Job No. 189360

June 24, 2022

Gregg Cawlfield
5710 Vessey Road
Colorado Springs, CO 80908

Re: Wastewater Study
Canyon Creek Ranch
El Paso County, Colorado

Ref: *Canyon Creek Ranch, Final Plat,* prepared by Land Development Consultants, Inc., dated December 20, 2020.
Ref: *Canyon Creek Ranch, Drainage Plan for Existing Conditions,* prepared by Land Development Consultants, Inc., dated March 22, 2022.

Dear Gregg:

As requested, personnel of RMG – Rocky Mountain Group has performed a preliminary investigation and site reconnaissance at the above referenced address. It is our understanding the parcel included in this study is:

- EPC Schedule No. 6214000112: addressed as 11550 Parallax Heights, which consists of approximately 23.96 acres and is zoned RR-5.

Project Description:

The site consists of approximately 23.96 acres and is mostly vacant land. It is our understanding the existing 23.96-acre parcel is to be subdivided into three separate lots and two tracts. Proposed lot 1 is to be approximately 5.04 acres and is to retain the existing single-family residence, individual water supply well and on-site wastewater treatment system. Proposed lots 2 and 3 are each to be approximately 5.04 acres and 6.974 acres, respectively, and are to contain a new single-family residence. Tracts A and B are to be approximately 4.32 acres and 3.28 acres, respectively, and are to remain vacant, unimproved land.

Each new lot is to be serviced by an on-site wastewater treatment system (OWTS) and individual water supply well. Proposed lots 2 and 3 are to be accessed by a proposed driveway that is to be extended from the existing Creek View Road. Proposed lot 1 can be accessed by a driveway off of the intersection of Mountain View Drive and Forest Edge Drive. A Site Vicinity Map is included as Figure 1.

This letter is to provide information for the on-site wastewater report per the On-Site Wastewater Treatment Systems (OWTS) Regulations of the El Paso County Board of Health pursuant to Chapter 8.

The following are also excluded from the scope of this report including (but not limited to) foundation recommendations, site grading/surface drainage recommendations, subsurface

drainage recommendations, geologic, natural and environmental hazards such as landslides, unstable slopes, seismicity, snow avalanches, water flooding, corrosive soils, erosion, radon, wild fire protection, hazardous waste and natural resources.

Previous Studies and Field Investigation

Reports of previous geotechnical engineering/geologic investigations for this site were available for our review and are listed below:

1. *Profile Pit Evaluation for Gregg Cawfield, Lot #2, 0 Creek View Road, El Paso County, Colorado,* prepared by Geoquest, LLC, Job No. 21-1147, dated October 25, 2021.
2. *Soils Report for Gregg Cawfield, Lot #2, 0 Creek View Road, El Paso County, Colorado,* prepared by Geoqest, LLC, Job No. 21-1147, dated October 25, 2021.
3. *Profile Pit Evaluation for Gregg Cawfield, Lot #3, 0 Creek View Road, El Paso County, Colorado,* prepared by Geoquest, LLC, Job No. 21-1148, dated October 21, 2021.
4. *Soils Report for Gregg Cawfield, Lot #3, 0 Creek View Road, El Paso County, Colorado,* prepared by Geoqest, LLC, Job No. 21-1148, dated October 21, 2021.

SITE CONDITIONS

Personnel of RMG performed a reconnaissance visit on April 29, 2022. The purpose of the reconnaissance visit was to evaluate the site surface characteristics including landscape position, topography, vegetation, natural and cultural features, and current and historic land uses. Four 8-foot deep profile pits were reportedly observed by Geoquest, LLC on September 30, 2021. The profile pit locations for each proposed new lot are included in Figure 2, Profile Pit Location Map.

The site surface characteristics were observed to consist of native grasses and weeds with dense stands of pine trees.

The following conditions were observed with regard to the 23.96-acre parcel:

- A well currently does exist on the existing 23.96-acre site;
- No runoff or irrigation features anticipated to cause deleterious effects to treatment systems on the site were observed;
- No major waterways exist on the property. Portions of the proposed new lots are within the designated 100-year floodplain. However, construction is not anticipated to be within the existing floodplain;
- A minor waterway, Kettle Creek, exists through the northern portion of the property, traversing the site from east to west; Additional minor drainage swales feed into Kettle Creek that exist on the property;
- Slopes greater than 20 percent do exist on the site; and
- Significant man-made cuts do not exist on the site.

Treatment Areas

Treatment areas at a minimum must achieve the following:

- Treatment areas must be elevated above groundwater or bedrock as defined by the Definitions 8.3.4 of the Regulations of the El Paso County Board of Health, Chapter 8, *OWTS Regulations*, amended May 23, 2018;
- Each lot (after purchase but prior to construction of an OWTS) will require an OWTS Site Evaluation report prepared per *the Regulations of the El Paso County Board of Health, Chapter 8, OWTS Regulations.* During site reconnaissance, a minimum of four 8-foot deep profile pits will need to be excavated in the vicinity of the proposed treatment area;
- Comply with any physical setback requirements of Table 7-1 of the El Paso County Department of Health and Environment (EPCHDE);
- Treatment areas are to be located a minimum 100 feet from any well (existing or proposed), including those located on adjacent properties per Table 7-2 per the EPCHDE;
- Treatment areas must also be located a minimum 50 feet from any spring, lake, water course, irrigation ditch, stream or wetland;
- Other setbacks for the treatment area include, but are not limited to, a minimum of 10 feet from property lines, dry gulches, cut banks and fill areas (from the crest).

DOCUMENT REVIEW

RMG has reviewed the provided *Canyon Creek Ranch Final Plat and Drainage Plan for Existing Conditions* (prepared by Land Development Consultants, Inc.) and identified the soil conditions anticipated to be encountered during construction of the proposed OWTS for proposed lots 2 and 3, Creek View Road. Based on our site observations and a review of documented Natural Resource Conservation Service – NRCS Web Soil Survey data provided by *websoilsurvey.nrcs.usda.gov*., the Web Soil Survey Descriptions are presented below. A review of FEMA Map No. 08041C0315G, 08041C0526G, 08041C0295G, and 08041C0507G, effective December 7, 2018 indicates that the proposed treatment areas are not anticipated to be located within an identified floodplain.

SOIL EVALUATION

Personnel of Geoquest, LLC reportedly performed a soil evaluation to include four 8-foot deep profile pits on September 30, 2021 (Profile Pit PP-1 and PP-2 for proposed lot 2 and Profile Pit PP-1 and PP-2 for proposed lot 3). The profile pits were excavated in areas that appeared most likely to be used for residential construction. The profile pit logs are presented in the *Profile Pit Evaluation* reports referenced above. A Septic Suitability map is presented in Figure 3.

The soil conditions as indicated by the NRCS data are anticipated to consist of Kettle gravelly loamy sand with 8 to 40 percent slopes. The Kettle gravelly loamy sand was mapped by the USDA to encompass the entire property. Properties of the loamy sand include somewhat excessively drained soils, depth of the water table is anticipated to be greater than 80 inches, runoff is anticipated to be medium, frequency of flooding and/or ponding is none, and landforms include hills.

The USDA Soil Survey Map is presented in Figure 4.

Bedrock was reported in the profile pits performed by Geoquest, LLC. Sandstone bedrock was reportedly encountered on proposed lot 3 at a depth of 28 inches in profile pit PP-1 and 22 inches in profile pit PP-2. No bedrock was reportedly encountered on proposed lot 2. Neither groundwater nor redoximorphic features (indicating the fluctuation of groundwater or higher groundwater levels) were reported in the profile pits.

CONCLUSIONS

In summary, it is our opinion the site is suitable for individual on-site wastewater treatment systems within the cited limitations. Contamination of surface and subsurface water resources should not occur if the treatment areas are to be evaluated and installed according to El Paso County Health Department and state guidelines in conjunction with proper maintenance.

LIMITATIONS

The information provided in this report is based upon the subsurface conditions observed in the profile pit excavations and accepted engineering procedures. The subsurface conditions encountered in the excavation for the treatment area may vary from those encountered in the profile pit excavations. Therefore, depth to limiting or restrictive conditions, bedrock, and groundwater may be different from the results reported in this letter.

Individual wastewater treatment systems are proposed for each new lot. Additional OWTS site evaluations for the proposed lots will need to be performed in accordance with the applicable health department codes prior to construction.

I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

RMG – Rocky Mountain Group

Kelli Zigler

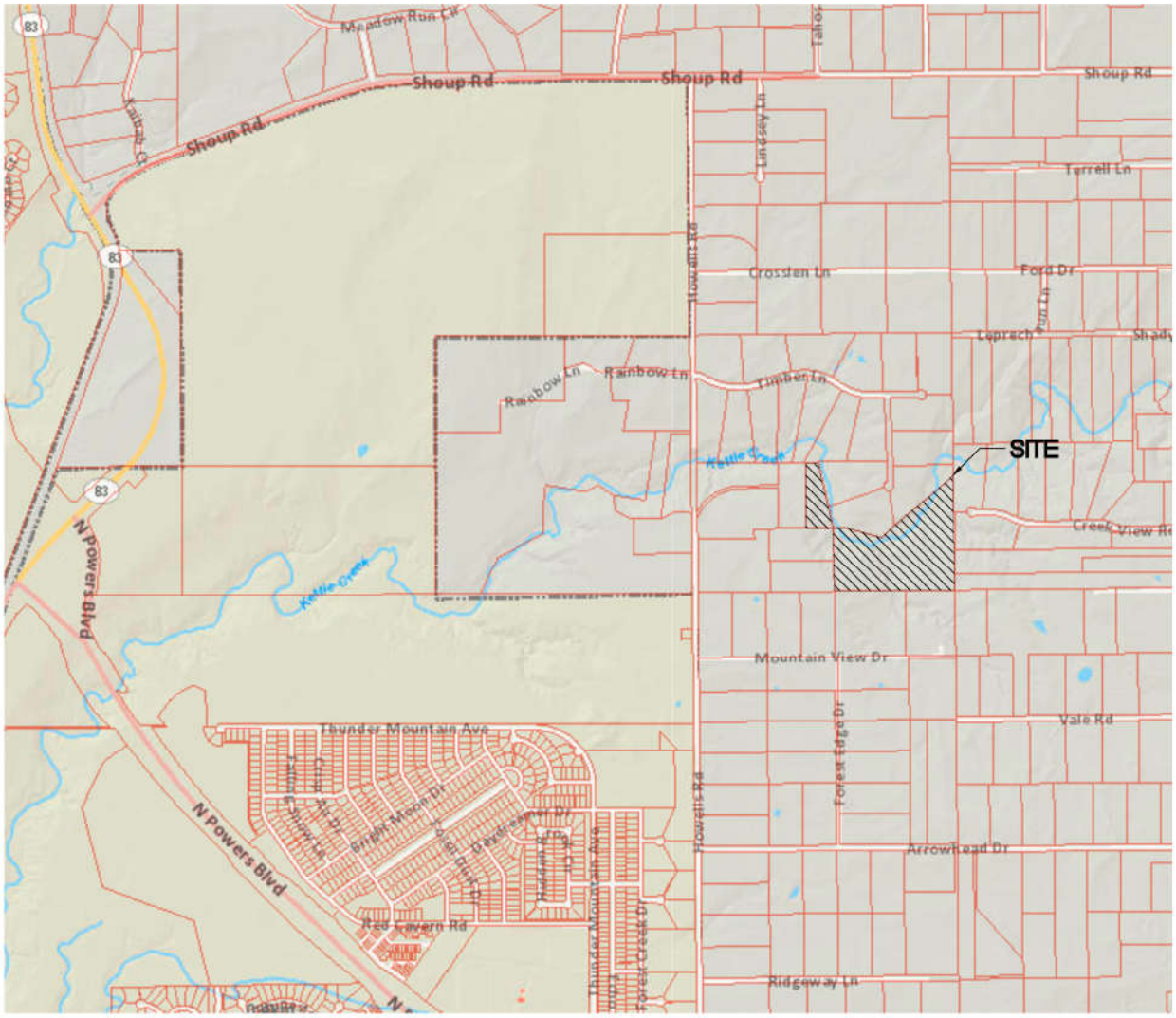
Kelli Zigler
Project Geologist

Reviewed by,

RMG – Rocky Mountain Group

COLORADO REGISTERED
ANTHONY P. MUNGER
6/28/22
39818
PROFESSIONAL ENGINEER

Tony Munger, P.E.
Geotechnical Project Manager



NOT TO SCALE

Architecture
Structural
Geotechnical

RMG

Materials Testing
Forensics
Civil / Planning

Engineers / Architects
SOUTHERN COLORADO OFFICE
2910 AUSTIN BLUFFS PKWY, SUITE 100,
COLORADO SPRINGS, CO 80918
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
Southern Colorado, Denver Metro, Northern Colorado

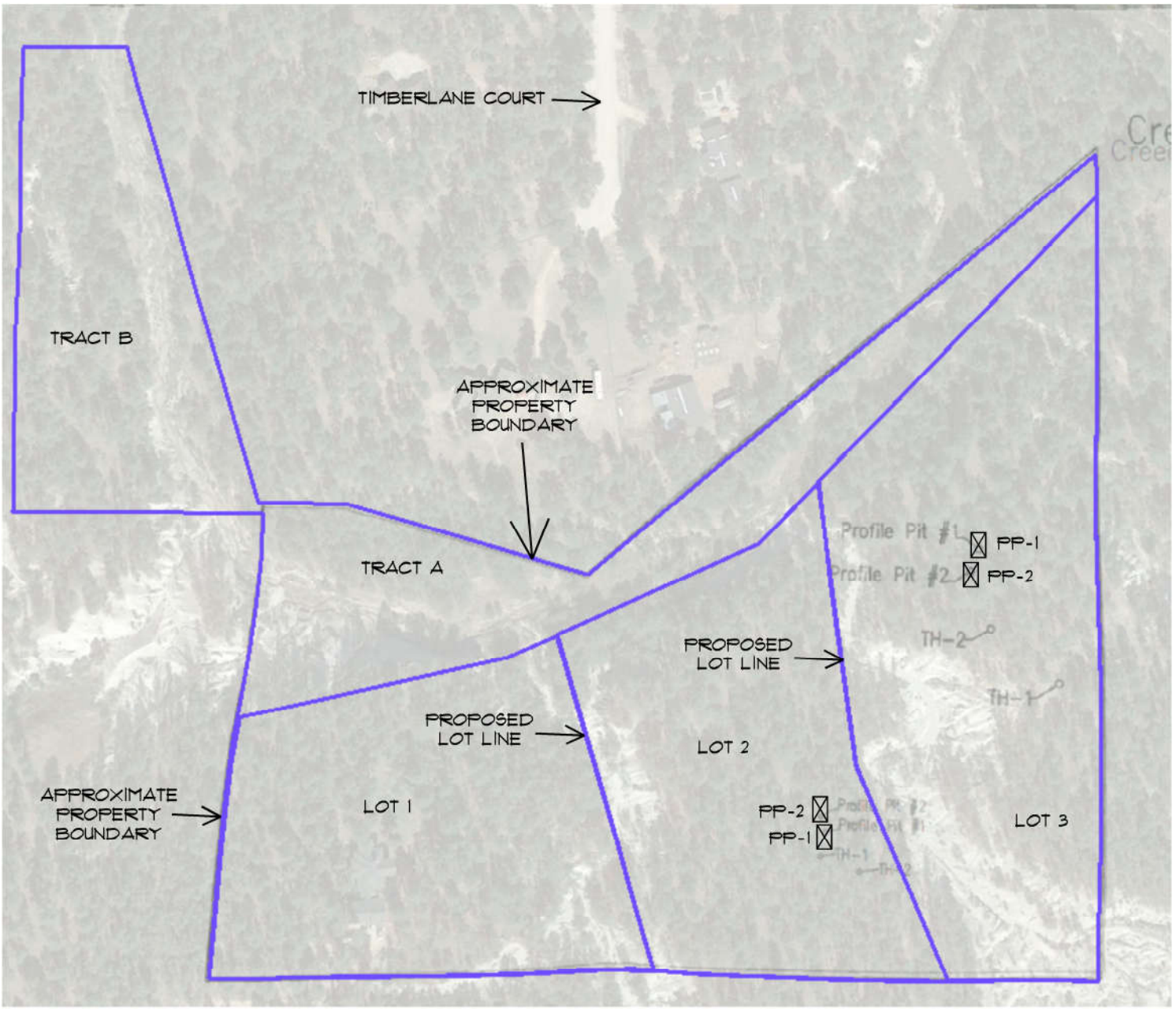
SITE VICINITY MAP

0 CREEK VIEW ROAD
CANYON CREEK RANCH
EL PASO COUNTY, COLORADO
GREGG CAWLFIELD

JOB No. 189360

FIG No. 1

DATE 6-24-2022



NOT TO SCALE

☒ DENOTES APPROXIMATE LOCATION OF PROFILE PITS OBSERVED BY GEOQUEST, LLC, JOB NO. 21-1147 AND 21-1148, DATED 30 SEPTEMBER, 2021

Architecture
Structural
Geotechnical

RMG

Materials Testing
Forensics
Civil / Planning

Engineers / Architects

SOUTHERN COLORADO OFFICE
2910 AUSTIN BLUFFS PKWY, SUITE 100,
COLORADO SPRINGS, CO 80918
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

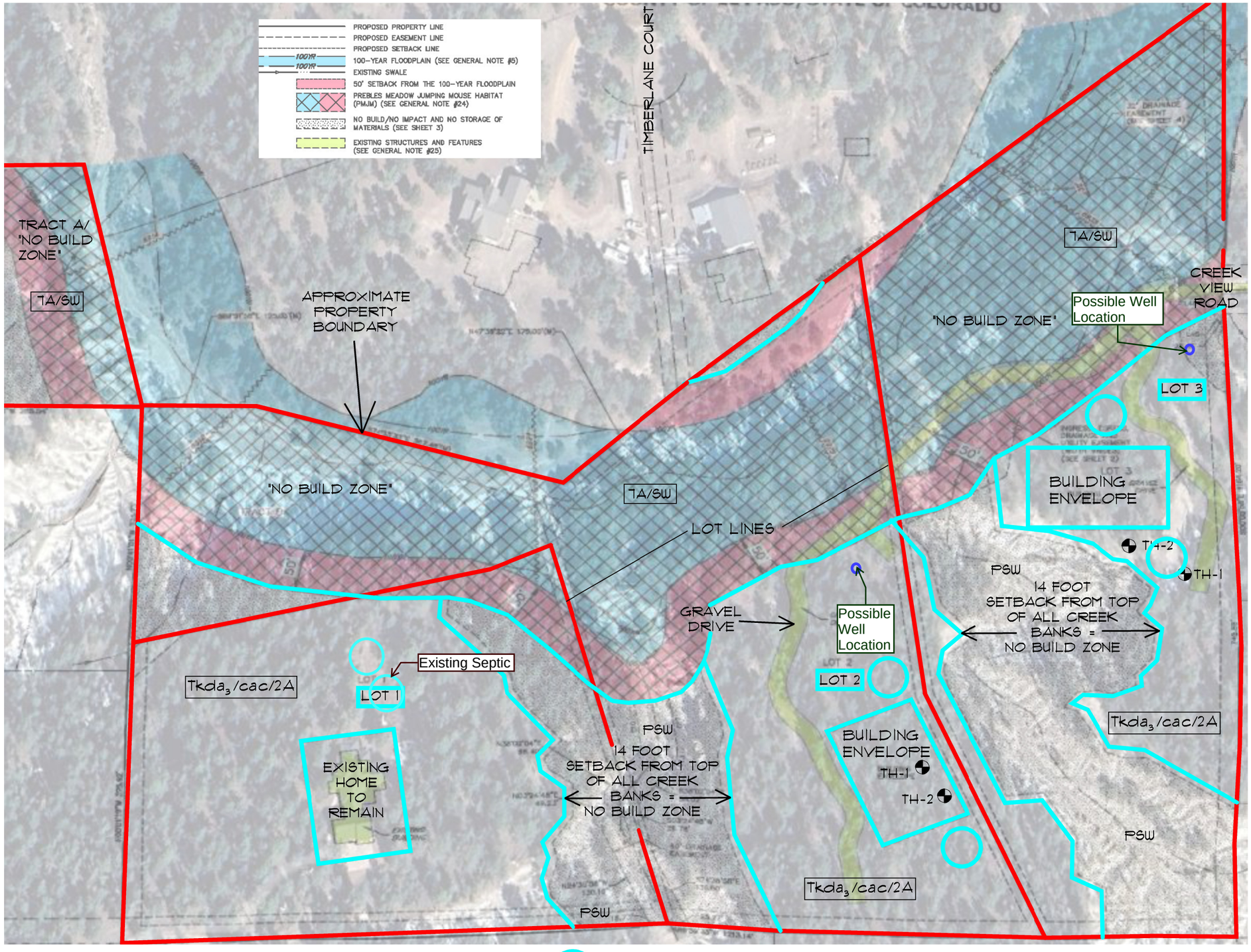
PROFILE PIT LOCATION MAP

0 CREEK VIEW ROAD
CANYON CREEK RANCH
EL PASO COUNTY, COLORADO
GREGG CAWLFIELD

JOB No. 189360

FIG No. 2

DATE 6-24-2022



REFERENCE
NOT TO SCALE

DENOTES APPROXIMATE LOCATION OF TEST HOLES PERFORMED BY GEOQUEST, LLC, JOB NO. 21-1147 AND 21-1148, DATED 30 SEPTEMBER, 2021

NOTE: THE SELECTED OWTS LOCATIONS ARE FOR ILLUSTRATION ONLY. IF THE EL PASO COUNTY HEALTH DEPARTMENT PHYSICAL SETBACK REQUIREMENTS ARE MET AND THE OWTS DOES NOT FALL WITHIN THE NO BUILD ZONE THERE ARE NOT ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF THE OWTS FOR EACH LOT

JOB No. 189360

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SOUTHERN COLORADO OFFICE
2910 AUSTIN BLUFFS PKWY, SUITE 100,
COLORADO SPRINGS, CO 80918
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

CANYON CREEK RANCH

EL PASO COUNTY, COLORADO
GREGG CAWFIELD

ENGINEER:	TPM
DRAWN BY:	KMZ
CHECKED BY:	TPM
ISSUED:	6-24-2022
REVISED:	12-26-2024
REVISED: Include "No Build Zone"	5-19-2025
REVISED: Updated Site Plan	11-20-2025

SEPTIC SUITABILITY MAP

SHEET No.
FIG-3

41 - Kettle Gravelly Loamy Sand, 8 to 40 Percent Slopes

NOT TO SCALE

Architecture
Structural
Geotechnical

RMG

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Forensics
Civil / Planning

Engineers / Architects
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2910 AUSTIN BLUFFS PKWY, SUITE 100,
COLORADO SPRINGS, CO 80918
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

USDA SOIL SURVEY MAP

0 CREEK VIEW ROAD
CANYON CREEK RANCH
EL PASO COUNTY, COLORADO
GREGG CAWLFIELD

JOB No. 189360

FIG No. 4

DATE 6-24-2022

GEOQUEST, LLC
6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

To Whom It May Concern,

Attached are the results of the Profile Pit Evaluation performed for your site. **Completion of the report does NOT automatically place you in the queue to complete a design.** We require the following information is provided to us prior to placing a job in the queue.

1. Accurate number of bedrooms either proposed or existing in the house. Be sure to include all rooms with closets.

2. Designs for new construction also requires submittal of a site plan. This shall include at a minimum the following: all property lines dimensioned with lengths and angles, accurate dimensions from the house to property lines and corners, proposed construction of all buildings, location of Well with dimensions from structures and property lines, location of driveway, drawings **MUST** be to Scale, and slope or topography lines. **Additional fees will be assessed for incomplete and unclear site plans.** A surveyor's CADD file is preferred (.DWG or .DXF). It is your responsibility to provide correct information. Additional fees will be assessed if any information changes.

3. Site plans that are provided as DWG / DXF Files are exempt from redrawing fees. PDF Files of Surveyor's Site Plans for New Builds **WILL** incur a $50 Redrawing Fee. Hand drawn Site Plans for New Builds **WILL** incur a $200-$400 Redrawing Fee and a site walk will be required. Septic Repair Designs do **NOT** incur Additional Fees.

Please read the evaluation to determine if the system for your site shall be designed by a licensed engineer or if a conventional design is allowed. If a conventional system is allowed, a design document is still required by the health department, this may be provided by an engineer, installer, or builder familiar with On-Site Wastewater Treatment System (OWTS) regulations. OWTS Designs and Record Drawings are done at an additional cost. Please contact the office for pricing. If installing in El Paso County, an Engineer's Record Drawing (additional fee) is required for final acceptance by the health department. If installing in a different county please verify with the installer who will be completing the Record Drawing. We are happy to complete this for an additional fee.

Per county and state regulations, the Soil Treatment Area (STA), commonly referred to as the leach field, shall be installed adjacent to the test pit locations. **Any alteration or deviation from the tested locations will require additional testing at an additional cost.**

The homeowner shall be made aware of the responsibilities of owning a septic system. Please contact your local health department for homeowner responsibilities and Do's and Don'ts.

Geoquest, LLC provides no warranty for the evaluation or design (should this be completed). This evaluation and design have been prepared in compliance with the state and the local governing public health department's regulations. However, the test procedures are limited in determining soil absorption across the proposed STA. Many factors contribute to soil absorption outside of our control as well as unknown water usage. It is important to follow proper OWTS installation practices to minimize risk.

Please feel free to contact us at (719) 481-4560, if you have any questions.

GEOQUEST, LLC

6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

PROFILE PIT EVALUATION

FOR

GREGG CAWLFIELD

JOB #21-1147

Lot #2,
0 Creek View Road,
El Paso County,
Colorado

COLORADO REGISTERED
CHARLES E. MILLIGAN
34608
PROFESSIONAL ENGINEER

Sincerely,

Charles E. Milligan, P.E.

PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **Lot #2, 0 Creek View Road, El Paso County, Colorado.** The location of the test pits was determined by Gregg Cawlfield. The residence will not be on a public water system. The number of bedrooms in the design for the residence is unknown. Due to the natural slope of the property, the entire system will feed to the west at approximately 18% at least 20 feet. All applicable portions of the El Paso County Public Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on September 30, 2021, in accordance with Table 10-1 of the **E.P.C.P.H. OWTS Regulations.**

Soil Profile #1:

0 to 6" - Topsoil - loam, organic composition.

6" to 8' - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, grey in color, 10 YR 6/1, soil type 2A with 10% rock.

Soil Profile #2:

0 to 6" - Topsoil - loam, organic composition.

6" to 8' - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, light brownish grey in color, 10 YR 6/2, soil type 2A with 6% rock.

Groundwater was not encountered during the inspection. Bedrock was not encountered during the inspection. No known wells were observed within 100 feet of the proposed system. **All setbacks shall conform to county regulations.**

Due to encountering USDA soil type 2A, the septic system to be installed on this site need not be by a Colorado Licensed Engineer. A conventional septic system is approved for this site. Based on the observed conditions, we feel a design based on an LTAR of 0.50 GPD/SF (USDA soil type 2A, treatment soil, treatment level 1) is reasonable. Maximum depth of the installation shall not be deeper than 4 feet below the existing grade.

If during construction of the field itself, subsurface conditions change considerably or if the location of the proposed field changes, this office shall be notified to determine whether the conditions are adequate for the system as designed or whether a new system needs to be designed.

Weather conditions at the time of the test consisted of cloudy skies with moderate temperatures.

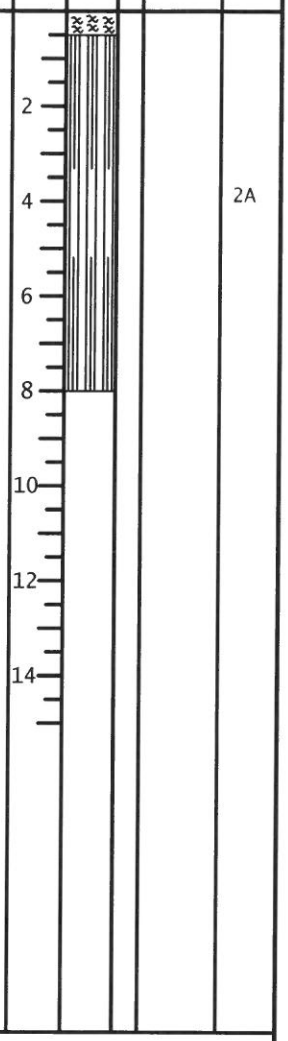
PROFILE PIT LOG - Profile Pit #1

JOB#: 21-1147
DATE EVALUATED: 30 Sep 2021
EQUIPMENT USED: Mini-excavator

0-6" **TOPSOIL**
Loam
Organic Composition

6"-8' **Sand**
Fine-coarse Grained
Moderate Density
Low-moderate Moisture Content
Low-moderate Clay Content
Low-moderate Cohesion
Low-moderate Plasticity
Grey Color
10YR 6/1

USDA Soil Texture: Sandy Loam
USDA Soil Type: 2A
USDA Structure Shape: Granular
USDA Structure Grade: 1
Cementation Class: Non-cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50
Soil Type 2A w/ 10% Rock



LTAR to be Used for OWTS Sizing: **0.50GPD/SF (USDA Type 2A, Treatment soil, Treatment Level 1)**
Depth to Groundwater (Permanent or Seasonal): Not Encountered
Depth to Bedrock and Type: Not Encountered
Depth to Proposed Infiltrative Surface from Ground Surface: Max. 4' Below Grade Gravity Fed
Soil Treatment Area Slope and Direction: West @18%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 21-1147
Sheet: 1 of 2
Date: 15 Oct 2021
Scale: 1/4" = 1'
Drawn by: mtj
Checked by: cem

Project Name and Address

Gregg Cawfield

0 Creek View Rd.
Lot 2
Sch. No. 6214000112
El Paso County, Colorado

GEOQUEST, LLC.
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

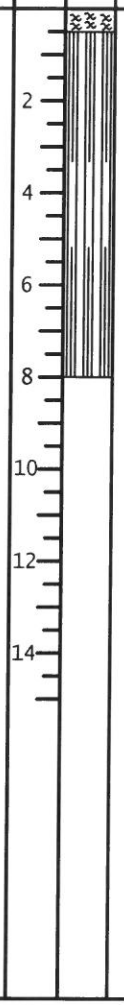
PROFILE PIT LOG - Profile Pit #2

JOB#: 21-1147
DATE EVALUATED: 30 Sep 2021
EQUIPMENT USED: Mini-excavator

0-6" **TOPSOIL**
Loam
Organic Composition

6"-8' **Sand**
Fine-coarse Grained
Moderate Density
Low-moderate Moisture Content
Low-moderate Clay Content
Low-moderate Cohesion
Low-moderate Plasticity
Light Brownish Grey Color
10YR 6/2

USDA Soil Texture: Sandy Loam
USDA Soil Type: 2A
USDA Structure Shape: Granular
USDA Structure Grade: 1
Cementation Class: Non-cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50
Soil Type 2A w/ 6% Rock



LTAR to be Used for OWTS Sizing: **0.50GPD/SF (USDA Type 2A, Treatment soil, Treatment Level 1)**
Depth to Groundwater (Permanent or Seasonal): Not Encountered
Depth to Bedrock and Type: Not Encountered
Depth to Proposed Infiltrative Surface from Ground Surface: Max. 4' Below Grade Gravity Fed
Soil Treatment Area Slope and Direction: West @18%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 21-1147
Sheet: 2 of 2
Date: 15 Oct 2021
Scale: 1/4" = 1'
Drawn by: mtj
Checked by: cem

Project Name and Address

Gregg Cawfield

0 Creek View Rd.
Lot 2
Sch. No. 6214000112
El Paso County, Colorado

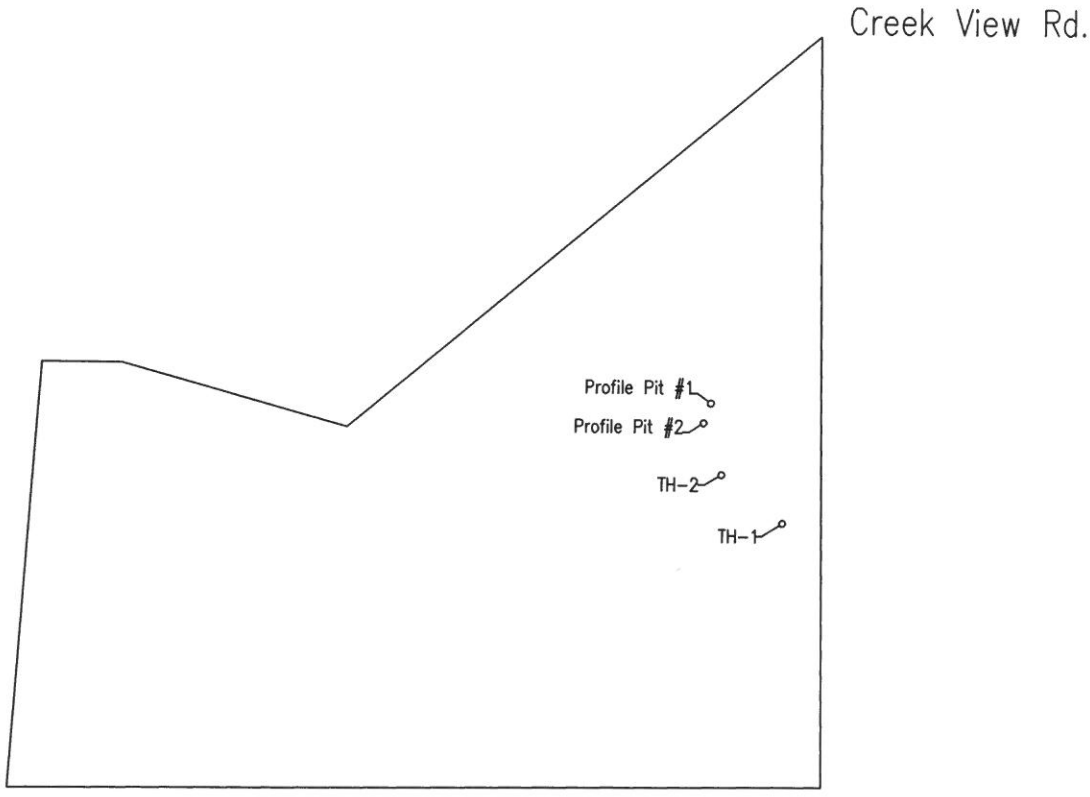
GEOQUEST, LLC.
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

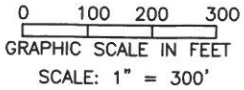
GEOQUEST LLC

SITE MAP

Lot 2
0 Creek View Rd.
El Paso County
Colorado
Job #21-1147



Location from Northeast Lot Corner to Profile Pit #1:
S. 16° W. – 590'
Location from Profile Pit #1 to Profile Pit #2:
S. 20° W. – 32'
GPS Coordinates:
Pit 1; N. 38° 59' 59.52" W. 104° 44' 52.74"
Pit 2; N. 38° 59' 59.33" W. 104° 44' 52.75"



SCALE: 1" = 300'

GEOQUEST, LLC
6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

PROFILE PIT EVALUATION

FOR

GREGG CAWLFIELD

JOB #21-1148

Lot #3,
0 Creek View Road,
El Paso County,
Colorado

Sincerely,

Charles E. Milligan, P.E.

COLORADO LICENSED
CHARLES E. MILLIGAN
34608
21 Oct 21
PROFESSIONAL ENGINEER

PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **Lot #3, 0 Creek View Road, El Paso County, Colorado.** The location of the test pits was determined by Gregg Cawlfield. The residence will not be on a public water system. The number of bedrooms in the design for the residence is unknown. Due to the natural slope of the property, the entire system will feed to the west at approximately 17% at least 20 feet. All applicable portions of the El Paso County Public Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on September 30, 2021, in accordance with Table 10-1 of the **E.P.C.P.H. OWTS Regulations.**

Soil Profile #1:

0 to 8" - Topsoil - loam, organic composition.

8" to 28" - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, yellowish brown in color, 10 YR 5/4, soil type 2A with 10% rock.

28" to 5' - USDA soil texture sandy loam, soil type 2A, structure shape massive, structure grade 0, moderately cemented, LTAR 0.50, light gray in color, 10 YR 7/1, sandstone.

Soil Profile #2:

0 to 8" - Topsoil - loam, organic composition.

8" to 22" - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, pale brown in color, 10 YR 6/3, soil type 2A with 7% rock.

22" to 5' - USDA soil texture sandy clay loam, soil type 3A, structure shape massive, structure grade 0, moderately cemented, LTAR 0.30, light gray in color, 10 YR 7/1, sandstone.

Groundwater was not encountered during the inspection. Bedrock was encountered at the depth of 28 inches in Profile Pit #1 and 22 inches in Profile Pit #2 during the inspection. No known wells were observed within 100 feet of the proposed system. **All setbacks shall conform to county regulations.**

Due to encountering bedrock, the septic system to be installed on this site shall be designed by a Colorado Licensed Engineer. Based on the observed conditions, we feel a design based on an LTAR of 0.50 GPD/SF (USDA soil type 2A, treatment soil, treatment level 1) is reasonable. An above grade uniformly pressure dosed soil treatment area is required.

If during construction of the field itself, subsurface conditions change considerably or if the location of the proposed field changes, this office shall be notified to determine whether the conditions are adequate for the system as designed or whether a new system needs to be designed.

Weather conditions at the time of the test consisted of cloudy skies with moderate temperatures.

PROFILE PIT LOG - Profile Pit #1

JOB#: 21-1148
DATE EVALUATED: 30 Sep 2021
EQUIPMENT USED: Mini-excavator

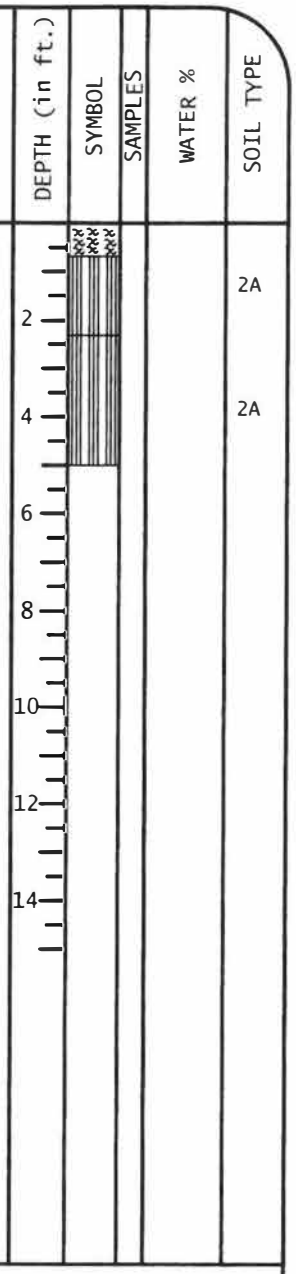
0-8" **TOPSOIL**
Loam
Organic Composition

8"-28" **Sand**
Fine-coarse Grained
Moderate Density
Low-moderate Moisture Content
Low-moderate Clay Content
Low Cohesion
Low Plasticity
Yellowish Brown Color
10YR 5/4

USDA Soil Texture: Sandy Loam
USDA Soil Type: 2A
USDA Structure Shape: Granular
USDA Structure Grade: 1
Cementation Class: Non-cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50
Soil Type 2A w/ 10% Rock

28"-5' **Sandstone**
Fine-coarse Grained
High Density
Moderate Moisture Content
Low-moderate Clay Content
Low-moderate Cohesion
Low-moderate Plasticity
Light Gray Color
10YR 7/1

USDA Soil Texture: Sandy Loam
USDA Soil Type: 2A
USDA Structure Shape: Massive
USDA Structure Grade: 0
Cementation Class: Moderately
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50



LTAR to be Used for OWTS Sizing: **0.50GPD/SF (USDA Type 2A, Treatment soil, Treatment Level 1)**
Depth to Groundwater (Permanent or Seasonal): Not Encountered
Depth to Bedrock and Type: Sandstone @28"
Depth to Proposed Infiltrative Surface from Ground Surface: Above Grade (Uniformly Pressure dosed STA)
Soil Treatment Area Slope and Direction: West @17%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 21-1148
Sheet: 1 of 2
Date: 12 Oct 2021
Scale: 1/4" = 1'
Drawn by: mtj
Checked by: cem

Project Name and Address

Gregg Cawfield

0 Creek View Rd.
Lot 3
Sch. No. 6214000112
El Paso County, Colorado

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

PROFILE PIT LOG - Profile Pit #2

JOB#: 21-1148
DATE EVALUATED: 30 Sep 2021
EQUIPMENT USED: Mini-excavator

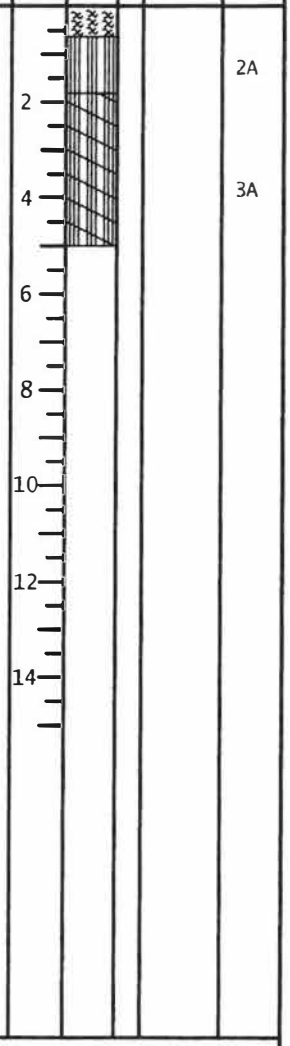
0-8" **TOPSOIL**
Loam
Organic Composition

8"-22" **Sand**

Fine-coarse Grained	USDA Soil Texture: Sandy Loam
Moderate Density	USDA Soil Type: 2A
Low-moderate Moisture Content	USDA Structure Shape: Granular
Low-moderate Clay Content	USDA Structure Grade: 1
Low Cohesion	Cementation Class: Non-cemented
Low Plasticity	Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50
Pale Brown Color 10YR 6/3	Soil Type 2A w/ 7% Rock

22"-5' **Sandstone**

Fine-coarse Grained	USDA Soil Texture: Sandy Clay Loam
High Density	USDA Soil Type: 3A
Moderate Moisture Content	USDA Structure Shape: Massive
Moderate Clay Content	USDA Structure Grade: 0
Low-moderate Cohesion	Cementation Class: Moderately
Low-moderate Plasticity	Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.30
Light Gray Color 10YR 7/1	



LTAR to be Used for OWTS Sizing: **0.50GPD/SF (USDA Type 2A, Treatment soil, Treatment Level 1)**
Depth to Groundwater (Permanent or Seasonal): Not Encountered
Depth to Bedrock and Type: Sandstone @22"
Depth to Proposed Infiltrative Surface from Ground Surface: Above Grade (Uniformly Pressure dosed STA)
Soil Treatment Area Slope and Direction: West @17%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 21-1148	Project Name and Address
Sheet: 2 of 2	Gregg Cawfield
Date: 12 Oct 2021	0 Creek View Rd.
	Lot 3
	Sch. No. 6214000112
Scale: 1/4" = 1'	El Paso County, Colorado
Drawn by: mtj	
Checked by: cem	

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GEOQUEST LLC

SITE MAP

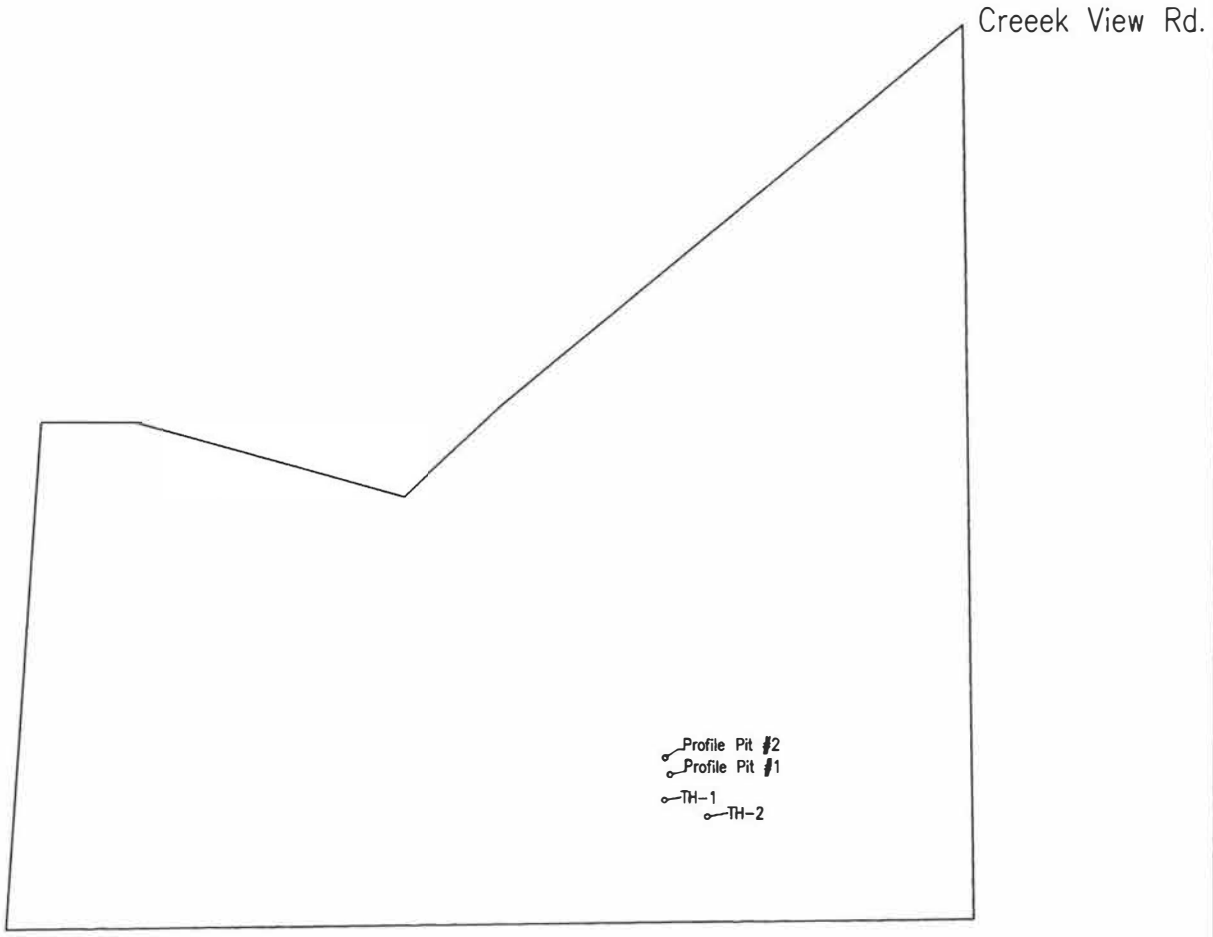
Lot 3

0 Creeek View Rd.

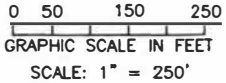
El Paso County

Colorado

Job# 21-1148



Location from Southeast Lot Corner to Profile Pit #1:
N. 64° W. - 439'
Location from Profile Pit #1 to Profile Pit #2:
N. 17° W. - 22'
GPS Coordinates:
Pit 1; N. 38° 59' 55.60" W. 104° 45' 55.36"
Pit 2; N. 38° 59' 58.80" W. 104° 44' 55.45"



SCALE: 1" = 250'