

TARRANT REGIONAL WATER DISTRICT

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

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

PERMIT # RC10-045

Property Owner Cliff J. Maillet

Mailing Address 511 Hidden Oaks Ln.
 Corsicana, Texas 75109

Property Location Lot 3 Hidden Oaks I

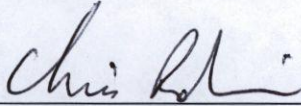
 Same Address

 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-8058

10-29-10

Date

TARRANT REGIONAL WATER DISTRICT

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

**ON-SITE SEWAGE FACILITY PROGRAM
LOW PRESSURE PIPE SYSTEM
INSPECTION REPORT**

PROPERTY OWNER: Cliff Maillet

PERMIT NUMBER: RC10-045

I. SEWER	Y	N
CLEANOUTS PROPERLY INSTALLED:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PROPER TYPE PIPE FROM STRUCTURE TO DISPOSAL SYSTEM:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SLOPE OF SEWER 1/8 INCH PER FOOT MINIMUM:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. SEPTIC TANK	Y	N
TANK SIZE REQUIRED: 1250 gal as designed TANK SIZE INSTALLED: 1,250 gal existing	**	**
TYPE: concrete MANUFACTURER: <i>Unknown</i>	**	**
RISERS PROVIDED ON TANKS BURIED GREATER THAN 12":	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INLET FLOWLINE GREATER THAN 3" ABOVE OUTLET FLOWLINE:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUTLET LIQUID PENETRATION 1/4 TO 1/2 TOTAL LIQUID DEPTH:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
"T" PROVIDED ON INLET AND OUTLET:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF SINGLE TANK, ARE 2 COMPARTMENTS PROVIDED?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
III. PUMP TANK	Y	N
TANK SIZE REQUIRED: 750 gal TANK SIZE INSTALLED: <i>750 gal</i>	**	**
TYPE: Concrete MANUFACTURER: TPS	**	**
TYPE AND SIZE OF PUMP: <i>Burnes Step SS 1HP</i>	**	**
IV. DRAINFIELD	Y	N
LATERAL LINE SIZE: <input checked="" type="checkbox"/> 1" PVC <input type="checkbox"/> 1 1/4" PVC <input type="checkbox"/> 1 1/2" PVC <input type="checkbox"/> OTHER SPECIFY _____	**	**
SUPPLY LINE DIAMETER: <i>2in</i>	**	**
MANIFOLD DIAMETER: <i>2in</i>	**	**
AREA REQUIRED: 4,200 sqft AREA INSTALLED: <i>4200 ft²</i>	**	**
EXCAVATION DEPTH: WIDTH: <i>8in</i> LENGTH: <i>1400 ft</i>	**	**
DISTANCE BETWEEN EXCAVATIONS: <i>3ft</i>	**	**
PROPER PLACEMENT OF DAMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TYPE OF MEDIA: <i>crack</i>	**	**
DEPTH OF MEDIA: <i>12in</i>	**	**
PROPER BARRIER BETWEEN MEDIA AND BACKFILL:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RISERS INSTALLED FOR HEAD PRESSURE ADJUSTMENT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DATE HEAD PRESSURE WAS SET: <i>10-29-10</i>	**	**
ZONES INSTALLED PROPERLY. <i>yes</i> HOW MANY? <i>1</i>	**	**
PROPER CONTROL VALVES INSTALLED. <i>yes</i> HOW MANY? <i>1</i>	**	**
MINIMUM REQUIRED SETBACK DISTANCES MET? IF NOT, LIST DEFICIENCIES.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AUDIO/VISUAL ALARMS INSTALLED:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

COMMENTS: *Condensation line plumbed separate from cess tank plumbed 10-24-10*

INSPECTED BY: *Chris [Signature]* OS-8058

DATE: *10-29-10*

James H. Joles Septic Service

117 Ingham Rd
Corsicana, TX 75110
903-874-5977

GENERATOR NAME: X Smallt
ADDRESS: _____

CASH	_____
CHECK	<input checked="" type="checkbox"/>
AMOUNT \$	<u>175⁰⁰</u>

WASTE REMOVED FROM: SEPTIC TANK Phone _____

\$25.00 RETURN CHECK FEE

WASTE TANK OR TRAP CAPACITY: 1000 GALLONS WASTE DISPOSAL SITE: J. D. Ingham

I CERTIFY THAT THE WASTE MATERIAL REMOVED FROM THE ABOVE PREMISES CONTAINS NO HAZARDOUS MATERIALS.

GENERATOR AND/OR REPRESENTATIVE NAME: _____
(PLEASE PRINT)

10-24-10
(DATE AND TIME SERVICED)

(GENERATOR SIGNATURE)

TRANSPORTER INFORMATION

BUSINESS NAME: James H. Joles Septic Service TNRCC REGISTRATION NUMBER: 20861
ADDRESS: 117 Ingham Road Corsicana, Texas 75110 TELEPHONE: 903-874-5977

GALLONS TRANSPORTED: 1000 WASTE DISPOSAL SITE: J.D. Ingham

CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS CORRECT, AND THAT ONLY WASTE CERTIFIED FOR REMOVAL BY THE GENERATOR IS CONTAINED IN THE SERVICING VEHICLE. I AM AWARE THAT FALSIFICATION OF THIS TRIP TICKET MAY RESULT IN REVOCATION OF MY WASTE TRANSPORTATION PERMIT, CRIMINAL PROSECUTION, AND/OR CIVIL PENALTIES.

RIVERS NAME: James H. Joles
10-24-10
(DATE AND TIME WASTE TRANSPORTED)

James Harry Joles
(DRIVER SIGNATURE)

DISPOSAL INFORMATION

BUSINESS NAME: James H. Joles Septic Service
DISPOSAL FACILITY REGISTRATION OR PERMIT NUMBER: 710309
ADDRESS: 221 Ingham Road Corsicana, Texas 75110 TELEPHONE: 903-874-3889

CERTIFY THAT I HAVE BEEN AUTHORIZED BY THE TEXAS NATURAL CONSERVATION COMMISSION TO ACCEPT THE ABOVE SPECIFIED WASTE AND THAT I HAVE DISPOSED OF THE WASTE IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED IN THAT AUTHORIZATION.

AMOUNT RECEIVED: _____
(DATE AND TIME WASTE RECEIVED)

SITE OPERATOR NAME: J.D. Ingham
J.D. Ingham by Cassie Ingham

TARRANT REGIONAL WATER DISTRICT

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

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

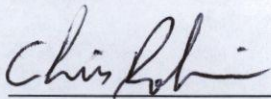
Application Number RC10-045
Property Owner Cliff J. Maillet
Mailing Address 511 Hidden Oaks Ln.
 Corsicana, Texas 75109
Property Location Lot 3 Hidden Oaks I
 Same Address
 Navarro County, Texas

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 300 gallons, the use of water saving devices is required. Existing leaching chambers to be removed and existing baffled tank to be pumped.**



OS-8058
Chris Robison/Authorized District Representative

10-21-10
Date

TARRANT REGIONAL WATER DISTRICT
140 FM 416, Streetman, Texas 75859
903-389-3928
Fax # 903-389-7587

TRWD USE ONLY

RC10-045
APPLICATION NO.

APPLICATION FOR ON-SITE
SEWAGE FACILITY

11954

RECEIPT NO.
10-18-10

DATE

200

AMOUNT

Rochland Chamber
TRWD RESERVOIR

Navarra
COUNTY OF INSTALLATION

1. PROPERTY OWNER'S NAME: Maillet Cliff J
(LAST) (FIRST) (MIDDLE)
2. PERMANENT MAILING ADDRESS: 511 Hidden Oaks Ln Cors. Tx 75109
(STREET/PO BOX) (CITY/STATE) (ZIP)
3. TELEPHONE NO. DURING DAY: 903 874-5027 HM
(903) 229-2735 (cell)
4. SITE ADDRESS: Same
(STREET) (CITY/STATE) (ZIP)
5. PROPERTY DESCRIPTION: LOT NO. 3 BLOCK - SEC PI SIZE - SQ.FT.
6. SUBDIVISION: Hidden Oaks Acreage 1.74 Survey A-139 Robert Carudine
SOURCE OF WATER: Private Well Public Water Supply MEM
(NAME OF SUPPLIER)
7. SINGLE FAMILY RESIDENCE: No. of Bedrooms 4 Living Area (sq. ft.) 3366
DESIGNED MAXIMUM DAILY WATER CONSUMPTION (gpd): 300
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 Marklar LICENSE NO.: RS2604
PHONE NO.: 214-507-9521
11. INSTALLER: Holland R Beckman REGISTRATION NO.: OS7335
PHONE NO.: 903-389-8189

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.

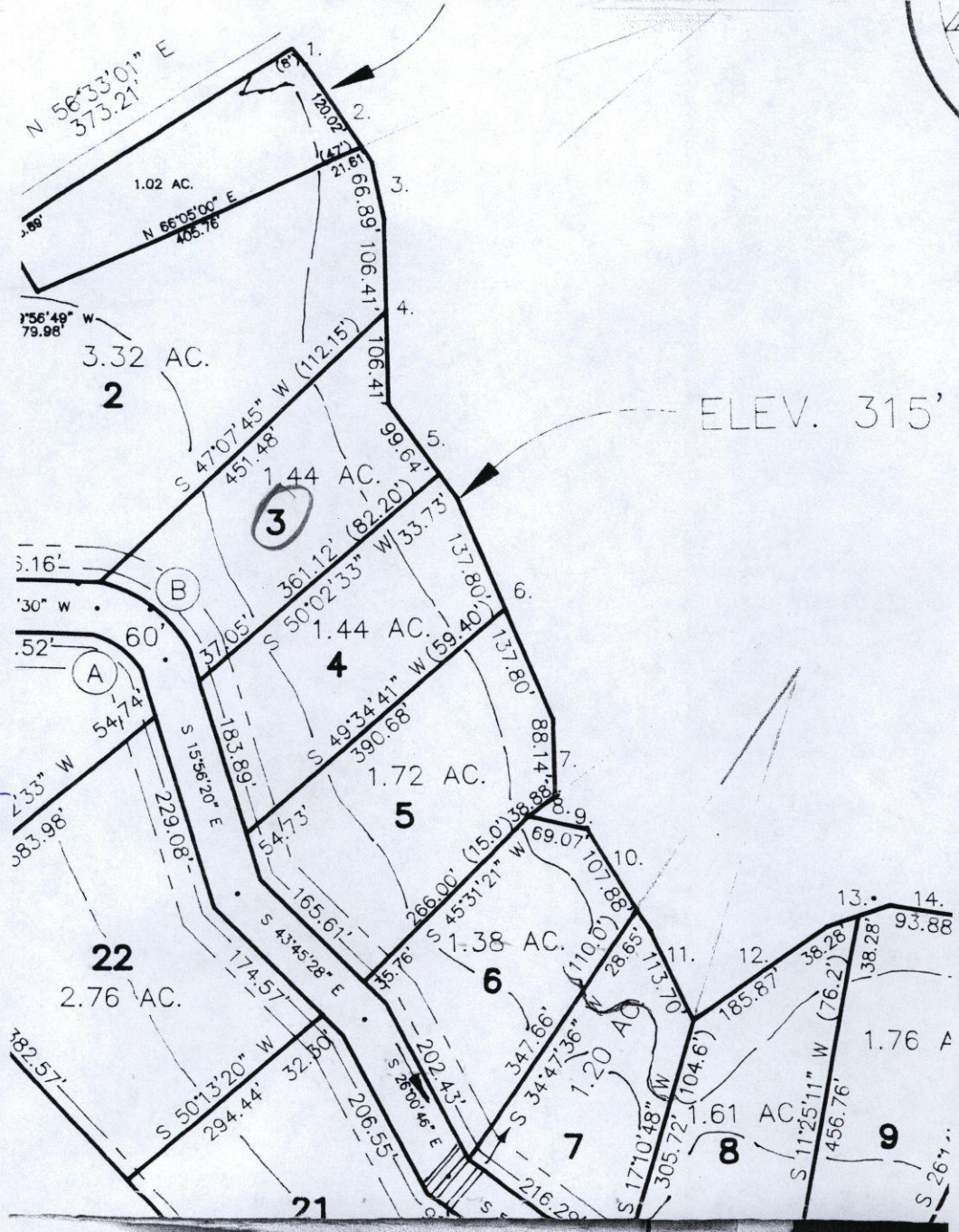
e. Maillet
(SIGNATURE OF OWNER)

10/18/10
(DATE)

Sherry Fortson
(SIGNATURE OF AUTHORIZED DISTRICT REPRESENTATIVE)

10-18-10
(DATE)

"RESERVED FOR PROPERTY OWNERS ASSOCIATION"



Scale

1" = 200'

Hidden Oaks I

ELEV. 315'

OSSF SOIL & SITE EVALUATION

Page 1 (Soil & Site Evaluation)

Date Performed: 10/13/10

Property Owner: Cliff Maillet

Site Location: 511 Hidden Hills Lane Corsicana, Texas 75109 Proposed Excavation Depth: 24-34"

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 feet	III	N/A	No	No	SCL to 6"
2 feet	IV	N/A	No	No	Clay
3 feet	IV	N/A	No	No	Clay
4 feet	IV	N/A	No	No	Clay
5 feet	IV	N/A	No	No	Clay

SOIL BORING

NUMBER: 2

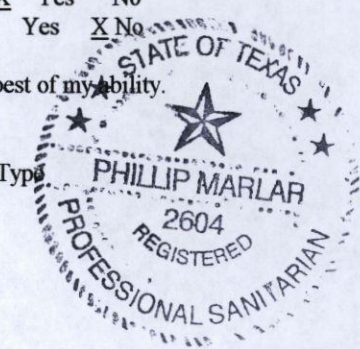
Depth (feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles / Water Table)	Restrictive Horizon	Observations
1 feet	III	N/A	No	No	SCL to 8"
2 feet	IV	N/A	No	No	Clay
3 feet	IV	N/A	No	No	Clay
4 feet	IV	N/A	No	No	Clay
5 feet	IV	N/A	No	No	Clay

FEATURES OF SITE AREA

- Presence of 100 year flood zone Yes No
- Presence of Upper Water Shed Yes No
- Presence of adjacent ponds, streams, water impoundments Yes No
- Existing or Proposed water well in nearby area (within 150 feet) Yes No
- Ground Slope 4 to 5 %

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

Phillip Marlar S. #2604 10/13/10 SE# 9819
 (Signature of person performing evaluation) (Date) Registration Number and Type



Date Performed: 10/13/10

Site Location: 511 Hidden Oaks Ln. Corsicana, Tx 75109 Subsurface Disposal Surface Disposal

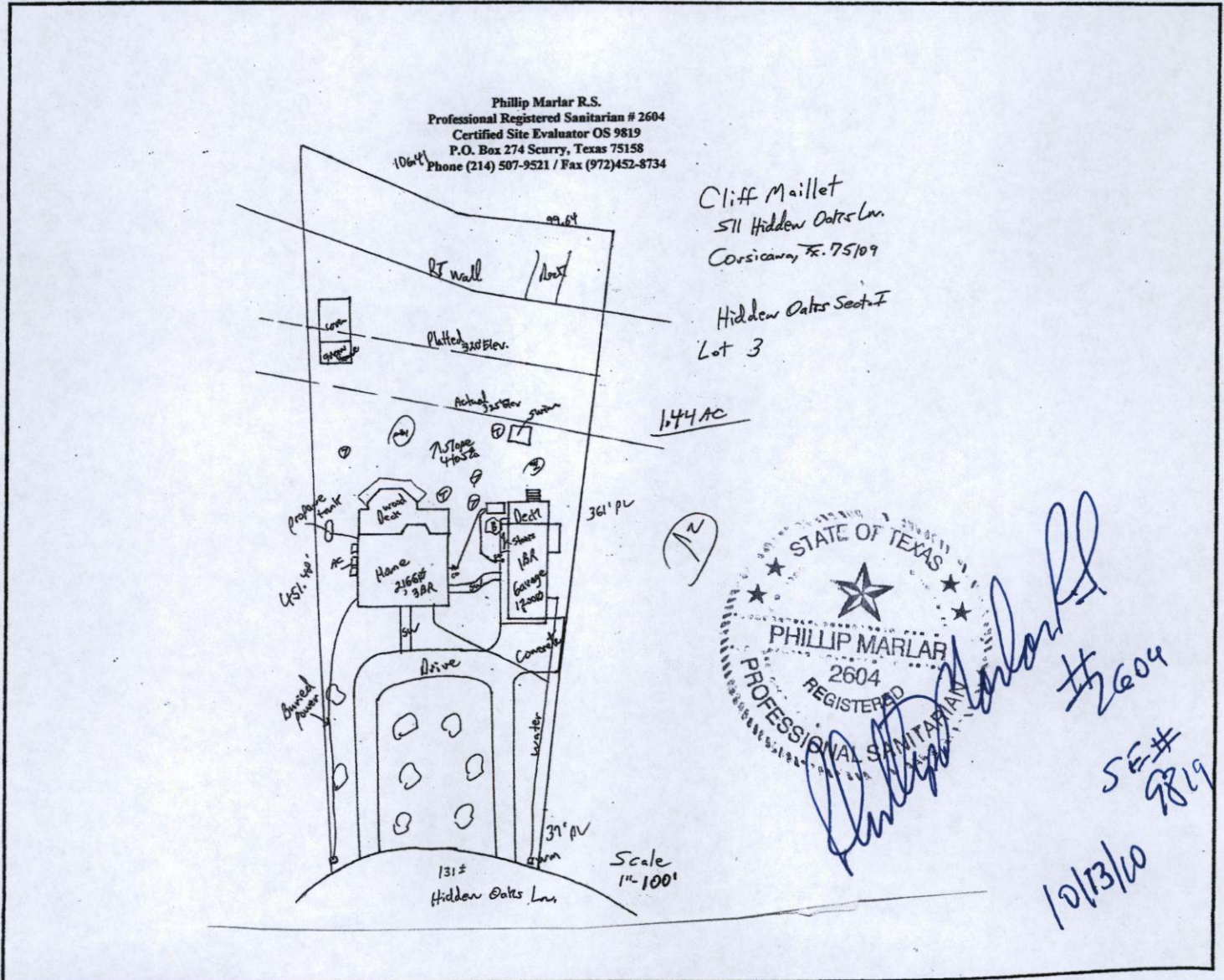
Schematic of Lot or Tract

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: 1.44 AC.

SITE DRAWING

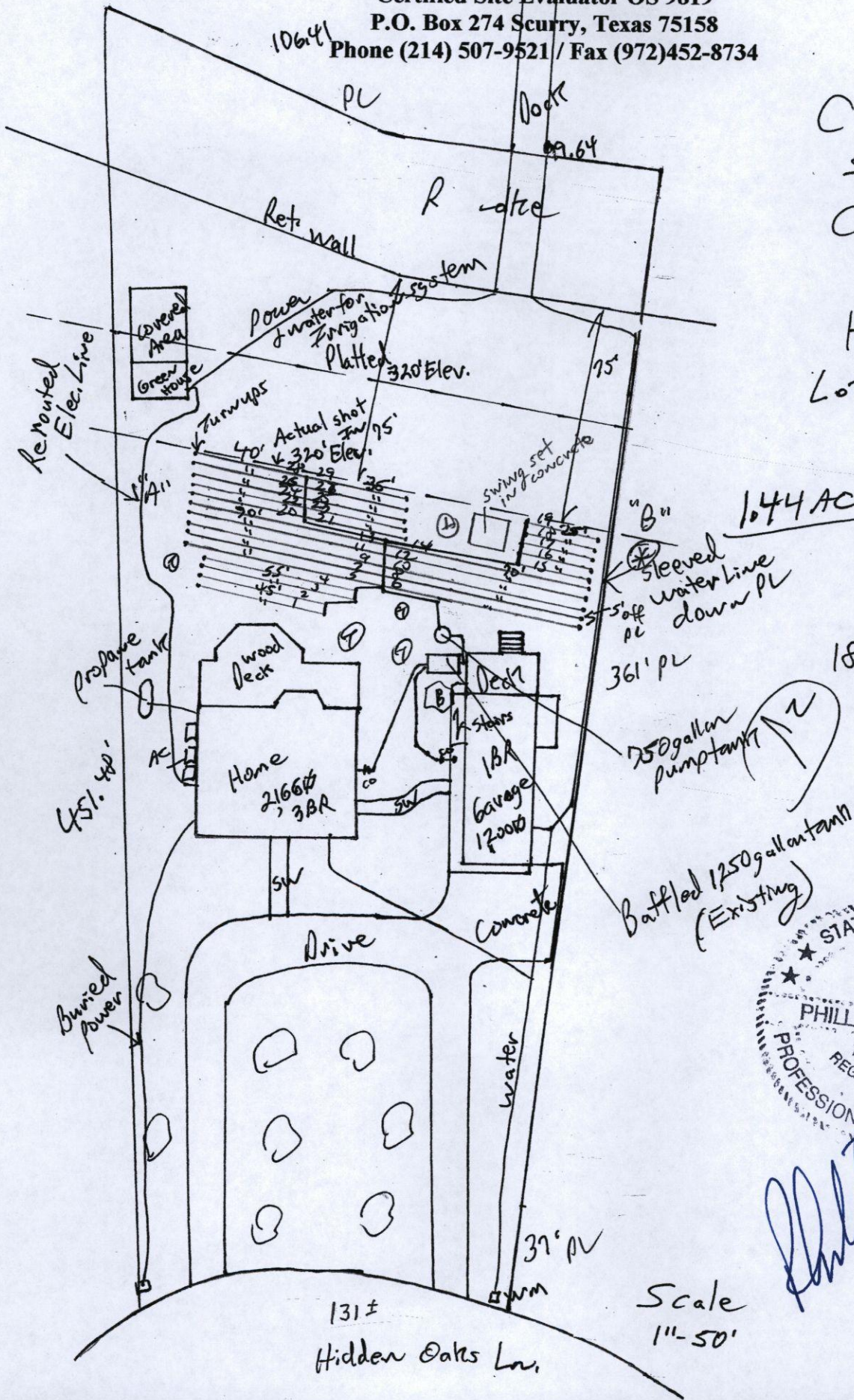


Phillip Marlar R.S.
 Professional Registered Sanitarian # 2604
 Certified Site Evaluator OS 9819
 P.O. Box 274 Scurry, Texas 75158
 Phone (214) 507-9521 / Fax (972) 452-8734

Cliff Maillet
 511 Hidden Oaks Ln.
 Corsicana, Tx. 75109

Hidden Oaks Sect. F
 Lot 3 Class IV Soil

1,400' of 1" PVC
 Sch 40 Lateral
 Lines on 3.5'
 Centers for
 4,200' ±
 180' of 2" PVC Sch 40
 Supply Line



1,44 AC



Phillip Marlar
 #2604
 JE# 9819
 10/13/00

Scale
 1" = 50'

Phillip Marlar R.S.
Registered Professional Sanitarian
P.O. Box 274 Scurry, Texas 75158
Phone (214) 507-9521

October 13, 2010
Tarrant Regional Water District Designated Representative

Subject Property: Cliff Maillet's Residence at 511 Hidden Oaks Lane Corsicana, Texas
Design: Low Pressure Dosing System (Hidden Oaks Est. Section I ; lot 3)

Design Parameters:

3 Bedroom home (2,166 sq ft of living area) (3 Bedroom Equivalent) + Garage apartment with 1 bedroom & 1,200 sq ft living area (1 or 2 Bedroom Equivalent)
3 Bedroom Home = 240 gpd + 180 gpd for apartment = 420 gpd (Water Saving Fixtures)
Soil Evaluation Class IV soil
Long Term Loading Rate .1 gal / sq ft / day
Required Absorption Area = 420 gpd / .1 gal / sq ft / day = 4,200 sq ft
Designed Absorption Area = 4,200 sq ft
Total Length of Laterals = 1,400'

System Parameters

1 - existing baffled 1,250 gallon tank
An A-1800 Zabel Filter on outlet of the 500 gallon tank compartment
750 gallon pump tank with high water alarm
Supply Line - 2" diameter sch 40 piping
Lateral Lines - 1 "diameter sch 40 piping
Supply Line Length - 180'
Lateral Line Length - 1,400'
Hole Size in Laterals - 1/8"
First & last hole in each line must be 2 to 3' from end & start of lines
Hole Spacing - 6.5 to 9' (See attached chart)
Holes - 178
Elevation Head - 5'
Friction Head - 12.07' (using 5.59 friction rate)
Pressure Head - 2' (Operating Head)
Total Head - 19.07 Ft
1/2 HP Barnes EH-L 512 pump with 19.07 Ft head will pump 70 + gpm
GPM at 2 ft Operating Head = 60.1 gpm + 2 gpm for 1/8" anti-siphon hole = 62.1 gpm
Type Pump - 1/2 HP Submersible Sewer Pump Barnes EH-L 512 or **equivalent**
Pump at 62.1 gpm will deliver 25 ft. head - Pump on - off controlled by float switch
Lateral Depth - 24 to 34 " (Average Depth 29")
Excavation width 6" to 1' wide Rock - washed clean 3/8 to 1"
Rock Depth - at least 10" under the pipe (laterals) then another 2" for total of 12"
Earthen dams to be installed every 20' through out lateral lines
Volume Supply Line - 29.16 gallons Volume Laterals - 57.4 gallons



Phillip Marlar
#2604
SE#
9819
10/13/10

Phillip Marlar R.S.
Registered Professional Sanitarian
P.O. Box 274 Scurry, Texas 75158
Phone (214) 507-9521

Volume Supply & Laterals - 86.56 gallons Check Valve Required - YES; due to elev. at top of field
Minimum Dosing required - 316.16 gallons
Proposed minimum dosing - 317.16 gallons
(18" of effluent depth in pump tank to be pumped at a time)

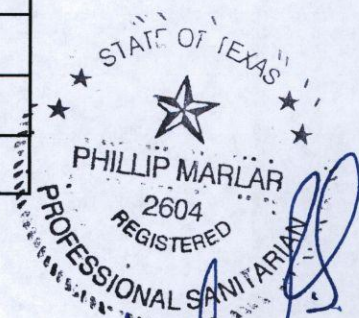


Phillip Marlar
#2604
SE#
2814
10/13/10

Maillet - Elevation Chart

Line	Side "A"	Side "B"
1	4'-3"	3'-9"
2	4-6	4-0
3	4-8	4-4
4	4-11	4-7
5 & 6	5-0	4-5
7 & 8	5-3	4-8
9 & 10	5-3	4-10
11 & 12	5-4	5-0
13 & 14	5-6	5-3
15	5-6	5-4
16	5-9	5-7
17	6-0	5-10
18	6-3	6-1
19	6-7	6-5
20 & 21	5-8	5-7
22 & 23	5-11	5-11
24 & 25	6-2	6-2
26 & 27	6-4	6-4
28 & 29	6-7	6-7

Tank - 3'-9"



Phillip Marlar
 #2604
 SE#
 9819
 10/13/09

Where drainage goes thru field

Maillet - Elevation Chart

Line	Side "A"	Side "B"
1	4'-3"	3'-9"
2	4-6	4-0
3	4-8	4-4
4	4-11	4-7
5 & 6	5-0	3-8
7 & 8	5-3	4-0
9 & 10	5-3	4-3
11 & 12	5-4	4-6
13 & 14	5-6	4-10
15	5-6	5-4
16	5-9	5-7
17	6-0	5-10
18	6-3	6-1
19	6-7	6-5
20 & 21	5-8	5-7
22 & 23	5-11	5-11
24 & 25	6-2	6-2
26 & 27	6-4	6-4
28 & 29	6-7	6-7

Actual
Grade
Shots

Low spot
5-0
4-11
4-11
5-4
5-7

Hump behind
Garage
to be shaved
Down

Tank - 3'-9"

Phillip Marlar R.S.
Registered Professional Sanitarian
P.O. Box 274 Scurry, Texas 75158
Phone (214) 507-9521

Maillet LLP - OSSF Specifications (Elevation Chart)

Line	Elevation Avg/Line	Difference in Elev.	Pressure Head
1	4'	0	2'
2	4.5'	.5'	2.5'
3	4.5'	.5'	2.5'
4	5'	1'	3'
5	5'	1'	3'
6	5'	1'	3'
7	5'	1'	3'
8	5'	1'	3'
9	5'	1'	3'
10	5'	1'	3'
11	5.5'	1.5'	3.5'
12	5.5'	1.5'	3.5'
13	5.5'	1.5'	3.5'
14	5.5'	1.5'	3.5'
15	5.5'	1.5'	3.5'
16	5.5'	1.5'	3.5'
17	6'	2'	4'
18	6'	2'	4'
19	6.5'	2.5'	4.5'
20	5.5'	1.5'	3.5'
21	5.5'	1.5'	3.5'



Phillip Marlar
 #2604
 10/13/10 JE# 9819

**Phillip Marlar R.S.
Registered Professional Sanitarian
P.O. Box 274 Scurry, Texas 75158
Phone (214) 507-9521**

22	6'	2'	4'
23	6'	2'	4'
24	6'	2'	4'
25	6'	2'	4'
26	6.5'	2.5'	4.5'
27	6.5'	2.5'	4.5'
28	6.5'	2.5'	4.5'
29	6.5'	2.5'	4.5'

Lateral lines will vary from 24 to 34" in depth.
Average line depth will be 29" in depth.

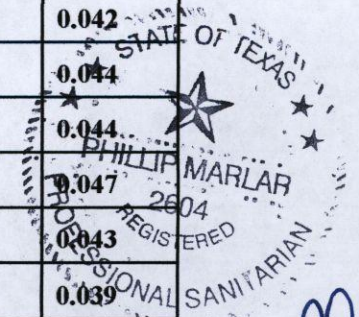


Phillip Marlar
#2604
10/13/10 SEH
98A

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

Cliff Maillet LLP - OSSF Specifications

Line	Length	Pressure Head	Hole Space	# Holes	Hole Size	Flow GPM/Hole	Rate GPM/Line	GPM/Ft./Line
1	45'	2'	6.5'	7	1/8"	.26	1.82	0.040
2	45'	2.5'	7'	6	1/8"	.29	1.74	0.039
3	55'	2.5'	7'	8	1/8"	.29	2.32	0.042
4	55'	3'	7.5'	7	1/8"	.32	2.24	0.041
5	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
6	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
7	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
8	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
9	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
10	70'	3'	7.5'	9	1/8"	.32	2.88	0.041
11	70'	3.5'	8'	9	1/8"	.345	3.11	0.044
12	70'	3.5'	8'	9	1/8"	.345	3.11	0.044
13	70'	3.5'	8'	9	1/8"	.345	3.11	0.044
14	70'	3.5'	8'	9	1/8"	.345	3.11	0.044
15	25'	3.5'	8'	3	1/8"	.345	1.04	0.042
16	25'	3.5'	8'	3	1/8"	.345	1.04	0.042
17	25'	4'	8.5'	3	1/8"	.37	1.11	0.044
18	25'	4'	8.5'	3	1/8"	.37	1.11	0.044
19	25'	4.5'	9'	3	1/8"	.39	1.17	0.047
20	40'	3.5'	8'	5	1/8"	.345	1.73	0.043
21	35'	3.5'	8'	4	1/8"	.345	1.38	0.039
22	40'	4'	8.5'	5	1/8"	.37	1.85	0.046
23	35'	4'	8.5'	4	1/8"	.37	1.48	0.042
24	40'	4'	8.5'	5	1/8"	.37	1.85	0.046



Phillip Marlar
 10/13/10 #2604
 SE # 989

25	35'	4'	8.5'	4	1/8"	.37	1.48	0.042
26	40'	4.5'	9'	5	1/8"	.39	1.95	0.049
27	35'	4.5'	9'	4	1/8"	.39	1.56	0.045
28	40'	4.5'	9'	5	1/8"	.39	1.95	0.049
29	35'	4.5'	9'	4	1/8"	.39	1.56	0.045
Totals	1,400'			178			60.1	

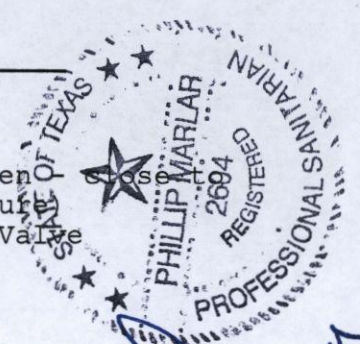
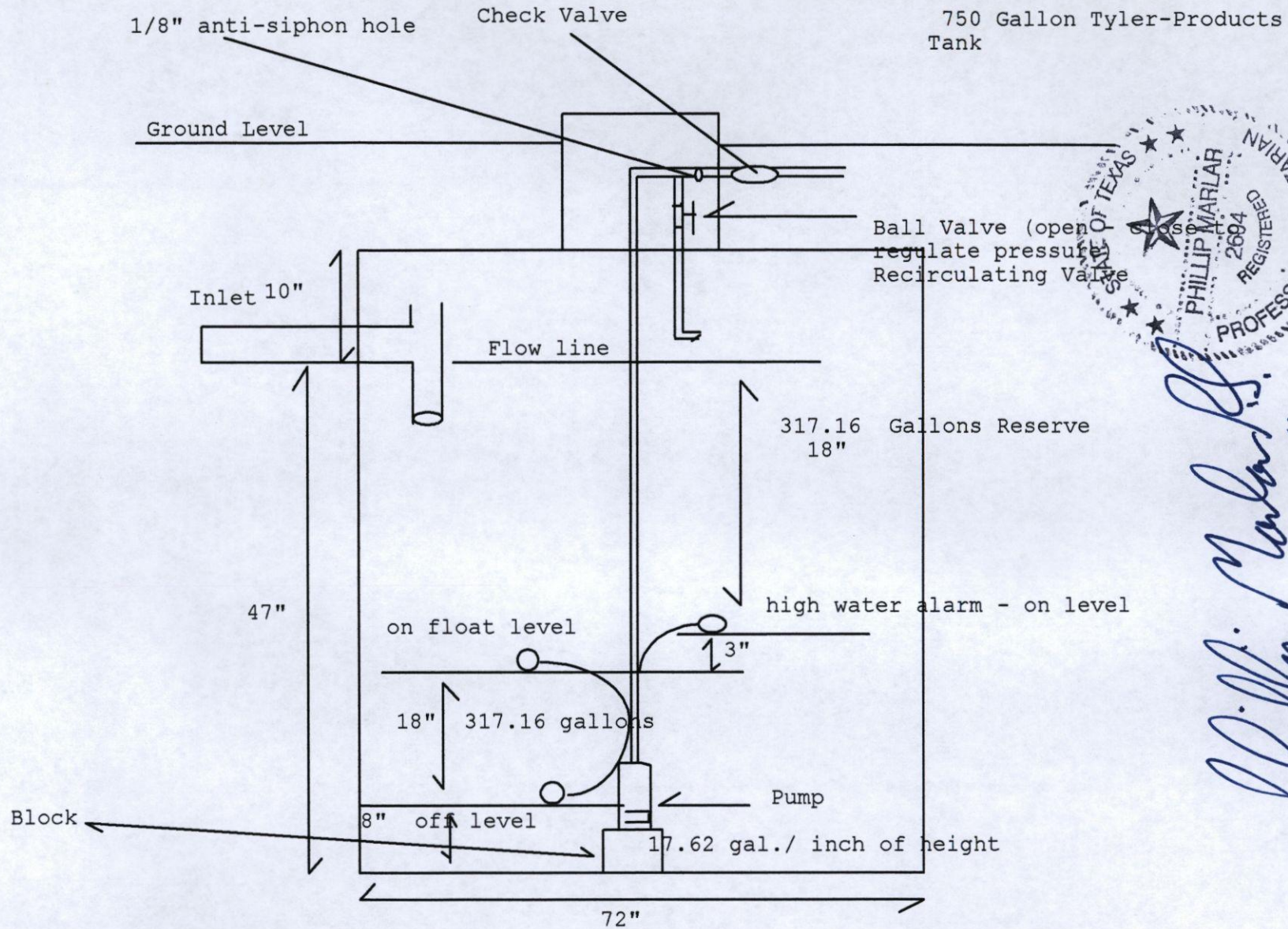
All lateral lines to be 24 to 34" in depth.
Average line depth to be 29" in depth.



Phillip Marlak

#2604
 JE#
 9819

10/13/60



Phillip Marlar
 #2694
 10/13/10 JE#9819

Pump Time 5.28 minutes for 317.16 gallons at 54.77 gpm at .86 psi (2ft).

Total Head 19.07 FT at 60.1 gpm for 2" Sch 40 PVC piping.

.5 HP Barnes 512-EHL @ 62.1 gpm will deliver 25 FT total head.

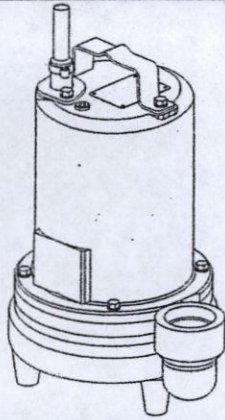
EH 512L

BARNES® EH-L

SUBMERSIBLE EFFLUENT PUMPS

3/4" Spherical Solids Handling Single Seal

SECTION	B
PAGE	3
DATE	12/99
REPLACES	1/98



Series: EH-L 0.5 - 1.5 HP
3450 RPM



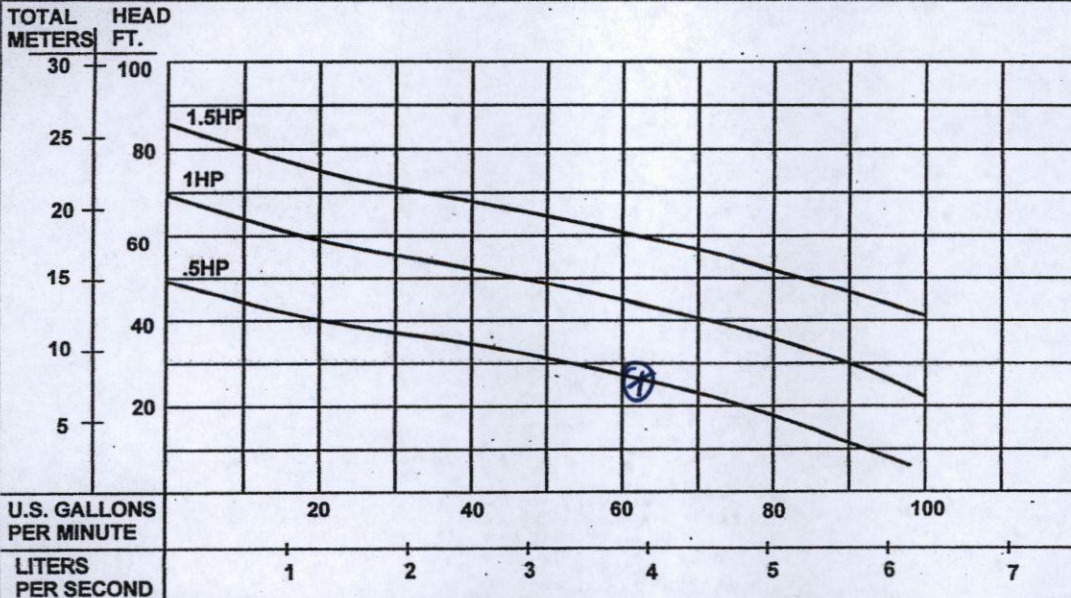
CSA 108 - File No. LR16567
UL 778

NRTLIC

Description:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS.

DISCHARGE: 2" (51mm) NPT, Vertical
LIQUID TEMPERATURE: 104°F (40°C) Continuous.
VOLUTE: Cast Iron ASTM A-48, Class 30.
MOTOR HOUSING: Cast Iron ASTM A-48, Class 30.
SEAL PLATE: Cast Iron ASTM A-48, Class 30.
IMPELLER: *Design:* 3 Vane, Open, With Pump Out Vanes On Back Side. Dynamically Balanced, ISO G6.3.
Material: Polypropylene with stainless insert
SHAFT: 416 Stainless Steel
SQUARE RINGS: Buna-N
HARDWARE: 300 Series Stainless Steel
PAINT: Air Dry Enamel.
SEAL: *Design:* Single Mechanical
Material: Carbon/Ceramic/Buna-N
CABLE ENTRY: Hardware - 300 Series Stainless
15 ft. (4.6M) Cord. Plug on 120 Volt. Custom Molded For Sealing And Strain Relief.
SPEED: 3450 RPM (Nominal).
UPPER BEARING: Single Row, Ball, Oil Lubricated
LOWER BEARING: Single Row, Ball, Oil Lubricated
MOTOR: *Design:* NEMA L-Single Phase, NEMA B-Three Phase Torque Curve. Completely Oil-Filled, Squirrel Cage Induction. Class B
Insulation:
SINGLE PHASE: Permanent Split Capacitor (PSC). Includes Overload Protection In Motor.
THREE PHASE: 200-240/480 is Tri-Voltage. 600V Requires Overload Protection to be Included in Control Panel.
OPTIONAL EQUIPMENT: Seal Material, Impeller Trims, N/C Temperature Sensors with cable for 3 phase pumps (Requires Relay in Control Panel), Additional Cable.



Testing is performed with water, specific gravity of 1.0 @ 68° F, other fluids may vary performance.



A Crane Co. Company

PUMPS & SYSTEMS

Barnes Pumps, Inc
Distributor Sales & Service Dept.
420 Third Street/P.O. Box 603
Piqua, Ohio 45356-0603
Ph: (937) 615-3595
Fax: (937) 773-7157

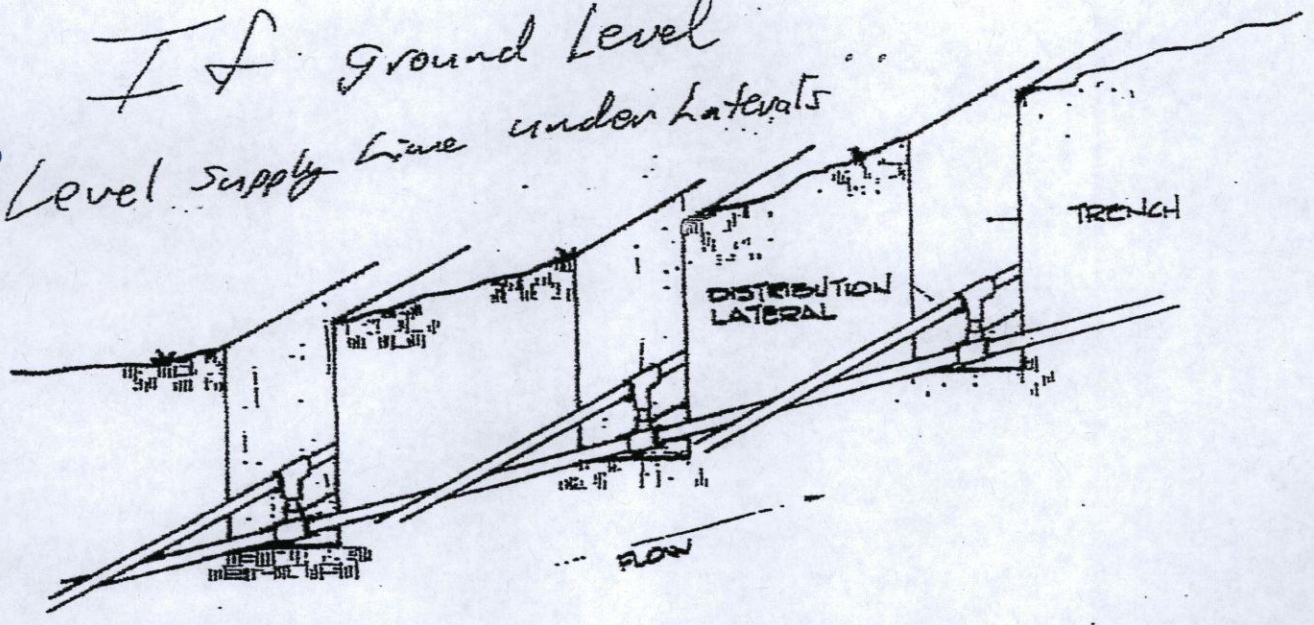
Barnes Pumps, Inc.
Bid-To-Spec & Project Sales
1485 Lexington Ave.
Mansfield, Ohio 44907-2674
Ph: (419) 774-1511
Fax: (419) 774-1530

Barnes Pumps Canada, Inc.
83 West Drive
Bramalea, Ontario
Canada L6T 2J6
Ph: (905) 457-6223
Fax: (905) 457-2650



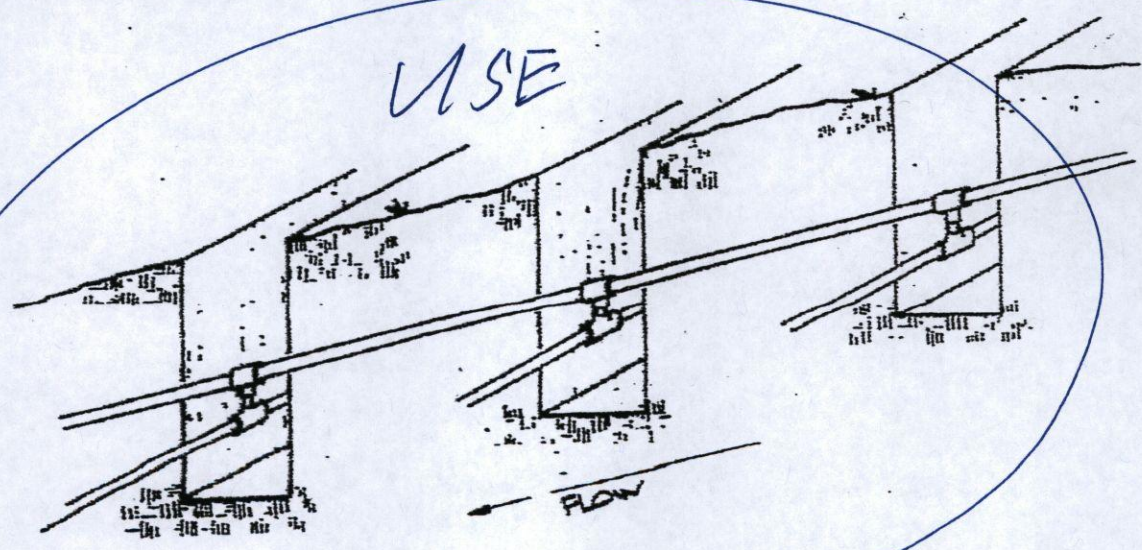
5.59

3/6/16 I & F Ground Level
Level supply line under laterals



A. PUMPING UPHILL

USE



B. PUMPING DOWNHILL

Figure 10. Manifold placement on slopes

On-Site Sewage Facility System ATC Review

Applicant Name: C.J. Maillet Application #: RC10-045 Date received: 10-18-10
 Subdivision: Hidden Oaks Lot: 3 Block: - Section: I
 Acreage: 1.5 acres Survey: R. Cavendish Abstract: 139 Quad: 3
 Site Address: 511 Hidden Oaks Ln. City: Corsicana County: Navarro
 Site Evaluator: Phillip Marlar Designer: Phillip Marlar Proposed Installer: Rod Pickle
 Reservoir: Richland Chambers

Date of Review	10-18-10 10-20-10		
Reviewer's Name	Harrison	Robinson	*Bailey
Reviewer's Lic. #	OS28839	OS8058	OS6515

1 Application Form

- A. All spaces either filled in or marked N/A
- B. Signature of owner or agent
- C. Name, license number of designer
- D. Name, license number of proposed installer
- E. Legal description of lot

	(Yes, No, NA)	
✓	✓	
✓	✓	
✓	✓	
✓	✓	
✓	✓	

2 Site Evaluation

- A. Scale drawing of site and evaluation locations
- B. Soil evaluation per USGS to include depth, type, restrictive horizons
- C. Sanitary easement from public water well, if applicable
- D. Gravel analysis, if applicable
- E. Signed and sealed by Site Evaluator

✓	✓	
✓	✓	
N/A	N/A	
N/A	N/A	
✓	✓	

3 Design Document

- A. Signed and sealed by designer
- B. Proposed installation drawing to scale
- C. Absorptive drainfield disposal system
- D. Proprietary disposal system
- E. Nonstandard disposal system
- F. Maximum daily wastewater inflow addressed

✓	✓	
✓	✓	
N/A	N/A	
N/A	N/A	
✓	✓	
✓	✓	

4 Surface Application Systems - TRWD WCO Rules

- A. Dual chlorinators required
- B. Chlorine alarm required
- C. 100 micron filter required
- D. Property line setback (20') addressed
- E. Nighttime spraying & timer addressed
- F. Autodialer required

N/A	N/A	
↓	↓	
↓	↓	

5 Variance Documentation

- A. Appropriate documentation for variance request, if applicable

N/A	N/A	
-----	-----	--

6 Ancillary Documents (if applicable)

- A. Plat and/or survey
- B. Maintenance contract
- C. Affidavit to the Public
- D. Affidavit to Join Property

✓	✓	
N/A	N/A	
↓	↓	

COMMENTS: Need originals of the design, faxed copy submitted.

* Not required for issuance.

ATC Issue Date: 10-21-10 Issued By: Chris Robinson License #: OS-8058

Revised 11/20/08