

**Design Concept**

Center point of the design proposal is the concern for a unique and innovative design, which – despite its horizontal development – appears as a landmark.

The project is composed of numerous apparently homogeneous boxes appearing as “shooting stars”. They are formally contrasting to the most possible extent with the existing residential houses, while functionally intend to integrate into and complement the existing residential zone.

**Social Integration**

Basic principal for the new residential development is the concept of mixed uses (integration of small commercial units) as much as the projected demand allows.

Each residential unit has an adjunct terraced garden for small-scale food production. Rather than a competitive business, this is to be understood as an occupational therapy for senior citizens. Products are sold in the “Senior Market” located at the most frequented corner between Topaz Drive and Bahia Drive. This market will provide the complete area with fresh fruits and vegetables and interlace the new residents with the existing local community.



Modules		Area Chart		Cost Chart (the prevailing wages were used)		
Module	Unit Number	sq ft / unit	Total sq ft	USD / sq ft	USD / unit	USD / total
Studio (S)	7	841	5,887	128.175	107,787.855	754,514.885
One Bedroom (1B)	8	1,024	8,192	128.175	130,706.999	1,081,768.979
Two Bedroom (2B)	3	1,225	3,675	128.175	156,996.855	470,994.175
Auxiliary (AUX)	10	841	8,410	128.175	107,787.855	1,077,878.545
Small Retail Store (R)	3	841	2,523	124.475	104,677.125	314,633.355
Medium Retail Store (R)	2	1,024	2,048	124.475	127,483.400	254,966.800
Small Office (R)	2	345	1,380	124.475	169,673.125	209,556.250
<b>TOTAL CONSTRUCTED AREAS</b>			<b>33,441</b>			<b>4,262,848.965</b>
Green Terrace	19	1,075	20,425	4.185	4,096.125	83,388.375
Street	1	24,225	24,225	68.885	1,669,338.725	1,681,338.725
Plaza	11	3,917	43,087	68.885	2,966,158.975	2,929,948.685
<b>TOTAL OUTDOOR AREAS</b>			<b>88,217</b>			<b>4,896,656.225</b>
<b>TOTAL ALL AREAS</b>			<b>121,658</b>			<b>9,159,505.190</b>

Community Plan 1"=50'



Cross-Section in North-South Direction

**Sustainability and Energy Concept**

Apart from its social sustainability, the new development will have many ecological features, which classify it as sustainable such as the rainwater collection underneath every housing unit, which catches up with the unequal distribution of rain during the year, and an integrated household grey water system. This water will be used for irrigation of the terraced gardens attached to each housing unit.

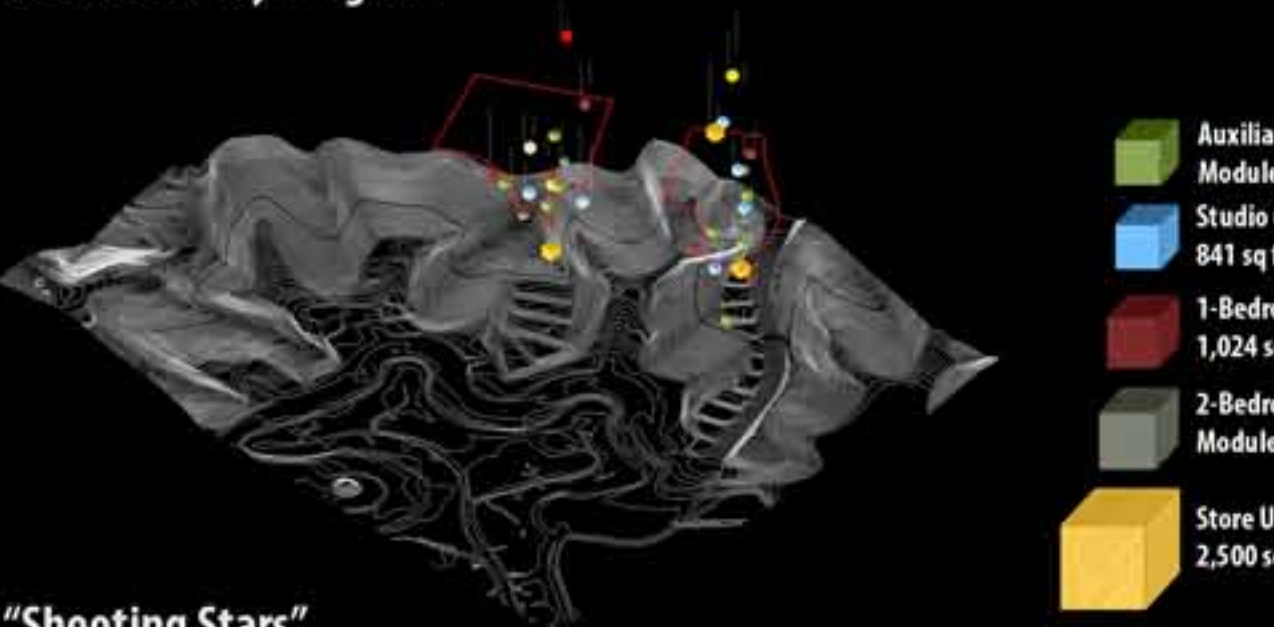
In order to accomplish with the zero net energy goal, the building's façade is composed of a surface area that is almost totally covered with PV panels—single-crystal silicon on the roof, thin-film copper indium gallium diselenide on the sides. This façade can easily produce even more than a 100% of the projected energy consumption.

A wood frame structure with phase-change material in the drywall creates highly insulating exterior walls, which maintain comfortable temperatures in the interior all year around. The new development will meet all necessary LEED energy certification standards.

**4 to 5 Units around a Plaza**

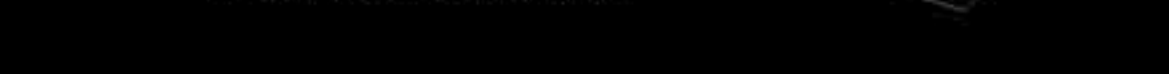


**Distribution by Program**



“Shooting Stars”

**Distribution in Parcels**

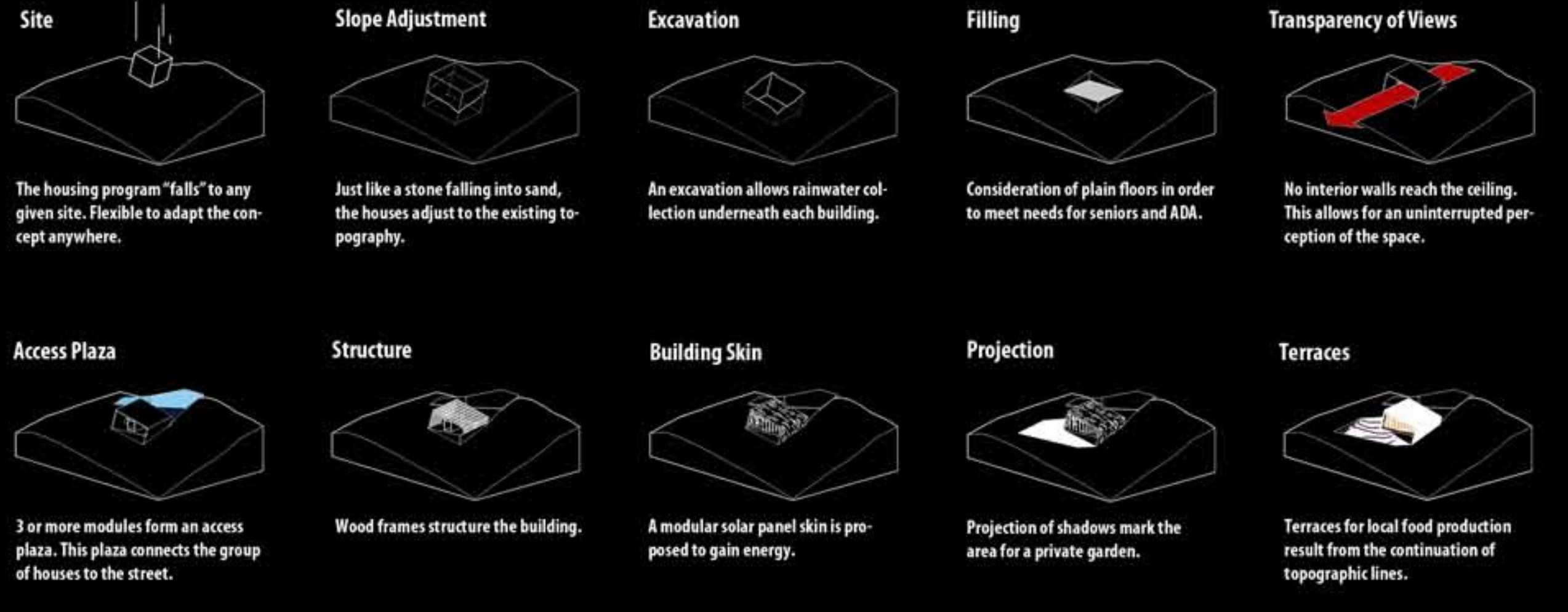


View from within Misty Road Parcel

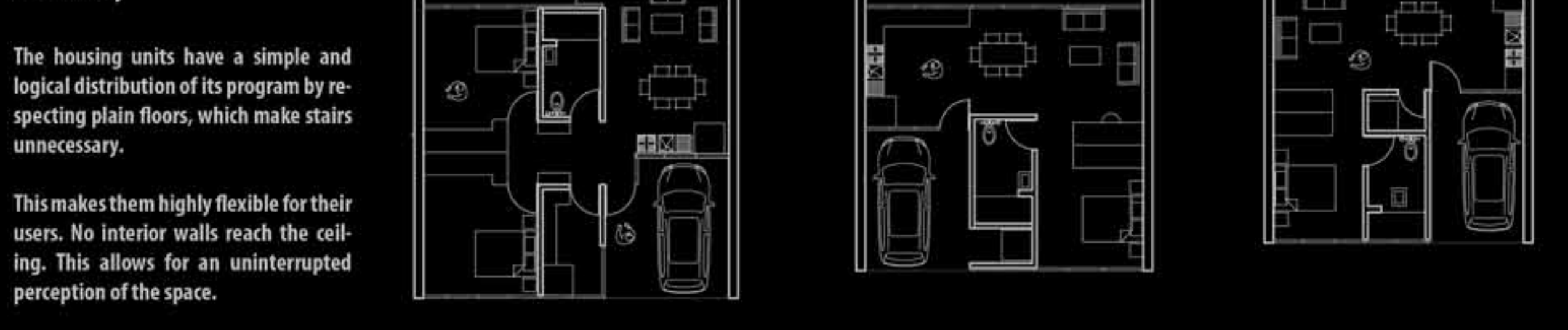


Bird's Eye View over Bahia Drive

**Conceptual Diagrams**



**Flexibility**



Misty Road Elevation



Bahia Drive Elevation