pit Number 2 Surface Elevation Proposed Depth Elevation

Depth (Feet)	Soil Texture	Texture Class (Ia, Ib, II, III, IV)	% Gravel (Required when Texture Class is II or III)	Observation Notes (Restrictive Horizon, Size of Gravel, Groundwater, Mottling, Fractured Rock, Recent Weather, etc.)
0	Same	Same	Same	Same
1				
2				
3				
4				
5				
6				

By my signature, I hereby certify that the information provided in this report is based on my site observations and are accurate to the best of my ability. I understand that any misrepresentation of the information contained in this report may be grounds to revoke or suspend my license.
The site evaluation determined the site is suitable for a DRIP disposal system with ATU treatment. According to Table XIII, the site is **suitable / not suitable** for this proposed system. A copy of Tables IX and XIII have been given to the property owner to inform them of other alternatives based upon the results of this site evaluation.

Signature: TCEQ/PE License # See above Date: See above

I hereby certify that this design conforms to both TCEQ and local regulations for On-Site Sewage Facilities and, with proper use, maintenance, and under normal climatic conditions, can be expected to function without creating a nuisance.

Sincerely,

Frank Aguirre, Registered Sanitarian, Lic. 994, SE 10807, DR 30400
Chris Heimann, SE 32694, DR 32589

REVISED
9:19 am, Dec 28, 2018

Septic Systems Express
Excellent Septic Design and Inspection

16159 Old Stable Rd. San Antonio, Texas 78247-4490
Frank Aguirre, R.S. 210.275.7866 frankseptic45@gmail.com
Chris Heimann, S.E., D.R. 210.827.1607 chrisseptic70@gmail.com

PLANNING MATERIALS FOR A SEPTIC SYSTEM IN COMAL COUNTY

DATE, FIELD WORK: 25 October 2018

THE PLAYERS:
Property owner: Jarrett Ott & Kayla Ott, c/o Clint Bayless, 100 N. Santa Rosa, Suite 1022, San Antonio, Texas 78207, (210)446-8362, clintbaylisscustomhomes.com
Site Evaluator: Chris Heimann, SE, #32694
Designer: Frank Aguirre, R.S., Lic. 994
Installer: Robert Keltner, 830.743.0483, 28152
Septic system design review & inspections: Comal County: Brenda Ritzen or Sandra Hernandez, 830.608.2090

THE PROPERTY:
Street numerical address: 2719 Glenn Drive
Legal description: Lot 103, Astro Hills, Unit 1

Contributing zone: The property is on the Contributing zone and the septic system design complies with all the provisions of the existing CZP.

THE PROPOSED PROJECT:
A new single family residence, 3 BR, 2781 SF

THE ESTIMATED SEWAGE PRODUCTION CHARACTERISTICS:
Hydraulic loading estimated at 300 gpd, sized, by regulations, to a 4 BR home.
Organic loading estimated at 140 to 300 mg/l BOD with traces of FOG and TSS (residential strength)

DESCRIPTION OF PROPOSED MONITORING OF SEWAGE CHARACTERISTICS:
Hydraulic loading as the major portion of the water meter reading.

TARGET FINAL EFFLUENT PARAMETERS:
Hydraulic loading less than the estimated loading on ANY GIVEN DAY.
Organic loading: BOD and TSS of less than 65 mg/l

WATER SOURCE: CLWS

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SITE EVALUATION DATA:
A. This certifies that proper soil analysis procedures were followed.
B. Soils at this site are Class IV and are not suitable with respect to texture.
C. The overall site suitability is not appropriate for a Standard on-site wastewater system.

SYSTEM DESCRIPTION:

Pre-treatment: Single compartment (trash) tank in front of the ATU
Treatment: 600 gpd ATU (aerobic treatment unit) with disinfection
The system to be installed must be done so in STRICT ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS by a Class II septic system installer.

Water pump requirements: Must overcome an elevation head of 16', a friction head of 12.72' and a maximum head of 28.72

It shall operate the dripfield at 10 application times (operated by a control box using a timer) with the recycling valve in the pump tank adjusted so that the output is at least 6 gpm. Each cycle shall run for 5 minutes.

DRIFIED MANAGEMENT: A drifield management system shall be set at the outlet of the pump tank and shall include a 100 micron filter, a water meter, pressure regulator set at 40 PSI, valving to facilitate backflow of the filter and an exit supply line to the dripfield.

Supply line and return line size:

K-rain indexing valve

A WATER REUSE LAWN IRRIGATION SYSTEM

While the aerobic treatment unit will treat the wastewater to a "Class I effluent," much higher quality that it was when it exited the home or business, the dripfield's purpose is to RETURN that treated wastewater to the environment within the confines of the owner's property and to do so without causing it harm

The DRIPFIELD is the only one of the many ways that treated effluent can be returned to the Texas environment that ACTUALLY HELPS FEED THE GRASSES on the property.

It distributes the treated effluent at a constant rate and in a uniform fashion over the entire "wetted" area.

The publication, Wastewater Subsurface Drip Distribution, by the Tennessee Valley Authority, P.7 says, "The success of drip dispersion depends on how successful the wastewater dose rate and the volume is matched to the soil and site characteristics.... The hydraulic processes are complicated and the number of variables is large."

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One aspect of this is that the instantaneous water application rate of the system must never exceed the water absorption capacity of the soil, which varies depending upon the current water content of that soil.

Every attempt has herein been made to design this system toward the maximum probability of success by upholding the soil's relatively high soil absorption rate through a low rate of application, this in order to keep the soil below its saturation point.

One of the largest threats to any dripfield is excessive rainfall. But, while that can't be helped, all man-made, extraneous waters, e.g., from the property improvements, must be totally avoided.

A. DRIPFIELD PREPARATION/INSTALLATION

Prior to trenching, the site must be scarified and Class II or Class III soil added so as to give all driplines at least 6" of that soil over and above any Class IV clay or limestone. Drip tubing will be laid and the entire field area will be capped with 6" Class II soil (not sand). The entire field area will be sodded with hearty grasses, e.g, Bermuda or St. Augustine, prior to system startup.

Of extreme importance is that the entire dripfield must be protected from surface water running over it. This would do great damage to its ability to absorb wastewater from the septic system.

B. DRIPFIELD MANAGEMENT

The first step is the installation of a WASTEFLOW HEADWORKS UNIT or management center. It will include a micro-filter to filter the treated effluent prior to sending it out through the drip tubes, a water meter to measure flows through the entire unit, a "programmable logic controller" to control everything from the pump tank forward, some piping for system flushing and various valves and a pressure regulator so that the dripfield operates under a CONSTANT PRESSURE of 40 psi, so that each emitter will have the same flow rate. It is the "brain" of the entire drip system.

C. DRIP TUBING

This .5" tubing will be set 6" to 8" below grade (right at the roots of the grass!), with the lines being 2' apart. The tubing includes a protected and specially designed opening called an "emitter" that allows treated water to exit at a FIXED rate.

This tubing now includes highly specialized chemicals in it that protect against root intrusion and biological growth on the inside walls of the tubes and emitters. Each emitter is constructed to enhance turbulence in the line which equalizes flows and keeps them clean.
The driplines shall be connected to each other by the use of a flexible tubing, e.g, SpaFlex, with QuickLock fittings. They are referred to as "loops" and do not include any emitters.

THE PREFERRED BRAND OF DRIP TUBING IS GEOFLOW with emitters that flow, under 40 psi, .6 gal/hr. (but Netafim can be substituted).

D. COMPONENTS AND STANDARD VALUES

Air release/vacuum breaker: A valve set at the high point of each zone so as to prevent siphoning of effluent from higher to lower parts of the dripfield

Dosing: normal dosing of a dripfield zone

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Drip tubing: a .55" commercial tubing, chemically treated to fight bacterial growth and root intrusion and with a emitter every 2' that is engineered to cause agitated flows to further reduce any kind of clogging or bacterial growth.

Dripfield saturation: a deleterious situation where effluent begins to pond; one common cause is allowing pump times to run past 5 minutes in length.

Emitter flow: .61 gal/hr or .01 gpm

Equal distribution: the distribution of treated effluent in equal rates and volumes across the entire dripfield

Flushing: forcing an increased rate of flow, the same direction as is normal flow, but at a higher velocity, this to clean debris out of driplines

Indexing valve: a valve placed outside the management center, whose purpose is to divide the dripfield into zones that will be feed one at a time, this in order to reduce the size of the pump needed.

Management center: Container at the pump outlet that contains a 100 micron filter, pressure regulator set at 40 psi, a ball vale for flushing, this partially open and over valves and piping as needed

Minimum scour velocity: At least 2'/sec must be forced through the tubing to properly scour it

PSI: set by the pressure regulator at 40 psi

Return line: Always a 1" pvc, Sch. 40 pipe, it returns undelivered effluent to the pump tank or to the pre-treatment tank of the ATU; it includes a ball run valve before entry to the pump tank. It shall also include a 1" air release valve at its high point.

Scarification: The plowing or trenching of surface soils so as to remove rocks, tree roots, etc. and allow the tubing to sit in 8" of sandy loam, later to be capped with another 4" of a sandy loam

Section: A run of drip tubing that starts from a Supply line and ends at either another point on that Supply line or at a Return line, accompanied by an air release valve.

Supply line: Always a 1" pvc, Sch. 40 pipe, issuing from the management center to a K-rain Indexing valve or directed by solenoid valves to feed all zones, one at a time.

Zone: A portion of an overall dripfield that is connected to its own Supply line and Return line; it is not ever to be more than 320' in length. All zones will be approximately the same size.

E. CALCULATIONS

The home of [2871] SF and of [3] bedrooms must be rated at a MAXIMUM flow on ANY GIVEN

DAY of [300] gpd

Soil application rate: [.2] gal/SF/day (that of a Class [III] soil)

Total absorption area (TAA) required = [300] gpd/[.2] Ra = at least [1500] SF of dripfield

Total drip tubing required = TAA/2 = at least [750]' total length with an emitter every 2' with a

total number of emitters of at least [375].

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Rules:
1. Place air release at the end of each zone.
2. Place a single check at the end of each zone.
3. Place a globe valve, left partially cracked at the end of each zone. (To allow for continuous flush back to the pre-treatment tank)
4. Friction head loss in tubing is .67'/100' of tubing
5. Emitter drip rate: .01 gpm

Drip calc gpd/Ra = SF SF/2 = length

Length 847 x 2 = 1697 SF x .2 = 339 gpd (over-sized for this home)

The requirement: A maximum flow of [339] gal. on any given day, with a residential strength of under 300 mg/l BOD (organic strength).

OVERALL DRIPFIELD SIZING

The dripfield shall consist of [2] zones with a total length of 847' of dripline.

DRIPFIELD RATES OF FLOW

The larger zone ZONE shall include [470]' of dripline or [235] emitters, issuing .01 gpm

for a total flow for the zone of [2.35] gpm.

(Note: THIS is why it is referred to as a "drip" system and, with the placement of the tubing at the roots of the grasses, and why it's so beneficial to them.)

TOTAL HEAD NEEDED

Total friction loss of [470]' of tubing, at .67'/100', = [3.15]' +

For a [1]" pvc, Sch. 40 pipe, at [2.5] gpm, the friction loss per 100' is [1]'. For a

maximum total length of supply and return lines of [55]', the total friction loss of those lines =

[1.5]' +

an elevation head loss of [10]' .....

= A TOTAL HEAD REQUIREMENT FOR EACH ZONE OF [14.65]'

WELL PUMP MUST BE CAPABLE OF PUMPING AT LEAST [2.5] GPM AT A HEAD OF [15]'.
(see pump graph below)

PUMP ACTIVATIONS

At the total flow of [339] gpd and a total pump flow rate set at [2.5] gpm, the total run

time per day will be [136] minutes.

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This will be divided, using 6 minutes as the maximum run time of any pumping event into [10]

pump activations per day or one every [1] hour.

The field area will be **sodded** with hearty grass such as Bermuda or St. Augustine prior to system startup.

DRIPFIELD INSTRUCTIONS:

1. Geoflow is the preferred brand of tubing, although Netafim is acceptable.
2. No trees shall be removed without owner approval.
3. If the dripfield is to be constructed above the native soils, all large, loose rocks must be removed prior to construction and the native surface is first to be tilled or scarified. The imported soil must be clean Class III loam.
4. The drip tubing shall be installed by cutting trenches, plowing or laying the tubing on scarified ground. The tubing is to be installed parallel to the contours with 2' spacing.
5. The finished top elevation of the backfill on the dripfield area must graded so that no water can pond either over or uphill form the field.
6. Never allow the pump to run for over 5 minutes, pressurizing any portion of the dripfield. Doing so can cause a "tunneling" of water upwards from an emitter which may take months to heal
7. All pipe and tubing is to be buried with at least 6" of soil cover.
8. If seepage or other underground water is found during excavation of the distribution tubing, stop construction.
9. Do not install the dripfield during or after a rain. The soil must be dry enough that no noticeable compaction of the soil occurs during construction.
10. Protect the dripfield from excessive stormwater OR WATER FROM ANY OTHER SOURCE from flowing over it by berms (raising up), swale (lowering) or guttering as needed.
11. Disallow any driving or heavy equipment over the dripfield.
12. If imported soil is to be added, the grass in that area of the dripfield shall be first removed.
13. No grade cuts shall be made close to the dripfield.
14. The owner must keep the dripfield maintained (mowed) at all times, as the sun's evaporation plays a major role in its proper functioning.

REVISED
9:20 am, Feb 07, 2020

Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

Lines	Length
1–8	44
9	40
10 – 11	39
Total:	470'

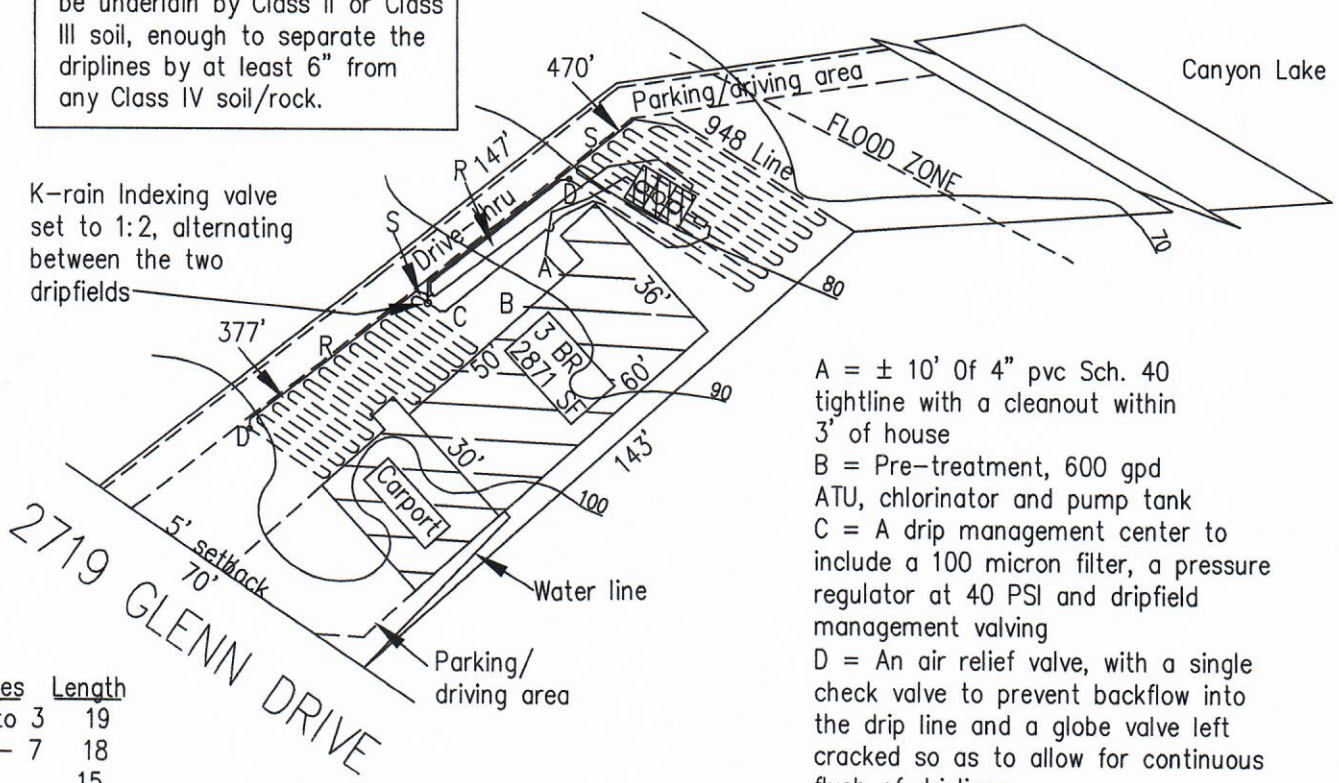
OTT RESIDENCE
25 OCTOBER 2018

Revision of 6 Feb 2020

North

1" = 40'

NOTE: The entire dripfield shall be underlain by Class II or Class III soil, enough to separate the driplines by at least 6" from any Class IV soil/rock.



A = ± 10' Of 4" pvc Sch. 40 tightline with a cleanout within 3' of house
B = Pre-treatment, 600 gpd ATU, chlorinator and pump tank
C = A drip management center to include a 100 micron filter, a pressure regulator at 40 PSI and dripfield management valving
D = An air relief valve, with a single check valve to prevent backflow into the drip line and a globe valve left cracked so as to allow for continuous flush of driplines
S = 1" pvc Sch. 40 supply line
R 1" pvc Sch. 40 return line bringing un-used effluent back to the management center whic will be directed back to the pre-treatment tank of the ATU

Lines	Length
1 to 3	19
4 – 7	18
8	15
9	14
10 & 11	13
12 – 16	18
17 – 22	17
Total:	377

Dripfield: Side section = 377' (alternated by a K-rain Indexing valve)
Rear section = 470'
Total length = 847'

Lines counted from front to back. 22 lines in total.

Note: The contractor may make field adjustments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

Lot 103
Astro Hills
Unit 1

STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED
PROFESSIONAL SANITARIAN

RS 994
OS 10807
DR 30400

GEOFLOW SUBSURFACE DRIP

Air Vacuum Relief Valve

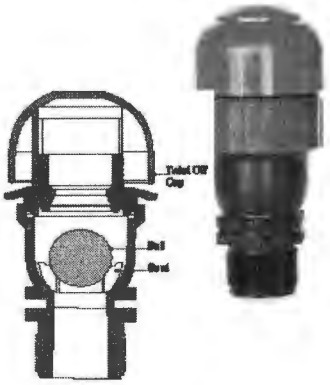
UPDATED

Description

Air release occurs when air escape the system at startup and vacuum relief allows air to enter during shutdown. The air vent vacuum breakers are installed at the highest points in the drip field to keep soil from being sucked into the emitters due to back siphoning and back pressure. This is an absolute necessity with underground drip systems. They are also used for proper drainage of the supply and return manifolds. Use one on the high point of the supply manifold and one on the high point of the return manifold and any high points of the system.

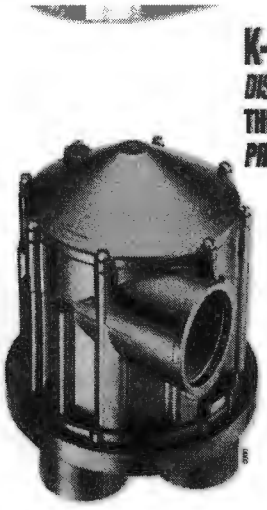
Features

Geoflow's new kinetic air vacuum breakers have a twist off cap that is easy to take apart for cleaning. No need to remove the valve to maintain it. The large clear passageway allows lots of air to flow in and out easily. The protected mushroom cap is ideal for wastewater, directing spray downward.



Part No.	APVBK75m	APVBK100m

K-rain Indexing valve



K-RAIN 6000

DISTRIBUTING VALVES

THE NEXT GENERATION OF

PROFESSIONAL PRODUCTS.

FEATURES/BENEFITS

- 2 Year Trade Warranty- Factory support up to two years after purchase
- Metal Die-Cast Body- Durable, long lasting, and capable of high pressure applications
- Available in 4 and 6 Outlet Models- Can quickly and easily change from two to six watering zones.
- Versatility of Design- Valves are easily maintained and serviced for long product life
- Operates at 10 GPM @ Pressures of 25-150 PSI- Ideal for pump-fed systems or high-flow city water systems
- Built-in Atmospheric Vacuum Breaker- Releases any vacuum created between the pump and the valve or your timer.

K RAIN

IRRIGATION SOLUTIONS WORLDWIDE

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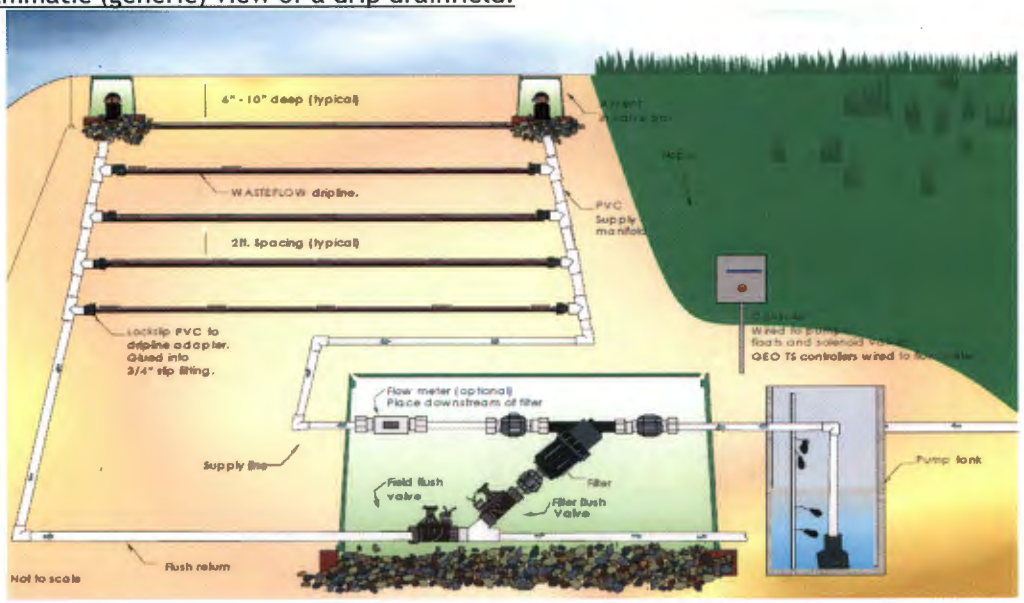
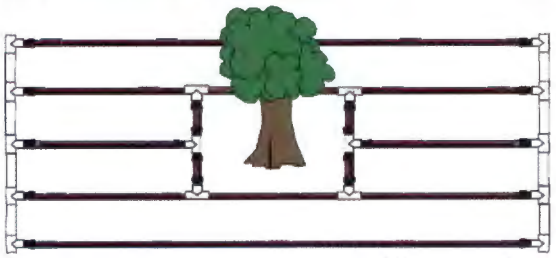
9:20 am, Dec 28, 2018

Diagrammatic (generic) view of a drip drainfield:



Looping around trees...



Loop dripline around trees

A drip emitter...

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9:20 am, Dec 28, 2018

Air release valves:

GEOFLOW SUBSURFACE DRIP

Air Vent / Vacuum Relief Valve

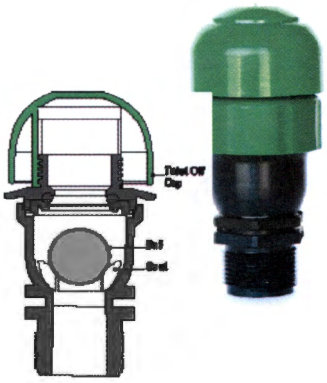
UPDATED

Description

Air release occurs when air escape the system at startup and vacuum relief allows air to enter during shutdown. The air vent vacuum breakers are installed at the highest points in the drip field to keep soil from being sucked into the emitters due to back siphoning and back pressure. This is an absolute necessity with underground drip systems. They are also used for proper drainage of the supply and return manifolds. Use one on the high point of the supply manifold and one on the high point of the return manifold and any high points of the system.

Features

Geoflow's new kinetic air vacuum breakers have a twist off cap that is easy to take apart for cleaning. No need to remove the valve to maintain it. The large clear passageway allows lots of air to flow in and out easily. The protected mushroom cap is ideal for wastewater, directing spray downward.



Part No.	APVBK75m	APVBK100m

K-rain Indexing valve

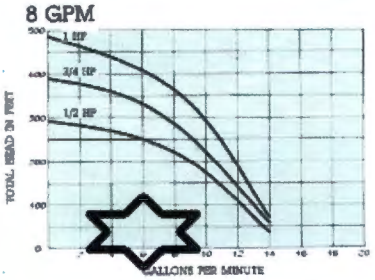
REVISED
9:20 am, Dec 28, 2018

Typical high head well pump charts:

High Head Filtered Effluent Pumps

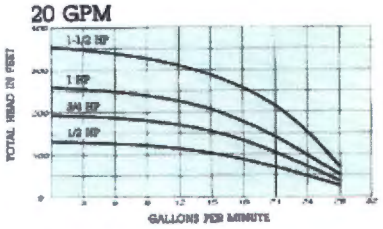
½, ¾, 1 and 1½ HP
8, 12, 20, 25, and 35 GPM
4" Diameter Submersibles

8 GPM



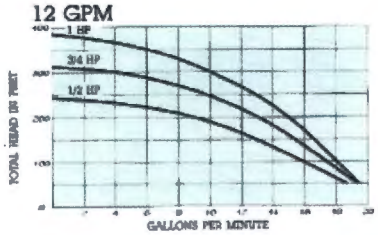
HP	Voltage	Pump Model
½	115	2NFL51-8E
½	230	2NFL52-8E
¾	230	2NFL72-8E
1	230	2NFL102-8E

20 GPM



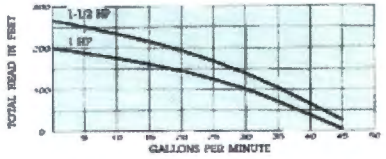
HP	Voltage	Pump Model
½	115	2NFL51-20E
½	230	2NFL52-20E
¾	230	2NFL72-20E
1	230	2NFL102-20E
1½	230	2NFL152-20E

12 GPM



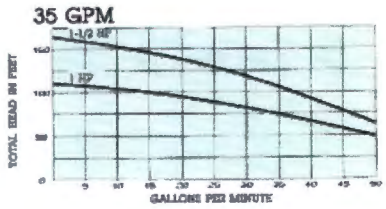
HP	Voltage	Pump Model
½	115	2NFL51-12E
½	230	2NFL52-12E
¾	230	2NFL72-12E
1	230	2NFL102-12E

25 GPM



HP	Voltage	Pump Model
1	230	J1025BE
1½	230	J1525BE

35 GPM



HP	Voltage	Pump Model
1	230	J1035BE
1½	230	J1535BE

REVISED
9:20 am, Dec 28, 2018

FRICTION LOSS CHART

Friction Loss (in feet) per 100 Feet of Run
Schedule 40 PVC Pipe

Flow Rate @ Static Head		3/4 Inch		1 Inch		1 1/4 Inch		1 1/2 Inch		2 Inch	
GPM	GPH	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe
1	60	0.51	0.83								
2	120	1.02	1.64	0.55	0.71	0.14	0.24	0.07	0.1		
5	300	5.73	8.89	1.72	2.19	0.44	0.74	0.22	0.3	0.07	0.09
7	420	10.52	17.04	3.17	4.02	0.81	1.37	0.38	0.5	0.11	0.14
10	600	20.04	32.10	6.02	7.60	1.55	2.66	0.72	1.0	0.21	0.28
15	900	42.46	67.88	12.77	16.72	3.28	5.63	1.53	2.3	0.45	0.58
20	1,200	72.34	115.45	21.75	28.40	5.59	9.61	2.61	3.9	0.76	0.97
25	1,500			32.88	42.95	8.45	14.50	3.95	5.9	1.15	1.48
30	1,800			46.08	60.26	11.85	20.32	5.53	8.3	1.62	2.06
35	2,100					15.76	27.02	7.36	11.1	2.15	2.75
40	2,400					20.18	34.64	9.43	14.2	2.75	3.51
45	2,700					25.10	42.95	11.73	17.7	3.43	4.36
50	3,000					30.51	52.41	14.25	21.5	4.16	5.31
60	3,600							19.98	30.2	5.84	7.43
70	4,200									7.76	9.88
75	4,500									8.82	1.22
80	4,800									9.94	1.65
90	5,400									12.37	1.72
100	6,000									15.03	1.12
125	7,500										
150	9,000										

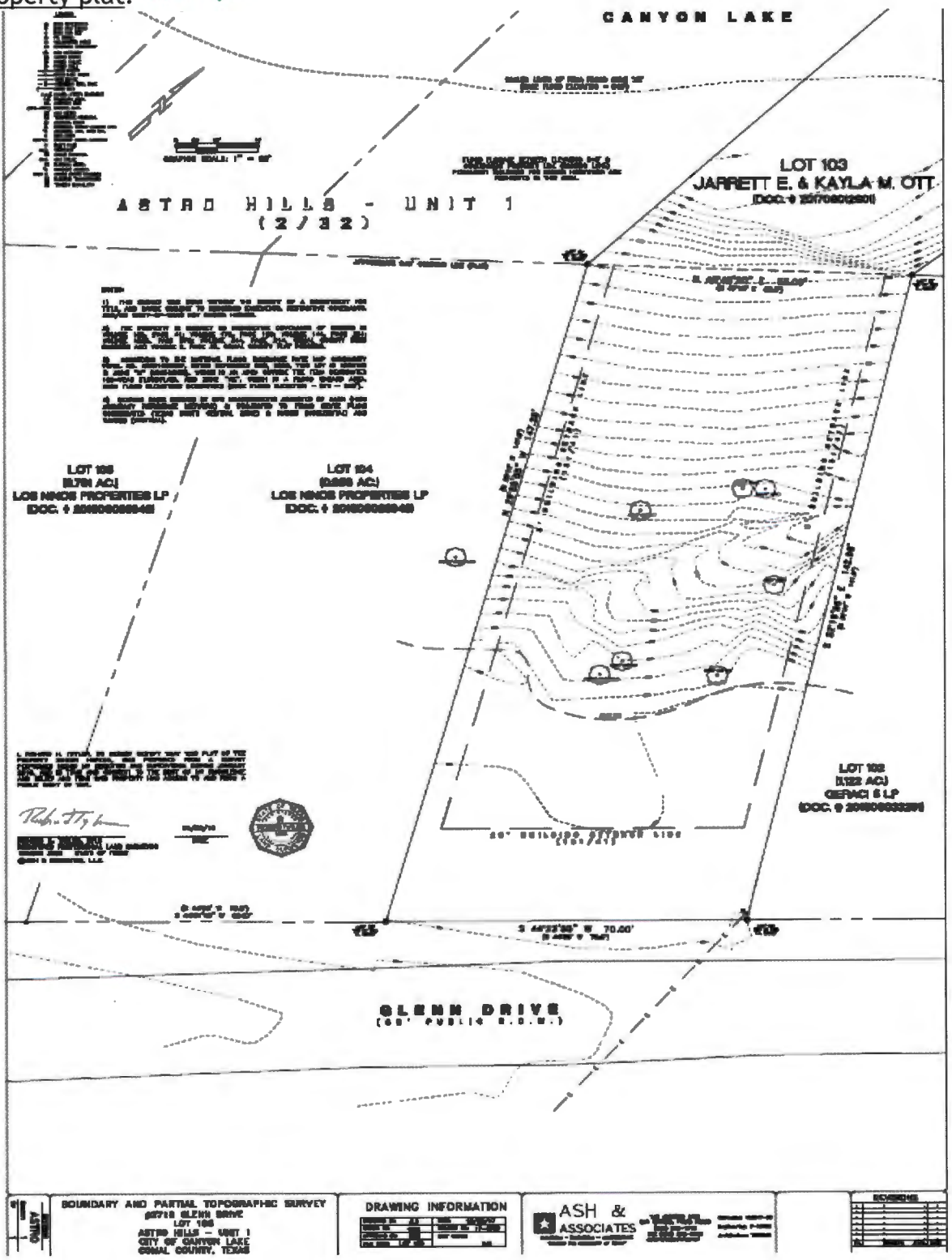
Location:

REVISED
9:20 am, Dec 28, 2018

Flood zone/Aquifer map:

REVISED
9:20 am, Dec 28, 2018

Property plat:



Hernandez, Sandra

From: Hernandez, Sandra
Sent: Tuesday, December 18, 2018 10:05 AM
To: 'Frank Aguirre'
Subject: 108450 deficiency comments

RE: Astro Hills, Unit 1, Lot 103

Frank,
We received planning materials for the referenced permit application on December 6, 2018 and found those planning materials to be deficient. In order to continue processing this permit, we need the following information:

1. Show the floodplain location of the property on your site plan.
2. The recorded deed does not reference a block number. Revise permit application.
3. Sign your planning materials and resubmit to our office.
4. Dimension every dripline on your design.
5. Revise accordingly and resubmit to our office.

If you have any questions, you can email me or call the office.

Thank you,
Sandra

VOID

REVISED
9:50 am, Dec 31, 2018

REVISED
8:37 am, Dec 28, 2018

Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

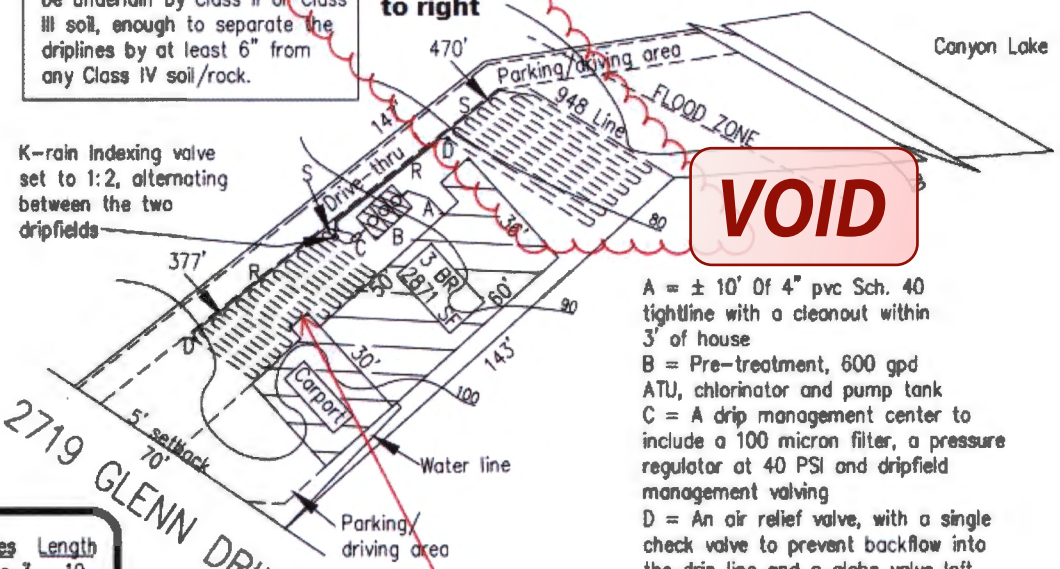
Lines	Length
1–8	44
9	40
10 – 11	39
Total:	470'

OTT RESIDENCE
25 OCTOBER 2018
Revision of 28 Dec 2018

North
1" = 40'

NOTE: The entire dripfield shall be underlain by Class II or Class III soil, enough to separate the driplines by at least 6" from any Class IV soil/rock.

Lines numbered from left to right



VOID

A = ± 10' Of 4" pvc Sch. 40 tightline with a cleanout within 3' of house
B = Pre-treatment, 600 gpd ATU, chlorinator and pump tank
C = A drip management center to include a 100 micron filter, a pressure regulator at 40 PSI and dripfield management valving
D = An air relief valve, with a single check valve to prevent backflow into the drip line and a globe valve left cracked so as to allow for continuous flush of driplines
S = 1" pvc Sch. 40 supply line
R 1" pvc Sch. 40 return line bringing un-used effluent back to the management center whic will be directed back to the pre-treatment tank of the ATU

Lines	Length
1 to 3	19
4 – 7	18
8	15
9	14
10 & 11	13
12 – 16	18
17 – 22	17
Total:	377

Lines counted from front to back, 22 lines in total.

Dripfield: Side section = 377' (alternated by a K-rain Indexing valve)
Rear section = 470'
Total length = 847'

Note: The contractor may make field adjustments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

Lines numbered from left to right

Lot 103
Astro Hills
Unit 1

STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED
PROFESSIONAL SANITARIAN

PS 004

VOID

Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

REVISED
8:37 am, Dec 28, 2018

Lines	Length
1–8	44
9	40
10 – 11	39
Total	470'

VOID

OTT RESIDENCE
25 OCTOBER 2018

Revision of 28 Dec 2018

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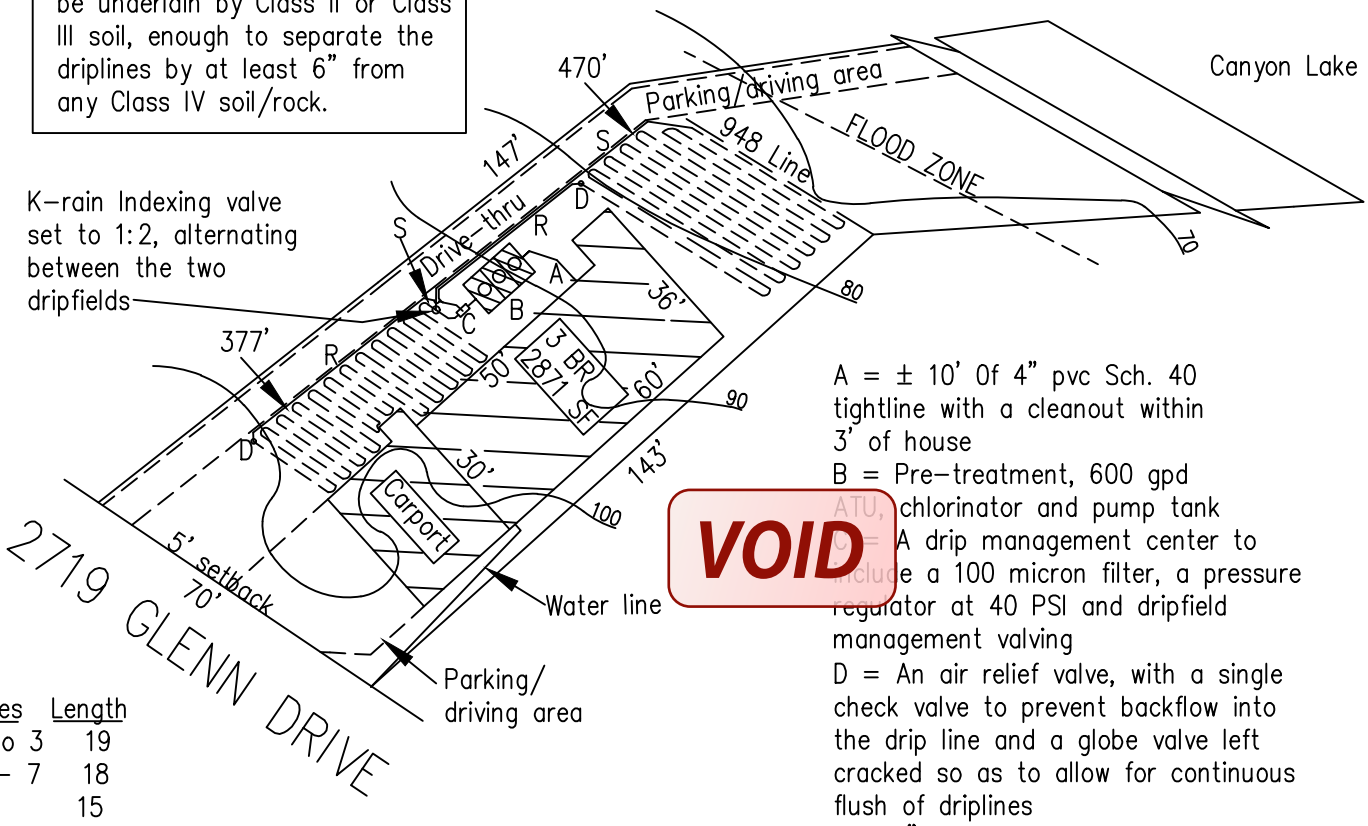

VOID

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9	14
10 & 11	13
12 – 16	18
17 – 22	17
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Rear section = 470' K-rain Indexing
Total length = 847' valve)

Lines counted from front to back. 22 lines in total.

Note: The contractor may make field adjustments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

VOID

Lot 103
Astro Hills
Unit 1

STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED PROFESSIONAL SANITARIAN

RS 994
OS 10807
DR 30400

VOID

FRICTION LOSS CHART

Friction Loss (in feet) per 100 Feet of Run

Schedule 40 PVC Pipe

Flow Rate @ Static Head		3/4 Inch		1 Inch		1 1/4 Inch		1 1/2 Inch		2 Inch	
GPM	GPH	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe	Rigid Pipe	Flex Pipe
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2	120	1.02	1.64	0.55	0.71	0.14	0.24	0.07	0.1		
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7	420	10.52	17.04	3.17	4.[illegible]2	0.81	1.37	0.38	0.5[illegible]	0.11	0.14
10	600	20.04	32.10	6.02	7.[illegible]0	1.55	2.66	0.72	1.0[illegible]	0.21	0.28
15	900	42.46	67.86	12.77	16.[illegible]72	3.28	5.63	1.53	2.3[illegible]	0.45	0.58
20	1,200	72.34	115.45	21.75	28.[illegible]40	5.59	9.61	2.61	3.9[illegible]	0.76	0.97
25	1,500			32.88	42.[illegible]95	8.45	14.50	3.95	5.9[illegible]	1.15	1.48
30	1,800			46.08	60.[illegible]26	11.85	20.32	5.53	8.3[illegible]	1.62	2.06
35	2,100					15.76	27.02	7.36	11.[illegible]3	2.15	2.75
40	2,400					20.18	34.64	9.43	14.[illegible]5	2.75	3.51
45	2,700					25.10	42.95	11.73	17.[illegible]1	3.43	4.36
50	3,000					30.51	52.41	14.25	21.[illegible]2	4.16	5.31
60	3,600							19.98	30.[illegible]6	5.84	7.43
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80	4,800									9.94	1[illegible].65
90	5,400									12.37	1[illegible].72
100	6,000									15.03	1[illegible].12
125	7,500										
150	9,000										

VOID

Location:

VOID

VOID

Septic Systems Express
Excellent Septic Design and Inspection

16159 Old Stable Rd. San Antonio, Texas 78247-4490
Frank Aguirre, R.S. 210.275.7866 frankseptic45@gmail.com
Chris Heimann, S.E., D.R. 210.827.1607 chrisseptic70@gmail.com

PLANNING MATERIALS FOR A SEPTIC SYSTEM IN COMAL COUNTY

DATE, FIELD WORK: 25 October 2018

THE PLAYERS:
Property owner: Jarrett Ott & Kayla Ott, c/o Clint Bayless, 100 N. Santa Rosa, Suite 1022, San Antonio, Texas 78207, (210)446-8362, clintbaylisscustomhomes.com
Site Evaluator: Chris Heimann, SE, #32694
Designer: Frank Aguirre, R.S., Lic. 9[illegible]
Installer: Robert Keltner, 830.743.0[illegible]
Septic system design review & inspections: Comal County: Brenda Ritzen or Sandra Hernandez, 830.608.2090

THE PROPERTY:
Street numerical address: 2719 Glenn Drive
Legal description: Lot 103, Astro Hills, Unit 1

Contributing zone: The property is on the Contributing zone and the septic system design complies with all the provisions of the existing CZP.

THE PROPOSED PROJECT:
A new single family residence, 3 BR, 2781 SF

THE ESTIMATED SEWAGE PRODUCTION CHARACTERISTICS:
Hydraulic loading estimated at 300 gpd, sized, by regulations, to a 4 BR home.
Organic loading estimated at 140 to 300 mg/l BOD with traces of FOG and TSS (residential strength)

DESCRIPTION OF PROPOSED MONITORING OF SEWAGE CHARACTERISTICS:
Hydraulic loading as the major portion of the water meter reading.

TARGET FINAL EFFLUENT PARAMETERS:
Hydraulic loading less than the estimated loading on ANY GIVEN DAY.
Organic loading: BOD and TSS of less than 65 mg/l

WATER SOURCE: CLWS

VOID

SITE EVALUATION DATA:
A. This certifies that proper soil analysis procedures were followed.
B. Soils at this site are Class IV and are not suitable with respect to texture.
C. The overall site suitability is not appropriate for a Standard on-site wastewater system.

SYSTEM DESCRIPTION:

Pre-treatment: Single compartment (trash) tank in front of the ATU
Treatment: 600 gpd ATU (aerobic treatment unit) with disinfection
The system to be installed must be done so in STRICT ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS by a Class II septic system installer.

Water pump requirements: Must overcome an elevation head of 16', a friction head of 12.72' and a maximum head of 28.72

It shall operate the dripfield at 10 application times (operated by a control box using a timer) with the recycling valve in the pump tank adjusted so that the output is at least 6 gpm. Each cycle shall run for [illegible]

VOID

DRIFIED MANAGEMENT: A drifield management system shall be set at the outlet of the pump tank and shall include a 100 micron filter, a water meter, pressure regulator set at 40 PSI, valving to facilitate backflow of the filter and an exit supply line to the dripfield.

Supply line and return line size:

K-rain indexing valve

A WATER REUSE LAWN IRRIGATION SYSTEM

While the aerobic treatment unit will treat the wastewater to a "Class I effluent," much higher quality that it was when it exited the home or business, the dripfield's purpose is to RETURN that treated wastewater to the environment within the confines of the owner's property and to do so without causing it harm

The DRIPFIELD is the only one of the many ways that treated effluent can be returned to the Texas environment that ACTUALLY HELPS FEED THE GRASSES on the property.

It distributes the treated effluent at a constant rate and in a uniform fashion over the entire "wetted" area.

The publication, Wastewater Subsurface Drip Distribution, by the Tennessee Valley Authority, P.7 says, "The success of drip dispersion depends on how successful the wastewater dose rate and the volume is matched to the soil and site characteristics.... The hydraulic processes are complicated and the number of variables is large."

One aspect of this is that the instantaneous water application rate of the system must never exceed

VOID

the water absorption capacity of the soil varies depending upon the current water content of that soil.

Every attempt has herein been made to design this system toward the maximum probability of success by upholding the soil's relatively high soil absorption rate through a low rate of application, this in order to keep the soil below its saturation point.

One of the largest threats to any dripfield is excessive rainfall. But, while that can't be helped, all man-made, extraneous waters, e.g., from the property improvements, must be totally avoided.

A. DRIPFIELD PREPARATION/INSTALLATION

Prior to trenching, the site must be scarified and Class II or Class III soil added so as to give all driplines at least 6" of that soil over and above any Class IV clay or limestone. Drip tubing will be laid and the entire field area will be capped with 6" Class II soil (not sand). The entire field area will be sodded with hearty grasses, e.g, Bermuda or St. Augustine, prior to system startup.

Of extreme importance is that the entire dripfield must be protected from surface water running over it. This would do great damage to its ability to absorb wastewater from the septic system.

B. DRIPFIELD MANAGEMENT

The first step is the installation of a WASTEFLOW HEADWORKS UNIT or management center. It will include a micro-filter to filter the treated effluent prior to sending it out through the drip tubes, a water meter to measure flows through the entire unit, a "programmable logic controller" to control everything from the pump tank forward, some piping for system flushing and various valves and a pressure regulator so that the dripfield operates under a CONSTANT PRESSURE of 40 psi, so that each emitter will have the same flow rate. It is the "brain" of the entire drip system.

C. DRIP TUBING

This .5" tubing will be set 6" to 8" below grade (right at the roots of the grass!), with the lines being 2' apart. The tubing includes a protected and specially designed opening called an "emitter" that allows treated water to exit at a FIXED rate.

This tubing now includes highly specialized chemicals in it that protect against root intrusion and biological growth on the inside walls of the tubes and emitters. Each emitter is constructed to enhance turbulence in the line which equalizes flows and keeps them clean.
The driplines shall be connected to each other by the use of a flexible tubing, e.g, SpaFlex, with QuickLock fittings. They are referred to as "loops" and do not include any emitters.

THE PREFERRED BRAND OF DRIP TUBING IS GEOFLOW with emitters that flow, under 40 psi, .6 gal/hr. (but Netafim can be substituted).

D. COMPONENTS AND STANDARD VALUES

Air release/vacuum breaker: A valve set at the high point of each zone so as to prevent siphoning of effluent from higher to lower parts of the dripfield

Dosing: normal dosing of a dripfield zone

Drip tubing: a .55" commercial tubing, chemically treated to fight bacterial growth and root intrusion and with a emitter every 2' that is engineered to cause agitated flows to further reduce any kind of clogging or bacterial growth.

Dripfield saturation: a deleterious situation where effluent begins to pond; one common cause is allowing pump times to run past 5 minutes in length.

Emitter flow: .61 gal/hr or .01 gpm

Equal distribution: the distribution of treated effluent in equal rates and volumes across the entire dripfield

Flushing: forcing an increased rate of flow, the same direction as is normal flow, but at a higher velocity, this to clean debris out of driplines

Indexing valve: a valve placed outside the management center, whose purpose is to divide the dripfield into zones that will be feed one at a time, this in order to reduce the size of the pump needed.

Management center: Container at the pump outlet that contains a 100 micron filter, pressure regulator set at 40 psi, a ball vale for flushing, this partially open and over valves and piping as needed

Minimum scour velocity: At least 2'/sec must be forced through the tubing to properly scour it

PSI: set by the pressure regulator at 40 psi

Return line: Always a 1" pvc, Sch. 40 pipe, it returns undelivered effluent to the pump tank or to the pre-treatment tank of the ATU; it includes a ball run valve before entry to the pump tank. It shall also include a 1" air release valve at its high point.

Scarification: The plowing or trenching of surface soils so as to remove rocks, tree roots, etc. and allow the tubing to sit in 8" of sandy loam, later to be capped with another 4" of a sandy loam

Section: A run of drip tubing that starts from a Supply line and ends at either another point on that Supply line or at a Return line, accompanied by an air release valve.

Supply line: Always a 1" pvc, Sch. 40 pipe, issuing from the management center to a K-rain Indexing valve or directed by solenoid valves to feed all zones, one at a time.

Zone: A portion of an overall dripfield that is connected to its own Supply line and Return line; it is not ever to be more than 320' in length. All zones will be approximately the same size.

E. CALCULATIONS

The home of [2871] SF and of [3] bedrooms must be rated at a MAXIMUM flow on ANY GIVEN

DAY of [300] gpd

Soil application rate: [.2] gal/SF/day (that of a Class [III] soil)

Total absorption area (TAA) required = [300] gpd/[.2] Ra = at least [1500] SF of dripfield

Total drip tubing required = TAA/2 = at least [750]' total length with an emitter every 2' with a

total number of emitters of at least [375].

Rules:

1. Place air release at the end of each zone.
2. Place a single check at the end of each zone.
3. Place a globe valve, left partially cracked at the end of each zone. (To allow for continuous

flush back to the pre-treatment tank)
4. Friction head loss in tubing is .67'/100' of tubing
5. Emitter drip rate: .01 gpm

Drip calc gpd/Ra = SF SF/2 = length

Length 847 x 2 = 1697 SF x .2 = 339 gpd (over-sized for this home)

The requirement: A maximum flow of [339] gal. on any given day, with a residential strength of under 300 mg/l BOD (organic strength).

OVERALL DRIPFIELD SIZING

The dripfield shall consist of [2] zones with a total length of 847' of dripline.

DRIPFIELD RATES OF FLOW

The larger zone ZONE shall include [470]' of dripline or [235] emitters, issuing .01 gpm

for a total flow for the zone of [2.35] gpm.

(Note: THIS is why it is referred to as a "drip" system and, with the placement of the tubing at the roots of the grasses, and why it's so beneficial to them.)

TOTAL HEAD NEEDED

Total friction loss of [470]' of tubing, at .67'/100', = [3.15]' +

For a [1]" pvc, Sch. 40 pipe, at [2.5] gpm, the friction loss per 100' is [1]'. For a

maximum total length of supply and return lines of [55]', the total friction loss of those lines =

[1.5]' +

an elevation head loss of [10]' .....

= A TOTAL HEAD REQUIREMENT FOR EACH ZONE OF [14.65]'

WELL PUMP MUST BE CAPABLE OF PUMPING AT LEAST [2.5] GPM AT A HEAD OF [15]'.
(see pump graph below)

PUMP ACTIVATIONS

At the total flow of [339] gpd and a total pump flow rate set at [2.5] gpm, the total run

time per day will be [136] minutes.

This will be divided, using 6 minutes as the maximum run time of any pumping event into [10]

pump activations per day or one every [1] hour.

The field area will be **sodded** with hearty grass such as Bermuda or St. Augustine prior to system startup.

DRIPFIELD INSTRUCTIONS:

1. Geoflow is the preferred brand of tubing, although Netafim is acceptable.
2. No trees shall be removed without owner approval.
3. If the dripfield is to be constructed above the native soils, all large, loose rocks must be removed prior to construction and the native surface is first to be tilled or scarified. The imported soil must be clean Class III loam.
4. The drip tubing shall be installed by cutting trenches, plowing or laying the tubing on scarified ground. The tubing is to be installed parallel to the contours with 2' spacing.
5. The finished top elevation of the backfill on the dripfield area must graded so that no water can pond either over or uphill form the field.
6. Never allow the pump to run for over 5 minutes, pressurizing any portion of the dripfield. Doing so can cause a "tunneling" of water upwards from an emitter which may take months to heal
7. All pipe and tubing is to be buried with at least 6" of soil cover.
8. If seepage or other underground water is found during excavation of the distribution tubing, stop construction.
9. Do not install the dripfield during or after [illegible] soil must be dry enough that no noticeable compaction of the soil occurs during construction.
10. Protect the dripfield from excessive stormwater OR WATER FROM ANY OTHER SOURCE from flowing over it by berms (raising up), swale (lowering) or guttering as needed.
11. Disallow any driving or heavy equipment over the dripfield.
12. If imported soil is to be added, the grass in that area of the dripfield shall be first removed.
13. No grade cuts shall be made close to the dripfield.
14. The owner must keep the dripfield maintained (mowed) at all times, as the sun's evaporation plays a major role in its proper functioning.

VOID

Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

REVISED
8:38 am, Dec 26, 2018

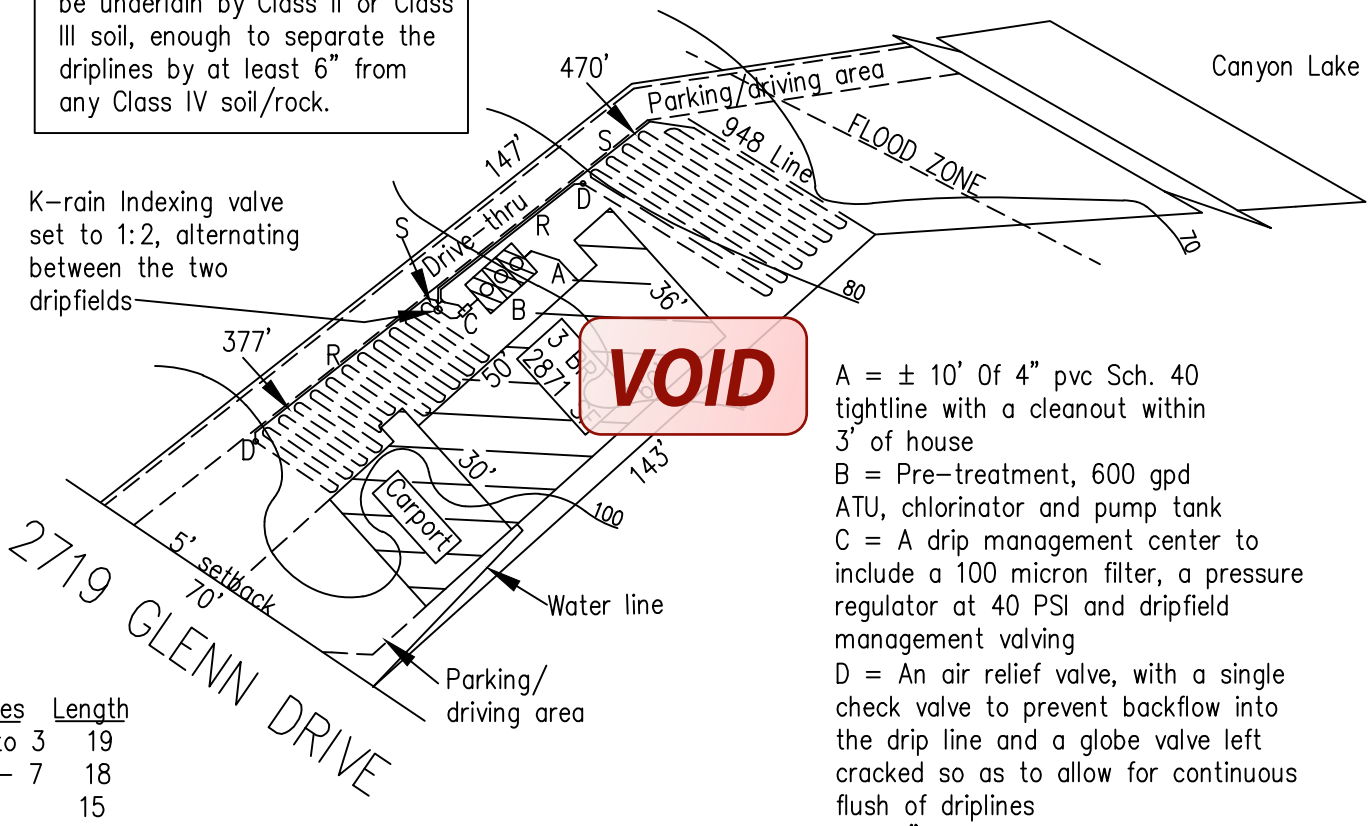
Lines	Length
1–8	44
9	40
10 – 11	39
Total:	470'

OTT RESIDENCE
25 OCTOBER 2018

Revision of 23 Dec 2018

North
1" = 40'

NOTE: The entire dripfield shall be underlain by Class II or Class III soil, enough to separate the driplines by at least 6" from any Class IV soil/rock.



VOID

A = ± 10' 0f 4" pvc Sch. 40 tightline with a cleanout within 3' of house
B = Pre-treatment, 600 gpd ATU, chlorinator and pump tank
C = A drip management center to include a 100 micron filter, a pressure regulator at 40 PSI and dripfield management valving
D = An air relief valve, with a single check valve to prevent backflow into the drip line and a globe valve left cracked so as to allow for continuous flush of driplines
S = 1" pvc Sch. 40 supply line
R 1" pvc Sch. 40 return line bringing un-used effluent back to the management center whic will be directed back to the pre-treatment tank of the ATU

Lines	Length
1 to 3	19
4 – 7	18
8	15
9	14
10 & 11	13
12 – 16	18
17 – 22	17
Total:	377

Dripfield: Side section = 377' (alternated by a
Rear section = 470' K-rain Indexing
Total length = 847' valve)

Note: The contractor may make field adjust-ments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

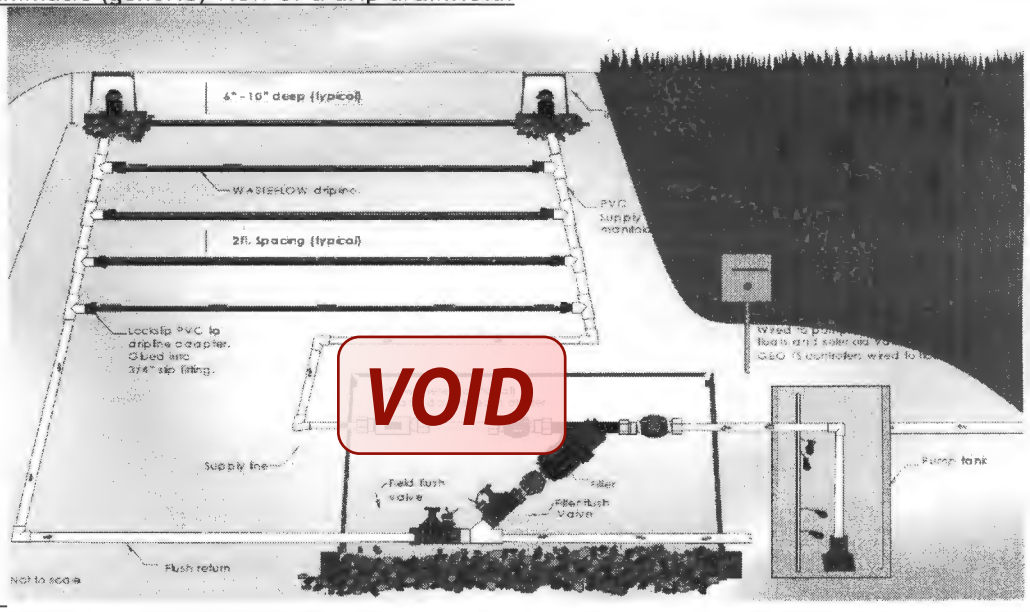
VOID

Lot 103
Astro Hills
Unit 1

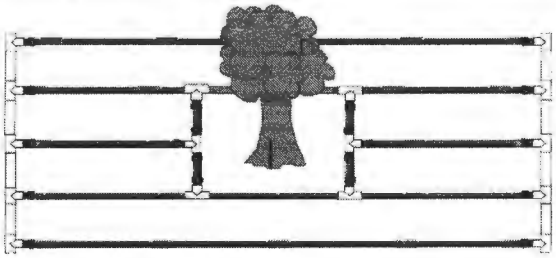
STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED
PROFESSIONAL SANITARIAN

RS 994
OS 10807
DR 30400

Diagrammatic (generic) view of a drip drainfield:



Looping around trees...



Loop dripline around trees

A drip emitter...

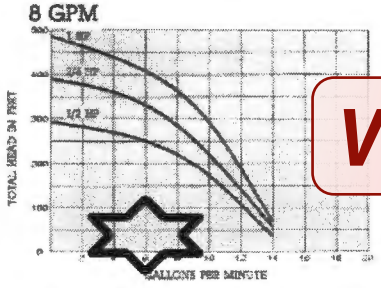
Air release valves:

Typical high head well pump charts:

High Head Filtered Effluent Pumps

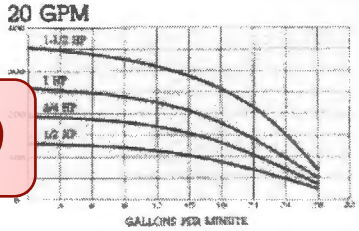
½, ¾, 1 and 1½ HP
8, 12, 20, 25, and 35 GPM
4" Diameter Submersibles

8 GPM



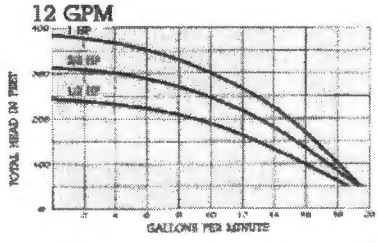
HP	Voltage	Pump Model
½	115	2NFL51-8E
½	230	2NFL52-8E
¾	230	2NFL72-8E
1	230	2NFL102-8E

20 GPM



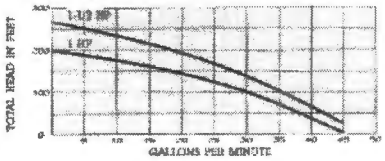
HP	Voltage	Pump Model
½	115	2NFL51-20E
½	230	2NFL52-20E
¾	230	2NFL72-20E
1	230	2NFL102-20E
1½	230	2NFL152-20E

12 GPM



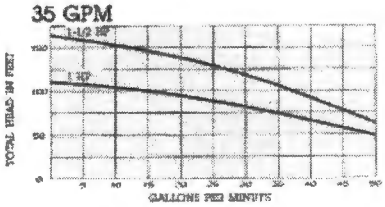
HP	Voltage	Pump Model
½	115	2NFL51-12E
½	230	2NFL52-12E
¾	230	2NFL72-12E
1	230	2NFL102-12E

25 GPM



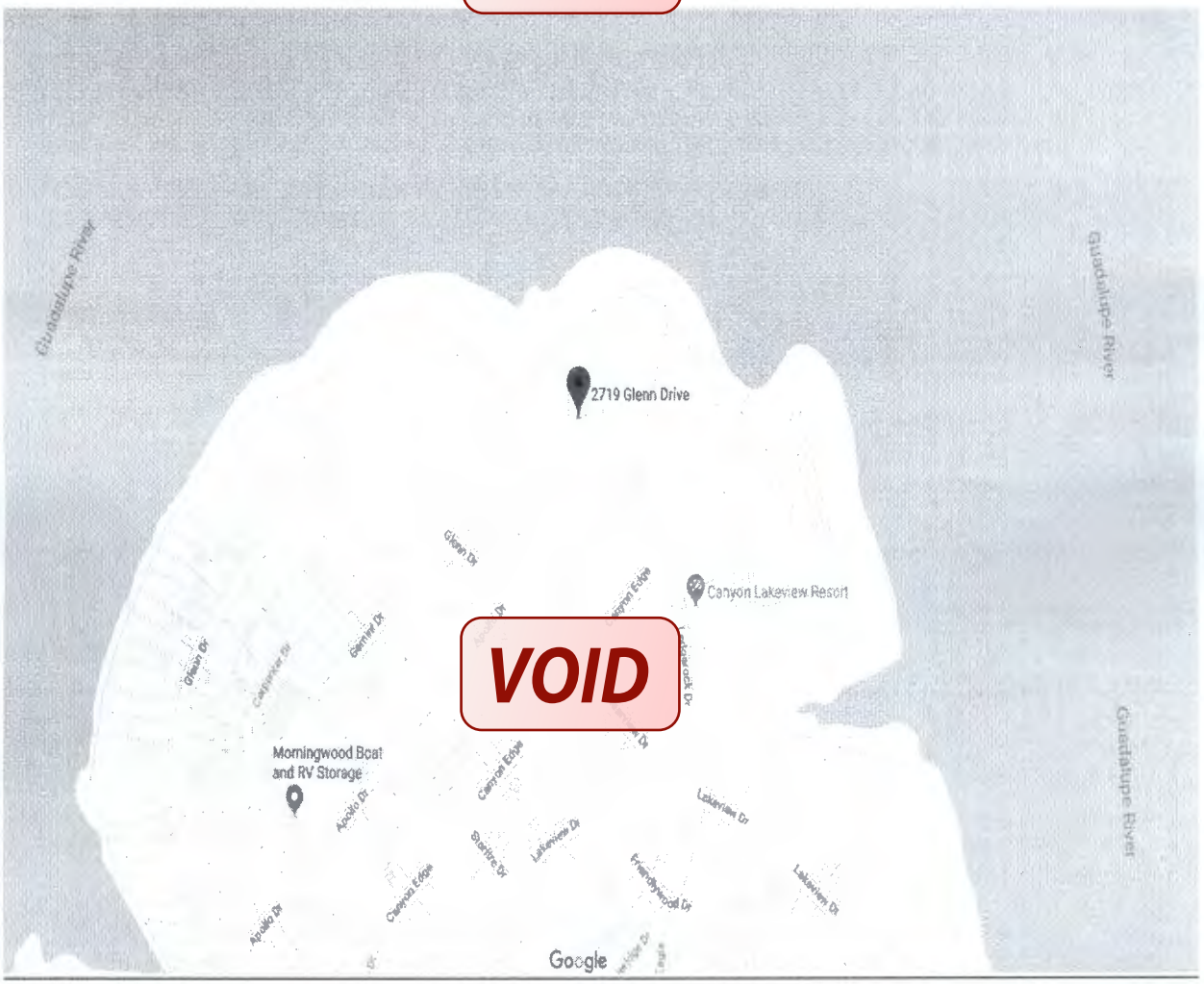
HP	Voltage	Pump Model
1	230	J1025BE
1½	230	J1525BE

35 GPM



HP	Voltage	Pump Model
1	230	J1035BE
1½	230	J1535BE

VOID

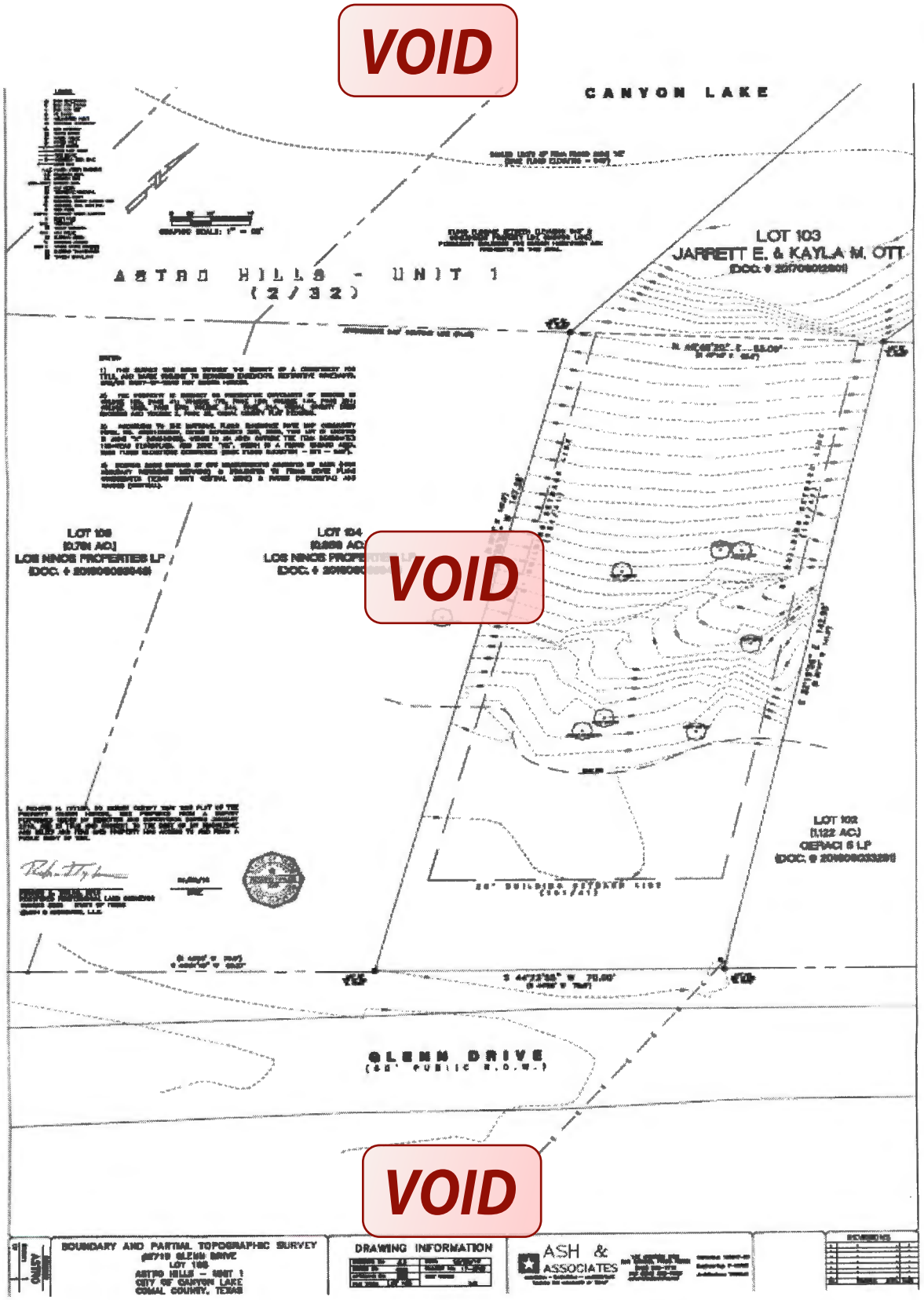


VOID

Flood zone/Aquifer map:

VOID

Property plat:



Property deed:

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

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

Date 12/1/18 VOID Permit # 10845D

Owner Name	Jarrett & Kayla Ott	Agent Name	Frank Aguirre
Mailing Address	710 Dimaggio Dr	Agent Address	16159 Old Stable Rd.
City, State, Zip	Midland, Tx, 79706	City, State, Zip	San Antonio, Texas 78247-4490
Phone #	432-770-5273	Phone #	210-275-7866
Email	kjoproperties@outlook.com	Email	frankseptic45@gmail.com

All correspondence should be sent to: ☒ Owner ☑ Agent ☑ Both

Subdivision Name Astro Hills Unit 1 Lot 103 Block 2 S-A

Acreage/Legal 1.088

Street Name/Address 2719 Glenn Dr City Canyon Lake Zip 78133

Type of Development:

☒ Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) House

Number of Bedrooms 3

Indicate Sq Ft of Living Area 2871

RECEIVED
DEC 06 2018
COUNTY ENGINEER

☐ Commercial or Institutional Facility VOID

(Planning materials must show adequate land area for doubling the [illegible] needed for treatment units and disposal area)

Type of Facility

Offices, Factories, Churches, Schools, Parks, Etc. - Indicate Number Of Occupants

Restaurants, Lounges, Theaters - Indicate Number of Seats

Hotel, Motel, Hospital, Nursing Home - Indicate Number of Beds

Travel Trailer/RV Parks - Indicate Number of Spaces

Miscellaneous

Estimated Cost of Construction: $ 390,341.01 (Structure Only)

Is any portion of the proposed OSSF located in the United States Army Corps of Engineers (USACE) flowage easement?

☐ Yes ☒ No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

Source of Water ☒ Public ☐ Private Well

Are Water Saving Devices Being Utilized Within the Residence? ☒ Yes ☐ No

By signing this application, I certify that:

- The completed application and all additional information submitted does not contain any false information and does not conceal any material facts.
- Authorization is hereby given to the permitting authority and designated agents to enter upon the above described property for the purpose of site/soil evaluation and inspection of private sewage facilities..
- I understand that a permit of authorization to construct will not be issued until the Floodplain Administrator has performed the reviews required by the Comal County Flood Damage Prevention Order.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

VOID

JM Ott 12/1/18

Signature of Owner Date

195 David Jonas Dr., New Braunfels, Texas 78132-3760 (830) 608-2090 Fax (830) 608-2078

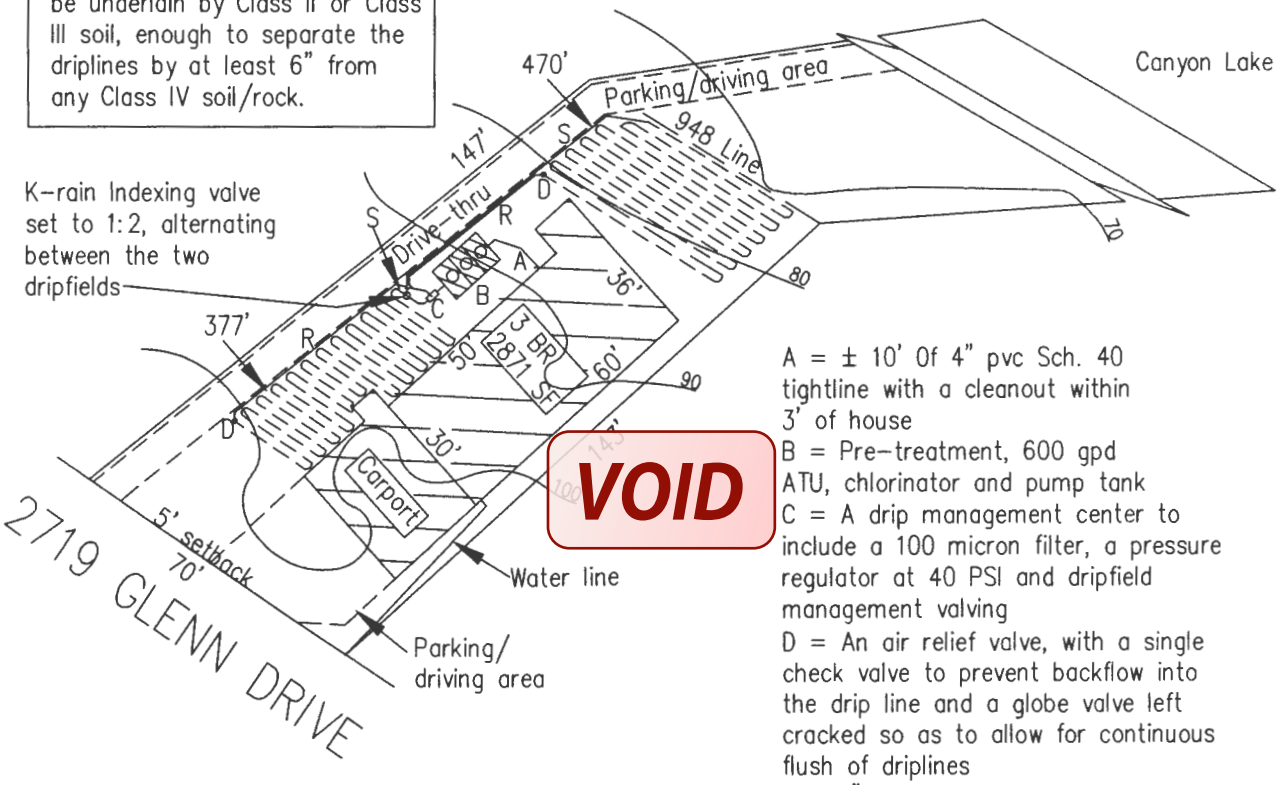
Septic Systems Express
DBA of Frank Aguirre and Associates, Inc.

VOID

OTT RESIDENCE
25 OCTOBER 2018

North
1" = 40'

NOTE: The entire dripfield shall be underlain by Class II or Class III soil, enough to separate the driplines by at least 6" from any Class IV soil/rock.



VOID

A = ± 10' Of 4" pvc Sch. 40 tightline with a cleanout within 3' of house
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Dripfield: Side section = 377' (alternated by a
Rear section = 470' K-rain Indexing
Total length = 847' valve)

Note: The contractor may make field adjustments to the system so as to better fit specific site conditions encountered. All angles, lengths and locations shown are approximate and are adjustable during the actual system installation.

VOID

Lot 103
Astro Hills
Unit 1

STATE OF TEXAS
FRANK AGUIRRE
994
REGISTERED
PROFESSIONAL SANITARIAN

RS 994
OS 10807
DR 30400

20180030429 08/06/2018 11:23:35 AM 1/2

WARRANTY DEED

Date: July 31st, 2018

Grantor: KJO Properties, LLC

Grantor's Mailing Address: 710 Dimaggio Dr., Midland, Texas 79706

Grantee: Jarrett Ott and Kayla Ott

Grantee's Mailing Address: 710 Dimaggio Dr., Midland, Texas 79706

Consideration: TEN AND N0/100 DOLLARS ($ 10.00) AND OTHER GOOD AND VALUABLE CONSIDERATION

Lot 103, ASTRO HILLS, UNIT NO. 1, Comal County, Texas, according to plat thereof recorded in Volume 2, Page(s) 32, Map and Plat Records of Comal County, Texas;

Reservations from and Exceptions to Conveyance and Warranty: This conveyance is given and accepted subject to any and all restrictions, reservations, covenants, conditions, rights-of-way, easements of record in said County, and municipal and other governmental zoning laws, regulations and ordinances, if any, affecting the herein described property.

Grantor, for the consideration and subject to the reservations from 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 wise belonging to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators, and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof.

Taxes for the current year have been prorated and their payment is assumed by Grantee.

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

KJO Properties, Series LLC
BY:

Jarrett Ott, Member

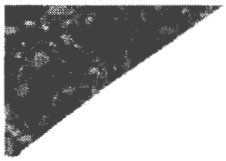
Kayla Ott, Member

STATE OF TEXAS
COUNTY OF COMAL

This instrument was acknowledged before me on the 31st day of July 2018 by Jarrett Ott and Kayla Ott.

NOTARY PUBLIC, STATE OF TEXAS

REBECCA LAMB
Commission # 130421104
My Commission Expires
October 27, 2019



This page has been added to comply with the statutory requirement that the clerk shall stamp the recording information at the bottom of the last page.

This page becomes part of the document identified by the file clerk number affixed on preceding pages.

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/06/2018 11:23:35 AM
CHRISTY 2 Page(s)
201806030429

Bobbie Koepp

COUNTY OF COMAL **COUNTY ENGINEER'S OFFICE**

Staff will complete shaded items

[redacted]
Date Received *Initials*

[redacted]
Permit Number

OSSF/FLOODPLAIN DEVELOPMENT APPLICATION CHECKLIST

Instructions:

Place a check mark next to all items that apply. For items that do not apply, place "N/A". This OSSF/Floodplain Development Application Checklist must accompany completed application.

OSSF Permit

✓ Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate

✓ Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer

✓ Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.

✓ Required Permit Fee

✓ Surface Application/Aerobic Treatment System

✓ Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public

✓ Signed Maintenance Contract with Effective Date as Issuance of License to Operate

Floodplain Development Permit

X Property in Incorporated City

___ Completed Application

___ Boundary Map Indicating Location of Proposed Improvements

___ Copy of Recorded Deed

___ Required Permit Fee

I affirm that I have provided all information required for my OSSF/Floodplain Development Application and that this application constitutes a completed OSSF/Floodplain Development Application.

[redacted] 25 Oct 18

Signature of Applicant Date

[redacted] [redacted]

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection

1. Inspection Date: JULY 20,2020 Installed: 3/20/2020 Service Expires:3/20/2022

BILLING ADDRESS
JARETT & KAYLA OTT
2719 GLENN DR
CANYON LAKE, TX 78133

PHYSICAL ADDRESS
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: NEED #
ALT. PHONE:

LOT: LT 130

PERMIT#: 108450
COUNTY: COMAL
ID: 619080480
PRESS: N/A

SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 400

NOTES:
TYPE OF SYSTEM: DRIP

Inspected Items:	Operational	Inoperative
Aerators		
[illegible] Compressor PSI (Record Pressure Reading)	1.0	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted	/	
Access Ports are Secured		

2. Action taken or Repairs or Needed repairs to system (list all components replaced)

CHECKED micron, pump, Alarms, FLOATS, Flushed Field, Compressor

SYSTEM OPERATING AS DESIGNED? (Y)/N

(Yes) [illegible]

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/	Clear	
Cl(Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner

Maintenance Technician: Thomas AS 11

Date of completion: 7/29/20 Start Job Time 10:40 Stop Job Time 11:00

Maintenance Provider: Walker Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record to be completed signed and dated after each inspection.

1 Inspection Date: NOVEMBER 20, 2020 Installed: 3/20/2020 Service Expires: 3/20/2022

BILLING ADDRESS:
JARETT & KAYLA OTT
2719 GLENN DR
CANYON LAKE, TX 78133

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: NEED #
ALT. PHONE:

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
PIN: 619080480
MAP ID: N/A

SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

NOTES:
TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators PSIM Comp Pressure PSI (Record Pressure Reading)	1.25	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Spray/Field Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted	/	

2 Action taken or Repairs if Needed (Repairs or system (List all components replaced)

CHECKED pump. Alarm, FLOATS, MICRON FILTER, Compressor.

SYSTEM OPERATING AS DESIGNED? Y/N

Access Ports are Secured (Yes) No

3 Tests required and results

	Required Yes	Required No	Results (e.g. 1 mpn 100ml or Trace)	Test Method
BOD(Grab)				
TSS(Grab)		/		
Cl2(Grab)	/			
Fecal Coliform				

Main Breaker WAS OFF Turned ON everything working pumping down High water

Copies of this report have been forwarded to the following: COMAL county / homeowner

Maintenance Technician: Thomas

Date of completion: 11/30/20 Travel Job Time: 12:00 Stop Job Time 12:20

Maintenance Provider: Walker Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1.Inspection Date: JULY 20,2021 Installed: 3/20/2020 Service Expires:3/20/2022

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777
TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI (Record Pressure Reading)	2.0	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted	/	
Access Posts are Secured	Yes (Y)	No

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

Checked micron filter, pump, Alarm, Floats, Fields, Compressor

SYSTEM OPERATING AS DESIGNED? (Y)/N

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD (Grab)				
TSS (Grab)		/		
Cl (Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Thomas

Date of completion: 8/5/21 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

11

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6652

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1.Inspection Date: NOVEMBER 20,2021 Installed: 3/20/2020 Service Expires:3/20/2022

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480

SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777
TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI (Record Pressure Reading)	2.0	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted	/	
Access Posts are Secured	(Yes)	No

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED Alarms, FLOATS, PUMP, MICRON FILTER, Compressor

SYSTEM OPERATING AS DESIGNED? (Y)/N

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/	CLEAR	
Cl(Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: THOMAS id

Date of completion: 11.24.21 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Wade Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: MARCH 20, 2022 Installed: 3/20/2020 Service Expires: 3/20/2022

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777
TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI (Record Pressure Reading)	2.5	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted	/	

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED PUMP, ALARMS, FLOATS, FILTER, COMPRESSOR, FIELD

SYSTEM OPERATING AS DESIGNED? (Y)/N

Access Posts are Secured	(Yes)	No

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/		
Cl(Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: THOMAS 11

Date of completion: 3/15/22 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

Countryside *Construction, Inc.*
300 Chapman Parkway, Canyon Lake, TX. 78133
Phone: 830-899-2615 or 1-888-379-3721 Fax: 830-899-6662

Septic System Service Agreement

In consideration of payment for this service contract, we will abide by and agree to its terms and conditions:

Name: JARETT & KAYLA OTT **Address: 2719 GLENN DR**
Sub-Div./County: ASTRO HILLS, COMAL **CANYON LAKE, TX 78133**
Permit #: 108450 DRIP Model #: CLEARSTRM 600 Serial #: 619080480
Phone: 817-219-8870 (JERETT)

PLEASE SELECT CONTRACT TERM

( ) One Year Service Agreement $320.00 (x) Two Year Service Agreement $620.00

Legal Description: LT 130, ASTRO HILLS - COMAL
This non-refundable contract will be in effect FROM: 3/20/2022 TO: 3/20/2023 OR 2024 (If paying the two year service agreement add one year to expiration date by circling it). Countryside Construction, Inc. will provide the following:

- An inspection every (4) four months which will include: Servicing of the mechanical & electrical components as necessary to insure system is functioning as engineer designed, pulling and cleaning the Norweco Brand aerator shaft, cleaning compressor air filters of other brands, check chlorine, conduct solids test to determine if system should be pumped, back flushing tubing for drip irrigation fields and checking sprinklers on above ground systems.

1) **The property owner is responsible for "purchasing and keeping chlorine"** in the chlorinator, (if applicable). If the chlorine test reveals "No Chlorine" in the system, the property owner may incur an additional cost.
2) If any improper operation is observed (which cannot be corrected at that time) the property owner will be notified immediately of the conditions and the estimated cost.
3) **ANY PARTS, WARRANTY OR NON-WARRANTY, FREIGHT CHARGES, LABOR OR SERVICE CALLS NOT PAID IN FULL AT THE END OF (30) DAYS SHALL REMAIN THE PROPERTY OF COUNTRYSIDE CONSTRUCTION AND AUTHORIZES CONTRACTOR TO REMOVE AND REPOSSESS ANY PARTS INSTALLED. CLIENT FURTHER AGREES TO PAY ANY LABOR COST OF THE INSTALLATION AND REASONABLE COST OF REMOVAL OF SAID PARTS.**
4) **THE SIGNING OF THIS SERVICE AGREEMENT AUTHORIZES COUNTRYSIDE CONSTRUCTION TO ENTER THE PROPERTY TO EXECUTE ALL TERMS OF THIS CONTRACT.**

Countryside Construction, Inc., **will warranty installation** of the septic system to be according to state and county regulations and the designs approved by the county. **HOMEOWNER WILL BE RESPONSIBLE FOR SERVICE CALLS, LABOR AND SHIPPING COSTS ON ANY "WARRANTIED PARTS" EXCHANGED DURING WARRANTY.** All other components will be according to manufacturer's warranties.
Important: As Countryside Construction, Inc. **cannot control what or how much effluent** goes into this septic system, we **cannot warranty** how the system will function. Refer to manufacturers or installer's instructions, for suggestions on septic operation. If necessary, between inspections, it is the property owner's responsibility to clean the micron filters on drip irrigation systems. This service agreement **does not** cover the cost of "**service calls, labor or materials** that are required or **parts out of warranty,** the failure to maintain electrical power to the system, **sprinklers that are broken,** leaking, stopped-up or otherwise mal-functioning; or sewage flows exceeding the hydraulic/organic design capabilities and the input of non-biodegradable materials (solvents, grease, oil, paints, etc.), or any usage contrary to the requirements as advised by authorized service representative. Laboratory test work is available at an additional cost. Chlorine, filters, or parts that are out of warranty are available at a reasonable cost.
This contract **does not** include the **pumping of a tank** or of any **compartment of a tank, or settlement of soil on or around any part of the system regardless of reason**:
Violations of the warranty also include: disconnecting the alarm, restricting ventilation to the aerator, overloading the system above its rated capacity; or flooding by external means. Rodent, insect or fire ant damage or any other form of unusual abuse is a violation.
A renewal service contract **should** be **"activated" (30) thirty days before expiration** of existing contract. We will contact property owner prior to expiration of existing contract.

Serviced by: *Countryside Construction Inc.*
Walker Chapman – Installer's Licensee #OS0002929-OSSF **Maintenance Provider Licensee #MP0000035**

(X) _____ Print Name (X) Kayla Ott Date: 3/21/22
Property Owner Signature

(X) Walker Chapman Date: 3-21-22 Authorized Service Representative *(revised 08/13/2020)*

PAID 3/21/22 cc

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: JULY 20,2022 Installed: 3/20/2020 Service Expires:3/20/2024

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)
GATE CODE:
SUBDIVISION: ASTRO HILLS Manufacturer: CLEARSTRM 600
LOT: LT 130,
PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777

TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI Record Pressure Reading	2.5	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted		
Access Posts are Secured		

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED PUMP, Alarms, FLOATS, MICRON FILTER, FIELD, Compressor

SYSTEM OPERATING AS DESIGNED? (Y)/N

(Yes) No

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/		
Cl(Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Thomas

11

Date of completion: 7/19/22 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Waken Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: November 20,2022 Installed: 3/20/2020 Service Expires:3/20/2024

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)
GATE CODE:
SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777

TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI Record Pressure Reading	2.5	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted		
Access Posts are Secured	Yes	No

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED pump, Alarms, FLOATS, FILTER, FIELD, Compresson

SYSTEM OPERATING AS DESIGNED? (Y)/N

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD (Grab)				
TSS (Grab)		/		
Cl (Grab)	/			
Fecal Coliform				

please Treat For ANTS.

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: THOMAS 11

Date of completion: 11/2/22 Start Job Time: 11:00 Stop Job Time: 11:15

Maintenance Provider: Walker Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: MARCH 20,2023 Installed: 3/20/2020 Service Expires:3/20/2024

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)
GATE CODE:
SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777

TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI Record Pressure Reading	3.0	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted		

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED PUMP, Alarms, FILTER, FLOATS, FIELD, Compressor

SYSTEM OPERATING AS DESIGNED? Y/N

Access Posts are Secured (Yes) No

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/		
Cl(Grab)	/			
Fecal Coliform				

PLEASE ADD Chlorine

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: THOMAS 11

Date of completion: 3-8-23 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: NOVEMBER 20,2023 Installed: 3/20/2020 Service Expires:3/20/2024

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)
GATE CODE:
SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600

LOT: LT 130,

PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777

TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators SCFM/Compressors PSI Record Pressure Reading	2.5	
Filters	/	
Irrigation Pumps	/	
Recirculation Pumps	N/A	
Disinfection Device	/	
Chlorine Supply	/	
Electrical Circuits	/	
Distribution System	/	
Sprayfield Vegetation	N/A	
Back Flush Drip Field, if applicable	/	
Other as Noted		
Access Posts are Secured	(Yes)	No

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED PUMP, ALARMS, FILTER, FLOATS, FIELD. COMPRESSOR

SYSTEM OPERATING AS DESIGNED? (Y) N

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		/		
Cl(Grab)	/			
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Thomas 11

Date of completion: 11/13/23 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

MJ Septic, LLC

1328 W Borgfeld
San Antonio, TX 78260

Phone: (210) 875-3625

www.mjseptic.com **mjseptic@mjseptic.com**

To: Ryan Powell
308 Warbler Dr
Spring Branch, TX 78070

Printed:3/24/2023
Site: 308 Warbler Dr
Spring Branch, TX 78070
(412) 849-3865

Permit #: **108542**
Agency: Comal County Environmental Health
County: Comal Sub: Mystic Shores
Mfg / Brand: Pro Flo Aerobic Systems, LP - Pro Flo Aerobic Systems, LP
Treatment Type: Aerobic
Disposal: Surface Application

Customer ID: 4836
Contract Dates: 10/17/2022 - 10/17/2025
Scheduled Date: 2/17/2023 Inspection 1 of 9
Aerator: HP80 HiBlow Air Com Installed: 10/17/2019
Aerator S/N: 80HP20504P, 022 Warranty End: 10/17/2021

Service Type: Scheduled Inspection
Visit Date: 2/6/2023 Time In: 11:11 am Out: 11:35 am
Method: Other
Technician: Steve Chavarria
Maint. Provider: Michael J. Long

☑ This counts as a type of "Scheduled Inspection"
Entered By: Audrey Miller
☑ Copy emailed to Customer
Customer Emailed: 2/10/2023
☑ Copy emailed to the Agency
Agency Emailed: 3/24/2023

Aerators: Operational
Filters: Operational
Irrigation Pumps: Operational
Disinfection Device: Operational
Chlorine Supply: Operational
Chlorine Residual: 0.1mg/L

Sludge Levels
For Tank 1: 5"

Chlorinator: Op

Tank Lid / Riser: Secured

Electric Circuits: Operational
Distribution System: Operational
Sprayfield Veg: Operational

☑ **Problem Indicated**

Alarm: Operational

Comments

☑ **Service Completed**

- Technician noted that there was a problem or issue with this Scheduled Inspection. - Our technician indcated that one of your sprinkler heads is damaged and in need of replacement. - Repair declined onsite; please call the office at (210)875-3625 if you would like to schedule repairs.

- Tech reset your timer.
- Technician Secured the Tank Lid and/or Riser prior to leaving location.
- *Septic tank cleaning is recommended between 10 and 12 inches of sludge in the pump tank (tank 1) or unless otherwise recommended by technician for other reasons such as full trash tank, etc.*
- *This inspection report is not valid for any real estate transactions* - Copy emailed to the customer on 2/10/2023.

Insp ID #:50156

Provider: Michael J. Long

MJ Septic, LLC

1328 W Borgfeld
San Antonio, TX 78260

Phone: (210) 875-3625

www.mjseptic.com **mjseptic@mjseptic.com**

License Info: MP0001294 Expires: 8/31/2025

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: JULY 20, 2023 Installed: 3/20/2020 Service Expires: 3/20/2024

BILLING ADDRESS:
JARETT & KAYLA OTT
1530 PB LANE #K5019
WICHITA FALLS, TX 76302

PHYSICAL ADDRESS:
2719 GLENN DR
CANYON LAKE, TX 78133

TELEPHONE: 817-219-8870 (JERETT)
ALT. PHONE: 775-397-7777 (JEDEDIAH)
GATE CODE:
SUBDIVISION: ASTRO HILLS MFG: CLEARSTRM 600
LOT: LT 130,
PERMIT#: 108450
COUNTY: COMAL
SN: 619080480
MAPSCO: N/A

NOTES: RENTAL PROPERTY - PROPERTY MANAGER IS JEDEDIAH DUER - 775-397-7777

TYPE OF SYSTEM: DRIP

Inspected Item:	Operational	Inoperative
Aerators 3CFM/Compressors P3I Record Pressure Reading	3psi	
Filters	✓	
Irrigation Pumps	✓	
Recirculation Pumps	N/A	
Disinfection Device	✓	
Chlorine Supply	✓	
Electrical Circuits	✓	
Distribution System	✓	
Sprayfield Vegetation	✓	
Back Flush Drip Field, if applicable	N/A	
Other as Noted		

2. Action taken or Repairs or Needed repairs to system (list all components replaced):
Cleaned filter on Compressor. Checked Micron filter. Checked pump, floats and Driptield. Set timer.

SYSTEM OPERATING AS DESIGNED? Y/N

Access Posts are Secured	(Yes)	No

3. Tests required and results:

	Required		Results	Test
	Yes	No	mg/l mpn/100ml or Trace	Method
BOD(Grab)				
TSS(Grab)		✓	Clear	Grab
Cl(Grab)	✓		1.0	DPD
Fecal Coliform				

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Kyle 11

Date of completion: 8.18.23 Start Job Time: _____ Stop Job Time: 9:25

Maintenance Provider: Walka Chapman