



FINAL UTILITY REPORT

for

Front Range Construction

**LOT 1B, BLOCK 9, CITADEL STATION FILING 6, FOURTH AMD
TOWN OF CASTLE ROCK
661 Prairie Hawk Drive**

Town of Castle Rock
Project No. **SDP25-0020**

Owner/Developer:
Front Range Development Company LLC
5863 Kingsfield St.
Castle Rock, CO 80104

Prepared By:
2N CIVIL, LLC
P.O. Box 630042
Littleton, CO 80163-0042
(303) 925-0544
Project No. 25005

October 31, 2025
Revised January 30, 2026

APPROVAL BLOCK SHEET FOR UTILITY REPORT

PROJECT: *Front Range Construction*

The site is in the Northwest ¼ of Section 11, Township 8 South, Range 67 West of the 6th Principal Meridian, Town of Castle Rock, County of Douglas, State of Colorado. The site lies approximately 700 feet south of the intersection of Topeka Way and Prairie Hawk Drive.

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.

Signature: _____
Registered Professional Engineer
State Of Colorado No. 37643
(Affix Seal)

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.

Front Range Development Company LLC _____
Name of Developer

Authorized Signature

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PROJECT LOCATION AND DESCRIPTION

SITE LOCATION –

The site is in the Northwest ¼ of Section 11, Township 8 South, Range 67 West of the 6th Principal Meridian, Town of Castle Rock, County of Douglas, State of Colorado. The site lies approximately 700 feet south of the intersection of Topeka Way and Prairie Hawk Drive and is addressed as 661 Prairie Hawk Drive.

DESCRIPTION OF PROPERTY AND LAND USE –

The project will consist of the construction of a single-story steel building and paved parking lot. The building will serve as a base of operations for a construction company. The total number of SFEs proposed for this development at buildout is 7. The site is currently vacant and no existing water or sewer utilities are present on the site.

The proposed 4,800 square foot building will be served by a new domestic water service and meter (size to be determined).

The proposed irrigated area for the project (including areas both on site and within the right-of-way) is 4,761 sq ft. As this is below 5,000 square feet, a separate irrigation meter is not required and a dual commercial meter will be placed inside the building. The highest peak flow will be 2 gpm. Refer to the irrigation Hydraulic Calculations provided in Appendix C.

The 100 year floodplain from the adjacent Industrial Tributary encroaches onto the site. According to FEMA Firm Map No. 08035C188G with an effective date of March 16, 2016, the Base Flood Elevation (BFE) of the major drainageway closest to the site is 6222.

The most recent analysis of the existing floodplain is being performed by Harris Kocher Smith Engineering (HKS) as a part of the Brickyard development CD25-0042. A new 72" RCP culvert and 12'x8' trail culvert are proposed as a part of the off-site improvements associated with that project. These conduits will provide increased capacity such that stormwater will no longer flood upstream of the Prairie Hawk Drive road embankment to the extent shown in the Master Plan. This analysis represents the best available data since the Master Plan was published and is currently pending approval as of the date of this report.

Any future development of the existing water and wastewater infrastructure needed to serve this site is the responsibility of the developer consistent with 3.6 of the water and wastewater manual for the Town of Castle Rock.

CALCULATED WATER DEMANDS

AVERAGE DAY DEMANDS (ADD) –

Based on Table 4.4.1 in the Towns Wastewater Collection Design Criteria Manual.

Site Data		
	sq ft	ac
Site Area:	102,259	2.348

Land Use	ADD/Unit (gpd/acre)	SFEs/Unit (SFE/Acre)	ADD (gpd)	ADD (gpm)	SFE	AF/YR
Industrial / Other Commerical	1,200	3.0	2,817	1.96	7.04	3.15
Total			2,817	1.96	7.04	3.15

MAX DAY DEMANDS (MDD) –

The max day demand is based on the factors found in the Town's Criteria Manual Section 4.4.1.2.

Maximum Day			
Demand	Peaking Factor	gpd	gpm
MDD	2.5	7,043	4.89

PEAK HOUR DEMANDS (PHD) – $PHD = PHD \text{ Factor} * ADD$

The peak hour demand is based on the factors found in the Town's Water System Design Criteria Manual Section 4.4.1.2.

Peak Hourly			
Demand	Peaking Factor	gpd	gpm
PHD	5.5	15,494	10.76

Per TCR Water System Design Criteria Manual Section 4.4.1.2

Per the Criteria, peaking factors are not applied to irrigation ADD demands. Max Day Demand and Peak Hour Demand are calculated by multiplying the ADD demand by the demand factors, the irrigation ADD is added to the calculated MDD and PHD.

The fire flow as confirmed by Castle Rock Fire is **1,500 gpm @ 20 psi** for a duration of not less than 2-hours. A sprinkler system is not required or proposed for this building. Refer to the Castle Rock Fire and Rescue Department Plan Review memo provided in the Appendix.

Storage Requirements	Fire Flow (gpm)	Required Storage (gal)	MG
MDD	1,500	187,043	0.187

EXISTING WATER SYSTEM

EXISTING DISTRIBUTION SYSTEM –

There is a 12" DIP main that runs north/south within Prairie Hawk Drive on the east side of the street and will serve as the connection point for the proposed development. The site is located within the Yellow pressure zone. Please see Exhibit C for a portion of the Castle Rock Utilities Map, showing the existing system in this area.

PROPOSED WATER SYSTEM

The project proposes to connect to the existing 12" DIP main in Prairie Hawk Drive with one ¾" inch domestic service to the building. The final commercial meter size will be determined at the time of permitting based on the required demand of the site and total building fixture units provided to the Town of Castle Rock.

The results of a hydraulic model fire flow test at hydrant #2847 and #2848 are provided in the Appendix C. A hydrant test at FH 2848 located approximately 475 feet south of Topeka Way on Prairie Hawk Dr. on 5/27/25 yielded static pressure of 65.2 psi and a Residual pressure of 41.8 psi, which yields a projected flowrate of 1,500 gpm available. The Town of Castle Rock Utilities Department completed a model of the Hydrant and provided the above results. The hydrant tests reveal that the system can meet the 1,500 gpm required fire flow over 1 hydrant (See Fire Memo Appendix C).

WATER MODEL

Due to there being no main line extensions a water model was not completed for this project.

PROPOSED SUPPLY FACILITIES –

We do not foresee any additional facilities to serve the development.

LAND DEDICATION REQUIREMENTS –

This project will comply with land dedication requirements set forth in the Town's Municipal Code.

EXISTING WASTEWATER SYSTEM

EXISTING COLLECTION SYSTEM –

There is a 12" VCP sanitary main that runs north/south under Prairie Hawk Drive on the West side of the street and will serve as the connection point for the proposed development.

CALCULATED WASTEWATER FLOWS

AVERAGE DAY WASTEWATER FLOWS (ADF) –

Based on Table 4.4.1.1 in the Town's Criteria Manual.

Land Use	ADF/Unit (gpd/acre)	SFEs/Unit (SFE/Acre)	ADF (gpd)	ADF (MGD)	cfs	SFE
Industrial / Other Commerical	600	3.0	1,409	0.0014	0.0022	0.78

PEAKING FACTOR –

The peaking factor is $3.65 \times \text{ADF}^{-0.168}$ with a Maximum PF of 5.0

PEAK DESIGN FLOW RATE –

PDF = peak base flow + I/I allowance = $(\text{ADF} \times \text{PF}) + (0.1 \times \text{ADF})$

Refer to Appendix D for Wastewater Flows.

Land Use	PF = $3.65 \times [(\text{ADF})^{-0.168}]$ (MGD)	Peaking Factor (Max=5 used in calculations)	I&I - 10% of ADF (MGD)	Peak Design Flow Rate		
				Total (MGD)	Total (gpd)	Total (cfs)
Industrial / Other Commerical	11.0	5.0	0.0001	0.0072	7,183	0.011

PROPOSED WASTEWATER SYSTEM

PROPOSED COLLECTION SYSTEM –

The proposed building will produce a peak flow of 0.011 CFS. The building will be serviced by a 4" PVC pipe to the existing main at 2% slope. The service would flow at 1.35 ft/s velocity and 9/16" deep. Refer to Appendix E for Wastewater Hydraulic calculations.

The Brickyard project [CD25-0042] will construct a 24" sanitary interceptor main in Prairie Hawk Drive, replacing the existing 12" VCP main. A new 8" main will be connected to the interceptor main at a 5' diameter manhole located at the northeast corner of the site. This is required as the Town's criteria does not allow services to tie directly to interceptor mains. The proposed 8" main will extend west and terminate at a new manhole located within the right-of-way. The 4" sanitary service will tie into this section of 8" main.

A grease interceptor is not proposed for this project.

PROPOSED WASTEWATER FACILITIES –

We do not foresee any additional facilities to serve the development.

WASTEWATER CAPACITY (MODEL)

Since we are only requesting a service to serve the building system was not modeled.

Disclaimer: The Castle Rock Utilities Department is not responsible or liable for assumptions made by the Developer regarding utility information associated with the proposed development.

POTENTIAL PERMITTING REQUIREMENTS

As with any development the contractor or developer will be required to obtain all necessary permits to complete construction, including but not limited to:

Building Permits
Right-of-Way Permits
State of Colorado, Stormwater Discharge Permit
Electric Permits
Plum Creek Water Reclamation Authority

We do not anticipate any special or unusual permits being required.

EXISTING TOWN OF CASTLE ROCK MASTER PLANS

This development is specific to re-developing lots within the Town. The Water and Wastewater Master Plans were reviewed for compliance with the plans. The plans do not address specific lots within the Town, rather are a broad, large scale review of necessary infrastructure to serve the Town now and in the future. The 2022 Wastewater Master Plan (WWMP) outlines upsizing the existing 12" VCP within Prairie Hawk Drive to an interceptor main adjacent to this site. Interceptor main improvements are currently under design review as part of The Brickyard – Prairie Hawk Infrastructure Public Improvement Construction Plans [CD25-0042]. The sanitary service for this project will connect to the short 8" main extension, that will in turn connect to the 24" interceptor line being built with project CD25-0042. Refer to Appendix F for a copy of Figure 4.2 2022 Master Plan CIP Projects from the 2022 WWMP.

REFERENCES

Town of Castle Rock Water System Design Criteria Manual – 2018

Town of Castle Rock Wastewater Collection Design Criteria Manual – 2018

Town of Castle Rock Water Master Plan – 2017 Update

Town of Castle Rock Wastewater Master Plan – 2016 & 2022 Update

The Brickyard – Prairie Hawk Infrastructure Public Improvement Construction Plans
CD25-0042 (*Draft issued 10-27-2025*)

Appendix A

Water Demands

Site Data		
	sq ft	ac
Site Area:	102,259	2.348

Land Use	ADD/Unit (gpd/acre)	SFEs/Unit (SFE/Acre)	ADD (gpd)	ADD (gpm)	SFE	AF/YR
Industrial / Other Commerical	1,200	3.0	2,817	1.96	7.04	3.15
Total			2,817	1.96	7.04	3.15

Maximum Day Demand			
	Peaking Factor	gpd	gpm
MDD	2.5	7,043	4.89

Peak Hourly Demand			
	Peaking Factor	gpd	gpm
PHD	5.5	15,494	10.76

Per TCR Water System Design Criteria Manual Section 4.4.1.2

Appendix B

Water Storage

Storage Requirements	Fire Flow (gpm)	Required Storage (gal)	MG
MDD	1,500	187,043	0.187

Appendix C

Water Hydraulic Modeling



TOWN OF CASTLE ROCK FIRE FLOW TEST FORM

5/27/2025

F8-2025

Service Address:

see attached map for location

661 Prairie Hawk Dr

Test Conducted By:

Fire flow is estimated with hydraulic model

Pressure Hydrant

Hydrant ID	FH	2848	
Pre-test Static Pressure (Ps1)		65.2	psi
Residual Pressure (Pr)		41.8	psi
Post-test Static Pressure (Ps2)			psi
Flowing Hydrant			
Hydrant ID	FH	2847	
Orifice Side (D)			in
Main Size (Dp)			in
Calculated Flowrate (Qr)		1500	gpm
Estimated Volume Discharged (Q)			gallons



Castle Rock Fire and Rescue Department
300 Perry Street
Castle Rock, CO 80104

July 21, 2025

**RE: Confirmation Memo of Required Fire Flow
Site Development Plan, Amendment No.1 – Lot 1B, Block 9, Citadel Station Filing 6, 4th
Amendment**

To Life Safety Division,
Please accept the following required fire flow evaluation based upon the currently adopted
2018 International Fire Code for review and confirmation for each of the following proposed
buildings.

661 Prairie Hawk Drive

Total Fire Flow Calculation Area: **4,800-square feet**

Building Construction Type: **II-B**

Are fire sprinklers provided throughout this building? **NO**

Are you proposing a reduction in Required Fire Flow for fire sprinklers? **NO**

Are Fire walls provided in this building? **NO**

Reference Appendix B, Table B105.1

Required Fire Flow: **1500-gpm at 20-psi**

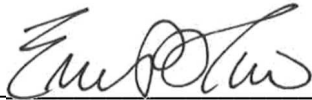
Flow Duration: **2-hours**

Reference Appendix C, Table C105.1

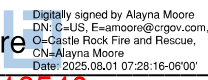
Required Number of Fire Hydrants: **1**

Maximum Average Spacing: **500 feet**

Maximum Distance from Fire Hydrant to Building: **250-feet**, as a fire truck would drive
(Note in sprinkled buildings, a hydrant shall be located within 100-ft of the FDC)

Design Engineers Signature:  Date: July 21, 2025

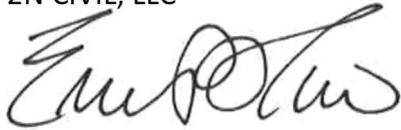
The determined Required Fire Flow, Number of Fire Hydrants and Hydrant Spacing as shown
above satisfy the fire protection requirements of the Castle Rock Fire and Rescue Department.
Final fire hydrant placement will be determined and approved during the Site Development
(SDP) and/or Construction Document (CD) review phase.

Castle Rock Fire Signature:  **Alayna Moore** Date: **8-1-2025**
Fire Department Plan Review Number: **18540**

Thank you for your time in reviewing and returning the above confirmation. Should you have any questions please contact me.

Respectfully,

2N CIVIL, LLC

A handwritten signature in black ink, appearing to read 'Eric P. Tuin', written in a cursive style.

Eric P. Tuin, P.E., M.ASCE
Owner



Not acceptable for
fire protection at this
location

Acceptable as water
supply for this
location

These plans have been reviewed for the adopted fire code by Castle Rock Fire and Rescue Department, and are:

Reviewed for Compliance

Fire and Life Safety Division on 01/28/2026 2:00:37 PM.

Signature of Plans Reviewer:

Kevin Sullivan

Kevin Sullivan
ICC/STATE Certification number: 216312661



Review and approval are for general compliance and compatibility with the design as outlined by the adopted fire code, adopted building code and NFPA standards of the submitted structural and fire protection documents. The contractor and fire protection company shall be responsible for complying with the stamped plans/documents and coordination of the work of those trades associated with the required fire and life safety elements of these stamped plans.

ANNUAL WATER USE CALCULATIONS

Prairie Hawk
Seasonal Water Use and Peak Flow Projections
1/29/26

Description	Irrigated Acres	Month	Application Rate (in./month)	Monthly water use (gallons)	Minimum Required Flow-(GPM)
Irrigated Turf Grass					
		April	0.00	0	
		May	2.07	0	
		June	3.11	0	
	0.000	July	4.00	0	0.0
		August	3.40	0	
		Sept.	2.22	0	
		Octobe	0.00	0	
annual sub-total					
			14.80 /yr	0 /yr	
				0.00 acrefeet	
Irrigated Shrub Beds					
		April	0.00	0	
		May	1.36	3,397	
		June	2.13	5,321	
	0.092	July	2.72	6,795	1.3
		August	2.37	5,920	
		Sept.	1.42	3,547	
		Octobe	0.00	0	
annual sub-total					
			10.00 /yr	24,980 /yr	
				0.08 acrefeet	
Irrigated Native Grass					
		April	0.00	0	
		May	0.50	0	
		June	0.76	0	
	0.000	July	1.00	0	0.0
		August	0.86	0	
		Sept.	0.55	0	
		Octobe	0.00	0	
annual sub-total					
			3.67 /yr	0 /yr	
				0.00 acrefeet	
Totals					
	0.09 irrigated acres			24,980 gals/yr	
				0.08 acrefeet/yr	
				1 GPM - peak flow required	

HYDRAULIC CALCULATIONS



Irrigation System Hydraulic Worksheet

Project Name: **Prairie Hawk**

Project Location:

Date: **January 29, 2026**

Prepared by: **David Zickerman**

Controller: **"A" - zone A1**

Current TOCR Registration #: **15-1032**

Tap Size: **0.75"**

Static Water Pressure: **55 psi**

Source of Pressure: **Town of Castle Rock Utilities**

Hydraulic Grade At Zone:

Company: **Avocat Irrigation Design**

	Ft. of Copper	Pipe Size (")	K Copper	Friction Loss (from chart)	Flow-GPM	Loss/Gain
Service Line (tap to meter):	200	LF	0.75	K Copper	0.73 /100 FT	2 1.46
Water Meter:			0.75		0.30	2 0.30
Service Line (meter to backflow):	25	LF	0.75	K Copper	0.73 /100 FT	2 0.18
Backflow:	Febco 860	0.75			12	2 12.00
Master Valve:	Griswold DWS	3/4			2.9	2 2.90

Pressure Required at Head:

Drip Emitters

20

Lateral Allowance:

2.00

Control Valve Allowance:

5.00

Mainline Allowances:

Length of Mainline	Pipe Material	Size	Gals.			
340 LF CL200BE	1.5"	"@	2	GPM	0.01 /100 FT	0.03
LF CL200BE	"@	2	GPM-Looped		/100 FT	0.00

Elevation:

Tap elevation

6,217

High/Low:

6,227

4.33

Green shading indicates required information you must provide

Total System requirements (PSI)

48.21

Available System Pressure (PSI)

55.00

Town of Castle Rock provides a minimum of 43 psi

Total Irrigated area for tap # _____ is _____ sq. ft.

IRRIGATION SCHEDULE



IRRIGATION CHART

Registered Professional: **David Zickerman**

Registration #: **15-1032**

Date: **7-18-23**

Company Name: **Avocat Irrigation Design**

Address: **7114 W. Jefferson Ave., Suite 201, Lakewood, CO**

Phone: **303-562-5698**

Email: **avocet@wipertel.net**

Clock Make: **Rain Bird ESP-ME3**

Zone	Hydrozone	Plant Type	Head Type	Nozzle	App. Rate	GPM	Inches/Month	Run Time	Run Time	Water Usage
		(Turf Native, Shrubs, Perennials, Trees, Annuals, etc.)	(Rotors, Sprays, Emitters, etc.)	(Nozzle/Emitter size)	(inches/hour)	(Per Zone)	(Peak inch to avoid 6" month or 1.5" week)	(Minutes/Month)	(Minutes Every Third Day)	(Gallons per month)
Ex. 1	High	Blue Grass	RE 1806 SAM PHS	15"	1.83	15	6	197	20	2951
Ex. 2	Low	Buffalo Grass	Hunter I-20	3	1.83	15	1	33	3	492
A1	Low	Shrubs/Trees	Drip	0.5 GPH	0.55	2	2	216	22	436
A2	Low	Shrubs/Trees	Drip	0.5 GPH	0.55	2	2	216	22	436
A3	Low	Trees	Drip	0.9 GPH	1.1	2	2	109	11	218
A4	Low	Shrubs/Trees	Drip	0.5 GPH	0.55	2	2	216	22	436
Totals							Totals	764	76	1527
								Min/Month	Min/cycle	Water Usage

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

IRRIGATION DESIGN PREPARED BY DAVID ZICKERMAN TOCR #15-1032

DEVELOPMENT SERVICES

DATE

Irrigation
Details

Appendix D

Wastewater Flows

AVERAGE DAY WASTEWATER FLOWS (ADF) –
Based on Table 4.4.1.1 in the Town's Criteria Manual.

Land Use	ADF/Unit (gpd/acre)	SFEs/Unit (SFE/Acre)	ADF (gpd)	ADF (MGD)	cfs	SFE
Industrial / Other Commerical	600	3.0	1,409	0.0014	0.0022	0.78

PEAKING FACTOR –

The peaking factor is $3.65 \times \text{ADF}^{-0.168}$ with a Maximum PF of 5.0

PEAK DESIGN FLOW RATE –

PDF = peak base flow + I/I allowance = $(\text{ADF} \times \text{PF}) + (0.1 \times \text{ADF})$

Land Use	PF = $3.65 \times [(\text{ADF})^{-0.168}]$ (MGD)	Peaking Factor (Max=5 used in calculations)	I&I - 10% of ADF (MGD)	Peak Design Flow Rate		
				Total (MGD)	Total (gpd)	Total (cfs)
Industrial / Other Commerical	11.0	5.0	0.0001	0.0072	7,183	0.011

Appendix E

Wastewater Hydraulic Modeling

Channel Report

4in PVC Sanitary Sewer Service Capacity

Circular

Diameter (ft) = 0.33

Invert Elev (ft) = 100.00

Slope (%) = 2.00

N-Value = 0.011

Calculations

Compute by: Known Q

Known Q (cfs) = 0.01

Highlighted

Depth (ft) = 0.05

Q (cfs) = 0.011

Area (sqft) = 0.01

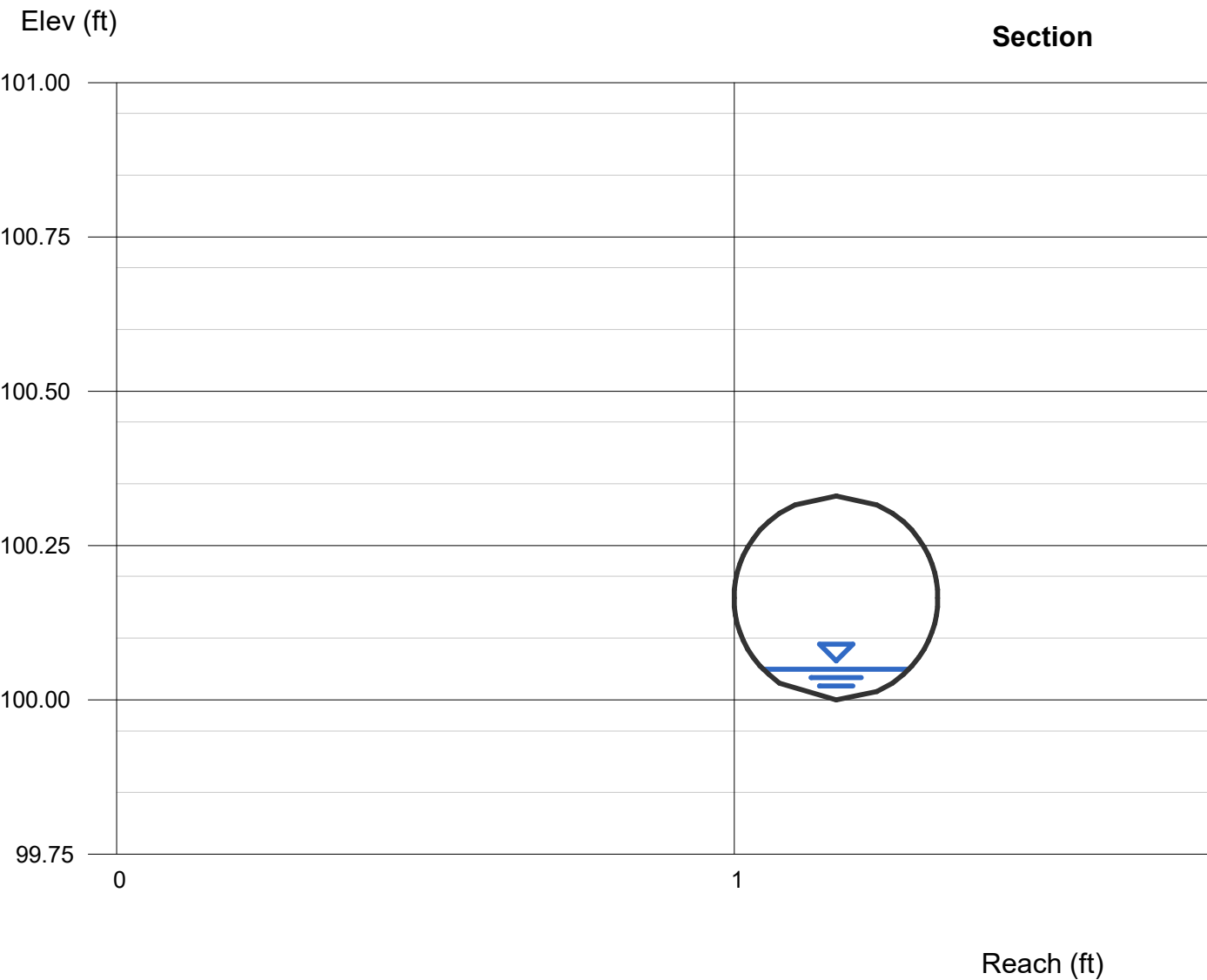
Velocity (ft/s) = 1.35

Wetted Perim (ft) = 0.26

Crit Depth, Yc (ft) = 0.06

Top Width (ft) = 0.24

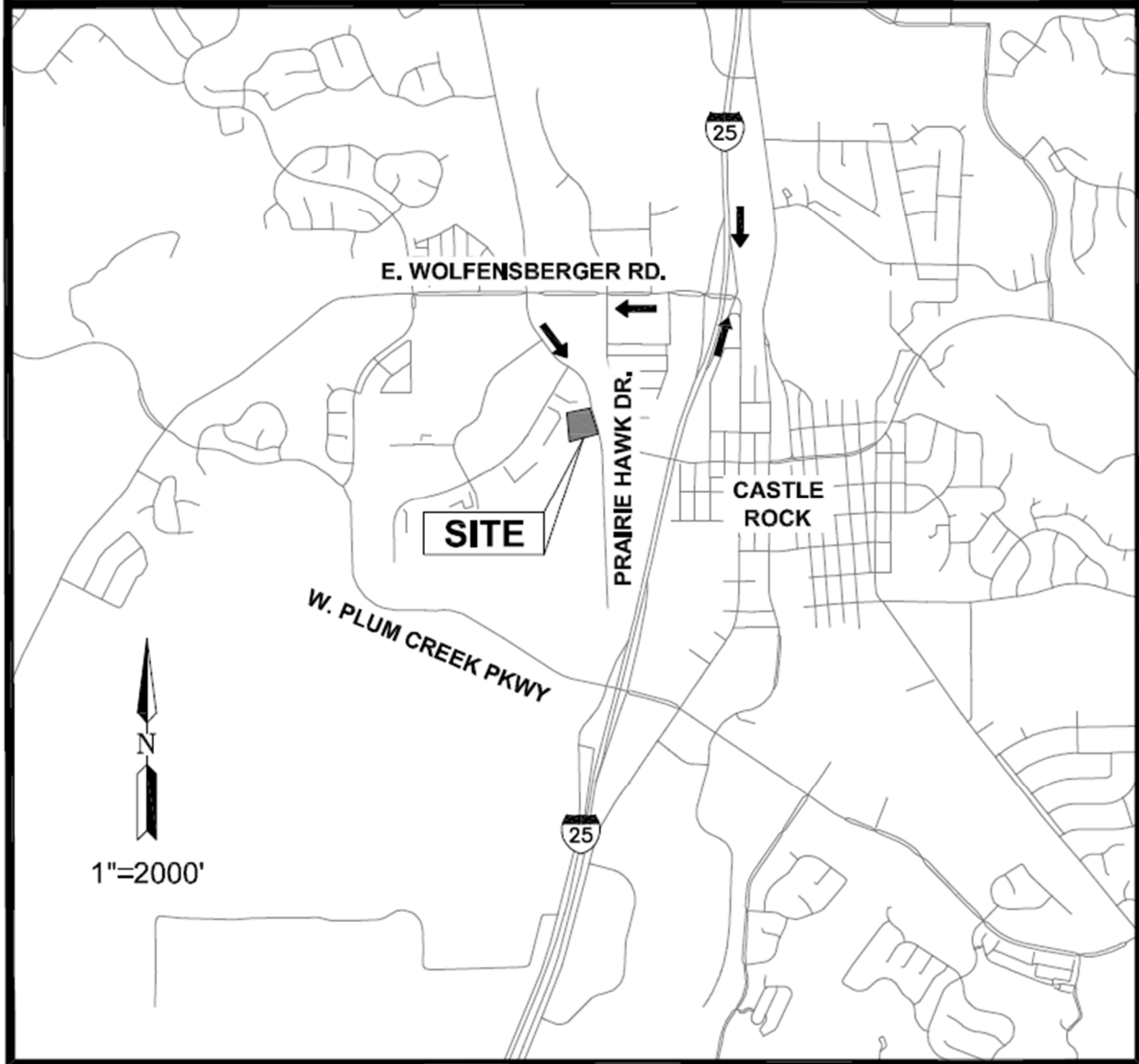
EGL (ft) = 0.08



Appendix F

Maps and Plans

VICINITY MAP

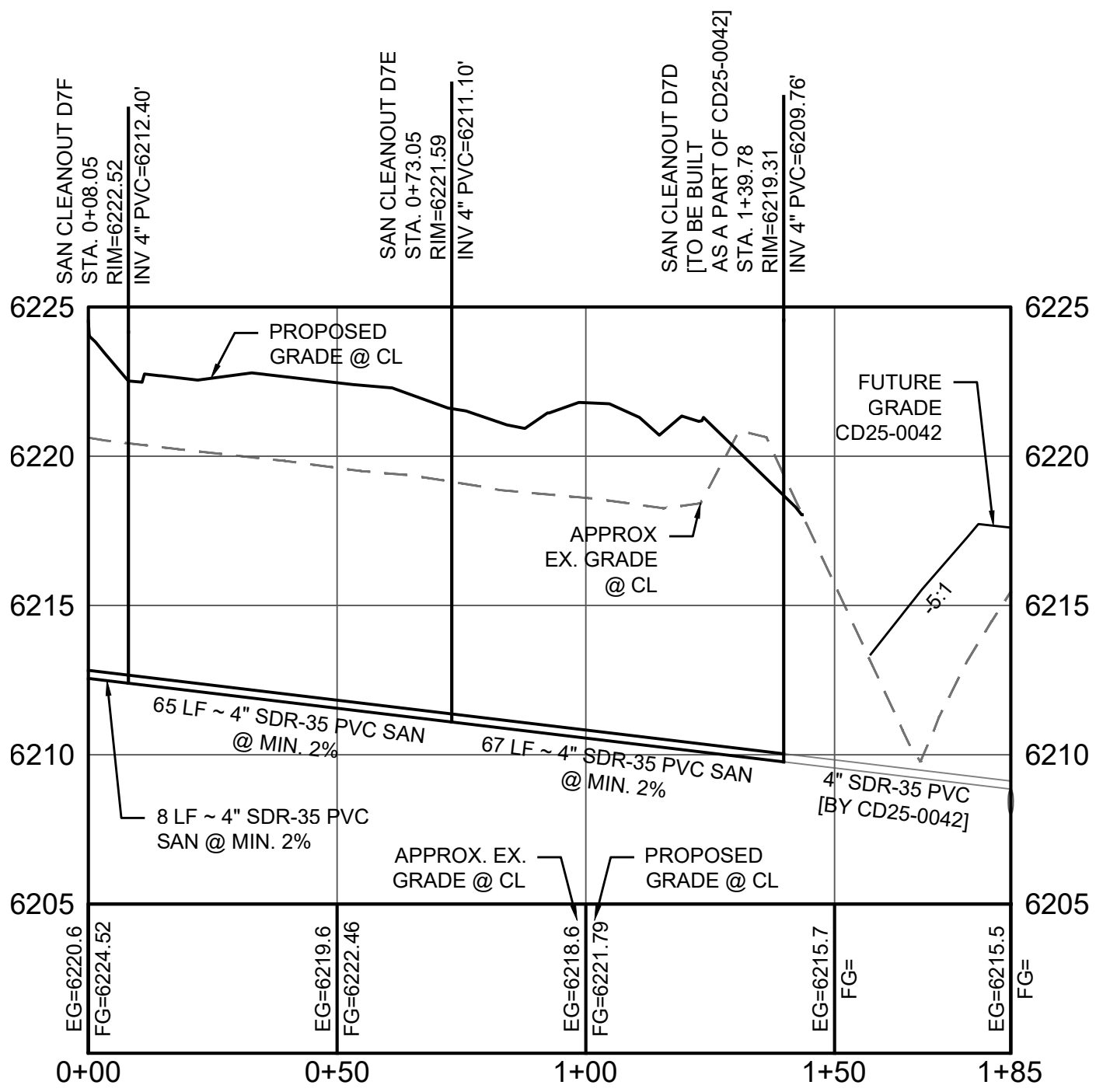




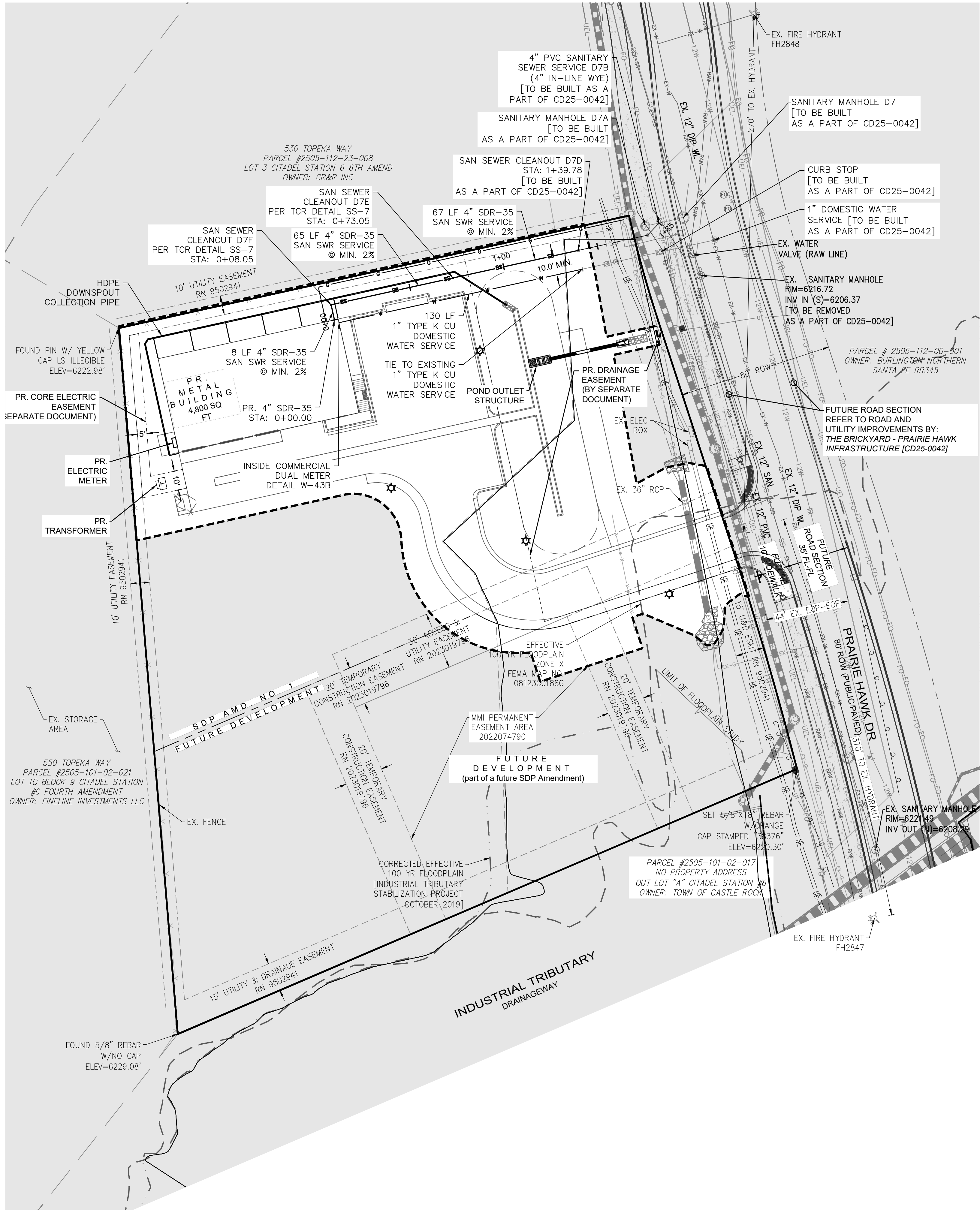
Know what's below.
Call before you dig.

CAUTION: NOTICE TO CONTRACTOR

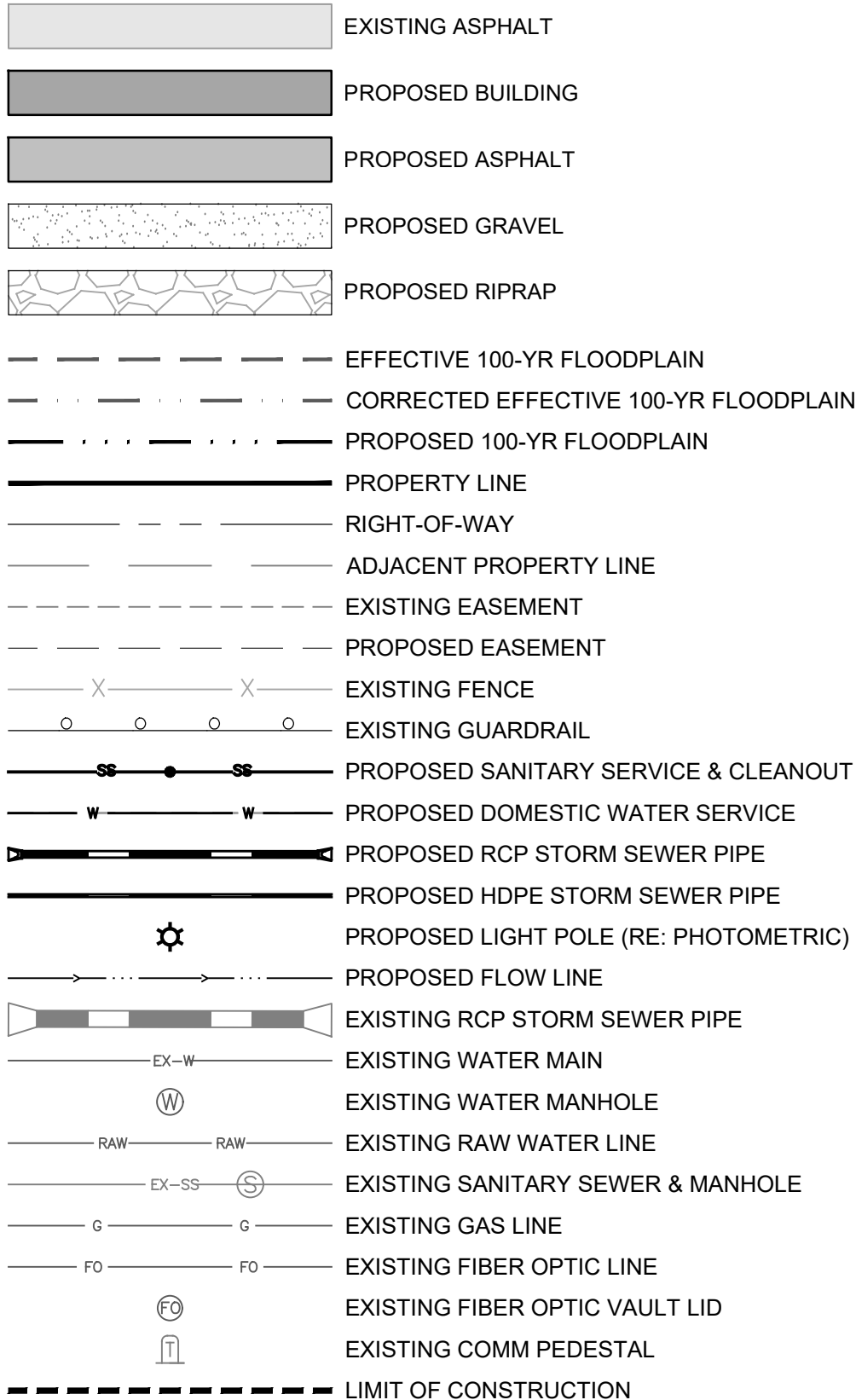
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



4in Sanitary Sewer Service PROFILE
SCALE: (H) 1" = 30' (V) 1" = 5'
START STA: 0+00.00, END STA: 1+85.42



LEGEND



UTILITY NOTES:

1. THIS SITE IS LOCATED WITHIN THE TOWN OF CASTLE ROCK YELLOW WATER PRESSURE ZONE.
2. ALL PROPOSED EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
3. ALL UTILITY EASEMENTS FOR WATER AND WASTEWATER LINES SHALL BE FOR THE EXCLUSIVE USE OF THE TOWN SO THAT ACCESS AND MAINTENANCE MAY BE PERFORMED.
4. THE MINIMUM SEPARATION BETWEEN WATERLINES, SANITARY SEWER AND STORM SEWER LINES IS 10 FEET.
5. THE MINIMUM SEPARATION BETWEEN WATER SERVICE LINES IS 5 FEET.
6. ANY TIE-IN, CROSSING OR LOWERING OF TOWN CRITICAL INFRASTRUCTURE WILL REQUIRE A TIME AND MATERIALS PERMIT (TMU) WITH FEES REQUIRED PRIOR TO CONSTRUCTION.

FIRE FLOW DATA:

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS: 1,500 GPM
THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 1 FIRE HYDRANT
CODE USED FOR ANALYSIS: 2018 IFC APPENDIX B
FIRE FLOW CALCULATION AREA, CONSTRUCTION TYPE II-B: 4,800 SF

BENCHMARK

ELEVATIONS WERE DERIVED FROM A PROCESSED OPUS SOLUTION AND REPRESENT NAVD88 ELEVATIONS. A SITE BENCHMARK SHALL BE THE NORTHEAST CORNER OF LOT 1B, BEING A 1.25\"/>

BASIS OF BEARINGS

BEARINGS ARE BASED UPON THE SOUTH LINE OF LOT 1B BETWEEN A FOUND 5/8\"/>

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

TODD ERIC WEST, P.E.
STATE OF COLORADO PE NO. 37643
FOR AND ON BEHALF OF 2N CIVIL, LLC

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

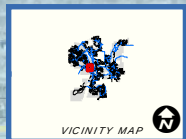
DEVELOPMENT SERVICES

DATE





- Legend**
- Sanitary Sewer
 - Stormwater Conduit
 - Fiber
 - Raw Water Distribution Main
 - Water Distribution Main



Date: 2/24/2021

1 inch = 417 feet

Document Path: J:\GIS\Standard Maps\10.6\Letter Portrait_10.6.mxd



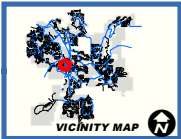
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**CASTLE ROCK
UTILITIES MAP
(INTERNAL USE ONLY)**



Legend

- Sanitary Sewer
- Stormwater Conduit
- Fiber
- Raw Water Distribution Main
- Water Distribution Main



0 45 90 180 270 Feet

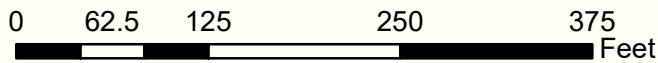
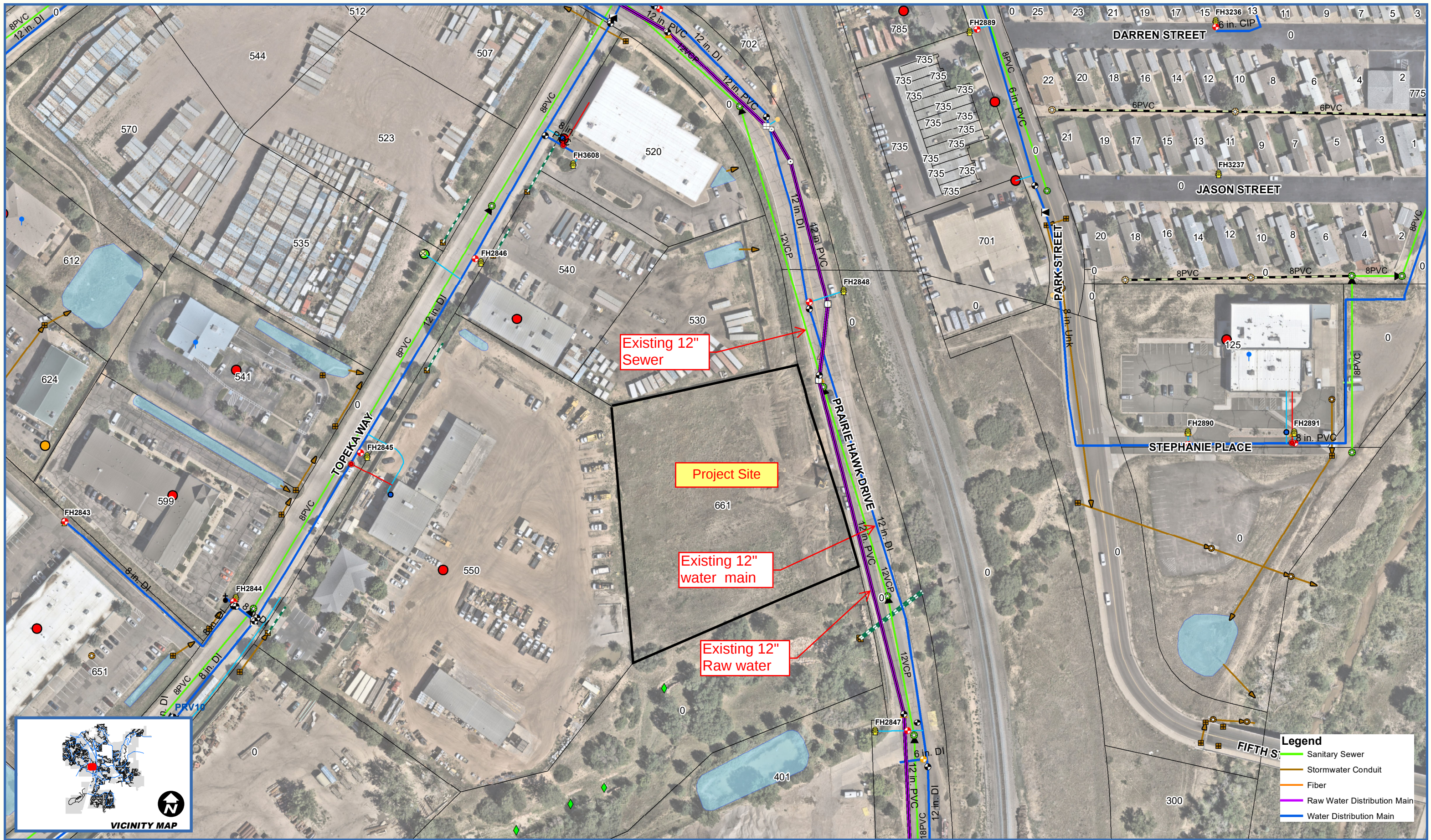
Date: 5/30/2025 1 inch = 109 feet

Document Path: \\crsan1\UTShare\GIS\Standard Maps\10.6\Letter LndScp.mxd



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CASTLE ROCK UTILITIES MAP (INTERNAL USE ONLY)



1 inch = 125 feet

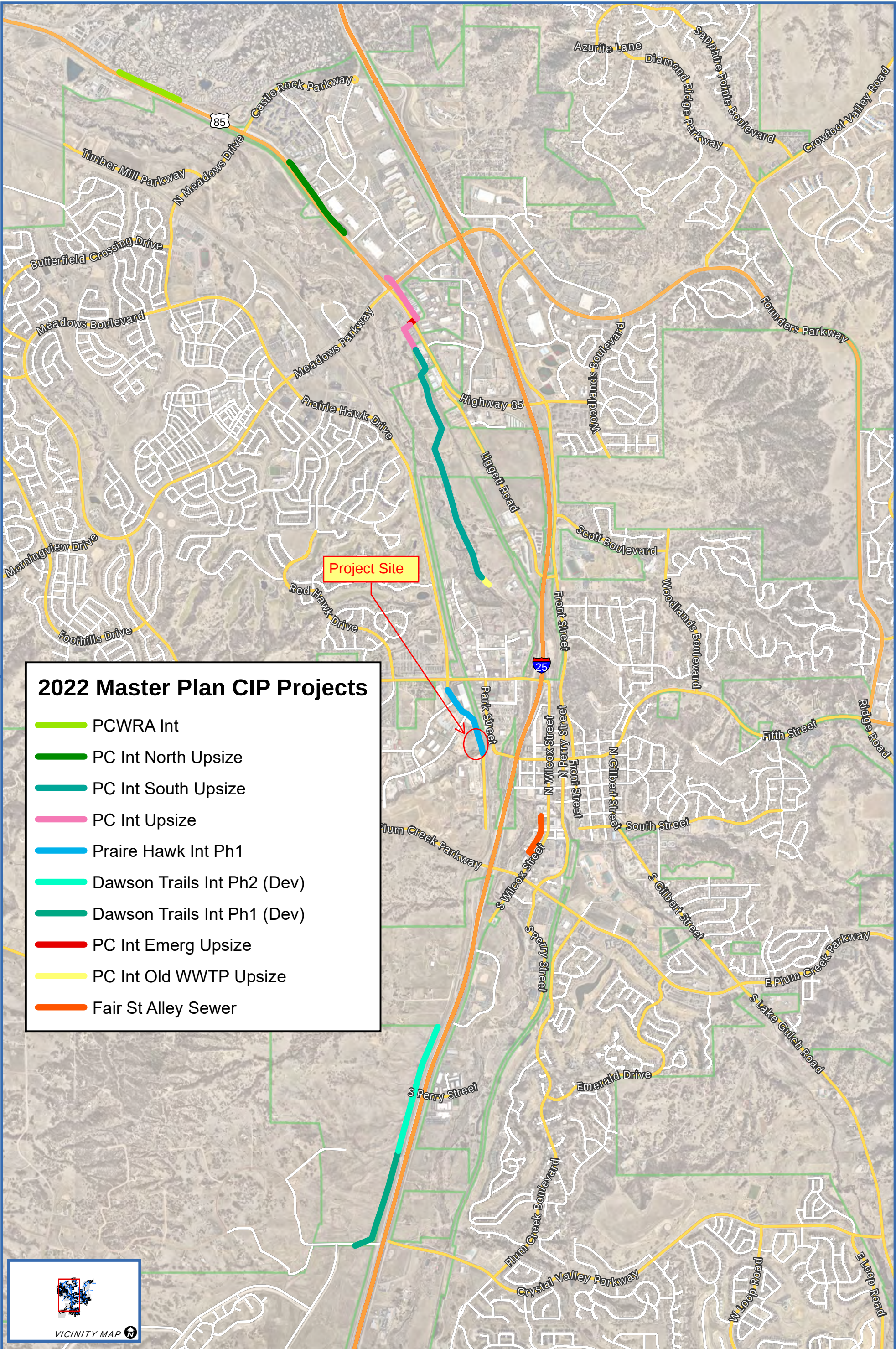


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**CASTLE ROCK
UTILITIES MAP
(INTERNAL USE ONLY)**

Date: 2/12/2025

Document Path: J:\GIS\Standard Maps\10.6\11x17 LndScp.mxd



2022 Master Plan CIP Projects

- PCWRA Int
- PC Int North Upsize
- PC Int South Upsize
- PC Int Upsize
- Praire Hawk Int Ph1
- Dawson Trails Int Ph2 (Dev)
- Dawson Trails Int Ph1 (Dev)
- PC Int Emerg Upsize
- PC Int Old WWTP Upsize
- Fair St Alley Sewer



0 1,150 2,300 4,600 6,900 Feet

1 inch = 2,337 feet



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product the Town of Castle Rock assumes no liability for its use or accuracy. Questions or comments regarding the cartographic composition of this map including, but not limited to, errors, omissions, corrections, and/or updates, should be directed to the Utilities Department, Town of Castle Rock, (720) 733-6056. Copyright 2022, Town of Castle Rock Utilities Mapping.

CASTLE ROCK
2022 WWMP
FIGURE 4.2



Commercial Business Building Permit Grease Interceptor Requirement

All Commercial Business Building Permits for new business and construction of new buildings, remodels, or tenant improvement permits will be required to comply with Town Code 13.05, Grease Interceptors Required. Applicant will be required to submit an Industry Information Questionnaire through Plum Creek Water Reclamation Authority (PCWRA) to verify if the business will require an oil/grease interceptor. Please go to the PCWRA website at:

https://www.pcwracolorado.org/pretreatment/commercial_businesses/index.php

CONSTRUCTION DRAWINGS

Please note PCWRA requires all new commercial buildings to provide a stub-out for a separate waste line for future interceptor installation, if not proposed with the project. All drainage fixtures and grease waste lines that are tied to the oil/grease must be shown in the construction drawings as well as the location of the oil/grease.

ACKNOWLEDGEMENT

The applicant must sign and date this form to acknowledge that the applicant has read and understands the Town's Code requirement regarding Grease Interceptors, PCWRA's requirement to complete an Industry Information Questionnaire and Food Service Application, and the Town's requirement that a letter from PCWRA must be provided with the Town of Castle Rock Building Permit. This signed form is required to be included in the Utility Report with the Predevelopment Plan (PDP), Site Development Plan (SDP) and Construction Document (CD) submittals.

Front Range Construction

Name of Project

661 Prairie Hawk Drive, Castle Rock, Colorado 80109

Address of property, if known

Jesse Gutowski
Signature

10/26/2025

Date



Industry Information Questionnaire

In order to properly evaluate, process, and issue a connection approval to discharge into the sanitary sewer, an Industry Information Questionnaire must be completed online.

HANDWRITTEN COPIES WILL NOT BE ACCEPTED.

(Additional applications may be required.)

PROPOSED LOCATION OF COMMERCIAL, PRODUCTION OR MANUFACTURING FACILITY

Proposed Facility Name * Front Range Construction Services

Name of new or existing business

Street Address * 661 Prairie Hawk Drive

City * Castle Rock

State CO

Postal Code * 80109

Is this a multi-tenant building? * ☐ Yes ☒ No

COMPANY OWNERS INFORMATION

Company Name * Front Range Construction Services

Mailing Address * PO Box 523

City * Castle Rock

State * CO

Postal Code * 80104

Contact Name *	Jesse Gutowski
Phone Number *	(303)-931-4669
Contact Email *	jgutowski@frontrangeecs.org

PROPERTY OWNER OF THE PROPOSED LOCATION

Property Owner Name *	Front Range Construction Services
Property Owner Mailing Address *	PO Box 523
City *	Castle Rock
State *	CO
Postal Code *	80109
Property Owner Contact Name *	Jesse Gutowski
Phone Number *	(303)-931-4669
Email *	jgutowski@frontrangeecs.org

AUTHORIZED REPRESENTATIVE IN OFFICIAL DEALINGS WITH PCWRA

Authorized Representative Name *	Jeff Goessling
Title (i.e. Owner, Manager, General Contractor, etc.) *	Construction Manager
Phone Number *	(314)-277-0477
Email *	jgoessling@frontrangeecs.org

BUSINESS INFORMATION

Will this be a new build? *	☒ Yes
	☐ No

Provide a brief description of the commercial, manufacturing, or service activities your business plans to conduct: *

The building will be used to store our vehicles, equipment and materials and to allow us a space to do routine maintenance. There will also be an office space in the building used for meetings etc...

When did/will the business begin operations? *

12/1/2019

Comments

Business Category *

- ☐ Assembly
- ☐ Auto Services
- ☐ Dental (please provide NAICS or SIC code below)
- ☐ Food Processing/Service
- ☒ Industrial (please provide NAICS or SIC code below)
- ☐ Manufacturing (please provide NAICS or SIC code below)
- ☐ Medical (please provide NAICS or SIC code below)
- ☐ Office (Not Medical)
- ☐ Retail
- ☐ Vehicle/Equipment Wash
- ☐ Warehouse/Storage
- ☐ Other

6 Digit NAICS/SIC Code

238110

If unsure of code, please visit <https://www.naics.com/>

Comments

Will there be other businesses leasing or occupying space at this facility? *

☐ Yes ☒ No

Will the business dispose of any chemicals or hazardous waste? *

☐ Yes ☒ No

Permit number assigned by Building Division if applicable

Signature*

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment.

Jesse Gutowski



Final Utility Report Checklist

The Final Utility Report must be in conformance with the latest Town of Castle Rock Water and Wastewater System Design Criteria Manuals, available on the Town's website.

For the Final Utility Report, the Preliminary Utility Report and associated hydraulic modeling shall be thoroughly updated to reflect the final design and layout of all water/wastewater system facilities and mains since the approval of the Site Development Plan (SDP), and as now shown on the Construction Drawings (CDs). The Final Utility Report shall describe adherence to the Preliminary Utility Report or describe deviations, and shall resolve any outstanding issues regarding the Town's ability to serve the development. As applicable, hydraulic modeling shall be provided for both the initial phase of development represented on the CDs, and for full build-out of the overall site. The Final Utility Report shall include a discussion of applicable SCADA requirements.

The following outline sets forth the **required minimum** content to be provided in the Final Utility Report that shall be submitted with the CDs. This report must be prepared by, or the report preparation supervised by a registered Professional Engineer licensed in Colorado. A copy of this checklist must be submitted with the Final Utility Report.

Please check off the following items to assure your report is complete. Appropriate notations shall be provided with the checklist. For example, if a specific item is not addressed or not applicable, an explanation needs to be provided.

Included	N/A	
		TITLE SHEET
		A. Name of Project, including legal name of development
		B. Address
		C. Owner
		D. Developer
		E. Engineer
		F. Submittal date and revision dates as applicable
		APPROVAL BLOCK SHEET (Available on Town's website)
		TABLE OF CONTENTS
		PROJECT LOCATION AND DESCRIPTION
		A. Site Location
		B. Description of Property and Land Use
		CALCULATED WATER DEMANDS
		A. Average Day Demands (ADD)
		B. Max Day Demands (MDD)

Final Utility Report – Formatting Checklist

Included	N/A	
		CALCULATED WATER DEMANDS (CONT.)
		C. Peak Hour Demands (PHD)
		D. Irrigation Demands
		EXISTING WATER SYSTEM
		A. Existing Distribution System
		B. Existing Supply Facilities
		PROPOSED WATER SYSTEM
		A. Proposed Distribution System
		B. Proposed Supply Facilities
		C. Required Fire Flows
		D. Land Dedication Requirements
		PROPOSED WATER SYSTEM ANALYSIS AND MODELING
		A. Hydraulic Models
		B. Hydraulic Modeling Scenarios
		C. Hydraulic Modeling Output and Required Schematics
		D. Fire Flow Test Results
		CALCULATED WASTEWATER FLOWS
		A. Average Day Wastewater Flows (ADF)
		B. Peaking Factor (PF)
		C. Peak Design Flows (PDF)
		EXISTING WASTEWATER SYSTEM
		A. Existing Collection System
		PROPOSED WASTEWATER SYSTEM
		A. Proposed Collection System
		B. Proposed Wastewater Facilities
		C. Land Dedication Requirements
		PROPOSED WASTEWATER SYSTEM ANALYSIS AND MODELING
		A. Hydraulic Models
		B. Hydraulic Modeling Scenarios
		C. Hydraulic Modeling Output and Required Schematics
		POTENTIAL SUBDIVISION IMPROVEMENTS AGREEMENT (SIA) ITEMS
		POTENTIAL PERMITTING REQUIREMENTS
		REFERENCES

Final Utility Report – Formatting Checklist

Included	N/A	
		APPENDICES
		Appendix A — Water Demands
		Water Fixture Unit Counts and Tap/Meter Sizing Calculations
		Irrigation Demands
		Hydraulic Worksheet(s) and Irrigation Chart(s)
		Appendix B — Water Storage
		Confirmation Memo for Required Fire Flow
		Appendix C — Water Hydraulic Analysis and Modeling
		Fire Flow Test Results
		Appendix D — Wastewater Flows
		Appendix E — Wastewater Hydraulic Modeling
		Appendix F — Maps and Plans
		A. Vicinity Map
		B. Utility Map(s) provided by the Utilities Department
		C. Overall Utility Plan from the CDs
		D. Water/Wastewater Utility Plan(s)

Notes/Comments: