

J&K Geological Services
18291 Smokey Pine Rd
Peyton, Colorado 80831
(719) 499-5431

The original soils and geology report should be submitted here as well for review, as this project should stand on it's own merit.

February 6, 2019

Add PCD File No. SF1921

Widefield Investment Group
#3 Widefield Blvd.
Colorado Springs, CO 80911

Per DCM Vol. 1 11.3.3, recommendations for the foundation preparation and embankment construction shall be provided for all permanent detention facilities.

Gentlemen,

At your request, personnel of J&K Geologic Services, (J&K), installed a total of 6 piezometers in The Glen at Widefield East on December 1, 2017, as discussed in our letter dated January 1, 2018, (J&K Job # 171201). Reference the attached Piezometer Location Plan, (Fig. #1).

The piezometers were installed as part of a monitoring program to verify ground water elevations in Filings #9 & #11 as approved by the Colorado Geological Survey, (CGS) and the comment letter dated April 16, 2016, (CGS Unique No. EP-16-0003 4), concerning the Preliminary Plat Plan for The Glen at Widefield East.

The piezometer borings were advanced to a depth at least 10 ft. below the depth groundwater was encountered during the drilling process. A 2 inch diameter slotted pipe was installed in the boring and was backfilled with washed sand. The upper 3 ft. of the boring was backfilled with Vol-Clay powder to seal the piezometer from outside water sources.

The groundwater levels were measured once a month from December 2017 through December 2018. An electronic Ken-Tech brand water level indicator was used to measure the depth to the groundwater.

In the CGS comment letter for the above referenced development dated January 15, 2016, Ms. Jill Carlson, CEG, recommended "basements should not be allowed in areas where observed groundwater levels are shallower than 14 ft. below planned final grades...". As the groundwater measurements show this requirement has been surpassed in all areas of the development that were of concern for shallow groundwater.

As in all other filings of The Glen at Widefield East, each individual lot is to be investigated by the lot owner's Geotechnical Engineer of Record for final foundation parameters and recommendations.

We trust this provides the information you requested. Should questions arise or if further information is needed, please contact J&K Geological Services at your convenience.

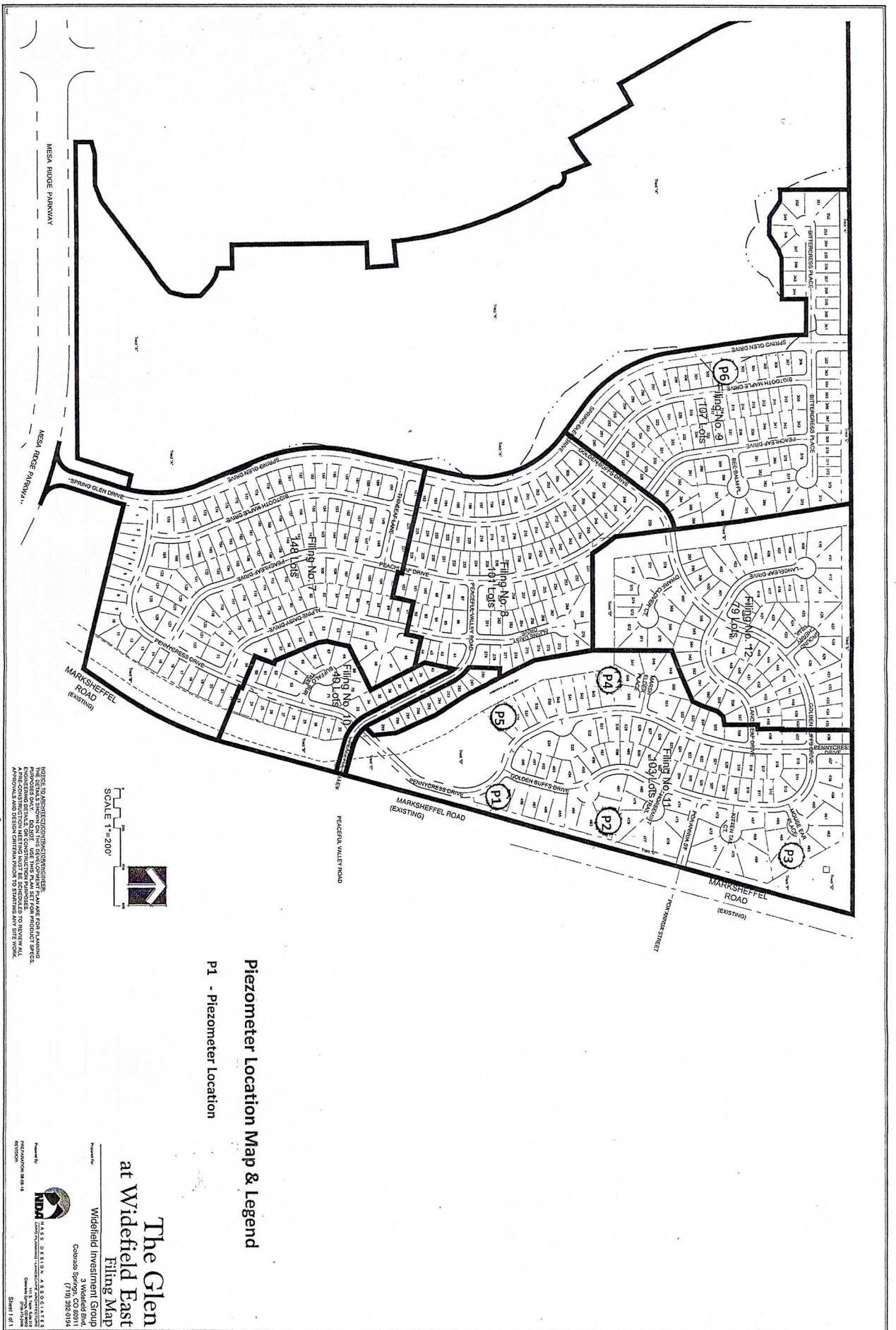
Respectfully submitted,

J&K GEOLOGIC SERVICES, LLC

A handwritten signature in black ink, appearing to read 'J. Frohbieter', with a stylized, flowing script.

**James F. Frohbieter,
Professional Geologist**

JFF/ksf



**GROUND WATER MEASUREMENTS: THE GLEN AT WIDFIELD EAST
DECEMBER 2017 THROUGH DECEMBER 2018**

Piezometer #*	P-1	P-2	P-3	P-4	P-5	P-6
Elevation (ft.)	5678.82	5681.36	5692.34	5684.37	5680.36	5687.60
Depth to water below current ground surface	Depth to water	Depth to water	Depth to water	Depth to water	Depth to water	Depth to water
December 12/05/2017	26'1"	29'6"	37'2"	34' 10"	31'10"	20'2"
January 01/25/2018	25'0"	29'0"	36'2"	32'0"	29'10"	20'8"
February 02/26/2018	25'1"	28'10"	36'0"	31'10"	30'0"	21'8"
March 03/22/2018	26'10"	28'9"	36'3"	31'10"	30'1"	21'4"
April 04/26/18	27'1"	28'11"	36'1"	32'0"	30'4"	21'7"
May 5/31/2018	28'0"	28'11"	37'0"	32'4"	30'0"	21'0"
June 06/21/2018	30'0"	29'8"	38'6"	32'0"	30'2"	20'6"
July 07/23/2018	30'9"	29'4"	38'3"	32'7"	30'9"	19'6"
August 08/14/2018	31'1"	30'10"	38'9"	32'4"	31'2"	18'4"
September 09/19/2018	30'10"	30'9"	38'9"	33'2"	31'2"	18'9"
October 10/24/2018	30'8"	30'7"	38'4"	32'6"	31'0"	18'6"
November 11/29/2018	30'8"	30'8"	38'3"	32'3"	31'3"	18'6"
December 12/14/2018	30'4"	30'0"	38'0"	32'4"	31'3"	18'5"

*Piezometers installed 12/01/2017