

September 20, 2019



**ENTECH**  
ENGINEERING, INC.

505 ELKTON DRIVE  
COLORADO SPRINGS, CO 80907  
PHONE (719) 531-5599  
FAX (719) 531-5238

Tech Contractors  
3575 Kenyon Street, Ste 200  
San Diego, California 92110

Attn: Raul Guzman

Re: Soil, Geology and Geologic Hazard Evaluation  
Meridian Ranch – Rolling Hills Ranch, Filings 1 through 4  
SE of Sunrise Ridge Drive and Rex Road  
El Paso County, Colorado

Dear Mr. Guzman:

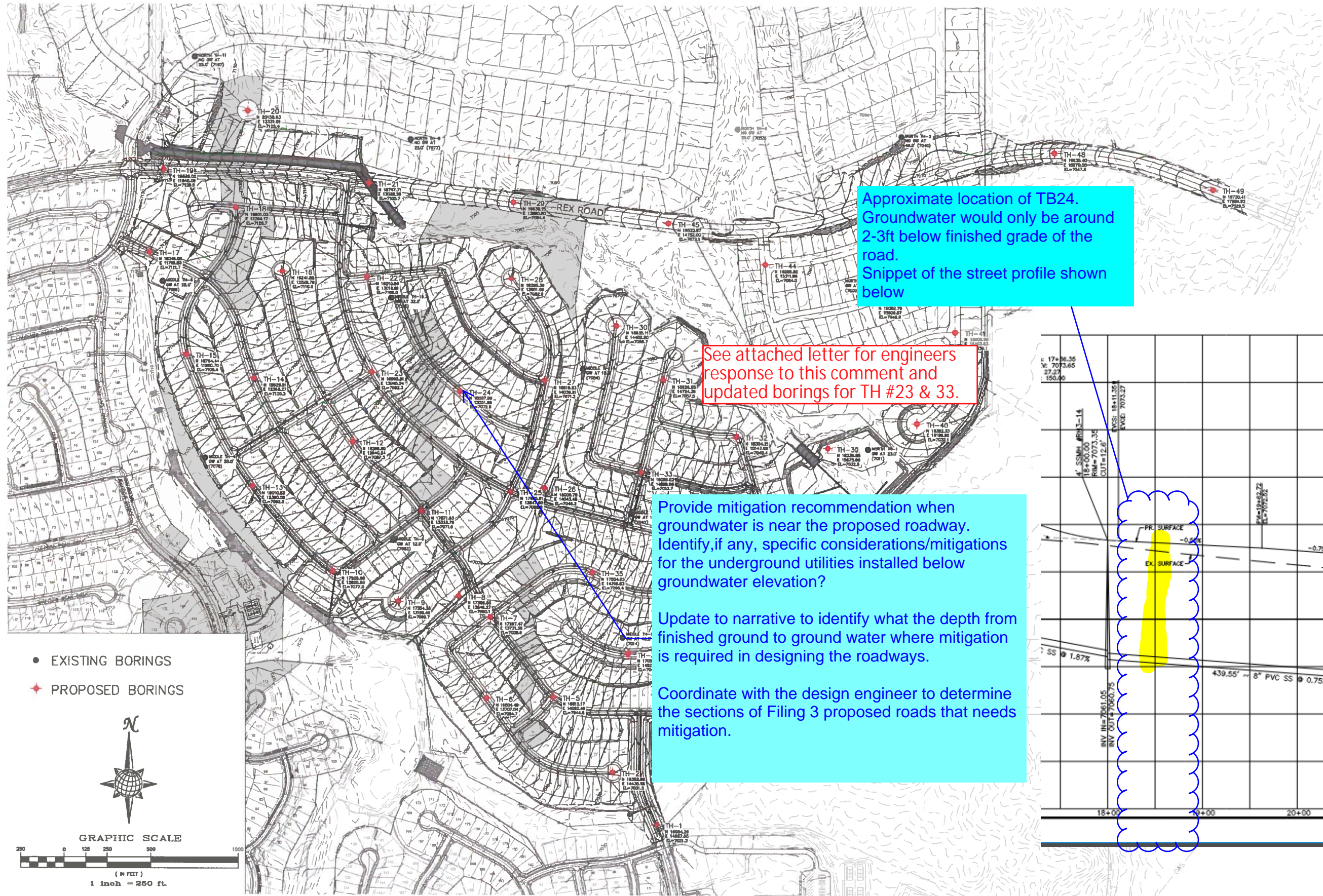
As requested, personnel of Entech Engineering, Inc. have investigated the above referenced site to evaluate the conditions with respect to geology and geologic hazards affecting development of the site. The subsurface soil conditions were investigated by Entech Engineering, Inc., Test Boring Logs (Appendix A) and Summary of Laboratory Testing Results are included with this report.

The project consists of single-family residential development on an approximate 250-acre site. The site lies in El Paso County, Colorado, approximately 4 miles north of Falcon, Colorado. The approximate location of the site is shown on the Vicinity Location Map, Figure 1.

The topography of the site is gently to moderately sloping rolling hills that generally slope in a southeasterly direction. Minor drainages exist on the site that trend in south-southeasterly directions. The drainages were dry at the time of this investigation. The site lies in portions of S½ of Section 20, and Northern portion of Section 29 Township 12 South, Range 64 West of the 6th Principal Meridian in El Paso County, Colorado. The site is currently vacant. The Site Plan/Proposed Grading is presented in Figure 3.

Forty-nine test borings were drilled on the site as a part of a Subsurface Soil Investigation dated July 15, 2019, (Reference 1). The Test Boring Logs are included in Appendix A. Laboratory Test Results are summarized in Table 1. Information from this report was used evaluating the site.

The scope of this report includes a geologic analysis/evaluation of the site utilizing published geologic data, available subsurface soils information and site-specific mapping of major geologic features, and identification of geologic hazards with respect to the development with recommended mitigation techniques. The Natural Resource Conservation Service (NRCS), previously the Soil Conservation Service (SCS) Survey was also reviewed to evaluate the site.



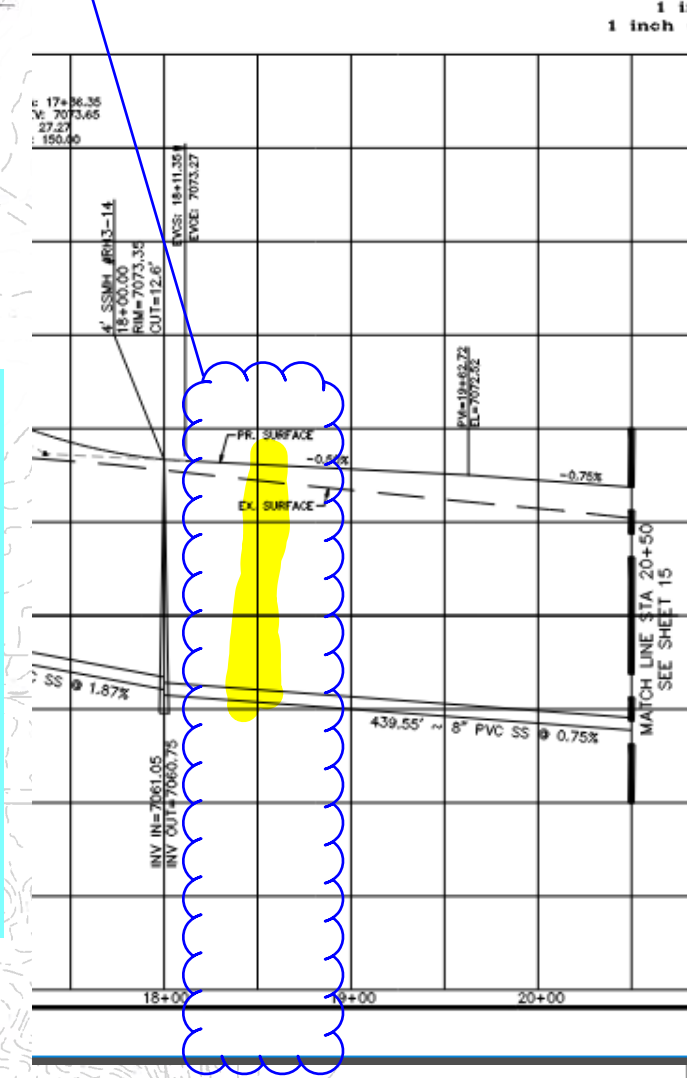
Approximate location of TB24. Groundwater would only be around 2-3ft below finished grade of the road. Snippet of the street profile shown below

See attached letter for engineers response to this comment and updated borings for TH #23 & 33.

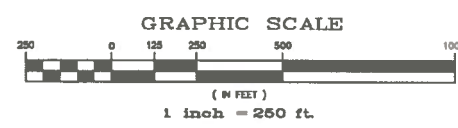
Provide mitigation recommendation when groundwater is near the proposed roadway. Identify, if any, specific considerations/mitigations for the underground utilities installed below groundwater elevation?

Update to narrative to identify what the depth from finished ground to ground water where mitigation is required in designing the roadways.

Coordinate with the design engineer to determine the sections of Filing 3 proposed roads that needs mitigation.



- EXISTING BORINGS
- ★ PROPOSED BORINGS



REVISION	BY

**ENTTECH**  
ENGINEERING, INC.  
505 ELKTON DRIVE  
COLORADO SPRINGS, CO. 80907 (719) 531-5599

SITE PLAN/PROPOSED GRADING  
MERIDIAN RANCH - ROLLING HILLS RANCH  
FILINGS 1 - 4  
EL PASO COUNTY, CO.  
FOR: TECH CONTRACTORS

DRAWN L.L.L.
CHECKED
DATE 9/16/19
SCALE AS SHOWN
JOB NO. 190300
FIGURE No. 3

TEST BORING NO. 23  
 DATE DRILLED 3/12/2019  
 Job # 190300

TEST BORING NO. 24  
 DATE DRILLED 3/12/2019  
 CLIENT TECH CONTRACTORS  
 LOCATION ROLLING HILLS

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/12/19							WATER @ 9', 3/12/19 WATER @ 2', 6/6/19						
6" TOPSOIL, SAND, SILTY, FINE TO COARSE GRAINED, TAN, LOOSE, MOIST	0-6	[Symbol]		4	3.3	1	6" TOPSOIL, SAND, SILTY, FINE TO COARSE GRAINED, TAN, DENSE, MOIST 6/6/19	0-6	[Symbol]		45	11.4	1
	5	[Symbol]		7	4.5	1	CLAYSTONE, SANDY, TAN, HARD, MOIST	5	[Symbol]	50 7"	50	16.8	3
	10	[Symbol]		50 10"	12.1	2	3/12/19 SANDSTONE, CLAYEY, FINE TO COARSE GRAINED, BROWN, VERY DENSE, WET	10	[Symbol]	50 11"	50	21.0	2
SANDSTONE, SLIGHTLY SILTY, FINE TO COARSE GRAINED, BROWN, VERY DENSE, MOIST CLAYSTONE, SANDY, BLUE GRAY, HARD, MOIST	15	[Symbol]		50 8"	12.5	3		15	[Symbol]	50 7"	50	8.3	2
	20	[Symbol]		50 11"	13.3	3	CLAYSTONE, SANDY, BLUE GRAY, HARD, MOIST	20	[Symbol]	50 9"	50	10.4	2
								25	[Symbol]	50 5"	50	16.1	3



**ENTECH**  
**ENGINEERING, INC.**

505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

TEST BORING LOG

DRAWN

DATE:

CHECKED: *h*

DATE:

7-12-19

JOB NO.:  
 190300

FIG NO.:  
 A- 12