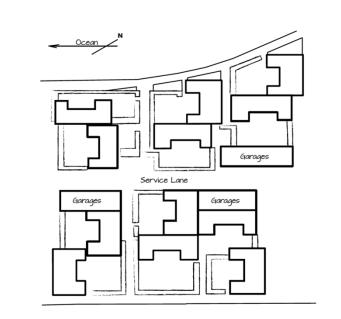
El Pueblo Ribera Court

Haley Gamble | Eden Cannon | Emma Moseley Hollie Sin | Sarah Zheng

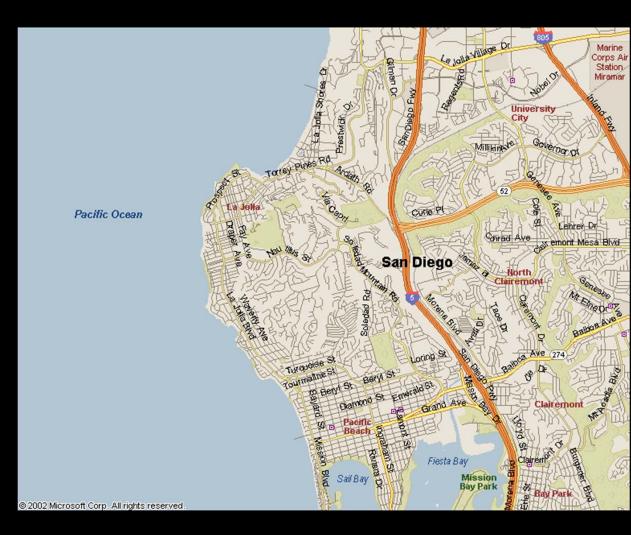
Introduction





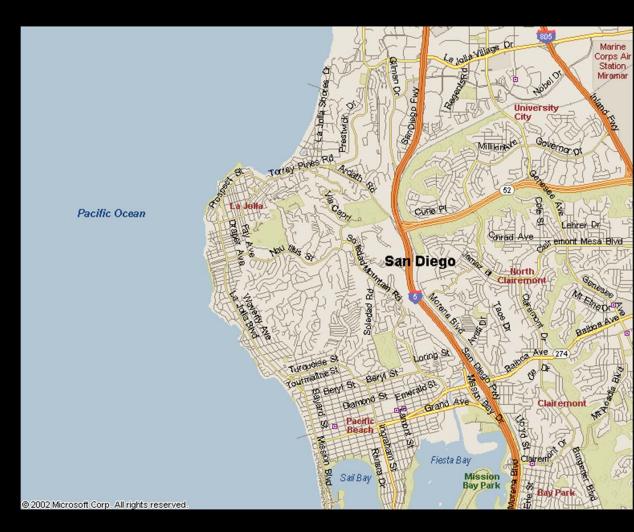
Location

-La Jolla, San Diego California -32. 49 degrees N, 117.16 degrees W

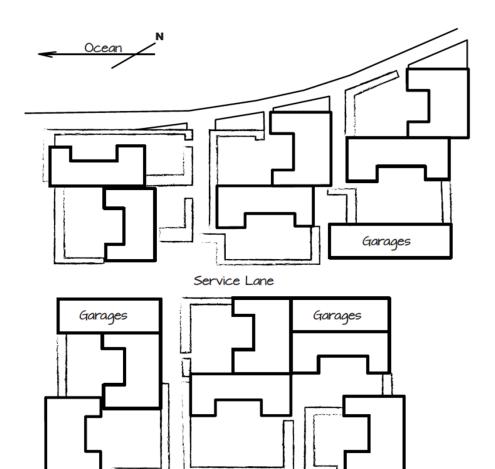


Climate

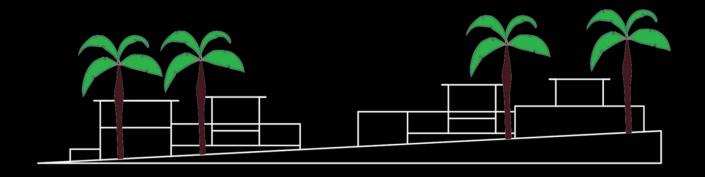
-Temperatures range from 49-76 fahrenheit (average low and average high year round) -Up to two inches of precipitation in February, and as little as 0.1 inches in July

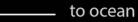


Site Environmental Conditions



Site Section





Dm	12.5m	25m

Solar Access

-Site arrangement and low building height designed with intent that sunlight reach every patio

-Mostly successful excluding units oriented closer to north

-Floor-to-ceiling glazing in front rooms allows them to be lit naturally

-Natural lighting and heating a reasonable option

Solar Shading

-Solar access is moderately controlled using the overhang into the courtyard

-To better accommodate for the immense sunlight at noon each day, optional features include:

- -Movable Louvers
- Window coverings/ motorized window coverings
- Inset Windows

-Each feature reducing reducing heat, cooling and lighting energy

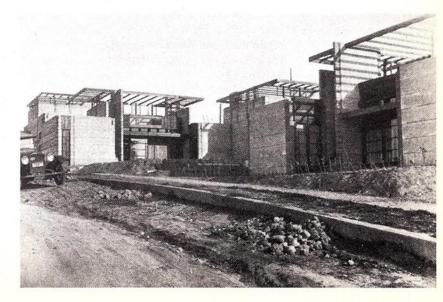
Sustainability

- -still standing today, as it was declared a historic site in 1977
- -constructed from wood, glass and precast concrete -relatively low embodied energy (15.9, 2.5 and 2.0 MJ/Kg respectively)
- -using precast bricks allows for less formwork and time spent on site
- -units are spread out around the site rather than being stacked (increases ecological footprint)

Unit Environmental Conditions

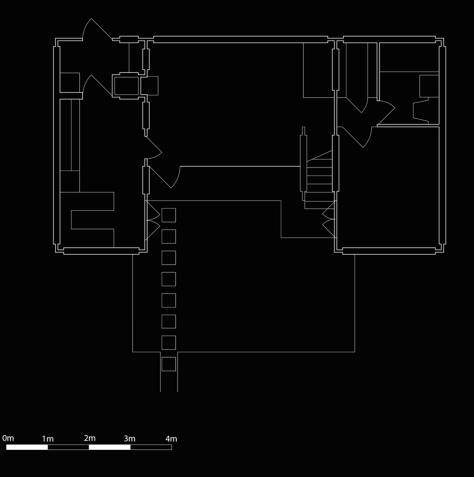
Individual Units

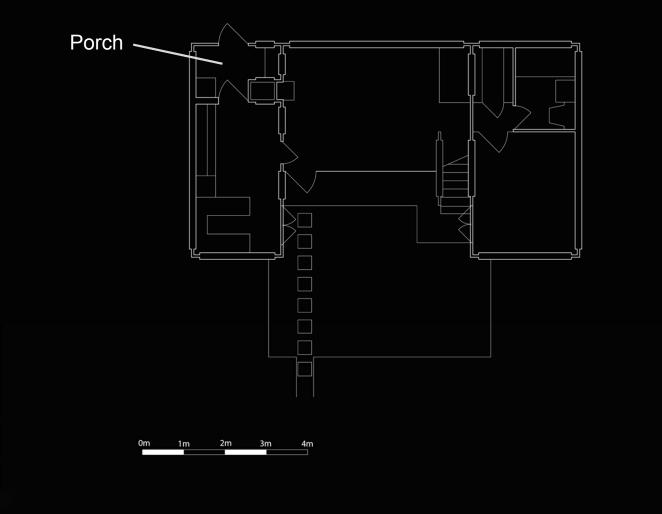
-Single floor, u-shaped buildings, with private patios -Solid concrete walls, sliding wood and glass doors, transom windows, wooden roof structure

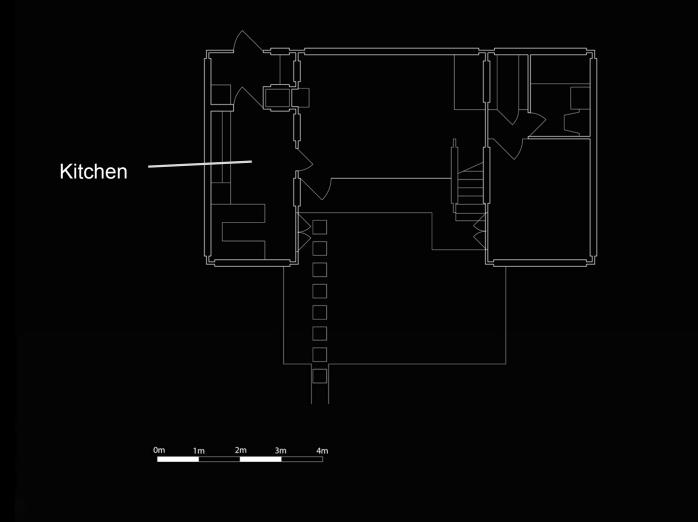


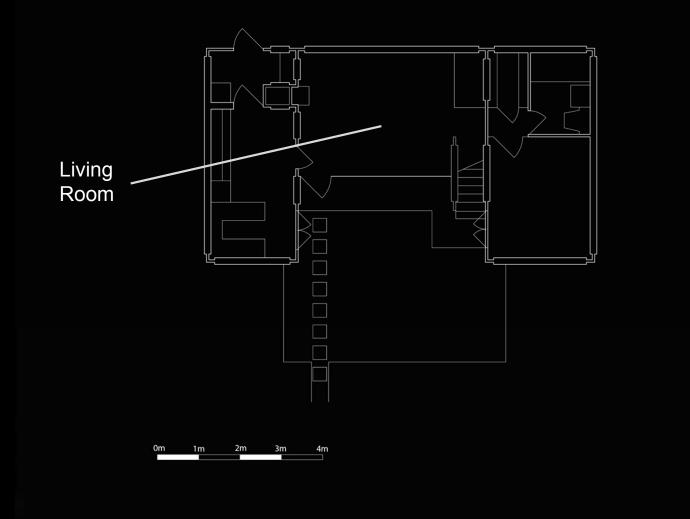
45-47 Pueblo Ribera Court, La Jolla, 1923: opposite, plan; above, construction of concrete walls; below, view along Playa Sur Avenue

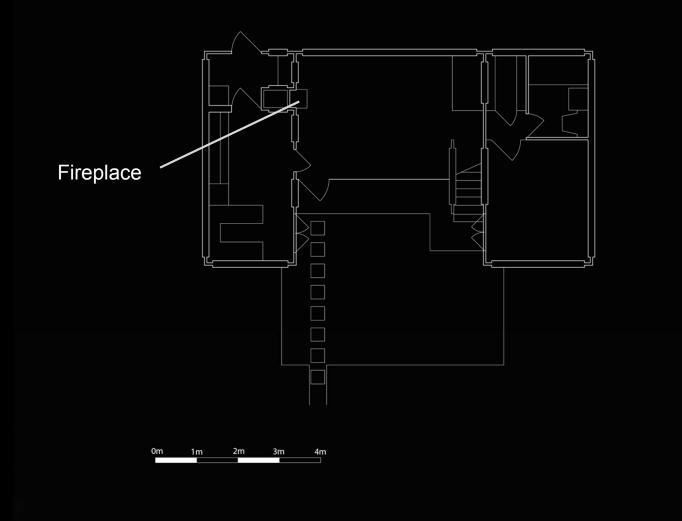
Ground Floor

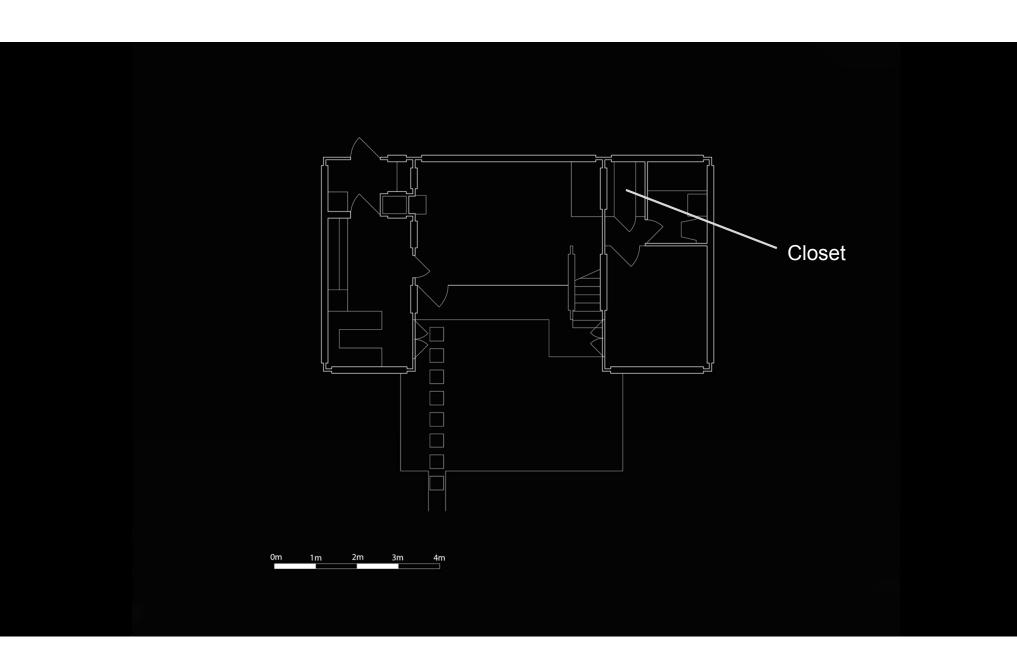


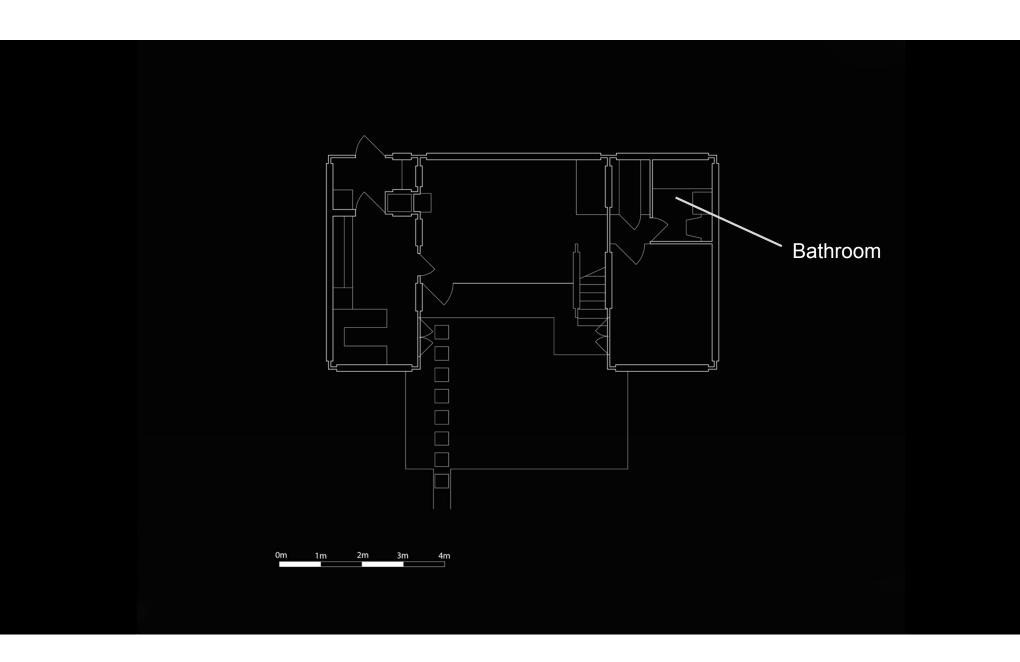


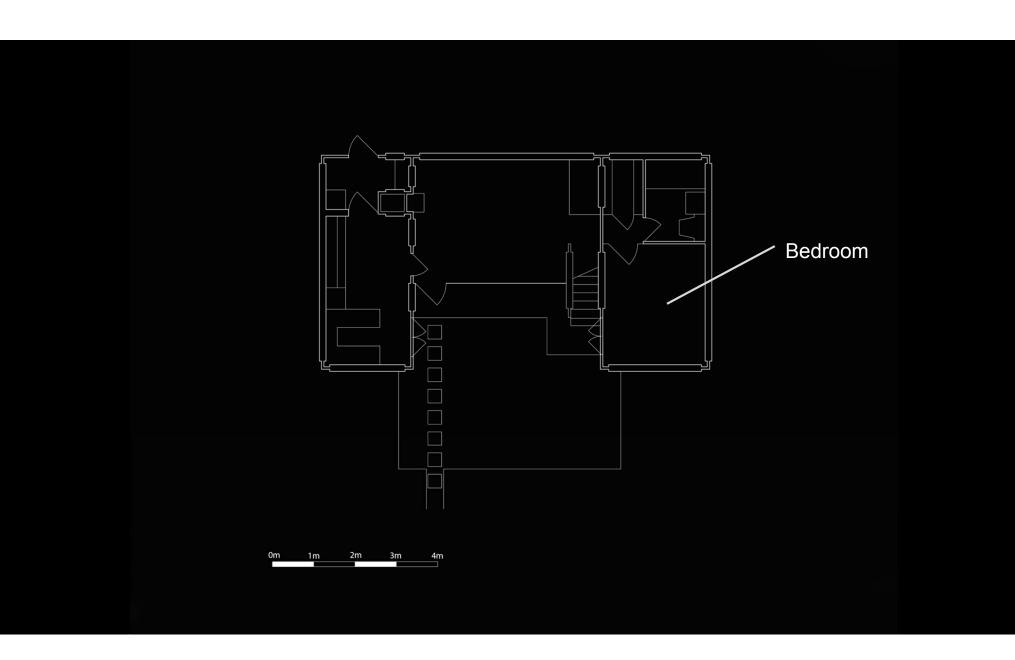


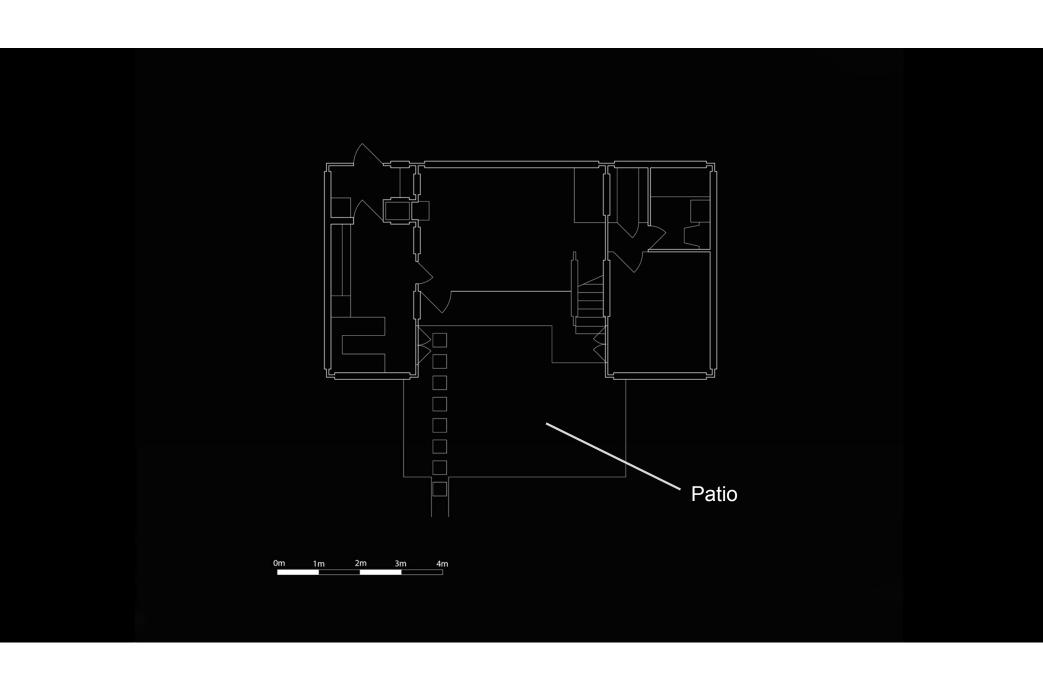




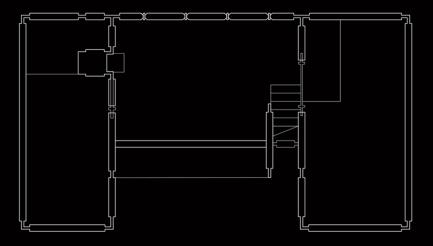




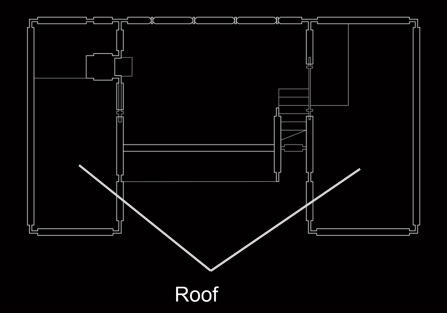




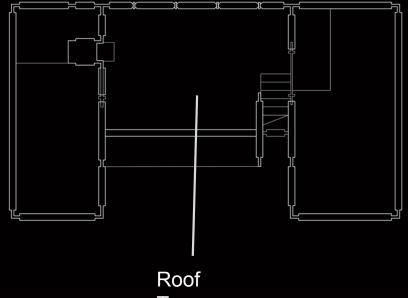
Upper Level







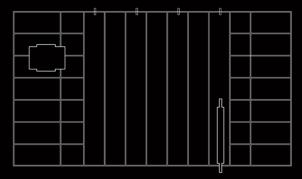


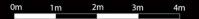




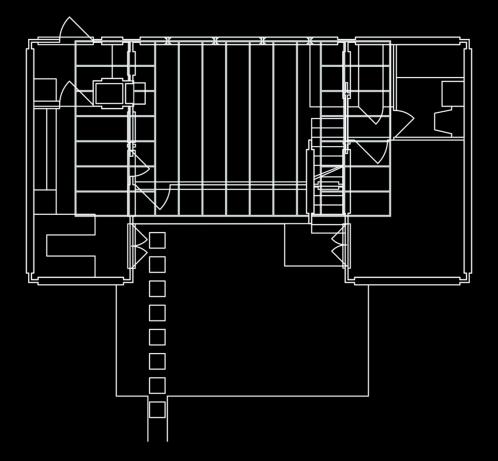


Pergola

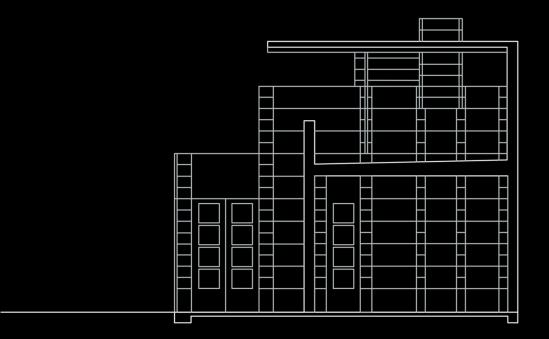




Superimposed



Unit Section





Ventilation

-Narrow buildings, open floor plans and vegetative shading promote natural ventilation

-Steady wind conditions and temperate climate make the site predisposed to wind driven ventilation strategies -Potential improvements: windows opposite patio sliding doors, ensure all buildings bridge a pressure differential, increase ceiling height

Sources

- 1. Sherwood, R. "Modern Housing Prototypes." El Pueblo Ribera Court.
- 2. "<u>Whole Building Design Guide.</u>" *Natural Ventilation.* <u>http://www.wbdg.org/resources/naturalventilation.php</u>
- 3. "<u>HK Green Building Technology Net.</u>" *Natural Ventilation.* <u>http://gbtech.emsd.gov.hk/english/utilize/natural.html</u>
- 4. "Measure of Sustainability Embodied Energy." *Canadian Architect.* <u>http://www.canadianarchitect.com/asf/perspectives_sustainibility/measures_of_sustainablity_intro.htm</u>

Photos

- 1. http://lab3js.blogspot.ca/2013_09_01_archive.html
- 2. <u>http://www.savewright.org/wright_chat/viewtopic.php?p=</u> 52984&sid=19f56696880404adb94bab98a6e806f7