

Orig. 1/19/2019
Rev. 1 (4/01/19)
Rev. 2 (9/11/19)
Rev. 3 (2/18/20)
Rev. 4 (4/16/20)

Wastewater Evaluation Report

**Proposed Grandwood Subdivision
NE of Higby Road and Fairplay Drive**

El Paso County, Colorado

VIVID Project No.: D18-2-175

PCD File No. SP195

File# SF-20-026



Only the client or it's designated representatives may use this document
and only for the specific project for which this report was prepared.

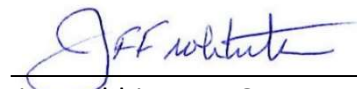
January 19, 2019
Revision 1- April 1, 2019
Revision 2- September 11, 2019
Revision 3- February 18, 2020
Revision 4- April 16, 2020

Report prepared for:

Bill Herebic
Grandwood Enterprises, LLC
270 Lodgepole Way
Monument, Colorado 80132
Herebic5@msn.com

WASTEWATER EVALUATION REPORT
Proposed Grandwood Subdivision
NE of Higby Road and Fairplay Drive
El Paso County, Colorado
VIVID Project No. D18-2-175

Prepared by:



Jim Frohbieter, P.G.
Senior Geologist



William J. Barreire, P.E.
Senior Geotechnical Engineer

VIVID Engineering Group, Inc.
1053 Elkton Drive
Colorado Springs, CO 80907
(719) 896-4356 phone
(719) 896-4357 fax

Table of Contents

1.0	INTRODUCTION	1
1.1	General.....	1
1.2	Project Description.....	1
1.3	Purpose and Scope.....	1
2.0	FIELD EXPLORATION AND LABORATORY TESTING	2
2.1	Field Exploration	2
2.2	Laboratory Testing	3
2.3	General Geology.....	3
2.3.1	Site Description	3
2.3.2	Geologic Reconnaissance.....	3
3.0	ON-SITE WASTEWATER TREATMENT	4
3.1	Evaluation	4
3.2	NRCS Soil Survey Mapping	4
3.3	Results of Evaluations	4
3.4	Conclusions	4
3.5	Other Considerations.....	5
4.0	LIMITATIONS	6

- Figure 1: VICINITY MAP
- Figure 2: EXPLORATION LOCATION PLAN
- Figure 3a: REGIONAL GEOLOGY MAP
- Figure 3b: SITE-SPECIFIC GEOLOGY MAP
- Figure 4a: NRCS SOIL SURVEY MAP
- Figure 4b: NRCS SOIL SURVEY MAP (Soil Descriptions)
- Figure 5: TOPOGRAPHIC MAP
- Figure 6: FLOOD HAZARD MAP
- Figure 7: SEPTIC SUITABILITY MAP

- Appendix A: Logs of Explorations
- Appendix B: Laboratory Test Results



1.0 INTRODUCTION

1.1 General

This report presents the results of a wastewater evaluation report performed for the proposed Grandwood Subdivision to be constructed northeast of Higby Road and Fairplay Drive in El Paso County, Colorado. An attached Vicinity Map (Figure 1) shows the general location of the project. Our evaluation was performed for Grandwood Enterprises, LLC, and was authorized by Mr. Bill Herebic. **This report is a 3rd revision of the original report to incorporate information related to: the proximity of water wells, lakes streams, irrigation ditches, and other water sources in the area; and the availability and feasibility of inclusion of the development into a central sewage system (special district). This information is presented in Section 3.5 of this report.**

1.2 Project Description

The proposed project includes the development of a 151-acre parcel into a residential subdivision. 48 lots are planned, that will be approximately 2.5 acres in size. The property has no current improvements and is in a generally native condition. The development will include construction of access roadways and utilities. Residential lots will require individual water well and septic systems. A preliminary site layout is shown on Figure 2, attached to this report.

1.3 Purpose and Scope

The purpose of this evaluation was to evaluate the site for general feasibility of the use of individual Onsite Wastewater Treatment Systems (OWTS) – a.k.a. septic systems. This report is part of the submittal of the Preliminary Development Plan for this proposed subdivision to El Paso County.

VIVID's scope of services included:

- A visual reconnaissance to observe surface and geologic conditions at the project site and locating the exploratory borings and test pit sites;
- Notification of the Utility Notification Center of Colorado (UNCC)/Colorado 811 to identify underground utility lines at the boring locations prior to our drilling;
- The drilling of seven exploratory borings (including percolation testing) and excavation of three test pits for tactile evaluation of the soils. This scope was previously discussed and approved by El Paso County Board of Health personnel who perform development reviews for the County for proposed OWTS facilities. These exploration were performed on 20 percent of the proposed lots at currently accessible locations across the proposed development area;
- Laboratory testing of selected samples obtained during the field exploration to evaluate relevant physical, geologic, and engineering properties of the soil; and
- Preparation of this report, which includes a description of the proposed project, a description of the surface and subsurface site conditions found during our investigation, and an evaluation of the feasibility of the use of OWTS for this development.

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

A field exploration performed on December 20, 2018 included the drilling of seven exploratory borings (including percolation testing), and excavation of three test pits for tactile evaluation of the soils at the locations presented on Figure 2 – Exploration Location Plan. This exploration and some of the basic information are presented in Table 1, below.

Table 1
Summary of Subsurface Exploration

Boring Designation	Approximate Boring Depth [feet, below ground surface]	Approximate Depth to Groundwater [feet, below ground surface]	Approximate Depth to Weathered Bedrock [feet, below ground surface]	Approximate Depth to Competent Bedrock [feet, below ground surface]
B-1	25.0	23.0	None Encountered	None Encountered
B-2	14.5	None Encountered	4.0	12.0
B-3	25.0	19.0	None Encountered	None Encountered
B-4	20.0	17.0	-	12.0
B-5	14.5	None Encountered	8.0	None Encountered
B-6	25.0	19.0	25.0	None Encountered
B-7	20.0	14.0	14.0	None Encountered
TP-1	10.0	None Encountered	None Encountered	None Encountered
TP-2	10.0	None Encountered	None Encountered	None Encountered
TP-3	10.0	None Encountered	None Encountered	None Encountered

Borings were performed with a truck-mounted CME-45 drill rig equipped with 4-inch outside diameter, continuous-flight, solid-stem auger. Samples were taken with a 2.5-inch O.D./2.0-inch I.D., California-type sampler, standard penetration (SPT) sampler, and by bulk methods. Penetration tests were obtained at the various sample depths as well.

Test pits were performed with a rubber-tire backhoe. Tactile observation/evaluation of the soils exposed was performed during excavation. Bulk samples of the soils were obtained for laboratory testing purposes.

Appendix A to this report includes logs of the borings and test pits describing the subsurface conditions. The lines defining boundaries between soil and rock types on the logs are based upon drill behavior and interpolation between samples and are therefore approximate. Transition between soil and rock types may be abrupt or may be gradual.

2.2 Laboratory Testing

Laboratory tests were performed on selected soil samples to estimate their relative engineering properties. Tests were performed in general accordance with the following methods of ASTM or other recognized standards-setting bodies, and local practice:

- Description and Identification of Soils (Visual-Manual Procedure)
- Classification of Soils for Engineering Purposes
- Moisture Content
- Sieve Analysis of Fine and Coarse Aggregates
- Liquid Limit, Plastic Limit, and Plasticity Index
- Swell/Settlement

Results of the laboratory tests are included in Appendix B of this report. Selected test results are also shown on the boring logs in Appendix A.

2.3 General Geology

2.3.1 Site Description

The site is 151 acres and is currently covered with native grasses, trees, and shrubs. The parcel is a generally mild south and west sloping parcel with two shallow alluvial valleys separated by sandstone topographic highs. The site is bounded on the north, east and west by existing residential subdivisions. Higby Road borders the south.

2.3.2 Geologic Reconnaissance

A visual geologic reconnaissance of the site was performed by Mr. Jim Frohbieter, Professional Geologist, with J&K Geological Services. This reconnaissance was supported by the field drilling and test pit explorations, as well as geologic mapping and information from the following sources:

- CGS Geologic Map of the Monument Quadrangle, El Paso County, Colorado by Jon P. Thorson and Richard F. Madole, 2003
- Soil Survey of El Paso County Area, Colorado Soil Conservation Service, USDA, 1979
- El Paso County, Colorado: Potential Geologic Hazards and Surficial Deposits, Environmental and Engineering Maps and Tables for Land Use (Colorado Springs Quadrangle 1961), Charles S. Robinson and Associates, Inc. Cochran, D.M. (1977)
- Review of Available Geologic Hazard Studies in the surrounding area

Geologic maps are presented as Figures 3a-Regional Geology Map and Figure 3b-Site Specific Geology Map, attached to this report. An NRCS Soil Survey Map and associated Soil Descriptions are presented as Figures 4a, and 4b. A USGS Topographic Map is attached as Figure 5.



3.0 ON-SITE WASTEWATER TREATMENT

3.1 Evaluation

The site was evaluated for use of On-Site Wastewater Treatment Systems (OWTS); a.k.a. Septic Systems. For the purpose of submitting the Preliminary Development Plan, and after review of requirements listed in the El Paso County Land Development Code, the El Paso County Public Health Regulations, and written and verbal communication with both departments, a combination of profile borings/percolation testing (7 total), and tactile test pits (3 total) were performed. These explorations were performed at currently accessible locations across the development, and are shown on Figure 2. Logs of the borings and test pits are presented in Appendix A. Laboratory test results are presented in Appendix B, and select lab data is presented on the logs in Appendix A. Percolation test results and Long Term Acceptance Rate (LTAR) values are presented at the bottom of the logs in Appendix A as well. Figure 7 presents a Septic Suitability Map showing the possible configurations of septic fields, residence, and water well locations for the evaluated lots.

3.2 NRCS Soil Survey Mapping

Mapping of the NRCS Soil Survey on this site is presented on Figure 4a with descriptions of the soil types presented on Figure 4b. The NRCS soil descriptions generally agree with the soils encountered in our investigation and the results of our laboratory soil testing.

3.3 Results of Evaluations

Soils encountered at the locations evaluated generally included Silty to Clayey SAND, to “cleaner” Well to Poorly-Graded SAND. These coincide with Sand, Loamy Sand, Sandy Loam, and Loam (Soil Types 1 and 2) per USDA Soil Type categories. These soils are generally considered to have favorable percolation rates for conventional septic system design and construction.

Percolation rates at our exploration locations ranged from approximately 5 to 23 minutes/inch. LTAR values based on tactile evaluations, and laboratory soil testing were estimated to range from 0.80 to 0.60 gallons/square foot/day.

Dawson Formation weathered to relatively un-weathered bedrock (mainly sandstone with minor clayey or claystone layers) was encountered in five of the ten explorations at approximate depths of 4, 8, 12, 14, and 24 feet below the existing ground surface. Groundwater was encountered in five of the ten explorations at approximate depths ranging from 14 to 23 feet below the existing ground surface. Table 1 presented in this report shows depth to bedrock and groundwater for each exploration in tabular format. This information is also presented on the individual exploration logs in Appendix A.

3.4 Conclusions

The locations evaluated as part of this study generally found soils and percolation rates that are favorable for conventional septic system construction. Geologic mapping as presented on Figures 3a and 3b indicate that shallower bedrock of the Dawson Formation (see areas of Tkd4 on Figure 3a) will be encountered at various locations that were outside accessible limits of this evaluation. These areas are anticipated to have higher occurrences of shallow bedrock and lower percolation rates that would require engineered systems.

Add note on plat document specifying that certain lots will require engineered



3.5 Other Considerations

Existing Water Wells:

Two water wells are located within the eastern portion of the site adjacent the Jackson Creek drainage feature. The wells are 210 to 415 feet deep and uses are Domestic and Domestic Stock. A well field (no structure) is mapped adjacent the southern edge of the property. The residential communities adjacent and to the north, east, and south are on individual wells for domestic & household only use and septic systems.

Existing Lakes, Streams, Irrigation Ditches, etc.:

The nearest lakes (Lake Woodmoor and Monument Lake) are located 2 to 3 miles from the site at up or cross-gradient locations. Jackson Creek (1st order drainage) crosses the east portion of the site which is a perennial stream and flows to the south and west of the site. Several ponds associated with the Jackson Creek drainage are located on site and downstream that have historically been associated with livestock uses.

Availability of Central Sewage System:

The site is not within the boundaries of a water/sanitation district. Woodmoor Water & Sanitation District boundary is located adjacent the east and northeast site boundary and would be the closest connection if they allowed inclusion, which is unclear based on discussions to date. The estimated cost to tie into Woodmoor’s sewage system is significant and includes the main items presented in the table below. In summary, connecting to Woodmoor’s wastewater system results in an estimated cost on the order of \$2.7 M versus \$0.72 M for individual OWTS for full build out of the subdivision.

ITEM	AMOUNT	UNIT COST	TOTAL COST
Lift Station	2	\$400,000	\$800,000
8" Pipeline	14,000 Linear Feet (LF)	\$64.00 per LF ¹⁾	\$896,000
Manholes	30 (1 per 400 LF)	\$4,386 ¹⁾	\$131,580
Installation	14 (1,000 LF segments)	\$1,402 ¹⁾	\$19,628
Design/Drawings ²⁾	1	\$25,000	\$25,000
Inclusion Fee ³⁾	1	\$400,000	\$400,000
Tap fee	48	\$9,228	\$442,944
TOTAL COST ESTIMATE			\$2,715,152

Notes:

- 1) Unit cost from 2019 El Paso County Financial Assurance charts
- 2) Design/Drawings include all system design, construction drawings, permits and financial assurances
- 3) Inclusion fee can vary widely

Other considerations:

- Based on conversations with Woodmoor Water and Sanitation it is unlikely that they will service the site for wastewater only. If they require water service as well the above cost impact to the project will increase by at least 3 times.
- The return flows from the planned septic systems meets the State’s augmentation requirements for pumping from the Dawson aquifer. Without those return flows Grandwood would have to purchase non-tributary augmentation water from another source. At \$3,000 per acre foot this could be as much as \$72,000 annually.

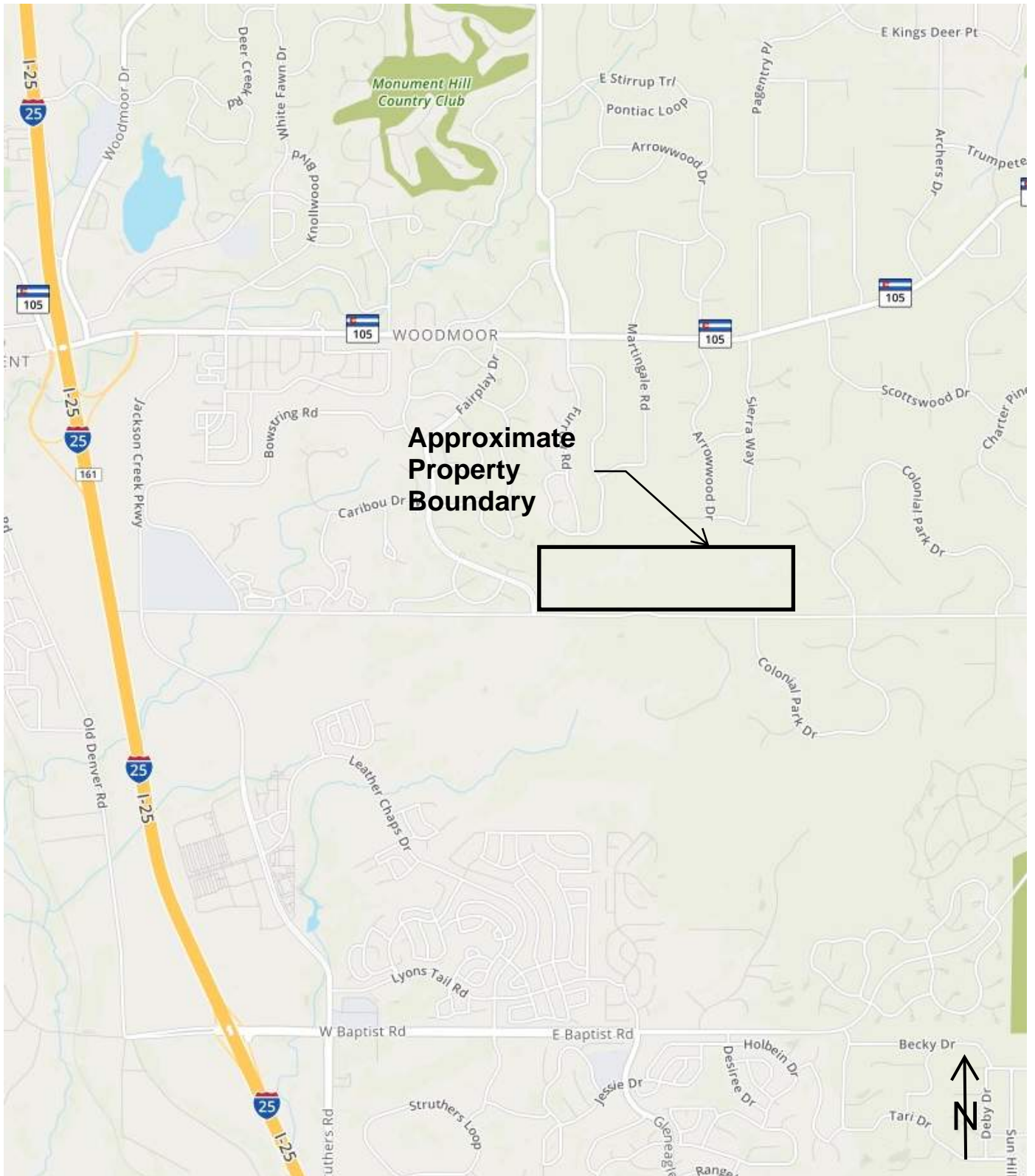
Based on our evaluation, inclusion into a special district would be cost prohibitive for the development.




4.0 LIMITATIONS

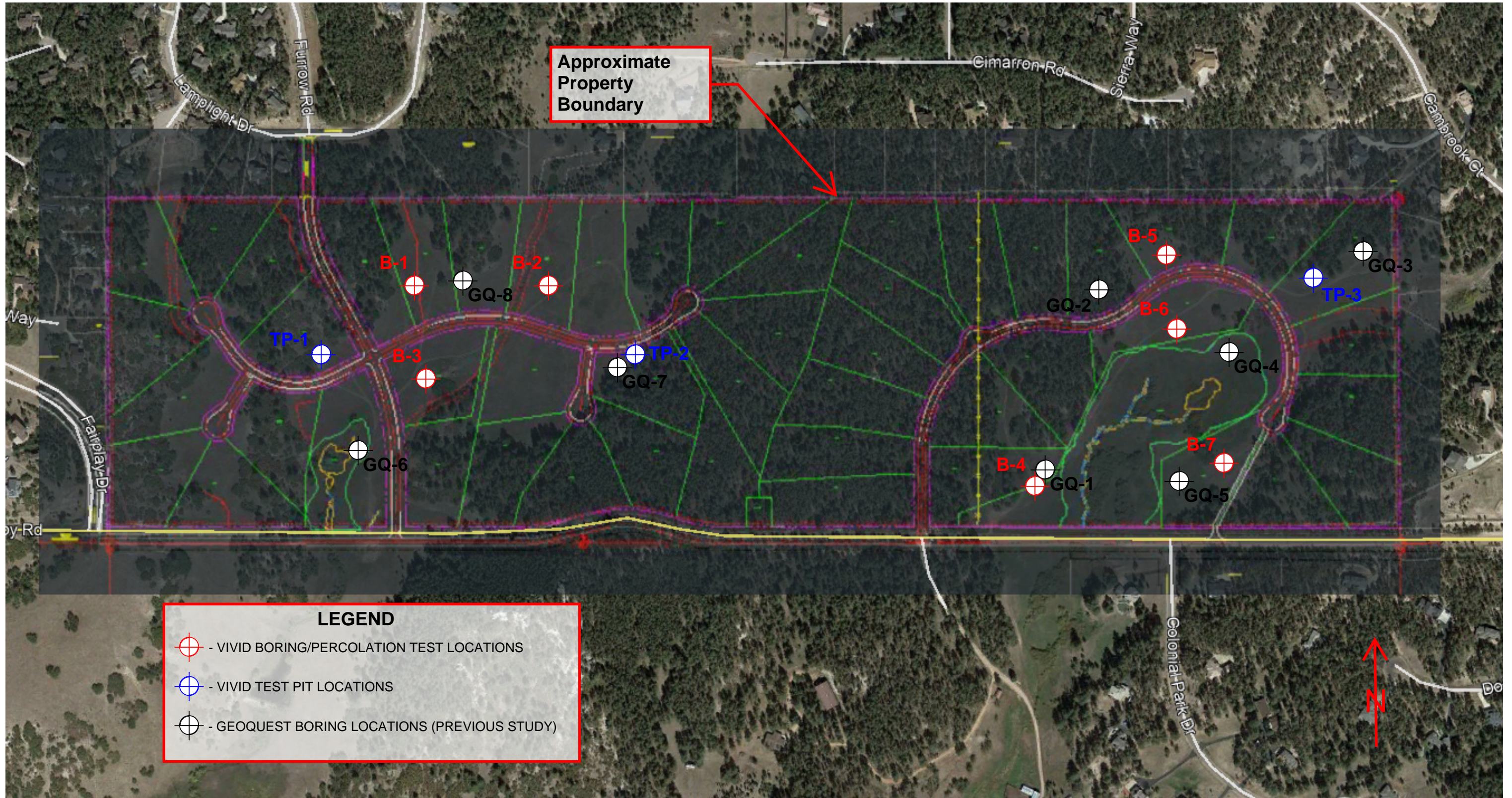
This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of VIVID's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. VIVID makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two (2) years from the date of the report.






Not to Scale. Base image obtained from www.mapquest.com, 2019

	Project No: D18-2-175	VICINITY MAP	Figure 1
	Date: 1/15/19		
	Drawn by: WJB	Grandwood Subdivision El Paso County, Colorado	
	Reviewed by: BTM		



LEGEND

-  - VIVID BORING/PERCOLATION TEST LOCATIONS
-  - VIVID TEST PIT LOCATIONS
-  - GEOQUEST BORING LOCATIONS (PREVIOUS STUDY)

Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019.



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, Colorado 80907
 719.896.4356

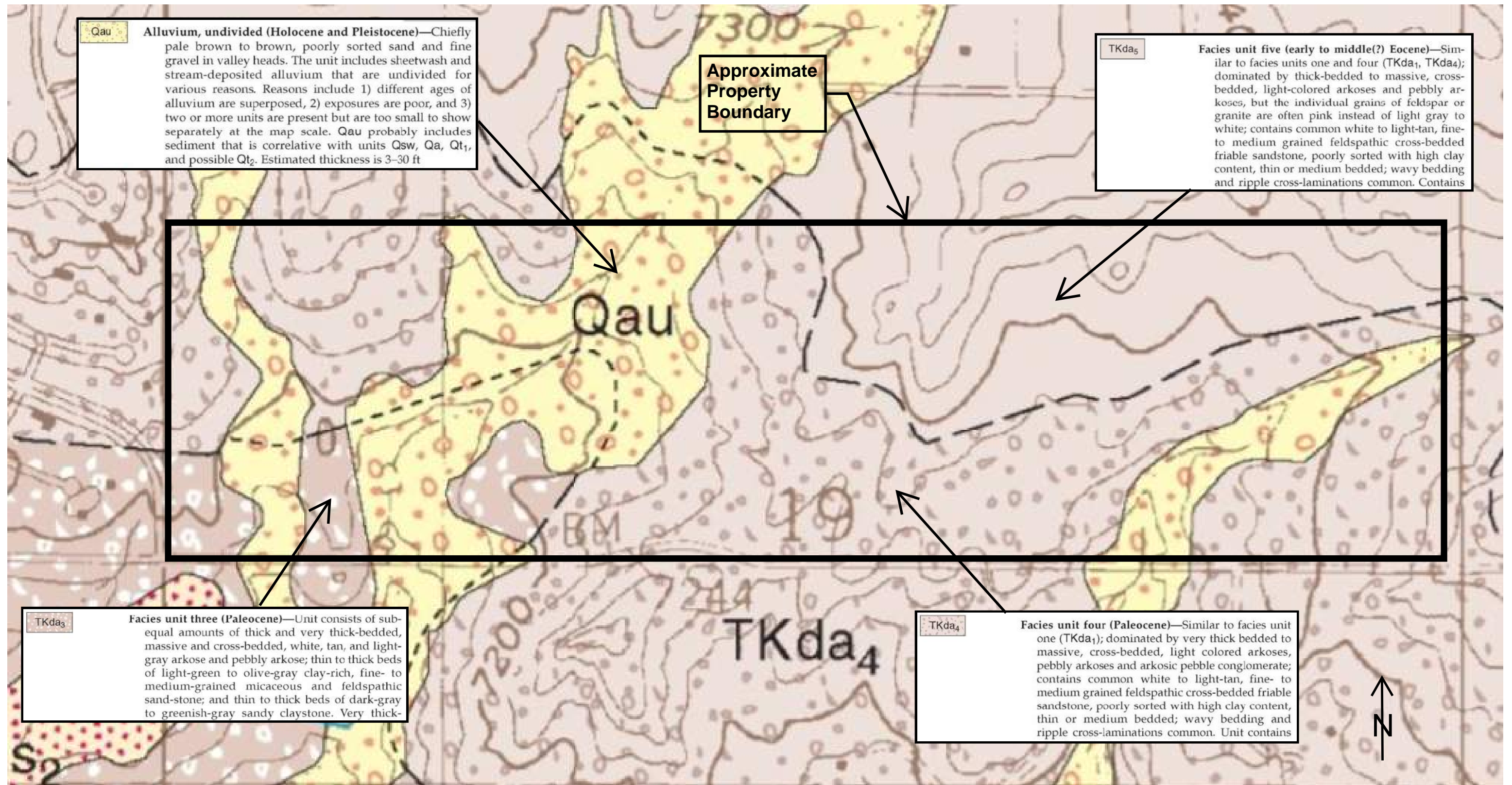
Project No: D18-2-175
Date: 1/15/19 rev 2: 4/16/20
Drawn by: WJB
Reviewed by: BTM

EXPLORATION LOCATION PLAN

Grandwood Subdivision
 El Paso County, Colorado

Figure

2



Not to Scale. Base image from https://ngmdb.usgs.gov/Prodesc/proddesc_76327.htm (Geologic Map of the Monument Quadrangle, El Paso County, Colorado, 2003)



VIVID Engineering Group, Inc.
1053 Elkton Drive
Colorado Springs, Colorado 80907
719.896.4356

Project No: D18-2-175

Date: 1/15/19

Drawn by: WJB

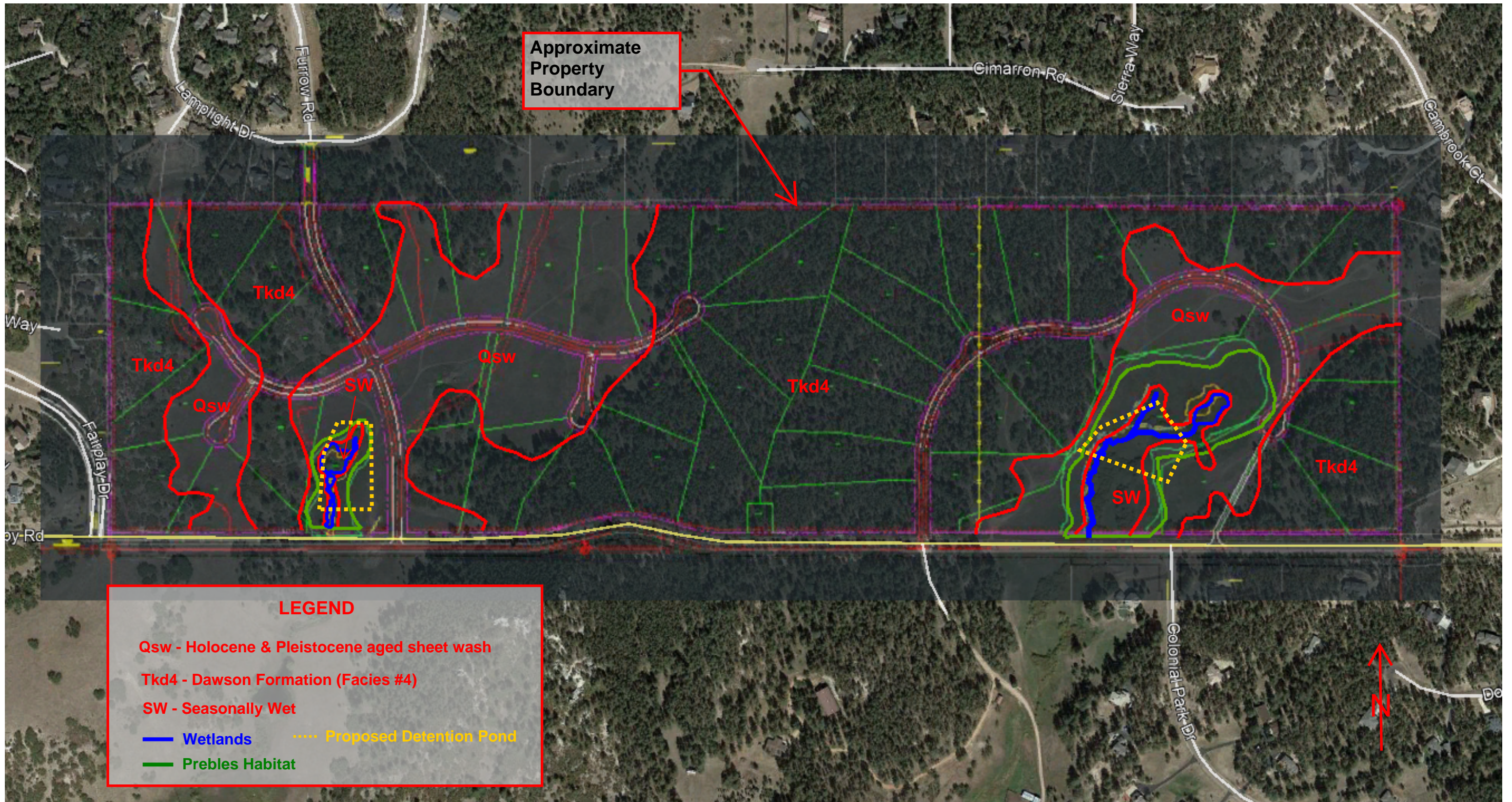
Reviewed by: BTM

REGIONAL GEOLOGY MAP


Grandwood Subdivision
El Paso County, Colorado

Figure

3a



Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019.
 Site-specific Geology Mapping by Jim Frohbieter, Professional Geologist



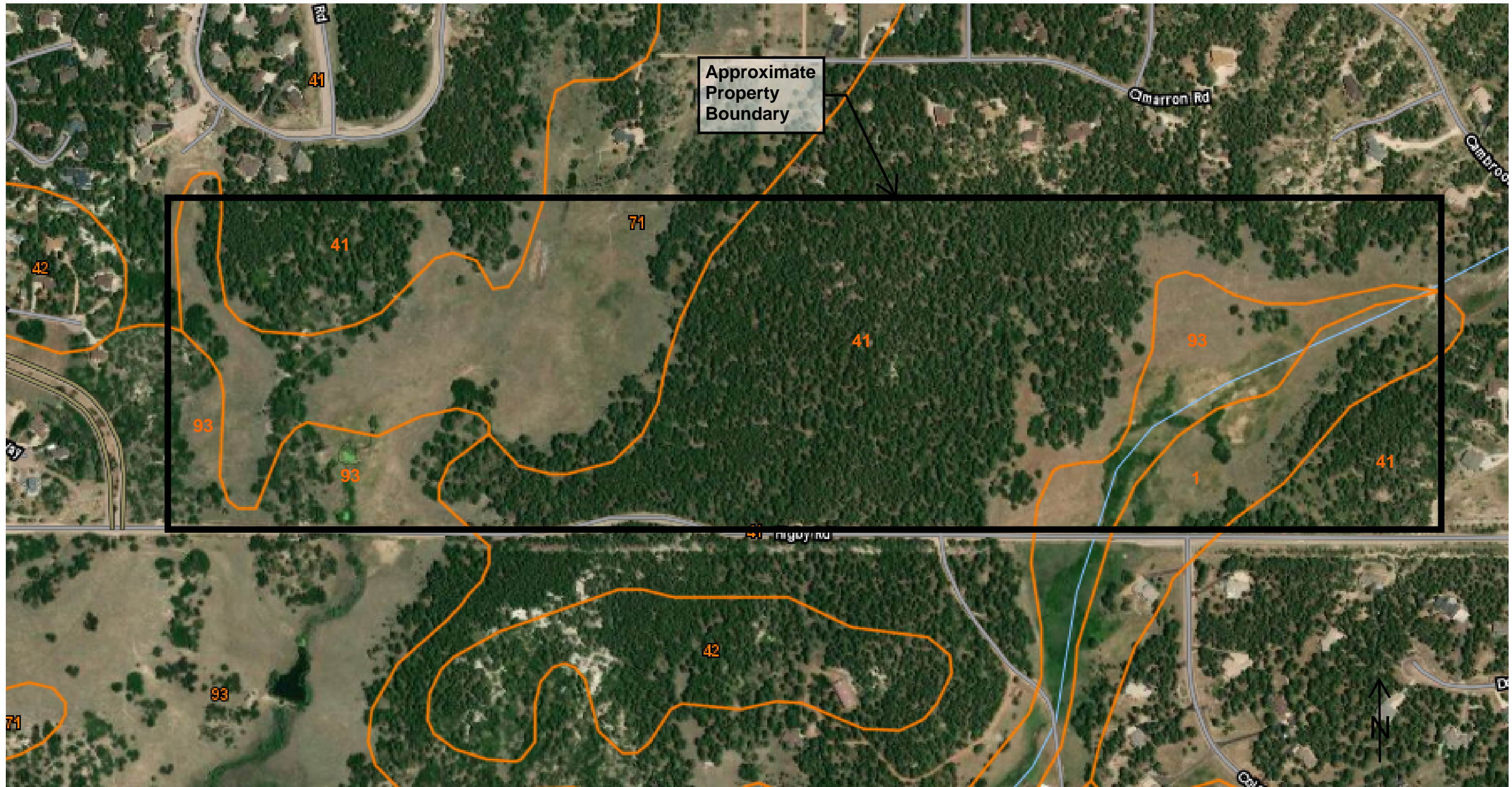
VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, Colorado 80907
 719.896.4356

Project No: D18-2-175
Date: 1/15/19 rev 2: 4-16-20
Drawn by: WJB
Reviewed by: BTM

SITE-SPECIFIC GEOLOGY MAP

Grandwood Subdivision
 El Paso County, Colorado

Figure
3b



Not to Scale. Base image from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, Colorado 80907
 719.896.4356

Project No: D18-2-175
Date: 1/15/19
Drawn by: WJB
Reviewed by: BTM

NRCS SOIL SURVEY MAP

Grandwood Subdivision
 El Paso County, Colorado

Figure
4a

El Paso County Area, Colorado**1—Alamosa loam, 1 to 3 percent slopes****Map Unit Setting**

National map unit symbol: 3670
 Elevation: 7,200 to 7,700 feet
 Farmland classification: Prime farmland if irrigated and reclaimed of excess salts and sodium

Map Unit Composition

Alamosa and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alamosa**Setting**

Landform: Flood plains, fans
 Down-slope shape: Linear
 Across-slope shape: Linear
 Parent material: Alluvium

Typical profile

A - 0 to 6 inches: loam
 Bt - 6 to 14 inches: clay loam
 Btk - 14 to 33 inches: clay loam
 Cg1 - 33 to 53 inches: sandy clay loam
 Cg2 - 53 to 60 inches: sandy loam

Properties and qualities

Slope: 1 to 3 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Poorly drained
 Runoff class: Very high
 Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
 Depth to water table: About 12 to 18 inches
 Frequency of flooding: Frequent
 Frequency of ponding: None
 Calcium carbonate, maximum in profile: 5 percent
 Salinity, maximum in profile: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)
 Available water storage in profile: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
 Land capability classification (nonirrigated): 5w
 Hydrologic Soil Group: D
 Ecological site: Mountain Meadow (R048AY241CO)
 Hydric soil rating: Yes

Minor Components**Other soils**

Percent of map unit:
 Hydric soil rating: No

El Paso County Area, Colorado**41—Kettle gravelly loamy sand, 8 to 40 percent slopes****Map Unit Setting**

National map unit symbol: 368h
 Elevation: 7,000 to 7,700 feet
 Farmland classification: Not prime farmland

Map Unit Composition

Kettle and similar soils: 85 percent

Estimates are based on observations, descriptions, and transect mapunit.

Description of Kettle**Setting**

Landform: Hills
 Landform position (three-dimensional): Side slope
 Down-slope shape: Linear
 Across-slope shape: Linear
 Parent material: Sandy alluvium derived from arkose

Typical profile

E - 0 to 16 inches: gravelly loamy sand
 Bt - 16 to 40 inches: gravelly sandy loam
 C - 40 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 8 to 40 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Somewhat excessively drained
 Runoff class: Medium
 Capacity of the most limiting layer to transmit water (Ksat): (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 storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
 Land capability classification (nonirrigated): 7e
 Hydrologic Soil Group: B
 Hydric soil rating: No

Minor Components**Other soils**

Percent of map unit:
 Hydric soil rating: No

Pleasant

Percent of map unit:
 Landform: Depressions
 Hydric soil rating: Yes

El Paso County Area, Colorado**71—Pring coarse sandy loam, 3 to 8 percent slopes****Map Unit Setting**

National map unit symbol: 369k
 Elevation: 6,800 to 7,600 feet
 Farmland classification: Not prime farmland

Map Unit Composition

Pring and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pring**Setting**

Landform: Hills
 Landform position (three-dimensional): Side slope
 Down-slope shape: Linear
 Across-slope shape: Linear
 Parent material: Arkosic alluvium derived from sedimentary rock

Typical profile

A - 0 to 14 inches: coarse sandy loam
 C - 14 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Well drained
 Runoff class: Low
 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 storage in profile: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
 Land capability classification (nonirrigated): 3e
 Hydrologic Soil Group: B
 Ecological site: Loamy Park (R048AY222CO)
 Hydric soil rating: No

Minor Components**Pleasant**

Percent of map unit:
 Landform: Depressions
 Hydric soil rating: Yes

Other soils

Percent of map unit:
 Hydric soil rating: No

El Paso County Area, Colorado**93—Tomah-Crowfoot complex, 8 to 15 percent slopes****Map Unit Setting**

National map unit symbol: 36bb
 Elevation: 7,300 to 7,600 feet
 Farmland classification: Not prime farmland

Map Unit Composition

Tomah and similar soils: 50 percent
 Crowfoot and similar soils: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tomah**Setting**

Landform: Alluvial fans, hills
 Landform position (three-dimensional): Side slope, crest
 Down-slope shape: Linear
 Across-slope shape: Linear
 Parent material: Alluvium derived from arkose and/or residuum weathered from arkose

Typical profile

A - 0 to 10 inches: loamy sand
 E - 10 to 22 inches: coarse sand
 C - 48 to 60 inches: coarse sand

Properties and qualities

Slope: 8 to 15 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Well drained
 Runoff class: Medium
 Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
 Depth to water table: More than 80 inches
 Frequency of flooding: None
 Frequency of ponding: None
 Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
 Land capability classification (nonirrigated): 6e
 Hydrologic Soil Group: B
 Ecological site: Sandy Divide (R049BY216CO)
 Hydric soil rating: No

Description of Crowfoot**Setting**

Landform: Hills, alluvial fans
 Landform position (three-dimensional): Side slope, crest
 Down-slope shape: Linear
 Across-slope shape: Linear
 Parent material: Alluvium

Typical profile

A - 0 to 12 inches: loamy sand
 E - 12 to 23 inches: sand
 Bt - 23 to 36 inches: sandy clay loam
 C - 36 to 60 inches: coarse sand

Properties and qualities

Slope: 8 to 15 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Well drained
 Runoff class: Medium
 Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
 Depth to water table: More than 80 inches
 Frequency of flooding: None
 Frequency of ponding: None
 Available water storage in profile: Low (about 4.7 inches)

Not to Scale. Base image from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, Colorado 80907
 719.896.4356

Project No: D18-2-175

Date: 1/15/19

Drawn by: WJB

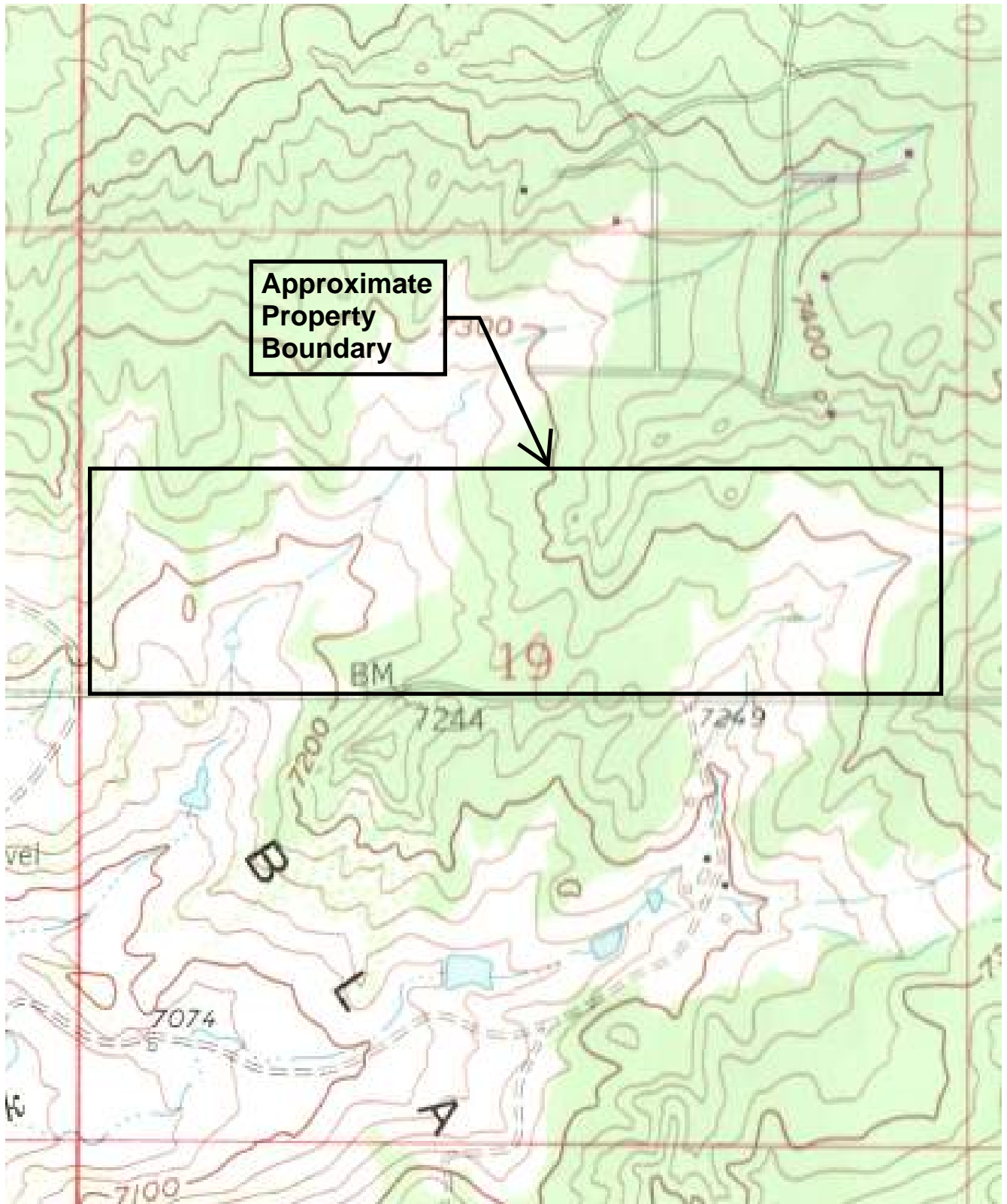
Reviewed by: BTM

NRCS SOIL SURVEY MAP (Soil Descriptions)


Grandwood Subdivision
 El Paso County, Colorado

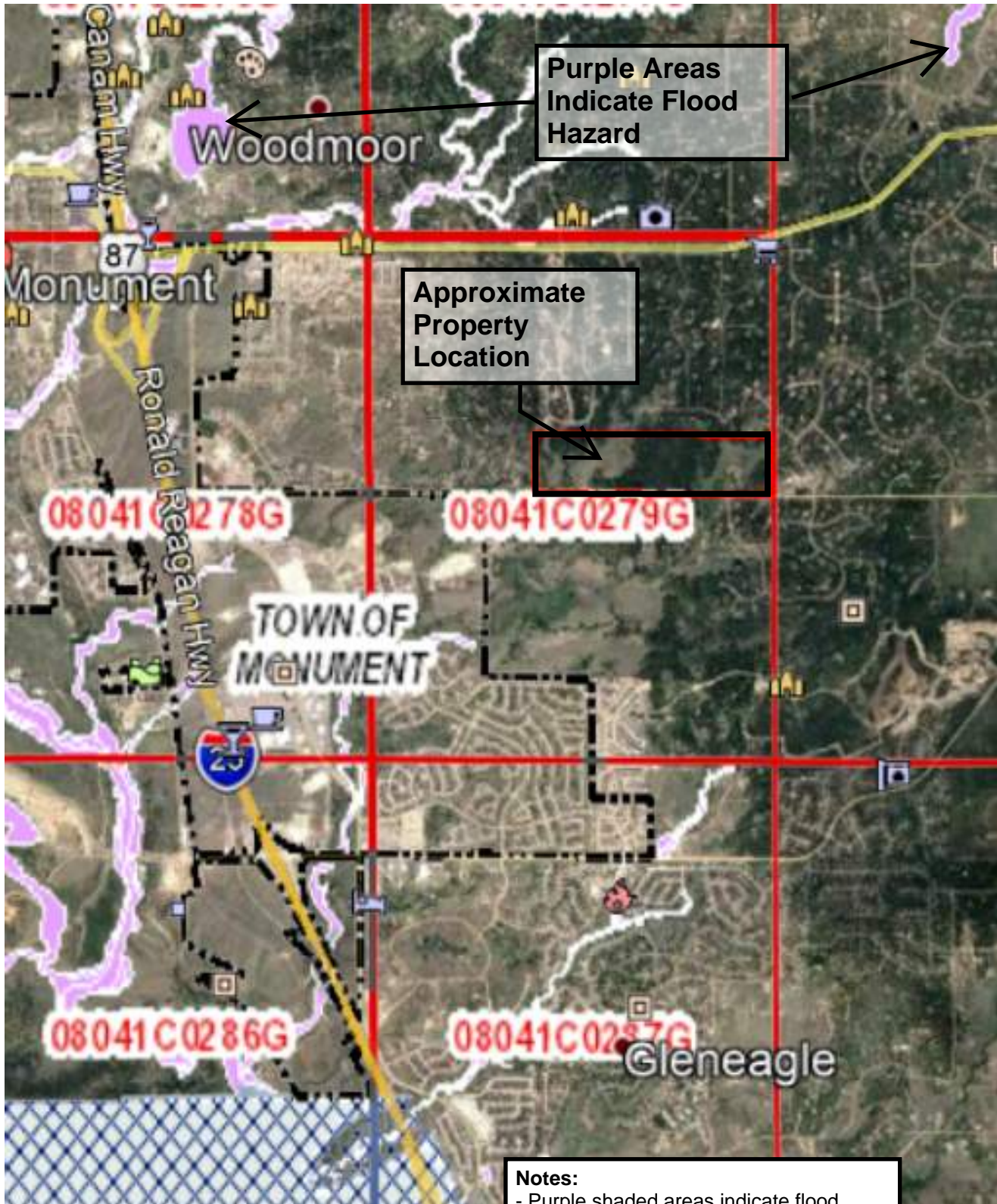
Figure

4b



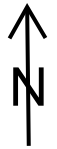
Not to Scale. Base image obtained from USGS 7.5 Minute Quadrangle, 1961

	Project No: D18-2-175	TOPOGRAPHIC MAP	Figure 5
	Date: 1/15/19		
	Drawn by: WJB	Grandwood Subdivision El Paso County, Colorado	
	Reviewed by: BTM		



Not to Scale. Base image obtained from https://dsat.services.femadata.com/arcgis/rest/services/FEMA_R8/RiskMAP_ElPasoCounty_Colorado/MapServer/legend, 2019

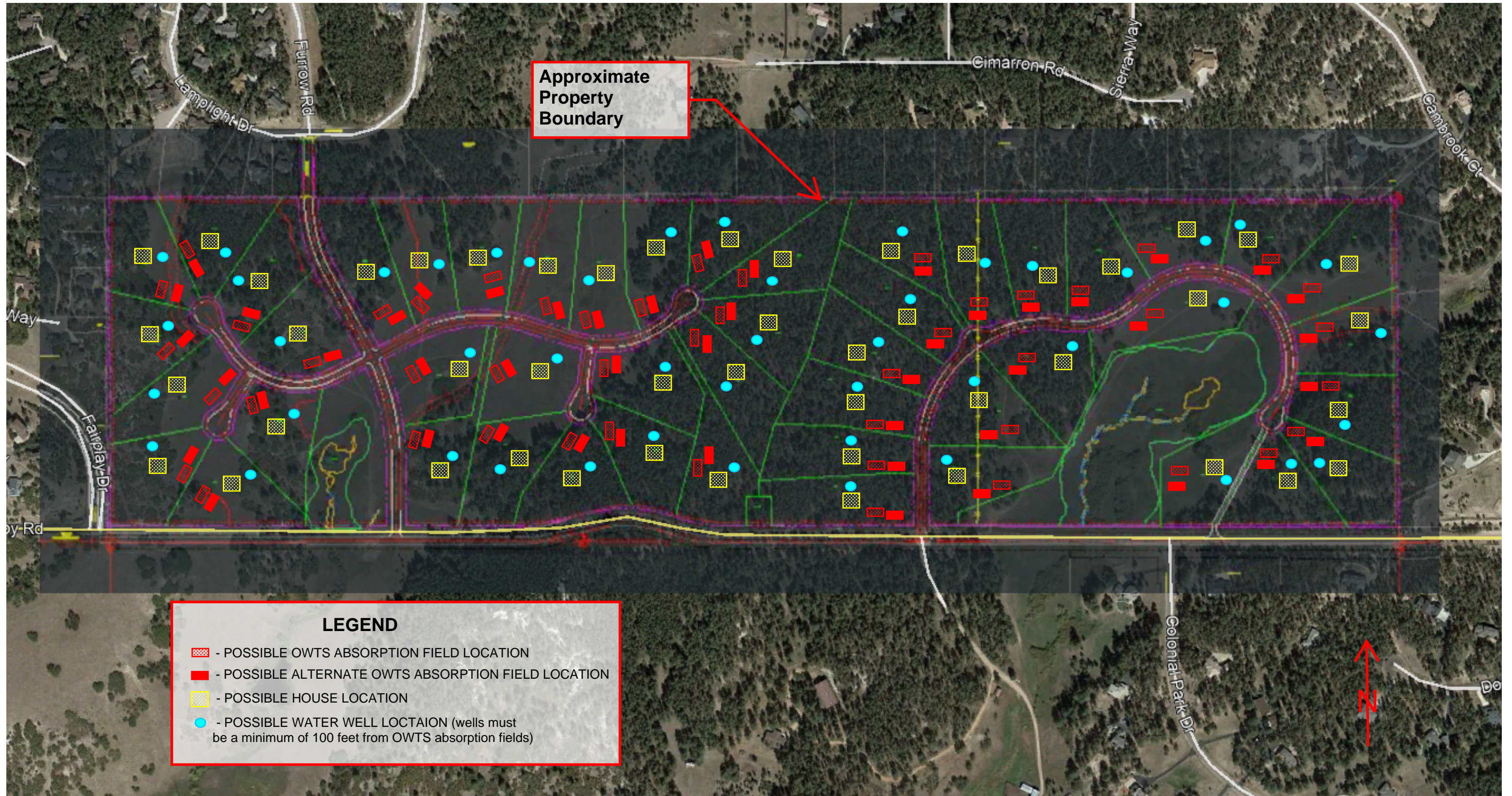
Notes:
 - Purple shaded areas indicate flood hazard risk
 - Site has no mapped flood hazards



Project No: D18-2-175
Date: 1/15/19
Drawn by: WJB
Reviewed by: BTM

FLOOD HAZARD MAP
Grandwood Subdivision El Paso County, Colorado

Figure
6



Approximate
Property
Boundary

LEGEND

- POSSIBLE OWTS ABSORPTION FIELD LOCATION
- POSSIBLE ALTERNATE OWTS ABSORPTION FIELD LOCATION
- POSSIBLE HOUSE LOCATION
- POSSIBLE WATER WELL LOCATION (wells must be a minimum of 100 feet from OWTS absorption fields)

Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019.



VIVID Engineering Group, Inc.
1053 Elkton Drive
Colorado Springs, Colorado 80907
719.896.4356

Project No: D18-2-175
Date: 1/15/19 rev 2: 4-16-20
Drawn by: WJB
Reviewed by: BTM

SEPTIC SUITABILITY MAP

Grandwood Subdivision
El Paso County, Colorado

Figure

7

Appendix A
Logs of Explorations



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-1

CLIENT Herebic Homes

PROJECT NUMBER D18-2-175

DATE STARTED 12/20/18 **COMPLETED** 12/20/18

DRILLING CONTRACTOR Old Dirt Drilling

DRILLING METHOD CME-45 Truck

LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire

NOTES _____

PROJECT NAME Grandwood Subdivision

PROJECT LOCATION Higby Road, Monument, Colorado

GROUND ELEVATION _____ **HOLE SIZE** 4 inches

GROUND WATER LEVELS:

∇ **AT TIME OF DRILLING** 23.00 ft

AT END OF DRILLING ---

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
4.5	SPT	4-5			Silty to Clayey SAND, tan, dry to wet (below about 23 feet), loose to medium dense, fine to coarse-grained. USDA Soil Type: 2, Structure Shape: GR, Structure Grade: 2
7.5	SPT	7-5			
10.5	SPT	3-5	MC = 8.2% LL = NP PL = NP Fines = 14.0%		
15.5	SPT	5-5			
20.5	SPT	4-4			
25.0	SPT	5-5	MC = 17.3% LL = NP PL = NP		
				25.0	Bottom of borehole at 25.0 feet.

Note:
 Average Percolation Rate = 18 min./in.
 LTAR = 0.60 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-2

PAGE 1 OF 1

CLIENT Herebic Homes

PROJECT NUMBER D18-2-175

DATE STARTED 12/20/18 **COMPLETED** 12/20/18

DRILLING CONTRACTOR Old Dirt Drilling

DRILLING METHOD CME-45 Truck

LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire

NOTES _____

PROJECT NAME Grandwood Subdivision

PROJECT LOCATION Higby Road, Monument, Colorado

GROUND ELEVATION _____ **HOLE SIZE** 4 inches

GROUND WATER LEVELS:

AT TIME OF DRILLING ---

AT END OF DRILLING ---

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\ID18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\ID18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
3.0	SPT	9-8			Silty to Clayey SAND, tan to light brown, dry, loose to medium dense, fine to coarse-grained. USDA Soil Type: 2, Structure Shape: GR, Structure Grade: 2
4.0					
5.0	SPT	7-15			Dawson Formation Weathered SANDSTONE with clayey zones, tan to light gray, dry to slightly moist, medium dense to very dense. USDA Soil Type: 3A, Structure Shape: 0, Structure Grade: 1
10.0	SPT	35-15/2"	MC = 10.6% LL = 43 PL = 26 Fines = 22.0%		
12.0					Dawson Formation CLAYSTONE, sandy, light gray, slightly moist, hard. USDA Soil Type: 4A, Structure Shape: 0, Structure Grade: 1
14.5	MC	50	MC= 17.0%		

Comp. = 0.7%
 Under 1ksf surcharge pressure

Bottom of borehole at 14.5 feet.

Note:
 Average Percolation Rate = 23 min./in.
 LTAR = 0.60 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-3

CLIENT Herebic Homes

PROJECT NUMBER D18-2-175

DATE STARTED 12/20/18 **COMPLETED** 12/20/18

DRILLING CONTRACTOR Old Dirt Drilling

DRILLING METHOD CME-45 Truck

LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire

NOTES _____

PROJECT NAME Grandwood Subdivision

PROJECT LOCATION Higby Road, Monument, Colorado

GROUND ELEVATION _____ **HOLE SIZE** 4 inches

GROUND WATER LEVELS:

∇ **AT TIME OF DRILLING** 19.00 ft

AT END OF DRILLING ---

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
4.8	SPT	9-8			Well Graded to Silty to Slightly Clayey SAND, dark brown to tan and pink, dry to wet (below about 19 feet), medium dense to loose. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
5.2	SPT	4-4	MC = 2.1% LL = NP PL = NP Fines = 11.4%		
9.8	SPT	5-4			
14.8	SPT	5-5	MC = 4.4% LL = NP PL = NP Fines = 7.8%		
19.8	SPT	3-3			
24.8	SPT	5-5			
25.0					Bottom of borehole at 25.0 feet.

Note:
 Average Percolation Rate = 5 min./in.
 LTAR = 0.80 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-4

CLIENT <u>Herebic Homes</u>	PROJECT NAME <u>Grandwood Subdivision</u>
PROJECT NUMBER <u>D18-2-175</u>	PROJECT LOCATION <u>Higby Road, Monument, Colorado</u>
DATE STARTED <u>12/20/18</u> COMPLETED <u>12/20/18</u>	GROUND ELEVATION _____ HOLE SIZE <u>4 inches</u>
DRILLING CONTRACTOR <u>Old Dirt Drilling</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>CME-45 Truck</u>	▽ AT TIME OF DRILLING <u>17.00 ft</u>
LOGGED BY <u>J. Frohbieter</u> CHECKED BY <u>W. Barreire</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15.03 - F:\VIVID PROJECTS\18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
5	▲ SPT	5-5	MC = 2.8% LL = NP PL = NP Fines = 19.0%		Poorly Graded to Silty/Slightly Clayey SAND, brown to tan to pinkish-tan, dry, loose to medium dense, fine to coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
	▲ SPT	5-6			
10	▲ SPT	2-3			
12.0					
15	▲ SPT	35-15/1"	MC = 11.7% LL = NP PL = NP Fines = 15.0%		Dawson Formation SANDSTONE with clayey zones, tan to light gray, dry to slightly moist, very dense to hard, fine to coarse-grained, poorly cemented. USDA Soil Type: 3A, Structure Shape: 0, Structure Grade: 1
19.7	▲ SPT	25-25/2"			

Bottom of borehole at 19.7 feet.

Note:
 Average Percolation Rate = 5 min./in.
 LTAR = 0.80 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-5

PAGE 1 OF 1

CLIENT Herebic Homes
PROJECT NUMBER D18-2-175
DATE STARTED 12/20/18 **COMPLETED** 12/20/18
DRILLING CONTRACTOR Old Dirt Drilling
DRILLING METHOD CME-45 Truck
LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire
NOTES _____

PROJECT NAME Grandwood Subdivision
PROJECT LOCATION Higby Road, Monument, Colorado
GROUND ELEVATION _____ **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15.03 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\D18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
1.0				8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
2-3	SPT	2-3		Poorly Graded to Silty/Slightly Clayey SAND, brown to tan, slightly moist, loose. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
3-2	SPT	3-2		
8.0				Dawson Formation Weathered SANDSTONE, clean to slightly clayey, tan to pink, dry to slightly moist, dense to hard. USDA Soil Type: 3A, Structure Shape: 0, Structure Grade: 1
31-19/3"	SPT	31-19/3"		
50	SPT	50		
14.5				Bottom of borehole at 14.5 feet.

Note:
 Average Percolation Rate = 5 min./in.
 LTAR = 0.80 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-6

CLIENT <u>Herebic Homes</u>	PROJECT NAME <u>Grandwood Subdivision</u>
PROJECT NUMBER <u>D18-2-175</u>	PROJECT LOCATION <u>Higby Road, Monument, Colorado</u>
DATE STARTED <u>12/20/18</u> COMPLETED <u>12/20/18</u>	GROUND ELEVATION _____ HOLE SIZE <u>4 inches</u>
DRILLING CONTRACTOR <u>Old Dirt Drilling</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>CME-45 Truck</u>	▽ AT TIME OF DRILLING <u>19.00 ft</u>
LOGGED BY <u>J. Frohbieter</u> CHECKED BY <u>W. Barreire</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
3-3	SPT	3-3			Well Graded to Silty/Slightly Clayey SAND, tan to pinkish-tan, dry to wet (below about 19 feet), loose. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
5	SPT	3-2			
10	SPT	2-2	MC = 10.1% LL = 25 PL = 19 Fines = 21.0%		
15					
19	SPT	3-4			
20	SPT	1-2			
24.5					
25	SPT	4-35			
					Dawson Formation Weathered SANDSTONE, clean to slightly clayey, tan, moist, very dense Bottom of borehole at 25.0 feet.

Note:
 Average Percolation Rate = 7 min./in.
 LTAR = 0.80 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

BORING NUMBER B-7

CLIENT Herebic Homes

PROJECT NUMBER D18-2-175

DATE STARTED 12/20/18 **COMPLETED** 12/20/18

DRILLING CONTRACTOR Old Dirt Drilling

DRILLING METHOD CME-45 Truck

LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire

NOTES _____

PROJECT NAME Grandwood Subdivision

PROJECT LOCATION Higby Road, Monument, Colorado

GROUND ELEVATION _____ **HOLE SIZE** 4 inches

GROUND WATER LEVELS:

∇ **AT TIME OF DRILLING** 14.00 ft

AT END OF DRILLING ---

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\ID18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\ID18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1.0					8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
	▲ SPT	4-6			Silty to Slightly Clayey SAND, tan with some iron-oxide staining, dry to slightly moist, loose to medium dense, fine-grained to about 6 feet then coarse-grained. USDA Soil Type: 2, Structure Shape: GR, Structure Grade: 2
5	▲ SPT	6-5	MC = 6.4% LL = NP PL = NP Fines = 30.0%		
10	▲ SPT	6-6			
14.0					14.0 ∇
15	▲ SPT	6-25	MC = 22.1% LL = 33 PL = 24 Fines = 54.0%		Dawson Formation Weathered SANDSTONE to CLAYSTONE, tan to gray, moist to very moist, very dense to hard, poorly cemented, fine to coarse-grained
19.7	▲ SPT	30-20/2"			19.7

Bottom of borehole at 19.7 feet.

Note:

Average Percolation Rate = 6 min./in.
 LTAR = 0.60 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

TEST PIT NUMBER TP-1

CLIENT Herebic Homes **PROJECT NAME** Grandwood Subdivision

PROJECT NUMBER D18-2-175 **PROJECT LOCATION** Higby Road, Monument, Colorado

DATE STARTED 12/20/18 **COMPLETED** 12/20/18 **GROUND ELEVATION** _____ **TEST PIT SIZE** 60 X 120 inches

EXCAVATION CONTRACTOR Bush Excavating **GROUND WATER LEVELS:**

EXCAVATION METHOD Rubber-Tire Backhoe **AT TIME OF EXCAVATION** ---

LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire **AT END OF EXCAVATION** ---

NOTES _____ **AFTER EXCAVATION** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
	GB			8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
	GB			Poorly Graded SAND with silt, brown, dry, loose to medium dense, coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
5	GB	MC = 2.9% LL = NP PL = NP Fines = 16.5%		Silty to Clayey SAND, brown, dry to moist, medium dense, fine to coarse-grained. USDA Soil Type: 2, Structure Shape: GR, Structure Grade: 2
10	GB			

Bottom of test pit at 10.0 feet.

Note:
 Average Percolation Rate = N/A
 LTAR = 0.60 gal./s.f./day

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\ID18-2-175 GRANDWOOD SUBDIVISIONG - DRAFTING\ID18-2-175.GPJ



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

TEST PIT NUMBER TP-2

CLIENT Herebic Homes
PROJECT NUMBER D18-2-175
DATE STARTED 12/20/18 **COMPLETED** 12/20/18
EXCAVATION CONTRACTOR Bush Excavating
EXCAVATION METHOD Rubber-Tire Backhoe
LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire
NOTES _____

PROJECT NAME Grandwood Subdivision
PROJECT LOCATION Higby Road, Monument, Colorado
GROUND ELEVATION _____ **TEST PIT SIZE** 60 X 120 inches
GROUND WATER LEVELS:
AT TIME OF EXCAVATION ---
AT END OF EXCAVATION ---
AFTER EXCAVATION ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15.03 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\D18-2-175.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
	GB			8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
	GB	MC = 5.7% LL = NP PL = NP Fines = 8.6%		Well Graded SAND with silt and clay, light brown, dry to slightly moist, loose to medium dense, fine to coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
5	GB			Well Graded SAND with silt and clay, tan, slightly moist, loose to medium dense. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
	GB			Clayey SAND, brown, slightly moist, medium dense. USDA Soil Type: 2, Structure Shape: GR, Structure Grade: 2
10				

Bottom of test pit at 10.0 feet.

Note:
 Average Percolation Rate = N/A
 LTAR = 0.60 gal./s.f./day



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

TEST PIT NUMBER TP-3

CLIENT Herebic Homes
PROJECT NUMBER D18-2-175
DATE STARTED 12/20/18 **COMPLETED** 12/20/18
EXCAVATION CONTRACTOR Bush Excavating
EXCAVATION METHOD Rubber-Tire Backhoe
LOGGED BY J. Frohbieter **CHECKED BY** W. Barreire
NOTES _____

PROJECT NAME Grandwood Subdivision
PROJECT LOCATION Higby Road, Monument, Colorado
GROUND ELEVATION _____ **TEST PIT SIZE** 60 X 120 inches
GROUND WATER LEVELS:
AT TIME OF EXCAVATION ---
AT END OF EXCAVATION ---
AFTER EXCAVATION ---

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
0 - 1.0				8"-12" Topsoil - SAND, slightly clayey with organics, dark brown, dry, loose
1.0 - 2.0	GB			Poorly Graded SAND with clay, light brown, dry to slightly moist, loose to medium dense, fine to coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
2.0 - 4.0				Poorly Graded SAND with silt and clay, light brown, dry to slightly moist, loose to medium dense, fine to coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
4.0 - 10.0	GB	MC = 4.5% LL = NP PL = NP Fines = 11.6%		Poorly Graded SAND with clay, tan, dry to slightly moist, loose to medium dense, fine to coarse-grained. USDA Soil Type: 1, Structure Shape: N/A, Structure Grade: 0
10			10.0	Bottom of test pit at 10.0 feet.

Note:
 Average Percolation Rate = N/A
 LTAR = 0.80 gal./s.f./day

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 1/17/19 15:03 - F:\VIVID PROJECTS\ID18-2-175 GRANDWOOD SUBDIVISION - DRAFTING\ID18-2-175.GPJ



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

KEY TO SYMBOLS











CLIENT Herebic Homes

PROJECT NAME Grandwood Subdivision




PROJECT NUMBER D18-2-175

PROJECT LOCATION Higby Road, Monument, Colorado

LITHOLOGIC SYMBOLS (Unified Soil Classification System)


-  CLAYSTONE
-  SANDSTONE
-  SC: USCS Clayey Sand
-  SC-SM: USCS Clayey Sand
-  SM: USCS Silty Sand
-  SP-SC: USCS Poorly-graded Sand with Clay
-  SP-SM: USCS Poorly-graded Sand with Silt
-  SW-SM: USCS Well-graded Sand with Silt
-  TOPSOIL
-  WEATHERED SANDSTONE

SAMPLER SYMBOLS

-  Grab Sample
-  2" I.D. Modified California Sampler (MC)
-  Standard Penetration Test (SPT)

ABBREVIATIONS

- LL - LIQUID LIMIT (%)
- PI - PLASTIC INDEX (%)
- MC - MOISTURE CONTENT (%)
- DD - DRY DENSITY (PCF)
- NP - NON PLASTIC
- FINES- PERCENT PASSING NO. 200 SIEVE

 Water Level at Time
 Drilling, or as Shown

KEY TO SYMBOLS - GINT STD US LAB.GDT - 1/17/19 15:36 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION6 - DRAFTING\D18-2-175.GPJ

Appendix B

Laboratory Test Results



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

SUMMARY OF LABORATORY RESULTS

CLIENT Herebic Homes **PROJECT NAME** Grandwood Subdivision

PROJECT NUMBER D18-2-175 **PROJECT LOCATION** Higby Road, Monument, Colorado

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)		
B-1	9.0	NP	NP	NP	19	14	SM	8.2			
B-1	24.0	NP	NP	NP				17.3			
B-2	9.0	43	26	17	9.5	22	SC	10.6			
B-3	4.0	NP	NP	NP	19	11	SW-SM	2.1			
B-3	14.0	NP	NP	NP	25	8	SW-SM	4.4			
B-4	2.0	NP	NP	NP	12.5	19	SM	2.8			
B-4	14.0	NP	NP	NP	9.5	15	SM	11.7			
B-6	9.0	25	19	6	19	21	SC-SM	10.1			
B-7	4.0	NP	NP	NP	12.5	30	SM	6.4			
B-7	14.0	33	24	9	9.5	54	ML	22.1			
TP-1	2.0	NP	NP	NP	25	17	SM	2.9			
TP-2	3.0	NP	NP	NP	12.5	9	SW-SM	5.7			
TP-3	4.0	NP	NP	NP	25	12	SP-SM	4.5			

LAB SUMMARY - GINT STD US LAB.GDT - 1/17/19 09:33 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION\6 - DRAFTING\D18-2-175.GPJ



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

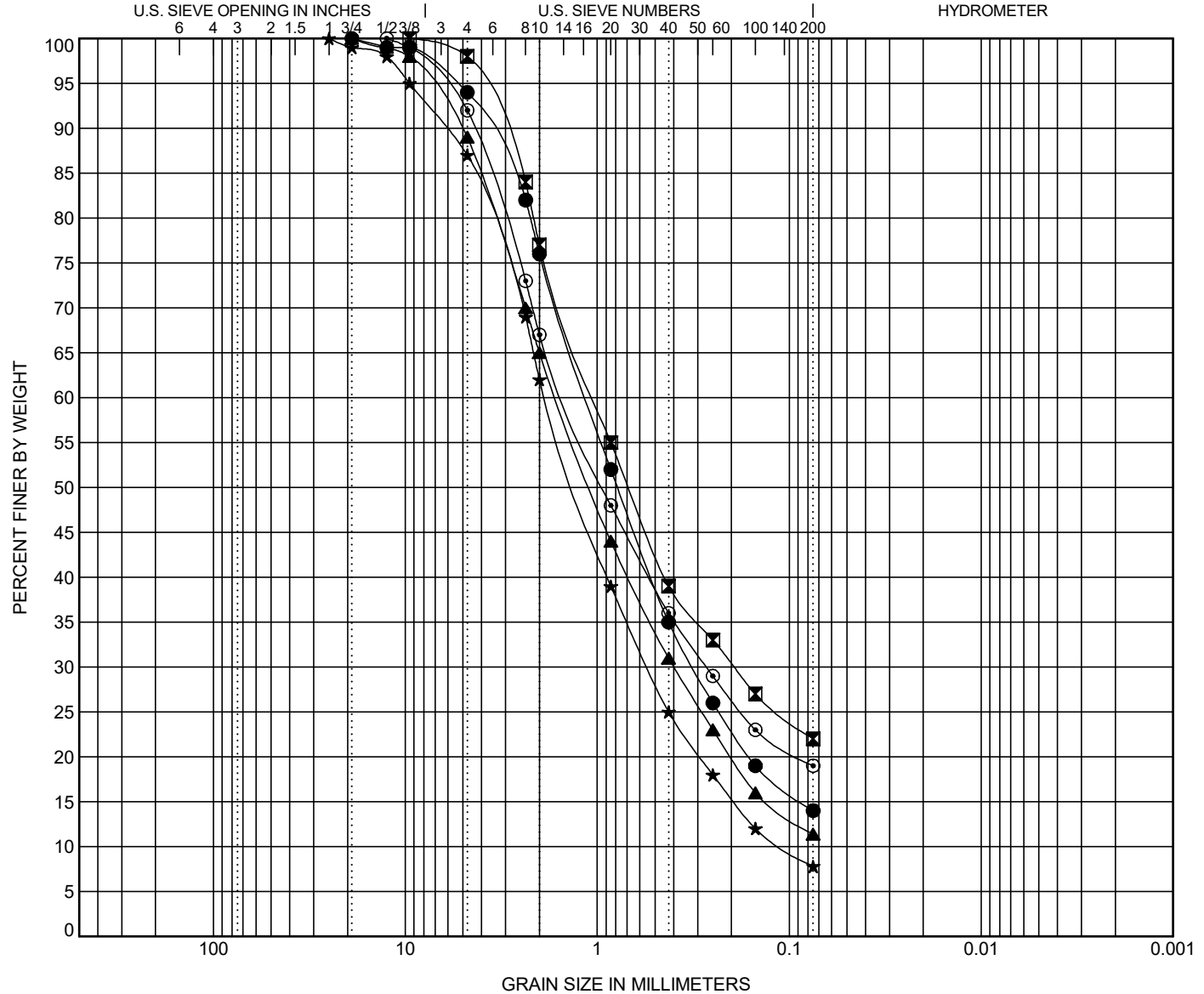
GRAIN SIZE DISTRIBUTION

CLIENT Herebic Homes

PROJECT NAME Grandwood Subdivision

PROJECT NUMBER D18-2-175

PROJECT LOCATION Higby Road, Monument, Colorado



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● B-1	9.0	SILTY SAND(SM)	NP	NP	NP		
■ B-2	9.0	CLAYEY SAND(SC)	43	26	17		
▲ B-3	4.0	WELL-GRADED SAND with SILT(SW-SM)	NP	NP	NP	1.60	26.86
★ B-3	14.0	WELL-GRADED SAND with SILT(SW-SM)	NP	NP	NP	1.48	17.22
○ B-4	2.0	SILTY SAND(SM)	NP	NP	NP		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-1	9.0	19	1.131	0.316		6.0	80.0	14.0	
■ B-2	9.0	9.5	1.032	0.194		2.0	76.0	22.0	
▲ B-3	4.0	19	1.631	0.398		11.0	77.6	11.4	
★ B-3	14.0	25	1.857	0.544	0.108	13.0	79.2	7.8	
○ B-4	2.0	12.5	1.459	0.27		8.0	73.0	19.0	

GRAIN SIZE - GINT STD. US LAB. GDT - 1/17/19 09:32 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION\6 - DRAFTING\D18-2-175.GPJ



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

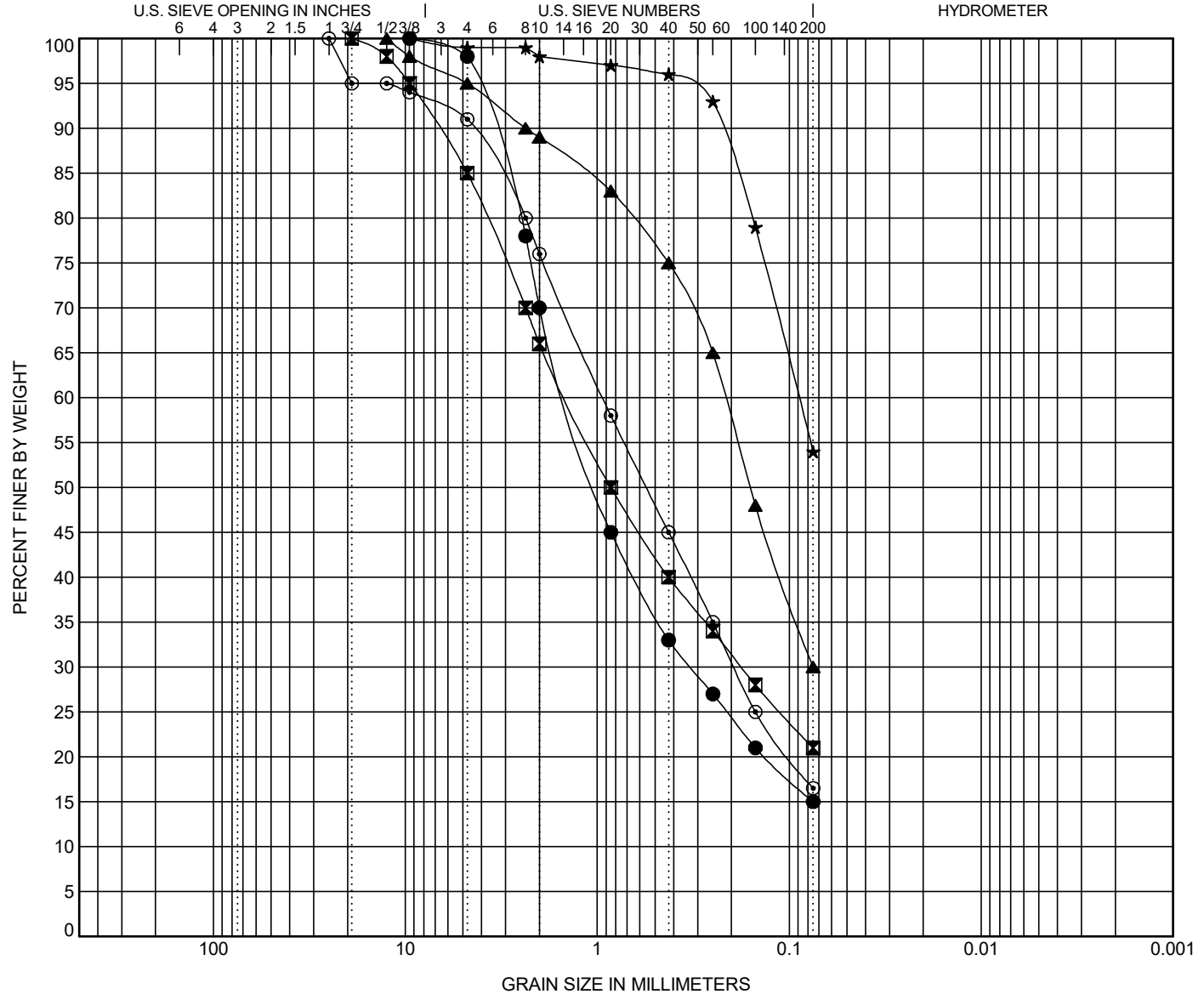
GRAIN SIZE DISTRIBUTION

CLIENT Herebic Homes

PROJECT NAME Grandwood Subdivision

PROJECT NUMBER D18-2-175

PROJECT LOCATION Higby Road, Monument, Colorado



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● B-4	14.0	SILTY SAND(SM)	NP	NP	NP		
■ B-6	9.0	SILTY, CLAYEY SAND with GRAVEL(SC-SM)	25	19	6		
▲ B-7	4.0	SILTY SAND(SM)	NP	NP	NP		
★ B-7	14.0	SANDY SILT(ML)	33	24	9		
⊙ TP-1	2.0	SILTY SAND(SM)	NP	NP	NP		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-4	14.0	9.5	1.42	0.326		2.0	83.0		15.0
■ B-6	9.0	19	1.451	0.178		15.0	64.0		21.0
▲ B-7	4.0	12.5	0.215	0.075		5.0	65.0		30.0
★ B-7	14.0	9.5	0.089			1.0	45.0		54.0
⊙ TP-1	2.0	25	0.935	0.194		9.0	74.5		16.5

GRAIN SIZE - GINT STD. US LAB.GDT - 1/17/19 09:32 - F:\VIVID PROJECTS\D18-2-175 GRANDWOOD SUBDIVISION6 - DRAFTING\D18-2-175.GPJ



VIVID Engineering Group, Inc.
 1053 Elkton Drive
 Colorado Springs, CO 80907
 Telephone: 719-896-4356
 Fax: 719-896-4357

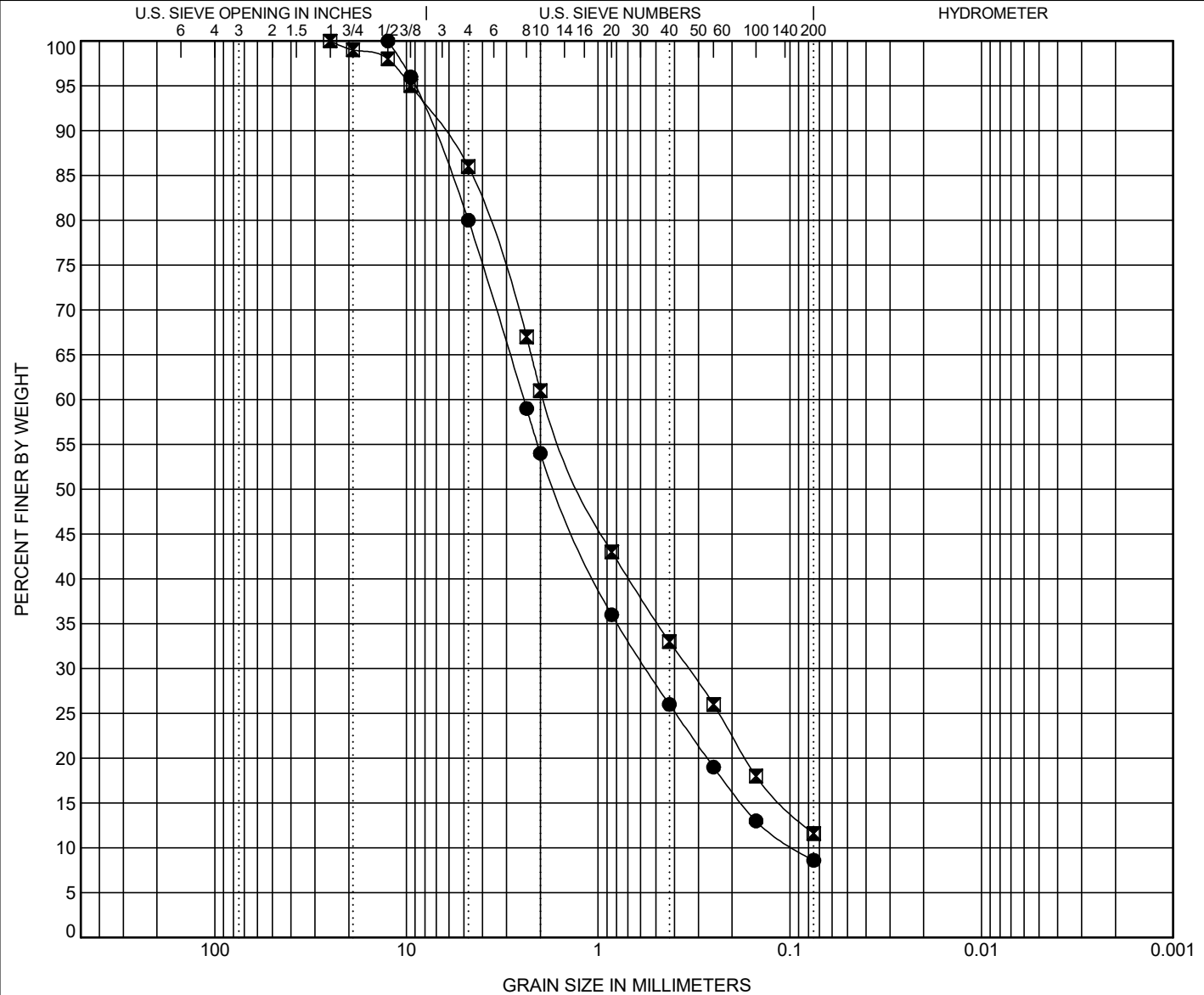
GRAIN SIZE DISTRIBUTION

CLIENT Herebic Homes

PROJECT NAME Grandwood Subdivision

PROJECT NUMBER D18-2-175

PROJECT LOCATION Higby Road, Monument, Colorado



OWTS Report_v1.pdf Markup Summary

Arrow (14)



Subject: Arrow
Page Label: 17
Author: wbarreire
Date: 1/18/2019 10:01:16 AM
Status:
Color: ■
Layer:
Space:



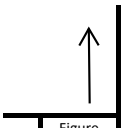
Subject: Arrow
Page Label: 10
Author: Brysen Mustain
Date: 1/18/2019 10:05:26 AM
Status:
Color: ■
Layer:
Space:



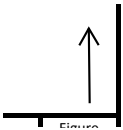
Subject: Arrow
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:06:22 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:06:22 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 16
Author: Brysen Mustain
Date: 1/18/2019 10:09:09 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 17
Author: Brysen Mustain
Date: 1/18/2019 10:09:21 AM
Status:
Color: ■
Layer:
Space:

Subject: Arrow
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:22:12 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:25:04 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:25:55 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:27:36 AM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 11
Author: wbarreire
Date: 4/16/2020 7:20:21 PM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 18
Author: wbarreire
Date: 4/16/2020 7:21:10 PM
Status:
Color: ■
Layer:
Space:





Subject: Arrow
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:



Subject: Arrow
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: ■
Layer:
Space:

Callout (9)



Subject: Callout
Page Label: 17
Author: wbarreire
Date: 1/18/2019 10:01:12 AM
Status:
Color: ■
Layer:
Space:

Purple Areas Indicate Flood Hazard



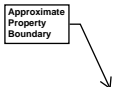
Subject: Callout
Page Label: 17
Author: Brysen Mustain
Date: 1/18/2019 10:01:21 AM
Status:
Color: ■
Layer:
Space:

Approximate Property Location



Subject: Callout
Page Label: 16
Author: Brysen Mustain
Date: 1/18/2019 10:02:28 AM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary



Subject: Callout
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:27:57 AM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary

Approximate Property Boundary

Subject: Callout
Page Label: 10
Author: Brysen Mustain
Date: 1/18/2019 10:29:06 AM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary

Approximate Property Boundary

Subject: Callout
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:40:52 AM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary

Approximate Property Boundary

Subject: Callout
Page Label: 18
Author: wbarreire
Date: 4/16/2020 7:01:05 PM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary

Approximate Property Boundary

Subject: Callout
Page Label: 11
Author: wbarreire
Date: 4/16/2020 7:05:01 PM
Status:
Color: ■
Layer:
Space:

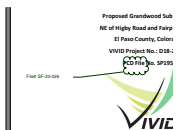
Approximate Property Boundary

Approximate Property Boundary

Subject: Callout
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:29:48 PM
Status:
Color: ■
Layer:
Space:

Approximate Property Boundary


Cloud+ (2)




Subject: Cloud+
Page Label: 1
Author: John Green
Date: 11/17/2020 7:55:23 PM
Status:
Color: ■
Layer:
Space:

File# SF-20-026




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:19:31 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:22 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:31 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:54 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:02 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:30 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:57 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:36:02 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:41:51 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:42:19 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:42:25 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:42:29 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:46:23 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:04 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:13 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:22 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:32 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:43 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:08 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:16 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:38 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:45 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:58 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:07 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:17 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:25 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:44 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:57 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:05 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:14 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:40 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:51:03 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:00:34 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:05:25 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:23 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:10 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:50 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:46:15 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:12 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:45 PM
Status:
Color: 
Layer:
Space:




Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:50:44 PM
Status:
Color: 
Layer:
Space:



Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:34 PM
Status:
Color: 
Layer:
Space:



Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:53:41 PM
Status:
Color: 
Layer:
Space:






Subject: Ellipse
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:56:26 PM
Status:
Color: 
Layer:
Space:

Image (17)




Subject: Image
Page Label: 10
Author: wbarreire
Date: 1/15/2019 5:01:47 PM
Status:
Color: 
Layer:
Space:




Subject: Image
Page Label: 16
Author: wbarreire
Date: 1/17/2019 4:35:22 PM
Status:
Color: 
Layer:
Space:



Subject: Image
Page Label: 17
Author: wbarreire
Date: 1/17/2019 6:09:08 PM
Status:
Color: 
Layer:
Space:



Subject: Image
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:12:57 AM
Status:
Color: 
Layer:
Space:



Subject: Image
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:22:30 AM
Status:
Color: ■
Layer:
Space:



Subject: Image
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:25:34 AM
Status:
Color: ■
Layer:
Space:



Subject: Image
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:25:50 AM
Status:
Color: ■
Layer:
Space:



Subject: Image
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:27:17 AM
Status:
Color: ■
Layer:
Space:



Subject: Image
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:41:19 AM
Status:
Color: ■
Layer:
Space:



Subject: Image
Page Label: 15
Author: wbarreire
Date: 1/18/2019 11:01:52 AM
Status:
Color: ■
Layer:
Space:

Subject: Image
Page Label: 15
Author: wbarreire
Date: 1/18/2019 11:02:00 AM
Status:
Color: ■
Layer:
Space:

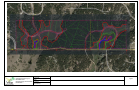
Subject: Image
Page Label: 15
Author: wbarreire
Date: 1/18/2019 11:02:08 AM
Status:
Color: ■
Layer:
Space:


Subject: Image
Page Label: 15
Author: wbarreire
Date: 1/18/2019 11:02:17 AM
Status:
Color: ■
Layer:
Space:

Subject: Image
Page Label: 15
Author: wbarreire
Date: 1/18/2019 11:05:04 AM
Status:
Color: ■
Layer:
Space:

Subject: Image
Page Label: 11
Author: wbarreire
Date: 4/16/2020 6:35:53 PM
Status:
Color: ■
Layer:
Space:


Subject: Image
Page Label: 18
Author: wbarreire
Date: 4/16/2020 7:00:33 PM
Status:
Color: ■
Layer:
Space:




Subject: Image
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:23 PM
Status:
Color: 
Layer:
Space:

Line (3)




Subject: Line
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: 
Layer:
Space:




Subject: Line
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: 
Layer:
Space:




Subject: Line
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:24:29 PM
Status:
Color: 
Layer:
Space:

Polygon (2)



Subject: Polygon
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: 
Layer:
Space:



Subject: Polygon
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:27:50 PM
Status:
Color: 
Layer:
Space:

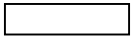
Rectangle (155)



Subject: Rectangle
Page Label: 16
Author: wbarreire
Date: 1/17/2019 4:39:29 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 17
Author: wbarreire
Date: 1/18/2019 10:01:29 AM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 10
Author: wbarreire
Date: 1/18/2019 10:04:46 AM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:17:56 AM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:41:08 AM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 1/18/2019 2:49:13 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 1/18/2019 2:49:28 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 1/18/2019 2:49:47 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:20:00 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:18 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:28 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:42 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:49 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:24:58 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:11 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:24 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:37 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:25:47 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:26:08 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:27:11 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:29:06 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:30:56 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:30:59 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:31:18 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:31:20 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:31:35 PM
Status:
Color: 
Layer:
Space:




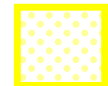
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:31:36 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:32:32 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:32:52 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:35:58 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:36:16 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:36:18 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:39:06 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:39:11 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:39:17 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:39:22 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:46:26 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:46:51 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:46:57 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:11 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:19 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:39 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:47:49 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:19 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:42 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:49 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:48:54 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:02 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:14 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:46 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:49:53 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:00 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:09 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:20 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:36 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:46 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:50:57 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:54:55 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:54:57 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:55:13 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:55:42 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:56:14 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:56:15 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:57:05 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:57:09 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:58:06 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:58:09 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:58:54 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 4:58:58 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:00:35 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:00:37 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:00:39 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:01:26 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:01:27 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:01:53 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:01:55 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:02:07 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:02:09 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:03:13 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:03:27 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:03:33 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:03:48 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:03:49 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:04:16 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:04:21 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:04:40 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:04:42 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:04:52 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:05:00 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:05:48 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:05:50 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:06:50 PM
Status:
Color: ■
Layer:
Space:



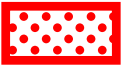
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:06:52 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:07:18 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 2/13/2020 5:07:20 PM
Status:
Color: ■
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:42:46 PM
Status:
Color: ■
Layer:
Space:

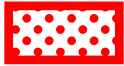
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:42:50 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:42:53 PM
Status:
Color: 
Layer:
Space:




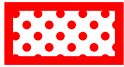
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:43:34 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:43:36 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:43:44 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:43:45 PM
Status:
Color: 
Layer:
Space:






Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:06 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:07 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:21 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:26 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:44:27 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:03 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:13 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:27 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:48 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:45:57 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:46:02 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:46:17 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:46:41 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:46:55 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:14 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:26 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:28 PM
Status:
Color: 
Layer:
Space:




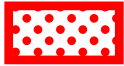
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:41 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:47:50 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:48:02 PM
Status:
Color: 
Layer:
Space:




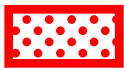
Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:48:29 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:48:31 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:50:48 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:01 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:05 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:39 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:57 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:51:59 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:52:18 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:52:21 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:53:43 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:53:47 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:53:50 PM
Status:
Color: 
Layer:
Space:




Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:53:58 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:14 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:17 PM
Status:
Color: 
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:39 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:42 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:57 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:54:58 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:11 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:14 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:22 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:26 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:38 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:40 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:48 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:55:49 PM
Status:
Color: ■
Layer:
Space:



Subject: Rectangle
 Page Label: 18
 Author: wbarreire
 Date: 4/16/2020 6:59:32 PM
 Status:
 Color: ■
 Layer:
 Space:



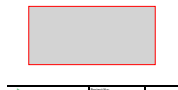
Subject: Rectangle
 Page Label: 18
 Author: wbarreire
 Date: 4/16/2020 6:59:34 PM
 Status:
 Color: ■
 Layer:
 Space:



Subject: Rectangle
 Page Label: 18
 Author: wbarreire
 Date: 4/16/2020 7:01:11 PM
 Status:
 Color: ■
 Layer:
 Space:

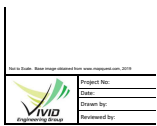


Subject: Rectangle
 Page Label: 11
 Author: wbarreire
 Date: 4/16/2020 7:04:56 PM
 Status:
 Color: ■
 Layer:
 Space:



Subject: Rectangle
 Page Label: 13
 Author: wbarreire
 Date: 4/16/2020 7:29:53 PM
 Status:
 Color: ■
 Layer:
 Space:

Text Box (109)



Subject: Text Box
 Page Label: 10
 Author: Brysen Mustain
 Date: 1/15/2019 12:17:26 PM
 Status:
 Color: ■
 Layer:
 Space:

Not to Scale. Base image obtained from
 www.mapquest.com, 2019

LEGEND **Subject:** Text Box **LEGEND**
Page Label: 11
Author: wbarreire
Date: 1/15/2019 5:54:01 PM
Status:
Color: ■
Layer:
Space:

LEGEND **Subject:** Text Box **LEGEND**
Page Label: 18
Author: wbarreire
Date: 1/15/2019 5:54:01 PM
Status:
Color: ■
Layer:
Space:

TP-1 **Subject:** Text Box **TP-1**
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:07:08 PM
Status:
Color: ■
Layer:
Space:

TP-2 **Subject:** Text Box **TP-2**
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:07:32 PM
Status:
Color: ■
Layer:
Space:

TP-3 **Subject:** Text Box **TP-3**
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:07:45 PM
Status:
Color: ■
Layer:
Space:

B-3 **Subject:** Text Box **B-3**
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:29 PM
Status:
Color: ■
Layer:
Space:

B-2

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:32 PM
Status:
Color: ■
Layer:
Space:

B-2

B-1

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:35 PM
Status:
Color: ■
Layer:
Space:

B-1

B-5

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:40 PM
Status:
Color: ■
Layer:
Space:

B-5

B-6

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:43 PM
Status:
Color: ■
Layer:
Space:

B-6

B-4

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:46 PM
Status:
Color: ■
Layer:
Space:

B-4

B-7

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:17:48 PM
Status:
Color: ■
Layer:
Space:

B-7

GQ-6 **Subject:** Text Box
Page Label: 11 GQ-6
Author: wbarreire
Date: 1/15/2019 6:19:27 PM
Status:
Color: ■
Layer:
Space:

GQ-7 **Subject:** Text Box
Page Label: 11 GQ-7
Author: wbarreire
Date: 1/15/2019 6:20:05 PM
Status:
Color: ■
Layer:
Space:

GQ-8 **Subject:** Text Box
Page Label: 11 GQ-8
Author: wbarreire
Date: 1/15/2019 6:20:30 PM
Status:
Color: ■
Layer:
Space:

GQ-1 **Subject:** Text Box
Page Label: 11 GQ-1
Author: wbarreire
Date: 1/15/2019 6:21:07 PM
Status:
Color: ■
Layer:
Space:

GQ-2 **Subject:** Text Box
Page Label: 11 GQ-2
Author: wbarreire
Date: 1/15/2019 6:21:58 PM
Status:
Color: ■
Layer:
Space:

GQ-3 **Subject:** Text Box
Page Label: 11 GQ-3
Author: wbarreire
Date: 1/15/2019 6:22:38 PM
Status:
Color: ■
Layer:
Space:

GQ-4

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:23:01 PM
Status:
Color: ■
Layer:
Space:

GQ-4

GQ-5

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:23:31 PM
Status:
Color: ■
Layer:
Space:

GQ-5

ect No: D18-2-175

rn by:

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:29:55 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

ect No: D18-2-175

rn by:

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 1/15/2019 6:29:55 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

y: WJB

. .

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:30:11 PM
Status:
Color: ■
Layer:
Space:

WJB

y: WJB

. .

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 1/15/2019 6:30:11 PM
Status:
Color: ■
Layer:
Space:

WJB

by: _____
ed by: BTM

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:30:19 PM
Status:
Color: ■
Layer:
Space:

BTM

by: _____
ed by: BTM

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 1/15/2019 6:30:19 PM
Status:
Color: ■
Layer:
Space:

BTM



Subject: Text Box
Page Label: 11
Author: Brysen Mustain
Date: 1/15/2019 6:32:46 PM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019.



Subject: Text Box
Page Label: 18
Author: Brysen Mustain
Date: 1/15/2019 6:32:46 PM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019.

EXPLORATION LOCATION PLAN

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:36:46 PM
Status:
Color: ■
Layer:
Space:

EXPLORATION LOCATION PLAN

ect No: D18-2-175
:
/n by:

Subject: Text Box
Page Label: 12
Author: wbarreire
Date: 1/15/2019 6:38:28 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

ect No: D18-2-175

rn by:

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 1/15/2019 6:38:28 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

ect No: D18-2-175

rn by:

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/15/2019 6:38:28 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

ect No: D18-2-175

rn by:

Subject: Text Box
Page Label: 15
Author: wbarreire
Date: 1/15/2019 6:38:28 PM
Status:
Color: ■
Layer:
Space:

D18-2-175

by:
ed by: BTM

Subject: Text Box
Page Label: 12
Author: wbarreire
Date: 1/15/2019 6:38:55 PM
Status:
Color: ■
Layer:
Space:

BTM

by:
ed by: BTM

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 1/15/2019 6:38:55 PM
Status:
Color: ■
Layer:
Space:

BTM

by:
ed by: BTM

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/15/2019 6:38:55 PM
Status:
Color: ■
Layer:
Space:

BTM

by:
ed by: BTM

Subject: Text Box
Page Label: 15
Author: wbarreire
Date: 1/15/2019 6:38:55 PM
Status:
Color: ■
Layer:
Space:

BTM

by: WJB

Subject: Text Box
Page Label: 12
Author: wbarreire
Date: 1/15/2019 6:39:21 PM
Status:
Color: ■
Layer:
Space:

WJB

by: WJB

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 1/15/2019 6:39:21 PM
Status:
Color: ■
Layer:
Space:

WJB

by: WJB

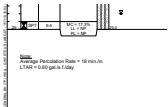
Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/15/2019 6:39:21 PM
Status:
Color: ■
Layer:
Space:

WJB

by: WJB

Subject: Text Box
Page Label: 15
Author: wbarreire
Date: 1/15/2019 6:39:21 PM
Status:
Color: ■
Layer:
Space:

WJB



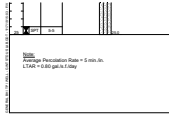
Subject: Text Box
Page Label: 20
Author: Abbas Al Eyoon
Date: 1/17/2019 3:29:39 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 18 min./in.
LTAR = 0.60 gal./s.f./day



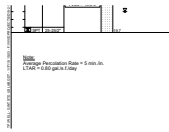
Subject: Text Box
Page Label: 21
Author: Abbas Al Eyoon
Date: 1/17/2019 3:29:48 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 23 min./in.
LTAR = 0.60 gal./s.f./day



Subject: Text Box
Page Label: 22
Author: Abbas Al Eyoon
Date: 1/17/2019 3:29:53 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 5 min./in.
LTAR = 0.80 gal./s.f./day



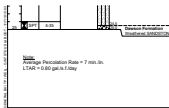
Subject: Text Box
Page Label: 23
Author: Abbas Al Eyoon
Date: 1/17/2019 3:29:59 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 5 min./in.
LTAR = 0.80 gal./s.f./day



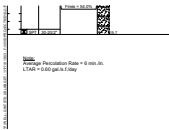
Subject: Text Box
Page Label: 24
Author: Abbas Al Eyoon
Date: 1/17/2019 3:30:05 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 5 min./in.
LTAR = 0.80 gal./s.f./day



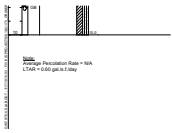
Subject: Text Box
Page Label: 25
Author: Abbas Al Eyoon
Date: 1/17/2019 3:30:10 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 7 min./in.
LTAR = 0.80 gal./s.f./day



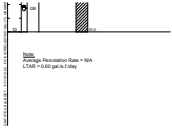
Subject: Text Box
Page Label: 26
Author: Abbas Al Eyoon
Date: 1/17/2019 3:30:18 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = 6 min./in.
LTAR = 0.60 gal./s.f./day



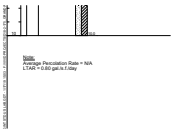
Subject: Text Box
Page Label: 27
Author: Abbas Al Eyoon
Date: 1/17/2019 3:30:26 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = N/A
LTAR = 0.60 gal./s.f./day



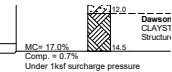
Subject: Text Box
Page Label: 28
Author: Abbas Al Eyoon
Date: 1/17/2019 3:30:40 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = N/A
LTAR = 0.60 gal./s.f./day



Subject: Text Box
Page Label: 29
Author: Abbas Al Eyoon
Date: 1/17/2019 3:31:11 PM
Status:
Color: ■
Layer:
Space:

Note:
Average Percolation Rate = N/A
LTAR = 0.80 gal./s.f./day



Subject: Text Box
Page Label: 21
Author: Abbas Al Eyoon
Date: 1/17/2019 3:33:31 PM
Status:
Color: ■
Layer:
Space:

MC= 17.0%
Comp. = 0.7%
Under 1ksf surcharge pressure



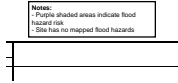
Subject: Text Box
Page Label: 16
Author: Brysen Mustain
Date: 1/17/2019 4:41:08 PM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image obtained from USGS
7.5 Minute Quadrangle, 1961



Subject: Text Box
Page Label: 17
Author: Brysen Mustain
Date: 1/17/2019 5:54:31 PM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image obtained from
https://dsat.services.femadata.com/arcgis/rest/services/FEMA_R8/RiskMAP_EIPasoCounty_Colorado/MapServer/legend, 2019



Subject: Text Box
Page Label: 17
Author: wbarreire
Date: 1/18/2019 10:01:47 AM
Status:
Color: ■
Layer:
Space:

Notes:
- Purple shaded areas indicate flood hazard risk
- Site has no mapped flood hazards

N

Subject: Text Box
Page Label: 12
Author: wbarreire
Date: 1/18/2019 10:03:58 AM
Status:
Color: ■
Layer:
Space:

N

N

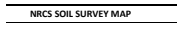
Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:03:58 AM
Status:
Color: ■
Layer:
Space:

N

N

Subject: Text Box
Page Label: 10
Author: Brysen Mustain
Date: 1/18/2019 10:05:17 AM
Status:
Color: ■
Layer:
Space:

N



Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:31:23 AM
Status:
Color: ■
Layer:
Space:

NRCS SOIL SURVEY MAP



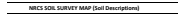
Subject: Text Box
Page Label: 14
Author: Brysen Mustain
Date: 1/18/2019 10:40:07 AM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image from
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



Subject: Text Box
Page Label: 15
Author: Brysen Mustain
Date: 1/18/2019 10:40:07 AM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image from
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



Subject: Text Box
Page Label: 15
Author: wbarreire
Date: 1/18/2019 10:43:00 AM
Status:
Color: ■
Layer:
Space:

NRCS SOIL SURVEY MAP (Soil Descriptions)

41

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:50:34 AM
Status:
Color: ■
Layer:
Space:

41

93

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:50:37 AM
Status:
Color: ■
Layer:
Space:

93

41

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:50:42 AM
Status:
Color: ■
Layer:
Space:

41

93

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:50:51 AM
Status:
Color: ■
Layer:
Space:

93

1

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:51:02 AM
Status:
Color: ■
Layer:
Space:

1

41

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:51:28 AM
Status:
Color: ■
Layer:
Space:

41

93

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 10:51:42 AM
Status:
Color: ■
Layer:
Space:

93

Object No:
Date: 1/15/19
Drawn by:

Subject: Text Box
Page Label: 12
Author: wbarreire
Date: 1/18/2019 11:32:29 AM
Status:
Color: ■
Layer:
Space:

1/15/19



Subject: Text Box
Page Label: 12
Author: Brysen Mustain
Date: 1/18/2019 11:32:34 AM
Status:
Color: ■
Layer:
Space:

Not to Scale. Base image from
https://ngmdb.usgs.gov/Prodesc/proddesc_76327.htm (Geologic Map of the Monument Quadrangle, El Paso County, Colorado, 2003)

Object No:
Date: 1/15/19
Drawn by:

Subject: Text Box
Page Label: 14
Author: wbarreire
Date: 1/18/2019 11:33:12 AM
Status:
Color: ■
Layer:
Space:

1/15/19

Subject No:

Subject: Text Box

1/15/19

Date: 1/15/19

Page Label: 15

Author: wbarreire

Drawn by:

Date: 1/18/2019 11:38:24 AM

Status:

Color: ■

Layer:

Space:

Subject: Text Box

REGIONAL GEOLOGY MAP

Page Label: 12

Author: wbarreire

Date: 1/18/2019 11:48:04 AM

Status:

Color: ■

Layer:

Space:

REGIONAL GEOLOGY MAP

Subject: Text Box

SITE-SPECIFIC GEOLOGY MAP

Page Label: 13

Author: wbarreire

Date: 1/18/2019 12:06:52 PM

Status:

Color: ■

Layer:

Space:

SITE-SPECIFIC GEOLOGY MAP

Subject: Text Box

Not to Scale. Base image dated 06/09/2017 and obtained from Google Earth, 2019. Site-specific Geology Mapping by Jim Frohbieter, Professional Geologist

Page Label: 13

Author: Brysen Mustain

Date: 1/18/2019 12:08:40 PM

Status:

Color: ■

Layer:

Space:



Subject: Text Box

SEPTIC SUITABILITY MAP

Page Label: 18

Author: wbarreire

Date: 1/18/2019 2:34:12 PM

Status:

Color: ■

Layer:

Space:

SEPTIC SUITABILITY MAP

Subject: Text Box

- POSSIBLE HOUSE LOCATION

Page Label: 18

Author: wbarreire

Date: 1/18/2019 2:53:00 PM

Status:

Color: ■

Layer:

Space:

POSSIBLE HOUSE LOCATION

POSSIBLE WATER WELL LOCATION (wells must be a minimum of 100 feet from OWTS absorption fields)	
Engineering Group, Inc.	Project No.
Sheet No.	Date

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 1/18/2019 2:54:03 PM
Status:
Color: ■
Layer:
Space:

- POSSIBLE WATER WELL LOCATION (wells must be a minimum of 100 feet from OWTS absorption fields)

POSSIBLE OWTS ABSORPTION FIELD LOCATION	
Engineering Group, Inc.	Project No.
Sheet No.	Date

Subject: Text Box
Page Label: 18
Author: Shane Noonan
Date: 1/18/2019 2:54:21 PM
Status:
Color: ■
Layer:
Space:

- POSSIBLE OWTS ABSORPTION FIELD LOCATION

POSSIBLE ALTERNATE OWTS ABSORPTION FIELD LOCATION	
Engineering Group, Inc.	Project No.
Sheet No.	Date

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 1/18/2019 2:54:54 PM
Status:
Color: ■
Layer:
Space:

- POSSIBLE ALTERNATE OWTS ABSORPTION FIELD LOCATION

Project No:	
Date:	1/15/19 rev 2: 4/16/20
Drawn by:	
Reviewed by:	

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 4/16/2020 6:32:40 PM
Status:
Color: ■
Layer:
Space:

1/15/19 rev 2: 4/16/20

Project No:	
Date:	1/15/19 rev 2: 4-16-20
Drawn by:	
Reviewed by:	

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 4/16/2020 6:58:37 PM
Status:
Color: ■
Layer:
Space:

1/15/19 rev 2: 4-16-20

N

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 4/16/2020 7:20:21 PM
Status:
Color: ■
Layer:
Space:

N

N

Subject: Text Box
Page Label: 18
Author: wbarreire
Date: 4/16/2020 7:21:10 PM
Status:
Color: ■
Layer:
Space:

N

Qsw

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:

Qsw

Tkd4

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:

Tkd4

SW

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:

SW

Qsw

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:

Qsw

Tkd4

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:28:11 PM
Status:
Color: ■
Layer:
Space:

Tkd4

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 4/16/2020 7:29:05 PM
Status:
Color: ■
Layer:
Space:

- VIVID TEST PIT LOCATIONS

- VIVID TEST PIT LOCATIONS

Subject: Text Box
Page Label: 11
Author: Shane Noonan
Date: 4/16/2020 7:29:09 PM
Status:
Color: ■
Layer:
Space:

- VIVID BORING/PERCOLATION TEST LOCATIONS

- VIVID BORING/PERCOLATION TEST LOCATIONS

Subject: Text Box
Page Label: 11
Author: wbarreire
Date: 4/16/2020 7:29:13 PM
Status:
Color: ■
Layer:
Space:

- GEOQUEST BORING LOCATIONS (PREVIOUS STUDY)

- GEOQUEST BORING LOCATIONS (PREVIOUS STUDY)

Engineering Project, Inc.
10000 E. 1st Ave.
Denver, Colorado 80231

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 4/16/2020 7:30:40 PM
Status:
Color: ■
Layer:
Space:

1/15/19 rev 2: 4-16-20

Project No:	
Date: 1/15/19 rev 2: 4-16-20	
Drawn by:	
Reviewed by:	

N

Subject: Text Box
Page Label: 16
Author: Brysen Mustain
Date: 4/26/2018 10:23:17 AM
Status:
Color: ■
Layer:
Space:

N

N

Subject: Text Box
Page Label: 17
Author: Brysen Mustain
Date: 4/26/2018 10:23:17 AM
Status:
Color: ■
Layer:
Space:

N

Tkd4 - Dawson Formation (Facies #4)

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: ■
Layer:
Space:

Tkd4 - Dawson Formation (Facies #4)

SW - Seasonally Wet

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: ■
Layer:
Space:

SW - Seasonally Wet

© 2019 Esri. All rights reserved. ArcGIS Online

N

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: ■
Layer:
Space:

N

Qsw - Holocene & Pleistocene aged sheet wash

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:05:26 PM
Status:
Color: ■
Layer:
Space:

Qsw - Holocene & Pleistocene aged sheet wash

Tkd4

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:06:10 PM
Status:
Color: ■
Layer:
Space:

Tkd4

Qsw

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:06:10 PM
Status:
Color: ■
Layer:
Space:

Qsw

SW

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:06:10 PM
Status:
Color: ■
Layer:
Space:

SW

Tkd4

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/11/2019 5:06:10 PM
Status:
Color: ■
Layer:
Space:

Tkd4

Prebles Habitat

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:24:19 PM
Status:
Color: ■
Layer:
Space:

Prebles Habitat

Proposed Detention Pond

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:24:19 PM
Status:
Color: ■
Layer:
Space:

Proposed Detention Pond

LEGEND

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:24:19 PM
Status:
Color: ■
Layer:
Space:

LEGEND

Wetlands

Subject: Text Box
Page Label: 13
Author: wbarreire
Date: 9/13/2019 4:24:19 PM
Status:
Color: ■
Layer:
Space:

Wetlands

Typewritten Text (33)

_____ **Subject:** Typewritten Text
Page Label: 16 D18-2-175
Io: D18-2-175 **Author:** Brysen Mustain
_____ **Date:** 1/15/2019 4:57:45 PM
_____ **Status:**
Color: ■
Layer:
Space:

_____ **Subject:** Typewritten Text
Page Label: 17 D18-2-175
Io: D18-2-175 **Author:** Brysen Mustain
_____ **Date:** 1/15/2019 4:57:45 PM
_____ **Status:**
Color: ■
Layer:
Space:

_____ **Subject:** Typewritten Text
Page Label: 10 D18-2-175
Io: D18-2-175 **Author:** Brysen Mustain
_____ **Date:** 1/15/2019 4:57:45 PM
_____ **Status:**
Color: ■
Layer:
Space:

_____ **Subject:** Typewritten Text
Page Label: 16 1/15/19
Project No: _____ **Author:** Brysen Mustain
Date: 1/15/19 _____ **Date:** 1/15/2019 6:26:47 PM
Drawn by: _____ **Status:**
Reviewed by: _____ **Color:** ■
Layer:
Space:

_____ **Subject:** Typewritten Text
Page Label: 17 1/15/19
Project No: _____ **Author:** Brysen Mustain
Date: 1/15/19 _____ **Date:** 1/15/2019 6:26:47 PM
Drawn by: _____ **Status:**
Reviewed by: _____ **Color:** ■
Layer:
Space:

_____ **Subject:** Typewritten Text
Page Label: 10 1/15/19
Project No: _____ **Author:** Brysen Mustain
Date: 1/15/19 _____ **Date:** 1/15/2019 6:26:47 PM
Drawn by: _____ **Status:**
Reviewed by: _____ **Color:** ■
Layer:
Space:

Subject: Typewritten Text
Page Label: 16
Author: Brysen Mustain
Date: 1/17/2019 4:28:51 PM
Status:
Color: ■
Layer:
Space:

Subject: Typewritten Text
Page Label: 17
Author: Brysen Mustain
Date: 1/17/2019 6:01:23 PM
Status:
Color: ■
Layer:
Space:

2 **Subject:** Typewritten Text
Page Label: 11
Author: Brysen Mustain
Date: 1/17/2019 6:03:50 PM
Status:
Color: ■
Layer:
Space:

6 **Subject:** Typewritten Text
Page Label: 17
Author: Brysen Mustain
Date: 1/18/2019 10:11:01 AM
Status:
Color: ■
Layer:
Space:

5 **Subject:** Typewritten Text
Page Label: 16
Author: Brysen Mustain
Date: 1/18/2019 10:11:34 AM
Status:
Color: ■
Layer:
Space:

4a **Subject:** Typewritten Text
Page Label: 14
Author: Brysen Mustain
Date: 1/18/2019 10:39:16 AM
Status:
Color: ■
Layer:
Space:

TOPOGRAPHIC MAP

FLOOD HAZARD MAP

TOPOGRAPHIC MAP

FLOOD HAZARD MAP

2

6

5

4a

4b

Subject: Typewritten Text
Page Label: 15
Author: Brysen Mustain
Date: 1/18/2019 10:42:08 AM
Status:
Color: ■
Layer:
Space:

4b

3a

Subject: Typewritten Text
Page Label: 12
Author: Brysen Mustain
Date: 1/18/2019 12:05:29 PM
Status:
Color: ■
Layer:
Space:

3a

7

Subject: Typewritten Text
Page Label: 18
Author: Brysen Mustain
Date: 1/18/2019 2:34:16 PM
Status:
Color: ■
Layer:
Space:

7

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 10
Author: Brysen Mustain
Date: 1/18/2019 3:31:14 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 11
Author: Brysen Mustain
Date: 1/18/2019 3:32:28 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 12
Author: Brysen Mustain
Date: 1/18/2019 3:33:02 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 13
Author: Brysen Mustain
Date: 1/18/2019 3:33:39 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 14
Author: Brysen Mustain
Date: 1/18/2019 3:34:17 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 15
Author: Brysen Mustain
Date: 1/18/2019 3:34:41 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 16
Author: Brysen Mustain
Date: 1/18/2019 3:35:13 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 17
Author: Brysen Mustain
Date: 1/18/2019 3:35:43 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

Subject: Typewritten Text
Page Label: 18
Author: Brysen Mustain
Date: 1/18/2019 3:36:10 PM
Status:
Color: ■
Layer:
Space:

Grandwood Subdivision
El Paso County, Colorado

3b

Subject: Typewritten Text
Page Label: 13
Author: Brysen Mustain
Date: 1/19/2019 11:55:28 AM
Status:
Color: ■
Layer:
Space:

3b

by: WJB

ved by:

Subject: Typewritten Text
Page Label: 16
Author: Brysen Mustain
Date: 12/3/2018 10:41:42 AM
Status:
Color: ■
Layer:
Space:

WJB

by: WJB

ved by:

Subject: Typewritten Text
Page Label: 17
Author: Brysen Mustain
Date: 12/3/2018 10:41:42 AM
Status:
Color: ■
Layer:
Space:

WJB

by: WJB

ved by:

Subject: Typewritten Text
Page Label: 10
Author: Brysen Mustain
Date: 12/3/2018 10:41:42 AM
Status:
Color: ■
Layer:
Space:

WJB

y:BTM

Subject: Typewritten Text
Page Label: 16
Author: Brysen Mustain
Date: 12/3/2018 10:41:48 AM
Status:
Color: ■
Layer:
Space:

BTM

y:BTM

Subject: Typewritten Text
Page Label: 17
Author: Brysen Mustain
Date: 12/3/2018 10:41:48 AM
Status:
Color: ■
Layer:
Space:

BTM

y:BTM

Subject: Typewritten Text
Page Label: 10
Author: Brysen Mustain
Date: 12/3/2018 10:41:48 AM
Status:
Color: ■
Layer:
Space:

BTM

VICINITY MAP

Subject: Typewritten Text
Page Label: 10
Author: Brysen Mustain
Date: 12/3/2018 11:04:35 AM
Status:
Color: ■
Layer:
Space:

VICINITY MAP

1

Subject: Typewritten Text
Page Label: 10
Author: Brysen Mustain
Date: 3/8/2018 12:37:41 PM
Status:
Color: ■
Layer:
Space:

1

Workpoint (21)



Subject: Workpoint
Page Label: 11
Author: Brysen Mustain
Date: 1/15/2019 5:55:26 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 5:57:26 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:03:47 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:04:23 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:04:41 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:09:38 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:11:07 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:11:35 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:13:03 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:13:42 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:14:45 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:15:23 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:19:13 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:19:58 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:20:26 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:21:02 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:21:49 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:22:38 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:22:58 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:23:25 PM
Status:
Color: ■
Layer:
Space:



Subject: Workpoint
Page Label: 11
Author: wbarreire
Date: 1/15/2019 6:23:48 PM
Status:
Color: ■
Layer:
Space: