

**WATER RESOURCES REPORT**

**For**

**Trails at Aspen Ridge  
PUDSP Amendment**

Prepared for:

**El Paso County Planning & Community Development**  
2880 International Circle, Suite 110  
Colorado Springs, CO 80910

On Behalf of:

**COLA, LLC**  
555 Middle Creek Pkwy, Suite 500  
Colorado Springs, CO 80920

Prepared by:



**Matrix**

2435 Research Parkway, Suite 300  
Colorado Springs, CO 80920  
(719) 575-0100  
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February 2021

Project No. 20.886.028

### **Introduction and Purpose**

The Trails at Aspen Ridge development is a mixed-use development located on approximately 175 acres. The Trails at Aspen Ridge PUDSP Amendment is a portion (118 acres) of this site comprised of 680 single-family residential lots. The property is located south and east of the intersection of Bradley Road and Powers Boulevard, specifically in Section 9 of Township 15 South, Range 65 West. The site was rezoned from RS-5000 to PUD with the previously approved Trails at Aspen Ridge PUDSP (PUDSP-191) approved by El Paso County in December of 2019 and is a part of the larger Waterview Sketch Plan.

Springs at Waterview East currently has a Metropolitan District in place (Waterview II Metropolitan District) to provide and coordinate services including water, wastewater, drainage, and open space maintenance among other services. The Trails at Aspen Ridge PUDSP Amendment will continue to be part of the Waterview II Metropolitan District. Refer to Appendix A for the legal description.

The purpose of this report is to present water system improvements as recommended to serve The Trails at Aspen Ridge PUDSP Amendment area. It is also intended to serve as a guideline for the ensuing design of the recommended improvements.

### **Water Demand**

The Widefield Water and Sanitation District has been providing potable water service for a long period of time in accordance with the Colorado Department of Public Health and Environment (CDPHE). The District will continue to provide water, water treatment, water storage, and water distribution for the development in exchange for fees and recurring periodic charges.

The Widefield Water and Sanitation District requests an average district-wide water demand of 0.35ac-ft/year per Single Family Equivalent (SFE). These demands have been developed from actual usage records and recognized by the State Engineers Office. These water demands include irrigation; no separate meters are provided for irrigation. As such, these water demands have been used to project the water usage for the Trails at Aspen Ridge PUDSP Amendment.

The average annual water demand for the Trails at Aspen Ridge PUDSP Amendment is estimated to be 238 acre-feet of water per year. Widefield Water and Sanitation District will be the service provider for water and wastewater through an extension of the existing distribution and collection system. Wastewater is estimated to be 205 gpd per single family residence. Based on this, the projected wastewater collection would be 139,400 gpd.

### **Land Use**

The Trails at Aspen Ridge PUDSP Amendment consists of approximately 118 acres of single-family residential and open spaces uses. An assumption of 2.9 persons/unit results in a population of 1,972 for the development. By applying Widefield Water and Sanitation District unit water demand factors to land use forecasts, the water demands have been developed for the ultimate build-out as shown in the following table:

Will any of the landscape and turn mentioned in LOI be irrigated?

PER LETTER FROM WIDEFIELD WATER AND SANITATION DISTRICT, PUDSP WATER DEMAND IS CALCULATED BASED ON SFE'S ONLY. LANDSCAPE/IRRIGATION DEMANDS ARE INCLUDED AS EACH FILING IS SUBMITTED INDIVIDUALLY.

Land Use	AC-Ft/Year	Water Demand		
		Trails at Aspen	Average Daily Demand (gpm)	Demand (gpm)
Potable				
SF Residential	238		148	370
Irrigation	0		0	0
Park/Open Space	0		0	0
<b>Total</b>	<b>238</b>			

The Trails at Aspen Ridge PUDSP Amendment will require 238 acre-feet per year based on the 680 single-family lots proposed in the development. This translates into 148 gallons per minute for the Average Daily Demand (ADD). Generally accepted peaking factors of 2.5 and 4.0 have been applied to the ADD in order to find the Max Daily Demand (MDD) and Peak Hour Demand (PHD), respectively. The MDD is used to determine storage needs and the PHD is used for modeling system delivery pressures and to size distribution piping. The water demand of 0.35 ac-ft/year provided by the Widefield Water and Sanitation District includes irrigation demands, therefore no additional flows have been calculated.

Fire flow demand is also typically included in the design of the water system. A fire flow demand of 1500 gpm with a minimum pressure of 20 psi will be required from the water system.

### Water Supply

The Widefield Water and Sanitation District has numerous groundwater and surface water rights; these water supply sources are summarized in the Widefield Water and Sanitation District Water Quality Report. In addition, the District has an Inclusion and Service Agreement with Rankin Holdings, LP, the Eugenia M. & Basil E. Blue Trust, and Judy R. Timm for water rights. Refer to Appendix B for these documents. Based on the water demand calculated and the available, the District is capable of servicing the Trails at Aspen Ridge PUDSP Amendment development.

### Water Quality

The Widefield Water and Sanitation District has been providing potable water in accordance with El Paso County Health Department and CDPHE standards and reporting requirements for several decades. Each district provides treatment and disinfection of their raw water sources prior to distribution. CDPHE standards require that the water supply be disinfected and that the supply receives minimum chlorine contact time of 30 minutes before first use. Water quality is more summarized in the Widefield report, located in Appendix B.

### Storage

Storage reservoirs are ground mounted and elevated steel tanks designed in accordance with CDPHE and AWWA Standards. Storage is sized to provide a minimum of 30% of MDD and includes a reserve to supply a fire flow of 3,500 gpm for three hours.

### Distribution

The water distribution system provides water at a maximum static pressure of 120 psi during periods of low use, a minimum residual pressure of 40 psi during PHD, and a minimum residual pressure of 20 psi during MDD with a superimposed fire flow of 3,500 gpm. Because the storage tank is ground mounted within the development, the system must be pressurized by pumps. A pumphouse will be required in order to serve a majority portion of the Trails at Aspen Ridge PUDSP Amendment development. To maximize the system's efficiency, the pressure zone will use a looped piping system with a minimum pipe diameter of six inches and fire hydrants throughout. All pipes and appurtenances will be designed to meet or exceed AWWA Standards.

### Water System Improvements

The system required to serve the Trails at Aspen Ridge PUDSP Amendment will connect to existing infrastructure which was installed for the Trails at Aspen Ridge Filing No. 1 development. In addition to the internal looping system for the filing, a 12" PVC waterline was required to extend from the existing 12" PVC waterline located west of the intersection of Fontaine Boulevard and Powers Boulevard. This waterline extends east then north until reaching the southwestern corner of the Trails at Aspen Ridge Filing No. 1 development.

In order to service the entirety of the Trails at Aspen Ridge PUDSP Amendment, an additional 12" PVC offsite waterline will need to be installed. This will connect to the existing infrastructure installed for Trails at Aspen Ridge Filing No. 1 at the southeast corner of the property. From here, it will extend to the south and west until reaching the existing 12" watermain located at the intersection of Fontaine Boulevard and Rolling View Drive. This waterline improvement will also require an upgrade to a 12" PVC for the existing 6" water main in Lonewood Drive. These improvements will need to be complete prior to the 270<sup>th</sup> lot in the overall Trails at Aspen Ridge development.

As previously mentioned, a pumphouse will be required on site in order to provide the needed pressures to adequately service the entirety of the Trails at Aspen Ridge PUDSP Amendment. This proposed pumphouse will be required to service any lots located in proposed filings 3-6.

Refer to the Water System Improvement Plan in Appendix A for a depiction of existing and proposed infrastructure.

### Opinion of Probable Costs for Capital Improvements

Since the engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor's method of determining prices, or over the competitive bidding or market conditions, the opinion of probable construction costs provided herein are made on the basis of the engineer's experience and qualifications and represents the best judgement as an experienced and qualified professional familiar with the construction industry. The engineer cannot, and does not, guarantee that proposals, bids, or actual construction costs will not vary from the opinion of probable costs. The estimated costs for capital water system improvements required to serve the Trails at Aspen Ridge PUDSP Amendment development are outlined below. These costs do not include other costs or gains that may be incurred in the acquisition of land, financing, investing, local distribution, the salvage value of equipment, or other necessary internal infrastructure, unless specifically noted.

Opinion of Probable Costs for Capital Improvements				
Item	Units	Quantity	Unit Price	Total Cost
Water Pumphouse	LS	1	\$650,000	\$650,000
Water Main Extension	LF	7,200	\$135	\$972,000
Additional Storage	gal	1,000,000	\$0.95	\$950,000
Total Estimated Cost:				\$2,572,000

#### Rates and Charges

The Widefield Water and Sanitation District will impose one-time charges to recoup the cost of constructing water system improvements as well as regular periodic billings to recoup continuing costs for operations, maintenance, and equipment replacement. This system of rates and charts is published by each district annually.

## **Appendix A**

### **Legal Description Maps**

LEGAL DESCRIPTION: REMAINDER TRAILS AT ASPEN RIDGE

A TRACT OF LAND LOCATED IN A PORTION OF THE WEST 1/2 OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 9; THENCE N00°19'32"W ON THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 9, A DISTANCE OF 1,600.02 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION;

- 1) THENCE N90°00'00"W A DISTANCE OF 511.94 FEET TO A POINT OF CURVE TO THE RIGHT;
- 2) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 690.00 FEET, A DELTA ANGLE OF 14°33'21", AN ARC LENGTH OF 175.29 FEET, WHOSE LONG CHORD BEARS N82°43'20"W A DISTANCE OF 174.82 FEET;
- 3) THENCE S14°33'21"W A DISTANCE OF 123.85 FEET;
- 4) THENCE S12°47'44"W A DISTANCE OF 80.40 FEET TO A POINT OF CURVE TO THE RIGHT;
- 5) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 20.00 FEET, A DELTA ANGLE OF 92°52'44", AN ARC LENGTH OF 32.42 FEET, WHOSE LONG CHORD BEARS S59°14'18"W A DISTANCE OF 28.99 FEET TO A POINT OF COMPOUND CURVE TO THE RIGHT;
- 6) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 915.00 FEET, A DELTA ANGLE OF 00°20'29", AN ARC LENGTH OF 5.45 FEET, WHOSE LONG CHORD BEARS N74°09'06"W A DISTANCE OF 5.45 FEET;
- 7) THENCE S15°57'58"W A DISTANCE OF 50.00 FEET TO A NON-TANGENT CURVE TO THE RIGHT;
- 8) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 965.00 FEET, A DELTA ANGLE OF 06°15'56", AN ARC LENGTH OF 105.53 FEET, WHOSE LONG CHORD BEARS N70°51'04"W A DISTANCE OF 105.47 FEET;
- 9) THENCE S00°00'00"W A DISTANCE OF 214.74 FEET;
- 10) THENCE S88°42'27"W A DISTANCE OF 110.10 FEET;
- 11) THENCE N01°25'17"W A DISTANCE OF 4.78 FEET;
- 12) THENCE S88°27'00"W A DISTANCE OF 160.00 FEET;
- 13) THENCE S00°08'37"W A DISTANCE OF 44.57 FEET;
- 14) THENCE S02°52'08"W A DISTANCE OF 44.56 FEET;
- 15) THENCE S05°32'45"W A DISTANCE OF 44.55 FEET;
- 16) THENCE S08°16'16"W A DISTANCE OF 44.55 FEET;
- 17) THENCE S10°58'49"W A DISTANCE OF 44.56 FEET;
- 18) THENCE S13°41'29"W A DISTANCE OF 44.57 FEET;
- 19) THENCE S17°04'35"W A DISTANCE OF 44.59 FEET;
- 20) THENCE S19°47'14"W A DISTANCE OF 44.56 FEET;
- 21) THENCE S22°29'47"W A DISTANCE OF 44.55 FEET;
- 22) THENCE S25°12'20"W A DISTANCE OF 44.55 FEET;
- 23) THENCE S27°14'20"W A DISTANCE OF 22.28 FEET;
- 24) THENCE S29°42'04"W A DISTANCE OF 49.02 FEET;
- 25) THENCE S35°26'44"W A DISTANCE OF 49.01 FEET;
- 26) THENCE S36°30'56"W A DISTANCE OF 116.64 FEET;
- 27) THENCE S32°43'04"W A DISTANCE OF 66.86 FEET;
- 28) THENCE S14°55'16"W A DISTANCE OF 66.77 FEET;
- 29) THENCE S00°26'25"E A DISTANCE OF 193.86 FEET;
- 30) THENCE S90°00'00"W A DISTANCE OF 159.90 FEET;
- 31) THENCE S00°00'00"E A DISTANCE OF 13.82 FEET;
- 32) THENCE S89°33'35"W A DISTANCE OF 110.00 FEET;
- 33) THENCE N00°26'25"W A DISTANCE OF 12.59 FEET;

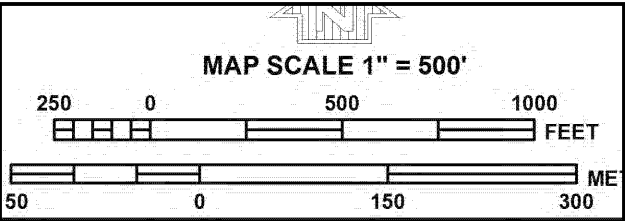
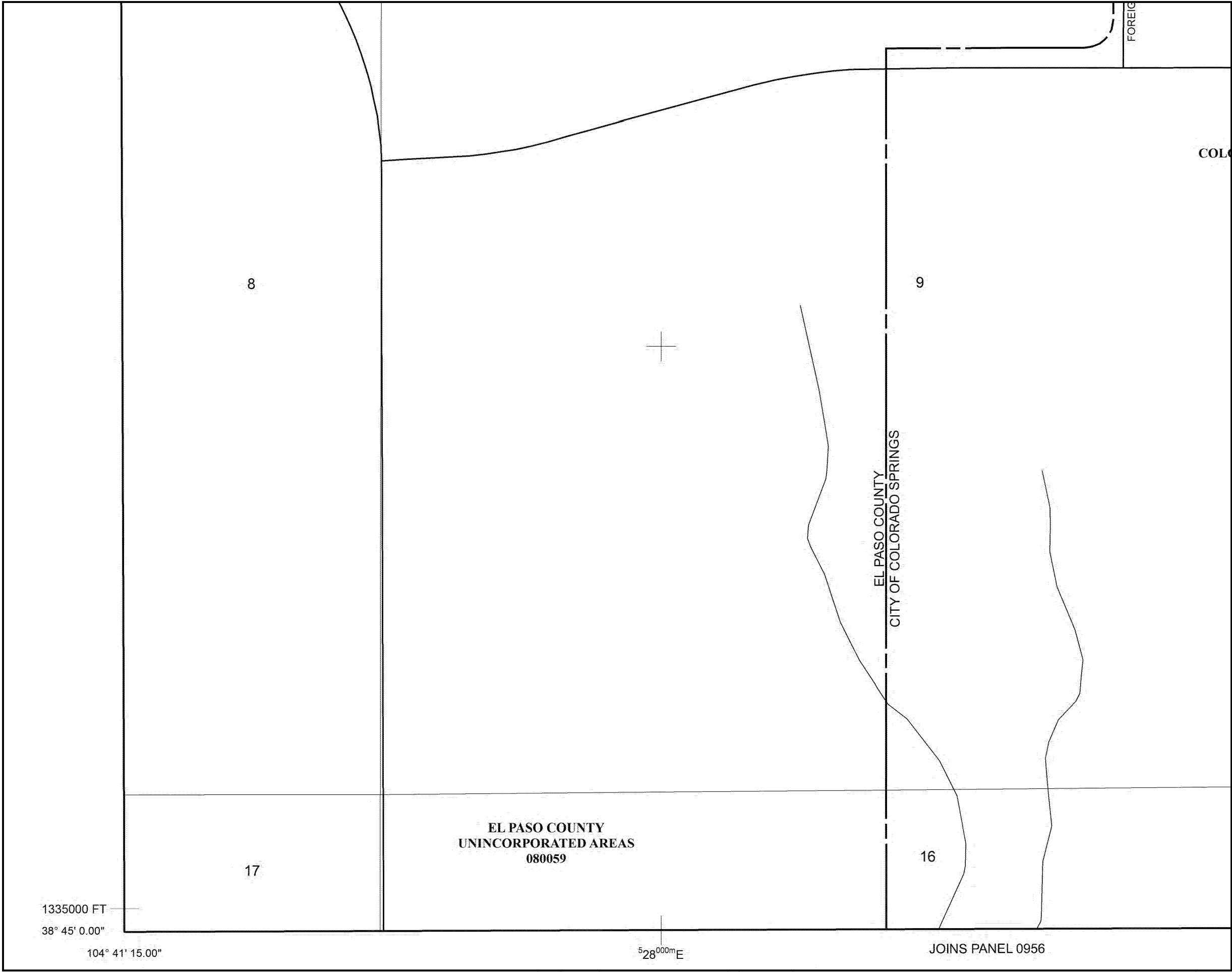
- 34) THENCE S89°33'35"W A DISTANCE OF 160.00 FEET;
- 35) THENCE S00°26'25"E A DISTANCE OF 55.00 FEET TO A POINT OF CURVE TO THE RIGHT;
- 36) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 20.00 FEET, A DELTA ANGLE OF 90°00'00", AN ARC LENGTH OF 31.42 FEET, WHOSE LONG CHORD BEARS S44°33'35"W A DISTANCE OF 28.28 FEET;
- 37) THENCE S89°33'35"W A DISTANCE OF 358.00 FEET TO A POINT OF CURVE TO THE RIGHT;
- 38) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 27.00 FEET, A DELTA ANGLE OF 89°57'15", AN ARC LENGTH OF 42.39 FEET, WHOSE LONG CHORD BEARS N45°27'48"W A DISTANCE OF 38.17 FEET;
- 39) THENCE N00°29'10"W A DISTANCE OF 20.98 FEET;
- 40) THENCE S89°30'50"W A DISTANCE OF 224.98 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF HIGHWAY 21, AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;
- 41) THENCE N00°29'10"W ON SAID RIGHT-OF-WAY LINE, A DISTANCE OF 1,691.70 FEET;
- 42) THENCE S90°00'00"E A DISTANCE OF 515.00 FEET;
- 43) THENCE N00°00'00"E A DISTANCE OF 148.75 FEET TO A NON-TANGENT CURVE TO THE LEFT;
- 44) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 260.00 FEET, A DELTA ANGLE OF 13°32'37", AN ARC LENGTH OF 61.46 FEET, WHOSE LONG CHORD BEARS N28°47'53"E A DISTANCE OF 61.32 FEET;
- 45) THENCE N22°01'36"E A DISTANCE OF 538.12 FEET TO A POINT OF CURVE TO THE RIGHT;
- 46) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 410.00 FEET, A DELTA ANGLE OF 52°19'12", AN ARC LENGTH OF 374.39 FEET, WHOSE LONG CHORD BEARS N48°11'12"E A DISTANCE OF 361.52 FEET;
- 47) THENCE N74°20'48"E A DISTANCE OF 525.87 FEET;
- 48) THENCE N15°39'12"W A DISTANCE OF 470.00 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;


THE FOLLOWING THREE (3) COURSES FOLLOW SAID SOUTHERLY RIGHT-OF-WAY LINE:

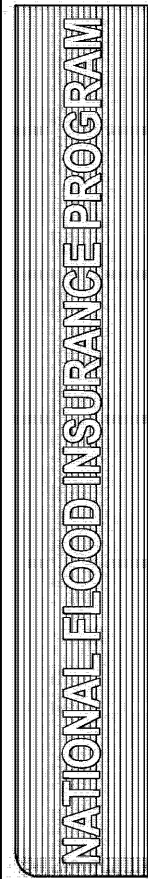
- 49) THENCE N74°20'48"E A DISTANCE OF 385.15 FEET TO A POINT OF CURVE TO THE RIGHT;
- 50) THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 2,759.79 FEET, A DELTA ANGLE OF 15°09'41", AN ARC LENGTH OF 730.29 FEET, WHOSE LONG CHORD BEARS N81°55'39"E A DISTANCE OF 728.16 FEET;
- 51) THENCE N89°30'29"E A DISTANCE OF 3.77 FEET TO A POINT ON THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 9;
- 52) THENCE S00°19'32"E A DISTANCE OF 2,038.35 FEET TO THE POINT OF BEGINNING.

THE ABOVE TRACT OF LAND CONTAINS 5,139,369 SQUARE FEET OR 117.984 ACRES, MORE OR LESS.






**PANEL 0768G**

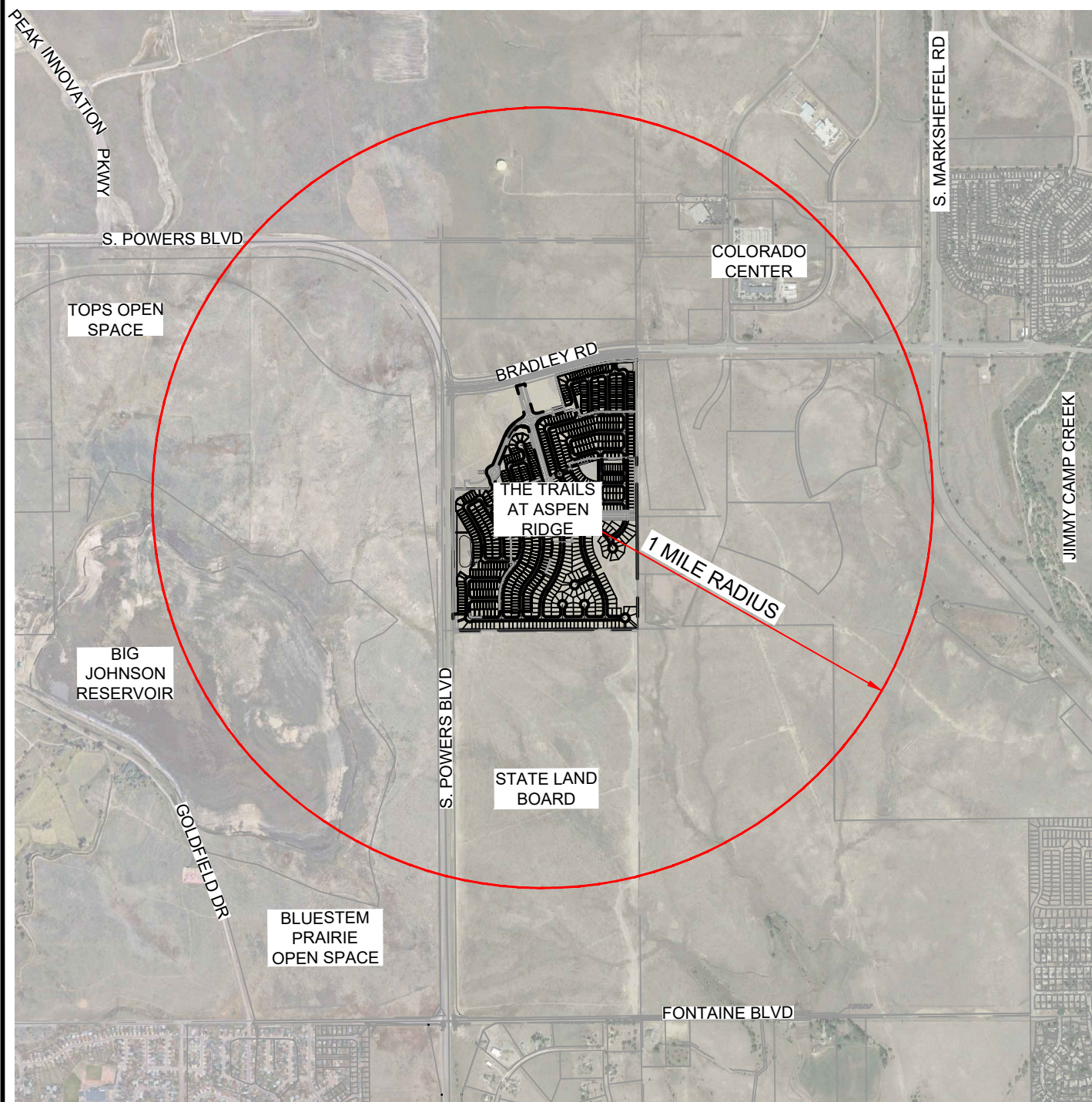
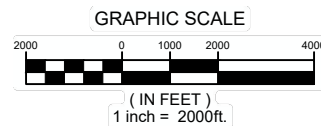
**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**EL PASO COUNTY,**  
**COLORADO**  
**AND INCORPORATED AREAS**  
  
**PANEL 768 OF 1300**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)  
**CONTAINS**  

COMMUNITY	NUMBER	PANEL	SUFFIX
COLORADO SPRINGS, CITY OF	080060	0768	G
EL PASO COUNTY	080059	0768	G

  
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**  
**08041C0768G**  
  
**MAP REVISED**  
**DECEMBER 7, 2018**  
**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



PREPARED BY:



# Matrix

# TRAILS AT ASPEN RIDGE ONE MILE RADIUS MAP

DESIGNED BY:

NMS

*SCALE*

DRAWN BY:

*LCB*

HORIZ. 1" = 2000'

CHECKED BY:

*NMS*

VERT. N/A

DATE ISSUED: FEB 2021

FEB 2021

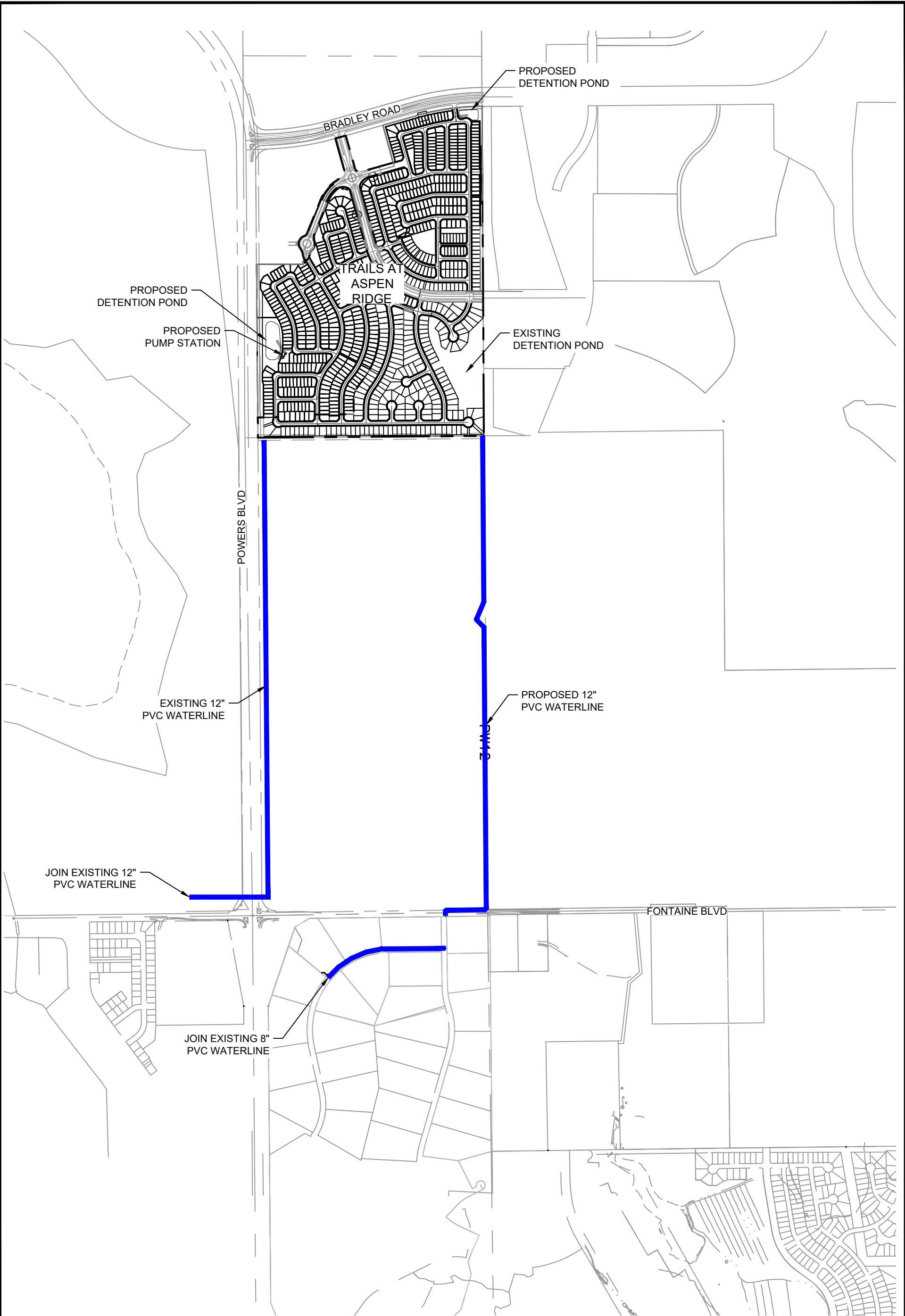
SHEET

1 OF 1

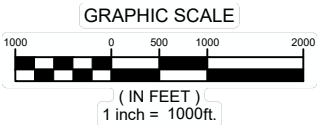
DRAWING No.

WR01

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PREPARED BY:



# TRAILS AT ASPEN RIDGE WATER SYSTEMS IMPROVEMENT PLAN

DESIGNED BY:  
DRAWN BY:  
CHECKED BY:

NMS  
LCB  
NMS

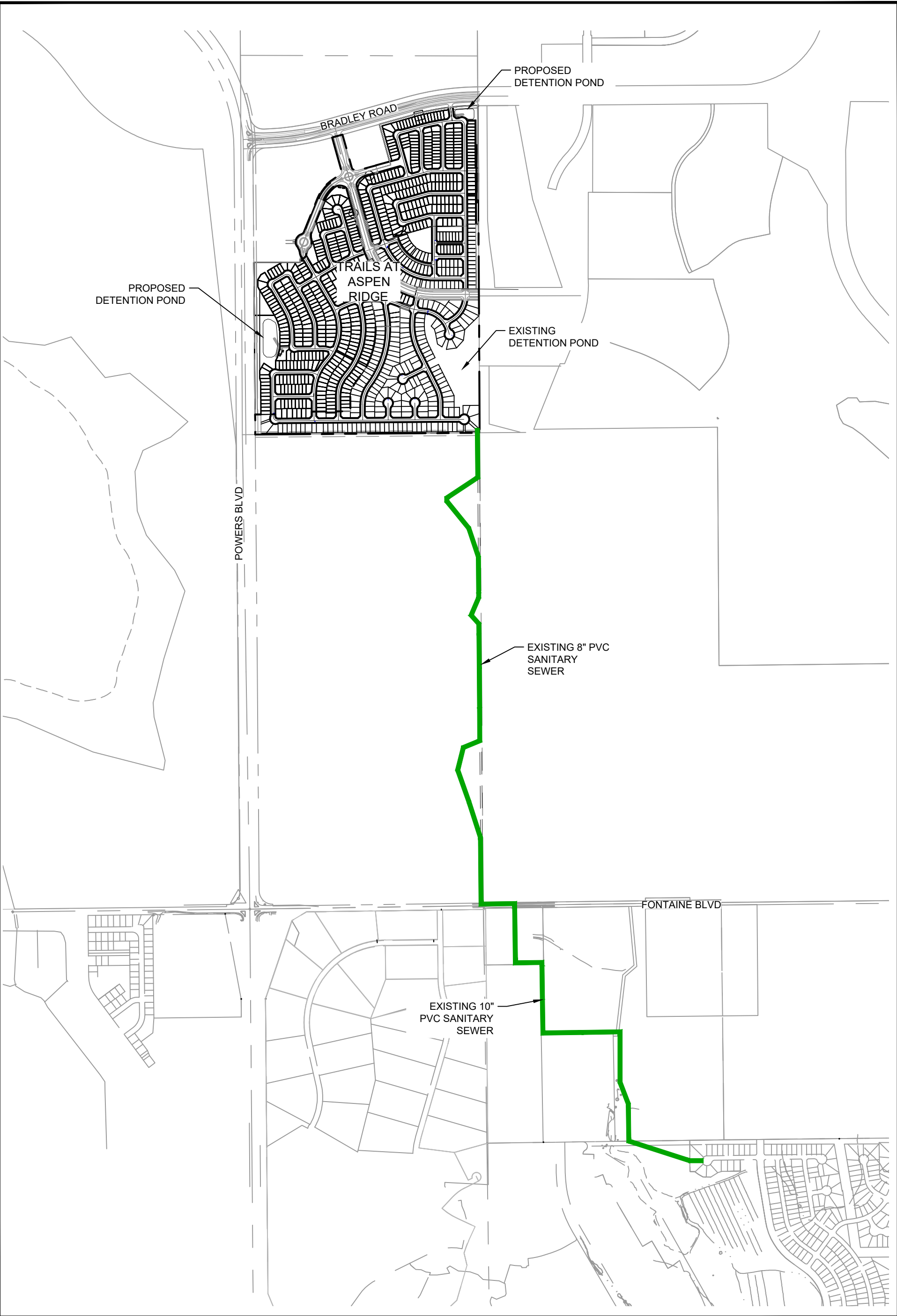
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DATE ISSUED: FEB 2021  
SHEET 1 OF 1

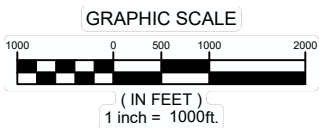
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WR02



FILE NAME: S:\20.886.028 Trails PLUDSP Major Amend\100 Dwg\105 Exhibits\Water Resources Exhibits\WATER RESOURCES EXHIBITS.dwg PLOT DATE: January 29, 2021 10:30:41 AM CTB FILE: Matrix.ctb



PREPARED BY:



TRAILS AT ASPEN RIDGE  
SANITARY SYSTEMS IMPROVEMENT PLAN

DESIGNED BY:	NMS	SCALE	DATE ISSUED:	FEB 2021	DRAWING No.
DRAWN BY:	LCB	HORIZ. 1" = 1000'	SHEET	1 OF 1	WR02
CHECKED BY:	NMS	VERT. N/A			

## **Appendix B**

### Supporting Reports & Documents



February 5, 2021

Tim Buschar  
COLA, LLC  
555 Middle Creek Pkwy, Suite 500  
Colorado Springs, Colorado 80921

Cole Emmons  
County Attorney's Office  
27 East Vermijo Avenue  
Colorado Springs, Colorado 80903

**Re: Commitment Letter for Preliminary Plan of Trails at Aspen Ridge, Revised from Commitment Letter for Trails at Aspen Ridge dated November 19, 2019, Revised from Commitment Letter for Waterview East, Dated October 19, 2017, and Revised June 13, 2019.**

Dear Dan and Cole:

The Widefield Water and Sanitation District commits to providing water and sewer service to the above-mentioned subdivision per this letter. This letter is a revision of the original Commitment Letter dated October 19, 2017 and was previously named Waterview East. This revision reflects the change in density to the subdivision previously committed to on November 19, 2019. This revised commitment letter is a recommitment for the Trails at Aspen Ridge, less Filing 1.

**The water commitment is for Trails at Aspen Ridge is for 680 Residential Lots with an annual water requirement of 238.00 acre-feet. The District has existing legal and physical water supply to meet the expected demand. The estimated wastewater load is 139,400 gallons per day.**

Sincerely,

A handwritten signature in blue ink that reads "Robert K. Bannister".

Robert Bannister, PE, District Engineer


C: Brandon Bernard, Water Department Manager  
Travis Jones, Wastewater Department Manager

**WIDEFIELD WATER AND SANITATION DISTRICT**

**8945 Fontaine Blvd.**  
**Colorado Springs, CO 80925**

**District Water and Wastewater Report**  
**Annual Update**

**Date of Update** January 1, 2020

**Update Author** Robert K. Bannister, P.E.  
District Engineer   
Widefield Water and Sanitation District

**Attachments**

- Widefield Water Facilities Map
- Widefield 2019 Water Quality Consumer Confidence Report
- End of 2019 Year Commitment Balance Sheet

**WATER REPORT UPDATE**

**1. Water General**

The Widefield Water and Sanitation District's (the District) Water System was originally created in the 1960's and has been expanded for nearly 60 years. The system serves approximately 9350 single family equivalent households.

All water supply is based on surface water rights, renewable groundwater, and a mix of various sources. The system does not rely on any non-renewable water sources.

The current Legal Water Supply Holding of the District are estimated at 7,900 annual acre-feet.

The current Developed Physical Supply is 5271 annual acre-feet. The three-year running average actual use is 2615 acre-feet which is roughly 48% of the existing available physical supply.

A revised table of active commitments, and completed subdivisions is attached. This table is valid as of January 1, 2019.

**2. Recent Water Volumes Used**

The recent three-year water use and tap data are as follows:

Year	Annual Use (Acre-Feet)	Single Family Equivalent (Taps in SFE)
2017	2612	8521
2018	2702	8927
2019	2531	9350

### 3. **Water Supply**

**Changes in Water Supply:** In 2019, the District placed the Fontaine Water Treatment Facility online. This plant uses ion exchange to remove PFOS and PFOA from the District's water supply. This plant added an additional 500 gpm of treated water to the system.

The District added an additional raw water pipeline to include additional wells in the Widefield Aquifer to the Southmoor Water Treatment Facility. This increased the production in the facility to maximum capacity of 2,200 gpm and allowed for five wells to be treated by the facility, up from three wells previously.

The District hired consultants to design a new Booster 2 Pump Station to provide additional pumping for the West to East Project. This pump station is expected to be constructed in 2021.

The District hired consultants to design a new Zone 6 Storage Tank known as the Rolling Hills Tank. Design is in its infancy and size has not been determined by the end of 2019. Construction is expected in 2020 and 2021.

#### **Listing of Water Supplies:**

*Renewable Groundwater* – All sources previously documented at County Attorney's Office.

- Widefield Aquifer – The District is allocated the use of 2,650 annual acre-feet through the Widefield Aquifer Stipulation.
- Jimmy Camp Aquifer – The District is allocated 650 annual acre-feet through the Widefield Aquifer Stipulation.
- Vennetucci Lease – The District is perpetually leased an allocation of 596 annual acre-feet through a Public Trust Partnership which provides for funding of the Vennetucci Trust farm through water revenues on a perpetual basis. The Vennetucci Lease has become contaminated and the District has suspended the lease until treatment has been established. This is expected in 2021.

*Surface Water Supplies* – Sources documented at County Attorney's Office.

- The District owns 1,500 annual acre-feet of the Fountain Valley Authority Project which safely yields 1,425 annual acre-feet of fully consumable water.



- The District has 812 shares of Fountain Mutual Irrigation Water and is the owner/operator of the Crews Gulch Augmentation Station as this supply is used in augmentation or leased out on an annual basis, as it has never been fully needed.
- The District owns roughly 1,931 annual acre-feet of return flows from CSU's portion of the FVA project. This is used in augmentation.
- The District owns a mix of senior surface water supplies and out-of-priority water supplies that total 1,274 annual acre-feet. This is the fully consumable water right for future growth that is currently leased to a third party.

#### **Potential or Intended Future Supplies**

Although the District does have active cases that are intended to extend supplies, the District does not wish to disclose the volumes or nature of those supplies that are in active acquisition states.

#### **Legal Documentation Accompanying New Water Acquisitions and Augmentations Plans**

None.

#### **4. The District's Water Quality**

The water quality provided by the District meets or exceeds all required State and Federal Drinking Water Standards. For detailed water quality report, please see the Widefield Consumer Confidence Report which is updated annually and accessible at <https://www.wwsdonline.com/media/WWSD.2018CCR.2019.pdf>. A copy is attached.

#### **5. The District's Physical Water System**

The District's system is too large to show all lines and facilities, the attached Facilities Map shows the major facilities. The District's System consists of:

Service area of roughly 16.2 square miles.

Over 665,000 lineal feet of water mains varying in size from 4 to 30-inches in diameter.

Six water tanks totaling approximately 9.8 million gallons of storage.

Six Pressure Zones.

Four booster stations.

24-inch transmission main from Fountain Valley Authority.

Participation in Pueblo Reservoir and Frying Pan Arkansas Water project.

Two Ion Exchange Water Treatment Plant, one includes an Air Stripper Water Treatment Plant.

Eleven active wells (not including inactive wells or Venetucci wells).

#### **6. Major Capital Improvement Projects Accomplished During Recent Years and Anticipated Improvements for the Upcoming Years**

Most Recent Three Years – Upgrades to water facilities include the following:

- Continuation of the West to East Transmission line. This project includes certain transmission line upgrades which will continue over the next 10 years.
- Construction of an Ion Exchange plant to remove PFC's from the District's drinking water.
- Construction of the Veterans Affairs Pikes Peak National Cemetery Water Delivery System.
- Development of Zone 6 in the northeast section of the District.
- Well Manifold to bring additional wells to the Ion Exchange water treatment facility.

Expected Upcoming Three-Year Improvements – These are all system-wide capital projects.

- Additional construction of the West to East Transmission line.
- Upgrade of the Booster #2 Pump Station.
- Refurbishment of the existing air stripper facility to ion exchange technology.
- Construction of new Zone 6 tank (Developer funded).
- Construction of new Zone 7a Booster Station (Developer funded).

## **WASTEWATER REPORT UPDATE**

### **1. Wastewater General**

The Widefield Water and Sanitation District's (the District) Wastewater System was originally created in the 1960's and has been expanded for nearly 60 years. The system serves over 8737 single family equivalent households.

The current hydraulic capacity of the Widefield Wastewater Treatment Plant is 2.14 MGD. *Note – WWTO are rated on the basis of Average Daily Maximum Monthly Flow, which differs from Max Day Flow.* There has been no increase to plant capacity since 2001, however, the plant was rerated in 2016 to 2.14 MGD due to lack of air processing capabilities.

The treatment plant discharges to the Lower Fountain Creek.

Current 3 year running average loading is 1.67 MGD which is roughly 78% of Plant Capacity.

Current projected use plus active commitments are projected to be roughly 1.72 MG which represents approximately 69% of Current Hydraulic Plant Capacity. *Note – wastewater treatment plants are rated on the basis of Average Daily Maximum Monthly Flow, which differs from Max Day Flow.*

### **2. Actual Wastewater Volumes Treated**

The three most recent years of wastewater plant loads and tap data are as follows:

Year	Average Daily Flow (MGD)	Single Family Equivalent (Taps in SFE)
2017	1.75	8326
2018	1.71	8737
2019	1.56	9253

### **3. Existing Widefield Wastewater System**

The District's Wastewater System consist of:

Service area of roughly 14.3 square miles.

Over 530,000 lineal feet of pipeline varying in size from 4 to 24-inches in diameter.

Over 23,00 lineal feet of pressure pipeline varying in size from 4 to 12-inches in diameter.

Five lift stations.

Wastewater Treatment Plant – 2.14 MGD capacity.

The existing wastewater plant remains in compliance with CDPHE Discharge Standards.

### **4. Major Capital Improvements Accomplished during the Past Year and Anticipated Improvements for the Upcoming Years**

Most Recent Three Years – Upgrades to wastewater facilities include the following:

- Some replacement of older lines in older areas of the District.
- Installed 3<sup>rd</sup> pump at the Jimmy Camp Lift Station.
- Continued construction of East Jimmy Camp Interceptor along the East Jimmy Camp Creek (Developer funded).
- Upgrade of treatment system to meet Regulation 85 requirements. This upgrade includes Bio-nutrient Removal. This is not expected to increase capacity.
- Upgrade of solids handling to perform dewatering of sludge.
- 

Expected Upcoming Three-Year Improvements – These are all system wide capital projects:

- Continued replacement of older lines or relining of existing pipe.
- Upgrade air handling equipment.
- Upgrade step screen.



# WIDEFIELD WSD 2019 Drinking Water Quality Report

## For Calendar Year 2018

*Public Water System ID: CO0121900*

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact BRANDON BERNARD at 719-464-2051 with any questions or for public participation opportunities that may affect water quality.

### General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [www.colorado.gov/cdphe/ccr](http://www.colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121900, WIDEFIELD WSD, or by contacting BRANDON BERNARD at 719-464-2051. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It *does not* mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.



## Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
WELL W4 (Groundwater-Well) WELL W2Groundwater-Well) WELL W3 (Groundwater-Well) WELL C1 (Groundwater-Well) WELL W7 (Groundwater-Well) WELL E2 (Groundwater-Well) WELL C3 (Groundwater-Well) WELL C36 (Groundwater-Well) JHW2 WELL REDRILL (Groundwater-Well) JHW5R WELL (Groundwater-Well) JHW4R WELL (Groundwater-Well) WELL C2 REDRILL (Groundwater-Well) PURCHASED FROM CO0121275 (Groundwater-Consecutive Connection) WELL W1 (Groundwater-Well) PURCHASED FROM CO0121775 (Surface Water-Consecutive Connection) PURCHASED FROM CO0121300 (Surface Water-Consecutive Connection)	Environment, Industry, Soil runoff, and erosion of natural deposits

## Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).

- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

### **Detected Contaminants**

WIDEFIELD WSD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b> <b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <u><b>OR</b></u> If sample size is less than 40 no more than 1 sample is below 0.2 ppm <b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	March, 2018	<u>Lowest period</u> percentage of samples meeting TT requirement: 95%	1	20	No	4.0 ppm

Assessments for Microorganism Contaminants Sampled in the Distribution System		
Contaminant Name	TT Requirement	TT Violation
Total Coliform	We were required to conduct an assessment of our system due to one of the following: More than 5.0% positive samples per period (If sample size is greater than or equal to 40) <u><b>OR</b></u> More than 1 positive sample per period (If sample size is less than 40) <u><b>OR</b></u> Repeat samples not collected after positive sample.	No
Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.  <i>During the past year we were required to conduct ZERO Level 1 assessment(s)!</i>		

Lead and Copper Sampled in the Distribution System								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	02/22/2018 to 03/14/2018	0.38	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/31/2018 to 12/12/2018	2.8	60	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	07/31/2018 to 12/12/2018	0.33	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	02/22/2018 to 03/14/2018	2.6	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2018	12.3	1.41 to 30	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	28.62	4.1 to 59.71	16	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources



### Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2017	1.68	0.71 to 2.65	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2017	1.5	1.5 to 1.5	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2017	6.83	6.1 to 8.2	3	ppb	30	0	No	Erosion of natural deposits
Gross Beta Particle Activity	2017	2	2 to 2	1	pCi/L*	50	0	No	Decay of natural and man-made deposits

\*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.

### Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2018	0.01	0.01 to 0.01	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2018	0.89	0.89 to 0.89	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2018	4.39	0.85 to 6.9	7	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

### Volatile Organic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Tetrachloroethylene	2018	0.13	0 to 0.63	5	ppb	5	0	No	Discharge from factories and dry cleaners

#### Secondary Contaminants\*\*

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2018	180	180 to 180	2	ppm	N/A
Total Dissolved Solids	2014	1105	1100 to 1110	2	ppm	500

#### Unregulated Contaminants\*\*\*

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Bromochloroacetic Acid	2018	2.41	0.909-4.53	8	Parts per Billion
Chlorodibromoacetic Acid	2018	0.90	0.379-1.58	8	Parts per Billion
Dibromoacetic Acid	2018	1.92	1.14-2.91	8	Parts per Billion
Bromodichloroacetic Acid	2018	1.43	0-3.7	8	Parts per Billion
Dichloroacetic Acid	2018	4.24	0-10.8	8	Parts per Billion
Monobromoacetic Acid	2018	0.25	0-0.83	8	Parts per Billion
Trichloroacetic Acid	2018	2.88	0-7.14	8	Parts per Billion
Manganese	2018	4.8	0.412-9.35	2	Part per Billion
Perfluorobutanesulfonic acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorheptanoic acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion

### Unregulated Contaminants\*\*\*

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Perfluorohexanesulfonic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorooctanesulfonic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorooctanoic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion

\*\*\*More information about the contaminants that were included in UCMR monitoring can be found at: <https://drinktapp.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR>. Learn more about the EPA UCMR at: <http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/contact.cfm>.

### Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions

CITY OF FOUNTAIN - 2018 MONITORING RESULTS

The table below displays the levels of contaminants detected from water samples taken throughout the 2018 calendar year from the City of Fountain. This table also reflects Fountain Valley (FVA) Authority's (PWSID #CO0121300) test results for 2018 as the City of Fountain purchases 99% of it's drinking water from FVA. If you have any questions regarding the FVA's results, please contact them directly. The City of Fountain joined with Security Water District and Widefield Water & Sanitation District on a water exchange joint project; therefore, Security and Widefield's CCR information has also been included. If you would like a complete copy of their CCR, you are welcome to contact them directly. If you would like to view all test results for the City of Fountain's Water Department, they are available at 301 E. Iowa Avenue, Fountain, CO during normal business hours. NOTE: Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section, that means the City of Fountain did not detect any contaminants in the last round of monitoring.

INORGANIC CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	LEVEL DETECTED	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
ARSENIC	ppb	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 - 1	1	1	2016	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste.
BARIUM	ppm	2	2	.04 - .05	0.04	2	2017	0.01 - 0.01	0.01	2	2018	0.06	N/A	N/A	2018	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
CHROMIUM	ppb	100	100	N/A	N/A	N/A	N/A	0 - 1	0.25	4	2017	N/A	N/A	N/A	N/A	Discharge from steel and pulp mills; erosion of natural deposits.
FLOURIDE	ppm	4	4	1.7 - 1.8	1.75	2	2017	0.89 - 0.89	0.89	1	2018	0.53	N/A	N/A	2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
NICKEL	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.53	N/A	N/A	2018	Erosion of natural deposits; discharge from industries; discharge from refineries and steel mills.
NITRATE	ppm	10	10	1.6 - 3	2.3	2	2018	0.85 - 6.9	4.39	7	2018	0.44	N/A	N/A	2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
SELENIUM	ppb	50	50	4 - 7.4	5.7	2	2017	N/A	N/A	N/A	N/A	6	N/A	N/A	2018	Discharge from pertroleum and metal refineries; erosion of natural deposits; discharge from mines.
TETRACHLOROETHYLENE	ppb	0	5	N/A	N/A	N/A	N/A	0 - 0.63	0.13	5	2018	N/A	N/A	N/A	N/A	Discharge from factories and dry cleaners.
TRICHLOROETHYLENE	ppb	0	5	N/A	N/A	N/A	N/A	0 - 1	0.17	6	2017	N/A	N/A	N/A	N/A	Discharge from metal degreasing sites and other factories.
SECONDARY CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
SODIUM	ppm	N/A	N/A	120 - 140	130	2	2017	180 - 180	180	2	2018	19.6	N/A	N/A	2018	Erosion of natural deposits
TOTAL DISSOLVED SOLIDS	ppm	N/A	N/A	N/A	N/A	N/A	N/A	1100 - 1110	1105	2	2014	N/A	N/A	N/A	N/A	Secondary Standard: 500
DIBROMOACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	1.14 - 2.91	1.92	8	2018	N/A	N/A	N/A	N/A	N/A
DICHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 10.8	4.24	8	2018	N/A	N/A	N/A	N/A	N/A
TIRCHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 7.14	2.88	8	2018	N/A	N/A	N/A	N/A	N/A
ORGANIC CONTAMINANTS	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
HEXACHLOROCYCLO-PENTADIENE	ppb	50	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0 - .06	0.03	2	2016	N/A
DISINFECTANTS SAMPLED IN THE DISTRIBUTION SYSTEM																
DISINFECTANT	UNIT	Lowest period percentage of samples meeting TT requirements: 100%	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES	
CHLORINE	ppm		Number of Samples Below Level: <u>0</u>			30	2018	Number of Samples Below Level: <u>1</u>		20	2018	TT= No More Than 4 Hours With Sample Below 0.2 MG/L		2018	<b>Disinfectants Sampled in the Distribution System</b> - TT Requirements: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR if sample size is less than 40 no more than 1 sample is below 0.2 ppm. <b>Typical Sources:</b> Water additive used to control microbes.	

LEAD & COPPER (Sampled in the distribution System)	UNIT	90th PERCENTILE AL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES		
			90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES	90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES	90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES			
COPPER	ppm	1.3	0.38	0	60	11/8/18 - 11/16/18	0.33 - 0.38	0	60	2/22/18 - 12/12/18	N/A	N/A	N/A	N/A	Corrosion of household plumbing systems; erosion of natural deposits.		
LEAD	ppb	15	6.3	2	60	11/8/18 - 11/16/18	2.6 - 2.8	1	60	2/22/18 - 12/12/18	N/A	N/A	N/A	N/A	Corrosion of household plumbing systems; erosion of natural deposits.		
(DISINFECTION BYPRODUCTS PRECURSOR) REMOVAL RATIO OF RAW AND FINISHED WATER - FOUNTAIN VALLEY AUTHORITY																	
TOTAL ORGANIC CARBON	UNIT	MCLG	MCL	SAMPLE DATES			AVERAGE		RANGE		MCL VIOLATION				TYPICAL SOURCES		
	RATIO	N/A	TT MIN. RATIO: 1.00	MONTHLY - Running Annual Average (2017)			1.08		1 - 1.28		NO				Naturally present in the environment		
FOUNTAIN VALLEY AUTHORITY (FVA) MICROBIOLOGICAL CONTAMINANTS																	
CONTAMINANT	UNIT		AVERAGE		SAMPLE SIZE		DATE	LEVEL DETECTED				VIOLATION		TYPICAL SOURCES			
TURBIDITY	NTU		---		---		Sept. 2018					NO		Soil Runoff			
TURBIDITY	NTU		---		---		Dec. 2018					NO		Soil Runoff			
FOUNTAIN VALLEY AUTHORITY (FVA) CRYPTOSPORIDIUM AND RAW SOURCE WATER E. COLI																	
CONTAMINANT	UNIT		MCL	RANGE DETECTED	YEAR	DESCRIPTION										TYPICAL SOURCES	
CRYPTOSPORIDIUM	oocysts		0	0	2018	Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capeable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdpminal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.										Naturally present in the environment	
E. COLI	MPN		N/A	0 - 10	2018											Naturally present in the environment	
DISINFECTION BY- PRODUCTS	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES	
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED		
TOTAL HALOCETIC ACIDS (HAA5)	ppb	N/A	60	9.2 - 27	19.2	16	2018	1.41 - 30	12.3	16	2018	N/A	N/A	N/A	N/A	By-product of drinking water disinfection.	
TOTAL TRIHALOMETHANES (TTHM)	ppb	N/A	80	25.5 - 53.8	40.68	16	2018	4.1 - 59.71	28.62	16	2018	N/A	N/A	N/A	N/A	By-product of drinking water disinfection.	
RADIONUCLIDES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES	
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED		
GROSS ALPHA	pCi/L	0	15	4.2 - 4.2	4.2	1	2017	0.71 - 2.65	1.68	2	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits	
GROSS BETA PARTICLE ACTIVITY	pCi/L	0	50	N/A	N/A	N/A	N/A	2 - 2	2	1	2017	N/A	N/A	N/A	N/A	Decay of natural and man-made deposits	
RADIUM, COMBINED (226, 228)	pCi/L	0	5	1.34 - 1.34	1.34	1	2017	1.5 - 1.5	1.5	1	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits	
URANIUM - COMBINED	ppb	0	30	7.2 - 7.2	7.2	1	2017	6.1 - 8.2	6.83	3	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits	

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA’s National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

UNREGULATED CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	LEVEL DETECTED	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	
BROMOCHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.909 - 4.53	2.41	8	2018	N/A	N/A	N/A	N/A	N/A
CHLORODIBROMOACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.379 - 1.58	0.90	8	2018	N/A	N/A	N/A	N/A	N/A
CHROMIUM	ppb	N/A	N/A	0 - .9	0.19	49	2014-2015	.2 - 1.1	0.19	49	2014-2015	N/A	N/A	N/A	N/A	N/A
BROMODICHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 3.7	1.43	8	2018	N/A	N/A	N/A	N/A	N/A
COBALT	ppb	N/A	N/A	0 - 1.35	0.03	48	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MANGANESE	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.412 - 9.35	4.8	2	2018	N/A	N/A	N/A	N/A	N/A
MONOBROMOACETIC ACID	PPB	N/A	N/A	N/A	N/A	N/A	N/A	0 - 0.83	0.25	8	2018	N/A	N/A	N/A	N/A	N/A
MOLYBDENUM	ppb	N/A	N/A	0 - 7.07	3.5	49	2014-2015	1.3 - 6.	3.5	49	2014-2015	N/A	N/A	N/A	N/A	N/A
CHROMIUM	ppb	N/A	N/A	0 - .9	0.19	49	2014-2015	.2 - 1.1	0.19	49	2014-2015	N/A	N/A	N/A	N/A	N/A
STRONTIUM	ppb	N/A	N/A	460 - 640	447	49	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VANADIUM	ppb	N/A	N/A	0 - .05	0.45	49	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CHROMIUM, HEXAVALENT (DISSOLVED)	ppb	N/A	N/A	0 - .05	0.14	53	2014-2015	.032 - .62	0.14	53	2014-2015	N/A	N/A	N/A	N/A	N/A
CHLORATE	ppb	N/A	N/A	N/A	45	49	2014-2015	25 - 390	45	49	2014-2015	N/A	N/A	N/A	N/A	N/A
1,4-DIOXANE	ppb	N/A	N/A	0 - .19	0.059	17	2014-2015	.07 - .13	0.059	17	2014-2015	N/A	N/A	N/A	N/A	N/A
PERFLUOROBUTANESULFONIC ACID (PFBS)	ppb	N/A	N/A	N/A	N/A	N/A	N/A	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROHEPTANOIC ACID (PFHpA)	ppb	N/A	N/A	0 - .01	0.0096	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROHEXANESULFONIC ACID (PFHxS)	ppb	N/A	N/A	0 - .06	0.098	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROOCTANESULFONIC ACID (PFOS)	ppb	N/A	N/A	0 - .04	0.033	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROOCTANOIC ACID (PFOA)	ppb	N/A	N/A	.02 - .04	0.017	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A

\*\*\*More information about the contaminants that were included in UCMR3 monitoring can be found at: <http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx>. Learn more about the EPA UCMR at: <http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/contact.cfm>

**VIOLATIONS, SIGNIFICANT DEFICIENCIES, BACKFLOW/CROSS-CONNECTION, AND FORMAL ENFORCEMENT ACTION** - THE STATE OF COLORADO REQUIRES ALL WATER DISTRIBUTORS TO LIST ANY DETECTED CONTAMINANTS THAT APPEAR; REASON OF DETECTED CONTAMINANTS; AND CORRECTIVE MEASURES TAKEN TO PREVENT FROM REOCCURRING. THE FOLLOWING WATER PROVIDERS WERE GIVEN NOTIFICATION OF THE STATE'S FINDINGS REGARDING ANY AND ALL VIOLATIONS, IF ANY, WITH THE RESULTS LISTED BELOW:

NAME	CATEGORY	TIME PERIOD	HEALTH EFFECTS	CORRECTIVE MEASURES
Cross Connection Rule	Failure to meet Cross Connection/Backflow Requirements - Health-based	11/14/18 - Open	May pose risk to public health	State drinking water regulations require that all public drinking water systems, such as FVA, test a percentage of the backflow prevention devices located within their systems annually. In March of 2018, FVA identified 6 backflow prevention devices within its water system that were not tested as required in 2017. This means that FVA violated State drinking water regulations by failing to ensure that these 6 backflow prevention devices were tested in 2017. All 6 of the backflow prevention devices were tested on March 8, 2018 and passed the tests. Therefore, FVA is not aware of any uncontrolled cross connections to its water supply system. FVA is providing the state with an updated Backflow Prevention Cross-Connection Program Plan that includes measures to avoid this type of violation in the future.



**Fountain Valley Authority (PWSID # CO0121300)**  
**2019 Water Quality Report Information for the 2018 Calendar Year for:**  
City of Fountain (PWSID # CO0121275)  
Colorado Springs Utilities (PWSID # CO0121150)  
Security Water District (PWSID # CO0121775)  
Stratmoor Hills Water District (PWSID # CO0121800)  
Widefield Water District (PWSID # CO0121900)

**WATER SOURCE INFORMATION**

Fountain Valley Authority treats surface water received from the Fryingpan-Arkansas Project. The Fryingpan-Arkansas Project is a system of pipes and tunnels that collects water in the Hunter-Fryingpan Wilderness Area near Aspen. Waters collected from the system are diverted to the Arkansas River, near Buena Vista, and then flows approximately 150 miles downstream to Pueblo Reservoir. From Pueblo Reservoir, the water travels through a pipeline to the water treatment plant.

**COLORADO SOURCE WATER ASSESSMENT AND PROTECTION**

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [www.colorado.gov/cdphe/ccr](http://www.colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121300, FOUNTAIN VALLEY AUTHORITY or by contacting Colorado Springs Utilities Laboratory Services at 719-668-4560. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed below.

**Potential sources of contamination to our source water areas may come from:**

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites



- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Other Facilities
- Commercial/Industrial Transportation
- High-and-Low-Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural Land (row crops, small grain, pasture/hay, orchards/vineyards, fallow and other)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

Fountain Valley Authority is dedicated to protecting our source water and ensuring quality treated water is delivered to our customers. The results of the source water assessment are not a reflection of our treated water quality received at the system connections, but rather a rating of the susceptibility of contamination under the guidelines of the Colorado SWAP program.

### POSSIBLE WATER CONTAMINANTS

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

#### Contaminants that may be present in source water include:

- Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants: salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.



- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### FLUORIDE INFORMATION

Fluoride is a compound found naturally in many places, including soil, food, plants, animals and the human body. It is also found naturally in Fountain Valley Authority's water source. Fountain Valley Authority does not add additional fluoride to the treated water. Any fluoride in the treated water results from what occurs naturally in the source water.

### LEAD INFORMATION

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### DEFINITIONS

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

#### **WANT MORE INFORMATION**

For questions concerning this report, please call Colorado Springs Utilities Laboratory Services at (719) 668-4560.

#### **TABLE OF DETECTED CONTAMINANTS**

Fountain Valley Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

### **Detected Contaminants Table**

Fountain Valley Authority (PWSID CO0121300)

**Inorganic Contaminants**

Monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MCL	MCLG	Units	Level Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination
<b>Barium</b>	2	2	ppm	0.06	No	April 2018	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Fluoride</b>	4	4	ppm	0.53	No	April 2018	Erosion of natural deposits; discharge from fertilizer and aluminum factories
<b>Nitrate (as Nitrogen)</b>	10	10	ppm	0.44	No	April 2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Nickel</b>	N/A	N/A	ppb	0.53	N/A	April 2018	Erosion of natural deposits, discharge from industries, discharge from refineries and steel mills
<b>Selenium</b>	50	50	ppb	6	No	April 2018	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Sodium</b>	N/A	N/A	ppm	19.6	N/A	April 2018	Erosion of natural deposits

**Organic Contaminants**

Monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MCL	MCLG	Units	Average	Range	MCL Violation	Sample Dates	Possible Source(s) of Contamination
<b>Hexachlorocyclopentadiene</b>	50	50	ppb	0.03	0 - 0.06	No	April, July 2016	Discharge from chemical factories

**Turbidity**

Continuously monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	TT Requirement	Level Detected	TT Violation	Sample Dates	Possible Source(s) of Contamination
<b>Turbidity</b>	Maximum 1 NTU for any single measurement	Highest Single Measurement: 0.128 NTU	No	Sept 2018	Soil Runoff
<b>Turbidity</b>	In any month, at least 95% of samples must be less than 0.3NTU	Lowest Monthly percentage of samples meeting TT requirement: 100%	No	Dec 2018	Soil Runoff

**Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio and Finished Water**

Monitored at the Treatment Plant (entry point to transmission system)

Contaminant	MCL	MCLG	Units	Average	Range Low - High	MCL Violation	Sample Dates	Possible Source(s) of Contamination
<b>Total Organic Carbon (TOC)</b>	TT minimum ratio = 1.00	N/A	N/A	1.08	1 – 1.28	No	Monthly - Running Annual Average	Naturally present in the environment

#### Disinfectants

Continuously monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MRDL	Units	Level Detected	MRDL Violation	Sample Dates	Possible Source(s) of Contamination
<b>Chlorine</b>	TT= No more than 4 hours with a sample below 0.2 ppm	ppm	0 samples above or below the level	No	Jan – Dec 2018	Water additive used to control microbes

#### Violations, Significant, Backflow/Cross Connection, and Formal Enforcement Actions

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
<b>Cross Connection Rule</b>	Failure to meet Cross Connection/Backflow Requirements – Health-based	11/14/18 - Open	May pose a risk to public health	N/A	N/A

#### Additional Violation Information

State drinking water regulations require that all public drinking water systems, such as FVA, test a percentage of the backflow prevention devices located within their systems annually. In March of 2018, FVA identified 6 backflow prevention devices within its water system that were not tested as required in 2017. This means that FVA violated State drinking water regulations by failing to ensure that these 6 backflow prevention devices were tested in 2017. All 6 of the backflow prevention devices were tested on March 8, 2018 and passed the tests. Therefore, FVA is not aware of any uncontrolled cross connections to its water supply system. FVA is providing the state with an updated Backflow Prevention Cross-Connection Program Plan that includes measures to avoid this type of violation in the future.

**INCLUSION AND SERVICE AGREEMENT**  
**between**  
**WIDEFIELD WATER & SANITATION DISTRICT**  
**and**  
**RANKIN HOLDINGS, LP, a Colorado limited partnership, the EUGENIA M. & BASIL E.**  
**BLUME TRUST, and JUDY R. TIMM, an individual**  
**(Cygnet Land)**

This Inclusion and Service Agreement (this "Agreement") is entered into on this 20th day of February, 2015 by and between the **WIDEFIELD WATER & SANITATION DISTRICT**, a quasi-municipal corporation and political subdivision of the State of Colorado (the "District"), and **RANKIN HOLDINGS, LP, a Colorado limited partnership, the EUGENIA M. & BASIL E. BLUME TRUST, and JUDY R. TIMM, an individual** (the "Property Owner").

**WHEREAS**, on or about February 17, 2015, the Property Owner, with consent by the sole and exclusive contract purchaser, RH Powers, LLC, a Colorado limited liability company ("Contract Purchaser"), submitted a petition requesting inclusion of certain real property located within El Paso County, Colorado, and consisting of approximately 385 acres (the "Cygnet Land Property"), into the water and wastewater service areas of the District, and requesting water and wastewater service to such Property; and

**WHEREAS**, on February 17, 2015, at a duly held public meeting, the District considered the petition for the inclusion of the Cygnet Land Property, and adopted a conditional resolution authorizing the inclusion of the Cygnet Land Property into its water and wastewater service area boundaries, subject to, *inter alia*, execution of the District's form of Inclusion and Service Agreement for the subject property; and

**WHEREAS**, the District and Property Owner agree that the District shall provide water and wastewater service to the Cygnet Land Property, subject to the terms and conditions contained in this Agreement.

**NOW, THEREFORE**, each of the parties agree that the following shall be conditions upon provision of water and sewer service to the Cygnet Land Property by the District:

1. District Fees. Receipt by the Board of Directors of the District of all required fees, which shall include (a) the District's water and sewer tap fees; (b) the District's water resource acquisition fee (in lieu of conveyance of water rights, as described in paragraph 4, below); (c) cost recovery, meter installation, inspection, and all other applicable District fees, and (d) all costs incurred by the District, its agents and employees in processing the inclusion of the Property. Such fees shall be paid in accordance with the District's Rules and Regulations.

2. Off-Site Public Facilities.

a. General. Off-Site Facilities are water and/or wastewater public improvements to the District's water and/or wastewater system and facilities which are determined by the District to be necessary to provide service to proposed developments, and to avoid degradation in service to existing property within the District.



**INCLUSION AND SERVICE AGREEMENT**  
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**WHEREAS**, the District and Property Owner agree that the District shall provide water and wastewater service to the Cygnet Land Property, subject to the terms and conditions contained in this Agreement.

**NOW, THEREFORE**, each of the parties agree that the following shall be conditions upon provision of water and sewer service to the Cygnet Land Property by the District:

1. District Fees. Receipt by the Board of Directors of the District of all required fees, which shall include (a) the District's water and sewer tap fees; (b) the District's water resource acquisition fee (in lieu of conveyance of water rights, as described in paragraph 4, below); (c) cost recovery, meter installation, inspection, and all other applicable District fees, and (d) all costs incurred by the District, its agents and employees in processing the inclusion of the Property. Such fees shall be paid in accordance with the District's Rules and Regulations.

2. Off-Site Public Facilities.

a. General. Off-Site Facilities are water and/or wastewater public improvements to the District's water and/or wastewater system and facilities which are determined by the District to be necessary to provide service to proposed developments, and to avoid degradation in service to existing property within the District.



3. On-Site Facilities. Property Owner or Future Owner shall be responsible for the financing, construction and installation of all water and wastewater public improvements to the District's water and wastewater systems and facilities within the Cygnet Land Property ("On-Site Facilities"), which are determined by the District to be necessary to serve the Cygnet Land Property. On-Site Facilities shall only be constructed after they are approved by the District, according to the process for approval of such facilities set forth in the District's Rules and Regulations. Such On-Site Facilities shall be conveyed by Property Owner or the Future Owner to the District as required by the District's Rules and Regulations. More specifically, following the preliminary acceptance period and the one-year warranty period, as described in the District's Rules and Regulations, the Property Owner or the Future Owner shall convey all facilities to the District for ownership and maintenance.

4. Water Rights / Water Resource Acquisition Fee. The Property Owner shall comply with the District's water policy, requiring the payment of the District's Water Resource Acquisition Fee applicable to the Cygnet Land Property, in lieu of the conveyance of water rights to the District.

5. Easements. Property Owner or Future Owners, upon development of the Cygnet Land Property, shall convey such easements to the District as the District determines are necessary to provide water and wastewater service to the Cygnet Land Property as developed. Such easements shall be conveyed at no cost to the District, and in accordance with the District's Rules and Regulations. The District agrees to cooperate with the Property Owner in obtaining such easements.

6. District Rules and Regulations. On and after the effective date of this Agreement, Property Owner and any Future Owners and the Cygnet Land Property shall be subject to all of the Rules and Regulations and Terms and Conditions of Service of the District, as they may be amended from time to time, and to the payment of any District taxes, rates, fees, tolls or charges, in existence at the time such amounts are due.

7. Commitment to be Served. Except as provided in paragraph 8, the Property Owner agrees that the Cygnet Land Property will obtain water and wastewater service exclusively from the District on a perpetual basis under the Rules and Regulations of the District and its Terms and Conditions of service, as may be amended from time to time by the District. The Property Owner agrees that it will not seek annexation, connection or inclusion into a municipality or other special district without first obtaining the written consent, in form satisfactory to the District, of such municipality or special district of such entity's acknowledgement of and agreement to the exclusive provision of water and wastewater service by the District as set forth herein. The District acknowledges its intent to cooperate with the Property Owner or the Future Owner in the County land use planning process regarding the County's requirement for a finding of sufficient water necessary for the Cygnet Land Property.

8. District Inability to Provide Service. The owner of the Cygnet Land Property may seek service from, and/or the Cygnet Land Property may be served by, another entity if the



District is unable to issue taps to service the Cygnet Land Property for which a final plat has been approved. The District shall be deemed unable to issue taps if all of the following occurs:

- a. The owner submits an appropriate tap application to the District (up to the total number of taps required to serve the platted property);
- b. The owner provides satisfactory financing of any water or wastewater line extensions necessary to connect to the District's facilities;
- c. The owner pays the District's tap fees for the requested taps, and
- d. The District fails to issue the requested number of tap permits as needed.

9. County Finding of Insufficiency of Water. In addition, the owner of the Cygnet Land Property may seek service from, and/or the Cygnet Land Property may be served by, another entity if the final plat for the Cygnet Land Property has been denied by El Paso County due to a finding that the District has insufficient water resources to supply the proposed final platted development.

10. Covenant Running with the Property. The terms and conditions of this Agreement shall be recorded with the El Paso County Clerk and Recorder. The parties intend that the covenants of this Agreement shall run with the Cygnet Land Property and shall be binding upon the Petitioner and the Future Owner of all or any part of the Cygnet Land Property, and their respective successors and assigns.


11. Remedy. In the event of a breach of this Agreement by the Property Owner or any successor or assign of the Property Owner, the District shall have the right to require specific performance of this Agreement or sue for monetary damages under the Agreement, as appropriate.

12. Amendment. No provision of this Agreement may be amended, waived or otherwise modified without the prior written consent of both parties. No action taken pursuant to this Agreement shall be deemed to constitute a waiver by the party taking such action.

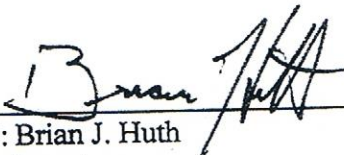
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WIDEFIELD WATER AND SANITATION DISTRICT

  
By: J. Mark Watson  
Its: President

ATTEST:

  
By: Brian J. Huth  
Its: Secretary

STATE OF COLORADO                    )  
  )  
COUNTY OF EL PASO                 )       ss.

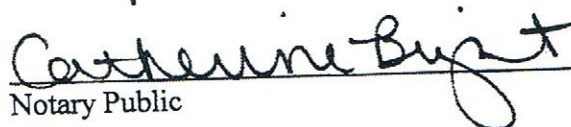
The foregoing instrument was acknowledged before me this 17<sup>th</sup> day of February 2015, by J. Mark Watson and Brian J. Huth as President and Secretary of Widefield Water and Sanitation District.

WITNESS my hand and official seal.

My commission expires: 8/3/2018

[SEAL]



  
Notary Public

PROPERTY OWNER:  
RANKIN HOLDINGS, LP, a Colorado  
limited partnership

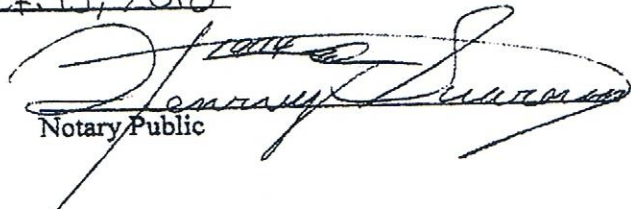
Name: Roger Rankin Rankin Holdings  
Title: MANAGER  
Date: 3/4/2015

STATE OF ~~COLORADO~~ FLORIDA )  
 ) ss.  
COUNTY OF Palm Beach )

The foregoing instrument was acknowledged before me this 6<sup>th</sup> day of  
March ~~February~~, 2015, by Roger B. Rankin, as Manager of Rankin Holdings, LP, a  
Colorado limited partnership.

WITNESS my hand and official seal.

My commission expires: Oct. 15, 2018

  
Notary Public



By signature of its representative below, the Petitioner affirms that it has taken all necessary action to authorize said representative to execute this Petition.

PROPERTY OWNER:  
EUGENIA M. & BASIL E. BLUME TRUST

Eugenia M. Blume Basil E. Blume  
Name: EUGENIA M. BLUME BASIL E. BLUME  
Title: Trustees  
Date: 2/19/2015

STATE OF COLORADO

COUNTY OF El Paso

) ss.  
)

The foregoing instrument was acknowledged before me this 19<sup>th</sup> day of February, 2015, by \_\_\_\_\_, as Trustee of the Eugenia M. & Basil E. Blume Trust.

WITNESS my hand and official seal.

My commission expires:

6/11/15  
[Signature]  
Notary Public

**PROPERTY OWNER:**

JUDY R. TIMM

Judy R. Timm  
Name: Judy R. Timm

Date: 2-20-15

Arizona  
STATE OF ~~COLORADO~~

COUNTY OF Maricopa

)  
) ss.  
)

The foregoing instrument was acknowledged before me this 20 day of February, 2015, by Judy R. Timm, an individual.

WITNESS my hand and official seal.

My commission expires:

5-29-17

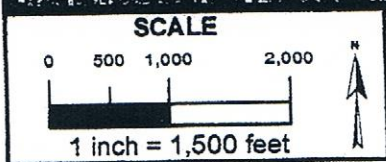
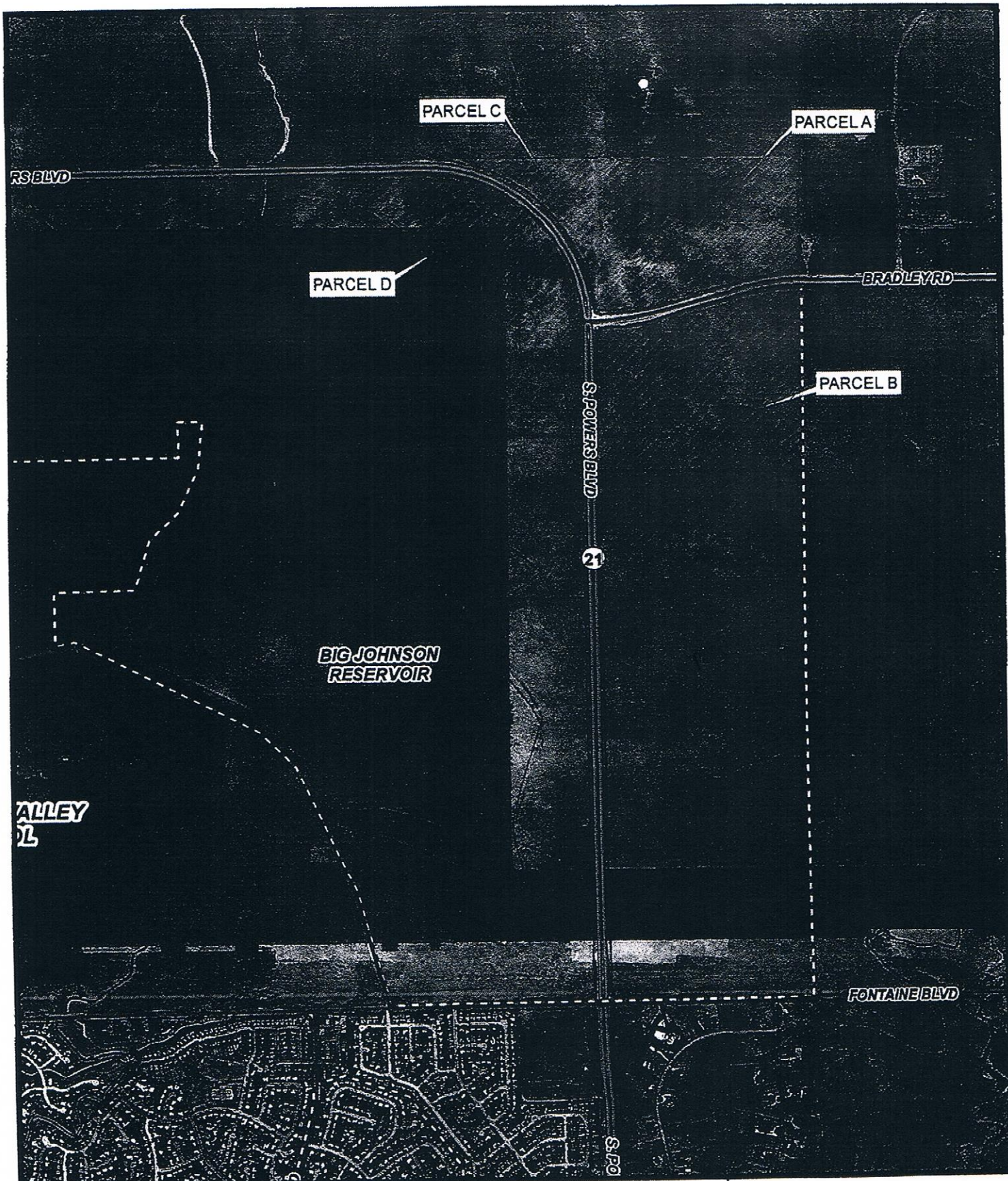
Michael Rosson  
Notary Public



**EXHIBIT A**  
**(CYGNET LAND PROPERTY)**

**[A-1: Drawing]**  
**[A-2: Narrative]**





**CYGNET SERVICE AREA INCLUSION  
MAP**

**EXHIBIT A-1**





**CYGNET SERVICE AREA INCLUSION  
EXHIBIT A-2**

FOUR (4) PARCELS TOTALLING 385 ACRES MORE OR LESS.

**PARCEL A**

**LEGAL DESCRIPTION:**

A TRACT OF LAND LOCATED IN A PORTION OF THE NORTHWEST 1/4 OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 9;

1. THENCE S00°19'32"E ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 9, A DISTANCE OF 1403.76 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF BRADLEY ROAD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING FIVE (5) COURSES FOLLOW SAID NORTHERLY RIGHT-OF-WAY LINE;

2. THENCE S89°30'29"W A DISTANCE OF 4.38 FEET TO A POINT OF CURVE TO THE LEFT;
3. THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT WITH A RADIUS OF 2969.79 FEET, A DELTA ANGLE OF 15°09'41", AN ARC LENGTH OF 785.85 FEET, WHOSE LONG CHORD BEARS S81°55'38"W A DISTANCE OF 783.56 FEET;
4. THENCE S74°20'48"W A DISTANCE OF 952.02 FEET TO A POINT OF CURVE TO THE RIGHT;
5. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 2759.79 FEET, A DELTA ANGLE OF 12°59'05", AN ARC LENGTH OF 625.44 FEET, WHOSE LONG CHORD BEARS S80°50'20"W A DISTANCE OF 624.10 FEET,
6. THENCE S87°19'53"W A DISTANCE OF 64.32 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY, SAID POINT ALSO BEING A POINT OF THE CURVE TO THE RIGHT;

THE FOLLOWING TWO (2) COURSES FOLLOW SAID EASTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD:

7. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 150.00 FEET, A DELTA ANGLE OF 82°43'14", AN ARC LENGTH OF 216.56 FEET, WHOSE LONG CHORD BEARS N51°18'30"W A DISTANCE OF 198.24 FEET TO A POINT OF REVERSE CURVE TO THE LEFT;
8. THENCE ALONG THE ARC OF SAID REVERSE CURVE TO THE LEFT WITH A RADIUS OF 2105.00 FEET, A DELTA ANGLE OF 10°48'33", AN ARC LENGTH OF 397.12 FEET, WHOSE LONG CHORD BEARS N15°21'08"W A DISTANCE OF 396.53 FEET TO THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9;
9. THENCE N00°17'44"W ALONG SAID WEST LINE OF THE NORTHWEST QUARTER, A DISTANCE OF 1373.36 FEET TO THE NORTHWEST CORNER OF SAID SECTION 9;
10. THENCE S89°51'23"E ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9, A DISTANCE OF 2636.12 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

THE ABOVE TRACT OF LAND CONTAINS 99.48 ACRES MORE OR LESS.

BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 9, T15 S. R 65 W OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, WHICH IS ASSUMED TO BEAR S89°33'35"W FROM THE WITNESS CORNER 143.54 FEET EAST OF THE SOUTHWEST CORNER OF SAID SECTION 9 (SAID WITNESS CORNER BEING A 2" IRON POST WITH A 2 1/2" ALUM. CAP LS 17664), TO THE SOUTH 1/4 CORNER OF SAID SECTION 9 (A 3" BY 30" ALUM. MONUMENT LS 10377).



## PARCEL B

### LEGAL DESCRIPTION:

A TRACT OF LAND LOCATED IN A PORTION OF THE WEST ¼ OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH ¼ CORNER OF SAID SECTION 9; THENCE S00°19'32"E ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 9, A DISTANCE OF 1613.76 FEET

TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION:

1. THENCE S00°19'32"E CONTINUING ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 9, A DISTANCE OF 3638.37 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 9;
2. THENCE S89°33'35"W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 9, A DISTANCE OF 2495.44 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING TWO (2) COURSES FOLLOW SAID EASTERLY RIGHT-OF-WAY LINE:

3. THENCE N00°29'10"W A DISTANCE OF 3037.92 FEET TO A POINT OF CURVE TO THE RIGHT;
4. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 150.00 FEET, A DELTA ANGLE OF 87°49'03", AN ARC LENGTH OF 229.91 FEET, WHOSE LONG CHORD BEARS N43°25'21"E A DISTANCE OF 208.05 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING FIVE (5) COURSES FOLLOW SAID SOUTHERLY RIGHT-OF-WAY LINE:

5. THENCE N87°19'53"E A DISTANCE OF 53.06 FEET TO A POINT OF CURVE TO THE LEFT;
6. THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT WITH A RADIUS OF 2969.79 FEET, A DELTA ANGLE OF 12°59'05", AN ARC LENGTH OF 673.03 FEET, WHOSE LONG CHORD BEARS N80°50'20"E A DISTANCE OF 671.59 FEET;
7. THENCE N74°20'48"E A DISTANCE OF 952.02 FEET TO A POINT OF CURVE TO THE RIGHT;
8. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 2759.79 FEET, A DELTA ANGLE OF 15°09'41", AN ARC LENGTH OF 730.29 FEET, WHOSE LONG CHORD BEARS N81°55'38"E A DISTANCE OF 728.16 FEET;
9. THENCE N89°30'29"E A DISTANCE OF 3.77 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

THE ABOVE TRACT OF LAND CONTAINS 195.25 ACRES, MORE OR LESS.

BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 9, T15 S. R. 65 W OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, WHICH IS ASSUMED TO BEAR S89°33'35"W FROM THE WITNESS CORNER 143.54 FEET EAST OF THE SOUTHWEST CORNER OF SAID SECTION 9 (SAID WITNESS CORNER BEING A 2" IRON POST WITH A 2 ½" ALUM. CAP LS 17664), TO THE SOUTH ¼ CORNER OF SAID SECTION 9 (A 3" BY 30" ALUM. MONUMENT LS 10377).



PARCEL C

LEGAL DESCRIPTION:

A TRACT OF LAND LOCATED IN A PORTION OF THE NORTHEAST ¼ OF SECTION 8,  
TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY,  
COLORADO, MORE PARTICULARLY DESCRIBES AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 8;

1. THENCE S89°33'59"W ON THE NORTH LINE OF SAID SECTION 8, A DISTANCE OF 1929.50 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY, AND A NON TANGENT CURVE TO THE RIGHT;
2. THENCE ON THE ARC OF SAID CURVE AND SAID NORTHERLY RIGHT-OF-WAY LINE WITH A RADIUS OF 2105.00 FEET, A DELTA ANGLE OF 68°22'36", AN ARC LENGTH OF 2512.10 FEET, WHOSE LONG CHORD BEARS S54°56'42"E A DISTANCE OF 2365.66 FEET TO THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 8;
3. THENCE N00°17'44"W ALONG SAID EAST LINE OF THE NORTHEAST QUARTER, A DISTANCE OF 1373.36 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

THE ABOVE TRACT OF LAND CONTAINS 17.00 ACRES, MORE OR LESS.

BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 9, T15 S. R 65 W OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, WHICH IS ASSUMED TO BEAR S89°33'35"W FROM THE WITNESS CORNER 143.54 FEET EAST OF THE SOUTHWEST CORNER OF SAID SECTION 9 (SAID WITNESS CORNER BEING A 2" IRON POST WITH A 2 ½" ALUM. CAP LS 17664), TO THE SOUTH ¼ CORNER OF SAID SECTION 9 (A 3" BY 30" ALUM. MONUMENT LS 10377).

**PARCEL D**

**LEGAL DESCRIPTION:**

A TRACT OF LAND LOCATED IN A PORTION OF SECTION 8, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE S89°33'35"W, A DISTANCE OF 66.65 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY; THENCE N00°29'10"W ALONG SAID WESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 3170.76 FEET TO THE TRUE POINT OF BEGINNING OF THIS DIRECTION;

1. THENCE S89°34'16"W A DISTANCE OF 446.84 FEET TO A POINT OF CURVE TO THE RIGHT;
2. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 1645.00 FEET. A DELTA ANGLE OF 53°38'50", AN ARC LENGTH OF 1540.25 FEET, WHOSE LONG CHORD BEARS N63°35'49"W A DISTANCE OF 1484.60 FEET;
3. THENCE N36°46'24"W A DISTANCE OF 297.03 FEET TO A POINT OF CURVE TO THE LEFT;
4. THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT WITH A RADIUS OF 1895.00 FEET, A DELTA ANGLE OF 53°55'04", AN ARC LENGTH OF 1783.27 FEET, WHOSE LONG CHORD BEARS N63°43'56"W A DISTANCE OF 1718.20 FEET;
5. THENCE N00°41'28"W A DISTANCE OF 210.00 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS FILE FOR RECORD IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING THREE (3) COURCES FOLLOW SAID SOUTHERLY AND WESTERLY RIGHT-OF-WAY LINES OF POWERS BOULEVARD:

6. THENCE N89°18'32"E A DISTANCE OF 1579.97 FEET TO A POINT OF CURVE TO THE RIGHT;
7. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 1895.00 FEET, A DELTA ANGLE OF 90°12'18", AN ARC LENGTH OF 2983.44 FEET, WHOSE LONG CHORD BEARS S45°35'19"E A DISTANCE OF 2684.73 FEET;
8. THENCE S00°29'10"E A DISTANCE OF 5.50 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 9, T15 S. R 65 W OF THE 6<sup>TH</sup> P.M., EL PASO COUNTY, COLORADO, WHICH IS ASSUMED TO BEAR S89°33'35"W FROM THE WITNESS CORNER 143.54 FEET EAST OF THE SOUTHWEST CORNER OF SAID SECTION 9 (SAID WITNESS CORNER BEING A 2" IRON POST WITH A 2 ½" ALUM. CAP LS 17664), TO THE SOUTH ¼ CORNER OF SAID SECTION 9 (A 3" BY 30" ALUM. MONUMENT LS 10377).