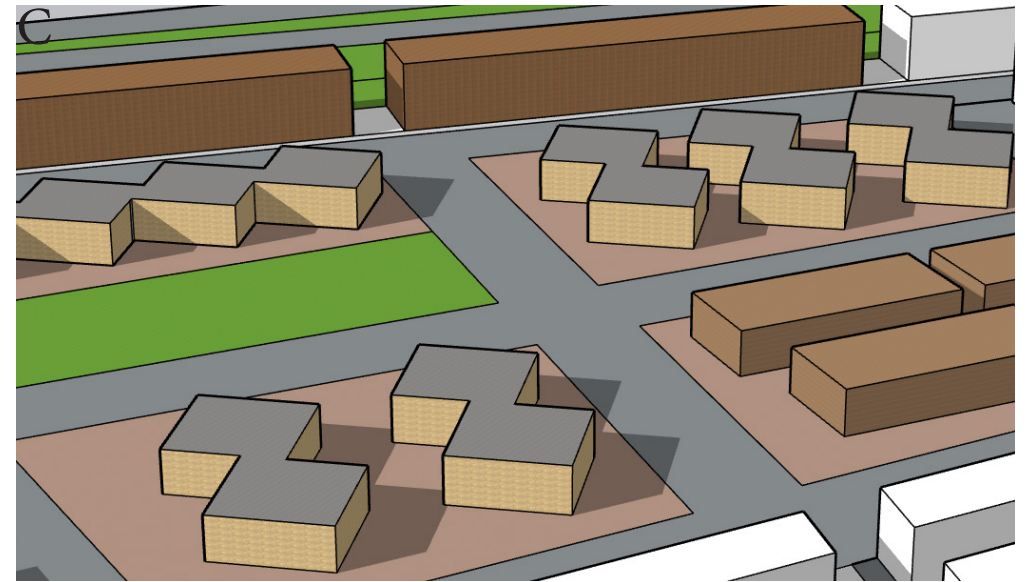
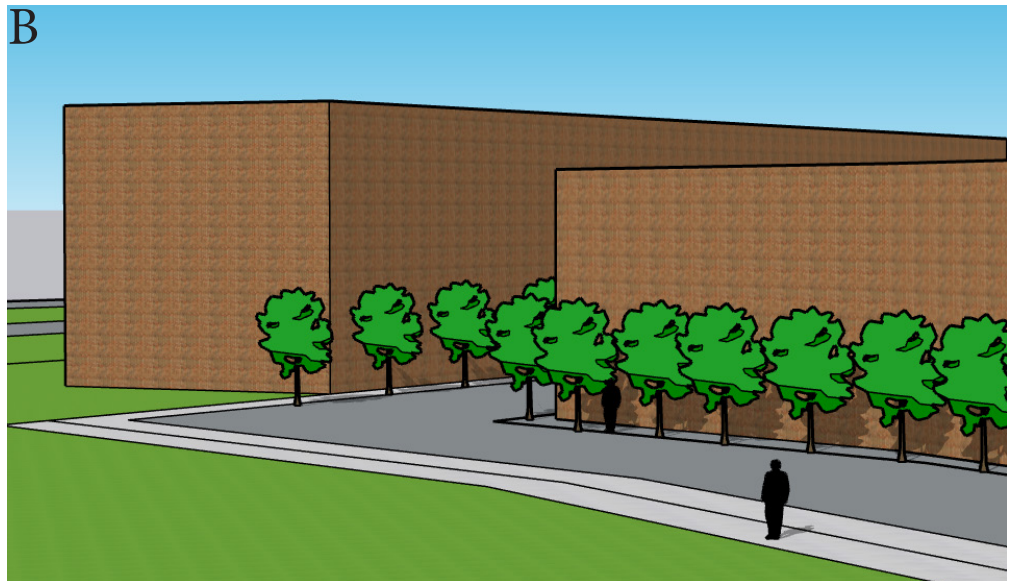
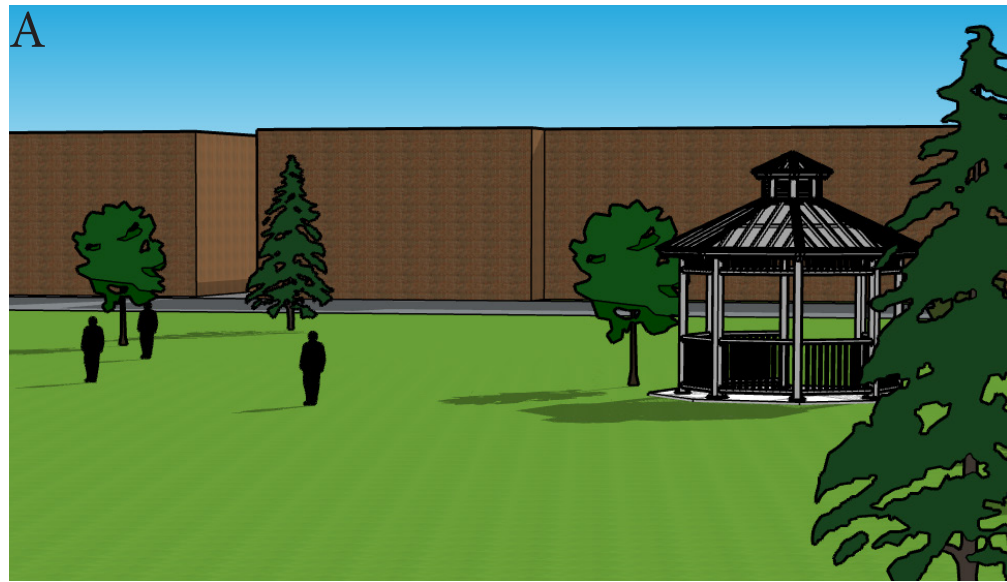


Gunbarrel Transit Village

The Gunbarrel Transit Village is a 130-acre walkable, multimodal community just a 30-minute bus ride or a couple train stops away from the heart of Boulder. Colorado's explosion of growth has led to an explosion of need for affordable housing and housing that targets young professionals or young couples. The abundance of apartment housing in the Gunbarrel Transit Village certainly fills this need. The development is designed to be a 20-minute neighborhood, meaning that every resident has everything they need on a day-to-day basis within a twenty-minute walk from their residence. Separated bike lanes and bike-safe residential roads provide residents with easy to access to the transportation option of their choice.

The design of the neighborhood encourages residents to leave their cars to weekend trips to the mountains, facilitating clean, green, and healthy living.

RENDERS AND VIEWS



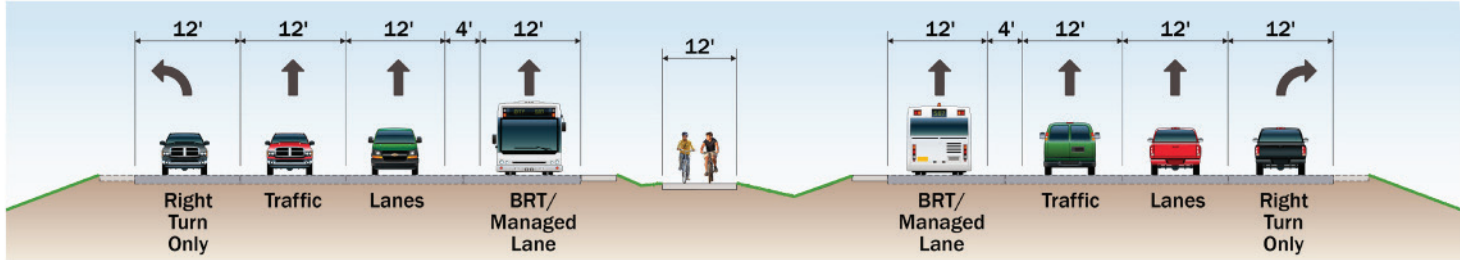
Circulation, Zoning, Land Use

The street network of the Gunbarrel Transit Village is made up of three parts: a radial network that intersects with two grids. The street network was designed in a way that followed the topography of the land -- radiating outward from where the train station is located. The grids located on the north of the site are informed by the existing street network and the angles created by State Highway 119, State Highway 52, and N 71st St.

Gunbarrel Transit Village is a transit oriented development (TOD), so the bus stop that used to be at the SH119/SH52 has been moved into the median of SH119 in line with the train station. This makes the bus stop easier to access for residents. A schematic for the new bus stop system from RTD's SH119 BRT Corridor Project can be found below.



- Freight Rail
- Passenger Rail
- RTD Route BOLT
- Personal Vehicles



SH 119 BRT/Managed Lane Typical Section with Median Running Bikeway

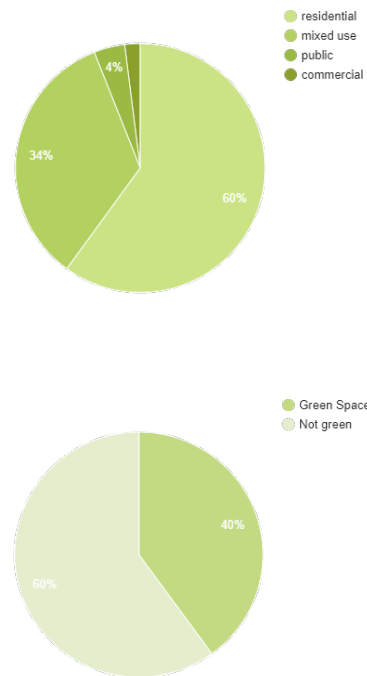
Process Land Use Map



Zoning Map

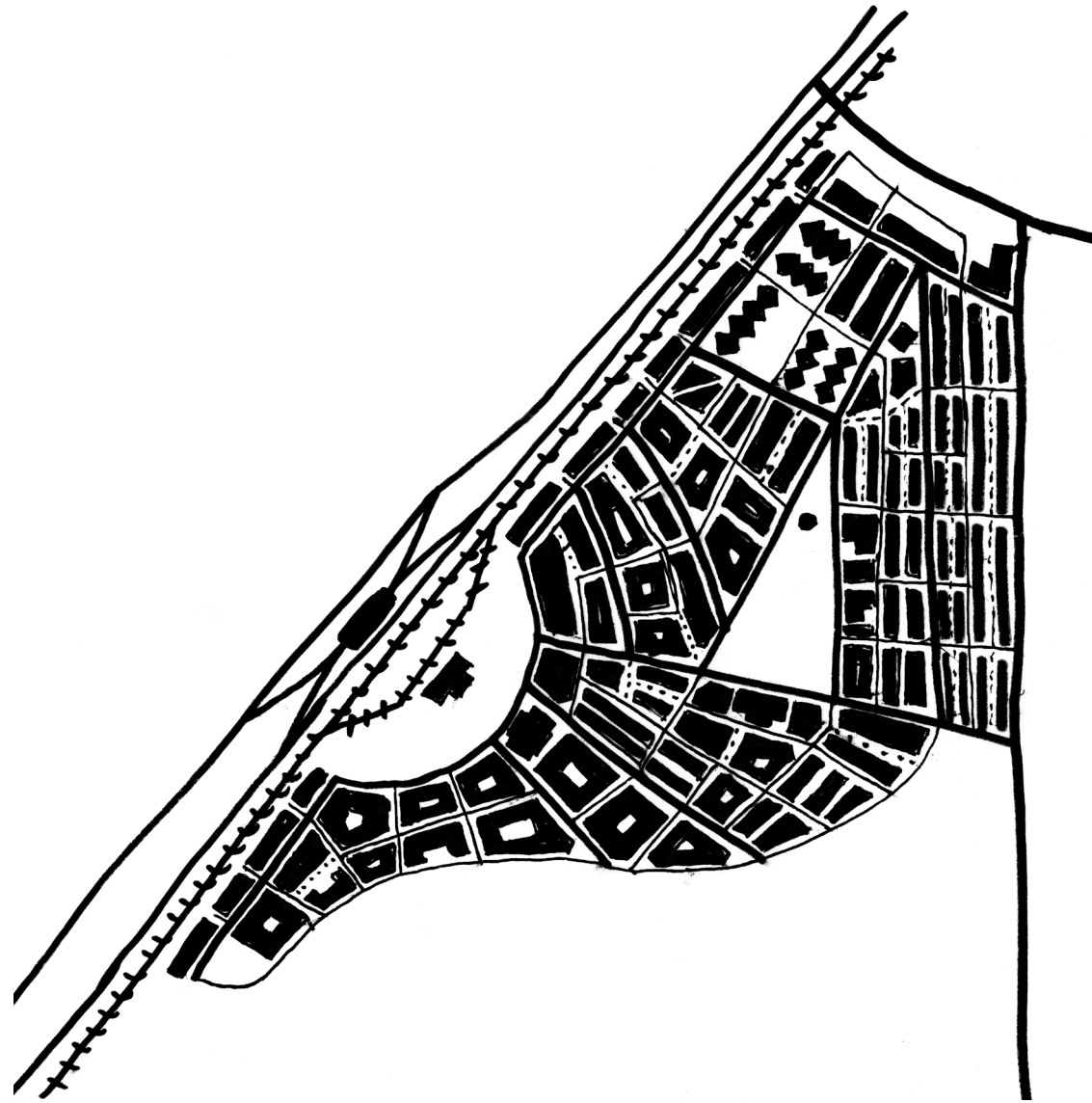


How is space utilized?



Most of the square footage in this development is residential, at 60%. 2% of the site's square footage goes to isolated commercial buildings. 34% is given to mixed use space, which combines residential and commercial space into one building. 4% of the total square footage goes to public uses such as the fire station, post office, rec center, and library.

Of the site's 130 acres, 52 acres are devoted to parks and green space. This amounts to 40% of the site being dedicated to parks and open space.



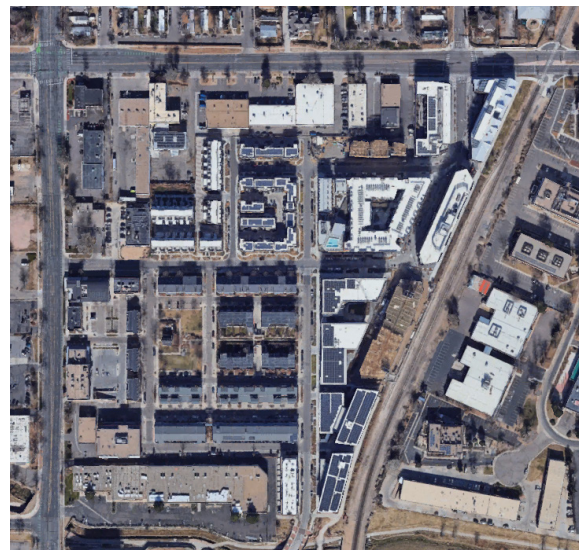
PRECEDENT ANALYSIS

Nothing can exist without precedent! There is no need to re-invent the wheel! Although the phrase 'Transit Oriented Development' is recent, it describes an old concept -- living along transportation routes. There are many real cities, towns, and places that have influenced my design, but the three that have had the most influence -- Krasnoturinsk, Boulder TOD, and Westminster Station -- are highlighted.



KRASNOTURINSK, SVERDLOVSK OBLAST', RUSSIA

Krasnoturinsk is a city in Sverdlovsk Oblast', Russia. The city has a population of 60,000 people, and was established in 1758 as a copper mining settlement. Krasnoturinsk is connected to Ekaterinburg, the capitol of Sverdlovsk Oblast', by rail, and the city grew around the rail -- a classic example of transit oriented development. Like many European cities, Krasnoturinsk has part of it built on a radial grid, and much of the block typology is made of block perimeter buildings. I took some inspiration from the center of the city for my own city's center as seen by the radial street network and block perimeter buildings on the Gunbarrel Transit Village Nolli and Street Map on the left side of the page.



BOULDER TRANSIT VILLAGE

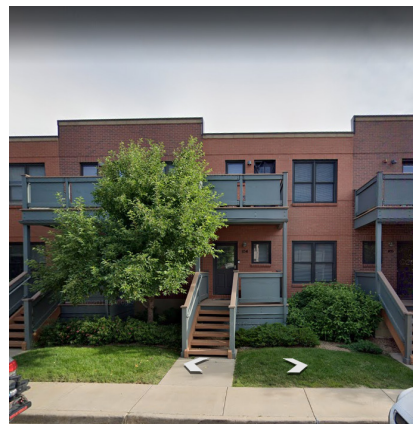
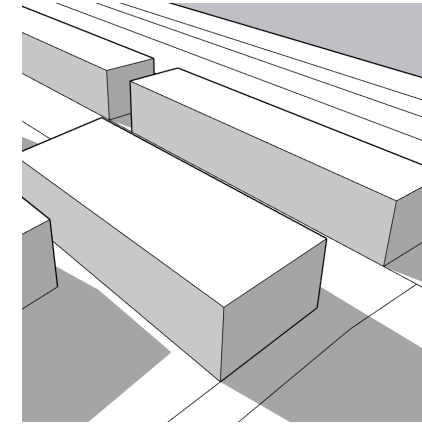
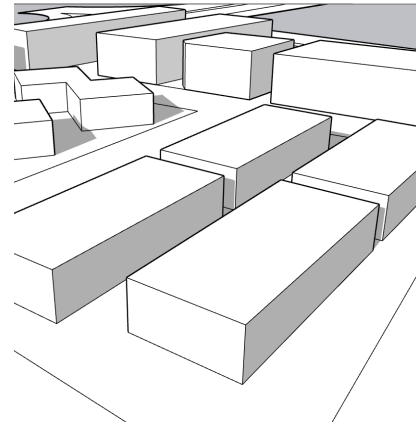
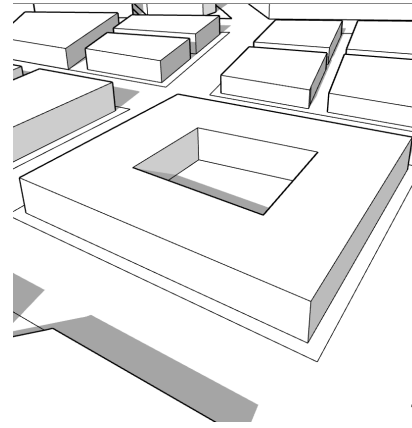
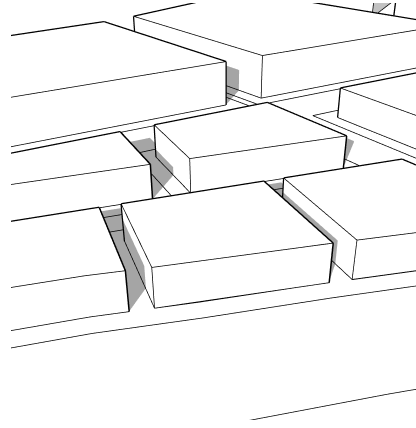
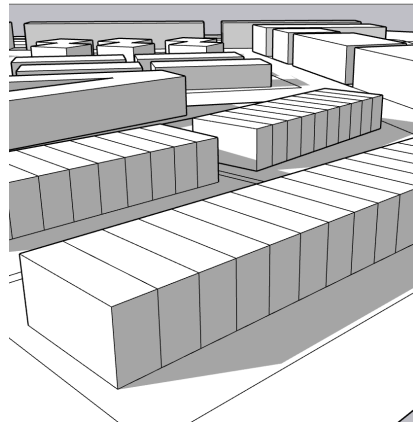
Boulder Transit Village is a local inspiration for the Gunbarrel Transit Village. Both developments run along the same single-track railway in Boulder County. Boulder Transit Village inspired my development to have linear mixed-use buildings along the railway as a noise buffer from freight rail traffic. The row houses in my master plan have the same dimensions as the row houses in the Boulder TOD. The lack of surface parking lots and narrow streets to discourage the use of personal vehicles through the neighborhood were inspirations when I was creating my street network.



WESTMINSTER STATION

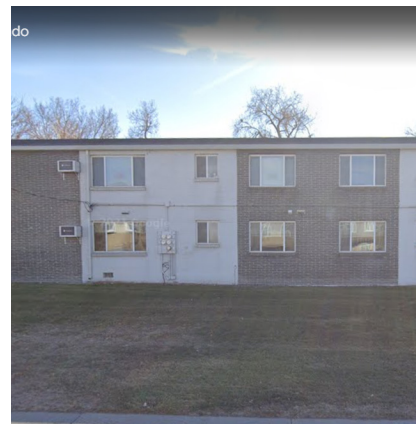
Westminster Station is another Colorado-based precedent for the Gunbarrel Transit Village. I took inspiration from the green space around this train station. The radial park right outside the train station in Westminster is very similar to the park right outside my train station. While a beautiful park and valuable civic space, the park also provides a buffer around the passing siding that pulls into the site.

BUILDING TYPOLOGIES



ROW HOUSES

Row houses in the site are located on the north east end, parallel to N 71st St. The row houses on this site are similar to the row homes built in the Boulder Transit Village near Pearl St. The average unit size is 750 sq. ft., and each unit has a yard behind it.



BLOCK

Much of the site is made up of block style buildings, most of which are apartment buildings. Most of the Block typology buildings are one or two stories, but some are three stories tall.



BLOCK PERIMETER

Block Perimeter structures are common throughout the site. Block perimeter type buildings provide pockets of private outdoor space to the residents of this area. These types of buildings create an engaging public, streetside atmosphere while maintaining private space.



LINEAR BLOCK

This type of building typology is found on the north end of the site. These buildings are primarily two story tall apartments. The average unit size of these apartments is 600 sq. ft.

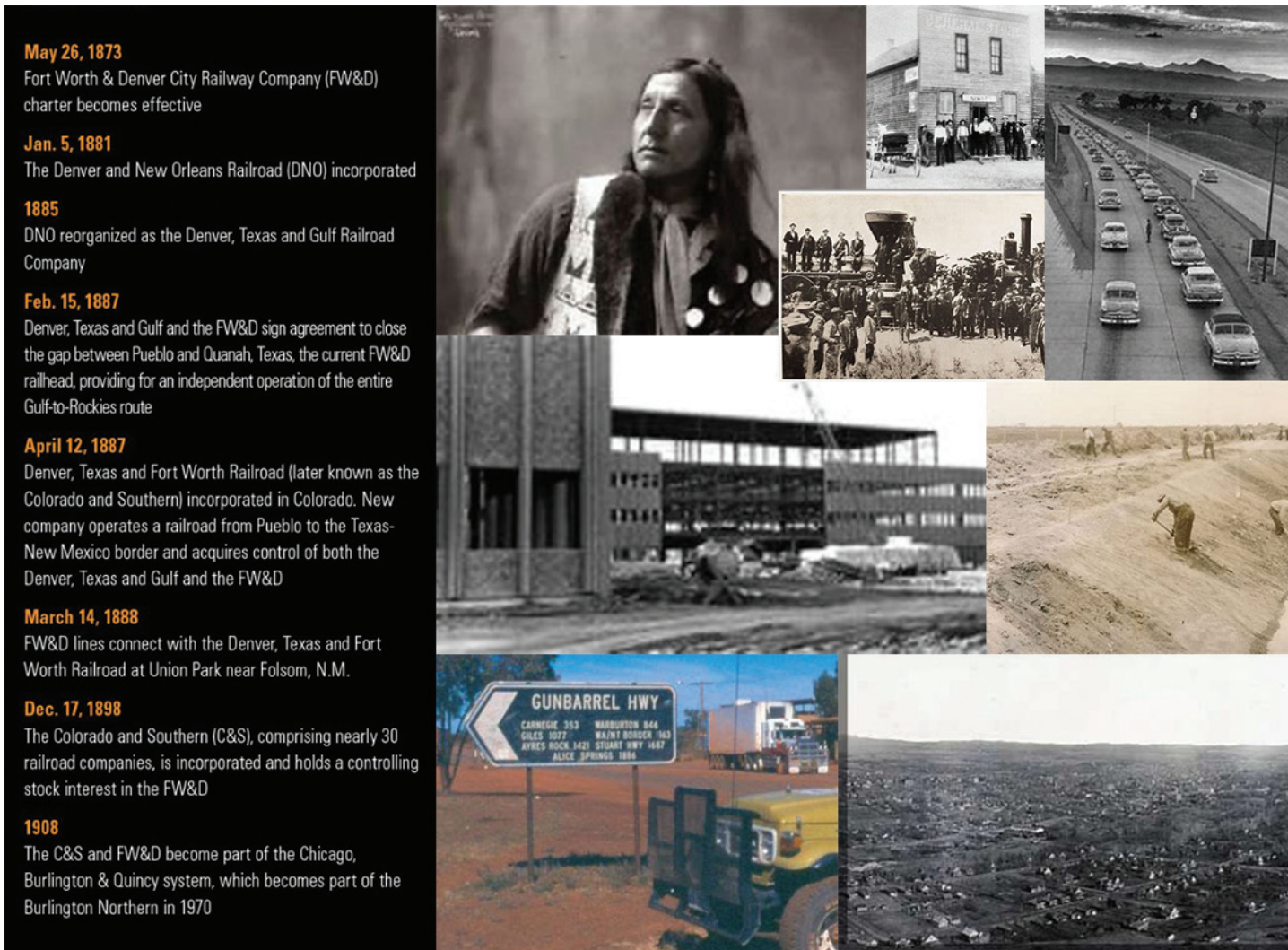


MIXED USE/LINEAR BLOCK

Mixed use buildings make up a buffer of buildings along the Diagonal Highway. This typology is similar to the linear block building typology, but the ground floor level is taller with larger units to make space for stores and other commercial uses.

LEGEND

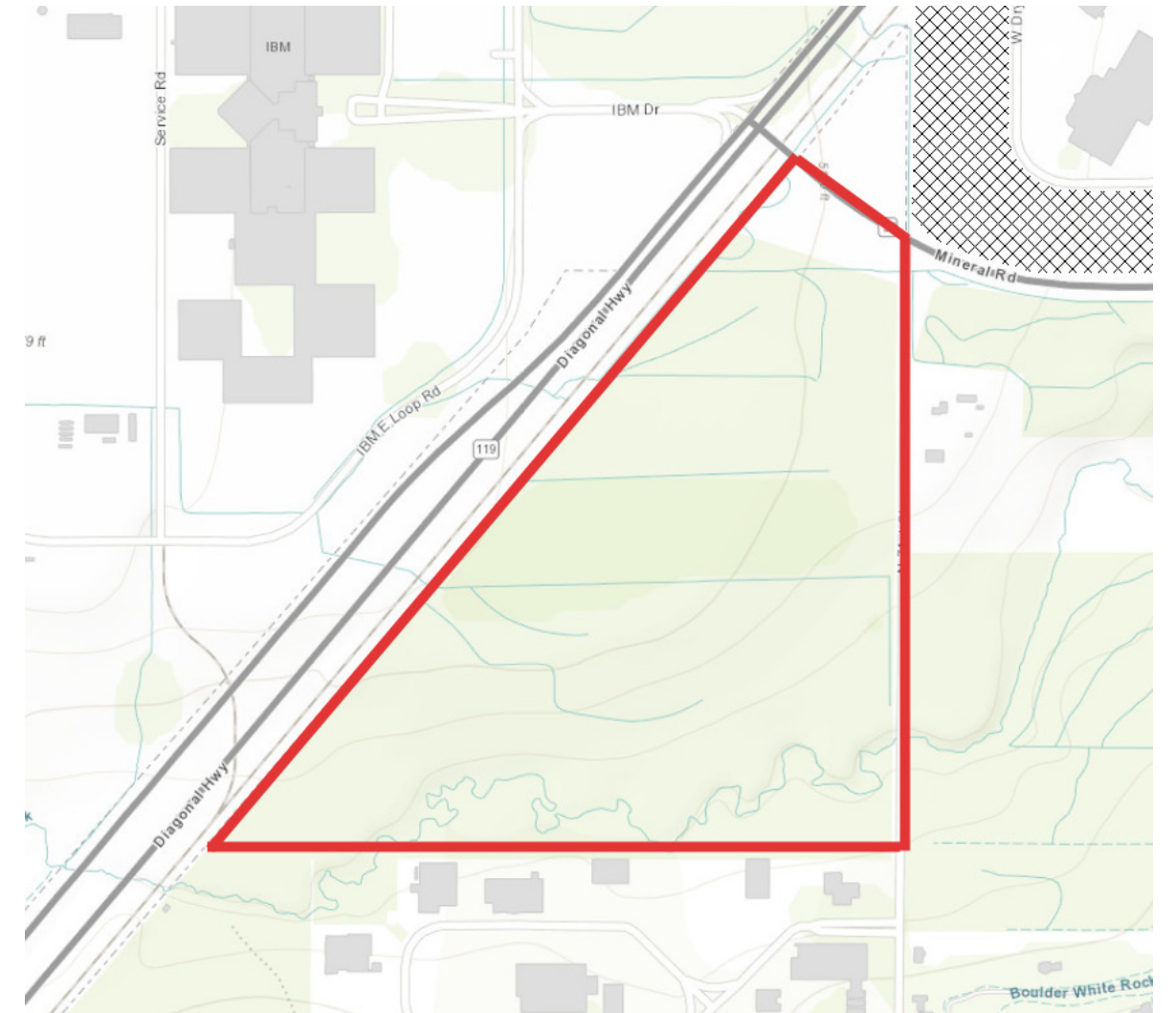
- ROW HOUSES
- APARTMENT BLOCKS
- LINEAR BLOCK
- BLOCK PERIMETER
- MIXED USE



HISTORY OF GUNBARREL DEVELOPMENT SITE

Although the site of the Gunbarrel TOD may seem to be under-utilized or empty today, the site and the surrounding areas have a rich history. The site sits on historical Cheyenne, Arapahoe, and Apache land. The nearby town of Niwot is named after Apache Chief Niwot. For decades, the land on and around the site was primarily inhabited by homesteaders. Beginning in the 1860s, the Fort Worth & Denver City Railway Company built a railroad to serve the miners coming to Colorado because of the gold rush. The railway is now owned by BNSF, who run freight along the front range. The areas surrounding the site, and Gunbarrel especially, began to be developed in the 1960s, when IBM built a campus across from our site. This prompted the state to fully pave SH119 and SH52, and prompted the building of suburbs in Gunbarrel to support the IBM employees and their families.

The historical character is not lost in the area. The agricultural roots of Niwot and Gunbarrel are visible to this day, as much of what is between Boulder and Longmont is farm land. IBM remains as a large employer in the area, and their campus is clearly visible from the site. The development of the Gunbarrel Transit Village calls back to the history of the land and emphasizes the importance of the rail road in the mid-19th century development of the Western United States.



TOPOGRAPHY, HYDROLOGY, AND CONTEXT

It is always important to know the geography and context of the site being developed, as those factors play a large part in deciding the design. The site is very flat and the land decreases in elevation radially from the north west to the south east areas of the site. This drove the design of a radial street network, as such a network would complement the topography nicely. The only significant water feature on the site is Dry Creek in the south of the site; the other water lines on the map signify irrigation ditches that are of little consequence design-wise.

Gunbarrel Transit Village sits between two large sources of employment and a major arterial road (SH119) with bus rapid transit. This drove my decision to dedicate 60% of the development's square footage for housing. Access to employment within a mile of the residents, as well as easy access to Longmont and Boulder, means that the site can focus more on building housing and less on building jobs. Access to employment also helps keep car use to a minimum and encourages multimodal transportation such as cycling.