

RICHLAND CHAMBERS AREA CONSTRUCTION

**P. O. BOX 222
STREETMAN, TX 75859
(903) 389-8189**

To Whom it may Concern:

On 4/23/14 a septic inspection was conducted at 1217 The Shores Dr., Corsicana, TX 75109, Lot 516, Phase VII, The Shores. The review included procuring a copy of the design and permit documentation for review and reviewing the physical plant on site. Permit review indicated it was permitted for Larry Schorn on 6/4/08. Review of the design documentation indicated an Aqua Aire AA500-4075 with 1984 linear feet of Geoflow P.C.

The system was designed by Phillip Marla RS 2604 on 4/8/08. The authorization to construct was issued by Stephen Harrison TRWD OS 21243 on 6/04/08. The system was installed by Perry Richter OSII 3111 and inspected by TRWD, Stephen Harrison OS 21243 on 06/2/08 with final approval issued the same day.

Review of the system revealed one issue. The access lids for the trash and aeration chamber were below ground level and could allow surface run-off into the tank. Risers should be added to circumvent this.

The review also concluded virtually no sludge or scum accumulation. The effluent distribution rate was consistent with the flow rate on the Geoflow P.C.

In addition to the deficiencies noted homeowners should be aware of some basic steps that enhance the longevity of the system and minimize chances for failure. Hydraulic overload (excess water flow) can lead to failure. This is caused by leaking or hanging toilets, leaking faucets, too many residents or guests for extended periods in the structure. Water filters, ice machines and other appliances that flush or defrost into septic also contribute to failure.

TARRANT REGIONAL WATER DISTRICT

140 FM 416, Streetman, Texas 75859
903-389-3928

**AUTHORIZATION TO CONSTRUCT
AN
ON-SITE SEWAGE FACILITY**

Application Number RC08-038

Property Owner Larry & Linda Schorn

Mailing Address 1203 Travis Cir.
Irving, TX 75038

Property Location Lot: 516 The Shores
1217 The Shores Dr.
Corsicana, TX 75109

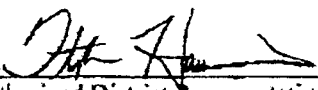
Navarro County, Texas

This serves to notify all persons that an on-site sewerage facility application, related technical data, and the appropriate fee have been received by the Tarrant Regional Water District (District) from the property owner. The application has been reviewed for technical and administrative consideration against the standards set forth by the District. Approval is hereby granted for the construction as shown on the submitted plans.

Any modifications to submitted plans require approval by the Tarrant Regional Water District prior to installation.

You or your installer must contact the District office at 903-389-3928 between 7:30 A.M. to 8:30 A.M. to arrange for the required facility inspection. Calls after 8:30 A.M. may result in inspection being delayed until the next working day. The authorization to construct is valid for one year from the date of issue of an application. If a final inspection has not been performed within one year of issue, a new application and fee will be required.

Comments: The following design is based upon the minimum standards set forth by the Texas Commission on Environmental Quality and is based on a maximum daily flow of 360 gallons, the use of water saving devices is required.


Authorized District Representative OS-21243

6-4-08
Date

TARRANT REGIONAL WATER DISTRICT

140 FM 416, Streetman, Texas 75859
903-389-3928

**NOTICE OF APPROVAL
OF
ON-SITE SEWAGE FACILITY**

PERMIT # RC08-038

Property Owner: Larry & Linda Schorn

Mailing Address: 1203 Travis Circle
Irving, TX 75038

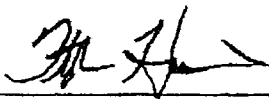
Property Location: Lot: 516 The Shores
1217 The Shores Drive
Corsicana, TX 75109

Navarro County, Texas

This serves to notify all persons that the on-site sewage facility owned by the above has satisfied design, construction, and installation requirements of the Texas Commission on Environmental Quality (TCEQ) and the District Waste Control Order. This Tarrant Regional Water District On-Site Sewage Facility Permit is issued for the operation of the above identified on-site sewage facility.

ANY MODIFICATIONS TO THE SYSTEM STRUCTURE, OR ITS COMPONENTS, MAY REQUIRE A NEW PERMIT. The owner must notify this office of the aforementioned changes.

ADDITIONAL INFORMATION:



Authorized District Representative OS-21243

6-25-08

Date

TARRANT REGIONAL WATER DISTRICT
140 FM 416 Streetman, TX 75859
903-389-3928

ON-SITE SEWAGE FACILITY PROGRAM

AEROBIC TREATMENT & DRIP EMITTER INSPECTION REPORT

PROPERTY OWNER: <u>Larry & Linda Schorn</u>	PERMIT NUMBER: <u>RC08-038</u>
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I. SEWER		Y	N
TWO-WAY CLEANOUT PROPERLY INSTALLED:		✓	
PROPER TYPE PIPE FROM STRUCTURE TO DISPOSAL SYSTEM:		✓	
SLOPE OF SEWER 1/8 INCH PER FOOT MINIMUM:		✓	
II. PRETREATMENT		Y	N
IS PRETREATMENT REQUIRED?		✓	
TANK PROPERLY PLUMBED?		✓	
TANK SIZE REQUIRED: 400 Gal.	TANK SIZE INSTALLED: <u>400 Gal</u>	**	**
TANK TYPE: <u>Concrete</u>	MANUFACTURER: <u>Ecological Tanks</u>	**	**
III. AEROBIC TREATMENT UNIT		Y	N
UNIT SIZE REQUIRED 500 GPD	UNIT SIZE INSTALLED <u>500</u> GPD	**	**
MANUFACTURER: <u>Ecological Tanks</u>		**	**
MODEL NUMBER: <u>AA500-4075</u>	SERIAL NUMBER: <u>AA025887</u>	**	**
TYPE OF AERATOR <u>Aqua Aire</u>	SERIAL NUMBER: <u>AA025887</u>	**	**
HIGH WATER ALARM INSTALLED?	(check type) ☒ LIGHT ☐ SOUND	✓	
FILTER INSTALLED (if required)?		✓	
ALARM WIRING SEPARATE FROM PUMP?		✓	
CHLORINATOR PROPERLY INSTALLED?		✓	
CHLORINE TABLETS IN PLACE?		N/A	
MAINTENANCE INSPECTION TAG IN PLACE		✓	
IV. PUMP/TANK			
TANK SIZE REQUIRED: 750 Gal.		TANK SIZE INSTALLED: <u>750 Gal</u>	
TYPE: <u>Concrete</u>		MANUFACTURER: <u>Ecological Tanks</u>	
TYPE AND SIZE OF PUMP: <u>Starite 1/2 hp (00190583)</u>			
CORRECT TIMER INSTALLED: <u>Yes</u>		RUN TIME: <u>3.5 min</u> OFF TIME: <u>2 min</u>	
V. APPLICATION AREA (SUB-SURFACE ONLY)			
AREA REQUIRED: 3900 sqft.		AREA INSTALLED: <u>3968 ft²</u>	
TYPE LINE INSTALLED: <u>Geo-Flow Wasteflow "PC"</u>			
LENGTH OF DRIP EMITTER LINE INSTALLED: <u>1984'</u>			
LENGTH OF LOW PRESSURE DOSING LINE INSTALLED: <u>N/A</u>			
SPACING OF LINE INSTALLED: <u>2'</u>			
DEPTH OF LINE INSTALLED: <u>8"-12"</u>			

COMMENTS: Pressure set at 25 PSI

INSPECTED BY: [Signature] OS-21243

DATE: 6-25-08



BUILDING PERMIT

COUNTY OF NAVARRO, TEXAS

No 10159

JOB ADDRESS			1217 The Shores Dr. Cor. 75109		
LOT NO.	BLK.	SUBDIVISION	516 The Shores Ph. 7 214-384-1611		
OWNER	Larry & Linda Shorn 1203 Travis Cr. Irving 75038		PHONE		
CONTRACTOR	Wesley Betik		PHONE		
ELECTRICIAN	Waldrip Electric		PHONE		
PLUMBER	Larcia		PHONE		
MECHANICAL	Waldrip		PHONE		
USE OF BUILDING residential					
CLASS OF WORK: ☒ NEW ☐ ADDITION ☐ ALTERATION ☐ REPAIR ☐ DEMOLISH					
DESCRIBE WORK: build new home - week-end					
TYPE OF CONSTRUCTION		SO. FT.	NO. OF STORES		
Stucco/stone		3652'	2		
NO. OF BEDROOMS	NO. OF BATHS	FOUNDATION			
4	4 1/2	Concrete			
ROOF	SPRINKLERS REQUIRED	PARKING SPACES			
metal					
NO. OF DWELLING UNITS	ZONING	OCCUPANCY GROUP			
1	SF	SF			
NOTICE THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN 6 MONTHS, OR IF CONSTRUCTION OR WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 1 YEAR AT ANY TIME AFTER WORK IS COMMENCED. THE ISSUANCE OF THIS PERMIT SHOULD NOT BE CONSTRUED BY ANY PERSON AS AN APPROVAL OF BUILDING OR CONSTRUCTION TECHNIQUES, METHODS, OR MATERIALS.			I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF LAW AND ORDINANCES GOVERNING THIS TYPE OF WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OF LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.		
SIGNATURE			Wesley L Betik		
VALUATION \$			PERMIT FEE \$		
485,000.00			489.45		
APPROVED FOR RECORD BY:			DATE		
Walt Steeklen			11-27-07		
SPECIAL CONDITIONS:					
THIS BECOMES YOUR PERMIT WHEN APPROVED FOR ISSUANCE					

April 8, 2008

Tarrant Regional Water District Designated Representative
Chris Robinson

Regarding: Variance request on the 320' elevation property line buffer distance
from the drip field at the Schorn residence at The Shore Drive Corsicana,
Texas. (The Shores lot 516 / Phase 7)

The variance is being requested because no other alternative system can be installed on the lot without a variance request. The subject site is located on approximately .5+ acre lake front tract. A drip disposal system is being proposed for the waste water system for the property. The home has 4 bedrooms and 3,652 square feet of living area.

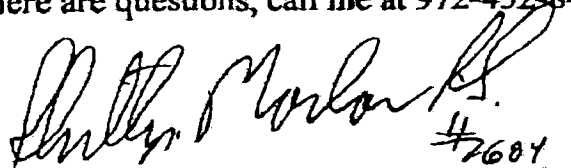
Due to the size of the home and the very restrictive and limited area for the disposal field in the front and side yards, part of the drip field will be installed below the platted 320' elevation. All drip lines will be above the 318' elevation, which is closer to the retaining wall and lake. The other property lines will have the required 5' buffer distance.

Every available area is being used first, to install the disposal field and obtain the required buffer distances from drip lines. The street side of the home is very limited for drip line due to some trees, the water line and water main, and a sidewalk.

The closest drip line would be 53' away from the edge of the lake at the retaining wall.

The over all situation listed above would not adversely affect the environment, neighboring property, or water quality.

If there are questions, call me at 972-452-8487.


Phillip Marlar R.S.

#2684
SE#9819
4/8/08



OSSF SOIL & SITE EVALUATION

Page 1 (Soil & Site Evaluation)

Date Performed: 4/8/08

Property Owner: Schorn Residence

Site Location: Shore Drive Corsicana, Texas 75109

Proposed Excavation Depth: 12"

REQUIREMENTS:

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil borings or dug pits must be shown on the site drawing. For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed disposal field excavation depth. For surface disposal, the surface horizon must be evaluated. Describe each soil horizon and identify any restrictive features on this form. Indicate depths where features appear.

SOIL BORING

NUMBER: 1

Depth (feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles / Water Table)	Restrictive Horizon	Observations
1 foot	IV	N/A	No	Yes	Clay
2 foot	IV	N/A	No	Yes	Clay
3 foot	IV	N/A	No	Yes	Clay
4 foot	IV	N/A	No	Yes	Clay
5 foot	IV	N/A	No	Yes	Clay

SOIL BORING

NUMBER: 2

Depth (feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles / Water Table)	Restrictive Horizon	Observations
1 foot	IV	N/A	No	Yes	Clay
2 foot	IV	N/A	No	Yes	Clay
3 foot	IV	N/A	No	Yes	Clay
4 foot	IV	N/A	No	Yes	Clay
5 foot	IV	N/A	No	Yes	Clay

FEATURES OF SITE AREA

Presence of 100 year flood zone

Presence of Upper Water Shed

Presence of adjacent ponds, streams, water impoundments

Existing or Proposed water well in nearby area (within 150 feet)

Ground Slope

6 to 7 %

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

(Signature of person performing evaluation)

(Date)

Registration Number and Type

☒ Yes No
☐ Yes ☒ No
☒ Yes No
☐ Yes ☒ No



1. Blocking of the flow of water in the flood way is prohibited.

2. The existing creeks or drainage channels traversing along or across the addition will remain as open channels and will be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across said lots.

3. Navarra County will not be responsible for the maintenance and operation of said drainage ways or for the control of erosion.

4. Navarra County will not be responsible for any damage, personal injury or loss of life or property occasioned by flooding or flooding conditions.

REVISIONS
OPEN SP
AND LOS
PARAGR.

2.) A 20' UT

3.) AREA IN
AND 1407
LOCATE

4.) A 10' U

5.) A DRAIN
ALL CRI
SAND PL
TRIBUTY

6.) THE G/
PROVI
TEXA:
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8.) WATT

9.) SEM
WITH
REI

10.) THE
THE

11.) PC
IN

12.) R

13.) F
F

RICHLAND-CHAMBERS RESERVOIR

REVISED
320' ESMT.
SEE DETAIL "L"

Exhibit "B", Easement
Third Parcel Call 18.31 Ac.
Harry Donald Nicholson
to
Tarrant County Water Control and Improvement District Number One
9/7/824

Exhibit "A", Fee Conveyance
Second Parcel Call 212.49 Ac.
Harry Donald Nicholson
to
Tarrant County Water Control and Improvement District Number One
9/7/824

REVISED
320' ESMT.
SEE DETAIL "M"

REVISED
320' ESMT.
SEE DETAIL "N"

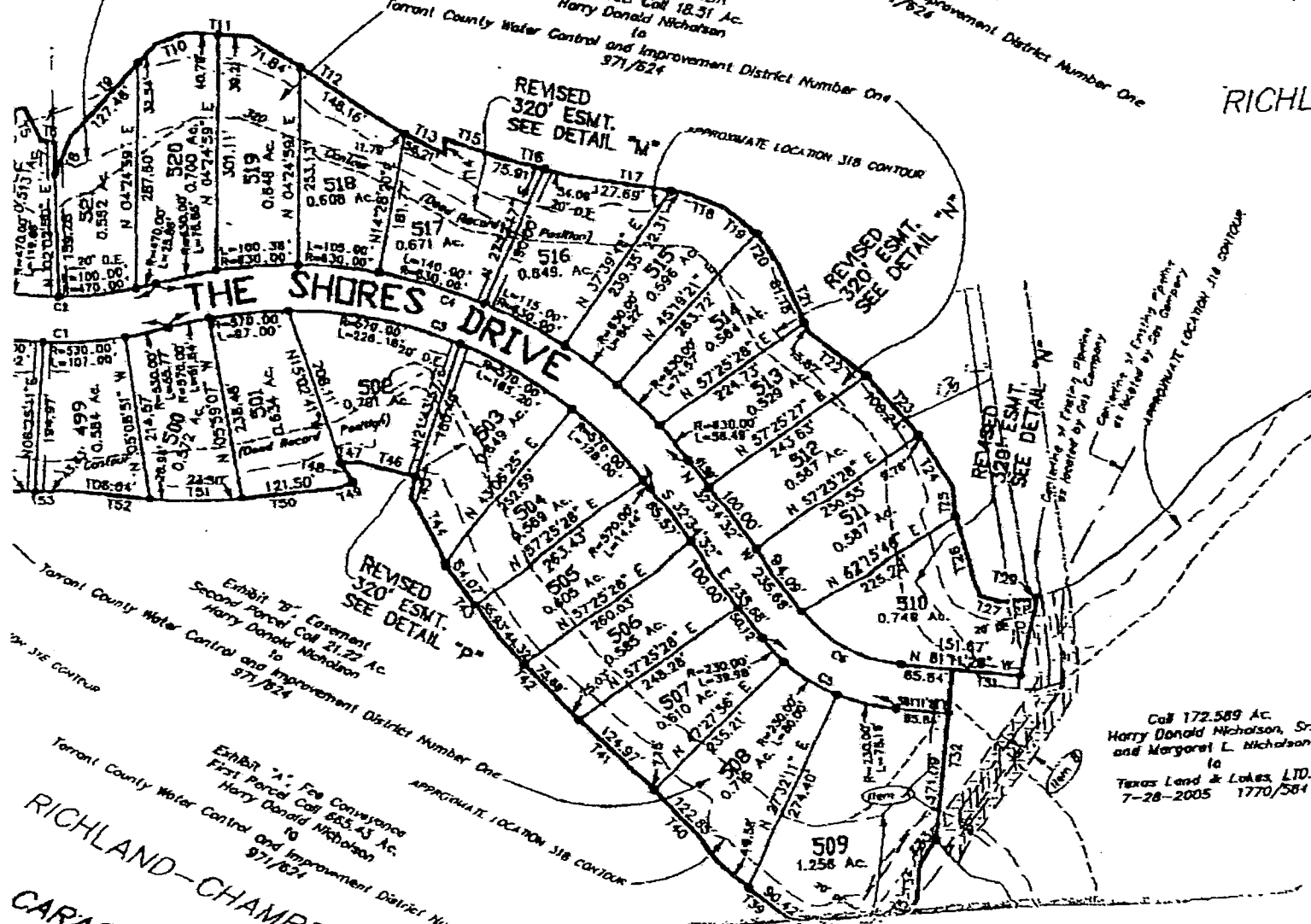
REVISED
320' ESMT.
SEE DETAIL "P"

REVISED
320' ESMT.
SEE DETAIL "Q"

Exhibit "B", Easement
Second Parcel Call 21.22 Ac.
Harry Donald Nicholson
to
Tarrant County Water Control and Improvement District Number One
9/7/824

Exhibit "A", Fee Conveyance
First Parcel Call 655.45 Ac.
Harry Donald Nicholson
to
Tarrant County Water Control and Improvement District Number One
9/7/824

Call 172.589 Ac.
Harry Donald Nicholson, Sr.
and Margaret L. Nicholson
to
Texas Land & Lakes, LTD.
7-28-2005 1770/584



Date Performed: 4, 8, 08

Site Location: The Shores Phase 2/Lot 516 ☒ Subsurface Disposal ☐ Surface Disposal

Original
Schematic of Lot or Tract

Show:

Compass North, adjacent streets, property lines, property dimensions, location of buildings, easements, swimming pools, water lines, and any other structures where known, all to scale.

Location of existing or proposed water wells within 150 feet of the property.

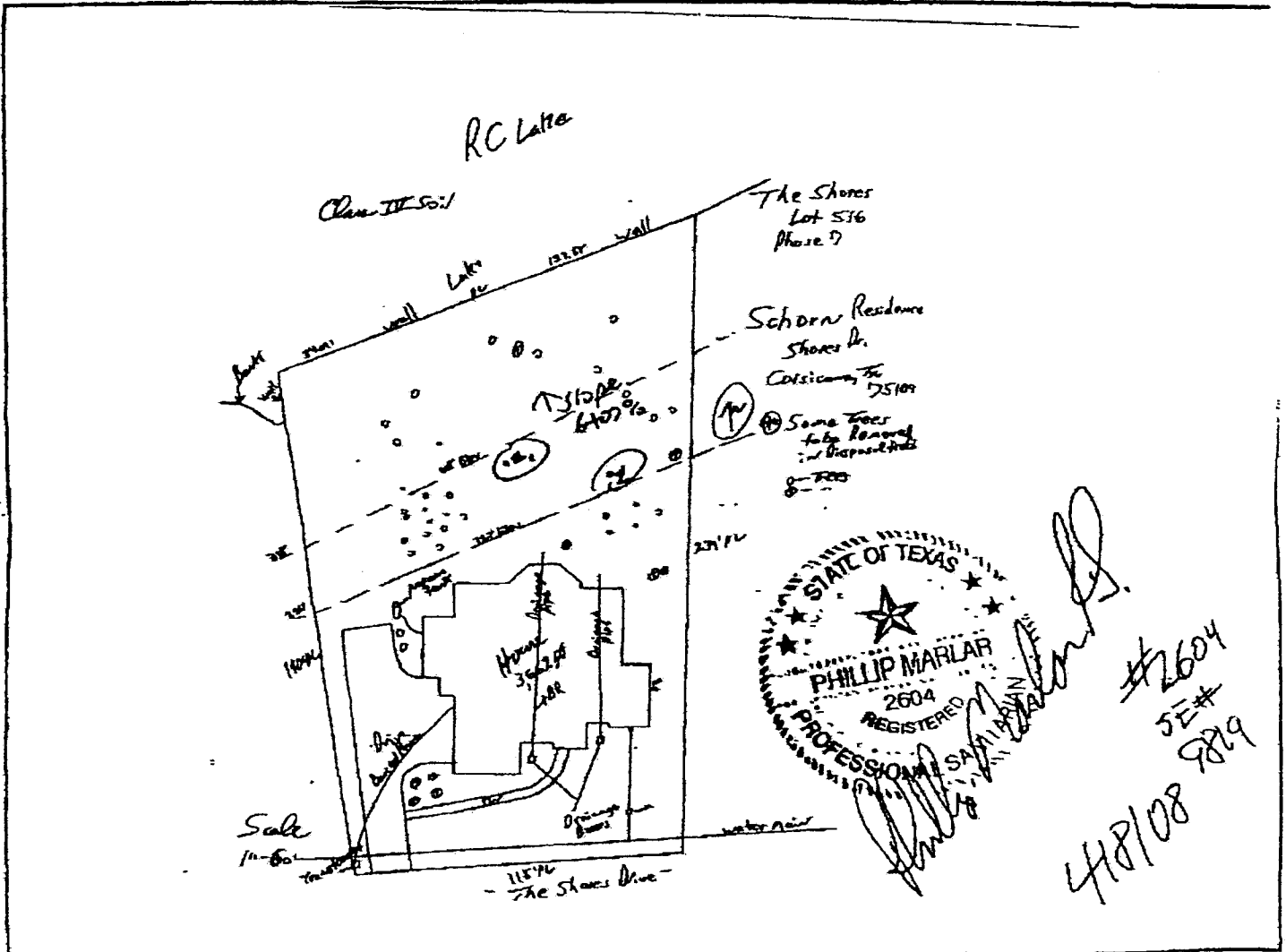
Indicate slope or provide contour lines from the structure to the farthest location of the proposed disposal field.

Location of soil boring or excavation pits (show location with respect to a known reference point).

Location of natural, constructed, or proposed drainage ways (ditches, streams, ponds, lakes, rivers, etc.), water impoundment areas, cut or fill bank, sharp slopes and breaks.

Lot Size: _____ or Acreage: .5 AC ±

SITE DRAWING



Plan IV Soil Drip Emitters Design

Schorn Residence
Shores Dr.

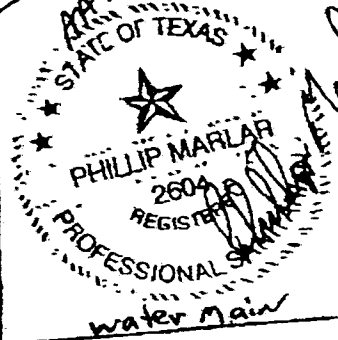
Corsicana ^{R.} 75109

④ Some trees
to be removed
in Disposal Area

0 - trees
⑤ - "

1,950' of Geo-Flo
"PC" Drip Line on
2' centers for
3900 ft

Agua Viva
PPA 500-409510



4/8/08
55#
2604

Scale

11-304

- 115' PL
the Shores Ave -

**PHILLIP MARLAR R.S.
REGISTERED PROFESSIONAL SANITARIAN
TEXAS REGISTRATION # 2604
PHONE (972) 452-8487
P.O. Box 274 SCURRY, TX. 75158**

Subsurface (Drip) Irrigation
On - Site Sewage Facility System Design

April 8, 2008

Schorn Residence
The Shores Drive
Corsicana, Texas 75109

Site Location: The Shores Est. Phase 7 ; lot 516: Installing new drip emitter system.

DESIGN PARAMETERS

Soil Evaluation - Class IV soil
Number of Bedrooms - 4 Square feet living area - 3,652 s.f. (5 bedroom equivalent)
Gallons per day - 360 gpd (Water Saving Fixtures)
Application rate - .1 gal/sq ft / day (Class IV Soil application rate)
Required Disposal Area - 3,600 Sq. Ft.
Designed Disposal Area - 3,900 Sq. Ft.
1- Zone Zone 1-3,900 sq. ft. (1,950' of Geo-Flow "PC" line)
 Zone 1- 975 Emitters at .53gal/ hr - 8.61 gpm Appl. Rate - .0927 gal/sq ft / day

Drip irrigation standards for class IV soil, require an application rate of .1 gal / sq ft / day. For a 4 bedroom home (< 4,500 sq ft living area)(water saving fixtures), area based on 360 gpd divided by .1 gal/sq ft/day (application rate) = 3,600 sq.ft.

1,950' of emitter line with 975 emitters at 4 sq ft of area per emitter = 3,900 sq ft field area.

SYSTEM PARAMETERS

Pre-treatment tank - 400 gallon tank
Aeration Tank - Aqua Aire 500-4075, C (500 gpd) (Required dial-up alarm Aqua Safe model 214 (PC-3BRAPC))
Chlorinator - stackable - free flowing tablets (Optional)
Pump tank - 750 gallon pump tank
Pump - 1/2 H.P. Submersible
Supply/Manifold - 1" PVC SCH 40 / Return line - 1" PVC SCH 40
Geo-Flow "PC" Pressure Compensating Drip Emitter Tubing
Emitters placed on 2' centers in lateral field / all lines looped
Filter - located in pump tank, automatic backwash (Spin filter - 100 Micron Mesh -operates at 20 psi)
Pressure set for 20 to 50 PSI
Vacuum breakers - on highest elevations on supply & return lines
Ball Valve on return line used to continually backflush drip field to pump tank chamber
Dosing Volume - 30.13 gallons (Approx. 12 doses per day)
Timer used on Pump to dose field - Pump run time per dosing approx. 3.5 min. every 2 hrs.

SOIL ANALYSIS

Class IV Soil



Phillip Marlar #2604
4/8/08
584
984

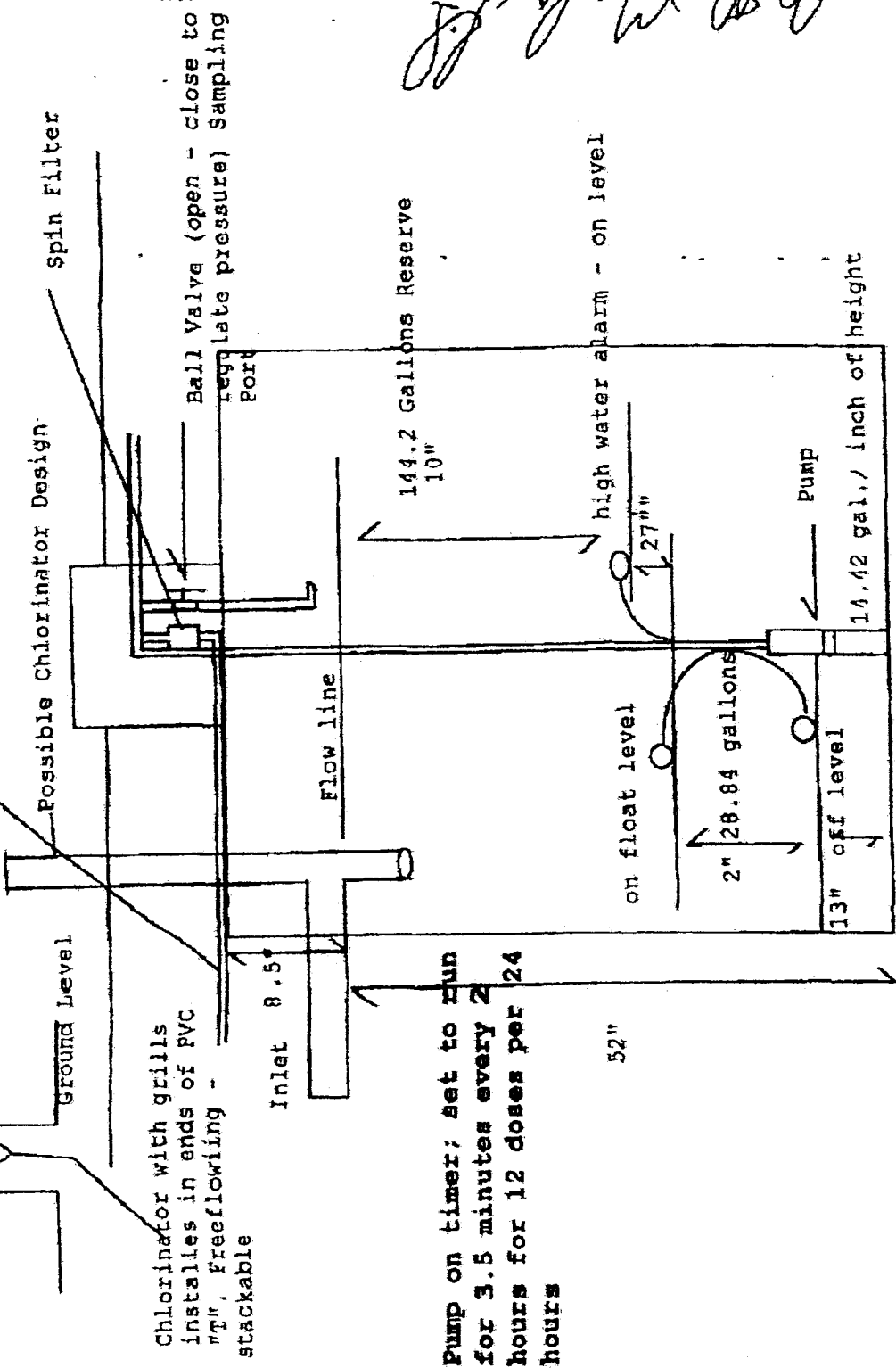
Treatment Tank

Pump Tank

Ground Level

Backwash line off spin filter to pretreatment tank

750 Gallon Aqua Aire 4075, C pump chamber



Pump on timer; set to run for 3.5 minutes every 2 hours for 12 doses per 24 hours



4/8/08

55# 9819

#2604

Phillip Marlar

Pump Time 3.5 minutes for 30.13 gallons at 8.61 gpm at 15 to 55 psi.

Total Head 82.85 Ft at 8.61 gpm for 1" Sch 40 PVC piping @ 30 psi.

1/2 HP Submersible @ 8.61 gpm will deliver 140+ Ft total head.