

DESIGNING AFFORDABLE AND SUSTAINABLE APARTMENTS

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Project Abstract:

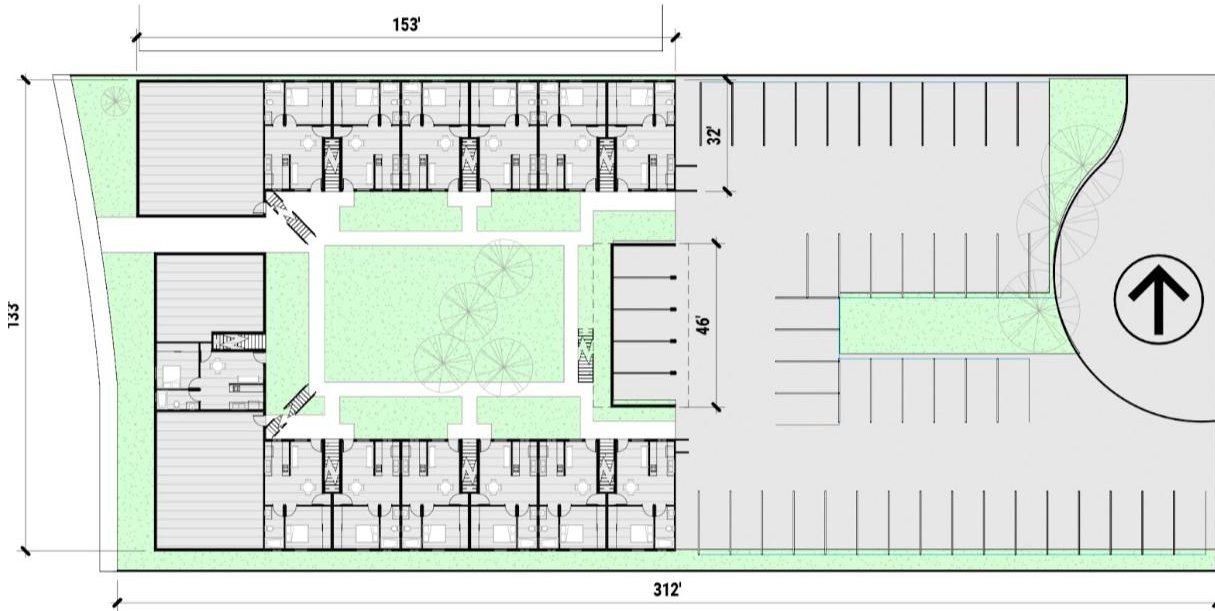
One of the policies created in California to address the issue of unaffordable housing is the density bonus law, which incentivizes construction of more affordable housing. However, this policy can be difficult to understand and construction is one of the main sources of pollution, which is why it is essential to design new buildings to minimize damage to the environment and people, so in this project we test the density bonus law on a real site in El Cajon while trying to reduce pollution with the use of passive design and natural materials. I analyzed the design methods of successful sustainable housing projects for low income people to understand and apply what works in their design and what can be improved. My research indicates that implementing affordable housing programs funded by the government can help real estate developers pay the costs of building sustainable apartments for extremely low income people without sacrificing beauty, a sense of community, and people's health.



FACADE RENDER

TYOLOGICAL STUDIES

- Analyzed existing apartment buildings in El Cajon to understand what works in their designs and what doesn't



Drawings of Ballantyne 275 and 1249 E Madison Ave apartment buildings by Jaziel Mayoral





GROUND PLAN PROPOSAL



LEVEL 2 PROPOSAL



LEVEL 3 PROPOSAL

DENSITY BONUS LAW

- Incentivizes affordable housing by allowing more units to be built
- Classifying 100% of the units as affordable provides 80% density bonus
- Increased maximum amount of housing units allowed on site from 8 to 15 units
- Waives parking requirements if site is close to a major transit station

MAIN DESIGN PRINCIPLES:

- Units around a courtyard provide a flexible communal space
- Outdoor circulation allows units to have windows on 2 sides for cross ventilation
- Same unit design is repeated with plumbing sharing the same wall



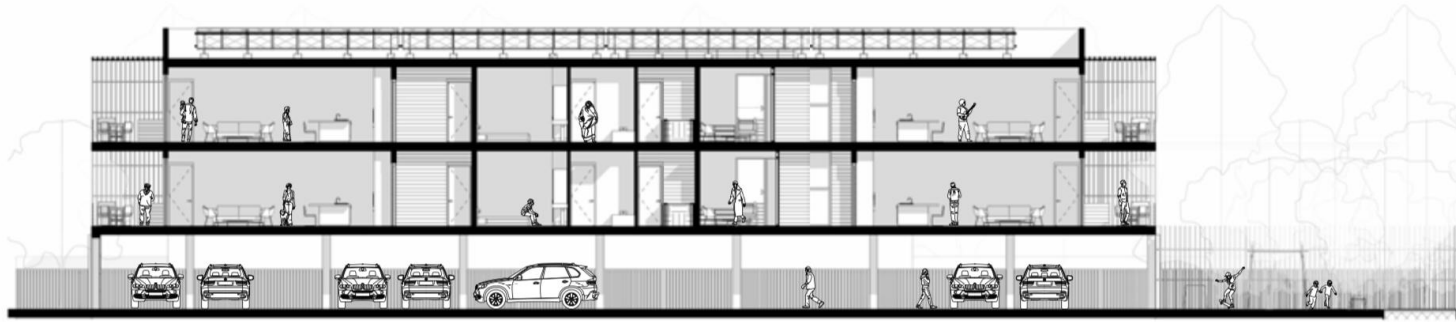
EAST FACING SECTION THROUGH COURTYARD



1 BED UNIT INTERIOR RENDER



COURTYARD RENDER



NORTH FACING SECTION THROUGH PARKING GARAGE



NORTH FACING SECTION THROUGH COURTYARD

PROPOSAL SUMMARY

- 8 1-bedroom Units
- 4 3-Bedroom Units
- 2 2-bedroom Units
- 2 Studio Units
- 15 parking spaces
- Access to park
- Communal laundry room
- Recreation facilities



BACKYARD RENDER