

Olvera,Brandon

From: Olvera,Brandon
Sent: Tuesday, April 30, 2024 4:04 PM
To: Greg Johnson
Cc: Brad Parker
Subject: RE: 1896 LIVE OAK DR - HUERTA #11

Good Afternoon,
File has been updated. Update page 2 of the application.

Thank You,

| **Brandon Olvera** | Designated Representative OS0034792 | Comal County | www.cceo.org |
| 195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e:
olverb@co.comal.tx.us |

From: Greg Johnson <gregjohnsonpe@yahoo.com>
Sent: Wednesday, April 24, 2024 7:44 AM
To: Olvera,Brandon <Olverb@co.comal.tx.us>
Cc: Brad Parker <parker.construction@yahoo.com>
Subject: 1896 LIVE OAK DR - HUERTA #11

This email originated from outside of the organization.

Do not click links or open attachments unless you recognize the sender and know the content is safe.

- Comal IT

Revised.
Thx,
Greg

Send for Greg W. Johnson, P.E.,R.S.)

170 Hollow Oak

New Braunfels, TX 78132

Office/Fax (830) 905-2778

Email: gregjohnsonpe@yahoo.com

*** 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 GREG W. JOHNSON, P.E.

System Description PROPRIETARY; AEROBIC TREATMENT AND DRIP TUBING

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

Tank Size(s) (Gallons) CLEARSTREAM 600NCST Absorption/Application Area (Sq Ft) 2000

Gallons Per Day (As Per TCEQ Table III) 240

(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 prepared 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.)

Is there is no existing WPAP for the proposed development activity? 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 WPAP has been approved by the appropriate regional office.)

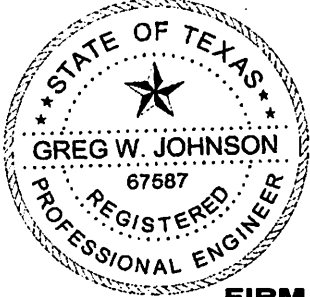
Is the property located over the Edwards Contributing Zone? Yes No
 Is there an existing TCEQ approval CZP for the property? Yes No
 (if yes, the P.E. or R.S. shall certify that the OSSF design complies with all provisions of the existing CZP)

VOID

If there is no existing CZP, does the proposed development activity require a TCEQ approved CZP? Yes No
 (if yes, the P.E. or R.S. 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: _____



FIRM #2585

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]
Signature of Designer

January 18, 2024
Date

Comal County Environmental Health OSSF Inspection Sheet

Installer Name: _____

OSSF Installer #: _____

1st Inspection Date: _____

2nd Inspection Date: _____

3rd Inspection Date: _____

Inspector Name: _____

Inspector Name: _____

Inspector Name: _____

Permit#:		Address:					
No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd 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)				
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)				

Inspector Notes:

**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 Single Tank, 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		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						
15	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number						
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		285.33(c)(3)(A)-(F)				
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) 285.33(a)(2)				
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 Insp.
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.		285.32(c)(1)				
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						
35	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.						
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						

**Comal County Environmental Health
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?		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)				
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		285.33(d)(2)(G) (i)285.33(d)(2) (A)285.33(d)(2)(F)				
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						



COMAL COUNTY

ENGINEER'S OFFICE

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

Permit Number: 117346
Issued This Date: 04/18/2024
This permit is hereby given to: MICHAEL & DOLORES HUERTA

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

1896 LIVE OAK DR
CANYON LAKE, TX 78133

Subdivision: TAMARACK SHORES
Unit: 2
Lot: 93
Block: 0
Acreage: 0.0000

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
ENGINEER'S OFFICE

**OSSF DEVELOPMENT APPLICATION
CHECKLIST**

Staff will complete shaded items

--	--

Date Received

Initials

--

Permit Number

Instructions:

Place a check mark next to all items that apply. For items that do not apply, place "N/A". This OSSF Development Application Checklist **must** accompany the 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 - See Attached Fee Schedule
- Copy of Recorded Deed
- 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

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

Signature of Applicant

04/02/2024

Date

___ COMPLETE APPLICATION
Check No. _____ Receipt No. _____

INCOMPLETE APPLICATION — (Missing Items Circled, Application Refeused)



COMAL COUNTY
ENGINEER'S OFFICE

RECEIVED
By Brandon Olvera at 3:24 pm, Apr 30, 2024
ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR
NEW BRAUNFELS, TX 78132
(830) 608-2090
WWW.CCEO.ORG

Date January 16, 2024

Permit Number 117346

1. APPLICANT / AGENT INFORMATION

Owner Name MICHAEL & DOLORES HUERTA
Mailing Address 2704 S 3RD ST.
City, State, Zip AUSTIN, TEXAS 78704
Phone # 512-779-7080
Email mhuerta512atx@gmail.com

Agent Name GREG JOHNSON, P.E.
Agent Address 170 HOLLOW OAK
City, State, Zip NEW BRAUNFELS TEXAS 78132
Phone # 830-905-2778
Email gregjohnsonpe@yahoo.com

2. LOCATION

Subdivision Name TAMARACK SHORES Unit 2 Lot 93 Block

Survey Name / Abstract Number Acreage

Address 1896 LIVE OAK DRIVE City CANYON LAKE State TX Zip 78133

3. TYPE OF DEVELOPMENT

Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) 3 - PERSONAL RV'S

Number of Bedrooms

Indicate Sq Ft of Living Area

Non-Single Family Residential

(Planning materials must show adequate land area for doubling the required land 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: \$ 50,000 (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 Rainwater Collection

4. SIGNATURE OF OWNER

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. I certify that I am the property owner or I possess the appropriate land rights necessary to make the permitted improvements on said property.
- 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.

Michael Huerta
Signature of Owner

January 12, 2024
Date



On-Site Sewage Facility (OSSF) Service Agreement

- I. **General:** This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between Michael Huerta & Dolores Huerta, (hereinafter referred to as "Client") and SOTX Septic Services (hereinafter to as "Contractor"). By this agreement, Contractor agrees to render services, as described herein, and the Client agrees to fulfill his/her/their responsibilities under this agreement as described herein.
- II. **Effective Dates:** This agreement commences on receipt of full payment and runs for two (2) years. Agreement's... Starting Date: (Date License to Operate is Issued) Ending Date: (2yrs. From Date of LTO)
- III. **Services by Contractor:** Contractor will provide the following services (hereinafter referred to as the "Services"):
1. In compliance with Agency (TCEQ and/or County) and manufacturer's requirements, inspect and perform routine maintenance on the On-Site Sewage Facility (hereinafter referred to as the "OSSF") three (3) times per year (approximately once every four (4) months).
 2. Report to the appropriate regulatory authority and to the Client, as is required by both the State's on-site rules and the local Agency's rules, if more stringent. All findings must be reported to the local Agency within 14 days.
 3. If any components of the OSSF are found to need repair during the inspection, the Contractor will notify the Client of the repairs needed.
 4. Visit in response to Client's request(s) for unscheduled service(s) within two business days from the date of Contractor's receipt of Client's request. All unscheduled responses are in addition to the fee covered by this Agreement and will be billed to the Client.
 5. Provide notification of arrival to site to the homeowner or to site personnel. Additionally, written notification of the visit will be left at the site or with site personnel upon completion or inspection, as well as, forwarded to agency within 14 days.
- IV. **Site Location:** The Services are to be performed at the property located at:
- 1896 Live Oak Dr. Lot 93
- V. **Payment(s):** The fee for this Agreement only covers the Services describes herein. This fee does not cover equipment, parts or labor supplied for the repairs or charges for unscheduled Client-request trips to the site. Payments for such additional services are due when service is provided or rendered. Payments not received within 30 days from due date will be subjected to a \$20.00 late penalty and / or a 1.5% carrying charge, whichever is greater, in addition the reasonable attorney's fees and all costs of collection incurred by Contractor in collection of any unpaid debt(s). By signing this contract, the Client is authorizing the Contractor to remove any parts which were installed but not paid for at the end of 30 days. The Client is still responsible for any labor costs associated with the installation and remove of said parts.

Initials...

Customer: MCHContractor: CDH

Client's Responsibilities: The Client is responsible for each and all the following:

1. Maintain chlorinator and provide proper chlorine supply, if OSSF is equipped with same.
 2. Provide all necessary yard or lawn maintenance and removal of obstacles as needed to allow the OSSF to function properly, and to allow Contractor easy access to all parts of the OSSF.
 3. Maintain a current license to operate and abide by the conditions and limitations of that license and all requirements for on-site sewage facilities (OSSF's) from the State and local regulatory agency, as well as manufacturer's recommendations.
 4. Immediately notify the Contractor and Agency of all problems with, including the failure of the OSSF.
 5. Upon receiving a written notification of services needed from the Contractor, it becomes the Client's responsibility to contact the Contractor to authorize the service. If the Client chooses to use a different contractor to perform the service, the Client's responsible for ensuring the contractor holds the proper license (installer II) and is certified by the manufacturer. Also, the Client is responsible for ensuring proper notification is given to the Agency, as required by the State and local Agency rules.
 6. Provide the Contractor with water usage records, upon request, for evaluation by the Contractor of the OSSF performance.
 7. Clients residing in Harris County should allow for samples at both the inlet and outlet to the OSSF to be obtained by the Contractor for the purpose of evaluating the OSSF's performance when requested by the Client. If these samples are sent to the lab for testing, the Client will directly pay the lab for the cost of the testing plus pay the Contractor for all man-hours expended in providing this additional service at the rate of \$75.00 per hour measured from office to site, site to lab, and lab to office, otherwise known as portal to portal.
 8. Not allow the backwash from water treatment or water conditioning equipment to enter the OSSF.
 9. Provide for pumping of tanks, when needed, at Clients expense.
 10. Maintain site drainage to prevent adverse effects on OSSF.
 11. Promptly and fully pay Contactor's bills, fees, or invoices as described herein.
- VI. Access by Contractor:** Contractor, or personnel authorized by the Contractor, may enter the property at reasonable times without prior notice for the purpose of performing the above-described Services. Contractor will require access to the OSSF electrical and physical components, including tanks, by means of manways or risers for the purpose of evaluations required by manufacturer, and/ or rules. If such manways or risers are not in place, excavation together with other labor and materials will be required and will be billed to Client as additional service at the rate of \$75.00 per hour, plus materials billed at list price. Excavated soil is to be replaced as best as reasonably possible.
- VII. Application or Transfer of Payments:** The fees paid for this agreement may transfer to subsequent owner(s); however, this agreement will not transfer. The subsequent owner(s) must sign a similar agreement authorizing Contractor to perform the above-described Services and accepting Client's responsibilities. This replacement Agreement must be signed and received within 30 days of transfer of ownership. Contractor will apply all funds received from Client first to any past due obligations arising from this Agreement including late charges, return check charges, and charges for repairs or services not paid within 30 days of invoicing. The consumption of the payment in this manner may lead to early termination of the agreement by Contractor.
- VIII. Termination of Agreement:** This Agreement may be terminated by either party within 30 days written notice in the event of substantial failure to perform in accordance with its terms by the other party without fault of the terminating party. If this Agreement is so terminated, Contractor shall be paid at the rate of \$75.00 per hour for any work performed, but not yet paid. The party terminating will immediately notify the other party, the equipment manufacturer, and the regulatory agency of the termination.
- IX. Limits of Liability:** In no event shall the Contractor be liable for indirect, consequential, incidental or punitive damages, whether in contact tort or any other theory. In no event the Contractor's liability for direct damages exceed the price for the Services described in this Agreement.
- X. Severability:** If any provision in the Agreement shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If court finds that any provision of this

Initials...

Customer: MCAH

Contractor: CDH

Agreement is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be written, construed, and enforced as so limited.

XI. **Performance of Agreement:** Commencement of performance by Contractor under this agreement is contingent on the following conditions (1) Contractor receiving a fully execute original copy of this agreement. (2) Contractor receiving payment in full for the fee as described in Section V. If the above conditions are not met, then Contractor is not obligated to perform any portion of this agreement.

XII. **Entire Agreement:** This agreement contains the entire agreement parties, and there are no other promises or conditions in any other agreement, oral or written.

Client... (And/or authorized agent)

Printed Name: Michael Huerta Signature: Michael Huerta Date: 04/01/2024

Printed Name: _____ Signature: _____ Date: _____

Physical Address: 1986 Live Oak Dr Lot 93, CanyonLake Zip: 78133

Mailing Address: 2704 S 3rd Street, Austin Zip: 7704

Phone # 512-779-7080 Cell# 512-779-7080 County: Comal

Email: mhuerta512atx@gmail.com Gate Code: Open

=====Contractor=====Contractor=====

SOTX Septic Services
15656 Cranes Mill Rd.
Canyon Lake, TX 78133
830-481-3249
sotxservices@gmail.com

Clarence D. Hinds Jr Clarence D Hinds Jr.

Lic #: OSSF Installer II #: OS0030965

Maintenance Provider #: MP0002439

BRAD PARKER

Installer Name: _____

Phone #: 830-310-2344

Email: parker.construction@yahoo.com

Lic #: OS#0035249

CLEARSTREAM 600 NC3T

Manufacturer: _____

GPD: 600 800 1000 Other: _____

Disposal: Spray Drip Other: _____

Initials...

Customer: _____

Contractor: CDH

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: January 17, 2024

Site Location: TAMARACK SHORES, UNIT 2, LOT 93

Proposed Excavation Depth: N/A

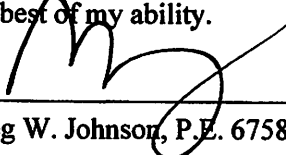
Requirements:

- At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area.
- Locations of soil boring or dug pits must be shown on the site drawing.
- For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
- Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

SOIL BORING NUMBER <u> </u> SURFACE EVALUATION						
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	III	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 6"	BROWN
6"						
1						
2						
3						
4						
5						

SOIL BORING NUMBER <u> </u> SURFACE EVALUATION						
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	SAME		AS		ABOVE	
6"						
1						
2						
3						
4						
5						

I certify that the findings of this report are based on my field observations and are accurate to the best of my ability.



 Greg W. Johnson, P.E. 67587-F2585, S.E. 11561

01/17/24

 Date

Comments

Add Comment Sort ▲

▼ **callen** **04/16/2024 2:57 PM**

One probe at 10 inches one at 8 inches one at 6 inches

Close

**CCEO
COPY**

CCEO

COPY



CCCEO

COPY



CSCEO
COPY



CCEO

COPY



OSSF SOIL EVALUATION REPORT INFORMATION

Date: January 18, 2024

Applicant Information:

Name: MICHAEL & DOLORES HUERTA
Address: 2704 SOUTH 3rd STREET
City: AUSTIN State: TEXAS
Zip Code: 78704 Phone: (512) 779-7080

Site Evaluator Information:

Name: Greg W. Johnson, P.E., R.S. S.E. 11561
Address: 170 Hollow Oak
City: New Braunfels State: Texas
Zip Code: 78132 Phone & Fax (830)905-2778

Property Location:

Lot 93 Unit 2 Blk ___ Subd. TAMARACK SHORES
Street Address: 1896 LIVE OAK DRIVE
City: CANYON LAKE Zip Code: 78133
Additional Info.: _____

Installer Information:

Name: _____
Company: _____
Address: _____
City: _____ State: _____
Zip Code: _____ Phone _____

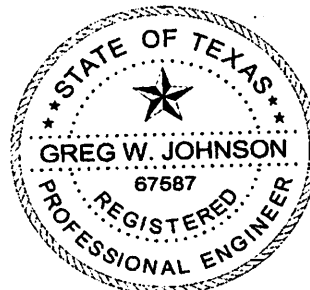
Topography: Slope within proposed disposal area: 3 %
Presence of 100 yr. Flood Zone: YES ___ NO X
Existing or proposed water well in nearby area. YES ___ NO X
Presence of adjacent ponds, streams, water impoundments YES ___ NO X
Presence of upper water shed YES ___ NO X
Organized sewage service available to lot YES ___ NO X

NOTE: 3 PERSONAL RV SITES @ 114 GPD EACH

I HAVE PERFORMED A THOROUGH INVESTIGATION BEING A REGISTERED PROFESSIONAL ENGINEER AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 (REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (EFFECTIVE DECEMBER 29, 2016).

Greg W. Johnson
GREG W. JOHNSON, P.E. 67587 - S.E. 11561

01/18/24
DATE



FIRM #2585

**AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
MICHAEL & DOLORES HUERTA
2704 S. 3RD STREET
AUSTIN, TX 78704-6208**

SITE DESCRIPTION:

Located in Tamarack Shores, Section 2, Lot 93, at 1896 Live Oak Drive, the proposed system will serve three personal RV's situated in an area with shallow Type III soil as described in the Soil Evaluation Report. Native grasses and oak trees were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:

A 3-inch SCH-40 pipe discharges from the RV's into a Clearstream 600 NC3T 600gpd aerobic plant containing a 400-gallon pretreatment tank, an aerobic treatment plant, and a 700-gallon pump chamber containing a submersible (Dominator 0.5 hp) well pump. The well pump is activated by a time controller allowing the distribution ten times per day with an 8 minute run time with float setting at 240 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 100 micron disc filter (Arkal) then through a 1" SCH-40 manifold to a 2024 sf. drip tubing field, with *Netifim Bioline* drip lines set approximately two feet apart with *0.61 gph* emitters set every two feet, as per the attached schematic. A pressure regulator PMR-MF 30psi installed in the pump tank on the manifold to the field will maintain pressure at 30 psi. A 1" SCH-40 return line is installed to periodically flush the system by cycling a 1" ball valve. Solids caught in the disc filter are continuously flushed each cycle back to the pump tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Field area will be scarified and built up with 6" of Type II or Type III soil. A minimum of 12" soil required between drip tubing and rock and between drip tubing and aerobic tank. Drip tubing will be laid and capped with 6" of Type II or Type III soil (*NOT SAND*). The field area will be covered with Curlex erosion control blankets and heavily seeded or sodded with grass prior to system startup. Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed.

DESIGN SPECIFICATIONS:

Daily waste flow: 342 GPD DESIGN RATE (3 personal RV'S @ 114 GPD)

pretreatment tank size: 400 Gal

Plant Size: Clearstream 600 NC3T 600gpd (TCEQ Approved)

Pump tank size: 700 Gal

Reserve capacity after High Level: 80 Gal (1/3 day Req'd)

Application Rate: Ra = 0.2 gal/sf

Total absorption area: $Q/Ra = 342 \text{ GPD}/0.20 = 1710 \text{ sf}$. (Actual 2024 sf.)

Total linear feet drip tubing: 1014' *Netifim Bioline* drip tubing .61 GPH

Pump requirement: 507 emitters @ .61 gph @ 30 psi = 5.1545gpm

Pump Requirement (cont.) 0.5 hp Dominator submersible well pump

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

$$\text{MSV} = 2 \text{ FPS } (\text{ID} \uparrow 2)/4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$\text{MSV} = 2(3.14159((.55/12) \uparrow 2)/4) * 7.48 * 60$$

$$\text{MSV} = 1.5 \text{ gpm PER LINE} * 3 \text{ LINES} = 4.5 \text{ GPM MIN FLOW RATE}$$

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

$$\text{MSV} = 2 \text{ FPS } (\text{ID} \uparrow 2)/4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$\text{MSV} = 2(3.14159((1.049/12) \uparrow 2)/4) * 7.48 * 60$$

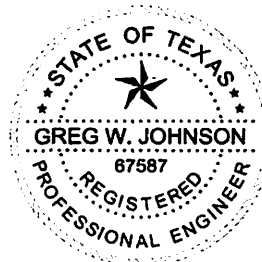
$$\text{MSV} = 5.4 \text{ GPM}$$

PIPE AND FITTINGS:

All pipes and fittings in this drip tubing system shall be 1" schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging.

Designed in accordance with Chapter 285, Subchapter D, §285.30 and §285.40 Texas Commission On Environmental Quality. (Effective December 29,2016)

Greg W. Johnson, P.E. No. 67587 / F-2585
170 Hollow Oak
New Braunfels, Texas 78132
830/905-2778



RECEIVED

By Brandon Olvera at 3:59 pm, Apr 30, 2024

Greg W. Johnson, P.E.
170 Hollow Oak
New Braunfels, Texas 78132
830/905-2778

April 24, 2024

Comal County Office of Environmental Health
195 David Jonas Drive
New Braunfels, Texas 78132-3760

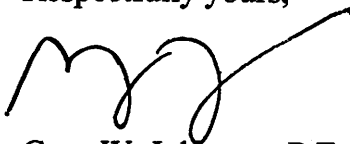
RE: Septic Design #117346
1896 Live Oak Drive
Tamarack Shores, Section 2, Lot 93
Canyon Lake, TX 78133
Huerta Residence

Brandon,

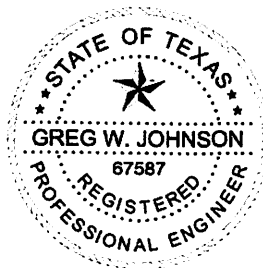
A portion of the waterline is as close as five feet from the proposed drip field. A variance is required to Chapter 285 Table X & 290.44(e)(8). Equivalent protection will be maintained by sleeving the water service line with SCH-40 PVC within ten feet of the proposed drip field. I hereby request a variance to Chapter 285 Table X & 290.44(e)(8).

If I can be of further assistance please contact me.

Respectfully yours,



Greg W. Johnson, P.E., F#2585



RECEIVED

By Brandon Olvera at 3:59 pm, Apr 30, 2024

INSTALL 2024sf OF FIELD USING 1012' OF DRIP TUBING. THERE SHALL BE NO PARKING, DRIVING OR STORAGE ON THE SEPTIC FIELD AT ANY TIME FOR ANY REASON.

*USE TWO WAY CLEAN OUTS
**USE SCH-40 OR SDR-26 TO TANK

X= TEST HOLE

SLEEVE WATER LINE WITH 2"-SCH-40 PVC PIPE WHEN ENTERING CLOSER THAN 10' FROM SEPTIC SYSTEM OR SEPTIC FIELD WHICH EXCEEDS TAC 30 CHAPTER 290.44(e)(B)(i).

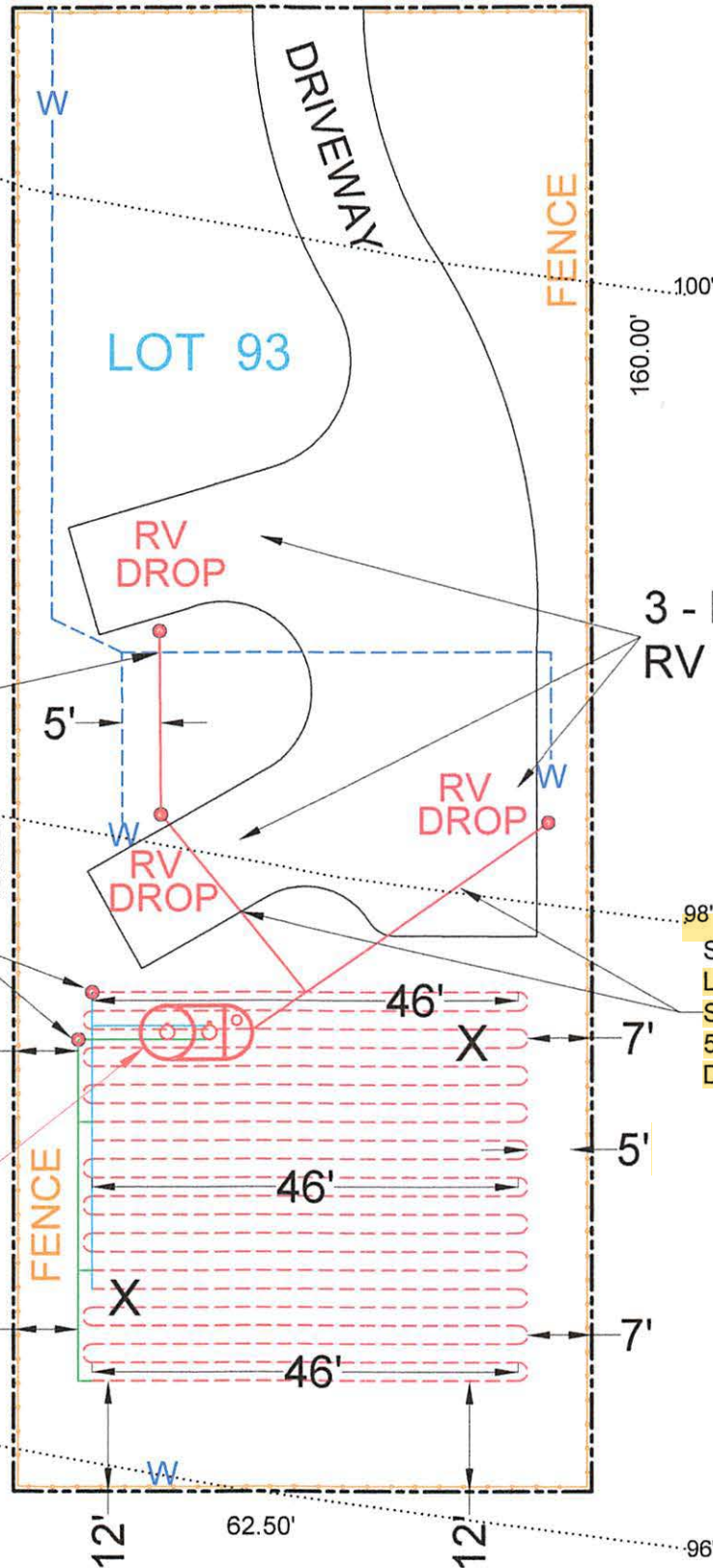
1" VACUUM BREAKERS

CLEARSTREAM 600NC3T AEROBIC TREATMENT PLANT

3 - PERSONAL RV SITES

SLEEVE SEPTIC LINE WITH SCH-40 WITHIN 5' AND UNDER DRIVEWAY.

LIVE OAK DRIVE



OWNER: MICHAEL & DOLORES HUERTA		DRAWN BY: EJS III	
STREET ADDRESS: 1896 LIVE OAK DRIVE			
LEGAL DESC: TAMARACK SHORES	UNIT/SECTION/PHASE: 2	BLOCK:	LOT: 93
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=20'	DATE: 1/18/2024	2nd REVISION: 4/24/2024

RECEIVED

By Brandon Olvera at 3:59 pm, Apr 30, 2024

TANK NOTES:

Tanks must be set to allow a minimum of 1/8" per foot fall from the residence.

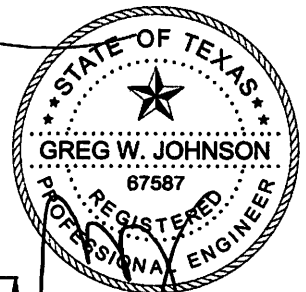
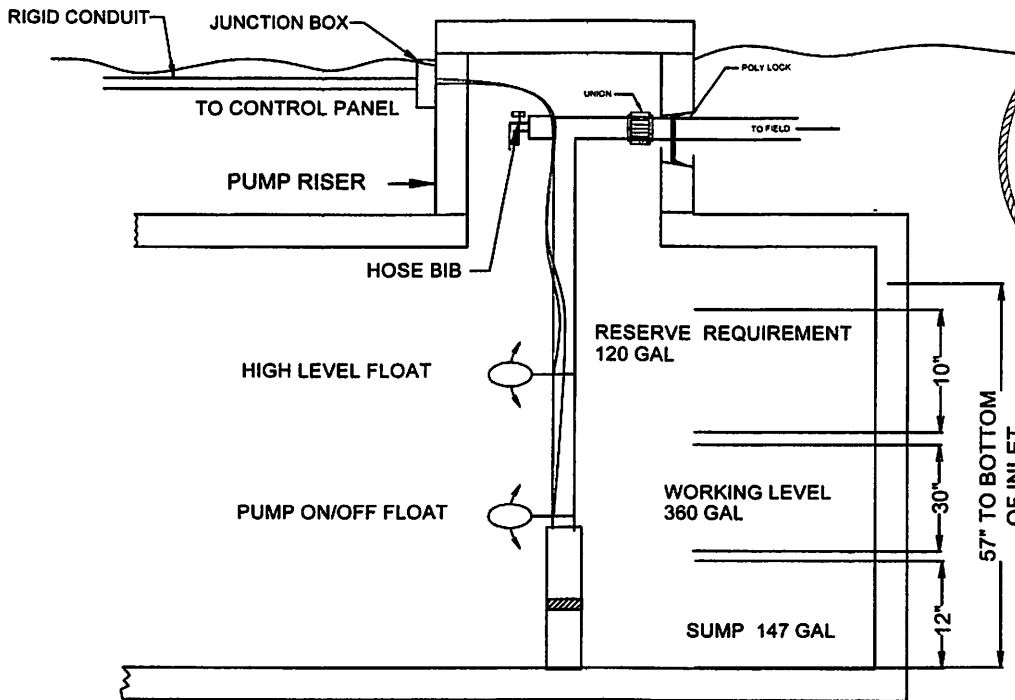
Tightlines to the tank shall be SCH-40 PVC.

A two way sanitary tee is required between residence and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

Tanks must be left uncovered and full of water for inspection by the permitting authority.

ALL WIRING MUST BE IN COMPLIANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE



F-2585

04/24/24

TYPICAL PUMP TANK CONFIGURATION

CLEARSTREAM 600NC3T U W/ 700 GAL PUMP TANK

Arkal 1" Super Filter

Catalog No. 1102 0 _ _ _

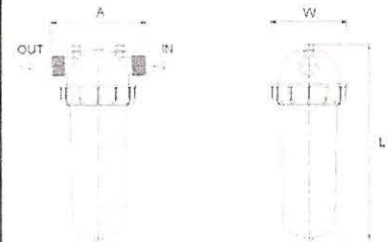
Features

- ♦ A "T" shaped filter with two 1" male threads.
- ♦ A "T" volume filter for in-line installation on 1" pipelines.
- ♦ The filter prevents clogging due to its enlarged filtering area that collects sediments and particles.
- ♦ Manufactured entirely from fiber reinforced plastic.
- ♦ A cylindrical column of grooved discs constitutes the filter element.
- ♦ Spring keeps the discs compressed.
- ♦ Screw-on filter cover.
- ♦ Filter discs are available in various filtration grades.



Technical Data

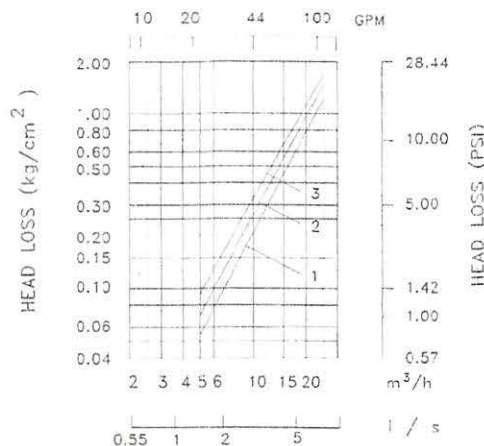
Inlet/outlet diameter	1" BSPT (male)	1" NPT (male)
	25.0 mm – nominal diameter 33.6 mm – pipe diameter (O. D.)	
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m ³ /h (1.7 l/sec)	35 gpm
General filtration area	500 cm ²	77.5 in ²
Filtration volume	600 cm ³	37 in ³
Filter length L	340 mm	13 13/32"
Filter width W	130 mm	5 3/32"
Distance between end connections A	158 mm	6 7/32"
Weight	1.420 kg	3.13 lbs.
Maximum temperature	70° C	158 °F
pH	5-11	5-11



Filtration Grades

- Blue (400 micron / 40 mesh)
- Yellow (200 micron / 80 mesh)
- Red (130 micron / 120 mesh)
- Black (100 micron / 140 mesh)
- Green (55 micron)

Head Loss Chart





PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Specifications

The pressure regulator shall be capable of operating at a constant, factory preset, non-adjustable outlet pressure of 6, 10, 12, 15, 20, 25, 30, 35, 40, 50, or 60 PSI (0.41, 0.69, 0.83, 1.03, 1.38, 1.72, 2.07, 2.41, 2.76, 3.45, or 4.14 bar) with a flow range between:

- 4 - 16 GPM (909 - 3634 L/hr) for 6 - 10 PSI models or
- 2 - 20 GPM (454 - 4542 L/hr) for 12 - 60 PSI models.

The pressure regulator shall maintain the nominal pressure at a minimum of 5 PSI (0.34 bar) above model inlet pressure and a maximum of 80 PSI (5.52 bar) above nominal model pressure*. Refer to the PRU performance curve to establish specific outlet pressures based on relative inlet pressure and flow rate. Always install downstream from all shut off valves. Recommended for outdoor use only. Not NSF certified.

All pressure regulator models shall be equipped with one of these inlet-x-outlet configurations:

Inlet	Outlet
3/4-inch Female National Pipe Thread (FNPT)	3/4-inch Female National Pipe Thread (FNPT)
1-inch Female National Pipe Thread (FNPT)	1-inch Female National Pipe Thread (FNPT)
1-inch Female British Standard Pipe Thread (FBSPT)	1-inch Female British Standard Pipe Thread (FBSPT)

The upper housing, lower housing, and internal molded parts shall be of engineering-grade thermoplastics with internal elastomeric seals and a reinforced elastomeric diaphragm. Regulation shall be accomplished by a fixed stainless steel compression spring, which shall be enclosed in a chamber isolated from the normal water passage.

Outlet pressure and flow shall be clearly marked on each regulator.

The pressure regulator shall carry a two-year manufacturer's warranty on materials, workmanship, and performance. Each pressure regulator shall be water tested for accuracy before departing the manufacturing facility.

The pressure regulator shall be manufactured by Senninger Irrigation in Clermont, Florida. Senninger is a Hunter Industries Company.

Physical

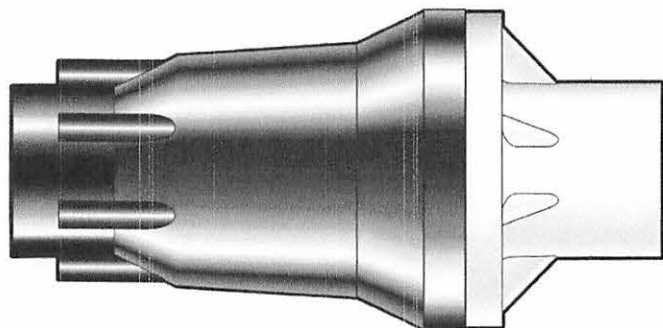
3/4" FNPT x 3/4" FNPT model (shown on right)

Overall Length	5.2 inches (13.1 cm)
Overall Width	2.5 inches (6.4 cm)

1" FNPT x 1" FNPT model

1" FBSPT x 1" FBSPT model

Overall Length	5.8 inches (14.6 cm)
Overall Width	2.5 inches (6.4 cm)



* Please consult factory for applications outside of recommended guidelines.



PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

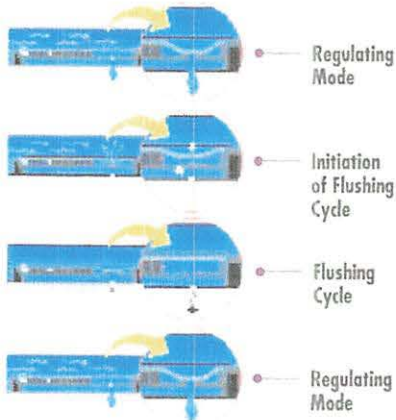
Model Numbers

Model #	Flow Range	Preset Operating Pressure	Maximum Inlet Pressure
PMR-6 MF	4 - 16 GPM (909 - 3634 L/hr)	6 PSI (0.41 bar)	80 psi (5.51 bar)
PMR-10 MF	4 - 16 GPM (909 - 3634 L/hr)	10 PSI (0.69 bar)	90 psi (6.20 bar)
PMR-12 MF	2 - 20 GPM (454 - 4542 L/hr)	12 PSI (0.83 bar)	90 psi (6.20 bar)
PMR-15 MF	2 - 20 GPM (454 - 4542 L/hr)	15 PSI (1.03 bar)	95 psi (6.55 bar)
PMR-20 MF	2 - 20 GPM (454 - 4542 L/hr)	20 PSI (1.38 bar)	100 psi (6.89 bar)
PMR-25 MF	2 - 20 GPM (454 - 4542 L/hr)	25 PSI (1.72 bar)	105 psi (7.24 bar)
PMR-30 MF	2 - 20 GPM (454 - 4542 L/hr)	30 PSI (2.07 bar)	110 psi (7.58 bar)
PMR-35 MF	2 - 20 GPM (454 - 4542 L/hr)	35 PSI (2.41 bar)	115 psi (7.93 bar)
PMR-40 MF	2 - 20 GPM (454 - 4542 L/hr)	40 PSI (2.76 bar)	120 psi (8.27 bar)
PMR-50 MF	2 - 20 GPM (454 - 4542 L/hr)	50 PSI (3.45 bar)	130 psi (8.96 bar)
PMR-60 MF	2 - 20 GPM (454 - 4542 L/hr)	60 PSI (4.14 bar)	140 psi (9.65 bar)



Bioline® Dripperline

Pressure Compensating Dripperline for Wastewater



BioLine's Self-Cleaning, Pressure Compensating Dripper is a fully self-contained unit molded to the interior wall of the dripper tubing.

As shown at left, BioLine is continuously self-cleaning during operation, not just at the beginning and end of a cycle. The result is dependable, clog free operation, year after year.



Product Advantages

The Proven Performer

- Tens of millions of feet used in wastewater today.
- Bioline is permitted in every state allowing drip disposal.
- Backed by the largest, most quality-driven manufacturer of drip products in the U.S.
- Preferred choice of major wastewater designers and regulators.
- Proven track record of success for many years of hard use in wastewater applications.

Quality Manufacturing with Specifications Designed to Meet Your Needs

- Pressure compensating drippers assure the highest application uniformity - even on sloped or rolling terrain.
- Excellent uniformity with runs of 400 feet or more - reducing installation costs.
- Highest quality-control standards in the industry: Cv of 0.25 (coefficient of manufacturer's variation).
- A selection of flows and spacings to satisfy the designer's demand for almost any application rate.

Long-Term Reliability

- Protection against plugging:
 - Dripper inlet raised 0.27" above wall of tubing to prevent sediment from entering dripper.
 - Drippers impregnated with Vinyzene to prevent buildup of microbial slime.
 - Unique self-flushing mechanism passes small particles before they can build up.



Root Safe

- A physical barrier on each BioLine dripper helps prevent root intrusion.
- Protection never wears out - never depletes - releases nothing to the environment.
- Working reliably for up to 15 years in subsurface wastewater installations.
- Additional security of chemical root inhibition with Techfilter - supplies Trifluralin to the entire system, effectively inhibiting root growth to the dripper outlets.



Applications

- For domestic strength wastewater disposal.
- Installed following a treatment process.
- Can be successfully used on straight septic effluent with proper design, filtration and operation.
- Suitable for reuse applications using municipally treated effluent designated for irrigation water.

Specifications

Wall thickness (mil): 45*

Nominal flow rates (GPH): .4, .6, .9*

Common spacings: 12", 18", 24"*

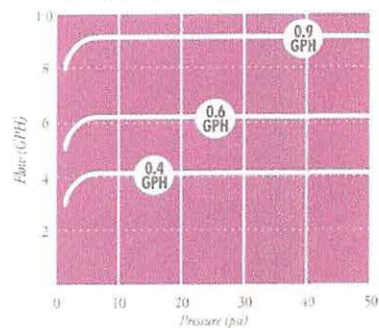
Recommended filtration: 120 mesh

Inside diameter: .570*

Color: Purple tubing indicates non-potable source

*Additional flows, spacings, and pipe sizes available by request. Please contact Netafim USA Customer Service for details.

BIOLINE Flow Rate vs. Pressure



NETAFIM USA
 5470 E. Home Ave. • Fresno, CA 93727
 888.638.2346 • 559.453.6800
 FAX 800.695.4753
www.netafimusa.com

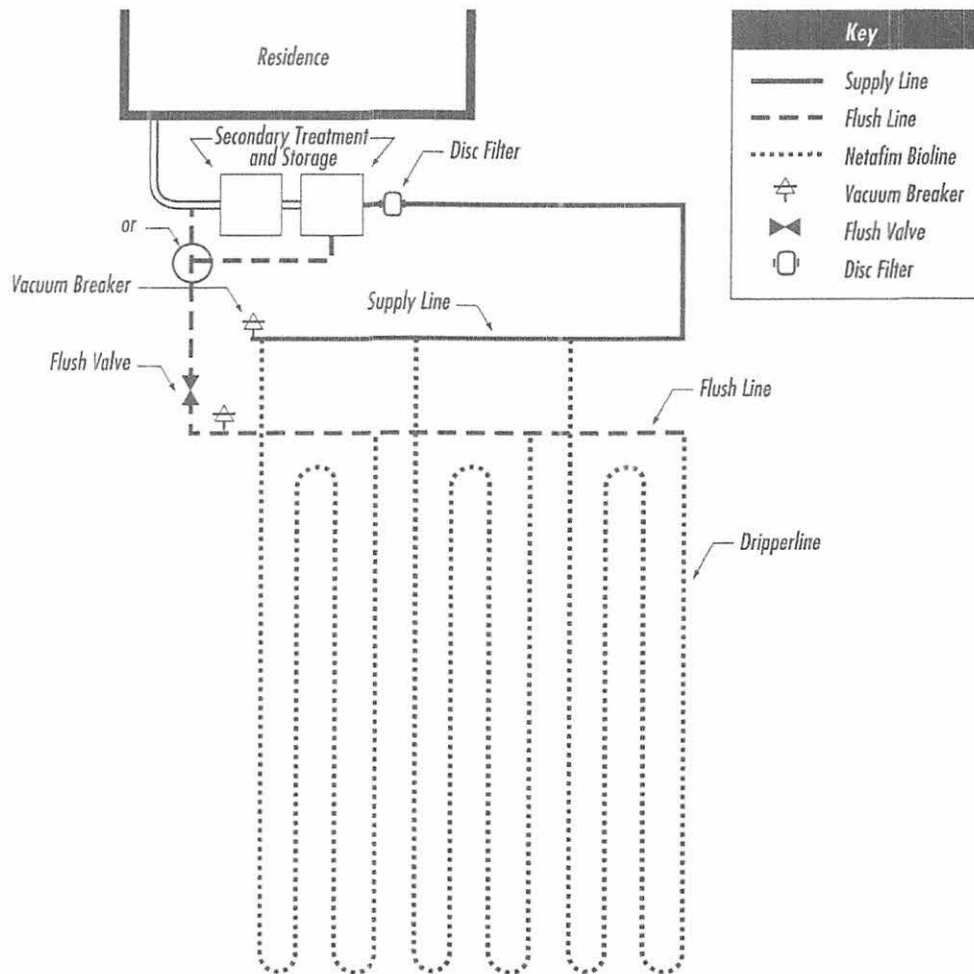
NETAFIM WASTEWATER DISPERSAL SYSTEM DESIGN GUIDE

SAMPLE DESIGNS

SINGLE TRENCH LAYOUT

Rectangular field with supply and flush manifold on same side and in same trench;

- Locate supply and flush manifold in same trench
- Dripperlines are looped at the end opposite the supply and flush manifolds
- The longest Bioline length should not exceed 400 ft. Drip fields 200 ft. in length might loop the Bioline once; drip dispersal fields under 100 ft. might be looped twice, as illustrated





Date January 16, 2024

Permit Number _____

1. APPLICANT / AGENT INFORMATION

Owner Name MICHAEL & DOLORES HUERTA
Mailing Address 2704 S 3RD ST.
City, State, Zip AUSTIN, TEXAS 78704
Phone # 512-779-7080
Email mhuerta512atx@gmail.com

Agent Name GREG JOHNSON, P.E.
Agent Address 170 HOLLOW OAK
City, State, Zip NEW BRAUNFELS TEXAS 78132
Phone # 830-905-2778
Email gregjohnsonpe@yahoo.com

2. LOCATION

Subdivision Name TAMARACK SHORES Unit 2 Lot 93 Block _____
Survey Name / Abstract Number _____ Acreage _____
Address 1896 LIVE OAK DRIVE City CANYON LAKE State TX Zip 78133

3. TYPE OF DEVELOPMENT

Single Family Residential
Type of Construction (House, Mobile, etc.) 2 PERMANENT RESIDENCE
Number of Bedrooms _____
Indicate Sq Ft of Living Area _____
 Non-Single Family Residential
(Planning materials must show adequate site plan for drainage, one residential lot 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 _____
Miscellaneous _____

VOID

Estimated Cost of Construction: \$ 50,000 (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 Rainwater Collection

4. SIGNATURE OF OWNER

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. I certify that I am the property owner or I possess the appropriate land rights necessary to make the permitted improvements on said property.
- 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.

Dolores Huerta DOLORES HUERTA
Signature of Owner

January 12, 2024
Date

**AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
MICHAEL & DOLORES HUERTA
2704 S. 3RD STREET
AUSTIN, TX 78704-6208**

SITE DESCRIPTION:

Located in Tamarack Shores, Section 2, Lot 93, at 1896 Live Oak Drive, the proposed system will serve two personal RV's situated in an area with shallow Type III soil as described in the Soil Evaluation Report. Native grasses and oak trees were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:

A 3-inch SCH-40 pipe discharges from the RV's into a Clearstream 600 NC3T 600gpd aerobic plant containing a 400-gallon pretreatment tank, an aerobic treatment plant, and a 700-gallon pump chamber containing a reversible (bi-directional) pump. The well pump is activated by a time controller cycling the distribution ten times per day with an 8 minute on time and a flow rate of 240 gpm. A high level audible and visual alarm will activate should the pump fail. Distribution is through a series of 10' diameter iron disc filter (Ark) chambers through a 3" SCH-40 manifold to a 1000 sf. drip tubing field. *Netifim Bioline* drip emitters are approximately two feet apart with 61 gpd emitters set at two feet, as per the schematic. Pressure regulator (R-M) is installed on the pump tank on the manifold to the field. A pressure of 30 psi is maintained. A 4" return line is installed to periodically flush the system by cycling a 1" ball valve. Solids caught in the disc filter are continuously flushed each cycle back to the pump tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Field area will be scarified and built up with 6" of Type II or Type III soil.

tubing and aerobic tank. Drip tubing will be laid and capped with 6" of Type II or Type III soil (NOT SAND). The field area will be covered with Curlex erosion control blankets and heavily seeded or sodded with grass prior to system startup. Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed.

DESIGN SPECIFICATIONS:

Daily waste flow: 240 GPD DESIGN RATE (2 personal RV'S @ 114 GPD)

pretreatment tank size: 400 Gal

Plant Size: Clearstream 600 NC3T 600gpd (TCEQ Approved)

Pump tank size: 700 Gal

Reserve capacity after High Level: 80 Gal (1/3 day Req'd)

Application Rate: Ra = 0.2 gal/sf

Total absorption area: Q/Ra = 240 GPD/0.20 = 1200 sf. (Actual 2000 sf.)

Total linear feet drip tubing: 1000' *Netifim Bioline* drip tubing .61 GPH

Pump requirement: 500 emitters @ .61 gph @ 30 psi = 5.0833gpm

Pump Requirement (cont.) 0.5 hp Dominator submersible well pump

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

DRIP TUBING W/ NOM. DIA. 0.55" ID

$$MSV = 2 \text{ FPS } (\text{ID} \uparrow 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$MSV = 2(3.14159((.55/12) \uparrow 2) / 4) * 7.48 * 60$$

$$MSV = 1.5 \text{ gpm PER LINE} * 3 \text{ LINES} = 4.5 \text{ GPM MIN FLOW RATE}$$

VOID

IN RETURN MANIFOLD NOM. DIA. 1" ID

$$MSV = 2 \text{ FPS } (\text{ID} \uparrow 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$MSV = 2(3.14159((.04) \uparrow 2) / 4) * 7.48 * 60$$

$$MSV = 4 \text{ GPM}$$

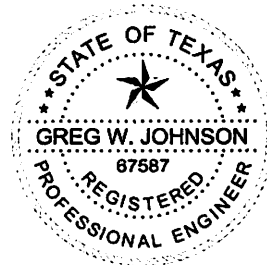
PIPE AND FITTINGS:

All pipes and fittings in this drip irrigation system shall be scheduled 40 PVC. Joints shall be sealed with approved solvent-type cement. Care for type of cement recommended to prevent PVC burrs during cutting of pipes causing possible plugging.

Designed in accordance with Chapter 285, Subchapter D, §285.30 and §285.40 Texas Commission On Environmental Quality. (Effective December 29,2016)

Greg W. Johnson 03/27/24

Greg W. Johnson, P.E. No. 67587 / F-2585
170 Hollow Oak
New Braunfels, Texas 78132
830/905-2778

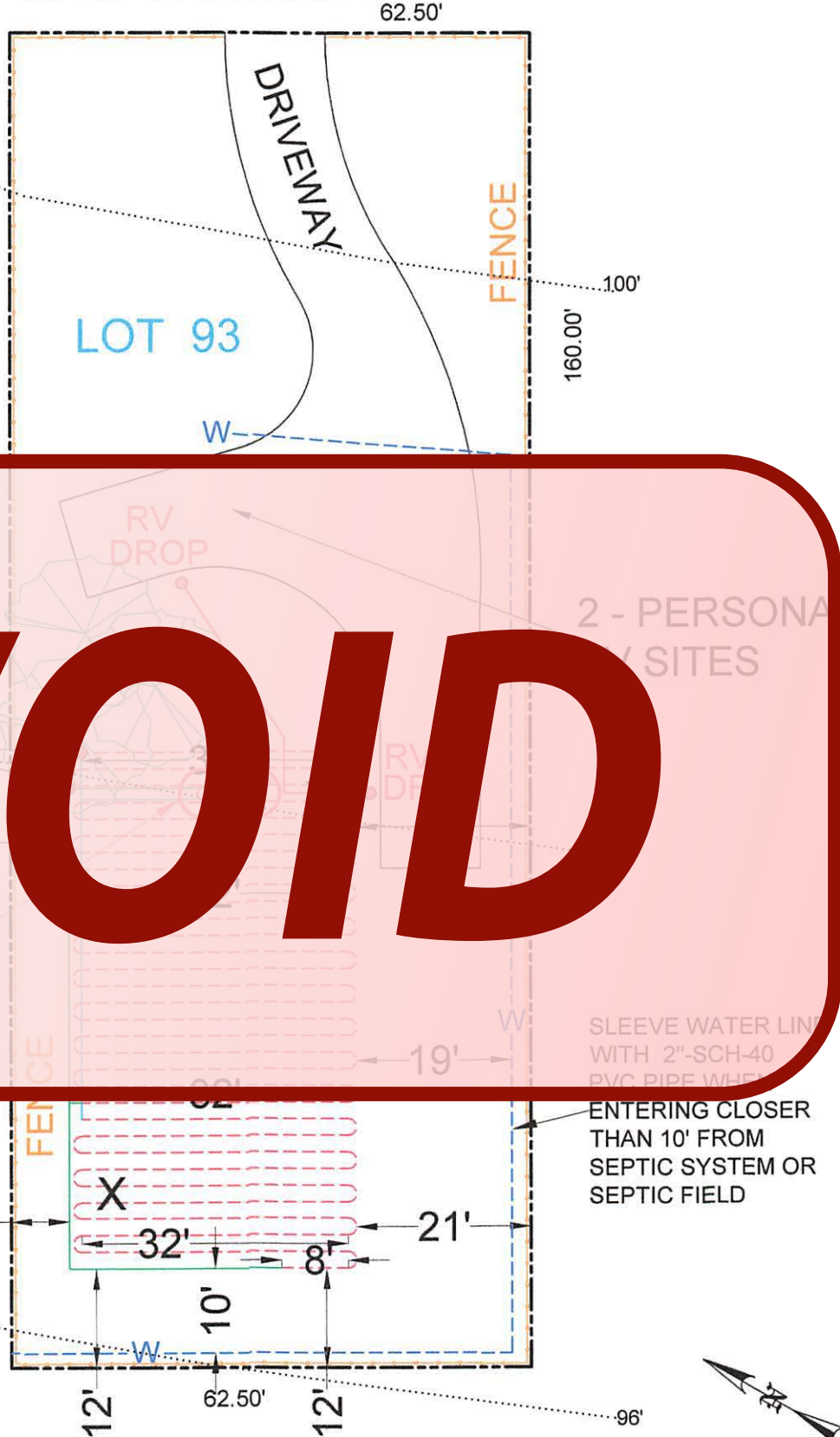


INSTALL 2000sf OF FIELD USING 1000' OF DRIP TUBING. THERE SHALL BE NO PARKING, DRIVING OR STORAGE ON THE SEPTIC FIELD AT ANY TIME FOR ANY REASON.

*USE TWO WAY CLEAN OUTS
 **USE SCH-40 OR SDR-26 TO TANK

X= TEST POINT

LIVE OAK DRIVE



VOID



OWNER: MICHAEL & DOLORES HUERTA		DRAWN BY: EJS III/GWJ	
STREET ADDRESS: 1896 LIVE OAK DRIVE			
LEGAL DESC: TAMARACK SHORES	UNIT/SECTION/PHASE: 2	BLOCK:	LOT: 93
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=20'	DATE: 1/18/2024	REVISED: 3/27/2024

QUITCLAIM DEED

DOC# 9906012950

THIS QUITCLAIM DEED, Executed this Saturday day of May, 8, by first party Benny B Saldana and wife, Hattie H. Saldana whose post office address is 2510 Little John Austin, Texas 78704 to second party Huerta, Michael & Dolores whose post office address is 2704 South 3rd Street Austin, Texas 78704

WITNESSETH, That the said first party, for good consideration and the sum of \$ 10.00 paid by the said second party, the receipt whereof is hereby acknowledged, does hereby remise, release and quitclaim unto the said second party forever, all the right, title, interest and claim which the said first party has in and to the following described parcel of land, and improvements and appurtenances thereto in the County of Comal County, State of Texas, to wit:

Lot 93 Tamaracck Shores 2 New Braunfels, Tx

IN WITNESS WHEREOF, The said first party has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in presence of:

Witness Michelle King

Witness Michele King

First Party Benny B Saldana & Hattie H Saldana

Second Party Michael C Huerta & Dolores A Huerta

STATE OF Travis COUNTY OF Texas }

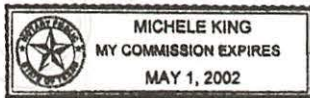
Michael & Dolores Huerta, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Michele King

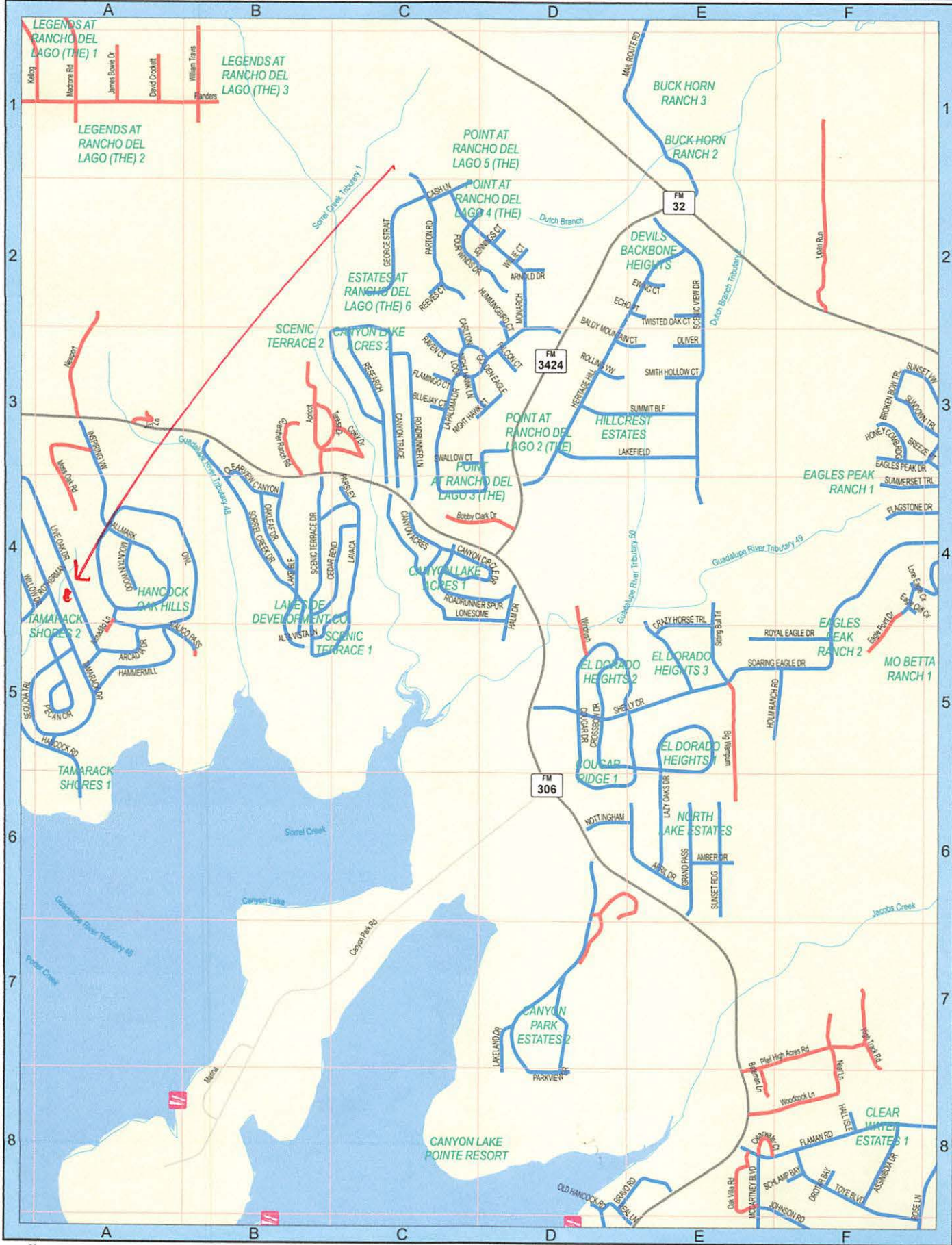
Affiant Known

ID Produced



Doc# 9906012950 # Pages: 1 Date: 05-18-1999 Time: 09:48:07 A.M. Filed & Recorded in Official Records of COMAL County, TX. JOY STREATER COUNTY CLERK Rec. Seal .00

DOC# 9906012950



SEE PAGE 20

