



# COMAL COUNTY

ENGINEER'S OFFICE

## License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date: **09/05/2023** Permit Number: **114177**

Location Description: 412 MCKINNEY WAY  
FISCHER, TX 78623

Subdivision: Legends at Rancho Del Lago  
Unit: 1  
Lot: 102  
Block: 0  
Acreage: 1.1400

Type of System: Aerobic  
Surface Irrigation

Issued to: Mike & Laurie Hurley

This license is authorization for the owner to operate and maintain a private facility at the location described in accordance to the rules and regulations for on-site sewerage facilities of Comal County, Texas, and the Texas Commission on Environmental Quality.

The license grants permission to operate the facility. It does not guarantee successful operation. It is the responsibility of the owner to maintain and operate the facility in a satisfactory manner.

Alterations to this permit including, but not limited to:

- Increase in the square feet of living area
- Increase in the number of bedrooms
- A change of use (i.e. residential to commercial)
- Relocation of system components (including the relocation of spray heads)
- Installation of landscaping
- Adding new structures to the system

may require a new permit. **It is the responsibility of the owner to apply for a new permit, if applicable.**

Inspection and licensing of a facility indicates only that the facility meets certain minimum requirements. It does not impede any governmental entity in taking the proper steps to prevent or control pollution, to abate nuisance, or to protect the public health.

This license to operate is valid for an indefinite period. The holder may transfer it to a succeeding owner, provided the facility has not been remodeled and is functioning properly.

Licensing Authority  
Comal County Environmental Health

Assistant  
OS0034792

ENVIRONMENTAL HEALTH INSPECTOR  
OS0038255

ENVIRONMENTAL HEALTH COORDINATOR

# Comal County Environmental Health OSSF Inspection Sheet

Installer Name: \_\_\_\_\_

OSSF Installer #: \_\_\_\_\_

1st Inspection Date: \_\_\_\_\_

2nd Inspection Date: \_\_\_\_\_

3rd Inspection Date: \_\_\_\_\_

Inspector Name: \_\_\_\_\_

Inspector Name: \_\_\_\_\_

Inspector Name: \_\_\_\_\_

Permit#:		Address:					
No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
1	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials		285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(ii) 285.30(b)(1)(A)(i)				
2	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards		285.91(10) 285.30(b)(4) 285.31(d)				
3	SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)		285.32(a)(1)				
4	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot		285.32(a)(3)				
5	SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)		285.32(a)(5)				
6	PRETREATMENT Installed (if required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(G) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(B) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(D) 285.32(b)(1)(E) 285.32(b)(1)(A) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(i) 285.32(b)(1)(E)(ii)(I)				
7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)				

Inspector Notes:

**Comal County Environmental Health  
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
8	SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If Single Tank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1) (E)285.91(2)285.32(b)(1) (F)285.32(b)(1)(E) (iii)285.32(b)(1)(E)(ii) (II)285.32(b)(1)(E)(ii) (I)285.32(b)(1)(E) (i)285.32(b)(1) (D)285.32(b)(1)(C) (ii)285.32(b)(1)(C) (i)285.32(b)(1) (B)285.32(b)(1) (A)285.32(b)(1)(E)(iv)				
9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
10	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
11	SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions		285.38(d) 285.38(e)				
12	SEPTIC TANK Tank Volume Installed						
13	PUMP TANK Volume Installed						
14	AEROBIC TREATMENT UNIT Size Installed						
15	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number						
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo-transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

**Comal County Environmental Health  
OSSF Inspection Sheet**

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

**Comal County Environmental Health  
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
32	EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field ( 1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom ) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe ( 1.25 - 1.5" dia. ) & Pipe Holes ( 3/16 - 1/4" dia. Hole Size ) 5 ft. Apart		285.33(b)(3)(A) 285.33(b)(3)(A) 285.33(b)(3) (B)285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
33	AEROBIC TREATMENT UNIT Is Aerobic Unit Installed According to Approved Guidelines.		285.32(c)(1)				
34	AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions						
35	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.						
36	PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
37	PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions						
38	PUMP TANK Secondary restraint system provided						
39	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried						

**Comal County Environmental Health  
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?		285.33(d)(2)(G)(iii)(II) 285.33(d)(2)(G)(iii)(III) 285.33(d)(2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)				
41	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed		285.33(d)(2)(G) (i)285.33(d)(2) (A)285.33(d)(2)(F)				
42	APPLICATION AREA Area Installed						
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						



# COMAL COUNTY

ENGINEER'S OFFICE

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

Permit Number: 114177  
Issued This Date: 03/10/2022  
This permit is hereby given to: Mike & Laurie Hurley

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

412 MCKINNEY WAY  
FISCHER, TX 78623

Subdivision: Legends at Rancho Del Lago  
Unit: 1  
Lot: 102  
Block: 0  
Acreage: 1.1400

### APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic  
Surface Irrigation

This permit gives permission for the construction of the above referenced on-site facility to commence. Installation must be completed by an installer holding a valid registration card from the Texas Commission on Environmental Quality (TCEQ). Installation and inspection must comply with current TCEQ and Comal County requirements.

Call (830) 608-2090 to schedule inspections.



# ON-SITE SEWAGE FACILITY APPLICATION

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

Date 02/22/2022

Permit Number 114177

## 1. APPLICANT / AGENT INFORMATION

Owner Name Mike and Laurie Hurley  
Mailing Address 12607 Carriage Dove  
City, State, Zip San Antonio TX 78249  
Phone # 210 394 1851  
Email mhurley1206@att.net

Agent Name Wade Cloud  
Agent Address PO Box 228  
City, State, Zip Boerne, TX 78006  
Phone # 210.385.6396  
Email wade@lonestaras.com

## 2. LOCATION

Subdivision Name Legends at Rancho Del Lago Unit 01 Lot 042 102 Block \_\_\_\_\_  
Survey Name / Abstract Number \_\_\_\_\_ Acreage 1.14  
Address 412 McKinney Way City Fischer State TX Zip 78623

## 3. TYPE OF DEVELOPMENT

Single Family Residential

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

Number of Bedrooms 4

Indicate Sq Ft of Living Area 2000

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: \$ 275,000 (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

## 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.

Mike Hurley Laurie Hurley

02/22/2022



\* \* \* **COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH** \* \* \*  
**APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN**  
**ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE**

Planning Materials & Site Evaluation as Required Completed By Wade A. Cloud, R.S.

System Description Aerobic Treatment, Surface Application

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

Tank Size(s) (Gallons) NuWater B-550, 600 GPD Absorption/Application Area (Sq Ft) 4687.5, Actual 4825.49

Gallons Per Day (As Per TCEQ Table III) 300

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

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

(If yes, the planning materials must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.))

Is there an existing TCEQ approved WPAP for the property?  Yes  No

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

If there is no existing WPAP, does the proposed development activity require a TCEQ approved WPAP?  Yes  No

(If yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed WPAP. A Permit to Construct will not be issued for the proposed OSSF until the proposed WPAP has been approved by the appropriate regional office.)

Is the property located over the Edwards Contributing Zone?  Yes  No

Is there an existing TCEQ approval CZP for the property?  Yes  No

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

If there is no existing CZP, does the proposed development activity require a TCEQ approved CZP?  Yes  No

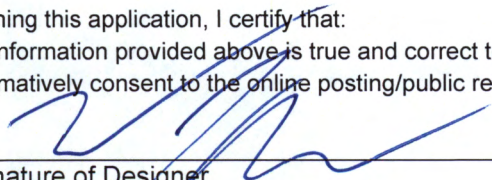
(If yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to Construct will not be issued for the proposed OSSF until the CZP has been approved by the appropriate regional office.)

Is this property within an incorporated city?  Yes  No

If yes, indicate the city: \_\_\_\_\_

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

07/04/22  
\_\_\_\_\_  
Date

VCB



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, 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 TCEQ primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The TCEQ, under the authority of the TWC and the Texas Health and Safety Code, requires owners to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the TCEQ requires a deed recording. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This deed certification is not a representation or warranty by the TCEQ of the suitability of this OSSF, nor does it constitute any guarantee by the TCEQ that the appropriate OSSF was installed.

II

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

Lot 102 Block \_\_\_\_\_ Subdivision Legends at Rancho Del Lago Unit/Phase/Section 1

If not in Subdivision: \_\_\_\_\_ Acres 1.14 Survey \_\_\_\_\_

The property is owned by (insert owner's full name): Mike and Laurie Hurley

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.

MIKE HURLEY  
Owner Name

Mike Hurley  
Owner Signature

Laurie Hurley  
Owner Name

Laurie Hurley  
Owner Signature

This instrument was acknowledged before me on: 23<sup>rd</sup> Day of February, 2022.

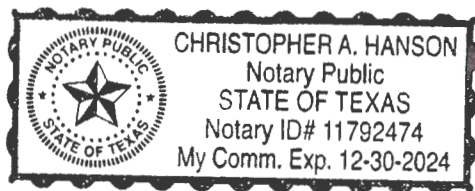
Christopher A. Hanson  
Notary's Printed Name

[Signature]  
Notary Public, State of Texas

Commission Expires: 12-30-2024

Filed and Recorded  
Official Public Records  
Bobbie Koepf, County Clerk  
Comal County, Texas  
03/01/2022 12:02:44 PM  
LAURA 1 Page(s)  
202206009787

Bobbie Koepf




Affix Notary Stamp Above

REGULATORY AUTHORITY Comal PERMIT/LICENSE NUMBER \_\_\_\_\_  
WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT  
Lonestar Aerobic Services, LLC Customer Mike and Laurie Hurley  
PO Box 228 Site Address 412 McKinney Way  
Boerne, TX 78006 City Fischer Zip 78623 Gate # 545  
Off. (830)443-4559 Mailing Address 12607 Carriage Dove  
Fax (210)579-6073 City San Antonio TX Zip 78249  
Website www.lonestaras.com Day Phone 210 394 1851  
E-Mail wadeccloud@lonestaras.com Home Phone \_\_\_\_\_  
Installer Robin Wise Emergency Phone \_\_\_\_\_

- I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between \_\_\_\_\_ (hereinafter referred to as "Customer") and Lonestar Aerobic Services, LLC. By this agreement, Lonestar 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. The designed flow rate for this system is a maximum of \_\_\_\_\_ gallons per day.
- II. Effective Dates: This agreement commences on \_\_\_\_\_ and ends on \_\_\_\_\_ for a total of two (2) years (initial agreement) or one (1) year (there after). If this is an initial agreement (new installation), the Customer will 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. Renewal: This Agreement shall automatically renew each year at the same terms, conditions, and costs, unless either party gives notice of termination a minimum of thirty (30) days prior to end of first agreement period. See Section IV.
- IV. Termination of Agreement: This Agreement may be terminated by either party with thirty (30) days written notice for any reason, including for example, substantial failure to perform in accordance with its terms, without fault or liability of the terminating party. If this Agreement is so terminated, Contractor will be paid at the rate of \$75 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. 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.
- V. Services: Contractor will:
- 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 regulations, for a total of three visits to site per year.
  - Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.
  - Repair or replace, if Contractor has 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 service costs are \$100.00 or less, Customer hereby authorizes Contractor to perform the service and bill Customer for said service. When service costs are greater than \$100.00, or if Contractor does not have necessary supplies at the site, Contractor will notify Customer of required service(s) and associated cost(s). Customer must notify Contractor of arrangements to effect repair of system within two (2) business days after said notification.
  - Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).
  - Forward copies of this Agreement and all reports to the regulatory agency and the customer.
  - Visit site in response to Customer's request for unscheduled service 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.
- VI. Disinfection:  Not Required,  Required. The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the \_\_\_\_\_ Customer. Initial
- VII. Electronic Monitoring is not included in this Agreement.
- VIII. Performance of Agreement: Commencement of performance by Contractor under this agreement is contingent on the following conditions:
- If this is an initial agreement (new installation):
    - Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.
    - Contractor's receipt of payment of the wastewater monitoring fee in accordance with the terms as described in Section XIV of this Agreement.
  - If this is not an initial agreement (existing system):
    - Contractor's receipt of a fully executed original copy of this agreement and all documentation requested by Contractor.
    - Contractor's receipt of payment of the wastewater monitoring fee in accordance with the terms as described in Section XIV of this Agreement.
  - If the above conditions are not met, Contractor is not obligated to perform any portion of this agreement.
- IX. Customer's Responsibilities: The Customer is responsible for each and all of the following:
- Provide all necessary yard or lawn maintenance and the removal of all obstacles, including but not limited to 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.
  - Protect equipment from physical damage including but not limited to that damage caused by insects.
  - Maintain a current license to operate, and abide by the conditions and limitations of that license, and all requirements for an on-site sewage facility (OSSF) from the State and/or local regulatory agency, whichever are more stringent, as well as proprietary system's manufacturer recommendations.
  - Notify Contractor immediately of any and all alarms, and/or any and all problems with, including failure of, the OSSF.
  - Provide, upon request by Contractor, water usage records for evaluation by Contractor as to the performance of the OSSF.
  - 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 these samples are taken to a laboratory for testing, with the exception of the service provided under Section V, sub-section D, above, Customer agrees to pay Contractor for sample collection and transportation, portal to portal, at a rate of \$35 per hour, plus the associated fees for laboratory testing.
  - Prevent the backwash or flushing of water treatment or conditioning equipment from entering the OSSF.
  - Prevent the condensate from air conditioning or refrigeration units, or the drains of icemakers, from hydraulically overloading the aerobic treatment units. Drain lines may discharge into the surface application pump tank if approved by system designer.
  - Provide for pumping and cleaning of tanks and treatment units, when and as recommended by Contractor, at Customer's expense.
  - Maintain site drainage to prevent adverse effects on the OSSF.
  - Pay promptly and fully, all Contractor's fees, bills, or invoices as described herein.
- 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. If not an initial agreement (new installation) and this access is not in place or provided for by the customer, the costs for the labor of excavation, and possibly other labor and materials costs, will be required. These costs shall be billed to Customer as an additional service at a rate of \$35 per hour, plus materials at list price. Excavated soil shall be replaced as best as Contractor can at the time such service is performed and under no circumstances is Contractor responsible for damages to sod, grass, roots, landscaping, or any unmarked underground items (telephone, television, or electric cables, water,

- XI. Limit of Liability: Contractor shall not be held liable for any incidental, consequential, or special damages, or for economic loss due to 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.
- XII. Severability: If any provision of this "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 this "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 does not include any equipment, materials, or labor necessary for non-warranty repairs or for unscheduled, Customer requested visits to the site.
- XIV. Payment: Full amount due upon signature (Required of new Customer). Payment of invoice(s) for any other service or repair provided by contractor is due upon receipt of invoice. Invoices are mailed 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 returned check fee.
- XV. Application or Transfer of payment: The fees paid for this agreement may transfer to the subsequent property owner(s); however this agreement is not transferable. Customer will advise 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 obligations arising from this Agreement including late fees or penalties, returned 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 promises or conditions in any other agreement, oral or written.

 03/04/22  
Wade A. Cloud                      Date                      Texas Installer II  
License number OS24590.

Mike Husley, Annie Husley 2/22/2022  
Customer Signature                      Date

# On-Site Sewage Facility Soil and Site Evaluation

Date Performed: 03/01/2022

New Installation  Replacement  Alteration

**Property Owner's Information:**

Name: Richard & Laurie Hurley  
 Address: 412 McKinney Way  
 City: Fischer, TX 78623  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Licensed Site Evaluator:**

Name: Wade A. Cloud  
 Company: Blackwater Designs  
 Address: PO Box 228  
 City: Boerne, TX 78006  
 Phone: 210.900.2971 Fax: 210.579.6073  
 TCEQ License #: OS0029338

**Property Description:**

Subdivision: The Legends at Rancho Del Lago, Unit 1  
 Plat date: \_\_\_\_\_ Lot: 102 Block: \_\_\_\_\_  
 Site Address: 412 McKinney Way  
 City: Fischer, TX 78623  
 County: Comal Unicorp. Area:  Y  N  
 Property Size: \_\_\_\_\_ Acres: 1.14  
 Survey: \_\_\_\_\_ Abstract: \_\_\_\_\_  
 Additional Info: \_\_\_\_\_

**Installer Information:**

Name: Robin Wise  
 Company: Rob Wise Construction  
 Address: PO Box 644  
 City: Boerne, TX 78006  
 Phone: 210.264.6745 Fax: \_\_\_\_\_  
 TCEQ License #: OS0021093

## Topography

Slope	Vegetation	Site Drainage	Water
<input type="radio"/> Flat-under 2%	<input type="radio"/> Grass/Brush	<input type="radio"/> Poor	<input type="radio"/> Seasonal Water Table
<input checked="" type="radio"/> Slight-under 4%	<input checked="" type="radio"/> Lightly Wooded	<input type="radio"/> Adequate	<input type="radio"/> Water Table, Depth: _____
<input type="radio"/> Severe-over 5%	<input type="radio"/> Heavily Wooded	<input checked="" type="radio"/> Good	<input type="radio"/> Lakes, Ponds, Streams
			<input type="radio"/> 100 Year Flood Zone
			<input type="radio"/> Recharge Feature Within 150ft

Comments/Observations: \_\_\_\_\_

## Water Supply

Public, name of public water supplier: \_\_\_\_\_  
 Private

For on-site water well:

Is water well less than 100 feet from proposed disposal area?  Y  N  
 Are neighboring wells less than 100 ft from proposed disposal area?  Y  N

If yes to either above, need documentation, i.e. well log or driller affidavit, that well(s) is/are pressure cemented or grouted to 100 ft or top of water table. (Cannot be closer than 50 ft)

Water Softener       Reverse Osmosis System       Other: \_\_\_\_\_

## Soil Evaluation

At least two soil evaluations 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 drawing.

For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed trench depth. For surface disposal, the surface horizon must be evaluated.

Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depth.

Proposed Trench Depth N/A (Will be 18" to 36" unless designed by P.E. or R.S.)

See document on back or next page.

Wade A. Cloud      03/01/2022  
 Wade A. Cloud, SE OS0029338      Date

Soil Boring or Dug Pit # 1 <b>Test holes were not attempted</b>					
Depth(ft)	Textural Class	Soil Texture & Color	Gravel Analysis for Class II and III	Drainage (Mottles/Water Table) indicate color of mottling	Restrictive Horizon
0----- -	N/A	N/A	N/A	N/A	Fractured Rock Outcroppings
1----- -					
2----- -					
3----- -					
4----- -					
5-----					
Soil Boring or Dug Pit # 2 <b>Test holes were not attempted</b>					
Depth(ft)	Textural Class	Soil Texture & Color	Gravel Analysis for Class II and III	Drainage (Mottles/Water Table) indicate color of mottling	Restrictive Horizon
0----- -	N/A	N/A	N/A	N/A	Fractured Rock Outcroppings
1----- -					
2----- -					
3----- -					
4----- -					
5-----					

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

This site is suitable for a standard On-Site Sewage Facility:  Y  N

 \_\_\_\_\_ 03/01/2022

Wade A. Cloud, SE OS0029338

Date

Compass North

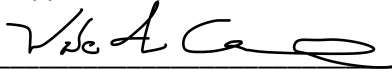
Site Sketch (See Attached)

Scale: \_\_\_\_\_

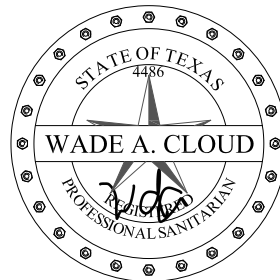
## On-Site Sewage Facility Design Criteria

<b>Property Information:</b>	<b>House Information:</b>
Site Address: _____	Number of Bedrooms: _____
City: _____, TX _____	Number of Facilities: _____
<b>Q=Sewage in GPD:</b>	<b>Total for Calculation:</b>
Water Saving Devices:      ___ Yes ___ No	Square Footage(Approx.): _____
Q Gallons/Day: _____	Water Supply: _____
Greywater Included:      ___ Yes ___ No	Additional GPD: _____:
<b>Rate of Adsorption (R<sub>a</sub>):</b>	<b>Each Bedroom &amp; Each Facility = 60 gpd</b>
Application Rate (gal/ft <sup>2</sup> /day): _____	<b>Facility = Kitchen + Laundry</b>
Minimum Adsorptive Area (ft <sup>2</sup> ): _____	<b>Supply Line From House:</b>
<b>Aerobic Treatment Unit:</b>	<b>Supply Line from Tank to Application Area:</b>
Required Minimum GPD: _____	Length (Approx. ft): _____
Pretreatment Tank Capacity (gal): _____	Size (in.): _____
Class 1 ATU: _____	Type: _____
Pump Tank Capacity (gal): _____	<b>Surface Application Area(πR<sup>2</sup>):</b>
Disinfectant Type: _____	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
Pump Operation: _____	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
Quantity (gal) Dosing Cycle :	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
Cycle Time: _____	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
Pump Size & Type: _____	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
Comments: _____ _____ _____ _____ _____ _____ _____	π(_____) <sup>2</sup> x _____: _____ ft <sup>2</sup>
	Total Adsorptive Area(ft <sup>2</sup> ): _____ ft <sup>2</sup>
	<b>Drip Application Area:</b>
	Minimum Linear Drip Tubing(ft <sup>2</sup> ): _____
	# of Drip Emitters(Aft <sup>2</sup> /4ft <sup>2</sup> ): _____
	Number of Emitters per Field: _____
	Pump Requirements(GPM)
	(_____) @ 0.61 GPH @ 25 PSI: _____

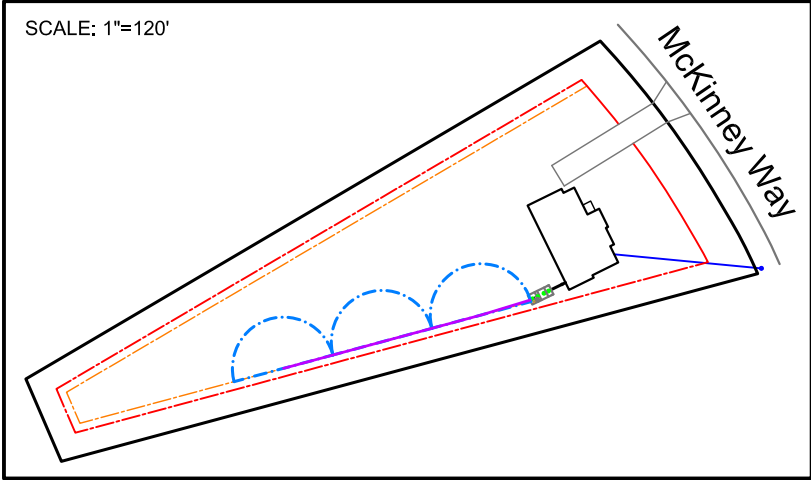
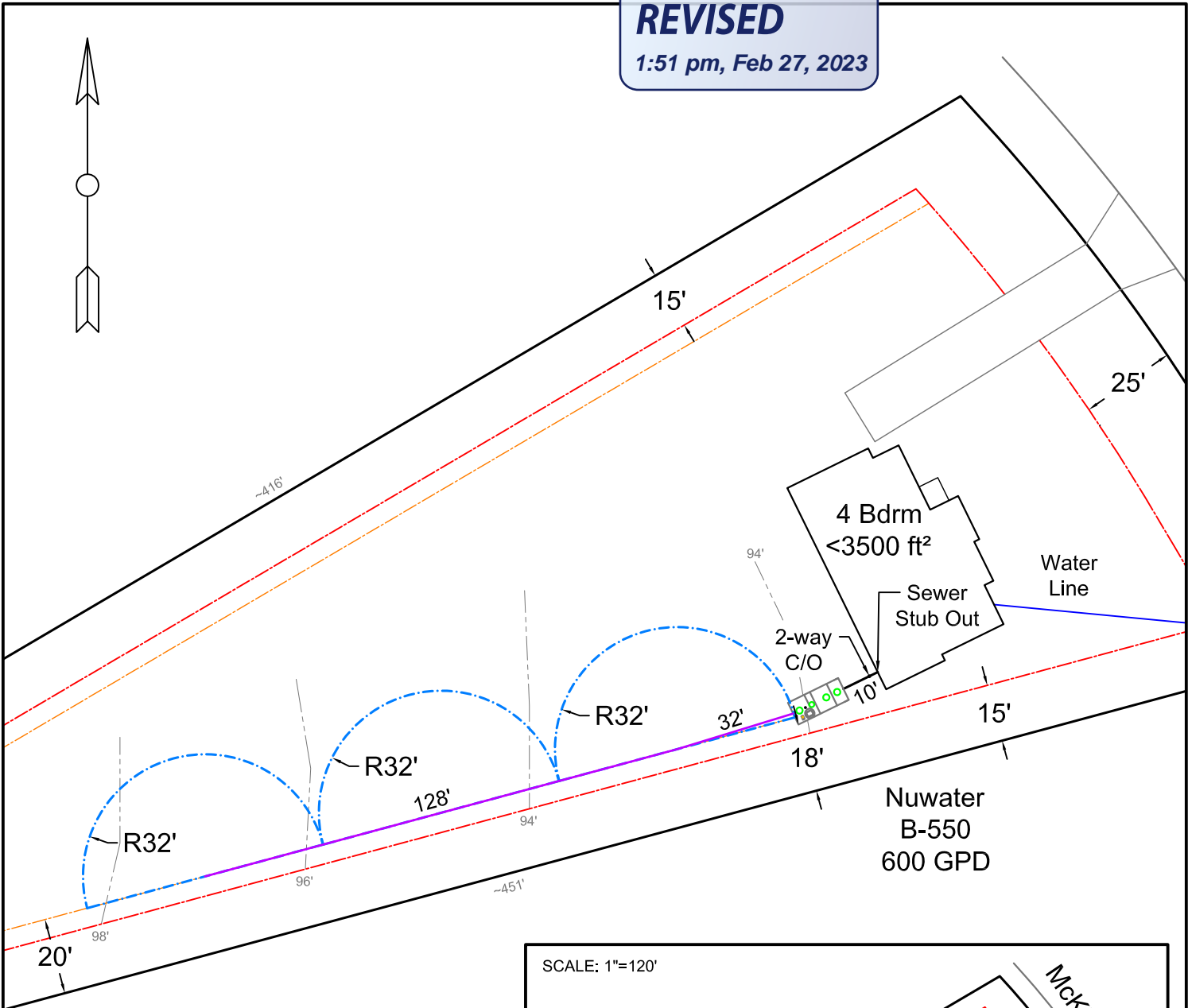
All design criteria is in accordance with TCEQ, Title 30, TAC Chapter 285, Subchapter D, On-Site Sewage Facilities (effective December 27, 2012). Above design is based on best available information and should function properly under normal operating conditions. All changes or modifications made to design must be approved by Wade A Cloud.

  
 \_\_\_\_\_  
 Wade A. Cloud, RS 4486  
 Blackwater Designs  
 PO Box 228 Boerne, TX 78006

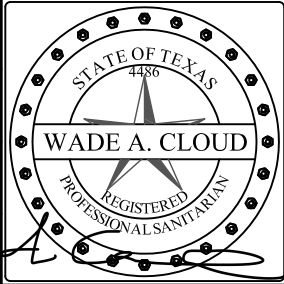
\_\_\_\_\_  
 Date  
 210.900.2971



**REVISED**  
1:51 pm, Feb 27, 2023



Project Name: <b>412 McKinney Way</b>	
Drawn by: <b>Blackwater Logistics</b>	
Date: <b>02/16/2023</b>	Bk/Pg:
Scale: <b>1"=40'</b>	Signature: <i>[Signature]</i>



Notes:

**Richard & Laurie Hurley**

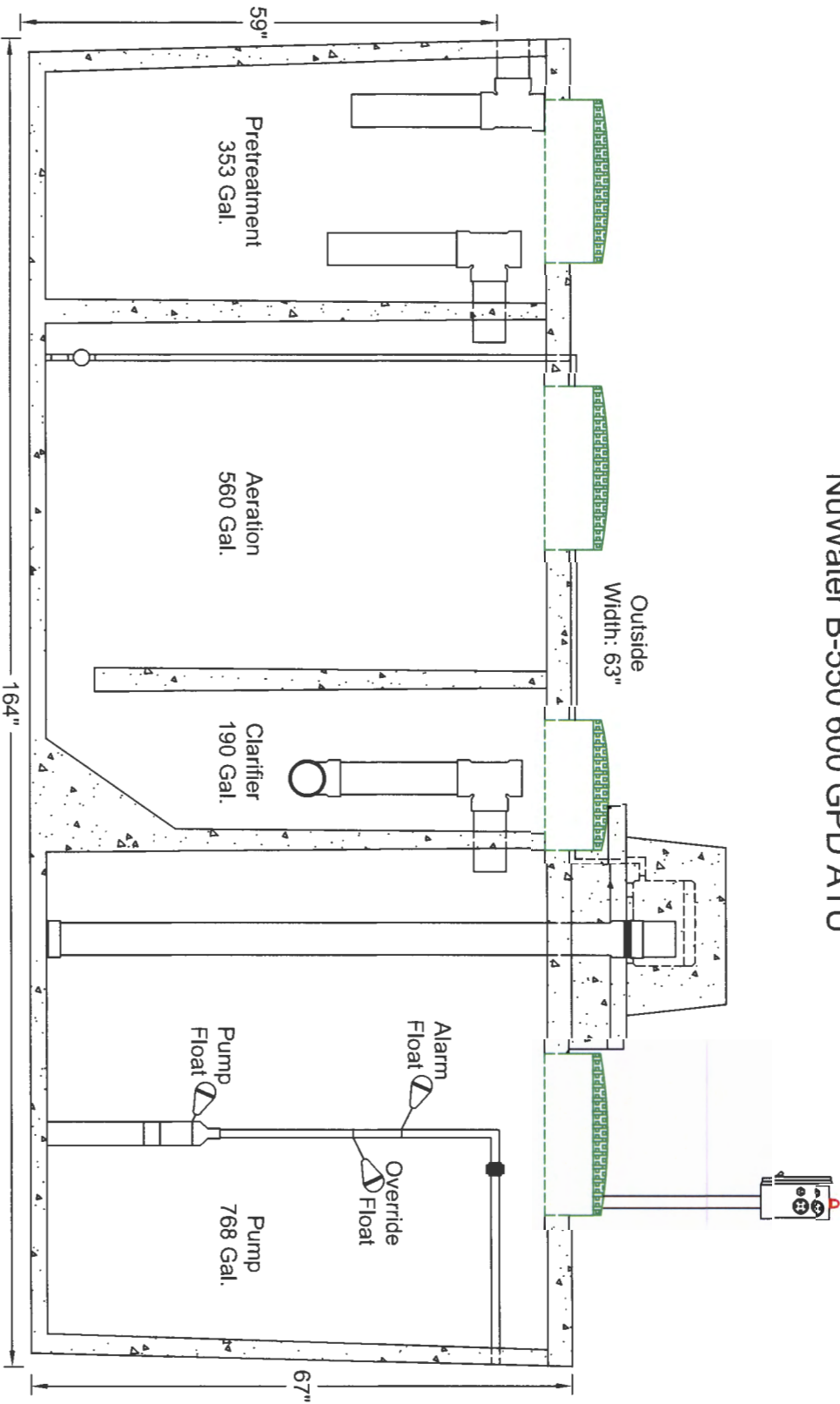
**Lot 102, The Legends at Rancho Del Lago, Unit 1, 1.14 Acres**

**As Built 1**

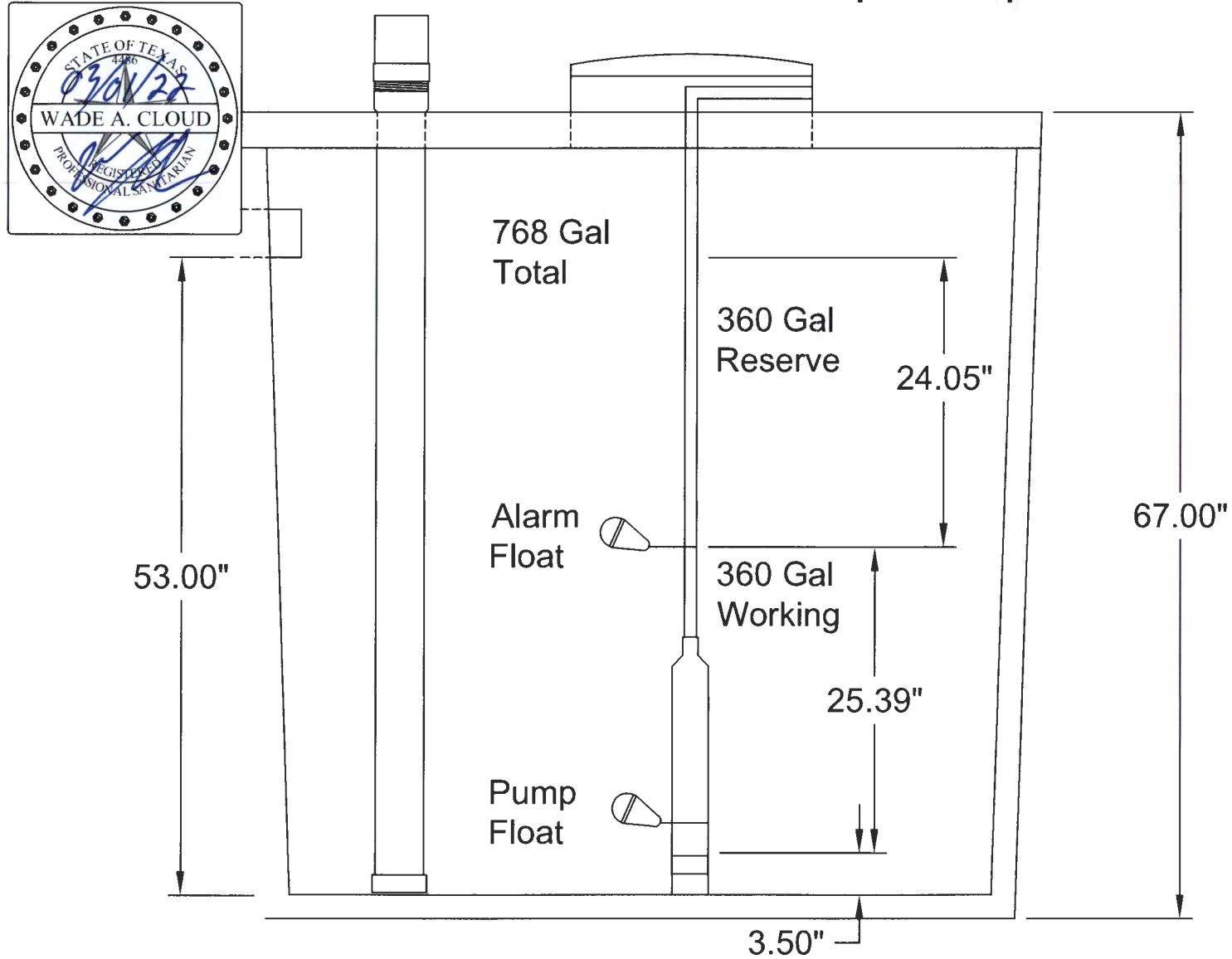
\*Test holes not performed, not ordered by customer.



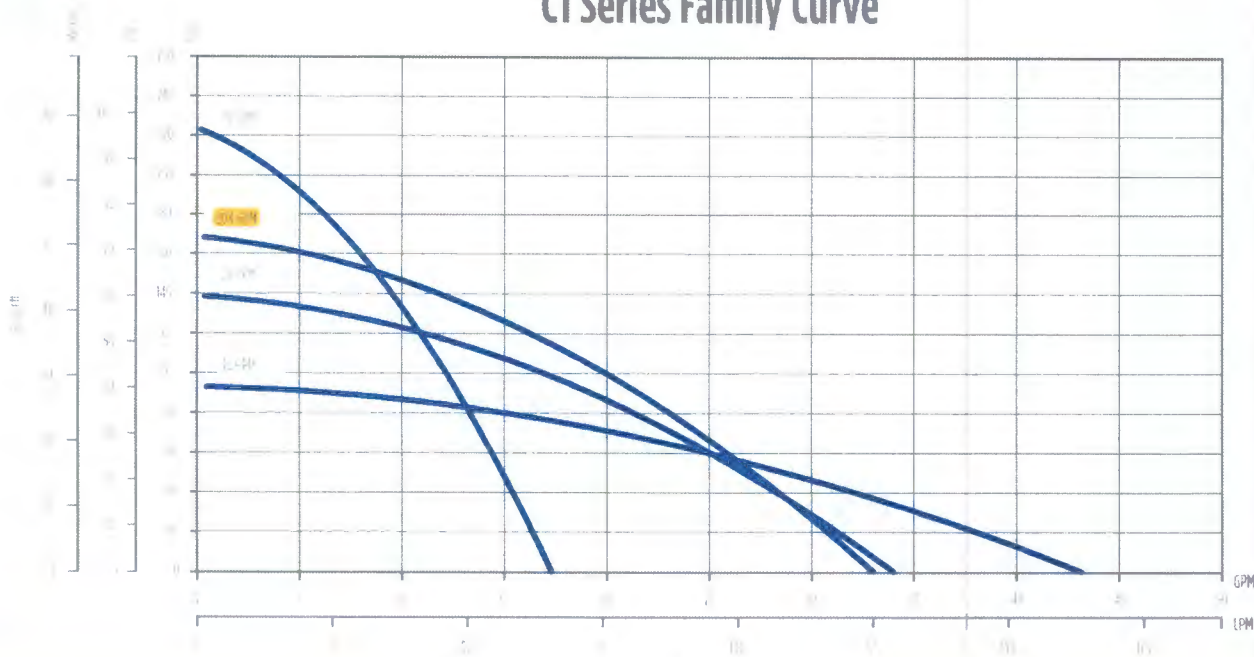
# NUWater B-550 600 GPD ATU



# NuWater 600 GPD ATU Pump Compartment



# C1 Series Family Curve



## FEATURES

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

## APPLICATIONS

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

## ORDERING INFORMATION

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

Note: All units have 10 foot long SJ00W leads.



**Franklin Electric**

franklinwater.com

M1698 07-14

# ProPlus™ Gear Driven Sprinkler Setting Instructions

## SPRINKLER INSTALLATION

### 1 ► INSTALL AND BURY

Do not use pipe dope. Thread the sprinkler on the pipe. Bury the sprinkler flush to grade. **NOTE:** Gear driven sprinklers and pop-up sprays should not be installed on the same watering zone.

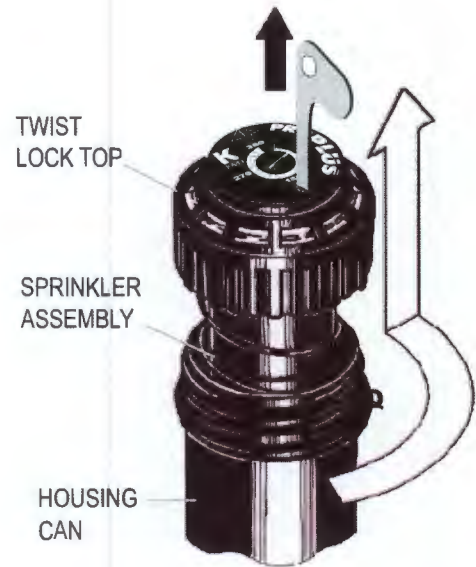
### 2 ► INSPECTING THE FILTER

Unscrew the top and lift the complete sprinkler assembly out of the housing can. The filter is located on the bottom of the sprinkler assembly and can be easily pulled out, cleaned and re-installed.

### 3 ► WINTERIZATION TIPS

When using an air compressor to remove water from the system please note the following:

- Do not exceed 30 PSI.
- Always introduce air into the system gradually to avoid air pressure surges. Sudden release of compressed air into the sprinkler can cause damage.
- Each zone should run no longer than 1 minute on air. Sprinklers turn 10 to 12 time faster on air than on water. Over spinning rotors on air can cause damage to the internal components.



## PERFORMANCE DATA

NOZZLE	PRESSURE			RADIUS		FLOW RATE			PRECIP in/hr / mm/hr			
	PSI	kPa	Bars	Ft.	M.	GPM	L/M	M <sup>3</sup> /H	■	▲	■	▲
#0.5	30	207	2.1	28	8.5	0.5	1.9	0.11	0.12	0.14	3	4
	40	276	2.8	29	8.8	0.6	2.3	0.14	0.14	0.16	3	4
	50	345	3.5	29	8.8	0.7	2.7	0.16	0.16	0.19	4	5
	60	414	4.1	30	9.1	0.8	3.0	0.18	0.17	0.20	4	5
#0.75	30	207	2.1	29	8.8	0.7	2.7	0.16	0.16	0.19	4	5
	40	275	2.8	30	9.1	0.8	3.0	0.18	0.17	0.20	4	5
	50	344	3.4	31	9.4	0.9	3.4	0.20	0.18	0.21	5	5
	60	413	4.1	32	9.8	1.0	3.8	0.23	0.19	0.22	5	6
#1.0	30	207	2.1	32	9.8	1.3	4.9	0.30	0.24	0.28	6	7
	40	275	2.8	33	10.1	1.5	5.7	0.34	0.27	0.31	7	8
	50	344	3.4	34	10.4	1.6	6.1	0.36	0.27	0.31	7	8
	60	413	4.1	35	10.7	1.8	6.8	0.41	0.28	0.33	7	8
#2.0	30	207	2.1	37	11.3	2.4	9.1	0.55	0.34	0.39	9	10
	40	275	2.8	40	12.2	2.5	9.5	0.57	0.30	0.35	8	9
	50	344	3.4	42	12.8	3.0	11.4	0.68	0.33	0.38	8	10
	60	413	4.1	43	13.1	3.3	11.4	0.68	0.34	0.36	8	9
2.5 Pre- installed	30	207	2.1	38	11.6	2.5	9.5	0.57	0.33	0.38	8	10
	40	275	2.8	39	11.9	2.8	10.6	0.64	0.35	0.41	9	10
	50	344	3.4	40	12.2	3.2	12.1	0.73	0.39	0.44	10	11
	60	413	4.1	41	12.5	3.5	13.3	0.80	0.40	0.46	10	12
#3.0	30	207	2.1	38	11.6	3.6	13.6	0.82	0.48	0.55	12	14
	40	275	2.8	39	11.9	4.2	15.9	0.96	0.53	0.61	14	16
	50	344	3.4	41	12.5	4.6	17.4	1.05	0.53	0.61	13	15
	60	413	4.1	42	12.8	5.0	19.0	1.14	0.55	0.63	14	16
#4.0	30	207	2.1	43	13.1	4.4	16.7	1.00	0.46	0.53	12	13
	40	275	2.8	44	13.4	5.1	19.3	1.16	0.51	0.59	13	15
	50	344	3.4	46	14.0	5.6	21.2	1.27	0.51	0.59	13	15
	60	413	4.1	49	14.9	5.9	22.4	1.34	0.47	0.55	12	14
#6.0	40	276	2.8	45	13.7	5.9	22.4	1.34	0.56	0.65	14	16
	50	344	3.4	46	14.0	6.0	22.7	1.36	0.55	0.63	14	16
	60	413	4.1	48	14.6	6.3	23.9	1.43	0.53	0.61	13	15
	70	482	4.8	49	14.9	6.7	25.4	1.52	0.54	0.62	14	16
#8.0	40	276	2.8	42	12.8	8.0	30.3	1.82	0.87	1.01	22	26
	50	344	3.4	45	13.7	8.5	32.2	1.93	0.81	0.93	21	24
	60	413	4.1	49	14.9	9.5	36.0	2.16	0.76	0.88	19	22
	70	482	4.8	50	15.2	10.0	37.9	2.27	0.77	0.89	20	23

## LOW ANGLE PERFORMANCE DATA

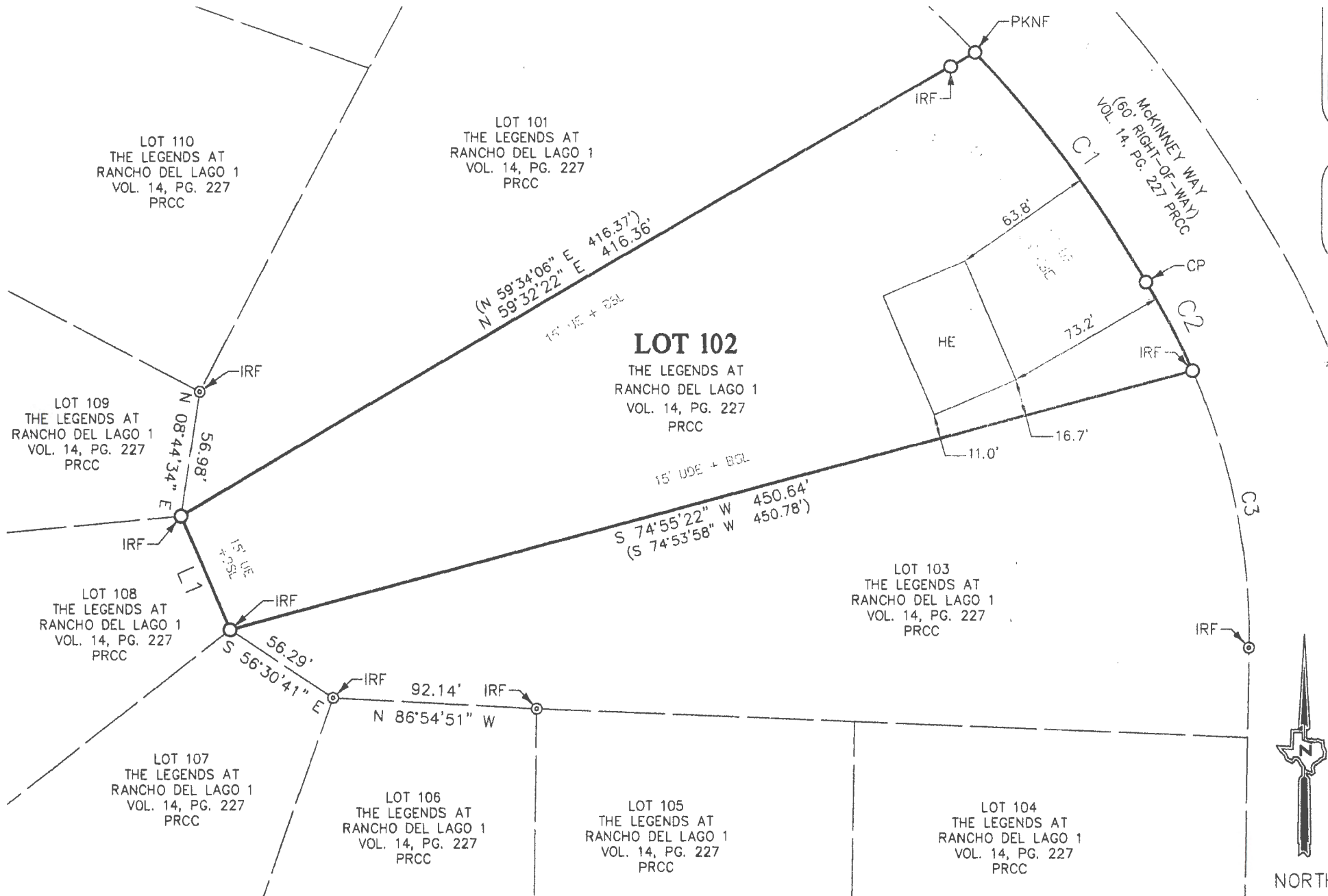
NOZZLE	PRESSURE			RADIUS		FLOW RATE			PRECIP in/hr / mm/hr			
	PSI	kPa	Bars	Ft.	M.	GPM	L/M	M <sup>3</sup> /H	■	▲	■	▲
#1.0	30	207	2.1	22	6.7	1.2	4.5	.27	0.48	0.55	12	14
	40	276	2.8	24	7.3	1.7	6.4	.39	0.57	0.66	14	17
	50	345	3.4	26	7.9	1.8	6.8	.41	0.51	0.59	13	15
	60	414	4.1	28	8.5	2.0	7.6	.45	0.49	0.57	12	14
#3.0	30	207	2.1	29	8.8	3.0	11.4	.68	0.69	0.79	17	20
	40	276	2.8	32	9.8	3.1	11.7	.70	0.58	0.67	15	17
	50	345	3.4	35	10.7	3.5	13.2	.80	0.55	0.64	14	16
	60	414	4.1	37	11.3	3.8	14.4	.86	0.53	0.62	14	16
#4.0	30	207	2.1	31	9.4	3.4	12.9	.77	0.68	0.79	17	20
	40	276	2.8	34	10.4	3.9	14.8	.89	0.65	0.75	17	19
	50	345	3.4	37	11.3	4.4	16.7	1.00	0.62	0.71	16	18
	60	414	4.1	38	11.6	4.7	17.8	1.07	0.63	0.72	16	18
#6.0	40	275	2.8	38	11.6	6.5	24.6	1.48	0.87	1.00	22	25
	50	344	3.4	40	12.2	7.3	27.7	1.66	0.88	1.01	22	26
	60	413	4.1	42	12.8	8.0	30.3	1.82	0.87	1.01	22	26
	70	482	4.8	44	13.4	8.6	32.6	1.96	0.86	0.99	22	25

\*All precipitation rates calculated for 180° operation.  
For the precipitation rate for a 360° sprinkler, divide by 2.



**K-RAIN MANUFACTURING CORP.**  
1640 Australian Avenue  
Riviera Beach, FL 33404 USA  
PH: 561.844.1002 / 1.800.735.7246  
FAX: 561.842.9493  
www.krain.com

© K-RAIN Manufacturing Corp.  
Part Number: 1100519 Rev. 01



**OBSERVED**

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	570.00'	130.78'	130.49'	S 36°21'40" E	13°08'45"
C2	300.00'	45.44'	45.39'	S 27°34'38" E	8°40'40"

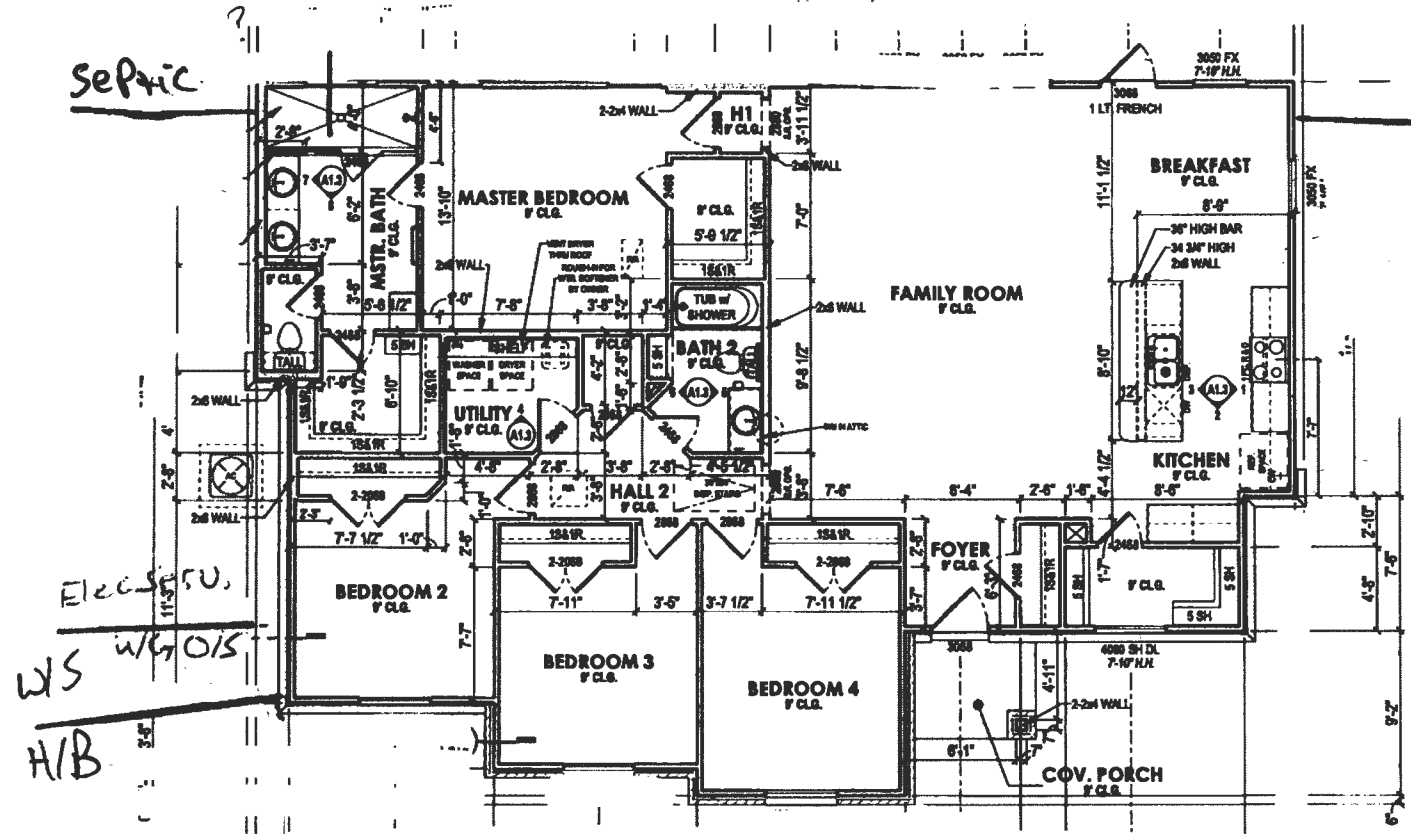
**RECORD**

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	570.00'	130.78'	N/A	N/A	N/A
C2	300.00'	45.21'	N/A	N/A	N/A

Any changes after \_\_\_\_\_ will result in a \$200 Change Order fee, or (b) a \$1000 Change Order fee for changes affecting the Elevations, Foundation, or Framing.

owner  
owner

sales



1 1ST FLOOR PLAN  
1/8" = 1'-0"

- FLOOR PLAN NOTES**
- BATH ACCESSORIES:**  
(HEIGHT TO BE BLOCKED & MOUNTED)  
 • TOWEL BARS - 84" A.F.F.  
 • TOILET PAPER HOLDER - 28" A.F.F.  
 • ROBE HOOK - 72" A.F.F.  
 • TOWEL ROD - 84" A.F.F.  
 • SHOWER ROD - 84" ADV. TUB DECK
- PLUMBING:**  
 • RANGE GAS SHUT-OFF VALVE (IF APPLICABLE) TO BE LOCATED IN ADJACENT CABINET
- MWAC:**  
 • FRESH AIR INTAKE SHALL BE VENTED THROUGH SOFFIT OR GABLE WALL
- WATER HEATER:**  
 • IF LOCATED IN ATTIC: PROVIDE PAN AND DRAIN  
 • IF GAS & LOCATED IN CLOSET: WEATHERSTRIP DOOR, PROVIDE OUTSIDE COMBUSTIBLE AIR, & INSULATE WALLS
- GARAGE (IF APPLICABLE):**  
 • SEE SPECS FOR FINISH

**TILSON**  
CUSTOM HOME BUILDERS

MR. & MRS. MICHAEL HURLEY  
Job #1221001  
Comal Country, City of Fischer

FILE COPY  
482  
GONZALES B

EC-11/20/22-SD

The measurements, dimensions, and other specifications shown on this document are subject to verification on site. The actual specifications of the building materials may vary. This document may not be relied on as representation of what the completed structure will look like.

**From:** [Ritzen, Brenda](#)  
**To:** "[wade@blackwater-logistics.com](mailto:wade@blackwater-logistics.com)"  
**Cc:** [Olvera, Brandon](#)  
**Subject:** RE: 412 McKinney Way As Built  
**Date:** Monday, February 27, 2023 1:52:00 PM  
**Attachments:** [image001.png](#)

---

Wade,

The permit file has been updated.

Thank you,



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

---

**From:** Olvera, Brandon <[Olverb@co.comal.tx.us](mailto:Olverb@co.comal.tx.us)>  
**Sent:** Monday, February 27, 2023 9:04 AM  
**To:** Ritzen, Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)>  
**Subject:** FW: 412 McKinney Way As Built

Brenda,

This is for permit 114177

Thank You,

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

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- Comal IT

# On-Site Sewage Facility Design Criteria

VOID

<b>Property Information:</b>		<b>House Information:</b>	
Site Address: <u>412 McKinney Way</u>		Number of Bedrooms: <u>4</u>	
City: <u>Fischer</u> , TX <u>78623</u>		Number of Facilities: <u>1</u>	
<b>Q=Sewage in GPD:</b>		<b>Total for Calculation:</b>	
Water Saving Devices: <input checked="" type="radio"/> Yes <input type="radio"/> No		Square Footage(Approx.): <u>&lt;3500 ft<sup>2</sup></u>	
Q Gallons/Day: <u>300</u>		Water Supply: <u>Well</u>	
Greywater Included: <input checked="" type="radio"/> Yes <input type="radio"/> No		Additional GPD: <u>0</u>	
<b>Rate of Adsorption (R<sub>a</sub>):</b>		<b>Each Bedroom &amp; Each Facility = 60 gpd</b>	
Application Rate (gal/ft <sup>2</sup> /day): <u>.064</u>		<b>Facility = Kitchen + Laundry</b>	
Minimum Adsorptive Area (ft <sup>2</sup> ): <u>4,687.50</u>		<b>Supply Line From House:</b>	
<u>-137.99</u>		Length (Approx. ft): <u>10'</u>	
<b>Aerobic Treatment Unit:</b>		Size (in.): <u>3" or 4"</u>	
Required Minimum GPD: <u>480</u>		Type: <u>Sch 40</u>	
Pretreatment Tank Capacity (gal): <u>353</u>		<b>Supply Line from Tank to Application Area:</b>	
Class 1 ATU: <u>Nuwater B-550</u>		Length (Approx. ft): <u>175'</u>	
Pump Tank Capacity (gal): <u>768</u>		Size (in.): <u>1"</u>	
Disinfectant Type: <u>Liquid Chlorine</u>		Type: <u>Sch 40</u>	
Pump Operation: <u>Timer</u>		<b>Surface Application Area(πR<sup>2</sup>):</b>	
Quantity (gal) Dosing Cycle : <u>Varied</u>		π( <u>32</u> ) <sup>2</sup> x <u>.5</u> :	<u>1,608.50</u> ft <sup>2</sup>
Cycle Time: <u>12:00 am-5:00 am</u>		π( <u>32</u> ) <sup>2</sup> x <u>.5</u> :	<u>1,608.50</u> ft <sup>2</sup>
Pump Size & Type: <u>1/2hp Franklin C1-Series</u>		π( <u>32</u> ) <sup>2</sup> x <u>.5</u> :	<u>1,608.50</u> ft <sup>2</sup>
Comments: <u>Installing a 600 GPD Nuwater B-550 with 2 sprinklers set at 180° with a 32' radius.</u>		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		π( <u>    </u> ) <sup>2</sup> x <u>    </u> :	<u>0.00</u> ft <sup>2</sup>
		Total Adsorptive Area(ft <sup>2</sup> ):	<u>4,825.49</u> ft <sup>2</sup>
<b>Drip Application Area:</b>			
		Minimum Linear Drip Tubing(ft <sup>2</sup> ):	<u>N/A</u>
		# of Drip Emitters(Aft <sup>2</sup> /4ft <sup>2</sup> ):	<u>N/A</u>
		Number of Emitters per Field:	<u>N/A</u>
		Pump Requirements(GPM)	
		( <u>N/A</u> ) @ 0.61 GPH @ 25 PSI:	<u>N/A</u>

All design criteria is in accordance with TCEQ, Title 30, TAC Chapter 285, Subchapter D, On-Site Sewage Facilities (effective December 27, 2012). Above design is based on best available information and should function properly under normal operating conditions. All changes or modifications made to design must be approved by Wade A. Cloud.

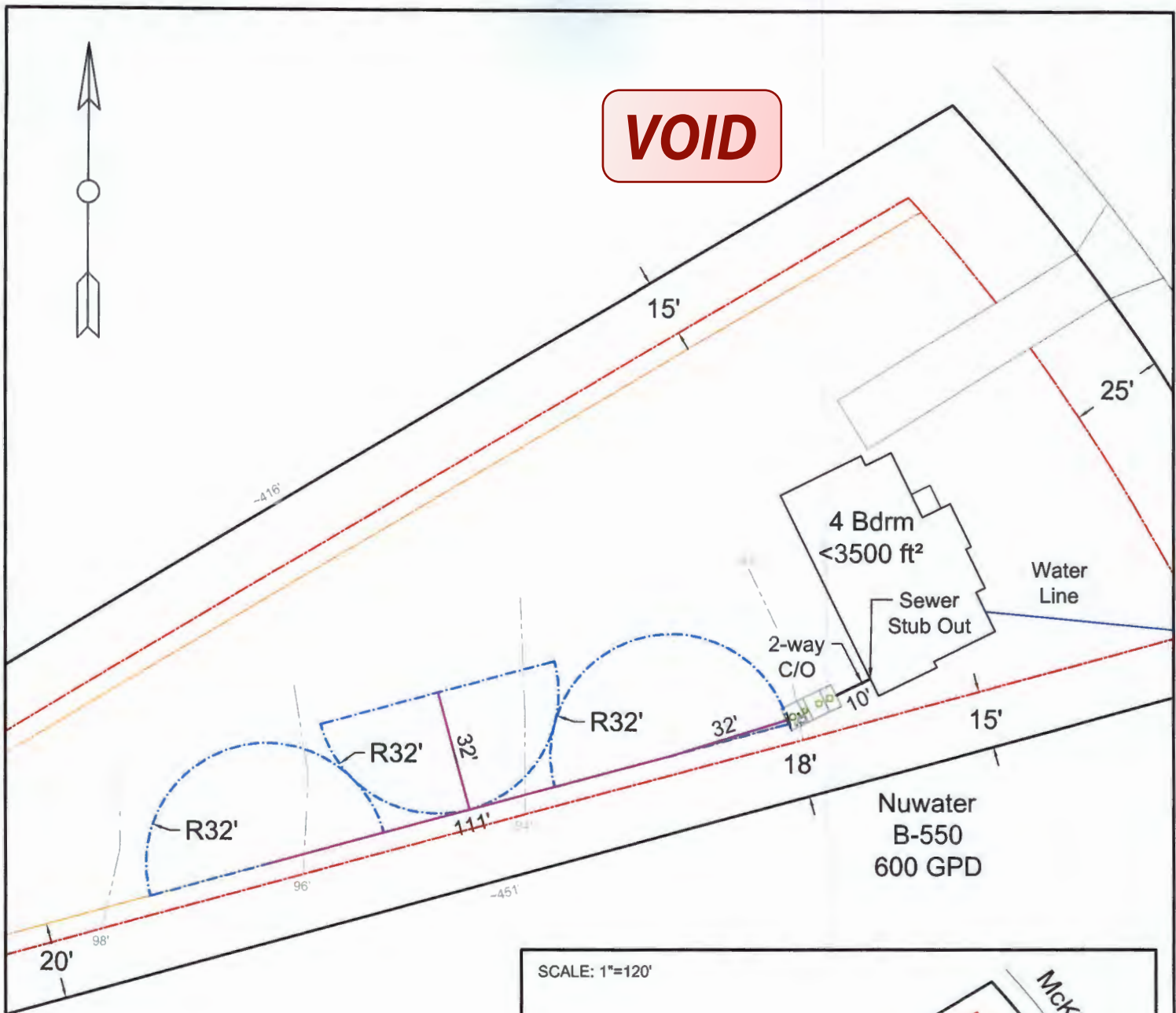
  
 Wade A. Cloud, RS 4486  
 Blackwater Designs  
 PO Box 228 Boerne, TX 78006

03/01/22  
 Date  
 210.900.2971

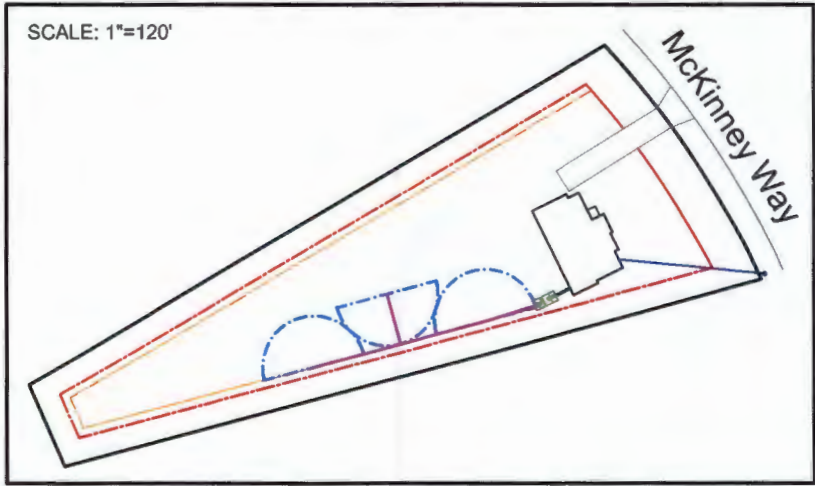




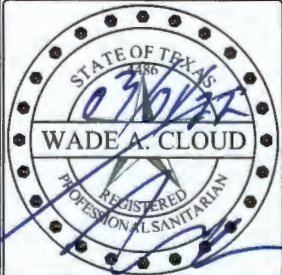
**VOID**



Nuwater  
B-550  
600 GPD



Project Name: <b>412 McKinney Way</b>	
Drawn by: <b>Blackwater Logistics</b>	
Date: <b>03/01/2022</b>	Bk/Pg:
Scale: <b>1"=40'</b>	Signature:



Notes:
<b>Richard &amp; Laurie Hurley</b>
<b>Lot 102, The Legends at Rancho Del Lago, Unit 1, 1.14 Acres</b>
<small>*Test holes not performed, not ordered by customer.</small>

alcs



202106037020 07/12/2021 11:16:52 AM 1/2

# WARRANTY DEED WITH VENDOR'S LIEN

THE STATE OF TEXAS )  
( KNOW ALL MEN BY THESE PRESENTS:  
COUNTY OF COMAL )

THAT, RANCHO DEL LAGO, INC., a Texas Corporation, of P.O. Box 2202, Canyon Lake, Comal County, Texas 78133-0009, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other valuable cash consideration to the undersigned paid by the Grantee herein named, the receipt of which is hereby acknowledged, and the further consideration of the execution and delivery by grantee of one certain promissory note of even date herewith in the principal sum of: One hundred twelve thousand five hundred and 00/100 DOLLARS (\$112,500.00), payable to the order of RANCHO DEL LAGO, INC., a Texas Corporation as therein provided and bearing interest at the rate therein specified and providing for acceleration of maturity in event of default and for attorney's fees, the payment of which note is secured by the vendor's lien herein retained, and is additionally secured by a Deed of Trust of even date herewith to MICHELE BARNES, TRUSTEE, has GRANTED, SOLD AND CONVEYED, and by these presents does GRANT, SELL AND CONVEY unto: Michael Richard Hurley and Laurie Kristin Hurley, 12607 Carriage Dove, San Antonio, Bexar County, Texas 78249, all of the following described real property in Comal County, Texas to-wit:

**All that certain tract or parcel of land lying and being situated in Comal County, Texas, known and designated as Lot 102 & 103, THE LEGENDS AT RANCHO DEL LAGO, UNIT 1, a subdivision, according to map or plat recorded in Volume 14, Page(s) 227-231, of the Map and Plat Records of Comal County, Texas.**

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said grantee(s), their heirs and assigns forever; and it does hereby bind itself, its successors and assigns to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee(s) their, heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

But it is expressly agreed that the Vendor's Lien, as well as the Superior Title in and to the above described premises, is retained against the above described property, premises and improvements until the above described note and all interest thereon are fully paid according to the face, tenor, effect and reading thereof, when this Deed shall become absolute.

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

This conveyance is made and accepted subject to the following:

- 1.) Any and all restrictions, reservations, assessments, maintenance charges, covenants, conditions and easements, if they are still in effect, shown of record in the hereinabove mentioned County and State, including restrictions for the subdivision.
- 2.) A water assessment of \$1,100.00 per lot for the purpose of installing a water system to bring water to the lot; said water assessment shall be due and payable to Rancho del Lago, Inc., a Texas Corporation, or its assigns on or before six (6) months after the lot is conveyed by RANCHO DEL LAGO, INC., a Texas Corporation.
- 3.) Recorded and unrecorded utility easements to Pedernales Electrical Cooperative, Inc., and GVTC Communications, Inc.
- 4.) Visible and apparent easements.

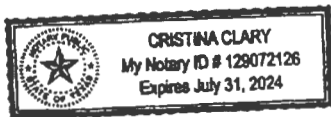
EXECUTED this 18th day of June, 2021

**RANCHO DEL LAGO, INC.,**  
a Texas Corporation

KELLY E. SIMMONS, Chief Financial Officer

STATE OF TEXAS     )  
                                  (  
COUNTY OF COMAL    )

This instrument was acknowledged before me on the 9th day of July, 2021, by KELLY E. SIMMONS, Chief Financial Officer of RANCHO DEL LAGO, INC., a Texas Corporation.



NOTARY PUBLIC, STATE OF TEXAS

AFTER RECORDING RETURN TO:

Rinco of Texas, Inc.  
P.O. Box 2202  
Canyon Lake, Texas 78133-0009  
(830) 935-2807  
(830) 935-2729 FAX

Filed and Recorded  
Official Public Records  
Bobbie Koepp, County Clerk  
Cowan County, Texas  
07/12/2021 11:16:52 AM  
TERRI 2 Page(s)  
202106037028

Bobbie Koepp

**RECEIVED**

By KG at 3:30 pm, Mar 09, 2022



**COMAL COUNTY**

ENGINEER'S OFFICE

**OSSF DEVELOPMENT APPLICATION CHECKLIST**

Staff will complete shaded items

[ ] [ ]

Date Received Initials

114177

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 **Repair, Customer**
- Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer **Repair**
- 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. **Repair**
- Required Permit Fee - See Attached Fee Schedule **Repair**
- Copy of Recorded Deed **Repair, Customer**
- Surface Application/Aerobic Treatment System
  - Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public **Repair, Customer**
  - Signed Maintenance Contract with Effective Date as Issuance of License to Operate **Repair, Customer**

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

03/04/2022

Date

\_\_\_ COMPLETE APPLICATION  
Check No. \_\_\_\_\_ Receipt No. \_\_\_\_\_

INCOMPLETE APPLICATION  
(Missing Items Circled, Application Refused)

**Lonestar Aerobic Services, LLC**  
**PO Box 228**  
**Boerne, TX 78006**

**Phone: (830) 443-4559**

**www.lonestaras.com**

**To: Mike/Laurie Hurley**  
**412 McKinney Way**  
**Fischer, TX 78623**

Printed: 1/2/2024  
Site: 412 McKinney Way  
Fischer, TX 78623

---

Permit #: <b>114177</b>	Customer ID: 3943	-----	
Agency: Comal County Environmental Health	Contract Dates: 9/30/2023 - 9/30/2025		
County: Comal	Sub: The Legend @ Rancho Del Lago	Scheduled Date: 1/30/2024	Inspection 1 of 6
Mfg / Brand: Enviro-Flo Inc. - NuWater B-0550-400PT, 600GPD	Aerator: Thomas AP-080-110		
Treatment Type: Aerobic With Chlorine			
Disposal: Surface Application			

---

**Service Type: Scheduled Inspection**  
**Visit Date: 1/2/2024**

This counts as a type of "Scheduled Inspection"  
**Entered By: Kyle P Borgerding**

**Technician: Kyle P Borgerding**  
**Maint. Provider: Wade A Cloud**

---

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

**Sludge Levels**  
**For Tank 1:**  
**For Tank 2:**  
**For Tank 3:**

**Chlorinator:** Op

**Tank Lid / Riser:** Secured

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

**Alarm:** Operational

**PSI Pressure:** 2.1

**Comments**

Adjusted timer. Tested all components, components are functioning properly. System is in good working order.

**Service Completed**

**Provider:** Wade A Cloud  
Main. Provider  
MP0000406  
[www.lonestaras.com](http://www.lonestaras.com)



Insp ID #:69735

**Lonestar Aerobic Services, LLC**  
**PO Box 228**  
**Boerne, TX 78006**

**Phone: (830) 443-4559**

**www.lonestaras.com**

**To: Mike/Laurie Hurley**  
**412 McKinney Way**  
**Fischer, TX 78623**

Printed: 1/2/2024  
Site: 412 McKinney Way  
Fischer, TX 78623

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**Tank Lid / Riser:** Secured

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**Service Completed**

**Provider:** Wade A Cloud  
Main. Provider  
MP0000406  
[www.lonestaras.com](http://www.lonestaras.com)



Insp ID #:69735