

# CHEROKEE METROPOLITAN DISTRICT

6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842 Telephone: (719) 597-5080 Fax: (719) 597-5145

November 22<sup>nd</sup>, 2019 Matt Childers c/o Richmond American Homes 4350 S. Monaco St. Denver, CO 80203

> Sent via email: <u>GEllis@jrengineering.com</u> Original to follow by US Mail

Re: Water and Sewer Service to Richmond Homes

Commitment Letter No. 2019-07 (Revision of 2018-15)

Dear Mr. Matt Childers,

As requested, this document will serve is as a formal Letter of Commitment from the Cherokee Metropolitan District to provide municipal water and sewer services for the Richmond American Homes Development located at the SW and SE corners of Hannah Ridge Drive and Constitution Avenue. The proposed location for this development is located within the District's established boundaries and therefore is eligible for service connections from the District.

Cherokee Metropolitan District staff, along with the developer, have determined that the following will be the total water demand required by this occupancy:

Type of Use	Demand (AF/yr)
Domestic	20.0
Irrigation	13.6
Total	33.6

This water commitment is hereby made exclusively for this specific development project at this site within the District. To confirm this commitment you must provide the District with a copy of the final plat approval from El Paso County Development Services within 12 months of the date of this letter. Otherwise, the District may use this allocation for other developments requesting a water commitment. If the subject project is re-platted, you must submit a new commitment request prior to submitting the re-plat to El Paso County, which may result in a recalculation of the water demand for the project.

If I may be of further assistance please contact me at your convenience.

Sincerely,

Amy Lathen General Manager

Cc: Peter Johnson; Water Counsel w/ encl: sent via email

Steve Hasbrouck; Board President w/ encl: sent via email

Kevin Brown; Jr. Engineer



# CHEROKEE METROPOLITAN DISTRICT

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November 13, 2018

Matt Childers c/o Richmond American Homes 4350 S. Monaco Street Denver, CO 80203

Re:

Residential Development – Richmond Homes at Feathergrass

Commitment Letter #2018-15

Dear Mr. Childers,

As requested, this letter is being provided as a formal Letter of Commitment by the Cherokee Metropolitan District (District) to provide municipal water and sewer service for the Richmond Homes at Feathergrass residential development. The parcel of land is located (SWC & SEC of Constitution Avenue and Hannah Ridge Drive) within the District's service boundary and, therefore, the District stands ready and willing to provide water and sewer service for the specific property and uses detailed herein.

As of May 18, 2016, through a technical memorandum prepared by Forsgren Associates, the State Engineer's Office confirmed that the District had a surplus of 453 acre-feet per year of water available for new residential and commercial developments. Since May 18, 2016, the District has issued 133.197 acre-feet per year of water commitments leaving a balance of 319.803 acre-feet per year of water for future developments. The above-mentioned development is estimated to need 30.40 acre-feet per year of water, which includes water for irrigation purposes, leaving the District with a water balance of 289.403 acre-feet per year for future developments.

Regarding wastewater capacity, the District's Water Reclamation Facility (WRF) has the required capacity to meet the sewer demand for this development. The WRF is rated for 4.80 million gallons per day (MGD), of which 2.60 MGD is owned by the District and reserved for the District's customers. The District's current contribution to the WRF is 1.60 MGD, therefore, there is an excess of 1.00 MGD of treatment capacity available and 0.940 MGD of available capacity for future commitments. Based on the information received in the "Preliminary Wastewater Disposal Report" dated November 2018 by JR Engineering, LLC, this development is anticipated to discharge 15,600 gallons of

wastewater per day (96 units x 2.50 persons/unit x 65 gpd/person) which equates to 1.66 % of the available capacity of the WRF leaving 0.924 MGD of capacity available for future developments.

This water commitment is hereby made exclusively for this specific development project at this site, within the District, which must achieve appropriate zoning and a final plat land use entitlement from El Paso County Development Services within 12 months from the date of this letter; otherwise, the District may use this allocation for other developments requesting a water commitment for growth that stands ready to develop.

I trust that you find this letter sufficient to meet your needs and land use applications. If I may be of further assistance, please contact me at your convenience.

Best Regards,

Jonathon Smith

Water & Wastewater Collections Manager

Encl: Water Supply Information Summary

Wastewater Disposal and Treatment Report

Sketch Plan

Water Balance and Water Commitments

Ec: Amy Lathen, General Manager, Cherokee Metropolitan District

# WATER SUPPLY INFORMATION SUMMARY

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

1. NAME OF DEVELOPMENT AS PRO		d Homes	@ Feathergrass	
2. LAND USE ACTION Single F	amily Attached		e	
3. NAME OF EXISTING PARCEL AS	RECORDED Not pla	tted		
SUBDIVISION	FILING	1.5	BLOCK	LOT
4. TOTAL ACREAGE 10.8	5. NUMBER OF LOTS	PROPOSED 96	6 PLAT MAP ENCLOSED	YES
6. PARCEL HISTORY - Please attach	copies of deeds, plats or	r other evidence	8 or documentation.	
A. Was parcel recorded with county p B. Has the parcel ever been part of a If yes, describe the previous action	division of land action a	□ YES × NO since June 1, 1	972?	177
7. LOCATION OF PARCEL - Include a	map deliniating the proje	ect area and tie	to a section corner.	
•	SECTION 5 T		4 □N x s RANGE 65	
8. PLAT - Location of all wells on pro		id permit numb not, scaled ha	ers provided. nd drawn sketch 🗀 Yes 🗀 No	*
9. ESTIMATED WATER REQUIREMENT		s Feet per Year	10. WATER SUPPLY SOURCE	
HOUSEHOLD USE # 96 of units  COMMERCIAL USE # of S.F.	GPD	29.8 <sub>AF</sub>		OTHER
IRRIGATION # 1.3 of acres  STOCK WATERING # of head	GPD	AF	MUNICIPAL ASSOCIATION COMPANY	WATER COURT DECREE CASE NO.'S
TOTAL	GPO	AF AF	LETTER OF COMMITMENT FOR SERVICE YES NO	
11. ENGINEER'S WATER SUPPLY REPO	RT 🗆 YES 🗶 NO	IF YES, PLEAS	SE FORWARD WITH THIS FORM. (This m	ay be raquired before our raview is completed.)
12. TYPE OF SEWAGE DISPOSAL SYST	EM			
SEPTIC TANK/LEACH FIELD	x	CENTRAL SYS	STEM - DISTRICT NAMECheroke	ee Metro
□ LAGOON		VAULT - LOCA	ATION SEWAGE HAULED TO	
3 ENGINEERED SYSTEM (Attach a copy o	f engineering design) 🗀	OTHER		

# Preliminary Wastewater Disposal Report For Richmond Homes at Feathergrass El Paso County, CO

November 2018

Prepared for:

MDC Holdings – Richmond American Homes 4350 South Monaco Street Denver, CO 809237 720-977-3883

Prepared by:

JR Engineering, LLC 5475 Tech Center Drive, Suite 235 Colorado Springs, CO 80907 303-267-6241

JR Project No. 25149.00

### LOCATION AND DESCRIPTION:

The proposed development is a 10.83-acre multi-family subdivision located within the northeast quarter of Section 5, Township 14 South, Range 65 West of the 6<sup>th</sup> Principle Meridian in El Paso County, Colorado. The site is immediately south of Constitution Avenue and on both the west and east sides of Hannah Ridge Drive.

The site lies within the Cherokee Metropolitan District Service area. Water and wastewater services will be provided by Cherokee Metropolitan District.

The proposed development includes up to 96 dwelling units installed in one phase.

### OPINION OF PROBABLE POPULATION AND QUANTITY OF EFFLUENT

The proposed development includes up to 96 dwelling units. The opinion of probable population and quantity of effluent is as follows:

Population: 96 dwelling units x 2.5 persons/unit = 240 persons

Quantity of Effluent: 240 persons x 65 GPD/person = 15,600 GPD

The projected quantity of effluent is based upon industry standards as well as methodology used by other utility providers in the area. The actual population and resulting effluent could vary from these calculations.

### WASTEWATER DISPOSAL

Effluent from the proposed developed site will be collected by standard 4-inch service lines and 8-inch mainlines. The proposed internal 8-inch mainlines will outfall into an existing sanitary manhole in Hannah Ridge Drive, approximately 380 feet south of Constitution Avenue. An existing 8-inch gravity sewer connects the manhole to the wastewater network to the south.

### WASTEWATER TREATMENT

Cherokee Metropolitan District's wastewater treatment facility went into operation in June 2010 and is located on a 160-acre parcel approximately 20 miles east of Cimarron Hills. The plant occupies roughly 26 acres of the 160-acre site.

The design rate capacity of the plan is 4.8 million gallons per day (MGD), at the present time the plant receives 1.5 MGD. The plant receives wastewater from three contributors: Cherokee Metropolitan District (1.2 MGD), Meridian Service Metropolitan District (0.18 MGD), and Schriever Air Force Base (0.13 MGD).

The treatment plant consists of an 'Influent' building, four 'Sequential Batch Reactors' (SBRs), three

'Aerobic Digesters' (ADs), 'Blower' and 'Operations' building, 'Solids Handling' building (i.e. biosolids), two 'Equalization Basins' (EQs) and an 'Effluent' building that contains the 'Ultraviolet Light Disinfection' (UV) unit. The treated effluent then exits the plant and flows five miles to the 'Rapid Infiltration Basins'. This is an overall general description of the plant.



2000	46	46 LOTS	5.25 AC (217,800 SF)	8 8 DU/AC
	TOTAL	GRAND TOTAL LOTS=	TOTAL SITE ACREAGE≈	GROSS DENSITY=

5,58 AC (243,093 SF) 9,0 DU/AC

TOTAL SITE ACREAGE=

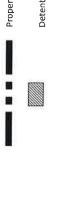
GROSS DENSITY=

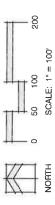
50 LOTS

22

# Legend:

Detention Pond







# Water Balance and Water Commitments (Cherokee Metropolitan District)

Development	Business Name	Address	5	Commitment Letter	etter
CEC Manufackaeffal Dond and Conceits along Assessed and			Letter #	Date	Acre Feet
orc. Marksheller noau alla constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue	2015-01	Expired	-4.460
Windermere Filing #1	Windermere Subdivision Filing #1	NEC Anteloper Ridge Drive and N. Carefree Circle	2015-02	Fynired	22 210
Constitution Apartment Complex	Constitution Apartments	6855 Constitution Avenue	2016-01	Expired	10,000
Meadowbrook Crossing Subdivision	Meadowbrook Crossing	Meadowhook Parkway and Highway	2017	LADOLT L	OLU JE
Kum & Go Store #692	Kum & Go	6800 Grace William Avenue	2017-01	5/4/2017	35.270
Kum & Go Store #692	Kum & Go	6809 Space Village Avenue	2017-02	9/8/2017	2,072
Freedom Springs Apartment Complex	Freedom Springs	734 Western Drive	2017-02	Devised 0,007,007	27.072
Covert Ops Paintball	Covert Ops Paintball	SUPPLY BUILDING	2019-01	2/22/2018	14.500
Mule Deer Villas Subdivision	Mule Deer Villas	CEC About Daing and M. Cambrook	2018-02	3/77/7018	0,150
Mule Deer Villas Subdivision	Solid Control	SEC Akels Drive and IN. Carefree Circle	50-8107	4/20/2018	36.250
Appaloosa Highway 24 Subdivision Elling #2	India Deel Villas	SEC Akers Drive and N. Carefree Circle	2018-03	Revised	-36.250
ZECENTAL INC. TO THE PROPERTY OF THE PROPERTY	Appaioosa Highway 24 Subdivision Filing #2	SEC Amelia Street & Terminal Avenue	2018-04	6/13/2018	1.247
SEC Marksnettel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue	2018-05	7/6/2018	4.460
SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue	2018-05	Revised	-4 460
Windermere Subdivision	Windermere	NEC Anteloper Ridge Drive and N. Carefree Circle	2018-06	7/6/2010	000 02
Gardens at North Carefree Subdivision (Mule Deer Villas)	Gardens at North Carefree	SEC Akers Drive and N. Carefree Circle	2010-02	0/0/2010	77.000
Hannah Ridge at Feathergrass Filing #5 (LLC Water)	Hannah Ridge Filing #5	NWC Akers Drive and Constitution Avenue	2010-07	0/12/2010	0T0.22
Hannah Ridge at Feathergrass Filing #5 (LLC Water)	Hannah Ridge Filing #5	NWC Akers Drive and Constitution Avenue	2018-08	Poving P	25,090
Hannah Ridge at Feathergrass Filing #6 (LLC Water)	Hannah Ridge Filing #6	NWC Akers Drive and Constitution Avenue	2018-08	9/17/2018	17 690
Hannah Ridge at Feathergrass Filing #7 (LLC Water & CMD Water)	Hannah Ridge Filing #7	NWC Akers Drive and Constitution Avenue	2018-10	0/17/2010	24,000
Space Village Filing #3 Lots #1, #2, #3	Space Village Filing #3 Lots #1. #2. #3	6809 Space Village Avenue	2010 11	0/00/00/0	2 440
Hannah Ridge AA and BB	Midtown at Hannah Ridge	NEC Akers Drive and Constitution Avenue	2018-17	9/17/18	32 500
Hannah Ridge at Feathergrass (LLC Water & CMD Water)	Hannah Ridge Filing #5	NWC Akers Drive and Constitution Avenue	2018-13	10/15/2018	26.210
SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	Claremont Ranch Filing #9C	2018-14	11/1/2018	5 940
Richmond Homes at Feathergrass	Richmond Homes @ Feathergrass	SWC/SEC Constitution Avenue and Hannah Ridge Drive	2018-15	11/13/2018	30.400
Richmond Homes at Feathergrass	Richmond Homes @ Feathergrass	SWC/SEC Constitution Avenue and Hannah Ridge Drive	2018-15	+	11/13/2018

289,403

Water Balance Remaining for Future Commitments (AFY)

453.000

Water Balance Beginning as of May 18, 2016 (AFY)
Water Committed since May 18, 2016 (AFY)