

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

*AUTHORIZATION TO CONSTRUCT  
AN  
ON-SITE SEWAGE FACILITY*

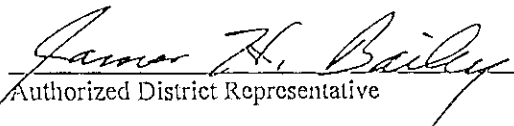
Application Number      RC 080060  
  
Property Owner            Keith E. Nickel  
  
Mailing Address           6703 Lake Circle Dr.  
  
                                 Dallas, Tx. 75214  
  
Property Location        Lot # 58  
  
                                 April Cove  
  
                                 Freestone 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 Natural Resource Conservation Commission and is based on a maximum daily flow of 240 gallons, the use of water saving devices is required.

  
\_\_\_\_\_  
Authorized District Representative

8-4-00  
\_\_\_\_\_  
Date

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

TRWD USE ONLY

RC080060  
APPLICATION NO.

APPLICATION FOR ON-SITE  
SEWAGE FACILITY

0802  
RECEIPT NO.  
8-2-00  
DATE  
\$150.00  
AMOUNT

R.C.

TRWD RESERVOIR

Freestone

COUNTY OF INSTALLATION

1. PROPERTY OWNER'S NAME: NICKEL KEITH EDWARD  
(LAST) (FIRST) (MIDDLE)
2. PERMANENT MAILING ADDRESS: 6703 LAKE CIRCLE DR. DALLAS, TX 75214  
(STREET/PO BOX) (CITY/STATE) (ZIP)
3. TELEPHONE NO. DURING DAY: (214) 408-9535 (PAGER) OR (972) 227-3380
4. SITE ADDRESS: SHADOW OAKS  
(STREET) (CITY/STATE) (ZIP)
5. PROPERTY DESCRIPTION: LOT NO. 58 BLOCK        SEC        SIZE        SQ.FT.  
SUBDIVISION: April Cove Acreage        Survey
6. SOURCE OF WATER: Private Well ☒ Public Water Supply Winkler  
(NAME OF SUPPLIER)
7. SINGLE FAMILY RESIDENCE: No. of Bedrooms 3 Living Area (sq. ft.) 1750  
DESIGNED MAXIMUM DAILY WATER CONSUMPTION (gpd): 240
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: W. H. H. H. LICENSE NO.: 1361  
PHONE NO.: 903-874-3945
11. INSTALLER: Jimmy RASH REGISTRATION NO.: 05-583  
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 TNRCC's On-Site Sewage Facility Rules (OSSF) and the District's Waste Control Order.

(SIGNATURE OF OWNER)

(DATE)

(SIGNATURE OF AUTHORIZED DISTRICT REPRESENTATIVE)

(DATE)

# ON-SITE SEWAGE FACILITY SOIL SURVEY REPORT INFORMATION

Property Owner's Name Keith Nickel  
 Mailing Address 137 Main Park Lane  
 City, State, Zip Duncanville, TX 75137  
 Site Location April Cove, Lot 58  
 County Freestone

(FOR HOLE #1)

DEPTH	TEXTURE	CLASS	STRUCTURE	WATER TABLE	SLOPE 0-30%	* SOIL SERIES	* SOIL ABSORPTION
in.	i.e. Loamy Sand, Sandy Loam, Loam, Silty Clay Loam, Sandy Clay, or Clay.	per USDA Chart i.e. Ia, Ib, II, III, or IV	Only if soil is a Class III i.e. Blocky, Platy, or Massive	PRESENT Yes / No	Maximum of overall drainfield	per County Soil Survey i.e. "Bowie"	LIMITATION RATING i.e. Fair, Moderate, Severe
0 - 26	Sandy Clay	III	Sub Ang Bl	No	6.3%		Moderate
26 - 30	Sandy Clay Loam	III	Sub Ang Bl	No			Moderate
30 - 42	Clay	IV		No			Severe

\* This can be found in the County Soil Survey entitled "Sanitary Facilities" (optional).

THE MOST RESTRICTIVE CLASS FOUND WITHIN TWO (2) FEET OF THE BOTTOM OF THE PROPOSED EXCAVATION IS: CLASS III [Note Class Ia & IV are unsuitable for standard disposal systems]

(FOR HOLE #2)

DEPTH	TEXTURE	CLASS	STRUCTURE	WATER TABLE	SLOPE 0-30%	* SOIL SERIES	* SOIL ABSORPTION
in.	i.e. Loamy Sand, Sandy Loam, Loam, Silty Clay Loam, Sandy Clay, or Clay.	per USDA Chart i.e. Ia, Ib, II, III, or IV	Only if soil is a Class III i.e. Blocky, Platy, or Massive	PRESENT Yes / No	Maximum of overall drainfield	per County Soil Survey i.e. "Bowie"	LIMITATION RATING i.e. Fair, Moderate, Severe
0 - 10	Sandy Loam	III	Sub Ang Bl	No	6.30%		Fair
10 - 28	Sandy Clay Loam	III	Sub Ang Bl	No			Moderate
28 - 32	Clay	IV					Severe

\* This can be found in the County Soil Survey entitled "Sanitary Facilities" (optional).

THE MOST RESTRICTIVE SOIL CLASS FOUND WITHIN TWO (2) FEET OF THE BOTTOM OF THE PROPOSED EXCAVATION IS: CLASS III [Note: Class Ia & IV are unsuitable for standard disposal systems]

EVALUATION PERFORMED BY: William Hill circle one: RS, PE, CPSS, DR. \*\*  
 DATE OF SOIL SURVEY: 21 July 2000 CERTIFICATION NO: QS7622

## TWO YEAR INITIAL SERVICE POLICY

Date: 7-28-00

Our firm, Jimmy RASH Construction, will inspect and service your Clearstream System for the first two years from the date of installation. There will be 3 inspections made each year for this initial two year period. Effluent quality inspection will include a visual inspection for color, turbidity, sludge build up, scum overflow and odor. Mechanical and electrical inspection and service include inspecting aerator, air filter, and alarm panel and replacing or repairing any component not found to be functioning correctly.

Upon expiration of this policy, our firm will offer a continuing service policy on a yearly basis to cover labor for normal maintenance and repairs on a year by year basis.

Violations of warranty include shutting off the electric current to the system for more than 24 hours, disconnecting the alarm system, restricting ventilation to the aerator, overloading the system above its rated capacity, or introducing excessive amounts of harmful matter into the system, or any other form of unusual abuse.

THIS POLICY DOES NOT INCLUDE PUMPING  
SLUDGE FROM UNIT IF NECESSARY.

Service Dealer:

Jimmy RASH  
18628 S Hwy 287  
CONRO, TX 75710

Owner:

[Signature]  
\_\_\_\_\_  
\_\_\_\_\_

Testing  
Backflow Preventers  
RPZA, PVB, DC

WILL HILL  
TESTING AND DESIGN  
204 N. FM 2555  
CORSICANA, TEXAS 75110  
905-874-3945

Design  
On-Site Sewage Systems  
Sludge Disposal Sites

## Calculations for Drip Emitter System

Keith Nickel  
April Cove \* Lot 58

3 bedroom house @ 240 GPD = 240 gal./day

Long term application in Class III soil = 0.2 gal./ sq. ft./day

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### *Required:*

240 gal/day + 0.2 gal./sq. ft./day = 1200 sq. ft. application area.

1200 sq. ft. + 4 sq. ft./emitter = 300 emitters X 2 ft. drip line/emitter = 600 ft. of drip line.

\*\*\*\*\*

### *Designed: ( See explanation after calculations).*

750 ft. dripline + 2 ft. line/emitter = 375 emitters x 1.13 gal./hr./emitter = 423.75 GPH.

423.75 GPH + 60 min./hr. = 7.06 GPM.

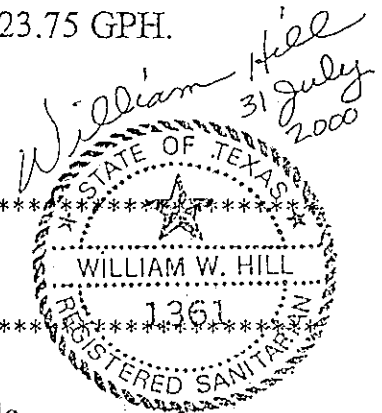
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(8 cycles/day) 240 GPD + 8 cycles/day = 30 gal./cycle

\*\*\*\*\*

(8 cycles/day) 30 gal./cycle + 7.06 gal./min. = 4.25 min./cycle

\*\*\*\*\*



T W D  
R. S. # 1361

Cont. specifications for Keith Nickel

TNRCC requires 1/3 daily rated usage (240 gal./3 = 80 gal) as reserve capacity in the pump tank in case of malfunction of the treatment system. At a designed reserve capacity of 134 gal. there will be 1.7 times the required reserve capacity.

Operating Pressure = 20 psi = 46 ft. head.

Pump Head:

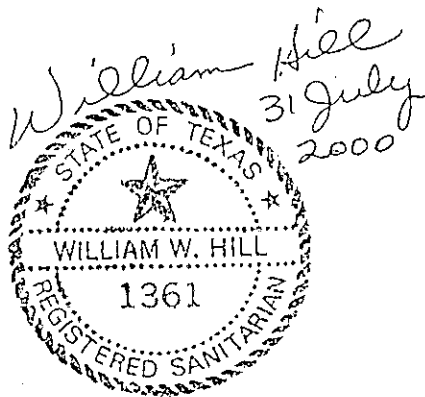
Pressure Head = 46.0 ft:

Friction Head = 7.0 ft.

Elevation Head = 7.0 ft.

60.0 ft. @ 7.06 GPM + 2 GPM recycle = 9.06 GPM @ 60 ft. total pump head.

The treatment system is to be a Clearstream -500 with the Clearstream P-20 1/2 HP pump.



500 Gal. Concrete Pump Tank (C)  
Jackson Concrete - Retreat  
240 Gal./Day

Keith Nickel  
April Cove  
Lot # 58

