

- POOL & GYM
- CYPRESS SCREEN
- SOLAR COLLECTING
- CARPORT
- KITCHEN GARDEN
- LOTUS CISTERN
- DWELLING



GRAFTING A NEW ELDER COMMUNITY

- [1] We are all subject to the same life cycle, and though death may come sooner rather than later, its reality faces all of us eventually.
- [2] Do we hide our elderly, and disguise our own 'demise'?
- [3] Or do we celebrate each phase of life, and honor our elders by enhancing their quality of life?
- [4] Do we compartmentalize 'nature,' and reduce it to an object to be viewed, or do we recognize its potential, and live symbiotically with the land?
- [5] Should we create senior ghettos in peri-urban developments?
- [6] Or ought we plan mixed communities in urban situations that support a variety of needs?
- [7] Ultimately, in the design of elderly settlements, we must ask ourselves how design can improve the activities of DAILY LIFE, sustainably and ethically.

Due to the extreme topography, the settlement is arranged into a series of clustered homes along Bahia Drive. The Misty Road parcel has been developed as a new farm park, with groves of Piñon Pine and Olive trees. While both parcels have steep slopes, the Bahia Drive parcel is more easily traversed. The amount of grading needed to make the Misty Road parcel accessible makes it a poor alternative to the Bahia Drive parcel.

Doubling down on the Bahia Drive parcel has the benefit of creating small communities within the larger community, and holds down infrastructure costs. By taking advantage of the existing grading along Bahia Drive, which forms a series of terraces, the design limits the amount of new grading that must take place, which also helps to decrease cost. A zero net water use system allows the settlement to exist largely off the grid. Along with composting toilets, and solar collection arrays on the covered parking, homes would need no outside energy or water for long spans of the year. Outside electrical hookup ensures energy when the days are cloudy, and rain collecting cisterns could be refilled easily in the case of an extended drought.

Rather than disguise this water system underground, inhabitants can take advantage in several ways aboveground. Lotus can be grown, both for their beauty, as well as their caloric content. Midway down the slope, a small gym sits alongside an outdoor lap pool. This naturally filtered pool will serve to keep the community fit, as well as providing entertainment

options for visiting grandchildren.

Adjacent to the lotus cisterns lie kitchen gardens, for use of the residents. These could be used for cut flowers as well as food vegetables. A varied border to the north serves to screen each cluster from Bahia Drive. Monterey Cypress (*cupressus macrocarpa*) will fill out, and provide excellent screening. They will also break up cold northern winds. Stands of Sweet Bay (*laurus nobilis*), Hackberry (*celtis reticulata*) attract bees and birds, as do clumps of lavender. These landscape elements help create community by encouraging outdoor cooperation.

Each unit is modest, but comfortable. A fully functional kitchen can be easily modified as a resident becomes wheelchair bound, and the bathroom features a roll in shower. Primarily though, the unit caters to the needs of an individual or couple, with ample storage and excellent views of San Pablo Bay. Utilizing Structural Insulated Panels and Steel Framing, each unit will be constructed primarily off-site, to be assembled on-site. This allows for a high degree of precision, and ensures higher quality. Because of the repetitive nature of the units, building in a factory will be somewhat more efficient.

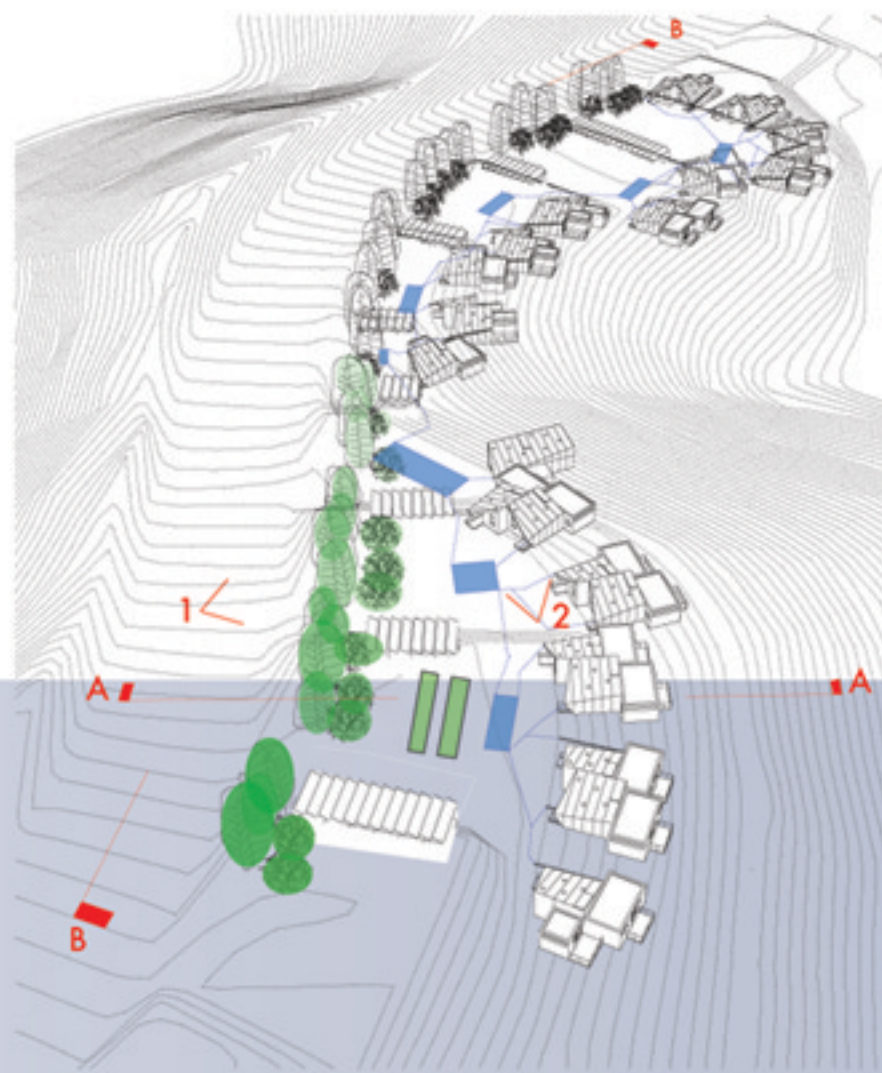
Using universal design principals these homes are ideal for an aging elderly population, but could just as easily accommodate other age groups. Good design for seniors is good design for everybody.

LEED GUIDELINE KEY CHECKPOINTS - Provided that these guidelines are met, project could be Platinum Certified.

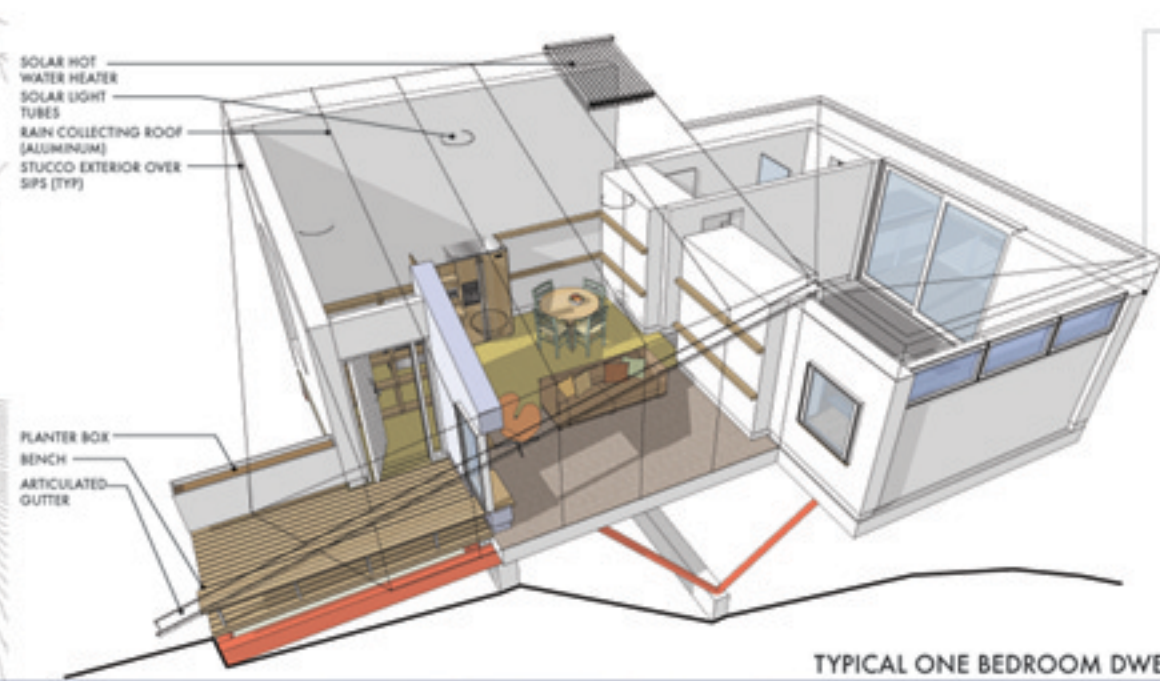
[1] Construction Activity Pollution Prevention	Erosion and Sedimentation Control Plan (ESC) to conform to the 2003 EPA Construction General Permit
[2] Development Density & Community Connectivity	Existing Neighborhood Density is too little.
[3] Brownfield Development	The site could be defined as a brownfield due to the disturbed (graded) soil.
[4.1] Public Transportation Access	The site does have access to a bus to San Francisco via Novato.
[4.2] Bicycle Storage	All residents have covered Bicycle storage.
[4.3] Low-Emitting and Fuel Efficient Vehicles	Carports can incorporate charging stations, utilizing the solar grid on the roof of each parking structure.
[4.4] Parking Capacity	Parking meets, but does not exceed local zoning requirements.
[5.1] Protect or Restore Habitat	50% of development utilizes native or adaptive species.
[6.1] Stormwater Design, Quantity Control	All building and site runoff is treated and utilized on site.
[6.2] Stormwater Design, Quality Control	The stormwater runoff from 90% of the average annual rainfall is captured or treated such that 80% of the average annual post development Total Suspended Solids (TSS) is removed.
[7.1] Heat Island Effect: Non-Roof	All parking spaces are covered with a reflective roof.
[7.2] Heat Island Effect: Roof	All roofs are either reflective (corrugated aluminum) or vegetated.
[8] Light Pollution Reduction	The project lighting could be designed so that the angle of maximum candela from each interior luminaire intersects opaque interior surfaces and does not exit through windows.

TWO BEDROOMS	3	1,000SF + 250SF EXTERIOR
ONE BEDROOM	12	700SF + 150 SF EXTERIOR
STUDIO	13	450SF + 150 SF EXTERIOR
=29 TOTAL UNITS		
=17,250SF INTERIOR		

SITE	
GRADING	500,000
UNDERGROUND UTILITIES	1,250,000
PATHS	200,000
CARPORTS & HARD SURFACES	500,000
PLANTING	800,250
SUBTOTAL	\$3,260,250
DWELLING [(1) ONE BEDROOM UNIT @ 700SF]	
CONC. P.I.P. FOUNDATION	10,000
STEEL FRAME STRUCTURE	13,000
STRUCTURAL INSULATED PANELS	15,000
INTERIOR FINISHES	12,000
PLUMBING	5,000
ROOF	15,000
SUBTOTAL	70,000
DIVIDE BY 700 SF FOR ~\$100/SF	
17,250 SF X \$100/SF = \$1,725,000	
GRAND TOTAL	\$4,985,250



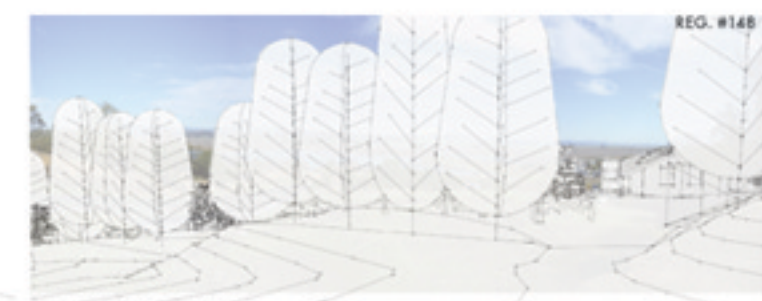
AERIAL SITE PERSPECTIVE WITH WATER COLLECTION NETWORK



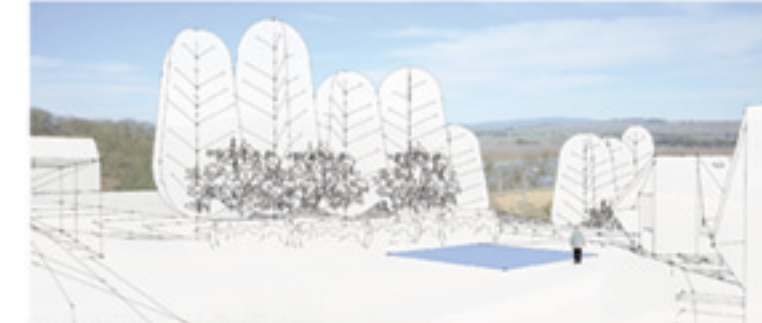
TYPICAL ONE BEDROOM DWELLING



VIEW FROM BEDROOM

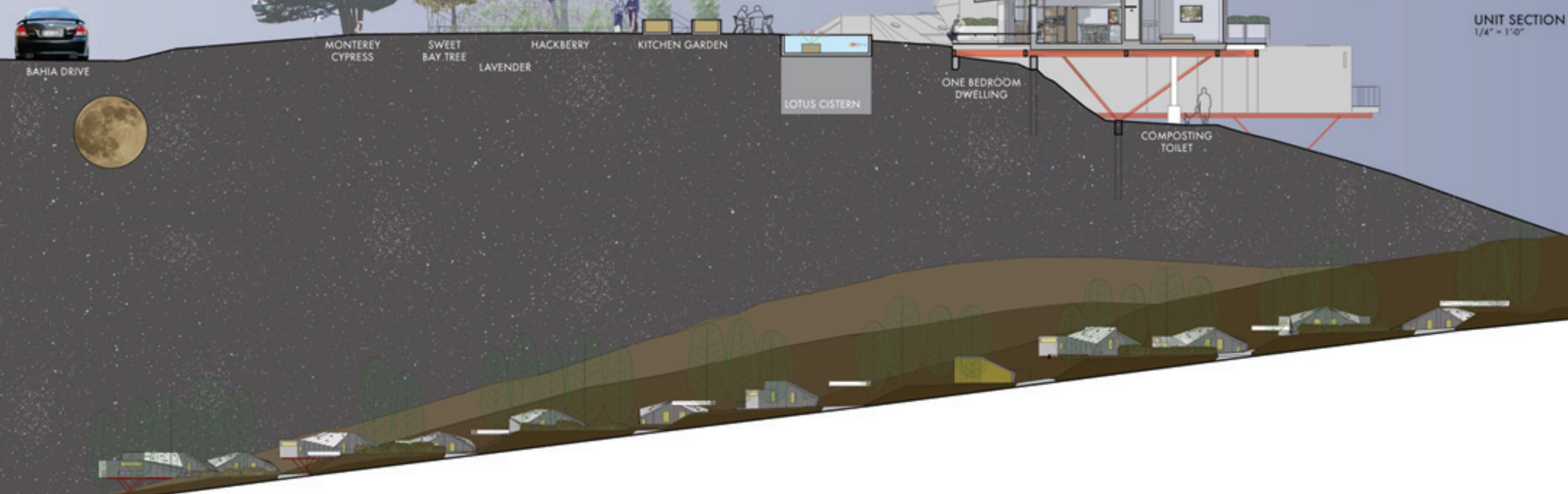


1 - VIEW FROM BAHIA DRIVE



2 - VIEW FROM CLUSTER HOUSING

SITE SECTION A-A
1/8" = 1'-0"



UNIT PLAN
1/8" = 1'-0"

POTENTIAL 2ND STORY ADU

UNIT SECTION
1/4" = 1'-0"

SITE SECTION B-B
1/32" = 1'-0"