

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 118659

1. APPLICANT / AGENT INFORMATION

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 CYPRESS LAKE GARDENS, WESTERN SKIES SECTION Unit _____ Lot 13 Block 101
 Survey Name / Abstract Number _____ Acreage _____
 Address 3139 WESTERN SKIES DRIVE City SPRING BRANCH State TX Zip 78070

3. TYPE OF DEVELOPMENT

☒ Single Family Residential

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

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1486

☐ 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: \$ 300,000 (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.

Signature of Owner

Date _____



COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

CYPRESS LAKE GARDENS, WESTERN SKIES SECTION,
BLK 101, LOT 13

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

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) NUWATER B-550-PC, 600 GPD Absorption/Application Area (Sq Ft) 2000

Gallons Per Day (As Per TCEQ Table 111) 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

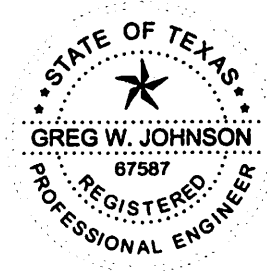
(if yes, the P.E. or R.S. shall certify that the OSSF design complies with all provisions of the existing CZP.)

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 UP has been approved by the appropriate reg

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 of Designer

May 6, 2025

Date

AFFIDAVIT**THE COUNTY OF COMAL
STATE OF TEXAS****CERTIFICATION OF OSSF REQUIRING MAINTENANCE**

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

I

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

II

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

WESTERN
SKIES UNIT/PHASE/SECTION 101 BLOCK 13 LOT CYPRESS LAKE GARDENS SUBDIVISION

IF NOT IN SUBDIVISION: _____ ACREAGE _____ SURVEY _____

The property is owned by (insert owner's full name): HC CASITAS HOLDINGS, 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 treatment system for a single family residence shall either obtain a maintenance contract within 30 days or maintain the system personally.

Upon sale or transfer of the above-described property, the permit for the OSSF shall be transferred to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from the Comal County Engineer's Office.

WITNESS BY HAND(S) ON THIS 6 DAY OF May, 2025

Sophie Campbell
Owner(s) Signature(s)

SOPHIE CAMPBELL - MANAGER

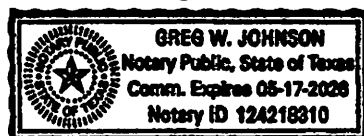
Owner(s) Printed name(s)

SOPHIE CAMPBELL

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 6 DAY OF

May, 2025

[Signature]
Notary Public Signature



Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
05/15/2025 11:36:21 AM
TRACY 1 Pages(s)
202506014284



Bobbie Koepp

WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT

Regulatory Authority COMAL

Block Creek Aerobic Services, LLC

444 A Old Hwy #9

Comfort, TX 78013

Off. (830) 995-3189

Fax. (830) 995-4051

Permit/License Number _____

Customer HC CASITAS HOLDINGS, LLC

Site Address 3139 WESTERN SKIES DR

City SPRING BRANCH Zip 78070

Mailing Address P.O. BOX 1905, SAN MARCOS 78667

County COMAL Map # CCEO PG 15, F5

Phone 956-792-6845

Email sophie@hccasitas.com

CYPRESS LAKE GARDENS, WESTERN SKIES
SECTION, BLOCK 101, LOT 13

I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between HC CASITAS HOLDINGS, LLC (hereinafter referred to as "Customer") and Block Creek Aerobic Services, LLC. By this agreement, Block Creek Aerobic Services, LLC and its employees (hereinafter inclusively referred to as "Contractor") agree to render services at the site address stated above, as described herein, and the Customer agrees to fulfill his/her/their responsibilities, as described herein.

II. Effective Date:

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

III. Termination of Agreement:

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

IV. Services:

Contractor will:

a. Inspect and perform routine upkeep on the On-Site Sewage Facility (hereinafter referred to as OSSF) as recommended by the treatment system manufacturer, and required by state and/or local regulation, for a total of three visits to site per year. The list of items checked at each visit shall be the: control panel, Electrical circuits, timer, Aeration including compressor and diffusers, CFM/PSI measured, lids safety pans, pump, compressor, sludge levels, and anything else required as per the manufacturer.

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

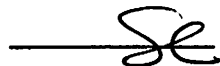
c. Repair or replace, if Contractor has the necessary materials at site, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and the service(s) cost less than \$100.00, Customer hereby authorizes Contractor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

d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).

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

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

V. Disinfection:



Customer's Initials



RC

Contractor's Initials

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

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

XII. Severability:

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

XIII. Fee for Services:

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

XIV. Payment:

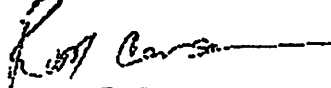
Full payment is due upon execution of this Agreement (Required of new Customer). For any other service(s) or repair(s) provided by Contractor the Customer shall pay the invoice(s) for said service(s) or repair(s) within thirty (30) days of the invoice date. The Contractor shall mail all invoices on the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

XV. Application or Transfer of payment:

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

XVI. Entire Agreement:

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



Rudy Carson

Block Creek Aerobic Services, LLC,
Contractor
MP# 0002036



Customer Signature

S. L. 25

Date



Customer's Initials



RC

Contractor's Initials

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: May 05, 2025

Site Location: CYPRESS LAKE GARDENS-WESTERN SKIES SECTION, BLOCK 101, LOT 13

Proposed Excavation Depth: N/A

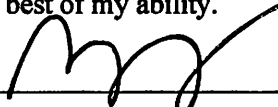
Requirements:

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

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

05/05/25
Date

OSSF SOIL EVALUATION REPORT INFORMATION

Date: May 06, 2025

Applicant Information:

Name: HC CASITAS HOLDINGS, LLC.
Address: P.O. BOX 1905
City: SAN MARCOS State: TEXAS
Zip Code: 78667 Phone: (956) 792-6845

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 13 Unit Blk 101 Subd. CYPRESS LAKE
GARDENS-WESTERN SKIES
SECTION
Street Address: 3139 WESTERN SKIES DRIVE
City: SPRING BRANCH Zip Code: 78070
Additional Info.:

Installer Information:

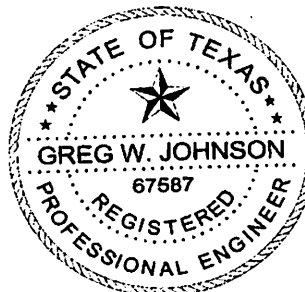
Name:
Company:
Address:
City: State:
Zip Code: Phone

Topography: Slope within proposed disposal area: < 1 %
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

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, P.E. 67587 - S.E. 11561

05/06/25
DATE



FIRM #2585

**AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
HC CASITAS HOLDINGS, LLC
P.O. BOX 1905
SAN MARCOS, TX 78667**

SITE DESCRIPTION:

Located in Cypress Lake Gardens, Western Skies Section, Block 101, Lot 13, 3139 Western Skies Drive, the proposed system will serve a three bedroom residence (1486sf.) 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 residence into a NuWater B-550 600gpd aerobic plant containing a 353-gallon pretreatment tank, an aerobic treatment plant, and a 768-gallon pump chamber containing a submersible (Franklin FPS E-Series) 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 2000 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 continuously flush the system by throttling 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 10" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil (***NOT SAND***). (***A minimum of twelve inches of soil required between drip tubing and rock/tank.***) The field area will be 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 Table III

Pretreatment tank size: 353 Gal

Plant Size: NuWater B550 600gpd (TCEQ Approved)

Pump tank size: 768 Gal

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

Application Rate: $R_a = 0.2$ gal/sf

Total absorption area: $Q/R_a = 240 \text{ GPD}/0.20 = 1200 \text{ sf.}$ (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.): Franklin FPS E-Series submersible well pump

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

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

$$\text{MSV} = 2 \text{ FPS } (\Pi d^5 / 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$\text{MSV} = 2(3.14159((.55/12)^5 / 2) / 4) * 7.48 * 60$$

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

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

$$\text{MSV} = 2 \text{ FPS } (\Pi d^5 / 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$


$$\text{MSV} = 2(3.14159((1.049/12)^5 / 2) / 4) * 7.48 * 60$$

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

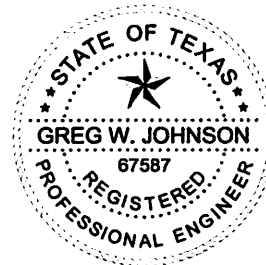
PIPE AND FITTINGS:

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)

 05/06/25

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



OWNER: HC CASITAS HOLDINGS, LLC.		DRAWN BY: EJS III	
STREET ADDRESS: 3139 WESTERN SKIES DRIVE			
LEGAL DESC: CYPRESS LAKE GARDENS-WESTERN SKIES SECTION		BLOCK: 101	LOT: 13
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=20'	DATE: 5/6/2025	REVISED:

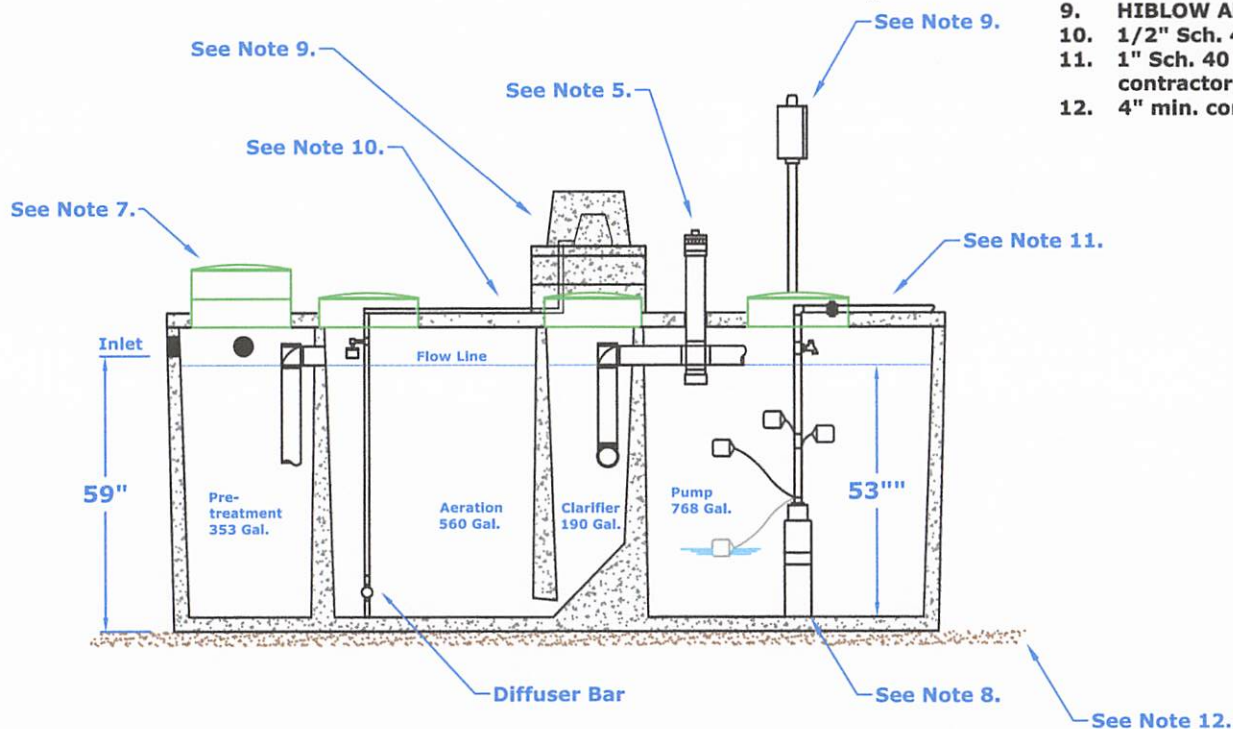
Assembly Details

OSSF



GENERAL NOTES:

1. Plant structure material to be precast concrete and steel.
2. Maximum burial depth is 30" from slab top to grade.
3. Weight = 14,900 lbs.
4. Treatment capacity is 600 GPD. Pump compartment set-up for a 360 GPD Flow Rate (4 bedroom, < 4,000 sq/ft living area). Please specify for additional set-up requirements. BOD Loading = 1.62 lbs. per day.
5. Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
6. Bio-Robix B-550 Control Center w/ Timer for night spray application. Optional Micro Dose (min/sec) timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle.
7. 20" Ø access riser w/ lid (Typical 4). Optional extension risers available.
8. 20 GPM 1/2 HP, high head effluent pump.
9. HIBLOW Air Compressor w/ concrete housing.
10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
11. 1" Sch. 40 PVC pipe to distribution system provided by contractor.
12. 4" min. compacted sand or gravel pad by Contractor



DIMENSIONS:

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

MINIMUM EXCAVATION DIMENSIONS:

Width: 76"
Length: 176"

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

Model: B-550-PC-400PT

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

Scale:

* All Dimensions subject to allowable specification tolerances.

Dwg. #: ADV-B550-3

Advantage
Wastewater Solutions LLC

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

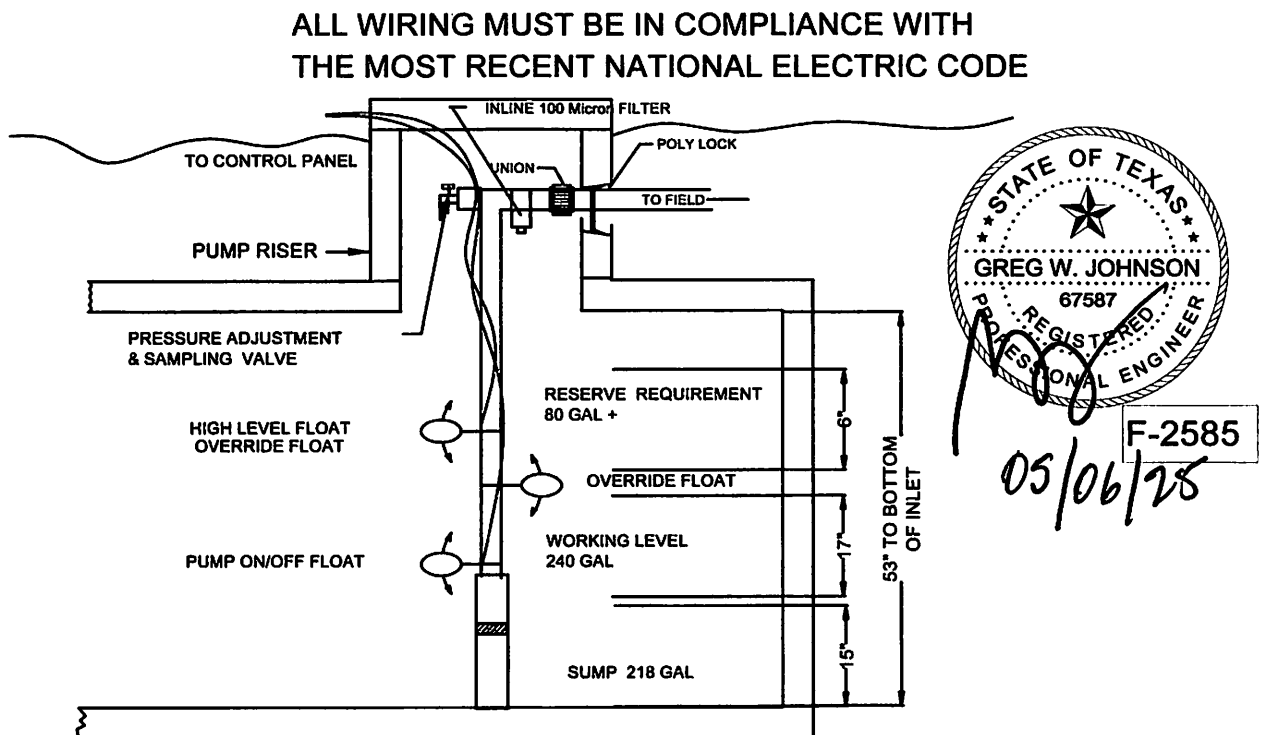
TANK NOTES:

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.

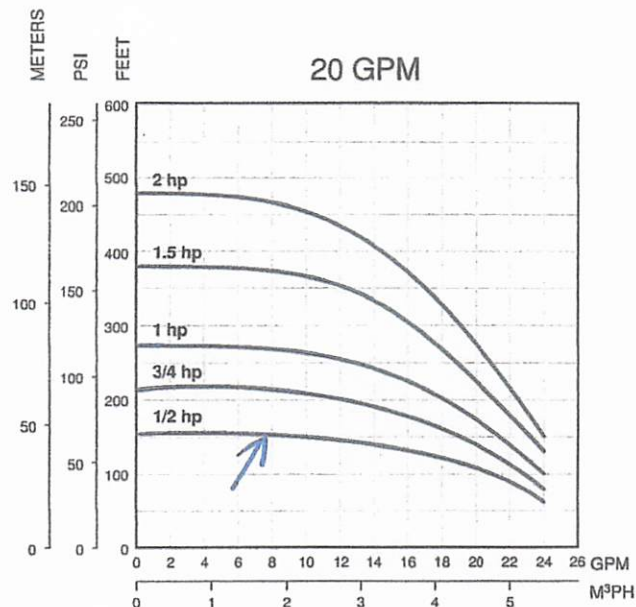
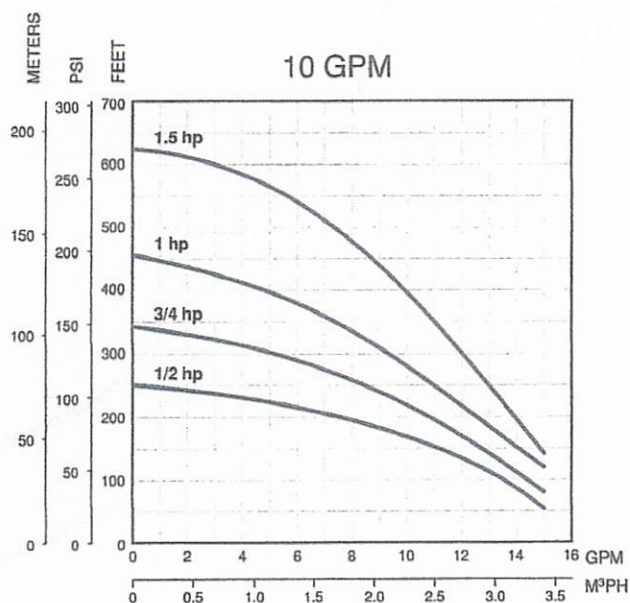
A two way sanitary tee is required between residence and tank.

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



**TYPICAL PUMP TANK CONFIGURATION
NU-WATER 550PC -400PT 768 GAL PUMP TANK**

Thermoplastic Performance



Thermoplastic Units Ordering Information

1/2 - 1.5 HP Single-Phase Units

Order No.	Model	GPM	HP	Volt	Wire	Wt.
94741005	10FE05P4-2W115	10	1/2	115	2	24
94741010	10FE05P4-2W230	10	1/2	230	2	24
94741015	10FE07P4-2W230	10	3/4	230	2	28
94741020	10FE1P4-2W230	10	1	230	2	31
94741025	10FE15P4-2W230	10	1.5	230	2	46
94742005	20FE05P4-2W115	20	1/2	115	2	25
94742010	20FE05P4-2W230	20	1/2	230	2	25
94742015	20FE07P4-2W230	20	3/4	230	2	28
94742020	20FE1P4-2W230	20	1	230	2	31
94742025	20FE15P4-2W230	20	1.5	230	2	40

Thermoplastic 1/2 - 2 HP Pump Ends

Order No.	Model	GPM	HP	Volt	Wire	Wt.
94751005	10FE05P4-PE	10	1/2	N/A	N/A	6
94751010	10FE07P4-PE	10	3/4	N/A	N/A	7
94751015	10FE1P4-PE	10	1	N/A	N/A	8
94751020	10FE15P4-PE	10	1.5	N/A	N/A	12
94752005	20FE05P4-PE	20	1/2	N/A	N/A	6
94752010	20FE07P4-PE	20	3/4	N/A	N/A	7
94752015	20FE1P4-PE	20	1	N/A	N/A	8
94752020	20FE15P4-PE	20	1.5	N/A	N/A	10
94752025	20FE2P4-PE	20	2	N/A	N/A	11

Arkal 1" Super Filter

Catalog No. 1102 0 _ _ _

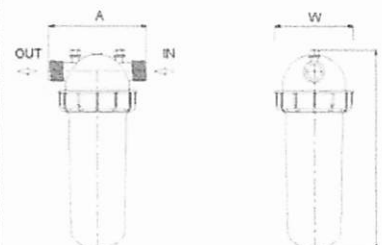
Features

- ♦ 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

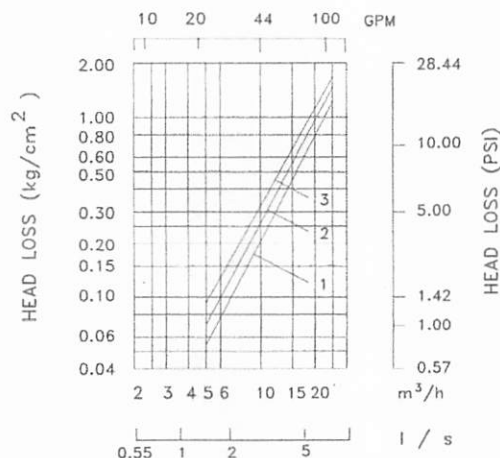
Inlet/outlet diameter	1" BSPT (male)	1" NPT (male)
	25.0 mm – nominal diameter	
	33.6 mm – pipe diameter (O. D.)	
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m ³ /h (1.7 l/sec)	35 gpm
General filtration area	500 cm ²	77.5 in ²
Filtration volume	600 cm ³	37 in ³
Filter length L	340 mm	13 13/32"
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

- ¾-inch Female National Pipe Thread (FNPT)
- 1-inch Female National Pipe Thread (FNPT)
- 1-inch Female British Standard Pipe Thread (FBSPT)

Outlet

- ¾-inch Female National Pipe Thread (FNPT)
- 1-inch Female National Pipe Thread (FNPT)
- 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

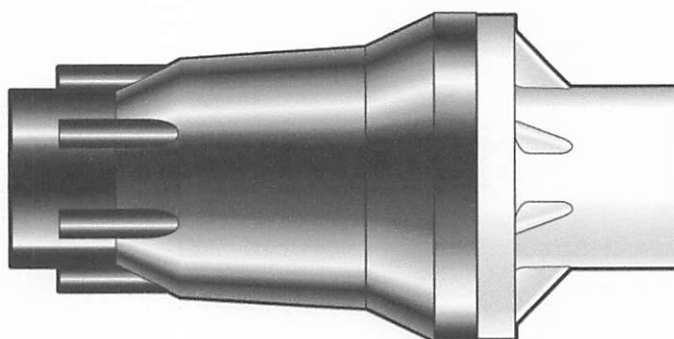
¾" FNPT x ¾" FNPT model (shown on right)

- 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

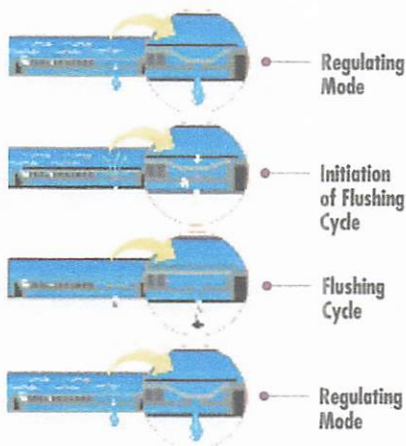
Model Numbers

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, dog free operation, year after year.



Product Advantages

The Proven Performer

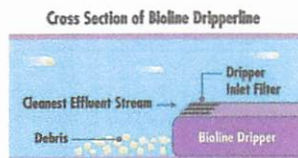
- Tens of millions of feet used in wastewater today.
- Bioline is permitted in every state allowing drip disposal.
- Backed by the largest, most quality-driven manufacturer of drip products in the U.S.
- Preferred choice of major wastewater designers and regulators.
- Proven track record of success for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

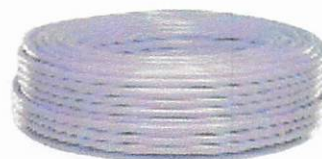
Long-Term Reliability

- 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"*

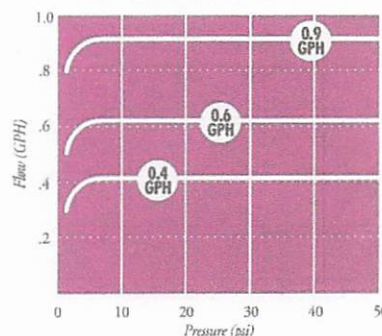
Recommended filtration: 120 mesh

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

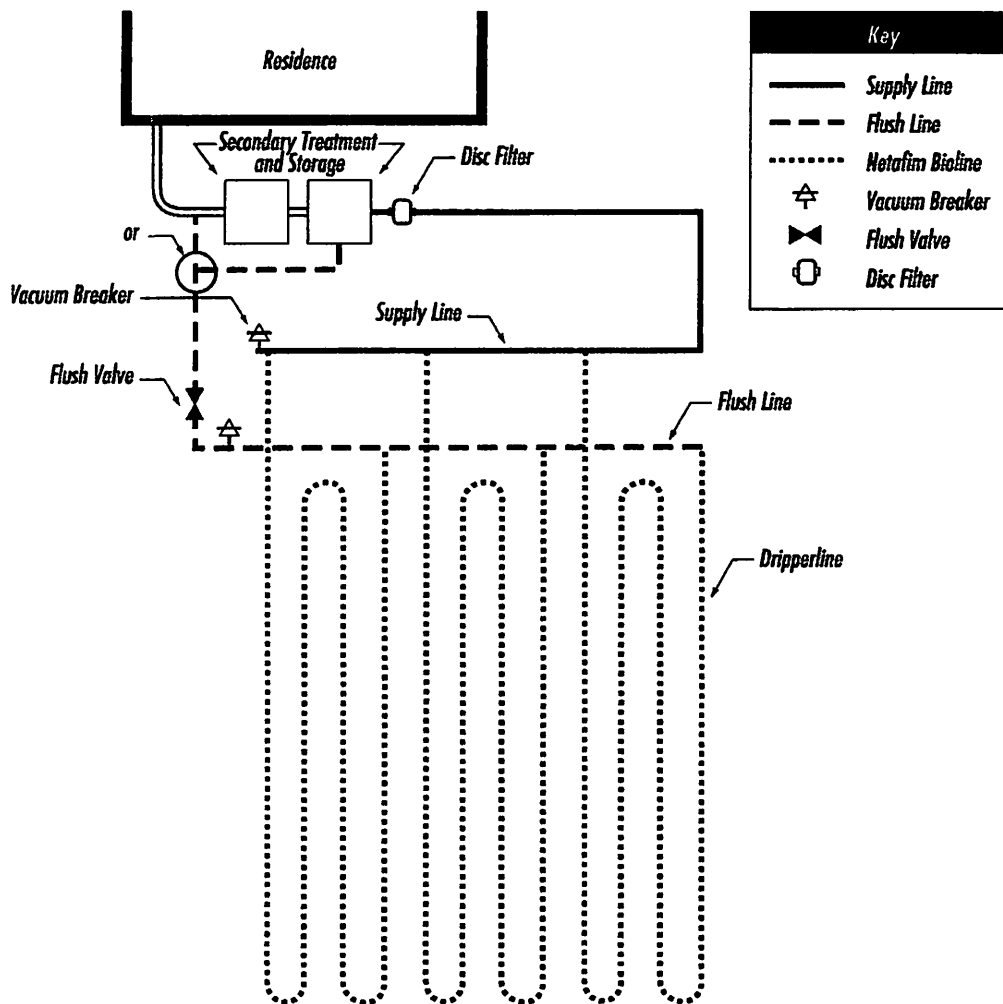
NETAFIM WASTEWATER DISPERSAL SYSTEM DESIGN GUIDE

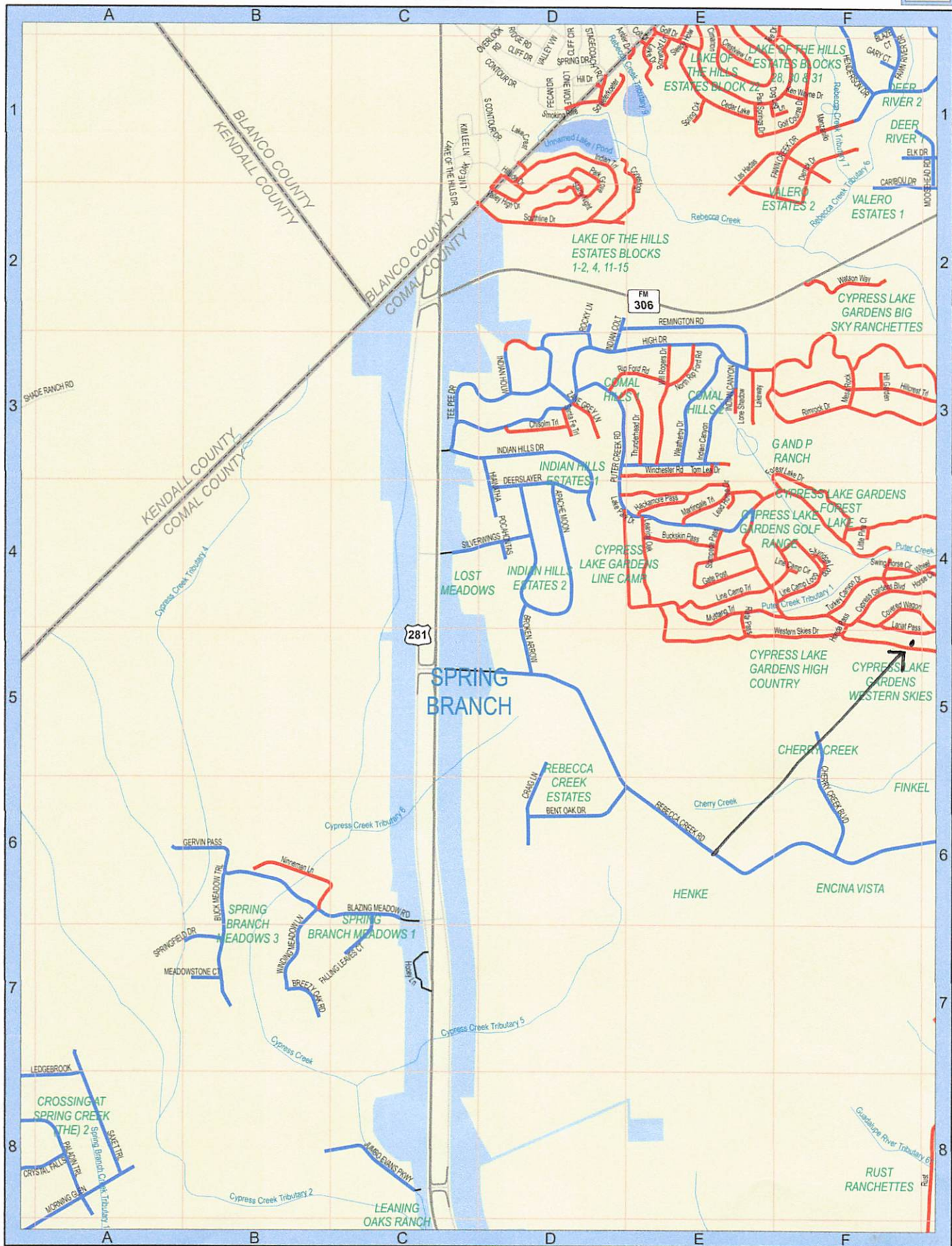
SAMPLE DESIGNS

SINGLE TRENCH LAYOUT

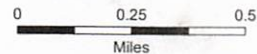
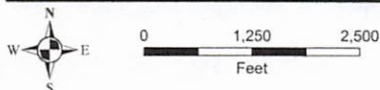
Rectangular field with supply and flush manifold on same side and in same trench;

- 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





SEE PAGE 16



FILED BY
ALAMO TITLE
GF# 400132400164

**GENERAL WARRANTY DEED
(CASH)**

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.

GF# SAT-13-4000132400164M

Date: 10/25/2024

Grantor: Susan Dollinski

Grantor's Mailing Address: 3099 Western Skies, Spring Branch, TX 78070

Grantee: HC Casitas Holdings, LLC

Grantee's Mailing Address: P.O. Box 1905, San Marcos, TX 78667

Consideration: TEN AND NO/100——(\$10.00)——DOLLARS and other good and valuable consideration, the receipt of which is hereby acknowledged and confessed;

Property (including any improvements):

Lot 13, Block 101, Cypress Lake Gardens, Western Skies Section, an Addition to the City of Spring Branch, Comal County, Texas, according to the map or plat thereof recorded in Volume 3, Pages 18-19, Map and Plat Records, Comal County, Texas.

Property commonly known as: 3139 Western Skies Drive, Spring Branch, TX 78070

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

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

Current ad valorem taxes on the property having been prorated, the payment thereof is assumed by Grantee.

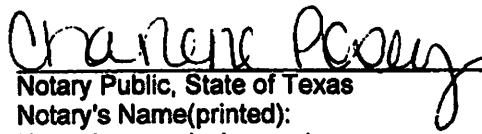
When the context requires, singular nouns and pronouns include the plural.


Susan Dolinski

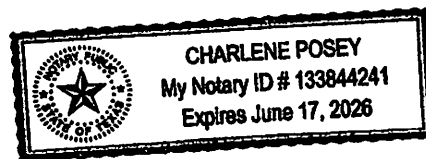
(Acknowledgment)

THE STATE OF TEXAS
COUNTY OF Comal

This instrument was acknowledged before me on the 25th day of October, 2024 by Susan Dolinski.


Notary Public, State of Texas
Notary's Name(printed):
Notary's commission expires:

AFTER RECORDING RETURN TO:
HC Casitas Holdings, LLC
P.O. Box 1906, San Marcos, TX 78667



Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
10/28/2024 11:26:11 AM
TERRI 2 Pages(s)
202406032772







COMAL COUNTY
ENGINEER'S OFFICE

**OSSF DEVELOPMENT APPLICATION
CHECKLIST**

Staff will complete shaded items

		118659
<i>Date Received</i>	<i>Initials</i>	<i>Permit Number</i>

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

05/16/2025

Date

___ COMPLETE APPLICATION	
Check No. _____	Receipt No. _____

INCOMPLETE APPLICATION	
___ (Missing Items Circled, Application Refused)	