

TECHNICAL MEMO:

1200 Capitol Street Development Public Facilities Impact Report

To: Brad Hagedorn (Developer)
From: Matt Wadey, AEI
Date: October 18, 2022

Project Introduction

The proposed Project at 1200 Capitol Street in Eagle Ranch consists of high density residential development with a small first floor commercial component. The Project is located on the southern terminus of Capitol Street, in the core of downtown Eagle Ranch. The proposed density is for (8) Studio apartments, (8) 2 Bedroom units and a 1190 sqft Commercial space. The building will consist of 3 floors.

Sanitary Sewer:

The project as proposed can be served by an existing 8" sewer main in Capitol Street. There is an existing 6" PVC sewer service stub already allocated and stubbed out from the project. Plumbing calculations (attached) indicate an 6" PVC service could adequately serve the amount of density. All sewer service extensions will be constructed in compliance with Town Design Standards.

Projected sewer effluent volumes are shown in the Tables below.

Commercial Use

Density Type	Square Footage	Sewage GPD/1000 SF Gross Building	Average Daily Volume (Gallons)	Peaking Factor	Peak Day Volume (Gallons)
Retail/ Office	1190	200*	238	1.5	357

* Flowrates taken from City of Denver Public Works

Residential Use

Density Type	Unit Count	Persons Per Unit	Sewage Volume Per Capita Daily (Gallons)	Average Daily Volume (Gallons)	Peaking Factor	Peak Day Volume (Gallons)
1 bedroom	8	2.0	81	1296	1.5	1944
2 bedroom	8	3.0	81	1944	1.5	2916

Treated Water System:

The proposed treated water distribution system for the Project will connect to the Town's existing 16" water main in Capitol Street. There is currently a 4" water service stubbed to the lot.

The building will be fire sprinklered and the existing 4" DIP service will extend to the building prior to being split into domestic and fire services. The attached plumbing calculations indicate a 2" potable line will be adequate. The fire suppression water service size will be determined by the fire suppression consultant. All water services will be installed in compliance with Town Design Standards.

Projected water demand volumes are shown in the Table below.

Retail Use

Density Type	Square Footage	Water GPD/ SF Gross Building	Average Daily Volume (Gallons)	Peaking Factor	Peak Day Volume (Gallons)
Retail/Office	1190	0.22	238	2.0	476

Residential Use

Density Type	Unit Count	Persons Per Unit	Sewage Volume Per Capita Daily (Gallons)	Average Daily Volume (Gallons)	Peaking Factor	Peak Day Volume (Gallons)
1 bedroom	8	2.0	100	1,600	2.0	3,200
2 bedroom	8	3.0	100	2,400	2.0	4,800

Thank you,



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