Preliminary Field Check For Drip Systems

DATE: 6/18/25

INSPECTOR: Corey Allen

OBSERVATION: 1 probe at 4 inches 1 probe at 10 inches

RECEIVED
By Kathy Griffin at 1:59 pm, May 28, 2025

COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

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

Date May 20, 2025

Permit Number 118695

1. APPLICANT / AGENT INFORMATION

Owner Name	MVJ HOMES LLC	Agent Name	GREG JOHNSON, P.E.
Mailing Address	PO BOX 592133	Agent Address	170 HOLLOW OAK
City, State, Zip	SAN ANTONIO TEXAS 78259	City, State, Zip	NEW BRAUNFELS TEXAS 78132
Phone #	210-304-0039	Phone #	830-905-2778
Email	medlorenzo23@yahoo.com	Email	gregjohnsonpe@yahoo.com

2. LOCATION

Subdivision Name CYPRESS COVE Unit SEC 3 Lot 504 Block

Survey Name / Abstract Number Acreage

Address 136 LIGHTNING BOLT 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 1760

☐ 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: $ 350,000 (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

05/22/25
Date

Revised January 2021

COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

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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) PRO-FLO MODEL 5060, 600 GPD **Absorption/Application Area (Sq Ft)** 2000

Gallons Per Day (As Per TCEQ Table III) 240

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

Is the property located over the Edwards Recharge Zone? ☐ Yes ☒ No

(If yes, the planning materials must be 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 P.E. or R.S. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to construct will not be issued for the proposed OSSF until the CZP has been approved by the ap

Is this property within an incorporated city? ☐ Yes ☒ No

If yes, indicate the city: _____

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

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 21, 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 (OSSF's), 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):

3 UNIT/PHASE/SECTION _____ BLOCK 504 LOT _____ CYPRESS COVE _____ SUBDIVISION

IF NOT IN SUBDIVISION: _____ ACREAGE _____ SURVEY

The property is owned by (insert owner's full name): MVJ HOMES, 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 22 DAY OF May ,20 25

Owner(s) signature(s)

LORENZO MEDINA - MANAGER
Owner (s) Printed name (s)

LORENZO MEDINA - MANAGER SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 22 DAY OF May ,20 25

Notary Public Signature

GREG W. JOHNSON
Notary Public, State of Texas
Comm. Expires 05-17-2026
Notary ID 124218310

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
05/27/2025 08:21:57 AM
TERRI 1 Pages(s)
202506015451

Bobbie Koepp

WASTEWATER TREATMENT FACILITY MAINTENANCE AGREEMENT

Regulatory Authority Comal

Cisco Septic
PO Box 1193
Converse, TX 78109
Off. (210) 598-9090
ciscoseptic@gmail.com

Permit/License Number _____
Customer Lorenzo Medina
Site Address 136 Lightning Bolt
City Spring Branch **Zip** 78070
Mailing Address 136 Lightning Bolt
County Comal **Map #** _____
Phone 210-304-0039
Email medlorenzo23@yahoo.com

I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between Lorenzo Medina (hereinafter referred to as "Customer") and Cisco Septic. By this agreement, Cisco Septic 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 June 2025 and ends on June 2026

Inspections will Occur during the months of Jun,Oct,Feb.

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 $175.00 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 comprised of items required by the manufacturer, the controlling regulatory board, and deemed by the Contractor as necessary for proper OSSF operation.
b. Provide a record of visits to the site.
c. Repair or replace, if Contractor has the necessary materials, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit after receiving authorization by the Customer. If such services are not covered by warranty, 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 agrees to provide Contractor payment at time of service or repair but no more than five (5) business days after said service or repair.
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 to perform a service call in response to Customer's request for alarm calls, repairs, or other service related items for OSSF. Service call visits will have a fee that is not covered by the cost of this contract and will be collected at time of scheduling.

V. Disinfection:
The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the Customer.

LM
Customer's Initials

Please note:
- Aerobic Spray systems require liquid chlorine bleach or septic chlorine tablets, depending on your brand of system, to be added on a monthly basis.

-Aerobic Drip systems do NOT require any additional disinfection steps. The Contractor may provide recommendations if your system is building sludge in higher than normal basis.

VI. Electronic Monitoring:

Electronic Monitoring is not included in this Agreement.

VII. Performance of Agreement:

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

a. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.

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

VIII. Customer's Responsibilities:

The customer is responsible for all the following:

a. Provide all necessary yard or lawn maintenance and removal of all obstacles, including but not limited to gates, dogs and other animals, vehicles, trees, brush, trash, or debris as needed to allow the OSSF to function properly, and to allow Contractor safe and easy access to all parts of the OSSF.
b. Protect equipment from physical damage including but not limited to that damage caused by insects.
c. Maintain a current license to operate, abide by the conditions and limitations of that license, and all requirements for an OSSF from the State and/or local regulatory agency, whichever requirements are more stringent, as well as the proprietary system's manufacturer recommendations.
d. Notify Contractor immediately of any and all alarms, and/or any and all problems with the OSSF, including failure of the OSSF.
e. Provide, upon request by Contractor, water usage records for the OSSF so that the Contractor can perform a proper evaluation of the performance of the OSSF.
f. Allow for samples at both the inlet and outlet of the OSSF to be obtained by Contractor for the purpose of evaluating the OSSF's performance if needed to diagnosis an issue. If these samples are taken to a laboratory for testing, with the exception of the service provided under Section IV (d) above, Customer agrees to pay Contractor for the sample collection and transportation, portal to portal, at a rate of $55.00 per hour, plus the associated fees for laboratory testing.
g. Prevent the backwash or flushing of water treatment or conditioning equipment from entering the OSSF.
h. Prevent the condensation from air conditioning, refrigeration units, water softener units or the drains of ice makers, from hydraulically overloading the aerobic treatment units. Drain lines may discharge into the surface application pump tank if approved by system designer.
i. Maintain site drainage to prevent adverse effects on the OSSF.
j. Install risers when and as recommended by Contractor in accordance with State and/or local regulatory agency at the Customer's expense.
k. Pay promptly and fully, all Contractor's fees, bills, or invoices as described herin.
l. Prevent failure to the OSSF by pumping and cleaning of tanks and treatment units, when and as recommended by Contractor, at the Customer's expense.

X. Access by Contractor:

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

X. Limit of Liability:

Contractor shall not be held liable for any incidental, consequential, or special damages, or for economic loss due to

TM

Customer's Initials

expense, or for loss of profits or income, or loss of use to Customer, whether in contract tort or any other theory. In no event shall Contractor be liable in an amount exceeding the total Fee for Services amount paid by Customer under this Agreement.

XI. Indemnification:

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

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

Customer hereby waives its right of recourse as to any Indemnitee when Indemnification applies, and Customer shall require its insurer(s) to waive its/their right of subrogation to the extent such action is required to render such waiver of subrogation effective. Customer shall be subrogated to Indemnitees with respect to all right 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 comprise 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.

III. 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. 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 III.

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.

MVJ homes llc lorenzo Medina (May 27, 2025 11:17 CDT)

Customer Signature Date

Francisco Mendieta Date
Contractor
MP#0002737

ON-SITE SEWERAGE FACILITY
SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: **May 20, 2025**

Site Location: **CYPRESS COVE, SECTION 3, LOT 504**

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 **SURFACE EVALUATION**

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 – 6"	III	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 6"	BROWN
1						
2						
3						
4						
5						

SOIL BORING NUMBER **SURFACE EVALUATION**

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

05/20/25
Date

OSSF SOIL EVALUATION REPORT INFORMATION

Date: May 21, 2025

Applicant Information:

Name: MVJ HOMES, LLC.
Address: P.O. BOX 592133
City: SAN ANTONIO State: TEXAS
Zip Code: 78259 Phone: (210) 304-0039

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 504 Unit 3 Blk ___ Subd. CYPRESS COVE
Street Address: 136 LIGHTNING BOLT
City: SPRING BRANCH Zip Code: 78070
Additional Info.: _____

Installer Information:

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

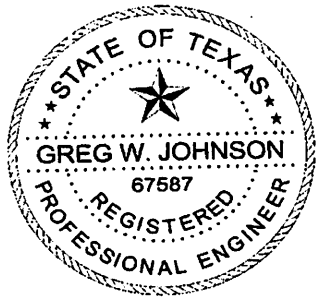
Topography: Slope within proposed disposal area: 6 to 8 %

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

05/21/25
DATE



FIRM #2585

AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
MVJ HOMES, LLC
P.O. BOX 592133
SAN ANTONIO, TX 78259

SITE DESCRIPTION:

Located in Cypress Cove, Section 3, Lot 504, at 136 Lightning Bolt, the proposed system will serve a three bedroom residence (1760sf.) 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 Pro-Flo Model 5060 600gpd aerobic plant containing a 397-gallon pretreatment tank, an aerobic treatment plant, and a 768-gallon pump chamber containing a submersible (FPS E-Series 0.5 hp) well pump. The well pump is activated by a time controller allowing the distribution ten times per day with an 8 minute run time with float setting at 240 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 100 micron disc filter (Arkal) then through a 1" SCH-40 manifold to a 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 to the pump tank 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 6" 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 12" required between drip lines 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: 397 Gal
Plant Size: Pro-Flo Model 5060 600gpd (TCEQ Approved)
Pump tank size: 768 Gal
Reserve capacity after High Level: 80 Gal (1/3 day Req'd)
Application Rate: Ra = 0.2 gal/sf
Total absorption area: Q/Ra = 240 GPD/0.20 = 1200 sf. (Actual 2000 sf.)
Total linear feet drip tubing: 1000' ***Netifim Bioline*** drip tubing .61 GPH
Pump requirement: 500 emitters @ .61 gph @ 30 psi = 5.0833gpm
Pump Requirement (cont.): FPS E-Series 0.5 hp submersible well pump

MINIMUM SCOUR VELOCITY (**MSV**) > 2 FPS
IN DRIP TUBING W/ NOM. DIA. 0.55" ID

MSV = 2 FPS (Πd↑2)/4*7.48 gal/cf*60 sec/min
MSV = 2(3.14159((.55/12)↑2)/4)*7.48*60
MSV = 1.5 gpm PER LINE * 3 LINES = 4.5 GPM MIN FLOW RATE

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

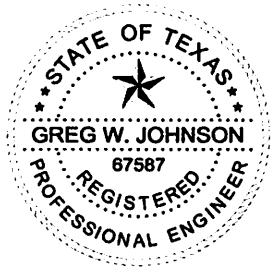
MSV = 2 FPS (Πd↑2)/4*7.48 gal/cf*60 sec/min
MSV = 2(3.14159((1.049/12)↑2)/4)*7.48*60
MSV = 5.4 GPM

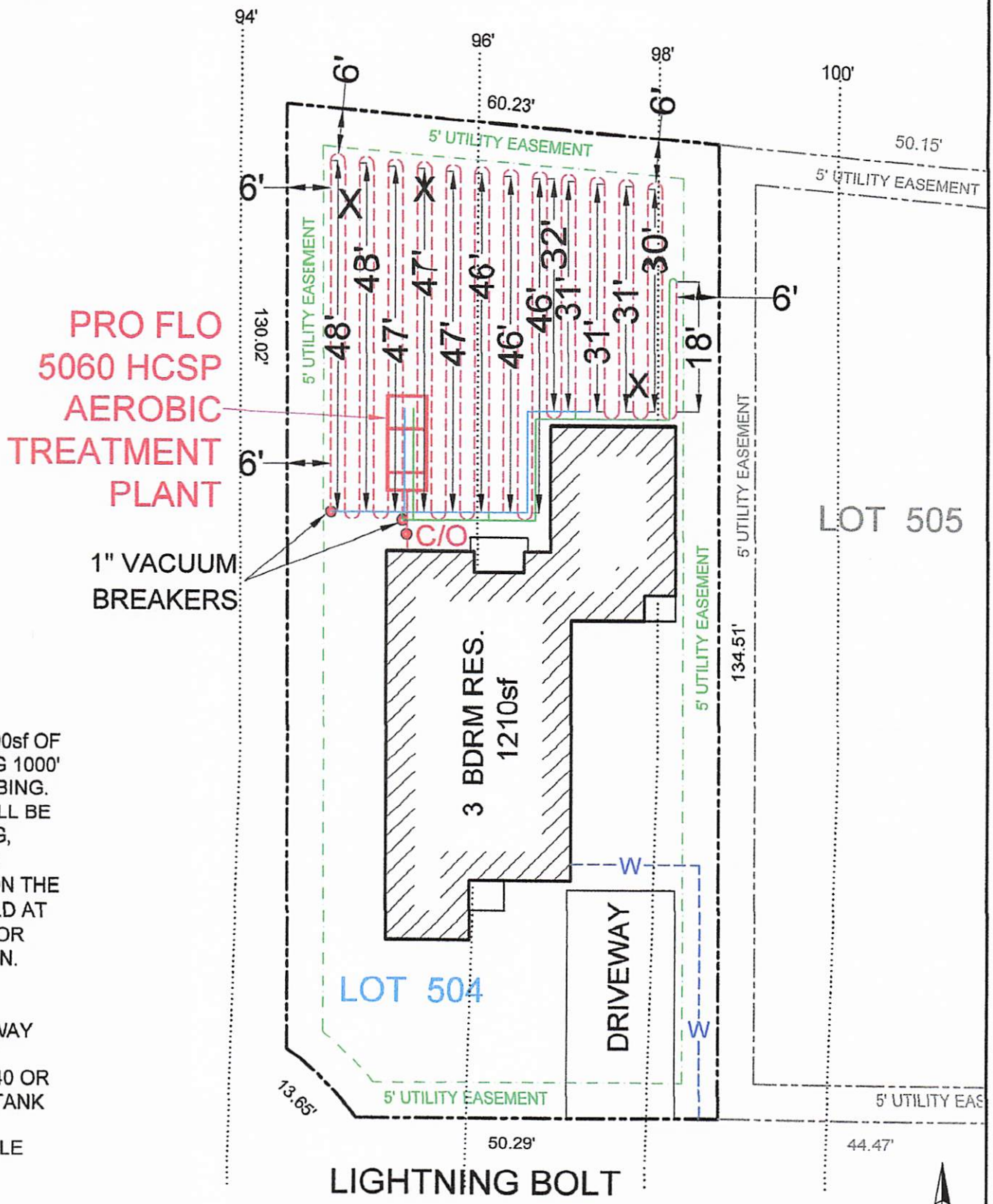
PIPE AND FITTINGS:
All pipes and fittings in this drip tubing system shall be 1" schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging.

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

05/21/25

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





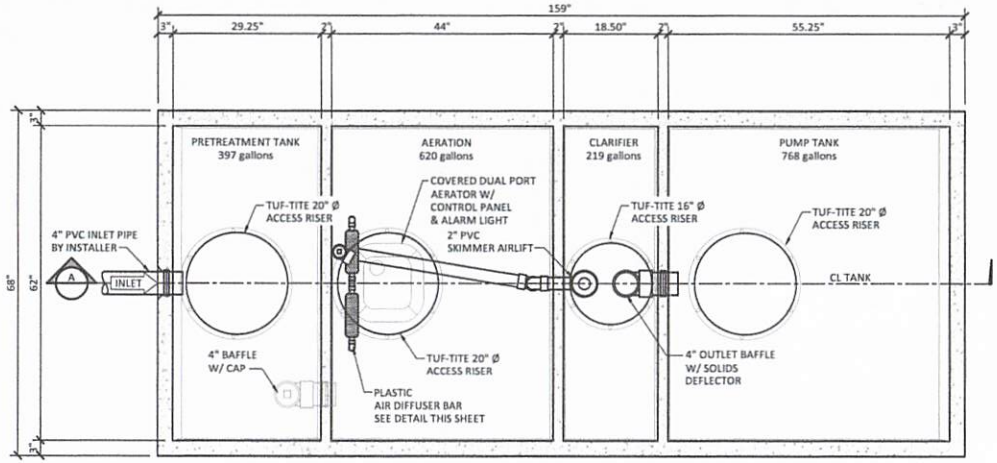
INSTALL 2000sf OF FIELD USING 1000' OF DRIP TUBING. THERE SHALL BE NO PARKING, DRIVING OR STORAGE ON THE SEPTIC FIELD AT ANY TIME FOR ANY REASON.

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

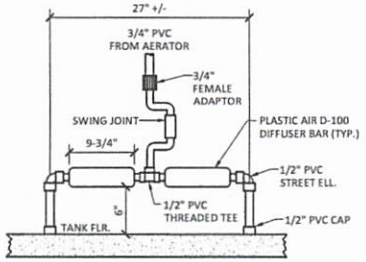
X= TEST HOLE

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

OWNER: MVJ HOMES, LLC.				DRAWN BY: EJS III	
STREET ADDRESS: 136 LIGHTNING BOLT					
LEGAL DESC: CYPRESS COVE		UNIT/SECTION/PHASE: 3	BLOCK:	LOT: 504	
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=20'	DATE: 5/21/2025	REVISED:		



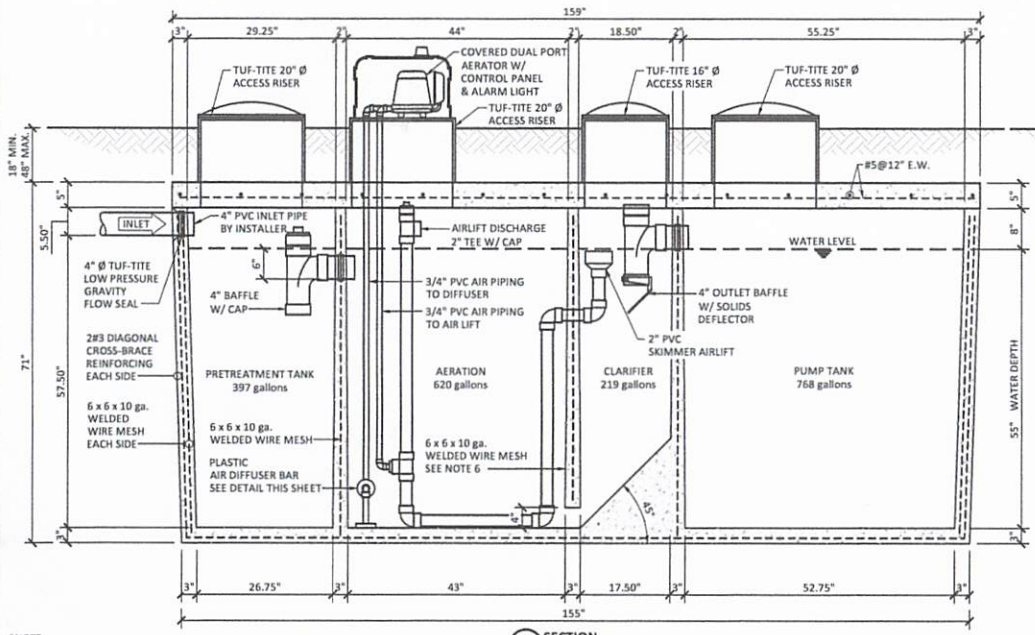
PLAN



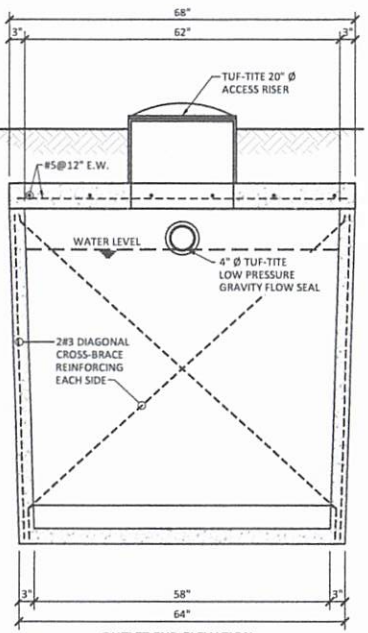
AIR DIFFUSER DETAIL

GENERAL NOTES:

1. ALL CONCRETE TO BE 4000 PSI, WITH A AGGREGATE SIZE OF 3/4".
2. ALL INSPECTION HOLES AND TOPS ARE TO BE SEALED WITH A NEOPRENE SEALER.
3. THE SUB GRADE IS TO BE WITHIN 1/2" AND FREE OF FOREIGN OBJECTS.
4. PRETREATMENT TANK & CLARIFIER RISERS MAY BE BELOW GRADE.
5. TANK LID TO BE SEALED WITH ASPHALTIC SEALANT.
6. A 2-1/2" THICK WALL MAY BE USED IN LIEU OF THE CAST IN PLACE INTERNAL WALL BETWEEN THE AERATION & CLARIFIER.
7. THE MANUFACTURER IS REQUIRED TO DEMONSTRATE THAT FAILURE WILL NOT OCCUR BY PHYSICALLY APPLYING LOADS TO THE TANK. THE LOAD APPLIED SHALL BE 1.5 TIMES THE DESIGN DEAD LOAD. SUCH TESTING SHALL BE WITNESSED & CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.



A SECTION



OUTLET END ELEVATION

*NOTE:
2" AIRLIFT RISER TO BE STRAPPED TO WALL SECTION
DRAWING SHOWS IT IN FRONT OF OF DIFFUSER FOR CLARITY

TANK DIMENSIONS		
TANK LENGTH (TOP)	159.00	in.
TANK LENGTH (BOTTOM	155.00	in.
TANK WIDTH (TOP)	68.00	in.
TANK WIDTH (BOTTOM)	64.00	in.
TANK HEIGHT	71.00	in.
WALL THICKNESS	3.00	in.
FLOOR THICKNESS	3.00	in.
LID THICKNESS	5.00	in.
BOTTOM TO INLET	60.50	in.

TANK VOLUMES				
PRETREATMENT CAPACITY	397	gal.		
AERATION CAPACITY	620	gal.		
CLARIFIER CAPACITY	219	gal.		
PUMP TANK CAPACITY	768	gal.		
WATER DEPTH	55	in.		
TANK CONCRETE VOLUME	86.11	FT^3	3.19	YD^3
TANK LID CONCRETE VOLUME	27.97	FT^3	1.04	YD^3
TANK WEIGHT (EMPTY)	12917	lbs.		
LID WEIGHT	4196	lbs.		
TOTAL TANK WEIGHT (EMPTY)	17112	lbs.		

TANK BUOYANCY CALCULATIONS				
TANK DIMENSIONS:				
Length =	159.0	Inches =	13.3	Ft
Width =	68	Inches =	5.7	Ft
Height =	71	Inches =	5.9	Ft
Tank Displacement Volume =			444.2	Cu Ft
Uplift Force (@ 62.4 #/cu ft) =			27720.8	Lbs
RESISTING FORCES				
Concrete Tank Deadweight (Empty) =			17112	Lbs
Weight of Inserted Equipment & Hatches =			150	Lbs
Total Tank Weight =			17262	**Lbs**
WEIGHT OF SOIL OVER TANK				
Length =			13.3	Ft
Width =			5.7	Ft
X-Section Area =			75.1	Sq Ft
LESS ACCESS HATCH AREAS				
1	16	Inches =	-1.05	Sq Ft
3	20	Inches =	-3.93	Sq Ft
Net Area for Soil Cover =			70.1091	Sq Ft
Height of Soil Cover =			**18.0**	Inches
Soil Cover Volume =			105.2	
Compacted Weight of Soil Cover =			100.00	Lbs/Cu Ft
Weight of Soil Cover =			10516.37	Lbs
Total Downward Force =			27778.37	Lbs
Net Uplift Force =			**-57.61**	

Since uplift force is negative, tank will not float when empty with indicated cover.

Soil skin friction has been neglected. Actual resistance will be greater.

STATE OF TEXAS
D. RAY YOUNG
37068
LICENSED
PROFESSIONAL ENGINEER
12-19-2013

REVISIONS / ISSUANCE		
REF.	DATE	DESC.

WATER ENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281-373-0500
FAX: 281-373-1113

PRO FLO AEROBIC SYSTEMS, LP
WASTEWATER TREATMENT SYSTEMS
20222 FM 362
WALLER, TEXAS 77484

AEROBIC WASTEWATER TREATMENT UNIT FOR USE IN HARRIS COUNTY, TEXAS

MODEL No.
5060 HCSP

DRAWN BY :	JLW
DATE:	12/3/2013
JOB No.:	4604.12
SHEET No.:	04 of 04

TANK NOTES:

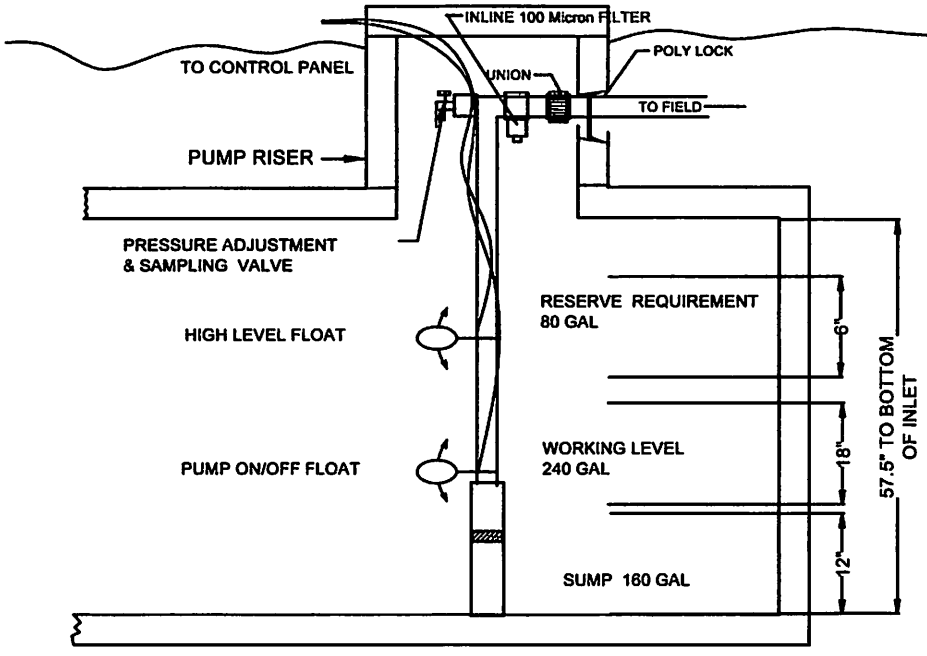
Tanks must be set to allow a minimum of 1/8" per foot fall from the residence.

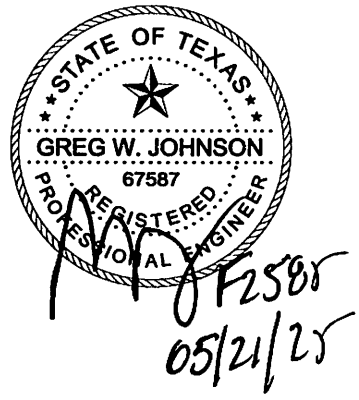
Tightlines to the tank shall be SCH-40 PVC.

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

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





TYPICAL PUMP TANK CONFIGURATION
PRO-FLO 768 GAL PUMP TANK

Arkal 1" Super Filter

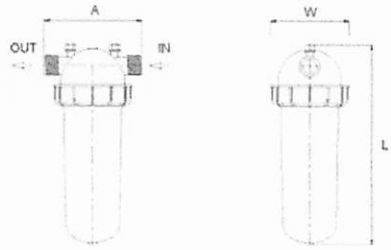
Catalog No. 1102 0_ _ _

Features

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

Technical Data

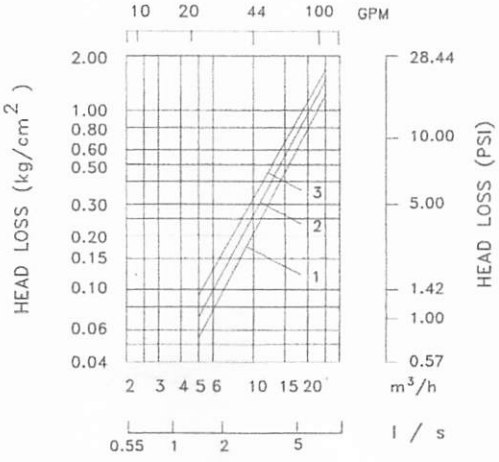
Inlet/outlet diameter	1" BSPT (male) 25.0 mm – nominal diameter 33.6 mm – pipe diameter (O. D.)	1" NPT (male)
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m^3/h (1.7 l/sec)	35 gpm
General filtration area	500 cm^2	77.5 in^2
Filtration volume	600 cm^3	37 in^3
Filter length L	340 mm	13 13/32"
Filter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



Filtration Grades

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

Head Loss Chart



PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Specifications

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

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

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

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

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

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

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

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

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

Physical

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

Overall Length 5.2 inches (13.1 cm)

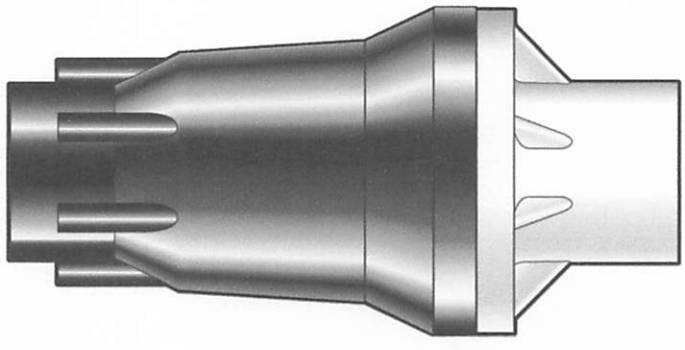
Overall Width 2.5 inches (6.4 cm)

1" FNPT x 1" FNPT model

1" FBSPT x 1" FBSPT model

Overall Length 5.8 inches (14.6 cm)

Overall Width 2.5 inches (6.4 cm)



* Please consult factory for applications outside of recommended guidelines.

PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

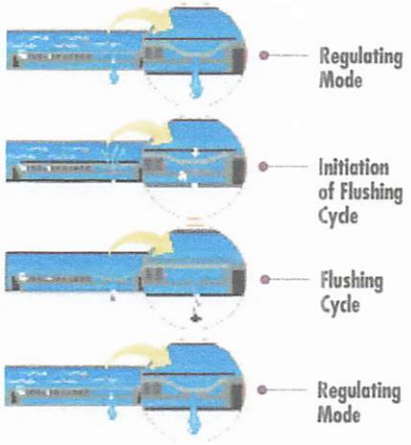
Model Numbers

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

NETAFIM™

Bioline® Dripperline

Pressure Compensating Dripperline for Wastewater



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

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

Product Advantages

The Proven Performer

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

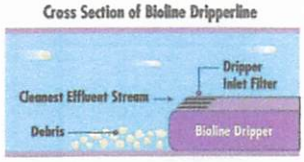
Quality Manufacturing with Specifications Designed to Meet Your Needs

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

Long-Term Reliability

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

Cross Section of Bioline Dripperline



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"*

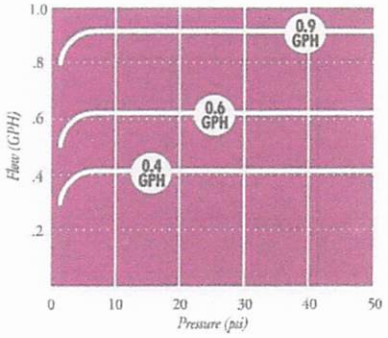
Recommended filtration: 120 mesh

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™

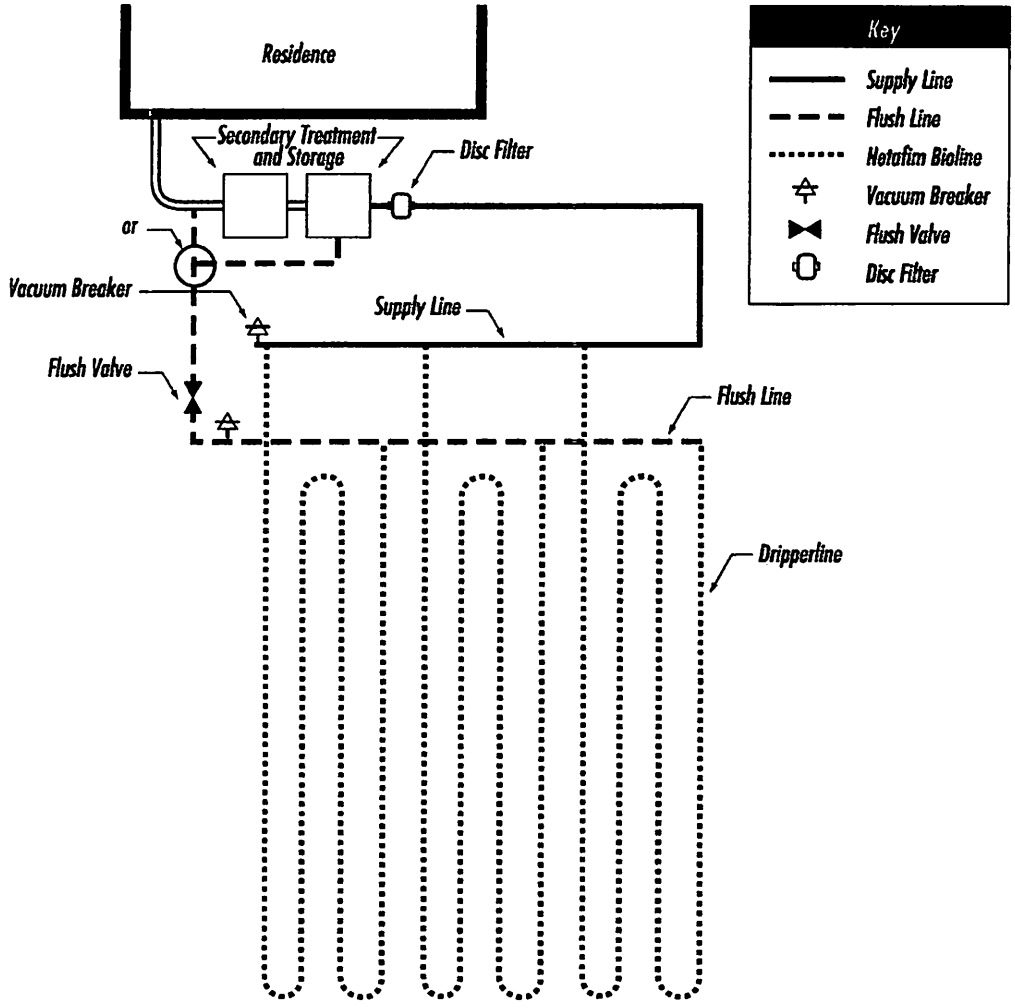
NETAFIM USA
5470 E. Home Ave. • Fresno, CA 93727
888.638.2346 • 559.453.6800
FAX 800.695.4753
www.netafimusa.com

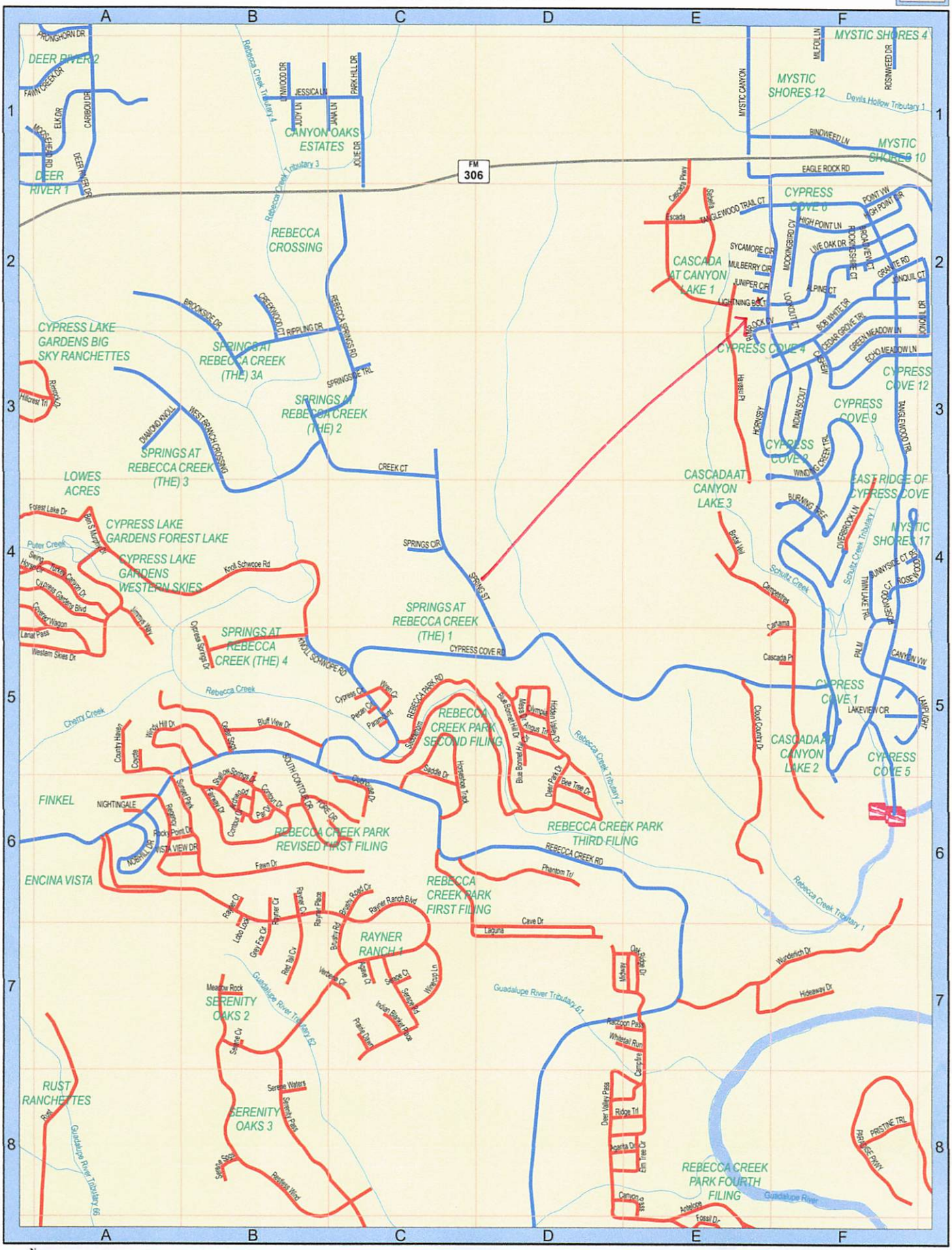
SAMPLE DESIGNS

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





Produced by the Comal County Engineer's Office - 7/17/2023

My Title Company of Texas

GF# 20220151TB

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.

WARRANTY DEED

Date: April 19, 2022

Grantor: Louis E. Pugh, a/k/a Louis Erwin Pugh, Jr., and wife, Linda Pugh, a/k/a Linda Stanley Pugh

Grantor's Mailing Address:

1726 Nile Drive, Corpus Christi, TX 78412-5011

Grantee: MVJ Homes LLC, a Texas limited liability company

Grantee's Mailing Address: PO Box 592133 San Antonio TX 78259

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

Lot 504 and Lot 505, CYPRESS COVE, SECTION 3, an addition to Comal County, Texas, according to the map or plat thereof recorded in Volume 1, Page 67 and 68, Map Records, Comal County, Texas.

Reservations From and Exceptions to Conveyance and Warranty: This conveyance, however, is made and accepted subject to the following matters, to the extent same are in effect at this time: any and all restrictions, covenants, assessments, reservations, outstanding mineral interests held by third parties, conditions, and easements, if any, relating to the hereinabove described property, but only to the extent they are still in effect and shown of record in the hereinabove mentioned County and State or to the extent that they are apparent upon reasonable inspection of the property; and to all zoning laws, regulations and ordinances of municipal and/or other governmental authorities, if any, but only to the extent they are still in effect and relating to the hereinabove described property. Ad valorem taxes on said property for the current year, having been prorated, the payment thereof is assumed by Grantee.

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 the Contract provides for any such limitations or other agreed matters to 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.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty.

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

Louis E. Pugh

Linda Pugh

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF Bexar §

This instrument was acknowledged before me on this the 19 day of April 2022, by Louis E. Pugh and Linda Pugh.

THERESA ANN WERNETTE
Notary Public, State of Texas
Comm Expires 05-05-2022
Notary ID 5146360

Notary Public, State of Texas

PREPARED IN THE OFFICE OF:
Law Office of Kenneth R. Cooper
14607 San Pedro, Suite 130
San Antonio, TX 78232-4356

AFTER RECORDING RETURN TO:
MVJ Homes LLC

THERESA ANN WERNETTE
Notary Public, State of Texas
Comm. Expires 05-05-2022
Notary ID 5146360

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
07/11/2022 02:23:19 PM
NANCY 2 Pages(s)
202206031740

Bobbie Koepp

RECEIVED
By Kathy Griffin at 1:59 pm, May 28, 2025

COMAL COUNTY
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

		118695
Date Received	*Initials*	*Permit Number*

Instructions:

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

OSSF Permit

- ☒ Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- ☒ Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- ☒ Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.
- ☒ Required Permit Fee - See Attached Fee Schedule
- ☒ Copy of Recorded Deed
- ☒ Surface Application/Aerobic Treatment System
  - ☒ Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public
  - ☒ Signed Maintenance Contract with Effective Date as Issuance of License to Operate

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

Signature of Applicant

05/28/2025
Date

___ COMPLETE APPLICATION

Check No. _____ Receipt No._____

INCOMPLETE APPLICATION
—— (Missing Items Circled, Application Refused)

Revised: September 2019