LEVEL III DRAINAGE REPORT

Oak Park Road Estates

Adams County, CO

PREPARED FOR:

F & C Realty
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PREPARED BY:

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May 16, 2023

ENGINEER CERTIFICATION OF DRAINAGE REPORT

I hereby certify that this report for the Final Drainage design of the Oak Park Road Estates project was prepared by me or under my direct supervision in accordance with the provisions of Adams County Storm Drainage Design and Technical Criteria for the owners thereof. I understand that Adams County does not and will not assume liability for drainage facilities designed by others.

Registered Professional Engineer
State of Colorado No. 15813

Date 05/16/2023

PREPARED UNDER THE DIRECT SUPERVISION OF
GREGORY S. KELLY, PE COLORADO LIC. #15813
FOR AND ON BEHALF OF KELLY DEVELOPMENT SERVICES, LLC

DEVELOPER CERTIFICATION OF DRAINAGE FACILITIES

Dan Fahey of F & C Realty hereby certifies that the drainage facilities for the Oak Park Road Estates project shall be constructed according to the design presented in this report. I understand that Adams County does not and will not assume liability for the drainage facilities designed and/ or certified by my engineer. I understand that Adams County reviews drainage plans pursuant to Colorado Revised Statues Title 30, Article 28; but cannot, on behalf of the Oak Park Road Estates project, guarantee that final drainage design review will absolve Raul Mota and/ or their successors and/ or assigns the future liability for improper design. I further understand that approval of the Final Plat and/ or Final Development Plan does not imply approval of my engineer's drainage design.

Date 6-6-23

Daniel C Fahey
Name of Developer

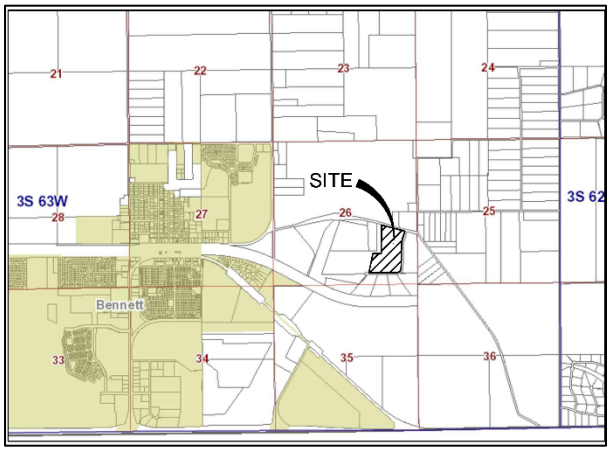
Daniel C Fahey
Authorized Signature

LEVEL III DRAINAGE REPORT
OAK PARK ROAD ESTATES

A. INTRODUCTION

1. Location

The Oak Park Road Estates project is an uplatted 35-acre site located at the northwest corner of the intersection of Old Victory Road and Oak Park Road, along the northern ROW of Oak Park Road, in unincorporated Adams County, CO. It is in the Southeast One-Quarter of Section 26, Township 3 South, Range 63 West of the 6th P. M., County of Adams, State of Colorado. The project is not located within the Adams County MS-4 area.



The site is bounded on the north and west by unplatted, rural agricultural ground, by Oak Park Road on the south, and Old Victory Road on the east. The property is undeveloped rural agricultural ground.

2. Proposed Development

The proposed development includes subdividing the parcel into three rural residential lots for single family home construction. The remainder of the property is anticipated to remain undeveloped agricultural ground.

From the NRCS soils report included in the Appendix of this report, the in-situ soil is a mixture of sandy loams, classified as Hydrologic Soil Types A and B. The soils consist of sandy loams and loamy sand with a low swell potential and well drained with low runoff characteristics. The existing ground surface slopes to the north and northeast at varying slopes from approximately 2% to 4% slope. Runoff generally flows north and northeasterly. The pre-development condition, as it currently exists, is that runoff flows to existing drainageways north of the subject property toward Kiowa Creek . The developed condition will not modify the existing drainage patterns as the project is for single family rural residential use with minimal land

disturbance.

There are no major drainageways crossing the site; however, Kiowa Creek is located approximately 800 feet to the west of the site. The site is located within the Zone X floodplain area for Kiowa Creek as shown on the FEMA FIRM Map No. 08001C0720H dated March 5, 2007. A copy of this map is included in the Appendix of this report.

The property is not located within any Master Drainage Plan or Outfall Systems Plan study areas, nor is it located within the Adams County MS-4 area.

B. DESIGN CRITERIA

References

This drainage report is based upon information from the August 15, 2017 Adams County Development Standards and Regulations Chapter 9 *Storm Drainage Design and Stormwater Quality Regulations* and Mile High Flood District Storm Drainage Criteria Manual Volumes 1- 3 (MHFD).

Hydrologic Criteria

The Rational Method was used to calculate runoff from this site in accordance with the Adams County Regulations and Mile High Flood District Manuals. The 1-Hour Design Point Rainfall Values from the Adams County Regulations used for this report are:

P1, 2-Yr = 1.00 P1, 5-Yr = 1.42 P1, 100-Yr = 2.71

Detention calculations were based upon Adams County requirements in accordance with the Manual using the simplified V=KA formulas. These volumes were input into MHFD's UD_Detention_v3.07 spreadsheet for calculation of ponding depth and outlet structure details.

Hydraulic Criteria

No on-site storm drainage improvements are proposed.

Minimum Design Standards

Because the project is not located within the MS-4 area, and due to the negligible change in developed drainage flows as compared to historic values, no water quality or detention facilities are proposed.

C. DRAINAGE PLAN

General Concept

The general drainage concept for the property will remain unchanged from the existing condition as no major site improvements are proposed that would affect the existing drainage patterns.

An exemption from stormwater detention is requested and justified according to the following criteria of Section 9-01-11 of the Adams County Development Standards and Regulations:

1. The site is adjacent to Kiowa Creek, a major drainageway of which the site would comprise a miniscule portion of the tributary area (<1000:1).
2. The site is a rural residential lot split without the construction of a roadway.

Additionally, the percent increase in imperviousness for the overall site is 0.3%, a negligible increase as further demonstrated by the minute increases in overall stormwater flow.

Water quality for the site will be accommodated via grass buffer areas adjacent to the future home locations. Due to the minimal flows generated on the site, the buffers are also of minimal size and in reality, will exceed the design requirements per the design form by nature of the natural adjoining areas adjacent to the future homes. Lot 1 should have an 11'x15' grass buffer, lot 2 a 4'x15' buffer, and lot 3 a 6'x15' buffer. Design forms for each are included in the appendix of this report.

Specific Details

No overlot or major grading improvements are proposed; therefore, no change to the existing drainage patterns is anticipated. The site has been divided into seven onsite basins.

The Basins are further described as follows:

Basin A is a small basin at the corner of Old Victory Road and Oak Park Road, 0.45-acres in size that flows to Old Victory Road. No improvements will be made to this basin.

Basin B is the largest basin on the property, 17.94-acres in size. This basin flows to an existing drainage at the northeast corner of the site and is anticipated to have two of the three proposed single-family homes constructed within.

Basin C is a small basin located at the north-central portion of the property and is 0.21-acres in size that flows to the north. No improvements will be made to this basin.

Basin D is another small basin located in the center of the site, 1.70-acres in size that also flows north. No improvements will be made to this basin.

Basin E is a 4.37 acre basin at the southwest portion of the site that flows to the north. No improvements will be made to this basin.

Basin F is a small 1.08-acre basin at the very southwest corner of the property along Oak Park Road. This basin flows to Oak Park Road. No improvements will be made to this basin.

Basin G is a 9.27-acre basin at the western end of the property that flows to the north. The third single-family home is anticipated to be constructed in this basin.

Basin Summary Data including areas, historic, and developed flows are in the two following tables:

HISTORIC BASIN RUNOFF SUMMARY TABLE							
Basin Designation	**Basin Area (ac)**	**C_5**	**C_{100}**	**Impervious %**	**T_c (min)**	**Q_5 (cfs)**	**Q_{100} (cfs)**
A	0.45	0.01	0.13	2.0%	11.7	0.02	0.40
B	17.94	0.01	0.13	2.0%	17.9	0.53	13.15
C	0.21	0.01	0.13	2.0%	10.8	0.01	0.20
D	1.70	0.01	0.13	2.0%	13.3	0.06	1.44
E	4.37	0.01	0.13	2.0%	16.0	0.14	3.39
F	1.08	0.01	0.13	2.0%	11.4	0.04	0.98
G	9.27	0.01	0.13	2.0%	15.4	0.30	7.33

BASIN RUNOFF SUMMARY TABLE							
Basin Designation	**Basin Area (ac)**	**C_5**	**C_{100}**	**Impervious %**	**T_c (min)**	**Q_5 (cfs)**	**Q_{100} (cfs)**
A	0.45	0.01	0.13	2.0%	11.7	1.01	0.40
B	18.04	0.02	0.14	3.1%	17.9	0.01	14.05
C	0.21	0.01	0.13	2.0%	10.8	0.06	0.20
D	1.70	0.01	0.13	2.0%	16.0	0.14	1.44
E	4.37	0.01	0.13	2.0%	11.4	0.04	3.39
F	1.08	0.01	0.13	2.0%	15.4	0.56	0.98
G	9.32	0.02	0.14	3.0%	0.0	0.00	7.82

Post-Construction BMP and Stormwater Detention

No detention or water quality facilities are required with the project as the property is not located within the MS-4 boundary area, and post-developed impacts will be negligible as demonstrated in the comparative tables above.

E. LOW IMPACT DEVELOPMENT STANDARDS AND REQUIREMENTS

The project is not located with the Adams County MS-4 area.

F. SUSTAINANBLE DEVELOPMENT PRACTICES

The project is not located with the Adams County MS-4 area and development impacts are minimal.

G. POTENTIAL EROSION AND SEDIMENT IMPACTS

Construction of the Oak Park Road Estates will likely disturb less than an acre of land on the three lots as is typical of a rural residential single-family project. Erosion and sediment impacts will be negligible.

H. CONCLUSIONS

This project will have little to no impact upon the existing conditions and surrounding area as disturbance and variance from the existing, pre-developed condition is minimal. It is my professional opinion that the design will be equivalent in quality, effectiveness, durability, and safety to the requirements prescribed in the Adams County Development Manual.

G. Appendices

1. Hydrologic Computations
   a. Land use assumptions, composite “C” and % Impervious calculations
   b. Initial and major storm runoff computations for developed runoff conditions

2. Graphs, tables, SCS Soils Data, floodplain map, and other relevant data

3. Grass Buffer Design Forms

APPENDIX 1

HYDROLOGIC COMPUTATIONS

COMPOSITE 'C' FACTORS (HISTORIC)

LOCATION: Oak Park Road Estates | Adams County | Soil Type: A/B | Final Drainage Report | BY: AWT | DATE: 2/10/2023

SUB-BASIN	Acreage				PAVED				ROOFS				LAWNS				COMPOSITE C FACTOR				PERCENT IMPERVIOUS
DESIGNATION	PAVED	ROOFS	LAWNS	TOTAL	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	
			Imperviousness =		100				90				2								
A	0.00	0.00	0.45	0.45	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
B	0.00	0.00	17.94	17.94	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
C	0.00	0.00	0.21	0.21	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
D	0.00	0.00	1.70	1.70	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
E	0.00	0.00	4.37	4.37	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
F	0.00	0.00	1.08	1.08	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
G	0.00	0.00	9.27	9.27	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
Overall Site	0.00	0.00	35.03	35.03	0.84	0.86	0.87	0.89	0.80	0.85	0.90	0.90	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%

COMPOSITE 'C' FACTORS (DEVELOPED)

LOCATION: Oak Park Road Estates | Adams County | Soil Type: A/B | Final Drainage Report | BY: AWT | DATE: 2/10/2023

SUB-BASIN	Acreage				PAVED				ROOFS				LAWNS				COMPOSITE C FACTOR				PERCENT IMPERVIOUS
DESIGNATION	PAVED	ROOFS	LAWNS	TOTAL	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	2YR	5 YR	10 YR	100 YR	
			Imperviousness =		100				90				2								
A	0.00	0.00	0.45	0.45	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
B	0.09	0.11	17.83	18.04	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.02	0.02	0.02	0.14	3.1%
C	0.00	0.00	0.21	0.21	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
D	0.00	0.00	1.70	1.70	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
E	0.00	0.00	4.37	4.37	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
F	0.00	0.00	1.08	1.08	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.01	0.01	0.01	0.13	2.0%
G	0.05	0.06	9.21	9.32	0.84	0.86	0.87	0.89	0.73	0.75	0.77	0.81	0.01	0.01	0.01	0.13	0.02	0.02	0.02	0.14	3.0%
Overall Site	0.14	0.17	34.85	35.16	0.84	0.86	0.87	0.89	0.80	0.85	0.90	0.90	0.01	0.01	0.01	0.13	0.02	0.02	0.02	0.14	2.3%

TIME OF CONCENTRATION (DEVELOPED)

LOCATION: Oak Park Road Estates | **Final Drainage Report** | **BY: AWT** | **DATE: 2/13/2023**

SUB-BASIN DATA			INIT./OVERLAND TIME (Ti)			TRAVEL TIME (Tt)					TOTAL	Tc Check (Urbanized Basins)		FINAL Tc
DESIGNATION	C_5	AREA (AC)	LENGTH (FT)	SLOPE %	Ti (Min.)*	GRASS/ PAVED	LENGTH (FT)	SLOPE %	VEL (FPS)**	Tt (Min.)	Ti+Tt (Min.)	LGTH. (FT)	Tc = (L/180) + 10	(minutes)
A	0.01	0.45	100	3.50	13.16	GRASS	210	2.60	1.13	3.10	16.3	310	11.7	11.7
B	0.02	18.04	500	4.50	26.84	GRASS	929	3.70	1.35	11.50	38.3	1429	17.9	17.9
C	0.01	0.21	136	3.80	14.93	GRASS	0	3.80	1.36	0.00	14.9	136	10.8	10.8
D	0.01	1.70	500	4.00	28.15	GRASS	90	4.00	1.40	1.07	29.2	590	13.3	13.3
E	0.01	4.37	285	1.80	27.73	GRASS	790	3.10	1.23	10.68	38.4	1075	16.0	16.0
F	0.01	1.08	260	3.50	21.22	GRASS	0	3.50	1.31	0.00	21.2	260	11.4	11.4
G	0.02	9.32	500	3.90	28.16	GRASS	465	3.90	1.38	5.61	33.8	965	15.4	15.4

REMARKS

FORMULAS:

*** Ti = 0.395 (1.1-C5)L^0.5/S/100^1/3**

**** V=Cv*(S/100)^0.5**

TIME OF CONCENTRATION (DEVELOPED)

LOCATION: Oak Park Road Estates | **Final Drainage Report** | **BY: AWT** | **DATE: 2/13/2023**

SUB-BASIN DATA			INIT./OVERLAND TIME (Ti)			TRAVEL TIME (Tt)					TOTAL	Tc Check (Urbanized Basins)		FINAL Tc
DESIGNATION	C_5	AREA (AC)	LENGTH (FT)	SLOPE %	Ti (Min.)*	GRASS/ PAVED	LENGTH (FT)	SLOPE %	VEL (FPS)**	Tt (Min.)	Ti+Tt (Min.)	LGTH. (FT)	Tc = (L/180) + 10	(minutes)
A	0.01	0.45	100	3.50	13.16	GRASS	210	2.60	1.13	3.10	16.3	310	11.7	11.7
B	0.02	18.04	500	4.50	26.84	GRASS	929	3.70	1.35	11.50	38.3	1429	17.9	17.9
C	0.01	0.21	136	3.80	14.93	GRASS	0	3.80	1.36	0.00	14.9	136	10.8	10.8
D	0.01	1.70	500	4.00	28.15	GRASS	90	4.00	1.40	1.07	29.2	590	13.3	13.3
E	0.01	4.37	285	1.80	27.73	GRASS	790	3.10	1.23	10.68	38.4	1075	16.0	16.0
F	0.01	1.08	260	3.50	21.22	GRASS	0	3.50	1.31	0.00	21.2	260	11.4	11.4
G	0.02	9.32	500	3.90	28.16	GRASS	465	3.90	1.38	5.61	33.8	965	15.4	15.4

REMARKS

FORMULAS:

*** Ti = 0.395 (1.1-C5)L^0.5/S/100^1/3**

**** V=Cv*(S/100)^0.5**

Storm Drainage System Design
(Rational Method Procedure)

Subdivision: Oak Park Road Estates
Designer: AWT
Date: 2/13/2023
Design Storm: 5 -YR HISTORIC

$$I = \frac{28.5 * P_1}{(10+T_C)^{0.786}}$$

Where: P_1 = 1.42

Design Point	Direct Runoff							Total Runoff				Comment
	Subbasin Designation	Area	Runoff Coeffecient	t_c	C x A	I	Q	t_c	C x A	I	Q	
		ac.		min.	ac.	in/hr	cfs	min.	ac.	in/hr	cfs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	A	0.45	0.01	11.7	0.00	3.60	0.02					
2	B	17.94	0.01	17.9	0.18	2.95	0.53					
3	C	0.21	0.01	10.8	0.00	3.73	0.01					
4	D	1.70	0.01	13.3	0.02	3.41	0.06					
5	E	4.37	0.01	16.0	0.04	3.13	0.14					
6	F	1.08	0.01	11.4	0.01	3.64	0.04					
7	G	9.27	0.01	15.4	0.09	3.19	0.30					

Storm Drainage System Design
(Rational Method Procedure)

Subdivision: Oak Park Road Estates
Designer: AWT
Date: 2/13/2023
Design Storm: 5 -YR DEVELOPED

$$I = \frac{28.5 * P_1}{(10+T_C)^{0.786}}$$

Where: P_1 = 1.42

Design Point	Direct Runoff							Total Runoff				Comment
	Subbasin Designation	Area	Runoff Coeffecient	t_c	C x A	I	Q	t_c	C x A	I	Q	
		ac.		min.	ac.	in/hr	cfs	min.	ac.	in/hr	cfs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	A	0.45	0.01	11.7	0.00	3.60	0.02					
2	B	18.04	0.02	17.9	0.34	2.95	1.01					
3	C	0.21	0.01	10.8	0.00	3.73	0.01					
4	D	1.70	0.01	13.3	0.02	3.41	0.06					
5	E	4.37	0.01	16.0	0.04	3.13	0.14					
6	F	1.08	0.01	11.4	0.01	3.64	0.04					
7	G	9.32	0.02	15.4	0.17	3.19	0.56					

Storm Drainage System Design
(Rational Method Procedure)

Subdivision: Oak Park Road Estates
Designer: AWT
Date: 2/13/2023
Design Storm: 100-YR HISTORIC

$$I = \frac{28.5 * P_1}{(10+T_C)^{0.786}}$$

Where: P_1 = 2.71

Design Point	Direct Runoff							Total Runoff				Comment
	Subbasin Designation	Area	Runoff Coeffecient	t_c	C x A	I	Q	t_c	C x A	I	Q	
		ac.		min.	ac.	in/hr	cfs	min.	ac.	in/hr	cfs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	A	0.45	0.13	11.7	0.06	6.87	0.40					
2	B	17.94	0.13	17.9	2.33	5.64	13.15					
3	C	0.21	0.13	10.8	0.03	7.12	0.20					
4	D	1.70	0.13	13.3	0.22	6.51	1.44					
5	E	4.37	0.13	16.0	0.57	5.97	3.39					
6	F	1.08	0.13	11.4	0.14	6.94	0.98					
7	G	9.27	0.13	15.4	1.21	6.08	7.33					

Storm Drainage System Design
(Rational Method Procedure)

Subdivision: Oak Park Road Estates
Designer: AWT
Date: 2/13/2023
Design Storm: 100-YR DEVELOPED

$$I = \frac{28.5 * P_1}{(10+T_C)^{0.786}}$$

Where: P_1 = 2.71

Design Point	Direct Runoff							Total Runoff				Comment
	Subbasin Designation	Area	Runoff Coeffecient	t_c	C x A	I	Q	t_c	C x A	I	Q	
		ac.		min.	ac.	in/hr	cfs	min.	ac.	in/hr	cfs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	A	0.45	0.13	11.7	0.06	6.87	0.40					
2	B	18.04	0.14	17.9	2.49	5.64	14.05					
3	C	0.21	0.13	10.8	0.03	7.12	0.20					
4	D	1.70	0.13	13.3	0.22	6.51	1.44					
5	E	4.37	0.13	16.0	0.57	5.97	3.39					
6	F	1.08	0.13	11.4	0.14	6.94	0.98					
7	G	9.32	0.14	15.4	1.28	6.08	7.82					

BASIN RUNOFF SUMMARY TABLE							
Basin Designation	**Basin Area (ac)**	**C_5**	**C_{100}**	**Impervious %**	**T_c (min)**	**Q_5 (cfs)**	**Q_{100} (cfs)**
A	0.45	0.01	0.13	2.0%	11.7	1.01	0.40
B	18.04	0.02	0.14	3.1%	17.9	0.01	14.05
C	0.21	0.01	0.13	2.0%	10.8	0.06	0.20
D	1.70	0.01	0.13	2.0%	16.0	0.14	1.44
E	4.37	0.01	0.13	2.0%	11.4	0.04	3.39
F	1.08	0.01	0.13	2.0%	15.4	0.56	0.98
G	9.32	0.02	0.14	3.0%	0.0	0.00	7.82

DESIGN POINT RUNOFF SUMMARY TABLE					
Design Point	**Contributing Basins**	**Contributing Area (acres)**	**T_c (min)**	**Q_5 (cfs)**	**Q_{100} (cfs)**
1	A	0.45	11.7	0.02	0.40
2	B	18.04	17.9	1.01	14.05
3	C	0.21	10.8	0.01	0.20
4	D	1.70	13.3	0.06	1.44
5	E	4.37	16.0	0.14	3.39
6	F	1.08	11.4	0.04	0.98
7	G	9.32	15.4	0.56	7.82

HISTORIC DESIGN POINT RUNOFF SUMMARY TABLE					
Design Point	**Contributing Basins**	**Contributing Area (acres)**	**T_c (min)**	**Q_5 (cfs)**	**Q_{100} (cfs)**
1	A	0.45	11.7	0.02	0.40
2	B	17.94	17.9	1.01	13.15
3	C	0.21	10.8	0.01	0.20
4	D	1.70	13.3	0.06	1.44
5	E	4.37	16.0	0.14	3.39
6	F	1.08	11.4	0.04	0.98
7	G	9.27	15.4	0.56	7.33

APPENDIX 2

GRAPHS, TABLES, SCS SOILS DATA, FLOODPLAN MAPS,
AND OTHER RELEVANT DATA

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Adams County Area, Parts of Adams and Denver Counties, Colorado

February 10, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,380 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and Denver Counties, Colorado
Survey Area Data: Version 19, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AsC	Ascalon sandy loam, 3 to 5 percent slopes	12.9	35.7%
AsD	Ascalon sandy loam, 5 to 9 percent slopes	7.9	21.8%
BoD	Blakeland loamy sand, 3 to 9 percent slopes	0.6	1.7%
Bt	Blakeland-Truckton association	10.6	29.2%
TtD	Truckton loamy sand, 3 to 9 percent slopes	4.2	11.6%
Totals for Area of Interest		**36.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Adams County Area, Parts of Adams and Denver Counties, Colorado

AsC—Ascalon sandy loam, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2tlnt
Elevation: 3,550 to 5,970 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Map Unit Composition

Ascalon and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ascalon

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind-reworked alluvium and/or calcareous sandy eolian deposits

Typical profile

Ap - 0 to 6 inches: sandy loam
Bt1 - 6 to 12 inches: sandy clay loam
Bt2 - 12 to 19 inches: sandy clay loam
Bk - 19 to 35 inches: sandy clay loam
C - 35 to 80 inches: sandy loam

Properties and qualities

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.1 to 1.9 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: R067BY024CO - Sandy Plains, R072XY111KS - Sandy Plains

Hydric soil rating: No

Minor Components

Stoneham

Percent of map unit: 10 percent
Landform: Interfluves
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY002CO - Loamy Plains, R072XY100KS - Loamy Tableland
Hydric soil rating: No

Vona

Percent of map unit: 8 percent
Landform: Interfluves
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY024CO - Sandy Plains, R072XY111KS - Sandy Plains
Hydric soil rating: No

Platner

Percent of map unit: 2 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY002CO - Loamy Plains, R072XY100KS - Loamy Tableland
Hydric soil rating: No

AsD—Ascalon sandy loam, 5 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2tlmx
Elevation: 3,870 to 6,070 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Ascalon

Setting

Landform: Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind-reworked alluvium and/or calcareous sandy eolian deposits

Typical profile

Ap - 0 to 6 inches: sandy loam
Bt1 - 6 to 12 inches: sandy clay loam
Bt2 - 12 to 19 inches: sandy clay loam
Bk - 19 to 35 inches: sandy clay loam
C - 35 to 80 inches: sandy loam

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Minor Components

Stoneham

Percent of map unit: 10 percent
Landform: Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Manter

Percent of map unit: 5 percent
Landform: Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

BoD—Blakeland loamy sand, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 34vs
Elevation: 4,600 to 5,800 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 135 to 155 days

Map Unit Composition

Blakeland and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blakeland

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed and/or eolian deposits derived from mixed

Typical profile

H1 - 0 to 9 inches: loamy sand
H2 - 9 to 60 inches: sand

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R067BY015CO - Deep Sand
Hydric soil rating: No

Minor Components

Truckton

Percent of map unit: 5 percent
Hydric soil rating: No

Bt—Blakeland-Truckton association

Map Unit Setting

National map unit symbol: 34vt
Elevation: 4,400 to 6,000 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 125 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Blakeland and similar soils: 60 percent
Truckton and similar soils: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blakeland

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed and/or eolian deposits derived from mixed

Typical profile

H1 - 0 to 9 inches: loamy sand
H2 - 9 to 60 inches: sand

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R067BY015CO - Deep Sand
Hydric soil rating: No

Description of Truckton

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Typical profile

H1 - 0 to 9 inches: loamy sand
H2 - 9 to 21 inches: sandy loam
H3 - 21 to 32 inches: loamy sand
H4 - 32 to 60 inches: coarse sand

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
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 supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R067BY015CO - Deep Sand
Hydric soil rating: No

Minor Components

Valent

Percent of map unit: 10 percent
Hydric soil rating: No

Vona

Percent of map unit: 10 percent
Hydric soil rating: No

TtD—Truckton loamy sand, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 34wz
Elevation: 4,400 to 6,000 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 125 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Truckton

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Typical profile

H1 - 0 to 9 inches: loamy sand
H2 - 9 to 21 inches: sandy loam
H3 - 21 to 32 inches: loamy sand
H4 - 32 to 60 inches: coarse sand

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
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 supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Minor Components

Vona

Percent of map unit: 8 percent
Hydric soil rating: No

Blakeland

Percent of map unit: 5 percent
Hydric soil rating: No

Loup

Percent of map unit: 1 percent
Landform: Swales
Ecological site: R067BY029CO - Sandy Meadow
Hydric soil rating: Yes

Tryon

Percent of map unit: 1 percent
Landform: Swales
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: Yes

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NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided by the Adams County and Commerce City GIS departments. The coordinate system used for the production of the digital FIRM is Universal Transverse Mercator, Zone 13N, referenced to North American Datum of 1983 and the GRS 80 spheroid, Western Hemisphere.

This map reflects more detailed and up- to- date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report* (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de- annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

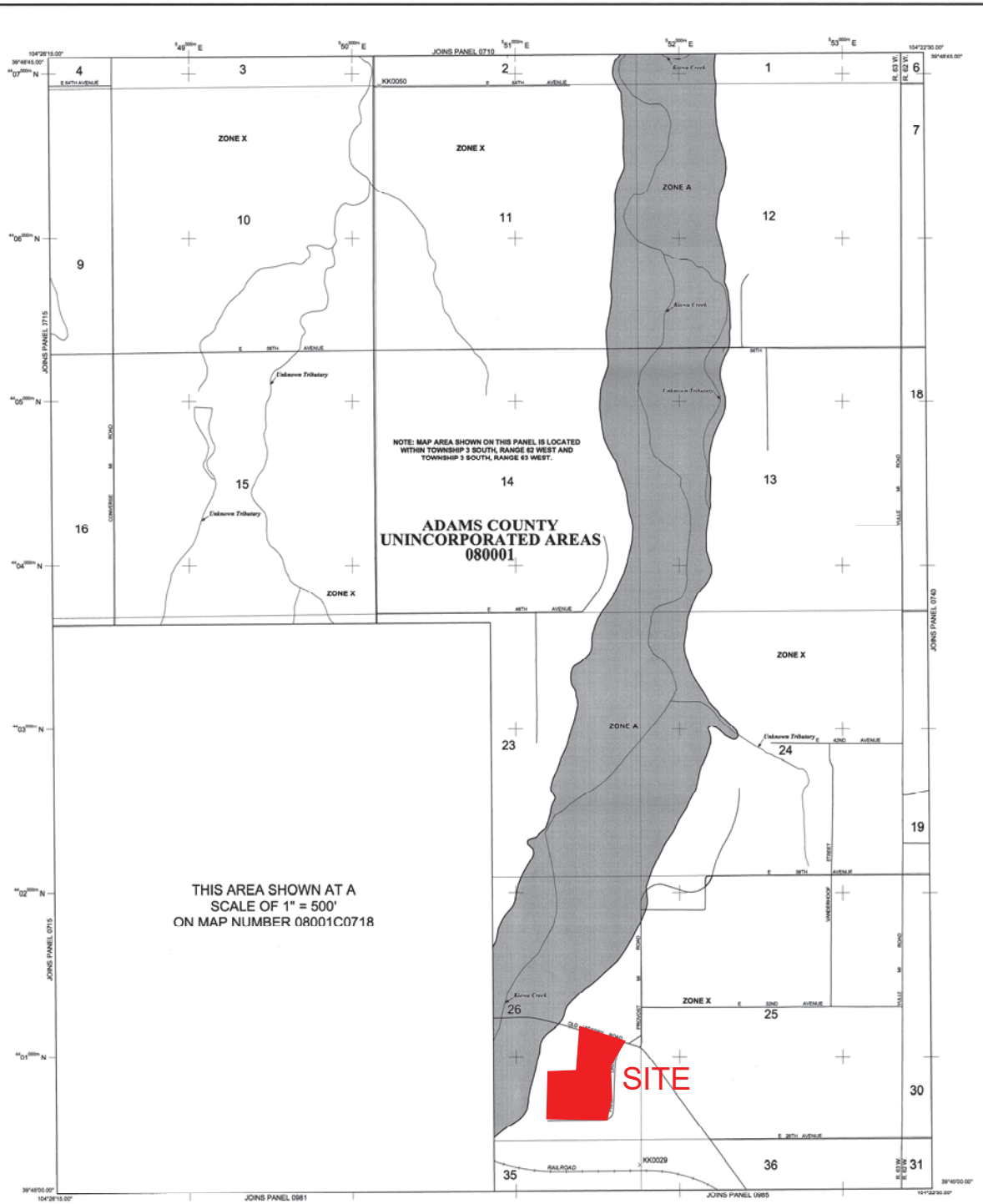
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1- 800- 358- 9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report*, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1- 800- 358- 9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1- 877- FEMA MAP** (1- 877- 336- 2627) or visit the FEMA website at http://www.fema.gov/.

This digital Flood Insurance Rate Map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner agreements with FEMA to produce this digital FIRM.

Additional flood hazard information and resources are available from local communities, the Colorado Water Conservation Board, and the Urban Drainage and Flood Control District.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000 N — 1000-meter Universal Transverse Mercator grid ticks, zone 13
- 6000000 M — 5000-foot grid ticks: Alabama State Plane coordinate system, east zone (FIPSZONE 0101), Transverse Mercator
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
August 16, 1995
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 5, 2007 - to update map format.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1- 800- 638- 6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0720H

FIRM
FLOOD INSURANCE RATE MAP
ADAMS COUNTY, COLORADO AND INCORPORATED AREAS

PANEL 720 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ADAMS COUNTY	080001	0720	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
08001C0720H
MAP REVISED
MARCH 5, 2007

Federal Emergency Management Agency

APPENDIX 3

GRASS BUFFER DESIGN FORMS

Design Procedure Form: Grass Buffer (GB)

UD-BMP (Version 3.07, March 2018)

Designer: AT
Company: Kelly Development Services
Date: May 16, 2023
Project: Oak Park Drive
Location: Lot 1

1. Design Discharge A) 2-Year Peak Flow Rate of the Area Draining to the Grass Buffer	Q_2 = 0.5 cfs
2. Minimum Width of Grass Buffer	W_G = 11 ft
3. Length of Grass Buffer (14' or greater recommended)	L_G = 15 ft
4. Buffer Slope (in the direction of flow, not to exceed 0.1 ft / ft)	S_G = 0.050 ft / ft
5. Flow Characteristics (sheet or concentrated) A) Does runoff flow into the grass buffer across the entire width of the buffer?	Choose One: (•) Yes ( ) No
B) Watershed Flow Length	F_L = 50 ft
C) Interface Slope (normal to flow)	S_I = 0.010 ft / ft
D) Type of Flow Sheet Flow: $F_L * S_I \leq 1$ Concentrated Flow: $F_L * S_I > 1$	Sheet
6. Flow Distribution for Concentrated Flows	Choose One: (•) None (sheet flow); ( ) Slotted Curbing; ( ) Level Spreader; ( ) Other (Explain):
7 Soil Preparation (Describe soil amendment)	None - minimal disturbance
8 Vegetation (Check the type used or describe "Other")	Choose One: (•) Existing Xeric Turf Grass; ( ) Irrigated Turf Grass; ( ) Other (Explain):
9. Irrigation (*Select None if existing buffer area has 80% vegetation AND will not be disturbed during construction.)	Choose One: ( ) Temporary; ( ) Permanent; (•) None*
10. Outflow Collection (Check the type used or describe "Other")	Choose One: ( ) Grass Swale; ( ) Street Gutter; ( ) Storm Sewer Inlet; (•) Other (Explain): Sheet flow in historic pattern

Notes:
Watershed length based upon future home site

Design Procedure Form: Grass Buffer (GB)

UD-BMP (Version 3.07, March 2018) **Sheet 1 of 1**

Designer: AT
Company: Kelly Development Services
Date: May 16, 2023
Project: Oak Park Drive
Location: Lot 2

1. Design Discharge A) 2-Year Peak Flow Rate of the Area Draining to the Grass Buffer	Q_2 = 0.2 cfs
2. Minimum Width of Grass Buffer	W_G = 4 ft
3. Length of Grass Buffer (14' or greater recommended)	L_G = 15 ft
4. Buffer Slope (in the direction of flow, not to exceed 0.1 ft / ft)	S_G = 0.050 ft / ft
5. Flow Characteristics (sheet or concentrated) A) Does runoff flow into the grass buffer across the entire width of the buffer?	Choose One: (•) Yes ( ) No
B) Watershed Flow Length	F_L = 50 ft
C) Interface Slope (normal to flow)	S_I = 0.010 ft / ft
D) Type of Flow Sheet Flow: $F_L * S_I \leq 1$ Concentrated Flow: $F_L * S_I > 1$	Sheet
6. Flow Distribution for Concentrated Flows	Choose One: (•) None (sheet flow); ( ) Slotted Curbing; ( ) Level Spreader; ( ) Other (Explain):
7 Soil Preparation (Describe soil amendment)	None - minimal disturbance
8 Vegetation (Check the type used or describe "Other")	Choose One: (•) Existing Xeric Turf Grass; ( ) Irrigated Turf Grass; ( ) Other (Explain):
9. Irrigation (*Select None if existing buffer area has 80% vegetation AND will not be disturbed during construction.)	Choose One: ( ) Temporary; ( ) Permanent; (•) None*
10. Outflow Collection (Check the type used or describe "Other")	Choose One: ( ) Grass Swale; ( ) Street Gutter; ( ) Storm Sewer Inlet; (•) Other (Explain): Sheet flow in historic pattern

Notes:
Waterhsed flow length based on approximate future footprint of home site

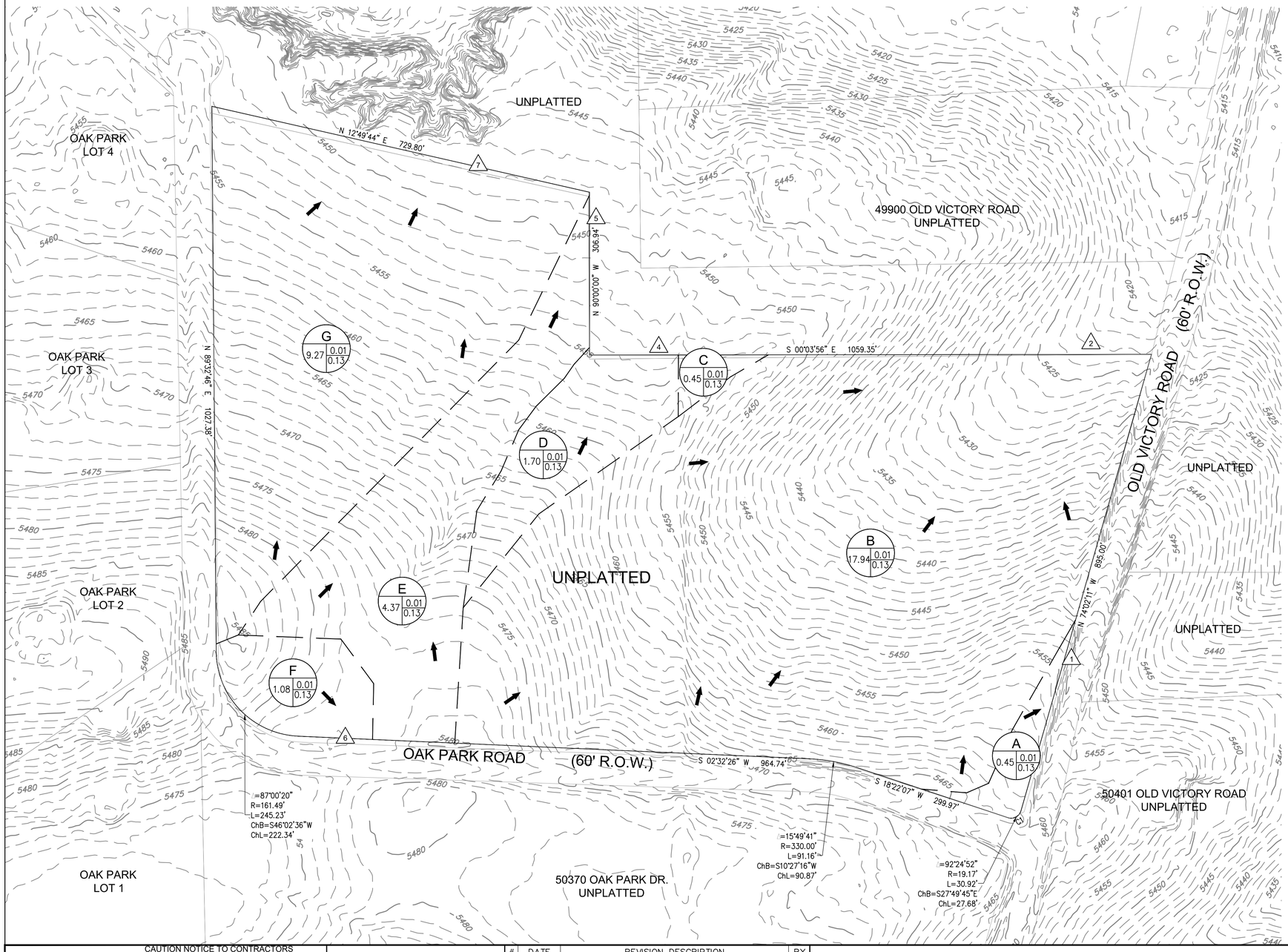
Design Procedure Form: Grass Buffer (GB)

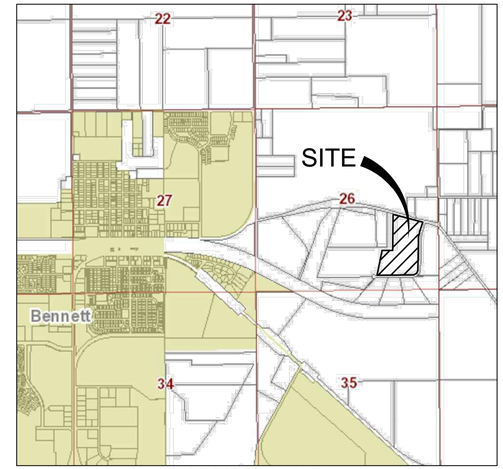
UD-BMP (Version 3.07, March 2018)

Designer: AT
Company: Kelly Development Services
Date: May 16, 2023
Project: Oak Park Drive
Location: Lot 3

1. Design Discharge A) 2-Year Peak Flow Rate of the Area Draining to the Grass Buffer	Q_2 = 0.3 cfs
2. Minimum Width of Grass Buffer	W_G = 6 ft
3. Length of Grass Buffer (14' or greater recommended)	L_G = 15 ft
4. Buffer Slope (in the direction of flow, not to exceed 0.1 ft / ft)	S_G = 0.050 ft / ft
5. Flow Characteristics (sheet or concentrated) A) Does runoff flow into the grass buffer across the entire width of the buffer?	Choose One: (•) Yes ( ) No
B) Watershed Flow Length	F_L = 50 ft
C) Interface Slope (normal to flow)	S_I = 0.010 ft / ft
D) Type of Flow Sheet Flow: $F_L * S_I \leq 1$ Concentrated Flow: $F_L * S_I > 1$	Sheet
6. Flow Distribution for Concentrated Flows	Choose One: (•) None (sheet flow); ( ) Slotted Curbing; ( ) Level Spreader; ( ) Other (Explain):
7 Soil Preparation (Describe soil amendment)	None - minimal disturbance
8 Vegetation (Check the type used or describe "Other")	Choose One: (•) Existing Xeric Turf Grass; ( ) Irrigated Turf Grass; ( ) Other (Explain):
9. Irrigation (*Select None if existing buffer area has 80% vegetation AND will not be disturbed during construction.)	Choose One: ( ) Temporary; ( ) Permanent; (•) None*
10. Outflow Collection (Check the type used or describe "Other")	Choose One: ( ) Grass Swale; ( ) Street Gutter; ( ) Storm Sewer Inlet; (•) Other (Explain): Sheet flow in historic pattern

Notes:
Watershed length based upon future home site





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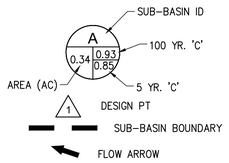

HISTORIC BASIN RUNOFF SUMMARY TABLE

Basin Designation	Basin Area (ac)	C_5	C_{100}	Impervious %	T (min)	Q_5 (cfs)	Q_{100} (cfs)
A	0.45	0.01	0.13	2.0%	11.7	0.02	0.40
B	17.94	0.01	0.13	2.0%	17.9	0.53	13.15
C	0.21	0.01	0.13	2.0%	10.8	0.01	0.20
D	1.70	0.01	0.13	2.0%	13.3	0.06	1.44
E	4.37	0.01	0.13	2.0%	16.0	0.14	3.39
F	1.08	0.01	0.13	2.0%	11.4	0.04	0.98
G	9.27	0.01	0.13	2.0%	15.4	0.30	7.33

HISTORIC DESIGN POINT RUNOFF SUMMARY TABLE

Design Point	Contributing Basins	Contributing Area (acres)	T (min)	Q_5 (cfs)	Q_{100} (cfs)
1	A	0.45	11.7	0.02	0.40
2	B	17.94	17.9	0.78	13.15
3	C	0.21	10.8	0.01	0.20
4	D	1.70	13.3	0.06	1.44
5	E	4.37	16.0	0.14	3.39
6	F	1.08	11.4	0.04	0.98
7	G	9.27	15.4	0.43	7.33

COLORADO L. LICENSED GREGORY S. KELLY 38813 PROFESSIONAL ENGINEER

PREPARED UNDER THE DIRECT SUPERVISION OF GREGORY S. KELLY, COLORADO PE #38813 FOR AND ON BEHALF OF KELLY DEVELOPMENT SERVICES, LLC

CAUTION NOTICE TO CONTRACTORS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUCH CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

PREPARED FOR:

F & C REALTY
DAN FAHEY
56321 E. COLFAX AVE.
STRASBURG, CO 80136
PH: 303-916-4155
FAX:

#	DATE	REVISION DESCRIPTION	BY
1			
2			
3			
4			
5			

project no.	2109.01	drawn by	
date	2/13/2023 – 7:47 am	designed by	
dwg.	HDR.dwg	approved by	

OAK PARK ROAD ESTATES

LEVEL III DRAINAGE REPORT
PRE-DEVELOPED CONDITION

KELLY DEVELOPMENT SERVICES, LLC
9301 SCRUB OAK DR
LONE TREE, CO 80124
303-888-6338
greg@kellydev.com

SHEET NUMBER
DR1
SHEET 1
PROJECT NUMBER
2209.01

[V-TO.dwg] [V-MA.dwg] [EXMA.dwg] [TBh.dwg]
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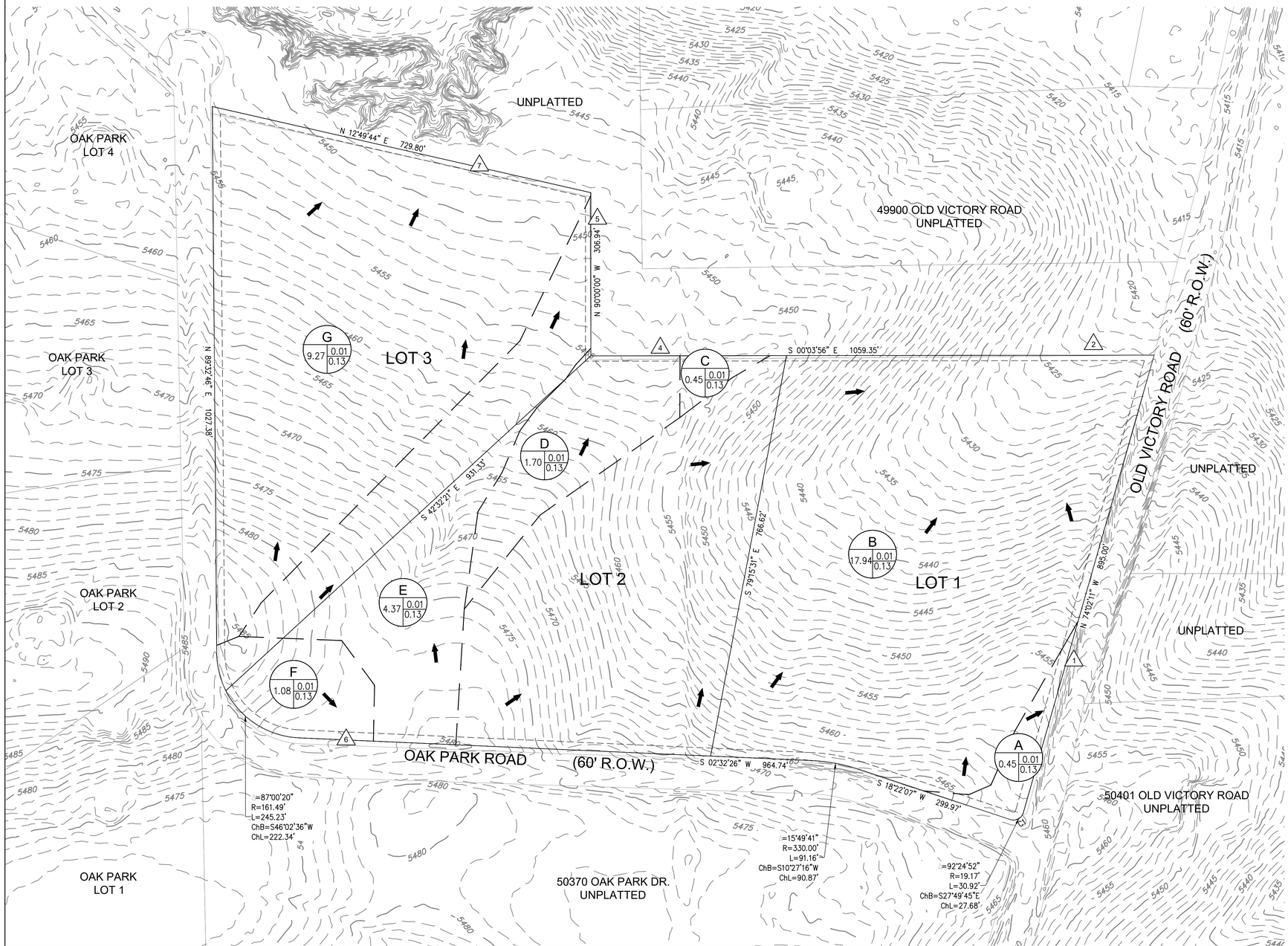

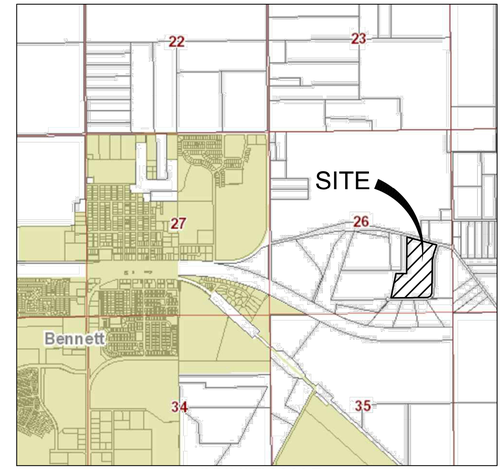

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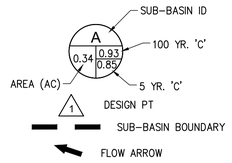


BASIN RUNOFF SUMMARY TABLE

Basin Designation	Basin Area (ac)	C_5	C_{100}	Impervious %	T (min)	Q_5 (cfs)	Q_{100} (cfs)
A	0.45	0.01	0.13	2.0%	11.7	1.01	0.40
B	18.04	0.02	0.14	3.1%	17.9	0.01	14.05
C	0.21	0.01	0.13	2.0%	10.8	0.06	0.20
D	1.70	0.01	0.13	2.0%	16.0	0.14	1.44
E	4.37	0.01	0.13	2.0%	11.4	0.04	3.39
F	1.08	0.01	0.13	2.0%	15.4	0.56	0.98
G	9.32	0.02	0.14	3.0%	0.0	0.00	7.82

DESIGN POINT RUNOFF SUMMARY TABLE

Design Point	Contributing Basins	Contributing Area (acres)	T (min)	Q_5 (cfs)	Q_{100} (cfs)
1	A	0.45	11.7	0.02	0.40
2	B	18.04	17.9	1.01	14.05
3	C	0.21	10.8	0.01	0.20
4	D	1.70	13.3	0.06	1.44
5	E	4.37	16.0	0.14	3.39
6	F	1.08	11.4	0.04	0.98
7	G	9.32	15.4	0.56	7.82

NORTH
GRAPHIC SCALE
100 0 50 100
1 INCH = 100 FEET

GRASS BUFFER DESIGN SUMMARY

Lot	Q_5 (cfs)	Length (ft)	Width (ft)
1	0.50	15	11
2	0.20	15	4
3	0.30	15	6

COLORADO LICENSED PROFESSIONAL ENGINEER
Gregory S. Kelly
PREPARED UNDER THE DIRECT SUPERVISION OF GREGORY S. KELLY, PE COLORADO LIC. #15813 FOR AND ON BEHALF OF KELLY DEVELOPMENT SERVICES, LLC

CAUTION NOTICE TO CONTRACTORS
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUCH CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RES LOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

PREPARED FOR:
F & C REALTY
DAN FAHEY
56321 E. COLFAX AVE.
STRASBURG, CO 80136
PH: 303-916-4155
FAX:

#	DATE	REVISION DESCRIPTION	BY
1			
2			
3			
4			
5			

project no.	2109.01	drawn by	
date	5/16/2023 – 11:32 am	designed by	
dwg.	FDR.dwg	approved by	

OAK PARK ROAD ESTATES

LEVEL III DRAINAGE PLAN

KELLY DEVELOPMENT SERVICES, LLC
9301 SCRUB OAK DR
LONE TREE, CO 80124
303-888-6338
greg@kellydev.com

SHEET NUMBER
DR2
SHEET 1
PROJECT NUMBER
2209.01

[V-TO.dwg] [V-MA.dwg] [EXMA.dwg] [C-MA.dwg] [TBh.dwg]
Drawing name: D:\Projects\2209 OVR\C3D\Sheet\Drainage\FDR.dwg May 16, 2023 – 11:32am

CASE NO: PRC2023-00007

OAK PARK ESTATES SUBDIVISION ~~FILING No. 1~~

A PARCEL OF LAND SITUATE IN THE S SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE SIXTH PRINCIPAL MERDIAN,
COUNTY OF ADAMS, STATE OF COLORADO.
SHEET 1 OF 2

Know all men by these presents that (owner name(s)), being the sole owner(s) of the following described tract of land:

INSERT THIS BEFORE THE LEGAL AFTER THE HEADING

PURPOSE STATEMENT:

THIS OAK PARK ESTATES SUBDIVISION FILING No. 1 IS INTENDED TO SUBDIVIDE 35.0253 ACRES INTO 3 SINGLE FAMILY LOTS AND EASEMENTS. ~~THE UNDERSIGNED DOES HEREBY DEDICATE, GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENT TO ADAMS COUNTY AND/OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH PUBLIC EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.~~

OWNERSHIP AND DEDICATION CERTIFICATE

A PARCEL OF PROPERTY LOCATED IN SECTION 26, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 26, FROM WHENCE THE SOUTHEAST CORNER OF SAID SECTION 26 TO BEAR SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 2664.34 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, ALONG THE EAST LINE OF SAID SOUTH 1/2 OF SECTION 26, A DISTANCE OF 846.15 FEET TO A POINT, SAID POINT BEING ON THE SOUTH RIGHT OF WAY LINE OF THE OLD VICTORY HIGHWAY;
THENCE NORTH 67 DEGREES 08 MINUTES 33 SECONDS WEST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 179.98 FEET;
THENCE NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, A DISTANCE OF 198.50 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, A DISTANCE OF 100.05 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON THE WEST RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE CONTINUING NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, ALONG SAID SOUTH RIGHT OF WAY LINE OF THE OLD VICTORY HIGHWAY, A DISTANCE OF 895.00 FEET TO THE NORTHWEST CORNER OF SAID PARCEL;
THENCE DEPARTING FROM SAID SOUTH RIGHT OF WAY, SOUTH 00 DEGREES 03 MINUTES 56 SECONDS EAST, ALONG THE WEST LINE OF SAID PARCEL, A DISTANCE OF 1059.35 FEET;
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 306.94 FEET;
THENCE SOUTH 12 DEGREES 49 MINUTES 44 SECONDS WEST, A DISTANCE OF 729.80 FEET TO THE NORTH RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE ALONG THE NORTH AND WEST RIGHT OF WAY LINE OF SAID OAK PARK ROAD THE FOLLOWING SIX (6) COURSES:
1) THENCE NORTH 89 DEGREES 32 MINUTES 46 SECONDS EAST, A DISTANCE OF 1027.38 FEET TO AN ARC WITH A CURVE TO THE LEFT;
2) THENCE ALONG AN ARC WITH A CURVE TO THE LEFT A DISTANCE OF 245.23 FEET, HAVING A CENTRAL ANGLE OF 87 DEGREES 00 MINUTES 20 SECONDS, A RADIUS LENGTH OF 161.49 FEET, A CHORD LENGTH OF 222.34 FEET WHICH CHORD BEARS NORTH 46 DEGREES 02 MINUTES 36 SECONDS EAST, TO A POINT OF TANGENCY;
3) NORTH 02 DEGREES 32 MINUTES 26 SECONDS EAST, A DISTANCE OF 964.73 FEET TO A POINT OF CURVATURE;
4) ALONG THE ARC TO THE RIGHT A DISTANCE OF 91.16 FEET, HAVING A CENTRAL ANGLE OF 15 DEGREES 49 MINUTES 41 SECONDS, A RADIUS LENGTH OF 330.00 FEET, A CHORD LENGTH OF 90.87 FEET WHICH CHORD BEARS NORTH 10 DEGREES 27 MINUTES 17 SECONDS EAST;
5) NORTH 18 DEGREES 22 MINUTES 07 SECONDS EAST, A DISTANCE OF 299.97 FEET;
6) NORTH 27 DEGREES 50 MINUTES 02 SECONDS WEST, A DISTANCE OF 27.68 FEET TO THE POINT OF BEGINNING SAID POINT BEING ON THE SAID SOUTH RIGHT OF WAY LINE OF OLD VICTORY HIGHWAY AND THE POINT OF BEGINNING.

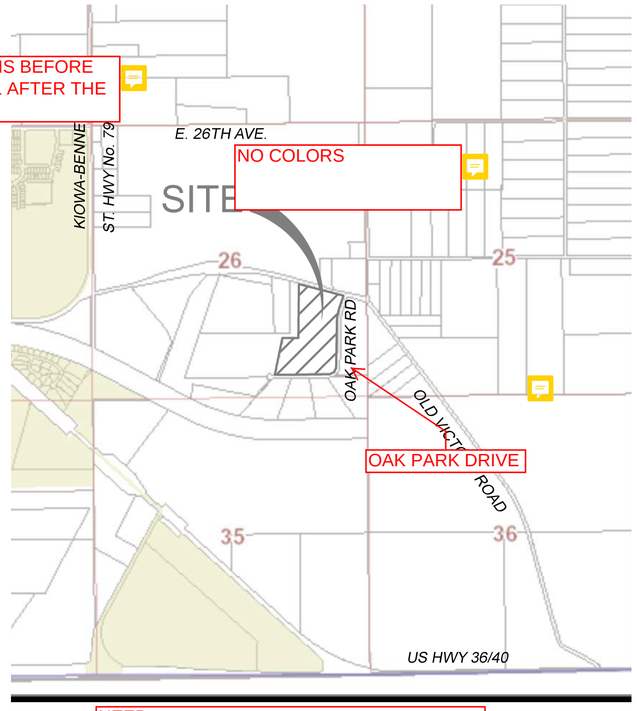
Have (Has) by these presents laid out, platted, and subdivided the same into lot(s), tract(s), street(s), and easement(s) as shown on this plat under the name and style of (subdivision name).

~~DEDICATION:~~

THE UNDERSIGNED O[illegible]D THE SAME INTO LOTS AND BLOCK, EASEMENTS AND ~~BUFFERS~~ AS SHOWN ON THIS PLAT UNDER THE NAME OAK PARK ESTATES SUBDIVISION FILING No. 1. THE UNDERSIGNED DOES HEREBY GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENTS TO ADAMS COUNTY AND / OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

BLOCKS, LOTS AND EASEMENTS

DON'T INCLUDE THE OIL AND GAS SETBACK BUFFER IN THE DEDICATION. THIS IS A PRIVATE PARTY ISSUE FOR SUBSEQUENT OPERATIONS. PROVIDE AS A NOTE



NEED:
PLANNING COMMISSION APPROVAL
RECOMMENDED FOR APPROVAL BY THE ADAMS COUNTY PLANNING COMMISSION THIS _____ DAY OF _____ A.D. 202_

_____
CHAIR

BOARD OF COUNTY COMMISSIONERS' APPROVAL
APPROVED BY THE ADAMS COUNTY BOARD OF COUNTY COMMISSIONERS THIS _____ DAY OF _____ A.D. 202_

_____
CHAIR

ADAMS COUNTY ATTORNEY'S OFFICE

_____
APPROVED AS TO FORM

EXECUTED THIS DAY _____ OF _____, 2023
OWNER: F & C REALTY COMPANY, A COLORADO CORPORATION

_____
BY: DANIEL FAHEY

~~OWNERS CERTIFICATE~~

IN WITNESS THEREOF F & C REALTY COMPANY, A COLORADO CORPORATION, HAVE CAUSED THESE PRESENTS TO BE EXECUTED THIS ___ DAY OF _____ AD.

MANAGER: DANIEL FAHEY

BY: _____
DANIEL FAHEY

~~DANIEL FAHEY, 56321 EAST COLFAX AVENUE STRASBURG, CO 80136~~

NOTARY PUBLIC

STATE OF COLORADO)
) SS
COUNTY OF ADAMS)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ___ DAY OF _____, 202__ AD.
BY DANIEL FAHEY.
AS _____ OF F & C REALTY COMPANY
WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES: _____
NOTARY ADDRESS: _____

SURVEYOR'S CERTIFICATE:

I, HAROLD J. PONSERELLA, A DULY LICENSED PROFESSIONAL LAND SURVEYOR, REGISTERED IN THE STATE OF COLORADO DO HEREBY CERTIFY THAT THERE NO ROADS, PIPELINES, IRRIGATION DITCHES, OR OTHER EASEMENTS IN EVIDENCE OR KNOWN BY ME TO EXIST ON OR ACROSS THE HEREIN BEFORE DESCRIBED PROPERTY EXCEPT AS SHOWN ON THIS PLAT.
I FURTHER CERTIFY THAT I HAVE PERFORMED THE SURVEY SHOWN HEREON, OR SUCH SURVEY WAS PREPARED UNDER MY DIRECT RESPONSIBILITY AND SUPERVISION, THAT THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, AND THAT ALL MONUMENTS EXIST AS SHOWN HEREIN.

DATE: 2/24/2023

_____
HAROLD J. PONSERELLA
COLORADO P.L.S. NO. 19766
FOR & ON BEHALF OF:
PO BOX 694 STRASBURG CO, 80136
303.549.7992

PRELIMINARY FOR REVIEW ONLY

EASEMENT STATEMENT

FIFTEEN-FOOT (15') WIDE UTILITY AND DRAINAGE EASEMENTS ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE FRONT LOT LINES OF EACH LOT IN THE SUBDIVISION. TEN-FOOT (10') WIDE DRY UTILITY EASEMENTS ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE REAR LINES OF EACH LOT AND TO THE SIDE LINES OF EACH LOT. THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITIES. UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION.

~~ACCESS PROVISION STATEMENT~~

NOT REQUIRED ON THIS PLAT AS ONLY ACCESS IS OAK PARK DRIVE

STATEMENT RESTRICTING ACCE[illegible]JOR HIGHWAYS, PARKWAYS, STREETS OR FREEWAYS, MUST BE APPROVED BY ADAMS COUNTY.

CERTIFICATE OF CLERK AND RECORDER:

PRELIMINARY PLATS DO NOT GET RECORDED, REMOVE CLERK AND RECORDERS BLOCK

TH[illegible]E OF THE ADAMS COUNTY CLERK AN[illegible]T ___.M. ON TH[illegible]_____.

_____
COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

COTTONWOOD SURVEYING AND ASSOCIATES, INC.
P.O. BOX 694, STRASBURG, COLORADO (303) 549-7992
JOB No. 2023-04 *DATE: 2/24/2023*

CASE NO: PRC2023-00007

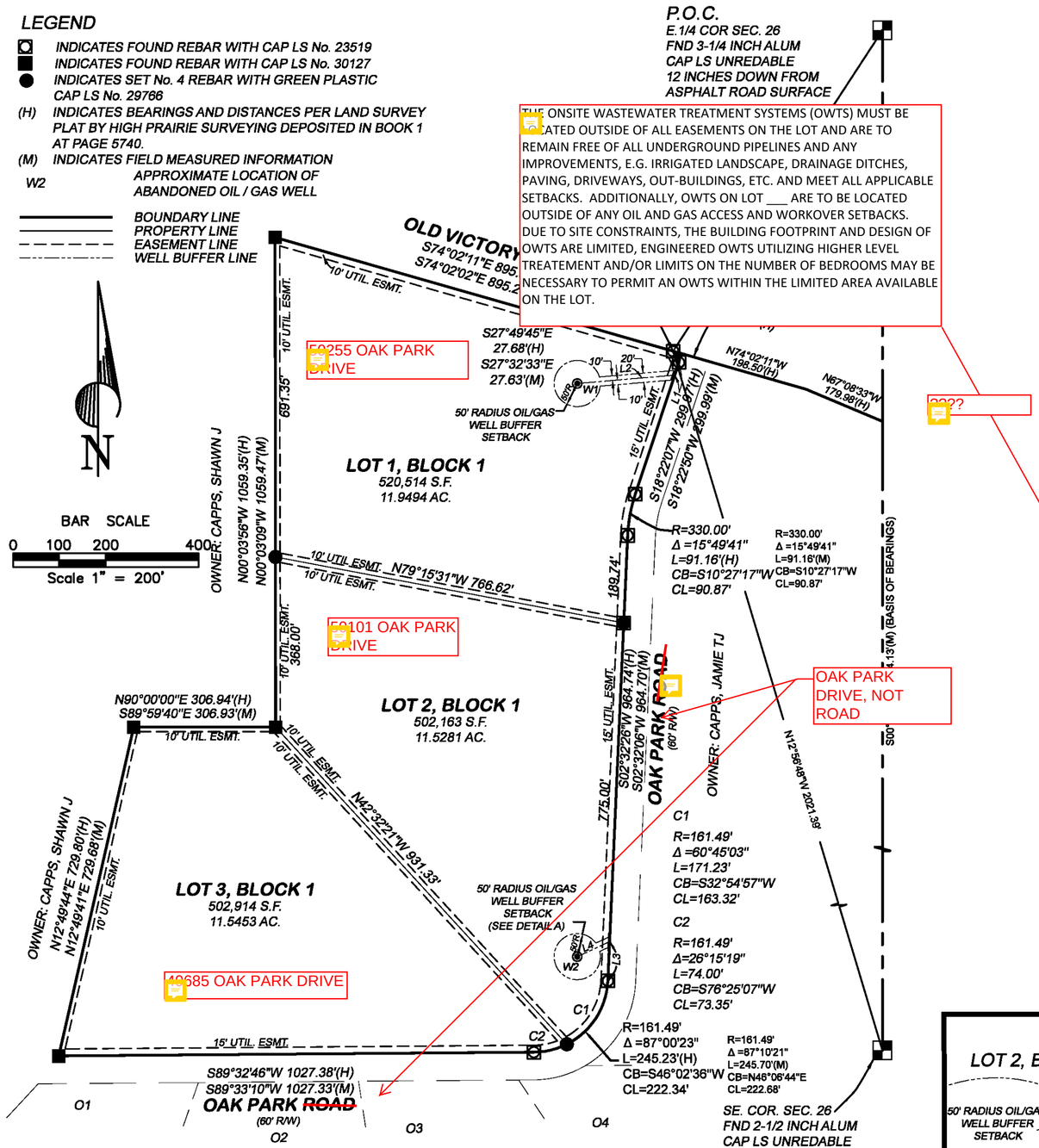
OAK PARK ESTATES SUBDIVISION FILING No. 1

A PARCEL OF LAND SITUATE IN THE ~~SOUTHEAST~~ SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE SIXTH PRINCIPAL MERDIAN, COUNTY OF ADAMS, STATE OF COLORADO.

SHEET 2 OF 2

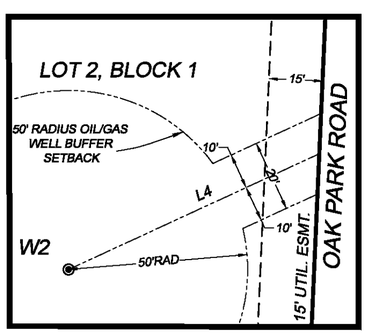
LEGEND

- INDICATES FOUND REBAR WITH CAP LS No. 23519
- INDICATES FOUND REBAR WITH CAP LS No. 30127
- INDICATES SET No. 4 REBAR WITH GREEN PLASTIC CAP LS No. 29766
- (H) INDICATES BEARINGS AND DISTANCES PER LAND SURVEY PLAT BY HIGH PRAIRIE SURVEYING DEPOSITED IN BOOK 1 AT PAGE 5740.
- (M) INDICATES FIELD MEASURED INFORMATION
- W2 APPROXIMATE LOCATION OF ABANDONED OIL / GAS WELL
- BOUNDARY LINE
- PROPERTY LINE
- EASEMENT LINE
- WELL BUFFER LINE



O1 OWNER: DUSAK JOHN M AND DUSAK LINDA M
O2 OWNER: VIRAMONTES-PILAR JUAN F AND VIRAMONTES-PILAR CRYSTAL JOY
O3 OWNER: AGUIRRE MANUEL
O4 OWNER: NELAN CHELSEA AND NELAN CHAD

LINE	BEARING	DISTANCE
L1	S18°22'07"W	28.78'
L2	S85°04'00"W	211.75'
L3	N02°32'26"E	84.72'
L4	S65°13'01"W	77.11'



W2 EASEMENT DETAIL A
SCALE 1"=30'

COTTONWOOD SURVEYING AND ASSOCIATES, INC.
P.O. BOX 694, STRASBURG, COLORADO (303) 549-7992
JOB No. 2023-04 DATE: 2/24/2023

NOTES:

1. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CS&A, INC. TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, CS&A, INC. RELIED UPON COMMITMENT NO. K70783937-2 BY LAND TITLE GUARANTEE COMPANY, COMMITMENT DATE: 08/11/2022 AT 5:00 P.M.

2. NOTICE - ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY COMMITS A CLASS TWO(2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, OF THE COLORADO REVISED STATUTE.

4. THE SUBJECT PROPERTY LIES WITHIN ZONE %UX AS SHOWN ON THE FEMA FLOOD HAZARD MAP No. 08001C0720H EFFECTIVE DATE 3/5/2007.

5. BENCH MARK: NGS DEEP ROD "LADYBIRD" PID No. AA8177. MONUMENT IS SITUATE ALONG THE EAST SIDE OF THE OLD RESTSTOP ATOP LADYBIRD HILL BETWEEN BENNETT, CO AND STRASBURG CO. WEST OF THE EXIT FOR LADYBIRD HILL ELEVATION = 5563 FEET (NAVD 88) GPS OBSERVED.

6. DISTANCES SHOWN HEREON ARE EXPRESSED IN U.S. SURVEY FEET AND DECIMALS THEREOF. A U.S. SURVEY FOOT IS DEFINED AS EXACTLY 1200 / 3937 METERS.

7. THE LOCATION OF ABANDONED AND PLUGGED WELL LYING WITHIN THE SUBJECT PROPERTY IS GRAPHICALLY SHOWN HEREON AND IS APPROXIMATE BASED UPON INFORMATION FROM THE COLORADO OIL/GAS COMMISSION WEBSITE.

8. THE ABOVE LEGAL DESCRIPTION WAS PREPARED BY KEITH WESTFALL, PLS 30127, HIGH PRAIRIE SURVEY CO., PO BOX 384, KIOWA, CO AS SHOWN ON THE DEPOSITED LAND SURVEY PLAT BOOK 1 AT PAGE 5740, ADAMS COUNTY.

7. ENGINEERED INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (ISDS) MAY BE REQUIRED ON CERTAIN LOTS. ENGINEERED ISDS ARE LARGER AND MORE COSTLY THAN CONVENTIONAL SYSTEMS. LOT-SPECIFIC SOILS AND PERCOLATION TESTS SHALL BE USED TO DETERMINE THE TYPE AND SIZE OF ISDS.

8. SUITABLE AREA NEEDS TO BE DESIGNED ON EACH LOT SITE PLAN FOR BOTH PRIMARY AND REPLACEMENT WASTEWATER ABSORPTION AREAS. REPLACEMENT OF THE PRIMARY ABSORPTION AREA MAY BE REQUIRED.

IF FAILURE OF THE PRIMARY AREA OCCURS. THESE AREAS NEED TO MEET ALL TRI-COUNTY HEALTH DEPARTMENT SETBACK REQUIREMENTS, AND ARE TO REMAIN FREE OF ANY IMPROVEMENTS, E.G. IRRIGATED LANDSCAPING, PAVING, OUT-BUILDINGS, ETC.

9. INSPECTION OF ISDS SYSTEMS SHALL BE THE RESPONSIBILITY OF THE TODD CREEK METROPOLITAN DISTRICT. MAINTENANCE OF ISDS SYSTEMS SHALL BE THE RESPONSIBILITY OF THE OWNER.

10. NOTICE TO PROSPECTIVE BUYERS: THERE ARE PLUGGED AND ABANDONED WELLS LOCATED ON THIS PLAT IN LOTS 1 AND 2. PURSUANT TO ADAMS COUNTY DEVELOPMENT STANDARDS SECTION 4-10-02-03-03-05(2) THERE ARE 50FT RADIUS BUFFERS AROUND THE ABANDONED WELLHEADS DEDICATED AS WELL MAINTENANCE AND WORKOVER SETBACKS. NO STRUCTURES, FENCES OR DRIVEWAYS SHALL BE LOCATED WITHIN THIS SETBACK. PUBLIC ACCESS FOR INGRESS AND EGRESS TO THE WELL MAINTENANCE AND WORKOVER SETBACK AREA IN LOTS 1 AND 2 IS PROVIDED BY THE EASEMENT AS SHOWN.

11. THE OWNER SHALL DISCLOSE TO PROSPECTIVE PURCHASERS OF LOTS 1 AND 2 WITHIN A RADIUS OF 200 FEET OF THE PLUGGED AND ABANDONED WELLS OF (1) THE LOCATION OF THE PLUGGED AND ABANDONED WELL, (2) THE LOCATION OF THE MAINTENANCE AND WORKOVER SETBACK, AND (3) THE PURPOSE FOR THE WELL MAINTENANCE AND WORKOVER SETBACK.

12. THERE ARE EXISTING UNDERGROUND GAS AND/OR OIL LINES WITHIN UNDOCUMENTED EASEMENTS WITHIN THIS DEVELOPMENT. THIS IS A GENERAL NOTE INFORMING THAT SUCH LINES OR EASEMENTS MAY EXIST ON ANY LOT AND CANNOT BE ACCURATELY LOCATED ON ANY PLATS AND THAT THE SURVEYOR/ENGINEER ARE NOT LIABLE OR RESPONSIBLE FOR ANY BUILDING RESTRICTIONS OR LIMITATIONS CAUSED BY THESE LINES OR EASEMENTS. RESPONSIBILITY IS WITH THE OWNER/DEVELOPER TO LOCATE ANY SUCH LINES SO AS TO PROVIDE AN ACCEPTABLE BUILDING ENVELOPE.

PRELIMINARY FOR REVIEW ONLY

50255 OAK PARK DRIVE

50101 OAK PARK DRIVE

49685 OAK PARK DRIVE

OAK PARK DRIVE, NOT ROAD

???

ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS) MUST BE LOCATED OUTSIDE OF ALL EASEMENTS ON THE LOT AND ARE TO REMAIN FREE OF ALL UNDERGROUND PIPELINES AND ANY IMPROVEMENTS, E.G. IRRIGATED LANDSCAPE, DRAINAGE DITCHES, PAVING, DRIVEWAYS, OUT-BUILDINGS, ETC. AND MEET ALL APPLICABLE SETBACKS. ADDITIONALLY, OWTS ON LOT ___ ARE TO BE LOCATED OUTSIDE OF ANY OIL AND GAS ACCESS AND WORKOVER SETBACKS. DUE TO SITE CONSTRAINTS, THE BUILDING FOOTPRINT AND DESIGN OF OWTS ARE LIMITED, ENGINEERED OWTS UTILIZING HIGHER LEVEL TREATEMENT AND/OR LIMITS ON THE NUMBER OF BEDROOMS MAY BE NECESSARY TO PERMIT AN OWTS WITHIN THE LIMITED AREA AVAILABLE ON THE LOT.

OAK PARK ESTATES SUBDIVISION - PRELIMINARY PLAT

CASE No.: PRC2023-00007

A PARCEL OF LAND SITUATE IN THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE SIXTH PRINCIPAL MERDIAN,
COUNTY OF ADAMS, STATE OF COLORADO.
SHEET 1 OF 2

PURPOSE STATEMENT:

THIS OAK PARK ESTATES SUBDIVISION FILING No. 1 IS INTENDED TO SUBDIVIDE 35.0253 ACRES INTO 3 SINGLE FAMILY LOTS AND EASEMENTS.

OWNERSHIP AND DEDICATION CERTIFICATE:

KNOW ALL MEN BY THESE PRESENTS THAT F & C REALTY COMPANY, A COLORADO CORPORATION, BEING THE SOLE OWNER OF THE FOLLOWING DESCRIBED TRACT OF LAND:

A PARCEL OF PROPERTY LOCATED IN SECTION 26, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 26, FROM WHENCE THE SOUTHEAST CORNER OF SAID SECTION 26 TO BEAR SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 2664.34 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, ALONG THE EAST LINE OF SAID SOUTH 1/2 OF SECTION 26, A DISTANCE OF 846.15 FEET TO A POINT, SAID POINT BEING ON THE SOUTH RIGHT OF WAY LINE OF THE OLD VICTORY HIGHWAY;
THENCE NORTH 67 DEGREES 08 MINUTES 33 SECONDS WEST, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 179.98 FEET;
THENCE NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, A DISTANCE OF 198.50 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, A DISTANCE OF 100.05 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON THE WEST RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE CONTINUING NORTH 74 DEGREES 02 MINUTES 11 SECONDS WEST, ALONG SAID SOUTH RIGHT OF WAY LINE OF THE OLD VICTORY HIGHWAY, A DISTANCE OF 895.00 FEET TO THE NORTHWEST CORNER OF SAID PARCEL;
THENCE DEPARTING FROM SAID SOUTH RIGHT OF WAY, SOUTH 00 DEGREES 03 MINUTES 56 SECONDS EAST, ALONG THE WEST LINE OF SAID PARCEL, A DISTANCE OF 1059.35 FEET;
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 306.94 FEET;
THENCE SOUTH 12 DEGREES 49 MINUTES 44 SECONDS WEST, A DISTANCE OF 729.80 FEET TO THE NORTH RIGHT OF WAY LINE OF SAID OAK PARK ROAD;
THENCE ALONG THE NORTH AND WEST RIGHT OF WAY LINE OF SAID OAK PARK ROAD THE FOLLOWING SIX (6) COURSES:
1) THENCE NORTH 89 DEGREES 32 MINUTES 46 SECONDS EAST, A DISTANCE OF 1027.38 FEET TO AN ARC WITH A CURVE TO THE LEFT;
2) THENCE ALONG AN ARC WITH A CURVE TO THE LEFT A DISTANCE OF 245.23 FEET, HAVING A CENTRAL ANGLE OF 87 DEGREES 00 MINUTES 20 SECONDS, A RADIUS LENGTH OF 161.49 FEET, A CHORD LENGTH OF 222.34 FEET WHICH CHORD BEARS NORTH 46 DEGREES 02 MINUTES 36 SECONDS EAST, TO A POINT OF TANGENCY;
3) NORTH 02 DEGREES 32 MINUTES 26 SECONDS EAST, A DISTANCE OF 964.73 FEET TO A POINT OF CURVATURE;
4) ALONG THE ARC TO THE RIGHT A DISTANCE OF 91.16 FEET, HAVING A CENTRAL ANGLE OF 15 DEGREES 49 MINUTES 41 SECONDS, A RADIUS LENGTH OF 330.00 FEET, A CHORD LENGTH OF 90.87 FEET WHICH CHORD BEARS NORTH 10 DEGREES 27 MINUTES 17 SECONDS EAST;
5) NORTH 18 DEGREES 22 MINUTES 07 SECONDS EAST, A DISTANCE OF 299.97 FEET;
6) NORTH 27 DEGREES 50 MINUTES 02 SECONDS WEST, A DISTANCE OF 27.68 FEET TO THE POINT OF BEGINNING SAID POINT BEING ON THE SAID SOUTH RIGHT OF WAY LINE OF OLD VICTORY HIGHWAY AND THE POINT OF BEGINNING.

HAVE (HAS) BY THESE PRESENTS LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, AND EASEMENTS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF OAK PARK ESTATES SUBDIVISION. THE UNDERSIGNED DOES HEREBY GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENTS TO ADAMS COUNTY AND / OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

IN WITNESS THEREOF F & C REALTY COMPANY, A COLORADO CORPORATION, HAVE CAUSED THESE PRESENTS TO BE EXECUTED THIS ___ DAY OF _____ , 202__ AD.
OWNER: F & C REALTY COMPANY, A COLORADO CORPORATION.
MANAGER: DANIEL FAHEY

BY: _____
DANIEL FAHEY

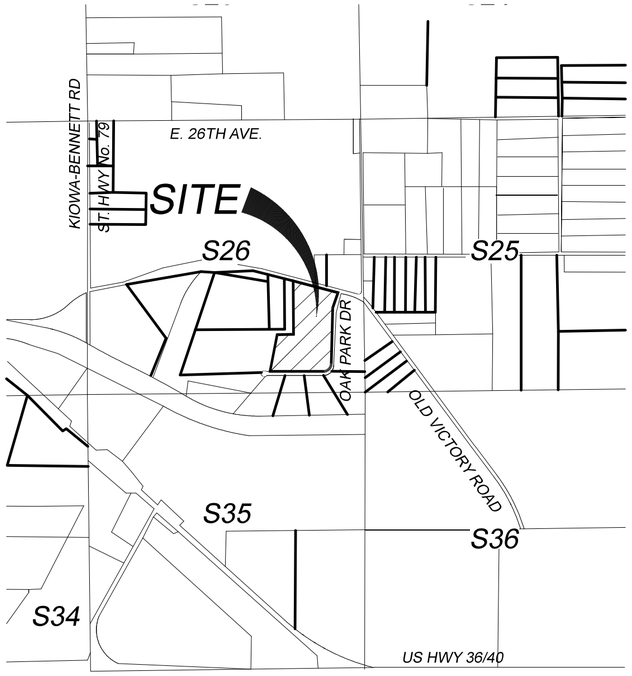
NOTARY PUBLIC:

STATE OF COLORADO)
) SS
COUNTY OF ADAMS)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ___ DAY OF _____ 202__ AD. BY DANIEL FAHEY AS MANAGER OF F & C REALTY COMPANY.

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES: _____
NOTARY ADDRESS: _____



VICINITY MAP
SCALE 1"=2000'

PLANNING COMMISSION APPROVAL:

RECOMMENDED FOR APPROVAL BY THE ADAMS COUNTY PLANNING COMMISSION THIS __ DAY OF _____ A.D. 202__

_____
CHAIR

BOARD OF COUNTY COMMISSIONERS' APPROVAL:

APPROVED BY THE ADAMS COUNTY BOARD OF COUNTY COMMISSIONERS THIS ___ DAY OF _____ A.D. 202__

_____
CHAIR

ADAMS COUNTY ATTORNEY'S OFFICE:

_____
APPROVED AS TO FORM

SURVEYOR'S CERTIFICATE:

I, HAROLD J. PONSERELLA, A DULY LICENSED PROFESSIONAL LAND SURVEYOR, REGISTERED IN THE STATE OF COLORADO DO HEREBY CERTIFY THAT THERE NO ROADS, PIPELINES, IRRIGATION DITCHES, OR OTHER EASEMENTS IN EVIDENCE OR KNOWN BY ME TO EXIST ON OR ACROSS THE HEREIN BEFORE DESCRIBED PROPERTY EXCEPT AS SHOWN ON THIS PLAT.
I FURTHER CERTIFY THAT I HAVE PERFORMED THE SURVEY SHOWN HEREON, OR SUCH SURVEY WAS PREPARED UNDER MY DIRECT RESPONSIBILITY AND SUPERVISION, THAT THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, AND THAT ALL MONUMENTS EXIST AS SHOWN HEREIN.

DATE: 2/24/2023

_____
HAROLD J. PONSERELLA
COLORADO P.L.S. NO. 29766
FOR & ON BEHALF OF:
PO BOX 694 STRASBURG CO, 80136
303.549.7992

PRELIMINARY NOT FOR REVIEW ONLY

EASEMENT STATEMENT

FIFTEEN-FOOT (15') WIDE UTILITY AND DRAINAGE EASEMENTS ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE FRONT LOT LINES OF EACH LOT IN THE SUBDIVISION. TEN-FOOT (10') WIDE DRY UTILITY EASEMENTS ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE REAR LINES OF EACH LOT AND TO THE SIDE LINES OF EACH LOT. THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITIES. UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION.

COTTONWOOD SURVEYING AND ASSOCIATES, INC.
P.O. BOX 694, STRASBURG, COLORADO (303) 549-7992

JOB No. 2023-04 *DATE: 2/24/2023*

REVISED: 6/2/2023
REVISED: 5/15/2023

OAK PARK ESTATES SUBDIVISION - PRELIMINARY PLAT

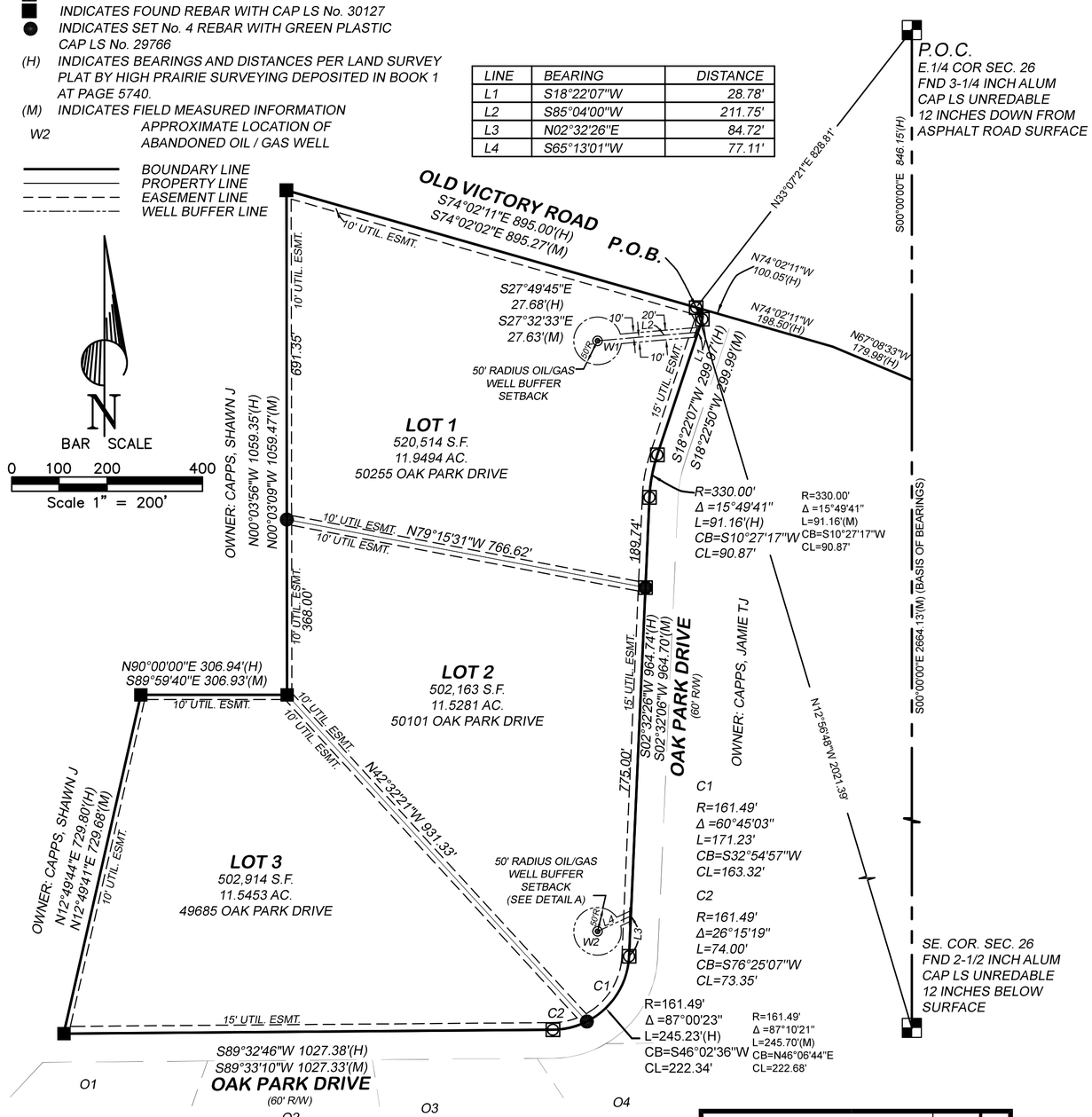
CASE No.: PRC2023-00007

A PARCEL OF LAND SITUATE IN THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE SIXTH PRINCIPAL MERDIAN,
COUNTY OF ADAMS, STATE OF COLORADO.

LEGEND

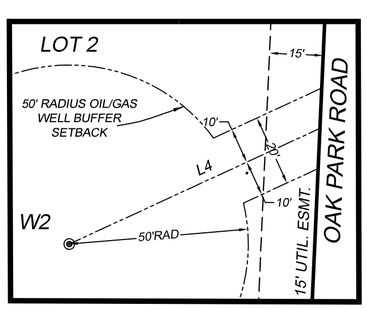
- INDICATES FOUND REBAR WITH CAP LS No. 23519
- INDICATES FOUND REBAR WITH CAP LS No. 30127
- INDICATES SET No. 4 REBAR WITH GREEN PLASTIC CAP LS No. 29766
- (H) INDICATES BEARINGS AND DISTANCES PER LAND SURVEY PLAT BY HIGH PRAIRIE SURVEYING DEPOSITED IN BOOK 1 AT PAGE 5740.
- (M) INDICATES FIELD MEASURED INFORMATION
- W2 APPROXIMATE LOCATION OF ABANDONED OIL / GAS WELL
- BOUNDARY LINE
- PROPERTY LINE
- EASEMENT LINE
- WELL BUFFER LINE

LINE	BEARING	DISTANCE
L1	S18°22'07"W	28.78'
L2	S85°04'00"W	211.75'
L3	N02°32'26"E	84.72'
L4	S65°13'01"W	77.11'



BAR SCALE
0 100 200 400
Scale 1" = 200'

O1 OWNER: DUSAK JOHN M AND DUSAK LINDA M
O2 OWNER: VIRAMONTES-PILAR JUAN F AND VIRAMONTES-PILAR CRYSTAL JOY
O3 OWNER: AGUIRRE MANUEL
O4 OWNER: NELAN CHELSEA AND NELAN CHAD



W2 EASEMENT DETAIL A
SCALE 1"=30'

NOTES:

1. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CS&A, INC. TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, CS&A, INC. RELIED UPON O AND E REPORT NO. OE1052818 BY LAND TITLE GUARANTEE COMPANY, EFFECTIVE DATE: 02/24/2023.

2. NOTICE - ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY COMMITS A CLASS TWO(2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, OF THE COLORADO REVISED STATUTE.

4. THE SUBJECT PROPERTY LIES WITHIN ZONE %UX AS SHOWN ON THE FEMA FLOOD HAZARD MAP No. 08001C0720H EFFECTIVE DATE 3/5/2007.

5. BENCH MARK: NGS DEEP ROD "LADYBIRD" PID No. AA8177. MONUMENT IS SITUATE ALONG THE EAST SIDE OF THE OLD RESTSTOP ATOP LADYBIRD HILL BETWEEN BENNETT, CO AND STRASBURG CO. WEST OF THE EXIT FOR LADYBIRD HILL ELEVATION = 5563 FEET (NAVD 88) GPS OBSERVED.

6. DISTANCES SHOWN HEREON ARE EXPRESSED IN U.S. SURVEY FEET AND DECIMALS THEREOF. A U.S. SURVEY FOOT IS DEFINED AS EXACTLY 1200 / 3937 METERS.

7. THE LOCATION OF ABANDONED AND PLUGGED WELL LYING WITHIN THE SUBJECT PROPERTY IS GRAPHICALLY SHOWN HEREON AND IS APPROXIMATE BASED UPON INFORMATION FROM THE COLORADO OIL/GAS COMMISSION WEBSITE.

8. THE ABOVE LEGAL DESCRIPTION WAS PREPARED BY KEITH WESTFALL, PLS 30127, HIGH PRAIRIE SURVEY CO., PO BOX 384, KIOWA, CO AS SHOWN ON THE DEPOSITED LAND SURVEY PLAT BOOK 1 AT PAGE 5740, ADAMS COUNTY.

7. ENGINEERED INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (ISDS) MAY BE REQUIRED ON CERTAIN LOTS. ENGINEERED ISDS ARE LARGER AND MORE COSTLY THAN CONVENTIONAL SYSTEMS. LOT-SPECIFIC SOILS AND PERCOLATION TESTS SHALL BE USED TO DETERMINE THE TYPE AND SIZE OF ISDS.

8. SUITABLE AREA NEEDS TO BE DESIGNED ON EACH LOT SITE PLAN FOR BOTH PRIMARY AND REPLACEMENT WASTEWATER ABSORPTION AREAS. REPLACEMENT OF THE PRIMARY ABSORPTION AREA MAY BE REQUIRED.

IF FAILURE OF THE PRIMARY AREA OCCURS. THESE AREAS NEED TO MEET ALL ADAMS COUNTY HEALTH SETBACK REQUIREMENTS, AND ARE TO REMAIN FREE OF ANY IMPROVEMENTS, E.G. IRRIGATED LANDSCAPING, PAVING, OUT-BUILDINGS, ETC.

9. THE ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS) MUST BE LOCATED OUTSIDE OF ALL EASEMENTS ON THE LOT AND ARE TO REMAIN FREE OF ALL UNDERGROUND PIPELINES AND ANY IMPROVEMENTS, E.G. IRRIGATED LANDSCAPE, DRAINAGE DITCHES, PAVING, DRIVEWAYS, OUT-BUILDINGS, ETC. AND MEET ALL APPLICABLE SETBACKS. ADDITIONALLY, OWTS ON LOT 1 AND LOT 2 ARE TO BE LOCATED OUTSIDE OF ANY OIL AND GAS ACCESS AND WORKOVER SETBACKS. DUE TO SITE CONSTRAINTS, THE BUILDING FOOTPRINT AND DESIGN OF OWTS ARE LIMITED, ENGINEERED OWTS UTILIZING HIGHER LEVEL TREATMENT AND/OR LIMITS ON THE NUMBER OF BEDROOMS MAY BE NECESSARY TO PERMIT AN OWTS WITHIN THE LIMITED AREA AVAILABLE ON THE LOT.

10. NOTICE TO PROSPECTIVE BUYERS: THERE ARE PLUGGED AND ABANDONED WELLS LOCATED ON THIS PLAT IN LOTS 1 AND 2. PURSUANT TO ADAMS COUNTY DEVELOPMENT STANDARDS SECTION 4-10-02-03-03-05(2) THERE ARE 50FT RADIUS BUFFERS AROUND THE ABANDONED WELLHEADS DEDICATED AS WELL MAINTENANCE AND WORKOVER SETBACKS. NO STRUCTURES, FENCES OR DRIVEWAYS SHALL BE LOCATED WITHIN THIS SETBACK. PUBLIC ACCESS FOR INGRESS AND EGRESS TO THE WELL MAINTENANCE AND WORKOVER SETBACK AREA IN LOTS 1 AND 2 IS PROVIDED BY THE EASEMENT AS SHOWN.

11. THE OWNER SHALL DISCLOSE TO PROSPECTIVE PURCHASERS OF LOTS 1 AND 2 WITHIN A RADIUS OF 200 FEET OF THE PLUGGED AND ABANDONED WELLS OF (1) THE LOCATION OF THE PLUGGED AND ABANDONED WELL, (2) THE LOCATION OF THE MAINTENANCE AND WORKOVER SETBACK, AND (3) THE PURPOSE FOR THE WELL MAINTENANCE AND WORKOVER SETBACK.

12. THERE ARE EXISTING UNDERGROUND GAS AND/OR OIL LINES WITHIN UNDOCUMENTED EASEMENTS WITHIN THIS DEVELOPMENT. THIS IS A GENERAL NOTE INFORMING THAT SUCH LINES OR EASEMENTS MAY EXIST ON ANY LOT AND CANNOT BE ACCURATELY LOCATED ON ANY PLATS AND THAT THE SURVEYOR/ENGINEER ARE NOT LIABLE OR RESPONSIBLE FOR ANY BUILDING RESTRICTIONS OR LIMITATIONS CAUSED BY THESE LINES OR EASEMENTS. RESPONSIBILITY IS WITH THE OWNER/DEVELOPER TO LOCATE ANY SUCH LINES SO AS TO PROVIDE AN ACCEPTABLE BUILDING ENVELOPE.

13. LOTS WITHIN THE OAK PARK ESTATES SUBDIVISION WILL BE SERVED BY ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS). ADAMS COUNTY HEALTH DEPARTMENT REQUIRES THAT SEPTIC TANKS BE PUMPED AND INSPECTED EVERY FOUR YEARS. AT LEAST EVERY FOUR YEARS, EACH PROPERTY OWNER SHALL HAVE THEIR SEPTIC TANK PUMPED AND INSPECTED BY A SYSTEMS CLEANER LICENSED BY ADAMS COUNTY HEALTH DEPARTMENT AND SHALL SUBMIT A RECEIPT INDICATING THAT THE SEPTIC SYSTEM HAS BEEN PUMPED AND INSPECTED TO THE ADAMS COUNTY HEALTH DEPARTMENT EHWATERPROGRAM@ADCOGOV.ORG.

PRELIMINARY
FOR REVIEW ONLY

COTTONWOOD SURVEYING AND ASSOCIATES, INC.
P.O. BOX 694, STRASBURG, COLORADO (303) 549-7992

JOB No. 2023-04 DATE: 2/24/2023

REVISED: 6/2/2023
REVISED: 5/15/2023

May 26, 2023

Adams County Community & Economic Development
4430 S. Adams County Pkwy., 1st Fl., Suite W2000
Brighton, CO 80601-8204

Re: 49900 Old Victory Road – REZONING AND PRELMIINARY PLAT
Response to Comments 1 – 04/28/23

PLN01: No response required:

Noted.

Response required:
PLN04: Applicant must resubmit with proof of water for the three proposed lots. If this location is on well and septic, please provide proof that these developments would have an adequate amount of water secured. Provide a water supply plan. See attached comment letter from Department of Natural Resources.

A Water Supply Information Sheet has been provided noting the supply requirements and proposed aquifer underlying the property that will be used for the limited domestic wells.

PLN05: Please see attached calculation for PLD fees that will be due at the time of scheduling the Final Plat. They will be due before being scheduled for public hearing. An estimate of those fees are attached to this packet.

Noted.

PLN06: Depending on what the case engineer comments indicate concerning drainage, a drainage tract might be required on the plat upon resubmittal.

No drainage facilities are required that would necessitate a tract.

The following comments apply to the plugged and abandoned oil and gas wells:
ENV1. There are two (2) plugged and abandoned oil and gas wells, one operated by Vessels Oil and Gas Co. and the second by Sunset Plugging and Equipment Inc., on the subject parcel. Prior to submittal of a final plat or site-specific development plan, each plugged and abandoned well shall be located and surveyed. The plugged and abandoned well shall be permanently marked by a brass plaque set in concrete similar to a permanent benchmark to monument its existence and location. Such plaque shall contain all information required on a dry hole marker by the Colorado Oil and Gas Conservation Commission and the County.

Per David Dittmer, each well is located per the COGCC coordinates on the plat and the information shown is adequate.

ENV2.On every final plat or site-specific development plan which contains a plugged and abandoned well, there shall be dedicated a well maintenance and workover setback depicted on the plat, the

dimensions of which shall be not less than fifty feet in width and 100 feet in length. No permanent structures shall be located within this setback. The plugged and abandoned well shall be located in the center of the setback. There shall be public access for ingress and egress to the setback of a width of not less than twenty feet. Refer to Section 4-11-02-03-03-05.2.c of the Adams County Development Review Standards.

The setback is provided on the plat (50' radius alternate).

ENV3. The Final Plat shall include the following notice to prospective buyers of the location of the oil and gas well and associated easements: "The owner shall disclose to prospective purchasers of lots within a radius of 200 feet of the plugged and abandoned well of (1) the location of the plugged and abandoned well, (2) the location of the maintenance and workover setback, and (3) the purpose for the well maintenance and workover setback."

The note has been added.

ENV4. All known oil and gas well flow lines and/or easements shall be graphically depicted on the Final Plat.

No flow lines are known to exist.

The following comments apply to septic systems:
ENV5. Adams County Health Department (ACHD) regulates On-Site Wastewater Treatment Systems (OWTS), also known as septic systems, through the issuance of permits to install, repair, expand, use, or operate a system. This includes a plan review, site evaluation before installation, final inspection after installation, and certification before the system is put into use. The regulation, including setback requirements, can be found at https://adamscountyhealthdepartment.org/septic-system-and-use-permits.

Each OWTS will be permitted appropriately for each lot at the appropriate time of home construction.

ENV6. On-Site Wastewater Treatment System (OWTS) – New or Expanded
Proper wastewater management promotes effective and responsible water use, protects potable water from contaminants, and provides appropriate collection, treatment, and disposal of waste, which protects public health and the environment. Based on the applicant's description, a permit for the installation and final approval of the OWTS is required . More information is available at https://adamscountyhealthdepartment.org/septic-system-and-use-permits.
Septic system applications can be mailed or dropped off at the S. Platte Crossing office or emailed to EHWaterProgram@adcogov.org

Each OWTS will be permitted appropriately for each lot at the appropriate time of home construction.

ENV7. OWTS - Proposed Subdivision
ACHD has no objection to the proposed subdivision being served by Onsite Wastewater Treatment Systems (OWTS), provided the systems are permitted, installed, and operated in compliance with ACHD's current OWTS regulation. Specific mechanisms for accomplishing this may consist of plat note(s), newsletters, reminder letters, and distribution of ACHD's "On-Site Wastewater Treatment System Homeowner Guidelines," which can be found at https://adamscountyhealthdepartment.org/septic-system-and-use-permits.

An example plat note would read:
"Lots within the [insert name of subdivision] will be served by Onsite Wastewater Treatment Systems (OWTS). Adams County Health Department requires that septic tanks be pumped and inspected every four years. At least every four years, each property owner shall have their septic tank pumped and inspected by a systems cleaner licensed by Adams County Health Department and shall submit a receipt indicating that the septic system has been pumped and inspected to the Adams County Health Department EHWaterProgram@adcogov.org."

Added.

ENG1: According to the Federal Emergency Management Agency's January 20, 2016 Flood Insurance Rate Map (FIRM Panel #08001C0720H, the project site is NOT located within a regulated 100-yr floodplain. A Floodplain Use Permit is NOT required.

Noted.

ENG2: Property is NOT in Adams County MS4 Stormwater Permit area. A Stormwater Quality (SWQ) Permit is NOT required, but a State Permit COR400000 WILL be required if one (1) acre or more is disturbed. Applicant is responsible for installation and maintenance of Erosion and Sediment Control BMPs. Builder/developer is responsible for adhering to all the regulations of Adams County Ordinance 11 regarding illicit discharge.

Less than one acre is proposed to be disturbed. BMPs will be installed and maintained accordingly.

ENG3: If the applicant proposes to import greater than 10 CY of soil to this site, additional permitting is required. Per Section 4-04-02-02, of the Adams County Development Standards and Regulations, a Temporary or Special Use Permit is required to ensure that only clean, inert soil is imported into any site within un-incorporated Adams County. A Conditional Use Permit will be required if the importation exceeds 500,000 CY.

No import of soil is expected.

ENG4: The drainage analysis submitted for this project must be signed and stamped by a professional engineer registered with the state of Colorado.

The report has been stamped and signed.

ENG5: The traffic impact analysis submitted with this application has been reviewed and approved by Adams County Development Engineering.

Noted.

ENG6: Access Permits will be required at time of Building Permits for the new residential structures.

Access permits will be obtained.

ENG7: The results of the drainage analysis and traffic impact analysis indicate that there will be no adverse impacts from the development of this subdivision. Therefore, no public improvements are required to be designed and built to support this project. Consequently, a SIA is not required for this project.

Noted.

ENG8: Additional Drainage Report comments that must be address are as follows; The General Concept segment of the drainage report found on page 2, indicates that a detention pond will be built on the "north side of the site adjacent to Potomac Street". Other segments of the drainage report states that no drainage infrastructure will be built for the site. The drainage report should be clear about the drainage infrastructure that will be built to support this subdivision. If a detention pond is not going to be installed as part of this development, the proposed subdivision must meet the exemption requirements as defined in Chapter 9, Section 9-01-11 of the Adams County Development Standards, and include a description of the water quality features that will be installed on the site. The drainage report shall indicate which exemption criteria will be met by this development and described the required low impact development techniques that will be incorporated in the design to reduce a minimum of 50% of the proposed run-off volume.

Language from a previous report was errantly copied into the text. There will be no drainage infrastructure proposed on this site. The property meets several criteria for detention exemption. Grass buffer water quality treatment will be proposed on each lot, the calculations for which are included in the report.

ROW1: Revise the title by removing the Filing No. A filing would be a portion of a larger subdivision and this most likely won't be subdivided any further. Need to also state Subdivision - Preliminary Plat. Revise this in the dedication and ownership certificate.

Removed.

ROW2: Add case number to top right-hand corner of both sheets. No colors in the vicinity map.

Added and revised.

ROW3: Revise Purpose Statement by removing all dedication statements. This is coming below.

Revised.

ROW4: Title under the purpose statement will be OWNERSHIP AND DEDICATION CERTIFICATE

Revised.

ROW5: Below this add the provided redline comment provided on the plat, and remove the bolded "Dedication"

Revised.

ROW6: Revise the dedication statement as provided

Revised.

ROW7: Platting Blocks, Lots and Easements. Do not include the oil and gas buffer in this statement as it is not being dedicated and is for private party access.

Revised.

ROW8: See comments as to ownership execution and affirmation revisions.
Revised.

ROW9: Need a copy of the operating agreement or a copy of a recorded Statement of Authority for Dan allowing him to execute on behalf of F & C Realty.

Statement of Authority included.

ROW10: Access provision is not required due to ingress and egress options.

Removed.

ROW11: Need to add the following approval blocks:
Planning Commission
Board of County Commissioners
County Attorney's Office
see comments on plat

Added.

ROW12: Order of appearance for executions/approvals:
Owner
Surveyor
Planning Commission
Board of County Commissioners
County Attorney

Revised.

ROW13: Remove the Clerk and Recorder's block as preliminary plats are not recorded.

Revised.

ROW14: Rename all road names provided to Oak Park Drive not Road.

Revised.

ROW15: Revise the aliquot typo in the title: SOUTHEAST

Revised.

ROW16: Addressing provided is for reference at this time. It will need to be on the Final Plat for sure so the Assessor can address the lots from the plat. Until the Assessor assigns a Parcel Number (PIN) the address will not be recognized. Do not include these on any deed transferring interest as we do not address vacant lands.

Noted.

ROW17: Is the 30' strip of the drainage easement as described in 4284/548 within the boundary of Oak Park Drive? This easement should be cited on the plat.

Does not affect subject property.

ROW18: As the title shows the property encumbered by a Deed of Trust dated 10/7/2022, does the lender need to be a party to the plat? Verify.

Will verify at time of final plat.

Storm Water Detention
The applicant should be aware that any proposed detention pond for this project, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes and Designated Basin Rule 5.11, otherwise the structure may be subject to administration by this office. The applicant should review DWR's Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal, located at https://maperture.digitaldataservices.com/gvh/?viewer=cswdif, to meet the notification requirements.

No detention is proposed.

State Engineer's Office Opinion
This office has no comments regarding the rezoning of the property. Based on the above and pursuant to Section 30-28-136(1)(h)(I), C.R.S., the State Engineer's Office has not received enough information to render an opinion regarding the potential for causing material injury to decreed water rights, or the adequacy of the proposed water supply. Prior to further review of the subdivision water supply plan the following information is required:

1. Provide a water supply plan that clearly defines the water demand for the subdivision and the legal water sources that will be used to meet those demands. Details of necessary information to be included in the subdivision water supply plan can be found on Attachment A of the March 16, 2005 Updated Memorandum Regarding Subdivisions, available online https://dnrweblink.state.co.us/dwr/ElectronicFile.aspx?docid=3565889&dbid=0

Water Supply Information Sheet with estimated demands included.

2. If wells in the Denver aquifer are proposed as the water supply for the subdivision a Determination of Water Right and Replacement Plan for that aquifer must be obtained that is sufficient to meet the proposed subdivision's water demands and is consistent with Elbert County's 300 year water supply requirement.

The water well source will not be Denver Basin in this area (upper Arapahoe).

If you should have any questions, or need any additional information, please don't hesitate to call me at 303-317-300 or email me at Aaron@aperiopc.com .

Sincerely,

Aaron Thompson
Aperio Property Consultants, LLC

Cc: Dan Fahey

Attachment C

FORM NO. GWS-76 02/2005

WATER SUPPLY INFORMATION SUMMARY

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St., Room 818, Denver, CO 80203
Phone – Info (303) 866-3587 Main (303) 866-3581 Fax (303) 866-3589 http://www.water.state.co.us

Section 30-28-133,(d), C.R.S. requires that the applicant submit to the County, "Adequate evidence that a water supply that is sufficient in terms of quantity, quality, and dependability will be available to ensure an adequate supply of water."

1. NAME OF DEVELOPMENT AS PROPOSED: OAK PARK ESTATES SUBDIVISION FILING NO. 1

2. LAND USE ACTION: SUBDIVISION

3. NAME OF EXISTING PARCEL AS RECORDED: N/A
SUBDIVISION: , FILING (UNIT) , BLOCK , LOT

4. TOTAL ACREAGE: 35.02

5. NUMBER OF LOTS PROPOSED 3 PLAT MAP ENCLOSED? ☒ YES or ☐ NO

6. PARCEL HISTORY – Please attach copies of deeds, plats, or other evidence or documentation.

A. Was parcel recorded with county prior to June 1, 1972? ☐ YES or ☒ NO

B. Has the parcel ever been part of a division of land action since June 1, 1972? ☐ YES or ☒ NO
If yes, describe the previous action:

7. LOCATION OF PARCEL – Include a map delineating the project area and tie to a section corner.

____1/4 of the SE 1/4, Section 26, Township 3 ☐ N or ☒ S, Range 63 ☐ E or ☒ W
Principal Meridian: ☒ Sixth ☐ New Mexico ☐ Ute ☐ Costilla

Optional GPS Location: GPS Unit must use the following settings: Format must be **UTM**, Units must be **meters**, Datum must be **NAD83**, Unit must be set to **true N**, ☐ Zone 12 or ☐ Zone 13
Easting: _____
Northing:

8. PLAT – Location of all wells on property must be plotted and permit numbers provided.
Surveyor's Plat: ☒ YES or ☐ NO If not, scaled hand drawn sketch: ☐ YES or ☐ NO

9. ESTIMATED WATER REQUIREMENTS

USE	WATER REQUIREMENTS Gallons per Day	Acre-Feet per Year
HOUSEHOLD USE # 3 of units	795	0.89
COMMERCIAL USE # N/A of S. F		
IRRIGATION # 1.10 of acres	1,414	1.58
STOCK WATERING # 15 of head	162	0.18
OTHER:		
TOTAL	2,371	2.65

10. WATER SUPPLY SOURCE

☐ EXISTING WELL ☐ DEVELOPED SPRING
WELL PERMIT NUMBERS

☒ NEW WELLS -
PROPOSED AQUIFERS – (CHECK ONE)
☐ ALLUVIAL ☒ UPPER ARAPAHOE
☐ UPPER DAWSON ☐ LOWER ARAPAHOE
☐ LOWER DAWSON ☐ LARAMIE FOX HILLS
☐ DENVER ☐ DAKOTA
☐ OTHER:

☐ MUNICPAL
☐ ASSOCIATION
☐ COMPANY
☐ DISTRICT
NAME
LETTER OF COMMITMENT FOR SERVICE ☐ YES or ☐ NO

WATER COURT DECREE CASE NUMBERS:

11. WAS AN ENGINEER'S WATER SUPPLY REPORTDEVELOPED? ☐ YES or ☒ NO IF YES, PLEASE FORWARD WITH THIS FORM.
(This may be required before our review is completed.)

12. TYPE OF SEWAGE DISPOSAL SYSTEM

☒ SEPTIC TANK/LEACH FIELD
☐ LAGOON
☐ ENGINEERED SYSTEM (Attach a copy of engineering design.)
☐ CENTRAL SYSTEM
DISTRICT NAME:
☐ VAULT
LOCATION SEWAGE HAULED TO:
☐ OTHER: