

**ENGINEERING STUDY
for
WATERVIEW EAST - COMMERCIAL
PRELIMINARY PLAN
WASTEWATER SYSTEM IMPROVEMENTS**

Prepared For:

**WATERVIEW COMMERCIAL INVESTORS LLC
31 N. TEJON, SUITE 524
COLORADO SPRINGS, CO 80903**

Prepared By:

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August 2022

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Section 1 EXECUTIVE SUMMARY

This report presents the results of the engineering study for wastewater system improvements serving Waterview East - Commercial, located southeast of the Colorado Springs Airport in El Paso County, Colorado. Waterview East - Commercial is a development within the boundaries of what has been recognized as the Waterview Development, more specifically in recent county approvals within the boundaries of the Springs at Waterview East Preliminary Plan area.

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. Waterview East - Commercial will continue to be part of the Waterview II Metropolitan District. Waterview East – Commercial will receive water and wastewater services from Widefield Water and Sanitation District, gas service from Colorado Springs Utilities and electric service from MVEA.

Waterview East - Commercial is located within Phase 2 of the Waterview Sketch Plan. The Waterview East- Commercial Preliminary Plan proposes 10 commercial buildings on 22.1 acres. Proposing a gas station, a grocery store, a fast-food site, three restaurants, and four retail sites.

The average annual water demand for Waterview East - Commercial is estimated to be 13.42 acre-feet of water per year. Widefield Water and Sanitation District will be the service provider through an extension of the existing distribution system.

Wastewater is estimated to be 80% of water demand. The Waterview East -Commercial wastewater flow is estimated to be 10.74 acre-feet (13.42 x 0.8) or 9,588.11 gallons per day (gpd). Widefield Water and Sanitation District will collect and treat the wastewater prior to discharge to Fountain Creek.

The Widefield Water and Sanitation District PWSID is CO0121900.

Section 2 INTRODUCTION

2.1 Purpose

The purpose of this report is to present wastewater system improvements recommended to serve Waterview East - Commercial, a land development project located in El Paso County. It is also intended to serve as a guideline for the ensuing design of recommended improvements.

2.2 Scope

The scope of this report includes:

1. The definition of the service areas as well as identification of significant physical and environmental characteristics and constraints;
2. An analysis of available data to determine existing and to project future wastewater demands and treatment;
3. A description of legal, institutional and managerial arrangements that ensure adequate control of the proposed improvements; and,
4. A preliminary recommendation for a selected collection, treatment and potential pumping and transmission alternatives.

Section 3 EXISTING CONDITIONS

3.1 Description of the Service Area

Waterview East - Commercial consists of approximately 22.1 acres of commercial and open space uses and is located southeast of the City of Colorado Springs Airport, within Township 15 South, Range 65 West, Section 9.

3.2 Land Use

Waterview East - Commercial is located in El Paso County on the eastern edge of City of Colorado Springs and El Paso County urban development. Vacant land can be found north within the Colorado Springs Airport, west across Powers Boulevard in the Bluestem Prairie Open Space, east of the proposed development with current City of Colorado Springs residential use approvals and south of the proposed development in State Land Board Property. Some farming and ranching uses can still be found in these areas. Most of the vacant land has been through City or County planning processes for development.

3.3 Topography and Floodplains

The topography of the service area is typical of a high desert and short grass prairie. With existing slopes ranging from 2% to 9% prior to addition of a temporary stockpile created by adjoining construction. This stockpile has slopes of close to 30%. The stockpile is expected to be moved before construction begins on the Waterview East - Commercial development. The service area drains generally from north to south and is split between two El Paso County designated basins; Big Johnson/Crews Gulch to the west and Jimmy Camp Creek to the east.

There is no Federal Emergency Management Agency (FEMA) established a floodplain within the boundaries of Trails at Aspen Ridge.

3.4 Geology

The site is comprised of several different soil types. From the Soil Survey of El Paso County, the site falls into the following soil types:

1. "8" Blakeland loamy sand, 1 to 9 percent slopes; Type A Soil
2. "56" Nelson Tassel fine sandy loam, 3 to 19 percent slopes; Type B and D Soil
3. "86" Stoneham sandy loam, 3 to 8 percent slopes; Type B Soil
4. "108" Wiley silt loam, 3 to 9 percent slopes; Type B Soil

Note: "#" indicates Soil Conservation Survey soil classification number.

3.5 Groundwater

The Waterview East - Commercial development service area has is located on the extreme southern reaches of the Denver Basin aquifers. These aquifers are generally considered not feasible for potable water production. Soil borings in the Waterview East - Commercial developed areas have indicated no shallow groundwater.

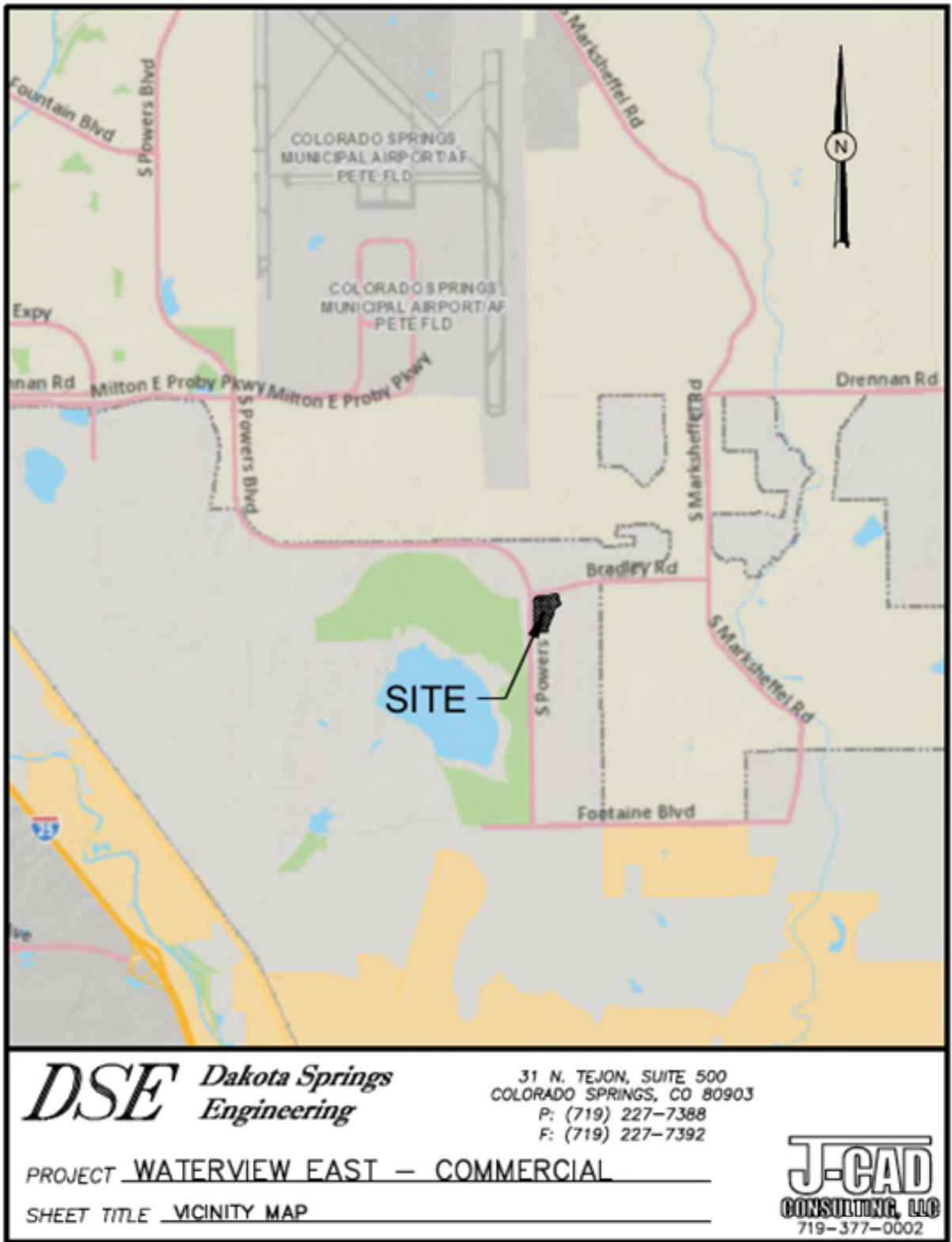


Figure 1: Vicinity Map

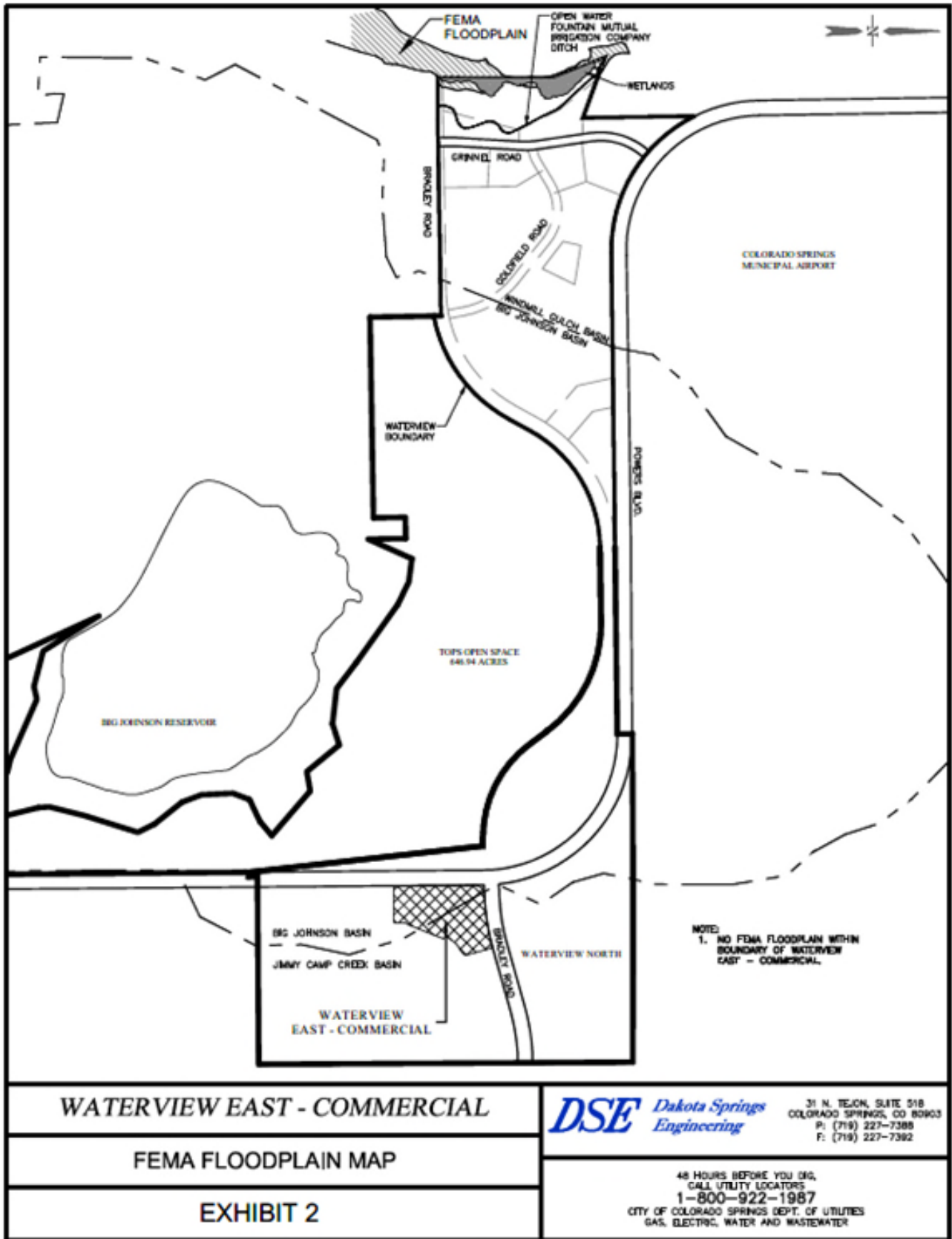


Figure 2: FEMA Floodplain Map

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 average annual monthly temperature is 48.4 F with an average monthly low of 30.3 F in the winter and an average monthly high of 68.1 F in the summer. Two years in ten will have a maximum temperature higher than 98 F and a minimum temperature lower than -16 F.

Precipitation averages 15.73 inches annually, with 80% of this occurring during the months of April through September. The average annual Class A pan evaporation is 45 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

Waterview East - Commercial is situated within two El Paso County identified Drainage Basins; Big Johnson/Crews Gulch and Jimmy Camp Creek. There are five water and sanitation utility providers near to or adjacent to the development. At the time of the original Sketch Plan approval there had been no legal actions to claim service rights for the service area by any of the adjacent service providers.

The Waterview II Metropolitan District has been established to provide and coordinate services including water, wastewater, drainage and open space maintenance among other services.

Widefield Water and Sanitation District have negotiated a service agreement for Springs at Waterview East which is inclusive of Waterview East - Commercial. The adjacent service providers considered include:

1. Colorado Springs Utilities; located north of the development-current gas and electricity provider.
2. Colorado Centre; located east of the development.
3. Widefield Water and Sanitation District; located south and east of the development.
4. City of Fountain (Water); located south (+/- 1 mile) of the development.
5. Security Water District

The service provider for Waterview East - Commercial is Widefield Water and Sanitation District and will be the entity responsible to finance construction and ensure the continuing operation and maintenance of improvements.

3.9 Wastewater Facilities

The Widefield Water and Sanitation District have been providing wastewater services for a long period of time in accordance with the Colorado Department of Health and Environment. The District will provide water, water treatment, water storage and water distribution for the development in exchange for fees and recurring periodic charges.

3.10 Relationship to Neighboring Water and Wastewater Facilities

The location of other major water and wastewater facilities, relative to the Waterview East - Commercial Development, are shown on Figure 3.

Figure 3 identifies water wells and habitable buildings within a 1-mile radius of the center of Waterview East - Commercial. No known wells are within the 1-mile radius.

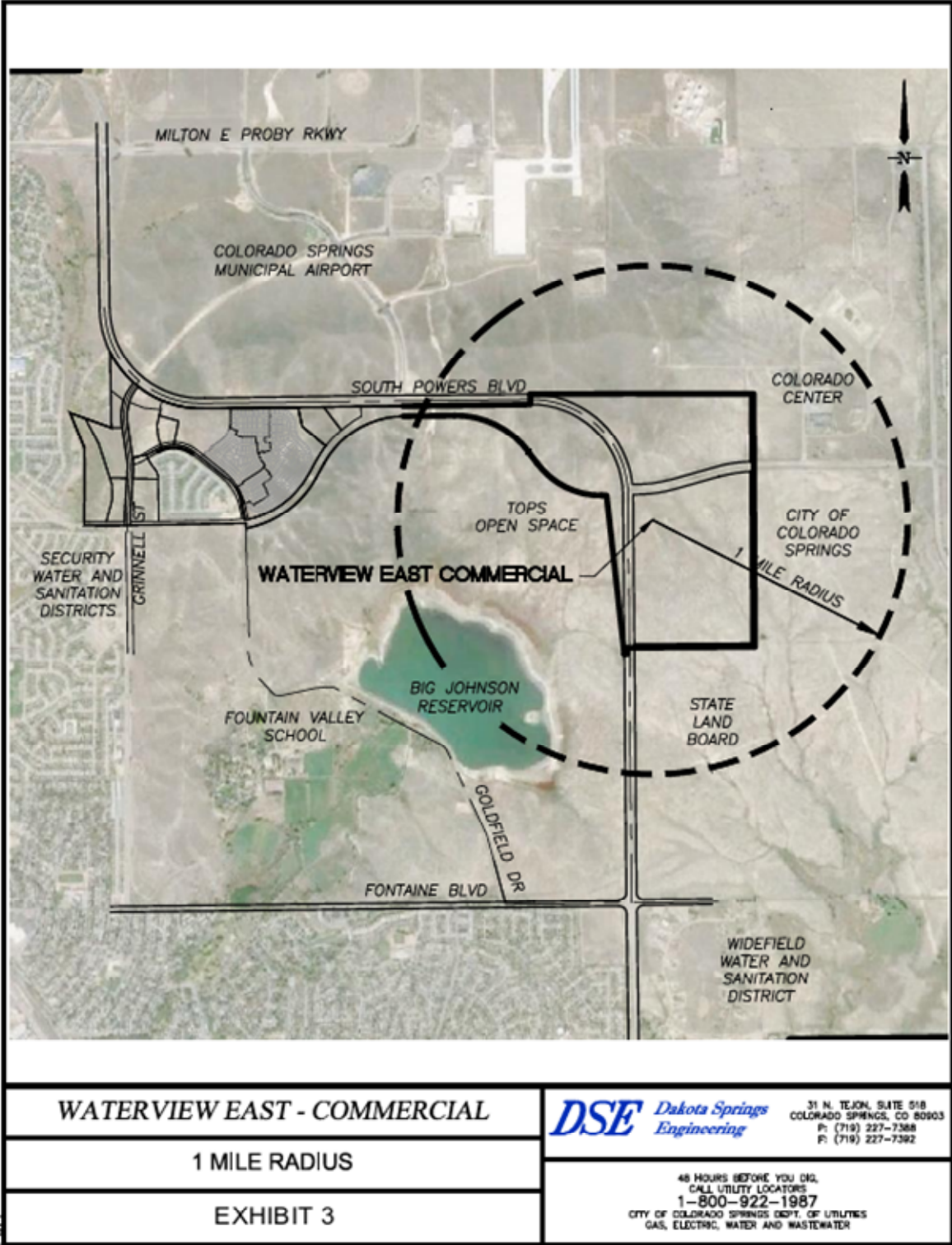


Figure 3: 1 MILE RADIUS

**Section 4
DEVELOPED CONDITIONS**

4.1 Land Use

Waterview East - Commercial consists of approximately 22.1 acres of commercial and open space uses and is located southeast of the City of Colorado Springs Airport, within Township 15 South, Range 65 West, Section 9.

The following tabulates land use for the development.

Table 1 – Land Use Plan

Land Use		Lot Area (AC)	Building Area (SF)	Employment Population	Population Equivalents	Percent Irrigated
Commercial						
LOT 1	BLDG 1	1.58	9750.00	16.25	3.25	11.36%
LOT 2	BLDG 2	1.13	23255.92	38.76	7.75	44.44%
LOT 3	BLDG 3	0.37	10800.00	18.00	3.60	66.32%
LOT 4	BLDG 4	0.29	2962.50	4.94	0.99	23.64%
LOT 5	BLDG 5	0.29	3277.84	5.46	1.09	27.60%
LOT 6	BLDG 6	5.21	8064.00	13.44	2.69	3.55%
	Storage Spaces		69865.68	NA	NA	
LOT 7	BLDG 7	0.38	10945.42	18.24	3.65	66.27%
LOT 8	BLDG 8	0.22	6600.00	11.00	2.20	68.92%
LOT 9	BLDG 9	0.30	9000.00	15.00	3.00	69.62%
Tracts	A-D	12.35	NA	NA	NA	15.00%
	TOTAL	22.12	3.55	141.09	28.22	NA

Assumptions: Commercial units at 600 square feet/employee
 Employees are considered to be 0.2 SFE
 25 gpd per employee (0.03 ac-ft/year)

4.2 Population and Employment

By using the land use information noted above and applying standard unit densities of 600 square feet per employee for commercial/industrial uses, permanent employment forecasts for Waterview East - Commercial are shown in the above table.

The above table uses the percent irrigation forecasts provided in Appendix C.

4.3 Wastewater Demand

The Waterview East - Commercial development will be serviced by Widefield Water and Sanitation District. By applying Widefield Water and Sanitation District unit water demand factors to land use forecasts, wastewater demands have been developed for ultimate build-out as shown in the following table extracted from the Water Supply Report:

WATER DEMAND

Land Use	SKETCH PLAN			
	AFY	ADD	MDD	PHD
		(gpm)	(gpm)	(gpm)
Potable				
Commercial Buildings Total				
BLDG 1	0.49	0.30	0.76	1.21
BLDG 2	1.16	0.72	1.80	2.88
BLDG 3	0.54	0.33	0.84	1.34
BLDG 4	0.15	0.09	0.23	0.37
BLDG 5	0.16	0.10	0.25	0.41
BLDG 6	0.40	0.25	0.62	1.00
BLDG 7	0.55	0.34	0.85	1.36
BLDG 8	0.33	0.20	0.51	0.82
BLDG 9	0.45	0.28	0.70	1.12
Tracts	0.00	0.00	0.00	0.00
Subtotal	4.23	2.62	6.56	10.50
Irrigation				
Commercial				
LOT 1	0.44	0.27	0.69	1.10
LOT 2	1.24	0.77	1.92	3.07
LOT 3	0.60	0.38	0.94	1.50
LOT 4	0.17	0.10	0.26	0.42
LOT 5	0.20	0.12	0.31	0.49
LOT 6	0.46	0.28	0.71	1.13
LOT 7	0.62	0.38	0.96	1.54
LOT 8	0.37	0.23	0.58	0.93
LOT 9	0.51	0.32	0.80	1.28
Tracts	4.57	2.83	7.08	11.33
Subtotal	9.18	5.69	14.24	22.78
TOTAL	13.42	8.32	20.80	33.28

Wastewater is estimated to be 80% of water demand. The Waterview East – Commercial wastewater flow is estimated to be 10.74 acre-feet (13.42 x 0.8) or 9,588.11 gallons per day (gpd). Widefield Water and Sanitation District will provide wastewater treatment for Waterview East - Commercial.

4.4 Wastewater Capacity

The Widefield Water and Sanitation District and the Security Sanitation District have capacity to serve the proposed development.

4.5 Wastewater Discharge Permit

The Widefield Water and Sanitation District and the Security Sanitation District have both been providing wastewater treatment in accordance with El Paso County Health Department and Colorado Department of Health and Environment standards and reporting requirements for several decades.

Section 5
WASTEWATER SYSTEM IMPROVEMENTS

5.1 General

The wastewater systems operated by Widefield Water and Sanitation District and the Security Sanitation District meet the applicable requirements of the Colorado Department of Health and Environment (CDHE). Both districts have been providing wastewater treatment services for many decades.

Waterview East - Commercial will be serviced by the Widefield Water and Sanitation District by a gravity system. The Widefield Water and Sanitation District system has been extended north from Fontaine Boulevard.

5.3 Wastewater Treatment

Wastewater will be conveyed to a State Permitted wastewater treatment facility for treatment per the discharge permit prior to be discharged to the stream system

5.4 Collection

The wastewater collection system will collect waste flow from each customer and convey the waste to the treatment facility via a series of collection pipes and interceptors. All pipe and appurtenances will be designed to meet or exceed AWWA standards.

5.5 Other Costs and Gains

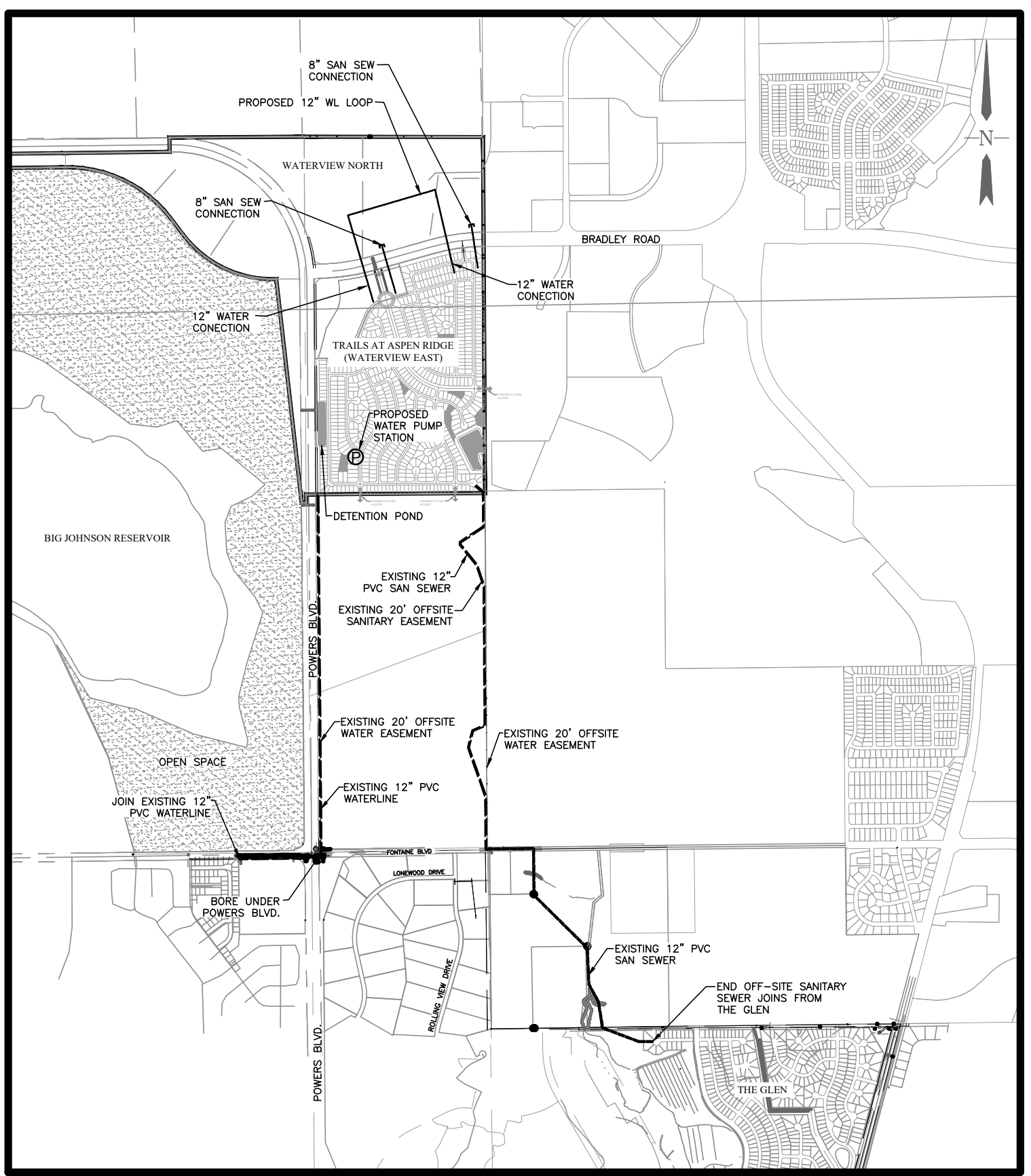
Estimated Costs

Item	Units	Quantity	Unit Price	Extension
Waterview Phase 1 Wastewater Lift Station	LS	1	Complete	Complete
Waterview Phase 2, 3 & 4 Sanitary Sewer Extension	LF	7200	\$80	\$576,000
Treatment Capacity	gal	701,231	\$0.95	\$666,169
Total Estimated Cost				\$1,028,098

The above system improvements are all constructed as part of Waterview East or are under construction by others. The costs included above only include capital costs for wastewater system improvements required to serve Waterview and are estimated from best available data. 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 infrastructure, among others, unless specifically noted.

5.6 Rates and Charges

The Security Sanitation District and the Widefield Water and Sanitation District will impose one-time charges to recoup the cost of constructing wastewater 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.



WATERVIEW NORTH

WATER AND SEWER SYSTEM IMPROVEMENTS

EXHIBIT 4

DSE *Dakota Springs Engineering*

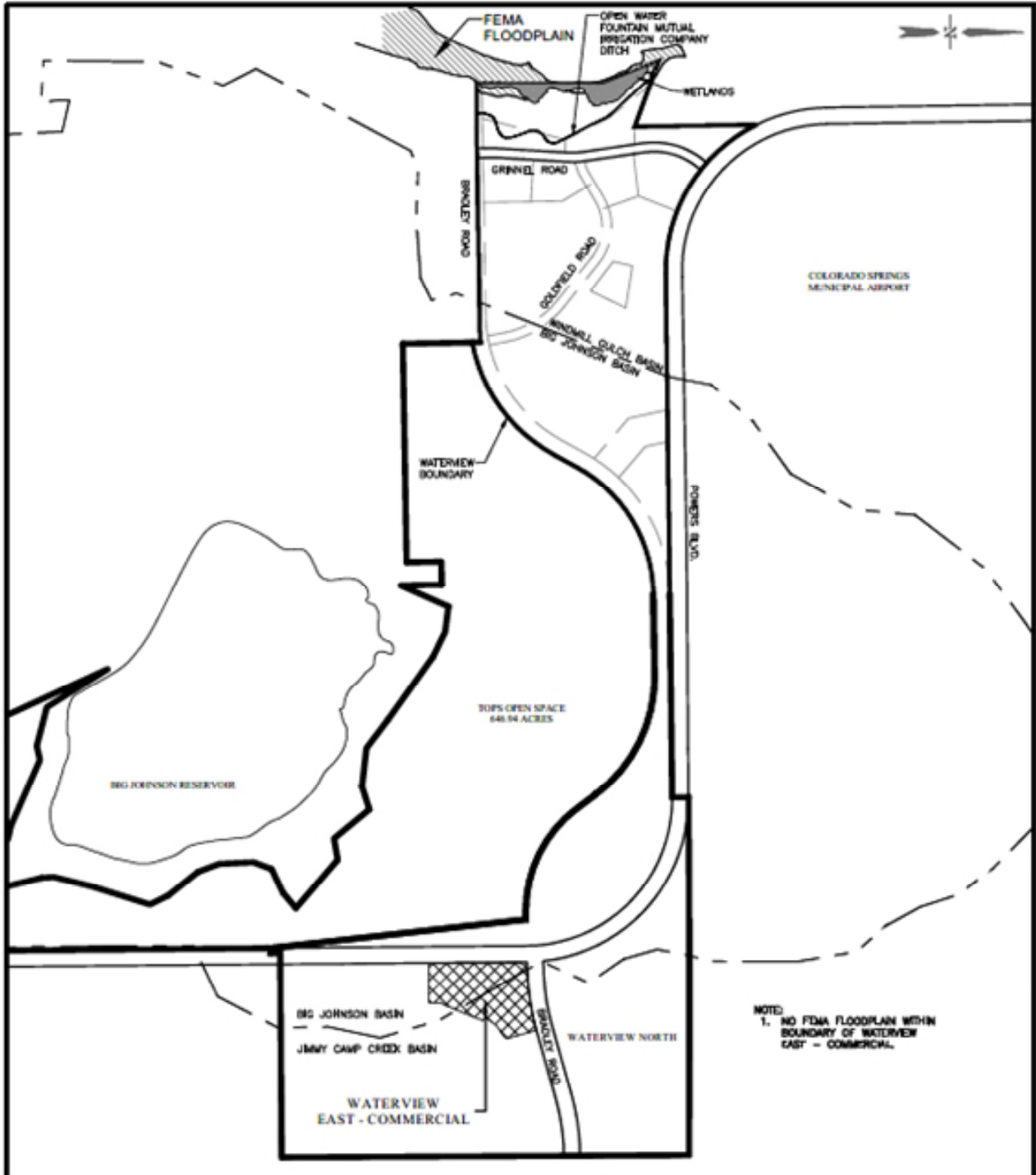
31 N. TEJON, SUITE 518
 COLORADO SPRINGS, CO 80903
 P: (719) 227-7388
 F: (719) 227-7392

48 HOURS BEFORE YOU DIG,
 CALL UTILITY LOCATORS
1-800-922-1987
 CITY OF COLORADO SPRINGS DEPT. OF UTILITIES
 GAS, ELECTRIC, WATER AND WASTEWATER

PDF:

Appendix A

100 Year Flood Plain Certification



NOTE:
1. NO FEMA FLOODPLAIN WITHIN BOUNDARY OF WATERVIEW EAST - COMMERCIAL.

WATERVIEW EAST - COMMERCIAL
FEMA FLOODPLAIN MAP
EXHIBIT 2

DSE <i>Dakota Springs Engineering</i>	31 N. TEJON, SUITE 518 COLORADO SPRINGS, CO 80903 P: (719) 227-7388 F: (719) 227-7382
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 1-800-922-1987 CITY OF COLORADO SPRINGS DEPT. OF UTILITIES GAS, ELECTRIC, WATER AND WASTEWATER	

Appendix B

District Letters of Commitment



August 9, 2022

Kimley-Horn and Associates
Attn: Larry Salazar
2 North Nevada Avenue, Suite 300
Colorado Springs, CO 80903

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

Re: Commitment Letter for Preliminary Plan of Waterview East-Commercial

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.

The water commitment is for Waterview East-Commercial is for 9 Commercial Lots and 12.35 acres of irrigated land, please see Exhibit A, with an annual water requirement of 31.15 acre-feet. These numbers are calculated using AWWA M22 manual for SFE per tap size, please see Exhibit B. Deviation from the estimated tap size will require the District to take an additional look at the water supply. Car washes have not been considered in this commitment and would need to be reevaluated for approval. The District has existing legal and physical water supply to meet the expected demand. **The estimated wastewater load is 8,815 gallons per day.**

Sincerely,

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

Robert Bannister, PE, District Engineer

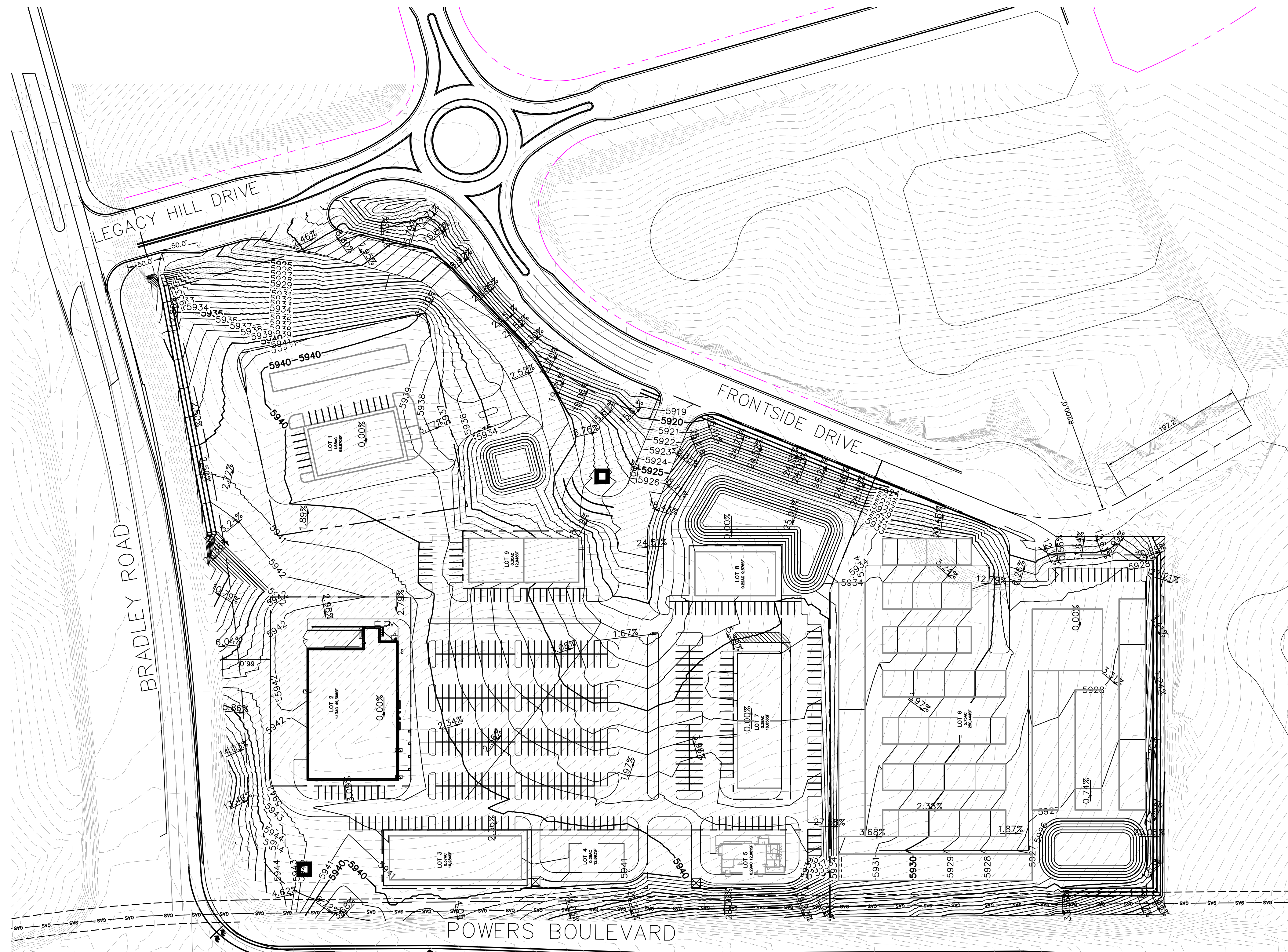
C: Travis Jones, Director of Operations

WATERVIEW EAST-COMMERCIAL

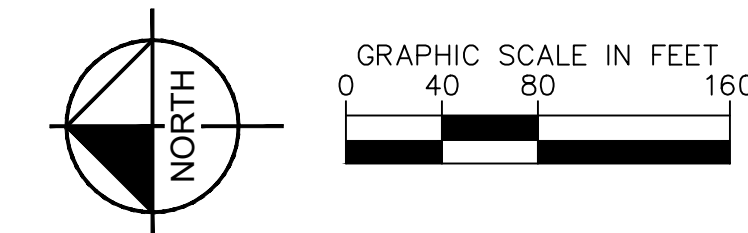
PRELIMINARY PLAN

SITUATED IN THE WEST HALF OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M.,
CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO

Exhibit A



LOT DATA	
LOT	SF/AC±
1	68,670/1.58
2	49,366/1.13
3	16,284/0.37
4	12,693/0.29
5	12,681/0.29
6	250,444/5.75
7	16,656/0.38
8	9,576/0.22
9	12,948/0.30
TRACT DATA	
TRACT	SF/AC
A	395,960/9.09



Kimley»Horn

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2 NORTH NEVADA AVENUE, SUITE 300
COLORADO SPRINGS, COLORADO 80903 (719) 453-0180

K:\CDS_LA116195000 - WaterView East Commercial\CADD\PlanSheets\DP.dwg Jun 14, 2022 7:48am

Waterview East Commercial Water Demand Estimates

Lot	Land Area (sqft)	Land Area (acres)	Building Area (sqft)	Use	Assumed Tap Size (inches)	SFE/Acre	SFE's	SFE's x 317 gpd/SFE = ADD (gpd)	SFE's x 677 gpd/SDF = MDD (gpd)
1	68,670	1.58	7,800	Commercial/Gas	1.5	4	6.3	1,999	4,269
2	49,366	1.13	21,939	Commercial/Grocery	3	4	4.5	1,437	3,069
3	16,284	0.37	10,800	Commercial/Retail	1	4	1.5	474	1,012
4	12,693	0.29	3,000	Commercial/Fast Food	1.5	4	1.2	369	789
5	12,681	0.29	3,500	Commercial/Fast Food	1.5	4	1.2	369	788
6	226,977	5.21	8,064	Commercial/Storage	0.75	4	20.8	6,607	14,111
7	16,656	0.38	11,038	Commercial/Retail	1	4	1.5	485	1,035
8	9,576	0.22	6,600	Commercial/Retail	1	4	0.9	279	595
9	12,948	0.30	9,015	Commercial/Retail	1	4	1.2	377	805
A	478,965	11.00		Landscaping	1.5	4	44.0	13,942	29,776
B	12,179	0.28		Landscaping	1.5	4	1.1	355	757
C	23,134	0.53		Landscaping	1.5	4	2.1	673	1,438
D	23,467	0.54		Landscaping	1.5	4	2.2	683	1,459
Totals	963,596	22.12	81,756				89	28,213	60,253

Appendix C

Waterview East – Commercial Preliminary Plan

WATERVIEW COMMERCIAL EAST BUILDING SF AND IRRIGATED AREAS

Lot	SF	Building or Irrigation SF	Use
1	68,670	7,800	Commercial/Gas
2	49,366	21,939	Commercial/Grocery
3	16,284	10,800	Commercial/Retail
4	12,693	3,000	Commercial/Fast Food
5	12,681	3,500	Commercial/Fast Food
6	226,977	8,064	Commercial/Storage
7	16,656	11,038	Commercial/ Retail
8	9,576	6,600	Commercial/ Retail
9	12,948	9,015	Commercial/ Retail
Total SF		81,756	
Tract		Irrigation SF	
A	478,965	71,845	Est. 15%
B	12,179	1,827	Est. 15%
C	23,134	3,470	Est. 15%
D	23,467	3,520	Est. 15%
Total Irrigated area		80,662	

WATERVIEW EAST-COMMERCIAL PRELIMINARY PLAN

SITUATED IN THE WEST HALF OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M.,
CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO

LEGAL DESCRIPTION

A TRACT OF LAND LOCATED IN A PORTION OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PM, EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTH 1/4 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 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 ARE ON SAID SOUTHERLY RIGHT-OF-WAY LINE OF SAID BRADLEY ROAD:
1) THENCE S89°30'29"W A DISTANCE OF 3.77 FEET TO A POINT OF CURVE TO THE LEFT;
2) THENCE ON SAID CURVE, HAVING A RADIUS OF 2759.79 FEET, AN ARC LENGTH OF 730.29 FEET, A DELTA ANGLE OF 15°09'41" WHOSE LONG CHORD BEARS S81°55'38"W A DISTANCE OF 728.16 FEET;
3) THENCE S74°20'48"W A DISTANCE OF 930.15 FEET TO THE POINT OF BEGINNING;
THENCE DEPARTING SAID RIGHT-OF-WAY S15°39'12"W A DISTANCE OF 394.68 FEET TO A POINT OF NON-TANGENT CURVE TO THE RIGHT WHOSE RADIAL BEARS N75°43'37"W;
THENCE ON SAID CURVE, HAVING A RADIUS OF 75.00 FEET, AN ARC LENGTH OF 56.94 FEET, A DELTA ANGLE OF 43°29'55" WHOSE LONG CHORD BEARS S36°01'21" W A DISTANCE OF 55.58 FEET;
THENCE S57°46'18"W A DISTANCE OF 68.47 FEET TO A POINT OF CURVE TO THE LEFT;
THENCE ON SAID CURVE, HAVING A RADIUS OF 450.00 FEET, AN ARC LENGTH OF 280.72 FEET, A DELTA ANGLE OF 35°44'30" WHOSE LONG CHORD BEARS S39°54'03"W, A DISTANCE OF 267.19 FEET;
THENCE S67°58'24"E A DISTANCE OF 40.00 FEET;
THENCE S22°01'36"W A DISTANCE OF 538.15 FEET TO A POINT OF CURVE TO THE RIGHT;
THENCE ON SAID CURVE, HAVING A RADIUS OF 260.00 FEET, AN ARC LENGTH OF 61.46 FEET, A DELTA ANGLE OF 13°32'35", WHOSE LONG CHORD BEARS S28°47'53"W A DISTANCE OF 61.31 FEET;
THENCE S00°00'00"W A DISTANCE OF 148.75 FEET;
THENCE N90°00'00"W A DISTANCE OF 515.00 FEET TO A POINT ON THE NORTHEASTERLY RIGHT- OF-WAY LINE OF POWERS BOULEVARD DESCRIBED IN SAID BOOK 5307 AT PAGE 1472 (NOW HIGHWAY 21);
THE FOLLOWING FIVE (5) COURSES ARE ON SAID RIGHT-OF-WAY LINE AND THE NORTHERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY:
1) THENCE N00°29'10"W A DISTANCE OF 1123.38 FEET TO A POINT OF CURVE TO THE RIGHT;
2) THENCE ON SAID CURVE, HAVING A RADIUS OF 150.00 FEET, AN ARC LENGTH OF 229.91 FEET, A DELTA ANGLE OF 87°49'03", WHOSE LONG CHORD BEARS N43°25'21"E A DISTANCE OF 208.05 FEET;
3) THENCE N87°19'53" E A DISTANCE OF 53.06 FEET TO A POINT OF CURVE TO THE LEFT;
4) THENCE ON SAID CURVE, HAVING A RADIUS OF 2,969.79 FEET, AN ARC LENGTH OF 673.03 FEET, A DELTA ANGLE OF 12°59'05", WHOSE LONG CHORD BEARS N80°50'20"E A DISTANCE OF 671.59 FEET;
5) THENCE N47°20'48"E A DISTANCE OF 21.87 FEET TO THE POINT BEGINNING.
PARCEL CONTAINS 963,596 SQUARE FEET OR 22.121 ACRES MORE OR LESS.

SOILS & GEOLOGY CONDITIONS, CONSTRAINTS & HAZARDS NOTES

- A GEOLOGIC HAZARDS EVALUATION AND PRELIMINARY GEOTECHNICAL INVESTIGATION, CROSSROADS NORTH, MARKSHEFFEL ROAD AND STATE HIGHWAY 24, EL PASO COUNTY, COLORADO, FOR THE EQUITY GROUP, WAS COMPLETED BY CTL THOMPSON ON OCTOBER 6, 2020 AND INCLUDED THE AREA OF DEVELOPMENT PROPOSED WITH THE CROSSROADS NORTH DEVELOPMENT. THE GEOLOGY AND SOILS REPORT FOR THE CROSSROADS NORTH DEVELOPMENT WAS PROVIDED AS PART OF THE CROSSROADS NORTH PRELIMINARY PLAN SUBMITTED TO THE EL PASO BOARD OF COUNTY COMMISSIONERS. PLANNING AND COMMUNITY DEVELOPMENT FILE NUMBER [TBD]. DEVELOPERS AND HOME OWNERS SHOULD BECOME FAMILIAR WITH THIS REPORT AND ITS CONTENTS. **
- THERE ARE NO SIGNIFICANT GEOLOGICAL HAZARDS; HOWEVER, THE POTENTIAL FOR GEOLOGIC CONSTRAINTS DO EXIST RELATED TO THE POTENTIAL FOR SHALLOW GROUNDWATER TABLES, EXPANSIVE CLAY OR CLAYEY SANDSTONE, ERODIBLE SANDY SOILS. THESE GEOLOGICAL CONDITIONS ARE CONSIDERED RELATIVELY COMMON TO THE AREA WITH MITIGATION ACCOMPLISHED BY IMPLEMENTING COMMON ENGINEERING AND CONSTRUCTION PRACTICES. IF THE PREVIOUSLY LISTED POTENTIAL GEOLOGICAL HAZARDS ARE FOUND TO EXIST, AN EVALUATION SHALL BE PERFORMED AT THE TIME OF FINAL GEOTECHNICAL INVESTIGATION FOR THOSE INDIVIDUAL LOTS.
WE DID NOT IDENTIFY GEOLOGIC HAZARDS THAT WE BELIEVE PRECLUDED DEVELOPMENT OF THE SITE. THE CONDITIONS IDENTIFIED AT THE SITE THAT MAY POSE CONSTRAINTS TO DEVELOPMENT INCLUDED THE PRESENCE OF POTENTIALLY HYDRO-COMPACTIVE SOILS, EXISTING FILL STOCKPILES, AND EROSION. REGIONAL GEOLOGIC CONDITIONS THAT IMPACT THE SITE INCLUDE SEISMICITY AND RADIOACTIVITY. WE BELIEVE EACH OF THESE CONDITIONS CAN BE MITIGATED WITH ENGINEERING DESIGN AND CONSTRUCTION METHODS COMMONLY EMPLOYED IN THIS AREA. THESE CONDITIONS ARE DISCUSSED IN GREATER DETAIL IN THE SECTIONS THAT FOLLOW. **
- CONVENTIONAL SPREAD FOOTINGS AND MAT FOUNDATIONS UNDERLAIN BY THE ON-SITE, NATURAL SANDS AND GRADING FILL WILL BE APPROPRIATE FOR LIGHTLY TO MODERATELY-LOADED BUILDINGS AT THE SITE. MODERATELY TO MORE HEAVILY-LOADED STRUCTURES MAY REQUIRE MODIFICATION OF THE NEAR-SURFACE AND SOILS (SUB-EXCAVATION AND DENSE COMPACTION UNDER CONTROLLED CONDITIONS), PRIOR TO CONSTRUCTION OF FOOTING FOUNDATIONS. A DEEP FOUNDATION SUCH AS DRILLED BEDROCK PIERS MAY BE AN APPROPRIATE OPTION FOR HEAVILY-LOADED STRUCTURES, IF THE BEDROCK FORMATION IS ENCOUNTERED AS A REASONABLE DEPTH. **
- SITE-SPECIFIC SOILS STUDIES SHALL BE PERFORMED FOR THE LOTS WITHIN THIS SUBDIVISION PRIOR TO FOUNDATION CONSTRUCTION TO IDENTIFY SUBSURFACE SOIL CONDITIONS ANTICIPATED TO SUPPORT FOUNDATIONS AND PROVIDE PRELIMINARY GEOTECHNICAL-RELATED PARAMETERS AND RECOMMENDATIONS FOR FOUNDATION DESIGN AND CONSTRUCTION. **
- GEO REPORT, OVERALL PLANS SHOULD PROVIDE FOR THE RAPID CONVEYANCE OF SURFACE RUNOFF TO THE STORM DRAIN SYSTEM AND CENTRALIZED DRAINAGE CHANNELS, WHICH WILL BE PROVIDED WITHIN THE EXISTING ROADWAY/PUBLIC SPACE TRACTS AND PROPOSED LOT DRAINAGE EASEMENTS.

** REFER TO THE SOILS REPORT FOR MORE DETAILED INFORMATION.

FLOODPLAIN NOTES

- PORTIONS OF THIS PROPERTY ARE LOCATED WITHIN ZONE X AS DESIGNATED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY MAP NUMBER '08041C0768G', EFFECTIVE DATE 'DECEMBER 7, 2018'.

PRELIMINARY PLAN NOTES

- THE FOLLOWING REPORTS HAVE BEEN SUBMITTED IN ASSOCIATION WITH THE PRELIMINARY PLAN FOR THIS SUBDIVISION AND ARE ON FILE AT THE COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT: TRANSPORTATION IMPACT STUDY; DRAINAGE REPORT; WATER RESOURCES REPORT; WASTEWATER DISPOSAL REPORT; GEOLOGY AND SOILS REPORT; FIRE PROTECTION REPORT; NATURAL FEATURES REPORT.
- TRACT-A, CONSIST OF A BLANKET EASEMENT FOR ALL PUBLIC AND PRIVATE UTILITIES, DRAINAGE, PARKING AND ACCESS FOR ALL ASSOCIATED LOTS. TRACT-A WILL BE THE RESPONSIBILITY OF THE WATERVIEW III METRO DISTRICT.
- ALL PROPERTY OWNERS ARE RESPONSIBLE FOR MAINTAINING PROPER STORM WATER DRAINAGE IN AND THROUGH THEIR PROPERTY. PUBLIC DRAINAGE EASEMENTS AS SPECIFICALLY NOTED ON THE PLAT SHALL BE MAINTAINED BY THE LOT OWNERS UNLESS OTHERWISE INDICATED.
- UNLESS OTHERWISE INDICATED, ALL FRONT, SIDE AND REAR LOT LINES ARE HEREBY PLATTED ON EITHER SIDE WITH A 10 FOOT PUBLIC UTILITY AND DRAINAGE EASEMENT. ALL EXTERIOR SUBDIVISION BOUNDARIES ARE HEREBY PLATTED WITH A 10 FOOT PUBLIC UTILITY AND DRAINAGE EASEMENT. THE SOLE RESPONSIBILITY FOR MAINTENANCE OF THESE EASEMENTS ON THE PRIVATE LOTS IS HEREBY VESTED WITH THE INDIVIDUAL PROPERTY OWNERS. THE RESPONSIBILITY OF THE COMMON TRACT AND RELATED EASEMENTS WILL BE WITH THE WATERVIEW III METRO DISTRICT.
- DEVELOPER SHALL COMPLY WITH FEDERAL AND STATE LAWS, REGULATIONS, ORDINANCES, REVIEW AND PERMIT REQUIREMENTS, AND OTHER AGENCY REQUIREMENTS, IF ANY, OF APPLICABLE AGENCIES INCLUDING, BUT NOT LIMITED TO, THE COLORADO DIVISION OF WILDLIFE, COLORADO DEPARTMENT OF TRANSPORTATION, U.S. ARMY CORPS OF ENGINEERS, AND THE U.S. FISH AND WILDLIFE SERVICE REGARDING THE ENDANGERED SPECIES ACT, PARTICULARLY AS RELATED TO THE LISTED SPECIES IDENTIFIED IN THE PROJECT'S ENVIRONMENTAL ASSESSMENT.
- NO DRIVEWAYS SHALL BE ESTABLISHED ALONG PUBLIC STREET UNLESS AN ACCESS PERMIT HAS BEEN GRANTED BY EL PASO COUNTY.
- EXCEPT AS OTHERWISE NOTED ON THE PRELIMINARY PLAN, INDIVIDUAL LOTS WILL HAVE FULL ACCESS AND SHARED PARKING BY WAY OF THE OVERALL TRACT-A.
- AT THE TIME OF APPROVAL OF THIS PROJECT, THIS PROPERTY IS LOCATED WITHIN THE SECURITY FIRE PROTECTION DISTRICT, WHICH HAS ADOPTED A FIRE CODE WITH FIRE MITIGATION REQUIREMENTS DEPENDING UPON THE LEVEL OF FIRE RISK ASSOCIATED WITH THE PROPERTY AND STRUCTURES. THE OWNER OF ANY LOT SHOULD CONTACT THE FIRE DISTRICT TO DETERMINE THE EXACT DEVELOPMENT REQUIREMENTS RELATIVE TO THE ADOPTED FIRE CODE.
- NO-BUILD AREAS ARE AS SHOWN ON THE PLANS. NO-BUILD AREAS INCLUDE, BUT ARE NOT LIMITED TO, WITHIN DESIGNATED DRAINAGE-EASEMENTS AND TRACTS, NO-BUILD AREAS WITHIN INDIVIDUAL LOTS ARE THE RESPONSIBILITY OF THE PROPERTY OWNER. ALL OTHER NO-BUILD AREAS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER'S AND ASSOCIATED WATERVIEW III METRO DISTRICT.
- THIS PROPERTY MAY BE ADVERSELY IMPACTED BY NOISE, DUST, FUMES, AND LIGHT POLLUTION CAUSED BY ADJACENT INDUSTRIAL AND AIRPORT PROPERTIES AND ACTIVITIES. THE BUYER SHOULD RESEARCH AND BE AWARE OF THIS POTENTIALITY AND THE RAMIFICATIONS THEREOF.
- SIGNAGE IS NOT APPROVED WITH THIS PLAN. A SEPARATE SIGN PERMIT IS REQUIRED. CONTACT THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT AT 2880 INTERNATIONAL CIRCLE FOR A SIGN PLAN APPLICATION.
- RETAINING WALLS EXCEEDING 4- FEET WILL NEED TO BE STRUCTURALLY ENGINEERED.
- ALL "STOP SIGNS" AND OTHER TRAFFIC CONTROL SIGNAGE SHALL BE INSTALLED BY THE DEVELOPER AT LOCATIONS SHOWN ON THE SITE DEVELOPMENT PLAN TO MEET MUTCD STANDARDS.
- PRIOR TO BUILDING PERMIT APPROVAL, A FINAL SUBDIVISION PLAT SHALL BE SUBMITTED FOR REVIEW BY THE EL PASO COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT, AND APPROVAL BY THE BOARD OF COUNTY COMMISSIONERS, OR DESIGNEE MUST BE RECORDED, OR AUTHORIZED DESIGNEE, AND THE PLAT SHALL BE RECORDED.
- ALL STREETS SHALL BE NAMED AND CONSTRUCTED TO EL PASO COUNTY STANDARDS AND ANY APPROVED DEVIATIONS. UPON ACCEPTANCE BY EL PASO COUNTY, PUBLIC STREETS SHALL BE MAINTAINED BY THE COUNTY.
- NOTWITHSTANDING ANYTHING DEPICTED IN THIS PLAN IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE (LDC), THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL (DCM), AND DOM VOLUME 2. ANY DEVIATIONS FROM THESE STANDARDS MUST BE SPECIFICALLY REQUESTED AND APPROVED IN WRITING TO BE ACCEPTABLE. THE APPROVAL OF THIS PRELIMINARY PLAN DOES NOT IMPLICITLY ALLOW ANY DEVIATIONS OR WAIVERS THAT HAVE NOT BEEN OTHERWISE APPROVED THROUGH THE DEVIATION APPROVAL PROCESS.
- DEVELOPMENT OF THE PROPERTY WILL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE EL PASO COUNTY LAND DEVELOPMENT CODE FOR OR ZONING, AND THE COMMERCIAL AVIATION DISTRICT OVERLAY (CAD-O)
- THIS PROPERTY IS NOT LOCATED WITHIN A DESIGNATED FEMA FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY MAPS NUMBERED '08041C0768G', DATED DECEMBER 7, 2018, THE LIMITS OF WHICH ARE SHOWN ON THE SURVEY. AREAS WITHIN THE FLOODPLAIN ARE ZONE AE, AREAS OUTSIDE THE FLOODPLAIN ARE ZONE X.
- WATER AND WASTEWATER SERVICES FOR THIS SUBDIVISION WILL BE PROVIDED BY THE WIDEFELD WATER AND SANITARY DISTRICT (WWS) SUBJECT TO THE DISTRICT'S RULES, REGULATIONS AND SPECIFICATIONS. THE OFFICE OF THE STATE ENGINEER HAS ISSUED AN OPINION OF WATER INADEQUACY BASED ON ITS ANALYSIS AND INTERPRETATION OF A STIPULATED AGREEMENT CONCERNING THE AVAILABILITY OF CERTAIN WATER RIGHTS.
- THE PROPERTY IS LOCATED IN THE AIRPORT OVERLAY ZONE. THIS SERVES AS NOTICE OF POTENTIAL AIRCRAFT OVERFLIGHT AND NOISE IMPACTS ON THIS PROPERTY DUE TO ITS CLOSE PROXIMITY TO AN AIRPORT, WHICH IS BEING DISCLOSED TO ALL PROSPECTIVE PURCHASERS CONSIDERING THE USE OF THIS PROPERTY FOR RESIDENTIAL AND OTHER PURPOSES. THIS PROPERTY IS SUBJECT TO THE OVERFLIGHT AND ASSOCIATED NOISE OF ARRIVING AND DEPARTING AIRCRAFT DURING THE COURSE OF NORMAL AIRPORT OPERATIONS. ALL PROPERTY WITHIN THIS SUBDIVISION IS SUBJECT TO AN AVIATION EASEMENT AS RECORDED IN BOOK 2478 AT PAGE 304 OF THE RECORDS OF THE EL PASO COUNTY CLERK AND RECORDER.
- A 30 DB(A) INDOOR NOISE REDUCTION SHALL BE ACHIEVED BY APPROVED CONSTRUCTION TECHNIQUES AS EVIDENCED BY A NOISE REDUCTION CERTIFICATE PRIOR TO SITE DEVELOPMENT PLAN APPROVAL.
- A TITLE 32 SPECIAL DISTRICT ANNUAL REPORT AND DISCLOSURE FORM SATISFACTORY TO THE PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT SHALL BE RECORDED WITH EACH PLAT.
- LANDSCAPE IMPROVEMENTS AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE OWNER FOR INDIVIDUAL LOT, BUT COMMON LANDSCAPE ASSOCIATED WITH TRACT-A WILL BE THE RESPONSIBILITY OF WATERVIEW III METRO DISTRICT
- LANDSCAPING SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 6 OF THE COUNTY CODE TOGETHER WITH ALL APPLICABLE CONDITIONS OF APPROVAL IMPOSED BY THE BOCC.
- THERE SHALL BE NO DIRECT LOT ACCESS TO POWERS BOULEVARD AND BRADLEY ROAD.



SITE DATA TABLE:

TAX ID NUMBERS	550920002
CURRENT ZONING	CR CAD-O
PROPOSED ZONING	CR CAD-O
PROPOSED LOTS	9
TOTAL SITE ACREAGE	22.10 AC
MINIMUM LOT SIZE	0.22 AC
TOTAL LOT ACREAGE	13.01 AC±
PRIVATE ROAD ACREAGE	.XX.XX AC±
DETENTION POND ACREAGE	0.91 AC±
OPEN SPACE ACREAGE	.XX.XX AC±

SHEET INDEX:

01	COVER SHEET
02	PRELIMINARY PLAN - 1
03	PRELIMINARY PLAN - 2
04	LANDSCAPE SHEET
05	LANDSCAPE STREET DETAIL SHEET

PROJECT TEAM
OWNER / DEVELOPER:
 WATERVIEW COMMERCIAL INVESTORS, LLC
 2727 GLEN ARBOR DRIVE
 COLORADO SPRINGS, CO 80920
PLANNER / LANDSCAPE ARCH.:
 KIMLEY-HORN
 2 NORTH NEVADA AVENUE
 SUITE 300
 COLORADO SPRINGS, CO 80903

CIVIL ENGINEER
 KIMLEY-HORN
 2 NORTH NEVADA AVENUE
 SUITE 300
 COLORADO SPRINGS, CO 80903

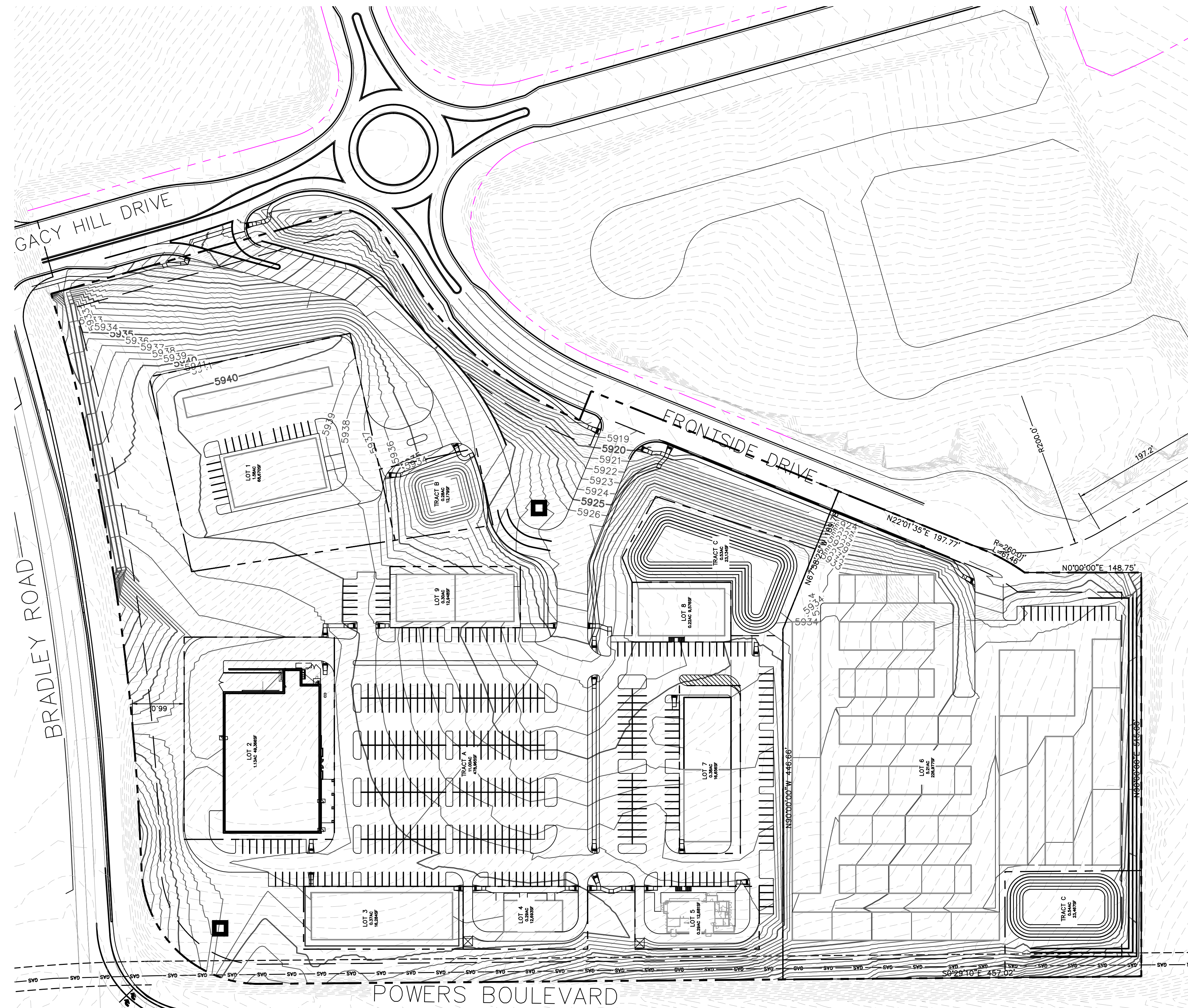
PLANNING AND COMMUNITY DEVELOPMENT



WATERVIEW EAST-COMMERCIAL

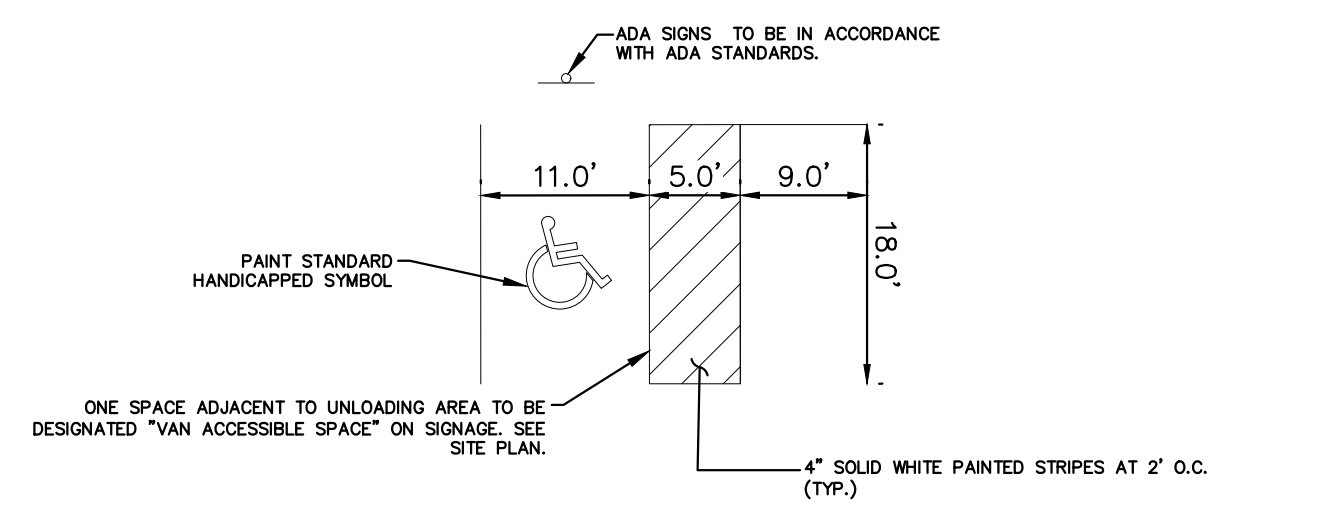
PRELIMINARY PLAN

SITUATED IN THE WEST HALF OF SECTION 9, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M.,
CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO



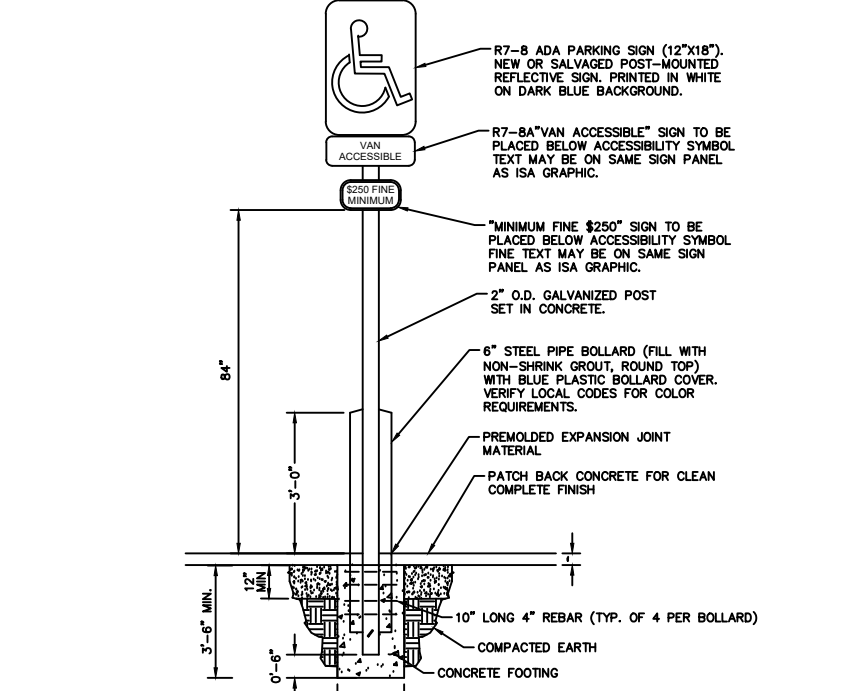
LOT DATA	
LOT	SF/AC±
1	68,670/1.58
2	49,366/1.13
3	16,284/0.37
4	12,693/0.29
5	12,681/0.29
6	226,977/5.21
7	16,656/0.38
8	9,576/0.22
9	12,948/0.30

TRACT DATA	
TRACT	SF/AC
A	478,965/11.00
B	12,179/0.28
C	23,134/0.53
D	23,467/0.54

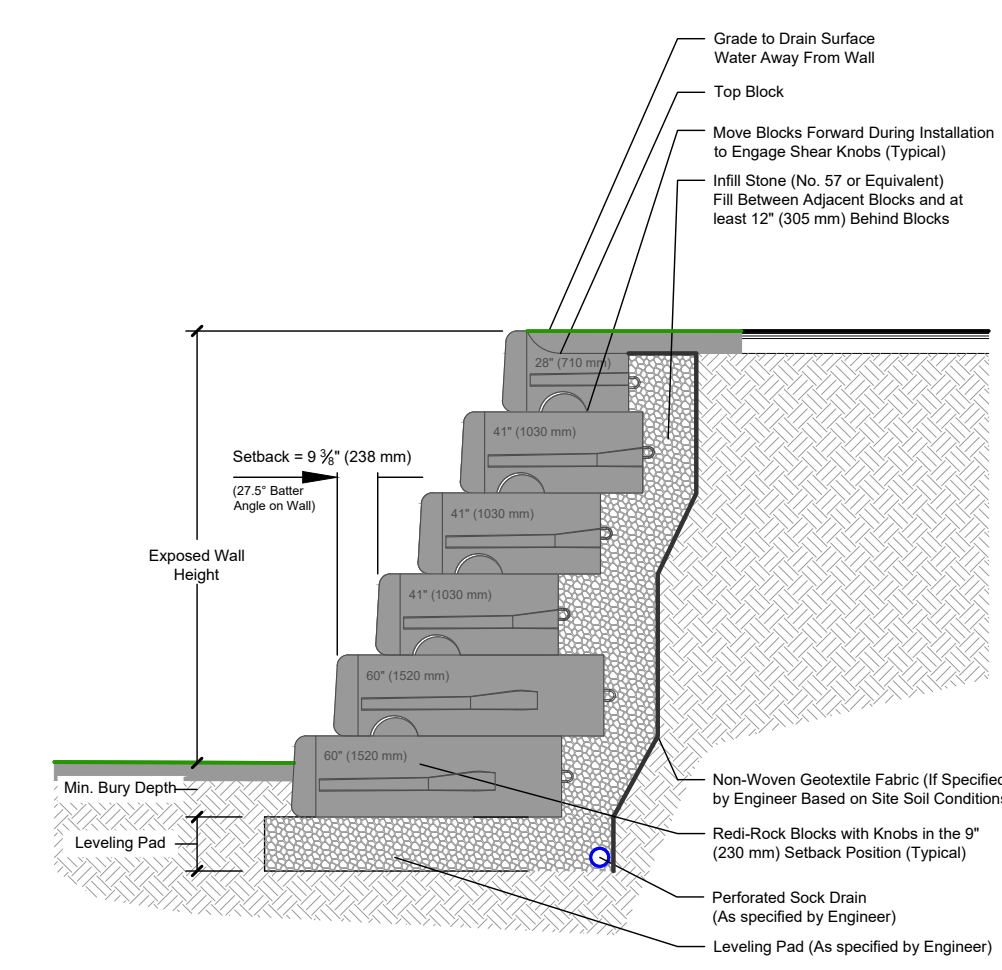


NOTES:
1. DIMENSIONS MAY VARY REFER TO SITE PLAN (SHEETS 5 AND 6).
2. SIGNAGE AND MARKINGS TO BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

A ADA MARKING STALL DETAIL
NTS



B ADA PARKING SIGN DETAIL
NTS



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Final wall design must address both internal and external drainage and all modes of wall stability.

C RETAINING WALL DETAIL
NTS

Kimley Horn
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