

CHEROKEE METROPOLITAN DISTRICT

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

August 3, 2018

Mr. Heath Herber c/o Mule Deer Investments 31 N. Tejon Street Suite 532 Colorado Springs, CO 80903

Re: Residential Development – The Gardens at North Carefree

Commitment Letter #2018-07 (revision of Commitment Letter #2018-03)

Dear Mr. Herber

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 above-mentioned development. Since the development has been revised from 125 townhomes to 71 single family homes, this commitment letter is a revision of Commitment Letter #2018-03 that was issued on April 20, 2018 by Kurt Schlegel. The parcel of land is located 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 October 2015, the State Engineer's Office has given the District a favorable opinion on the District's quantification of water supplies available for new subdivisions and commercial developments. The State Engineer confirmed, through a Technical Memorandum prepared by Forsgren Associates, that the District had a surplus of 453 acre feet per year of water available for new developments as of May 18, 2016. Since that time, the District has issued 83.829 acre feet per year of water commitments leaving a balance of 369.171 acre feet per year of water for future developments. The Gardens at North Carefree development requires 22.010 acre feet per year of water leaving the District with a water balance of 347.161 acre feet per year for future developments.

Regarding the 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 4.8 million gallons per day (MGD), of which 2.6 MGD is owned by the District and reserved for District's customers. The District's current contribution to the WRF is 1.560 MGD with a committed capacity of 1.593 MGD, therefore, there is an excess of 1.040 MGD of treatment capacity available and 1.007 MGD of

available capacity for future commitments. Based on the information received in the "Engineering Study for The Gardens at North Carefree Wastewater System Improvements" report dated July 2018 by Stantec, this development is estimated to discharge 15,718 gallons of wastewater per day which equates to 1.56% of the available capacity of the WRF leaving 0.991 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, and 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.

The District and I trust that you find this letter adequate for your needs and land use applications. If I may be of further assistance, please contact me at your convenience.

Best Regards,

Joylathon Smith

Water & Wastewater Collections Manager

Encl: Water Balance and Water Commitments (Cherokee Metropolitan District)

Commitment Letter #2018-03 for Mule Deer Villas (dated April 20, 2018)

Water Supply Information Summary for The Gardens at North Carefree

Water System Improvements for The Gardens at North Carefree; pages #1 and #9

Wastewater System Improvements for The Gardens at North Carefree; pages #1 and #4

Vicinity Map for The Gardens at North Carefree

Site Utilities Plan for The Gardens at North Carefree

Ec: Brian Beaudette, Interim General Manager, Cherokee Metropolitan District

Charles Cothern, Senior Project Manager, Stantec

Erin Ganaway, Project Engineer, N.E.S. Inc.

Water Balance and Water Commitments (Cherokee Metropolitan District)

Development	SEC Marksheffel Road and Constitution Avenue Phase #2 SEC Marksheffel	Windermere Filing #1 Winc	Constitution Apartment Complex	Meadowbrook Crossing Subdivision	Kum & Go Store #692	Freedom Springs Apartment Complex	Covert Ops Paintball	Mule Deer Villas Subdivision	Mule Deer Villas Subdivision	Appaloosa Highway 24 Subdivision Filing #2 Appaloos	(venue Phase #2	Windermere Subdivision	Gardens at North Carefree Subdivision (Mule Deer Villas)		
Business Name	SEC Marksheffel Road and Constitution Avenue Phase #2	Windermere Subdivision Filing #1	Constitution Apartments	Meadowbrook Crossing	Kum & Go	Freedom Springs	Covert Ops Paintball	Mule Deer Villas	Mule Deer Villas	Appaloosa Highway 24 Subdivision Filing #2	SEC Marksheffel Road and Constitution Avenue Phase #2	Windermere	Gardens at North Carefree		
Address	SEC Marksheffel Road and Constitution Avenue	NEC Anteloper Ridge Drive and N. Carefree Circle	6855 Constitution Avenue	Meadowbrook Parkway and Highway 24	6809 Space Village Avenue	734 Western Drive	6425 E. Platte Avenue	SEC Akers Drive and N. Carefree Circle	SEC Akers Drive and N. Carefree Circle	SEC Amelia Street & Terminal Avenue	SEC Marksheffel Road and Constitution Avenue	NEC Anteloper Ridge Drive and N. Carefree Circle	SEC Akers Drive and N. Carefree Circle		
Con Letter #	2015-01	2015-02	2016-01	2017-01	2017-02	2018-01	2018-02	2018-03	2018-03	2018-04	2018-05	2018-06	2018-07		
Commitment Letter er # Date Acr	Expired	Expired	Expired	5/4/2017	9/8/2017	2/22/2018	3/22/2018	4/20/2018	Revised	6/13/2018	7/6/2018	7/6/2018	8/3/2018		
Acre Feet	-4.460	-22 210	-19.000	36.270	2.072	14.500	0.150	36.250	-36.250	1,247	4,460	70.800	22,010		

Water Balance Beginning as of May 18, 2016 (AFV)

105.83

453.000

Water Balance Remaining for Future Commitments (AFY)

347.161



CHEROKEE METROPOLITAN DISTRICT

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

April 20, 2018

Mr. Heath Herber c/o Mule Deer Investments 31 N. Tejon Street Suite 532 Colorado Springs, CO 80903

re:

Mule Deer Villas

Mr. Herber,

This letter will serve as a formal Letter of Commitment by the Cherokee Metropolitan District to provide municipal water and sewer services for the Mule Deer Villas development. The proposed development is located within the District's established boundaries; the District possesses sufficient water rights to serve this development; the District has sufficient capacity at its water reclamation facility to service this development; therefore the District is able and willing to provide potable water delivery and wastewater collection & treatment services for Mule Deer Villas.

Cherokee Metropolitan District's allocation for multi-family occupancies is 0.29 acre feet, per unit, per year. Based on the 125 townhomes planned for this development, Cherokee staff has calculated that 36.25 acre feet of water will be required to serve this development and has sufficient potable water resources to commit to this project.

This water commitment is hereby made exclusively for this specific development project at this site, within the District, and must achieve appropriate zoning and a final plat land use entitlement from El Paso County Development Services within 12 months of the date of this letter.

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

Sincerely,

Kurt C. Schlegel General Manager

cc: Mr. Jonathon Smith; Cherokee Metropolitan District

WATER SUPPLY INFORMATION SUMMARY

Section 30-28-122.(d). C.R.S. requires that the applicant submit to the County. "Adequate evidence that a water supply that is sufficient in terms of quantity, quality and dependability will be available to ensure an adequate supply of water.

1. NAME OF DEVELOPMENT AS PROPOSED The Gardens at North Carefree									
2. LAND USE ACTION PUD/Preliminary Plan									
3. NAME OF EXISTING PARCEL AS RECORDED Hilltop Sketch Plan									
SUBDIVISION FILING BLOCK LOT									
Hilltop Sketch Plan									
4. TOTAL ACREAGE 5. NUMBER OF LO	TS PROPOSED PLA 71	AT MAP ENCLOSED YES							
6. PARCEL HISTORY – The site was Sketch Planned in 1999. Property to the north, south and west have been platted.									
A. Was parcel recorded with county prior to June 1, 1972? B. Has the parcel ever been part of a division of land action since June 1, 1972? If yes, describe the previous action Mule Deer Business Park Filing No. 2									
7. LOCATION OF PARCEL - Include a map delineating the proj									
E 1/2 of 1/4 SECTION 29 TOWNSHIP 13 □ N ☑ S RANGE 65 □ E ☑ W ¼ of 1/4 SECTION TOWNSHIP □ N ☐ S RANGE □ E ☑ W ¼ of 1/4 SECTION TOWNSHIP □ N ☐ S RANGE □ E ☑ W ¼ of 1/4 SECTION TOWNSHIP □ N ☐ S RANGE □ E ☑ W ¼ of 1/4 SECTION TOWNSHIP □ N ☐ S RANGE □ E ☑ W PRINCIPAL MERIDIAN: ☑ 6TH ☐ N.M. ☐ UTE ☐ COSTILLA									
8. PLAT – Location of all wells on property must be plotted and permit numbers provided									
Surveyors plat Yes No If not, scaled hand drawn Yes No No Wells									
9. ESTIMATED WATER REQUIREMENTS – Gallons per day or Acre Feet per Y	□EXISTING □ DEVELOPED WELLS SPRINGS	□ NEW WELLS –							
HOUSEHOLD USE (inc. lot irr) GPD 22.01		Proposed □ Alluvial □ Upper Arapahoe □ Upper Dawson □ Lower							
COMMERCIAL USE GPDAF	-	Arapahoe							
IRRIGATION GPDA		□ Lower Dawson □ Laramie Fox Hills □ Denver □ Dakota □ Other □							
STOCK WATERING GPD A	F MUNICIPAL ☐ ASSOCIATION	WATER COURT DECREE CASE							
OTHER GPD A		NO.							
TOTAL GPD22.01	AF NAME Cherokee Metropolitan								
	District LETTER OF COMMITMENT FOR SERVICE YES □NO								
11. ENGINEER'S WATER SUPPLY REPORT ⊠ YES □ NO IF YES, PLEASE FORWARD WITH THIS FORM.									
12. TYPE OF SEWAGE DISPOSAL SYSTEM									
☐ SEPTEC TANKLEACH	☑ CENTRAL SYSTEM – DIST	RICT NAME							
<u> </u>	Cherokee Metropolitan District								
LAGOON -	□ VAULT – LOCATION SEWA	AGE HAULED TO							
☐ ENGINEERED SYSTEM (Attach a copy of engineering design)	OTHER	2							

ENGINEERING STUDY for THE GARDENS AT NORTH CARFREE WATER SYSTEM IMPROVEMENTS

Prepared For:

Mule Deer Investments, LLC 2727 Glen Arbor Drive Colorado Springs, CO 80920

Prepared By:

Stantec

5725 Mark Dabling Boulevard, Suite 190 Colorado Springs, CO 80919

Project No. 52876

July 2018

Section 1 **EXECUTIVE SUMMARY**

This report presents the results of the engineering study for Water System Improvements serving The Gardens at North Carefree Development, a proposed development within the Hilltop Sketch Plan located due south of North Carefree Circle and due east of Akers Drive in El Paso County, Colorado.

The average annual water demand for The Gardens at North Carefree is estimated to be 22.01 acre-feet of water per year. This water will be delivered by the existing Cherokee Metropolitan District distribution system with extensions of that system as necessary.

To meet Drinking Water Standards both water suppliers' filter and disinfected source water prior to storage and have met Colorado Department of Health and Environment Drinking Water Standards.

The Cherokee Metropolitan District PWSID (Potable Water System Identification Number) is CO0121125.

Section 4 DEVELOPED CONDITIONS

4.1 Land Use

This report addresses The Gardens at North Carefree development anticipated to be submitted to El Paso County for review in August of 2018. The proposed use is for 71 single family lots.

4.2 Population and Employment

By using the land use information noted above and applying standard unit densities of 2.9 persons per dwelling for single family residential uses, 2.5 persons per dwelling for multifamily residential uses and 600 square feet per employee for commercial/industrial uses, permanent resident and employment forecasts for The Gardens at North Carefree are 206 permanent residence.

4.3 Water Demand

By applying Cherokee Metropolitan District unit water demand factors to land use forecasts, water demands have been developed for ultimate build-out and are as follows:

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71 SFE x 0.31 ac-ft./SFE = 22.01 ac-ft.
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Unit water demands are based on actual District records as described in section 3.11 (the Single Family Residential demands include irrigation because there is no separate meter for irrigation water).

Water demand is first calculated in acre-feet per year (AFY) to determine water supply needs. This value is then factored to determine the average daily demand (ADD) in gallons per minute (gpm), which is used to project maximum day and peak hour demands as well as to estimate revenues and operating costs. Maximum day demand (MDD) and peak hour demand (PHD) have been determined by applying accepted peaking factors of 2.5 and 4.0 to the ADD, respectively. The MDD is used to determine storage needs and the PHD is used for modeling system delivery pressures and to size distribution piping.

Calculated demand is as follows:

Ac-ft. = 22.01 ADD = 13.6 gpm MDD = 34.1 gpm PHD = 54.6 gpm

Fire flow demand is another demand typically included in the design of water systems. A fire flow demand of 1500 gpm in residential areas and 3500 gpm in commercial areas will be delivered at a minimum pressure of 20 psi by the respective water systems.

4.4 Water Supply

The Cherokee Metropolitan District have numerous ground water and surface water rights; these water supply sources are summarized in Appendix A.

ENGINEERING STUDY for THE GARDENS AT NORTH CAREFREE WASTEWATER SYSTEM IMPROVEMENTS

July 2018

Prepared For:

Mule Deer Investments, LLC 2727 Glen Arbor Drive Colorado Springs, CO 80920

Prepared By:

Stantec

5725 Mark Dabling Boulevard, Suite 190 Colorado Springs, CO 80919 719.432.6889

Project No. 52876

1.0 EXECUTIVE SUMMARY

This report presents the results of the engineering study for wastewater system improvements serving The Gardens at North Carefree, a proposed development located south of North Carefree and east of Akers Drive in El Paso County, Colorado.

The Gardens at North Carefree consists of 71 single family lots on 11.64 acres.

The service area is located within the Sand Creek Basin. The proposed development is within the Cherokee Metropolitan District service area.

The average wastewater to be produced by The Gardens at North Carefree is estimated to be 15,718 gallons per day; the Cherokee Metropolitan District will treat this wastewater.

The Cherokee Metropolitan District operates under a permit issued by the Colorado Water Quality Control Division, providing for discharge to the Black Squirrel Creek.

3.6 Climate

The climate of the study area is characterized by mild summers and winters, light precipitation, high evaporation and moderately high wind velocities.

The climate of the site is typical of a sub-humid to semiarid climate with mild summers and winters. The average temperature is 31 degrees F in the winter and 68.4 degrees in the summer. Total annual precipitation is 15.21 inches.

3.7 Natural Hazards Analysis

Natural hazards analysis indicates that no unusual surface or subsurface hazards are located in the service area. However, because the soils are cohesionless, sloughing of steep banks during drilling and/or excavation could occur. By siting improvements in a manner that provides an opportunity to lay the banks of excavations back at a 1:1 slope during construction, the problems associated with sloughing soils can be minimized.

3.8 Organizational Context

The Gardens at North Carefree is located in El Paso County and lies within the service area of the Cherokee Metropolitan District.

3.9 Wastewater Facilities

Primary Wastewater Facilities are located outside of the boundaries of the Gardens at North Carefree development. Cherokee Metropolitan District facilities include:

- Wastewater Treatment Facility
- · Wastewater Collection and pumping facilities

3.10 Relationship to Neighboring Water and Wastewater Facilities

The location of other major water and wastewater facilities, relative to the Gardens at North Carefree Development, are shown on Figure 3.

Figure 3 identifies water wells and habitable buildings within a 1-mile radius of the center of The Gardens at North Carefree. No known wells are within the 1-mile radius.

3.11 Wastewater Demand

The Gardens at North Carefree will be serviced by the Cherokee Metropolitan District and is assumed to have the same unit wastewater demands as the rest of the Cherokee Metropolitan District. Residential Demand within the District is estimated to be 80% of the water demand of 0.31 ac-ft./year per SFE or 22.01 ac-ft. or 19,648 GPD; Waste flow is estimated to be 15,718 GPD.



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Client/Project

MULE DEER INVESTMENTS, LLC GARDENS AT NORTH CAREFREE

Figure No.							
	1.0						
Title	VICINITY	MAP					

MULE DEER INVESTMENTS, LLC ZONE: CS