

This Document is in reference to 5018 Fox Ln, Damian Acres Ph2 Lot 53.

Soils are classified in order of water movement: Class 1 to Class 4. Class 1 (sand) allowing the easiest and fastest water movement and class 4 (clay) having little to no water movement. In order to install a standard septic system, the soil class must be between a class 1B and class 3 on the top 60" of soil where it is being installed.

According to USDA data, the soil composition of the property in question is that the first 24" of depth are a high class 3 soil (loamy clay) and the following 6 feet are a class 4 soil (clay soil). Due to this composition of soil, water is limited to move in the top 60" that is normal in most septic systems. To add to this issue, the continuous rain we have been receiving has the top 24" of soil water logged.

A standard septic system for this home is 2-500 gallon septic tanks and 145 feet of gravel lined drain field. In this system, water is filter through the tank and then flows into a 4" Perforated PVC pipe with gravel situated around it. The pipe is normally installed at a depth between 3' to 5' (which is class 4 clay soil at this site) with the trench being 3' wide and holding 12" of gravel at the bottom. Because of this soil composition, a standard septic system would not be effective at 5018 Fox Ln.

In soils such as this, an alternative system called an ET Bed is installed. This system is comprised of the same 2-500 gallon tanks, but the drain field is slightly different. Two pits measuring 13' wide X 80' long X 2' deep are excavated and dirt is removed. Three 4" Perforated pipelines measuring 80' each are then installed in each pit with 1' of gravel surrounding each PVC line. The remaining excavated area is filled with Sand (class 1 soil) to the top of the excavation. Piping in the pits is then connected to the tanks outlet. This allows the water to quickly filter through the rock up the sand to the surface where it will be evaporated by the sun or wind. The surface area is about 4 times that of a standard system to allow for the most evaporation.

The cost of this system increases as compared to a standard system due to the increased labor, materials such as gravel and pipe, increase in excavation, removal of excavated dirt, and hauling loads of sand to fill the excavated area.



Gomez Backhoe Service
 1000 W. Mile 2 Rd
 Mission, Tx 78574

Invoice

Date	Invoice No.
06/22/15	7504

Bill To:
G&G Contractors

Job Location

P.O. Number	Terms	Due Date	Contract #
		06/22/15	

Item	Description	Est Amt	Prior %	Quantity	Rate	Curr %	Amount
Septic System	2 Bedroom ET Bed for 5018 Fox Ln to include the following:				0.00		0.00
Septic System	500 gallon septic tanks excavated and set	600.00		2	300.00	100	600.00
Septic System	Bull Run switching Valve	200.00		1	200.00	100	200.00
Septic System	Solid Pipe by the foot excavated and set	500.00		100	5.00	100	500.00
Septic System	Perforated pipe by the food excavated and set	3,840.00		480	8.00	100	3,840.00
Septic System	~2000 cubic ft of gravel	1,000.00			1,000.00	100	1,000.00
Septic System	Bank Sand loads from San Benito to backfill remaining area	2,200.00			2,200.00	100	2,200.00

Total	\$8,340.00
Payments/Credit	\$0.00
Balance Due	\$8,340.00

HIDALGO COUNTY URBAN COUNTY PROGRAM

Memorandum

TO: File

FROM: Eric Trevino, Program Specialist 

DATE: June 29, 2015

RE: Septic System RE Pedro Vela Project (5018 Fox Ln., Edinburg, TX)

As a result of Rene Garza d/b/a G & G Contractors submitting a change order (see attached Gomez backhoe Service Invoice and explanation letter) regarding the Pedro Vela project (5018 Lox Ln., Edinburg, TX) needing an alternative septic system (ET Bed), a review was performed to confirm the request.

I contacted Roberto Serna, Executive Assistant – Hidalgo County Health Dept., to provide me a list of septic tank – installers, site evaluators, registered sanitarian tank designers and mortgage septic tank inspectors. As such, I contacted Raul S. Pizano (licensed septic tank installer) who stated that a standard septic tank system would not operate effectively with the current soil composition of the subject property. Mr. Pizano supports that the system Gomez Backhoe Service will work effectively. Also, Mr. Pizano supplied a cost estimate which was about \$600 over what Gomez Backhoe Service cost estimate – see attached supporting documentation.

In addition, due to the amount of space the alternative septic system will occupy, the demolition of a 10 x 30 shed (not in the original bid amount) will be required – see attached pictures. The original bid did not include said shed due to it not being in the way of the reconstruction of existing structure.

RG ENTERPRISES LLC dba G&G
CONTRACTORS

5125 S US HWY 281
TX 78539

Invoice

Date	Invoice #
6/19/2015	2015038

Bill To
URBAN COUNTY PROGRAM 427 E. Duranta Ave. Suite 107 Alamo, Tx 78516

P.O. No.	Terms	Project
		Pedro Vela-5018 Fox Lane

Quantity	Description	Rate	Amount
	Additional demolition work will need to be done due to the space required for the new septic system.. There is a large storage shed that measures approximately 10 x 30 and over 100 lf of cedar fence, there is a chicken coop, porch, and lots of trash that the family left behind that will need to be demolished and removed.	1,975.00	1,975.00
	Cost of New Septic System- See Attached-Supporting Documentation	8,340.00	8,340.00
		Total	\$10,315.00

From: "Roberto Serna" <roberto.serna@mail.hchd.org>
To: "eric trevino" <eric.trevino@co.hidalgo.tx.us>
Sent: Wednesday, June 10, 2015 9:42:08 AM
Subject: OSSF List

Roberto Serna
Executive Assistant
Hidalgo County
Health Department
Environmental Division
roberto.serna@hchd.org
Phone:(956) 383-0111 ext. 262
Fax:(956)m 383-7351

Septic Tank Installers List

License#	Expe. Date	Installer Name	Phone Number
2397	10/31/11	Caballero, Ricardo	968-7843 / 975-8429
20191	06/30/11	Carranza, Leonardo V	262-4145
1948	09/30/11	Chapa, Gustavo	781-3419 / 821-2039
2779	08/31/11	Davis, Jerry	289-1406
1349	02/29/12	Garza, Jacobo	739-1000 / 778-7666
3333	09/30/11	Garza, Pablo	867-2945
3300	08/31/10	Gomez, Isidoro	581-9063 / 519-7644
29970	12/31/15	Gonzalez, Aaron	650-9669
3880	09/30/10	Gonzalez, Felix	778-7668 / 383-7739
1350	08/31/10	Gonzalez, Jose A.	778-3543
6086	09/30/10	Hernandez, Lizandro	381-5223 / 605-2113
2700	03/31/11	Izaguirre, Aniceto	789-0619 / 580-4134
4378	11/30/10	Mata, Isaac	778-7231 / 682-7875
4873	03/31/12	Nava, Robert C	451-8939 / 781-0885
3150	04/30/11	Ochoa, Guillermo Jr	789-9028
8943	11/30/11	Perez, Valentin	684-1754
23599	05/14/14	Pizano S. Raul	330-6760
30925	4-30-17	Rocha, Rene Sr.	956-585-6744
1365	02/29/12	Rosales, Adolfo	534-7193
1364	03/31/11	Rosales, Jose	585-7379
22710	05/31/12	Saenz, Fernando	262-8506
8066	10/31/10	Trevino, Alarico	778-7688 / 782-1448
4729	09/01/11	Trevino, Freddy	460-9968

Site Evaluators

11443	Barrera, Noel RS	458-3640
11194	Caballero, Ricardo Jr	(512) 968-4873
9754	Chapa, Gustavo	781-3419 / 821-2039
9553	Davis, Jerry C	289-1406
10032	Gomez, Isidoro	581-9063 / 519-7444
12258	Gonzalez, Jose A	778-3543
22128	Guerra, Jose A	241-0508 / 399-6050
10435	Guerrero, Javier	262-4404
10029	Hernandez, Lisandro	381-5223
12481	Izaguirre, Aniceto	789-0619
11121	Mata, Isaac	778-7231
10965	Nava, Robert C	781-0885
23979	Pizano S. Raul	330-6760
6698	Rojas, Joe M RS	279-4519

Registered Sanitarian (Septic Tanks Design)

4008	Barrera, Noel RS	458-3640
2603	Garcia J. Alberto	622-8654
4052	Gomez, Luz	581-9063
3386	Izaguirre, Aniceto	789-0619
6698	Rojas, Jose	279-4519

License Mortgage Septic Tank Inspectors

Davis, Jerry	289-1406
Gomez, Luz	581-9063
Hernandez, Lisandro	381-5223 / 292-0814
Izaguirre, Aniceto	789-0619

DATE: 6-11-15

Raul Pizano
330-6760

Client Pedro Vela
Address 5018 Fox Ln
City, State Edinburg, TX
Phone (956) 787-8127

Quantity	Discription	Total
2	Decomission old Septic System Disinfection and Dispersal	600.00
2	500 Gallon Septic Tanks Excavation and Installing	650.00
1	Switching Valve	120.00
100	Solid Piping Excavation and installing	510.00
480	Perforated Piping Excavation and Installing	4200.00
2000	Gravel	900.00
55	Back Fill Sand	1925.00

Commentary
This is only an estimate!

TOTAL	<u>8905.00</u>
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Client

Date

Representative

Date







