ROUTE 238 PARCEL GROUP 6: Bayview Village Proposal



CITY SUPPORT FOR BAYVIEW CONCEPT OVERVIEW CONDITIONS, SITE PLAN, FLOOR PLANS PARKS, TRAILS AND OPEN SPACE AFFORDABILITY, SUSTAINABILITY, MOBILITY HEALTH AND SAFETY, DESIGN, COMMUNITY THE MARKET, RETURN, RISK REDUCTION

BAYVIEW VILLAGE

City of Hayward Support for Bayview Village

The Hayward Area Planning Association (HAPA), an advocacy group, has been developing a walking-oriented sustainable development called "Bayview Village" for this site over the last 15 years. The proposal accommodates more development, about 700 units, based on walkways and less parking. Its major themes: affordability, sustainability, mobility, health and safety, design, and community. Bayview would compete well for funds from the Affordable Housing and Sustainable Communities Program of the Strategic Growth Council.

The City of Hayward approved the concepts of Bayview Village in its Program Environmental Impact Report, Sustainable Mixed Use land use designation, and zoning. In May 2014 the City Council passed a resolution in support of Bayview concepts.

HAYWARD CITY COUNCIL

RESOLUTION NO. 14-057

Introduced by Council Member Salinas

RESOLUTION EXPRESSING SUPPORT FOR THE BAYVIEW QUARRY VILLAGE CONCEPT AS DEFINED BY DR. SHERMAN LEWIS AND FOR THE USE OF STATE CAP-AND-TRADE FUNDS FOR SUSTAINABLE AND TRANSIT-ORIENTED PROJECTS THROUGHOUT CALIFORNIA, INCLUDING BAYVIEW QUARRY VILLAGE

WHEREAS, the City of Hayward has identified being "GREEN" as one of its three major priorities; and

WHEREAS, Dr. Sherman Lewis has developed a concept, Bayview Quarry Village, that, when and if developed, would be a transit village with minimum vehicle use and low greenhouse gas emissions and would support the goals of the City's Climate Action Plan; and

WHEREAS, the Governor of the State of California and the California State Legislature have developed and implemented a Cap-and-Trade program within the State to fund, in part, programs related to sustainable communities, clean transportation, energy efficiency, natural resources, and waste diversion; and

WHEREAS, Dr. Lewis' concept fits many of these Cap-and-Trade program categories; and

WHEREAS, Bayview Quarry Village will not be able to proceed without substantial funding, both public and private. The proposal is consistent with the Master Plan for Parcel Group 6. The City requests feedback from the development community on the proposal. There are many ways to implement the concepts, illustrated by the specific ideas presented here. Bayview could be proposed as a project or its ideas used in related proposals.

More information is available from Sherman Lewis, President of HAPA, at <u>Sherman@csuhayward.us</u>, in the City's Document Library, and at <u>http://www.bayviewvillage.us/</u>.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Hayward does hereby express its support for the environmental benefits of the Bayview Quarry Village concept.

BE IT FURTHER RESOLVED, that the City Council strongly supports the use of State Cap-and-Trade funds to implement concepts and projects like Bayview Quarry Village and encourages the Governor and the California Air Resources Board to immediately consider Bayview Quarry Village as a high priority for using Cap-and-Trade funds.

IN COUNCIL, HAYWARD, CALIFORNIA May 6, 2014.

ADOPTED BY THE FOLLOWING VOTE:

- AYES: COUNCIL MEMBERS: Zermeño, Jones, Halliday, Peixoto, Salinas, Mendall MAYOR: Sweeney
- NOES: COUNCIL MEMBERS: None

ABSTAIN: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: None

ATTES

APPROVED AS TO FORM:

City Attorney of the City of Hayward

Bayview Village Project Description

Bayview Village would be a large development near California State University (CSU) East Bay in Hayward CA. It is designed to meet six complementary goals:

- Affordable housing
- Sustainability: building, energy, landscaping, water
- Green mobility: Alternative modes, reduced auto dependency
- Health and safety: Clean, safe, secure; more walking, recreation
- Good Design: High quality building design and site layout
- Community: balance of privacy and neighborliness.

The site is now an abandoned quarry accessible from the dead ends of Overlook Ave. and Palisade St. off Carlos Bee Blvd.

The project plans more larger units than most condominium projects in order to appeal to larger families and higher incomes.

Bayview is designed to be a community free from vehicular traffic, with homes on walkways providing a sense of neighborhood and shared informal space.

Densities			unit density		person density	
persons/unit	# of units	# of persons	per neighbor- hood acre	per net acre	per neighbor- hood acre	per net acre
2.50	704	1,760	28	51	69	128

Major policy framework

expensive parking.

development, mixed use, and alternative travel modes in a way convenient for work, home ay. It pulls together but usually isolated nto a whole system. Its mies of scale achieve a uality of life with fewer

Project Development

The actual project will be determined by the developer and the City. HAPA's involvement would be determined by the developer. I would like to work collaboratively, without compensation, on Bayview. My wife and I want to live there. CEQA review consistent with the Bypass General Plan EIR should be easy environmentally. As a former quarry largely devoid of vegetation, the property appears to be rock free of protected plant and animal species. The design will honor all fire rules and ADA universal design.

resources, lower costs, and a different system of pricing, land use, housing, energy, and transportation.

American suburbia is very inefficient at consumption. The cost of

housing, energy, and transportation is high, as are the environmental

the cultural dominance of a system of dispersed, auto-dependent,

high-cost suburbs limits thinking about large, complex, alternative

car by subsidizing large amounts of underpriced, bundled, and

efficient economically, environmentally, and socially.

and social costs. The walkable neighborhood system is not understood;

systems. Even new "transit-oriented development" pays homage to the

Bayview replaces the labor-intensive, high resource-consuming,

extensive land use system of suburbia with one that is inherently more

Bayview takes "smart growth" to a higher level of compact

Bayview would have the look and feel of a traditional walkable neighborhood based, in part, on the ability of high density to increase purchasing power and transit ridership with short walk distances. A cost-effective Village Bus and other mobility features equal or surpass the mobility of suburbia.

A successful development would demonstrate the viability of the Walkable Neighborhood System. Bayview residents will have significantly lower living costs, use dramatically less fossil energy. And reduce their emissions of greenhouse gases and pollution. Bayview reduces economic dependency on private autos, oil companies, foreign oil suppliers, and the related military costs and moral hazards.

Existing conditions

The project is now an abandoned quarry with strong geographical separation from adjacent land uses. The limited access and geographic buffering would make Bayview Village a community with its own distinct identity and ambiance.

On the east is a powerline corridor 200 feet wide and the existing City View Apartments. On the north is Dobbel Creek in a steep wooded ravine. The west slopes down steeply into single family neighborhoods. The south side narrows down almost to Carlos Bee Blvd. The developable area is surrounded by 9.38 acres of open space consisting of a steep rock face on the east, the long arc of the creek on the north, and a small abandoned quarry on the west with a cliff dropping down to Redstone Place. [link]

18.56 acres are developable.

Hard rock of gabbro and Knoxville Formation and need for large cut and fill make grading expensive.

Knoll elevation good for views. Knoll, overburden and south side can be used to fill pit to two percent grade from high in center to creek and south side of pit area with cut equal to fill.

Downslope at south end is five percent grade.

Odd shape of property creates opportunities for landscaping of odd bits of small unbuildable off-square areas.

Contouring for walking isolates about 1.7 acres best developed from City View Apartments on the east side with existing easy access.

If possible, two vacant lots and three developed lots on Overlook Ave. should be added to project.

Aerial Survey by R&R Land Surveying, San Mateo County, CA. 1'' = 20 feet; 2-foot contours

Preliminary Geologic Hazards Evaluation and hazards layer on aerial survey by Terrasearch Inc., Livermore CA



PARKS, TRAILS & OPEN SPACE: Parks

The Bayview Village planning used the research by William Holly White (<u>https://www.pps.org/</u>) on how to make small public spaces popular. Bayview uses dispersed, intimate, miniparks to provide open space and recreation close to every front door, take advantage of off-square parts of the site, and improve sight lines with greenery. The current Bayview plan has eight parks totaling 1.64 acres. The HOA would also maintain two plazas on the main walkway and a few small flower gardens in other spots and in the Village Square.

The parks are close to many front doors for easy child care, enjoying the weather, and BBQs.



Figure 5-1 Bayview Parks

PARKS, TRAILS & OPEN SPACE: Trails

The 238 Foothill Trail, ultimately five miles along on the surplus right-of-way of the defunct Route 238 Bypass, would run from I-580 in Castro Valley to Industrial Blvd. in south Hayward and connect to other long trails.

Bayview Village would plan, construct, and manage the trail through the site and would dedicate a conservation easement for public use during the daytime.

Bayview Village aligns the Foothill Trail along walkable grades, avoiding up and down and round-about alignments on steep side slopes. The trail has transit access using the busway.

Dobbel Creek is in a steep ravine where a wide trail would be environmentally damaging and would distance trail users from the woods. Bayview would have a narrow, low-cost footpath similar to some in HARD and East Bay Parks, which are conducive to an intimate enjoyment of nature.

The regional trail would be about 2,6220 feet long. It would be closed at night for security. It would be maintained and monitored on site by the HOA managers. Trail users would be encouraged to stop at the café and learn about Bayview.

Bayview also includes a trail up the rock face to a picnic site overlooking a three-bridge view of the Bay. The Bay View trail continues north and loops into a park on site.



Figure 5-3 Bayview Village Site Plan

Site Plan

The site plan currently proposes 702 units, with a mix of unit types: studio and one-bedroom condominiums in the Palisade Building; two-bedroom one bath and two-bedroom two bath flats in sixplexes; and townhouses with three, four, and five bedrooms. Unit sizes would vary from 440 to 2,100 square feet and most of the buildings would be three-story, wood-framed structures. The current plan calls for 6 studios, 26 one-bedrooms, 336 two-bedrooms, 185 three- bedrooms, 88 four-bedrooms, and 61 five bedrooms. Actual types will respond to sales.

See Parks, Trails, and Open Space above.

A parking lot on an extension of Overlook Ave. would have 100 spaces. The powerline corridor would have a community orchard and garden and would compost vegetative waste from the project.

The walkways would accommodate walking, bicycles and similar, wheelchairs, grocery carts, electric freight cart, public safety and emergency vehicles, moving vans, garbage trucks, and recycling trucks—not cars. These walkways would use a green paving system, grasscrete, to maintain the aesthetic of the Village. The Village Center would be a short walk away from the units.

Bayview has been carefully evaluated by civil engineers at Lea & Braze Engineering, Inc. and found to be feasible for wet and dry utilities in the right-of-way, complying with City of Hayward right-of-way street criteria such as maximum slope, minimum width, and minimum turning radius for fire protection; balancing cut and fill; providing drainage and ADA-approved slopes; phasing grading to delay cost until needed for building; and meeting State Water Board regulations for storm water treatment with an underground storm water detention pipenetwork with metered release into the creek and storm drains.

Resources permitting, adding five parcels on Overlook would improve the project.

Bayview Village Site Plan

Hayward CA August 2018



Village Center

Village busway: The busway would be an extension of Palisade St. across the powerline corridor to Carlos Bee Blvd. The busway would have elevated sidewalk bus stops for fast boarding. The stops would be sheltered.

Community Center:

 Ground floor: lobby, mailboxes, service counter with mailing services and mail too big for mailboxes, ATM, security video surveillance, small laundry, room for future child care, bicycle shop,

reading room with coffee, books and a wood-burning EPA-rated stove.; van and freight cart parking.

- Second floor: café and flexible multipurpose room with a small kitchen and small locker rooms used for a fitness center, meetings, banquets, performance, parties, clubs, movies, and events. This floor looks out over the Bay and would have a balcony.
- Top floor: two Homeowner Association (HOA) manager apartments, HOA office.
 Onsite management supports high quality attention, security, and services.
- Neighborhood Café: The neighborhood café on the second floor has sweeping views of the Bay, Mount Tam, downtown San Francisco, and down the peninsula to San Jose. Ideally, it would be a combination of bakery, pastry shop, café, restaurant, take-out, ice cream parlor and coffee shop.
- Village Square: A small park with large native trees (redwood, live oak, laurel, sycamore, buckeye), public art, and benches around a fountain is at the heart

of the center, a place to meet friends and visitors or relax in warm weather.

- Palisade St.: Parking reserved for public cars (car share/rental, taxi, e-hail (Lyft, Uber).
- Bicycle parking.
- Condos on the square have ground floors convertible to retail uses as demand allows.



Bayview Village Center

Floor plans

Bayview is intended for a mix of incomes, kinds of families, and ages. Bayview includes more large units than usual. The current plan calls for 6 studios, 26 one-bedroom apartments, 336 two-bedroom condominiums, 185 three-bedroom townhouses, 88 four-bedroom townhouses, and 61 fivebedroom townhouses. Actual types would respond to sales. Some units would be available to low income seniors and families. See Affordability for four-bedroom townhouse floor plan.

The use of bedrooms in the townhouses is flexible for a family room, study, work room or guest room, or storage. The three-bedroom ground floor has a large flex space for a bedroom, home office or secondary unit.

Buyers would have some flexibility in the floorplan within limits set by the front door, stairway, plumbing core and exterior walls. Walls could be adjusted for walk-in closets, bathrooms, a separate toilet room, bigger shower stalls, kitchen island, closet-bath combo, a wall for Wii or a big TV screen, and nooks for a computer or dog bed. The Floor Plan Options would include a few specific choices planned in advance.





Affordability

Four-bedroom Townhouse

1,700 square feet; 3 ½ bathrooms, patio Est. \$504,000 (\$750,000 with parking)

Q: If I buy it without parking, where do I park my car?

A: There is no parking next to the unit. There is no parking on the walkway. There is no parking for you in the adjacent neighborhood. There is parking about 100 to 200 yards away for \$150 per month or so. There is parking further away at a lower cost.

Q: But if I can't park my car next to my house, how will I get around?

A: You should be in the specific market for which the project is designed. You will have the special mobility designed for this project.

Q: What If I can afford \$504,000 and not \$750,000?

A: You should think about a new way to get around. And it gets better. You may qualify for a transportationefficient mortgage because the money you save on not owning or operating a car can apply to how much you can pay for the mortgage. You may qualify for an energyefficient mortgage because you pay less for energy.

Q: Energy? How is that relevant?

Living costs are much lower. They include the house, energy, and transportation. Bayview units are "tight"—highly insulated with very low heating and cooling costs. They use photovoltaic thermal energy system, heat pumps, induction stoves, and other technology to bring utility bills below PG&E. With lower mortgage, transportation, and energy costs, you save a lot.



Q with an A: No thanks—I have to commute an hour by car on a congested freeway to get to work.

Q with an A: Yes! I'm in a specific market where this works for me.

Living Costs

Living costs include living space, home energy use, and transportation costs combined. Living costs less in the walkway system than in suburbia or conventional smart growth, with comparable mobility. Bayview Village would provide 702 high-quality homes at prices mostly affordable to moderate incomes for the East Bay area. HAPA estimates show that only the five-bedroom townhouse is above the HUD affordability cut-off.

The project achieves affordability with more efficient land use, low-cost housing design, and lower home maintenance costs. HOA services eliminate many of the direct maintenance costs of home owning. HOA services save time and alleviate homeowners of work they may not want to do, or may not be able to do.

- Parking is optional and spaces are leased, reducing the cost of housing. Parking pays its own way, separate from housing.
- Less land is used for streets and parking, allowing more land to be used for housing and reducing the housing cost.
- Energy-efficient integral roofs with mechanical underneath support zero net on the grid.
- Efficient foundations serve several row houses and sixplex condos.
- Efficient three-story construction, and advanced energy and water savings built in, saving on utilities.
- Phasing of site development reduces carrying costs, getting sale income closer to outlays.
- Added costs of sustainable mobility



are more than offset by savings.

• The plan supports living without owning a car, saving more money.

Bayview would use low-cost housing design that reduces cost without affecting quality. Using only rectangular "four-square" foundations and efficient floor plans lowers costs. Foundations could use post-tensioned slabs using reusable steel forms and factoryassembled rebar modules. The modular sizing of foundations allows reuse of the forms and many uses of the same rebar format.

Computer-aided Design (CAD) can be used to minimize minimal waste of lumber, walls, and other building materials and increase efficiencies in construction. Repeated wall panels with the same design may have economies of scale that make it efficient to make them as modules in a factory on large jigs. Modules are transported and assembled onto foundations and bolted into place. Modular floor plans with common dimensions make it easy to shift among unit types to respond to market demand. Technology would be determined by what is most cost-effective at the time of construction.

The design saves an estimated 20 percent on housing construction costs relative to conventional building. Some of the cost of housing goes to HOA assets, for a net price reduction of about 15 percent for

the same interior space and floor plans as a singlefamily house. The comparison is complicated because Bayview provides more than a typical suburban house. Some of the investment is needed for mobility, like the Bus, and some is extra amenity, like the Village Center.

Sustainability

Bayview Village is the most sustainable development ever proposed for California to date and should achieve a platinum rating from LEED (Leadership in Energy and Environmental Design) for neighborhoods. The project uses photovoltaic and thermal energy, uses native drought-resistant landscaping, retains stormwater on site, uses water efficient fixtures, minimizes solid waste, has highly energy conserving construction, and uses energy-efficient appliances and

Water

- Bayview would have low water consumption and low pollution. There would be no private over-watering of the yard, hosing off sidewalks, or washing cars.
- Walkways would be permeable grasscrete for ground storage of water. Rain barrels would retain rain from roofs for irrigation. Walkway permeability and unit density significantly reduce the impacts of pavement, reducing storm-water runoff and heat-island effect.
- The storm water system would meet "C.3" requirements for on-site retention. Storm water would be stored and filtered mechanically in two-foot diameter retention pipes running underground on walkways and courtyards.



electronics. The alternative mobility features described below dramatically reduce air pollution and greenhouse gases.

The sustainability of Bayview is a result of the features discussed in other sections: The housing uses sustainable materials and minimizes construction waste. The energy system is sustainable. Green mobility reduces fossil fuel use and reduces pollution. This section discusses water, energy, and biodiversity.

- Hayward enjoys pristine Hetch Hetchy potable water, with service already on the site. Water use would be conserved through EPA WaterSense certified fixtures: dual flush toilets using 1.6 gallons per big flush, showerheads restricted to two gallons per minute, and washing machines using 14 gallons per load.
- The plan would have greywater systems, such as going from sink to toilet tank, and from washing machines to landscaping. No potable water would be used for irrigation.
- The City does not have data on available capacity in the Carlos Bee sewer. Sewer flows reduced by green water policies may fit within the capacity on Palisade Street.



Energy

Green energy has two major components, passive energy to reduce the need for active energy and active energy to supply what is needed.

Passive energy is in the building, using tight construction, insulation, and energy-efficient windows and doors which insulate the unit against outside temperatures, reducing the need for active energy. Additional passive energy design includes building orientation to the sun, larger south facing windows to gain heat in winter, thermal mass to absorb heat, and overhangs outside to increase shade during summer. Bayview will use computer modeling to design efficient buildings.

For active energy, buildings in Bayview Village will have optimal roof orientation for solar energy. A three-story building has just enough roof area to have solar collectors which, when combined with building efficiency, supply all the energy needed for three floors of living space below. For example, the electrical and thermal needs of a two-bedroom flat require a PV system capacity of 2.82 kilowatts (kW) and for a four-bedroom townhouse require a capacity of 4.32 kW. Three-story construction using wood frame and no elevators (except the Palisade Building and Community Center) also avoids the higher cost of higher buildings while using land more efficiently than lower buildings.

The active energy would come from PV-T AIR, which is photovoltaic plus thermal with insulation, glazing, and diffuse reflectors using air rather than water to move heat. The system is a sloped roof, meaning that it is not built on the roof; it is the roof, with no need to build a roof and then put collectors on top. The integral roof makes it easy to design panels that extend out from the top of the wall as eaves and have gutter attached, providing weather protection and getting more area and reducing costs.

Green energy would supply all electrical needs, space heat, hot water, fresh air, and clean air, and most space cooling with no fossil fuel use. Over the course of a year, a properly managed dwelling supplies surplus energy to the grid during summer and takes the same amount of energy off during the winter: "net zero on the grid".





Biodiversity

The parks and open space are sustainable. The site plan envisions eleven acres of surrounding natural open space and steep rock face, two acres of parks, the 238 Foothill Trail, a trail up to a picnic area overlooking the San Francisco Bay, and even two small plazas, a tot lot, and a bocce ball court.

Five small parks and other landscaped areas would have drought-tolerant native plants and be irrigated with a combination of stored storm water, filtered rain water, greywater, and seasonal ponds. The parks would have fire pits, grills and sheltered picnic tables.

The Bayview Village project would benefit the environment by replacing sparse vegetation and rock of the quarry with native plants, enriching habitat and bird life. Existing historic habitat, the wooded slopes in the Dobbel Creek area, would be protected.

The project would conserve land relative to suburbia. The density of Bayview, about 48 units per net acre, is twelve times denser than suburbia at about 4 units per acre. Bayview uses about eight percent of the area used by a typical suburban area. The figures for other kinds of density measurement—units per gross acre, persons per net acre, and persons per gross acre—have similar ratios. Bayview uses far less land than suburbia, saving agricultural and natural land.

Solid waste in Bayview seems likely to be similar to other neighborhoods. The project would make segregation and recycling of waste materials easy. The HOA would keep litter picked up.







Alternative Mobility

Bayview uses numerous policies to deal with the private automobile.

Bayview Village provides ample mobility without requiring a private car parked next to the dwelling. Bayview reduces the need for auto trips. The site itself would have destinations: a café with a view of the bay, recreation (fitness center, regional trail), and community activities in the Village Center.

Walking, cycling, shopping carts

In Bayview, proximity, density, and design make walking a major form of transportation. Walking increases when supported by design, the critical features of which are density, safety, aesthetics, direct routes which support short walking distances. Bayview Village tries to balance the need to get people to walk more with their reluctance to do so.

Village Bus

Instead of a house with bundled vehicle parking, residents buy a house and HOA assets, including a small bus system, the Village Bus. The unit price includes a prorated capital cost, and the HOA dues cover operating costs. The HOA owns and manages the Bus with a contract operator. Because the cost of the Bus is shared by everyone through home purchase and condo fees, it can provide service at a low cost.

Fast: The Village Bus would provide speedy access to stores, restaurants, and other businesses on a fixed direct route along Mission Blvd. and in downtown Hayward. Two minutes to campus; six minutes to downtown. Two small, 28-foot buses maneuverable in traffic; electric motor torque for fast hill climbing; signal preemption; right lane queue jumping, fast no-step boarding; no fare collection; proof of purchase enforcement; direct route; drop off at BART entrance.

Frequent: every ten minutes most of day; more frequent with campus cooperation.

Free: residents have eco-pass; system is paid for in purchase of units and HOA dues.

Sustainable: electric bus uses regenerative braking, has low emissions, low fuel costs, low maintenance costs.

Village Van, electrocart, deliveries

The HOA would own and manage a Village Van for several purposes like shopping, outings, and sporting and cultural events. The Village Van would be prioritized for taking kids to school and for after school activities. The local schools are Stonebrae Elementary School, Bret Harte Middle School, and Hayward High School. The electrocart would be used by HOA managers for some residential deliveries and maintenance of Bayview Village common assets.

Public Cars

Public cars are car share/rental, taxi, and e-hail, which are supported on site. The HOA would have arrangements with agencies for easy pick-ups and rentals. Palisade St. would have reserved spaces on the street for about 10 car share/rentals and drop-off/pickup for private cars.

Public Car Vouchers

Vouchers would support trips within Hayward for health care and rides home when the bus is not operating. Vouchers would be financed by HOA dues and surplus parking revenues.

On-site Parking

Bayview goals are accomplished by a limited number of on-site parking spaces leased at a market rate to residents. There are fewer spaces than units, 100 spaces for an eventual 702 units, and no parking next to the units, which may be the most controversial aspect of the project. The site would have a long parking lot on an extension of Overlook Avenue, 50 leased spaces on each side.

Off-site Parking

Off-site parking would be located on the back of a used car lot on Mission Blvd. near Bayview. The parking charge would be lower than on-site. This parking would be ideal for week-end and vacation use of a car.

Deparking Incentives

As demand for parking increases, some combination of increased parking and deparking incentives may be needed. Deparking incentives consist of the increasing cost at auctions of spaces and of a payment to a lease holder to give up the space for construction. The increasing value of lots provides funds to buy out a lease as a final nudge to live more sustainably and economically.

Longer Trips

Single family residents taking longer trips need to have the yard taken care of while gone and to provide for security, and they may need to pay for parking at an airport. In Bayview, HOA services take care of these problems, making it easy to go on trips.

Residents in Bayview would have about the same travel time to the Oakland Airport as people in the surrounding suburbia. They could take a taxi or e-hail all the way or take the Village Bus to the Hayward BART station and BART shuttle from the Coliseum BART station to the airport. BART goes directly into the San Francisco International Airport. Similarly, they could reach the Hayward Amtrak station and the major Amtrak station in Oakland's Jack London Square using the same modes.



BART to campus direct route



30 foot electric bus



no step entry:, low floor raised sidewalk

Walkways

Bayview Village uses walkways to reach condominiums and townhouses, with limited parking on an extension of Overlook Ave. The design serves specific markets that do not need routine use of a personal car parked on site. For these markets, Bayview provides ample mobility using alternative modes., less auto dependency, and more use of other modes than other designs. Increased walking and common facilities support a sense of community.

The median walk time from a front door to coffee and breakfast in the café is 2 minutes 30 seconds.

Use of the walkways is limited to walking, bicycles, tricycles, shopping carts, public safety vehicles, wheelchairs, garbage trucks, and moving vans. Most deliveries are managed using mail boxes and drop boxes at each residence. Entries of units have space for bicycles and shopping carts.

Travel time budgets

To compete with the automobile, Bayview provides acceptable times for commuting, shopping, meals out, long trips, and other trip purposes for its markets. Travel time budgets are a better explanation of travel behavior than mode of travel. People do not minimize travel time; they optimize among travel time for primary trip purposes, housing quality, and what they can afford. Bayview dramatically reduces vehicle miles traveled (VMT) and pollution without affecting travel time mobility.

Understanding mobility:



Health and safety

Walking. Walking is culturally complicated. Some people may buy into Bayview just so t0 put themselves in a situation where they will walk more. Bayview is designed with nudges to encourage walking. Yet the design cannot go too far or it could lose sales. Walk distance to a car and the bus is one issue. Elevators are another. They are not planned for the condos and townhouses, but are planned in the Palisade Building, a hallway building of studio and one-bedroom units. Elevators in single houses are costly; elevators to hallways serving many units are more efficient.

Auto accidents. Bayview's walkways and less use of cars in general will reduce risks from auto accidents.

Exercise. Residents will walk more and get more exercise and be healthier. Stairways encourage walking inside. Units in Bayview front on walkways, with pedestrian friendly design. Residents walk to reach the Village Center and the parking lot. Bayview will have a fitness center, trails, parks, and some access to nearby sports fields, swimming pool, and tennis courts.

Overweight. A more active, less sedentary lifestyle help fitness and weight control.

Building materials. Buildings would be designed for health. Wall paneling would avoid plywood and particle board that use formaldehyde-based glues and resins. Floor coverings would be from sustainable sources, such as natural-fibers like wool, cotton, or hemp, with minimal stain repellants, and installed with tacks instead of adhesives. Paints, adhesives, and sealants would be low in volatile organic compounds (VOCs) and be Green Seal certified.

Noise. Noise pollution within buildings will be prevented by special sound proofing between units. Without cars there would be no traffic noise, but given the closeness of the units, the HOA will have to have clear rules about noise and enforce them.

Security. More walking requires high security. Security measures would include defensible space design (fencing, good sight lines, windows on the walkways, lighting, no hiding places). A manager would be on duty at all times, be available by cell phone, and would patrol the site on an unpredictable schedule. The main walkways would have security video surveillance (CCTV) monitored from the Village Center. There should be entry gates at the entries to the two main walkways which would be closed at night. The Foothill Trail would be gated at night. Special measures would be taken quickly if a security problem arises.







Attractive design

How to create a perception of spaciousness in a highdensity neighborhood? The issue is not how dense to build it, but how to build it dense—without looking dense.

The components of good design include building mass and setbacks, streetscapes, facades, and long views. Building mass and setbacks are defined by the shape, height and lengths of building facades and their distance across the street or walkway from each other. Human-scale, threeVictorian colors would have a light toned main color, a stronger contrasting trim color, and a flashy highlighting color.

From a cornucopia of possibilities, Bayview Village would incorporate a limited, coherent, set of design choices variety with a consistent theme. Buyers would be offered some choices that are affordable and have enduring eye appeal—a gift to the walkway.

story height has less mass than higher buildings and is only one story higher than typical single family. The distance between facades is 30 feet or more. The buildings avoid massiveness by



breaking up long walls with offsets among frontages, internal balconies, bay windows, and push-outs.

Focus groups would be used to determine the facades, colors, upgrade options, and floorplans that would appeal to the largest market.

Bayview Village proposes to use neo-Victorian design with lapped siding, dentils and brackets, roof cornices, transoms, slanted and square bay windows; balustrades, porches and porticos, decorative elements on walls, etc.

Streetscapes

The streetscape would look inviting, familiar, and comfortable, like an up-scale old neighborhood. Longer views down the walkways would be varied—a long graceful curve, views into a park, or facades at an angle from the viewpoint. Some views would be a short distance, others long. Five small parks provide for varied views. Some units will have views of the Bay to the west. Buildings would have ground level flower boxes. Walkways would have alternating trees and old-fashioned street lamps. Intersections could have statuary lions to create entry ways. Five feet of width between the walkways and building fronts would be planted and maintained by the homeowner or the HOA. The main walkway would have two small plazas.



Village Square

6 plex of 2-bedroom condominium

3-bedroom townhouse

Facades

Below are examples of Victorian facades and elements of Victorian design.



nine-light windows // lapped siding // roof cornices // gables // transoms // bay windows // balustrades // porches // porticos // sawn decoratives // window hoods and shields // quoins // bargeboards // spindle work // sticks // fish scale shingles // rosettes // buttons // bullets // sunbursts // dentils // beading // brackets // pilasters // columns and colonnettes with caps and capitals // friezes and panels with wreaths, rinceaux or garlands // balusters and balustrades // bannisters, newel posts and finials.

Community

Bayview Village will take what we have learned about condominium owner associations and improve on it.

The HOA

The Bayview Village Homeowners Association (HOA) would operate to have turnover on its Board, elections, and periodic rotating participation opportunities by all residents, balancing the need for institutional memory and experience with new voices and expanding the network of people who know each other.

The Board would retain on-site professional managers. The current estimate as of fall 2019 is that the Manager could be paid \$110,000 per year and the Assistant Manager, \$75,000, in both cases including the value of their apartments (which lowers their taxable income). The Board would work with a professional HOA management company on personnel issues.

The managers would manage the common assets, which are the walkways, landscaping, parks, open space, trails, the Village Center and its Community Center, Village Bus, Village Van, electrocart, and the parking lot. They would manage collection of HOA dues, certain condo sales, rentals by condo owners, vouchers, various services in the Community Center, security services, events, and maintenance of

the outsides of buildings.

The management would have an explicit responsibility to know everybody and managing problems early. The HOA would have clear rules for common nuisances and equally clear enforcement, well-understood before people move in.

The HOA and manager would sponsor community events that bring people together, such as holiday-related parties or movies or cook-outs.

Pets

The HOA would have rules for reviewing pets before a sale or rental to screen out pets with temperaments that would intimidate other residents or cause other problems for the community. The HOA would have rules for managing pets. Pets would generally have to be kept inside. Cats and dogs could be limited to two per household. Dogs would have dog park, basically fencing to keep dogs inside but free to run. The HOA would post rules dealing with pet poop, barking, and other nuisances.

Public Space and Privacy

Walkways and courtyards make it easy to know neighbors. The Village Center encourages social interaction at the office, mailboxes,

café, and Village Square. The design invites people outside in good weather to walk, jog, or sit.

I vant to be alone! The HOA will have guidelines for respecting privacy and those who want privacy will have it.



The Market







Developers typically consider comparables based on auto-dpendency for all buyers. Bayview challenges developers to consider the viability of alternative mobility for specific markets. Bayview would primarily sell to a market that does not routinely commute by personal car: Cal State East Bay, people going downtown and to BART, home occupation and work at home, and retired.

CSU East Bay Hayward

Administrators, staff, faculty, students, and others who want to live close to the university would have a twominute ride on the Village Bus or an easy walk to the center of the campus. Bayview would help the university provide affordable housing very close to the campus for students and faculty. Afordable rentals for students are a major Bayview market, helped by minimal parking.

BART, downtown, and bus riders

Residents can reach Hayward BART, regional buses, downtown Hayward, and other local employment in the Mission corridor. The Village Bus reaches BART in six minutes with an estimated average travel time of 15 minutes. Hunt for parking and park? Nope. Cost of parking at BART? Zero.

Work at home, home occupation, home office workers

The three-bedroom townhouse has 340 square feet of flex space, especially designed for a home office, telecommuting, work-at-home, workshop or other use, and the other units can also serve these purposes.

Retirees and seniors

For retirees and seniors, life in Bayview Village is free of house and yard maintenance; the HOA does all the outside work. If driving skills are declining, Bayview Village offers alternative mobility. Empty-nesters may be tired of rattling around an empty house. Bayview Village makes travel easy: lock the front door and you're on your way. Bayview provides a peaceful and safe environment with opportunities for social and recreational activities.







Lifestyle markets









Families

Experience elsewhere shows that safe walkways are a magnet for families. Bayview would have a Tot Lot or two. The Village Van would chauffeur to schools and children's activities. A few handy seniors might want to do some babysitting.

People with Disabilities

No car traffic and no curbs. Walkways easy for wheelchair use. Ground entries have no steps. Units in the Palisade Building accessed by halls and elevators. The Bus will have no-step entry with wide doors.

Health Seekers

Residents will have low pollution and free access to a fitness center, parks, hiking trails, and nearby swimming pool, tennis courts, and playing fields. Some people want an environment where they walk more for health.

Environmentalists

Bayview Village is super green, achieving goals relating to greenhouse gases, passive solar, net zero solar energy reduced vehicle emissions, and habitat enrichment.

Co-housing, social community

Community-seekers value the kind of easy sociability

Bayview provides along walkways, in little parks, and at the Village Centers, while in suburbia people pass each other in cars and may have few neighbors. Bayview could accommodate some co-housing, a small collection of families with separate units in a contiguous area, perhaps sharing a common space, like a garden.







Wanted: Investors with imagination, deep pockets, and a long-time horizon, who want to make history as well as money.

Walkways vs Cars

More land in streets with parking means fewer units. Parking underneath means a higher cost per square foot of living space. HAPA analyzed the quarry site using a land use design program, Design CAD, to change the ROW (right-of-way) and the units among plans. The analysis compared a Cars plan with narrow streets (36 feet wide; 8foot parking lanes; 10-foot travel lanes) to a Walkway Plan with walkways 20 feet wide. The areas for parks, setbacks, floorplans, building height and so on were otherwise kept the same.

The analysis also assumed one underneath parking space per unit for two-bedroom condos and two underneath spaces for townhouses. We found that streets with parking and parking underneath caused a 36 percent reduction in the number of units possible—737 for walkways and 468 for cars. The wider right of way and wider units took more area per unit.

An analysis of building costs using Building-Cost.net for 2019 found that parking underneath increased costs for a three-bedroom townhouse for the same living space. Cost per lot went up 49 percent. Increased building costs and increased lot costs combined to make unit price go up from \$460,800 to \$653,400, 42 percent. Infrastructure costs were also higher with streets and parking.

The right-of-way shown in the Request for Qualifications in the figure for Roadway Typical Section was even wider: 50 feet wide.

Selling more units at a lower cost would be more profitable. (See Walkways vs cars.docx for more details.)

Financing

An extensive proforma for Bayview available from HAPA shows a rate of return for 702 units over nine years with a 20 to 30 percent internal rate of return on equity using the Excel Goal Seek macro. It has a year for entitlement, a year for design, a year and half for site improvements to first building pads, and 32 sales in year 4 quarter 3. The proforma has 18 Pages: Inputs, Sales, Summary, GMA (Gross Margin Analysis) by Construction Phase, GMA by Unit Type, Cash Flow, Timing, Land, Project Team, Project Fees, Site Improvements, Site Improvements by Phase, Building Team, Building Fees, Residential Buildings, Energy, HOA Assets and Parking proforma.

One estimate in 2019 ranged from about \$160,000 for a studio to \$588,000 for five bedrooms; others have assumed higher prices. Dues to the HOA (Homeowners Association) would run from about \$140 to \$200 per month.

Reducing Risk

Given the lack of comparables but the extremely strong pricing incentives for the specific markets to buy units, the absorption rate is particularly difficult to predict. Four risk reduction strategies are proposed.

Market research: A proposal by InterQ using travel diaries, interviews, and focus groups of the specific markets would be helpful; conventional market research is irrelevant. [link]

Reservations: A target for reservations could be stipulated before significant investment. The California Department of Real Estate allows a developer to take money down to reserve unit, based on having entitlement. The City could cooperate on expedited entitlement and getting an Overall Preliminary Public Report from DRE. Falling short on reservations would alleviate the developer's obligation to build the project.

Parking: Parking supply could increase to the extent the non-car modes system falls short of minimal absorption, but still limiting parking to one per household and maintaining deparking incentives.

Fall back plan: If absorption falls short of a two-year target, it would allow shifting to an approved fall back plan with more parking.

Other savings are available from phasing site improvements and phasing the implementation of HOA assets.