

PRELIMINARY UTILITY REPORT

FOR

**GOLD CROWN FIELD HOUSE
TOWN OF CASTLE ROCK, COLORADO
CASE NO. SDP26-0014**

Prepared for:

Gold Crown Foundation
150 S Harlan St.
Lakewood, CO 80226
Contact: Kevin Petty
Phone: 303.233.6776

Prepared by:



CORE Consultants, Inc.
3473 South Broadway
Englewood, CO 80113
Contact: Todd Wolma, PE
Phone: 303-703-4444
CORE Project Number: 25-092

June 12, 2026

Engineer's Statement:

The enclosed utility report, and exhibits, were prepared by me or under my direct supervision and is correct to the best of my knowledge and belief. Said utility report has been prepared in accordance with applicable Town of Castle Rock criteria and is in conformance with the master utility plans for the affected area. I accept responsibility for any liability caused by negligent acts, errors, or omissions on my part in preparing this report.

Todd Wolma, P.E.
Colorado Professional Engineer
License #59513

Owner/Developer's Statement:

As Owner/Developer of Land(s) identified within this report; I agree to proceed, implement and comply with all recommendations and requirements outlined herein.

Name of Developer

Authorized Signature

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I. GENERAL LOCATION AND DESCRIPTION

A. Site Location

This utility report supports the design of Gold Crown Field House development, which consists of an 83,000 sf indoor sports facility, 82,000 sf of outdoor playing fields and associated vehicle circulation drives and parking.

The project area is in the Northwest Quarter of Section 22, Township 8 South, Range 67 West of the Sixth Principal Meridian.

The proposed Gold Crown Field House is within the Dawson Trails planned development. At present, the site is vacant land. The site is bounded by Dawson Trails Boulevard on the southeast, an open space parcel (Tract C) on the south, rural residential lots of the unincorporated Twin Oaks subdivision on the west, and undeveloped, unincorporated parcels on the north. The development parcel lies within Planning Area PL-1.07, which designates parks, recreation, cultural and civic facilities as allowable uses.

B. Description of Property

The legal description of the development parcel is Dawson Trails Filing No. 1, Tract F, with a total land area of 44.1 acres. The proposed development will improve the southern 25 acres of the tract as a separate lot.

The project is analyzed under the *gym/fitness center* land use listed in the Town's water and wastewater criteria. The 83,000 sf building equates to 104 single family equivalents. The project will initially consist of approximately 69,000 sf of building area with an expansion of the remaining 14,000 sf to be constructed in the future. All calculations are for full buildout of the building and project to ensure that all water and wastewater infrastructure will meet future planned needs and not require upsizing.

Utility easements will be dedicated for a proposed water main loop and a proposed sanitary main that connect to the development site from the Dawson Trails Boulevard right-of way.

No utilities are located in FEMA or Town of Castle Rock defined floodplains. A small area of floodplain is located at the southwest corner of the property, however no construction is occurring within the floodplain.

There are no irrigation canals within or near the project area.

There are no notable geologic features within or near the site.

There are no existing on-site wastewater treatment systems on the project site.

There are no existing water wells on the project site. The northern portions of Tract F has been identified in the Dawson Trails Planned Development Plan as a potential future site for a Town of Castle Rock well. However, this well site parcel will be separate from the development site after a replat of Tract F.

II. CALCULATED WATER DEMANDS

A. Average Day Demands

Calculation of the average daily domestic water demand follows Section 4.4.1.1 of the Town's water criteria. *Gym/Fitness Center* is the relevant land use selected from Table 4.4.1.1 for the development's wastewater loads.

Average Daily Domestic Water Demand (ADD)

Land Use (Table 4.4.1.1)	ADD/Unit	SFE/Unit
Gym/Fitness Center	0.5 gpd/SF	0.00125 SFE SF
83,000 SF	41,500 gpd	104 SFE

A domestic water demand of 41,500 gallons per day (**28.8 gpm**) is used for preliminary design calculations. The building design does not include shower facilities. Actual fixture count may reflect domestic water demand that is significantly less than the above ADD used for preliminary calculations.

The irrigation water demand is taken from the site's preliminary irrigation plan, per Note 2 of Section 4.4.1.1 of the Town's water criteria.

The turf field is planned to be a synthetic turf field and therefore no irrigation is required.

The irrigation demand calculation for the remaining landscape area follows Section 4.4.1.1 of Town water criteria. The site is assumed to have up to 4.0 acres of irrigated landscape areas with the irrigation rate of Table 4.4.1 applied, resulting in 15,000 gallons per day.

A total average day water demand of 56,500 gallons per day (**39 gpm**) is used for preliminary design calculations, consisting of domestic and irrigation demand.

As design progresses, the irrigation water demand will be updated to reflect site's irrigation plan, per Note 2 of Section 4.4.1.1 of the Town's water criteria.

Demand calculations are tabulated in the appendix.

B. Max Day Demands

Maximum day domestic demand is based on a peaking factor of 2.5 applied to the average day demand per Section 4.4.1.2 of the Town's water criteria. A domestic water demand of 103,750 gallons per day (**72 gpm**) is used for preliminary design calculations.

A total maximum day water demand of 183,750 gallons per day (**82 gpm**) is used for preliminary design calculations, consisting of domestic and irrigation demand.

Fire flows are preliminarily assumed to be 3000 gpm for a 3-hour duration based on building floor area and a 50% reduction for sprinklers compliant with NFPA 13. The resulting tank storage requirement, for maximum day plus fire flow is 0.66 million gallons. The storage requirement is met by the Tank 4, as evaluated from the Town's water master plan.

The fire flow confirmation memo will be provided along with this report to assist in determination of fire flow for the Gold Crown Fieldhouse building.

Demand and storage calculations are tabulated in Appendix B.

C. Peak Hour Demands

Peak hour domestic flows are based on a peaking factor of 5.5 applied to the average day demand per Section 4.4.1.2 of the Town's water criteria. PHD.

A total peak hour water demand rate of 250,331 gallons per day (**169 gpm**) is used for preliminary design calculations, consisting of domestic and irrigation demand.

A single proposed irrigation tap is projected to supply a peak rate of 40 gallons per minute for on-site landscaping. The final utility report will refine the irrigation component of the peak hour demand based on zonal rates from the proposed irrigation plan.

III. EXISTING WATER SYSTEM

A. Existing Distribution System

An existing 12" water main in Dawson Trails Boulevard provides water service to the site. The nearest transmission main is a 16" blue zone water line that passes through the northeast and southeast legs of the Dawson Trails / Ike Street intersection at the northeast corner of the project site.

B. Existing Supply Facilities

The Blue Zone water system has connections to Tank 8 to the north and Tank 4 to the east. The Blue Zone hydraulic grades lines (HGL) used for water system analysis are 6508.0 for 100% full scenario and 6490.0 for the 20% full scenarios. All fire flows, domestic flows and irrigation demands can be adequately serviced from the Blue Zone HGL.

IV. PROPOSED WATER SYSTEM

A. Proposed Distribution System

A single 12" water main loop is proposed to serve the development site. The loop will have two connections to the existing 12" blue zone main in Dawson Trails Boulevard. Fire hydrants, the proposed building's fire line, the proposed domestic meter and a proposed irrigation meter will all connect to the on-site 12" loop.

Any future development of the existing water infrastructure needed to serve this site is the responsibility of the developer.

B. Proposed Supply Facilities

No supply facilities are proposed with this project.

C. Land Dedication Requirements

A utility easement will be dedicated over the portion of proposed water main loop through the development site, generally following the fire lane. Hydrants and meters will also be contained in the proposed easement. Easements will be complaint with Section 4.5 of the Town's water criteria.

V. CALCULATED WASTEWATER DEMANDS

A. Average Day Wastewater Flows

Calculation of the average daily wastewater flows follow Section 4.4.1.1 of the Town's wastewater criteria. *Gym/Fitness Center* is the relevant land use selected from Table 4.4.1.1 for the development's wastewater loads.

Average Daily Wastewater Flow (ADF)

Land Use (Table 4.4.1.1)	ADF/Unit	SFE/Unit
Gym/Fitness Center	0.5 gpd/SF	0.00125 SFE SF
83,000 SF	41,500 gpd	104 SFE

A wastewater load of 41,500 gallons per day (**28.8 gpm**; 0.064 cfs) is used for preliminary design calculations. The building design does not include shower facilities. Actual fixture count may reflect wastewater flows that are significantly less than the ADF above that is used for preliminary calculations.

B. Peaking Factor

Calculation of the wastewater peaking factor (PF) follows Section 4.4.1.2 of the Town's wastewater criteria, based on average daily flow (ADF) in units of million gallons per day (MGD):

$$PF = 3.65 \times [(ADF)^{-0.168}]; \quad PF \leq 5.0$$

$$3.65 \times [(0.041500 \text{ MGD})^{-0.168}] = 6.23$$

Therefore, a peaking factor of 5.0 is used for design calculations for the proposed main.

Verification of downstream capacity in the receiving interceptor uses a peaking factor based on combined flows to the evaluated design point. These calculations are tabulated in Appendix C.

C. Peak Design Flows

Calculation of the peak design flow rate (PDF) follow Section 4.4.1.3 of the Town's wastewater criteria:

$$PDF = (ADF * PF) + (0.1 * ADF) = (41,500 \text{ gpd} * 5.0) + (0.1 * 41,500 \text{ gpd}) = 211,650 \text{ gpd}$$

A peak design flow rate of 211,650 gallons per day (**147 gpm**; 0.33 cfs) is used for design calculations for the proposed main.

VI. EXISTING WASTEWATER SYSTEM

A. Existing Collection System

An existing 8" sanitary sewer main in Dawson Trails Boulevard provides wastewater service to the site. The 8" sewer main connects to a 24" interceptor at the east edge of the Dawson Trails Planned development. The 8" main receives no wastewater load at present.

VII. PROPOSED WASTEWATER SYSTEM

A. Proposed Distribution System

285 feet of 8" sewer main are proposed with this development. The main extension will connect to an existing manhole in Dawson Trails Boulevard.

The receiving interceptor is verified to operate within its allowable limit of 75% full, after inclusion of buildout flows from the entire basin. Therefore, no additional improvements to downstream infrastructure are proposed. The assumed flows and land uses are based on the Dawson Trails Filing 1 Final Utility Report. Capacity calculations are tabulated in the appendix.

Any future development of the existing water infrastructure needed to serve this site is the responsibility of the developer.

B. Proposed Wastewater Facilities

No wastewater facilities are proposed with this project.

C. Land Dedication Requirements

A utility easement will be dedicated over the portion of proposed sewer main on the development site, generally within the roadway. The easement will be compliant with Section 4.5 of the Town's wastewater criteria.

VIII. POTENTIAL PERMITTING REQUIREMENTS

No additional permitting requirements are anticipated with this project beyond the standard permitting processes for civil infrastructure projects.

IX. REFERENCES

- A. Town of Castle Rock Storm Water System Design 2018 Criteria Manual, December 2018.
- B. Town of Castle Rock Storm Wastewater Collection Design 2018 Criteria Manual, December 2018.
- C. Final Utility Report for Dawson Trails Filing 1 by CORE Consultants, approved February 21, 2025
- D. Town of Castle Rock Water Master Plan, 2023

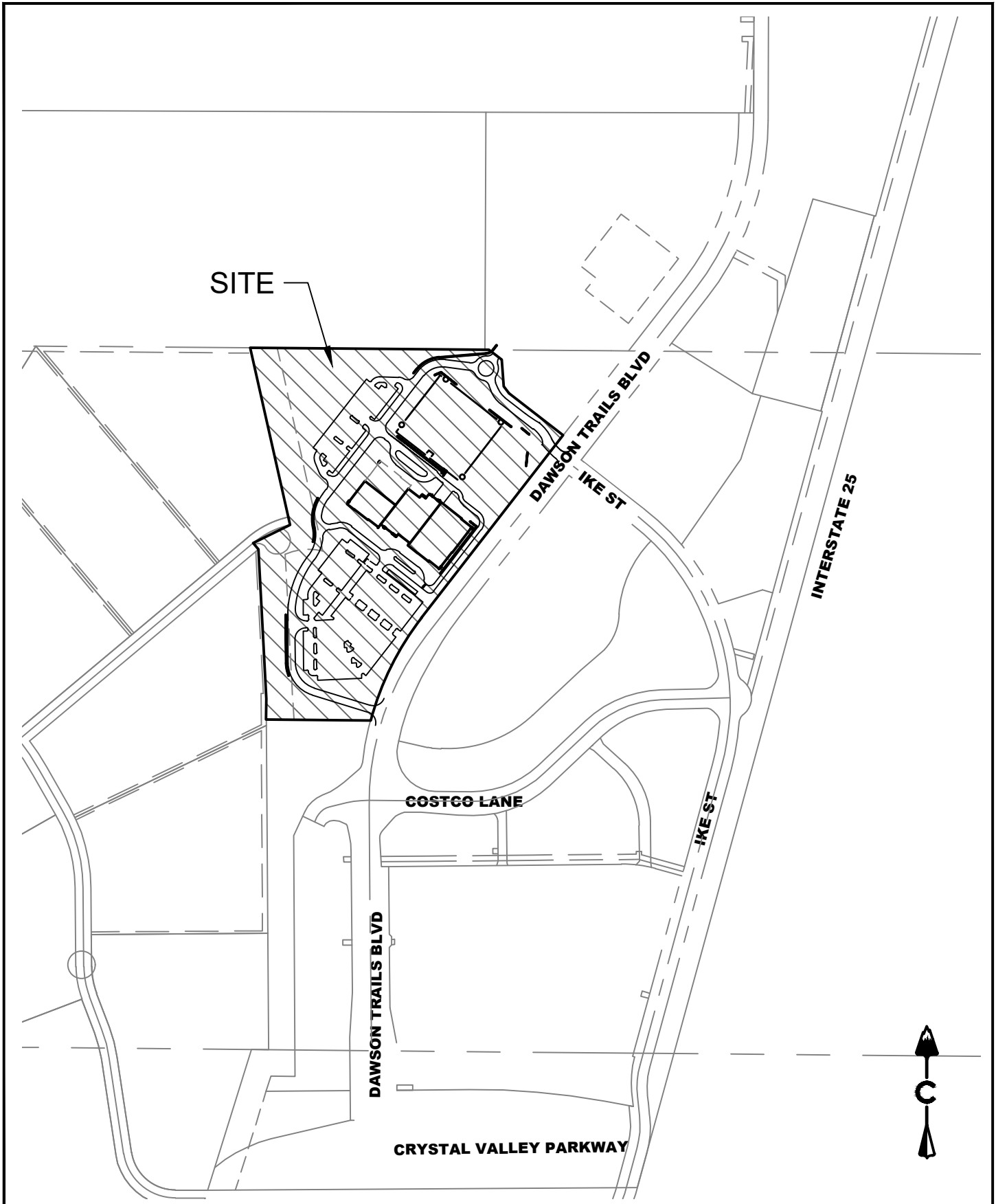
Computer Modeling Programs:

- A. WaterCAD by Bentley Systems, Inc., Version 23.00.00.19.

X. APPENDICES

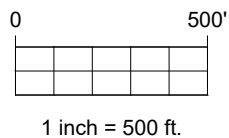
APPENDIX A

MAPS AND FIGURES



5/7/2026 10:41 AM X:\05-092 GOLD CROWN FIELDHOUSE\04\REPORTS\UTILITY\FIGURES_VICINITY MAP - 0501.DWG

CORE
CORE CONSULTANTS, INC.
LIVEYOURCORE.COM



GOLD CROWN
FIELDHOUSE
VICINITY MAP

CREATED BY: LCC

DATE: 05/06/2026

SHEET NUMBER
1
OF 1 SHEETS
JOB NUMBER
25-092

APPENDIX B

WATER COMPUTATIONS

Gold Crown Field House
Water Demand and Storage

DEMAND COMPONENT	GYM / FITNESS CENTER			DEMAND								
				SFE	AVG DAY		PEAK HOUR	PEAK HOUR		MAX DAY	MAX DAY	
<u>DOMESTIC</u>	SF	SFE / SF	GPD/SFE	(DU)	(GPD)	(GPM)	FACTOR	(GPD)	(GPM)	FACTOR	(GPD)	(GPM)
Field House	83000	0.00125	400	104	41,500	29	5.50	228,250	159	2.50	103,750	72
<u>IRRIGATION</u>	IRRIGATED ACRE	SFE/ACRE	GPD/AC		(GPD)	(GPM)	FACTOR	(GPD)	(GPM)	FACTOR	(GPD)	(GPM)
Landscaped Area	4.0	9.38	3750		15,000	10	1.00	15,000	10	1.00	15,000	10
<u>FIRE FLOW</u>	SF										(GPD)	(GPM)
Fire Flow @ 3000 gpm @ 3 hours	83000										540,000	3000
Total				104	56,500	39		243,250	169		658,750	3,082

TOTAL STORAGE VOLUME (GALLONS) 658,750

TOTAL STORAGE VOLUME (MG) 0.66

APPENDIX C

WASTEWATER COMPUTATIONS

PROJECT: DAWSON TRAILS BLVD (NORTH) - PHASE 1 05/07/26 MFW Date Initials * Flows for J-6 taken from Final Utility Report from CD 23-0002 Dawson Trails OffSite Sanitary Sewer						Town of Castle Rock Criteria												Unit Conversions		Design Criteria																								
						Single Family Residential and Duplexes Multi-Family Residential (Townhomes and Condos) Retail/ Offices* Restaurants* Fuel Station** Industrial*** Car Wash Gym / Fitness Center Parks										Typical ADF/ Unit 200 GPD/DU 130 GPD/DU 0.1 GPD/SF 1.5 GPD/SF 800 GPD/EA. 600 GPD/AC 5,000 GPD/AC 0.5 GPD/sf 200 GPD/SFE		0.01 GPD/SF		Pipe (in) 8 10 12 15 18 21 24 27 30 Min 0.40% 0.25% 0.20% 0.15% 0.11% 0.09% 0.08% 0.07% 0.06% Slope 7.50% 5.50% 4.50% 3.50% 2.50% 2.00% 1.80% 1.50% 1.30% Capacity (gpm) 374 536 780 1,224 1,705 2,326 3,131 4,009 4,916 1,619 2,514 3,698 5,913 8,126 10,964 14,850 18,559 22,882																								
PROJECTED FLOW DETERMINATION																										SEWER DESIGN																		
DESIGN POINT						RESIDENTIAL			NON-RESIDENTIAL								PEAK FLOW				INFILTRATION & INFLOW		CUMULATIVE TOTAL FLOW						Pipe Size (in)	Number of Pipes	Min Design Pipe Slope (ft/100 ft)	Max Design Pipe Slope (ft/100 ft)	Min Pipe Slope (ft/100 ft)	Max Pipe Slope (ft/100 ft)	Capacity (gpm) @ 75% depth @ Min Pipe Slope	Capacity (gpm) @ 75% depth @ Max Slope	Capacity @ 75% depth (gpm) @ Design Slope	Capacity Remaining (gpm)	Percent Capacity (75% Max)	Min Velocity (fps)	Max Velocity (fps)			
Design Point Location	PLANNING AREA	Phase	Contributing Flow 1	Contributing Flow 2	Contributing Flow 3	Multi Family (DU's)	Single Family (DU's)	Average Daily Flow (GPD)	Gym / Fitness Center (SF)	Parks (SFE)	Car Wash/Pump Station (SFE)	Industrial (Gross SF)	Fuel Station (SFE.)	Restaurants (Gross SF)	Retail / Office (Gross SF)	Average Daily Flow (GPD)	Total Average Daily Flow (GPD)	Total Average Flow (gpm)	Peak Factor	Peak Hour Flow (gpm)	Infiltration & Inflow (GPD)	Infiltration & Inflow (gpm)	Total Peak Sewage Flow (gpm)	Contributing Flow 1	Contributing Flow 2	Contributing Flow 3	Cumulative Total Peak Flow (gpm)	Cumulative Total Peak Flow (cfs)																
						a	b	c	d	dd	ddd	e	ee	f	ff	g	h	i	ii	j	k	m	n	o	p	q	r	rr	s	t					u	w	x	y	z	aa	bb	cc		
						Map	Map	130*a + 200*b	Map	Map	Map	Map	Map	Map	Map	3.375*d + 200*dd + 5,000*ddd + 0.05*e + 0.18*ee + 1.5*f + 0.1*ff	c + g	h/24/60	3.65 * (h/1,000,000) ^-0.168	i * 5	0.1*h	k/(24*60)	j + m	r	r	r	n+o+p+q	r / 0.1337*60										aa - r						
J-6.01	E-2														80,000	8,000	8,000	5.56	5.00	27.78	800	0.56	28.4				28.4	0.06	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,586	12%	2.67	7.25			
J-6.02	F-3					400		52,000				450,000			100,000	12,479	64,479	44.78	5.00	223.89	6,448	4.48	228.4				228.4	0.51	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,386	33%	5.07	7.25			
J-6																							228.4	4819.9			5048.3	11.25	24	1	0.59	1.80	0.08	1.80	3131	14850	14,810	9,762	53%	6.65	4.50			
J-7A.01	F-2		J-6.02								3		1		150,000	30,800	30,800	21.39	5.00	106.94	3,080	2.14	109.1				109.1	0.24	8	1	5	7.50	0.40	7.50	374	1619	1,615	1,506	19%	5.07	5.69			
J-7A																							109.1	5048.3			5157.4	11.49	24	1	0.28	1.80	0.08	1.80	3131	14850	14,810	9,653	68%	5.01	10.13			
J-7.01	E-1													25,000	25,000	40,000	40,000	27.78	5.00	138.89	4,000	2.78	141.7				141.7	0.32	8	1	2.9	7.50	0.40	7.50	374	1619	1,615	1,473	26%	4.50	6.59			
J-7.02	F-2		J-7.01												10,000	1,000	1,000	0.69	5.00	3.47	100	0.07	3.6				3.6	0.01	8	1	0.94	7.50	0.40	7.50	374	1619	1,615	1,611	6%	0.94	1.44			
J-7.03	F-2		J-7.02												20,000	2,000	2,000	1.39	5.00	6.94	200	0.14	7.1				7.1	0.02	8	1	3.93	7.50	0.40	7.50	374	1619	1,615	1,608	6%	1.85	1.85			
J-7			J-7A.01	J-7.03																				5157.4			5157.4	11.49	24	1	1.67	1.80	0.08	1.80	3131	14850	14,810	9,653	40%	9.79	10.13			
J-7B.01	F-2		J-7												20,000	2,000	2,000	1.39	5.00	6.94	200	0.14	7.1				7.1	0.02	10	1	1	5.50	0.25	5.50	536	2514	2,507	2,500	6%	1.18	1.65			
J-7B																							7.1	5157.4			5164.5	11.51	24	1	1.94	1.80	0.08	1.80	3131	14850	14,810	9,646	38%	10.32	10.14			
J-8.01	PL-1.07								83,000							41,500	41,500	28.82	5.00	144.10	4,150	2.88	147.0				147.0	0.33	8	1	3	7.50	0.40	7.50	374	1619	1,615	1,468	26%	4.67	6.15			
J-8.02	F-1		J-8.01												100,000	10,000	10,000	6.94	5.00	34.72	1,000	0.69	35.5				35.5	0.08	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,579	13%	2.81	4.05			
J-8.03	PL-1.08		J-8.02								1					5,000	5,000	3.47	5.00	17.36	500	0.35	17.8				17.8	0.04	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,597	10%	2.03	3.33			
J-8			J-8.03	J-7B.01																				5164.5			5164.5	11.51	24	1	0.59	1.80	0.08	1.80	3131	14850	14,810	9,646	53%	6.73	10.14			
J-9A.01	F-1		J-8									183,333				1,010	1,010	0.70	5.00	3.51	101	0.07	3.6				3.6	0.01	10	1	0.5	5.50	0.25	5.50	536	2514	2,507	2,504	5%	0.84	1.28			
J-9A																							3.6	5164.5			5168.1	11.51	24	1	1.29	1.80	0.08	1.80	3131	14850	14,810	9,642	43%	8.91	10.15			
J-9.01	PL-1.07									1						200	200	0.14	5.00	0.69	20	0.01	0.8				0.8	0.00	8	1	2	7.50	0.40	7.50	374	1619	1,615	1,614	3%	0.58	0.58			
J-9.02	F-1		J-9.01									183,333				1,010	1,010	0.70	5.00	3.51	101	0.07	3.6				3.6	0.01	8	1	0.5	7.50	0.40	7.50	374	1619	1,615	1,611	7%	0.67	1.44			
J-9			J-9.02	J-9A.01																				5168.1			5168.1	11.51	24	1	0.36	1.80	0.08	1.80	3131	14850	14,810	9,642	63%	5.52	10.15			
J-9B.01	F-1		J-9									183,333				1,010	1,010	0.70	5.00	3.51	101	0.07	3.6				3.6	0.01	10	1	2.52	5.50	0.25	5.50	536	2514	2,507	2,504	4%	1.28	1.28			
J-9B																	208,010	144.45	4.75	722.26	20,801	14.45	3.6	5168.1			5171.7	11.52	24	1	0.25	1.80	0.08	1.80	3131	14850	14,810	9,639	71%	4.79	10.16			

APPENDIX D

UTILITY PLANS

FINAL UTILITY REPORT
FOR
DAWSON TRAIL BLVD (SOUTH)
FILING 1 INFRASTRUCTURE
TOWN OF CASTLE ROCK, COLORADO
CD23-0034

Prepared for:

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Dawson Trail II LLC
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Prepared by:



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Phone: 303-730-5909
CORE Project Number: 20-224

February 21, 2025



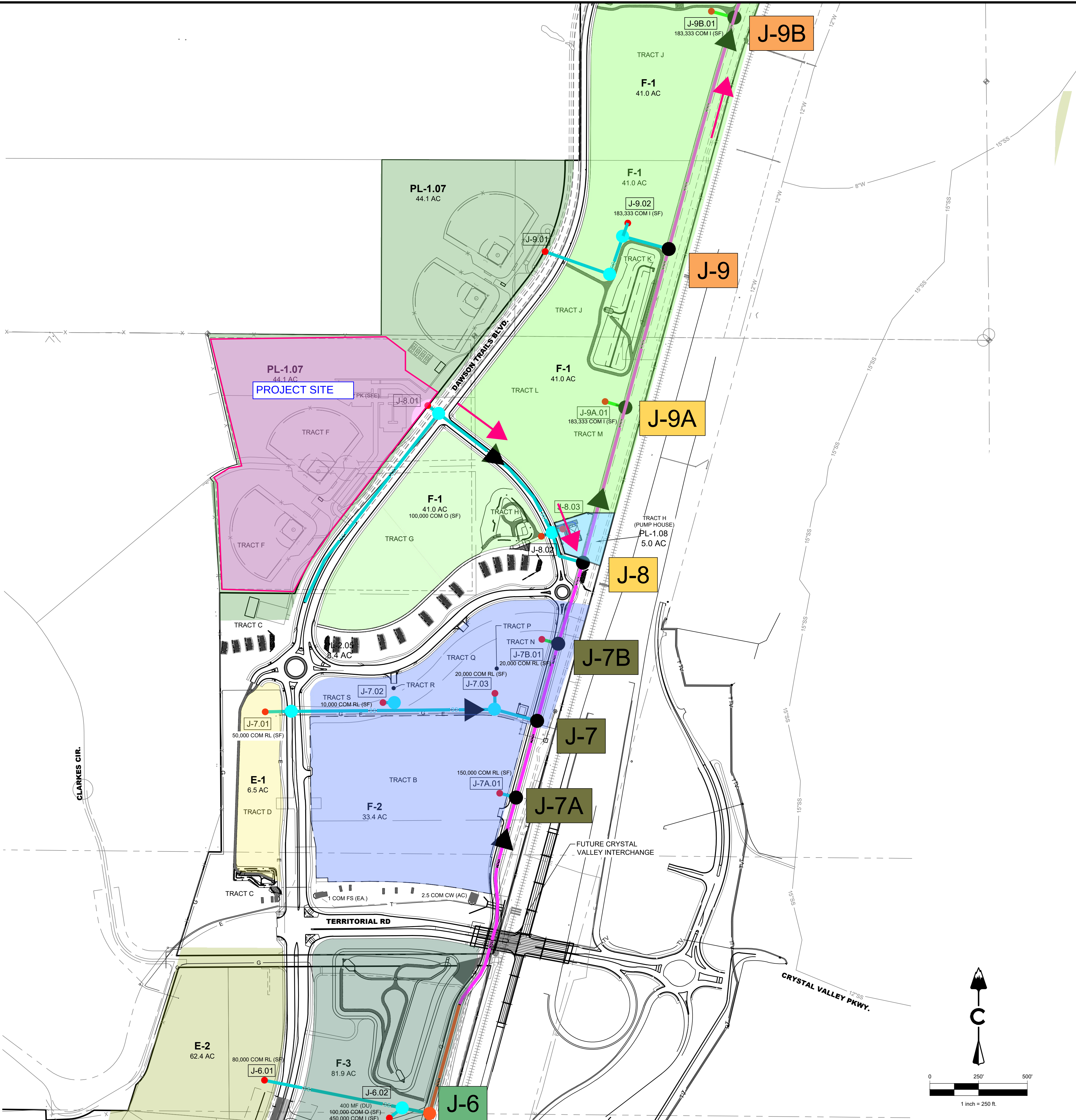
DEVELOPMENT SERVICES
APPROVED

By tkucewesky
on 04/21/2025
Approved CD23-0034 Final Utility Report.pdf
Record Document on File

PROJECTED FLOW DETERMINATION																											SEWER DESIGN										Reference C - p033				
DESIGN POINT						RESIDENTIAL			NON-RESIDENTIAL							PEAK FLOW			INFILTRATION & INFLOW		CUMULATIVE TOTAL FLOW							Pipe Size (in)	Number of Pipes	Min Design Pipe Slope (ft/100 ft)	Max Design Pipe Slope (ft/100 ft)	Min Pipe Slope (ft/100 ft)	Max Pipe Slope (ft/100 ft)	Capacity (gpm) @ 75% depth	Capacity (gpm) @ Min Pipe Slope	Capacity (gpm) @ 75% depth	Capacity @ 75% depth (gpm) @ Design Slope	Capacity Remaining (gpm)	Percent Capacity (75% Max)	Min Velocity (fps)	Max Velocity (fps)
Design Point Location	PLANNING AREA	Phase	Contributing Flow 1	Contributing Flow 2	Contributing Flow 3	Multi Family (DU's)	Single Family (DU's)	Average Daily Flow (GPD)	School (EA.)	Parks (SFE)	Car Wash/Pump Station (SFE)	Industrial (Gross SF)	Fuel Station (SFE.)	Restaurants (Gross SF)	Retail / Office (Gross SF)	Average Daily Flow (GPD)	Total Average Daily Flow (GPD)	Total Average Flow (gpm)	Peak Hour Flow (gpm)	Infiltration & Inflow (GPD)	Infiltration & Inflow (gpm)	Total Peak Sewage Flow (gpm)	Contributing Flow 1	Contributing Flow 2	Contributing Flow 3	Cumulative Total Peak Flow (gpm)	Cumulative Total Peak Flow (cfs)														
						a	b	c	d	dd	ddd	e	ee	f	ff	g 3,375*d + 200*dd + 5,000*ddd + 0.05*e + 0.18*ee + 1.5*f + 0.1*ff	h	i	j	k	m	n	o	p	q	r n+o+p+q	rr r / 0.1337*60	s	t		u	w	x	y	z	aa	bb aa - r	cc			
J-6.01	E-2					Map	Map	130*a + 200*b	Map	Map	Map	Map	Map	Map	Map	80,000	8,000	8,000	5.56	27.78	800	0.56	28.4				28.4	0.06	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,586	12%	2.67	7.25
J-6.02	F-3					400		52,000				450,000				100,000	12,479	64,479	44.78	223.89	6,448	4.48	228.4				228.4	0.51	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,386	33%	5.07	7.25
J-6																						228.4	4819.9				5048.3	11.25	24	1	0.59	1.80	0.08	1.80	3131	14850	14,810	9,762	53%	6.65	4.50
J-7A.01	F-2		J-6.02								3		1			150,000	30,800	30,800	21.39	106.94	3,080	2.14	109.1				109.1	0.24	8	1	5	7.50	0.40	7.50	374	1619	1,615	1,506	19%	5.07	5.69
J-7A																						109.1	5048.3				5157.4	11.49	24	1	0.28	1.80	0.08	1.80	3131	14850	14,810	9,653	68%	5.01	10.13
J-7.01	E-1													25,000	25,000	40,000	40,000	27.78	138.89	4,000	2.78	141.7				141.7	0.32	8	1	2.9	7.50	0.40	7.50	374	1619	1,615	1,473	26%	4.50	6.59	
J-7.02	F-2		J-7.01													10,000	1,000	1,000	0.69	3.47	100	0.07	3.6	141.7			145.3	0.32	8	1	0.94	7.50	0.40	7.50	374	1619	1,615	1,470	33%	3.22	6.75
J-7.03	F-2		J-7.02													20,000	2,000	2,000	1.39	6.94	200	0.14	7.1	145.3			152.4	0.34	8	1	3.93	7.50	0.40	7.50	374	1619	1,615	1,462	24%	5.27	6.37
J-7			J-7A.01	J-7.03																		152.4	5157.4				5309.8	11.83	24	1	1.67	1.80	0.08	1.80	3131	14850	14,810	9,501	40%	9.92	10.25
J-7B.01	F-2		J-7													20,000	2,000	2,000	1.39	6.94	200	0.14	7.1				7.1	0.02	10	1	1	5.50	0.25	5.50	536	2514	2,507	2,500	6%	1.18	1.65
J-7B																						7.1	5309.8				5316.9	11.85	24	1	1.94	1.80	0.08	1.80	3131	14850	14,810	9,493	39%	10.44	10.09
J-8.01	PL-1.07									1							200	200	0.14	0.69	20	0.01	0.8				0.8	0.00	8	1	3	7.50	0.40	7.50	374	1619	1,615	1,614	3%	0.58	0.58
J-8.02	F-1		J-8.01													100,000	10,000	10,000	6.94	34.72	1,000	0.69	35.5	0.8			36.3	0.08	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,579	13%	2.87	4.14
J-8.03	PL-1.08		J-8.02								1						5,000	5,000	3.47	17.36	500	0.35	17.8	36.3			54.1	0.12	8	1	2.5	7.50	0.40	7.50	374	1619	1,615	1,561	16%	3.20	4.28
J-8			J-8.03	J-7B.01																		54.1	5316.9				5371.0	11.97	24	1	0.59	1.80	0.08	1.80	3131	14850	14,810	9,439	55%	6.76	10.20
J-9A.01	F-1		J-8									183,333					1,010	1,010	0.70	3.51	101	0.07	3.6				3.6	0.01	10	1	0.5	5.50	0.25	5.50	536	2514	2,507	2,504	5%	0.84	1.28
J-9A																						3.6	5371.0				5374.6	11.97	24	1	1.29	1.80	0.08	1.80	3131	14850	14,810	9,436	44%	8.99	10.20
J-9.01	PL-1.07									1							200	200	0.14	0.69	20	0.01	0.8				0.8	0.00	8	1	2	7.50	0.40	7.50	374	1619	1,615	1,614	3%	0.58	0.58
J-9.02	F-1		J-9.01									183,333					1,010	1,010	0.70	3.51	101	0.07	3.6	0.8			4.4	0.01	8	1	0.5	7.50	0.40	7.50	374	1619	1,615	1,610	7%	0.82	1.76
J-9			J-9.02	J-9A.01																		4.4	5374.6				5379.0	11.98	24	1	0.36	1.80	0.08	1.80	3131	14850	14,810	9,431	64%	5.59	10.21
J-9B.01	F-1		J-9									183,333					1,010	1,010	0.70	3.51	101	0.07	3.6				3.6	0.01	10	1	2.52	5.50	0.25	5.50	536	2514	2,507	2,504	4%	1.28	1.28
J-9B																						3.6	5379.0				5382.6	11.99	24	1	0.25	1.80	0.08	1.80	3131	14850	14,810	9,428	74%	4.81	10.22
TOTAL						400		52,000	-	2	4	999,999	1	25,000	505,000	114,710	166,710	115.77	578.85	16,671	11.58						5379.0	11.98											64%		

JUNCTION TABLE				
JUNCTION	RESIDENTIAL (GPD)	NON-RESIDENTIAL (GPD)	TOTAL PEAK FLOW (GPM)	CUMULATIVE TOTAL PEAK FLOW (GPM)
J-6.01	-	8,000	28	28
J-6.02	52,000	12,479	228	228
J-7A.01	-	30,800	109	109
J-7A	-	-	109	5,157
J-7.01	-	40,000	142	142
J-7.02	-	1,000	4	145
J-7.03	-	2,000	7	152
J-7	-	-	152	5,310
J-7B.01	-	2,000	7	7
J-7B	-	-	7	5,317
J-8.01	-	200	1	1
J-8.02	-	10,000	36	36
J-8.03	-	5,000	18	54
J-8	-	-	54	5,371
J-9A.01	-	1,010	4	4
J-9A	-	-	4	5,375
J-9.01	-	200	1	1
J-9.02	-	1,010	4	4
J-9	-	-	4	5,379
J-9B.01	-	1,010	4	4
J-9B	-	-	4	5,383
TOTAL	52,000	114,710	925	5,383

SUMMARY TABLE			
	USE	QUANITIES	TOTALS
RESIDENTIAL	MULTIFAMILY (DU)	400	400
	SINGLE FAMILY (DU)	-	
NON-RESIDENTIAL	SCHOOL (EA)	-	1,505,000
	PARKS (SFE)	2	
	CAR WASH (AC)	4	
	INDUSTRIAL (SF)	999,999	
	FUEL STATIONS (EA.)	1	
	RETAIL/ OFFICE (SF)	505,000	



Reference C - p047

JUNCTION TABLE				
JUNCTION	RESIDENTIAL (GPD)	NON-RESIDENTIAL (GPD)	TOTAL PEAK FLOW (GPM)	CUMULATIVE TOTAL PEAK FLOW (GPM)
J-6.01	-	8,000	28	28
J-6.02	52,000	12,479	228	228
J-7A.01	-	30,800	109	109
J-7A	-	-	109	5,157
J-7.01	-	40,000	142	142
J-7.02	-	1,000	4	145
J-7.03	-	2,000	7	152
J-7	-	-	152	5,310
J-7B.01	-	2,000	7	7
J-7B	-	-	7	5,317
J-8.01	-	200	1	1
J-8.02	-	10,000	36	36
J-8.03	-	5,000	18	54
J-8	-	-	54	5,371
J-9A.01	-	1,010	4	4
J-9A	-	-	4	5,375
J-9.01	-	200	1	1
J-9.02	-	1,010	4	4
J-9	-	-	4	5,379
J-9B.01	-	1,010	4	4
J-9B	-	-	4	5,383
TOTAL	52,000	114,710	925	5,383

SUMMARY TABLE			
	USE	QUANTITIES	TOTALS
RESIDENTIAL	MULTIFAMILY (DU)	400	400
	SINGLE FAMILY (DU)	-	
NON-RESIDENTIAL	SCHOOL (EA)	-	1,505,000
	PARKS (SFE)	2	
	CAR WASH (AC)	4	
	INDUSTRIAL (SF)	999,999	
	FUEL STATIONS (EA.)	1	
	RETAIL/ OFFICE (SF)	505,000	

NOTES:
1. SEE APPENDIX C FOR DETAILED SANITARY SEWER CALCULATIONS

LEGEND

	BASIN 1
	BASIN 2
	BASIN 3
	BASIN 4
	BASIN 5

LEGEND

8" PROPOSED SANITARY	8" PROPOSED SANITARY
10" PROPOSED SANITARY	10" PROPOSED SANITARY
12" PROPOSED SANITARY	12" PROPOSED SANITARY
15" PROPOSED SANITARY	15" PROPOSED SANITARY
18" PROPOSED SANITARY	18" PROPOSED SANITARY
21" PROPOSED SANITARY	21" PROPOSED SANITARY
24" PROPOSED SANITARY	24" PROPOSED SANITARY
27" PROPOSED SANITARY	27" PROPOSED SANITARY
FORCE MAIN SANITARY	FORCE MAIN SANITARY
FLOW DIRECTION ARROW	FLOW DIRECTION ARROW
HIGH POINT	HIGH POINT
LOW POINT	LOW POINT
SANITARY JUNCTION	SANITARY JUNCTION
SANITARY INPUT PT.	SANITARY INPUT PT.
LIFT STATION	LIFT STATION



Water Master Plan 2023



Engineering Division



Table 2-4 Finished Water Storage Tank Inventory

Tank ID	Year Built	Capacity (MG)	Dia (ft)	Height (ft)	Zone	Fire Flow Volume	Fire Vol in Tank	Tank with More Fire Vol	Status
T- 3	1969	1.04	92.6	19.1	Purple	360,000	360,000		A
T- 4	1984	1.51	118.0	18.6	Blue	1,560,000	780,000	T-15	A
T- 5 ¹	1984	(0.5)	66.0	19.4	Yellow	390,000	0	T- 8	NIS
T- 6A	1986	2.0	120.0	23.5	Green	960000	480,000		A
T- 6B ²	1997	(2.0)	120.0	23.5	Green				NIS
T- 6C	2010	2.22	120.0	23.5	Green		480,000		A
T- 7 ³	1986	(2.0)	122.0	22.7	Red	NA	NA	NA	NIS
T- 8	1987	3.13	147.0	24.8	Blue	1,620,000	1,815,000		A
T- 9	1989	1.0	96.0	19.3	Purple	1,200,000	600,000	T -16	A
T- 11	1998	1.0	92.5	24.0	Purple	1,080,000	540,000	T -14	A
T- 12A	1999	3.94	172.0	22.8	Yellow	1,440,000	720,000		A
T- 12B	2007	6.13	172.0	22.8	Yellow		720,000		A
T- 14	2001	2.0	121.0	23.3	Red	600,000	1,440,000		A
T- 15	2002	4.03	174.0	22.7	Red	360,000	1,140,000		A
T- 16	2004	3.11	140.0	27.0	Red	300,000	900,000		A
T- 17A	2005	2.24	136.0	20.6	Red	180,000	90,000		A
T- 17B	2009	2.26	136.0	20.6	Red		90,000		A
T- 18	2022-2023	2.0	132.0	20.5	Yellow	600,000		T -16	UC
BMR 20A	1996	0.21			Tan	240,000	180,000 (current deficit)	20-C	A
BMR 20B	1996	0.09			Tan			20-C	A
BMR 20C	2022-2023	0.40	78.0	11.3	Tan				UC
Total Active Storage Capacity		38.31							

¹ Tank 5 is located in Citadel Station and currently is not in service. It has been physically disconnected from the distribution system and its future use will be evaluated.

² Tank 6B has been removed from service due to a structural failure. This tank is scheduled for demolition in the 5-year CIP.

³ Tank 7 is located in Dawson Trails and currently is not in service. This tank is not intended for future use by CRW.

A = Active; NIS = Not in Service; UC = Under Construction

SITE DEVELOPMENT PLAN
GOLD CROWN FIELDHOUSE

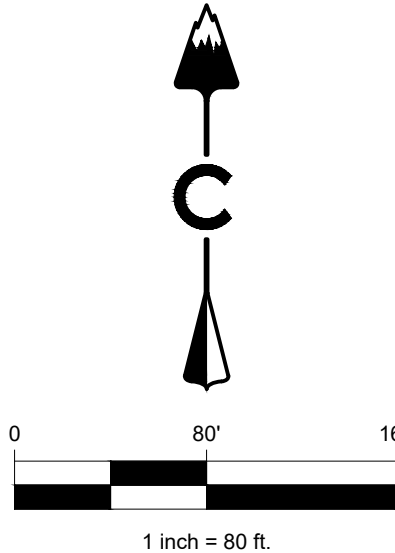
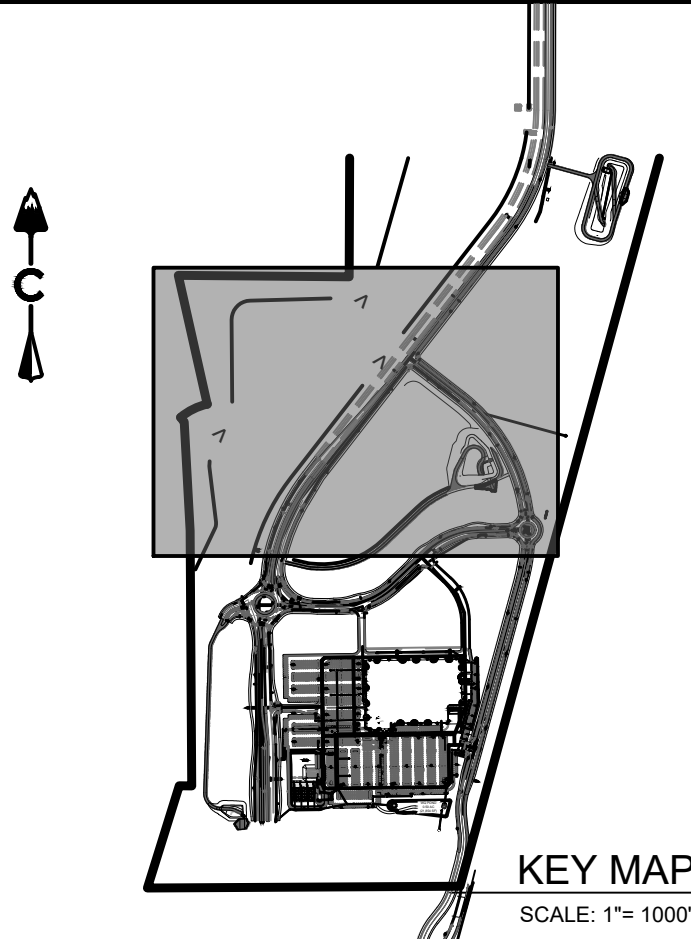
SITUATED IN PORTIONS OF THE SOUTH HALF OF SECTION 15 AND THE NORTH HALF OF SECTION 22,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, STATE OF COLORADO

FISHER INVESTMENT
PROPERTIES
REC. 2019083449

TRACT F
1,924,217 S.F.
±44.174 AC.
(PL 1.07, 44.1 AC.)

TRACT L
273,924 S.F.
±6.288 AC.
(PA F-1)

TRACT G
483,511 S.F.
±11.100 AC.
(PA F-2)



LEGEND

- EASEMENT
- RIGHT OF WAY (R.O.W.)
- CENTERLINE
- PROJECT BOUNDARY
- PROPOSED CURB & GUTTER
- PROPOSED STORM & STUB OUT
- PROPOSED SANITARY & STUB OUT
- PROPOSED WATER & STUB OUT
- EXISTING STORM & STUB OUT
- EXISTING SANITARY & STUB OUT
- EXISTING WATER & STUB OUT
- SANITARY SERVICE
- WATER SERVICE
- FUTURE STORM & STUB OUT
- EXISTING
- PROPOSED
- STREET LIGHT POLES
- POWER POLES
- SANITARY MANHOLES
- SANITARY CLEAN OUT
- WATER VALVES
- BEND AND THRUST BLOCK
- FIRE HYDRANTS
- WATERLINE REDUCER
- WATER STUB WITH BLOW OFF
- AIR RELEASE VALVE MH & VENT PIPE
- STORM MANHOLES
- STORM INLETS
- FES, FOREBAY, & TRICKLE CHANNEL
- OUTLET STRUCTURE
- CRUSHER FINES
- MAINTENANCE ACCESS
- RIPRAP

CORE CONSULTANTS, INC.
3473 S. BROADWAY
DENVER, CO 80113
303.703.4444
LIVEYOURCORE.COM

CORE

NORRIS
DESIGN
PEOPLE + PLACEMAKING

#	REVISION DESCRIPTION	DATE	BY	TW
1	1ST SUBMITTAL	8/12/2026		

GOLD CROWN FIELDHOUSE
CASTLE ROCK, COLORADO
SITE DEVELOPMENT PLAN
UTILITY PLAN

DESIGNED BY: LC
DRAWN BY: LI
CHECKED BY: TW

SDP NO.
26-0014
SHEET
6 OF 32

GOLD CROWN FIELDHOUSE
PROJECT NO. SDP26-0014