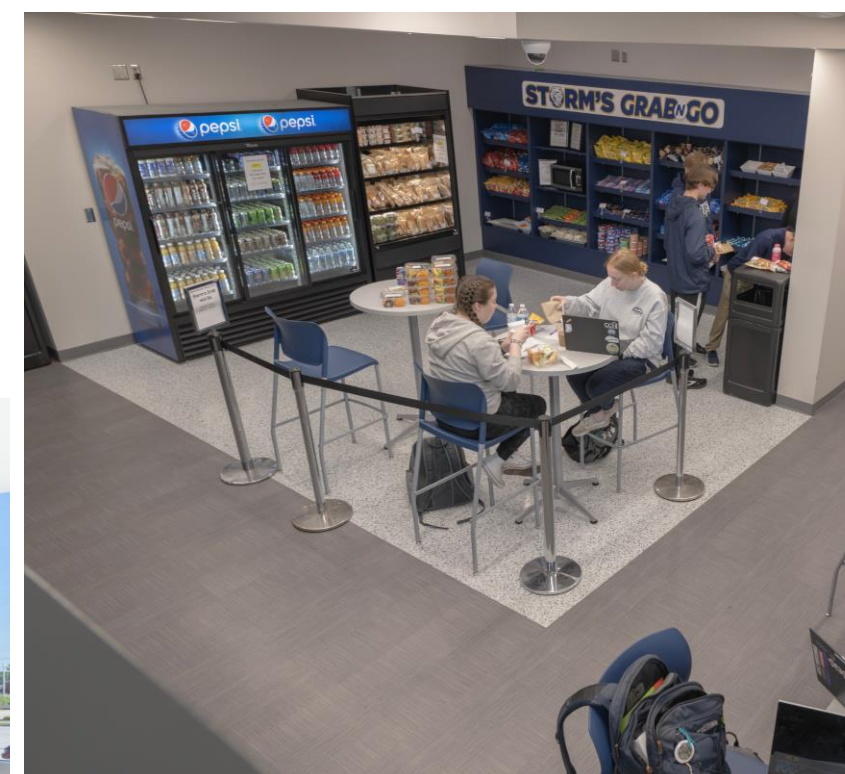


PROJECT OVERVIEW



A new dormitory is needed to house a growing student body with traditional dorms being demolished. 262 beds are being removed, so 316 beds are being added.

A "Grab n' Go" style eatery similar to the one in SDI pictured on the right, is on the first floor.



Study spaces, like the ones to the left are in the communal areas.



A new gym space and athletic laundry facilities are also placed on the first floor so that all students can access these areas.

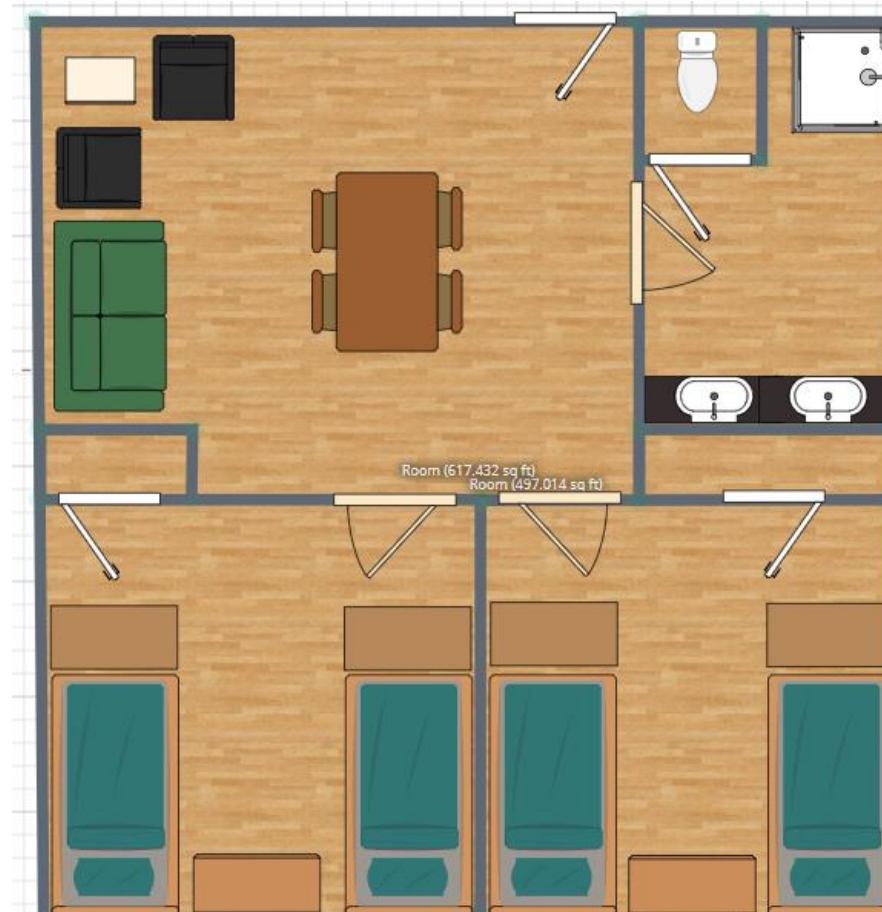


EXISTING SITE



The design location for the dormitory is the southeast corner of the intersection of Moss Street and Summit Street. This is north of the traditional dormitories. There is an existing residence and gravel parking lot on the site. Existing utilities, the residence, and the parking lot must be removed before the construction of the dormitory.

ROOM LAYOUTS

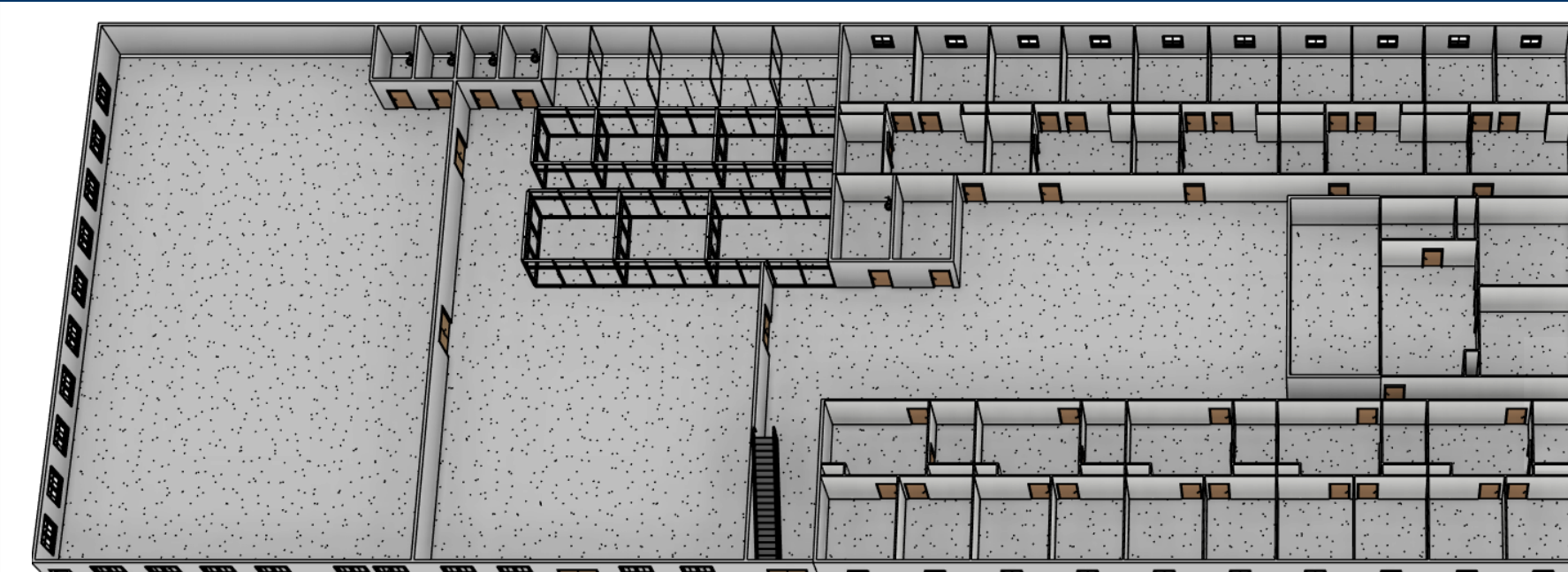


On the left, is a four-person apartment-style room layout. This layout includes 2 bedrooms, a bathroom, and a common space. 64 of 74 rooms in the dormitory follow this layout.



On the right, is a six-person apartment-style room layout. This layout includes 2 bedrooms, a bathroom, a shared closet, and a common space. With more people in these rooms, the bathrooms are larger with more amenities. 10 of 74 rooms in the dormitory follow this layout.

FLOOR LAYOUTS

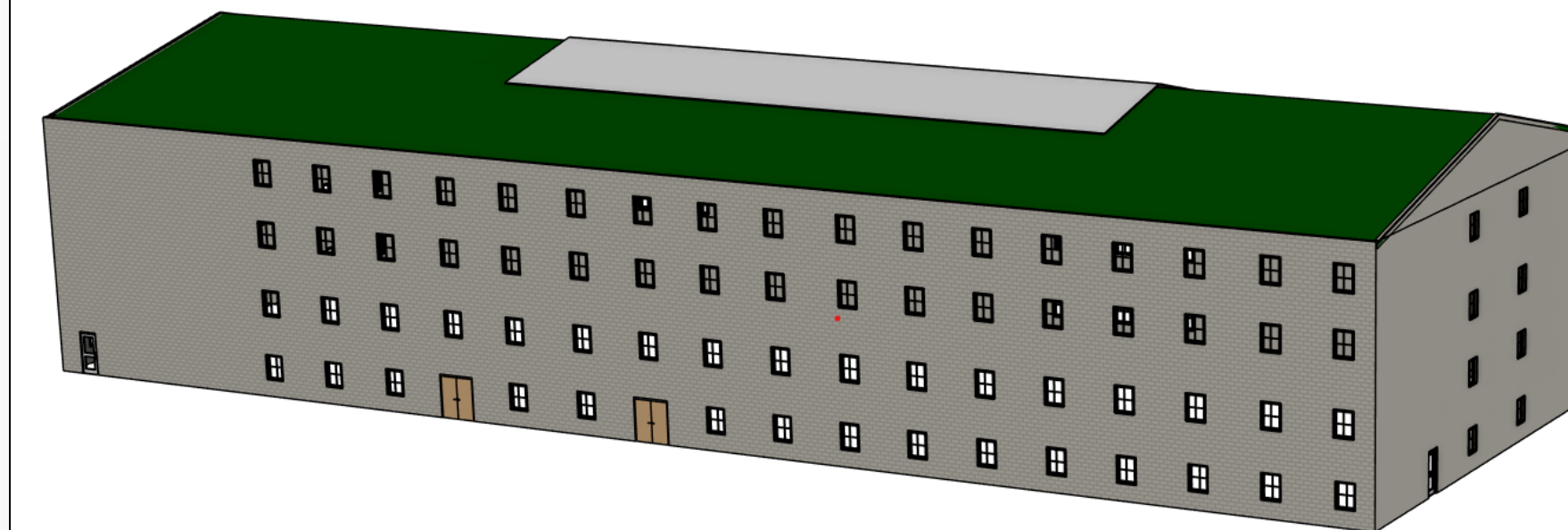


The layout for the first floor of the dorm is seen above. The open space on the left is a gym space. Immediately to the right of the gym are study spaces, a "Grab-n-Go" and public restrooms. This space is accessible to all students. On the right is the residential portion of the floor with rooms only accessible to residents. The open space on the residential side will be a common area with tables and couches.



This is the second floor of the dormitory. The floor is solely residential and has an open atrium in the middle with a skylight on the roof. There is an entrance to Moss Street on the North side of this floor. The third and fourth floors are nearly identical without exterior access.

BUILDING DESIGN



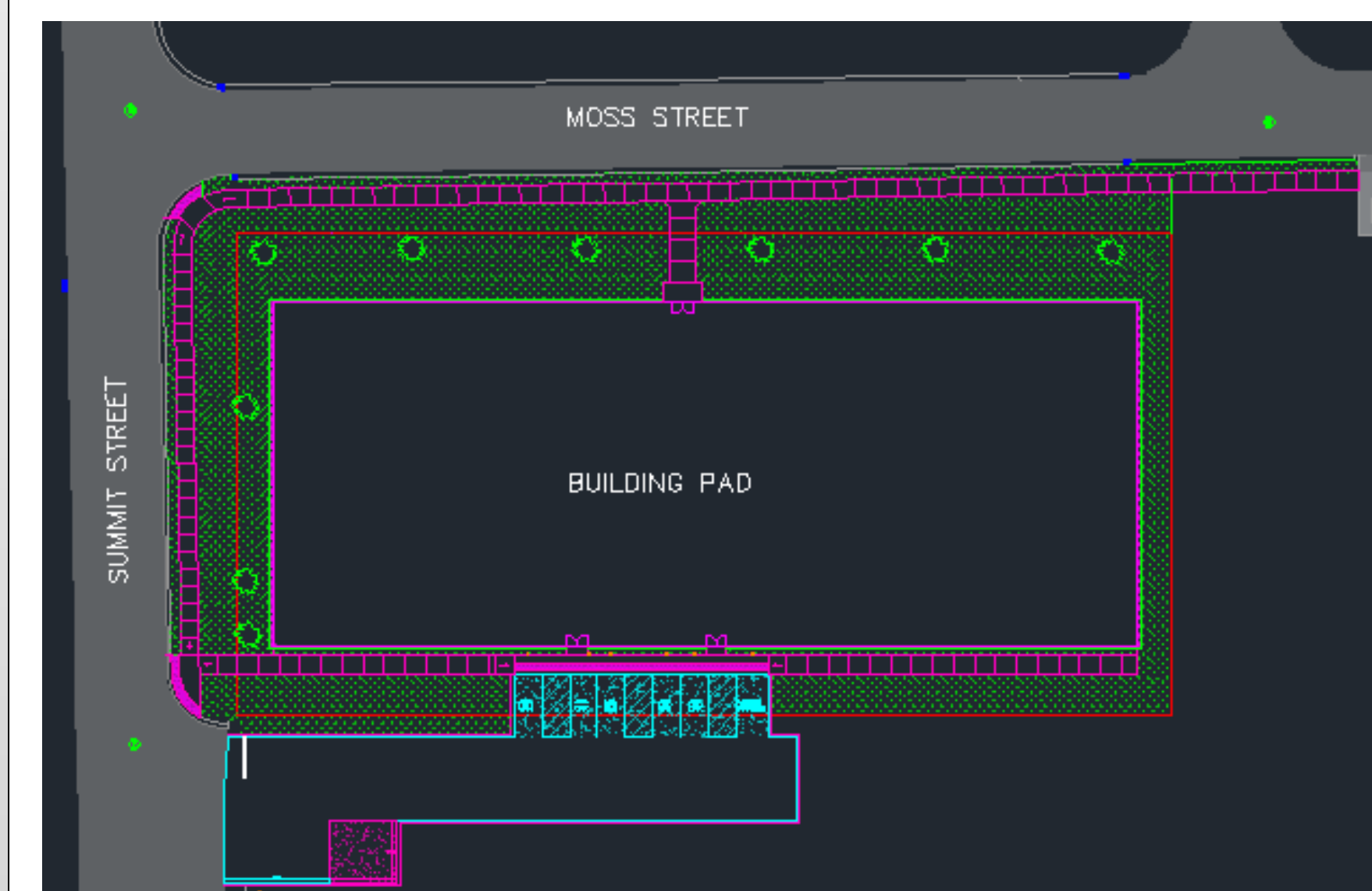
This is the Revit model of the exterior of the dormitory. This side of the building faces south towards Thunder Drive. The exterior will be brick with a copper roof and skylight in the center.



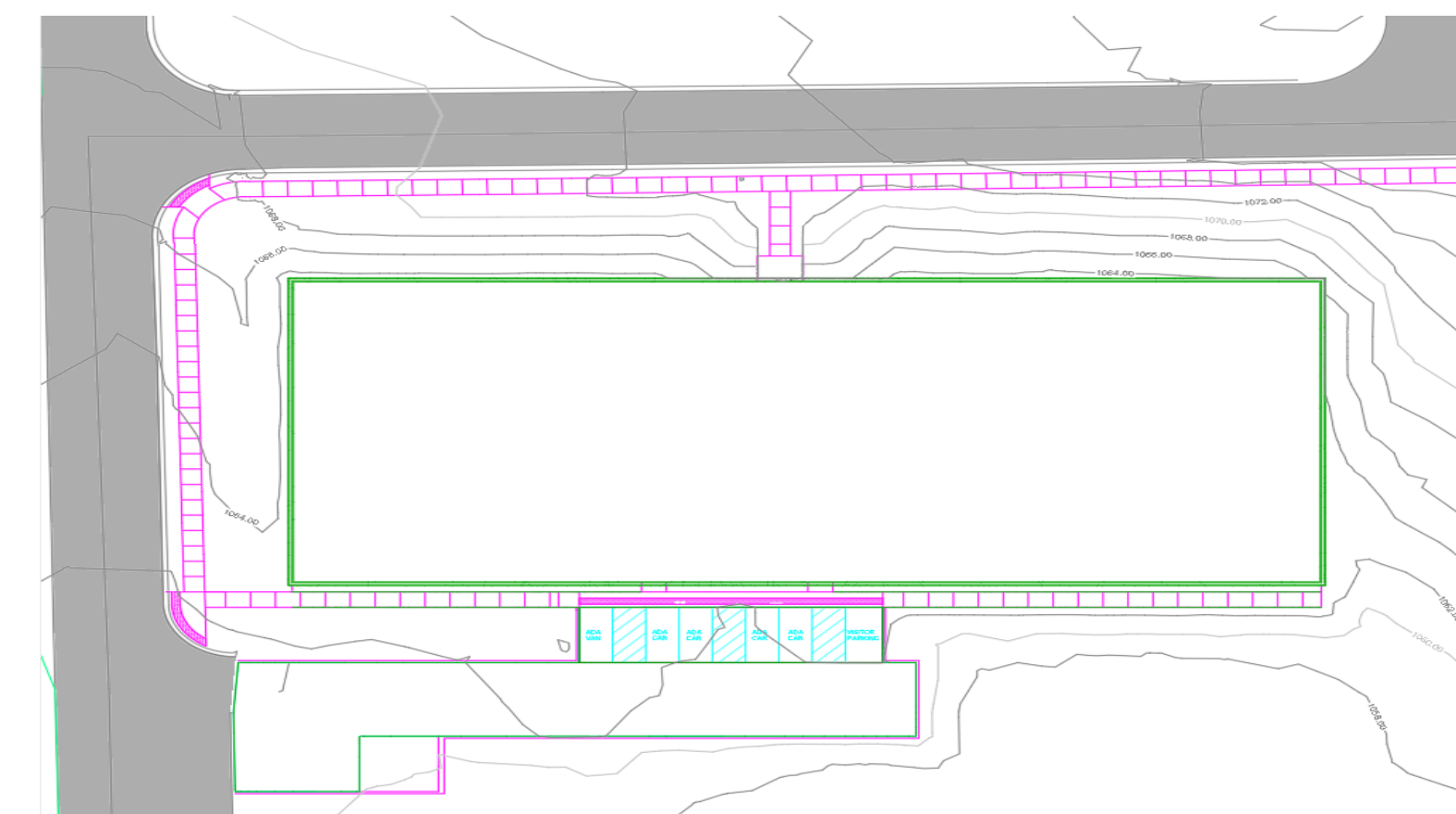
Center Ridge I-Beams Ridgeline

To the left is a model of the skylight on the roof. It is completely customizable and will match the roof color. This brings bright light into a traditionally dark space in dormitories.

SITE DESIGN

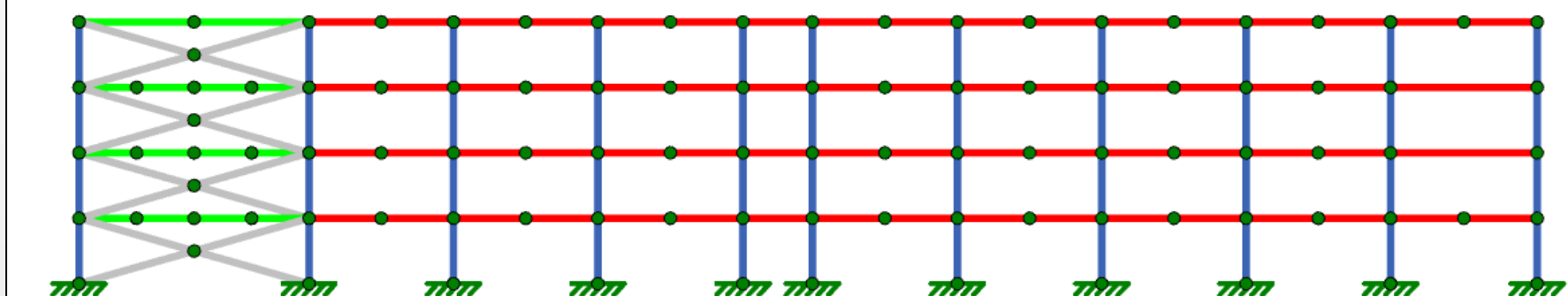
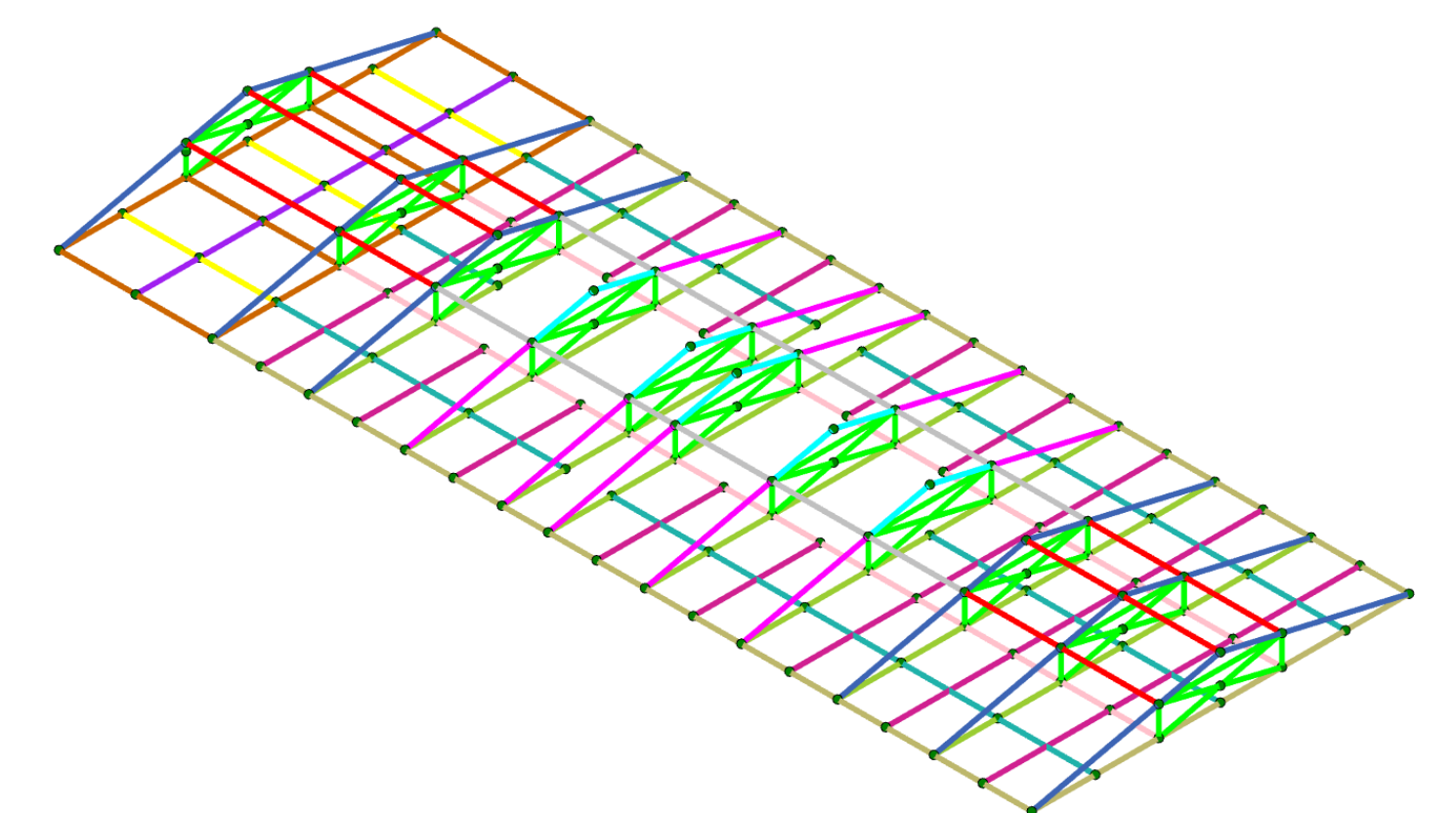


A plan view of the overall site layout. Existing roads can be seen in gray, with the access drive to the parking in blue. The sidewalks around the building are in pink. Landscaping and grass around the building pad are green.



The site has a significant elevation difference from north to south and east to west. Above is the grade optimization for the site to minimize cut and fill work. This determined the building's final floor elevation (FFE) at 1062.0 feet.

STRUCTURE



Displayed above are images generated from the RISA model, the software used to complete the structural design of the building. In the model, each color represents a different type of structural member, making it easier to distinguish between various components. The top image focuses on the roof, highlighting its layout and the arrangement of structural elements. The bottom image provides a view of the building's long side, offering a clear perspective on how the structural framework is organized. This view also showcases some of the cross-bracing incorporated to enhance the stability of the structure. The RISA model played a crucial role in visualizing and refining the design, ensuring that all elements work cohesively to meet structural requirements.

PAVEMENT



All parking spaces on the site are permeable asphalt pavement with a drainage layer underneath. This porous pavement will capture water underneath the six parking spots on-site. All runoff from surfaces other than the building will be drained to this location, detained in the stone layer, and infiltrated into the soil beneath.

