

# 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 Drip Irrigation		285.33(c)(3)(A)-(F)				

**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

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## ENGINEER'S OFFICE

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

Permit Number: 118205  
Issued This Date: 01/16/2025  
This permit is hereby given to: Edgestone Waters LLC

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

371 GRANITE RD  
SPRING BRANCH, TX 78070

Subdivision: Cypress Cove  
Unit: 11  
Lot: 5  
Block: 1  
Acreage: 0.2300

#### 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.

## **Preliminary Field Check For Drip Systems**

## ON-SITE SEWAGE FACILITY APPLICATION

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

Permit Number 118205

Owner Name	Edgestone Waters LLC
Mailing Address	440 Lousiana,Ste. 952
City, State, Zip	Houston, Texas 77002
Phone #	210-410-9988
Email	Emandoc@yahoo.com

Agent Name	John J. Haag, P.E.
Agent Address	15831 Secret Trails
City, State, Zip	San Antonio, Tx. 78247
Phone #	210-705-4268
Email	jhaag@satx.rr.com

Subdivision Name	Cypress Cove	Unit	11	Lot	5	Block	1
Survey Name / Abstract Number				Acreage	0.21		
Address	371 Granite	City	Spring Branch	State Tx.	Zip 78070		

☒ Single Family Residential

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

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1770

☐ 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: \$ 220000 (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

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.

Signature of Owner Mangy Mamber

Date 12/16/24



Planning Materials & Site Evaluation as Required Completed By John J. Haag, P.E.

System Description Proprietary aerobic treatment with drip disposal

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

SolarAerobic

Tank Size(s) (Gallons) 600 gpd min. Absorption/Application Area (Sq Ft) 1200 min

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 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.)

Is there at least one acre per single family dwelling as per 285.40(c)(1)? ☐ Yes ☒ No

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: \_\_\_\_\_

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.

John J. Haag, P.E.  
Signature of Designer

12/17/2024

Date



202406038356 12/17/2024 01:58:13 PM 1/1

THE COUNTY OF COMAL

STATE OF TEXAS

### CERTIFICATION OF OSSF REQUIRING MAINTENANCE

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

I

The Texas Health and Safety Code, Chapter 366 authorizes the TCEQ to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the 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. The TCEQ, under the authority of the TWC and the Texas Health and Safety Code, requires owners to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the TCEQ requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the TCEQ of the suitability of this OSSF, nor does it constitute any guarantee by the 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:

Legal Description: Lot 5, Block 1, Cypress Cove, Section 11

This property is owned by: Edgestone Waters LLC

This OSSF must be covered by a continuous maintenance contract for the first two years. After the initial two-year service policy, the owner of an aerobic system for a single-family residence shall either obtain a maintenance contract within 30 days or maintain the system personally.

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.

WITNESS BY HAND(S) ON THIS 17 DAY OF Dec, 2024.

*Emanuel Dehelean* Managing Member

Emanuel Dehelean (Managing Member, Edgestone Waters LLC)

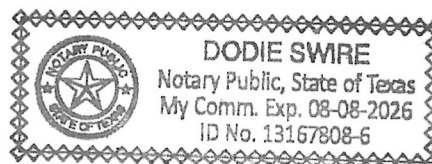
SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 17 DAY OF Dec, 2024.

*Dodie Swire*  
Notary Public, State of Texas

Filed and Recorded  
Official Public Records  
Bobbie Koepp, County Clerk  
Comal County, Texas  
12/17/2024 01:58:13 PM  
MARY 1 Page(s)  
202406038356



*Bobbie Koepp*



**REVISED**

10:24 am, Jan 16, 2025



RS Septic Service, LLC  
444D Old No. 9 Hwy  
Comfort, TX 78013  
(830)431-1601

**MP# 0001708 Christopher Ryan Seidensticker**

**PROPERTY LEGAL DESCRIPTION:**

**Customer:** Edgestone Waters, LLC

**Site Address:** 371 Granite

**City/State:** Spring Branch/Texas

**Zip:** 78070

**County:** Comal

**Phone Number:** 210-410-9988

**Email:** emandoc@yahoo.com

**Permit #:**

I. **General:** This On-Site Sewage Facility Service Agreement (hereinafter referred to as "Agreement") is entered into by and between Edgestone Waters, LLC (hereinafter referred to as "Client") and **RS Septic Service, LLC** (hereinafter referred to as "Contractor"). By this agreement, Contractor agrees to render services, as described herein "Services"), and the client agrees to fulfill his/her/their responsibilities under this agreement herein.

II. **Effective Dates:** This agreement commences on the date of

III. **Start Date:** License to Operate

**End Date:**

IV. **Services by Contractor:** Contractor will provide the following Services:

Inspect and perform routine maintenance on the On-Site Sewage Facility ("OSSF") in compliance with the code, regulations, and/or rules of the Texas Commission on Environmental Quality ("TCEQ") and county in which the OSSF is located (the "County") and the manufacturer's requirements, at a frequency of approximately once every four (4) months

Verify equal flow to Aerobic Treatment Units at each inspection.

Report to the appropriate regulatory authority and to Client, as required by the State of Texas' on-site rules and, if required, TCEQ or County rules. All findings must be reported to the appropriate regulatory authority within 14 days.

Notify Client and repair any components of the OSSF that are found to be in need of repair during the inspection. If repairs are required beyond routine maintenance Contractor must receive consent of Client to proceed.

Visit site in response to Client's request for unscheduled service within two business days from the date of Contractor's actual receipt of Client's request. Unscheduled service visits are not included in the fee agreement herein and will be billed to the client in addition to fees under this Agreement.

Provide notification of arrival to site to the Client or to site personnel. Additionally, Contractor will leave written notification of the visit at the site or with site personnel upon completion of inspection and forward such notice to the appropriate regulatory authority within fourteen (14) days.

V. **Payment(s):** Client shall pay to Contractor included w/ septic for the Services describe herein (the "Inspection and Routine Maintenance Fee"), excepting those described in Section III (4), or Section IX, herein. The Fee does not include equipment, parts or labor supplied for anything beyond routine inspection and routine maintenance. Payments for such additional services are due at the time services are provided or rendered. Payments not received within thirty (30) days from the due date will be subject to the greater of a \$20.00 late penalty or 1.5% carrying charge on the original balance for each month or portion thereof a balance in past due. (if for any reason such charges are found to be usurious by a court of competent jurisdiction, such charges shall be reduced to the maximum allowable by law. By signing this contract, Client authorizes Contractor to remove any parts installed, but not paid in full at the end of the thirty (30) days. Client agrees to pay for any labor cost associated with the installation the reasonable cost of removal of said parts.



**REVISED**

10:24 am, Jan 16, 2025

- VI. Client's Responsibilities:** Client is responsible for each and all the following:
- To maintain chlorinator and provide proper chlorine supply, if OSSF is so equipped.
  - To provide all necessary yard or lawn maintenance and removal of obstacles as needed to allow the OSSF to function properly, and to allow Contractor ready access to all parts of the OSSF.
  - To maintain a current license to operate and abide by the conditions and limitations of that license and all requirements for on-site sewage facilities from the State and local regulatory agency.
  - To maintain the OSSF in accordance with manufacturer's recommendations.
  - To immediately notify Contractor and Agency of any and all problems with the OSSF, including failure thereof.
  - If Client elects a different contractor to perform the required service, Client is responsible for ensuring the substitute contractor holds the proper license (installer II) and is certified by the manufacturer. Additionally, Client shall be responsible for ensuring proper notification is given to the appropriate regulatory authority, as required by the State and/or local regulatory authority rules.
  - To provide Contractor with water usage records, upon request, for evaluation by Contractor of the OSSF performance.
  - To pay required sampling charges for samples collected for testing (e.g., Biological Oxygen Demand/Total Suspended Solids ("BOD/TSS")) that may be required on the OSSF.
  - To prevent backwash from water treatment or water conditioning equipment to enter the OSSF. To provide, at Client's expense, for pumping of tanks as needed.
  - To maintain site drainage sufficient to prevent adverse effects on the OSSF.
  - To promptly and fully pay Contractor's bills, fees, or invoices as described herein.
- VI. Access by Contractor:** Client agrees to allow Contractor, or personnel authorized by the Contractor, to enter the property at reasonable times without prior notice for the purpose of performing the Services described herein. Such entry shall include access to the OSSF electrical and physical components, including tanks, by means of manways or risers for the purpose of evaluations required by the manufacturer, and/or regulatory authority rules. If such manways or risers are not in place, Client shall allow and be responsible for payment of required excavation, including labor and materials, necessary to allow access to the OSSF or any required components. Such excavation shall be billed at the rate of \$75.00 per hour for labor, plus materials billed at list price. Contractors shall make only those efforts reasonable under the circumstances to replace excavated soil.
- VII. Application or Transfer of Payment:** The fees paid for this agreement may transfer to any subsequent owner(s) of the property on which the OSSF is located. The subsequent owner(s) must sign a similar agreement authorizing Contractor to perform the above-described Services and accepting Client's responsibilities. The 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 termination of the agreement by Contractor.
- VIII. Termination of Agreement:** This agreement may be terminated by either party with 30 days' written notice. If this agreement is so terminated by Client, Contractor shall be paid at the rate of \$75.00 per hour for any work performed or required, but not yet paid. If terminated by Contractor, all amounts outstanding shall be due within thirty days of termination. The party terminating will immediately notify the other party, the equipment manufacturer, and the regulatory agency of the termination.
- IX. Limitations of Liability:** In no event shall Contractor be liable for indirect, consequential, incidental, or punitive damages, whether in contract, tort, or any other theory of liability. In no event shall the Contractor's liability for direct damages exceed payments by the Client under this Agreement.
- X. Severability and Reformation:** If any provision in this Agreement shall be held to be invalid or unenforceable for any reason, it shall be reformed to the minimum extent necessary to effect the intent of the Parties. If any provision is such that it cannot reasonably be reformed, it shall be struck from this Agreement and the remaining provisions shall continue to be valid and enforceable.
- XI. Performance of Agreement:** Commencement of performance by Contractor under this agreement is contingent on the following conditions: (1) Contractor receiving a fully executed original copy of this agreement, (2) Contractor receiving payment in full of the fee(s) described herein. If the above conditions are not met, then Contractor is from any obligation to perform any portion of this agreement.
- XII. Modification:** This Agreement may not be changed or modified except by an instrument in "Writing, signed by both Contractor and Client.
- XIII. Waiver:** Except as otherwise noted in this Agreement, the waiver by the other party of a breach of any provision of this Agreement shall not be construed as a continuing waiver or a consent to or waiver of any subsequent breach hereof.

**REVISED**

10:24 am, Jan 16, 2025

**XIV. Headings:** The Article and Section headings in this Agreement are for the convenience of reference only and do not constitute a plan of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

**XV. GOVERNING LAW AND CHOICE OF VENUE:** EACH OF THE PARTIES HERETO HEREBY CONSENTS TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF TEXAS, COUNTY OF COMAL, AND TO THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS- SAN ANTONIO DIVISION. AS WELL AS TO THE JURISDICTION OF ALL COURTS TO WHICH AN APPEAL MAY BE TAKEN FROM SUCH COURTS. FOR THE PURPOSE OF ANY SUIT, ACTION, OR OTHER PROCEEDING ARISING OUT OF, OR IN CONNECTION WITH, THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREBY, INCLUDING, WITHOUT LIMITATION, ANY PROCEEDING RELATING TO ANCILLARY MEASURES IN AID OF ARBITRATION, PROVISIONAL REMEDIES AND INTERIM RELIEF, OR ANY PROCEEDING TO ENFORCE ANY ARBITRAL DECISION OR AWARD. EACH PARTY HERETO EXPRESSLY WAIVES ANY AND ALL RIGHTS TO BRING ANY SUIT, ACTION, OR OTHER PROCEEDING IN OR BEFORE ANY COURT OR TRIBUNAL OTHER THAN COURTS OF THE STATE OF TEXAS, COUNTY OF COMAL, AND COVENANTS THAT IT SHALL NOT SEEK IN ANY MANNER TO PROSECUTE OR DEFEND ANY DISPUTE OTHER THAN AS SET FORTH IN THIS ARTICLE XVI OR TO CHALLENGE OR SET ASIDE ANY DECISION, AWARD, OR JUDGMENT OBTAINED IN ACCORDANCE WITH THE PROVISIONS HEREOF. EACH OF THE PARTIES HERETO HEREBY EXPRESSLY WAIVES ANY AND ALL OBJECTIONS IT MAY HAVE TO VENUE, INCLUDING, WITHOUT LIMITATION, THE INCONVENIENCE OF SUCH FORUM, IN ANY OF SUCH COURTS.

**XVI. JURY TRIAL WAIVER.** THE PARTIES HEREBY UNCONDITIONALLY WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY AND ALL CLAIMS OR CAUSES OF ACTION ARISING FROM OR RELATING TO THEIR RELATIONSHIP. THE PARTIES ACKNOWLEDGE THAT A RIGHT TO A JURY IS A CONSTITUTIONAL RIGHT, THAT THEY HAVE HAD AN OPPORTUNITY TO CONSULT WITH INDEPENDENT COUNSEL, AND THAT THIS JURY WAIVER HAS ENTERED INTO KNOWINGLY AND VOLUNTARILY BY ALL THE PARTIES TO THE AGREEMENT. IN THE EVENT OF LITIGATION, THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

**XVII. Reservations of Rights:** Contractor reserves all rights not specifically granted herein.

**XVIII. Counterparts:** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

**XIX. Counsel:** Contractor has previously recommended that Client engage counsel to assist him/her/it in reviewing this Agreement and all other matters relating to it. Contractor and Client shall each bear his/her own costs and expenses in connection with the negotiation and documentation of this Agreement.

**XX. Insurance:** Contractor shall, at all times during the term of this agreement, and its own expense, keep full force and effect automobile insurance in amounts acceptable to Client, for property damage, bodily injury or death. Contractor shall provide Client with evidence of such insurance upon request. In addition, Contractor shall maintain the following insurance coverage throughout this term of this Agreement:

In addition to Worker's Compensation, as required by law, Contractor shall carry Commercial General Liability insurance in the minimum amount of one million dollars (\$1,000,000.00), covering all of the Contractor's activities related to this Agreement. The Contractor's liability policies shall name Client as an additional insured. The contractor shall provide Client with certificate of insurance evidencing the aforesaid coverage, prior to commencing Services pursuant to the Agreement. The amounts of insurance required to be obtained by the Contractor hereunder shall not constitute a limitation on the indemnification obligations to the Contractor.

**XXI. Entire Agreement:** This agreement contains the entire agreement of the parties, and there are no promises or conditions in any other agreement, oral or written. The parties expressly disclaim reliance on any prior statements, oral or written, by either party not expressly provided for herein

APPROVED BY CONTRACTOR:  
(CHRISTOPHER RYAN SEIDENSTICKER) MP# 0001708

DATE: 1-16-25

APPROVED BY CLIENT:

*Managuy Merber*

DATE: 12/17/24



# ON-SITE SEWAGE FACILITY (OSSF) SITE EVALUATION FORM

## 1. OWNER INFORMATION

Property Owner's Full Legal Name: Edgestone Waters LLC

## 2. PROPERTY INFORMATION

City: Spring Branch      Zip Code: 78070

Legal Description:

Lot: 5      Block: 1      Subdivision: Cypress Cove      Section: 11      Phase:

If not located in subdivision: Survey:

Abstract:

Recorded (Vol/Pg):

## 3. SITE EVALUATION INFORMATION:

Name of Site Evaluator: John J. Haag

PE #: 90158

Date Performed: 12/16/2024

Proposed Excavation Depth: Surface

## 4. REQUIREMENTS:

- At least two soil evaluations must be performed on the site at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing.
- For subsurface disposal, soil evaluations must be performed to a depth of at least 2 feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.

Soil Profile Hole Number: 1

Depth (ft.)	Textural Class	Gravel Analysis	Drainage (Mottles/Water Table)	Restrictive Horizon	Observations
0	III	<30%	No	Yes	Limestone @ surface
1					
2					
3					
4					
5					

# ON-SITE SEWAGE FACILITY (OSSF) SITE EVALUATION FORM

Soil Profile Hole Number: 2					
Depth (ft.)	Textural Class	Gravel Analysis	Drainage (Mottles/Water Table)	Restrictive Horizon	Observations
0	III	<30%	No	Yes	Limestone @ surface
1					
2					
3					
4					
5					

## 5. FEATURES OF SITE AREA:

Presence of 100 year flood zone:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Presence of adjacent ponds, streams or water impoundments	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Existing or proposed water well in nearby area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Organized sewage available to lot or tract	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Recharge features within 150 feet	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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



12/16/2024

Haag Engineering Consultants, LLC  
Firm: F-5789

**REVISED**

8:55 am, Jan 16, 2025

**AEROBIC TREATMENT  
DRIP TUBING SYSTEM  
FOR:  
LOT 5, BLOCK 1  
CYPRESS COVE, SECTION 11**

**SITE DESCRIPTION:**

Located in Cypress Cove, Section 11, Lot 5, Block 11 the proposed system will serve at 3-bedroom, 1770 s.f. residence situated with soils per the Site Evaluation report. 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 or 4 inch SCH-40 pipe discharges from the residence into a Maxx Air M-600 (600 gpd) aerobic treatment plant containing a 353 gallon pretreatment tank and a 768 gallon pump chamber. The pump chamber contains a 0.5 HP Franklin C1-Series-20XC1-05P4-2W115 submersible well pump. The well pump is activated by a time controller allowing the distribution ten times per day with a 6-minute run time with the float setting at min. 240 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self-flushing 100-micron Arkal Disk filter then through a 1" SCH-40 manifold to a minimum 1200 sf drip tubing field with Netifim Bioline drip lines approximately two feet apart with 0.61 gph emitters set every two feet as per the attached schematic. A pressure regulator Model PMR35MF 35psi installed in the pump tank on the manifold to the field will maintain pressure at 35 psi. A 1" SCH-40 return line is installed to continuously flush the system by cycling a 1" ball valve. Solids caught in the disk filter are flushed each cycle back to the pump tank. Agricultural Products, Inc. (Model #VBK-1) 1" PVC vacuum breakers installed on the highest point on each manifold will prevent siphoning of effluent from higher to lower parts in the field. The field area shall be scarified and then built up so that a minimum of 12" of Type II or III soil is above any bedrock or type IV soils then the drip tubing shall be laid and capped with a minimum of 6" of Type II or Type III soil (NOT SAND). The field area shall be covered with Bermuda seeded erosion control mat or sodded with grass prior to system startup. The tank must have risers 2-inches minimum above finished grade on each opening with watertight caps that must be 65# or have a padlock or can only be removed with tools – all risers shall meet the minimum requirements of 30 TAC 285 effective July 6, 2023. A secondary plug, cap or suitable restraint must be provided below the riser cap to prevent tank entry should the cap be damaged or removed.

**DESIGN SPECIFICATIONS:**

Daily flow =  $Q=240$  gpd  
Pretreatment tank size: 353 gal  
Plant size: Maxx Air M-600; 600 gpd (TCEQ approved)  
Pump tank size: 768 gal  
Min. Reserve capacity after high level: 80 gal (1/3 day req'd)  
Application rate:  $Ra=0.2$  gal/sf  
Total absorption area:  $Q/Ra = \text{min. } 1200 \text{ sf}$  (1,488 sf actual)  
Total linear feet of drip tubing: 744' Netifim Bioline drip tubing 0.61 gph  
Pump requirement: 0.5 HP Franklin C1-Series-20XC1-05P4-2W115

## Calculation Outputs

### Total System Information

Application Area Required (square feet)	1,488
Total Amount of Bioline® Required (feet)	744
Total Number of Emitters in the Dripfield	372

### Zone Information

Number of Zones	1
Amount of Bioline® Per Zone (feet)	744
Number of Emitters Per Zone	372
Minimum Number of Laterals Per Zone	1
Maximum Number of Laterals Per Zone	11
Number of Laterals That Will be Used	2
Maximum Length of Bioline® Laterals Based on Inlet Pressure	391
Flow Rate Per Zone (GPM)	3.8
Holding Capacity of Dripperline Per Zone (Gallons)	9.9
Additional Flow Requirement to Accommodate Flushing Velocity	3.2

### Holding Capacity of Piping

Holding Capacity (Gallons) of Supply Line & Supply & Flush Manifolds	9.9
Holding Capacity (Gallons per Zone) of Bioline	9.9
Holding Capacity (Gallons) of Supply Line, Manifolds and Dripperline	19.8

### Head Loss Data - Dosing & Flushing Cycle

Friction Loss per 100' (psi) in Supply Line & Manifolds	1.2
Velocity (fps)	2.6
Friction Loss in Supply Line & Supply Manifolds (psi)	2.7
Friction Loss in Supply Line & Supply Manifolds (Feet of Head)	6.3
Additional Pressure Required for Return Manifold and Piping to Tank (psi)	1.8
Additional Pressure Required for Return Manifold and Piping to Tank (Feet of Head)	4.2
TDH (Total Dynamic Head) in Feet of Head	99.3

### Control Settings Information

Total System Runtime Per Day (Minutes)	63
Total Runtime Per Zone Per Day (Minutes)	63
Total System Dosing Events Per Day	10
Runtime For Each Dose (Minutes)	6
Off Time Between Doses in the Same Zone (Hours to nearest 0.1)	2.3

### Miscellaneous Information

Dosing Volume Per Emitter Per Dose (gallons)	0.07
Inches Per Week of Dosing	1.81
Volume of a Single Dose (gallons)	26.5

### Pump Selection

Pump Flow Rating (GPM)	7.0
TDH (Total Dynamic Head in Feet of Head)	99.3
Pump Manufacturer	Franklin
Pump Model	20XC1-05P4-2W115

**REVISED**

8:55 am, Jan 16, 2025

**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 and §285.40 Texas Commission on Environmental Quality (Revised March 2013).

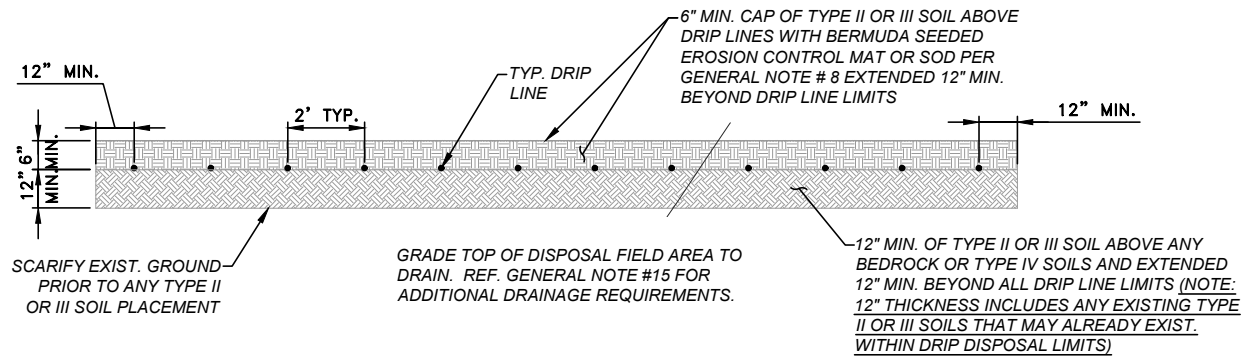
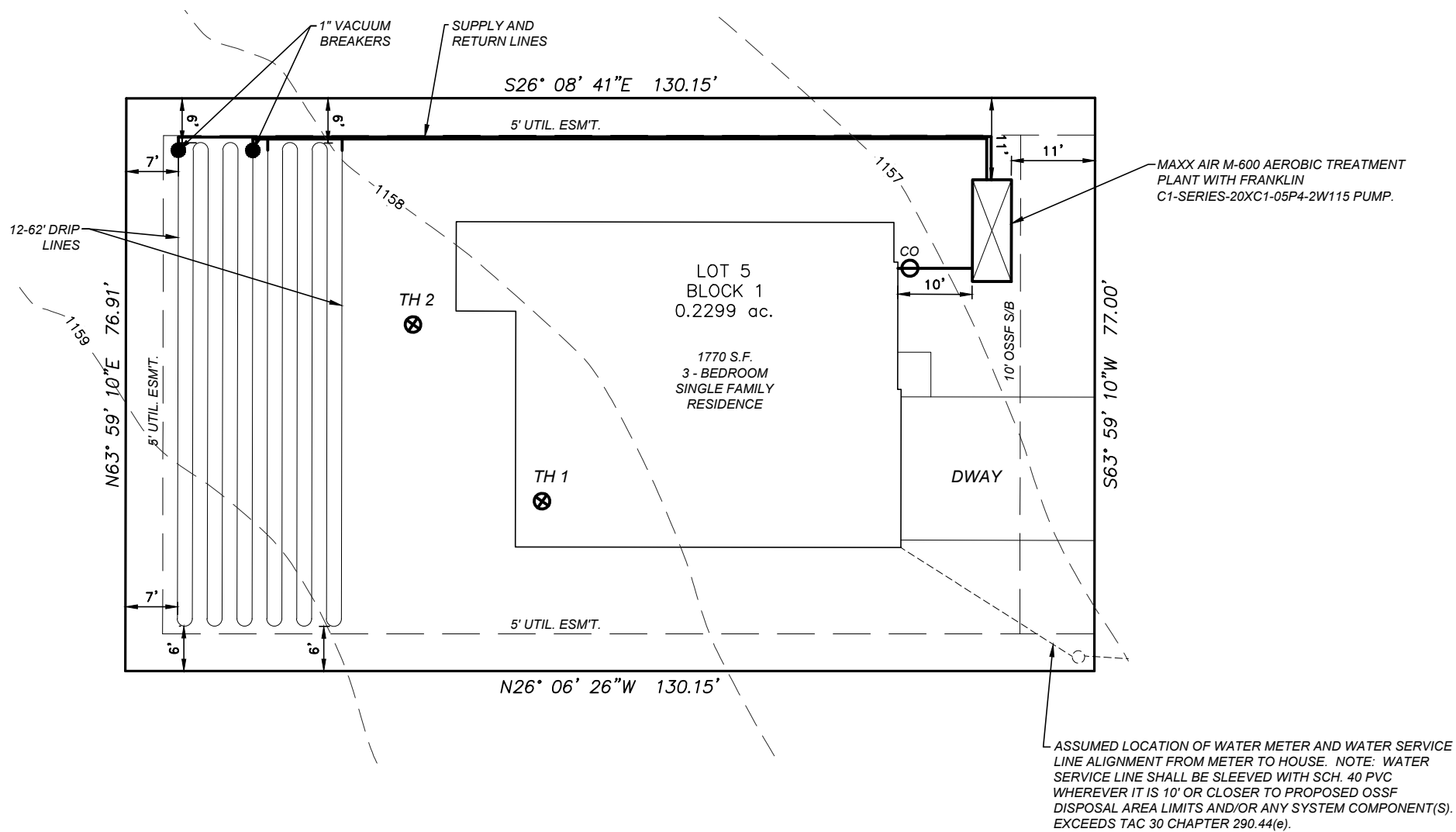


01/16/2025

Haag Engineering Consultants, LLC  
Firm No.: F-5786

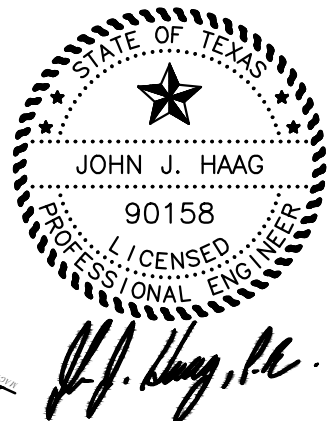
GENERAL NOTES:

- NO VEHICULAR TRAFFIC IS ALLOWED ON ANY PORTION OF THE DISPOSAL SYSTEM, UNLESS THE DESIGN SPECIFIES OTHERWISE.
- PIPE ALIGNMENT TO THE DISPOSAL BEDS MAY BE ALTERED AS REQUIRED. ANY CHANGE FROM THE PLANS MUST BE APPROVED BY THE ENGINEER AND THE APPROPRIATE GOVERNMENTAL AGENCY(IES).
- CONTRACTOR SHALL PROTECT TREES WHICH ARE NOT IN THE EXCAVATED CONSTRUCTION AREAS. CONTRACTOR SHALL MINIMIZE ROOT DAMAGE AND REASONABLY ADHERE TO THE DESIGN.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING A MINIMUM OF 1/4" PER FOOT OF FALL FROM THE BUILDING TO THE SEPTIC TANK.
- NOT AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED OVER THE DISPOSAL AREAS. ANY WATERING IN THESE AREAS SHALL BE DONE BY HAND AND ONLY WHEN REQUIRED TO MAINTAIN GRASS COVER.
- ALL CONSTRUCTION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY - TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ANY APPLICABLE LOCAL BUILDING AND SAFETY CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE CONSTRUCTION OF THIS SYSTEM.
- THE DRIP FIELD SHALL BE VEGETATED WITH EITHER BERMUDA SEEDER EROSION CONTROL MAT, ST. AUGUSTINE SOD OR BERMUDA SOD.
- FIELDS MUST BE MOWED AT REGULAR INTERVALS. FAILURE TO PROPERLY MAINTAIN VEGETATIVE COVER MAY RESULT IN SYSTEM FAILURE AND SHALL BE THE RESPONSIBILITY OF THE OWNER.
- ALL PIPES SHALL BE SCHEDULE 40 PVC OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. ALL JOINTS SHALL BE CLEANED WITH THE APPROPRIATE SOLVENT AND GLUED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
- ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY DISPOSAL SYSTEM OR SEWERAGE PIPE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF WATER LINES LESS THAN 10 FEET FROM THE DISPOSAL AREA.
- HIGH WATER ALARM SHALL BE LOCATED IN A NOTICEABLE LOCATION. THE ALARM SHALL BE A VISUAL AND AUDIBLE ALARM AND WIRED ON A SEPARATE CIRCUIT FROM THE PUMPS. ALL EXTERIOR CONTROLS AND CONNECTIONS SHALL BE ENCLOSED IN A WEATHER-PROOF HOUSING. ELECTRICAL CONSTRUCTION SHALL COMPLY WITH ALL LOCAL ELECTRICAL AND BUILDING CODES.
- NO EXCAVATION IS PERMITTED NEAR THE DISPOSAL FIELDS THAT WILL RESULT IN THE NONCOMPLIANCE OF APPLICABLE SETBACKS STATED IN THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY.
- ONLY GOOD QUALITY SANDY LOAM SHALL BE APPLIED OVER THE DISPOSAL FIELDS. CLAY LOAM IS UNACCEPTABLE AND WILL CAUSE SYSTEM FAILURE. SANDY LOAM SHALL BE DEFINED AS SHOWN IN TABLE VI (USDA SOIL TEXTURAL CLASSIFICATIONS) OF THE RULES AND REGULATIONS OF THE TCEQ. THE INSTALLER IS RESPONSIBLE FOR VERIFYING THE QUALITY OF EACH LOAD OF LOAM PLACED ON THE SYSTEM.
- STORM WATER (RAINFALL RUNOFF) SHOULD NOT BE ALLOWED TO FLOW OVER THE DISPOSAL FIELDS OR THE TANKS. DIVERSION BERMS, SWALES AND/OR RAIN GUTTERS SHOULD BE INSTALLED AS NECESSARY TO PREVENT SUCH RUNOFF.
- THE CONTRACTOR IS RESPONSIBLE FOR STAKING AND VERIFYING THE GRADES PRIOR TO EXCAVATION. ANY DISCREPANCIES OF MORE THAN 6 INCHES SHALL BE REPORTED TO THE ENGINEER PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOT DEVIATE FROM THESE PLANS WITHOUT THE WRITTEN CONSENT OF THE APPROPRIATE AUTHORITY AND THE ENGINEER.
- THIS DISPOSAL SYSTEM HAS BEEN DESIGNED TO OPERATE PROPERLY AT SPECIFICATIONS NOTED IN THESE PLANS. ALTERATIONS TO THE SYSTEM BY THE OWNER, INCLUDING BUT NOT LIMITED TO LANDSCAPING, DRAINAGE, BUILDING AND/OR WATER USAGE, MAY CAUSE PREMATURE FAILURE AND SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PLUMBING FIXTURES ARE CONNECTED TO THE DESIGNATED SEPTIC TANK(S). LOW FLOW TOILETS (1.6 GAL), SHOWERHEADS AND FAUCETS SHALL BE USED IN THE STRUCTURES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY AND PROTECTION OF THE PUBLIC FROM INJURY DURING CONSTRUCTION. THE OWNER SHALL BE RESPONSIBLE FOR THE PREVENTION OF PERSONAL INJURY TO ANYONE ON OR NEAR THE DISPOSAL SYSTEM.
- CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL TANKS HAVE ADEQUATE STRENGTH AND INTEGRITY TO PERFORM SATISFACTORILY AS SHOWN ON THESE PLANS.
- THE WASTEWATER FLOW TO THE SEPTIC SYSTEM SHALL NOT EXCEED THE DESIGN FLOW SHOWN ON THIS PLAN.



DRIP FIELD CROSS SECTION

SCALE: 1"=5'



1" = 20'

**OSSF LAYOUT**  
**LOT 5, BLOCK 1, GRANITE**  
**CYPRESS COVE, SECTION 11**  
**SPRING BRANCH, TEXAS**

ADD'L. NOTES:

- DESIGN DAILY WASTEWATER FLOW = 240 GPD (WATER SAVING DEVICES WERE ASSUMED FOR SEPTIC SYSTEM DESIGN).
- TOPOGRAPHIC DATA SOURCE: FEMA 2011 DATA
- INSTALLER SHALL VERIFY ALL EASEMENTS, SETBACKS AND PROPERTY LINE BEARINGS AND DISTANCES PRIOR TO CONSTRUCTION.
- ALL RISERS SHALL MEET THE MINIMUM REQUIREMENT OF 30 TAC 285 EFFECTIVE 07/06/2023.

NOTE: OSSF IS NOT WITHIN THE EDWARDS AQUIFER RECHARGE ZONE OR FEMA 100 YEAR FLOODPLAIN.  
SITE EVALUATION BY JOHN J. HAAG, P.E. ON 12/16/2024

DRAWN BY: JJH

CHECKED BY: JJH

DATE: 12/17/24

JOB NO. EDGESTONE 24001

SHEET 1 OF 1

**HAAG ENGINEERING CONSULTANTS**

15831 SECRET TRAILS  
SAN ANTONIO, TEXAS 78247  
FIRM: F-5789

TEL: (210) 705-4268

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Pump float settings for 240 gpd design flow and min. 80 gal reserve:

Pump off position: 12 inches above tank bottom (166.90 gal)

Pump on position: 29 inches above tank bottom (409.90 gal)

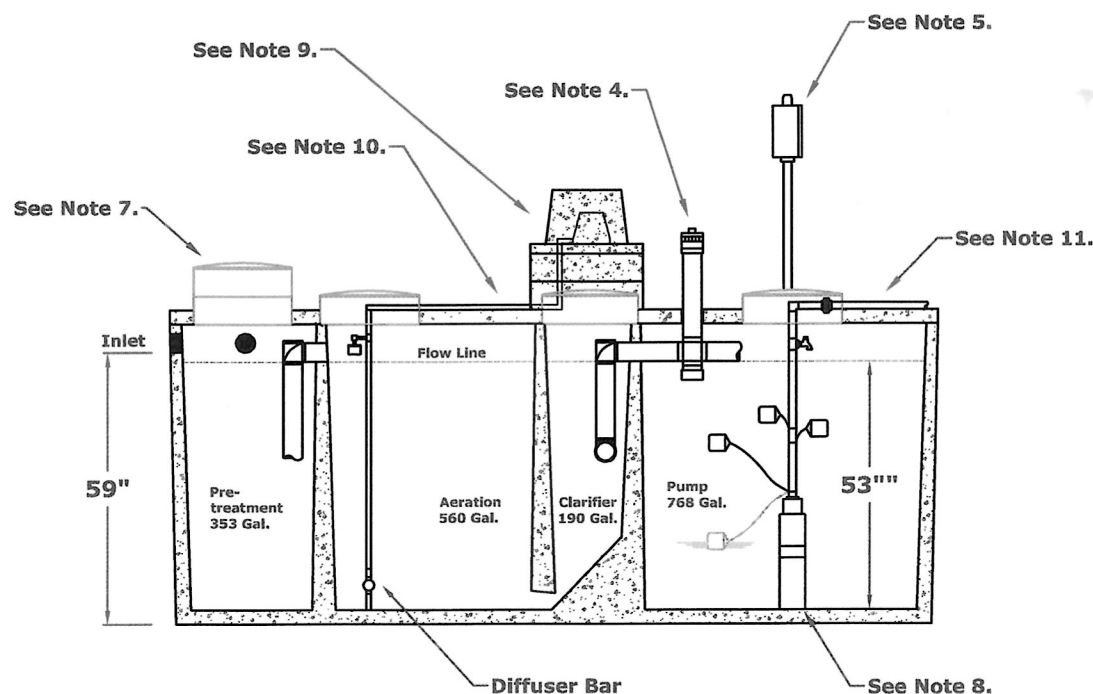
Alarm on position: 36 inches above tank bottom (512.22 gal)

254.04 gal reserve capacity at approx. 53 inches above tank bottom



#### GENERAL NOTES:

1. Plant structure material to be precast concrete and steel.
2. Weight = 14,900 lbs.
3. Treatment capacity is 600 GPD. BOD Loading = 1.62 lbs. per day.
4. Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
5. Control Center w/ Timer for night spray application.
7. 20" Ø access riser w/ lid (Typical 4). Optional extension risers available.
8. 20 GPM 1/2 HP, high head effluent pump.
9. Air Compressor w/ concrete housing.
10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
11. 1" Sch. 40 PVC pipe to distribution system provided by contractor.



#### DIMENSIONS:

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

#### MINIMUM EXCAVATION DIMENSIONS:

Width: 76"  
Length: 176"

## Maxx Air M-600 (600 GPD) Aerobic Treatment Plant (Assembled)

Dec, 2013  
By: A.S.

#### Scale:

\* All Dimensions subject to allowable specification tolerances.

Dwg. #: ADV-B550-3

**Advantage**  
Wastewater Solutions llc

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



# C1 SERIES

## CISTERN PUMPS

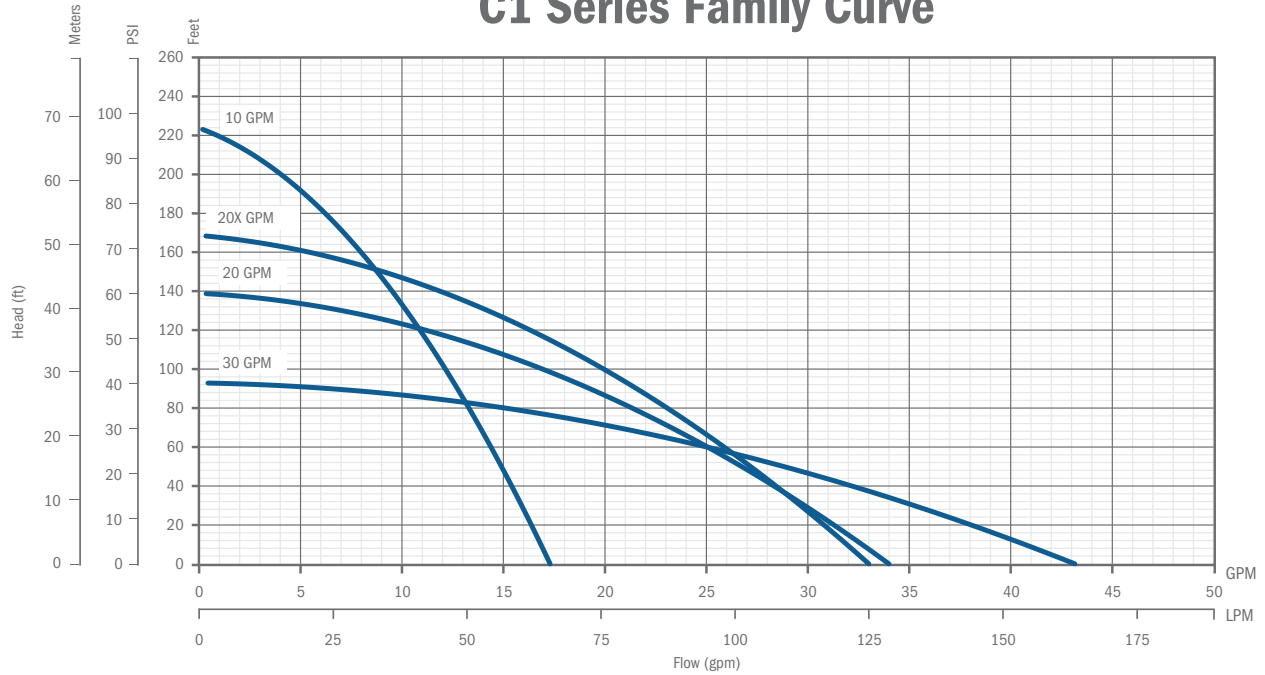
Designed for use in gray water / filtered effluent service applications, the C1 Series cistern pump provides high performance and long life in less than ideal water conditions. The C1 Series pump is able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components.

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





# C1 Series Family Curve



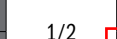
## FEATURES

- Supplied with a removable 5" base for secure and reliable mounting
- Bottom suction design
- Robust thermoplastic discharge head design resists breakage during installation and operation
- Single shell housing design provides a compact unit while ensuring cool and quiet operation
- Hydraulic components molded from high quality engineered thermoplastics
- Optimized hydraulic design allows for increased performance and decreased power usage
- All metal components are made of high grade stainless steel for corrosion resistance
- Available with a high quality 115 V or 230 V, 1/2 hp motor
- Fluid flows of 10, 20, and 30 gpm, with a max shut-off pressure of over 100 psi
- Heavy duty 600 V 10 foot SJ00W jacketed lead

## APPLICATIONS

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

## ORDERING INFORMATION

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

Note: All units have 10 foot long SJ00W leads.

# 1" SUPER/LONG MANUAL DISC FILTER

## INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

### FEATURES

- A "T" shaped reinforced plastic filter with two 1" male connections.
- Filter element consists of grooved discs, mounted on a spine, forming a cylindrical filter element. The discs are compressed together by a spring located at the bottom of the filter cover.
- Screw-on filter cover.
- Resistant to chemicals and liquid fertilizers.
- Available filtration grades: 040, 080, 120, 140 and 200.



### TECHNICAL DATA

FLOW RANGE	10 - 35 GPM
MAXIMUM PRESSURE	140 psi
FILTERING SURFACE AREA	78 sq. in.
FILTERING VOLUME	36 cu. in.
LENGTH	13 13/32"
WIDTH	6 7/32"
WEIGHT	3.11 lbs.
DISTANCE BETWEEN ENDS	6 7/32"
INLET/OUTLET DIAMETER	1" Male
MAXIMUM TEMPERATURE	158° F
pH	5 - 11

### MESH/MICRON

MESH	MICRON	DISC COLOR
040	400	Blue
080	200	Yellow
120	130	Red
140	115	Black
200	55	Green

### INSTALLATION

1. Filter can be installed either vertically or horizontally.
2. Use Teflon tape on filter threads - Do Not Use Pipe Dope.
3. Ensure correct inlet/outlet direction.
4. When connecting filter to pipe, do not overtighten.
5. Never use spanners for tightening the filter cover.

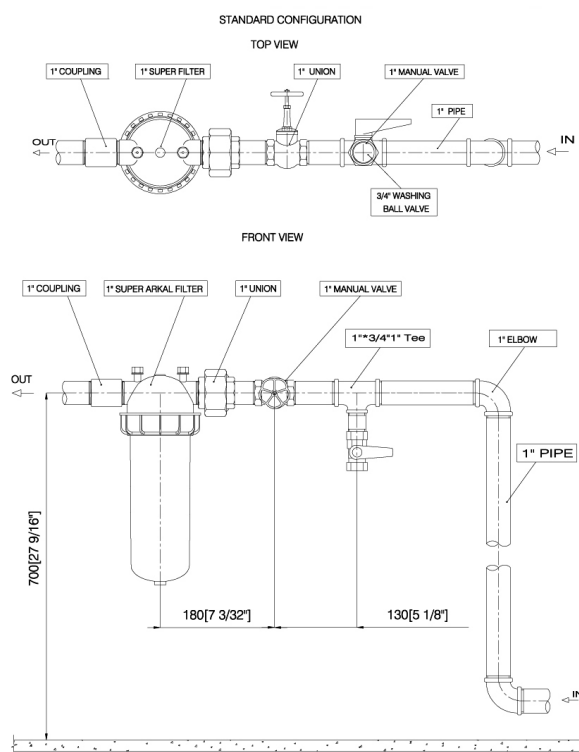
### MAINTENANCE AND CLEANING

#### DISMANTLING

1. Ensure system is turned off and no pressure remains in the pipeline.
2. Unscrew cover from the filter body.
3. Pull out entire filter element.

#### CLEANING

1. Move tightening ring to end of spine and flush discs with pressurized water.
2. If discs are not clean after flushing with water:
  - a. If the discs have an accumulation of algae in the grooves, soak the discs and spine in a small bucket of Clorox bleach for one hour and then reflush with fresh water.
  - b. If the discs have an accumulation of iron in the grooves, soak the discs and spine in a small bucket of 10% Muriatic Acid for one hour and then reflush with fresh water. Muriatic Acid can be purchased at any pool supply store.



## MAINTENANCE AND CLEANING

### ASSEMBLY

1. Verify that spring is in place inside the filter cover.
2. Insert filter element and make sure it is seated correctly.
3. Replace cover.
4. Tighten filter cover securely by turning the fixing nut clockwise and do not overtighten.

### WINTERIZATION

Drain all the water from the filter to avoid cracking due to freezing.

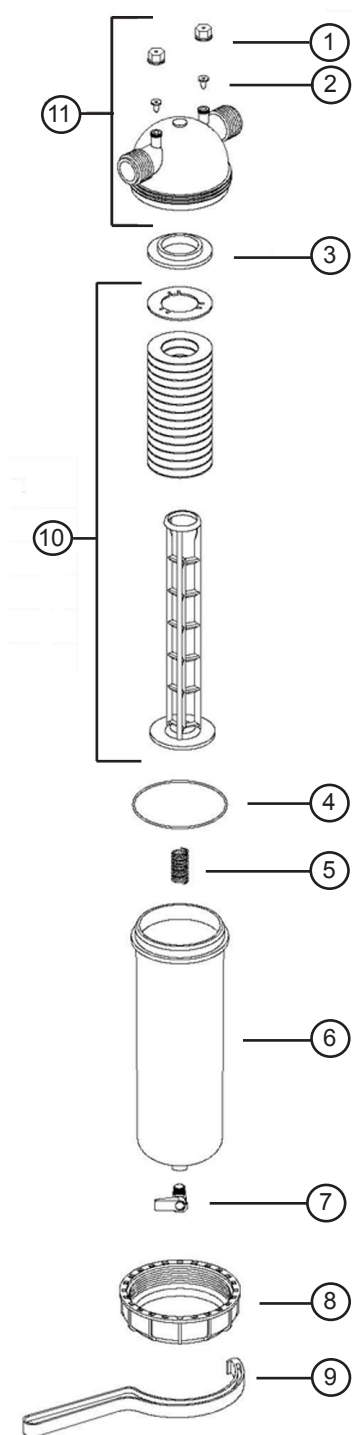
### PARTS BREAKDOWN - 1" SUPER/LONG FILTER

KEY	MODEL NUMBER	DESCRIPTION	MATERIALS
1	SEE # 11	GAUGE PORT NUT	R.PP
2	SEE # 11	GAUGE PORT SEAL	EPDM
3	-	FILTER ADAPTER RING	R.PA
4	25AP531140	COVER O RING	NR
5	25AP50440011	COMPRESSION SPRING	SS
6	25AP23113	FILTER COVER	R.PA
7	-	1/4" TAP (OPTIONAL)	BRASS
8	25AP231131	FIXING NUT	R.PA
9	25AP131199	FILTER WRENCH	R.PA
10	25AP21121-***	RING SET WITH SPINE	PP
11	25AP25000101	FILTER BODY COMPLETE	-

Substitute \*\*\* for proper mesh size.

### MATERIALS KEY

CODE	MATERIAL
SS	STAINLESS STEEL
PP	POLYPROPYLENE
NR	NITRILE RUBBER
R.PP	REINFORCED POLYPROPYLENE
R.PA	REINFORCED POLYAMIDE
EPDM	ETH. PROPY. RUBBER

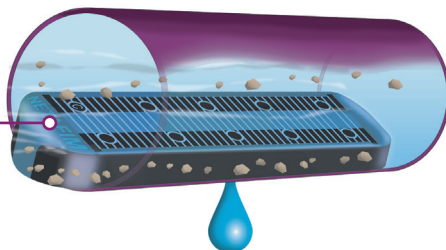


# BIOLINE® DRIPLINE

THE WORLD'S MOST ADVANCED CONTINUOUS  
SELF-CLEANING, PRESSURE COMPENSATING DRIPLINE  
SPECIFICALLY DESIGNED FOR WASTEWATER

## CROSS SECTION OF BIOLINE DRIPLINE

Bioline dripper inlets are positioned in the center of flow where water is the cleanest



## PRODUCT ADVANTAGES

- Pressure compensation - all drippers deliver equal flow, even on sloped or rolling terrain.
- Unique flow path - Turbonet technology provides more control of water and a high resistance to clogging.
- Continuous self-flushing dripper design - flushes debris, as it is detected - throughout operation, not just at the beginning or end of a cycle. Ensures uninterrupted dripper operation.
- Single hole dripper outlet from tubing:
  - Better protection against root intrusion
  - Allows the dripline to be used in subsurface applications without need for chemical protection
- Drippers capture water flow from the center of the tubing - ensures that only the cleanest flow enters the dripper.
- Built-in physical root barrier - drippers are protected from root intrusion without the need for chemical protection. Water exits dripper in one location while exiting the tubing in another.
- Three dripper flow rates - provides the broadest range of flow rates available. Allows the designer to match the dripline to any soil or slope condition.
- Bioline tubing is completely wrapped in purple - easily identifying it for non-potable use, regardless of how the tubing is installed.
- Anti-bacterial-impregnated drippers - prevents buildup of microbial slime.
- Can be used subsurface - Bioline can be installed on-surface, under cover or subsurface.
- No special storage requirements - does not degrade if stored outdoors.
- Techfilter compatible - an optional level of protection, provides a limited lifetime warranty against root intrusion.

## APPLICATIONS

- Typically installed following a treatment process
- Can be used with domestic septic tank effluent with proper design, filtration and operation
- Reuse applications including municipally treated effluent designated for irrigation and other disinfected and non-disinfected water sources.

## SPECIFICATIONS

- Dripper flow rates: 0.4, 0.6 or 0.9 GPH
- Dripper spacings: 12", 18" or 24" dripper spacings and blank tubing
- Pressure compensation range: 7 to 58 psi (stainless steel clamps recommended above 50 psi)
- Maximum recommended system pressure: 50 psi
- Tubing diameter: 0.66" OD, 0.57" ID
- Tubing color: Purple color indicates non-potable
- Coil lengths: 500' or 1,000' (Blank tubing in 250')
- Recommended filtration: 120 mesh
- Bending radius: 7"
- UV resistant
- Tubing material: Linear low-density polyethylene

Additional spacing and pipe sizes available by special order. Please contact Netafim USA Customer Service for details.

# BIOLINE DRIPLINE

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 3.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 2.3 GPM REQUIRED PER LATERAL TO ACHIEVE 3 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	102	94	84	136	127	113	161	151	137
	25	151	136	118	203	184	161	245	223	197
	35	193	171	146	260	232	200	315	283	245
	40	211	186	158	286	254	218	347	311	267
	45	228	200	169	310	274	233	377	335	287
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 3 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 2.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 2.0 GPM REQUIRED PER LATERAL TO ACHIEVE 2.5 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	128	115	100	172	155	136	205	187	165
	25	183	161	137	248	220	188	301	268	231
	35	228	198	166	310	272	229	379	333	283
	40	248	214	178	338	295	247	413	362	305
	45	266	229	190	364	316	263	447	389	327
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 2.5 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 2.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 1.6 GPM REQUIRED PER LATERAL TO ACHIEVE 2.0 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	161	141	119	217	191	164	263	233	201
	25	221	190	157	302	261	218	369	321	270
	35	269	229	187	370	316	260	455	391	324
	40	290	246	200	399	340	278	493	421	347
	45	310	261	212	427	362	296	527	449	369
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 2 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 1.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 1.2 GPM REQUIRED PER LATERAL TO ACHIEVE 1.5 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	201	171	140	275	235	194	337	289	241
	25	266	222	179	366	308	251	453	383	313
	35	316	262	210	437	365	295	543	455	369
	40	337	280	223	469	391	313	583	487	393
	45	358	296	235	497	413	331	619	517	415
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 1.5 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 1.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 0.8 GPM REQUIRED PER LATERAL TO ACHIEVE 1.0 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	248	205	163	344	285	228	427	355	285
	25	315	258	203	440	361	286	549	453	359
	35	367	299	234	513	419	331	643	527	417
	40	389	316	248	545	445	350	683	559	441
	45	409	332	260	574	468	367	721	589	463
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 1 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 0.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 0.4 GPM REQUIRED PER LATERAL TO ACHIEVE 0.5 fps

DRIPPER SPACING		12"			18"			24"		
DRIPPER FLOW RATE (GPH)		0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
INLET PRESSURE	15	301	242	188	422	341	265	531	429	335
	25	369	296	228	520	418	323	655	527	409
	35	421	337	260	595	476	368	749	603	467
	40	443	354	273	626	501	387	790	635	491
	45	464	371	285	656	524	404	829	665	513
Flow per 100' (GPM / GPH)		0.67/40	1.02/61	1.53/92	0.44/26.67	0.68/41	1.02/61	0.34/20	0.51/31	0.77/46

Lateral lengths are based on flows allowing for a 0.5 fps flushing/scouring velocity

Netafim recommends flushing velocities capable of breaking free any accumulated bioslimes and debris in the piping network.

- Notes:
1. Refer to local regulations for information on flushing velocities that may be written into codes.
  2. Netafim does not endorse a specific flushing velocity.
  3. Flushing velocities should be determined based on regulations, quality of effluent, and type of flushing control.
  4. Using a flushing velocity less than 1 fps does not provide turbulent flow as defined by Reynolds Number.
  5. Higher flushing velocities provide more aggressive flushing.

**From:** [Ritzen,Brenda](#)  
**To:** [emandoc@yahoo.com](mailto:emandoc@yahoo.com); [jhaag@satx.rr.com](mailto:jhaag@satx.rr.com)  
**Subject:** Permit 118205  
**Date:** Wednesday, January 15, 2025 2:41:00 PM  
**Attachments:** [image001.png](#)  
[Pages from 118205.pdf](#)

---

**Re: Edgestone Waters LLC  
Cypress Cove Unit 11 Lot 5 Block 1  
Application for Permit for Authorization to Construct an On-Site  
Sewage Facility (OSSF)**

**Owner / Agent :**

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

- 1 ✓ Maintenance provider signature needed on the maintenance contract.
- 2 ✓ There appears to be a typo on the actual sq. ft. of absorption area indicated within the written design specifications on page 1 of 3.
3. Revise as needed and resubmit.

Thank you,



**Brenda Ritzen**  
Environmental Health Coordinator  
195 David Jonas Dr.  
New Braunfels, TX 78132  
DR:OS00007722  
830-608-2090  
[www.cceo.org](http://www.cceo.org)





**VOID**

RS Septic Service, LLC  
444D Old No. 9 Hwy  
Comfort, TX 78013  
(830)431-1601

**MP# 0001708 Christopher Ryan Seidensticker**

**PROPERTY LEGAL DESCRIPTION:**

**Customer:** Edgestone Waters, LLC

**Site Address:** 371 Granite

**City/State:** Spring Branch/Texas

**Zip:** 78070

**County:** Comal

**Phone Number:** 210-410-9988

**Email:** emandoc@yahoo.com

**Permit #:**

I. **General:** This On-Site Sewage Facility Service Agreement (hereinafter referred to as "Agreement") is entered into by and between \_\_\_\_\_ (hereinafter referred to as "Client") and **RS Septic Service, LLC**. (hereinafter referred to as "Contractor"). By this agreement, Contractor agrees to render services, as described herein "Services", and the client agrees to fulfill his/her/their responsibilities under this agreement herein.

II. **Effective Dates:** This agreement commences on the date of \_\_\_\_\_

III. **Start Date:** License to Operate \_\_\_\_\_

**End Date:** \_\_\_\_\_

IV. **Services by Contractor:** Contractor will provide the following Services:

Inspect and perform routine maintenance on the On-Site Sewage Facility ("OSSF") in compliance with the code, regulations, and/or rules of the Texas Commission on Environmental Quality ("TCEQ") and county in which the OSSF is located. Inspections shall be performed in accordance with the manufacturer's requirements, at a frequency of approximately once every four (4) months.

Verify equal flow to Aerobic Treatment Units at each inspection.

Report to the appropriate regulatory authority and to Client, as required by the State of Texas' on-site rules and, if required, TCEQ or County rules. All findings must be reported to the appropriate regulatory authority within 14 days.

Notify Client and repair any components of the OSSF that are found to be in need of repair during the inspection. If repairs are required beyond routine maintenance Contractor must receive consent of Client to proceed.

Visit site in response to Client's request for unscheduled service within two business days from the date of Contractor's actual receipt of Client's request. Unscheduled service visits are not included in the fee agreement herein and will be billed to the client in addition to fees under this Agreement.

Provide notification of arrival to site to the Client or to site personnel. Additionally, Contractor will leave written notification of the visit at the site or with site personnel upon completion of inspection and forward such notice to the appropriate regulatory authority within fourteen (14) days.

V. **Payment(s):** Client shall pay to Contractor included w/ septic for the Services describe herein (the "Inspection and Routine Maintenance Fee"), excepting those described in Section III (4), or Section IX, herein. The Fee does not include equipment, parts or labor supplied for anything beyond routine inspection and routine maintenance. Payments for such additional services are due at the time services are provided or rendered. Payments not received within thirty (30) days from the due date will be subject to the greater of a \$20.00 late penalty or 1.5% carrying charge on the original balance for each month or portion thereof a balance in past due. [if for any reason such charges are found to be usurious by a court of competent jurisdiction, such charges shall be reduced to the maximum allowable by law. By signing this contract, Client authorizes Contractor to remove any parts installed, but not paid in full at the end of the thirty (30) days. Client agrees to pay for any labor cost associated with the installation the reasonable cost of removal of said parts.

**VOID**

**VI. Client's Responsibilities:** Client is responsible for each and all the following:

To maintain chlorinator and provide proper chlorine supply, if OSSF is so equipped.

To provide all necessary yard or lawn maintenance and removal of obstacles as needed to allow the OSSF to function properly, and to allow Contractor ready access to all parts of the OSSF.

To maintain a current license to operate and abide by the conditions and limitations of that license and all requirements for on-site sewage facilities from the State and local regulatory agency.

To maintain the OSSF in accordance with manufacturer's recommendations.

To immediately notify Contractor and Agency of any and all problems with, the OSSF, including failure thereof.

If Client elects a different contractor to perform the required service, Client is responsible for ensuring the substitute contractor holds the proper license (Installer II) and is certified by the manufacturer. Additionally, Client shall be responsible for ensuring proper notification is given to the appropriate regulatory authority, as required by the State and/or local regulatory authority rules.

To provide Contractor with water usage records, upon request, for evaluation by Contractor of the OSSF performance.

To pay required sampling charges for samples collected for testing (e.g., Biological Oxygen Demand/Total Suspended Solids ("BOD/TSS") that may be required on the OSSF.

To prevent backwash from water treatment or water conditioning equipment to enter the OSSF. To provide, at Client's expense, for pumping of tanks as needed.

To maintain site drainage sufficient to prevent adverse effects on the OSSF.

To promptly and fully pay Contractor's bills, fees, or invoices as described herein.

**VI. Access by Contractor:** Client agrees to allow Contractor, or personnel authorized by the Contractor, to enter the property at

reasonable times without prior notice for the purpose of performing the Services described herein. Such entry shall include access to the OSSF electrical and physical components, including tanks, by means of manways or risers for the purpose of evaluations required by the manufacturer, and/or regulatory authority rules. If such manways or risers are not in place, Client shall allow and be responsible for payment of required excavation, including labor and materials, necessary to allow access to the OSSF or any required components. Such excavation shall be billed at the rate of \$75.00 per hour for labor, plus materials billed at list price. Contractors shall make only those efforts reasonable under the circumstances to replace excavated soil.

**VII. Application or Transfer of Payment:** The fees paid for this agreement may transfer to any subsequent owner(s) of the property on which the OSSF is located. The subsequent owner(s) must sign a similar agreement authorizing Contractor to perform the above-described Services and accepting Client's responsibilities. The 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 termination of the agreement by Contractor.

**VIII. Termination of Agreement:** This agreement may be terminated by either party with 30 days' written notice. If this agreement is so terminated by Client, Contractor shall be paid at the rate of \$75.00 per hour for any work performed or required, but not yet paid. If terminated by Contractor, all amounts outstanding shall be due within thirty days of termination. The party terminating will immediately notify the other party, the equipment manufacturer, and the regulatory agency of the termination.

**IX. Limitations of Liability:** In no event shall Contractor be liable for indirect, consequential, incidental, or punitive damages, whether in contract, tort, or any other theory of liability. In no event shall the Contractor's liability for direct damages exceed payments by the Client under this Agreement.

**X. Severability and Reformation:** If any provision in this Agreement is held to be invalid or unenforceable for any reason, it shall be reformed to the minimum extent necessary to effect the intent of the Parties. If it cannot reasonably be reformed, it shall be struck from this Agreement and the remaining provisions shall continue to be valid and enforceable.

**XI**

**Performance of Agreement:** Commencement of performance by Contractor under this agreement is contingent on the following conditions: (1) Contractor receiving a fully executed original copy of this agreement, (2) Contractor receiving payment in full of the fee(s) described herein. If the above conditions are not met, then Contractor is from any obligation to perform any portion of this agreement.

**XII. Modification:** This Agreement may not be changed or modified except by an instrument in "Writing, signed by both Contractor and Client.

**XIII. Waiver:** Except as otherwise noted in this Agreement, the waiver by the other party of a breach of any provision of this Agreement shall not be construed as a continuing waiver or a consent to or waiver of any subsequent breach hereof.



**VOID**

**XIV. Headings:** The Article and Section headings in this Agreement are for the convenience of reference only and do not constitute a plan of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

**XV. GOVERNING LAW AND CHOICE OF VENUE:** EACH OF THE PARTIES HERETO HEREBY CONSENTS TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF TEXAS, COUNTY OF COMAL, AND TO THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS- SAN ANTONIO DIVISION, AS WELL AS TO THE JURISDICTION OF ALL COURTS TO WHICH AN APPEAL MAY BE TAKEN FROM SUCH COURTS, FOR THE PURPOSE OF ANY SUIT, ACTION, OR OTHER PROCEEDING ARISING OUT OF, OR IN CONNECTION WITH, THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREBY, INCLUDING, WITHOUT LIMITATION, ANY PROCEEDING RELATING TO ANCILLARY MEASURES IN AID OF ARBITRATION, PROVISIONAL REMEDIES AND INTERIM RELIEF, OR ANY PROCEEDING TO ENFORCE ANY ARBITRAL DECISION OR AWARD. EACH PARTY HERETO EXPRESSLY WAIVES ANY AND ALL RIGHTS TO BRING ANY SUIT, ACTION, OR OTHER PROCEEDING IN OR BEFORE ANY COURT OR TRIBUNAL OTHER THAN COURTS OF THE STATE OF TEXAS, COUNTY OF COMAL, AND COVENANTS THAT IT SHALL NOT SEEK IN ANY MANNER TO PROSECUTE OR DEFEND ANY DISPUTE OTHER THAN AS SET FORTH IN THIS ARTICLE XVI OR TO CHALLENGE OR SET ASIDE ANY DECISION, AWARD, OR JUDGMENT OBTAINED IN ACCORDANCE WITH THE PROVISIONS HEREOF. EACH OF THE PARTIES HERETO HEREBY EXPRESSLY WAIVES ANY AND ALL OBJECTIONS IT MAY HAVE TO VENUE, INCLUDING, WITHOUT LIMITATION, THE INCONVENIENCE OF SUCH FORUM, IN ANY OF SUCH COURTS.

**XVI. JURY TRIAL WAIVER.** THE PARTIES HEREBY UNCONDITIONALLY WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY AND ALL CLAIMS OR CAUSES OF ACTION ARISING FROM OR RELATING TO THEIR RELATIONSHIP. THE PARTIES ACKNOWLEDGE THAT A RIGHT TO A JURY IS A CONSTITUTIONAL RIGHT, THAT THEY HAVE HAD AN OPPORTUNITY TO CONSULT WITH INDEPENDENT COUNSEL, AND THAT THIS JURY WAIVER HAS ENTERED INTO KNOWINGLY AND VOLUNTARILY BY ALL THE PARTIES TO THE AGREEMENT. IN THE EVENT OF LITIGATION, THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

**XVII. Reservations of Rights:** Contractor reserves all rights not specifically granted herein.

**XVIII. Counterparts:** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

**XIX. Counsel:** Contractor has previously recommended that Client engage counsel to assist him/her/it in reviewing this Agreement and all other matters relating to it. Contractor and Client shall each bear his/her own costs and expenses in connection with the negotiation and documentation of this Agreement.

**XX. Insurance:** Contractor shall, at all times during the term of this Agreement, and at its own expense, keep full force and effect automobile insurance in amounts acceptable to Client, for property damage, bodily injury or death. Contractor shall provide Client with evidence of such insurance upon request. In addition, Contractor shall maintain the following insurance coverage throughout this term of this Agreement:

In addition to Worker's Compensation, as required by law, Contractor shall carry Commercial General Liability insurance in the minimum amount of one million dollars (\$1,000,000.00), covering all of the Contractor's activities related to this Agreement. The Contractor's liability policies shall name Client as an additional insured. The contractor shall provide Client with certificate of insurance evidencing the aforesaid coverage, prior to commencing Services pursuant to the Agreement. The amounts of insurance required to be obtained by the Contractor hereunder shall not constitute a limitation on the indemnification obligations to the Contractor.

**XXI. Entire Agreement:** This agreement contains the entire agreement of the parties, and there are no promises or conditions in any other agreement, oral or written. The parties expressly disclaim reliance on any prior statements, oral or written, by either party not expressly provided for herein

APPROVED BY CONTRACTOR:

DATE:

(CHRISTOPHER RYAN SEIDENSTICKER) MP# 0001708

APPROVED BY CLIENT:

DATE:

*EF [Signature]* Managing Member

12/17/24

**From:** [Ritzen,Brenda](#)  
**To:** [jhaag@satx.rr.com](mailto:jhaag@satx.rr.com); [emandoc@yahoo.com](mailto:emandoc@yahoo.com)  
**Cc:** [rssepticsservice@outlook.com](mailto:rssepticsservice@outlook.com)  
**Subject:** RE: Permit 118205  
**Date:** Thursday, January 16, 2025 8:57:00 AM  
**Attachments:** [image001.png](#)

---

John :

I have updated the permit file. I will await the signed contract before further processing.

Thank you,



**Brenda Ritzen**  
Environmental Health Coordinator  
195 David Jonas Dr.  
New Braunfels, TX 78132  
DR:OS00007722  
830-608-2090  
[www.cceo.org](http://www.cceo.org)

---

**From:** [jhaag@satx.rr.com](mailto:jhaag@satx.rr.com) <[jhaag@satx.rr.com](mailto:jhaag@satx.rr.com)>  
**Sent:** Thursday, January 16, 2025 6:45 AM  
**To:** Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)>; [emandoc@yahoo.com](mailto:emandoc@yahoo.com)  
**Cc:** [rssepticsservice@outlook.com](mailto:rssepticsservice@outlook.com)  
**Subject:** RE: Permit 118205

**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

---

Hi Brenda:

Please find the corrected Drip Summary (review comment #2 in your email below).

The maintenance provider will email the signed maintenance contract directly to you.

Thanks,

John J. Haag, P.E.  
Haag Engineering Consultants, LLC (Firm No.: F-5789)  
San Antonio, Texas 78247

**VOID**

**AEROBIC TREATMENT  
DRIP TUBING SYSTEM  
FOR:  
LOT 5, BLOCK 1  
CYPRESS COVE, SECTION 11**

**SITE DESCRIPTION:**

Located in Cypress Cove, Section 11, Lot 5, Block 11 the proposed system will serve at 3-bedroom, 1770 s.f. residence situated with soils per the Site Evaluation report. 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 or 4 inch SCH-40 pipe discharges from the residence into a Maxx Air M-600 (600 gpd) aerobic treatment plant containing a 353 gallon pretreatment tank and a 768 gallon pump chamber. The pump chamber contains a 0.5 HP Franklin C1-Series-20XC1-05P4-2W115 submersible well pump. The well pump is activated by a time controller allowing the distribution ten times per day with a 6-minute run time with the float setting at min. 240 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self-flushing 100-micron Arkal Disk filter then through a 1" SCH-40 manifold to a minimum 1200 sf drip tubing field with Netifim Bioline drip lines approximately two feet apart with 0.61 gph emitters set every two feet as per the attached schedule. A pressure regulator Model PMR35MF 35psi installed in the pump tank on the manifold to the field to maintain pressure at 35 psi. A 1" SCH-40 return line is installed to continuously flush the system by cycling a 1" ball valve. Solids caught in the disk filter are flushed each cycle back to the pump tank. Agricultural Products, Inc. (Model #VBK-1) 1" PVC vacuum breakers installed on the highest point on each manifold will prevent siphoning of effluent from higher to lower parts in the field. The field area shall be scarified and then built up so that a minimum of 12" of Type II or III soil is above any bedrock or type IV soils then the drip tubing shall be laid and capped with a minimum of 6" of Type II or Type III soil (NOT SAND). The field area shall be covered with Bermuda seeded erosion control mat or sodded with grass prior to system startup. The tank must have risers 2-inches minimum above finished grade on each opening with watertight caps that must be 65# or have a padlock or can only be removed with tools – all risers shall meet the minimum requirements of 30 TAC 285 effective July 6, 2023. A secondary plug, cap or suitable restraint must be provided below the riser cap to prevent tank entry should the cap be damaged or removed.

**DESIGN SPECIFICATIONS:**

Daily flow =  $Q=240$  gpd  
Pretreatment tank size: 353 gal  
Plant size: Maxx Air M-600; 600 gpd (TCEQ approved)  
Pump tank size: 768 gal  
Min. Reserve capacity after high level: 80 gal (1/3 day req'd)  
Application rate:  $Ra=0.2$  gal/sf  
Total absorption area:  $Q/Ra = \text{min. } 1200 \text{ sf}$  (1,288 sf actual)  
Total linear feet of drip tubing: 644' Netifim Bioline drip tubing 0.61 gph  
Pump requirement: 0.5 HP Franklin C1-Series-20XC1-05P4-2W115

**VOID**

## Calculation Outputs

### Total System Information

Application Area Required (square feet)	1,488
Total Amount of Bioline <sup>®</sup> Required (feet)	744
Total Number of Emitters in the Dripfield	372

### Zone Information

Number of Zones	1
Amount of Bioline <sup>®</sup> Per Zone (feet)	744
Number of Emitters Per Zone	372
Minimum Number of Laterals Per Zone	1
Maximum Number of Laterals Per Zone	11
Number of Laterals That Will be Used	2
Maximum Length of Bioline <sup>®</sup> Laterals Based on Inlet Pressure	391
Flow Rate Per Zone (GPM)	3.8
Holding Capacity of Dripperline Per Zone (Gallons)	9.9
Additional Flow Requirement to Accommodate Flushing Velocity	3.2

### Holding Capacity of Piping

Holding Capacity (Gallons) of Supply Line & Supply & Flush Manifolds	9.9
Holding Capacity (Gallons per Zone) of Bioline	9.9
Holding Capacity (Gallons) of Supply Line, Manifolds and Dripperline	19.8

### Head Loss Data - Dosing & Flushing Cycle

Friction Loss per 100' (psi) in Supply Line & Manifolds	1.2
Velocity (fps)	2.6
Friction Loss in Supply Line & Supply Manifolds (psi)	2.7
Friction Loss in Supply Line & Supply Manifolds (Feet of Head)	6.3
Additional Pressure Required for Return Manifold and Piping to Tank (psi)	1.8
Additional Pressure Required for Return Manifold and Piping to Tank (Feet of Head)	4.2
TDH (Total Dynamic Head) in Feet of Head	99.3

### Control Settings Information

Total System Runtime Per Day (Minutes)	63
Total Runtime Per Zone Per Day (Minutes)	63
Total System Dosing Events Per Day	10
Runtime For Each Dose (Minutes)	6
Off Time Between Doses in the Same Zone (Hours to nearest 0.1)	2.3

### Miscellaneous Information

Dosing Volume Per Emitter Per Dose (gallons)	0.07
Inches Per Week of Dosing	1.81
Volume of a Single Dose (gallons)	26.5

### Pump Selection

Pump Flow Rating (GPM)	7.0
TDH (Total Dynamic Head in Feet of Head)	99.3
Pump Manufacturer	Franklin
Pump Model	20XC1-05P4-2W115

**VOID**

**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 and §285.40 Texas Commission on Environmental Quality (Revised March 2013).



12/17/2024

Haag Engineering Consultants, LLC  
Firm No.: F-5786

**VOID**

202406037037 12/05/2024 03:18:14 PM 1/3

Alamo Title GF# 4000132400188

bicoy

**NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.**

**GENERAL WARRANTY DEED**

**Date:** December 3, 2024

**Grantor:** ELF CYPRESS COVE, LLC, a Texas limited liability company  
18955 Kentucky Downs Ln  
**Grantor's Mailing Address:** Yorba Linda, CA 92886

**Grantee:** Edgestone Waters LLC

**Grantee's Mailing Address,** 440 Louisiana, Ste 952, Houston, TX 77002  
**and after Recording, Return to:** \_\_\_\_\_

**Consideration:** Cash and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

**Property (including any improvements):**

Lot 5, Block 1, Cypress Cove, Section 11, according to a map and plat thereof recorded in Volume 3, Page 49, Map and Plat Records Comal County, Texas.

**Reservations from Conveyance:** None

**Exceptions to Conveyance and Warranty:** Validly existing easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded and validly existing instruments, other than conveyances of the surface fee estate, that affect the Property; and taxes for 2025, which Grantee assumes and agrees to pay, but not subsequent assessments for that and prior years due to change in land usage, ownership, or both, the payment of which Grantor assumes.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

The Contract between Grantor as the Seller and Grantee as the Buyer, if any, may contain

limitations as to warranty or other agreed matters; to the extent that such Contract provides for limitations or other agreed matters that will survive the closing and this conveyance, then such limitations or other agreed matters are hereby deemed incorporated by reference. The warranty of title contained in this Deed is hereby expressly excluded from the limitations or other agreed matters referenced in this paragraph.

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

ELF CYPRESS COVE, LLC,  
a Texas limited liability company

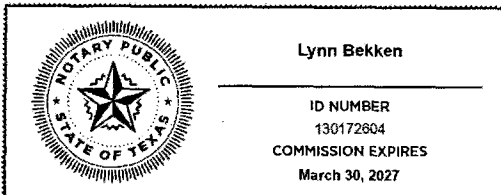
By: Frances Wesing Dow, Manager  
Frances Wesing Dow, Manager

By: [Signature]  
Lorenzo Medina, Manager

STATE OF Texas )

COUNTY OF Bexar )

This instrument was acknowledged before me on December 3rd, 2024 by Frances Wesing Dow, Manager of ELF CYPRESS COVE, LLC, a Texas limited liability company, on behalf of said company.



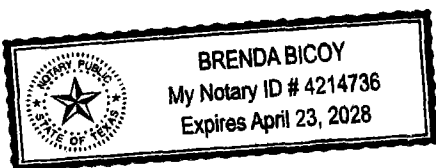
[Signature]  
Notary Public, State of Texas

Electronically signed and notarized online using the Proof platform.

STATE OF Nexas )

COUNTY OF Comal )

This instrument was acknowledged before me on December 4, 2024 by Lorenzo Medina, Manager of ELF CYPRESS COVE, LLC, a Texas limited liability company, on behalf of said company.



[Signature]  
Notary Public, State of Nexas

Record & Return to:

Edgestone Waters LLC  
440 Louisiana, Ste 952  
Houston TX 77002

Filed and Recorded  
Official Public Records  
Bobbie Koepp, County Clerk  
Comal County, Texas  
12/05/2024 03:18:14 PM  
TERRI 3 Pages(s)  
202406037037



Bobbie Koepp





**COMAL COUNTY**  
ENGINEER'S OFFICE

**OSSF DEVELOPMENT APPLICATION  
CHECKLIST**

*Staff will complete shaded items*

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*Date Received*

*Initials*

118205
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*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

\_\_\_\_\_  
Date

\_\_\_ COMPLETE APPLICATION

Check No. \_\_\_\_\_ Receipt No. \_\_\_\_\_

INCOMPLETE APPLICATION

\_\_\_\_ (Missing Items Circled, Application Refused)