



TEXAS ASSOCIATION OF REALTORS®
INFORMATION ABOUT ON-SITE SEWER FACILITY

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CONCERNING THE PROPERTY AT

**326 Zapalac Rd
 Smithville, TX 78957-2135**

A. DESCRIPTION OF ON-SITE SEWER FACILITY ON PROPERTY:

- (1) Type of Treatment System: ☐ Septic Tank ☒ Aerobic Treatment ☐ Unknown
- (2) Type of Distribution System: Aerobic ☐ Unknown
- (3) Approximate Location of Drain Field or Distribution System: South side of property ☐ Unknown
- (4) Installer: _____ ☒ Unknown
- (5) Approximate Age: 16 years ☐ Unknown

B. MAINTENANCE INFORMATION:

- (1) Is Seller aware of any maintenance contract in effect for the on-site sewer facility? ☒ Yes ☐ No
 If yes, name of maintenance contractor: Salinas Excavating LLC
 Phone: 512-581-7071 contract expiration date: _____
Maintenance contracts must be in effect to operate aerobic treatment and certain non-standard on-site sewer facilities.)
- (2) Approximate date any tanks were last pumped? 2016
- (3) Is Seller aware of any defect or malfunction in the on-site sewer facility? ☐ Yes ☒ No
 If yes, explain: _____
- (4) Does Seller have manufacturer or warranty information available for review? ☐ Yes ☒ No

C. PLANNING MATERIALS, PERMITS, AND CONTRACTS:

- (1) The following items concerning the on-site sewer facility are attached:
☐ planning materials ☐ permit for original installation ☐ final inspection when OSSF was installed
☐ maintenance contract ☐ manufacturer information ☐ warranty information
- (2) "Planning materials" are the supporting materials that describe the on-site sewer facility that are submitted to the permitting authority in order to obtain a permit to install the on-site sewer facility.
- (3) It may be necessary for a buyer to have the permit to operate an on-site sewer facility transferred to the buyer.

(TAR-1407) 1-7-04

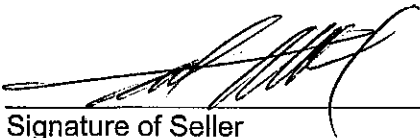
Initialed for Identification by Buyer _____ and Seller km

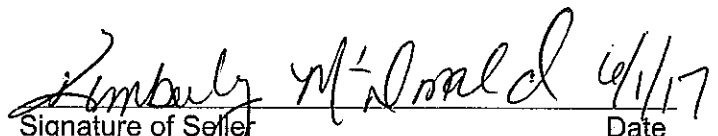
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D. INFORMATION FROM GOVERNMENTAL AGENCIES: Pamphlets describing on-site sewer facilities are available from the Texas Agricultural Extension Service. Information in the following table was obtained from Texas Commission on Environmental Quality (TCEQ) on 10/24/2002. The table estimates daily wastewater usage rates. Actual water usage data or other methods for calculating may be used if accurate and acceptable to TCEQ.

<u>Facility</u>	<u>Usage (gal/day) without water- saving devices</u>	<u>Usage (gal/day) with water- saving devices</u>
Single family dwelling (1-2 bedrooms; less than 1,500 sf)	225	180
Single family dwelling (3 bedrooms; less than 2,500 sf)	300	240
Single family dwelling (4 bedrooms; less than 3,500 sf)	375	300
Single family dwelling (5 bedrooms; less than 4,500 sf)	450	360
Single family dwelling (6 bedrooms; less than 5,500 sf)	525	420
Mobile home, condo, or townhouse (1-2 bedroom)	225	180
Mobile home, condo, or townhouse (each add'l bedroom)	75	60

This document is not a substitute for any inspections or warranties. This document was completed to the best of Seller's knowledge and belief on the date signed. Seller and real estate agents are not experts about on-site sewer facilities. Buyer is encouraged to have the on-site sewer facility inspected by an inspector of Buyer's choice.


Signature of Seller
Todd McDonald
6/1/17 Date


Signature of Seller
Kimberly McDonald
6/1/17 Date

Receipt acknowledged by:

Signature of Buyer Date

Signature of Buyer Date

BASTROP COUNTY
HEALTH & SANITATION
P O BOX 802
BASTROP, TEXAS 78602
312/332-7276

OSSF - LICENSE TO OPERATE

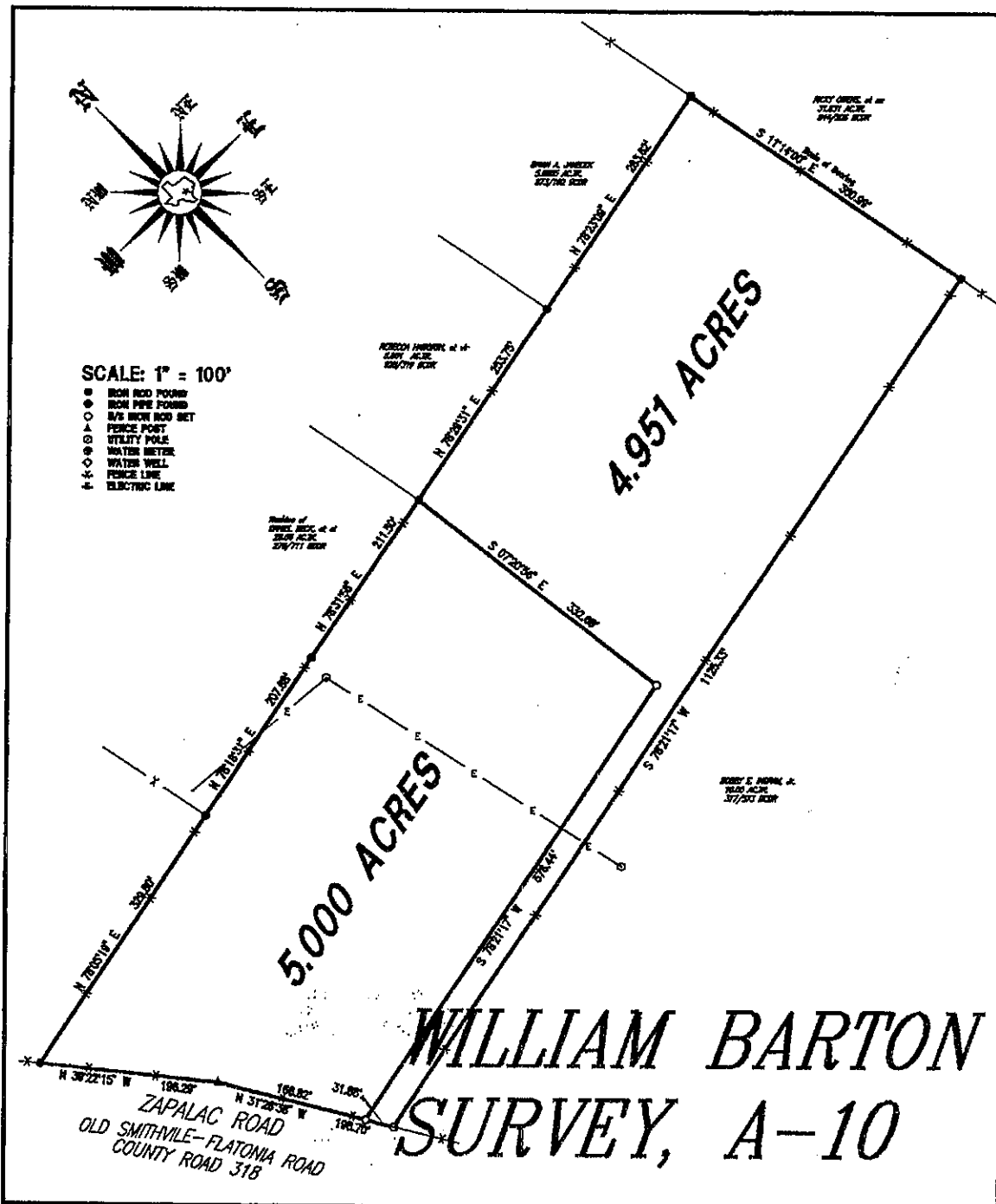
14870
PERMIT NUMBER
SITE LOCATION 4951 Arvia in The William Barton Survey, A-10
SI
SYSTEM TYPE
TANK SIZE
INSTALLER: Mark Hoffman
NOTE:
NO YES MON/YR
YEARLY MAINTENANCE CONTRACT RENEWAL REQUIRED
FIELD SIZE

The on-site sewage facility located at the above location has passed all inspections for compliance with the County Ordinance and State Standards. A License To Operate is hereby issued in the name of the property owner/applicant.

Clio Hernandez by CH
DESIGNATED REPRESENTATIVE SIGNATURE
FORM 300-07

8-14-00
DATE LICENSE TO OPERATE ISSUED

cword/later/LTO



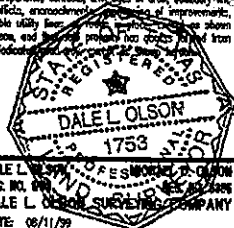
NO portion of this tract lies within a SPECIAL FLOOD HAZARD AREA designated as such by the Department of Housing and Urban Development, Federal Insurance Administration, as shown on TFM Number: 480216 0250 for BASTROP COUNTY, TEXAS.

Effective Date: 08/19/91
This Tract lies in Zone(s) X
Base Flood Elevation: None

WARNING:
This Flood Statement, as determined by a HUD-FIA FLOOD HAZARD BOUNDARY MAP, DOES NOT IMPLY that the Property or the improvements thereon will be free from Flooding or Flood Damage. On rare occasions, Greater Floods Can and Will Occur, and Flood Heights may increase by Man-Made or Natural Causes.

THIS STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR

The undersigned does hereby certify to the Title Agency, Underwriter, Lender, Mortgage Co. and/or Purchaser, that this survey was, this day, made on the ground, on the property legally described herein, and is correct, and there are no discrepancies, conflicts, divergences in area, boundary lines, conflicts, encroachments, or interests of improvement, visible utility lines, or other things shown or shown hereon, and that the same are correct and true and are a dedication of the same to the public use.



DALE L. OLSON, Registered Professional Land Surveyor, No. 1753, State of Texas.
DALE L. OLSON SURVEYING COMPANY
DATE: 08/11/99

DALE L. OLSON
REGISTERED PROFESSIONAL LAND SURVEYOR
771 WATER STREET (512) 321-5476 BASTROP, TEXAS

SURVEY PLAT
of TWO (2) TRACTS in the
WILLIAM BARTON SURVEY, A-10,
BASTROP COUNTY, TEXAS.

SCALE: 1" = 100.00'	MACK INVESTMENTS, Inc		
DRAWN BY: D. BRADY	DATE: 11 AUG 99	BOOK-FILE: 188-35	ORDER / 146389
		PLAT FILE / 4138 S	

SYSTEM SUMMARY

Prepared for: Mack Investments
326 Zapalac Road
Smithville, Texas
Bastrop County

Property Description: 9.9 acre homesite within a larger tract

Design Parameters

- 1 Wastewater Usage: <2,500 sf home with 3 bedrooms
- 2 Design Flow Rate: 240 gpd.
- 3 Irrigation Area Loading Rate: 0.064 gpd/sf.
- 4 Area Required: 3,750 sf
- 5 Area Designed: 5,281 sf
- 6 System Parameters

Pretreatment Tank: 500 gal.

Treatment Unit: AQUA SAFE A.S. 500L (rated capacity 500 gallons/day)

Pump Tank: 750 gallon capacity

Pump: 6 gpm @ 77' TDH

Chlorinator:

Tablet Chlorinator	Quantity	Units
Design Flow:	240	gpd
Tablet Size:	140	grams/tablet
% Chlorine:	70	%
Chlorine/Tablet:	98.0	grams/tablet
BOD ₅ requirement:	20	mg/L
Chlorine Dosage Required:	15/13.6	mg/Liter or grams/day
Tablet Consumption:	0.14	tablet/day
	7.2	days/tablet
Tablet Storage (120 days):	17	tablets(minimum)or equal

7. Sprinkler Area: 5,281 square feet
 8. Sprinkler Heads: 2 K-Rain #3LA, 29' radius or equivalent
3 gpm each @ 30 psi
-

1. SITE EVALUATION

A site evaluation was conducted on the property. The site evaluation indicated that an aerobic or a low pressure dose system is appropriate for the property. A completed site evaluation form is attached.

PARAMETER	DESCRIPTION	SUITABLE/ UNSUITABLE [a]
Topography	0-5% Slope	Suitable
Test Hole 1	0-2" below ground surface; Dark Brown, Formed a Ball, Ribboned >1/2"; No structure, Gritty Texture, Sticky Class II Sandy Loam	Suitable
	2-24" below ground surface; Black color; Formed a Ball, Ribboned >2"; Blocky Structure, Smooth, No mottling, Restrictive Horizon Class IV Silty Clay	Suitable
	24" to 48" below ground surface; Black Color; Formed a Ball, Ribboned >2"; No mottles; Smooth Texture; Blocky Structure, Restrictive Horizon, Class IV, Silty Clay	Unsuitable
Test Hole 2	0-20" below ground surface; Black color, Formed a Ball, Ribboned 2"; Blocky Structure, Neither Gritty nor smooth, Class IV Clay	Unsuitable
	20" to 30" below ground surface; Black Color with gray patches; Formed a Ball, Ribboned >2"; No mottles; Smooth Texture; Blocky Structure, Restrictive Horizon, Class IV, Silty Clay	Unsuitable
	30" to 50" below ground surface; Black Color; Formed a Ball, Ribboned >2"; No mottles; Smooth Texture; Blocky Structure, Restrictive Horizon, Class IV, Silty Clay	Unsuitable
Groundwater	Soil profile indicates no sign of seasonal groundwater.	Suitable
Flood Hazard	Site is not within 100-yr floodplain.	Suitable

[a] Relative to a standard system

The aerobic system will be designed to accommodate all flows including gray water from a new 1,200 sf house with 3 bedrooms on an approximate 9.9 acre homesite.

2. SYSTEM TYPE Non-standard

Aerobic Treatment with Surface Irrigation Disposal

3. SYSTEM MANUFACTURER

Ecological Tanks Inc.
2247 Hwy. 151 N
Downsville, La. 71234
(318) 644-0397, Fax (318) 644-7257

4. SYSTEM SIZE

Table III of 30 TAC Chapter 285 indicates that the daily flow rate for a three bedroom home with less than 2,500 sf is 240 gpd (gal /day).

5. SYSTEM CONFIGURATION

Pretreatment Tank: 500 gallon

Treatment System: AQUA SAFE A.S.500L (rated capacity 500 gallons/day)

Pump Tank: 750 gallons.

Treated Effluent Disposal: Surface irrigation by sprinklers controlled by commercial irrigation timers.

6. EFFLUENT QUALITY DATA

Biological Oxygen Demand (BOD) & Total Suspended Solids

30 day average	20 mg/L
7 day average	30 mg/L
Daily Maximum	45 mg/L
Single grab	65 mg/L
pH	6.0-9.0

7. EFFLUENT DISINFECTION

Treated effluent must be disinfected with chlorine prior to irrigation. Tablets or other dry chlorinators must use calcium hypochlorite of a type suited for wastewater disinfection.

8. MAX SURFACE APPLICATION RATE, Ri

Maximum application rates for surface irrigation of treated effluent is 0.064 gallons/square foot/day from 30 TAC Chapter 285, Figure 1.

9. REQUIRED SURFACE AREA, A

$$A=Q/R_i = 240 \text{ gpd} / 0.064 \text{ gpd/sf} = 3,750 \text{ sf}$$

10. SPRINKLER HEAD SPECIFICATIONS

K-Rain Model #3 LA or equivalent
Trajectory = 11 degrees
Radius = 29 feet @ 30 psi
Flowrate = 3.0 gpm
Coverage Area = $3.14 * r^2 = 3.14 * 29 \text{ ft} * 29 \text{ ft} = 2,640 \text{ sf}$

11. Number of Sprinkler Heads

Number of heads = $3,750 \text{ sf} / 2640 \text{ sf} / \text{head} = 1.4$
Use 2 sprinkler heads

12. SPRINKLER HEAD CONFIGURATION

Sprinkler heads will be placed in a linear configuration with a 58 ft spacing between heads and no spray area overlap as shown on the drawing.

13. DISTRIBUTION PIPING

Distribution piping must be 1 " Schedule 40 PVC.

14. PUMP SIZING

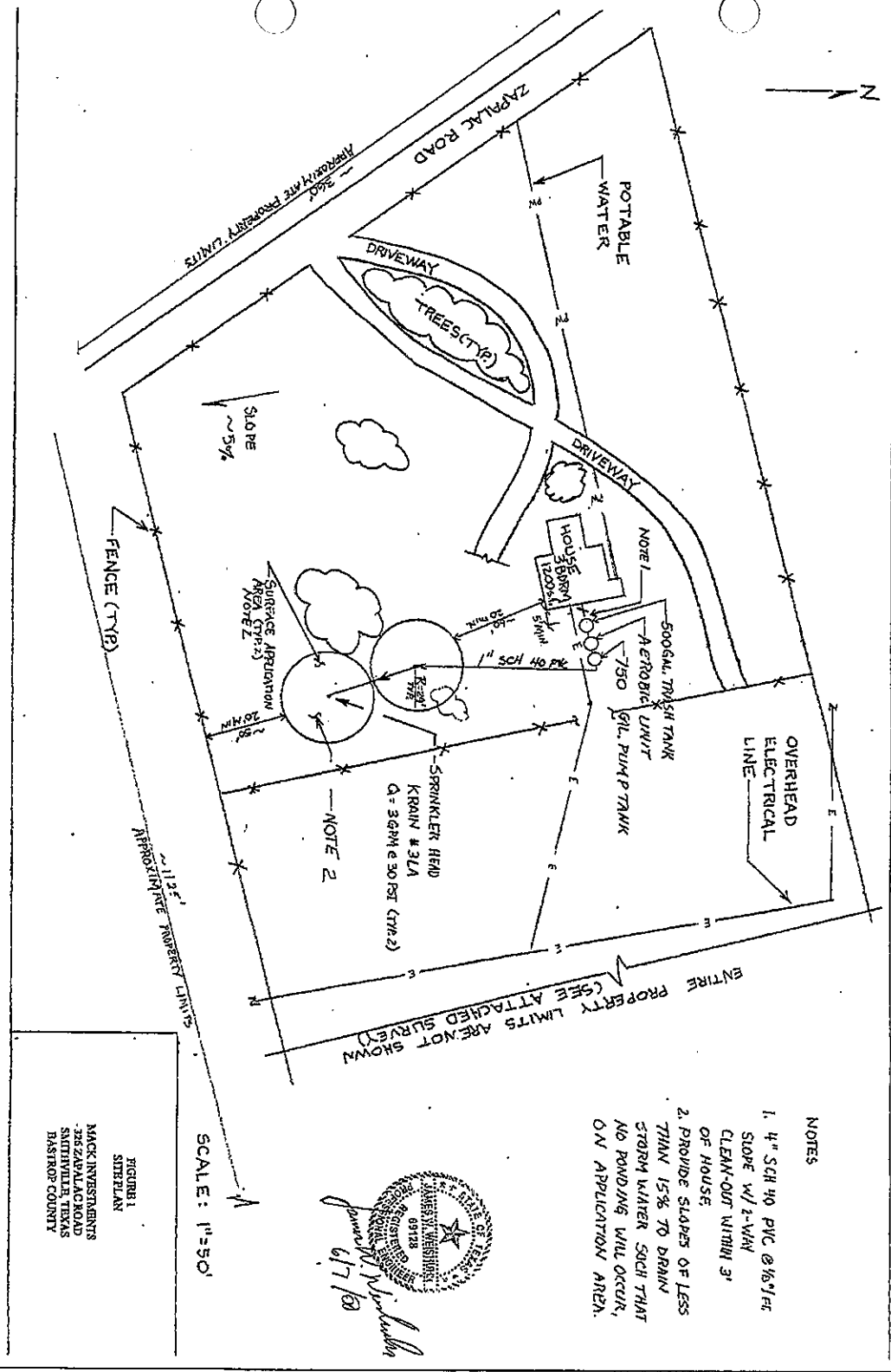
Flow Rate = 2 sprinkler heads * 3 gpm = 6 gpm
Total Head Calculations
Assume Elevation Head = 4'
Pressure Head (Sprinkler Head) = 69' = 30 psi
Friction Head for 1 " pipe = $1.2 * (155 \text{ ft supply line} * 2.14' / 100') = 3.98'$ Say 4'
Total Head = 4' + 69' + 4' = 77'
The pump must be sized for 6 gpm @ 77' of head.

15. LANDSCAPE PLAN

The irrigated area must be continuously covered or seeded with Common Bermuda, St. Augustine, or Annual Rye grass. The area must initially be covered with sod or 15 pounds of Common Bermuda seed (an equivalent rate of approximately 100 lb./acre). After initial seed has germinated (approximately 2-3 weeks), bare spots must be seeded again. Should Bermuda or St. Augustine become dormant during winter months, irrigated area must be seeded again with 15 pounds of Annual Rye grass.

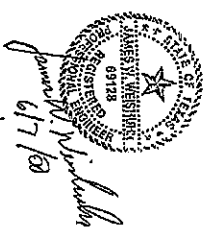
16. SYSTEM MAINTENANCE CONTRACT

The homeowner must maintain a valid signed maintenance contract with a valid maintenance company. The initial maintenance contract must be valid for a two year period. Subsequent contracts must be submitted to the Bastrop County Designated



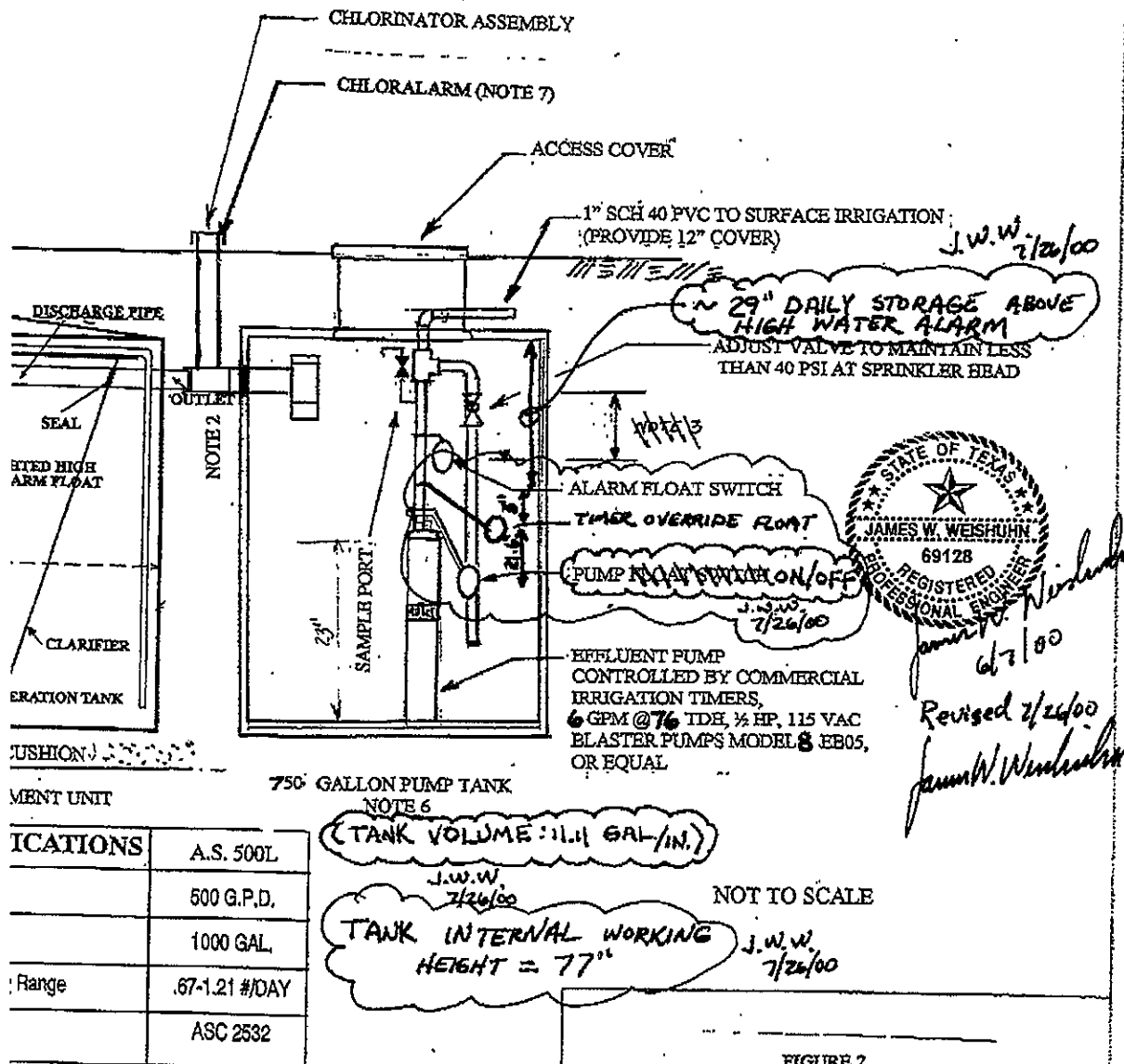
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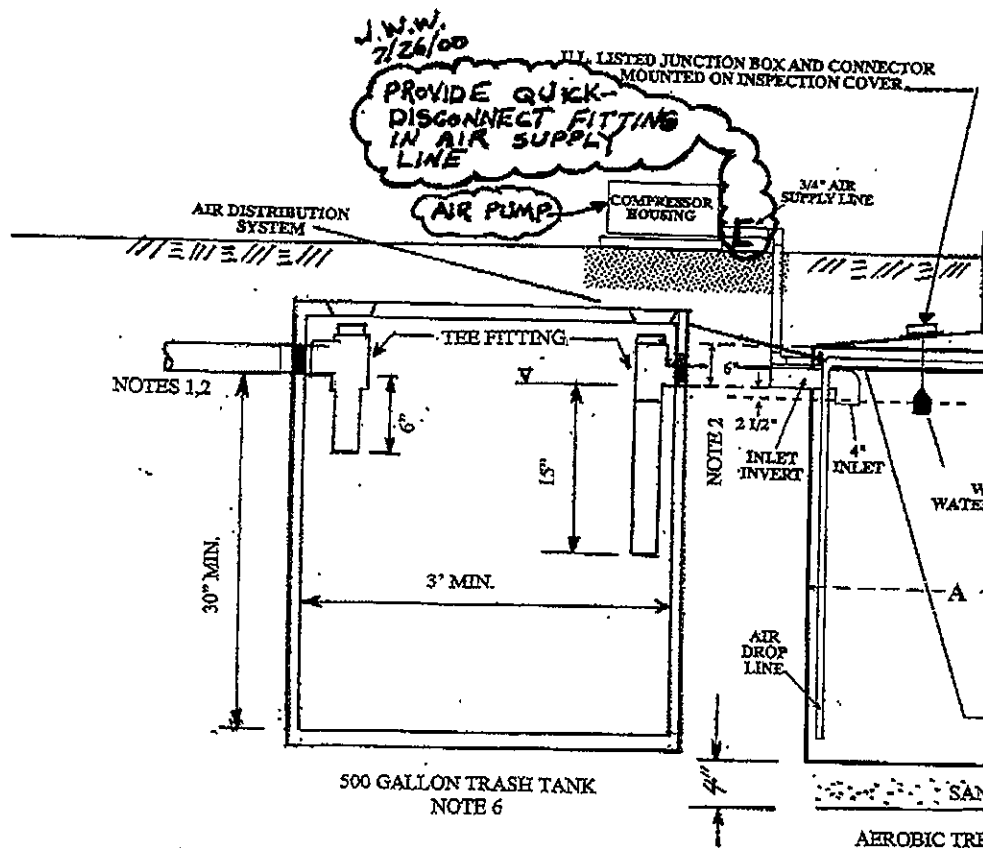
1. 4" SCH 40 PVC @ 1/8" PER SLOPE W/ 2-WAY CLEAN-OUT WITHIN 3' OF HOUSE.
2. PROVIDE SLOPES OF LESS THAN 15% TO DRAIN STORM WATER SUCH THAT NO PONDING WILL OCCUR, ON APPLICATION AREA.



SCALE: 1"=50'

FIGURE 1
SITE PLAN
MACK INVESTMENTS
-312 ZAPALAC ROAD
SOUTHVILLE, TEXAS
BASTROP COUNTY





NOTES

1. 4" DIAMETER SCHEDULE 40 PVC @ 1/8" / FT. SLOPE.
2. PROVIDE 3" OF DROP BETWEEN UNITS.
3. PROVIDE ADEQUATE HEIGHT FOR STORAGE OF DAILY FLOW DURING EMERGENCY CONDITIONS ABOVE HIGH LEVEL ALARM.
4. PROVIDE EXTENSIONS AS NEEDED.
5. PROVIDE CONTROL PANEL FOR AEROBIC UNIT AND PUMP TANK. PUMP TANK CONTROL WILL PROVIDE FOR NIGHT IRRIGATION WITH REPEAT CYCLE CAPABILITY (3 DOSES OF 80 GALLONS AT 2 HOUR FREQUENCIES). PANEL LOCATION TO BE FIELD DETERMINED.
6. TANKS MUST MEET THE SPECIFICATIONS OF ASTM C-1227-93a.
7. INSTALL A CHLORALARM SYSTEM IN THE CHLORINATOR/PUMP TANK SYSTEM TO SIGNAL LOW CHLORINE TABLET LEVELS AND SHUT-DOWN THE SURFACE APPLICATION PUMP IF ONLY ONE TABLET IS PRESENT IN THE CHLORINATOR.

8. PROVIDE AUDIO & VISUAL ALARMS FOR AIR PUMP FAILURE & HIGH WATER CONDITIONS IN THE PUMP TANK. ALARMS TO BE LOCATED IN PANEL DETAILED IN NOTE 5.

J.W.W. 7/26/00

AQUA SAFE SPEC

Treatment Capacity

Volumetric Capacity

Recommended B.O.D.₅ Load

Aerator-Aqua Safe Compressor