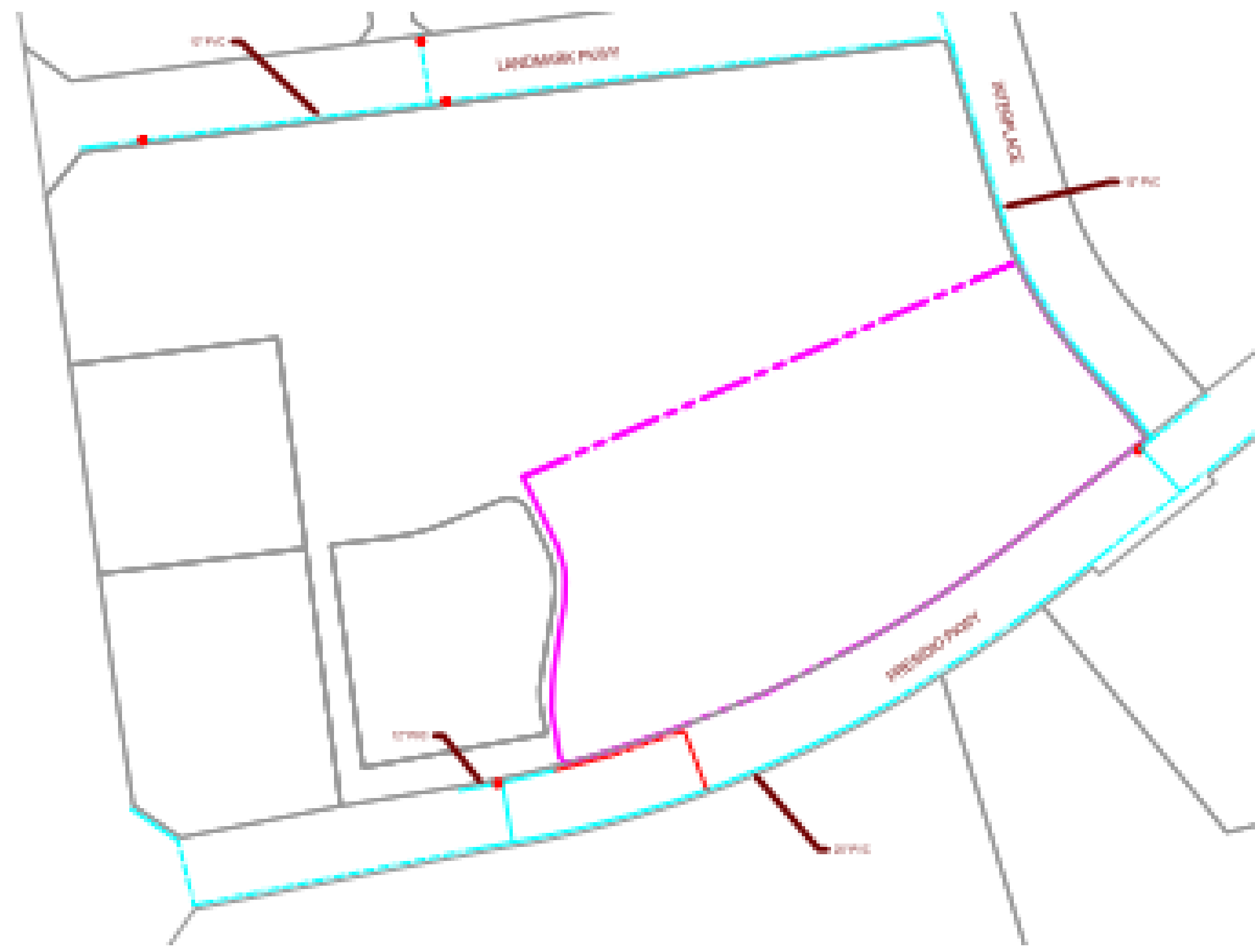


## UTILITIES

- Extending 12" PVC manifold enough to obtain water services, and looping back into 20" water main to eliminate prohibited dead end line.
- 8" sewer main extension with new manhole, and an 8" sewer lateral discharging into it.
- Mixed use building totals 48 EDUs and 4 water meters.

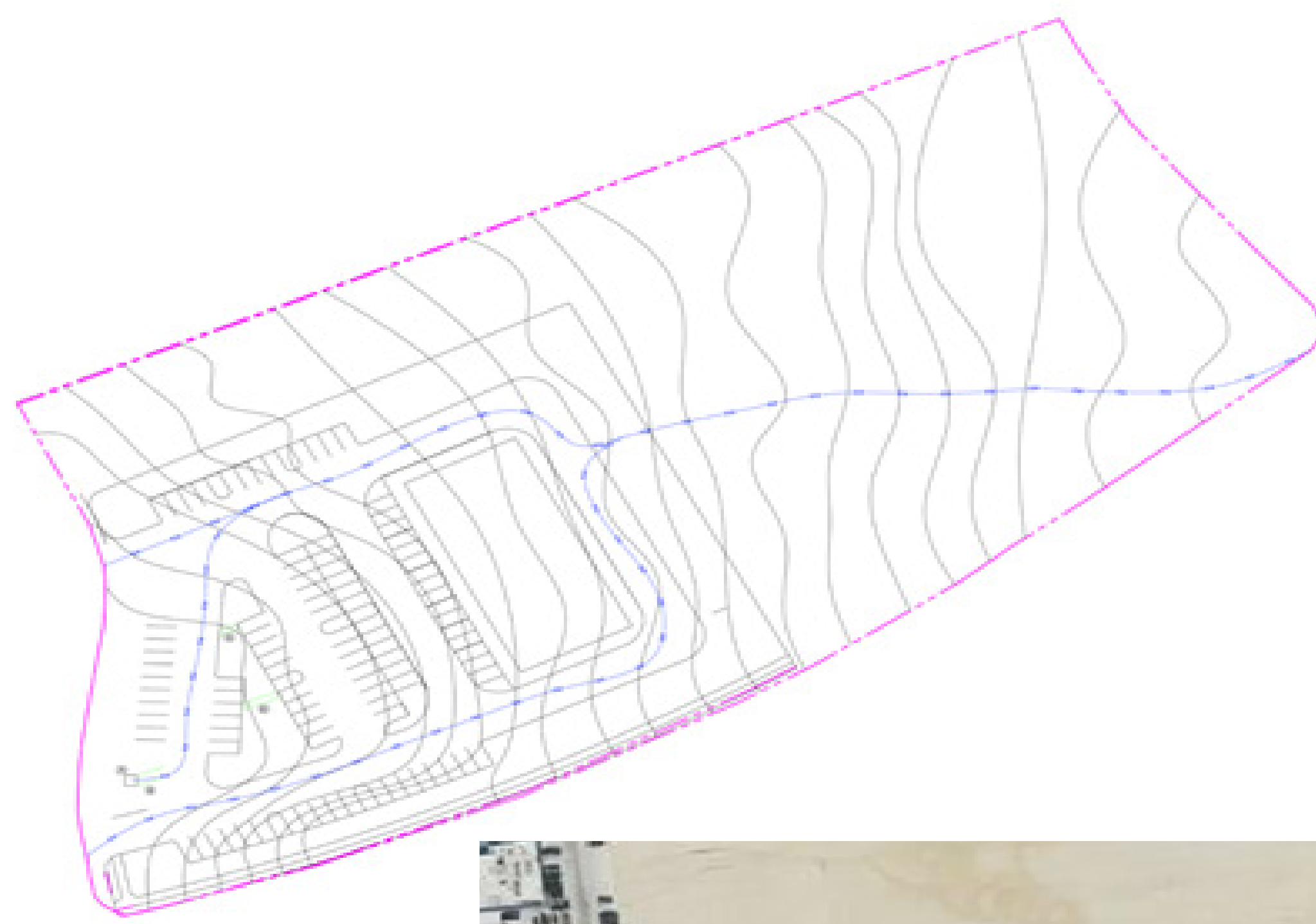


## ENVIRONMENTAL

- Silt fence and biodegradable erosion logs used to project runoff onto adjacent streets and on-site inlet.
- Existing grading used in conjunction with elevated grading on the eastern portion of the site to direct water downstream to on-site inlet and to the street with the existing storm drain.

## LAND DEVELOPMENT

- 5.78 acres located near the intersection of IH-10 W & Presidio PKWY on the north west side of San Antonio, Texas near UTSA.
- Zoned Master Planned Community District (MPCD).



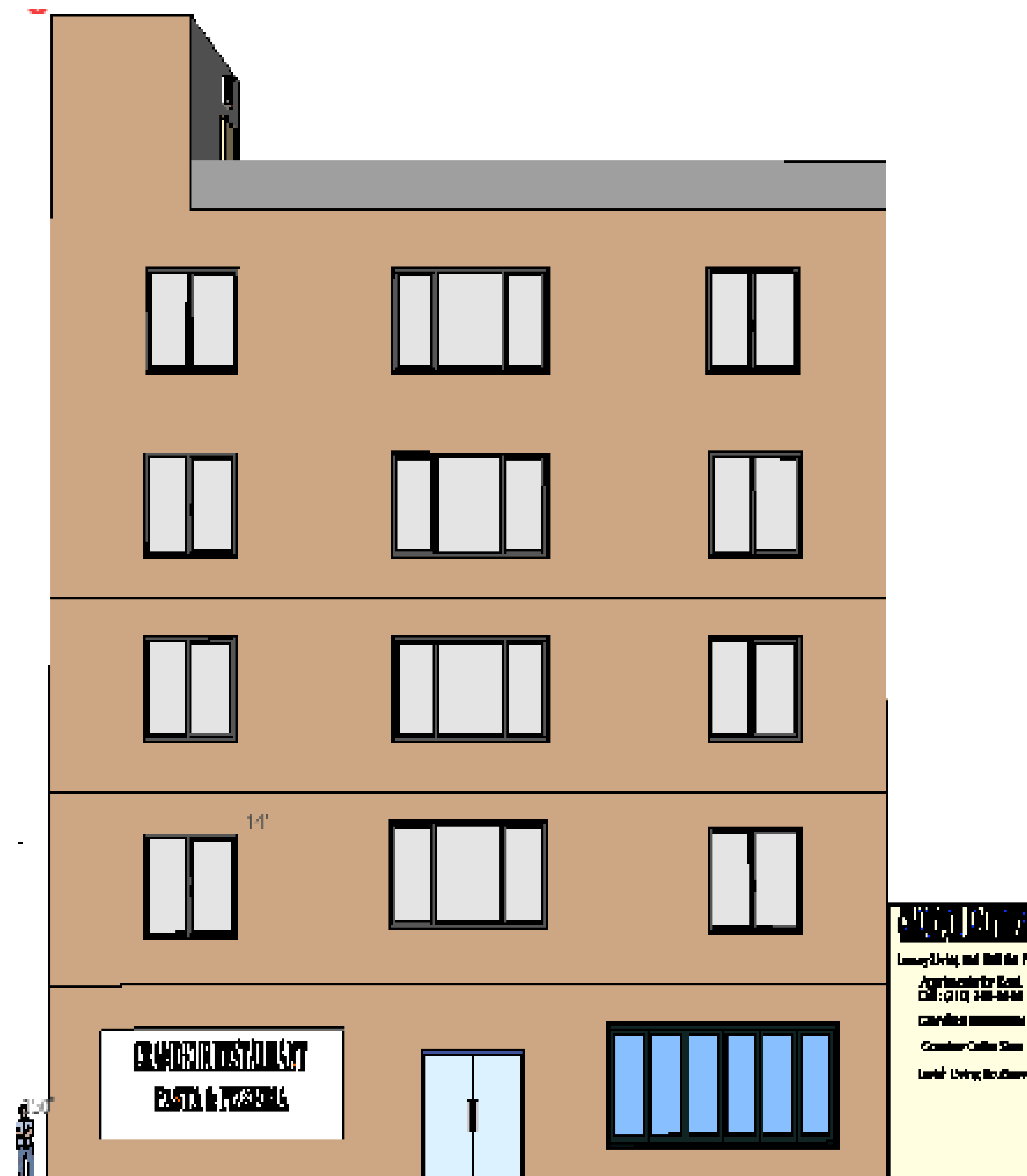
## TEAM



By: Yazmin Medrano, Tristan Marquez, Jorge Alcocer, Trent Ackerman, Daniel Ontiveros, & Luis Mancha

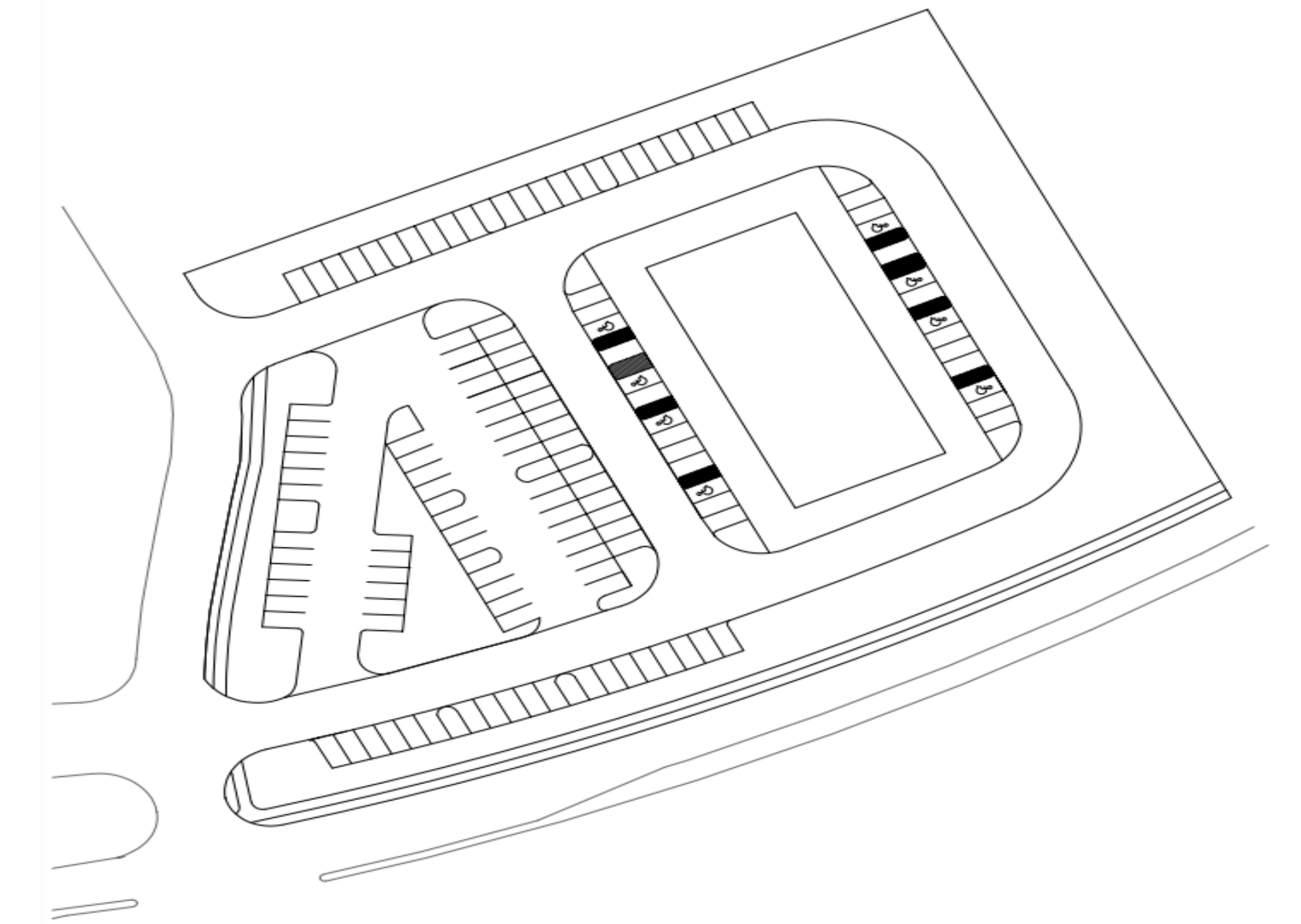
## INTRODUCTION

Grandeur apartments will consist of a five story mixed use building. The first floor will consist of a restaurant, coffee shop, and a boutique. The next four floors will consist of 20 apartments.



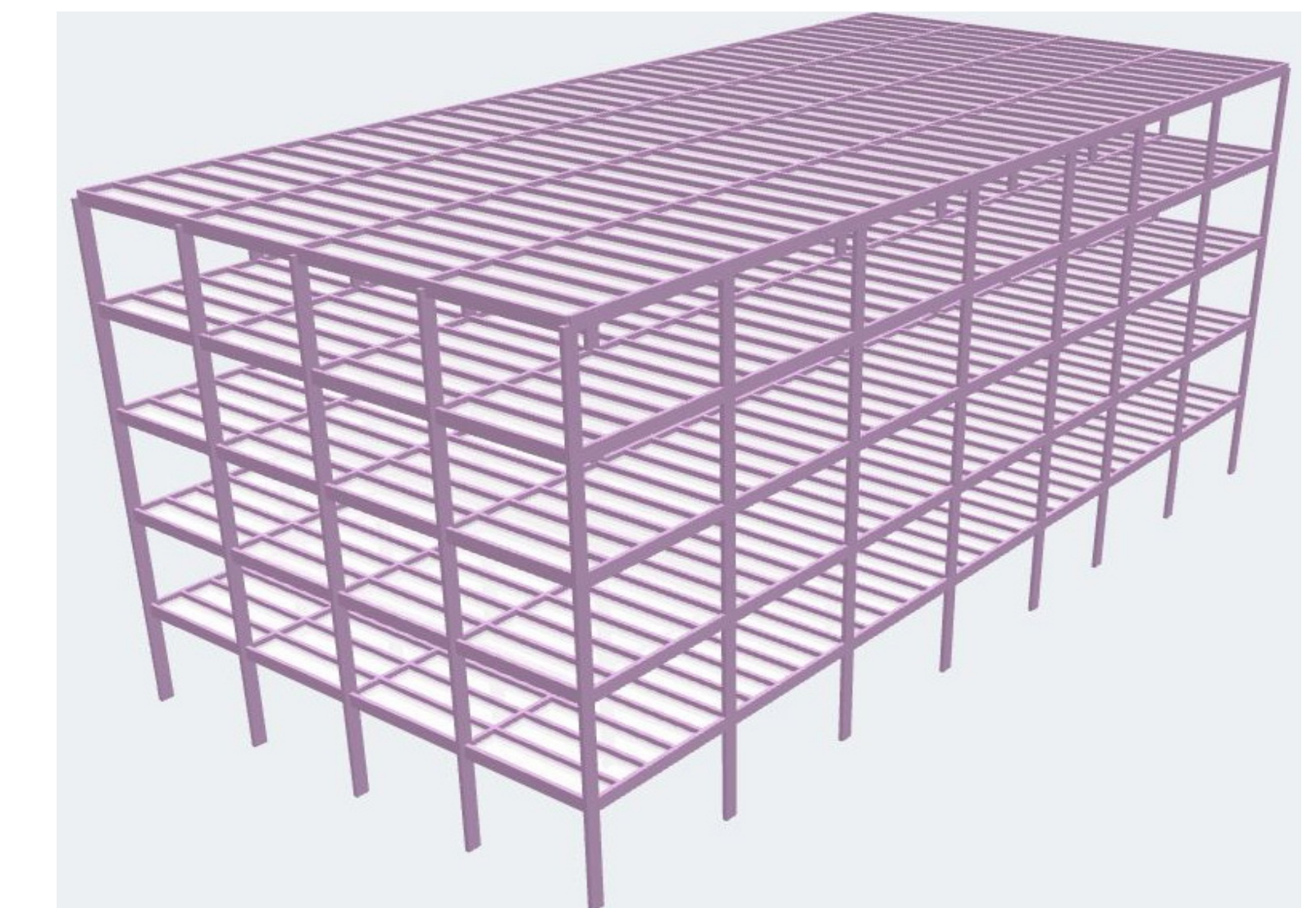
## TRANSPORTATION

- Level 2 TIA.
- Passed Level of Service Requirements.
- No necessary changes required to any intersection.



## STRUCTURAL

- CECO cast in place concrete forms.
- Building is to be constructed using ASTM A615 Grade 60 reinforcement and is to be paired with a concrete mix design that has a compressive strength of 4,500 Psi.



## GEOTECHNICAL/ FOUNDATION

- Concrete Drilled Pier Foundation: Straight Shaft, Friction Piers ( $f'_c = 4$  ksi &  $f_y = 60$  ksi).
- Typical Interior Drilled Pier: 2.5 ft diameter, 29 ft in length, 10 #14 re-bar for reinforcement.
- Pier Capacity: 553.01 kips
- Site Conditions: Clay surface with gravel and no trees.

