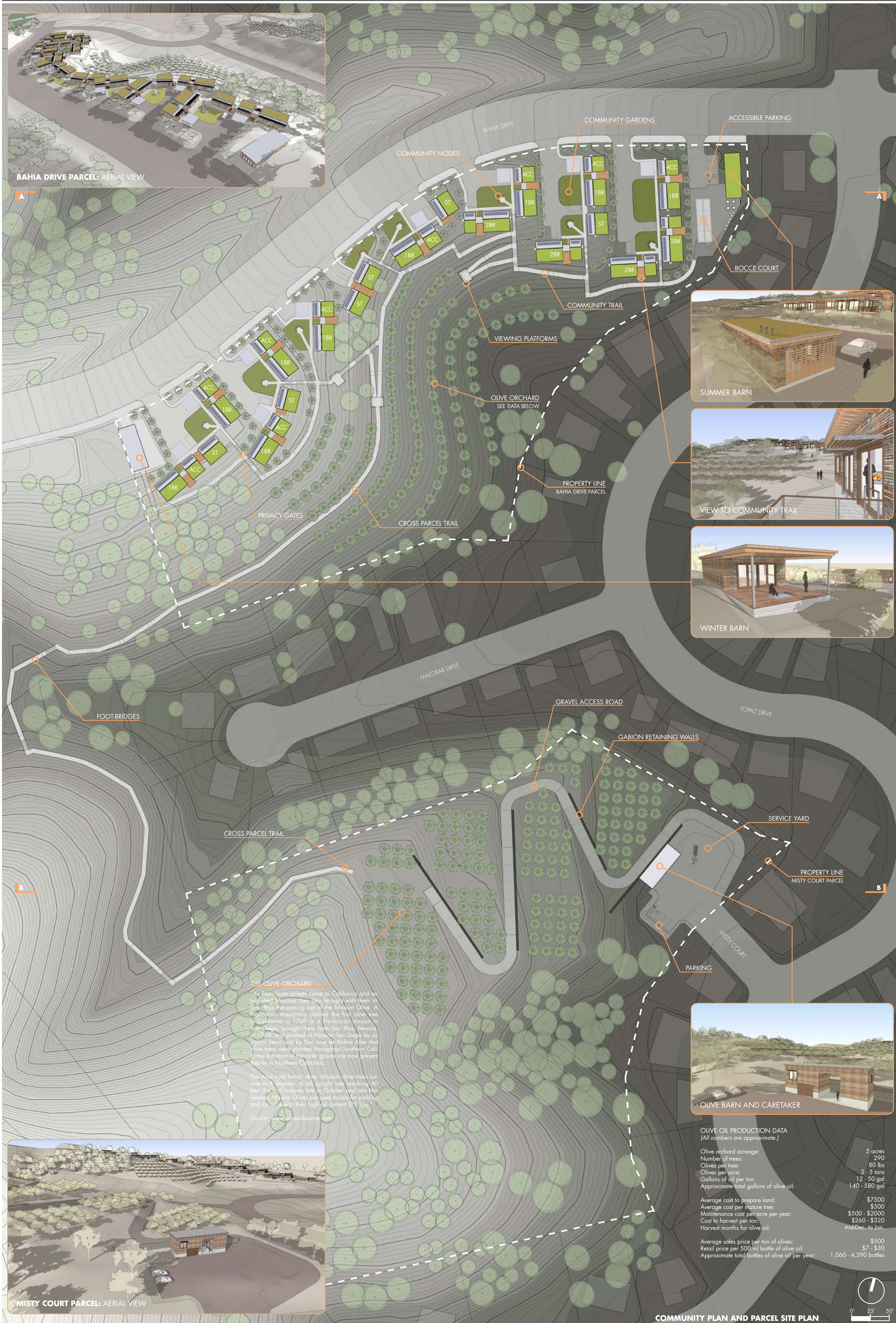




BAHIA DRIVE PARCEL: SECTION 'A-A'



BAHIA DRIVE PARCEL: AERIAL VIEW

MISTY COURT PARCEL: AERIAL VIEW

THE OLIVE ORCHARD
As Franciscan priests came to California and established Missions they also brought with them olives. Thus the coming of the Mission Olive, an indigenous missionary planted the first olive tree in California in 1769 at a Franciscan mission in San Diego, brought there from San Blas, Mexico. The olive tree planted at Mission San Diego by the Spanish Serra and by Don Jose de Balboa after that time were planted throughout Southern California but most of the olive groves are now present mainly in Northern California.

This ancient hardy olive, Mission olive tree, survives to a degree. A tall upright tree reaching 40 feet, the tree matures late in October and into November. Mission Olives are used mainly for packing and to make olive oil. Source: www.omegafoods.com

OLIVE OIL PRODUCTION DATA
(All numbers are approximate.)

Olive orchard acreage:	5 acres
Number of trees:	290
Olives per tree:	80 lbs
Olives per acre:	2.5 tons
Gallons of oil per ton:	17.50 gal
Approximate total gallons of olive oil:	140,500 gal
Average cost to prepare land:	\$7,500
Average cost per mature tree:	\$500
Maintenance cost per acre per year:	\$500 - \$2,000
Cost to harvest per ton:	\$260 - \$320
Harvest months for olive oil:	mid-Dec. to Jan.
Average sales price per ton of olives:	\$500
Retail price per 500 ml bottle of olive oil:	\$7 - \$30
Approximate total bottles of olive oil per year:	1,000 - 4,300 bottles

OLIVE HILL RESIDENCES - A Senior Housing Solution in Novato, California

PLANNING STRATEGIES:

- Creation of Dedicated Parcels:** the Bahia Drive Parcel contains all residential development including the units, community gardens and residential amenities. This allows the Misty Court parcel to be devoted to a small agricultural business development managed by members of the larger Bahia community.
- Maximum Development Potential/Minimum Site Disturbance:** entirety of construction is located on existing terraces, minimizing both site work and the destruction of existing trees.
- Optimum Siting:** arrangement of units maximizes sun exposure, natural ventilation and access to sweeping views for each residence.
- Preservation of Residential Scale:** the scale of the development and the abundant allocation of usable outdoor spaces reflect the scale of single-family ownership and of the surrounding community.
- Firm Control of Costs:** costs are controlled by minimizing site work, minimizing road infrastructure, maximizing building modularity, and, in the long run, by creating a highly energy-efficient community.

COMMUNITY STRATEGIES:

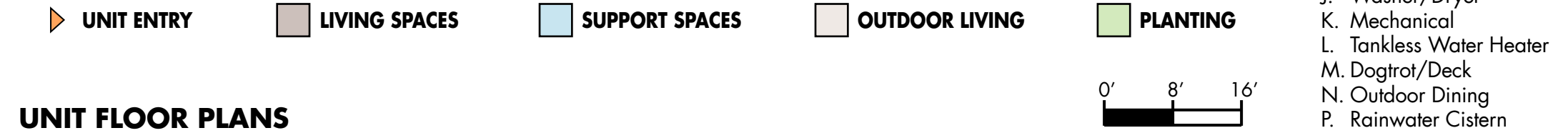
- Community Clusters:** units are arranged to create shared outdoor spaces on each terrace thereby creating micro-communities within the larger whole.
- Community Anchors:** two structures are located at either end of the residential development as bookends to the parcel. At the top of the hill, the Winter barn houses a gym and spa. At the foot of the hill, the Summer Barn houses indoor and outdoor community spaces, and the store that sells olive oil from both parcels. Within the store, an olive press showcases the final bottling of the oil and also serves as a festive destination for the community when communal pressings are scheduled during the harvest season.
- Community Gardens:** unit clusters enclose shared gardens for the cultivation of vegetables, flowers or simply native species. Residents can trade or sell locally-grown fresh produce at the Summer Barn on designated market days.
- Community Nodes:** the community gardens harbor gathering spots that provide natural venues for socializing, reading, or resting while weeding the garden.
- Community Trails:** multiple trails and paths are the circulatory system of the development. The main exterior trail connects the Summer and Winter Barns while also providing access to each terrace's community garden via secondary paths. A hiking trail connects to a lookout point in the Misty Court parcel.
- Community Outreach:** the cultivation, harvest and processing of olives on both parcels creates jobs for the greater Bahia community. Some jobs would be seasonal but others, such as the upkeep of the trees and the management of the Summer Barn store would be year-round.
- Fee-Simple Property Ownership:** single family home ownership with Home Owners Association maintenance of common areas fosters financial stability and participation in the upkeep of the community.

RESIDENTIAL UNIT STRATEGIES:

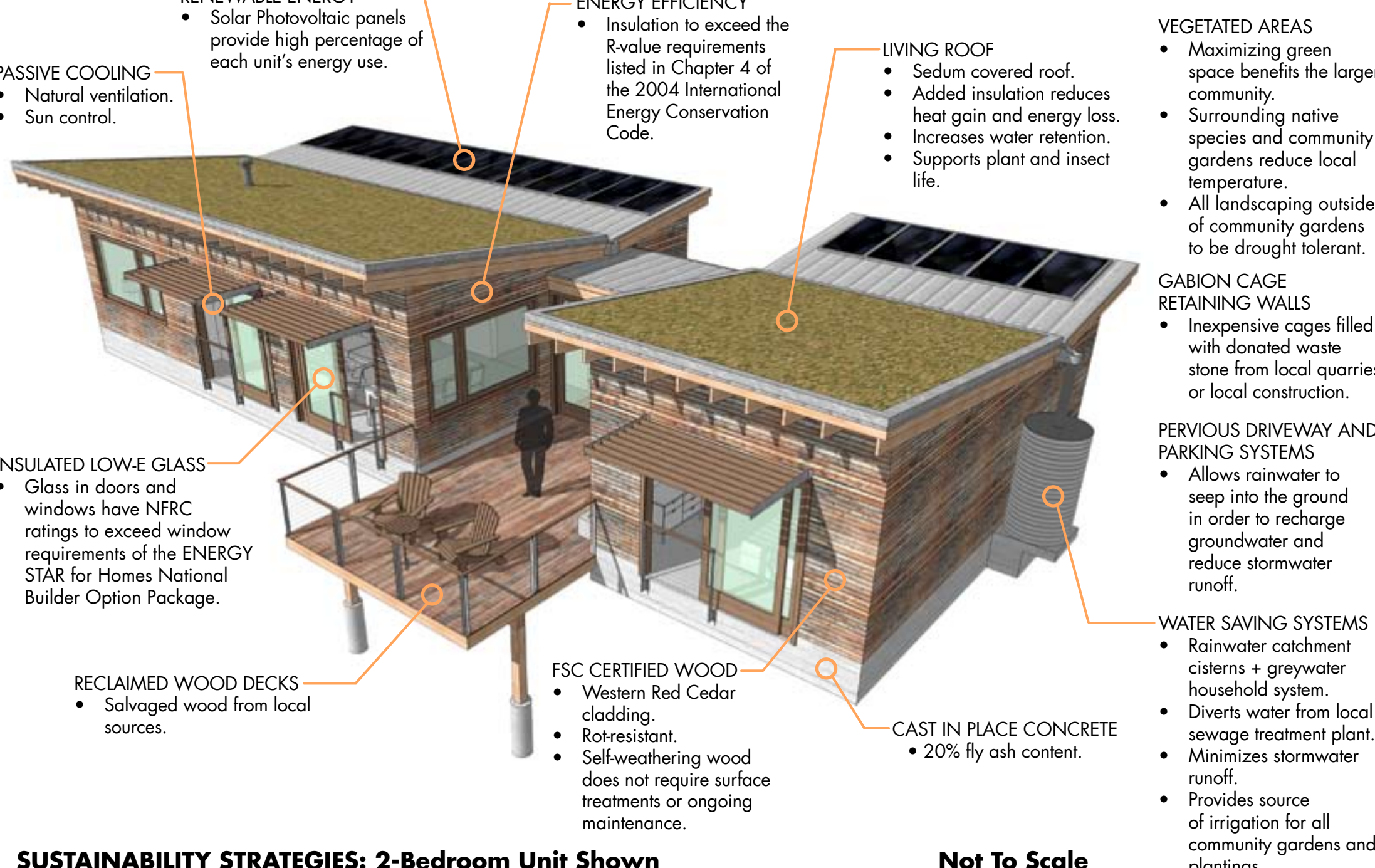
- Bilateral Unit Plans:** all units are arranged in two parallel bands. Living spaces line the view side of the units, maximizing the sweeping vista and exposure to the sun. Support spaces line the garden side, providing the living spaces with an insulating buffer from the public zones of the development.
- Modular Unit Design:** constant width of kitchens and bathrooms across all units allows for prefabrication of core spaces of local factories, such as M4 Homes or Colding Enterprises in Santa Rosa. Modular construction would allow up to 15% savings for core space construction.
- Modulated Openings:** the elevations reflect the arrangement of the bilateral plans. There are no openings on the short sides due to their proximity to other units. Rainwater catchment tanks and blind mechanical access doors are located on these elevations. Openings on the garden side are spate doors but one flexible to promote cross ventilation. Openings on the view side are maximized to capture views, sunlight in the winter and breezes in the summer. Spate doors have one fixed lead and one operable slider, which opens fully. A guardrail on the exterior turns the open door into a balcony.
- Space Forming Decks:** decks on the one and two-bedroom units create intuitive entry points, allow for greater separation between structures, and provide protected outdoor space for those units. Reaching out to the landscape, the decks extend the perceptual living space outdoors to capture even more dramatic views.
- Good Neighbor Policy:** unit roofs slope in two directions. Living roofs slope towards neighbors further up the slope, contributing positively to the view. Solar collector roofs slope away from those neighbors to eliminate unwanted reflections and also to capture more southern sunlight.
- Responsive to the Changing Needs of Seniors:** all kitchens and spaces along the accessibility path are fully ADA compliant and adaptable. Community gardens on each terrace are also accessible and provide greater room to roam beyond each individual unit. Self-sufficient accessory units, which can be used for on-site care or to supplement income, are paired with all one-bedrooms. The deck that separates them allows proximity and privacy.



Studio Unit	1-Bedroom Unit	Accessory Unit	2-Bedroom Unit
Quantity: 6	Quantity: 9	Quantity: 9	Quantity: 4
Area: 672 SF	Area: 828 SF	Area: 468 SF	Area: 1,250 SF
Parking Spaces: 1	Parking Spaces: 1	Parking Spaces: 1	Parking Spaces: 1
Covered Parking: No	Covered Parking: Yes	Covered Parking: Yes	Covered Parking: No
ADA Compliant: No	ADA Compliant: Yes	ADA Compliant: Yes	ADA Compliant: Yes



UNIT FLOOR PLANS



SUSTAINABILITY STRATEGIES: 2-Bedroom Unit Shown

CONCEPTUAL COST ESTIMATE

RESIDENTIAL UNIT COSTS
Total Floor Area for 19 Units Total = 20,695 SF

Subcategory	Cost per SF	Cost
Substructure	\$11.04	\$228,500
Shell (Including Green Grid Roof)	\$26.55	\$549,478
Interior	\$38.17	\$790,000
Services	\$37.47	\$775,500
Equipment	\$7.80	\$161,500
Subtotal:	\$121.03	\$2,504,837
Contractor Fees (10%)	\$12.10	\$250,483
Total Building Costs:	\$133.13	\$2,755,320
(Add-On) Photovoltaic Panels (8,000 SF @ \$80.00 per SF)		\$640,000
SIWEMWORK COST		
Underground Utilities (1,100 feet @ \$45 per linear foot)		\$49,500
Landscaping/Parking Lighting (30,000 SF @ \$20 per SF)		\$600,000
Minimal Grading (10,000 @ \$3.5 per SF)		\$35,000
Three Accessory Barns (3,600 SF @ \$100 per SF)		\$360,000
Olive Trees (\$500 per mature tree)		\$145,000
Irrigation System (5 acres @ \$20,000 per acre)		\$100,000
Subtotal:		\$1,289,500
Contractor Fees (10%)		\$128,950
Total Sitework Costs:		\$1,418,450
TOTAL PROJECT COST:		\$4,173,770



COMMUNITY GARDEN AND NODE