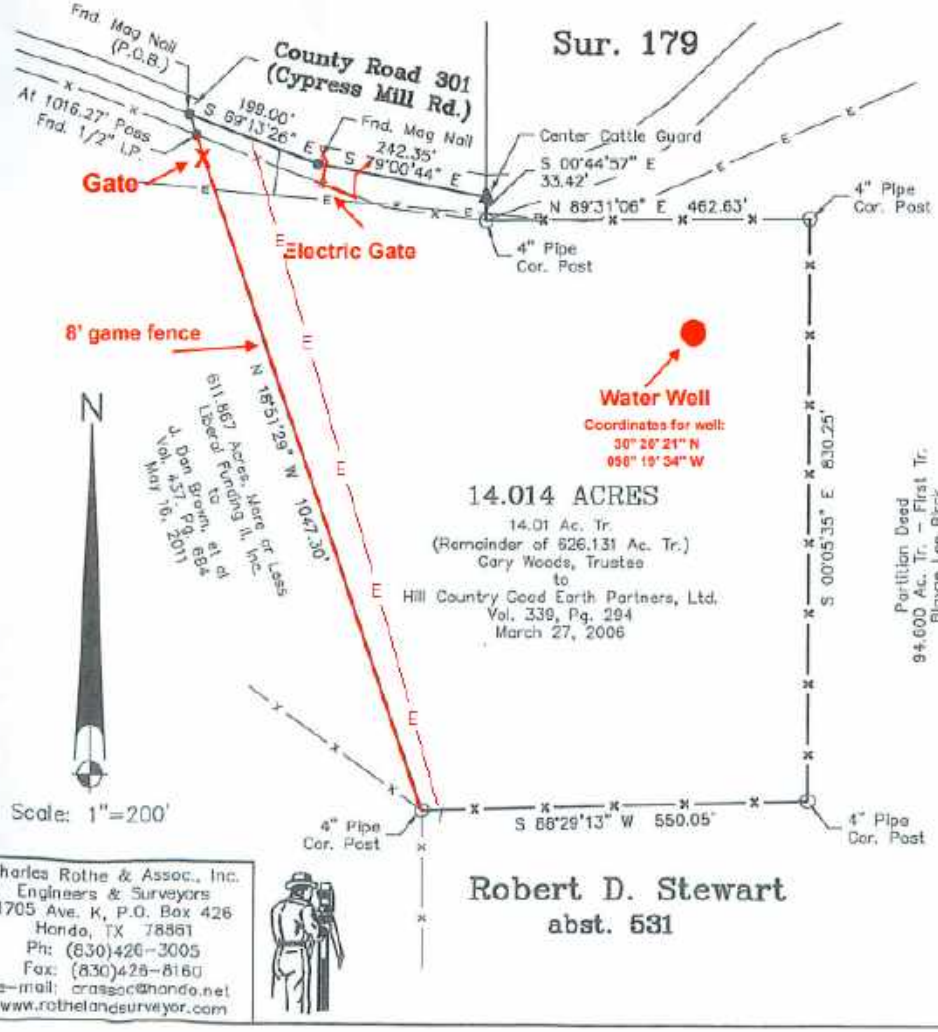
4252 Cypress Mill

Texas, AC +/-

Boundary

Reno Realty Group
P: 830-257-5777 www.RenoRealtyGroup.com 1614 Sidney Baker, Kerrville, TX 78028

Blanco County, Texas



Charles Rothe & Assoc., Inc.
Engineers & Surveyors
1705 Ave. K, P.O. Box 426
Hondo, TX 78861
Ph: (830)426-3005
Fax: (830)426-8160
e-mail: crassoc@hondo.net
www.rothelandsurveyor.com

Prepared For: Hill Country Good Earth Partners, Ltd.

A Plat of 14.014 acres of land situated about 17.6 miles N 18°30' E of Blanco, in Blanco County, Texas, out of Survey No. 179, Abstract No. 531, Robert D. Stewart, original Grantee, being that same property called 14.01 acres (Remainder of 626.131 Acre Tract, Volume 339 on Page 294) described in a Deed to Hill Country Good Earth Partners, Ltd. from Gary Woods, Trustee, dated March 27, 2006, as recorded in Volume 339 on Page 294 of the Official Public Records of Blanco County, Texas, said 14.01 acre tract of land described in Exhibit "B" in a Deed to Rustic River, Ltd. from Hill Country Good Earth Partners, Ltd., dated January 28, 2010, as recorded in Volume 417 on Page 205 of the aforementioned Official Public Records.

The bearings are relative to Geodetic North WGS 84 as taken from GPS Observations.

I certify that the foregoing plat was prepared from an actual survey made under my supervision on the ground and that same is true and correct. Witness my hand and seal this the 14th day of August 2018.

Charles W. Rothe
Registered Professional Surveyor No. 2453
Firm No. 10122200

STATE OF TEXAS
REGISTERED
CHARLES W. ROTHE
2453
PROFESSIONAL
LAND SURVEYOR

STATE OF TEXAS WELL REPORT for Tracking #606147

Owner:	[redacted]	Owner Well #:	**No Data**
Address:	**4252 Cypress Mill Rd Johnson City , TX 78636**	Grid #:	**57-46-2**
		Latitude:	**30° 20' 21" N**
Well Location:	**4252 Cypress Mill Rd Johnson City, TX 78636**	Longitude:	**098° 19' 34" W**
Well County:	**Blanco**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **5/10/2022** Drilling End Date: **5/10/2022**

Borehole:

Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
8	**0**	**50**
6.25	**50**	**360**

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
0	**50**	**3 Benseal 5 Portland 8 Bags/Sacks**

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 50 ft.**
Burlap/Neoprene at 55 ft.
Burlap/Neoprene at 87 ft.
Burlap/Neoprene at 90 ft.

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 5 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
90 - 360	**Ellenberger**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

P.O. Box 867
Marble Falls, TX 78654

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr.** Apprentice Number: **60952**

Comments: **BPGCD # 20210176**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**1**	**Top Soil**
1	**3**	**Red SS**
3	**8**	**Sandy Loam w Broken White LS**
8	**14**	**White LS**
14	**22**	**Sand - Gray Tan SS**
22	**26**	**Tan LS**
26	**30**	**Tan Gray Dolomite**
30	**52**	**Tan Gray Dolomite w Clay**
52	**56**	**Brown Dolomite**
56	**70**	**Broken Brown Dolomite**
70	**81**	**Gray Tan Dolomite w/Clay Clusters**
81	**90**	**Tan Dolomite**
90	**120**	**Pink Tan Dolomite**
120	**240**	**Gray Tan Dolomite**
240	**360**	**Gray Dolomite**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	**Blank**	**New**	**SDR17**	**2**	**100**
4.5	**Screen**	**New**	**.035**	**100**	**120**
4.5	**Blank**	**New**	**SDR17**	**120**	**300**
4.5	**Screen**	**New**	**.035**	**300**	**320**
4.5	**Blank**	**New**	**SDR17**	**320**	**340**
4.5	**Screen**	**New**	**.035**	**340**	**360**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

Geotechnical Solutions

2922 NW Loop 410, Ste. 105
San Antonio, Texas 78230 • 210. 209. 4472 : geotechsltns@gmail.com
Firm No.: F-19672

[redacted]

August 19, 2022
No.: 22-397 (Page 1 of 4)

RE: Geotechnical Study (Proposed Residence)
4252 Cypress Mill Road
Johnson City, Texas 78636

Sir:

Pursuant to your request, a representative of Geotechnical Solutions traveled to the above-referenced properties on July 21, 2022, to obtain soil samples **(by means of 2 borings,)** for the purposes of determining the Atterberg Limits (PI), soil classification/s, allowable bearing capacities, potential soil vertical movement estimates, and to provide foundation design parameters for proposed residence. The laboratory test results and our findings are summarized below. **Representative Site Photos** are attached.

Typical Stratigraphy & Atterberg Limits (PI)

Depth / Interval	*Soil Classification*	*Symbol*	LL, %	PL, %	PI
1/2”	Light brown to tan, Clayey-Silt, semi-moist, compact to moderately dense		26	9	**17**
	½” to approx. (2.3 to 2.8 feet)		36	12	**24**
2.5’	Limestone/or weathered stone, with intermittent silt seams, dense to very dense		--	--	**--**
4.5’+					

Overall Effective PI: 17 - 19 ; PVR/PVM: -1-1/2” to +1-1/4” (at soil surface)
Allowable q_a: 1800 psf at minimum depth of 12” below existing elevation

Reinforced Beam-and-Slab-on-Grade Foundation

A slab-on-grade foundation may be considered for the proposed building. Geotechnical and pertinent PTI design parameters, based on general design analysis methods in Chapters 3 and 4 PTI - 2004 Edition, along with the 2008 Supplement, were evaluated and are summarized in the following table. **BRAB-WRI** parameters are also provided.

CRITERIA BASED ON PVR/PVM OF APPROX.: *-1-1/2" to +1-1/4"*
(Design PI: 23)

Thornthwaite Moisture Index	**-15 to -14**
Allowable Bearing Capacity	**2000 psf**
Edge Moisture Variation Distance (Em)	**6.0' (center)**
	3.1' (edge)
Differential Vertical Soil Movement (Ym)	**1.40" (center)**
	1.85" (edge)
BRAB-WRI: C_w and Climatic Rating Factor:	**0.91 ; 0.09**
Minimum Perimeter Grade Beam Penetration into Clay-Soil, After Grubbing Activities	**18"**

The above design parameters assume that vertical moisture barrier (perimeter beam) is designed to extend to the recommended embedment depth and **that subgrade soil / fill soil and excavated grade beam trenches are free of roots and loose soil and should be in a moist and dense / well-compacted condition, prior to concrete placement/discharge. Voids created by the removal of trees or previously existing structures,** should be **backfilled** with moistened, low PI, sandy/gravelly soil and densely compacted. Final design parameters are commonly at the discretion of the project structural engineer.

The PTI method of predicting soil movement is mostly applicable when site moisture conditions are controlled by climatic conditions. Of course, foundation performance can be significantly influenced by adding perimeter pavement/s, yard drainage and yard maintenance, flower beds adjacent to foundation, rain gutters, utility line leaks, trees before and after construction, post construction subsurface or surface alterations near the foundation perimeter; and exceptional dry/wet prolonged conditions. The above criterion also assumes that proper irrigation methods and drainage **will be maintained** after construction. ***If proper drainage / irrigation is not maintained, potential vertical movements greater than that anticipated may occur.***

The use of **sacked fill** between the beams should be at the discretion of the structural engineer. In this case, the structural engineer should provide anticipated foundation performance information if sacked fill is incorporated in the overall foundation specifications/details.

LIMITATIONS OF GEOTECHNICAL STUDY
Proposed Residence
4252 Cypress Mill Road
Johnson City, Texas 78636

The analysis and recommendations contained in this report were based on the data from two (2) test borings, the laboratory test results, the observations associated with the properties and our experience in the area. This report may not reflect precise variations of the soil conditions across the site. If different subsurface conditions are encountered at the time of construction/excavations, we should be contacted to evaluate the conditions encountered.

This report was prepared for this project exclusively for the use of *Mr. Tyler Riddle and his design team and the builder / foundation contractor.*

Thank you for the opportunity to be of service
Geotechnical Solutions (F-19672)

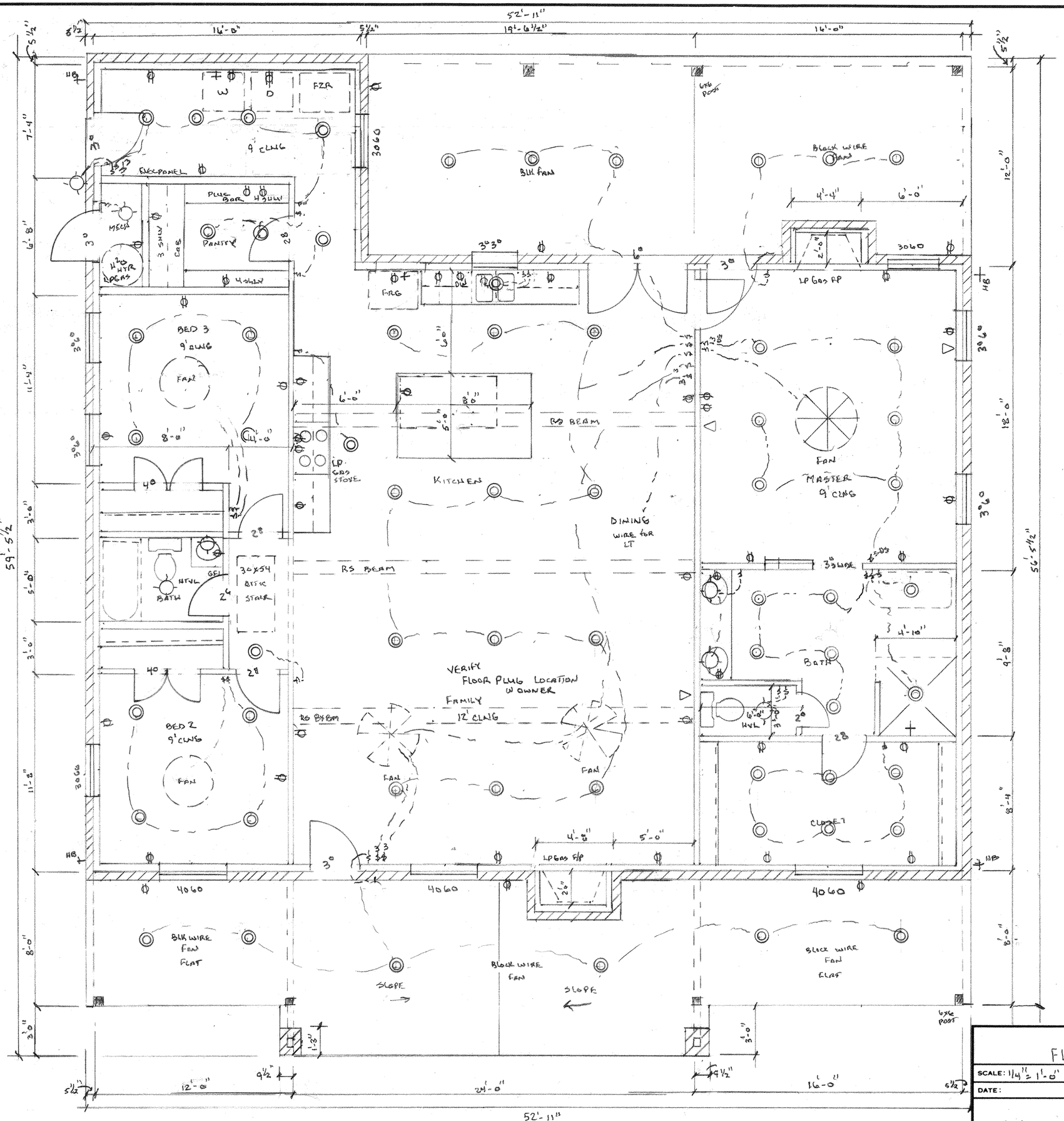
Alan J. Vasquez
Geotechnical Consultant

Conan C. Bear, P.E.
Engineering Consultant

8/19/22

Representative Site Photos

4252 Cypress Mill Road



ELECTRIC NOTES

VERIFY PHONE, T.V., FAN LOCATIONS WITH OWNER UNDER COUNTER LIGHTS

FLOOR PLAN

SCALE: 1/4" = 1'-0"	APPROVED BY:	DRAWN BY
DATE:		REVISED

AJ FUCHS RESIDENCE

4252 CYPRESS MILL RD JOHNSON CITY TX 78636

DRAWING NUMBER 01