

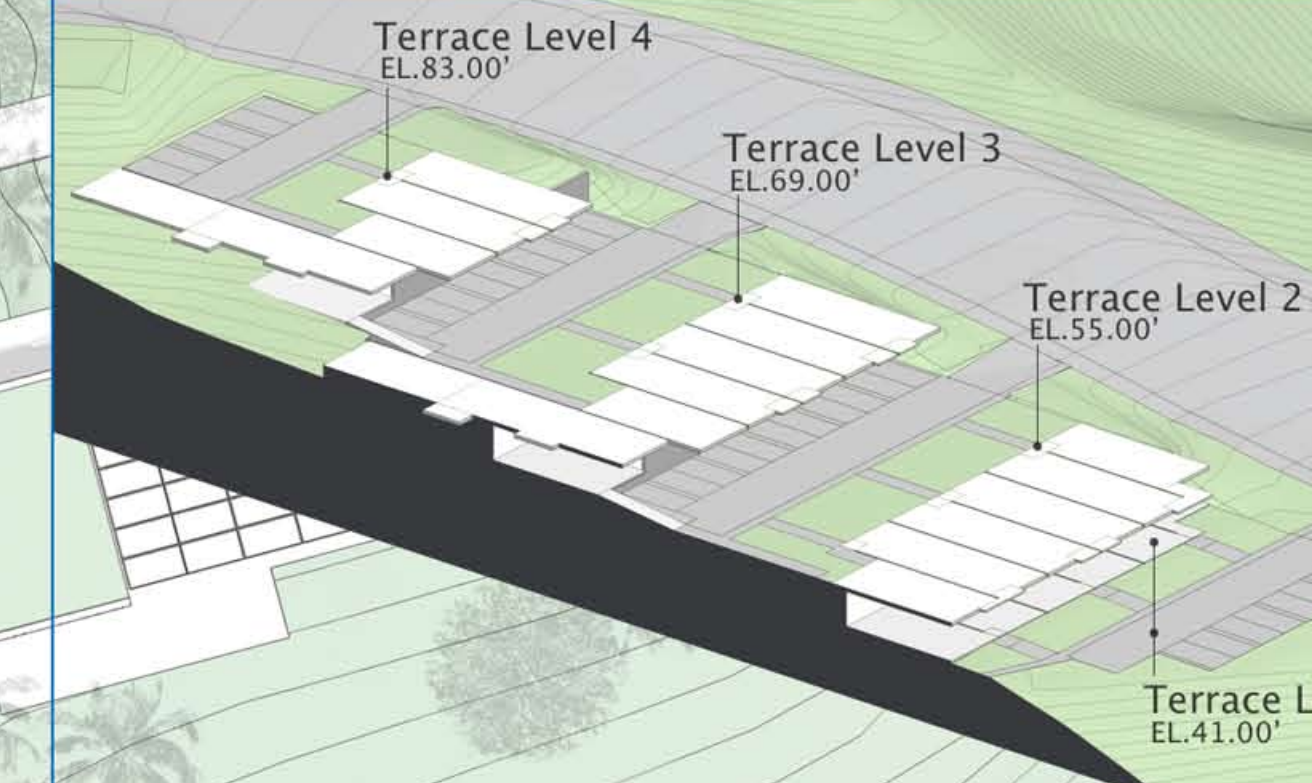
### DESIGN DESCRIPTION

**SITE DESIGN**  
The design places all the dwelling units on the four existing terraces at the eastern end of Bahia Drive Parcel, rather than spread out the units over two parcels. This arrangement takes advantage of the relatively flat existing step down terraces, and allows all the units to have excellent eastern views. This location also has the shortest distance for utility connection to the existing utilities under Topaz Drive. More importantly, by placing the development away from the hilltop, it would have less impact on the existing Bahia community and especially their views. Its close relationship to the existing neighborhood, encourages interaction between new residents and existing residents. The four terraces each have their own garden and parking spaces. It creates a smaller neighborhood with in a group. All the units are on one level, and are ADA accessible within each terrace. Another site design feature includes a 900 sf. convenience store which is located on Bahia Drive just west of the senior housing. A proposed community vineyard at the terrace's western end of the Bahia Drive Parcel are part of the plan.

**BUILDING DESIGN**  
The construction will utilize all the natural advantages of the eastern facing step down terraces site. The wood frame attached homes design is based on a 20' wide module. Buildings on each terrace are projected over the next terrace below to provide cover for parking and studio units. This modular design is highly efficient and cost effective. One and two bedroom units open to both east and west or south. Living room area has east facing clear store windows which creates a higher ceiling towards the east, and brings in natural light and air. Studio unit's living room and kitchen are open to the east. Inside the unit, a 6' low wall separates the living area and the sleeping area to provide privacy and admission of natural light. The interior open layout is designed for the ease of visual way finding and movement for the senior. Kitchens and bathrooms are ADA accessible or can be converted with out moving walls.

**GREEN DESIGN**  
Energy efficiency is achieved by fully utilizing natural light and cross ventilation. The open plan encourages passive air flow, and avoids use of air-conditioning systems. Radiant heating is installed in the floors. The west facing slope roof creates the east facing clear store window above the living room area, and the roof overhang extending to the west to block the heat gain. Solar panels cover most of the slope roof which provides power for the homes, with local power supply as backup. The flat green roof absorbs heat and reduces rain water runoff. Water conservation is achieved by recycled rainwater and household gray water. Rain water from the roof and the terrace surfaces are collected through the gravity flow of the step down terraces, to underground catchments. The recycled water is used for toilet flushing and site irrigation. Because the local weather conditions produce wet winters and arid summers, additional wells are tied into the rainwater catchment. Household potable water supply is connected to the existing water supply at Topaz Drive. More than half of the units is below the 60' high water pressure. Water pumps will deliver potable water to the remaining units. The exterior of the building is clad with recycled wood siding, and all plumbing fixtures are water efficient.

### DESIGN CONCEPT DIAGRAM



### CONCEPTUAL COST ESTIMATE

This conceptual cost estimate is based on 24,500 sq. ft. building area, is approximately \$121 per square foot (including construction cost). The design is cost effective, by utilizing the relative flat existing step down terraces, 20' wide framing module and passive natural ventilation. The conceptual cost, all in place cost is within \$250 to \$285 per square foot.

Item Name	Cost
Excavation	37,588.00
Foundation	177,733.00
Rough Carpentry	14,500.00
Insulation	416,309.80
Exterior Finish	52,693.00
Exterior Trim	392,919.00
Doors	20,741.00
Windows	24,194.00
Roofs	95,706.00
Finish Hardware	5,699.00
Roofing, Flashing	128,606.00
Green Roof	125,000.00
Finish Carpentry	48,962.00
Interior Wall Finish	138,327.00
Painting	108,797.00
Wiring	102,872.00
Lighting Fixture	95,226.00
Carpentry	32,179.00
Flooring	48,192.00
Countertops	53,498.00
Bath Accessories	19,239.00
Shower & Tub Enclosure	14,009.00
Cabinets	42,319.90
Countertops	98,814.00
Build in Appliances	41,170.00
Plumbing Rough-in and Connection	150,872.00
Plumbing Fixtures	75,627.00
Solar Panel and Solar Radiant Heating	282,000.00
Water Recycling System	85,000.00
Final Clean	\$2,568,722.00
Subtotal Direct Job Costs	\$2,568,722.00
Contingency	4,862.00
Insurance	62,712.00
Permits & Utilities	38,687.00
Subtotal Indirect Job Costs	\$109,781.00
Contractor Markup	280,015.00
<b>Total Estimated Construction Cost</b>	<b>\$2,958,300.00</b>

### UNIT SUMMARY

Studio	6 Units	700 sf.
One Bedroom	10 Units	1,000 sf.
Two Bedroom	3 Units	1,250 sf.
<b>Total Seniors Unit:</b>	<b>19 Units</b>	<b>17,950 sf.</b>
Second Unit	7 Units	750 sf.
Second Unit	2 Units	700 sf.
<b>Total Second unit:</b>	<b>9 Units</b>	<b>6,650 sf.</b>
<b>Total:</b>	<b>28 Units</b>	<b>24,600 sf.</b>
<b>Total parking:</b>	<b>31 Parking Spaces</b>	
	(Incl. 2 ADA spaces, and 16 Covered Spaces)	

