

ZAB Hearing

October 10, 2013



Garden Village | 2201 Dwight Way

TABLE OF CONTENTS

1 – Applicant Statement

2 – Letters of Support

3 – Community Outreach Meeting List & Brief Summaries

4- Design Changes Made in Response to Community & DRC Input

5 – Rooftop Farm Overview

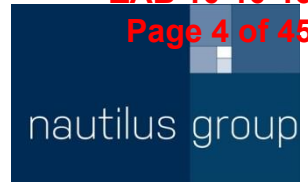
6 – Carshare Pod Overview

7 - Renderings

1 – Applicant Statement

GARDEN VILLAGE

2201 Dwight Way | Berkeley, CA



October 3, 2013

Michael Alvarez-Cohen, Chair
Members, Zoning Adjustments Board
2120 Milvia Street
Berkeley, CA 94704

Dear Chair Alvarez-Cohen and ZAB Members,

In 2011, seeking a fresh approach to student-oriented housing, Nautilus Group, a Berkeley-based developer, sponsored a design competition. Nautilus selected internationally-acclaimed architect Stanley Saitowitz, whose innovative design represents a modernistic interpretation of community living.

At first glance the project may seem unrelated to its context, however, upon further examination, color, texture and massing all relate to our surroundings emphasizing the importance of subtle connections in creating special urban places.

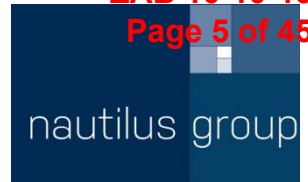
The Saitowitz design breaks away from the monolithic massing typically used for apartment buildings.

Shown below is such as massing that is commonly employed for apartment buildings.



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Instead, it employs 18 distinct building volumes interspersed among numerous, human-scaled courtyards.



Open-air walkways connect the buildings and provide access to large community decks and rooftop farms.

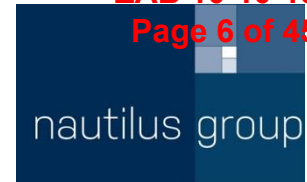
The buildings are clad in dark brown and quartz-colored wood-textured panels. Grade level pathways on site will re-use brick from the walls of the commercial building which currently occupies the site.

Garden Village represents a vision of broadening housing access and affordability through urban living and modern design.

“The essential quality of this Berkeley neighborhood is characterized by detached houses in continuous gardens. Behind main houses, in yards and courts, granny flats and in-law apartments have been added, and garages and workshops converted unto units, creating a dense fabric. The once single-family stand-alone homes have been transformed into multiples, sliced by level or divided by floor, in-filled wherever possible, creating a compact green village. This village is communal, interactive and open. It is formed around common gardens and courts

GARDEN VILLAGE

2201 Dwight Way | Berkeley, CA



which lead to private realms within. It is this found texture that we aim to continue and expand. This grain of dense yet open living is our model; the type is a garden village of small buildings as opposed to a single apartment complex.

Our project is a richly woven collection of compact buildings in a garden, a student village at the scale and openness of the surrounding fabric.”

- Stanley Saitowitz, Architect

Garden Village has been designed at every step with neighbors and the community planning objectives laid out in Berkeley’s Southside Plan in mind. Since the beginning of 2012 we have met with neighbors and the surrounding community extensively to listen and respond to their input. Section 3 of this package summarizes our meetings with the community and Section 4 highlights the significant changes that have been made in response to community input.

The following provides a brief list of the community and resident benefits Garden Village will offer based on community and DRC input, and the planning objectives laid out in Berkeley’s General Plan, the Southside Plan and the Climate Action Plan.

Housing Access & Affordability – Garden Village will broaden housing access for the Berkeley community by creating new housing units in a community which has a housing shortage.

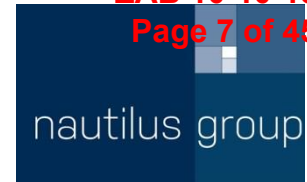
Neighborhood Parking & Traffic Reduction – This car-free community will provide all residents and the neighborhood access to vehicle travel when needed through its on-site car sharing hub. GreenTRIP, an innovative program developed by Transform, has estimated that Garden Village residents will drive less by at least 69% and yield 62% less greenhouse gases than the typical Bay Area household.

Car Sharing On-Site – Garden Village residents and neighbors can participate in the building’s professionally managed on-site car share program. Garden Village will not offer on-site parking to residents. However the on-site car-share feature, proudly supported by GreenTRIP, will promote an active lifestyle for residents and will limit the amount of cars on the road while ensuring that residents have all means of transportation available when needed. Membership is free to residents and reservations & account management will be easily performed online via the car-share portal. For more information about our on-site car sharing program, please see Section 6 of this package.

Transportation Benefits – Extensive building-sponsored transportation / traffic reduction benefits will be available for Garden Village residents: unlimited local transit passes at a 90% discount, a \$10 Bike Link locker card (providing 200-300 hours of bicycle parking at Bike Link locations) and free membership to

GARDEN VILLAGE

2201 Dwight Way | Berkeley, CA



the building's dedicated car sharing hub. These benefits encourage a healthy walking lifestyle and reduce dependence on cars and their associated impacts. GreenTRIP has estimated our extensive transportation benefits at approximately \$1.2 million over 40 years and has recognized the project as the most aggressive and comprehensive TDM program certified by GreenTRIP to date. The project's robust TDM program has been hailed by GreenTRIP as an inspiration for their soon-to-be-published Platinum Standard.

Bicycle Parking & Repair Station – The building's robust bicycle facilities complement the project's other transportation benefits and support the projects sustainability commitment. Each unit features two secure bicycle parking spaces, in addition to the number of bike racks at grade level and a bike garage underground with a total of 234 bicycle parking spaces. This number of bicycle spaces yields 3 spaces per unit, nearly 1 space for every tenant. An indoor bicycle repair station is provided that includes a bicycle stand, tools and a bench for residents to maintain their bicycles.

Organic Food Supply – Garden Village breaks new ground for the local, organic, & sustainable food movement. The project includes intensive rooftop farms above 16 of the eighteen building volumes (over 12,000 gross square-feet). The rooftop farm will be the first of its kind in California and will yield approximately 16 tons of produce annually. According to the USDA's Economic Research Service, this equates to enough fresh vegetables for every daily meal for an estimated 160 people. The produce will be available to all residents and the community via a CSA (Community Supported Agriculture). Participating residents and neighbors can enjoy fresh, organic produce grown right on-site. For more information about our rooftop farms, please see Section 5 of this package.

Local Business Support – This lively, walking-oriented development will increase foot traffic and provide new customers for local businesses downtown, along Telegraph Avenue and many other local streets.

Homes for very low-income residents – Garden Village will provide homes for 22 very low-income residents who otherwise could not afford quality housing.

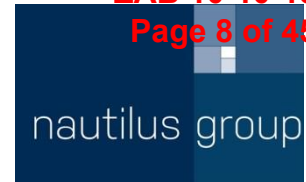
Neighborhood Crime Reduction and a Safe Home – The Garden Village community will have a state-of-the-art controlled access system, extensive security cameras, an on-site resident manager and on-site security every night patrolling the grounds. These security measures combined with additional "eyes and ears" on the ground will contribute to a safer neighborhood.

Improving the Streetscape – Garden Village will place unsightly overhead power and telephone poles and lines underground for an entire city block along Fulton Street. 13 new street trees will be planted along the project street frontage.

A Quiet Environment – Garden Village's design & construction will utilize acoustical details and materials which are above industry-standard to provide a peaceful environment for study. The balconies initially planned for the project were eliminated based on neighbor feedback.

GARDEN VILLAGE

2201 Dwight Way | Berkeley, CA



Modern Unit Features – Each Garden Village apartment includes single-occupancy bedrooms fully furnished with high quality well-designed furniture. Large operable windows are provided in every room and on opposing sides of each unit providing natural lighting and ample ventilation. Units also include full-size kitchens with high-efficiency appliances and high-efficiency in-unit washers & dryers.

Full-Time Management On-Site – An on-site manager will be available in the leasing office during regular business hours and on-site security will be available during evening hours. Representatives are on-site to ensure a high quality of resident life and to address residents and neighbor concerns day or night.

We have worked diligently with the community, staff and the DRC to develop an innovative project design which is thoughtful, will fit well within our community and will provide much-needed equitable housing at 2201 Dwight Way.

I look forward to sharing more with you at our hearing on October 10th.

Sincerely,

A handwritten signature in blue ink, appearing to read "RM", followed by a horizontal line.

Randall Miller
President

3 – Community Outreach Meeting List & Brief Summaries

Community Outreach Meeting List & Brief Summaries

4th Quarter, 2011 - Project Planning Commenced

February 1, 2012 – Focus Group Session 1 – We invited ten Cal students to join us and provide initial input for project planning. Discussion revolved around what their top priorities are in regards to housing and what problems they have with their existing housing.

March 27, 2012 – Community Meeting –Although a neighborhood meeting was not required for the project, we elected to hold a neighborhood meeting to ensure we reached out to as many individuals and groups as possible to discuss the project and respond to any concerns.

We invited 394 neighbors and groups to our neighborhood meeting. Of the 394 invitees, 4 people attended our meeting and various topics were discussed.

April 6, 2012 – BAHA PAC Meeting – Requested and was granted an opportunity to present our project to BAHA's (Berkeley Architectural Heritage Association) PAC (Preservation Action Committee). The committee provided positive feedback and suggestions for improvements.

June 19, 2012 – Meeting with Gale Garcia, Community Member –Met with Gale Garcia to clarify statements made at the March 27th community meeting.

August 2, 2012 – Application Deemed Complete

September 4, 2012 – Focus Group Session 2 - We invited ten Cal students to join us and provide feedback on our design as it had evolved from our first Focus Group session.

October 11, 2012 – Focus Group Session 3 - We invited ten Cal students to join us and discuss specific project elements in more depth which were identified in the first two focus groups.

October 18, 2012 – EIR NOP Issued

October 18, 2012 – EIR Initial Study Published

November 5, 2012 – EIR Scoping Hearing

November 20, 2012 – Meeting with Nathan George, Neighbor – One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

December 10, 2012 - Meeting with Nathan George, Neighbor– One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

December 13, 2012 - Meeting with Nathan George, Neighbor– One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

January 17, 2012 - Meeting with Nathan George, Neighbor – One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

January 30, 2013 – EIR DEIR Published

February 18, 2013 - Meeting with Nathan George, Neighbor – One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

February 25, 2013 - Meeting with Nathan George, Neighbor – One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

March 7, 2013 – LPC Public Hearing

March 14, 2013 – ZAB Preview Public Hearing

March 18, 2013 – EIR DEIR Public Comment Period End

April 18, 2013 – DRC Public Hearing #1

April 25, 2013 – Neighbor Meetings – 370 invitations were sent out to neighbors offering personal meetings on site to discuss the project. Of the 370 invitations, 2 neighbors responded, met with us and became supporters of the project.

May 16, 2013 – DRC Public Hearing #2

May 31, 2013 - Meeting with Nathan George, Neighbor – One of many meetings with our neighbor, Nathan George, to discuss building massing, density bonus, setbacks, etc.

June 20, 2013 – DRC Public Hearing #3

July 11, 2013 - Meeting with Nathan George, Neighbor – This meeting with Nathan George attempted to resolve all of his demands for the project. 5 of 6 of George's demands were met and the 6th demand (Fulton Street setback) was deferred to the DRC for direction.

July 18, 2013 – DRC Public Hearing #4

4- Design Changes Made in Response to Community & DRC Input

Design Changes Made in Response to Community & DRC Input



Garden Village | 2201 Dwight Way

Neighbor Concern Regarding Noise From Balconies

All Balconies Removed From Entire Project

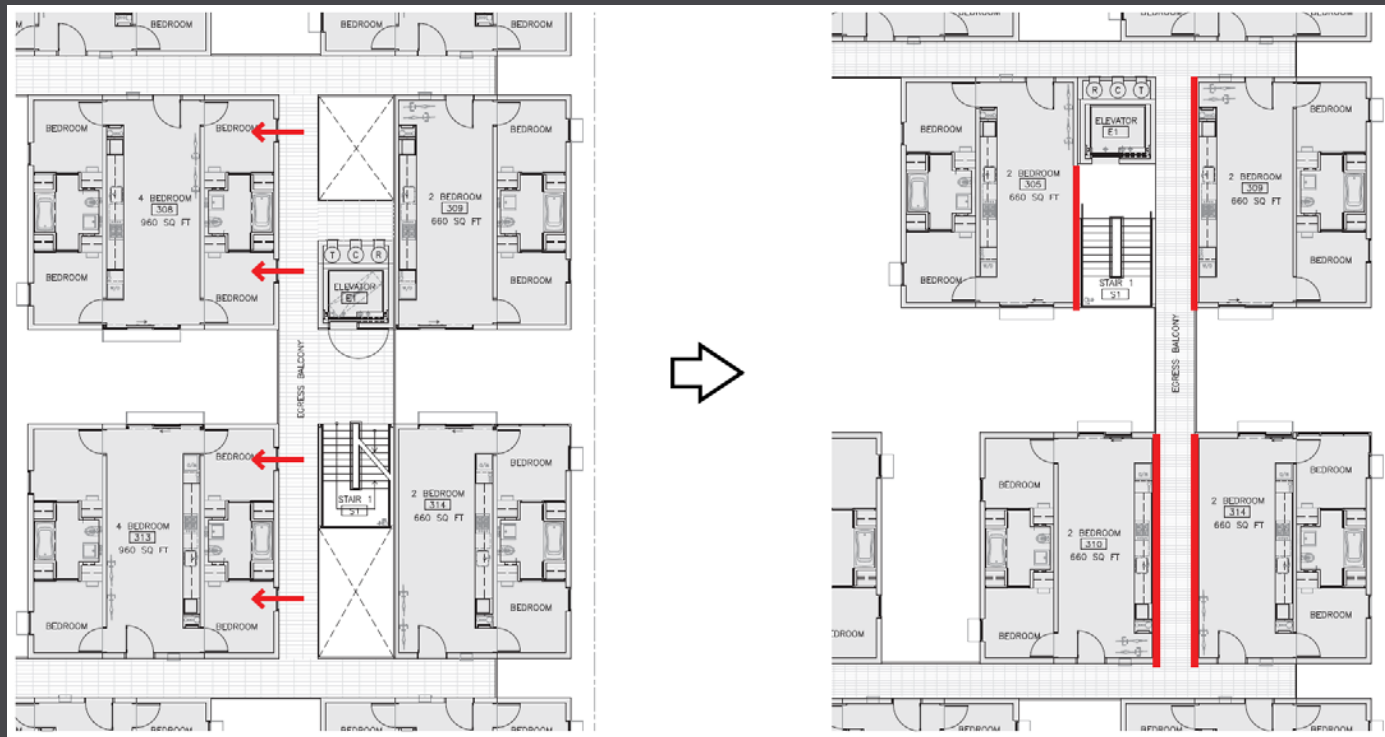


Garden Village

Community & Board Input, Changes & Results

DRC Concern Regarding Privacy at Interior Units

Bedrooms Adjacent to Walkways Eliminated

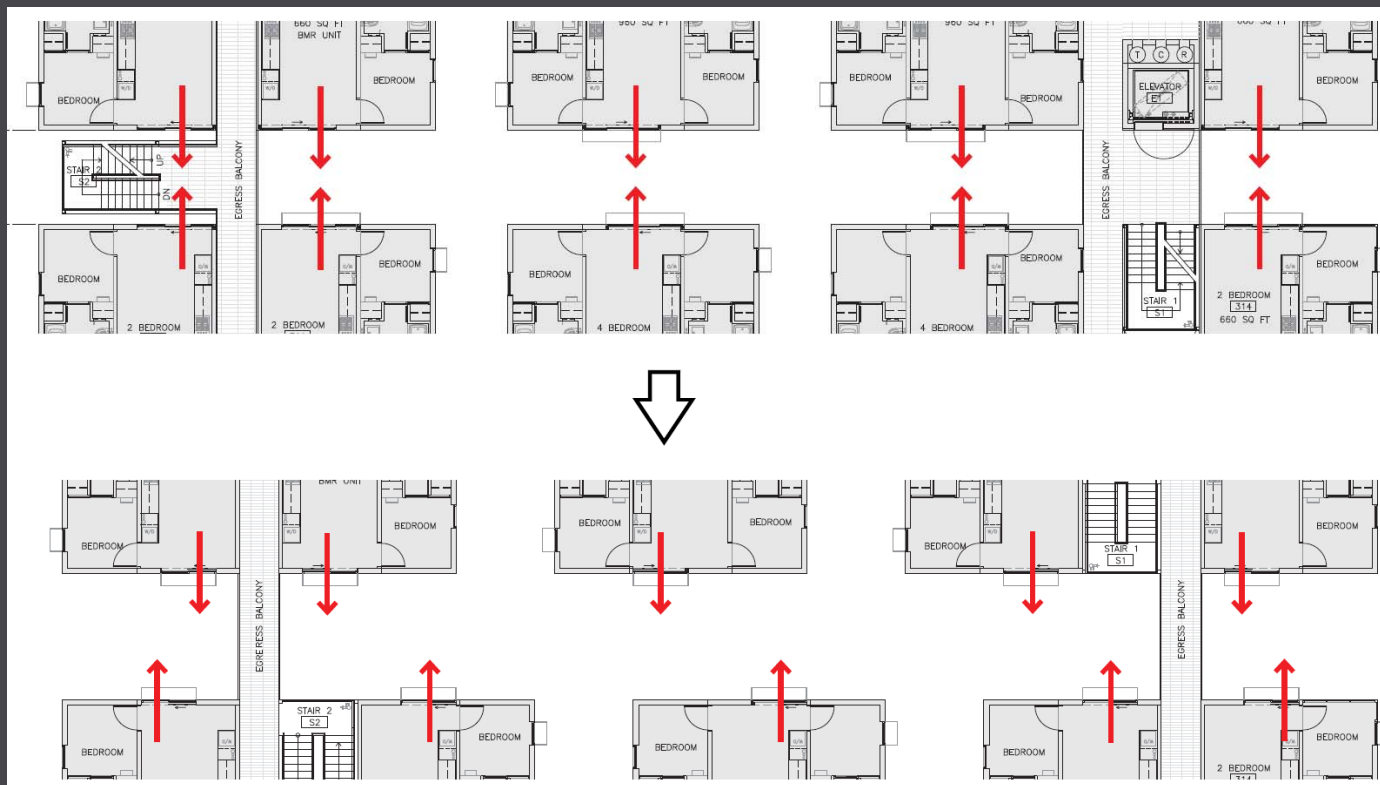


Garden Village

Community & Board Input, Changes & Results

DRC Concern Regarding Privacy of Opposing Unit Living Rooms

Living Room Windows Offset

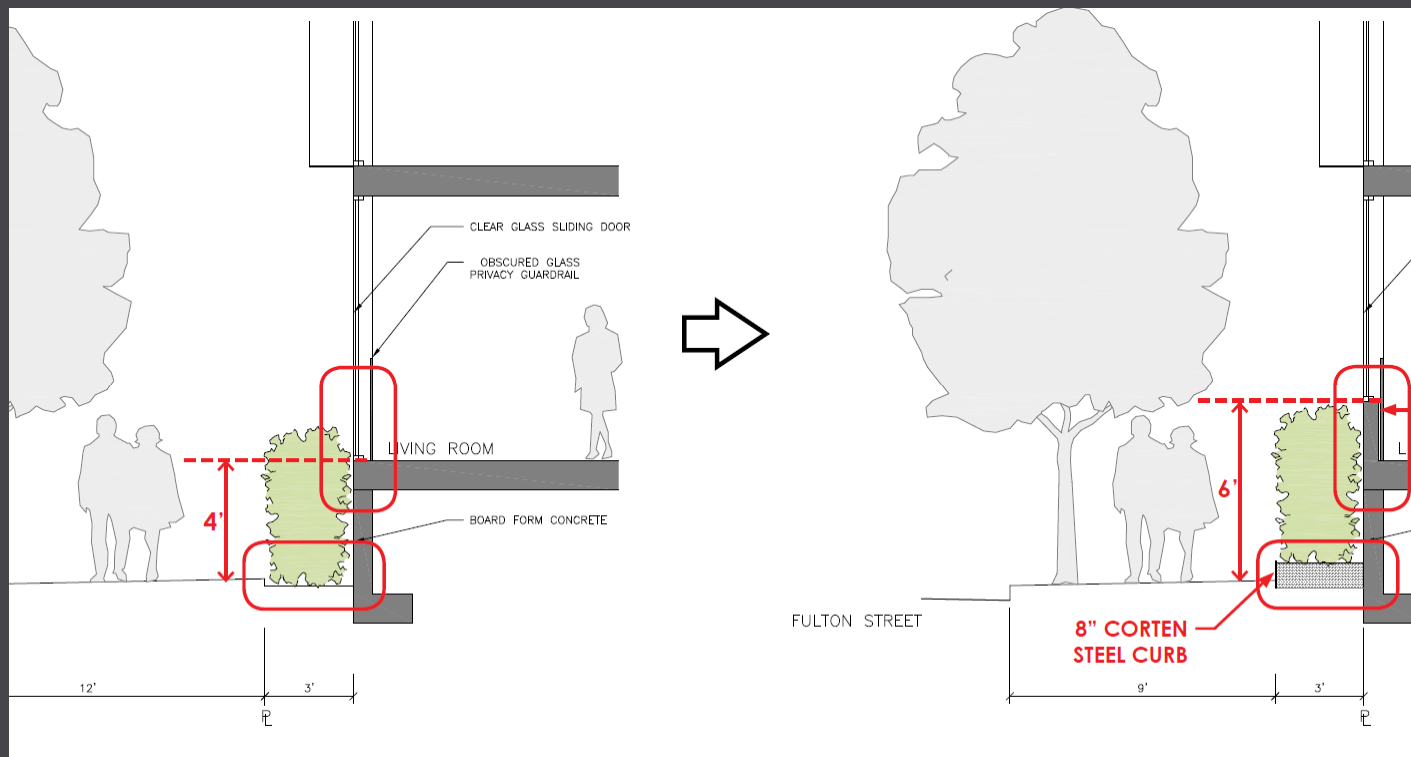


Garden Village

Community & Board Input, Changes & Results

DRC Concern Regarding Privacy & Safety of Units Along Street

Fulton St Frontage Buildings Modified

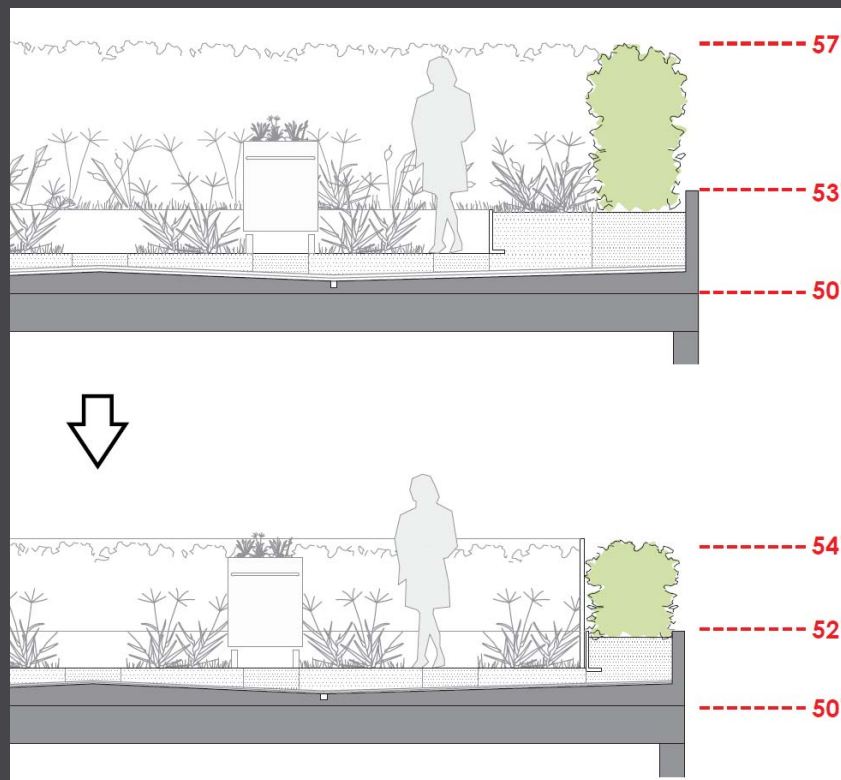


Garden Village

Community & Board Input, Changes & Results

DRC Rooftop Farm Hedge Height & Safety Concern

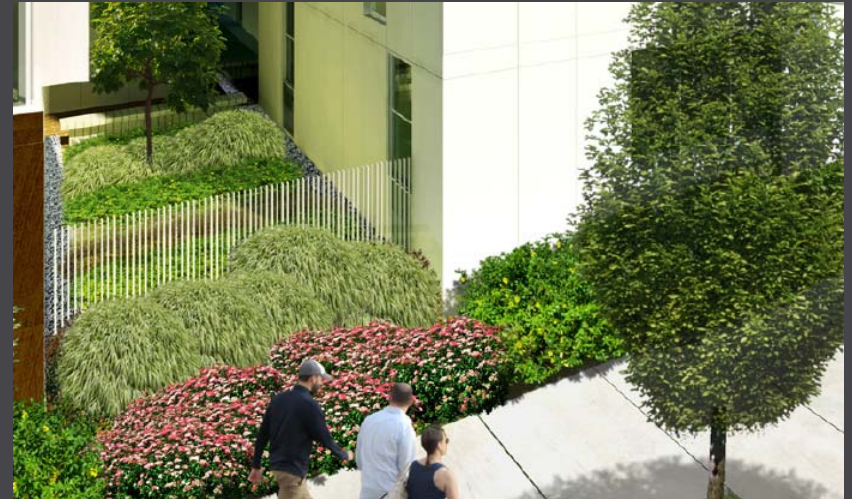
Parapet & Hedge Lowered / Guardrail Added



Garden Village

Community & Board Input, Changes & Results

Numerous Landscape Development & Improvement Comments

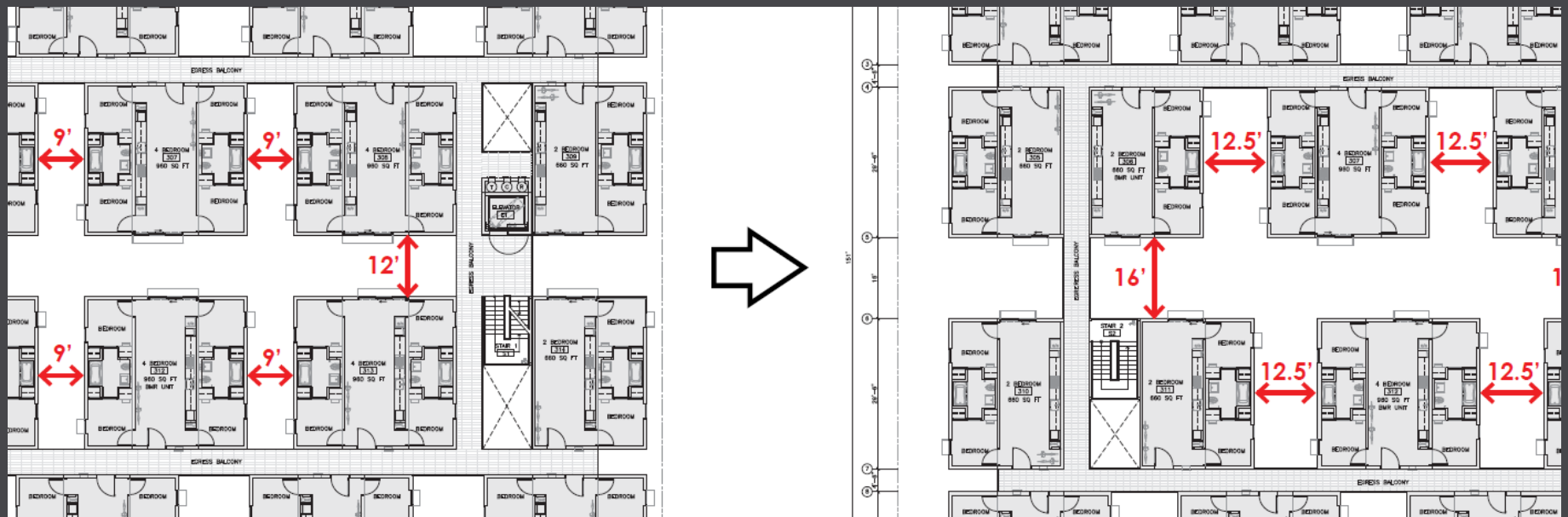


Garden Village

Community & Board Input, Changes & Results

DRC Sunlight Access Concern

16 Bedrooms Eliminated & Spacing Increased



Garden Village

Community & Board Input, Changes & Results

Neighbor Concern Regarding Building Height on Fulton Street

Eliminated 4 Units to Reduce Height
Along Fulton by 13 Feet



Garden Village

Community & Board Input, Changes & Results

Neighbor Concern Regarding Building Height on Fulton Street

Eliminated 4 Units to Reduce Height
Along Fulton by 13 Feet



Garden Village

Community & Board Input, Changes & Results

Neighbor Concern Regarding Building Height on Fulton Street

Eliminated 4 Units to Reduce Height
Along Fulton by 13 Feet



Garden Village

Community & Board Input, Changes & Results

Neighbor Desire for 6 foot setback along Fulton Street

3'-3 ⁷/₈" Setback/2.5' Landscape in Sidewalk, 5'-9 ⁷/₈" Total



Garden Village

Community & Board Input, Changes & Results

5 – Rooftop Farm Overview

Garden Village – Rooftop Farm Design & Operation Overview

Facility Philosophy

In the interest of maximizing project sustainability performance, Nautilus Group investigated multiple green building measures. With the goal of creating a model for truly low environmental impact housing, Nautilus Group moved away from image focused certification goals and trendy photovoltaics. Instead, they carefully focused on developing deep green value through energy and material efficiency strategies combined with addressing specific underserved community needs like car sharing and local agriculture. This food roofs project is intended as an investment in the emerging need and growing value of local urban agriculture.



Soil System

The soil growing medium is an engineered lightweight, well-draining mix designed to facilitate the growth of a permanent healthy mycelium nutrient web. The soil will be underfoot on the majority of roof surface, will be organized in 10 inch and 20 inch depths and will sit on a wicking sponge that will balance soil moisture levels and nutrient



retention. This soil web and wick system also serves as a rainwater retention device to maximize conservation of rain and potable water for irrigation. Soil nutrient import will occur through a fertigation system (organic, liquid, compost based fertilization integrated into the irrigation system). The fertigation system effectively reduces soil and fertilizer import to a small once or twice a year operation. Soil will not be rotated but instead will grow into a living nutrient web that, over the first few seasons, will become a significant and integral element of the facility. Limited soil import will occur in a system of closed poly bags and rolling buggies to minimize spillage or undesired dispersal.

Garden Village – Rooftop Farm

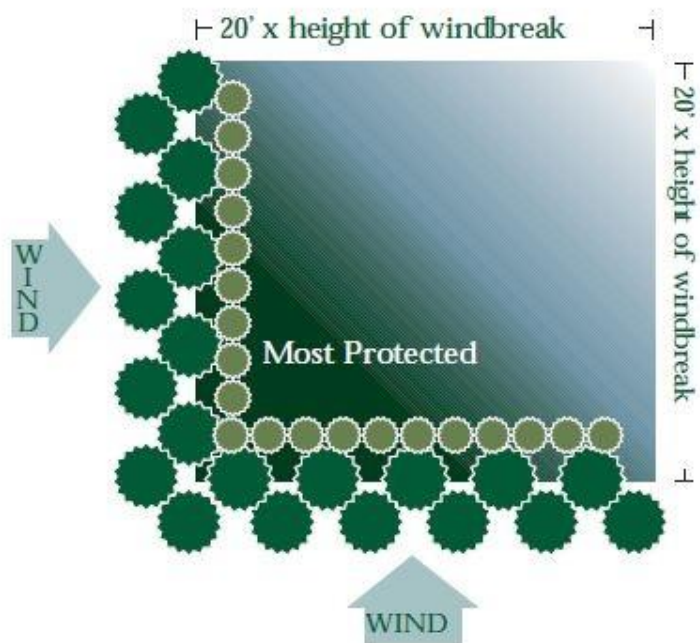
Design & Operation Overview

Water Management

Proper water use and management is integral to the health of the food roofs. Water will be distributed and delivered from an EBMUD irrigation water meter and via a system of manual and automated valves, soil moisture sensors, adjustable headers and drip tape. This allows regular scheduled irrigation with easy flexibility for manual override. The drip portion of the system also allows for minimal water use and maximum flexibility. With this irrigation system and the crop density and variety, each roof will consume about 47 gallons per day (at peak demand in July, the equivalent of 2-4 resident showers). Irrigation will be phased and scheduled so that watering needs minimize peak demand on the irrigation water meter across the multiple roofs.

Wind Protection

Wind conditions will be mitigated through strategic planting of hardy hedge rows (3 foot in height maximum). Because the roofs are small discrete areas, windbreaks will also be discrete barriers with varying porosity. Hedge rows will be most dense and substantial along the Fulton Street edge of the property and will continue in reduced height and increased porosity within and at the leading edge of subsequent roofs providing a consistent wind sheltered growing environment. As viewed from the adjacent streetscape these hedges will have a minimal visual presence, and where visible will have a visually soft organically shaped edge that does not substantially add to building shading or massing. Hedge density will be accomplished using taller, multiple hedge rows planted in staggered patterns in the high wind areas. Lower wind areas will have less height, reduced row quantity and increased spacing. Hedge layout will include some produce bearing sturdy species where feasible, and will provide essential habitat and nectar for integrated pest management strategies. Wind protection plantings will be managed and trimmed to adjust effectiveness and also to control visibility from the ground.



Garden Village – Rooftop Farm

Design & Operation Overview

Planting

The crop selection palette has been determined based on climate, soil depth, minimized soil disruption from harvesting, companion planting compatibility and market demand for delicate and hyper local varieties. The project will focus on 3-4 popular niche crops such as small fruited tomatoes & specialty lettuce mixes, will regularly produce a total of

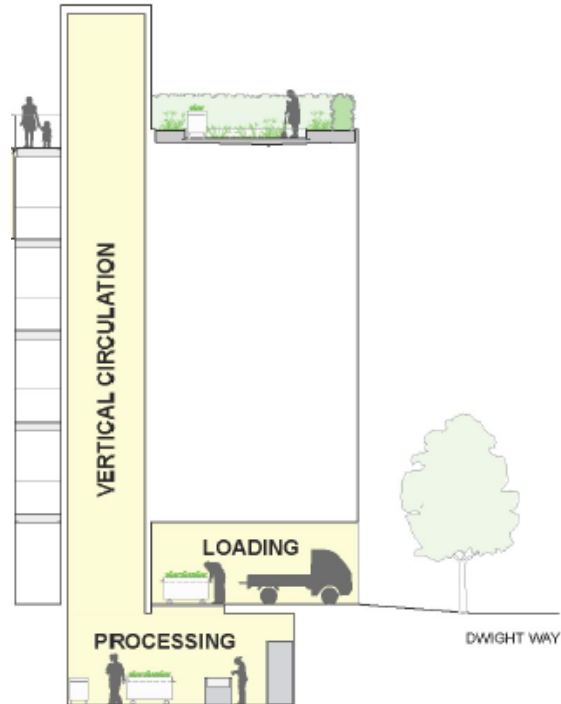


15-20 crop types for market and will additionally grow a dozen other crops that regenerate the soil and provide beneficial insect habitat for pest control. Careful attention will be made in maximizing the square foot production value of the space by choosing crops that are rare, don't ship well and are proven in the local climate. Production volume and farm health will be enhanced by inter-planting multiple crops (polyculture) in a single area. This minimizes exposed soil in the planted areas, allows phased harvesting of a single area, increases farm health and increases yield. Walking paths between beds will be planted with living mulches such as White Dutch Clover that aid in moisture retention, enable nitrogen fixing, minimize exposed soil and are beautiful beneficial insect habitats. Planted foot paths also minimize exposure of foot tracking to bare soil. When a portion of farm is fully harvested it will not remain unplanted for more than a day and will be replanted with starts from the green houses. No farm areas will be left fallow, but instead soils will be recharged using cover crops. Another primary product will be seeds that are grown, harvested and packaged on site.

Garden Village – Rooftop Farm Design & Operation Overview

Circulation

Horizontal movement among the food roofs will utilize the bar grate walk ways. Vertical circulation between the food roofs, the basement farm office and wash station, and the material lift loading area will utilize the elevator. Produce delivery will utilize a pickup truck parked at the material lift and will deliver a maximum of two loads per day. With careful attention to cleanliness, other similar projects have demonstrated successful integration of food roofs and residential occupancies with shared elevator use. When soil import or significant facility maintenance activities are planned (1-2 times per year), reusable roll-out walk off mats will be employed to control soil migration from the roof areas.



Distribution

In compliance with Berkeley City Ordinance, produce will be sold to end consumers via a Community Supported Agriculture (CSA) service to building tenants and then the surrounding community. The CSA will be managed online via the property's website. Additional production will be sold at the local farmer's markets. For maximum freshness and labor efficiency there will be a single harvest every day.



Produce will be washed, organized, stored, cooled and loaded in dedicated spaces in the basement and loading area. The sales goal for the facility is intended to allow for break-even financial operations.

Garden Village – Rooftop Farm

Design & Operation Overview

Rooftop Safety / Edge Condition

With worker and building occupant safety a primary concern, the rooftop edge detail has been crafted to create a physical barrier and incorporates a wind break as noted earlier in this document.



Management

A full time on-site Farm Manager will play a hands-on role in farm physical labor. In addition, the farm manager will care for facility maintenance, planting schedules, irrigation, distribution relationships, physical distribution, and management of the farm labor and distribution team (1 to 2 additional employees). Farm Manager succession will ideally occur through the training and grooming of farm laborers. Due to the site-specific design of this facility, the building owner will maintain a limited advisory position in farm management to ensure that operations continue to effectively utilize the infrastructure as well as integrate with the tenant community.



Environmental Building Strategies, LLC

Los Angeles • San Francisco • New York

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Garden Village – Rooftop Farm

Design & Operation Overview

Viability

Urban agriculture is an urgent need and solution for many of the challenges in today's cities. Bringing soil and food plant systems into the urban environment provides multiple tangible benefits. Some of these include; reduced heat island effect, reduced municipal storm water loads, local healthy food, community building, food desert reduction, reduced vehicular food distribution impacts, local jobs and additional local resource driven revenue.



6 – Carshare Pod Overview

Facility Philosophy

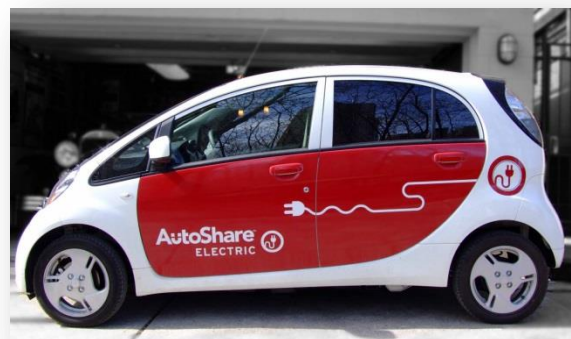
In the interest of creating a forward-thinking and innovative model for high-density housing that reduces traffic, provides innovative parking and generous transportation benefits to the project residents, Nautilus Group investigated many transportation and parking strategies for Garden Village. With the goal of creating a model for truly low environmental impact housing, Nautilus Group moved away from traditional “green-focused” certification goals. Instead, they carefully focused on developing transformative parking and transportation strategies, including a custom-tailored on-site car share program. [GreenTRIP](#) has conditionally certified the project, recognizing it for its traffic reduction and innovative parking strategies.

This custom car share program is responsive to the emerging need and growing value of access to vehicles only when people need them.



Vehicle Types and Quantity

When completed, the project will provide three (3) compact, fuel efficient and/or electric vehicles and one (1) micro van in its car share pod. Four (4) total vehicles will serve Garden Village’s 236 residents. This yields a vehicle per member ratio of 1:59 which is in line with industry standards. Zipcar’s ratio is 1:67 and City CarShare is 1:46¹. Additional vehicles (up to 10) may be added as necessary to maintain an availability rate of at least 96% for residents.



¹ Sands, James. 2012. " Zipcar Versus The Competition: A Comprehensive Perspective On Global Car Sharing," *Seeking Alpha*.

Vehicle Access and Fees



Membership to the car share program will be free for all residents. All residents with a valid driver's license, at least 18 years old and who do not have a history of DUI or DWI on their driving record will be provided membership to the program. Car usage fees will be similar to other car share programs (currently \$5-\$11.50/hr + \$0.00-\$0.50/Mi). Vehicles will be available 24/7, 365 days a year. Vehicles will be securely stored in the car share pod at the southeast corner of the site.

Residents have first priority for the car share vehicles. If the car share program is able to maintain an availability rate of at least 96% for the residents and has excess capacity, public access to the vehicles may be provided. Members of the public would have limited access to the building's car share pod only (not the entire building).

Reservations for the vehicles will be made via website either through the resident portal (which will manage leases, payments, maintenance requests, etc) or an independent website platform.

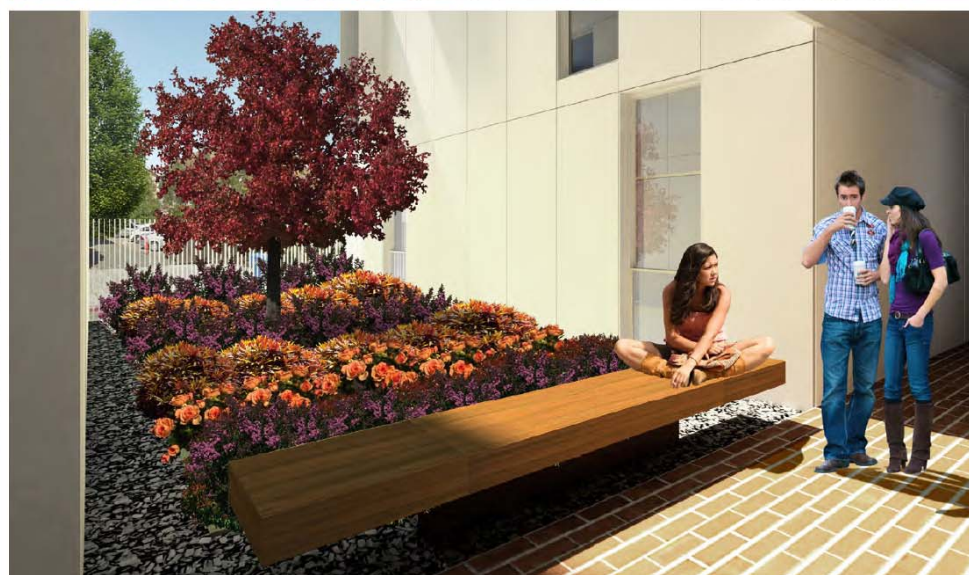
Program Management / Viability

Garden Village will partner with an experienced car sharing partner such as [Getaround](#) to maintain the car share fleet, administer membership and the insurance programs. The ownership entity will also monitor the car share program to ensure a high level of member satisfaction. Garden Village has committed to maintaining a member satisfaction rating within 5% of other recognized car share programs (City CarShare, ZipCar, etc).

Car share availability and member satisfaction rates will be analyzed yearly and evaluated by the building owner, the City's Transportation Department and GreenTRIP. If the building's car share program fails to meet the minimum availability threshold or member satisfaction rate, the building owner will provide free membership to all tenants to a recognized car share program (City Car Share, ZipCar, etc) and the vehicles will be located on site.



7 - Renderings



Garden Village

Renderings



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