



# COMAL COUNTY

## ENGINEER'S OFFICE

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

Issued This Date: **06/28/2023** Permit Number: **111264**

Location Description: 22620 SPANISH OAK DR  
SAN ANTONIO, TX 78266

Subdivision: Garden Oaks  
Unit: 3  
Lot: 8  
Block: 3  
Acreage:

Type of System: Aerobic  
Surface Irrigation

Issued to: Peter J. Wesp & Andrea L. Wesp

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

ENVIRONMENTAL HEALTH INSPECTOR

ENVIRONMENTAL HEALTH COORDINATOR

OS0038255

OS0007722

# 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: 111264  
Issued This Date: 09/01/2020  
This permit is hereby given to: Peter J. Wesp & Andrea L. Wesp

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

22620 SPANISH OAK DR  
SAN ANTONIO, TX 78266

Subdivision: Garden Oaks  
Unit: 3  
Lot: 8  
Block: 3  
Acreage:

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.

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

Date 08/18/2020

Permit # 111264

Owner Name Peter J. Wesp and wife, Andrea L. Wesp  
Mailing Address 22620 Spanish Oak Dr.  
City, State, Zip Garden Ridge, Tx. 78266  
Phone # 210-382-5565  
Email wesp@rfisd.net

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

All correspondence should be sent to:  Owner  Agent  Both Method:  Mail  Email

Subdivision Name Garden Oaks Unit 3 Lot 8 Block 3

Acreage/Legal 5.292

Street Name/Address 22620 Spanish Oak Dr. City Garden Ridge Zip 78266

**Type of Development:**

Single Family Residential

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

Number of Bedrooms 3

Indicate Sq Ft of Living Area 2043

RECEIVED

AUG 27 2020

COUNTY ENGINEER

Non-Single Family Residential

(Planning materials must show adequate land area for doubling the required land needed for treatment units and disposal area)

Type of Facility \_\_\_\_\_

Offices, Factories, Churches, Schools, Parks, Etc. - Indicate Number Of Occupants \_\_\_\_\_

Restaurants, Lounges, Theaters - Indicate Number of Seats \_\_\_\_\_

Hotel, Motel, Hospital, Nursing Home - Indicate Number of Beds \_\_\_\_\_

Travel Trailer/RV Parks - Indicate Number of Spaces \_\_\_\_\_

Miscellaneous \_\_\_\_\_

Estimated Cost of Construction: \$ 220000 (Structure Only)

Is any portion of the proposed OSSF located in the United States Army Corps of Engineers (USACE) flowage easement?

Yes  No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

Source of Water  Public  Private Well

Are Water Saving Devices Being Utilized Within the Residence?  Yes  No

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.

Peter J. Wesp  
Signature of Owner

8/13/20  
Date



\* \* \* **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 John J. Haag, P.E.

System Description Proprietary aerobic treatment with surface spray system disposal

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

Tank Size(s) (Gallons) 600 gpd, min. Absorption/Application Area (Sq Ft) 3750 min.

Gallons Per Day (As Per TCEQ Table III) 240

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

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

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

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

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

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

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

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

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

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

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

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

Is this property within an incorporated city?  Yes  No

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

By signing this application, I certify that:

- The information provided above is true and correct to the best of my knowledge.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

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

08/27/2020  
Date

Page 2 of 2

VCS

THE COUNTY OF COMAL



202006036078 08/27/2020 02:24:05 PM 1/1

STATE OF TEXAS

**CERTIFICATION OF OSSF REQUIRING MAINTENANCE**

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

I

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

II

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

Legal Description: Lot 8, Block 3, Garden Oaks, Unit 3

This property is owned by: Peter J. Wesp and wife, Andrea L. Wesp

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

The owner will, upon any sale or transfer of the above-described property, request a transfer of the permit for the OSSF to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from Comal County.

WITNESS BY HAND(S) ON THIS 18 DAY OF August

Peter J. Wesp, Owner

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 18 DAY OF August, 2020.

Notary Public, State of Texas

Filed and Recorded  
Official Public Records  
Bobbie Koepf, County Clerk  
Comal County, Texas  
08/27/2020 02:24:05 PM  
TERRI 1 Page(s)  
202006036078  
  
Bobbie Koepf

DANA GOAD  
Notary ID # 2653603  
My Commission Expires  
September 29, 2020

RECEIVED  
AUG 27 2020  
COUNTY ENGINEER

**ROCKY RIDGE SEPTIC  
INITIAL SERVICE CONTRACT**

2449 Rocky Ridge Loop  
Canyon Lake, Texas 78133  
(830) 935-2750 Home  
(830) 935-2753 Fax

This service policy entered into this \_\_\_\_\_ day of \_\_\_\_\_ by and between Peter J. Wesp (Home Owner) and Rocky Ridge Septic (Service Provider). Service provider agrees to operate and maintain the Aerobic System at the referenced property for a period of two years beginning LTO and ending \_\_\_\_\_.

**Legal Description:** Lot 8, Blk. 3, Garden Oaks, Unit 3

**Physical Address:** 22620 Spanish Oak Dr. Garden Ridge, Tx. 78266

By this agreement the contractor agrees to render professional service and the client agrees to fulfill the terms of this agreement. This agreement will provide all required inspections, testing, and services for your Aerobic treatment System. This agreement will provide:

1. 3 inspections per year (at least one every four months) for a total of 7 over the two year period. These inspections will include inspecting control panel, air pumps, diffuser operation, and replacing or repairing any component not functioning properly. Any alarm situation affecting the proper operation of the aerobic treatment process will be addressed within a 48 hour period.
2. An effluent quality inspection consisting of a visual check for color, turbidity, scum overflow, and examination for odor. A test for chlorine residual and ph will be taken and reported as necessary.
3. If any improper operation is observed, which cannot be corrected at the time of the service visit, you will be notified in writing of the estimated date of repair.
4. Customer is responsible for chlorine tablets or liquid chlorine.
5. Any additional visits, inspections or sample collection required by specific Municipalities, water/river authorities, County Agencies, the TCEQ, or any other regulatory agency will not be covered by this agreement.

RECEIVED  
AUG 27 2020  
COUNTY ENGINEER

At the conclusion of this agreement, our company will make available for purchase on an annual basis, a continuing service agreement. The manufacturer's homeowners' manual must be strictly adhered to or warranties are subject to invalidation.

Pumping of sludge build up is not covered by this agreement.

This agreement does not cover any labor or parts which must be replaced due to acts of God or due to misuse or abuse of the system.

**ACCESS BY CONTRACTOR**

The contractor or anyone authorized by the contractor may enter the property at reasonable times without prior notice for the purpose of the above mentioned services. The contractor may access the system components including the tank by means of excavation for the purpose of evaluation if necessary. Soil is to be replaced as best as possible.

**TERMINATION**

Either party may terminate this agreement within 10 days of written notice in event of substantial failure to perform by either party. If this agreement is terminated, the contractor will notify the appropriate agency.

HOMEOWNER

Peter J. Wesp 8/18/20  
Signature Date  
Phone 210-382-5565

SERVICE PROVIDER

[Signature]  
Signature Date  
Rocky Ridge Septic (830) 935-2750  
2449 Rocky Ridge Loop  
Canyon Lake, TX 78133

The effective date of this maintenance contract shall be the date the License to Operate is issued.



# HAAG ENGINEERING CONSULTANTS

15831 Secret Trails • San Antonio, Texas 78247 • Tel: (210) 705-4268 • Email: [jhaag@satx.rr.com](mailto:jhaag@satx.rr.com)

August 23, 2020

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

RECEIVED

AUG 27 2020

RE: Water Pollution Abatement Plan (WPAP)  
Lot 8, Block 3, Garden Oaks, Unit 3

Dear Brenda:

The referenced property is located within the Edwards Aquifer Recharge Zone. No known WPAP was prepared for this project and, to the best of my knowledge, the proposed project does not require a TCEQ approved WPAP because the total identifiable man-made existing and proposed impervious and/or disturbed area on this property is less than 20%. This On-Site Sewage Facility (OSSF) construction shall comply with the effective TCEQ requirements to protect any discovered sensitive and/or recharge features discovered on the property within 50-feet of the proposed septic tank or 150-feet of any OSSF spray disposal area limits.

Temporary erosion and sedimentation controls shall be utilized as necessary prior to construction per the effective and applicable TCEQ rules. If any recharge feature (caves, solution cavities, sink holes, etc.) is discovered during OSSF construction within 50-feet of the proposed septic tank or 150-feet of any OSSF spray disposal area limits, all regulated activities near the feature shall be suspended immediately and the owner shall immediately notify the appropriate Texas Commission on Environmental Quality (TCEQ) regional office of the discovery of the feature. After that, regulated activities shall not proceed near the feature until the permitting authority, in conjunction with the regional TCEQ office, has reviewed and approved an approved plan proposed to protect the feature, the structural integrity of the OSSF and the water quality of the Edwards aquifer.

Designed in accordance with TCEQ Chapter 285, Subchapter D, §285.40, 285.41 and 285.42 (effective March 2013).

Sincerely,



08/23/2020

Haag Engineering Consultants, Inc.  
Firm No.: F-5789





# HAAG ENGINEERING CONSULTANTS

15831 Secret Trails • San Antonio, Texas 78247 • Tel: (210) 705-4268 • Email: [jhaag@satx.rr.com](mailto:jhaag@satx.rr.com)

August 27, 2020

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

RECEIVED

AUG 27 2020

COUNTY ENGINEER

RE: Septic Setback Variance Request  
Lot 8, Block 3, Garden Oaks, Unit 3

Dear Brenda:

Due to the lack of available spray application area, it is necessary to have the setback from the property line to the edge of spray area at ten feet as required by TCEQ Chapter 385 rules Table X. I hereby request a variance to the twenty foot setback to the property line(s) as required by Comal County Order and an equivalent protection will be maintained by adding a battery backup to the timer clock to ensure sprayers only spray during the pre-dawn hours. In my professional opinion, this variance will not pose a threat to the environment or public health.

Sincerely,



*J. J. Haag, P.E.*

08/27/2020

Haag Engineering Consultants, Inc.  
Firm No.: F-5789

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

RECEIVED  
AUG 27 2020

COUNTY ENGINEER

<b>1. OWNER INFORMATION</b>
Property Owner's Full Legal Name: Peter J. Wesp

<b>2. PROPERTY INFORMATION</b>				
City: Garden Ridge			Zip Code: 78266	
Legal Description:				
Lot: 8	Block: 3	Subdivision: Garden Oaks	Sec:	Unit: 3
If not located in subdivision: Survey:				
Abstract:			Recorded (Vol/Pg):	

<b>3. SITE EVALUATION INFORMATION:</b>	
Name of Site Evaluator: John J. Haag	PE #: 90158
Date Performed: 08/11/2020	Proposed Excavation Depth: Surface

**4. REQUIREMENTS:**

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

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

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

Soil Profile Hole Number: 2					
Depth (ft.)	Textural Class	Gravel Analysis	Drainage (Mottles/Water Table)	Restrictive Horizon	Observations
0	III	<30%	No	Yes	Limestone @ surface  <div style="text-align: right; font-style: italic; font-weight: bold;">RECEIVED AUG 27 2020 COUNTY ENGINEER</div>
1					
2					
3					
4					
5					

**5. FEATURES OF SITE AREA:**

- |   |   |
|---|---|
| Presence of 100 year flood zone:                          | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                 |
| Presence of adjacent ponds, streams or water impoundments | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                 |
| Existing or proposed water well in nearby area            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                 |
| Organized sewage available to lot or tract                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                 |
| Recharge features within 150 feet                         | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (None observed) |

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



J. J. Haag, P.E.

08/11/2020

Haag Engineering Consultants, Inc.  
Firm: F-5789

**Aerobic With Surface Disposal**

by Felix I. Bernal, P.E. (c) 2002 - 2013

SITE EVALUATION PERFORMED ON: 11-Aug-20 by John J. Haag, P.E.



Date: 11/06/20  
 APPLICANT: Peter Wesp  
 MAILING ADDRESS:  
 CITY, ST, ZIP  
 CONTRACTOR  
 SITE ADDRESS: 22620 Spanish Oak Dr.  
 CITY, ST, ZIP Garden Ridge, Tx. 78266  
 LEGAL DESCRIPTION: Lot 8, Blk. 3, Garden Oaks, Unit 3  
 WATER SOURCE: Public

SOIL TYPE 3 AT SLOPE OF <15% BEDROOMS 3 Sq. Ft. 1487  
 Normally Required 300 GPD 225 GPD

WATER SAVING DEVICES? Y  
 APPLICATION RATE = 0.064 GALLONS PER SQ. FT. PER DAY  
 USAGE FLOW = 240 GALLONS PER DAY WHICH IS 80% OF 300 GPD  
 SEPTIC TANK VOLUME = 750 GALLONS TWO COMPARTMENT TANK REQUIRED  
 RESERVE CAPACITY = 80 (8 HOURS USAGE AFTER HIGH LEVEL ALARM)

AREA REQUIRED = 3,750 SQ. FT. OF ABSORPTION AREA OR 0.09 ACRES  
**WITHOUT WATER SAVING DEVICES** 4,688 SQ. FT. OF ABSORPTION AREA OR 0.11 ACRES

Use a 600 GPD Treatment Plant Model SA600 by Solar Aerobic  
 Nozzle # PSI (K-Rain ProPlus Low Angle Sprinkler Nozzle)  
 3 30 PSI WITH A 29 FOOT RADIUS AND 3.0

GPM/ SPRINKLER WITH A TOTAL OF 4.5 GPM FOR THE SYSTEM

**AREA COVERED BY PROPOSED SPRINKLER HEADS**

LINEAR FEET OF DISTRIBUTION = 128.0 FT. OF 1 INCH SCH-40 PURPLE PIPE 150 C (HAZEN-WILLIAMS)  
 SPACE BETWEEN SPRINKLER HEADS = 70 FT

WITH ANGLE OF DISTRIBUTION = 360 2 SPRINKLERS FOR A DOSE TIME OF 53 MINUTES  
 OF ABSORPTION AREA AREA PER SPRINKLER = 2,642 sf

SPRINKLERS	LENGTH OF PIPE	Dist. Angle	Flow GPM	Q GPM	Hf ft of head	Area
2	88 FT	180	1.5	4.500	1.38	1321.0
1	40 FT	360	3	3.000	0.30	2642.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
SUM=	128 feet of pipe		4.500		1.68 ft of head	3963.0 sf

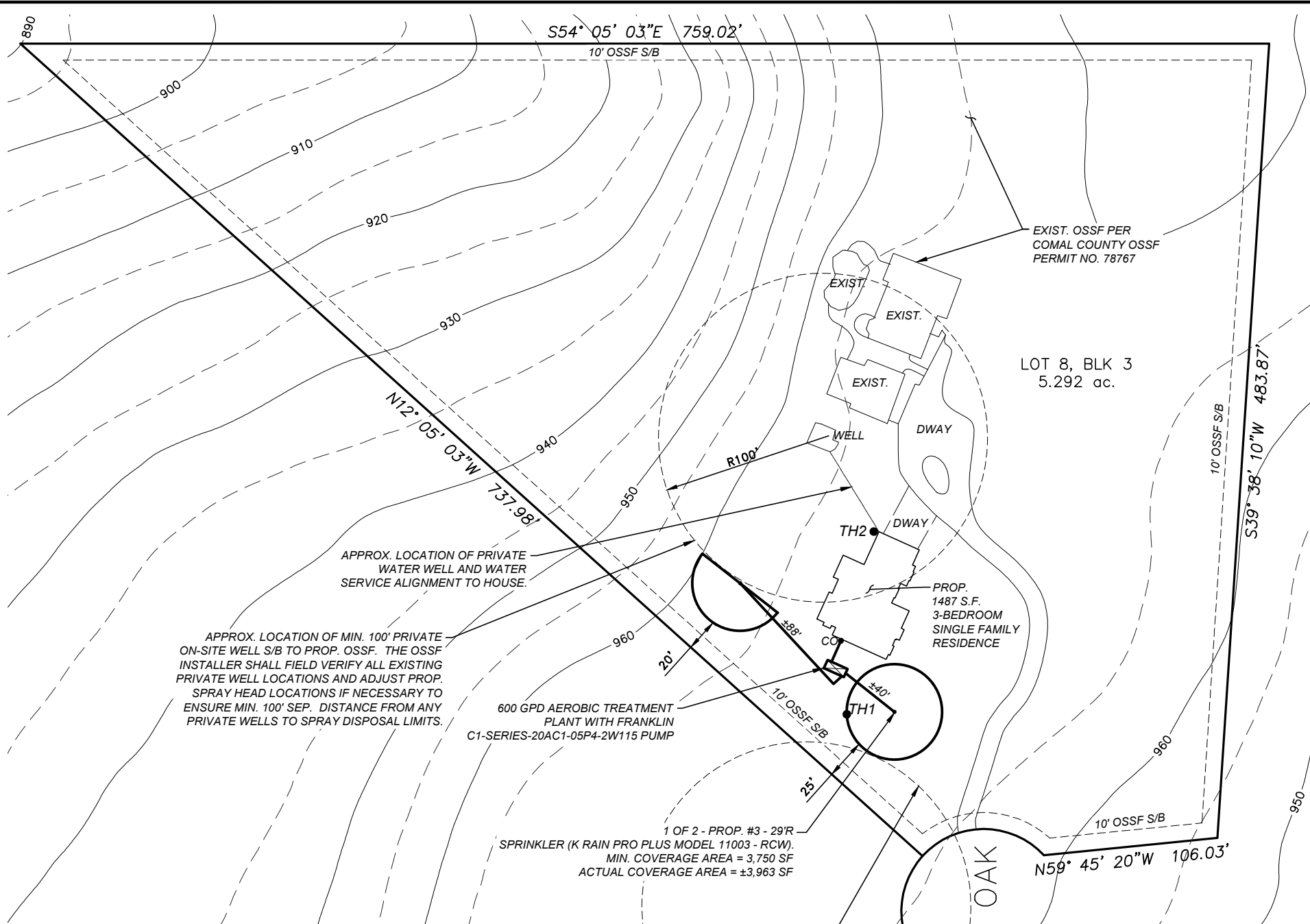
(Note: 0.4335= 62.424/144 for water at 39.2°F)

fittings factor	1.20
	2.01 ft of head
Hf for Dist Line	2.006772 ft of head
30.00 psi divided by 0.4335 =	69.20 ft of head
elevation difference	6.00 ft of head
head required for sprinkling	79.22 ft of head
pressure required for sprinkling	34.34 psi



**GENERAL NOTES:**

1. NO VEHICULAR TRAFFIC IS ALLOWED ON ANY PORTION OF THE DISPOSAL SYSTEM, UNLESS THE DESIGN SPECIFIES OTHERWISE.
2. PIPE ALIGNMENT TO THE DISPOSAL BEDS MAY BE ALTERED AS REQUIRED. ANY CHANGE FROM THE PLANS MUST BE APPROVED BY THE ENGINEER AND THE APPROPRIATE GOVERNMENTAL AGENCY(IES).
3. CONTRACTOR SHALL PROTECT TREES WHICH ARE NOT IN THE EXCAVATED CONSTRUCTION AREAS. CONTRACTOR SHALL MINIMIZE ROOT DAMAGE AND REASONABLY ADHERE TO THE DESIGN.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING A MINIMUM OF 1/4" PER FOOT OF FALL FROM THE BUILDING TO THE SEPTIC TANK.
5. NO AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED OVER THE DISPOSAL AREAS. ANY WATERING IN THESE AREAS SHALL BE DONE BY HAND AND ONLY WHEN REQUIRED TO MAINTAIN GRASS COVER.
6. ALL CONSTRUCTION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY - TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ANY APPLICABLE LOCAL BUILDING AND SAFETY CODES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE CONSTRUCTION OF THIS SYSTEM.
8. SPRAY APPLICATION AREAS SHALL BE COVERED WITH PERENNIAL GRASSES TO TAKE ADVANTAGE OF TRANSPIRATION. IF GRASSES ARE USED WHICH HAVE DORMANT PERIODS, STEPS SHOULD BE TAKEN TO PROVIDE SOME TYPE OF VEGETATION ON THE BEDS DURING THESE PERIODS.
  - 8.1. RECOMMENDED COVERAGE:
    - 8.1.1. BERMUDA: 1 LB/1000 S.F.
    - 8.1.2. RYE: 10 LB/1000 S.F.
    - 8.1.3. OR ST. AUGUSTINE SOD.
9. SPRAY APPLICATION AREAS MUST BE MOWED AT REGULAR INTERVALS. FAILURE TO PROPERLY MAINTAIN VEGETATIVE COVER MAY RESULT IN SYSTEM FAILURE AND SHALL BE THE RESPONSIBILITY OF THE OWNER.
10. ALL PIPES SHALL BE SCHEDULE 40 PVC OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. ALL JOINTS SHALL BE CLEANED WITH THE APPROPRIATE SOLVENT AND GLUED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
11. ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY DISPOSAL SYSTEM OR SEWERAGE PIPE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF WATER LINES LESS THAN 10 FEET FROM THE DISPOSAL AREA.
12. HIGH WATER ALARM SHALL BE LOCATED IN A NOTICEABLE LOCATION. THE ALARM SHALL BE A VISUAL AND AUDIBLE ALARM AND WIRED ON A SEPARATE CIRCUIT FROM THE PUMPS. ALL EXTERIOR CONTROLS AND CONNECTIONS SHALL BE ENCLOSED IN A WEATHER-PROOF HOUSING. ELECTRICAL CONSTRUCTION SHALL COMPLY WITH ALL LOCAL ELECTRICAL AND BUILDING CODES.
13. NO EXCAVATION IS PERMITTED NEAR THE DISPOSAL AREAS THAT WILL RESULT IN THE NONCOMPLIANCE OF APPLICABLE SETBACKS STATED IN THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY.
14. ONLY GOOD QUALITY SANDY LOAM SHALL BE APPLIED OVER THE DISPOSAL AREAS. CLAY LOAM IS UNACCEPTABLE AND WILL CAUSE SYSTEM FAILURE. SANDY LOAM SHALL BE DEFINED AS SHOWN IN TABLE VI (USDA SOIL TEXTURAL CLASSIFICATIONS) OF THE RULES AND REGULATIONS OF THE TCEQ. THE INSTALLER IS RESPONSIBLE FOR VERIFYING THE QUALITY OF EACH LOAD OF LOAM PLACED ON THE SYSTEM.
15. STORM WATER (RAINFALL RUNOFF) SHOULD NOT BE ALLOWED TO FLOW OVER THE DISPOSAL FIELDS OR THE TANKS. DIVERSION BERMS, SWALES AND/OR RAIN GUTTERS SHOULD BE INSTALLED AS NECESSARY TO PREVENT SUCH RUNOFF.
16. THE CONTRACTOR IS RESPONSIBLE FOR STAKING AND VERIFYING THE GRADES PRIOR TO EXCAVATION. ANY DISCREPANCIES OF MORE THAN 6 INCHES SHALL BE REPORTED TO THE ENGINEER PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOT DEVIATE FROM THESE PLANS WITHOUT THE WRITTEN CONSENT OF THE APPROPRIATE AUTHORITY AND THE ENGINEER.
17. WATER SOFTENER SHALL NOT BE CONNECTED TO THE SEPTIC TANK.
18. CONTRACTOR SHALL REPORT TO THE ENGINEER ANY ELEVATION DIFFERENCES GREATER THAN 4 FEET BETWEEN THE HIGHEST AND LOWEST TRENCH IN THE FIELD. THIS SHOULD BE CHECKED PRIOR TO INSTALLING THE LATERALS AND MANIFOLD.
19. THIS DISPOSAL SYSTEM HAS BEEN DESIGNED TO OPERATE PROPERLY AT SPECIFICATIONS NOTED IN THESE PLANS. ALTERATIONS TO THE SYSTEM BY THE OWNER, INCLUDING BUT NOT LIMITED TO LANDSCAPING, DRAINAGE, BUILDING AND/OR WATER USAGE, MAY CAUSE PREMATURE FAILURE AND SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PLUMBING FIXTURES ARE CONNECTED TO THE DESIGNATED SEPTIC TANK(S). LOW FLOW TOILETS (1.6 GAL), SHOWERHEADS AND FAUCETS SHALL BE USED IN THE STRUCTURES.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY AND PROTECTION OF THE PUBLIC FROM INJURY DURING CONSTRUCTION. THE OWNER SHALL BE RESPONSIBLE FOR THE PREVENTION OF PERSONAL INJURY TO ANYONE ON OR NEAR THE DISPOSAL SYSTEM.
22. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL TANKS HAVE ADEQUATE STRENGTH AND INTEGRITY TO PERFORM SATISFACTORILY AS SHOWN ON THESE PLANS.
23. THE WASTEWATER FLOW TO THE SEPTIC SYSTEM SHALL NOT EXCEED THE DESIGN FLOW SHOWN ON THIS PLAN.

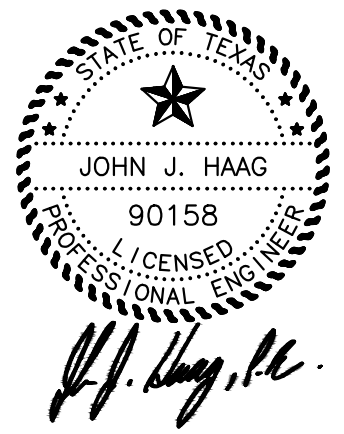
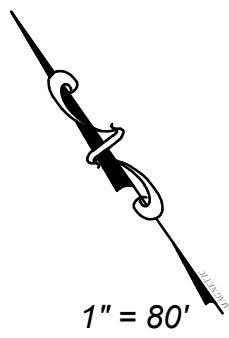


**PLAN REVISION NOTE:**

THIS PLAN WAS REVISED ON 11/06/2020 TO REFLECT, AS MUCH AS POSSIBLE, AS-BUILT INFORMATION PROVIDED TO HAAG ENGINEERING CONSULTANTS. HAAG ENGINEERING CONSULTANTS HAS NOT FIELD VERIFIED ANY SEPTIC SYSTEM AS-BUILT CONDITIONS FOR THIS PROJECT AND DOES NOT ATTEST TO ITS VALIDITY AND/OR ACCURACY.

APPROX. LOCATION OF MIN. 100' PRIVATE WELL S/B TO PROP. OSSF (ADJ. PROPERTY WELL). THE OSSF INSTALLER SHALL FIELD VERIFY ALL EXISTING PRIVATE WELL LOCATIONS AND ADJUST PROP. SPRAY HEAD LOCATIONS IF NECESSARY TO ENSURE MIN. 100' SEP. DISTANCE FROM ANY PRIVATE WELLS TO SPRAY DISPOSAL LIMITS.

- ADD'L. NOTES:**
1. SPRINKLER OPERATION SHALL BE TIMED TO DOSE BETWEEN MIDNIGHT AND 5:00 a.m.
  2. A BATTERY BACKUP TO THE TIMER CLOCK SHALL BE INSTALLED TO ENSURE DOSING ONLY OCCURS BETWEEN MIDNIGHT AND 5:00 a.m.
  3. DESIGN DAILY WASTEWATER FLOW = 240 GPD (WATER SAVING DEVICES WERE ASSUMED FOR SEPTIC SYSTEM DESIGN).
  4. TOPOGRAPHIC DATA SOURCE: FEMA 2011 DATA
  5. THE OSSF INSTALLER SHALL FIELD VERIFY ALL PROPERTY LINE LOCATIONS THAT THIS DESIGN REFERENCES PRIOR TO ANY OSSF INSTALLATIONS.



11/06/20

**OSSF LAYOUT**  
**LOT 8, BLK. 3 SPANISH OAK DR.**  
**GARDEN OAKS, UNIT 3**  
**GARDEN RIDGE, TEXAS**

NOTES: OSSF IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.

THIS SITE IS NOT WITHIN A FEMA 100 YEAR FLOODPLAIN.

SITE EVALUATION BY JOHN J. HAAG, P.E. ON 08/11/2020

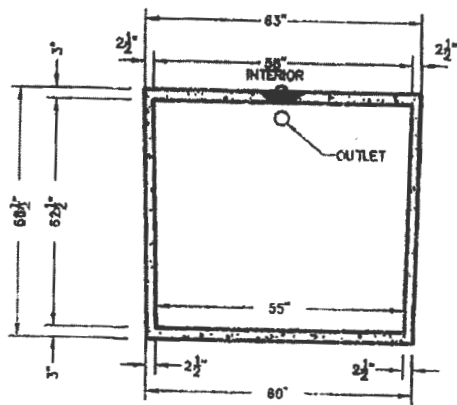
DRAWN BY: JJH  
 CHECKED BY: JJH  
 DATE: 11/06/20  
 JOB NO. MCB20002

**SHEET 1 OF 1**

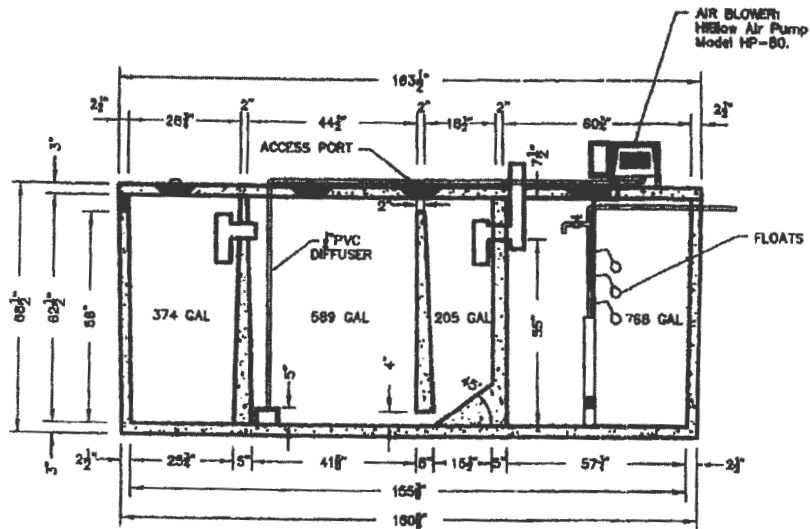
**HAAG ENGINEERING CONSULTANTS**

15831 SECRET TRAILS  
 SAN ANTONIO, TEXAS 78247  
 FIRM: F-5789  
 © COPYRIGHT 2020 HAAG ENGINEERING CONSULTANTS; ALL RIGHTS RESERVED

TEL: (210) 705-4268



SECTION B-B

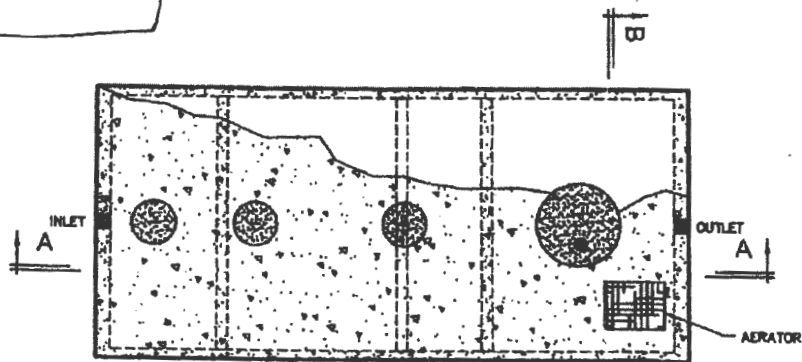


SECTION A-A

Pump float settings for min. 240 gpd design flow and min. 80 gal reserve:  
 Pump off position: 12" above tank bott. (approx. 166 gal)  
 Pump on position: 30" above tank bott. (approx. 419 gal)  
 Alarm on position: 36" above tank bott. (approx. 502 gal)  
 Approx. 265 gal. reserve at 55" above tank bott.



*J. Haag, P.E.*  
 01/29/19



PLAN VIEW

COUNTY ENGINEER  
 AUG 27 2020  
 RECEIVED

OWNER	DATE
DESIGNER	DATE
CHECKER	DATE
APPROVER	DATE

MODEL SA600-768PT  
 SEWER TREATMENT SYSTEM

SOLAR AEROBIC  
 6754 HWY 90 EAST  
 LAKE CHARLES, LA 70615  
 PHONE: (337) 439-0680

TREATMENT PLANT
SA-3
JULY 2020



# C1 SERIES

## CISTERN PUMPS

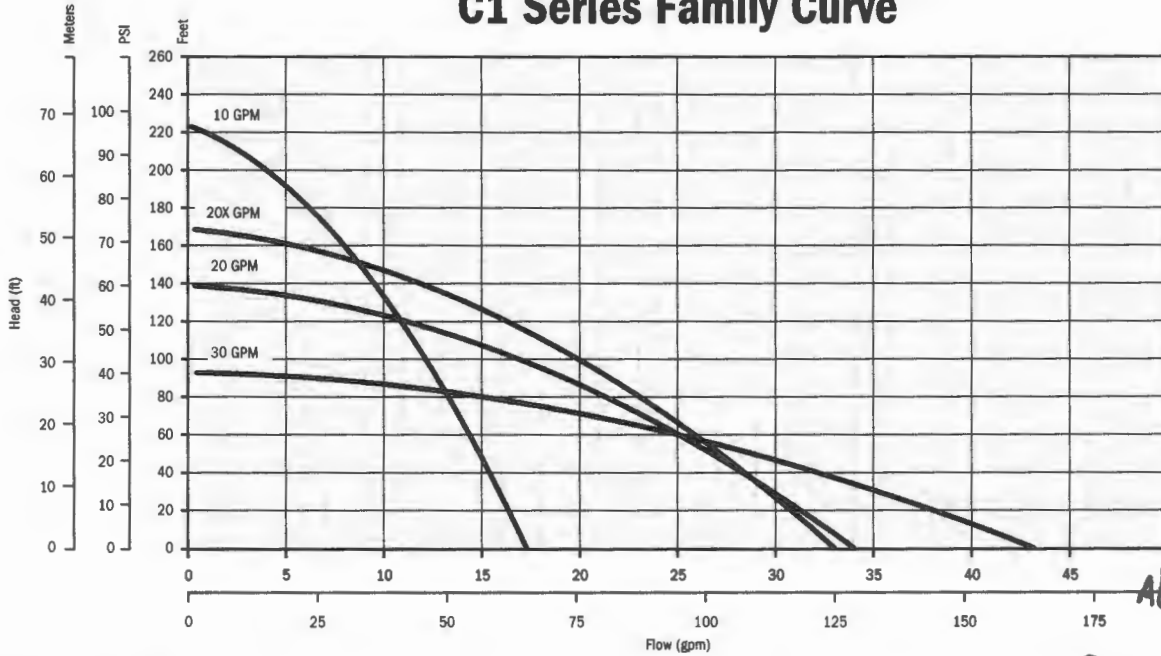
Franklin Electric's C1 Series Cistern Pumps are designed to provide reliable, long-term performance in a wide range of applications. The C1 Series Cistern Pumps are available in a variety of configurations to meet your specific needs. The C1 Series Cistern Pumps are designed to provide reliable, long-term performance in a wide range of applications. The C1 Series Cistern Pumps are available in a variety of configurations to meet your specific needs.



[franklinwater.com](http://franklinwater.com)



# C1 Series Family Curve



RECEIVED  
GPM  
AUG 27 2020

COUNTY ENGINEER

## 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.

**Aerobic With Surface Disposal**

by Felix I. Bernal, P.E. (c) 2002 - 2013

SITE EVALUATION PERFORMED ON:

11-Aug-20

by

John J. Haag, P.E.



**VOID**

Date: 08/27/20  
 APPLICANT: Peter Wesp  
 MAILING ADDRESS:  
 CITY, ST, ZIP  
 CONTRACTOR  
 SITE ADDRESS: 22620 Spanish Oak Dr.  
 CITY, ST, ZIP Garden Ridge, Tx. 78266  
 LEGAL DESCRIPTION: Lot 8, Blk. 3, Garden Oaks, Unit 3  
 WATER SOURCE: Public

RECEIVED  
 AUG 27 2020  
 COUNTY ENGINEER

SOIL TYPE 3 AT SLOPE OF <15% BEDROOMS 3 Sq. Ft. 1487  
 Normally Required 300 GPD 225 GPD

WATER SAVING DEVICES? Y  
 APPLICATION RATE = 0.064 GALLONS PER SQ. FT. PER DAY  
 USAGE FLOW = 240 GALLONS PER DAY WHICH IS 80% OF 300 GPD  
 SEPTIC TANK VOLUME = 750 GALLONS TWO COMPARTMENT TANK REQUIRED  
 RESERVE CAPACITY = 80 (8 HOURS USAGE AFTER HIGH LEVEL ALARM)

AREA REQUIRED = 3.75 ABSORPTION AREA OR 0.09 ACRES  
**WITHOUT WATER SAVING DEVICES** 4.68 ABSORPTION AREA OR 0.11 ACRES  
 Use a 600 GPD Treatment Plant Model SA600 by Solar Aerobic

Nozzle # 3 30 PSI (K-Rain ProPlus Low Angle Sprinkler Nozzle)  
 3 30 PSI WITH A 29 FOOT RADIUS AND 3.0 GPM/ SPRINKLER WITH A TOTAL OF 4.5 GPM FOR THE SYSTEM

**AREA COVERED BY PROPOSED SPRINKLER HEADS**

LINEAR FEET OF DISTRIBUTION = 80.0 FT. OF 1 INCH SCH-40 PURPLE PIPE 150 C (HAZEN-WILLIAMS)  
 SPACE BETWEEN SPRINKLER HEADS = 70 FT

WITH ANGLE OF DISTRIBUTION = 360 2 SPRINKLERS FOR A DOSE TIME OF 53 MINUTES  
 AREA PER SPRINKLER = 2,642 sf

**OF ABSORPTION AREA**

SPRINKLERS	LENGTH OF PIPE	Dist. Angle	Flow GPM	Q GPM	Hf ft of head	Area
2	40 FT	180	1.5	4.500	0.63	1321.0
1	40 FT	360	3	3.000	0.30	2642.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
0			0	0.000	0.00	0.0
SUM=	80 feet of pipe		4.500		0.92 ft of head	3963.0 sf

**VOID**

(Note: 0.4335= 62.424/144 for water at 39.2°F)

fittings factor	1.20
	1.11 ft of head
Hf for Dist Line	1.2542325 ft of head
30.00 psi divided by 0.4335 =	69.20 ft of head
elevation difference	6.00 ft of head
head required for sprinkling	77.57 ft of head
pressure required for sprinkling	33.63 psi



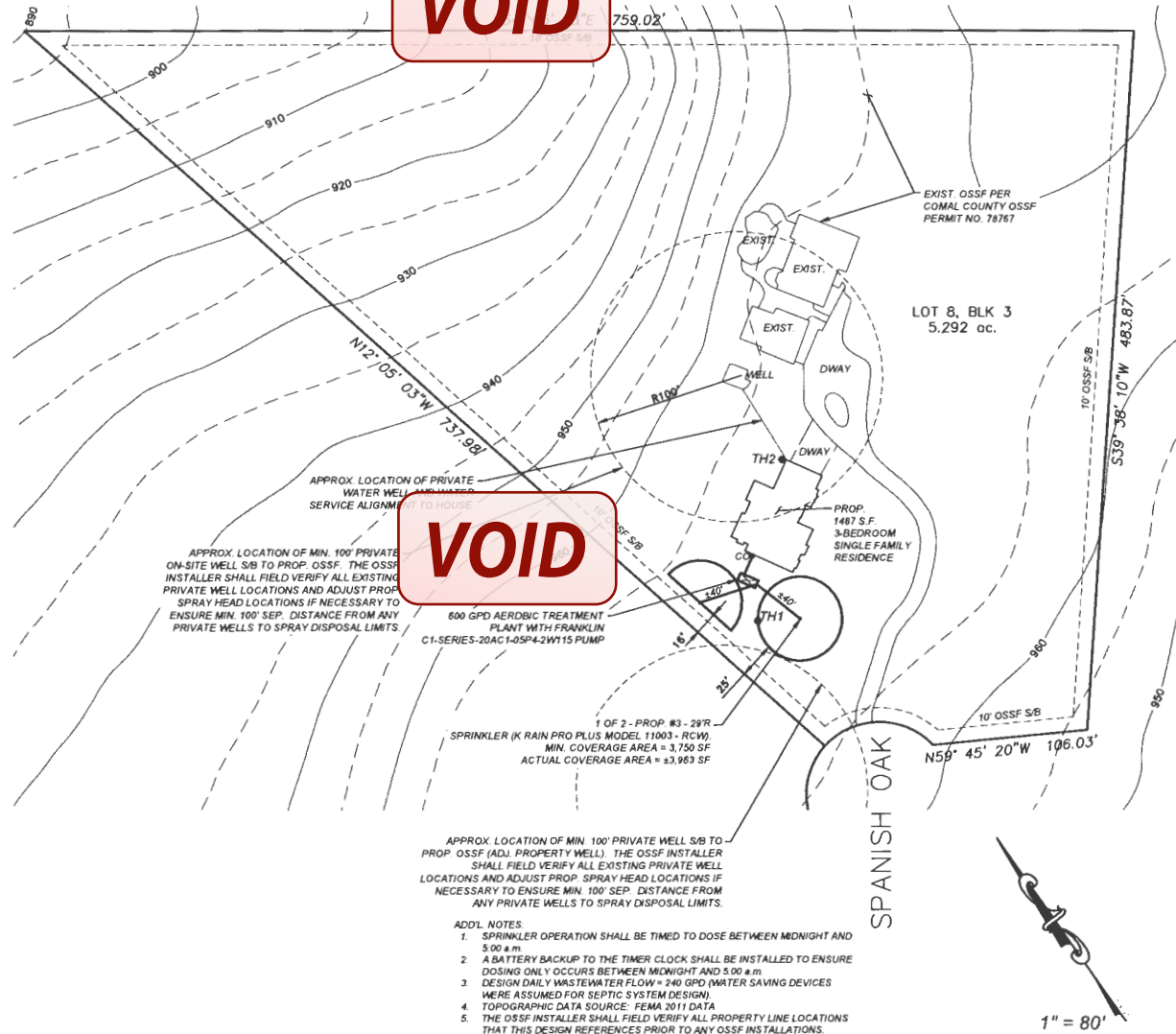
**VOID**

**VOID**

**VOID**

**GENERAL NOTES:**

1. NO VEHICULAR TRAFFIC IS ALLOWED ON ANY PORTION OF THE DISPOSAL SYSTEM UNLESS THE DESIGN SPECIFIES OTHERWISE.
2. PIPE ALIGNMENT TO THE DISPOSAL BEDS MAY BE ALTERED AS REQUIRED. ANY CHANGE FROM THE PLANS MUST BE APPROVED BY THE ENGINEER AND THE APPROPRIATE GOVERNMENTAL AGENCIES.
3. CONTRACTOR SHALL PROTECT TREES WHICH ARE NOT IN THE EXCAVATED CONSTRUCTION AREAS. CONTRACTOR SHALL MINIMIZE ROOT DAMAGE AND REASONABLY ADHERE TO THE DESIGN.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING A MINIMUM OF 1/4" PER FOOT OF FALL FROM THE BUILDING TO THE SEPTIC TANK.
5. NO AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED OVER THE DISPOSAL AREAS. ANY WATERING IN THESE AREAS SHALL BE DONE BY HAND AND ONLY WHEN REQUIRED TO MAINTAIN GRASS COVER.
6. ALL CONSTRUCTION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ANY APPLICABLE LOCAL BUILDING AND SAFETY CODES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE CONSTRUCTION OF THIS SYSTEM.
8. SPRAY APPLICATION AREAS SHALL BE COVERED WITH PERENNIAL GRASSES TO TAKE ADVANTAGE OF TRANSPIRATION. IF GRASSES ARE USED WHICH HAVE DORMANT PERIODS, STEPS SHOULD BE TAKEN TO PROVIDE SOME TYPE OF VEGETATION ON THE BEDS DURING THESE PERIODS.
9. **RECOMMENDED COVERAGE**
  - 8.1.1. BERMUDA: 1 LB/1000 S.F.
  - 8.1.2. RYE: 10 LB/1000 S.F.
  - 8.1.3. OR ST. AUGUSTINE SOD.
10. SPRAY APPLICATION AREAS MUST BE MOVED AT REGULAR INTERVALS. FAILURE TO PROPERLY MAINTAIN VEGETATIVE COVER MAY RESULT IN SYSTEM FAILURE AND SHALL BE THE RESPONSIBILITY OF THE OWNER.
11. ALL PIPES SHALL BE CHECKED 40 P.P.C. OR APPROVED EQUAL UNLESS NOTICED OTHERWISE. ALL JOINTS SHALL BE CLEANED WITH THE APPROPRIATE SOLVENT AND GLUED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
12. ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY DISPOSAL SYSTEM OR SEWERAGE PIPE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF WATER LINES LESS THAN 10 FEET FROM THE DISPOSAL AREA.
13. HIGH WATER ALARM SHALL BE LOCATED IN A NOTICEABLE LOCATION. THE ALARM SHALL BE A VISUAL AND AUDIBLE ALARM AND WIRED ON A SEPARATE CIRCUIT FROM THE PUMPS. ALL EXTERIOR CONTROLS AND CONNECTIONS SHALL BE ENCLOSED IN A WEATHER-PROOF HOUSING. ELECTRICAL CONSTRUCTION SHALL COMPLY WITH ALL LOCAL ELECTRICAL AND BUILDING CODES.
14. NO EXCAVATION IS PERMITTED NEAR THE DISPOSAL AREAS THAT WILL RESULT IN THE NONCOMPLIANCE OF APPLICABLE SETBACKS STATED IN THE RULES AND REGULATIONS OF THE APPROPRIATE AUTHORITY.
15. ONLY GOOD QUALITY SANDY LOAM SHALL BE APPLIED OVER THE DISPOSAL AREAS. CLAY LOAM IS UNACCEPTABLE AND WILL CAUSE SYSTEM FAILURE. SANDY LOAM SHALL BE DEFINED AS SHOWN IN TABLE VI (USDA SOIL TEXTURAL CLASSIFICATIONS) OF THE RULES AND REGULATIONS OF THE TCEQ. THE INSTALLER IS RESPONSIBLE FOR VERIFYING THE QUALITY OF EACH LOAD OF LOAM PLACED ON THE SYSTEM.
16. STORM WATER (RAINFALL RUNOFF) SHOULD NOT BE ALLOWED TO FLOW OVER THE DISPOSAL FIELDS OR THE TANKS. DIVERSION BERMS, SWALES AND/OR RAIN GUTTERS SHOULD BE INSTALLED AS NECESSARY TO PREVENT SUCH RUNOFF.
17. THE CONTRACTOR IS RESPONSIBLE FOR STAKING AND VERIFYING THE GRADES PRIOR TO EXCAVATION. ANY DISCREPANCIES OF MORE THAN 8 INCHES SHALL BE REPORTED TO THE ENGINEER PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOT DEVIATE FROM THESE PLANS WITHOUT THE WRITTEN CONSENT OF THE APPROPRIATE AUTHORITY AND THE ENGINEER.
18. WATER SOFTENER SHALL NOT BE CONNECTED TO THE SEPTIC TANK.
19. CONTRACTOR SHALL REPORT TO THE ENGINEER ANY ELEVATION DIFFERENCES GREATER THAN 4 FEET BETWEEN THE HIGHEST AND LOWEST TRENCH IN THE FIELD. THIS SHOULD BE CHECKED PRIOR TO INSTALLING THE LATERALS AND MANIFOLD.
20. THIS DISPOSAL SYSTEM HAS BEEN DESIGNED TO OPERATE PROPERLY AT THE SPECIFICATIONS NOTED IN THESE PLANS. ALTERATIONS TO THE SYSTEM BY THE OWNER, INCLUDING BUT NOT LIMITED TO LANDSCAPING, DRAINAGE, BUILDING AND/OR WATER USAGE, MAY CAUSE PREMATURE FAILURE AND SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PLUMBING FIXTURES ARE CONNECTED TO THE DESIGNATED SEPTIC TANK(S). LOW-FLOW TOILETS (1.6 GAL), SHOWERHEADS AND FAUCETS SHALL BE USED IN THE STRUCTURES.
22. CONTRACTOR OR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY AND PROTECTION OF THE PUBLIC FROM INJURY DURING CONSTRUCTION. THE OWNER SHALL BE RESPONSIBLE FOR THE PREVENTION OF PERSONAL INJURY TO ANYONE ON OR NEAR THE DISPOSAL SYSTEM.
23. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL TANKS HAVE ADEQUATE STRENGTH AND INTEGRITY TO PERFORM SATISFACTORILY AS SHOWN ON THESE PLANS.
24. THE WASTEWATER FLOW TO THE SEPTIC SYSTEM SHALL NOT EXCEED THE DESIGN FLOW SHOWN ON THIS PLAN.



1" = 80'

**OSSF LAYOUT**  
**LOT 8, BLK. 3 SPANISH OAK DR.**  
**GARDEN OAKS, UNIT 3**  
**GARDEN RIDGE, TEXAS**

NOTES: OSSF IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.  
 THIS SITE IS IN THE 100-YEAR FLOODPLAIN.  
 SITE EVALUATION PERFORMED ON 08/11/2020

DRAWN BY: JJH  
 CHECKED BY: JJH  
 DATE: 08/27/20  
 JOB NO. MCB20002  
 SHEET 1 OF 2

**HAAG ENGINEERING CONSULTANTS**  
 15831 SECRET TRAILS  
 SAN ANTONIO, TEXAS 78247  
 FIRM: F-5789  
 ©COPYRIGHT 2020 HAAG ENGINEERING CONSULTANTS; ALL RIGHTS RESERVED

TEL: (210) 705-4268

RECEIVED  
 AUG 27 2020  
 ENGINEER



superior title to said property, and subrogating the said Mortgagee unto all the rights and remedies of Grantor in the premises by virtue of said Note and liens; the indebtedness evidenced by said Note being due and payable in equal monthly installments, both principal and interest being due and payable at the office of **PHH MORTGAGE SERVICES;**

HAS GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY unto the said Grantee, the following described property, to-wit:

Being 5.292 acres of land out of **Lot 8, Block 3, GARDEN OAKS UNIT - 3,** according to the map and plat recorded in **Volume 6, page 37,** Map and Plat Records, Comal County, Texas. Said 5.292 acres of land being more particularly described by metes and bounds in Exhibit "A", attached hereto and made a part hereof.

This conveyance is made subject to, all and singular, the restrictions, easements and covenants, if any, applicable to and enforceable against the above described property as reflected by the records of the County Clerk of Comal County, Texas.

Taxes for the current year have been prorated and are assumed by Grantee.

It is expressly agreed and stipulated that a vendor's lien is retained in favor of the payee in said Note against the above described property, premises and improvements, until said Note, and all interest thereon, is fully paid according to the face and tenor, effect and reading thereof, when this deed shall become absolute.

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, Grantee's heirs and assigns forever.

Grantor does hereby bind Grantor, Grantor's heirs, executors, administrators and successors to warrant and forever defend, all and singular, the said premises unto the said

RECEIVED  
AUG 27 2020  
COUNTY ENGINEER



Grantee, Grantee's heirs, executors, administrators, successors and assigns, against every person whomsoever claiming or to claim the same or any part thereof.

EXECUTED on this the 29th day of August, 2001  
EFFECTIVE the 31st day of August, 2001.



GWEN BUTLER  
NOTARY PUBLIC, STATE OF OHIO  
My Commission Expires  
Sept. 19, 2005

Danny L. Sauder  
DANNY L. SAUDER  
Pamela J. Sauder  
PAMELA J. SAUDER

STATE OF TEXAS §  
COUNTY OF §

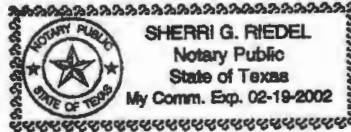
This instrument was acknowledged before me on this the 31st day of August, 2001, by DANNY L. SAUDER and wife, PAMELA J. SAUDER

Sherril G. Riedel  
Notary Public in and for the State of Texas

GRANTEE'S MAILING ADDRESS:

22620 Spanish Oak Drive  
Garden Ridge, TX 75046

1405.DEEDS



RECEIVED  
AUG 27 2020  
COUNTY ENGINEER

STATE OF OHIO  
COUNTY OF Ohio

This instrument was acknowledged before me on this the 29th day of August, 2001, by PAMELA J. SAUDER.

Gwen Butler  
NOTARY PUBLIC, STATE OF OHIO

EXHIBIT "A"

BEING all that certain tract or parcel of land containing 5.292 acres of land out of the Nicholaus Zuercher Survey No. 630, Abstract 690,

Comal County, Texas and being out of Lot 8, Block 3, GARDEN OAKS SUBDIVISION, UNIT III, according to the map and plat records of Comal County, Texas and being the same land, as surveyed and found on the ground, as that certain called 5.293 acre parcel described in Volume 706, Page 651 of the Official Public Records of Comal County, Texas; Said 5.292 acre parcel being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch iron rod found for the most northerly corner of Lot 8 and for the most northerly corner and POINT OF BEGINNING of this parcel;

THENCE with the common line of Lots 8 and 9, South 54 deg. 05' 34" East, a distance of 760.05 feet (called South 54 deg. 04' 15" East, 760.00 feet) to a 1/2 inch iron rod found for the most easterly corner of this parcel;

THENCE across Lot 9, South 39 deg. 41' 45" West, a distance of 484.64 feet (called South 39 deg. 37' 33" West, 484.28 feet) to a 3/8 inch iron rod found on the northerly right-of-way line of Spanish Oak for the most southerly corner of this parcel;

THENCE with said right-of-way line, North 59 deg. 30' 36" West, a distance of 105.97 feet (called North 59 deg. 45' 46" West, 106.21 feet) to a 3/8 inch iron rod found for the beginning of a curve to the left;

THENCE with the arc of said curve having a radius of 50.00 feet, a delta angle of 95 deg. 19' 25", a chord bearing of North 54 deg. 23' 07" West and a chord distance of 73.92 feet, a distance of 83.19 feet (called 93.30 feet) to a 1/2 inch iron rod found for the most southerly corner of this parcel;

THENCE leaving said right-of-way line and with the common line of Lots 7 and 8, North 12 deg. 05' 03" West (basis of bearings), a distance of 738.36 feet (called North 12 deg. 05' 03" West, 738.73 feet) to the POINT OF BEGINNING and containing 5.292 acres of land, more or less.

RECEIVED

AUG 27 2020

COUNTY ENGINEER

Doc# 200106028297  
# Pages 4  
Date: 8/31/01 2:37:19 PM  
Filed & Recorded in  
Official Records of  
COMAL COUNTY  
JOY STREATER  
COUNTY CLERK  
Fees \$15.00

Doc# 200106028297

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded

items	Date Received	Initials

Permit Number

Instructions:

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

OSSF Permit

- Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.
- Required Permit Fee
- 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

RECEIVED  
AUG 27 2020  
COUNTY ENGINEER

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

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

___ COMPLETE APPLICATION	
Check No. _____	Receipt No. _____

___ INCOMPLETE APPLICATION
(Missing Items Circled, Application Refused)