

TARRANT REGIONAL WATER DISTRICT

140 FM 416, Streetman, Texas 75859

903-389-3928

Fax # 903-389-7587

TRWD USE ONLY

RC110399

APPLICATION NO.

5086

RECEIPT NO.

11-17-03

DATE

\$200.00

AMOUNT

APPLICATION FOR ON-SITE SEWAGE FACILITY

RC

TRWD RESERVOIR

NAVARRO

COUNTY OF INSTALLATION

- 1. PROPERTY OWNER'S NAME: WOOD (LAST) JAMES (FIRST) M (MIDDLE)
- 2. PERMANENT MAILING ADDRESS: 411 Arrowhead Point Kerens Tx (STREET/PO BOX) (CITY/STATE) 75144 (ZIP)
- 3. TELEPHONE NO. DURING DAY: (972) 345-0650
- 4. SITE ADDRESS: Same (Currently Lot # 60) (STREET) (CITY/STATE) (ZIP)
- 5. PROPERTY DESCRIPTION: LOT NO. 60 BLOCK --- SEC --- SIZE --- SQ.FT.  
SUBDIVISION: Sweetwater Ranch Phase II Acreage 1.6 Survey ---
- 6. SOURCE OF WATER:  Private Well  Public Water Supply Chatfield (NAME OF SUPPLIER)
- 7. SINGLE FAMILY RESIDENCE: No. of Bedrooms 3 Living Area (sq. ft.) 4,500  
DESIGNED MAXIMUM DAILY WATER CONSUMPTION (gpd): 360
- 8. COMMERCIAL/INSTITUTIONAL (including multi-family residences) TYPE: N/A  
NO. OF EMPLOYEES/OCCUPANTS/UNITS: N/A DAYS OCCUPIED PER WEEK: N/A  
DESIGNED MAXIMUM DAILY WATER CONSUMPTION (gpd): N/A
- 9. IS AN ORGANIZED SEWAGE COLLECTION WITHIN 300 FEET?  Yes  No
- 10. DESIGNER: Phillip MALLAN LICENSE NO.: 2604  
PHONE NO.: (214) 507-9521
- 11. INSTALLER: JIMMY RASH REGISTRATION NO.: 05523  
PHONE NO.: (903) 872-5520

I certify that the above statements are true and correct to the best of my knowledge. Authorization is hereby given to the Tarrant Regional Water District to enter upon the above described private property for the purpose of lot evaluation and inspection of on-site sewerage facilities. I understand that the approval of this application constitutes authorization for construction of the on-site sewerage facility and that a permit to operate the facility will be granted following successful inspection of the installed system which indicates that the system was installed in compliance with TCEQ's On-Site Sewage Facility Rules (OSSF) and the District's Waste Control Order.

James M Wood  
(SIGNATURE OF OWNER)

11-10-03  
(DATE)

Charlotte Smith  
(SIGNATURE OF AUTHORIZED DISTRICT REPRESENTATIVE)

11-17-03  
(DATE)

*TARRANT REGIONAL WATER DISTRICT*

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

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

Application Number      RC 110399  
Property Owner            James M. Wood  
Mailing Address            411 Arrowhead Point  
   Kerens, Texas 75144  
Property Location        (Same)  
   Lot 60 Sweetwater Ranch  
  
   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-8058

\_\_\_\_\_  
Date

11-26-03

**TARRANT REGIONAL WATER DISTRICT**

140 FM 416, Streetman, Texas 75859

903-389-3928

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

PERMIT # RC 110399

Property Owner James M. Wood

Mailing Address 411 Arrowhead Point  
Kerens, Texas 75144

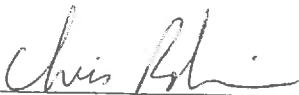
Property Location Lot 60 Sweetwater Ranch #  
(same address)  
Navarro County, Tx.

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:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



OS-8058

Authorized District Representative

12-16-03

Date

**TARRANT REGIONAL WATER DISTRICT**

140 FM 416, Streetman, Texas 75859

903-389-3928

**ON-SITE SEWAGE FACILITY PROGRAM**

**AEROBIC TREATMENT & DRIP EMITTER INSPECTION REPORT**

<b>PROPERTY OWNER:</b> James M. Wood	<b>PERMIT NUMBER:</b> RC 110399
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<b>I. SEWER</b>	Y	N
CLEANOUTS PROPERLY INSTALLED:	<input checked="" type="checkbox"/>	
PROPER TYPE PIPE FROM STRUCTURE TO DISPOSAL SYSTEM:	<input checked="" type="checkbox"/>	
SLOPE OF SEWER 1/8 INCH PER FOOT MINIMUM:	<input checked="" type="checkbox"/>	
<b>II. PRETREATMENT</b>	Y	N
IS PRETREATMENT REQUIRED?	<input checked="" type="checkbox"/>	
TANK PROPERLY PLUMBED?	<input checked="" type="checkbox"/>	
TANK SIZE REQUIRED: 478 GAL      TANK SIZE INSTALLED: 478 GAL	**	**
TANK TYPE: concrete      MANUFACTURER: Norweco-Singular	**	**
<b>III. AEROBIC TREATMENT UNIT</b>	Y	N
UNIT SIZE REQUIRED 500 GPD      UNIT SIZE INSTALLED 500 GPD	**	**
MANUFACTURER: Norweco-Singular	**	**
MODEL NUMBER: 960-SS-500      SERIAL NUMBER: 702205	**	**
TYPE OF AERATOR: Norweco-Singular      SERIAL NUMBER: "	**	**
HIGH WATER ALARM INSTALLED? (check type) <input checked="" type="checkbox"/> LIGHT <input checked="" type="checkbox"/> SOUND	<input checked="" type="checkbox"/>	
FILTER INSTALLED (if required)? yes	<input checked="" type="checkbox"/>	
ALARM WIRING SEPARATE FROM PUMP?	<input checked="" type="checkbox"/>	
CHLORINATOR PROPERLY INSTALLED?	<input checked="" type="checkbox"/>	
CHLORINE TABLETS IN PLACE?		N/A
<b>IV. PUMP TANK</b>		
TANK SIZE REQUIRED: 750 GAL      TANK SIZE INSTALLED: 750 GAL		
TYPE: concrete      MANUFACTURER: Norweco		
TYPE AND SIZE OF PUMP: 1/2 HP Singular		
<b>V. APPLICATION AREA (SUB-SURFACE ONLY)</b>		
AREA REQUIRED: 3600 ft <sup>2</sup> AREA INSTALLED: 3752 ft <sup>2</sup>		
TYPE LINE INSTALLED: reparation PC Bialine		
LENGTH OF DRIP EMITTER LINE INSTALLED: 1876		
LENGTH OF LOW PRESSURE DOSING LINE INSTALLED: N/A		
SPACING OF LINE INSTALLED: 18 in		
DEPTH OF LINE INSTALLED: 12 in		

COMMENTS: 30 PSI      Auto dialer connected

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INSPECTED BY: C. Robinson 09-8058      DATE: 12-16-03

THE COUNTY OF NAVARRO

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 NAVARRO County, Texas.

#### I

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on (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 owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the 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:

This OSSF must be covered by a continuous maintenance contract. All maintenance on this OSSF must be performed by an approved maintenance company, and a signed maintenance contract must be submitted to TARRANT REGIONAL WATER DISTRICT within 30 days after the property has been transferred.

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 TARRANT REGIONAL WATER DISTRICT

WITNESS BY HAND(S) ON THIS 12<sup>TH</sup> DAY OF NOVEMBER, 2003

JAMES M. WOOD  
KAREN G. WOOD  
(Owner(s) signatures(s))

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 12<sup>TH</sup> DAY OF NOVEMBER  
2003.



Betty M. Wofford



# BUILDING PERMIT

COUNTY OF NAVARRO, TEXAS

No 0718

JOB ADDRESS			APPLICANT ADDRESS
LOT NO. 60	BLK.	SUBDIVISION Sweetwater Ranch Ph. II 972-307-3602	
OWNER James Wood	ADDRESS 6705 Sandtrap Ct. Plano, TX	PHONE 45093	
CONTRACTOR Hal Prater	ADDRESS	PHONE	
ELECTRICAL sub.	ADDRESS	PHONE	
PLUMBING sub.	ADDRESS	PHONE	
MECHANICAL sub.	ADDRESS	PHONE	
USE OF BUILDING residential			
CLASS OF WORK: <input checked="" type="checkbox"/> NEW <input type="checkbox"/> ADDITION <input type="checkbox"/> ALTERATION <input type="checkbox"/> REPAIR <input type="checkbox"/> DEMOLISH			
DESCRIBE WORK: build new home			
TYPE OF CONST. brick	SQ. FT. 3896'	NO. OF STORIES 1	
NO. OF ROOMS 3 BR	NO. OF BATHS 5	FOUNDATION concrete	
ROOF comp.	SPRINKLERS REQUIRED	PARKING SPACES	
NO. OF DWELLING UNITS 1	ZONING SF	OCCUPANCY GROUP SF	
<p align="center"><b>NOTICE</b></p> <p>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.</p> <p>THE ISSUANCE OF THIS PERMIT SHOULD NOT BE CONSTRUED BY ANY PERSON AS AN APPROVAL OF BUILDING OR CONSTRUCTION TECHNIQUES, METHODS, OR MATERIALS.</p>		<p>I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF LAWS 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 OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.</p> <p>SIGNATURE: <i>James M. Wood</i></p> <p>VALUATION: \$ 214,280.00 PERMIT FEE \$ 522.11</p> <p>APPROVED FOR ISSUANCE BY: <i>Trish Lennor</i> DATE: 12-2-02</p>	
SPECIAL CONDITIONS:			
THIS BECOMES YOUR PERMIT WHEN APPROVED FOR ISSUANCE			

**Phillip Marlar R.S.**  
**Registered Professional Sanitarian # 2604**  
**Certified Site Evaluator OS 6352**  
**P.O. Box 274 Scurry, Texas 75158**  
**Phone (972) 452-8487**

## Soil Evaluation Report

Date: November 5, 2003

Property Owner: James Wood  
 Current Address:

Property Location:  
 Address: Same as above City: Kerens  
 Location / Subdivision: Sweet Water Ranch Est.  
 Lot: 60 Block: Section: II  
 County: Navarro Additional Information: Approx. 1.46 +- Acre

### Soil Borings

	Hole # 1	Hole # 2	
Depth(Feet)			
0	0-7" clay loam III	0-6" clay loam III	
1	7-48" clay IV	6-48" clay IV	
2			
3			
4			
Soil classification	IV	IV	
Textural Class	Clay	Clay	
Presence of Mottling	No	No	
Restrictive Horizon	Yes - Clay	Yes - Clay	
Groundwater	No	No	
Flood hazard	No	No	
Upper Water Shed	No	No	
Presence of ponds/streams/wells	Lake 50' + away from drip line	Same	
Topography	2 + % slope	2 + % slope	

Vegetation Present in disposal area: Native - Grasses (No trees in disposal area)

**Soil currently supports & will support future vegetative growth.**

Site suitable for a standard subsurface conventional system: **NO**

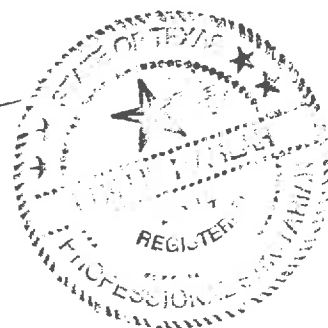
Comments/Additional Information: **See site design for test hole locations.**

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

Date: 11/5/03 Phillip Marlar R.S. # 2604

Phillip Marlar R.S. # 2604 / S.E. # 6352

SE#6352



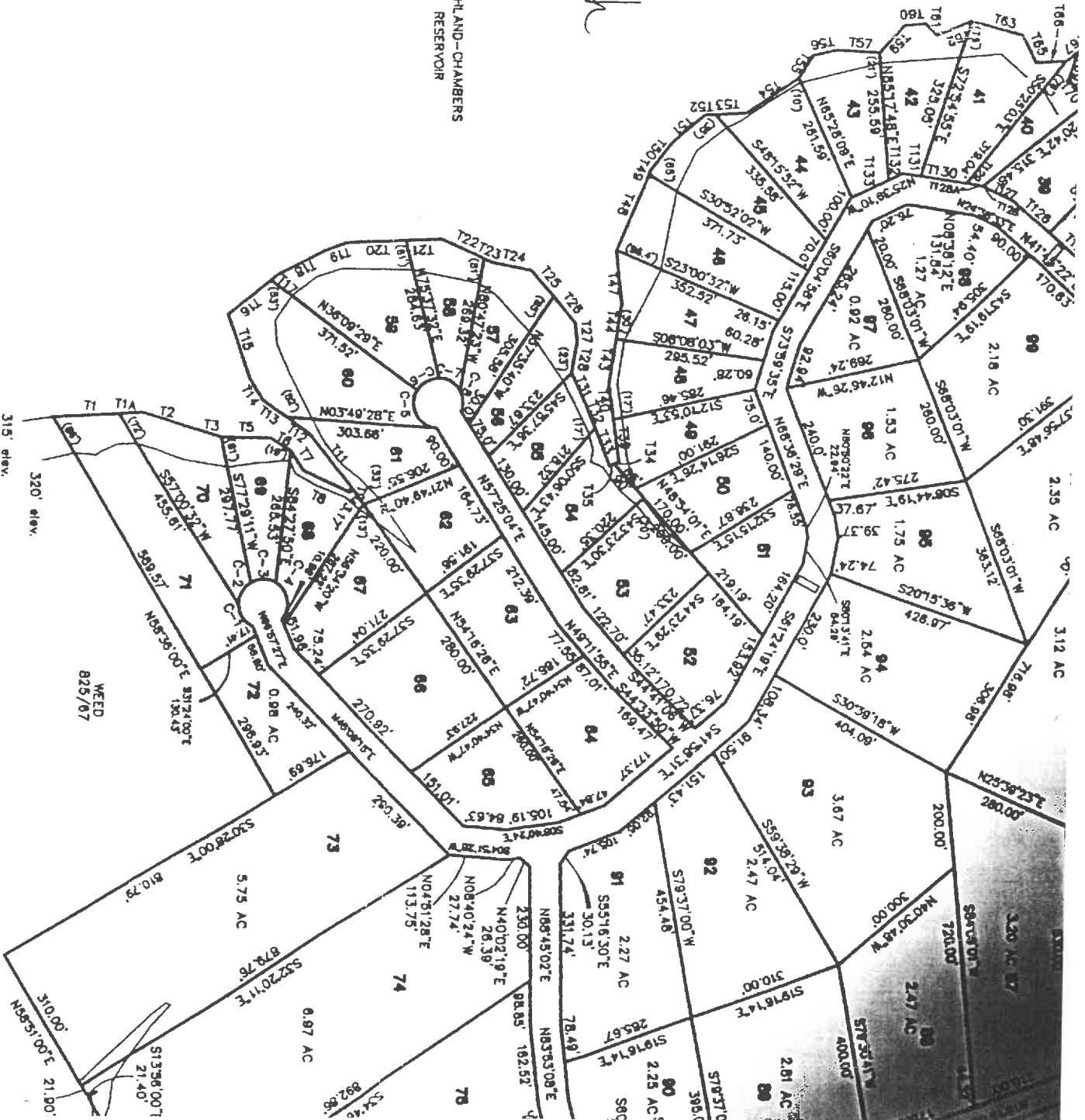


179.78'  
114.55'  
14.31'  
100.34'  
44.19'  
135.00'  
100.00'  
62.41'  
7.43'  
25.52'  
89.21'  
35.31'  
32.56'  
80.74'

# Sweetwater Ranch

## Pl. II

RICHLAND-CHAMBERS  
RESERVOIR



LESS THAN FIFTEEN (15)  
ST LINES

NOTED ON THE PRELIMINARY  
MAP AND EXPLAINED ON

RESERVED FOR PURPOSES AS  
TO ALL PUBLIC AND  
MAINTENANCE OF PAVING  
THE PROPERTY OWNER, NO  
ELEMENTS OR GROWTHS  
) UPON, OVER OR ACROSS  
HEREBY RESERVED FOR THE  
UTILITIES USING AND DESIRING  
ALL HAVE THE RIGHT TO  
BUILDINGS, FENCES, TREES,

TOTAL ACRE

**PHILLIP MARLAR R.S.**  
**REGISTERED PROFESSIONAL SANITARIAN**  
**TEXAS REGISTRATION # 2604**  
**Certified Site Evaluator OS 6352**  
**PHONE (972) 452-8487**  
**P.O. Box 274 SCURRY, TX. 75158**

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

November 5, 2003

James Wood ( Hal Prater - Builder)  
Sweet Water Ranch Est. Phase II; lot 60  
Kerens, Texas

Site Location: Installing new drip emitter system at lot 60 Sweet Water Ranch Est. II; lot 60.

**DESIGN PARAMETERS**

Soil Evaluation - Class IV Soil

Number of Bedrooms - 4 Square feet living area - 3,700 S.F. ( 5 bedroom equivalent)

Gallons per day - 360 gpd (Water Saving Fixtures)

Application rate - .1 gal/sq ft / day

Required Disposal Area - 3,600 Sq. Ft.

Designed Disposal Area - 3,636 Sq. Ft.

1- Zone Zone 1- 3,636 sq. ft. (1,818' of Netafim "PC" drip line)

Zone 1- 909 Emitters at .61gal/ hr - 9.24 gpm Appl. Rate - .096 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 ( 3,700 sq ft living area)area based on 360 gpd divided by .1 gal/sq ft/day (application rate) = 3,600 sq.Ft. 1,818' of emitter line with 909 emitters at 4 sq ft of area per emitter = 3,636 sq ft field area.

**SYSTEM PARAMETERS**

Pre-treatment tank - Norweco Singular 960-500 GPD pretreatment chamber - Approx. 478 gallons

Aeration Tank - Norweco Singular 960-500 GPD Unit (500 gpd) (Required auto-dial up alarm - Norweco model)

Chlorinator - stackable - free flowing tablets (Optional)

Pump tank - 750 gallon pump tank chamber

Pump - 1/2 H.P. Submersible

Supply/Manifold/Backwash Lines - 1" PVC SCH 40

Netafim "Bioline" .61 gph 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 regulator - set for 15 to 50 PSI

Vacuum breakers - on highest elevations

Ball Valve cracked open at pump tank - used to continuously backflush drip field to pump tank

Dosing Volume - 43.89 gallons (Approx. 8 doses per day)

Timer used on pump to dose field - Pump run time per dosing approx. 4.75 min. every 3 hrs.

**SOIL ANALYSIS**

Class IV Soil



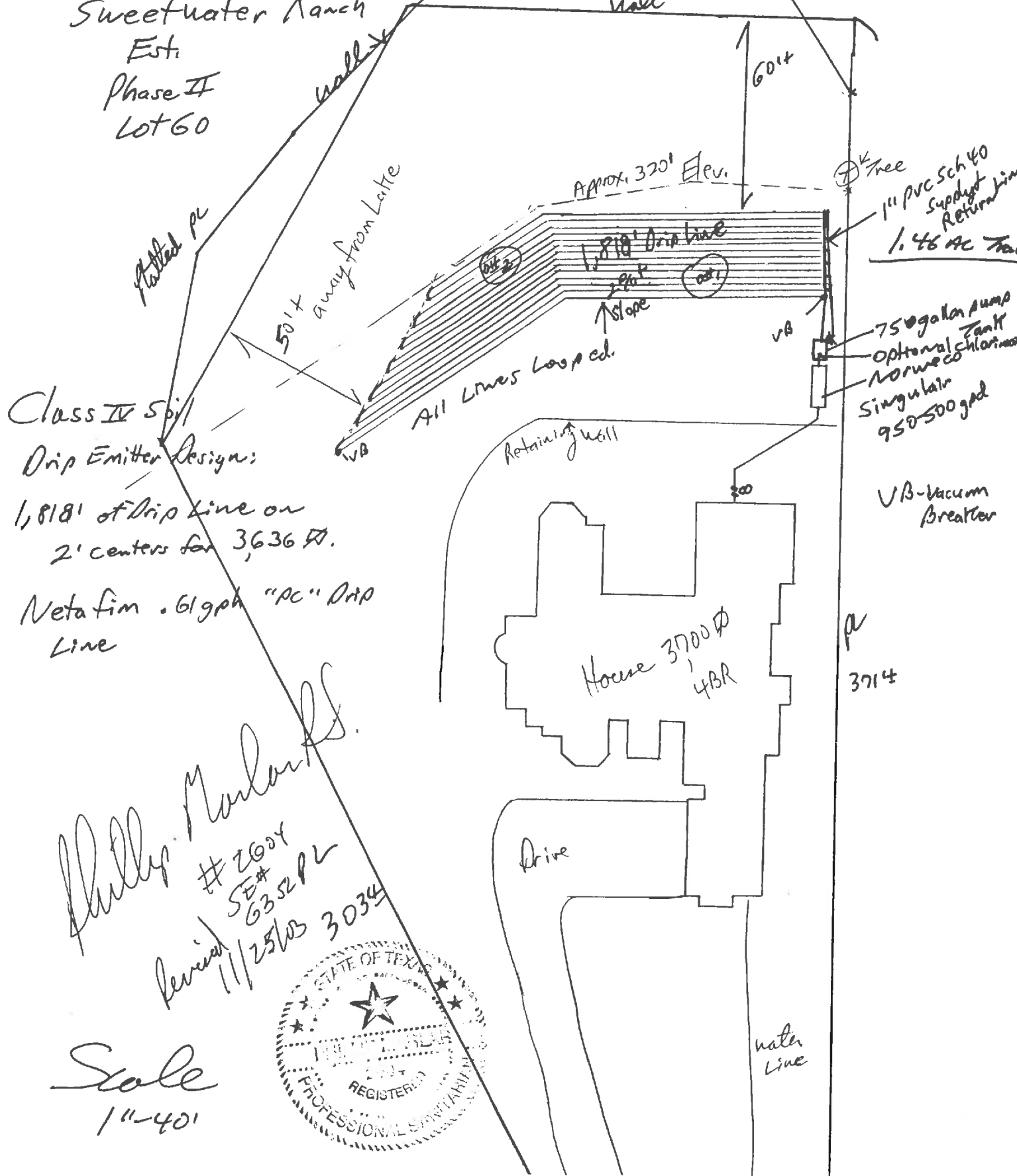
*Phillip Marlar R.S.*  
*# 2604*  
*5E#*  
*OS 6352*  
*Revised*  
*11/25/03*

Phillip Marlar R.S.  
 Registered Professional Sanitarian  
 Certified Site Evaluator OS 6352  
 P.O. Box 274 Scurry, Texas 75158  
 Phone (972) 452-8487

James Wood

Sweetwater Ranch  
 Est.  
 Phase II  
 Lot 60

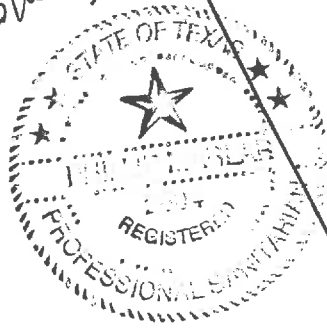
Latte

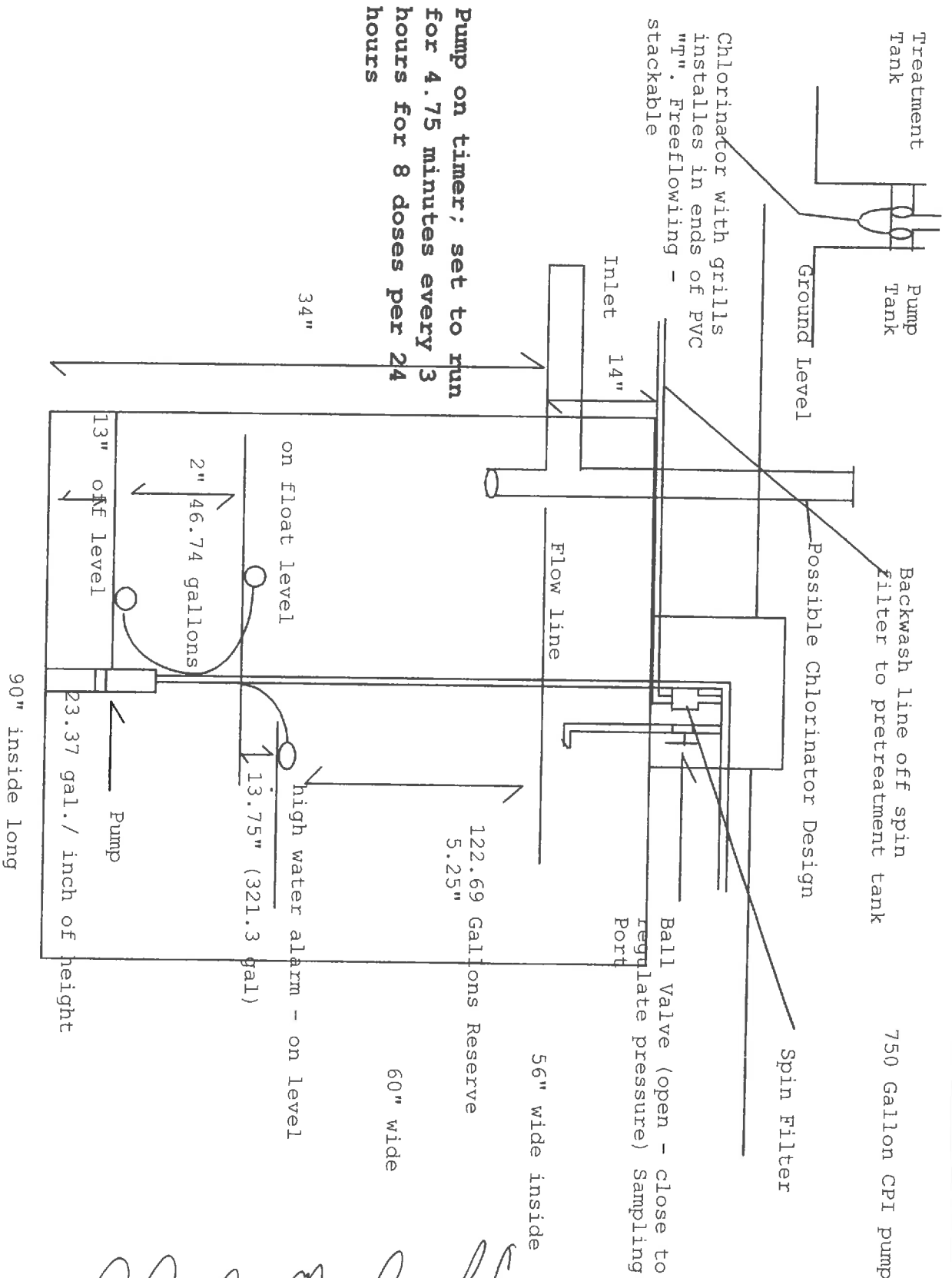


Class IV Spill  
 Drip Emitter Design:  
 1,818' of Drip Line on  
 2' centers for 3636 ft.  
 Netafim .61 gph "PC" Drip  
 Line

Phillip Marlar R.S.  
 #2604  
 SE#  
 6352 PL  
 Revised 11/25/03 3034

Scale  
 1"=40'





**Pump on timer; set to run for 4.75 minutes every 3 hours for 8 doses per 24 hours**

Pump Time 4.75 minutes for 43.89 gallons at 9.24 gpm at 30 psi.

Total Head 76.49 FT at 9.24 gpm for 1" Sch 40 PVC piping.

1/2 HP Norweco @ 9.24 gpm will deliver 140+ FT total head.

Approx. 8 doses per day

*Phillip M. ...*

#2604  
SE# 6382  
11/25/03

Revised



# NORWECO SINGULAIR SERVICE CONTRACT

The two year service contract for the Singulair Bio-Kinetic wastewater treatment system located at the site described above, is intended to enable the owner to economically obtain regular service inspections for the Singulair unit, as well as service calls for two years. The system will be inspected every ~~four~~<sup>three</sup> (4) months for a total of ~~six~~<sup>eight</sup> (6) over a two-year period. At owner's request for special service we will have a 48-hour period to respond, excluding holidays. The initial period for this contract is for two years. The drip line will be back flushed at every service.

The service includes inspection, adjustment and servicing of the mechanical, electrical, and other component parts to ensure proper function. This includes inspecting control panels. Air pumps, air filters, diffuser operation and replacing or repairing any component not found to be in working order. An effluent quality inspection consists of a visual check for color, turbidity, and examination for odors.

The Homeowner is responsible for maintaining chlorine in the treatment system. This has to be chlorine tablets designed for wastewater use, NOT SWIMMING POOL TABLETS. If the customer fail in their responsibility to add the chlorine tablets, they are in violation of law and appropriate action will be taken.

OWNER NAME: James M. Wood  
ADDRESS 411 Arrowhead Dr. EFFECTIVE DATE: \_\_\_\_\_  
Lot #60 Sweetwater Ranch  
CITY: Kerens, Tx 75144 EXPIRATION DATE: \_\_\_\_\_  
TELEPHONE NO. (972) 345-0650 SYSTEM INSTALLED ON: \_\_\_\_\_  
OWNER SIGNATURE: James M. Wood  
DIRECTIONS \_\_\_\_\_

## NORWECO SINGULAIR DISTRIBUTOR

NAME Jimmy RASH  
ADDRESS 8628 S Hwy 287  
CITY Consburg TX 75109  
PHONE# 903-872-5520

SIGNATURE OF SERVICE PROVIDER AND LICENSE # 05-583  
NORWECO PANEL SERIAL # \_\_\_\_\_