



ENTECH
ENGINEERING, INC.

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COLORADO SPRINGS, CO 80907
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November 16, 2023

T-Bone Construction
1310 Ford Street
Colorado Springs, CO 80915

Attn: Mike Thibault

Re: Wastewater Study
305 Pine Oaks Road
Parcel No. 75250-00-014
El Paso County, Colorado
Entech Job No. 231440

Dear Mr. Thibault:

The project consists of subdividing 17-acres into two rural residential lots. The existing home and out buildings on Lot 1 will remain, and a new residence is proposed for Lot 2. The site is located west of the intersection of Pine Oaks Road and Highway 115, in El Paso County, Colorado.

GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION

The site is located in a portion of the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 25, Township 15 South, Range 67 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located immediately south of Colorado Springs city limits, west of Pine Oaks Road and Highway 115 in El Paso County, Colorado. The location of the site is as shown on the Vicinity Map, Figure 1.

The topography of the site is gradually to moderately sloping to the northeast with steeper slopes along the northern and eastern side of the site. The proposed building area is gradually sloping to the northeast. Several minor drainage swales are located in the eastern portion of the site. A depression associated with an old gravel pit is located west of the existing house on Lot 1. Water was not observed in the drainage swales at the time of this investigation. The site boundaries are indicated on the USGS Map, Figure 2. Previous land uses have included undeveloped and a rural residential development. Site photographs, taken September 20, 2023, are included in Appendix A.

Total acreage involved in the proposed subdivision is 17-acres. Two rural residential lots are proposed. The proposed lot sizes range from 8.17 to 8.9-acres. The existing residence, outbuilding, on-site wastewater treatment system, and water well located on proposed Lot 1, will remain. The new lot will be serviced by a water cistern and on-site wastewater treatment system. The Site Plan with the proposed replat is presented in Figure 3.

SCOPE OF THE REPORT

The scope of the report will include the following a general geologic analysis utilizing published geologic data. Detailed site-specific mapping will be conducted to obtain general information in respect to major geographic and geologic features, geologic descriptions and their effects on the development of the property.

FIELD INVESTIGATION

Our field investigation consisted of the preparation of a geologic map of any bedrock features and significant surficial deposits. The Natural Resource Conservation Service (NRCS), previously the Soil Conservation Service (SCS) survey was also reviewed to evaluate the site. The position of



mappable units within the subject property are shown on the Geologic Map. Our mapping procedures involved both field reconnaissance and measurements, and aerial photo reconnaissance and interpretation. The same mapping procedures have also been utilized to produce the Geology/Engineering Geology Map which identified pertinent geologic conditions affecting development. The field mapping was performed by personnel of Entech Engineering, Inc. on January 27, 2023.

Two test borings and two test pits were excavated on the site to determine general suitability for the use of on-site wastewater treatment systems and general soil characteristics. The location of the test pit is indicated on the Site Plan/Test Pit Location Map, Figure 3. The Test Pit Log is presented in Appendix B. Results of this testing will be discussed later in this report.

Laboratory testing was also performed on some of the soils to classify and determine the soils engineering characteristics. Laboratory tests included grain-size analysis, ASTM D-422, and Atterberg Limits, ASTM D-4318. Results of the laboratory testing are included in Appendix C. A Summary of Laboratory Test Results is presented in Table 1.

SOIL AND GEOLOGIC CONDITIONS

Soil Survey

The Natural Resource Conservation Service (NRCS) (Reference 1, Figure 4), previously the Soil Conservation Service (Reference 2) has mapped three soil types on the site. Complete descriptions of the soil types are presented in Appendix D. In general, the soils consist of sandy loam to gravelly loamy sand. The soils are described as follows:

<u>Type</u>	<u>Description</u>
13	Bresser sandy loam, 5 to 9 percent slopes
17	Chaseville gravelly sandy loam, 8 to 40 percent slopes
38	Jarre-Tecolote, 8 to 65 percent slopes

The soils have been described to have moderate to rapid permeabilities. The soils are described as well suited for use as homesites. Possible hazards with soils erosion are present on the site. The erosion potential can be controlled with vegetation. The soils have been described to have moderate erosion hazards (Reference 2).

Soils

The soils encountered in the test borings and test pits consisted of a layer of slightly silty to clayey sand and sandy clay. Bedrock was not encountered in the test boring which were drilled to 20 feet. The upper sands were encountered at medium dense states and moist to dry conditions. The sand soils exhibit a low expansion potential.

Groundwater

Groundwater or signs of seasonally occurring water were not encountered in the test borings or test pits, which were drilled to 20 feet and excavated to 8 feet. It is anticipated groundwater will not affect shallow foundations on the site. Areas of potential seasonally shallow groundwater have been mapped in minor drainage swales in the eastern portion of the site that are discussed in the following sections. Fluctuations in groundwater conditions may occur due to variations in rainfall or other factors not readily apparent at this time. Isolated sand layers within the soil profile can carry water in the subsurface. Contractors should be cognizant of the potential for the occurrence of subsurface water features during construction.

Geology

Approximately ½ mile west of the site is a major structural feature known as the Rampart Range Fault. This fault marks the boundary between the Great Plains Physiographic Province and the Southern Rocky Mountain Province. The site exists within the southwestern extent of a large structural feature known as the Denver Basin. Bedrock in the area is typically gently dipping in a northeasterly direction (Reference 3). The bedrock underlying the site consists of the Pierre Shale Formation of Cretaceous Age. The Pierre Shale Formation typically consists of claystone and shale deposited in a marine environment associated with the Cretaceous Seaway. The claystone and shale are typically expansive.

The geology of the site was evaluated using the *Geologic Map of the Cheyenne Mountain Quadrangle*, by Rowley et. al. in 2003, (Reference 4, Figure 5). The Geology Map for the site is presented in Figure 6. Two mappable units were identified on this site which is described as follows:

- Qls** **Landslide Deposits of Quaternary Age:** This is a small older slide feature. No signs of recent movement were observed. The slide materials consist of silty to clayey sands and gravels. It appears that portions of the colluvium or Verdos Alluvium have slid along the bedrock surface. The majority of the main slide mass is dormant and fairly stable in its present state; however, the steeper sloping areas have been mapped with potentially unstable slopes.

- Qv** **Verdos Alluvium of Quaternary Age:** These are stream terrace deposits that cap the hillsides north of the site. These materials consist of reddish brown silty sand and gravels and may contain some cobble and boulder-size materials. Much of the material in the Verdos Alluvium was derived from the Pikes Peak Granite to the west.

The soils listed above were mapped from site-specific mapping, the *Geologic Map of the Cheyenne Mountain Quadrangle* distributed by the Colorado Geologic Survey in 2003 (Reference 4, Figure 5), The *Geologic Map of the Colorado Springs-Castle Rock Area*, distributed by the US Geological Survey in 1979 (Reference 5), and the *Geologic Map of the Pueblo 1° x 2° Quadrangle*, distributed by the US Geological Survey in 1978 (Reference 6). The test borings and test pits were used in evaluating the site and is included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

Drainage Areas

Areas of potential seasonally shallow groundwater were observed on the site (Figure 6). In these areas, we would anticipate the potential for periodically high subsurface moisture conditions and frost heave potential. These areas lie along minor drainage swales located in the eastern and southern portions of the site. Water was not observed in any of the drainages at the time of our site investigation. Due to lot sizes, it is anticipated these areas can be avoided by systems. The site does not lie within any floodplain zones according to the FEMA Map No. 08041CO905G dated December 7, 2018 (Figure 7, Reference 7). Exact locations of floodplain and specific drainage studies are beyond the scope of this report. Individual wastewater treatment systems must be located a minimum of 25 feet from dry gulches and 50 feet from water courses or floodplains.

ON-SITE WASTEWATER TREATMENT

The Natural Resource Conservation Service (Reference 1), previously the Soil Conservation Service (Reference 2) has been mapped with three soil descriptions. The Soil Survey Map (Reference 1) is presented in Figure 4, and the Soil Survey Descriptions (Reference 2) are presented in Appendix D. The soils are described as having moderate to rapid percolation rates. Records for the existing septic system were not available for the site.

Soils encountered in the tactile test pits consisted of sandy clay overlying sandy clay loam. The limiting layers encountered in the test pit is the sandy clay, which corresponds with USDA Soil Types 4 with an LTAR value of 0.20 gallons per day per square foot. Bedrock or signs of seasonally occurring groundwater were not observed in the test pits. Absorption fields must be maintained a minimum of 4 feet above groundwater or bedrock, or confining layer. Should groundwater or bedrock be encountered within 6 feet of the surface, designed systems will be required. Designed systems are anticipated for the new lot, however, other areas may be encountered on the lot where conventional systems would be suitable.

In summary, it is our opinion the site is suitable for individual on-site wastewater treatment systems (OWTS) and that contamination of surface and subsurface water resources should not occur provided the OWTS sites are evaluated and installed according to El Paso County and State Guidelines and properly maintained. Based on the testing performed designed systems will be required for the new lots. The Septic Suitability Map is presented in Figure 8. A possible house location, water well, and two septic sites for the new lots are indicated on Figure 8. Areas that should be avoided by septic systems are indicated on the septic suitability map.

Individual soil testing is required for proposed construction on lot 2 prior to construction. Absorption fields must be located a minimum of 100 feet from any well, including those on adjacent properties. Absorption fields must also be located a minimum of 50 feet from any drainages, floodplains or ponded areas and 25 feet from dry gulches.

T-Bone Construction
Wastewater Study
305 Pine Oaks Road
Parcel No. 75250-00-014
El Paso County, Colorado
Page 5



CLOSURE

This report has been prepared for T-Bone Construction, for application to the proposed project in accordance with generally accepted geologic soil and engineering practices. No other warranty expressed or implied is made.

We trust that this report has provided you with all the information that you required. Should you require additional information, please do not hesitate to contact Entech Engineering, Inc.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Reviewed by:

A handwritten signature in blue ink, appearing to read "Logan L. Langford".

Logan L. Langford, P.G.
Senior Geologist



A handwritten signature in blue ink, appearing to read "Joseph C. Goode, Jr.".

Joseph C. Goode, Jr., P.E.
President

LLL

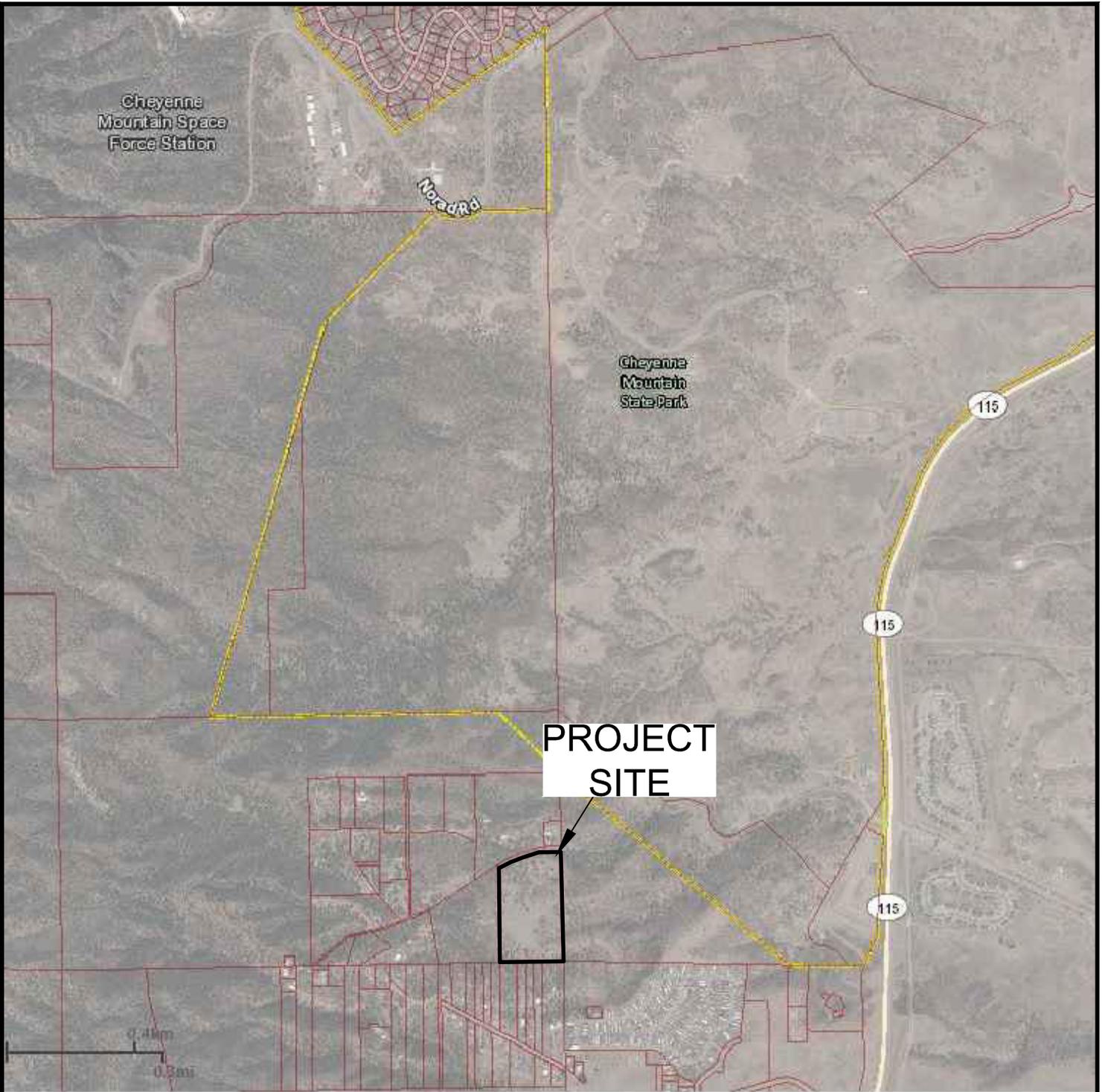
Encl.

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BIBLIOGRAPHY

1. Natural Resource Conservation Service, September 23, 2016. *Web Soil Survey*. United States Department Agriculture, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.
2. United States Department of Agriculture Soil Conservation Service. June 1981. *Soil Survey of El Paso County Area, Colorado*.
3. Scott, Glen R.; Taylor Richard B.; Epis, Rudy C; and Wobus, Reinhard A. 1978. *Geologic Structure Map of the Pueblo 1° x 2° Quadrangle, South-Central Colorado*. Sheet 2. U.S. Geologic Survey. Map I-1022, Sheet 2.
4. Rowley, Peter D., Himmelreich, John W., Kupfer, Donald H., and Siddoway, Christine S., 2003. *Geologic Map of the Cheyenne Mountain Quadrangle, El Paso County, Colorado*. Colorado Geological Survey. Open-File Report 02-5.
5. Trimble, Donald E. and Machette, Michael N. 1979. *Geologic Map of the Colorado Springs-Castle Rock Area, Front Range Urban Corridor, Colorado*. USGS, Map I-857-F.
6. Scott, Glen R.; Taylor Richard B.; Epis, Rudy C; and Wobus, Reinhard A. 1978. *Geologic Structure Map of the Pueblo 1° x 2° Quadrangle, South-Central Colorado*. Sheet 2. U.S. Geologic Survey. Map I-1022.
7. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the City of Colorado Springs, Colorado*. Map Number 08041CO905G.

FIGURES

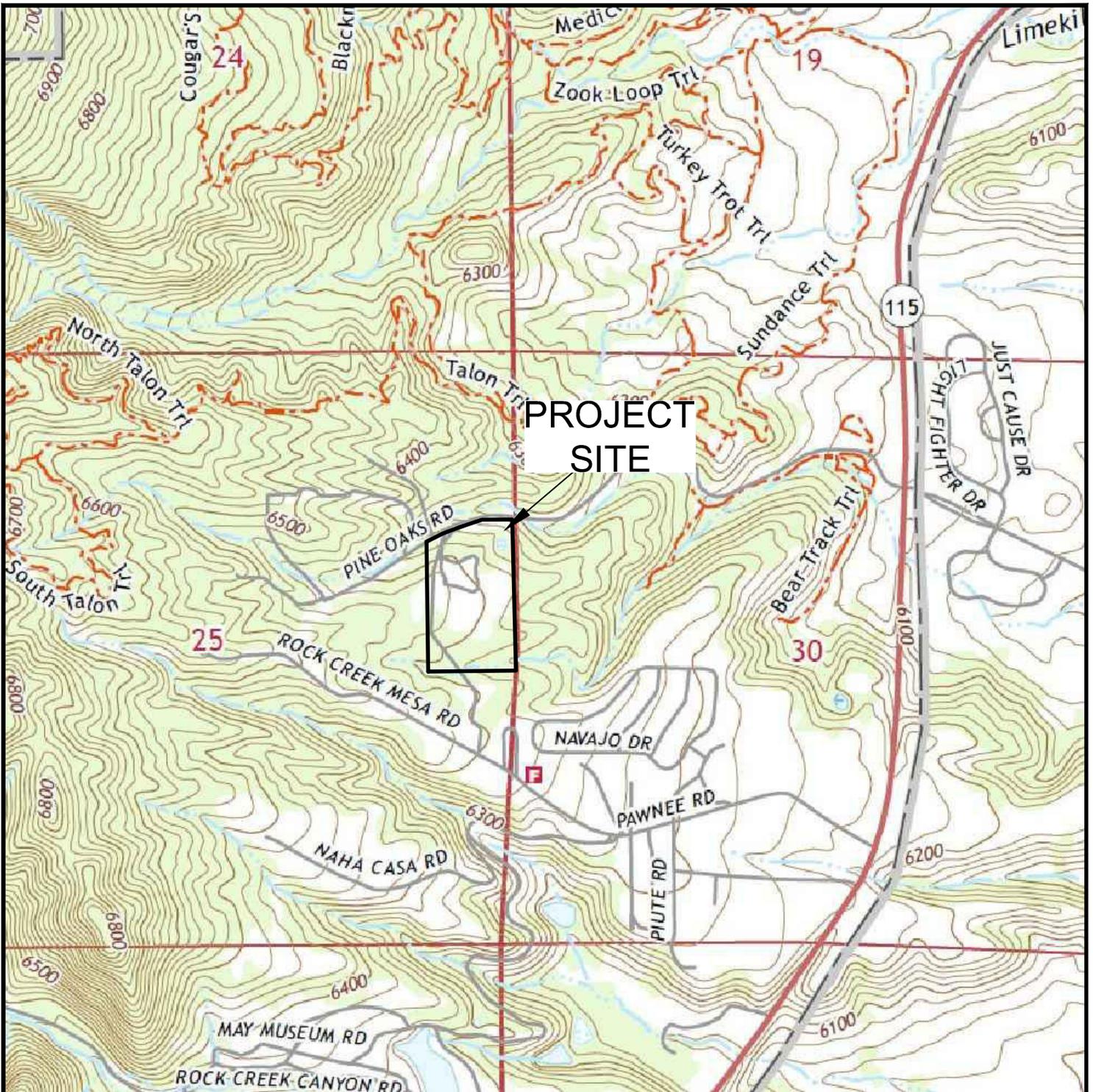


VICINITY MAP

305 PINE OAKS ROAD
EL PASO COUNTY, CO
T-BONE CONSTRUCTION

JOB NO.
231440

FIG. 1

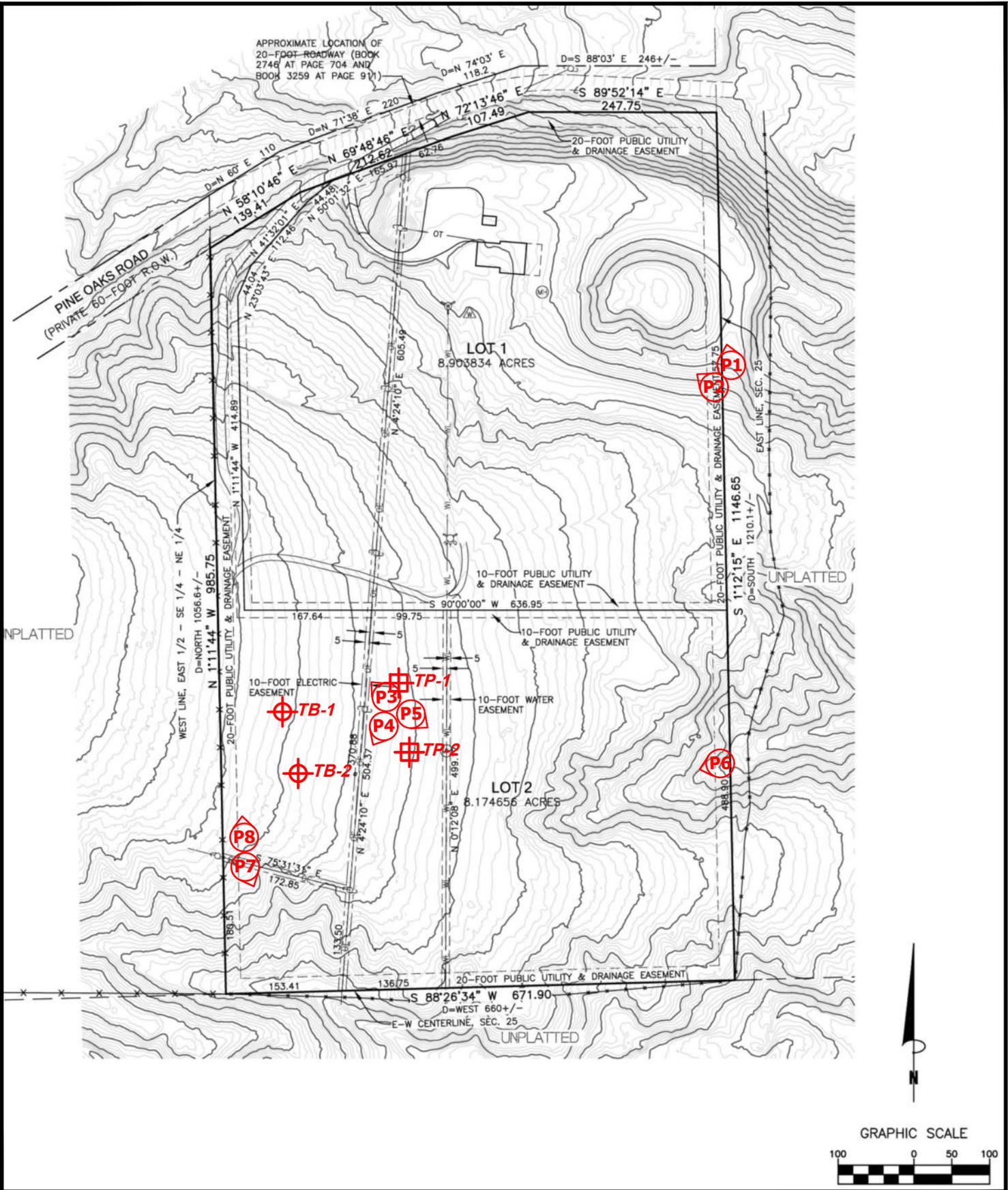


USGS TOPOGRAPHY MAP

ADDRESS
 COLORADO SPRINGS, COLORADO
 CLIENT

JOB NO.
 231532

FIG. 2



EXPLORATION AND SITE PLAN

305 PINE OAKS ROAD
 EL PASO COUNTY, CO
 T-BONE CONSTRUCTION

JOB NO.
 231440

FIG. 3

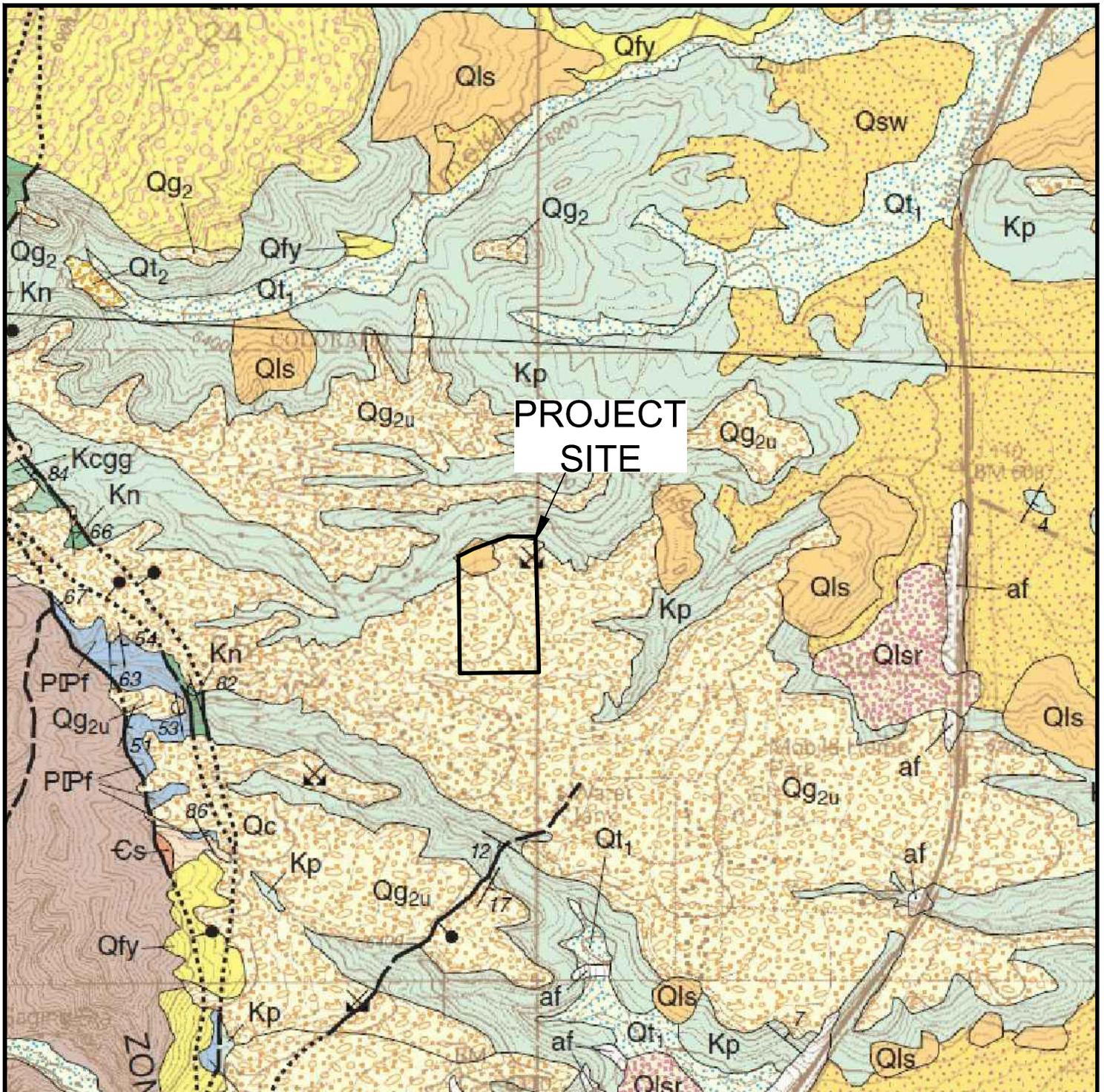


SOIL SURVEY MAP

305 PINE OAKS ROAD
EL PASO COUNTY, COLORADO
T-BONE CONSTRUCTION

JOB NO.
231440

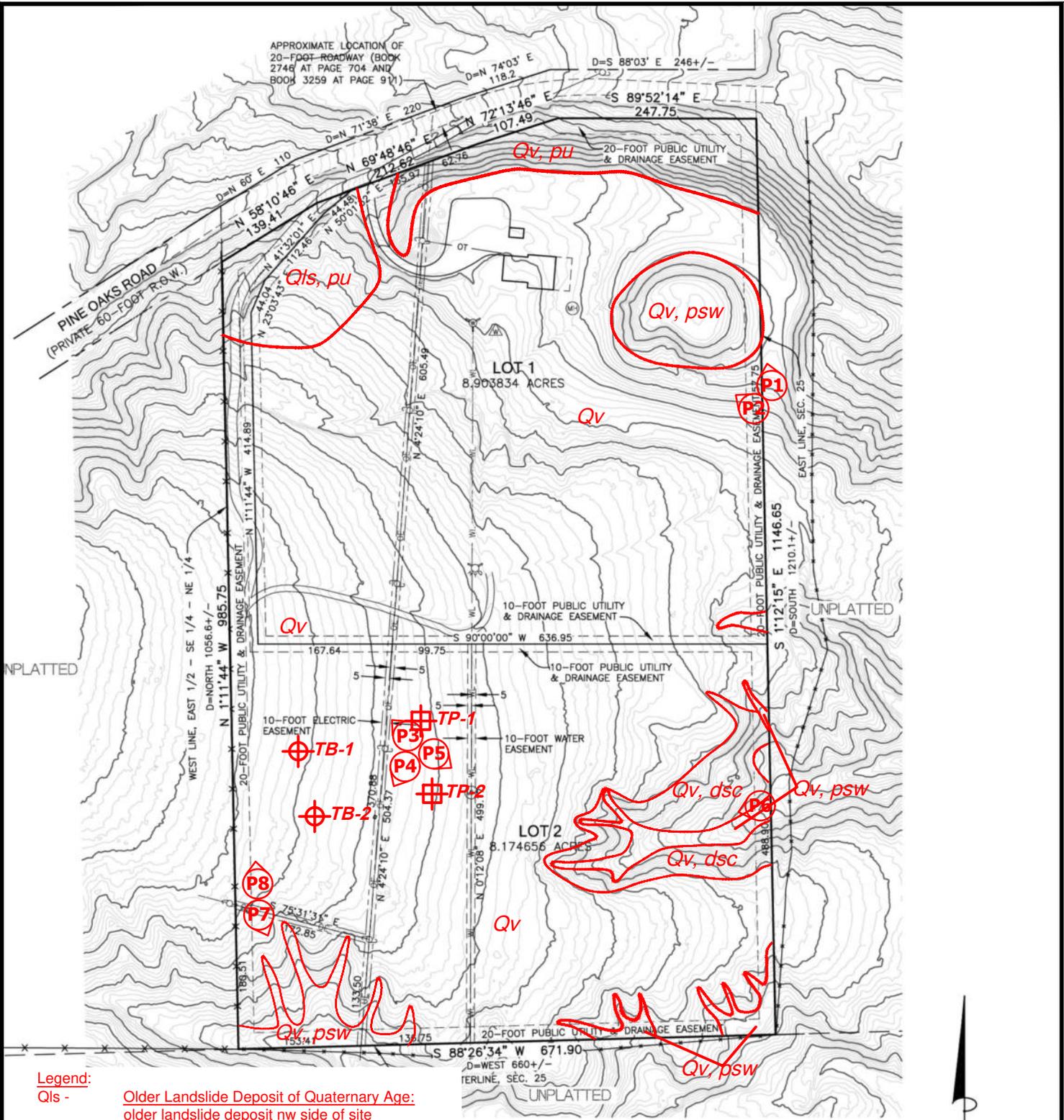
FIG. 4



**CHEYENNE MOUNTAIN QUADRANGLE
GEOLOGIC MAP**
305 PINE OAKS ROAD
EL PASO COUNTY, COLORADO
T-BONE CONSTRUCTION

JOB NO.
231440

FIG. 5



Legend:

- Qls - Older Landslide Deposit of Quaternary Age: older landslide deposit nw side of site
- Qv - Verdo Alluvium of Quaternary Age: red-brown sandy stream terrace deposits
- dsc - downslope creep area
- pu - potentially unstable slope
- psw - potentially seasonal shallow groundwater area

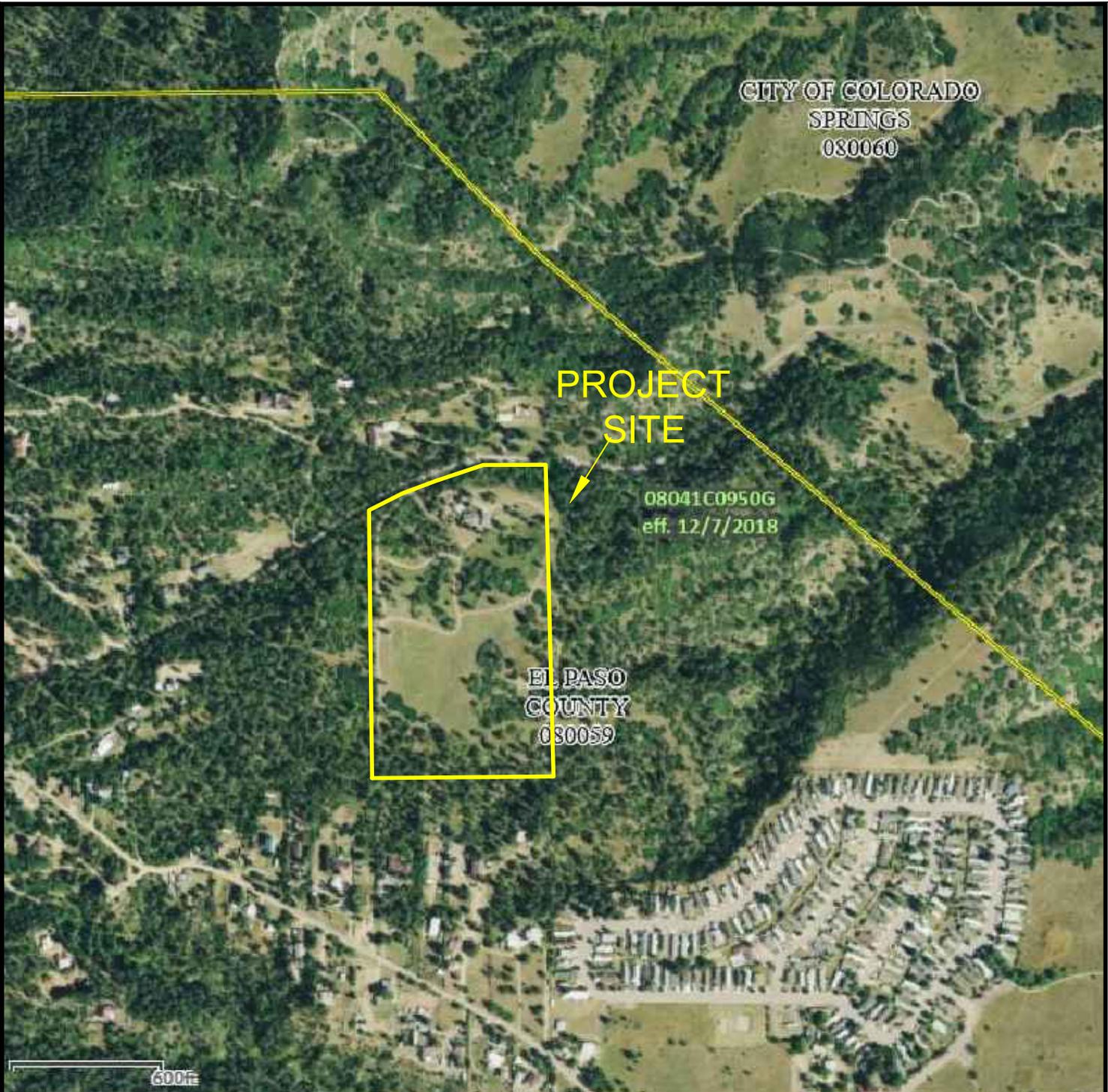
GEOLOGY/ENGINEERING GEOLOGY MAP

305 PINE OAKS ROAD
 EL PASO COUNTY, CO
 T-BONE CONSTRUCTION

JOB NO.
 231440

FIG. 6





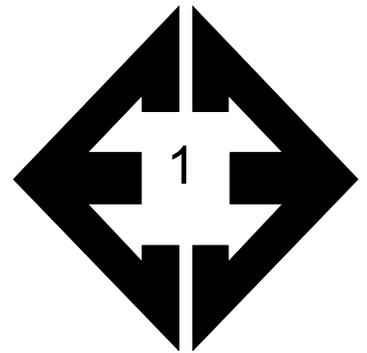
FEMA FLOODPLAIN MAP

305 PINE OAKS ROAD
EL PASO COUNTY, COLORADO
T-BONE CONSTRUCTION

JOB NO.
231440

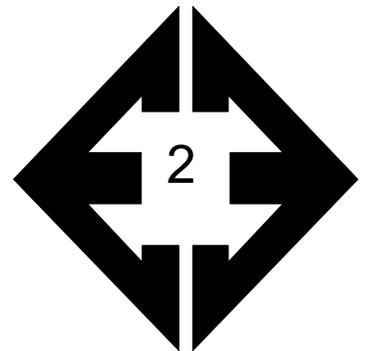
FIG. 7

APPENDIX A: Photographs



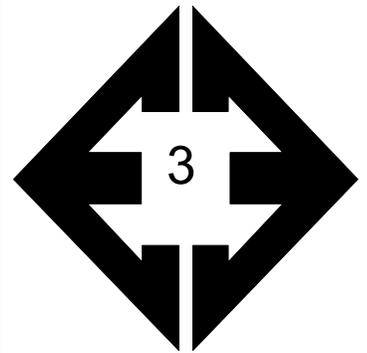
Looking north from the northeast side of the site.

September 20, 2023



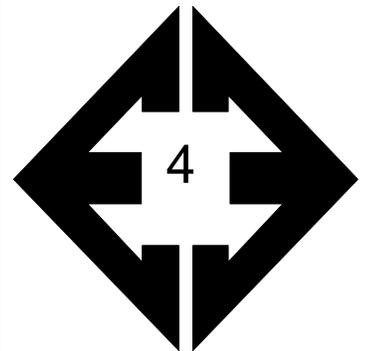
Looking northwest from the northeast side of the site.

September 20, 2023



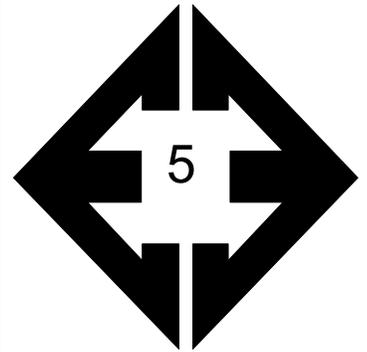
**Looking northwest
from the central
portion of the Lot 2.**

September 20, 2023



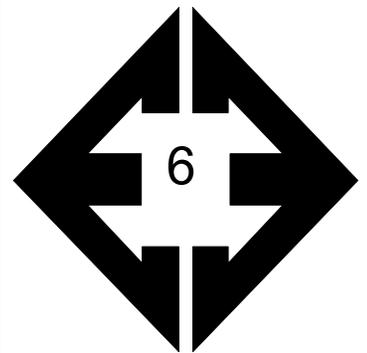
**Looking southwest
from the central
portion of the Lot 2.**

September 20, 2023



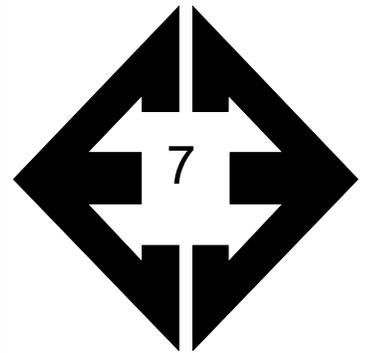
**Looking southeast
from the central
portion of the Lot 2.**

September 20, 2023



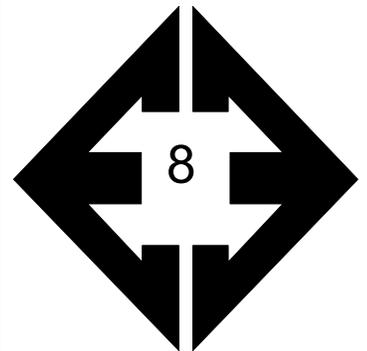
**Looking west towards
minor drainage area
from the southeastern
side of the site.**

September 20, 2023



Looking south from the southwestern side of the site.

September 20, 2023



Looking north from the southwestern side of the site.

September 20, 2023

APPENDIX B: Test Boring & Test Pit Logs

TEST BORING 1
DATE DRILLED 9/13/2023

TEST BORING 2
DATE DRILLED 9/13/2023

REMARKS

REMARKS

DRY TO 20', 9/13/23

DRY TO 20', 9/13/23

SAND, SLIGHTLY SILTY, RED BROWN, MEDIUM DENSE to LOOSE, MOIST to DRY

SAND, SLIGHTLY SILTY, RED BROWN, MEDIUM DENSE to LOOSE, MOIST to DRY

CLAYEY LENS

CLAYEY LENS

SAND, CLAYEY, RED BROWN, LOOSE, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			15	5.2		5			7	4.8	
5			15	1.2		5			11	2.9	
10			8	10.1		10			13	11.0	
15			18	2.8		15			15	9.3	
20			9	5.1		20			11	16.9	



TEST BORING LOGS

305 PINE OAKS ROAD
T-BONE

JOB NO.
231440

FIG. B-1

TEST PIT 1
 DATE EXCAVATED 9/20/2023

TEST PIT 2
 DATE DRILLED 9/20/2023

REMARKS

REMARKS

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type	REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type
topsoil, sandy clay loam, brown, moist	1						topsoil, sandy clay loam, brown, moist	1					
sandy clay, fine to medium grained, dark brown, moist	2-3			bl	s	4	sandy clay, fine to medium grained, dark brown, moist	2-3			bl	s	4
sandy clay loam, fine to coarse grained, dark grown, moist	4-6			gr	s	3	sandy clay loam, fine to coarse grained, dark grown, moist	4-6			gr	s	3
	7							7					
	8							8					
	9							9					
	10							10					

Soil Structure Shape

- granular - gr
- platy - pl
- blocky - bl
- prismatic - pr
- single grain - sg
- massive - ma

Soil Structure Grade

- weak - w
- moderate - m
- strong - s
- loose - l



TEST PIT LOGS

305 PINE OAKS ROAD
 T-BONE

JOB NO.
 231440

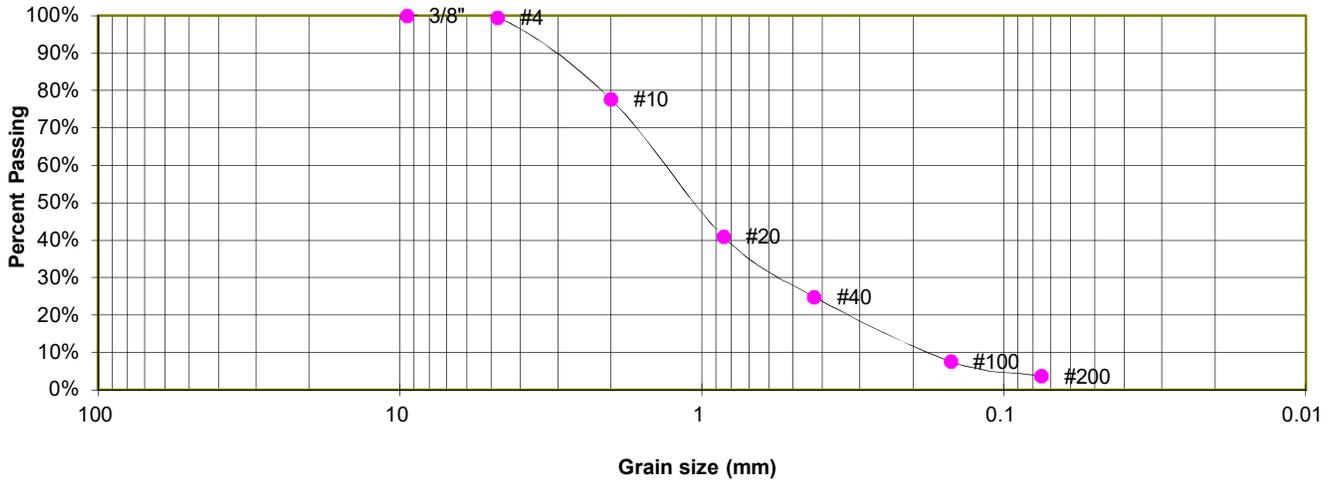
FIG. B-2

APPENDIX C: Laboratory Test Results

TEST BORING 1
 DEPTH (FT) 5

SOIL DESCRIPTION SAND, SLIGHTLY SILTY

**Sieve Analysis
 Grain Size Distribution**



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	99.5%
10	77.6%
20	41.0%
40	24.9%
100	7.6%
200	3.7%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SW



LABORATORY TEST RESULTS

305 PINE OAKS ROAD
 T-BONE

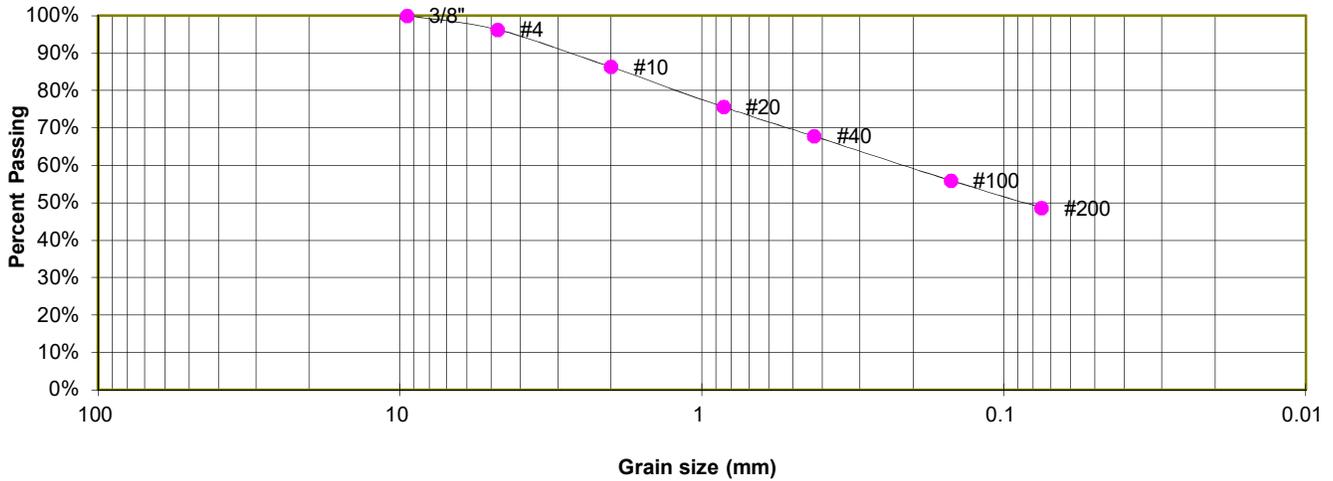
JOB NO.
 231440

FIG. C-1

TEST BORING 2
DEPTH (FT) 10

SOIL DESCRIPTION SAND, CLAYEY

Sieve Analysis Grain Size Distribution



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	96.3%
10	86.3%
20	75.6%
40	67.8%
100	56.0%
200	48.7%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC



LABORATORY TEST RESULTS

305 PINE OAKS ROAD
T-BONE

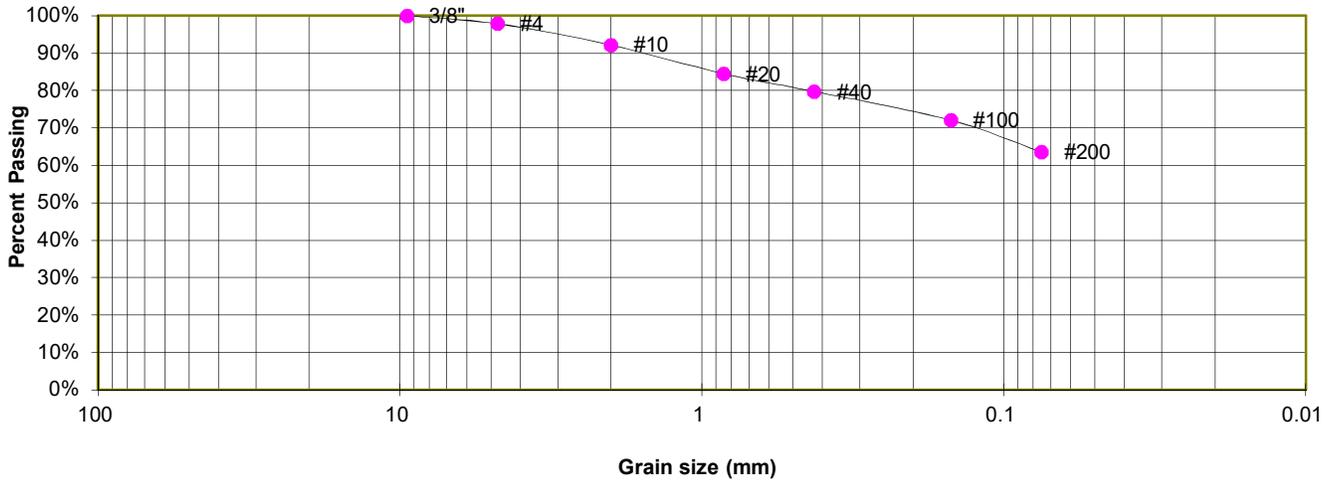
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FIG. C-2

TEST BORING TP-1
DEPTH (FT) 2.5

SOIL DESCRIPTION CLAY, SANDY

Sieve Analysis Grain Size Distribution



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	97.9%
10	92.2%
20	84.5%
40	79.8%
100	72.1%
200	63.6%

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL



LABORATORY TEST RESULTS

305 PINE OAKS ROAD
T-BONE

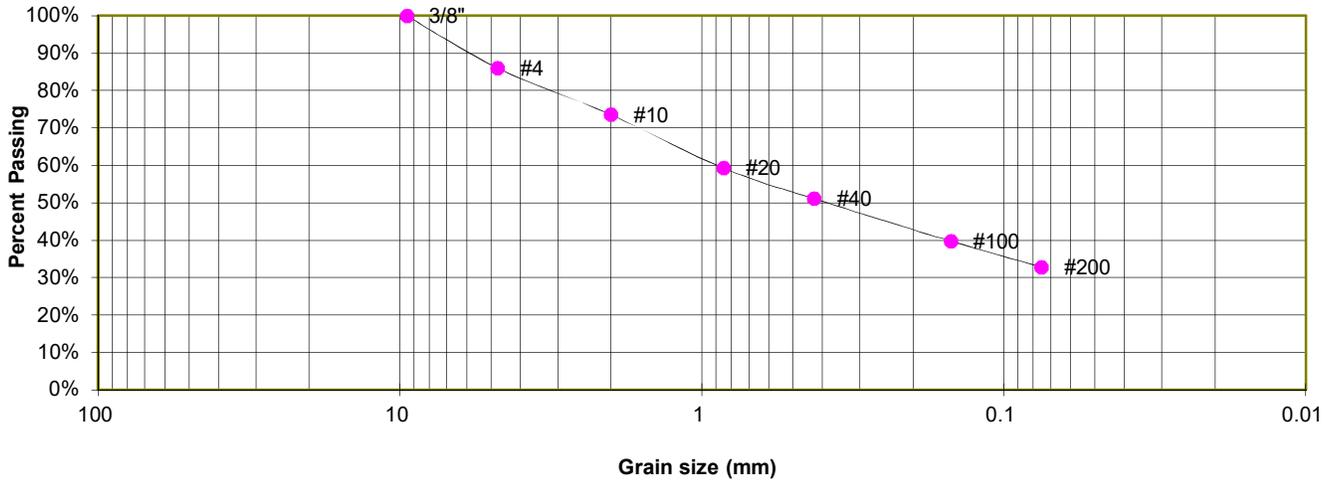
JOB NO.
231440

FIG. C-3

TEST BORING TP-2
DEPTH (FT) 6.5

SOIL DESCRIPTION SAND, CLAYEY

Sieve Analysis Grain Size Distribution



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	86.0%
10	73.5%
20	59.3%
40	51.1%
100	39.8%
200	32.8%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC



LABORATORY TEST RESULTS

305 PINE OAKS ROAD
T-BONE

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FIG. C-4

APPENDIX D: Soil Survey Descriptions

El Paso County Area, Colorado

13—Bresser sandy loam, cool, 5 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2tlpk
Elevation: 5,500 to 6,960 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 100 to 130 days
Farmland classification: Not prime farmland

Map Unit Composition

Bresser, cool, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bresser, Cool

Setting

Landform: Interfluves
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Tertiary aged alluvium derived from arkose

Typical profile

Ap - 0 to 5 inches: sandy loam
Bt1 - 5 to 8 inches: sandy loam
Bt2 - 8 to 27 inches: sandy clay loam
Bt3 - 27 to 36 inches: sandy loam
C - 36 to 80 inches: loamy coarse sand

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Minor Components

Ascalon

Percent of map unit: 10 percent
Landform: Interfluves
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Truckton

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 21, Aug 24, 2023

El Paso County Area, Colorado

17—Chaseville gravelly sandy loam, 8 to 40 percent slopes

Map Unit Setting

National map unit symbol: 367m
Elevation: 6,100 to 7,000 feet
Mean annual precipitation: 16 to 18 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 125 to 145 days
Farmland classification: Not prime farmland

Map Unit Composition

Chaseville and similar soils: 99 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chaseville

Setting

Landform: Terraces, alluvial fans, hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from arkose

Typical profile

A1 - 0 to 6 inches: gravelly sandy loam
A2 - 6 to 19 inches: very gravelly sandy loam
C1 - 19 to 40 inches: extremely gravelly loamy coarse sand
C2 - 40 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 8 to 40 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R049XY214CO - Gravelly Foothill
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 1 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado

Survey Area Data: Version 21, Aug 24, 2023

El Paso County Area, Colorado

38—Jarre-Tecolote complex, 8 to 65 percent slopes

Map Unit Setting

National map unit symbol: 368c
Elevation: 6,700 to 7,500 feet
Frost-free period: 90 to 125 days
Farmland classification: Not prime farmland

Map Unit Composition

Jarre and similar soils: 40 percent
Tecolote and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Jarre

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 5 inches: gravelly sandy loam
Bt - 5 to 22 inches: gravelly sandy clay loam
2C - 22 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 8 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R048AY222CO - Loamy Park
Hydric soil rating: No

Description of Tecolote

Setting

Landform: Alluvial fans
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 3 inches: very stony loam
E - 3 to 12 inches: very gravelly loamy sand
Bt - 12 to 45 inches: extremely gravelly sandy clay loam
C - 45 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 8 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R048AY255CO - Pine Grasslands
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit:
Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 21, Aug 24, 2023