



WARD NEIGHBORHOOD

MASTER PLAN

A new kind of neighborhood bringing new life

and opportunity to the heart of Honolulu.

A MASTER PLAN SUBMITTAL TO THE HAWAII COMMUNITY DEVELOPMENT AUTHORITY
PREPARED BY GENERAL GROWTH PROPERTIES INC.

Date April 2, 2008
GGP FINAL



WARD NEIGHBORHOOD

MASTER PLAN

TABLE OF CONTENTS

5	<i>Executive Summary</i>	89	<i>Infrastructure</i> Existing Infrastructure Infrastructure Development Requirements
11	<i>Existing Conditions</i> Ward Properties Today Current Zoning The Opportunity	97	<i>Sustainability</i> Growing Smarter Comparing Impacts Sustainability Focus Areas
19	<i>Mixed-Use Neighborhood</i> Live: Housing Work: Businesses Play: Shopping & Dining	103	<i>Cultural Resources</i> Neighborhood History Defining Cultural Resources Potential Cultural Programs
27	<i>Design Strategies</i> Strategy 1: Connected Public Spaces Strategy 2: Auahi Street as a Pedestrian Promenade Strategy 3: Mauka-Makai View Corridors Strategy 4: Streetscape Design	107	<i>Community Engagement</i> Public Information / Media Relations Community Leader Briefings Charrette: Open Spaces / Public Spaces Charrette: Creating a Livable Neighborhood
53	<i>Development Strategies</i> Urban Form Area Summary Land Block Tabulation Level Plans Phasing Design Guidelines Implementation	113	<i>Master Plan Summary</i> Consistency with Specific Elements Conformance with the Mauka Area Plan and Rules Requested Modifications to the Mauka Area Plan and Rules Compliance
73	<i>Transportation</i> Existing Transportation Context Proposed Transportation Strategy	129	<i>The Team</i>



A *new* kind of neighborhood bringing new *life*
and *opportunity* to the *heart* of Honolulu.

EXECUTIVE SUMMARY





EXECUTIVE SUMMARY

What sets Ward Neighborhood apart?

How do you create a new kind of neighborhood in the heart of Honolulu? First, bring together the past, present and future in a way that is unique to the spirit of Kaka'ako and Hawai'i. Second, embrace the qualities that are so important to people today, from a diversity of housing to economic viability to environmental stewardship.

The Ward Neighborhood Master Plan is a long-range plan of 20-plus years that would evolve over time to fulfill the needs of the community. It follows the guidelines set forth in the Mauka Area Plan of the Hawai'i Community Development Authority.

The Plan builds on the legacy of the 300+ businesses that have helped to define the Ward personality. They range from large retailers to unique boutiques that have become resident favorites and include small businesses operated by long-time owners with can-do attitudes and dedicated work ethics. A goal of Ward Neighborhood is to create better locations and even more potential for

these existing businesses. The neighborhood hopes to welcome new local and national retailers as well, along with entrepreneurs who want to bring their fresh ideas to this stimulating urban environment.

For decades, Ward has been a favorite gathering place for friends socializing, business interactions, family celebrations and community events. Ward Neighborhood would build on this tradition, creating a vibrant place to live, work and play that can be a magnet for people of all ages and backgrounds.

The Central Plaza will reach out toward Kewalo Basin and the Ko'olau Mountains, providing inspiration for residents and visitors. Two additional public plazas would be located on the Diamond Head and 'Ewa ends of the community. Auahi Street could be transformed into a thoroughfare that is both intimate and grand, ideal for strolling, window shopping and outdoor dining, shaded by a large canopy of street trees. These are the cornerstones of a community that can become favorite gathering places and create connections with surrounding neighborhoods.

Hawaii's multicultural diversity would be celebrated in Ward Neighborhood. Here will be a place to raise a family or to grow an international business. Residents and visitors—people of all ages and incomes—can be part of an



The Perfect Balance

Housing for a variety of incomes and lifestyles

Local & national retailers

Entertainment attractions

Casual & fine dining

Office space

Community space

Gathering places

Transportation choices

Sustainable design and building practices

EXECUTIVE SUMMARY

WARD NEIGHBORHOOD

MASTER PLAN | 5



exciting community that captures the entrepreneurial spirit of Kaka'ako and transforms it into a place that can be different from any other urban destination worldwide.

Finally, Ward Neighborhood will strive to adopt many principles for sustainability in its development practices. The input of the community can help guide the common vision of this most uncommon Neighborhood, creating a prosperity that should carry it well into the future.

The Heart of Ward Neighborhood

Imagine a lively urban gathering place that sings with the mele of children, celebrates the art, history and culture of Hawai'i, and provides inspiring views of the harbor and ocean. This place of world-class significance will be the Central Plaza of Ward Neighborhood. As part of the first phase of development, it should set the tone for great things to come. Shopping and dining experiences can become a part of the street level, with a blend of office and residential spaces on the levels above.

Encompassing 3.25 acres, the Central Plaza can be a magnet for family gatherings, community events and multi-cultural celebrations. More than 250 yards in length and with a public space larger than two football fields in size, the Plaza will extend and open to Kewalo Basin, creating views that bridge the sea and the city.

The Central Plaza would be a place where Hawaii's people can honor their past and celebrate traditional island values. It can be a place where keiki will perform their first hula and local artists may share their unique island music and art. Where friends can gather to talk story over a cup of coffee, passersby may enjoy an impromptu ukulele session, and people of all ages can enjoy the warm Hawaiian sun. Here, the essence of aloha will fill the air—every day of the year.

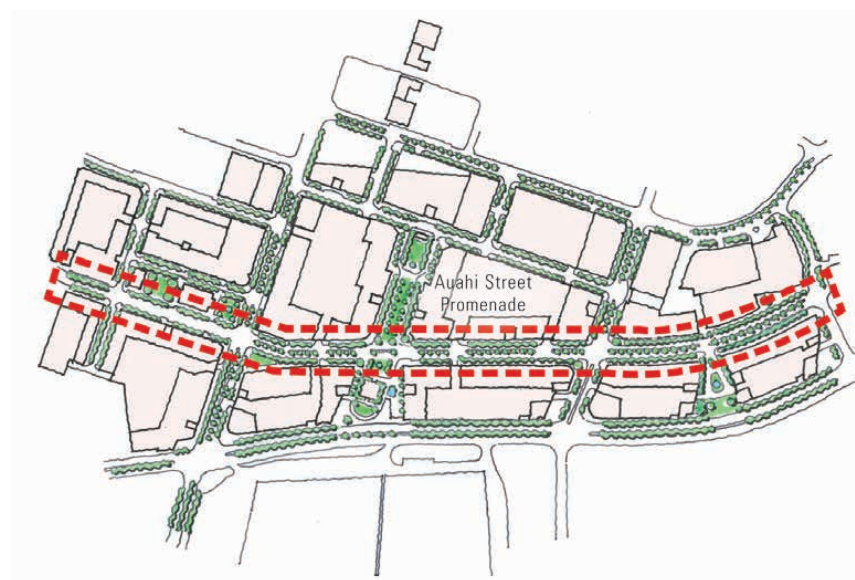
In addition to the Central Plaza, two major public plazas can become gathering places for the Diamond Head and 'Ewa areas of Ward Neighborhood. These three plazas, totaling more than five acres, will serve as the front yards for the surrounding residences. Along with parks, the plazas would offer beautiful green spaces for families to enjoy and children to play.



Auahi Street Reborn

If the Central Plaza is the heart of the community, then Auahi Street becomes the main link bringing the entire Neighborhood together. It would be a pedestrian-friendly boulevard lined with trees, gardens, open seating areas and outdoor art. The residential and commercial components would blend seamlessly within the overall design of the community. Urban dwellers will be able to find shopping, restaurant and entertainment venues just steps from their doorways.

Radiating from Auahi Street, a network of streets is envisioned. Green medians and wider sidewalks are planned to enhance the pedestrian experience and ensure safer crossings. Underground utilities will eliminate visual clutter. Landscaping and amenities such as lampposts and benches will conform to an aesthetically pleasing set of design standards. The streets would provide pedestrian, vehicular, transit and bicycle access to public places within the community and to adjacent neighborhoods.





The Benefits

More housing
and jobs per acre

Less land per person

Reduced energy
consumption

Reduced automobile
dependency

Positive health impacts

Smaller carbon footprint

Reduced water
consumption

Lower infrastructure
costs



Ocean view from Kewalo Basin



Preserving and Enhancing Views

The preservation and enhancement of the mauka and makai views from Ward Neighborhood requires careful attention. The orientation of buildings, street access points and the location of key public spaces will all be taken into consideration as the Master Plan unfolds.

Homes, shops and restaurants will share the existing views that extend mauka to makai on Ward Avenue and Kamake'e Street. The views from sidewalks, parks and plazas will be impressive for shoppers, visitors and residents alike.

The Central Plaza would open up to the south shore of Kewalo Basin, creating a gateway to Kaka'ako via Ala Moana Boulevard. Many will be able to enjoy the wide-open ocean views and the access to Ala Moana Beach Park and Kewalo Basin Park.

Growing Smarter

Our aspiration is to create a community inspired and guided by the spirit of environmental stewardship. With its rebirth, Ward Neighborhood will strive to fulfill a "triple bottom line:" maximizing economic, environmental and community assets.

Ward Neighborhood presents a new opportunity for smart growth on O'ahu. The Master Plan calls for compact development, incorporating environmental sustainability through the careful consideration of land use along with the responsible design and operation of the buildings.

As a place to live, work and play, Ward Neighborhood promises to be a steward of Hawaii's precious land and natural resources. The Neighborhood endeavors to be pedestrian friendly. Transportation and parking would be designed to enhance its residential quality. Bicycle paths and mass transit would provide alternatives to driving.



Supporting the Mauka Area Plan

The proposed revisions to the Hawai‘i Community Development Authority (HCDA) Mauka Area Plan recommend three fundamental objectives for Kaka‘ako:

1. Develop urban village neighborhoods.
2. Create great public places.
3. Make the connections with a balanced set of transportation modes.

By bringing a community to life that embraces the values, views and diversity of Kaka‘ako, the Ward Neighborhood Master Plan captures the spirit and vision of the Mauka Area Plan. Efficient and alternative transportation modes would be provided. Public spaces can be reenergized. By honoring what has come before, Ward Neighborhood will blossom into a vibrant, energetic, authentic urban village.

Ward Neighborhood | This is just the beginning.



EXISTING CONDITIONS





EXISTING CONDITIONS

The Ward Neighborhood Master Plan proposes redevelopment of numerous contiguous properties comprising approximately 60 acres in the Kakaʻako Mauka area.

Originally, Kakaʻako was low-lying swampland utilized by King Kamehameha I for recreation, fish ponds and salt production. As the area was filled in, it evolved into a working class neighborhood of homes above shops, churches, schools and parks. In the 1950s, the area encompassing the Ward properties was rezoned from residential to industrial, then developed in the 1970s into a series of low-rise shopping centers.





Ward Properties Today

The Ward properties are bordered on the mauka side by Queen Street and Halekauwila Street, on the Diamond Head end by Queen Lane and residential towers, on the 'Ewa side generally by 'Ohe Lane, and on the makai side by Ala Moana Boulevard. Smaller parcels are located between Queen and Waimanu Streets, and on the corner of Kapi'olani Boulevard and Ward Avenue. A Master Plan boundary map indicating Tax Map Keys (TMKs) for the properties is included at the end of the chapter titled "Master Plan Summary."

The site is enhanced by its immediate proximity to Downtown Honolulu, the Ala Moana and Kaka'ako Waterfront regional parks, and the Ala Moana

Center. It is further enhanced by its proximity to the Kamehameha Schools properties on the 'Ewa end, which are envisioned as a mixed-use redevelopment and home for new life-sciences facilities.

The geographic location also provides the opportunity to visually reinforce the natural linkage between the mountains and the sea through a system of view corridors, public spaces and transportation routes.

Redevelopment of the Ward properties offers the potential to create an exciting synergy of inter-related and complementary neighborhoods that link Downtown Honolulu and Ala Moana.

Taking a Closer Look

Today, the primary developments on the site are Ward Gateway Center, Ward Farmers Market, Ward Entertainment Center, Ward Warehouse and Ward Centers. Home to one-of-a-kind retailers, popular food establishments, entertainment venues, service providers and other thriving enterprises, this vibrant area is a destination for Honolulu residents. It supports an eclectic mix of successful companies from national chains and big box retailers, to mom-and-pop businesses and long-time entrepreneurs.

The buildings on the Ward properties are predominately one and two story retail and commercial structures, with the exception of a seven story office building on the Diamond Head end, a theatre/entertainment complex, and several multi-story parking structures. Currently, retail and restaurant uses total more than 600,000 square feet, while storage and office areas take up more than 370,000 square feet. With the addition of the parking structure that is being constructed near the corner of Kamake'e and Queen Streets, the number of parking stalls on the properties total more than 4,400.

The ages and styles of the buildings vary throughout the Ward properties. The Ward Industrial Center operates today in the original Quonset hut design. Two office buildings anchor the property and were built in the 1950s and 1960s, as were other buildings located on the 'Ewa side of Ward Avenue. The retail uses were added to the property over the last thirty-three years with the wood-built Ward Warehouse, the oldest building, constructed in 1975. Ward Centre was built in the 1980s and upgraded in 2005 with the addition of the Auahi Street Shops. In 2002, the Ward Entertainment Center opened with the state-of-the-art Ward 16 screen theater.

Over more than twenty years, the Ward Neighborhood Master Plan will be transformed into a community that could be as much as 80% residential in use, with the balance in retail, commercial and office uses. Buildings will vary in height, with a combination of low-, mid-rise and high-rise structures. Parking will be increased, with a minimum of 9,600 spaces.

There is parallel parking along Ward Avenue, Auahi and Kamake'e Streets. Additional parking is provided by a mix of surface lots and parking decks.

Although traffic levels on internal streets are generally low, Ward Avenue and Ala Moana Boulevard have high traffic volumes and do not work well for pedestrians and cyclists. In contrast, Auahi Street has low levels of traffic and has great potential to become a more pedestrian-friendly environment.



The grade changes on Auahi Street between buildings and streets are currently addressed by a mixture of stairs, rails, ramps and double sidewalks. Existing intersections and crosswalks are oversized, but can be more optimal for pedestrians. Landscaping, street trees and design elements vary along the street. Sidewalks are narrow and some storefronts face inward or are set back for parking.

Ward Properties - Existing Uses By Land Block

	LAND BLOCK 1	LAND BLOCK 2	LAND BLOCK 3	LAND BLOCK 4	LAND BLOCK 5	LAND BLOCK 6	TOTAL
USE (in Sq.Ft.)							
Retail	187,000	84,000	82,000	88,000	16,000	18,000	475,000
Restaurant / Fast Food	63,000	32,000	-	39,000	4,000	-	138,000
Theater / Entertainment	87,000	-	-	-	-	-	87,000
Storage / Office	83,000	-	-	-	197,000	-	280,000
Land Lease	-	-	-	-	129,000	-	129,000
Office	-	700	-	46,000	44,000	-	90,700
TOTAL:	420,000	116,700	82,000	173,000	390,000	18,000	1,199,700
PARKING (no. of stalls)							
Structured Parking	457	483	729*	620	212	-	2,501
Surface Parking							1,903
						TOTAL:	4,404

* Includes Ward Village Shops garage under construction



EXISTING CONDITIONS

WARD NEIGHBORHOOD



Current Zoning

The land use zones in the current HCDA Mauka Area Rules are as follows for the Ward properties:

Mixed-Use Zone Commercial (MUZ-C)—permits residential, commercial, light industrial and service industrial land uses, with an emphasis on commercial uses. The purpose of the MUZ-C Zone is to provide a mixed use sub-area, whereby residential, commercial, industrial and public uses may coexist. The primary emphasis within this zone is the development of a predominantly commercial multi-storied area. Typical uses include: (a) community-wide retail services and office commercial activities in easily

accessible and highly visible areas along major and secondary streets; (b) compatible mixing, at grade, of light and service industrial activities with commercial activities; and (c) residential activities nearby, yet separated from, commercial and industrial activities.

Mixed-Use Zone Residential (MUZ-R)—permits residential, commercial, light industrial and service industrial uses, with an emphasis on residential uses. The purpose of the MUZ-R Zone is to provide a mixture of light industrial, service industrial and neighborhood type commercial activities in areas which are primarily allocated to residential activities.

Ward Properties – Permitted Uses Summary

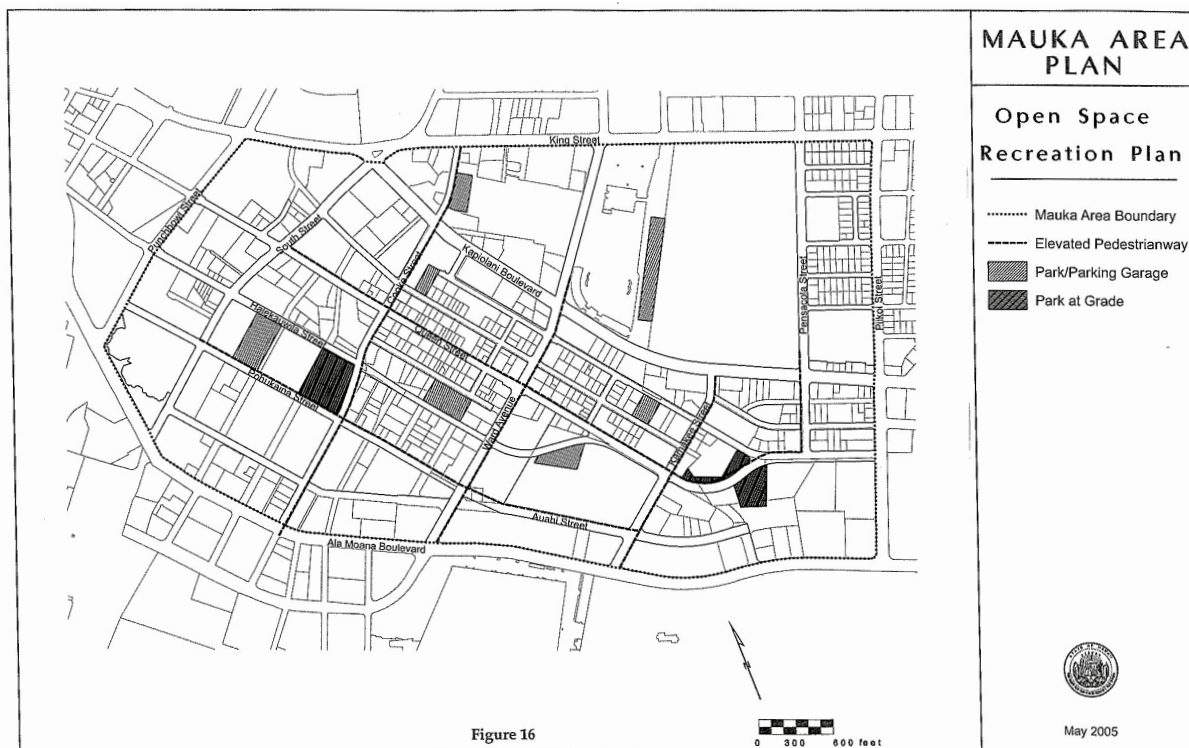
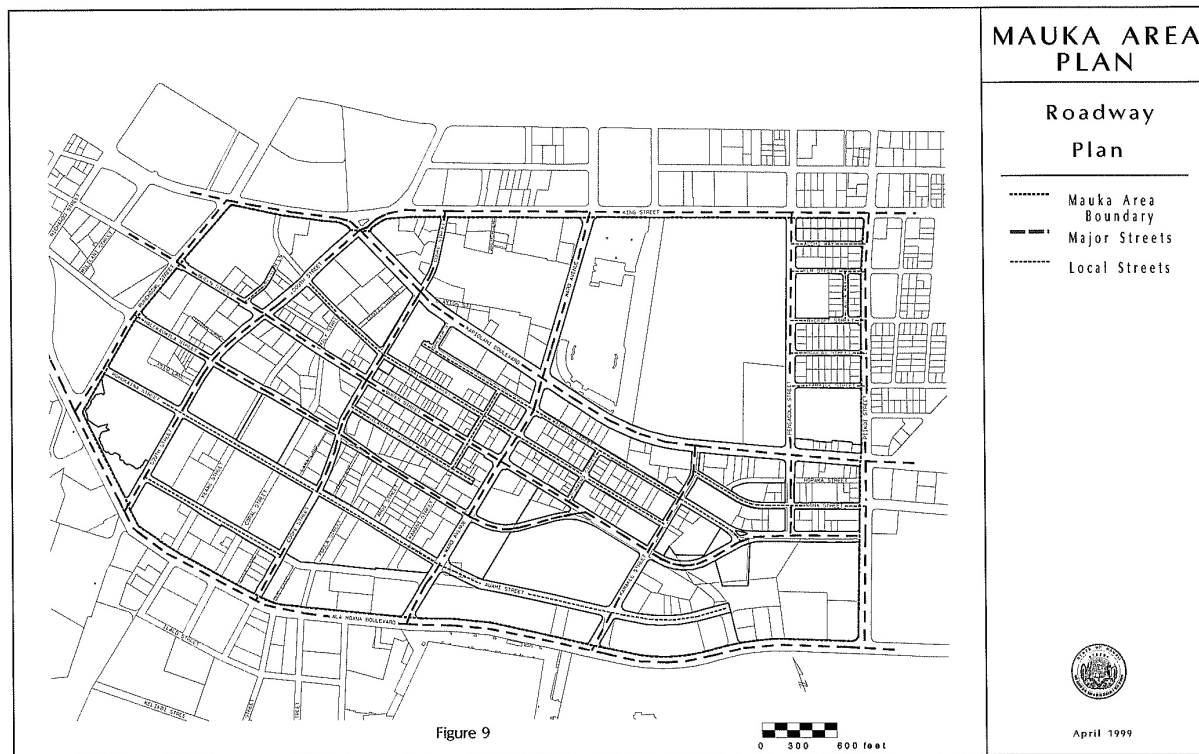
MUZ-C TMK	Area (sq ft)	MUZ-R TMK	Area (sq ft)		
2-1-049:063	14,989	2-1-050:001	5,000	“	5,000
2-1-049:080	11,637	“	5,000	“	5,000
2-1-056:001	7,500	“	5,000	“	5,000
“	7,500	2-1-050:061	27,124	2-1-052:043	5,000
“	7,500	2-1-050:062	5,000	“	5,000
“	7,500	“	4,644	“	5,000
“	7,100	2-1-052:011	4,958	“	5,000
“	7,100	2-1-052:012	19,650	2-1-052:045	5,000
“	7,100	2-1-052:016	4,012	2-1-052:046	5,000
“	7,100	2-1-052:017	4,958	“	5,000
“	9,200	“	4,958	“	5,000
“	6,636	2-1-052:020	43,543	2-1-052:051	6,250
“	5,445	2-1-052:022	37,261	2-1-052:052	6,250
“	7,255	“	3,829	2-1-052:053	7,500
“	5,200	“	16,371	2-1-053:001	129,979
2-3-001:001	24,287	“	19,958	“	32,312
“	7,159	“	19,958	“	13,625
“	25,000	2-1-052:024	18,115	“	32,182
2-3-001:004	25,000	2-1-052:027	10,000	“	6,769
2-3-001:005	273,684	2-1-052:028	5,000	2-1-053:030	41,135
2-3-002:002	10,120	“	5,000	2-3-002:001	477,582
2-3-002:059	247,168	“	4,858	2-3-002:067	9,159
2-3-003:065	10,000	2-1-052:031	4,958	2-3-002:086	2,430
2-3-003:093	10,000	2-1-052:032	4,958	2-3-002:087	3,809
2-3-005:004	11,603	“	4,958	2-3-002:104	161,619
2-3-005:005	25,391	“	4,958	2-3-003:022	10,000
2-3-005:006	181,024	2-1-052:033	6,250	2-3-003:094	10,000
2-3-005:012	12,688	2-1-052:034	6,250	2-3-005:013	159,291
2-3-02:69	7,873	2-1-052:035	7,500	2-3-005:014	10,609
		2-1-052:036	5,000	2-3-005:015	10,184
		“	5,000	2-3-005:016	9,138
		“	6,250	2-3-005:017	18,272
		2-1-052:038	6,250	“	9,978
		2-1-052:039	6,250	2-3-005:019	9,665
		2-1-052:040	6,250	“	8,452
		2-1-052:042	5,000	“	15,000
				2-3-005:022	19,570
Square Feet	989,759			Square Feet	1,629,789

	LAND AREA	ALLOWABLE FLOOR AREA	MAXIMUM COMMERCIAL	MAXIMUM RESIDENTIAL
Mixed Use Zone		3.5 FAR	1.2 FAR	Remaining Floor Area
Residential Emphasis (MUZ-R)	1,629,789 sf 37.41 ac	5,704,262 sf	1,955,747 sf	3,748,515 sf
Mixed Use Zone		3.5 FAR	60% of Total Floor Area	Remaining Floor Area
Commercial Emphasis (MUZ-C)	989,759 sf 22.72 ac	3,464,157 sf	2,078,494 sf	1,385,663 sf
TOTAL	2,619,548 sf 60.14 ac	9,168,418 sf	4,034,241 sf	5,134,177 sf

EXISTING CONDITIONS

WARD NEIGHBORHOOD

The current Mauka Area Plan includes the following Roadway and Open Space Recreation Plans.



The Opportunity

The location and size of the contiguous Ward properties present unique opportunities to enhance Kaka'ako's legacy and establish it as a diverse, vibrant mixed-use neighborhood. Through sensitive and creative planning, the Ward Neighborhood Master Plan can strive to:

- Build on the history and importance of Ward's place in people's lives.
- Develop the site with a diverse mix of uses, where people can live, work, visit, learn and be entertained.
- Provide significant open spaces—plazas, parks and community gathering spaces—by increasing density on some areas of the site and lowering it on others.
- Provide a significant amount of residential development to ensure the creation of sustainable, livable neighborhoods.
- Create new homes and growth opportunities for existing Ward businesses as well as additional businesses moving into the area.
- Respect and reinforce visual linkages between the mountains and the sea.
- Redevelop Auahi Street as a pedestrian-oriented, green urban promenade and principal shopping spine.
- Embrace planned future high-capacity transit.
- Enhance connectivity to the adjacent street systems, public parks and surrounding communities.
- Provide a master planned, comprehensive parking and traffic solution.

Comprising approximately 60 nearly contiguous acres, the Ward properties have an endearing tradition that has helped to define the local fabric, with small and large retailers that have become neighborhood favorites and businesses with a can-do attitude. For decades, it has been a favorite gathering place for family celebrations and community events. The future can be an evolution of this tradition.

All aspects of the proposed Ward Neighborhood Master Plan are based on the vision outlined in the Executive Summary. That vision will serve as an anchor, helping to assure that every part of the new Ward Neighborhood will be on a human scale, capturing the spirit of what came before and expressing the values of sustainability, community and culture.



MIXED-USE NEIGHBORHOOD





MIXED-USE NEIGHBORHOOD

Welcome back to the neighborhood! The old Kakaʻako neighborhood was a vibrant mix of homes, retail and restaurants. A variety of businesses was born to serve the community, and many are still going strong today. As the Ward Neighborhood Master Plan is implemented, the area will celebrate its roots as a place to live, work and play. Kakaʻako residents will be able to walk over for an evening saimin or run to the corner store for milk. It will be a gathering place for families and community groups.

Strategically located between Waikīkī and downtown Honolulu, the Kakaʻako district provides an unprecedented opportunity to create an integrated, livable urban environment; enabling people to live, shop, socialize, dine and be entertained right outside their front door rather than rely on their automobiles for everything they do.

The Ward Neighborhood Master Plan will guide the development of a new vibrant urban core, enabling residents to experience the synergy of a neighborhood that has so much to offer. Ward Neighborhood promises to set a new standard for an integrated lifestyle for the entire region.

A mixed-use development has positive implications for the vitality of the community. The evolution of the Ward properties to an urban village provides housing options not currently available in the Honolulu marketplace. The residential component will help to ensure that the area thrives and captures a sense of place. By creating a 24/7 environment, people will have a great sense of pride in the Ward community because they will be part of its fabric. This is what it takes to build a neighborhood—offer a variety of housing styles that will appeal to families, couples and singles of all ages and incomes.



Live in the Center of the Action

The plans for Ward Neighborhood include a mix of residential offerings at different price levels to fit a range of buyer profiles. This will enable a broader spectrum of people to live within the community than traditionally possible when designing a single high rise tower. It is possible that this community could begin to reshape the Honolulu housing market as it builds and evolves, offering alternatives to traditional residences in outlying areas that require longer commutes into “town.” Reducing drive time will enhance a resident’s quality of life.

A maintenance-free lifestyle can also mean less time focused on upkeep of homes and more time to enjoy the urban fabric and recreational opportunities created by Ward Neighborhood. Those who live in the Neighborhood will find themselves close to so much of the action, with a location in the heart of Honolulu between Downtown and Waikiki.



Within a five to ten minute walk from their residences, people living in Ward Neighborhood will be able to access supermarkets, personal services such as dry cleaners and hairdressers, and professional services such as doctors and dentists. With Ala Moana and Kaka’ako Waterfront Parks nearby, residents will find it convenient to step outside their doors for a leisurely walk or a several mile run.

Product Types for a Full Range of Housing Needs

The density and large number of units that can be accommodated on the property allow for a diverse mix of residences. High-rise, mid-rise, low-rise, lofts and town homes can all be offered at different price points during any given phase of the development. This type of diversity should create a more authentic sense of neighborhood and open the door for a broader spectrum of buyers at each phase.

High-rise

The high-rises of Ward Neighborhood would feature ocean and mountain views, with amenities such as health clubs, pools and outdoor recreation areas. A mix of floor plan types and sizes can include studio, one-, two- and three-bedroom floor plans. The high-rises will have a target audience of baby boomers, empty nesters and professionals.

Mid-rise

The mid-rise residential units will offer a unique urban core lifestyle. These units would feature a mix of floor plan types and sizes; studio, one-, two- and three-bedroom floor plans. Building amenities and building finishes can be tailored to various buyer profiles and target audiences, thus achieving a greater marketing reach.

Low-rise

The low-rise units can fulfill an urban core lifestyle with buildings situated closer to the street. These units feature a smaller boutique-style building format (fewer homes per building). This building type could be designed to target the needs and desires of a specific buyer profile. Units are likely to be composed of a mix of studio, one- and two-bedroom floor plans.

Lofts

Lofts would feature more open, minimalist and industrial design, tending toward higher ceilings along with alternative products as part of the interior finish materials. Lofts are geared toward those with an eye toward edgy, sophisticated architectural design. They are likely to be composed of a mix of studio, one- and two-bedroom floor plans.

Town homes

Town homes represent a housing type not typically found in new construction within urban centers, but are common in older urban areas. The town homes can provide a multi-level living opportunity that brings the residential feel even closer to the street and in some cases right down to street level. Typically, these units might include a mix of floor plans and sizes ranging from two bedrooms and three bedrooms to three bedrooms plus den.



Reserved Housing

The Ward Neighborhood Master Plan is committed to broadening housing opportunities and creating a diversity of residential types within the neighborhood.

The HCDA Mauka Area Rules require that 20% of the residential units be set aside as Reserved Housing units, targeting families of up to 140% of Annual Median Income (AMI). Reserved Housing is an essential part of the Master Plan's residential program. The HCDA Rules allow the development of Reserved Housing units offsite, or not on the land owned by General Growth Properties (GGP), but within Kaka'ako. The ability to develop these units offsite offers the kind of flexibility that is essential to meeting the needs of families who qualify for Reserved Housing.

In a given development phase, the Reserved Housing units will be built within two years of the development of market rate residential units, as required by the Mauka Area Rules. The reserved housing units in Ward Neighborhood may be integrated within mixed-use developments, located offsite within Kaka'ako or elsewhere as permitted.

The overall design of these homes will blend with the context of the Neighborhood. Building amenities, specifications, unit sizes as well as parking requirements will be adjusted in an effort to reduce construction costs while still addressing the needs of the community.



An Inviting Way of Life

Commuters arrive at the new transit station, go to the gym for a workout and get a latte on the way to the office.

A mainland visitor tries a spam musubi for the first time and enjoys the local entertainment and other cultural activities.

Friends stop to talk story with a family having dinner at an outdoor café.

Young mothers watch children gleefully play in a grassy area with a water-play fountain.

Couples stop for dessert after a movie or one of the outdoor evening performances.

Since Moving to Kaka'ako

"Since moving to Kaka'ako, I wake up at 7 a.m. refreshed and ready to go, instead of getting up at 5 a.m. and fighting the morning traffic from 'Ewa."

"We've been able to downsize our living space from 2100 square feet to 1500 square feet. It's easier for us to maintain and it's better for the environment, because we use less energy."

"Gasoline is expensive in Hawai'i. Because I can walk to work and almost everywhere else, I've dramatically reduced the miles I put on my car, which means less at the pump and more for me."



Work Close to Home

Currently, there are a number of Kaka'ako residents who already enjoy the lifestyle benefits of work locations within walking distance of their homes. Ward Neighborhood will continue this tradition, while at the same time attracting new residents who wish to give up their traffic-clogged commutes and live in "town," close to their places of work. Instead of waking up at 5 a.m. and making the long commute from an outlying community, residents of Ward Neighborhood will be able to sleep until 7 a.m., walk to work and be more refreshed during the day.

There will be many opportunities for small businesses to spring up in Ward Neighborhood, including medical offices or service businesses such as attorneys and CPAs. There is also great potential to provide space opportunities for "creative class" businesses such as the graphic arts, advertising or technology start-ups. The integrated environment of the new Ward Neighborhood will help bring them all together. The Master Plan currently provides for low-rise, mid-rise and high-rise office space to accommodate the needs of businesses in the Ward Neighborhood.



Play in the Neighborhood Day and Night

When fully implemented, the Ward Neighborhood Master Plan will include retail space interwoven with open space, active space and cultural amenities. Engaging storefronts and walkways will lead customers into a diverse and extensive retail experience and the unique public places of Ward Neighborhood. The stores and restaurants will serve area workers and residents, along with visitors and local residents from all over the island who will be attracted by the many choices and the events planned for public places.



Creating a Dynamic Retail Environment

The plans for the retail component of the development will support the character and values of the community in every way. The retail merchandising strategy will showcase local businesses and contribute to the celebration of Hawai'i that is at the heart of Ward Neighborhood's vision for the public places. In addition, exciting new retail concepts can be introduced to Hawai'i from the mainland and abroad. Customers will be able to eat, shop, run errands and socialize from early morning until late in the evening.

Ward Neighborhood is ideally suited for a dynamic retail environment, enhanced by the proximity to mass transit and the proposed office towers on the site. Easily accessible by car or public transit, and with abundant parking, the stores are expected to draw customers of all ages and from all areas of O'ahu. The retail component will play an important role in establishing this new gathering place for the city of Honolulu.

Putting Together the Right Tenant Mix

For many years, the retail shopping experience at Ward has been a vital part of the community culture, combining local, regional and national retailers. As the retail offerings of the area expand, the goal will be to relocate as many tenants as possible, a number of whom have dedicated local followings.

The quality and potential of Ward Neighborhood's retail mix is supported by the position of GGP as a leader in the shopping center industry. GGP is one of the largest U.S.-based publicly traded real estate investment trusts (REIT), based upon market capitalization. Best-known for its ownership or management of more than 200 shopping malls in 45 states, GGP has unprecedented ability to leverage its business relationships to attract quality retail to the community. The proper mix of retail tenants is crucial to ensuring that Ward Neighborhood is active all day and into the evening.

The types of retailers that we envision fall into 4 categories; shopping, dining, entertainment and service.

Shopping

Ward Neighborhood will build upon the unique retail shopping experience that has already been established by tenants who have worked hard to earn the trust of the community. Specialty retailers selling one-of-a-kind merchandise, galleries and local merchants selling handicrafts and art can complement well-known national and international retailers selling apparel, accessories, home furnishings, electronics and other items to meet the diverse lifestyles of the customers. New retailers will be selected from local businesses, mainland retailers and specialty retailers from abroad. GGP's locally-based leasing team, with many years of experience in leasing retail projects in Hawai'i, will create a merchandise mix that distinguishes tenants from other retail venues on O'ahu.



Dining

A tradition of great dining has already been established by the variety of restaurants currently serving customers. Ward Neighborhood will bring new and exciting dining options to the city of Honolulu throughout the day and evening. During the day, the proximity to thousands of daytime workers, as well as residents and tourists, will keep restaurants busy at lunch.

In addition to full-service restaurants, an area featuring small eateries may be established. These mini-café's will offer diverse options from sushi to sandwiches, tacos to tapas, many of which will be local in nature. These smaller eateries will share seating/dining areas, with plentiful indoor and outdoor seating options, adding to the ambiance of the open public places. This opportunity to connect to open space will make this collection of eateries a destination within the city, offering a chance to experience a thriving urban oasis like none other in Honolulu.

Quality destination restaurants will energize the heart of the neighborhood after hours, reinforced by the evening cultural activities in the public square. These restaurants can include well known local or national restaurant operators that are not perceived as a "chain." Emphasis will be placed on local operators to clearly establish Ward as a "must try" and "return-often" destination. A casual bistro related to the restaurants could cater to the sit-down lunch crowd, while also serving as a happy-hour destination for workers on their way to the transit station or home.





Entertainment

Ward Entertainment Center, with its movie theaters, restaurants and shops, has already become a favorite gathering place for people from around O‘ahu. Ward Neighborhood can expand on the entertainment theme. An art movie house can bring in films from around the world and reach a niche audience. A jazz club would enliven the night scene and gain a wide following. Outdoor concerts featuring Hawaii’s top entertainers could be a regular occurrence in the Central Plaza.

The recreational, outdoor lifestyle of the Neighborhood could also create demand for tenants such as bicycle and skateboard shops. A day spa would provide a welcome respite for residents and visitors alike.

Services

With the anticipated increase of residents, workers, local visitors and tourists, the need for services and conveniences will rise as well. Retailers serving the daily needs of the new Ward customer may include a grocery store, exercise studios, a pharmacy, a dry cleaner and a quick-print shop. These types of services can prove to be effective at drawing visitors through the Central Plaza in the late afternoon when a lull typically occurs.

DESIGN STRATEGIES





DESIGN STRATEGIES

The Ward Neighborhood Master Plan

The Ward Neighborhood Master Plan presents a unique opportunity to create a sensitively planned, mixed-use, sustainable and livable urban community where people can live, work, shop, socialize, play and be entertained—a vibrant community and district that remains a place for the people of Hawai‘i. This chapter outlines four major design strategies for Ward Neighborhood: Connected Public Spaces, Auahi Street as a Pedestrian Promenade, Mauka/Makai View Corridors and Streetscape Design.



The Four Main Design Strategies

Connected Public Spaces

Auahi Street as a
Pedestrian Promenade

Mauka/Makai
View Corridors

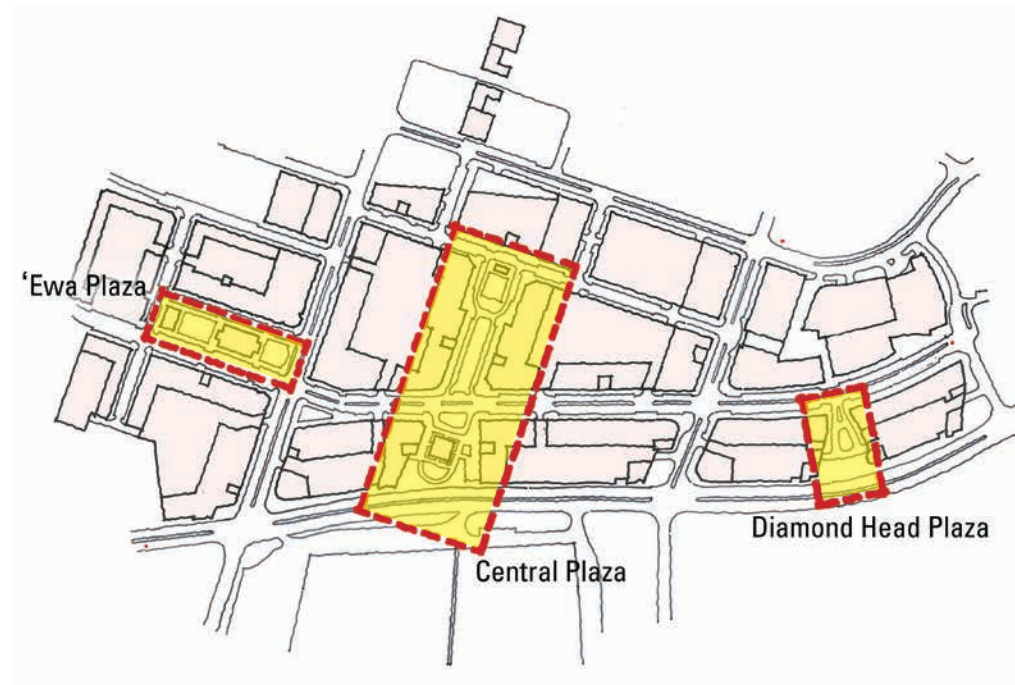
Streetscape Design

DESIGN STRATEGIES

WARD NEIGHBORHOOD

MASTER PLAN | 27

The design strategies are the cornerstones of the Ward Neighborhood Master Plan, creating an environment that fosters livability and creativity.

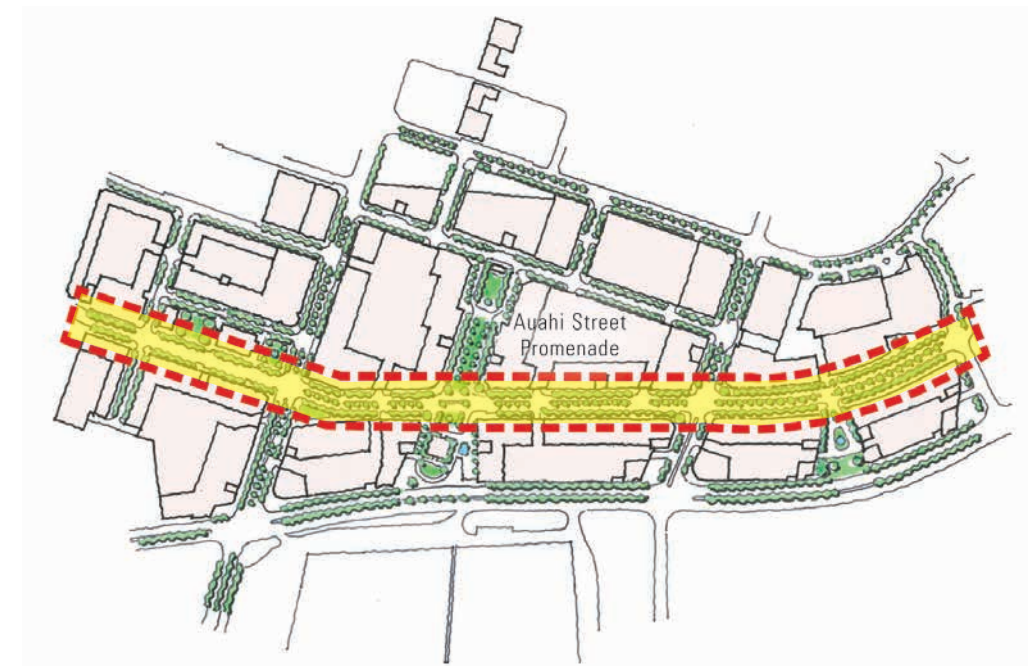


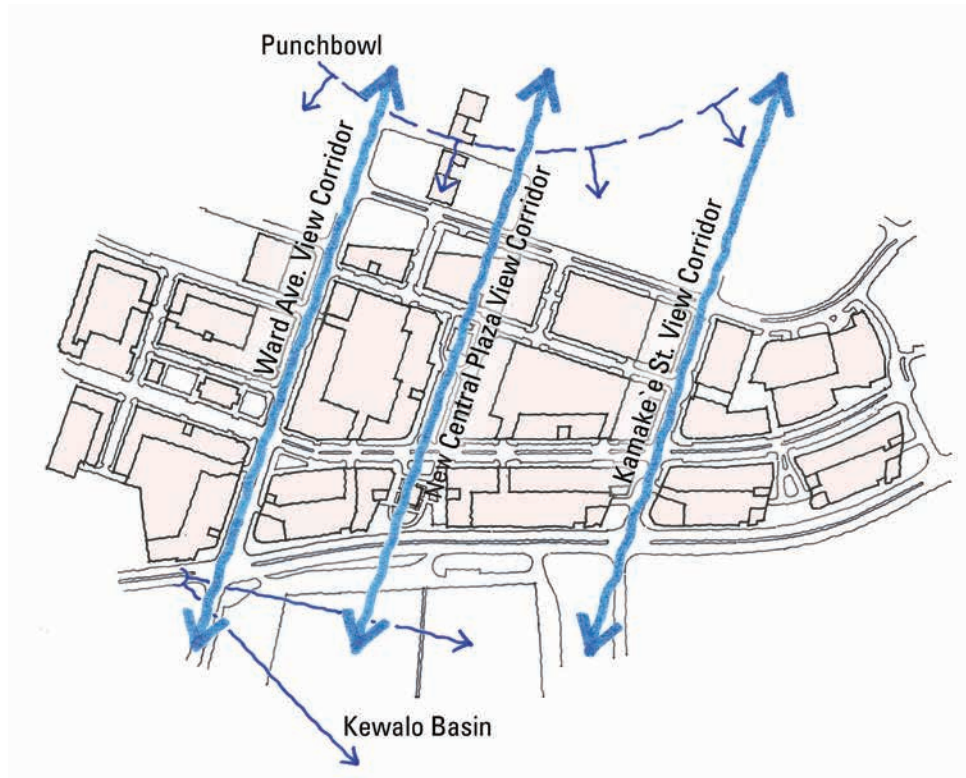
Design Strategy 1 Connected Public Spaces

Provide three significant and connected public spaces. At the center of Ward Neighborhood will be a new Central Plaza, with major public spaces 'Ewa of Ward Avenue and on the Diamond Head end of the Neighborhood. All three will be linked via Auahi Street.

Design Strategy 2 Auahi Street as a Pedestrian Promenade

Redevelop Auahi Street as a great pedestrian-oriented urban promenade and shopping street, a landscaped spine full of activity and character.



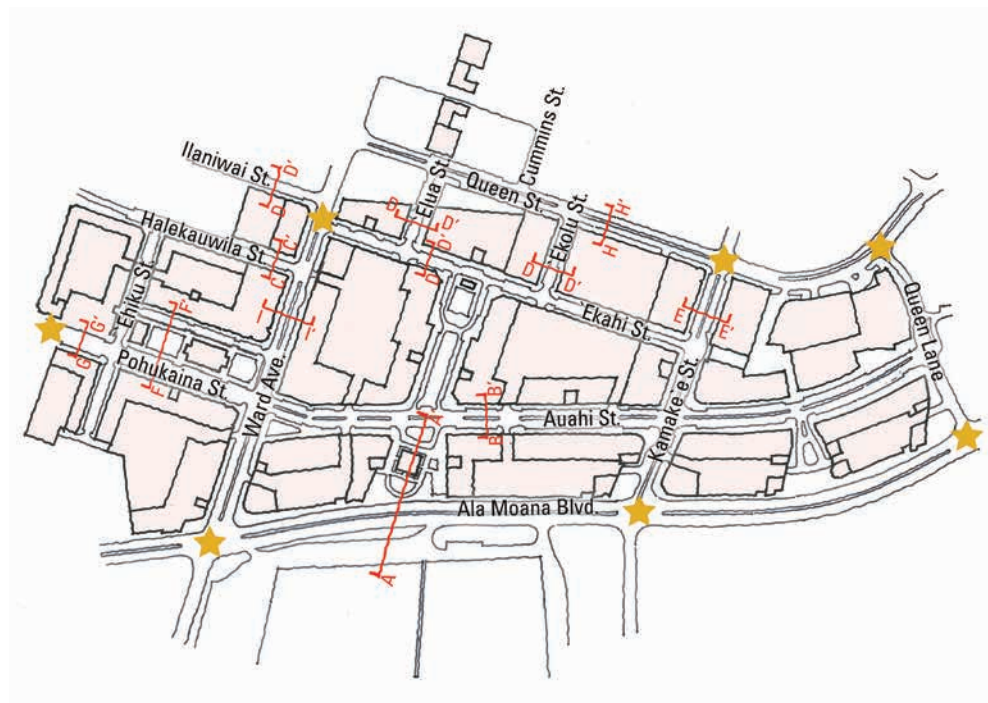


Design Strategy 3 Mauka/Makai View Corridors

Introduce an additional Mauka-Makai view corridor between the current Ward Avenue and Kamake'e Street view corridors. This new corridor will also serve as a visual window into the project from Ala Moana Boulevard and out to Kewalo Basin and the ocean. Each view corridor may include functional and safe pedestrian connections to encourage walking.

Design Strategy 4 Streetscape Design

Strongly define an identity for the three key intersections along Ala Moana Boulevard, marking them as gateways into the district and Central Kaka'ako on the mauka edge. The landscape character will provide a sense of arrival into Ward Neighborhood. The streetscape design will also create an identity for the pedestrian network within the community.



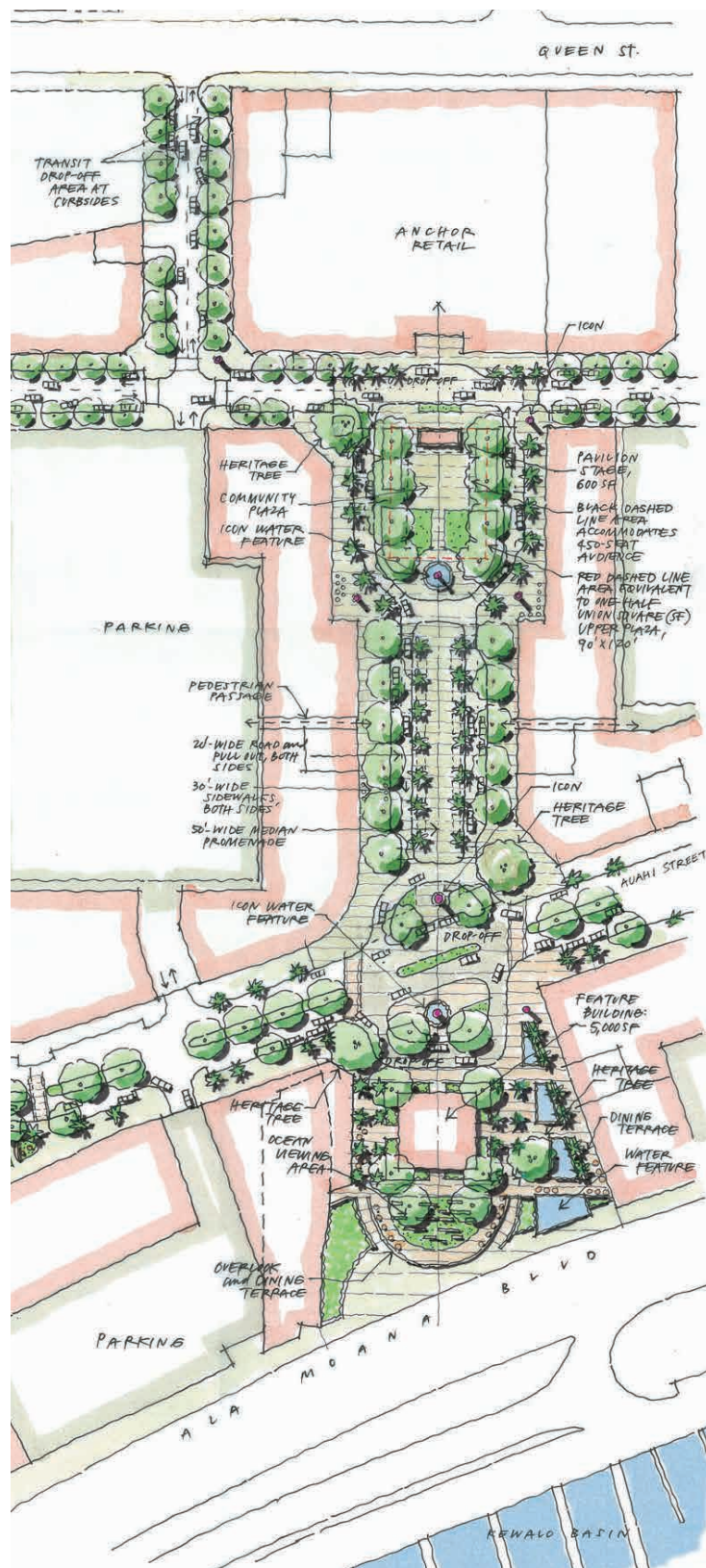


The Central Plaza unifies the neighborhood with a core open space

Design Strategy 1 *Connected Public Spaces*

The Ward Neighborhood Master Plan's strategy for the public spaces is to provide a variety of sizes, shapes and proportions to the open spaces in order to fulfill multiple uses. A dynamic hierarchy of useable public spaces will create gathering places for residents and visitors to enjoy entertainment, savor the outdoors or simply to relax. Along with parks, the plazas will offer beautiful green spaces for families to enjoy and children to play.

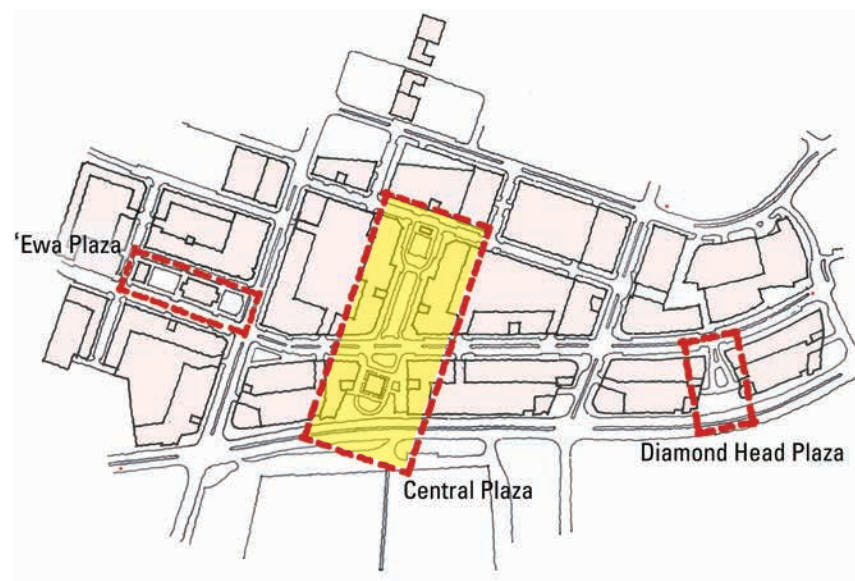


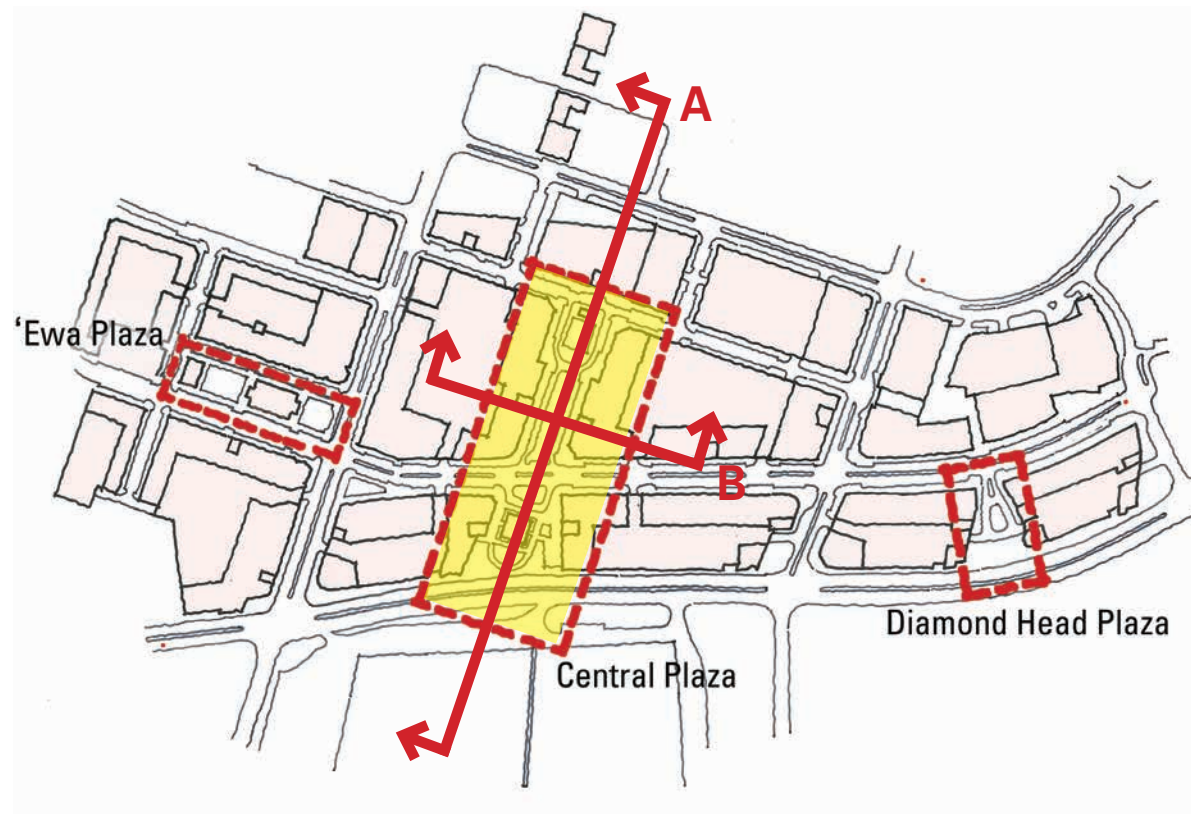


Plan view of the Central Plaza

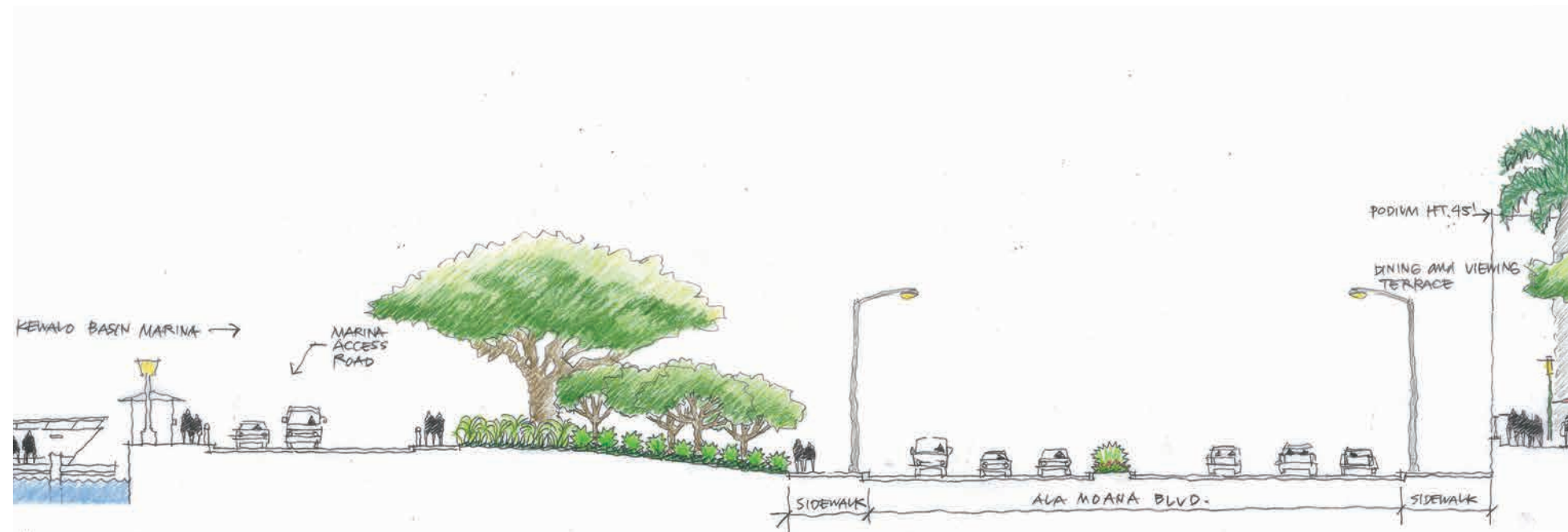
Central Plaza

At the heart of Ward Neighborhood, the Central Plaza is proposed to serve as the community's outdoor living room. This public space is designed to accommodate multiple uses including civic and cultural activities and special events. The linear organization of the space will offer pedestrians opportunities to stroll, shop, dine and gather in an inviting landscaped environment. Retail, commercial, dining and entertainment venues serve to activate the open spaces. When appropriate, the open space can be programmed to be completely auto free. Across Auahi Street, the Central Plaza will extend to the foot of Ala Moana Boulevard, offering views of the Pacific Ocean.

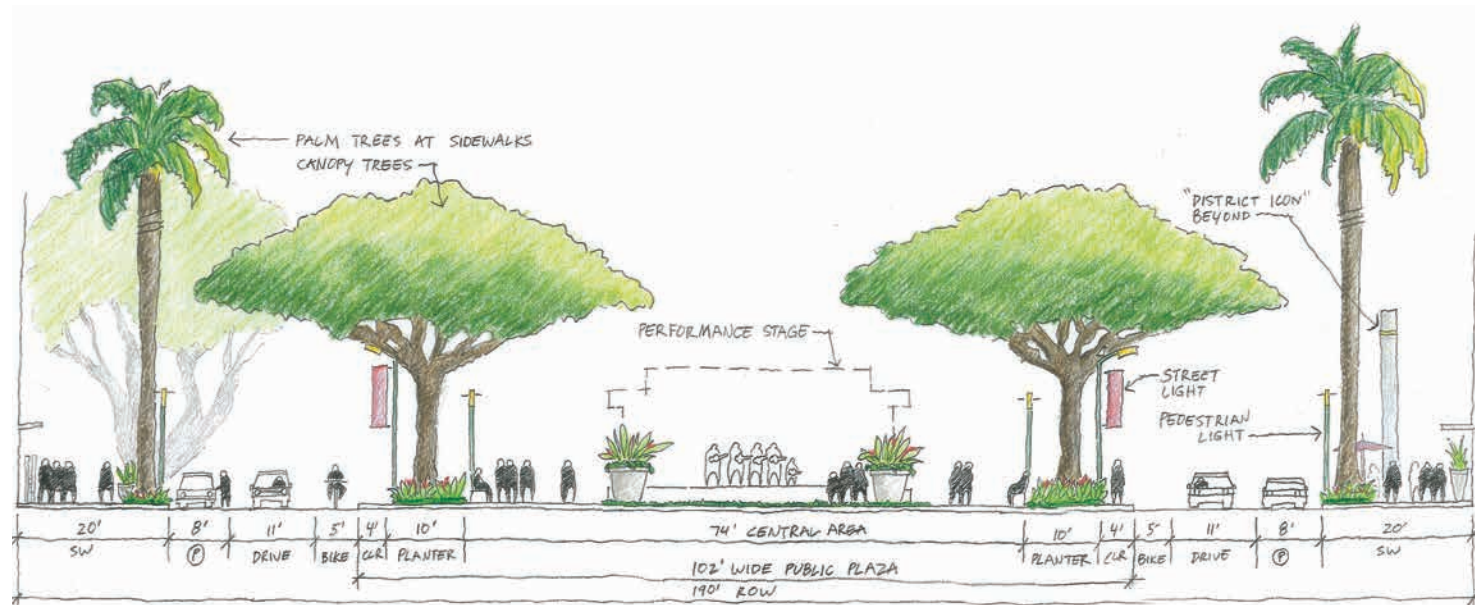




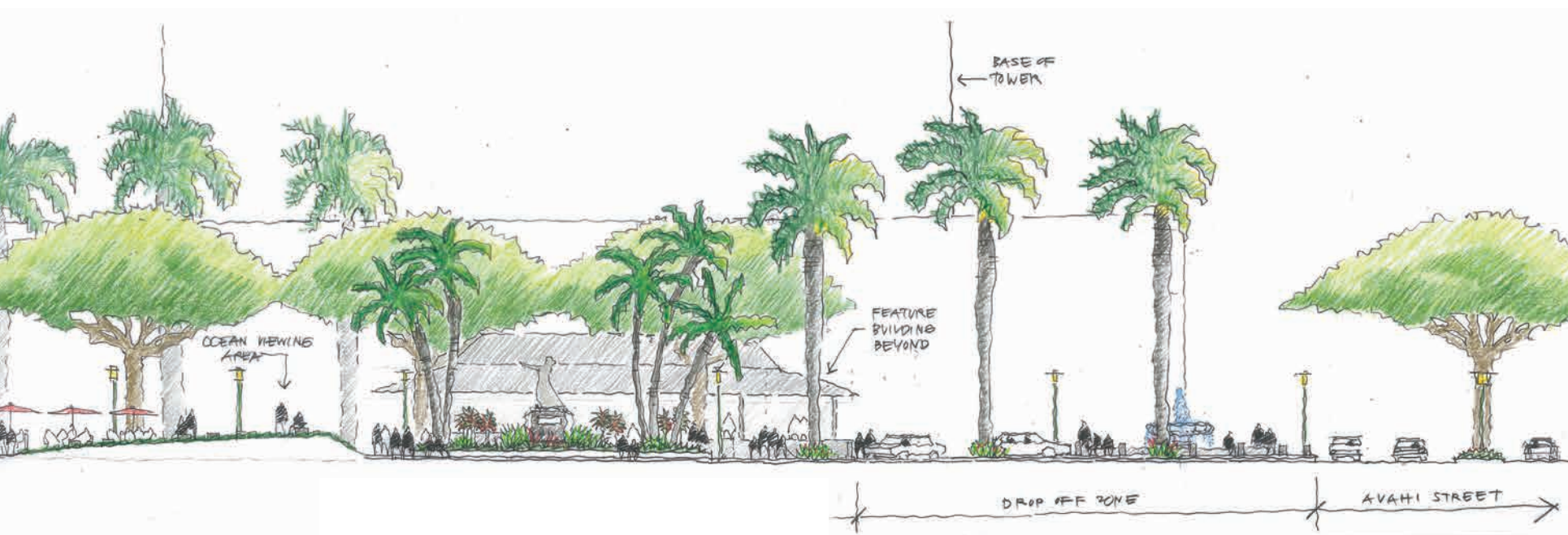
Map shows location and direction of adjacent section cuts through Central Plaza



Section A: Proposed section view of Central Plaza from Kewalo Basin to Auaahi Street



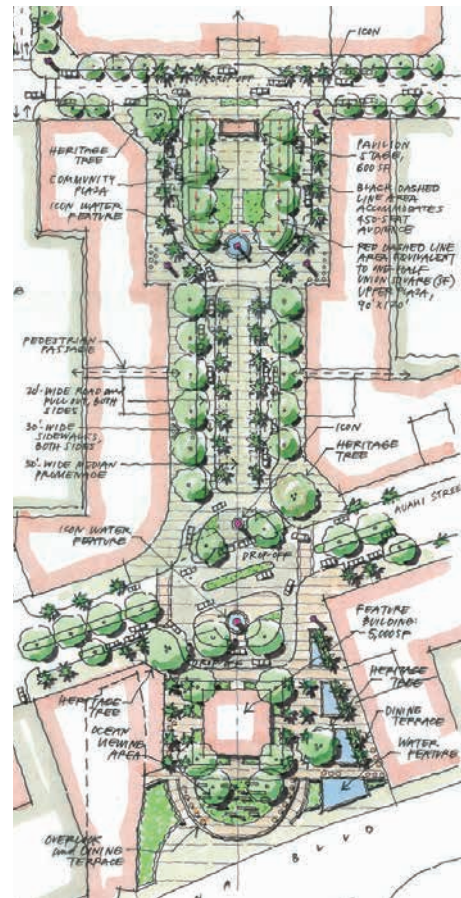
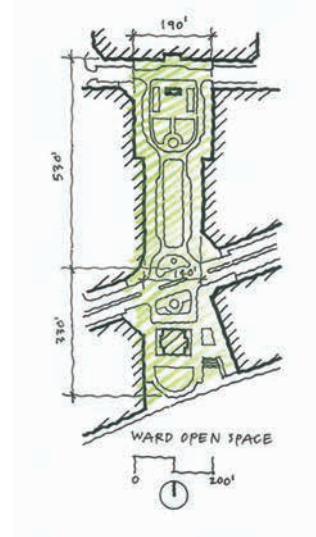
Section B: Proposed section view of Central Plaza from Diamond Head to 'Ewa



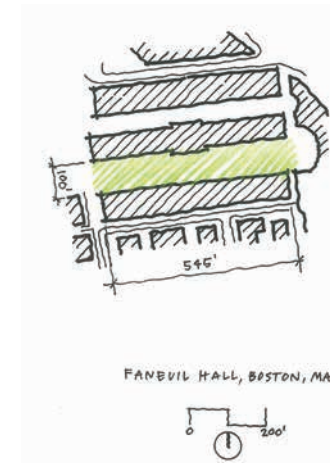
Ward Neighborhood Open Space Comparison

Open Space Comparisons

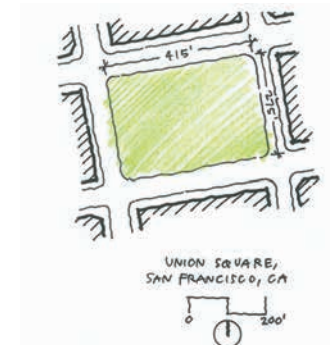
These visuals convey the scale of the 3.25-acre Central Plaza. Each sketch shows how a similar acreage fits within the footprint of other well-known and well-loved open spaces around the world.



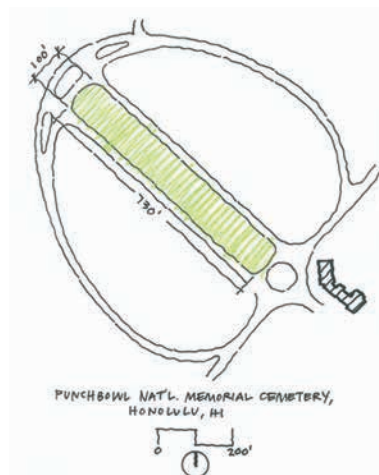
Proposed Central Plaza Concept



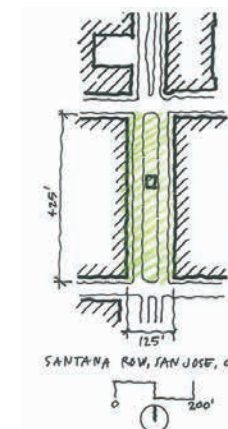
Faneuil Hall, Boston



Union Square, San Francisco



Punchbowl National Memorial Cemetery, Honolulu



Santana Row, San Jose



Night view of the Central Plaza



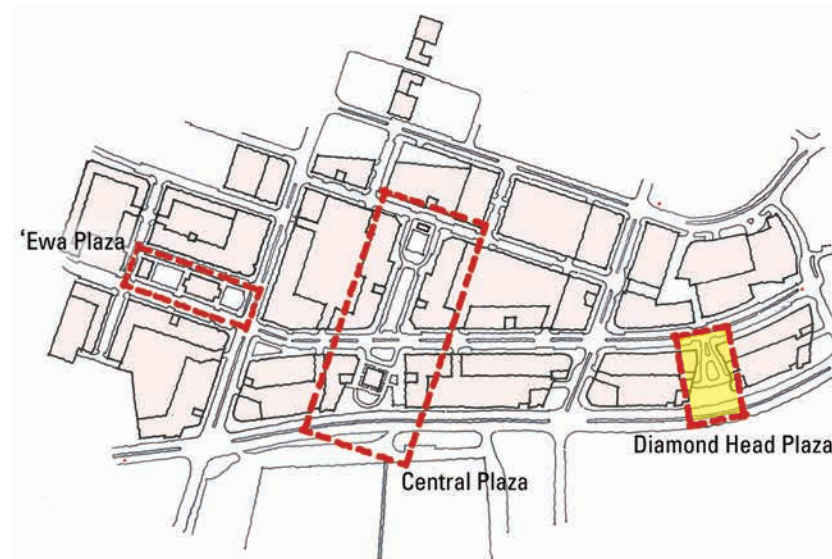
Central Plaza character example



Central Plaza character example

Diamond Head Plaza

Diamond Head Plaza is planned as an intimate and passive space scaled primarily as an observation point that can be accessed by foot or vehicles. It is primarily a public place suitable for informal gatherings to view the Ala Moana Beach Park and ocean beyond. The nearly one-acre space could provide places to rest, contemplate nature, sit alongside a fountain and enjoy ocean views.



Proposed plan view of Diamond Head Plaza



Diamond Head Plaza character example



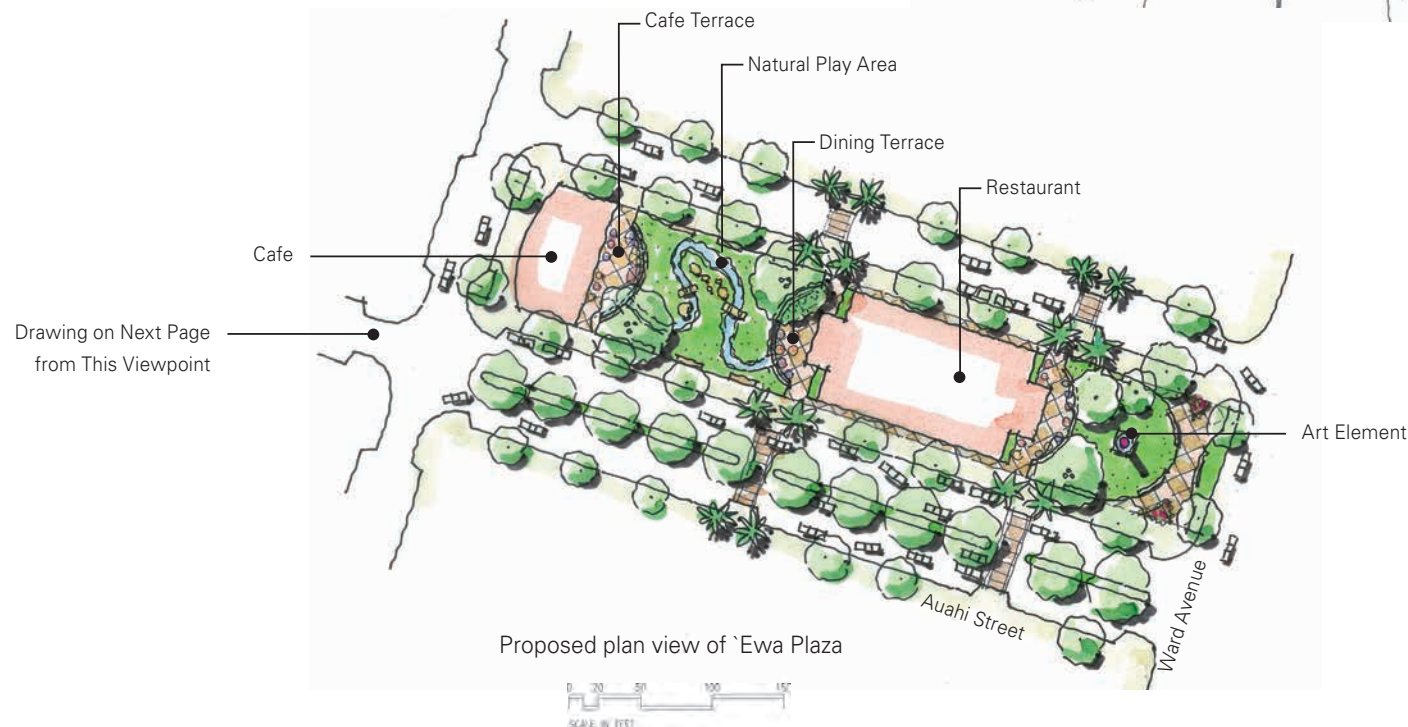
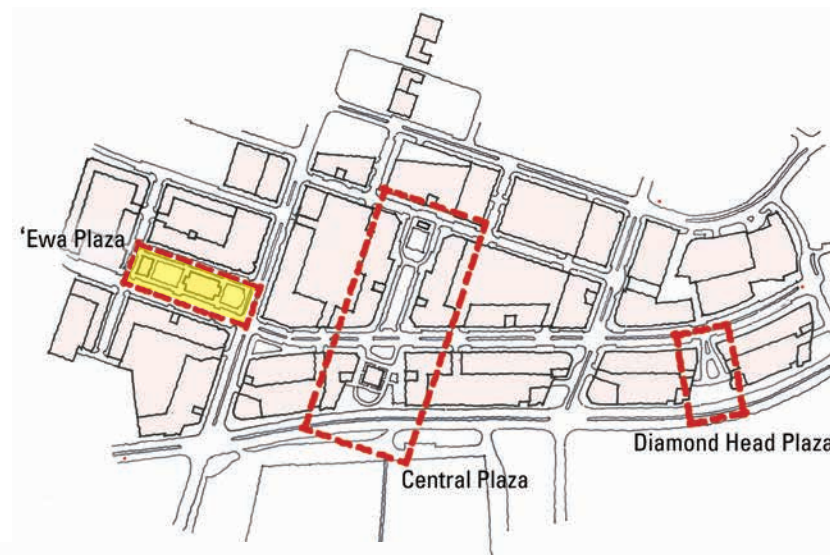
Diamond Head Plaza character example



'Ewa Plaza character example

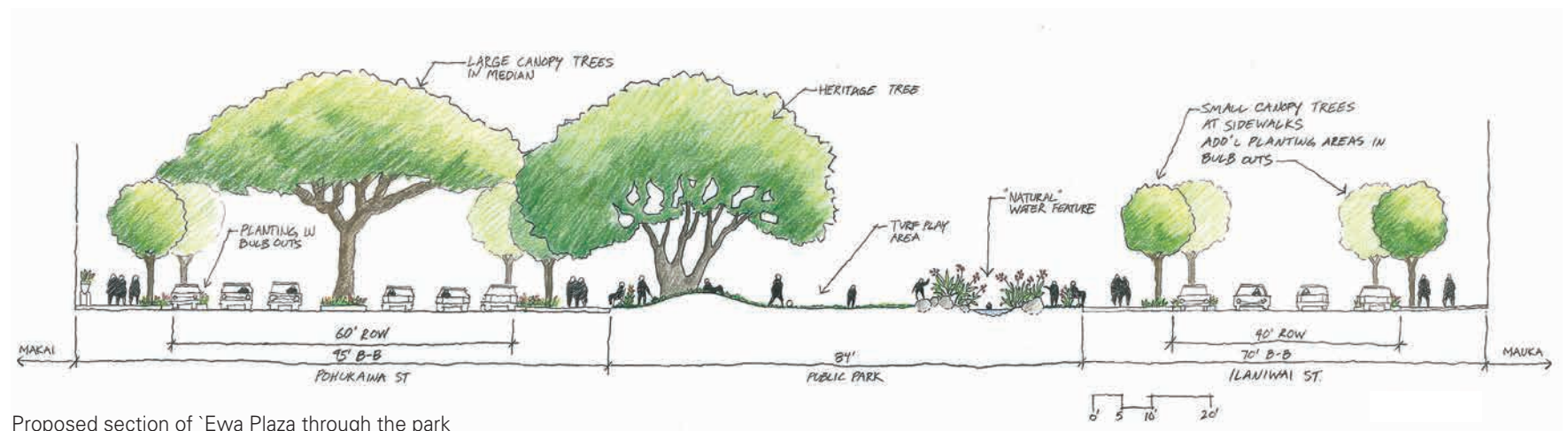
'Ewa Plaza

'Ewa Plaza is envisioned as a neighborhood public park and plaza located at the center of this residential mixed-use area. This one-acre open space serves as an outdoor activity area for residents, merchants and visitors. For instance, the park space can be used for informal gatherings, reading the newspaper or having a picnic lunch. Residents, tenants and visitors can enjoy an urban open space experience right outside their front doors.





'Ewa Plaza: a public Neighborhood park



Proposed section of 'Ewa Plaza through the park



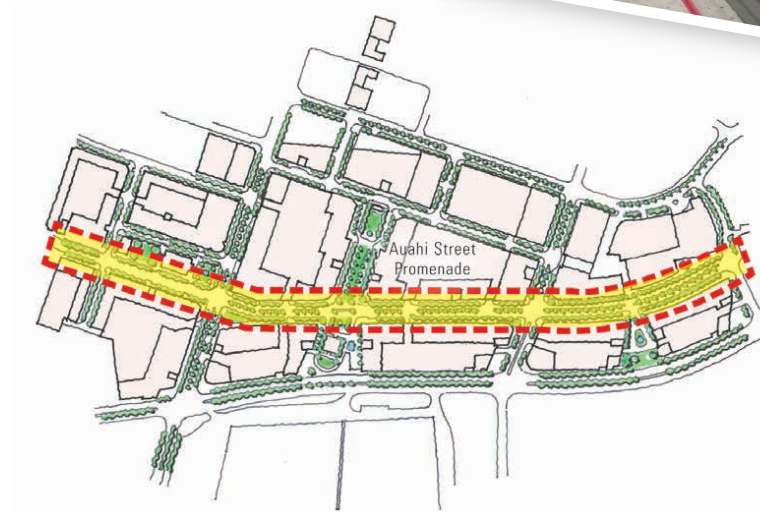
Above: Auahi Street as envisioned. Inset: Auahi Street 2007

Design Strategy 2

Auahi Street as a Pedestrian Promenade

Auahi Street is envisioned as a great pedestrian-oriented street like Las Ramblas in Barcelona. Proposed as a major arterial with two lanes of car traffic and parallel parking each way, Auahi Street will feature an enhanced streetscape that makes it pedestrian-friendly. Large street trees provide a canopy of shade, and landscaping helps to soften the edge between pedestrians and traffic. Street vendors, restaurants with outdoor patios and shops would enliven the space. Residents can come downstairs for a coffee or walk home from work, stopping along the way to chat with friends or pick up groceries.

Envisioned as a park-like pedestrian promenade, Auahi Street will connect the three major public open spaces. It will be punctuated by numerous ancillary plazas and pocket parks to help stitch together the urban fabric. These additional spaces would provide opportunities for respite, conversation or contemplation, as well as aesthetic landscape enhancements.



[illegible]

*Auahi Street
Scale Comparison*

Street as a pedestrian
promenade may compare

These overlays compare

Auahi Street to four
other streets known for
their great sense of place.

This aerial photograph shows the study area in San Francisco. A red dashed line outlines the project area, which is bounded by the Embarcadero to the north, the San Francisco Bay to the south, and the city streets to the east and west. The area includes various buildings, streets, and a marina.



Santana Row, San Jose | 1,500 LF



North Michigan Avenue, Chicago | 2,700 LF



3rd Street Promenade, Santa Monica | 1,960 LF



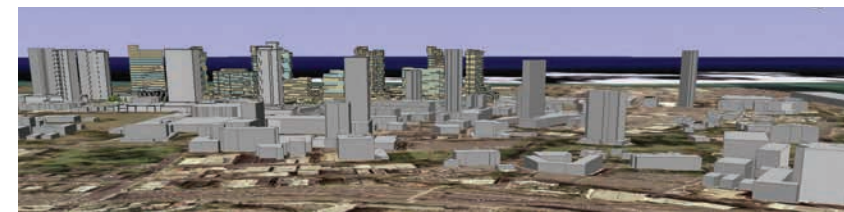
Las Ramblas, Barcelona | 3,850 LF



Existing makai view from Punchbowl over Kaka'ako.

Design Strategy 3 *Mauka/Makai View Corridors*

The Ward Neighborhood Master Plan will encompass a mauka-makai view axis spanning from the mountains and Punchbowl to Kewalo Basin and the ocean. Three major corridors will seek to preserve and enhance these views: Ward Avenue, the Central Plaza and Kamake'e Street. From homes, shops, restaurants and businesses, from sidewalks, parks and plazas, the mauka-makai views can be impressive and inspiring.



View from Punchbowl



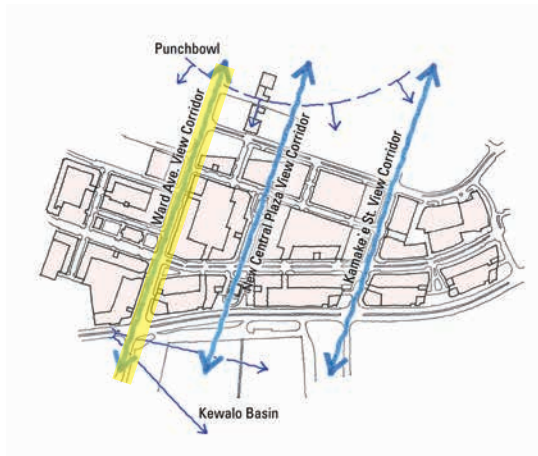
View from Kewalo Basin



View from Point Panic

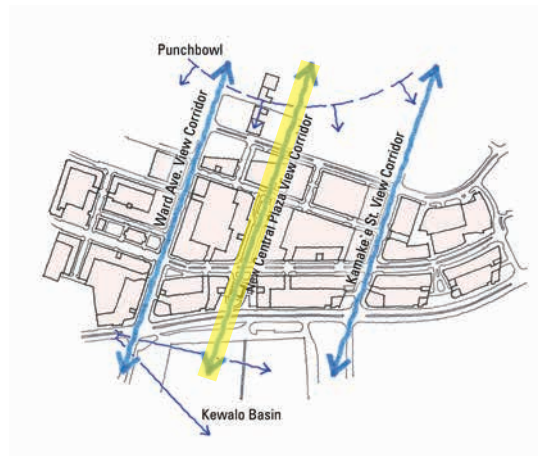
Ward Avenue View Corridor

The Ward Avenue View Corridor defines the district's development pattern on the 'Ewa and Diamond Head sides of Ward Avenue while respecting the mauka-makai axis that is central to the Master Plan vision. Streetscape treatments would provide safe and inviting pedestrian connections from Kewalo Basin to the neighborhood. Buildings will be set back within the limits of the right-of-way, and the streetscape design will reinforce the boundaries of this urban view corridor.



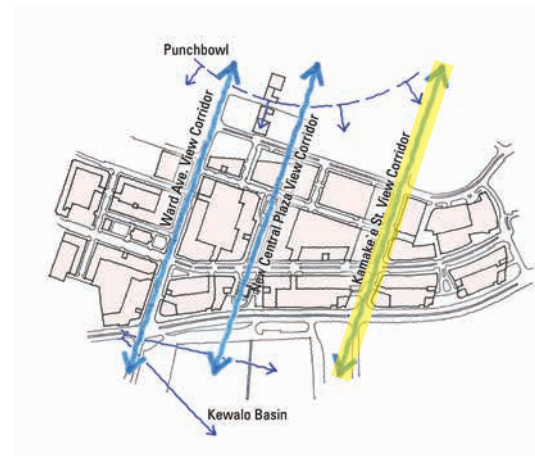
Central Plaza View Corridor

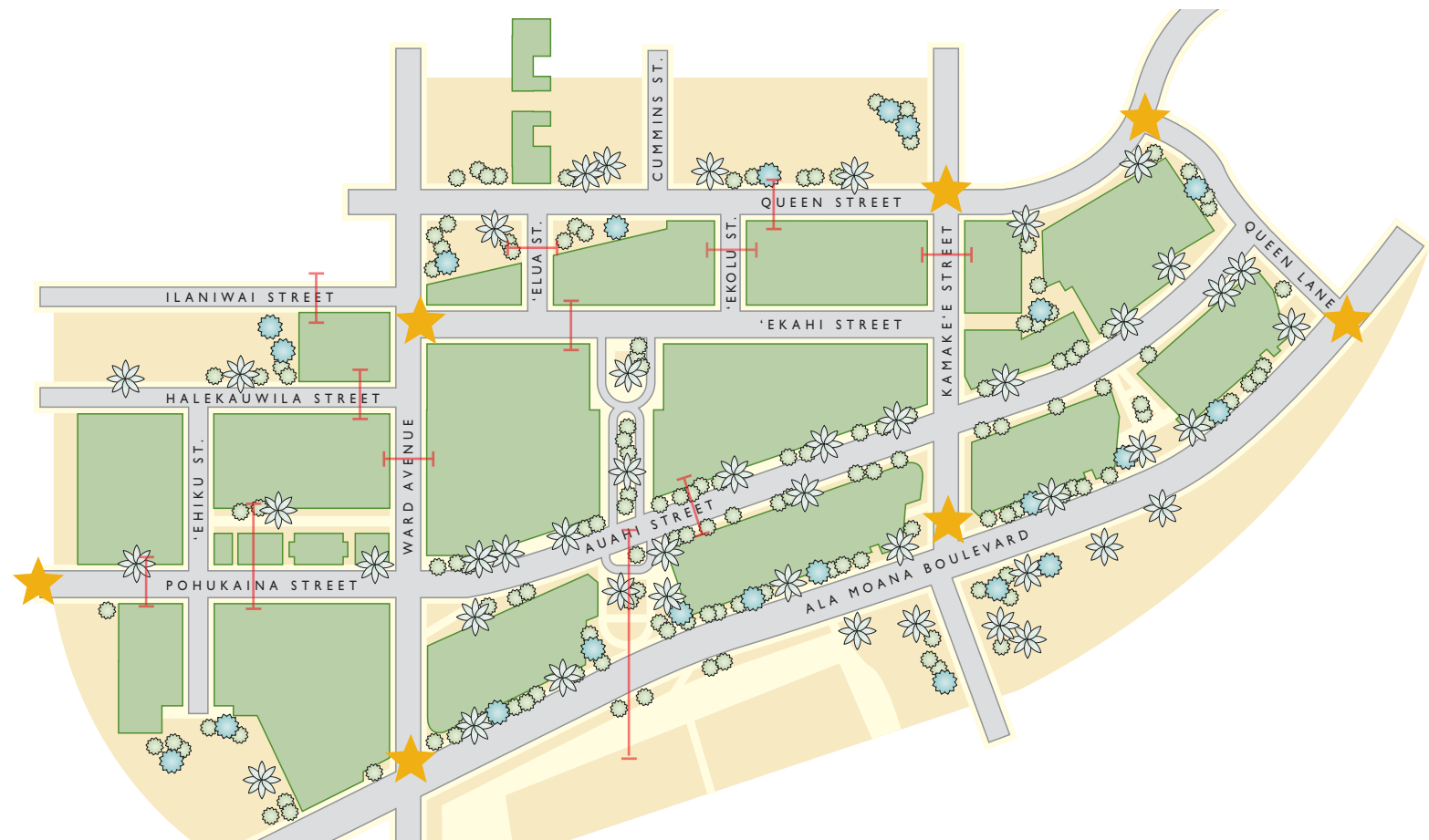
The Central Plaza View Corridor is a new view corridor proposed to link the district visually and physically to Kewalo Basin and the Pacific Ocean and beyond. The corridor is envisioned to serve multiple functions. It will be a place for community performances, festivals and activities, and can serve as a venue for public art. The corridor is designed as a great pedestrian promenade with commercial, retail and dining uses to energize the street level, along with a mix of office and residential uses to capitalize on the lifestyle of this integrated urban district.



Kamake'e Street View Corridor

The Kamake'e Street View Corridor reflects the same principles as the Ward Avenue View Corridor and will serve to frame, organize and define the district's development pattern on the 'Ewa and Diamond Head sides of the street. With all of its planned improvements, Kamake'e Street will be a key element in preserving the mauka-makai perspective as the development transitions between existing and future phases. The streetscape treatment would include safe and inviting pedestrian connections across Ala Moana Boulevard from Ala Moana Beach Park to Ward Neighborhood.





Design Strategy 4 Streetscape Design

The streetscape strategy provides for internal connectivity among the neighborhood's public places and external connectivity with adjacent neighborhoods. Streets are organized into public and private streets. The network provides pedestrian, vehicular, transit and bicycle access throughout the entire proposed development. A variety of public funding mechanisms will be explored to help finance streetscape improvements.

Most of Ward Neighborhood is within the Federal Emergency Management Area (FEMA) flood hazard zone, which requires raising the finish floor elevation of new buildings. To avoid the dual sidewalks, ramps, steps, and other grade transitions common throughout the area at present, raising the roadways to connect new buildings to the streets could be implemented under the Master Plan, as coordinated with the City. This option is being considered to enhance connectivity between the streets and the buildings.

Proposed streetscape designs are illustrated on the following pages, with their character defined in terms of street and sidewalk width, landscaping, medians and bike lanes.



Future gateway, see page 49.



Shows locations of sections on following pages.

Map above: The streetscape environment for each street in the master plan is shown in section drawings corresponding to this key diagram in the following pages.

Public Streets – Proposed Streetscape

STREET	EXISTING RIGHT-OF-WAY WIDTH	SETBACK REQUIREMENTS	PROPOSED BUILDING TO BUILDING WIDTH	PROPOSED RIGHT OF WAY WIDTH
Ward Avenue	80 ft	15 ft each side	110 ft	80 ft
Kamake'e Street	76 ft	15 ft each side	106 ft	78 ft
Auahi Street (Ward Ave to Queen Lane)	76 ft	15 ft each side	106 ft	64 ft
Pohukaina Street ('Ewa of Ko'ula St)	50 ft	15 ft each side	80 ft	50 ft
Halekauwila Street ('Ewa of Ko'ula St)	50 ft	15 ft each side	80 ft	50 ft
Ilaniwai Street	40 ft	15 ft each side	70 ft	40 ft

The table above compares the existing street widths, expressed as the right-of-way with the proposed street sections. The proposed design for each street works within the existing right-of-way and setbacks to provide a greatly enhanced streetscape environment.

Ward Avenue

Ward Avenue is a major mauka-makai oriented four-lane collector that serves as a gateway to Ward Neighborhood. The Master Plan provides an opportunity to unify the different developments along Ward Avenue frontage by introducing large-scale landscape improvements and by connecting key development parcels on both sides of the thoroughfare.

Kamake'e Street

Kamake'e Street is a mauka-makai oriented four-lane collector that serves as a gateway to the district. Kamake'e Street is unique in that it provides access to the middle of the development and an opportunity to link both sides of the street by use of landscape and streetscape improvements.

Auahi Street

Auahi Street is the central organizing street for Ward Neighborhood, providing access to all major residential, office and retail developments. Auahi Street would serve as the unifying spine for the community, offering well-designed pedestrian-scaled streets with spacious sidewalks, attractive street furnishings and landscape plantings.

The alignment of Auahi Street that is shown on the Ward Neighborhood Plan reflects the alignment indicated in the draft revisions to the HCDA Mauka Area Plan, which extends Auahi Street 'Ewa of Ward Avenue to Pohukaina Street.

Public Streets – Proposed Amenity Summary

	WARD AVENUE	KAMAKE'E STREET	AUAHI STREET
Three in Each Direction	Three in Each Direction	Two in Each Direction	Two in Each Direction
Separated Pedestrian Sidewalks	Yes	Yes	Yes
Landscape Median	Yes	Yes	Yes
Coordinated Street & Pedestrian Lighting	Yes	Yes	Yes
Underground Utilities	Yes	Yes	Yes
Streetscape Furnishings (benches, trash cans, newspaper racks, planters, etc.)	Yes	Yes	Yes
Coordinated Signage & Signalization at Intersections	Yes	Yes	Yes
Bus/Shuttle Shops	Yes	Yes	Yes
Bicycle Lanes	Yes	Yes	Yes (lane shared w/ autos)
On-Street Parking	Yes (non-peak)	Yes	Yes

Cummins Street

Cummins Street is a mauka-makai oriented street that resides “outside” of Ward Neighborhood proper, but provides an important connection to communities on the mauka end and the Blaisdell Center. As the transit station and alignment are refined, this connection will improve pedestrian access to areas located north of Ward Neighborhood.

Halekauwila Street

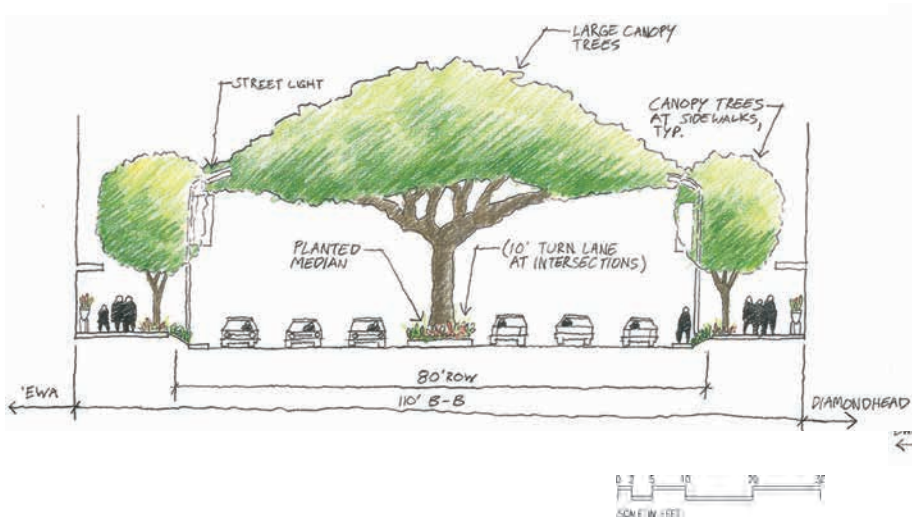
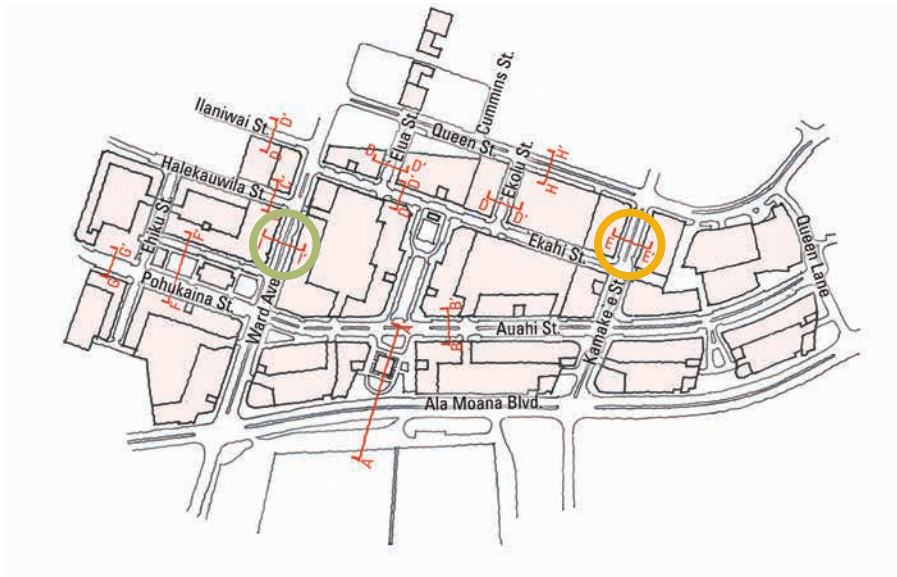
While the current Mauka Area Plan reflects an extension of Halekauwila Street on the Diamond Head side of Ward Avenue, the proposed revisions to the Mauka Area Plan indicate a future street through the area in a general alignment that would enhance connectivity. The Ward Neighborhood Master Plan reflects the proposed revised Mauka Area Plan by incorporating an internal street (‘Ekahi Street) that would extend from Ward Avenue to Kamake’e Street, offering the connectivity suggested in the proposed revised Mauka Area Plan.

Ala Moana Boulevard

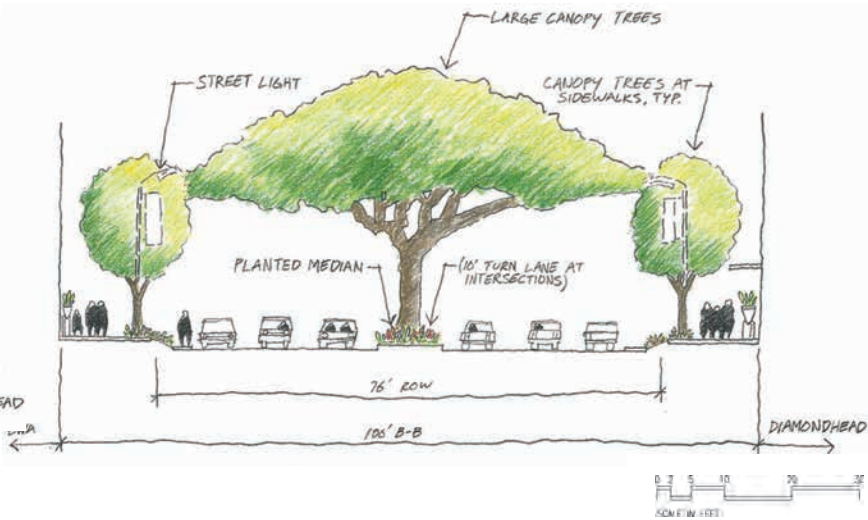
Ala Moana Boulevard presents an important yet challenging public face and edge for Ward Neighborhood, but also creates challenges. On the one hand, it needs to function as the Neighborhood’s “front porch” to the world. On the other hand, the sight and sound of heavy vehicular traffic on the boulevard needs to be buffered and screened.

Ward Neighborhood envisions working closely with the State Department of Transportation and the City and County of Honolulu to create attractive solutions and develop physical connections with surrounding areas. A pedestrian link to Kewalo Basin could be developed through improved crosswalks or elevated walkways across Ala Moana Boulevard.

Streetscape: Proposed Public Street Cross-Sections

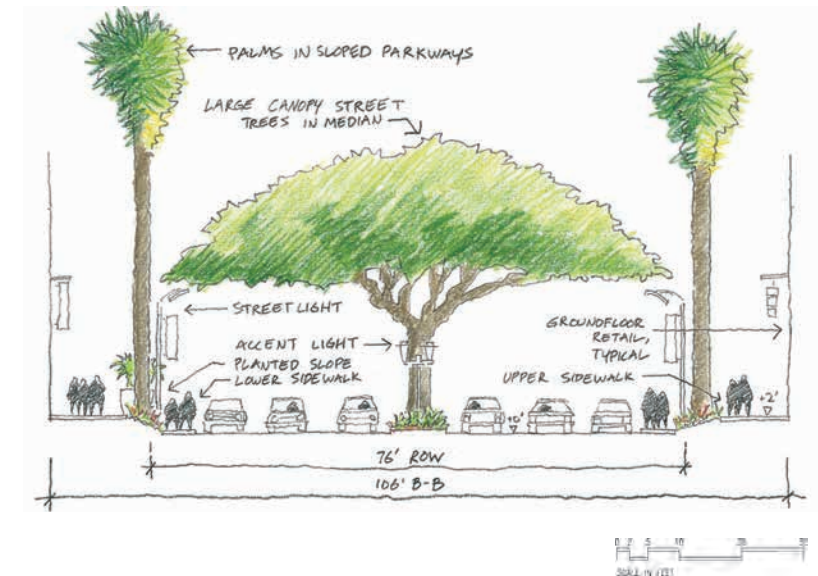
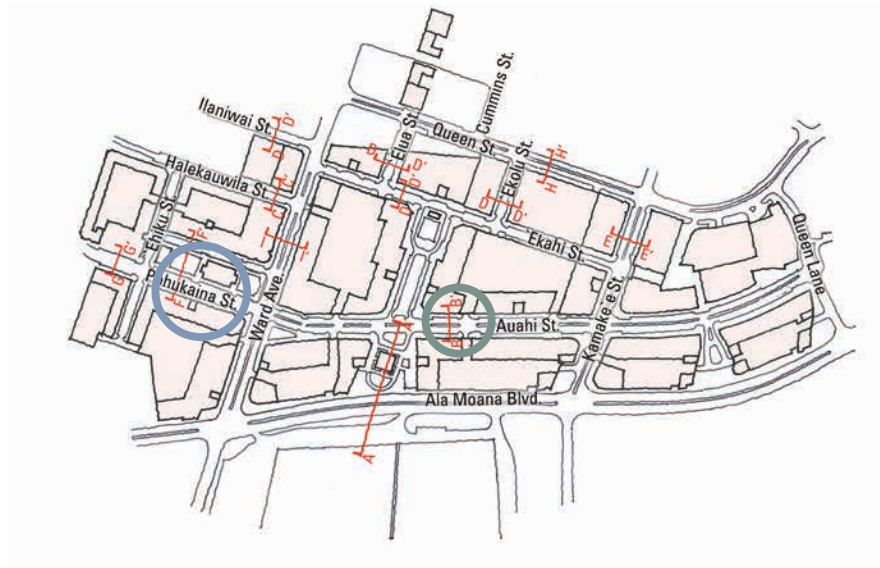


Section I-I': Ward Avenue

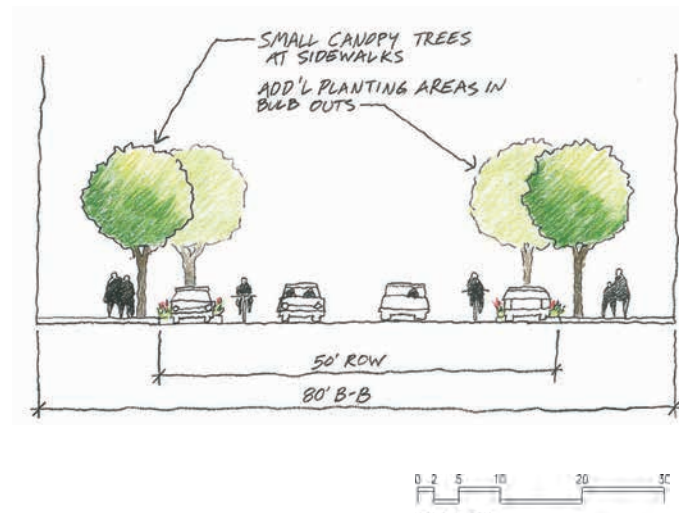


Section E-E': Kamake'e Street

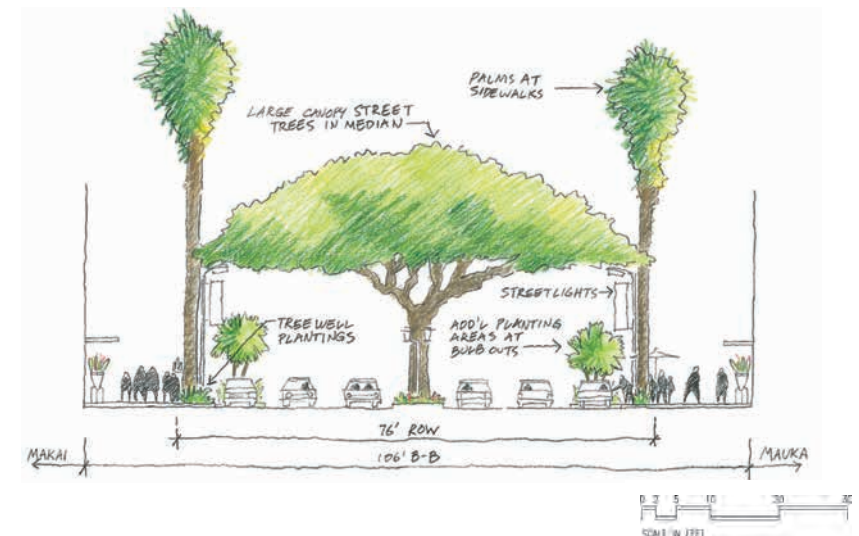
Streetscape: Proposed Public Street Cross-Sections



Section B-B': Auahi Street Existing Elevation



Section G-G': Pohukaina Street (Ewa of Ko'ula)



Section B-B': Auahi Street Optional Raised Elevation

Private Streets

Four internal streets temporarily named ‘Ekahi, ‘Elua, ‘Ekolu and ‘Ehiku would serve to direct the majority of cars to and from garages within Ward Neighborhood. Queen Lane is a private mauka-makai roadway between Queen and Auahi Streets.

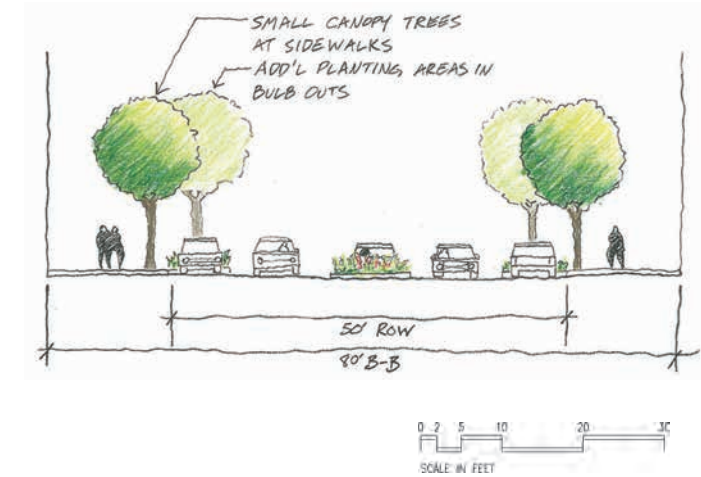
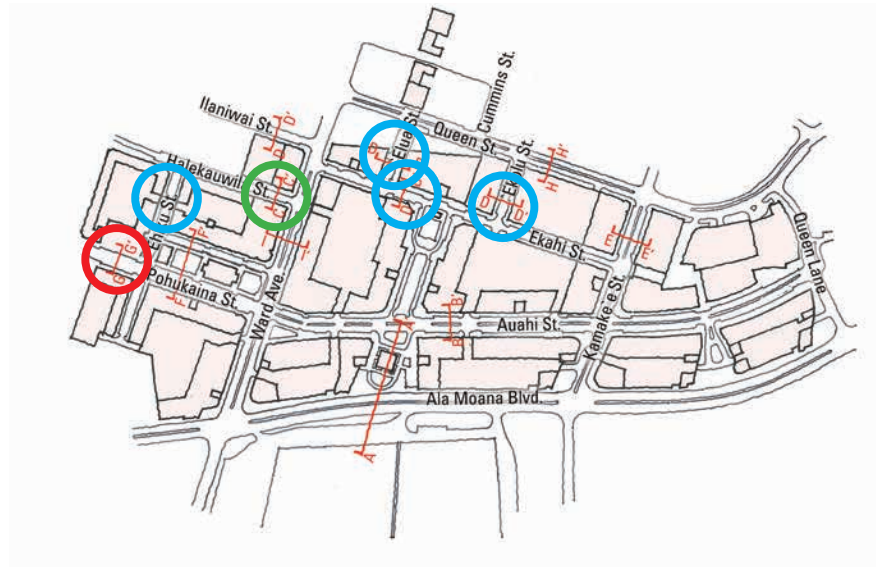
STREET	EXISTING RIGHT-OF-WAY WIDTH	SETBACK REQUIREMENTS	PROPOSED BUILDING TO BUILDING WIDTH	RIGHT-OF-WAY WIDTH
EXISTING				
Pohukaina Street (Ko‘ula St to Ward Ave)	60 ft	15 ft each side	95 ft	60 ft
Halekauwila Street (Ko‘ula St to Ward Ave)	50 ft	15 ft each side	80 ft	50 ft
Queen Lane	66 ft	5 ft each side	76 ft	66 ft
NEW				
‘Ekahi Street	–	–	70 ft	40 ft
‘Elua Street	–	–	70 ft	40 ft
‘Ekolu Street	–	–	70 ft	40 ft
‘Ehiku Street	–	–	70 ft	40 ft

The table above compares the existing street widths, expressed as the right-of-way with the proposed street sections. The proposed design for each street works within the existing right-of-way and setbacks to provide a greatly enhanced streetscape environment.

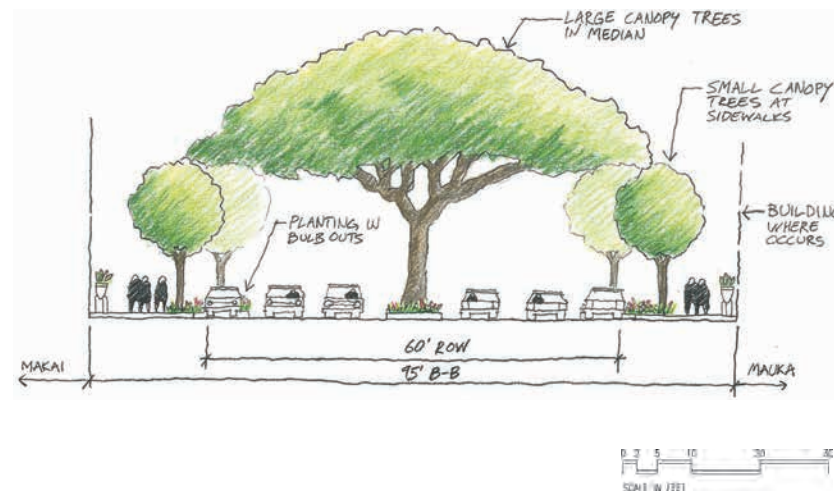
Proposed Private Street Amenity Summary

NUMBER OF TRAVEL LANES	ONE IN EACH DIRECTION
Separated Pedestrian Sidewalks	Yes
Landscape Medians	No
Coordinated Street & Pedestrian Lighting	Yes
Underground Utilities	TBD
Streetscape Furnishings (benches, trash cans, newspaper racks, planters, etc.)	Limited
Coordinated Signage & Signalization at Intersections	TBD
Bus/Shuttle Shops	No
Bicycle Lanes	TBD

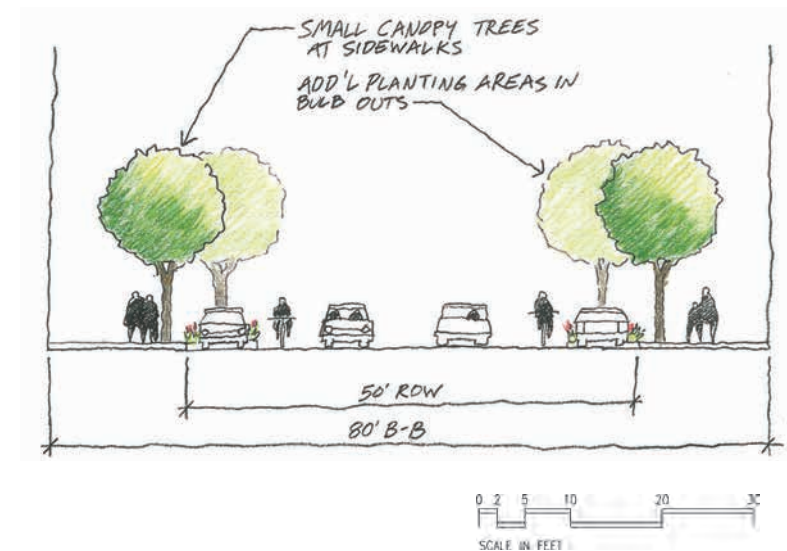
Private Street – Proposed Cross-Sections



Section C-C: Halekauwila Street



Section F-F: Pohukaina Street (Ko'ula to Ward)



Section D-D: New 'Ekahi, 'Elua, 'Ekolu, and 'Ehiku Streets

Streetscape: Enhancements

The following details apply to both public and private streets.

Intersections, Streets and Alleys

Intersections, streets and alleys express yet another level of open space experience for Ward Neighborhood. The Master Plan would include public sidewalks integral to the Neighborhood's network of streets, forming an important part of the visual and experiential qualities of the public spaces. These linkages, designed properly, will together form a cohesive plan for Ward Neighborhood as a vital and livable environment.

Bicycle Network

The Master Plan provides for bicycle connections to the existing network of bike routes linking the entire system to the City and County of Honolulu's proposed bicycle master plan. Bicycle lanes would be incorporated into streets where feasible to create an interconnected network within Ward Neighborhood. The improved bicycle and pedestrian environment can be an integral part of the overall transportation management strategy for the development.

Gateways

Art, architectural features and special paving would serve as gateways to Ward Neighborhood, welcoming people on each edge of the property. Each of the view corridors can provide mauka and makai gateway experiences. Care will be taken to integrate Ward Neighborhood with the emerging communities on the 'Ewa side, and with the high-density residential neighborhoods and Ala Moana Center on the Diamond Head side.



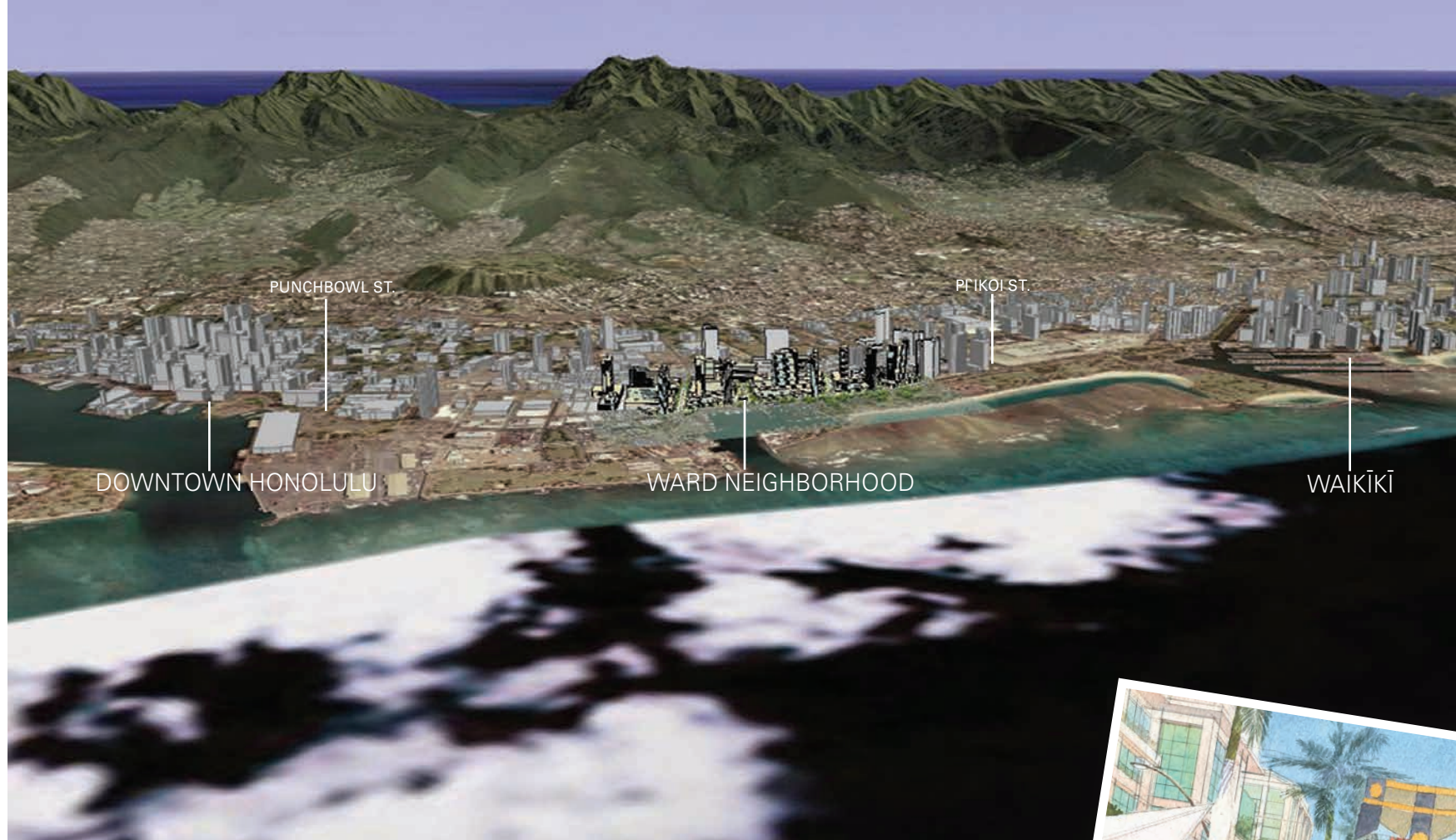
Bicycle lane example



Gateway example

DEVELOPMENT STRATEGIES





DEVELOPMENT STRATEGIES

Delivery of the public amenities rests on the ability to develop with higher density, leaving space for parks, wider landscaped streets and stunning views. It is important to remain flexible in how the development strategies can be implemented over the next 20-plus years. The phasing and mix of uses developed in the Ward Neighborhood will depend on changing market and social conditions.





Urban Form

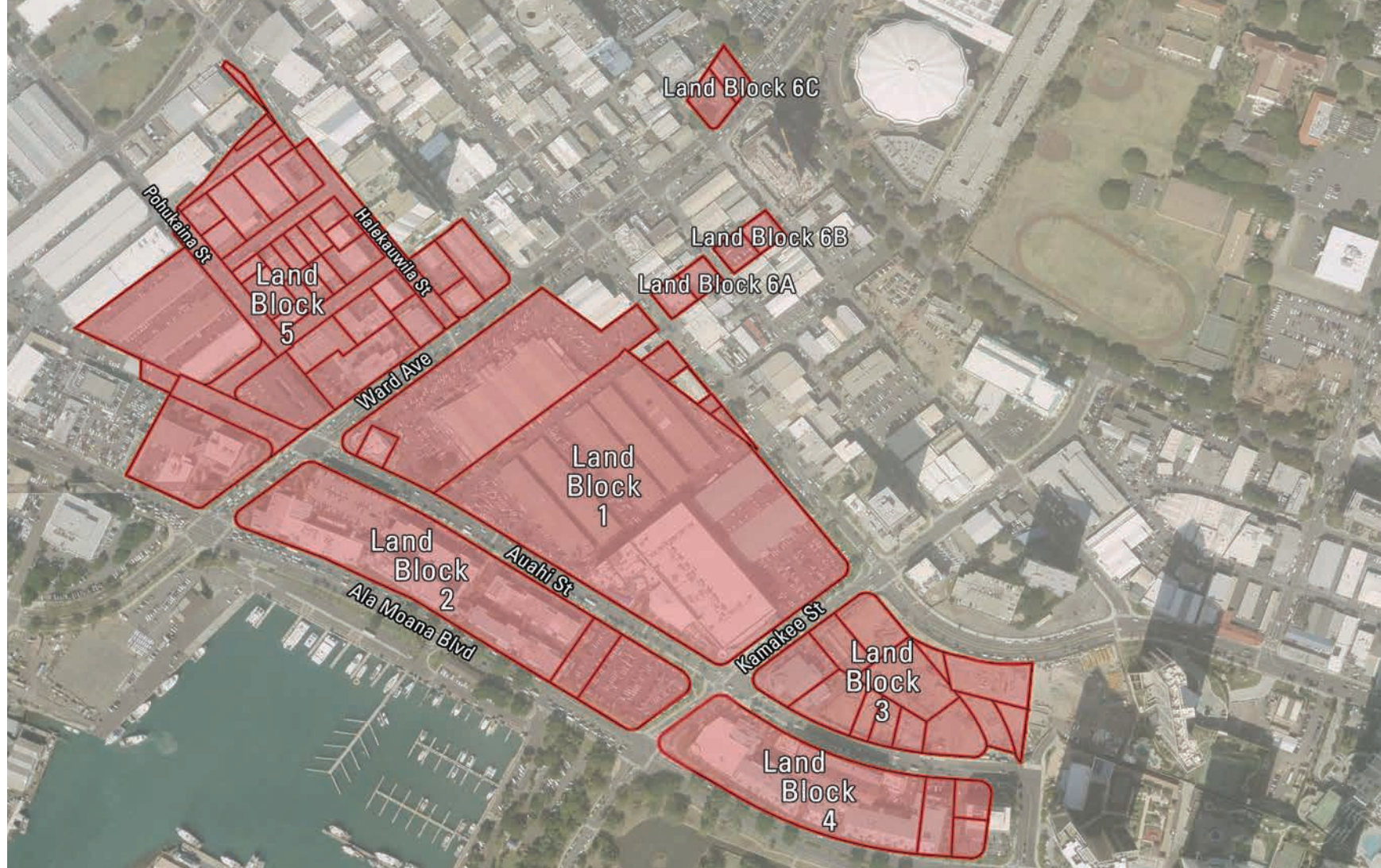
Reflecting the vision of the Mauka Area Plan, the Ward Neighborhood Master Plan provides for a range of uses that constitute a complete neighborhood redevelopment. Ward Neighborhood is both an origin and destination, incorporating residential options and employment opportunities as well as retail and cultural components. It promises to be a magnet for Hawai'i residents and visitors alike.

The key to the community and financial success of Ward Neighborhood is well-designed density. This makes it possible to underwrite the open space, streetscape and public programming that would enliven the neighborhood.

To further enhance the connections of Ward Neighborhood to its surroundings, careful consideration has been given in massing building density in a way that preserves and enhances view corridors.

As a true mixed-use district where people can live, shop, dine, be entertained and come together as a community, the remake of Ward Centers will include:

- Retail offerings
- Casual and fine dining
- Entertainment attractions
- A diversity of housing for a range of households
- Premier office space
- Services and amenities such as parks, grocery stores, fitness centers, clinics, schools
- Adequate parking



The Master Plan includes an area of approximately 60 acres and proposes a redevelopment density that will not exceed the maximum 3.5 Floor Area Ratio (FAR) permissible by the HCDA Mauka Area Rules in effect for the Kaka'ako Mauka district. The Master Plan divides the area into a number of land parcels or blocks. Each block can be developed individually or concurrently. The actual program for each parcel may vary depending on market demand and opportunities, but the overall development size is controlled by the maximum permissible FAR and the total size of the area.

The following Area Summary reflects how the proposed development is consistent with HCDA's development requirements under the current Mauka Area Rules. Square footage for various uses and density for each land block are listed along with related information.

There are many possible development solutions in which the Master Plan can be implemented within the parameters established. The scenario presented on the following pages is one possible development solution and does not represent a commitment to building within a defined sequence.

It demonstrates how the various uses can work together on distinct layers. The actual program and uses for each block will be reevaluated through the lifespan of the Master Plan based on market conditions. Each development phase will add mixed-use venues consistent with the Master Plan vision.

The Master Plan consists of four distinct layers of development that organize the uses horizontally as well as vertically. The layers include: street level; second level; podium levels; and the amenity roofs, mid-rise and high-rise towers.

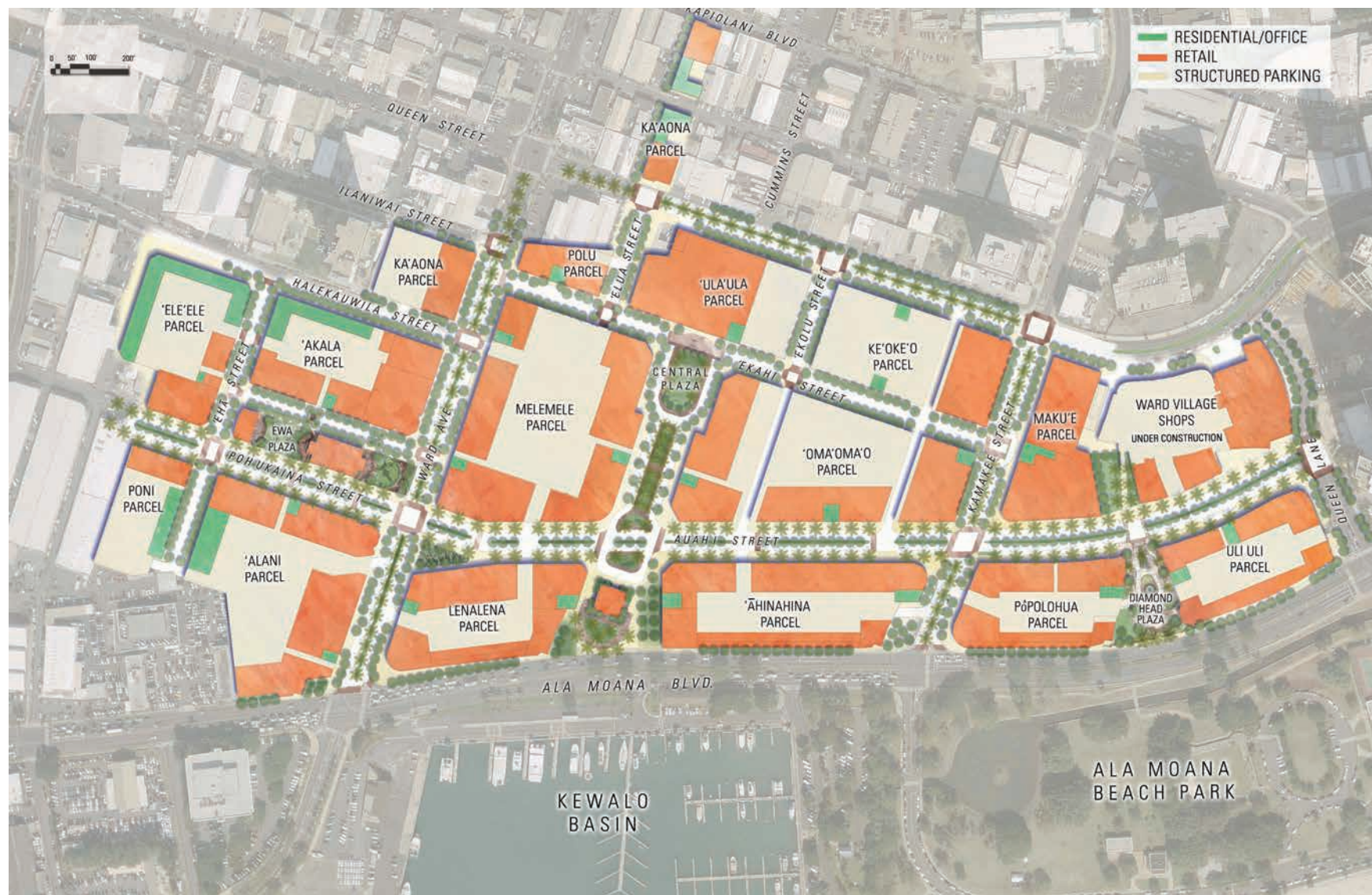
The full development of Ward Neighborhood will unfold over an extended 20-plus year period, in accordance with the planning principles and design guidelines established in the Ward Neighborhood Master Plan. The plans depicted on the next four pages represent a possible "vertical scenario" of uses and density distribution at build-out. The actual development, while consistent with the Master Plan, will be adjusted to reflect evolving needs of the community and accommodate changing market conditions.

Area Summary

	WARD NEIGHBORHOOD MASTER PLAN	HCDA MAUKA AREA RULES
TOTAL LAND AREA	60.14 ac (2,619,548 sf)	
OPEN SPACE	262,000 sf - estimated	261,955 sf (10% minimum)
PUBLIC FACILITIES	344,000 sf - estimated	331,812 sf (3%/4%)
GROSS BUILDING AREA	8,735,000 sf - estimated	
residential (maximum)	7,000,000 sf - maximum	
residential units (including reserved)	4,300 units	
reserved housing units (20%)	860 - 20%	20% minimum
retail, restaurant & entertainment (maximum)	5,000,000 sf - maximum	
office, commercial & other uses (maximum)	4,000,000 sf - maximum	
COVERED EXTERIOR AREA	435,000 sf - estimated	
PARKING	9,600 spaces - minimum	9,600 spaces - minimum
TOTAL AREA & FAR	9,170,000 sf - maximum (3.5 FAR)	3.5 FAR maximum

Land Block Tabulation

	LAND BLOCK 1	LAND BLOCK 2	LAND BLOCK 3	LAND BLOCK 4	LAND BLOCK 5	LAND BLOCK 6	TOTAL
LAND							
land in acres (ac)	21.11 ac	8.15 ac	6.20 ac	5.30 ac	17.84 ac	1.53 ac	60.14 ac
land in square footage (sf)	919,760 sf	355,130 sf	270,159 sf	230,706 sf	777,167 sf	66,626 sf	2,619,548 sf
BUILDING AREA							
gross building area (GBA)	2,840,400 sf	1,446,600 sf	707,840 sf	959,500 sf	2,675,965 sf	102,052 sf	8,732,357 sf
covered exterior	142,020 sf	72,330 sf	35,392 sf	47,975 sf	133,798 sf	5,103 sf	436,618 sf
total	2,982,420 sf	1,518,930 sf	743,232 sf	1,007,475 sf	2,809,763 sf	107,155 sf	9,168,975 sf
OPEN SPACE							
required (10% of lot area)	91,976 sf	35,513 sf	27,016 sf	23,071 sf	77,717 sf	6,663 sf	261,955 sf
provided	60,414 sf	74,653 sf	35,087 sf	34,245 sf	43,365 sf	7,951 sf	255,715 sf
	6.57%	21.02%	12.99%	14.84%	5.58%	11.93%	9.76%
RECREATIONAL SPACE							
required (55sf per dwelling)	65,924 sf	39,137 sf	12,954 sf	25,616 sf	86,922 sf	1,115 sf	231,669 sf
provided	77,947 sf	46,132 sf	0 sf	36,926 sf	88,956 sf	0 sf	249,961 sf
PUBLIC FACILITIES							
required at 4%	76,056 sf	50,704 sf	18,560 sf	35,340 sf	97,475 sf	1,232 sf	279,367 sf
(residential less reserved housing)							
required at 3% (balance)	28,170 sf	5,370 sf	7,315 sf	2,280 sf	7,173 sf	2,138 sf	52,446 sf
total required	104,226 sf	56,074 sf	25,875 sf	37,620 sf	104,648 sf	3,370 sf	331,812 sf
provided	154,621 sf	4,199 sf	0 sf	8,027 sf	177,183 sf	0 sf	344,030 sf
FAR							
area in this parcel	2,982,420	1,518,930	743,232	1,007,475	2,809,763	107,155	9,168,975
potential area transfer	-236,740	275,975	-202,325	200,004	89,679	-126,036	557
(up to 25% FAR)	-7.35%	22.20%	-21.40%	24.77%	3.30%	-54.05%	0.01%
FAR	3.24	4.28	2.75	4.37	3.62	1.61	3.50



FOR ILLUSTRATIVE PURPOSES ONLY. PLAN SUBJECT TO CHANGE.

The Street Level

This plan shows all street level functions including:

- New public spaces and pedestrian-friendly sidewalks
- Retail, dining, and entertainment uses, fronting public streets and open spaces
- New internal public roadways (private ownership)
- Residential units at base of podium
- Residential and office lobbies
- Parking garage entries and exits
- Parking structures
- Pedestrian access ways to/from parking structures
- Significant landscape screening at Ala Moana Boulevard



FOR ILLUSTRATIVE PURPOSES ONLY. PLAN SUBJECT TO CHANGE.

The Second Level

This plan shows all second level development including:

- Additional levels of retail, dining, and entertainment uses at various locations
- Office space at the second level
- Residential units facing public streets and open spaces
- Public and residential parking

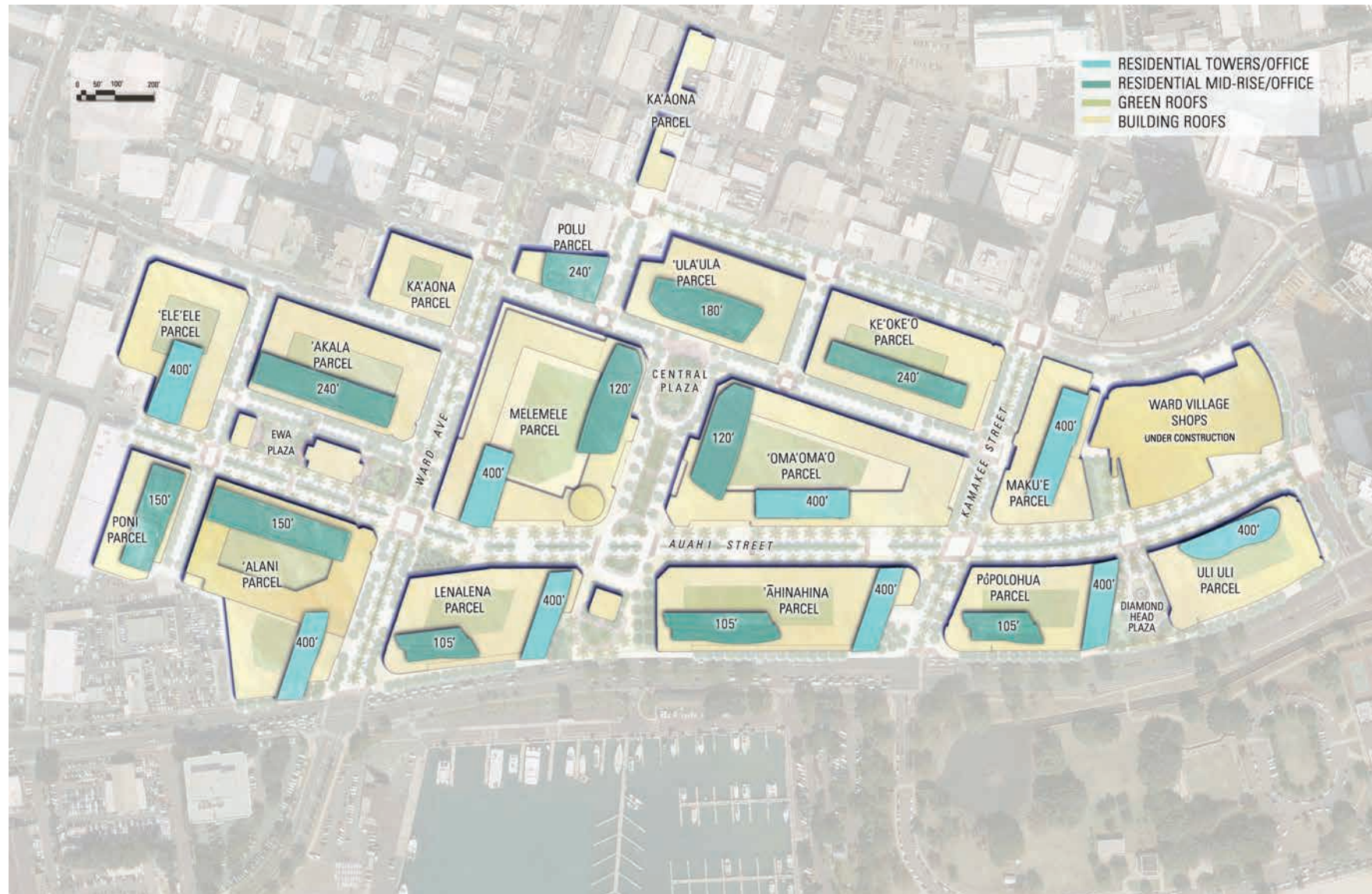


FOR ILLUSTRATIVE PURPOSES ONLY. PLAN SUBJECT TO CHANGE.

The Podium Levels

The podium is defined as the portion of the building on which a tower structure sits. It is the main façade seen at street level. The tower structure would sit above the podium and be set back from the right-of-way. Podium level uses might include:

- Office space
- Residential units, facing public streets and open spaces
- Screened public and residential parking structures



FOR ILLUSTRATIVE PURPOSES ONLY. PLAN SUBJECT TO CHANGE.

The Amenity Roofs, Mid-Rise and High-Rise Towers

Mid-rise and high-rise buildings are located above the podiums. These buildings vary in height depending on their location, and they include multiple uses such as residential units and commercial office space.

The upper level of the podium serves as an area for residential amenities and landscaped gardens, providing softer and greener views for the residents above.

Uses above the podium level could include the following:

- Mid-rise and high-rise commercial office space
- Mid-rise residential on various parcels, of various heights as noted
- Residential towers on various parcels, of various heights as noted
- Roof deck amenities and recreation areas for residential and office uses



Phasing Flexibility

The Master Plan represents a long term vision that will be incrementally implemented in response to market demand. Each stage of the development will help to inform the development of subsequent phases to better meet the needs of the evolving community.

The Ward Neighborhood Master Plan calls for a redevelopment of the Ward properties over more than twenty years toward the ultimate vision of a Neighborhood that is integrated by its public spaces and cohesive in its building designs, landscape plans and street amenities. The timetable for initiation of projects must be able to adapt to changing market conditions, public/private partnerships and other opportunities that may emerge as the Neighborhood becomes more fully formed—always moving toward a whole that is greater than the sum of its parts.

While no specific phasing sequence is defined, it is intended that public spaces will be developed earlier in the sequence, allowing residential, office and retail buildings to draw on a “bank” of public spaces that are already in place.

Potential Phasing Strategies

It is possible that the development of Ward Neighborhood could include as many as 10 to 15 different phases, implemented in response to market opportunities. At this time, it is difficult to say which uses (commercial, retail, residential) will be best for each of the land blocks within the community. However, the overall development will follow the vision of the Ward Neighborhood Master Plan and the Mauka Area Rules that are currently in effect.

PHASING PRIORITIES

PUBLIC SPACE STRATEGIES

- Place making
- Urban oasis
- Support livability at all project phases
- Network of public spaces that connects to broader community
- Catalyst for broader community revitalization

INFRASTRUCTURE STRATEGIES

- Keep ahead of demand
- Site preparation/enabling
- Leverage coordination opportunities

MIXED-USE STRATEGIES

- Maintain vibrancy for all uses throughout the life of the project
- Measured transition, implemented over more than 20 years
- Live-work-play, transit-oriented development
- Maintain existing office and retail in place while adding new uses over time
- Rather than one mega project, 10-15 projects implemented in response to market opportunity
- Places evolve over time
- Diversification of uses
- Mix of local and national retail tenants

TRANSPORTATION STRATEGIES

- Local connectivity
- Multi-modal access
- Transit orientation
- Traffic calming
- Pedestrian friendly
- Monitor demand and transit ridership
- Support public transportation, cyclists and pedestrians

INITIAL

- Central Plaza
- Connections to Ala Moana Beach Park and Kewalo Basin

- Site preparation and enabling
- Utilities to support phased development and public space

- Create place/context through open space strategy
- New housing around public space, lower density
- New retail facilities
- Transition from warehouse uses
- Lifestyle retail at Central Plaza
- Office above lifestyle retail

- Auahi Street pedestrian and streetscape improvements
- Utilize existing parking
- Capitalize on opportunities for shared parking due to mixed use
- Walk to work—encourage local accessibility
- Improved bus facilities

MID-RANGE

- 'Ewa Plaza west of Ward Avenue
- Diamond Head Plaza
- Connections to Blaisdell Center

- Utilities to support phased development

- New housing stock, built block by block, demand driven
- New retail facilities
- Supplemental retail stock
- Include service-oriented retail for residential population
- Office development complementary to residential and retail uses

- Auahi Street realignment
- New parking facilities to support new uses
- Integration with regional transportation strategy

LONGER TERM

- Secondary public spaces
- Transportation oriented development connections
- Identify additional public space opportunities in emerging neighborhoods

- Utilities to support phased development

- Density increase triggered by mass transit
- New housing stock, built block by block, demand driven
- New retail facilities

- Integration with future mass transit
- Transportation demand management



Santana Row, San Jose, California

Design Guidelines

Public Open Spaces

The Urban Open Space System

Well designed open spaces are vital to the success of a vibrant city. Public open spaces provide opportunities for activities such as community gatherings, relaxation, commerce, cultural events, celebrations, recreation, and social interaction, to name just a few. The proposed open spaces in the Ward Neighborhood Master Plan can help to provide a renewed sense of community identity, both at the neighborhood and regional levels. The synergy of these spaces in conjunction with the linkages between them will help to honor, celebrate and transform Ward Neighborhood into a vibrant, mixed-use gathering place.





Quebec City, Canada

Open Space Goals

In general, the vision for the public spaces will be guided by four themes:

Uses and Activities

- Spaces should be designed to accommodate regular events
- Public spaces should be designed for the human scale, creating a place where people feel comfortable
- Public spaces should acknowledge the context in which they are placed, such as adjacent land uses, architectural features, view corridors and natural features
- Public spaces should create a sense of place, defined by the context which surrounds them
- Focal points and/or subspaces within larger spaces can help provide diversity within the landscape

Access and Linkage

- Public spaces should be easy to find with views extending beyond the spaces' boundaries
- A visual connection between adjacent buildings and/or streets with public spaces can provide "eyes on the street" and a sense of safety
- Transit stops should be provided at public spaces as well as along pedestrian corridors
- Transition areas between pedestrian and vehicular corridors can establish a safe and seamless integration between these elements

- Accessibility for people of all ages and abilities should be provided at all public spaces
- Traffic calming strategies should be used where vehicular and pedestrian spaces converge

Comfort and Image

- Seating should be provided in all public spaces and along pedestrian walkways at key locations
- Cafés, restaurants or other food vendors (if offered within or adjacent to public spaces) can energize the areas with activity and attract users
- Landscape features, such as trees and shrubs, can bring life to a space by providing shade and nature
- Water features can help to cool a space
- Shelter from sun and rain, along with wind breaks, will be appreciated by users of the space

Sociability

- Art and water elements can help to create experiences that promote interaction
- Lighting can be an important element for users of a space after dark
- Designing for diversity—both in users and activities—will help attract the community to public spaces
- Opportunities for conversation, gathering and play should be provided



Example of Public Art. Photo copyright: Heidi Smets, 2008

Public Art

Public art helps to establish a unique sense of place and can further emphasize themes and cultural traditions attached to a place. Public art can help with wayfinding for residents and visitors and can enliven public open spaces and streetscapes in Ward Neighborhood.



Example of Public Art. Photo copyright: Heidi Smets, 2008



Above: Park Güell by Antonio Gaudí, Barcelona, Spain.
Inset: "The Fish" by Brian Robinson, Cairns, Queensland, Australia



Goals and Locations

Public art goals should be determined prior to initiating a particular project and appropriate locations for siting of artwork should be determined. Some of these goals might include:

- Enhancing neighborhood identity or themes.
- Using public art as a means of furthering the community's sense of spirit and pride.
- Fostering collective memory and giving meaning to a place.
- Engaging the general public in the art process in meaningful and responsive ways.
- Encouraging early collaboration on projects among artists, architects, landscape architects, engineers and other design professionals to allow for integrated art where possible.
- Giving visual expression to local values and cultural diversity.

Permanent and Temporary

Permanent art work would remain in the proposed location for a specific period of time. Guidelines for permanent work should include provisions for creating durable work, safety, maintenance, and relocation should the need arise. Temporary work can often complement public events and performances, and can help create a festive seasonal atmosphere. Guidelines for temporary work should include construction that does not damage permanent structures or landscaping. Safety and timely removal of the work should also be considered.



Santana Row, San Jose, California

Landscape

Landscape guidelines help to ensure a livable, high-quality, sustainable, mixed-use environment. These landscape design guidelines have an overarching environmental goal of balancing smart urban growth and environmental sustainability within Ward Neighborhood by:

- Supporting appropriate design for the local Hawaiian climate.
- Utilizing native Hawaiian species.
- Using sustainable materials and construction strategies.
- Pursuing opportunities for alternative energy generation.
- Reducing urban heat–island gain.
- Maximizing water conservation.
- Managing storm water as an opportunity.
- Implementing best management practices (BMPs).



Gateways

Gateways can serve to provide Ward Neighborhood with a memorable identity and should:

- Have an iconic form, designed to express a timeless and elegant image for the Neighborhood.
- Create a sense of entering or passing through the community.
- Be appropriately scaled for the street typology and adjacent building form.



Well-placed bollards

Parking and Circulation

Parking

Parking areas should be designed to enhance the resident's and visitor's experience and contribute to the overall character of Ward Neighborhood. Public parking in the community may be provided by parking structures and on-street parking.

- All parking areas shall comply with local codes and regulations, ratio requirements, general parking dimensions and any other applicable policies regarding parking.
- Safe and convenient parking access should be in compliance with the American With Disabilities Act (ADA) requirements.
- Parking garages may be screened from public views by wrapping with commercial or residential uses or with vegetation and/or architectural features.

Sidewalks and Pathways

Sidewalks and pathways serve as the primary pedestrian connections along the streets and within public open spaces of Ward Neighborhood.

- Walkways should be appropriately sized based on the intended use.
- Sufficient room for safe pedestrian passage needs to be established.
- Sidewalks should comply with the HCDA, the City and County of Honolulu, State of Hawai'i and ADA codes and standards.
- Pedestrian walkways that connect parking areas to buildings and public spaces should be clearly defined.
- Separate pedestrian circulation from vehicular circulation where feasible.

Crosswalks

Crosswalks and curb ramps at all street intersections would provide safe, accessible crossing of streets. Crosswalks and curb ramps should conform to the HCDA, the City and County of Honolulu, State of Hawai'i and ADA codes and standards.

Bollards

Bollards can restrict vehicles from pedestrian areas and provide added separation and safety between vehicles and outdoor dining spaces near the curb. Bollards may also be used to define and restrict parking areas and spaces for motorcycles. Bollards should incorporate lighting as an integral feature.



High quality lighting

Bicycle Circulation and Amenities

Bicycle transportation will be an integral part of the lifestyle at Ward Neighborhood. Clearly designated bike lane zones in vehicular roads or pedestrian areas should be established. Bike lanes should be designed to meet all local and federal standards for bikeway planning and design, and should conform to all vehicular codes.

Bicycle parking in public spaces should be provided at principal destinations and access points, at all open spaces and public facilities, in and around commercial and retail centers, and generally distributed liberally throughout the site to promote bicycle transportation.

Lighting

The primary goals for lighting in Ward Neighborhood are:

- To create an attractive daytime and nighttime urban environment.
- To establish a safe, active nighttime urban experience.
- Increase vehicular and pedestrian safety.
- Support security requirements.
- Maintain and elevate the character of Kaka'ako.

All lighting within Ward Neighborhood should meet the design requirements of the AASHTO standard specifications for luminaires, and should conform to Illuminating Engineering Society of North America (IES) standards, and meet all pertinent requirements of the HCDA, the City and County of Honolulu, and the International Dark-Sky Association (IDA).

Planting

The selection of planting materials should be carefully considered during the design process in order to create a palette that enhances the character and image of the streets and public spaces in Ward Neighborhood. Hawaiian native or compatible species should be used whenever possible.

- Plants should be selected that tolerate coastal Honolulu conditions, including salinity, heat, wind, sand, heavy rains and local soil conditions.
- Plants should be selected that help reduce water demands. Plants that require moderate to heavy water use should be used sparingly and only in special locations.
- Plants should be selected that can be maintained in their natural forms to reduce maintenance, pruning, green waste and energy use.
- Plant materials should conform to all local and regional codes and regulations.
- All planting designs will comply with the HCDA Mauka Area Rules currently in effect.

Trees

Trees are essential for place-making as well as climate mitigation. Trees of an appropriate number, size and species are encouraged throughout landscaped areas. Careful planning and choice of tree form, spacing and species selection will ensure tree longevity and help to create a livable and vibrant urban environment within Ward Neighborhood.

Tree Form

Tree form plays an important role in the character of parks and public spaces. It is important to consider a tree's shape, scale, branch structure and texture when specifying trees. These characteristics should relate to the building form, street typology and both neighborhood and site character.

- Pedestrian and vehicular uses should be considered when choosing tree species.
- Tree crowns should be established to provide shade and maintain safe passage for pedestrians.
- Tree layout and spacing should be appropriate for maintaining or enhancing the street character.

Species Selection

Tree species selection should be based upon site conditions, street typology, district character and localized street tree patterns. Continuing the planting of a particular species down a street, path or along walkways can provide a sense of continuity in the urban environment.



Coconut Palm



Bird of Paradise



Brisbane Box

Ward Neighborhood Plant List

Following is an example of a potential plant palette that could be utilized in the Ward Neighborhood:

BOTANICAL NAME	COMMON NAME
TREES AND PALMS	
Aleurites moluccana	Kukui
Cassia fistula x C. javanica	Rainbow Shower Tree
Clusia rosea	Autograph Tree
Cocos nucifera	Coconut Palm
Conocarpus erectus var. argenteus	Silver Buttonwood
Cordia subcordata	True Kou
Delonix regia	Royal Poinciana
Ficus religiosa	Bo Tree
Lophostemon confertus	Brisbane Box
Noronhia emarginata	Madagascar Olive
Pandanus odoratissimus	Hala
Plumeria obtusa	Singapore Plumeria
Pritchardia pacifica	Fiji Fan Palm
Ravenala madagascariensis	Traveller's Palm
Roystonea regia	Cuban Royal Palm
Samanea saman	Monkeypod Tree
SHRUBS	
Cordyline fruticosa	Ti Plant
Crinum asiaticum	Spider Lily
Gardenia taitensis	Tiare Gardenia
Graptophyllum pictum	Caricature Plant
Hibiscus spp.	Hibiscus
Crinum augustum	Queen Emma Lily
Strelitzia reginae	Bird of Paradise
Strelitzia Nicolai	Giant Bird of Paradise
GROUND COVER	
Nephrolepis cordifolia	Kupukupu Fern
Phymatosorus grossus	Laua'e Fern
Rhoeo spathacea	Moses in a Cradle
Sida fallax	'Ilima papa
Wikstroemia uva-ursi	'Akia

Other Plant Material

Shrubs and Groundcovers

Shrubs and groundcovers play an important role in adding a pedestrian scale to streets and public open spaces. Additionally, they add color and texture to the landscape. They also aid in stormwater mitigation and erosion control during rain events.

Vines

Select placement and uses of vines can help insulate the building envelope, shade pedestrian zones and enhance the aesthetic experience. Vines should be considered on parking structure facades, balconies, interior courtyards and shade trellises.

Turf

Turf grass may provide a comfortable and safe recreational surface to areas within the public open spaces of Ward Neighborhood. Turf should only be used in areas intended for recreation, gatherings or respite. Low-growing ground covers or pervious materials appropriate for the climate should be used in all other areas to reduce maintenance and watering demands.

Irrigation

Highly efficient irrigation equipment shall be used for all planting areas. Irrigation systems shall be fully automatic and designed with moisture sensors and automatic shut-offs. Systems should be designed for future integration into a non-potable/recycled water system. Stormwater that is collected from roofs, paved areas, in swales, detention/retention ponds, cisterns, rain barrels and rain gardens should be reused for irrigation where feasible.

Site Furnishings

The relationship of landscape furnishings to buildings, walks, paths and plaza areas is important in both defining and reinforcing the design character of the streets and public spaces in Ward Neighborhood. Consistent use of similar or a family of site furnishings should be applied throughout the Neighborhood, made of durable materials suitable for a semi-tropical coastal environment.

Seating

Benches and seat walls offer places to rest, gather, wait and watch surrounding activities. Careful consideration should be paid to the materials used in relation to solar exposure, heat gain and adjacent buildings and furnishings.

Receptacles

Receptacles for trash and recycling provide an important component for the control of litter and trash, as well as play a key role in maintaining a positive image within Ward Neighborhood.



Giant Bird of Paradise



Royal Poinciana



Laua'e Fern



Street furnishings



Street furnishings

Drinking Fountains

Drinking fountains offer a place for respite and refreshment. Consideration should be paid to location of drinking fountains in relation to adjacent activities and recreational uses. Drinking fountains should be considered as potential art opportunities and should comply with all local codes and regulations and ADA.

Tables

Tables provide places for respite, gathering and picnicking. In Ward Neighborhood, they can become magnets for social gatherings. Whenever possible, tables shall be located in shaded areas, under trees or shade structures. Tables should comply with all local codes and regulations and ADA.

Kiosks and Newspaper Racks

Kiosks and newspaper racks may fulfill several important functions in Ward Neighborhood. They can provide important and timely information. Custom kiosks and racks can also help establish a unified streetscape design for the community.

Environmental Graphics

A coordinated environmental graphics strategy will simplify vehicular and pedestrian navigation, help promote safety, create a cohesive sign family and enhance the physical environment of Ward Neighborhood.

Service Areas and Utilities

While service areas and utilities are a necessity for any project, the goal at Ward Neighborhood is to integrate them seamlessly into the community. Utilities should be located under roads, walkways and plazas to minimize impacts on the landscape. Service areas should be located within parking garages and concealed by trees, shrubs or vines to help create a more pleasing visual exterior for the community.

Establishment and Implementation of Design Guidelines

As part of the planning and design work for the first phase developed under the Master Plan, more specific design guidelines will be prepared. These will address architectural, building, landscaping and other design standards in greater detail and will help to establish the foundation for the overall project throughout its implementation.

TRANSPORTATION





TRANSPORTATION

The Ward Neighborhood transportation strategy provides a comprehensive and multi-modal plan for the travel needs of people living, working and visiting Ward Neighborhood. The strategy includes a mix of programs and physical infrastructure intended to increase transit ridership, improve the pedestrian and bicycle environment and minimize traffic congestion.





The proposed Ward Neighborhood redevelopment promises to bring new attractions and land uses to the area, such as residential and office space as well as retail and restaurants. These varied land uses will help to improve the jobs-housing balance in central Honolulu and create additional opportunities for residents to live in close proximity to jobs, shopping and entertainment. Changing land uses and associated trip patterns can serve to balance the directional traffic patterns in the area, with the possible creation of new opportunities for walking, bicycle and transit trips.

The strategy provides a long term vision that will progressively help shift Ward Neighborhood from an auto-oriented environment to an area which embraces transit, walking and biking. The plan is to achieve such goals through a mix of new facilities, infrastructure and programs that will positively encourage sustainable travel behavior. The purpose is to propose a variety of transportation choices. It is a balanced strategy that places its greatest emphasis on access, mobility and connectivity.



Existing Transportation Context

Regional Context

The Ward Neighborhood is located one mile southeast from Downtown Honolulu and two miles northwest of Waikiki. It neighbors the Kewalo Basin and Pacific Ocean, and is bordered by Ala Moana Boulevard, the key arterial traffic route connecting Honolulu International Airport, Downtown and Waikiki Beach.

The Ward Neighborhood connects to a wide range of existing transport infrastructure including the H-1 Freeway, arterial roads, transit services and pedestrian and bicycle routes. The site is also adjacent to a planned mass transit station which is a part of the Honolulu High Capacity Transit Corridor Project.

Nearby employment concentrations at Downtown Honolulu and Waikiki give residents of the Kaka'ako district access to some 250,000 jobs within a 3-mile radius, representing 60% of Honolulu's total jobs. However,

despite the excellent accessibility of the site, residential population density is lower than in surrounding districts.

Because Ward Neighborhood is so accessible, even today its residents use transit and walk more than people in other parts of Honolulu. Transit and bicycling trips in Kaka'ako account for 17% and 16% of daily work trips respectively. These non-vehicle trips may increase as the area redevelops, which can establish a more transit-supportive and pedestrian-oriented community.

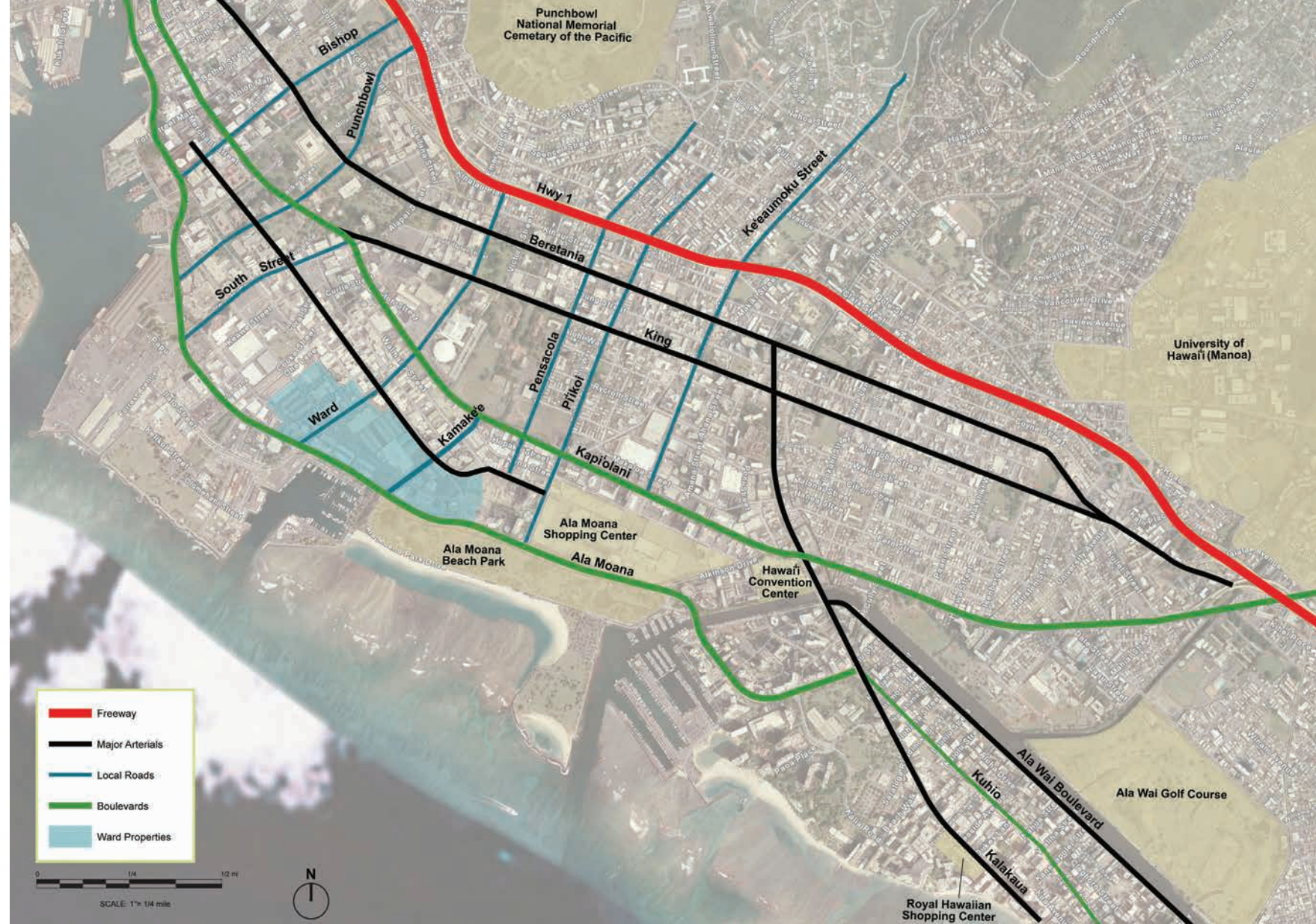


Figure 1: Existing Regional Street Network

Existing Traffic Network

The Ward Neighborhood is well served by the regional road network, including the following key routes:

- The H-1 Freeway provides a six-lane, limited access freeway that is the major east-west (Diamond Head-ʻEwa) access route in Honolulu, stretching from the Kalanianaʻole Highway near Diamond Head in the east and to Kapolei via the Airport and Waipahu in the west.
- Ala Moana Boulevard is a major six-lane arterial running east-west along the south side of the site. Ala Moana Boulevard is the primary connection between downtown Honolulu and Waikīkī.

- Kapiolani Boulevard is a major six-lane arterial running east-west three blocks north of the development site. It provides an alternative east-west route to Ala Moana Boulevard between Downtown and Waikīkī.
- Ward Avenue is an important four-lane arterial providing north-south (mauka-makai) access between Ala Moana Boulevard and Kapiolani Boulevard and the H-1 Freeway to the north.

The existing regional street network serving Ward Neighborhood is illustrated in Figure 1.

The local traffic network surrounding Ward Neighborhood provides the Kaka‘ako district with access to the various industrial, retail and residential uses that currently exist in the neighborhood. As the area becomes more pedestrian-oriented in character, it will be important to resolve street discontinuities and break down super-blocks to create an effective local street network.

Key local streets serving Ward Neighborhood are:

- Auahi Street is a four-lane street running east-west through Ward Neighborhood. Much of the Ward Neighborhood site is currently accessed from Auahi Street. It functions in a similar manner to a neighborhood “main street.”
- Queen Street runs in an east-west direction along the northern side of the Ward Neighborhood. Currently, the section of Queen Street adjacent to the site has a local-industrial street typology with no sidewalks and no lane striping. However, northwest of the development, Queen Street adopts a four lane collector typology with sidewalks.
- Kamake‘e Street, which runs through the eastern section of Ward Neighborhood, is a four lane collector that terminates to the south at Ala Moana Boulevard and to the north at Kapiolani Boulevard. It provides access to adjacent properties and acts as an alternative north-south route to Ward Avenue.

Existing traffic conditions show that, throughout a majority of the day, both the regional and local traffic networks currently perform well. However, during the peak hours, congestion is evident along regional routes such as Ala Moana Boulevard, Kapiolani Boulevard and the H-1 Freeway.

Future traffic conditions in the Kaka‘ako district are currently being assessed by the HCDA as part of an environmental review of the Mauka Area Plan. This study will investigate performance of the existing traffic network and forecast what changes could arise from the planned redevelopment of the district as a whole, including Ward Neighborhood. Planning for Ward Neighborhood will continue to involve close collaboration with the HCDA on this critical issue.

Opportunities to manage traffic congestion should be a part of future redevelopment at Ward Neighborhood, including strategies to improve street connectivity, encourage use of alternative modes, reduce peak travel demand and employ traffic calming techniques.

Existing Public Transit Network

Ward Neighborhood is located at the confluence of several transit services:

Bus Transit

Ward Neighborhood is conveniently located within a quarter-mile walk of 18 bus lines operated by TheBus. Bus lines mostly operate along Ala Moana Boulevard, with one service operating through Ward Neighborhood along Kamake‘e, Auahi and Ward Streets. Other bus lines operate along Kapiolani Boulevard, a short walk mauka of Ward Neighborhood. Ala Moana Center, adjacent to Ward Neighborhood, is a major transit hub providing transit connections throughout O‘ahu.

Trolley Service

The Waikiki Trolley, a private company, operates four lines on O‘ahu. The trolley routes predominantly serve tourists, with routing to shopping destinations, hotels and other tourist destinations. Two trolley routes (Red Line and Yellow Line) serve Ward Neighborhood, and riders can transfer between routes on Auahi Street.

Future High Capacity Transit Corridor Project

The Honolulu High Capacity Transit Corridor Project is planned as a high quality transit system for Honolulu in the corridor between Kapolei and the University of Hawai‘i at Manoa, with the first phase project extending to Ala Moana Center. Major destinations served by the transit line would include Ala Moana Center, Ward Neighborhood, Downtown Honolulu and a potential extension to the Airport.

The proposed mass transit system would provide an exclusive elevated right of way for transit vehicles. The vehicles would operate from 4 a.m.-midnight daily at intervals of 3-10 minutes.

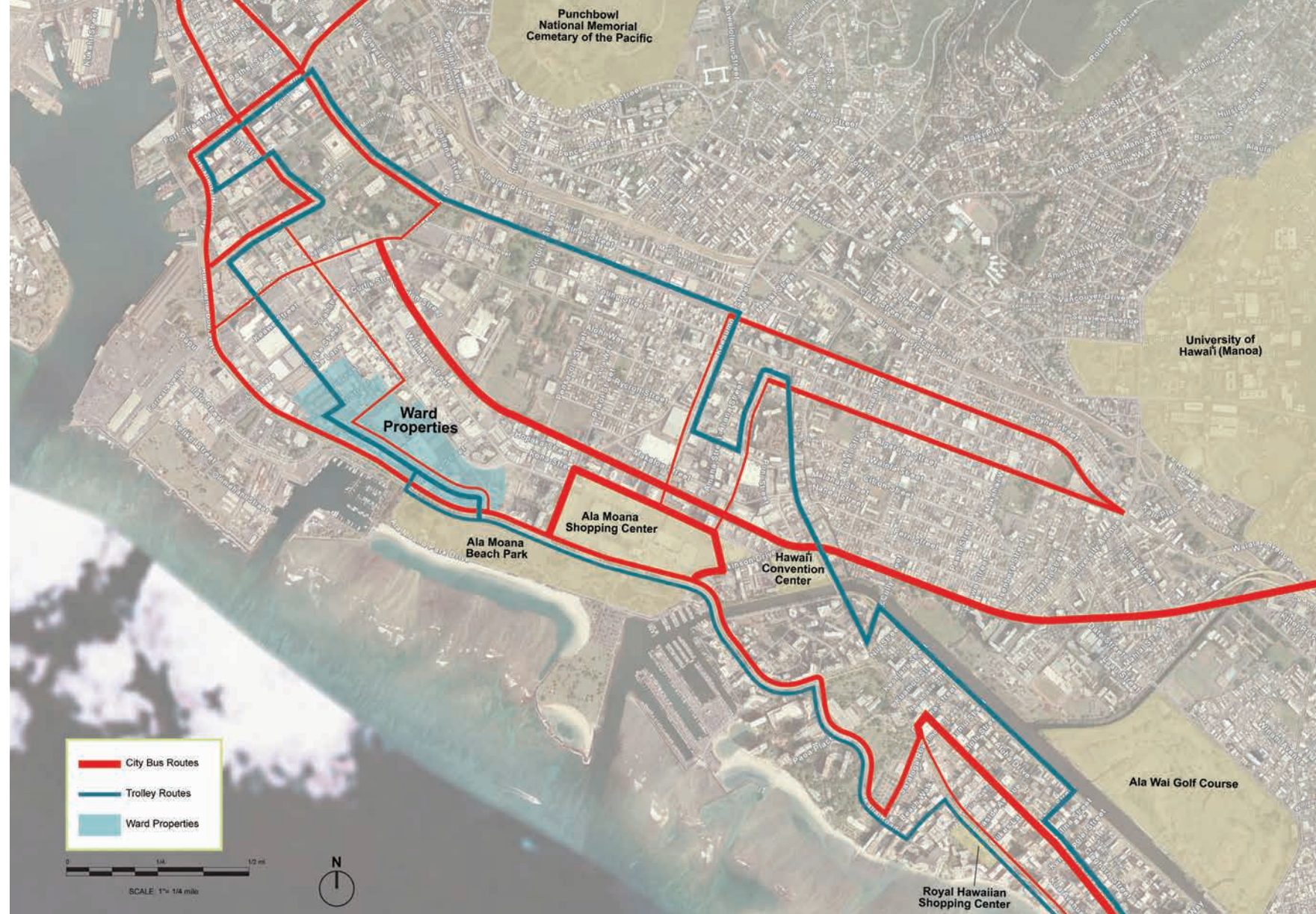


Figure 2: Existing Regional Transit Routes

Several alignment alternatives were studied in the vicinity of Ward Neighborhood including various options on Halekauwila Street, Queen Street, Kawaiahao Street and Waimanu Street. In the Diamond Head direction from the site, the system would operate via Kona Street to Ala Moana Center. The preferred alignment selected in the Alternatives Analysis Report travels via Halekauwila Street and Queen Street in the vicinity of Ward Neighborhood.

A station would be provided near Ward Avenue, although the exact location has yet to be determined. GGP has met with, and will continue to meet with, the City to discuss the transit alignment as well as the location of the transit station in Ward Neighborhood. The redevelopment of Ward Neighborhood provides a unique opportunity to embrace this new transit station within a mixed-use transit oriented community. Ward Neighborhood will be designed to be “transit ready.”

Ward Neighborhood’s transit routes are shown in Figure 2.



Figure 3: Existing Bicycling Routes

Existing Bicycle and Pedestrian Networks

The existing cycling network in the Kaka'ako district is fragmented and does not encourage cycling as a transportation choice. The neighborhood is also disconnected from planned regional cycling facilities. Redevelopment of Ward Neighborhood provides an opportunity to add to this network and improve opportunities for cycling within the Kaka'ako district.

Figure 3 illustrates existing regional bicycle routes in the surrounding area.

Many streets in Central Kaka'ako lack basic pedestrian facilities including curbs and sidewalks. Where present, sidewalks vary in width and are often obstructed by street furniture, utilities and other obstacles. Crosswalks are present at most major street intersections with pedestrian signals.

Within Ward Neighborhood, recently constructed sidewalks provide an improved pedestrian environment. Future redevelopment provides an important opportunity to further improve pedestrian conditions by providing streets that place pedestrians first, with the addition of attractive sidewalks, safe street crossings and quality public spaces.

Proposed Transportation Strategy

The Ward Neighborhood transportation strategy has been developed with the intent to provide future residents, workers and visitors of Ward Neighborhood with viable transportation alternatives that will improve the quality of life in the Kaka’ako district.

The following section discusses in greater detail the specific transportation strategies that are proposed as an integral part of the future Ward Neighborhood redevelopment.

Traffic Management

One of the goals of the Ward Neighborhood redevelopment is to reduce reliance on the private automobile, which in turn can improve the quality of life within the district.

Traffic management strategies will aim to minimize traffic by encouraging walking, cycling and transit ridership. Large volumes of automobile traffic will be more appropriate on arterial routes rather than on pedestrian-oriented local streets. At the same time, streets would be designed to be “complete streets” that include attractive landscaping and high quality facilities for all road users.

Traffic management strategies that could be implemented at Ward Neighborhood include:

Improved Streets

The proposed street network integrates with regional traffic routes. It also will improve local connectivity throughout the site. Improvements would include delineated traffic lanes, turn bays and indented parking while accommodating widening at key locations. The Master Plan provides for a cohesive street network with improved property access points and traffic flow, along with the potential to reduce conflicts with pedestrians.

Traffic Calming

Traffic calming is intended to slow down vehicle speeds by a number of design elements that naturally reduce speeds. These include narrowed lanes, landscaping, bulb-outs, frequent intersections and crosswalks, and slowed traffic from parking and turn maneuvers.



Bus transit service on Ala Moana Boulevard

Increase Street Connectivity

The streetscape within Ward Neighborhood will be designed to complement the surrounding community, reflecting the historical grid pattern that is inherently pedestrian and bicycle friendly.

Mixed-Use Development

The mixed-use land use program proposed for Ward Neighborhood should help to moderate the growth of peak hour traffic, as trips are distributed throughout the day, making better use of the road network.

Provide Local Housing, Employment and Retail Opportunities

By reducing the distance that residents have to travel to access services and employment, future residents of Ward Neighborhood may have a substantially reduced impact on the region’s transportation networks compared to typical fringe development. Clusters of more intensive land uses will also encourage people to walk between destinations and “link” their trips, so that they make fewer vehicle trips overall.

Provide a Transit-Supportive and Pedestrian Oriented Environment

Transit oriented development at Ward Neighborhood should provide the potential for a watershed change in travel behavior towards more sustainable modes of transportation. By providing people-friendly spaces and a denser concentration of housing, employment and retail, future residents are more likely to travel by transit, walk or bike. These policies will help support the existing bus network and future high capacity transit system.

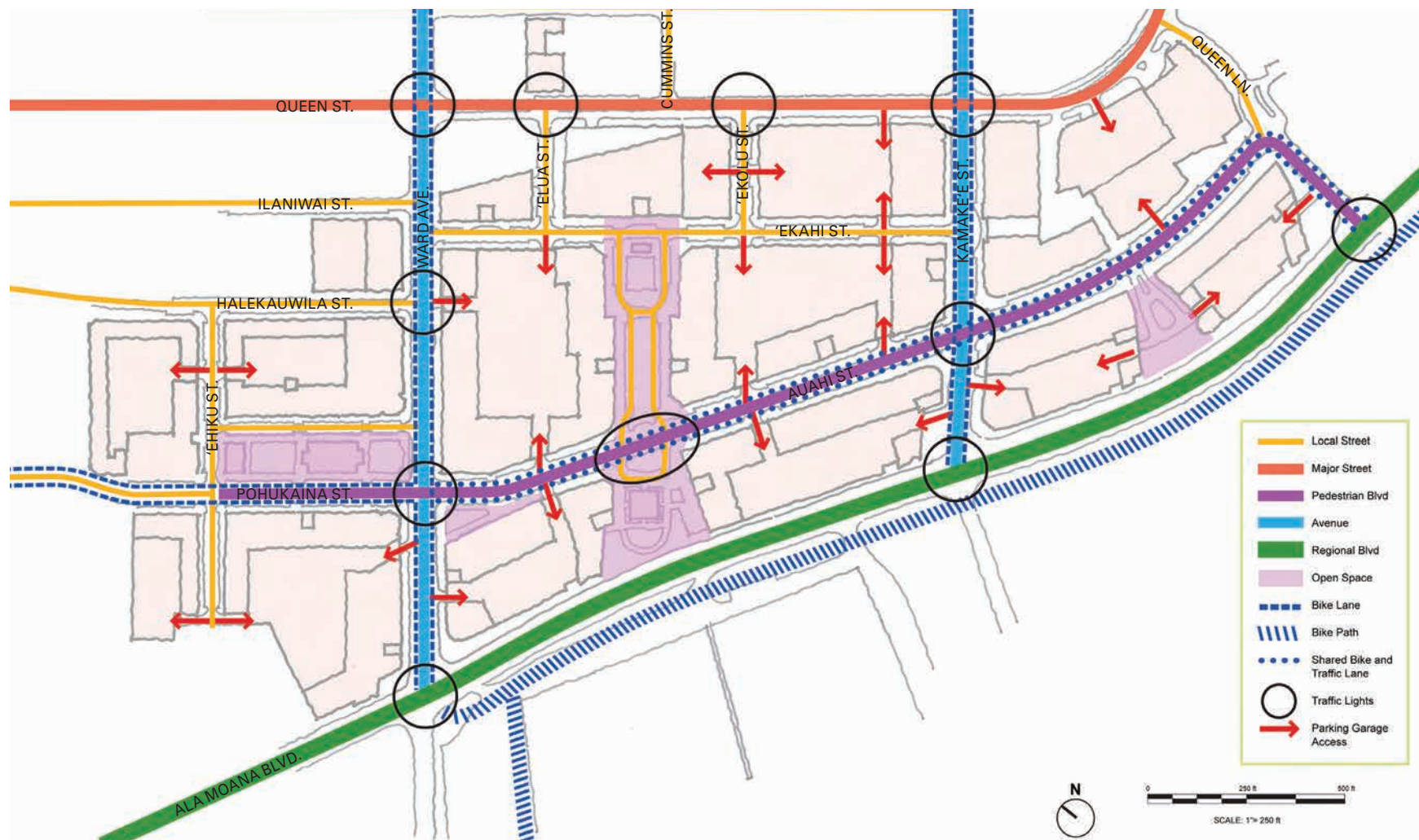


Figure 4: Concept For Street Connectivity And Access

Figure 4 illustrates the concept for street connectivity and access in Ward Neighborhood.

The street hierarchy builds on the concept outlined by the HCDA in its Draft Mauka Area Plan (May 2007), identifying the important regional roles of Ala Moana Boulevard, Ward Avenue, Kamake'e Street and Queen Street. Local connectivity would be provided by new and improved internal streets, which in turn can offer access to the planned car parking garages. Bicycle facilities are planned to connect the bicycle paths along the waterfront to the neighborhood, with proposed new mauka-makai bike lanes on Ward Avenue and Kamake'e Street, and a new Downtown Honolulu link along Pohukaina Street.

STREETS

PUBLIC

Ward Avenue
Kamake'e Street
Auahi Street
Pohukaina Street
(Ewa of Koula St.)
Halekauwila Street
(Ewa of Koula St.)
Ilaniwai Street
Ala Moana Blvd.
Queen Street

PRIVATE

EXISTING

Pohukaina Street
(Koula St to Ward Ave.)
Halekauwila Street
(Koula St to Ward Ave.)
Queen Lane

NEW

'Ekahi Street
'Elua Street
'Ekolu Street
'Ehiku Street



Parking Management

Parking is a critical aspect of Ward Neighborhood and its redevelopment. With the increase in density proposed in the Master Plan, a significant number of additional parking spaces will be required.

Plans to maximize parking efficiency are integral to the implementation of the Master Plan. A key component would be the provision to create publicly accessible shared parking garages, serving the many future land uses throughout Ward Neighborhood. Shared parking garages optimize parking efficiency by taking advantage of variations in the peak parking demand throughout the day for different land uses, and the likelihood that multiple trip purposes can be satisfied with only one auto trip.

Shared parking schemes have been successfully implemented in large scale shopping, mixed use and residential developments around the country. Potential parking efficiency benefits were estimated using an approach adapted from the Urban Land Institute's Shared Parking Study (2005). Under the proposed development program and relevant assumptions, the likely parking reduction for Ward Neighborhood was calculated to be approximately 15 percent, as illustrated in Figure 6.

The ultimate amount of parking provided at Ward Neighborhood will be based on the future mix of land uses, which cannot be accurately forecast at this time. The parking provision will be targeted to satisfy HCDA parking requirements and future parking demand. On the basis of current planning, at least 9,600 parking spaces would be provided over the 60-acre project. This number is expected to decrease over time, reflecting improved accessibility to transit and local services, as illustrated in Figure 5.

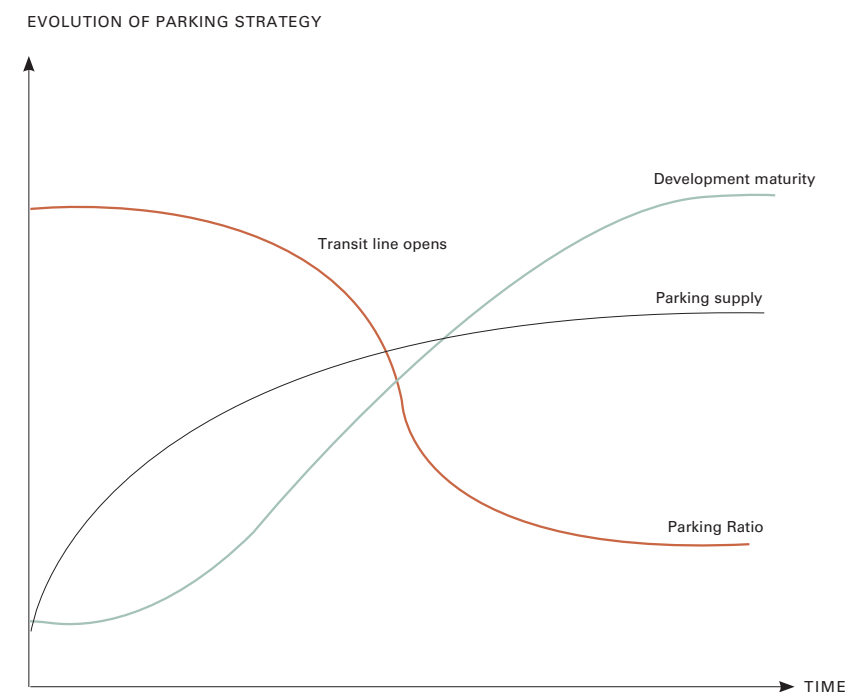


Figure 5: Phased Parking Provision

Transit Integration

The Ward Neighborhood is easily accessible by transit. With 18 public bus lines, the Waikiki Trolley and the future High Capacity Transit Corridor serving the site, Ward Neighborhood presents an exciting opportunity for Honolulu as a transit oriented development.

The integration of transit into the development concept would bring several benefits to Ward Neighborhood:

- Reduced reliance on private vehicles, reducing congestion, air pollution and associated traffic related impacts.
- Improved accessibility for all residents of Honolulu, particularly those without access to a car.
- Support for existing transit services, strengthening the service quality and frequency available to the local community.

Targeted transit integration strategies will be investigated and implemented to encourage ridership and accessibility throughout the development phasing. These programs may include the following:

Improved Bus Facilities and Integration

Several city bus routes serve Ward Neighborhood, but better quality bus stops and greater integration with TheBus could improve passenger convenience and help improve bus operations. Specific strategies to be targeted include integrating the bus routes and stops within new streetscapes, orienting development around transit stops, implementing attractive bus stop infrastructure and improvements to bus schedules.

Expansion of Tourist Trolley Services

The Waikiki Trolley currently provides a convenient transport choice for many Ward Neighborhood visitors. As the area develops, Ward Neighborhood would support increased services linking the area to Downtown Honolulu, Ala Moana Center and Waikiki.

Transportation Resource Center

A transportation resource center could provide neighborhood-wide transit concierge and information service, providing a personalized contact point for transit timetables, ridesharing information, bicycle routes and facilities and other transportation options available to residents, employees and visitors.

Transit Pass Programs

Discounted transit passes will be investigated to help encourage increased transit ridership as new residents move to the Neighborhood. As the development proceeds, partnerships would be developed with TheBus to determine if a discounted transit pass program can be used for the workers and future residents.

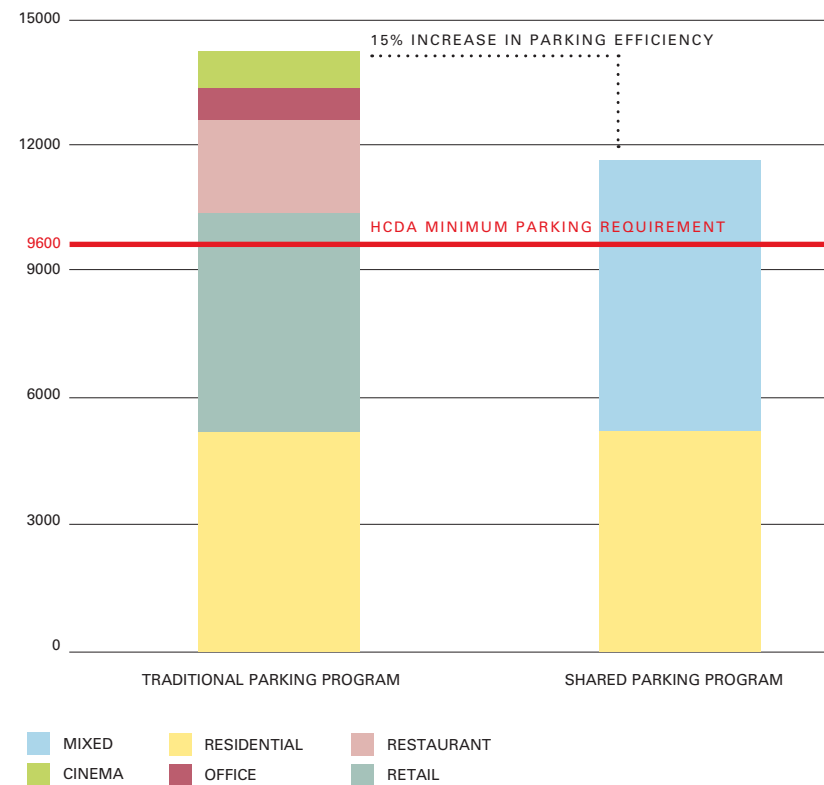


Figure 6: Shared Parking Efficiency

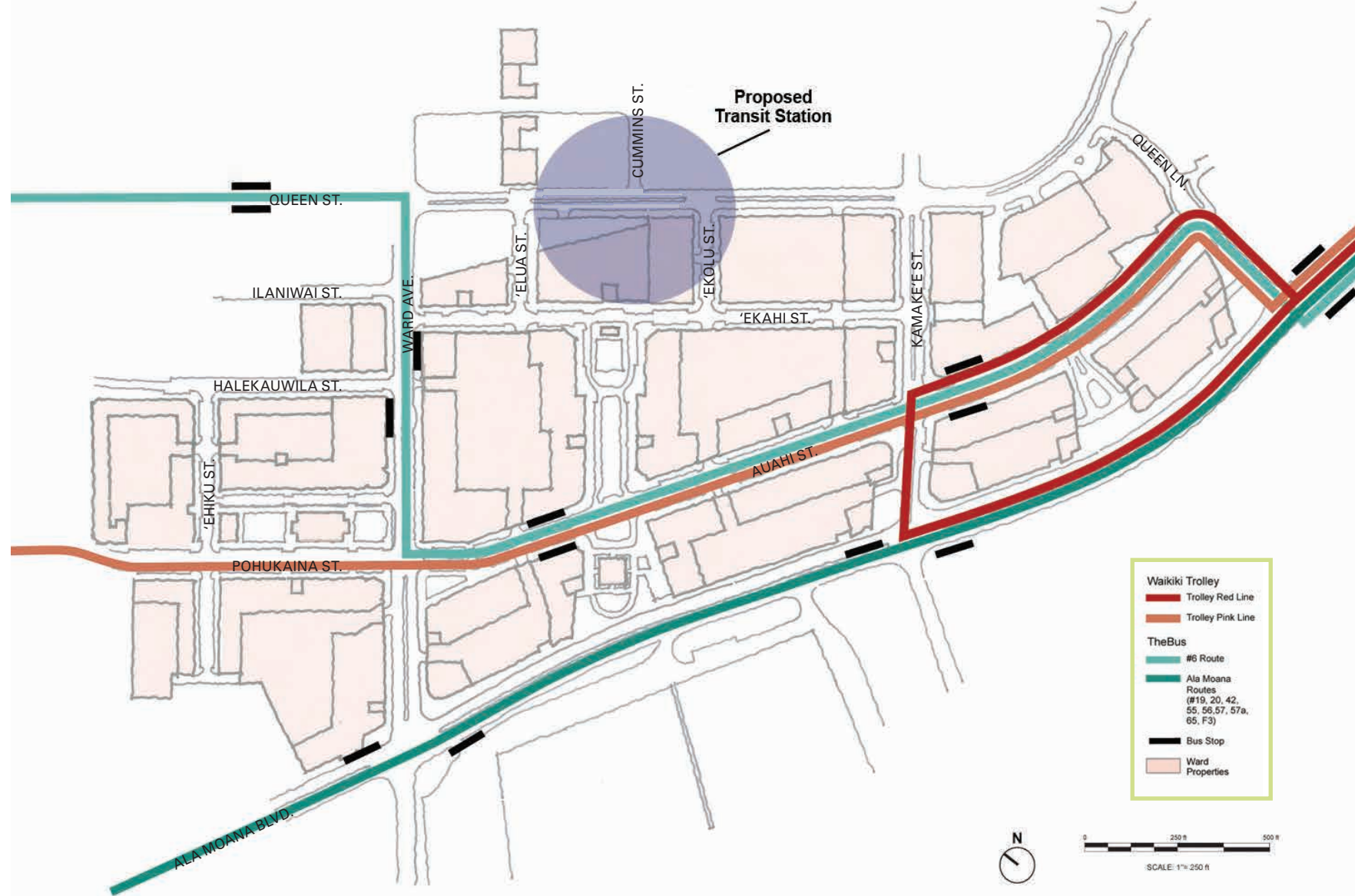


Figure 7: Proposed Transit Network

Future High Capacity Transit Station

The proposed High Capacity Transit station on or near Queen Street will potentially provide a tremendous opportunity for Ward Neighborhood. The transit station will offer the residents of Honolulu an easy, fast and affordable way to access the range of services offered at Ward Neighborhood, while providing an equally attractive way for local residents to get to work. As planning for the High Capacity Transit line proceeds, options will evolve to allow the transit station to become a centerpiece for Ward Neighborhood and an asset for all of Honolulu.

Figure 7 outlines a proposal for integration of the transit network with Ward Neighborhood. In the short to medium term, the existing bus routes offered by TheBus and Waikiki Trolley should serve the Neighborhood well, providing access across the site for residents, employees and visitors. New bus stops are proposed at convenient locations, designed to maximize accessibility throughout the Neighborhood. Bus stops will provide shelters, integrated into the streetscape, along with other passenger amenities.

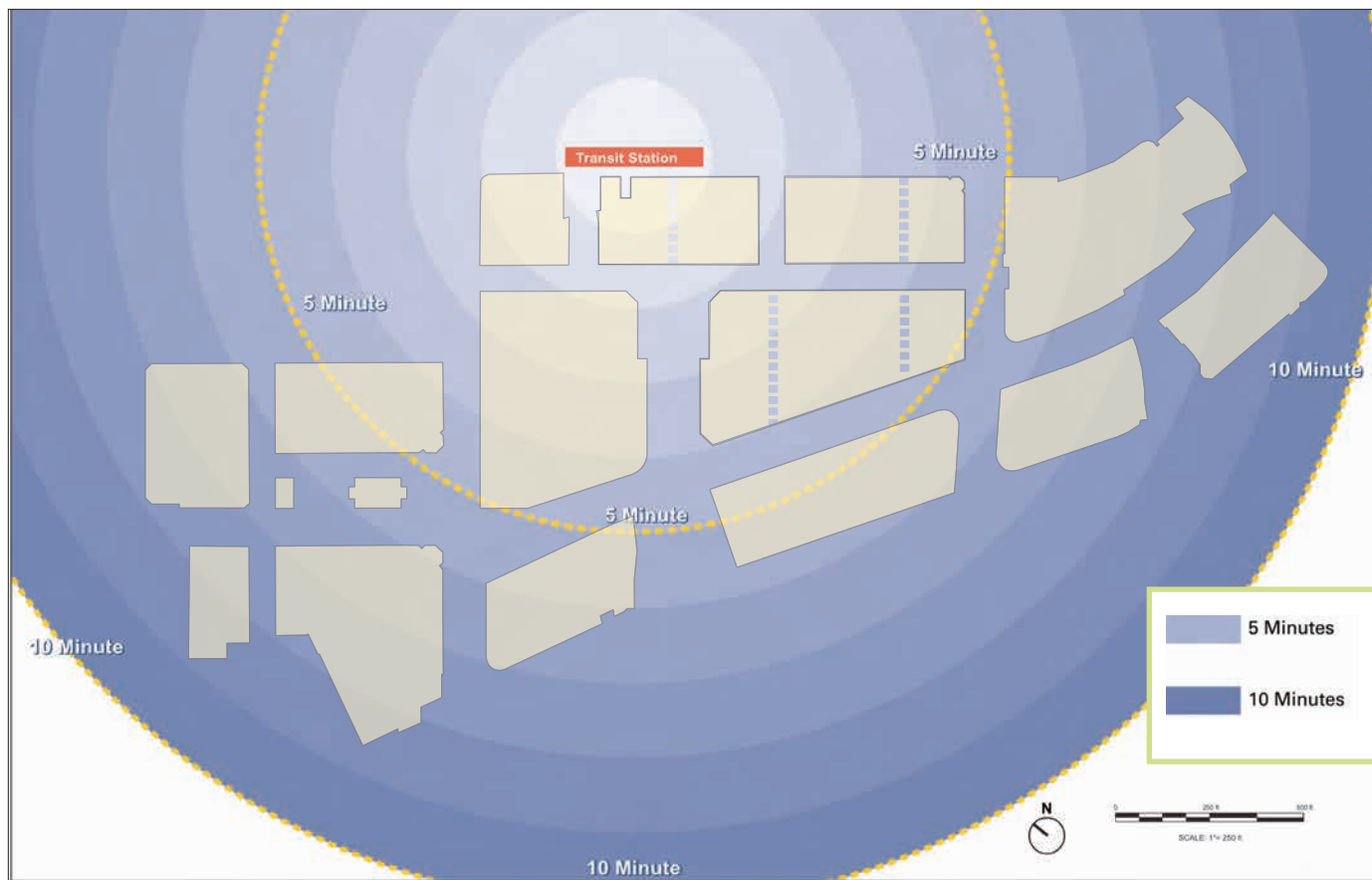


Figure 8: Walking Time To Access Future Transit Station

The Master Plan embraces the City and County of Honolulu’s planned High Capacity Transit station. The new station within Ward Neighborhood should provide a fast and convenient travel option. As shown in Figure 8, the transit station will be no more than a ten minute walk from anywhere in the Neighborhood, with many of the key retail and employment destinations within five minutes. Excellent proximity and integration with the future transit system should serve to maximize transit ridership, helping to mitigate future traffic impacts and promote a culture of sustainable travel behavior in the Neighborhood.



Figure 9: Proposed Bicycle Network

Future Pedestrian and Bicycle Networks

In some areas, Ward Neighborhood has good quality pedestrian infrastructure, while other streets are lacking. Bicycle facilities are currently absent from the neighborhood, and are not currently linked with regional bike routes. The redevelopment at Ward Neighborhood is an opportunity to create an attractive and safe environment that will invite

people to walk and bicycle through the district. Improved pedestrian and bicycle facilities will provide numerous benefits, including:

- Provision of an alternative transportation mode to and from Ward Neighborhood.
- Improving the attractiveness and functionality of the streetscape.
- Promoting the health benefits of walking and bicycling.
- Creating an environment oriented toward pedestrians instead of cars.

There are numerous bicycle and pedestrian-related actions that can be implemented to improve the environment in Ward Neighborhood. Features of the strategy include:

Providing a Local Bicycle Network

For the first time, a local bicycle network would be provided within Ward Neighborhood connecting to existing regional links. Bike lanes are planned to provide a strong east-west linkage along Pohukaina Street, connecting to Ward Avenue and the existing cycle path along Ala Moana Boulevard. New mauka-makai bike lanes would be provided on Ward Avenue and Kamake'e Street, providing local connectivity to bike routes further mauka and improving accessibility to Ala Moana Beach Park. Bicycles would share the traffic lane on Auahi Street.

Improved Pedestrian Environment

A superior pedestrian environment is planned throughout Ward Neighborhood, featuring wide, landscaped sidewalks and frequent crossings. At the heart of the neighborhood will be the Central Plaza, a new pedestrian dominated open space designed for performances, special events and recreation. Auahi Street should provide pedestrians with an entertaining promenade, lined with attractive retail shops and landscaping. Wide sidewalks, integrated lighting, curb ramps and active store fronts should make walking through the neighborhood a pleasurable experience throughout the day and night.

Implement Bicycle and Pedestrian Safety Measures

Safety will be the first priority for street design, with improvements planned for crossing signals, street markings and street lighting. These features will not only reduce conflicts between vehicles and people, but would increase the sense of security for those on the street.

Provide Bicycle and Pedestrian Amenities

In addition to large-scale infrastructure improvements, physical amenities such as bicycle lockers and racks, street furniture, and street landscaping should complete the streetscape. These will be designed to seamlessly integrate with the landscape plan, providing attractive yet functional facilities for the community.

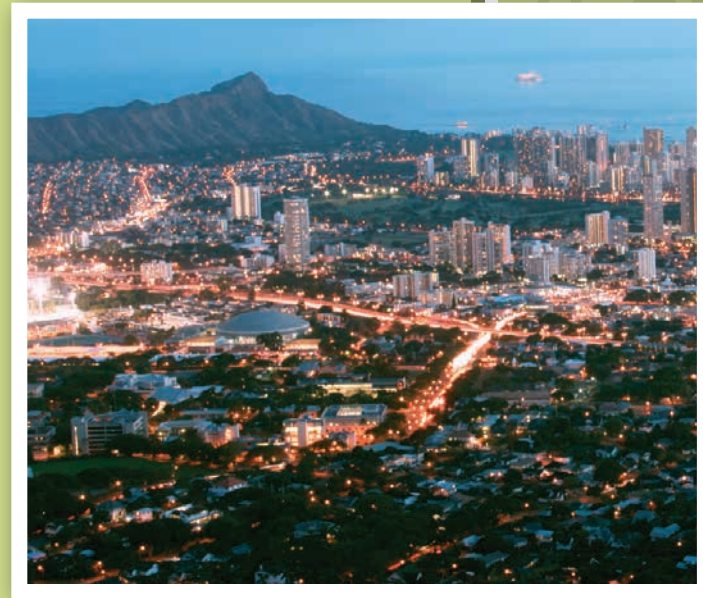


Bike lane



Bike parking

INFRASTRUCTURE





INFRASTRUCTURE

Serving and supporting a mixed-use community like Ward Neighborhood requires that careful attention be paid to the capacity and physical state of the utilities. While no major additions to the utility infrastructure in the area are required for development of Ward Neighborhood, planned undergrounding of the electrical utilities will help create a community that is safer and more pleasing to the eye for residents and visitors. Maximizing on-site storm water management will help protect the environment and reduce demands on public infrastructure.



Existing Infrastructure

Storm drainage

Existing drain lines in the Ward Neighborhood are owned by the City and County of Honolulu. Several run through the community, including 3'x4' and 2'x4' box culverts that drain the development site to Kewalo Basin. These culverts may require relocation to avoid proposed building locations. Plans were developed in a recent HCDA project to improve Queen Street from Kamake'e Street to Ward Avenue. However, this project has been cancelled for a number of reasons.

When the City was queried regarding the condition or adequacy of the storm drainage system, no specific areas of concern were noted. Storm drainage connections to these existing systems will likely be needed for the development. On-site storm water management techniques will help to minimize capacity demands on the municipal storm drainage systems.



Existing Water, Sewer and Drain

Sanitary Sewers

Connection to the sanitary sewer lines for Ward Neighborhood is managed by the City Department of Planning and Permitting (DPP) Wastewater Branch. Several major sewer lines run through the area and serve the adjacent upstream service district.

- 72" and 78" diameter sewer lines in Auahi Street;
- 60" diameter sewer line in Ward Avenue (DPP has indicated this line is close to capacity);
- 36" diameter sewer line in Ala Moana Boulevard (according to DPP, the structural integrity of this line is questionable);
- 69" diameter sewer line in Ala Moana Boulevard; and

- 48" diameter line in Kamake'e Street (DPP has stated this line was installed with a reverse slope and has capacity issues).

DPP did not note any constraints or limitations associated with the wastewater pumping stations and treatment facilities serving the Ward Neighborhood.

Existing Water, Sewer and Drain

Construction of a diversion sewer in Kalakaua Avenue could relieve the 48" sewer line in Kamake'e Street. There is also a 48" sewer line that crosses the project site under the existing Sports Authority building. Because this line may conflict with proposed building locations, options for the relocation of this line will need to be considered. A 12-inch sanitary sewer runs along Auahi Street and will serve as the main sewer service line for the core of the development.



Existing Gas, Electric and Telecommunications

Potable Water

The Honolulu Board of Water Supply (BWS) provides potable water to the development site and has indicated that the water system should have the needed capacity for fire protection. Ward Neighborhood will not require any new source, transmission or storage facilities. The long-range BWS plan for the Neighborhood is to pipe water from the leeward districts or undertake desalination. The main water service to the site is provided by a 20" diameter distribution main on Cooke Street and 12" diameter mains on Queen Street, Kapiolani Boulevard, Kamake'e Street, Ward Avenue and Ala Moana Boulevard. The projected average daily flow rate for Ward Neighborhood is 1,300,000 gallons per day.

Natural Gas

The Gas Company's primary gas distribution line for the 'Ewa side of Ward Neighborhood is a 3" diameter line on Kamake'e Street. The Gas Company has proposed extending this 3" service along Auahi St. and abandoning the 1-1/4" and 2" diameter lines that serve the existing Farmers Market, Ward Entertainment Center and Sports Authority Building. A 4" diameter gas line beneath the makai side of Auahi Street, Diamond Head of Kamake'e Street, serves Ward Centre and Hokua. The primary gas line for the 'Ewa side of the project is from Cooke Street. There are no high pressure gas mains through the site.



Electric Service

There is existing electric service provided to the site by the Hawaiian Electric Company (Hawaiian Electric). Hawaiian Electric's existing substation transformers can accommodate the anticipated loads for the first phases of development. However, duct line infrastructure will need to be installed in and around the area.

At full build-out of Ward Neighborhood, a substation on Cooke Street will need to be developed. Hawaiian Electric will need to extend 46 kV lines from its Ward Avenue Archer substation to the proposed Cooke Street substation for the Neighborhood. With a major duct bank through the site along Kamake'e Street, additional major ducts will not be required.

The State Department of Transportation (DOT) is considering undergrounding the overhead utility lines along Ala Moana Boulevard. One of the goals of Ward Neighborhood is to place all electric lines below grade.

Telecommunications

Oceanic Time Warner Cable provides existing cable communication service. No significant upgrades are anticipated, although additional power supply pedestals may be required and some of the overhead lines may be moved underground. The cables are generally underground on Ward Avenue and Kamake'e Street and overhead on Ala Moana Boulevard, Auahi Street and Queen Street. It is anticipated that all telecommunication lines be placed below grade in Ward Neighborhood.

Telephone service is provided by Hawaiian Telecom. Hawaiian Telecom has indicated that no off-site costs are necessary to provide service to this development. Support structures and equipment requirements will be determined in the future. Costs will be incurred to relocate existing aerial telephone lines underground as planned.

There is also a U.S. Army Signal Corps conduit in Ward Avenue and Ala Moana Boulevard and a Pacific LightNet fiber optic line in Kapiolani Boulevard.



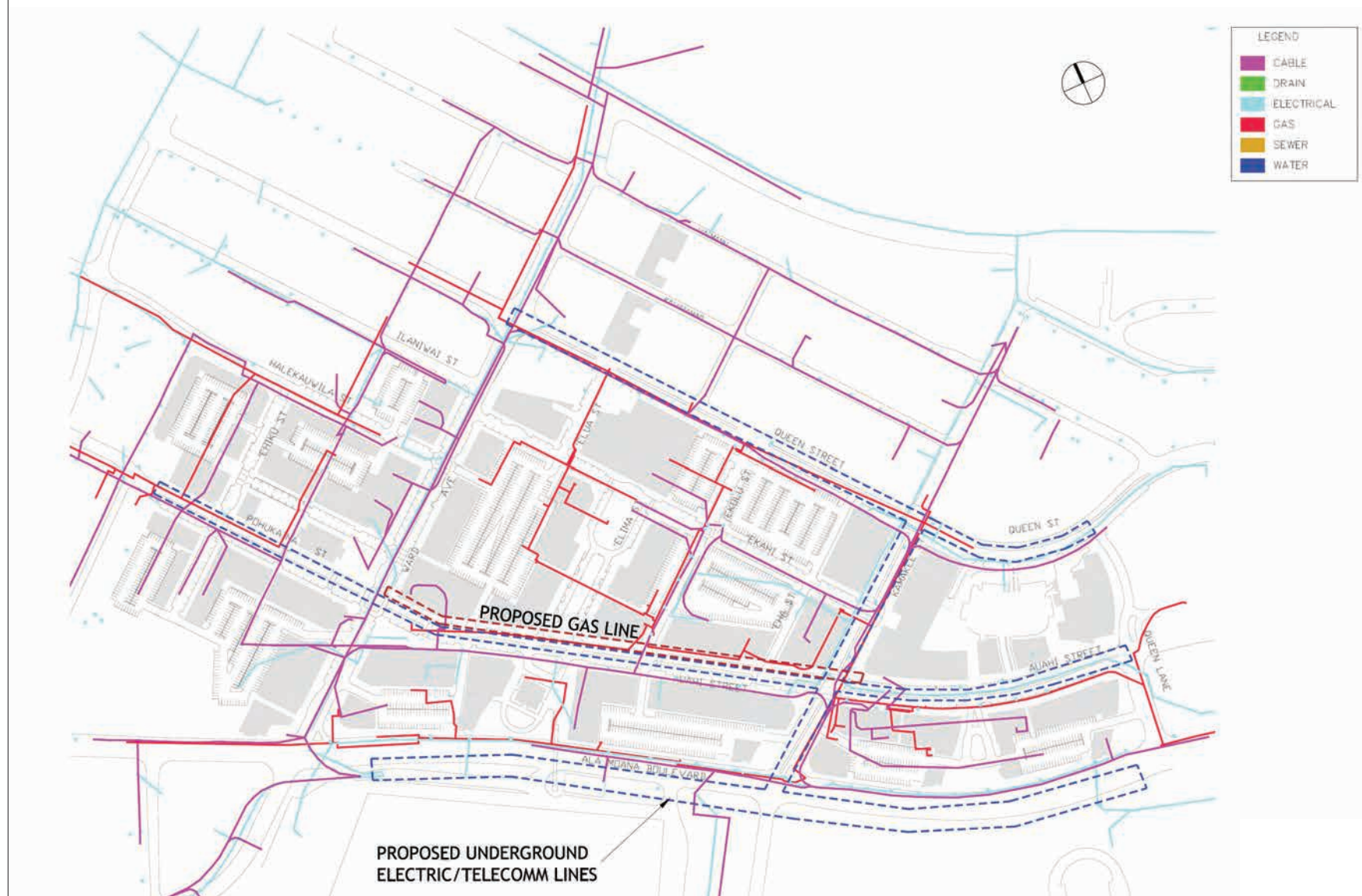
Proposed Water, Sewer and Drain

Infrastructure Development Requirements

Based on the information from the utility companies that will serve Ward Neighborhood, it appears that adequate utility service will be available for the development of Ward Neighborhood.

It is recommended that all overhead utilities be placed underground within the development boundaries.

The 3' x 4' box storm culvert and 48" sanitary line behind the current Sports Authority building may need to be relocated or buildings designed to avoid these lines. The same is true for the sanitary sewer lines in the current extension of Auahi Street, 'Ewa of Ward Avenue. In this area, a segment of the Auahi Street (West) extension will need to be abandoned or discontinued from public use.



Proposed Gas, Electric and Telecommunications

The sewer lines and storm drains in the right-of-way for Kamake'e Street at the Ala Moana Boulevard intersection will also need to be relocated or avoided. In this area, a previously relocated segment of Kamake'e Street was discontinued from public use, but the utilities still remain within the former right-of-way.

Auahi Street is planned to serve as a central utility corridor for Ward Neighborhood. Sanitary sewers, storm drains, water lines, gas, electric and telecommunications would be configured in a "service spine" running under Auahi Street from Ward Avenue to Queen Street.

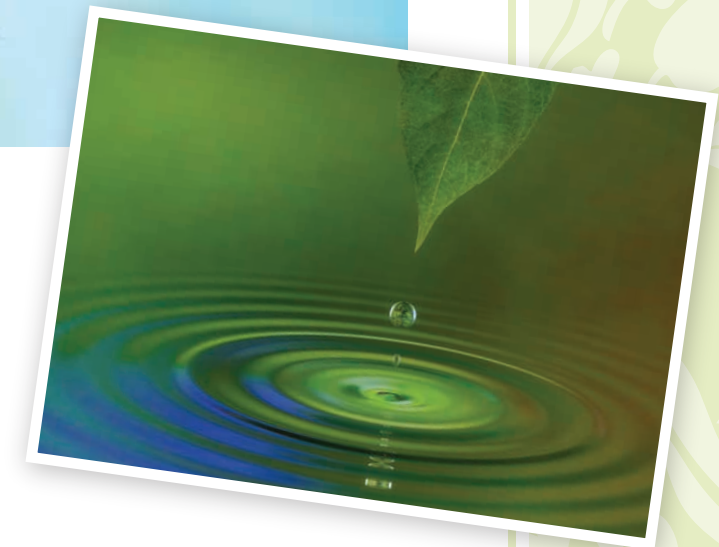
SUSTAINABILITY





SUSTAINABILITY

The proposed revisions to HCDA's Mauka Area Plan encourage the development of livable, master planned urban communities in Kaka'ako that are both environmentally sustainable and more effective in the use of land and natural resources on O'ahu. The environmentally sensitive approach to density and smart growth in the Ward Neighborhood Master Plan supports the direction set by local and State land-use policies. The Master Plan also calls for the adoption of sustainable practices in the development of Ward Neighborhood.



Growing Smarter

Shifting away from the trends that threaten quality of life and economy on O‘ahu requires a smarter approach to development. Growing smarter means focusing new development in areas with the least environmental impacts, while also providing a measurable benefit to existing communities.

Hawai‘i Government: Driving Smart Growth

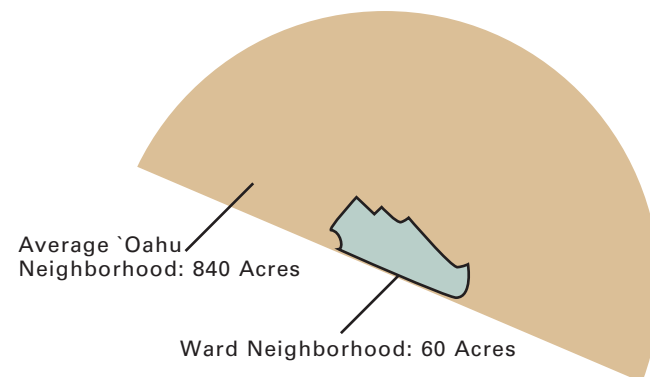
The State of Hawai‘i and City and County of Honolulu are committed to smart growth. The draft revisions to the Mauka Area Plan calls for urban development that addresses smart growth concepts such as pedestrian-friendly environments, transit oriented development and neighborhoods with a mix of uses. The Plan prioritizes introduction of urban villages—self-sustainable and environmentally sensitive neighborhoods that promote community development and cohesiveness. The Plan also states, “energy efficiency and the use of renewable resources will be encouraged in all development projects toward the goal of creating sustainable neighborhoods.”

State, city and district plans all recommend smart growth development as designed in the Ward Neighborhood Master Plan. Few locations on O‘ahu offer better opportunities for smart growth than Ward Neighborhood. In fact, the Master Plan should significantly reduce impacts to the region’s natural resources compared to a traditional development comprising the same amount of housing and commercial floor space.

How Does Ward Neighborhood Compare?

Through the introduction of a higher density mixed-use neighborhood to Honolulu, Ward Neighborhood would help to reduce the increasing percentage of land on Honolulu taken up by urban uses. When compared to the average land requirements for developments on O‘ahu, Ward Neighborhood can reduce land requirements by 780 acres.

Comparable Land Requirements for Similarly-Sized Developments:
Acres of Land for 4,229 Units



Source: Census 2000, Brookings Institute, 1997

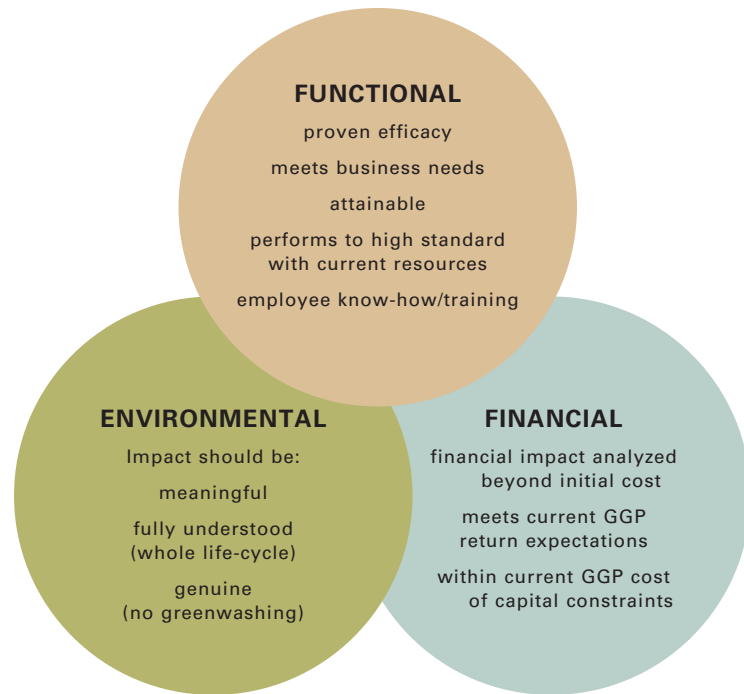
General Growth Property's Corporate Commitment to Sustainability

GGP has committed its business and operations to meet the principles of sustainable development. The following sustainability objectives have been developed by GGP:

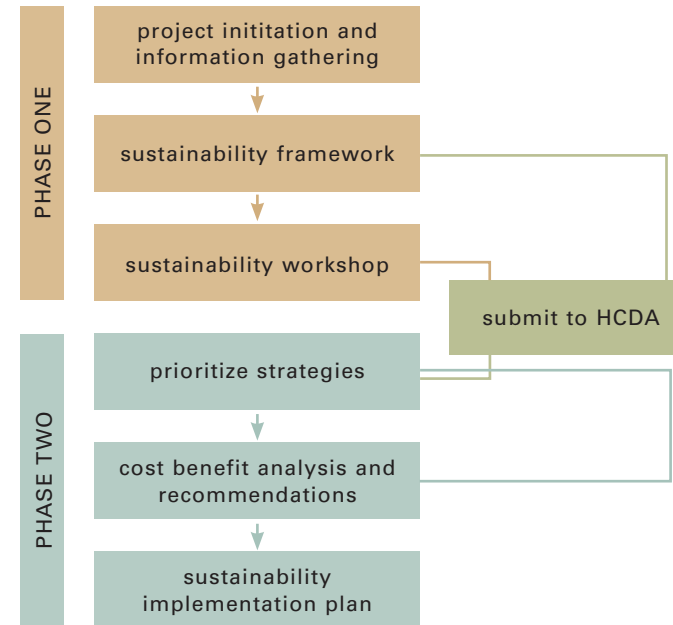
- Conserve energy short term and explore renewable energy sources long term.
- Facilitate reuse and recycling of natural resources and synthetic materials.
- Design sites, structures and landscapes that are resource efficient and environmentally responsible over their entire life cycle.
- Conserve water and contribute to clean water cycles.
- Source highly efficient, low-toxin materials, supplies and equipment that are produced and transported responsibly.
- Practice eco-friendly maintenance and cleaning.
- Optimize fuel efficiency of and minimize pollutants from vehicle fleets.
- Share meaningful results and lessons learned.

GGP recognizes the importance of a realistic approach to sustainability and has created specific criteria for new projects to meet multiple business goals. GGP believes each project must be:

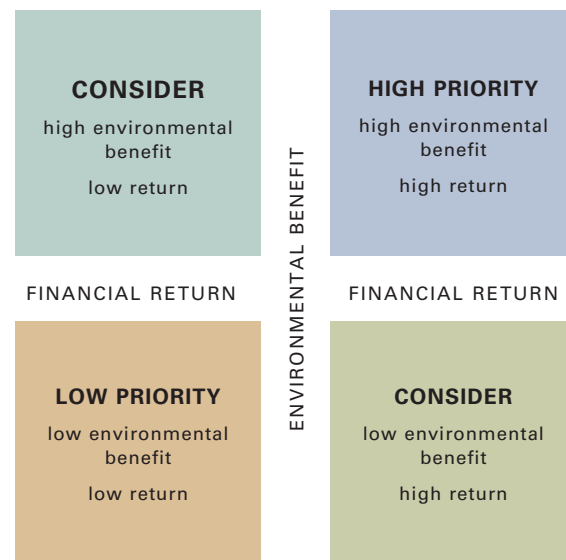
- Functional and effective to meet the needs of the business and perform as designed.
- Environmentally sound to reduce impact in a meaningful way throughout the project's life cycle.
- Financially viable considering all risks and ensuring initiatives achieve return on investment.



GGP's sustainability criteria for new projects



Approach to sustainability for Ward Neighborhood



GGP's decision-making framework

Those initiatives which can realize a high environmental benefit as well as a high return are priorities. Solutions that are of a genuine and meaningful benefit to the environment are a priority for GGP, versus ineffective but highly visible solutions.



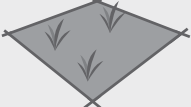



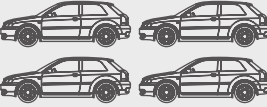









As with all GGP projects, these commitments have been reflected in the approach to master planning of Ward Neighborhood to ensure that this development contributes to a better quality of life for the surrounding community, is economically viable and presents a significantly smaller footprint when compared to traditional developments.

Approach

GGP has embarked on developing a practical sustainability framework for the master planning of Ward Neighborhood. Relevant information was collected and research conducted focusing on key areas.

Phase Two of the Ward Neighborhood sustainability approach will involve developing more detailed strategies which will be prioritized according to environmental and cost benefits and translated into a Sustainability Implementation Plan for future phases of the project.

Comparing Impacts: Typical Development and Ward Neighborhood

	Typical Development	Ward Neighborhood	
Density (Households and Jobs Per Acre)			Ward Neighborhood provides a higher density, allowing for a wider mix of uses within a close proximity. This provides more housing and jobs compared to a traditional development.
Land Required (Acres Per Capita)			As a mixed-use, higher density community, Ward Neighborhood will require dramatically less land per person than traditional development.
Energy Consumption (KwH Per Capita)			Ward Neighborhood will reduce per capita energy requirements by first decreasing demand through efficiency measures, and then seeking energy supply from clean and renewable sources.
Automobile Dependence (Vehicle Miles Traveled Per Capita)			Easy access to transit, amenities and jobs will allow people who live, work or play in Ward Neighborhood to travel fewer miles by automobile.
Health Impacts (Distance Walked Per Day Per Person)			With amenities and transit located close to their homes, residents of Ward Neighborhood will be able to travel by foot to most destinations—encouraging a healthier lifestyle than one bound to auto travel which can contribute to chronic health problems such as obesity.
Carbon Footprint (lbs CO ₂ Per Capita)			Reduced per capita auto travel and energy consumption among residents will lead to a reduction in CO ₂ emissions or smaller carbon footprint in Ward Neighborhood when compared to traditional development.
Water Consumption (Gallons Per Capita)			Integration of efficiency measures into building and landscape design as well as recycling of gray water will allow Ward Neighborhood to make better use of precious water resources in comparison to traditional development.
Public Infrastructure Cost (\$ Per Capita)			Ward Neighborhood's mix of uses allows for more self sufficient, more compact and more economical systems for transport of energy, water and waste into and out of the Neighborhood, reducing the cost of public infrastructure.

Sustainability Framework

The environmental opportunities for Ward Neighborhood can be categorized into eight focus areas. These include:

1. Incorporating reduced-footprint high-density design, mass transit accessibility and the pedestrian scale to achieve reduced parking requirements while also maximizing orientation of the site's natural features.
2. Reducing energy demand, providing sustainable energy supply and reducing carbon emissions through environmentally friendly transportation systems.
3. Maximizing water conservation with recycling.
4. Acquiring building and landscape materials from renewable, local sources.
5. Maximizing green space through landscaping with local species to enhance biodiversity on the site.
6. Encouraging responsible tenant and resident behaviors through recycling and conservation programs, as well as transportation demand management strategies.

7. Educating the community on environmental initiatives through displays and informational programs about the features of Ward Neighborhood and the Master Plan.
8. Considering third-party certification for sustainability performance through rating systems such as LEED.

Everyone Plays a Part

The environment should benefit from a development strategy that reduces energy and water use, introduces native landscaping, manages waste and is built of local materials. Everyone has an important role in ensuring Ward Neighborhood becomes a catalyst for even more sustainable development on Oahu.

- Retail and business tenants along with residents can learn and practice environmentally responsible lifestyles within this new environment.
- Tourists can learn about Hawaii's ecosystems, the historically sustainable practices of the islands and the sustainable features of Ward Neighborhood.

The Ward Neighborhood Master Plan provides a comprehensive framework for environmental responsibility. During its second phase, the Sustainability Program will develop implementation strategies. These strategies will be developed through a collaborative process that engages both local stakeholders and national expertise. Through a collaborative effort, environmentally sustainable elements in design, construction, residential and retail outreach and management practices will be incorporated.

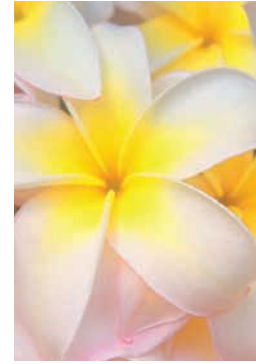


Sustainability Focus Areas



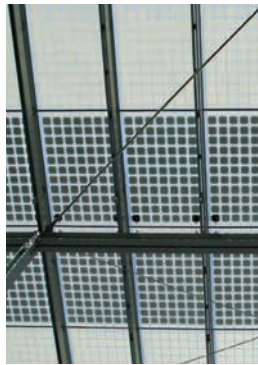
Site Planning

- Design for smart growth in line with Mauka Area Plan
- Maximize site orientation to capture renewable resources such as sun, wind and light
- Connect to mass transit to maximize accessibility and reduce parking requirements
- Create walkable environments
- Develop view corridors to enhance the mountain and ocean experience



Landscaping & Biodiversity

- Plant appropriate landscapes for the climate that increase biodiversity, reduce irrigation requirements and limit the need for pest management
- Create green links throughout the site as amenable public areas
- Develop microclimates to ensure tenant, resident and patron comfort



Energy & Emissions

- Implement passive strategies to encourage natural ventilation and lighting and reduce heat gain (white roofs)
- Use energy efficient active systems
- Consider renewable energy supply
- Introduce sustainable transportation (car sharing, light rail/bus, cycling, walking) to minimize reliance on private vehicle use and reduce carbon emissions



Partnerships

- Encourage partners in the development (tenants, residents) to pursue sustainable design
- Involve the community in decision-making
- Provide facilities that all partners can benefit from
- Create a living demonstration through signage to educate partners on sustainability features



Water Use & Quality

- Install water efficient systems and appliances
- Harvest rainwater
- Recycle greywater
- Implement sustainable drainage systems and stormwater treatment
- Reduce flood risk



Local Identity & Culture

- Identify the key characteristics of the community
- Create a sense of place and social identity
- Enhance cultural identity through education and local art
- Identify and recognize historical features



Materials & Waste

- Design to reduce waste and select materials on the basis of their life cycle impacts
- Use local suppliers to source goods and materials
- Reuse or recycle demolition materials and manage construction waste
- Reuse, recycle and compost during operation



Third Party Certification

- Review range of rating systems
- Consider third party certification for performance through rating systems such as LEED

CULTURAL RESOURCES





CULTURAL RESOURCES

A plan for the future without acknowledging the past is incomplete. Because the Ward Neighborhood Master Plan makes a commitment to honor the people and culture of Hawai‘i, it has devoted significant thought and public outreach to shaping a plan for preserving and honoring the cultural resources of the area.

For the benefit of both the present generation and those who will follow, the Master Plan will seek to preserve the heritage of Kaka‘ako. Ward Neighborhood will take steps to honor the past and share with residents and visitors the legacy of Kaka‘ako, from its early life and growth to its more recent history as a melting pot of cultures. From keiki hula to street dancing performances, from holiday gift giving to ho‘okupu presentations, the cultural events that have become a tradition at Ward Centers will be nurtured to an even higher level. Performances and displays from groups around O‘ahu and the Neighbor Islands will be presented.



Neighborhood History

King Kamehameha I

In the early 1800s, much of Kaka'ako was swampland. Although it did not have the intensive agriculture of other nearby Ahupua'a with streams and fresh water, Kaka'ako had fishponds and produced salt under the rule of King Kamehameha I.

A Place of Recreation

The shoreline of Kaka'ako, also known as Kewalo according to archaeological reports, was a place of fishing, canoe landings, cleansing and religious practices. As commercial and residential uses started to replace the fish and salt ponds of Kaka'ako, the mud flats and marshes were filled. In the 1880s, the shoreline was extended by huge public works projects that reclaimed land from low-lying coastal areas.



The Estate of Victoria Ward

The area of the Ward Neighborhood Master Plan is part of an estate created over a century ago by Victoria Ward and her husband, Curtis Perry Ward. Today, the Blaisdell Concert Hall marks the site of their former home at the "Old Plantation," a holding of over 100 acres that spanned from Thomas Square to the waterfront.

A Working Class Neighborhood

Until the 1950s, Kaka'ako was an eclectic and diverse neighborhood, with homes above shops, churches, schools and parks. In the 1950s, the area was rezoned to industrial. Victoria Ward, Ltd. developed a series of low-rise shopping centers in the 1970s. In May 2002, Victoria Ward, Ltd. was acquired by General Growth Properties, which also owns Ala Moana Center, just a few blocks away on the Diamond Head side.



Potential Cultural Programs

Many programs can serve to further the stewardship of cultural resources in Ward Neighborhood. An inventory of resources can be conducted to gather information about cultural or historic events. Educational materials and programs can be developed to enhance the public's awareness of the Kaka'ako heritage. Significant places in Kaka'ako where residents earned a living and went about their daily lives can be documented. Cultural activities and programs, which are already an integral part of the Ward tradition, can be expanded. The goal is to create programs for the gathering places that have meaning for everyone who comes to the community.

The Soul of a Community

How Ward Neighborhood creates connections to the history, people, arts and culture of Hawai'i will help define its legacy. They can range from permanent displays honoring the heritage of Kaka'ako to cultural performances of hula or slack key guitar. These cultural touchpoints can become a part of everyone who lives, visits or works in Ward Neighborhood.



Throughout the development of Ward Neighborhood, GGP will continue to reach out to the community to ensure that cultural traditions and practices are respected and honored.

COMMUNITY ENGAGEMENT





COMMUNITY ENGAGEMENT

The Ward Neighborhood Master Plan is about the people of Hawai‘i and can serve as a catalyst for an active and sustainable civic legacy. Ward Centers has become a favorite gathering place for the community and the intention is to build on this tradition. The opportunity exists to engage the community in a process to create a sense of ownership.

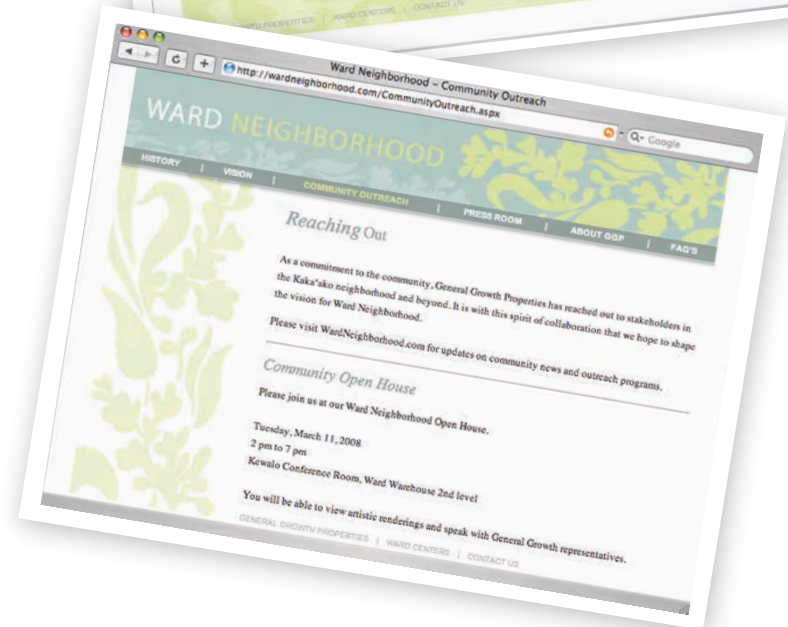
General Growth Properties is committed to working with stakeholders to understand and help manage what they value, through each stage of the planning, design and development process of Ward Neighborhood.

The community outreach program would be a well defined and closely managed process that will reach out through active communications tools and a range of forums structured around the interests of different stakeholder groups. The program will be designed to create and strengthen partnerships with the community and to allow for a process that respects the perspectives of all stakeholders.

The objectives of the Communications Program shall be to:

- Establish partnerships with the diverse interests who have a stake in the project, including current users, business groups, existing and potential residents, environmental interests and community organizations.
- Provide information that is accessible and easy to understand for the media and the general public.

There is a wide diversity of individuals and groups who may be considered “stakeholders” in the new Ward Neighborhood, from artists to affordable housing advocates, from downtown businesses to surrounding neighborhoods, from the native Hawaiian community to the visitor industry. They each have different information needs and interests that should be addressed.



Public Information

A communications media program would be established, helping to integrate a website and communications campaign to reach the broadest segment of the community. The challenge for this program is to provide information for individuals and organizations with varying levels of knowledge and interest about the project. Therefore, information about the Ward Neighborhood Master Plan will be factored into a multi-faceted information program.

- The Ward Neighborhood website will provide updated information about the project as well as an on-going medium for public input.
- Brochures and fact sheets can be developed on different aspects of the project. These materials should rely heavily on graphical communications and presentation of information in simple and readily understandable terms.
- E-newsletters would be a key element for targeted communications to program stakeholders. An e-newsletter database can be established to provide project stakeholders with up-to-date information about the project. The periodic e-newsletters will summarize the current status of the project, announce the opportunities for public input and identify issues to be addressed in the current phase of the project.

Media Relations

Our media relations program is slated to include a monthly media calendar, designed to anticipate and respond to issues that may impact the project throughout its duration, and particularly during key decision points for the project. It is anticipated that primary spokespersons for the program will be designated representatives of GGP, but the team will coordinate with HCDA on media outreach and messaging, as appropriate.



Special Topic Charrettes and Panels

GGP plans to engage stakeholders with special subject matter expertise to get their best thinking about project components and to identify opportunities for partnership or collaboration.

The process is already underway. On November 8, 2007, GGP invited over 20 stakeholders to help inform GGP's thinking about the best ways to address the open space and public place-making elements of the Master Plan. On January 24, 2008, a second charrette was held on the topic of creating a livable neighborhood (see the following pages for summaries of both charrettes).

Community Organization Briefings

Throughout planning, design and implementation, the project team will hold meetings with and make presentations to community organizations and other stakeholders to brief them on the project's progress and hear their comments and concerns.

The project team will provide regular project briefings to the HCDA Board and staff. The team will also coordinate with departments of the City and County of Honolulu, the State Department of Transportation and other public agencies to assure early identification of issues that may need to be addressed during the planning and development process.

Charrette: Open Spaces / Public Places

On November 8, 2007, General Growth Properties invited a group of community stakeholders to work with members of the Ward Neighborhood Plan design team to consider how a network of open spaces and public places might best serve the Ward Neighborhood and the people of O‘ahu.

The Open Spaces/Public Places Charrette was conceived as part of an ongoing program of community consultations that will assist in the evolution of the Ward Neighborhood Master Plan. The charrette brought together people with a variety of unique perspectives to inform GGP’s thinking about how culture, the environment, history, and a sense of neighborhood should guide our thinking about the design and programming of the public space system.

Many great ideas were captured and incorporated into the Plan submittal, and three major themes developed from the charrette.

Connectivity

One of the major messages of the charrette was that the Plan should physically reach out to the surrounding community by opening the area up with visual connections, providing view corridors that connect the mountains and the ocean.

Just as important is the need to establish pedestrian connections that make it easy and safe to walk or bike within the neighborhood and to nearby activities. Access to reliable and frequent public transportation alternatives is also essential to create a smooth transition to surrounding neighborhoods.

Programming

Because Ward Neighborhood is envisioned as a vibrant gathering place, it should welcome everyone. Many ethnic groups have called Kaka‘ako home over the decades. It is important to use the stories of the area to bring life to Kaka‘ako.

The programming strategies for the Neighborhood should include activities that enhance and support the vitality of surrounding neighborhoods. The space should have mixed uses where people who live in the area can walk to activities as well as be a place where families can meet, take hula lessons, participate in local events, eat unique local foods and go to farmers markets.

Social and cultural connections, which are at the center of the culture of Hawaii, need to be encouraged at every opportunity to make Ward Neighborhood a vibrant and vivid gathering place. Retail should include a mix of local and national tenants and there should be a diversity of housing opportunities to create a true neighborhood with people of many backgrounds, ages and incomes.



History, Diversity and Authenticity

Participants noted that the open space system could incorporate the traditional Hawaiian land management concept of Ahupua‘a, where resources from the mountain to the sea were used to sustain the community and to maintain a viable environment.

The Plan offers a unique opportunity to reopen the mauka to makai corridor, honoring the Ahupua‘a. The public places could include features that educate local people and visitors about cultural historical practices, native plants and the larger mauka-makai eco-system.

The Ward Neighborhood Master Plan presents an unprecedented opportunity to spotlight and celebrate the rich history of Kaka‘ako as it has evolved from its past lives as fishing village, multi-cultural neighborhood and industrial/business district. The mixed use concept contemplated in the Ward Neighborhood Plan reclaims the area as a place for people to live, work, socialize, play and be entertained.

Charrette: Creating a Livable Neighborhood

On January 24, 2008, GGP convened a gathering of residents, business people and other stakeholders to further explore the vision through a collaborative planning session.

The Ward Neighborhood Master Plan anticipates a new kind of neighborhood—featuring a variety of housing types along with a rich mix of retail, office and entertainment in a compact urban development. What are the ways to realize that vision?

To kick off the charrette and set the contextual framework, GGP shared its initial thinking about the physical elements of the Master Plan, which was informed by the November 8, 2007 charrette on open spaces and public places. Charrette participants provided feedback on some of the general elements of the plan, then formed smaller groups to focus on specific areas.

Defining Livability

Charrette participants were clear that one of the most important ways to assure livability in Ward Neighborhood is to make sure the plans are designed for people on the ground. They envision a community where it is easy for people to circulate and interact with each other. They also envision that the mix of shops will include corner stores, pharmacies, barber shops and other businesses that will meet the daily needs of residents within the Neighborhood.

Movement

Participants felt that the transportation system that serves the Neighborhood should accommodate all modes with an emphasis on making it easy for people to get out of their cars and into other forms of transportation. Features such as bike trails, larger sidewalks for pedestrians and shade trees will contribute both to easier access and comfort for the person on the street. At the same time, careful attention should be given to traffic flows and circulation along with intersection and traffic management to address bottlenecks and congestion.

Connectivity

Participants stressed that the Ward Neighborhood should not be an island unto itself. The Master Plan should assure compatibility with surrounding neighborhoods and provide for connectivity to work places in downtown Honolulu. Additionally, the Master Plan should include portals that make it easy for people to come into the area. One of the major connectivity challenges is Ala Moana Boulevard, which participants felt was both a physical and psychological barrier to crossing.

Diversity

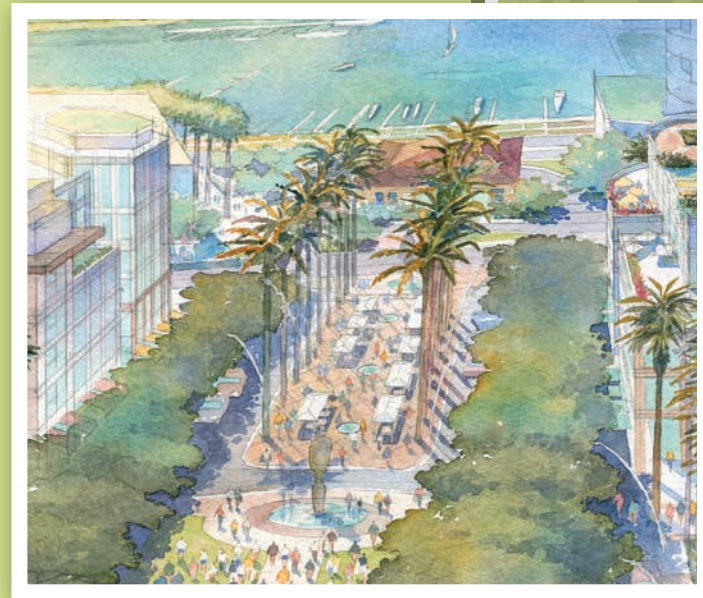
Participants pointed out that one of the most important factors—and a huge challenge—will be achieving diversity in the Neighborhood, where all people feel welcome regardless of their age or socio-economic status. They discussed the need for balanced housing options, including the “missing gap” between high-end and subsidized housing. They also suggested that the team explore mixed-use housing and rental options, versus ownership, which can be hard to finance.

Public Spaces

Participants suggested adding educational facilities to the mix of residential, retail and office uses in Ward Neighborhood. They said that the public spaces should be considered the “community’s living room.” They also had several suggestions related to programming the open space, including creating places for spontaneous events, such as music performances.



MASTER PLAN SUMMARY





MASTER PLAN SUMMARY

Consistency with the Mauka Area Plan and Rules

The Mauka Area Plan and Rules were developed to assure that future development in Kaka'ako will be implemented in a manner that protects the public's best interests-socially, economically and environmentally. The Ward Neighborhood Master Plan has been developed in accordance with; Chapter 206E, Hawai'i Revised Statutes; and the Mauka Area Plan and Rules for the Kaka'ako Community Development District amended as of June 1, 2005 and June 13, 2005 respectively (the Mauka Area Plan and Rules). The Mauka Area Rules are part of the Hawai'i Administrative Rules (HAR): Title 15, Department of Business, Economic Development & Tourism; Subtitle 4, Hawai'i Community Development Authority (HCDA); Chapter 22, Mauka Area in the Kaka'ako Community Development District.

In addition, the Ward Neighborhood Master Plan seeks to accomplish the objectives of the proposed revisions to the Mauka Area Plan. In particular, the Ward Neighborhood is guided by the three fundamental objectives of the draft revised Mauka Area Plan:

- Develop urban village neighborhoods;
- Create great public spaces; and
- Make the connections with a balanced set of transportation modes.



To achieve this vision, the Ward Neighborhood Master Plan incorporates a number of revisions that have been proposed by HCDA to the Mauka Area Plan. Specifically, the Ward Neighborhood Plan reflects:

- A vehicular and pedestrian connection between Ward Avenue and Kamake'e Street that is roughly parallel to Queen and Auahi Streets;
- A Mixed Use Zone (MUZ) for the Ward properties that anticipates the co-existence of commercial, residential and industrial uses within the same development; and
- Increased podium heights to allow for the development of retail and residential uses that will screen and surround the lower floors of central parking structures.

Additional modifications are requested to facilitate better building design and enhancement of mauka-makai visual corridors.

Fundamentally, however, the Ward Neighborhood Master Plan respects and is consistent with the current Mauka Area Plan and Rules regarding requirements in these and other areas:

- Reserved housing
- Open space and recreation
- Public facilities dedication
- Parking

Finally, the Ward Neighborhood Master Plan will provide public benefits that will extend beyond the boundaries of the Neighborhood. With more than five acres of public spaces, significant improvements to the Auahi Street streetscape, and the establishment of a true urban neighborhood housing families of diverse types and incomes, the Ward Master Plan seeks to bring significant public benefits to Kaka'ako and the community at large.



The Proposed Action

The Proposed Action requests the approval of a Master Plan for properties owned by General Growth Properties, as permitted by Subchapter 8 of the Mauka Area Rules. The Master Plan proposes a mixed-use development that will be implemented over the next twenty or more years that will include a range of housing types, retail, commercial, open space and public infrastructure improvements. The Master Plan will be implemented in accordance with established design guidelines to assure high quality and design continuity.

The master planning process affords flexibility such as the transfer of density within the broader zoning parameters established by HCDA. The greater flexibility afforded through the master planning tool allows the developer to identify creative opportunities to provide for public benefits for the larger community such as in the areas of housing, public facilities and public amenities.

The Ward Neighborhood Master Plan presents a synthesis of private uses with significant public benefits that will extend throughout O'ahu, consistent within the framework set forth in the current Mauka Area Plan and Rules.

Consistency with Specific Elements

The following findings address the consistency of the proposed action with the individual goals, objectives, and policies of the Kaka‘ako Mauka Area Plan and Rules.

A. Logical and Orderly Growth

The Ward Neighborhood Master Plan maximizes the efficient use of lands, while maintaining public and open spaces that assure quality experiences for residents, workers, business owners and visitors alike.

Further, the Master Plan contains detailed plans for the orderly development and extension of service infrastructure, and ensures that development will not outpace the availability of services, nor adversely affect the level of service to existing residents.

B. Housing Opportunity in a Mixed-Use Context

The proposed action provides a framework for efficient, dense, and thoughtfully-phased long-term urban development within the planning area. These include:

- The development of an integrated community of housing, commercial, cultural, civic and open space uses and infrastructure systems necessary to support the successful development and growth of the larger Kaka‘ako community.
- Expanded housing opportunities that will accommodate a range of economic levels, age groups and housing choices over the long-term implementation of the Master Plan.
- A maximum of about seven million square feet of residential uses that could provide for an estimated maximum of 4,300 residential units.
- Of the residential units, 20% will be reserved housing units.

C. Economic Development and Transportation

The proposed action will offer economic development opportunities that will reverberate even beyond the Kaka‘ako community:

- The Master Plan will expand employment opportunities for residents throughout O‘ahu, including opportunities created by the indirect employment-related growth.
- The Master Plan will generate numerous construction job opportunities as the plan area is developed, and will generate permanent employment opportunities associated with the various retail and office uses within the Neighborhood.
- The Master Plan provides for several new internal roads and a variety of circulation improvements to ease and manage traffic flow.
- The Master Plan will provide at least 9,600 parking places upon full development.

D. Environmental

The proposed action supports environmental quality in a number of ways:

- Projects built under the Master Plan will be inspired and guided by a sustainability framework, which will include the following features:
 - Use of sustainable and recycled/reused materials.
 - Building orientation that takes advantage of prevailing winds and natural light.
 - Native vegetation.
- The mixed-use neighborhood envisioned in the Master Plan offers an opportunity for transit-oriented development by complementing and integrating development with mass transit, provides multi-modal transportation options, reduces reliance on vehicles, and promotes active lifestyles through pedestrian and bicycle pathways.
- The Ward Neighborhood Master Plan is designed to make it easier for people to walk to work and shop within the Neighborhood or to adjacent neighborhoods.
- The Master Plan uses are carefully planned to enhance and improve views of the mountains and sea, in a manner that is consistent with the current Mauka Area Plan and Rules.

E. Public Space, Public Place

The public spaces presented in the Master Plan provide an organizing framework for the new Ward Neighborhood, by linking and defining a sense of place throughout.

- The Master Plan provides for a range of active and passive uses to meet the needs of the Neighborhood's diverse constituents.
- The Central Plaza will provide unique opportunities for people throughout O'ahu to enjoy performances and interact with others.
- Public spaces, parks, and plazas will be strategically located and scaled in response to desired activities, programs and uses envisioned. Public spaces will be designed to be flexible and accommodate a range of neighborhood needs and requirements.
- The network of streets and streetscapes will form the backbone of a network of pedestrian linkages that will add to the character and livability of the Kaka'ako district.
- In total, about 5 acres are proposed as open space and more than 340,000 square feet will be dedicated for public facilities.

F. Connectivity

The Neighborhood connects internally and externally, serving its residents while retaining multi-modal access to it and through it.

- Ward Neighborhood will welcome a new mass transit station that will connect it to a line extending through downtown and to west O'ahu.
- This district is an integral part of a larger transportation network and, thus, traffic circulation and access to, within, and through the development is a principal component of the Master Plan vision.
- The location of transit facilities offers opportunities to capitalize upon mixed-use development opportunities as well as to serve as a catalyst for projects mauka of Ward Neighborhood.
- Creating an attractive and engaging pedestrian environment is fundamental to defining the identity of Ward Neighborhood. A successful community is built around memorable people, places and spaces.

G. Culture and History

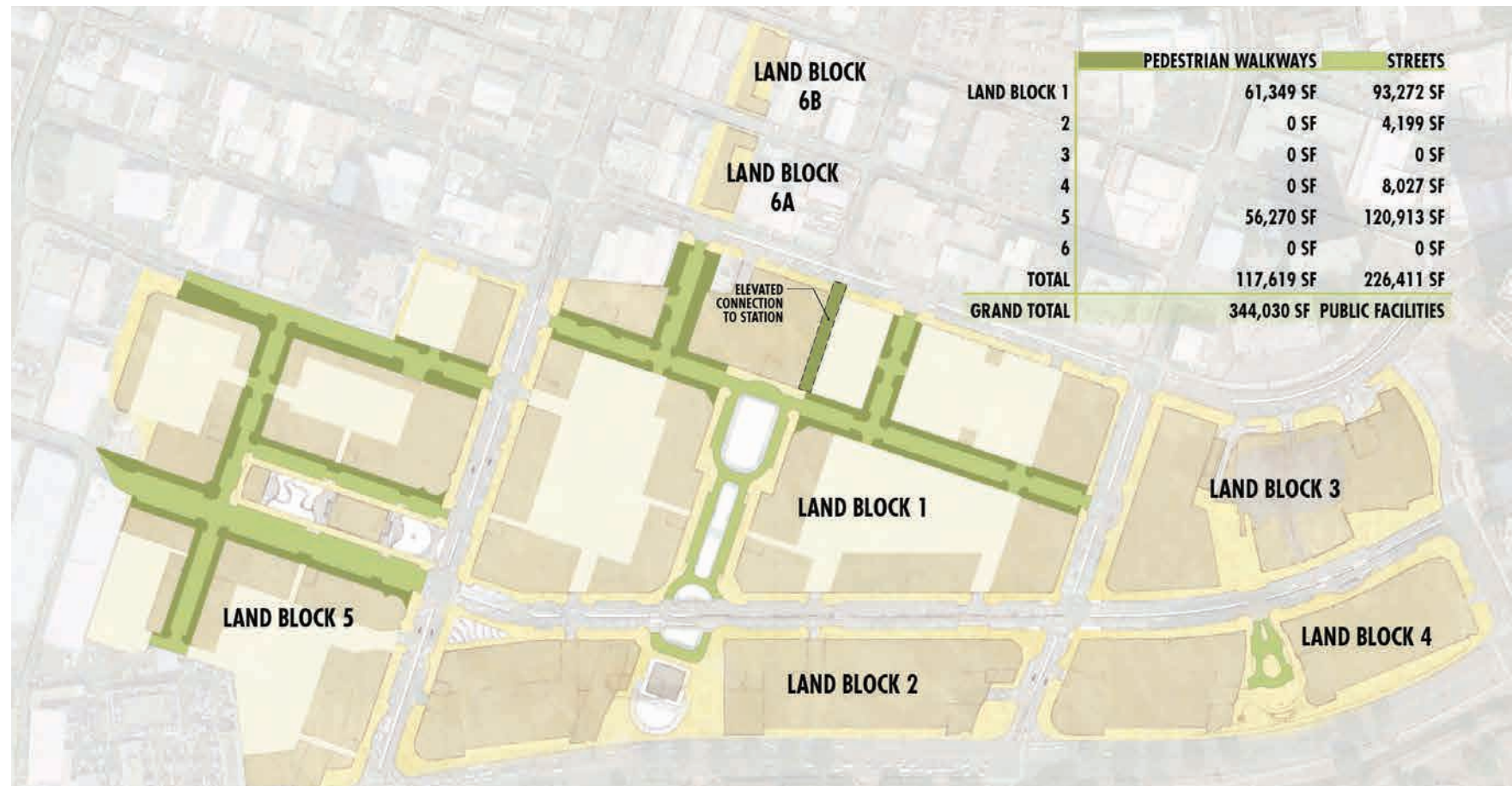
The Ward Neighborhood Master Plan will reclaim Kaka'ako as a neighborhood by transforming an aging group of retail properties into a cohesive, integrated, mixed-use community that honors O'ahu and its people.

- Public spaces will be organized to encourage a variety of celebrations of Hawaii's arts and culture—including performances and visual arts, both contemporary and traditional.
- Interpretive displays and signage will build awareness and understanding of the Neighborhood's history and culture.
- Partnerships with educational and cultural organizations will help grow the reputation of the new Ward Neighborhood as a generator of culture and arts on O'ahu.

H. Aesthetics

The Master Plan is guided by clearly articulated design standards that assure quality and continuity, while allowing for the flexibility necessary to allow the authentic spirit of the Neighborhood to evolve over time. These standards include:

- Undergrounding of utilities to remove visual clutter
- Consistent and clear wayfinding design, sidewalks and signage to facilitate pedestrian circulation
- Use of trees and plantings to reinforce the Neighborhood's connection to nature and microclimates
- A public art program to express and interpret local history, stories and events
- Specifications on street furniture and other public amenities to assure quality and durability



Proposed Public Facilities Plan

Conformance with the Mauka Area Plan and Rules

The design and development principles of the Ward Neighborhood Master Plan are in conformance with the Mauka Area Plan and Rules for the Kakaʻako Community Development District, amended as of June 1, 2005 and June 13, 2005 respectively.

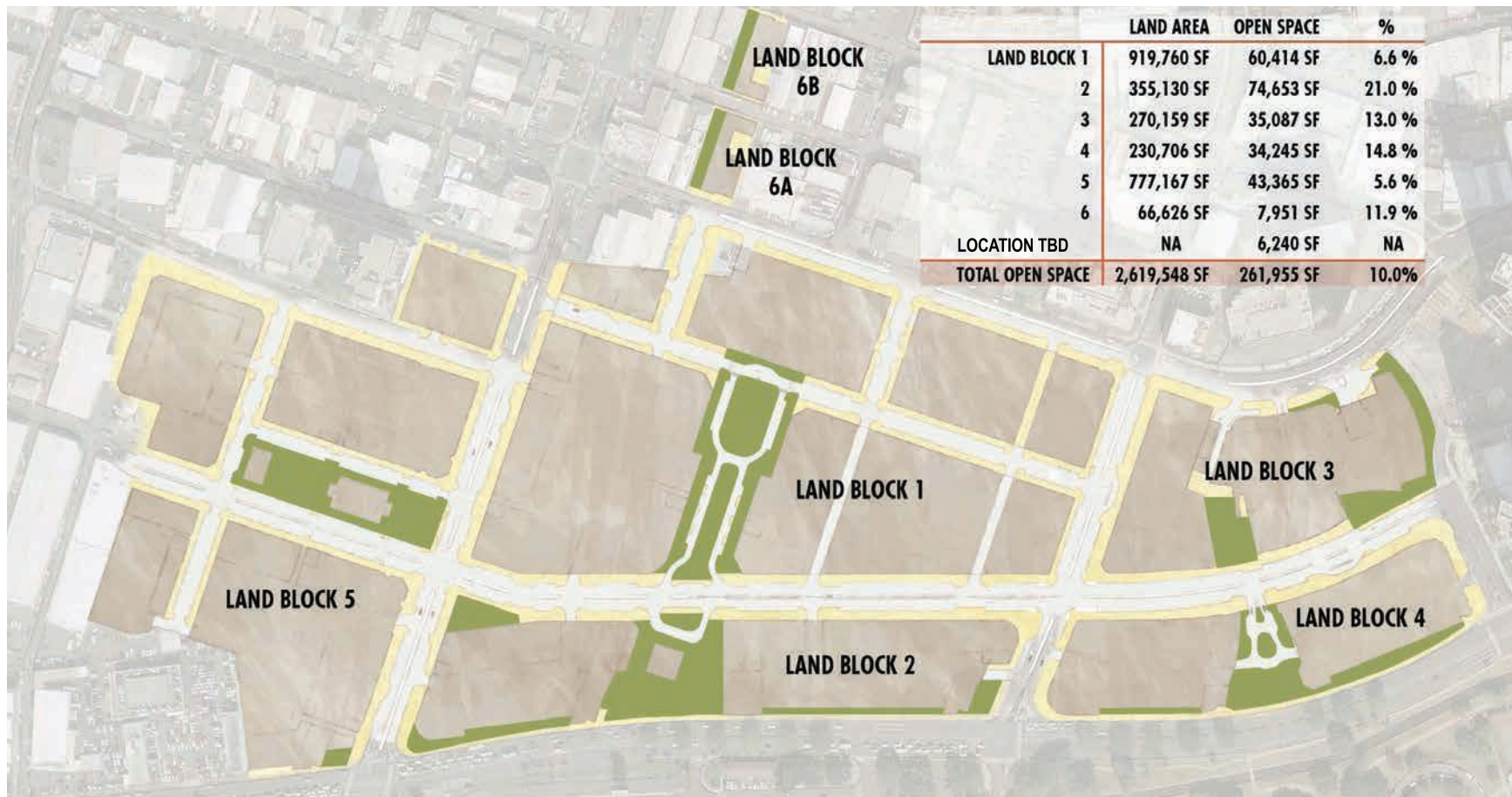
The following two sections highlight some of the most significant Mauka Area Rules that provide the foundation for this submittal, as well as the amendments to the Plan and modifications to the Rules identified as necessary to achieve the vision of the Ward Neighborhood Master Plan.

Floor Area Ratio (FAR)

Maximum FAR of 3.5 for entire development

- This represents a maximum of 9,170,000 sf.

Transfer of no more than 25% of FAR from one development lot to other lots.



Proposed Open Space Plan

Reserved Housing

20% of total dwelling units to be provided for sale or rental to qualified persons

- Under the Master Plan, as many as 860 units could be provided as reserved housing units.
- Reserved housing to be provided within Ward Neighborhood, offsite within Kaka'ako, or elsewhere as permitted, within two years of the development of market rate housing in a given development phase.

Public Facilities

3% of total commercial floor area

4% of total residential floor area (exclusive of reserved housing units)

- More than 340,000 sf of public facilities to be provided. Of this total:
 - About 226,000 sf will be streets that will be accessible by the public at all times
 - Nearly 118,000 sf will be pedestrian walkways that are improved and landscaped to enhance connectivity and that will be accessible by the public at all times.



Proposed Recreational Space Plan

Open space

At least 10% of the lot area within the Ward properties

- More than 260,000 sf to be provided as open space
- While no specific phasing sequence is defined, it is intended that public spaces will be developed earlier in the sequence, allowing residential, office and retail buildings to draw on a “bank” of public spaces that are already in place.

Recreational Space

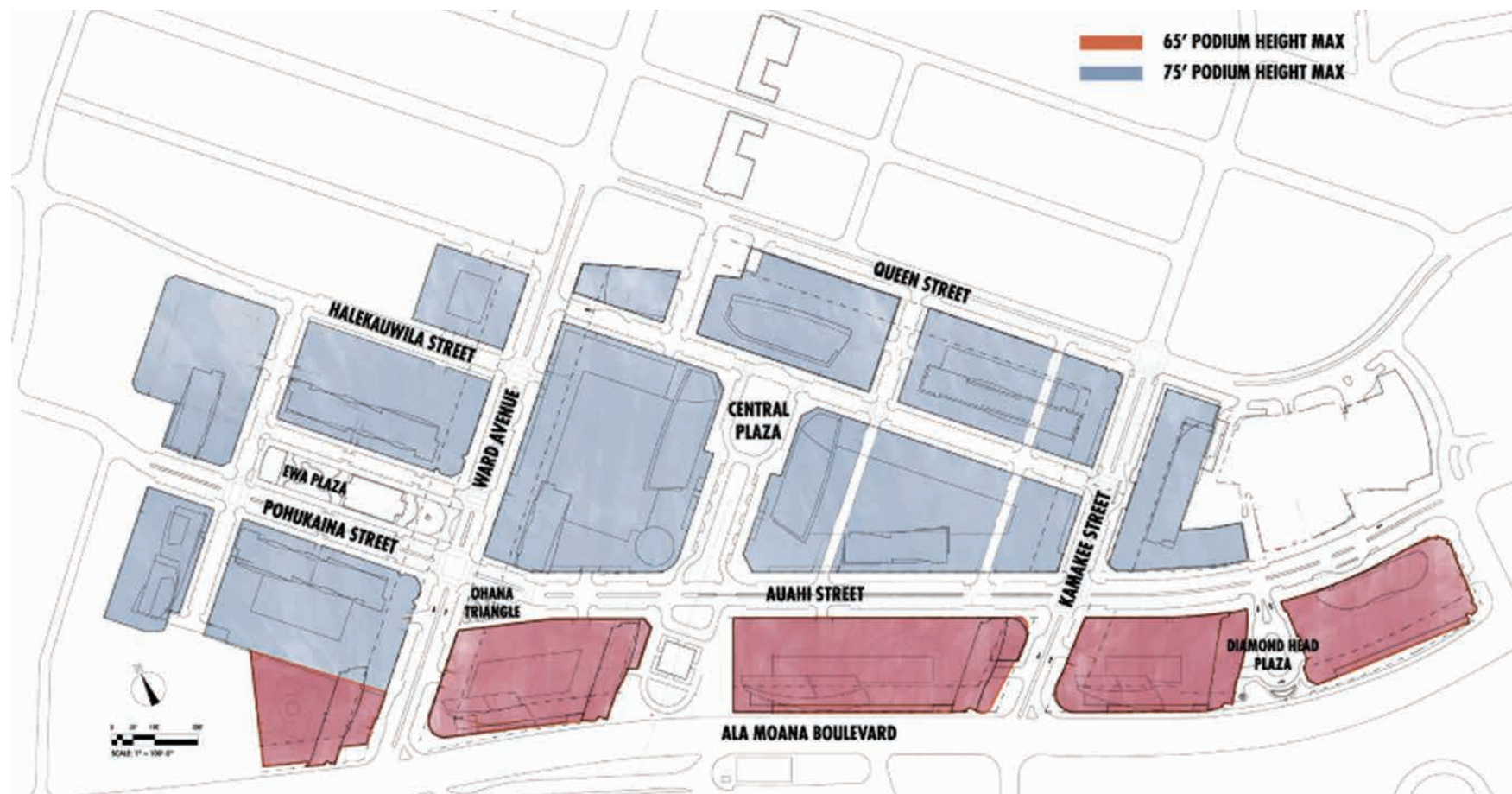
In addition, nearly 250,000 sf is to be provided as recreational space within Ward Neighborhood.

Tower Element

Maximum height-400 feet (+18 feet for structures housing mechanical equipment)

Maximum floor plate-16,000 sq. ft.

Separation of 300 feet between long sides and 200 feet between short sides



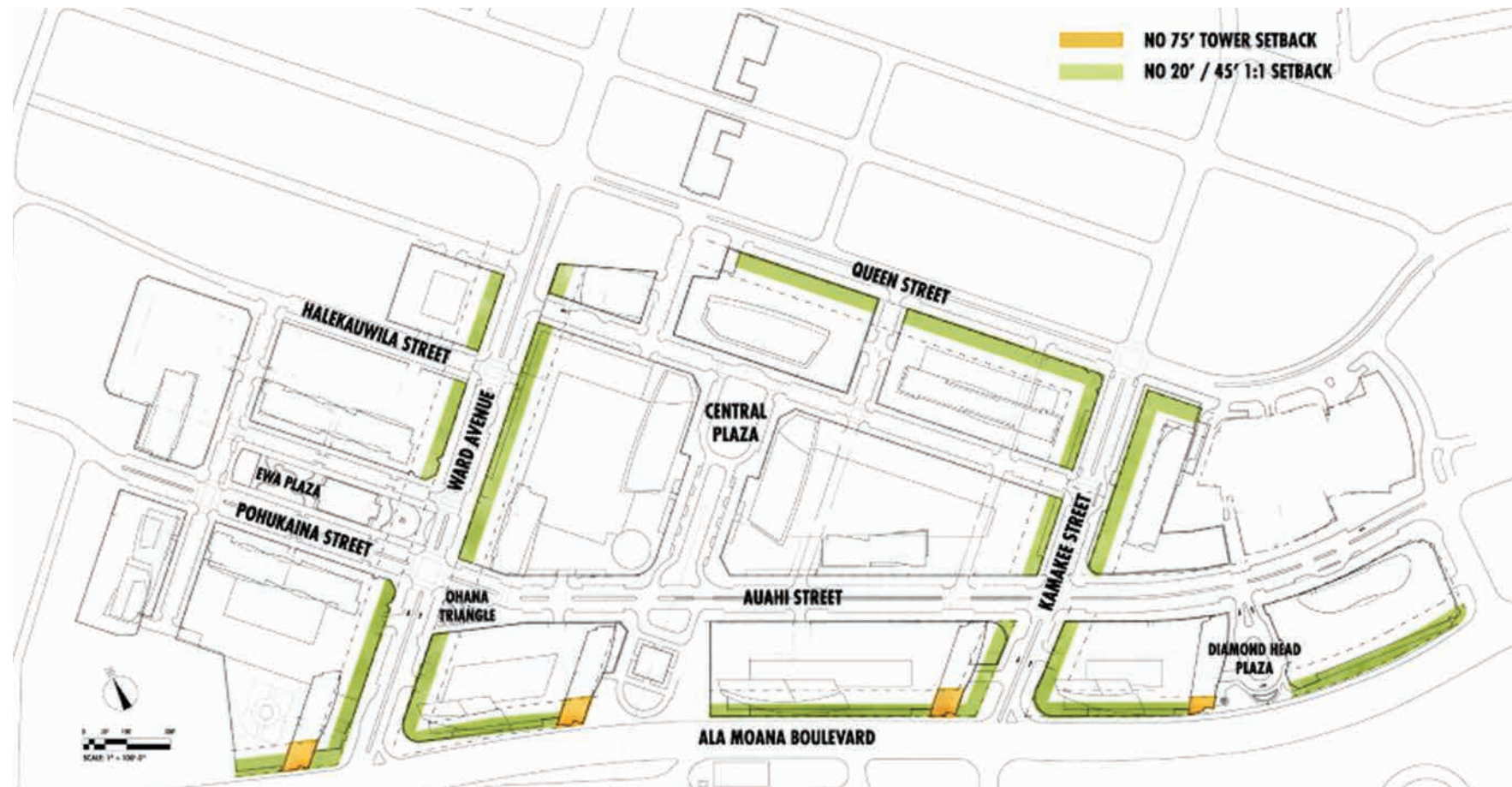
Requested Modifications to the Mauka Area Plan and Rules

Although the Ward Neighborhood Master Plan makes every effort to propose developments in accordance with the current HCDA Mauka Area Plans and Rules, the following modifications have been identified as necessary to achieve the vision of the Ward Neighborhood Plan.

Modification to Podium or “Street Front Element” height

- Increase the maximum Podium or Street Front Element height from 45 feet to 65 feet for parcels fronting Ala Moana Boulevard, and increase all other parcels not directly fronting the Ala Moana Boulevard to 75 feet.

Increasing the podium height allows for retail, restaurants, offices and residential units to be built within the podium. The additional podium height gives the parking structure the opportunity to move up and away from the street, occupying a smaller floor plate and making room for alternative uses. These new uses can then surround the bulk of the garages providing a more aesthetically pleasing and pedestrian friendly façade on the street.



Modification to Podium or “Street Front Element” setback

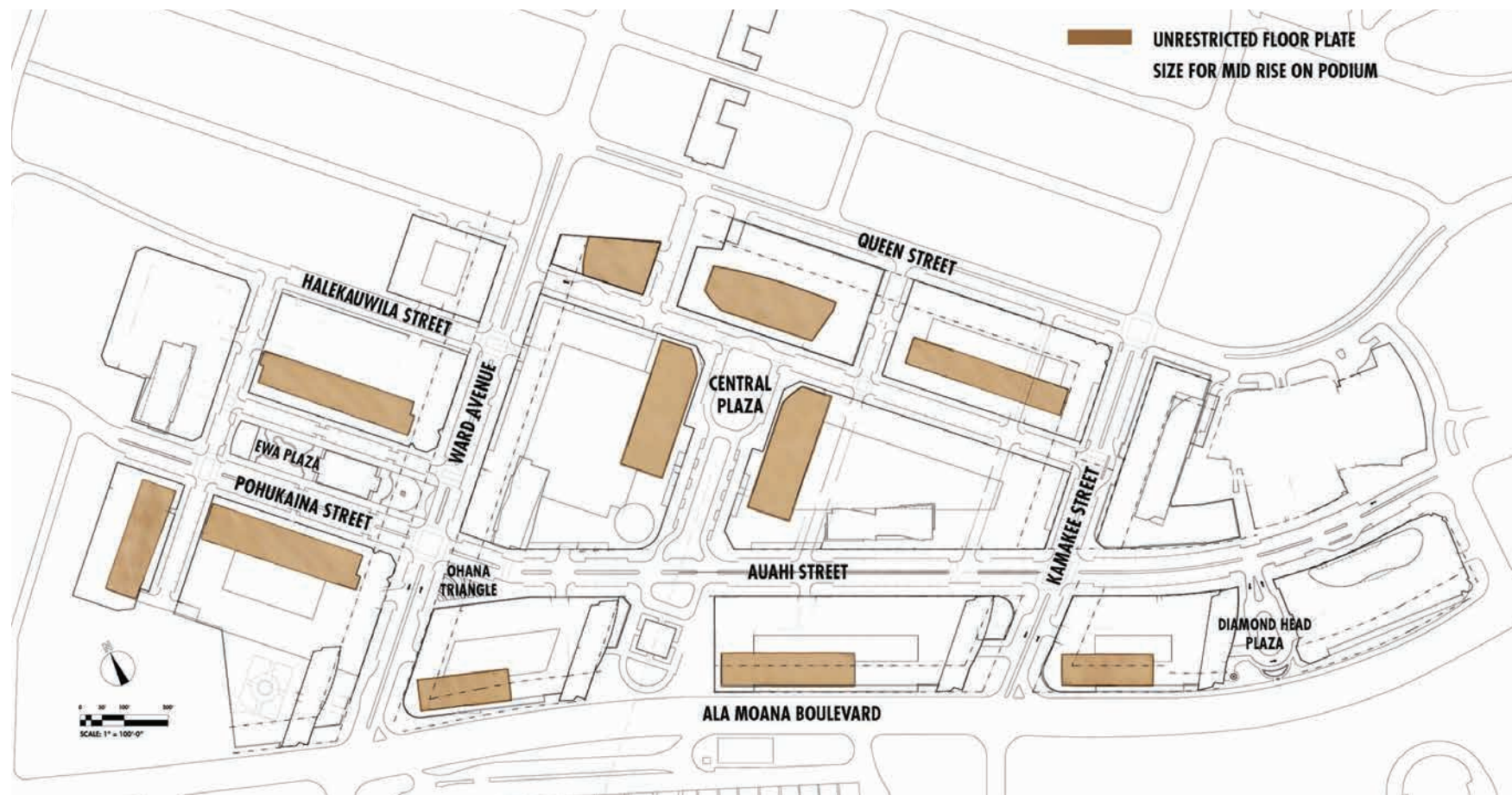
- Eliminate the 1:1 setback slope from 20 feet to 45 feet building height along Ala Moana Boulevard, Ward Avenue, Kamake’e Street, and Queen Street.

Eliminating the sloping setback on the podium allows for the development of a continuous building façade that better defines the edge of the street. Without this setback, the podium envelope will be larger and able to accommodate more density, allowing a greater portion of the development to be built closer to the ground level.

Modification to “Tower Element” setback

- Eliminate the 75 foot right of way setback for those tower elements along Ala Moana Boulevard with a mauka-makai orientation.

Eliminating this setback allows for the tower footprint to be rotated perpendicular to the ocean in a mauka-makai direction. This tower orientation will facilitate a slender building profile, which will help to preserve ocean and mountain views and maximize visual transparency through the district.



Modification to Side and Rear Setbacks

- Eliminate side and rear yard setbacks in selected locations where the facades of new buildings will abut solid walls of existing or future neighboring structures.

Eliminating setbacks in these locations will allow connections between buildings and prevent new residual spaces from being created between buildings, thus helping to minimize narrow and unsafe areas.

Modification with respect to Mid-Rise or “Mid-Height Element” floor plate size, height and separation

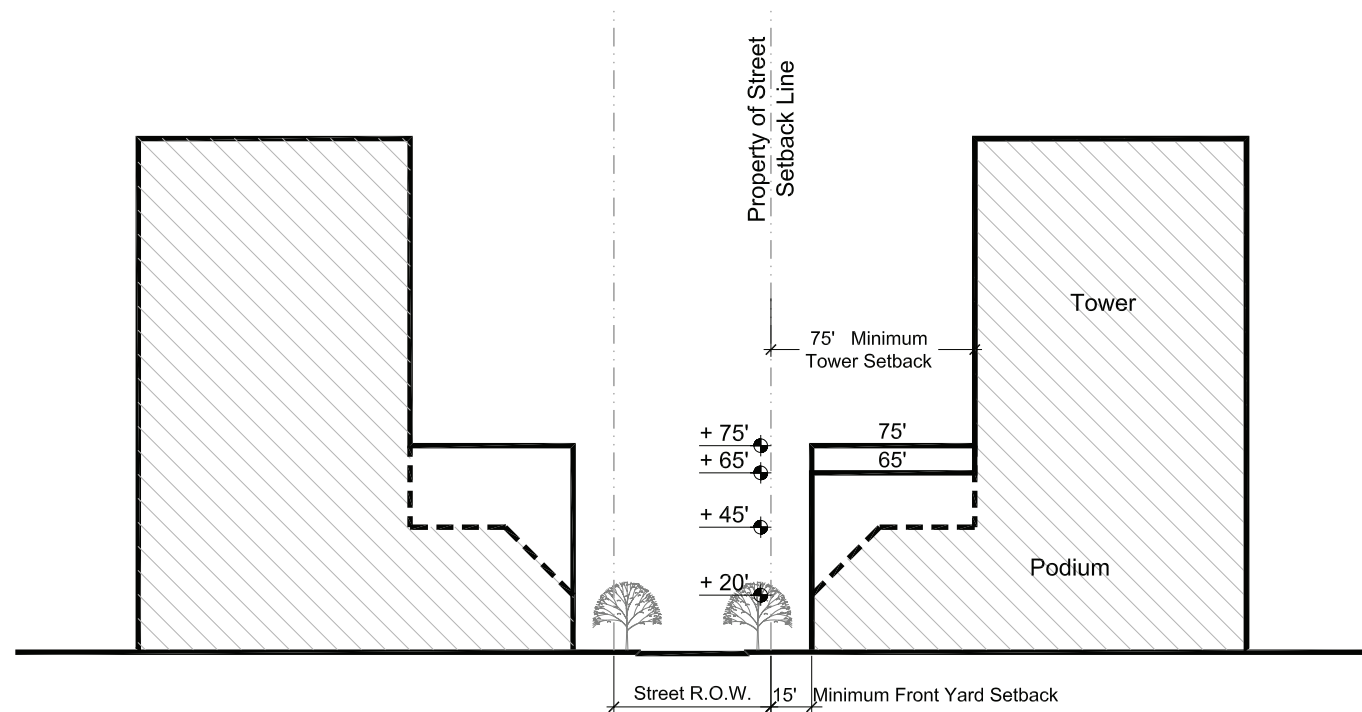
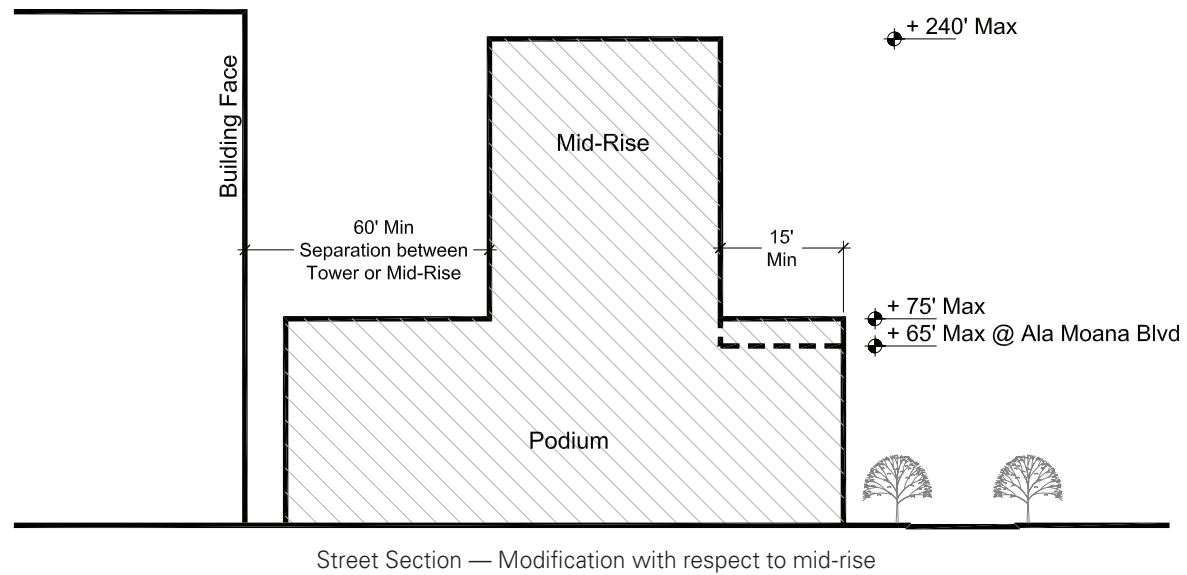
- Allow for the development of a Mid-Rise or “Mid-Height Element” without a maximum floor plate restriction. The maximum height should be no more than 240 feet, with a minimum separation of 60 feet between buildings.

The introduction of the Mid-Rise or “Mid-Height Element” as a building type with an unrestricted maximum footprint size provides an opportunity to distribute building mass more evenly between different parcels and reduce the number of towers needed to achieve the proposed 3.5 FAR density in the Ward Neighborhood.

Modifications for buildings under construction at Ward Village Shops site

- Preserve all modification and variances previously granted for the Ward Village Shops project in Land Block 3.

Since the first phase of this project is under construction and undergoing further redesign while the Master Plan application is being submitted, it is necessary to preserve all previously approved modifications and variances for this project in order to complete and include it within the Master Plan framework.



REFER TO MODIFICATION DIAGRAMS FOR PODIUM HEIGHTS, LOCATIONS AND BUILDING SETBACKS

Street Section — View corridor setbacks for 65' and 75' podium

Conformance with Proposed Revisions to Mauka Area Plan

The Ward Neighborhood Master Plan reflects the primary objectives of the proposed revisions to the Kaka'ako Mauka Area Plan. In particular, the key principles of the draft revised Mauka Area Plan are:

- Develop urban village neighborhoods;
- Create great public places; and
- Make the connections with a balanced set of transportation modes.

The proposed revisions to the Mauka Area Plan include a Roadway Plan that reflects a “future street” roughly parallel to Queen Street and Auahi Street between Ward Avenue and Kamake'e Street. In addition, the draft revisions to the Mauka Plan include a “Mixed Use Zone” for the Ward properties that would permit a mix of commercial, residential and industrial uses and would replace the current MUZ-C and MUZ-R zones that are designated in the existing Plan.

The Ward Neighborhood Master Plan incorporates these revisions.

Amendments Requested to Current Mauka Area Plan

The following amendments to the Mauka Area Plan that is currently in effect are requested:

- The Roadway Plan in the current Mauka Area Plan includes an extension of Halekauwila Street on the Diamond Head side of Ward Avenue connecting to Queen Street. GGP requests an amendment of the Plan to delete this extension of Halekauwila Street. The Ward Neighborhood Master Plan includes an internal street (‘Ekahi Street) that extends from Ward Avenue to Kamake'e Street and is similar in intent to the “future street” that is shown between Ward and Kamake'e on the Roadway Plan (Figure 7-2 of the proposed revisions to the Mauka Area Plan). Both the internal street shown in the Ward Neighborhood Plan and the “future street” enhance pedestrian and vehicular connectivity in the area and serve to break down a larger block into smaller, more walkable blocks.
- The proposed revisions to the Mauka Area Plan replace the current MUZ-C and MUZ-R designations for the Ward properties with a single “Mixed Use Zone” designation. GGP requests an amendment of the current Plan to reflect the “Mixed Use Zone” designation that is in the revised draft Mauka Area Plan. This would allow more flexibility in designing and developing the mixed use community that is proposed for Ward Neighborhood.



Proposed Instruments to Ensure Development Character, Quality or Usage

As part of the planning and design work for the first phase developed under the Master Plan, specific design guidelines will be prepared. These will address architectural, building, landscaping and other design standards in greater detail and will help to establish the foundation for the overall project throughout its implementation.

In addition, a Development Agreement could be executed with the HCDA to ensure that the appropriate development character, quality or usage is maintained. The Development Agreement could include the following elements:

- (1) An agreement that the lands will be developed in accordance with the Master Plan and with existing rules, despite the subsequent amendment of such rules, and in accordance with the modifications and plan amendments approved for the Master Plan;
- (2) An identification of permitted land uses and density for the project; and
- (3) An agreement regarding dedication of public facilities.

Responsibilities of the HCDA and the Landowner with respect to the Master Plan

The Master Plan provides for phasing over a period of more than twenty years, with flexible plans that adapt to changing markets. For each phase, the landowner or developer will be required to submit applications for development permits. It is the landowner or developer's responsibility to ensure that applications are submitted consistent with the Master Plan and HCDA rules. It is the responsibility of the HCDA to review the development permit applications and ensure that the proposed actions comply with the Master Plan and HCDA rules, including the provision of public facilities and reserved housing, among other things.

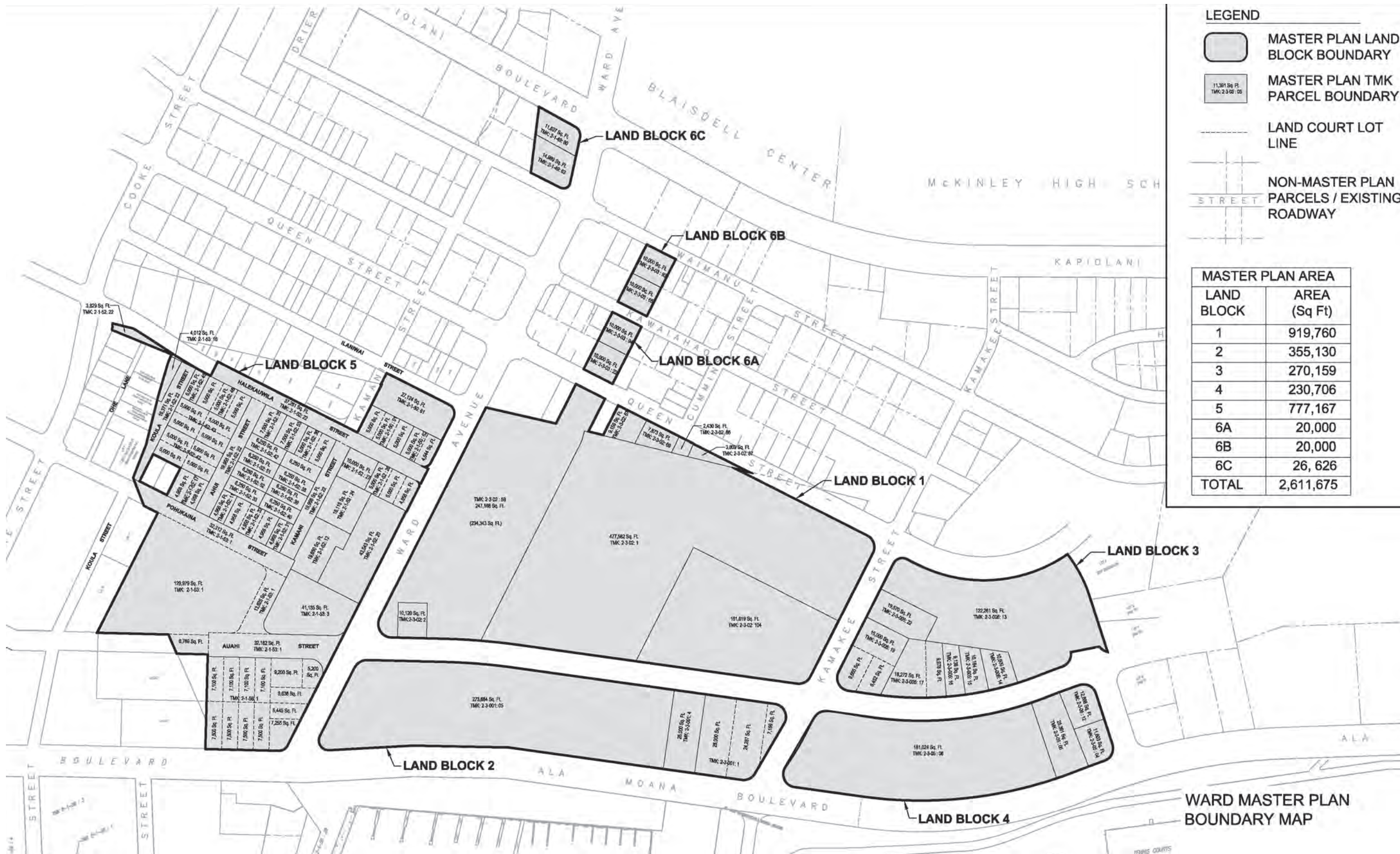
Compliance with Submittal Requirements for Master Plan

The following listing identifies the pages on which the Master Plan application requirements, as described in Subchapter 8 of the Mauka Area Rules, have been completed.

PAGE

- (1) A PLAN DRAWN TO SCALE SHOWING:
- 127 (A) Boundaries with property lines, dimensions and area;
- 56 – 60 (B) Proposed locations and uses of all structures and open areas, the maximum density or intensity of uses, the bulk and height of all structures and their relationship to each other and to adjacent areas, the maximum gross floor areas of buildings by types of uses, the maximum ground coverage of all buildings, the maximum FAR by blocks; and the relationship of buildings to required yard and view corridor setbacks;
- 21 (C) The proposed location and maximum number of residential units including reserved housing units;
- 81 (D) Traffic circulation, including existing roads proposed for closure and proposed changes to roadway alignments;
- 31 – 40 (E) Pedestrian circulation system, at grade and grade separated, including proposed arcades, through-block arcades, and plazas;
- 56 – 60 (F) The locations of proposed parking areas, with estimates of the number of parking spaces;
- 118 (G) The location and amount of land proposed to be dedicated for public facilities;
- 28 – 41 (H) The location or type of land and facilities in private ownership which are proposed for quasi-public use; and
- 119 – 120 (I) The location and minimum amount of proposed open space and recreation areas.

- CD (2) A THREE-DIMENSIONAL STUDY MODEL OF THE MASTER PLAN TO SHOW HOW THE AREA WOULD LOOK IF IT IS FULLY REDEVELOPED AS PROPOSED.
- (3) A REPORT DESCRIBING:
- 5 – 9 (A) Master plan purpose, objectives, strategies, and major concepts;
- 11 – 25 (B) Master plan boundary adjacencies, including current and
55 – 60 projected uses, facilities, and structures;
- 55 – 60 (C) Block by block proposed land use plan including, the maximum total floor area and ground coverage of proposed buildings, maximum building heights and density, and the maximum amount of reserved housing units proposed;
- 116 – 117 (D) Projected public and private benefits derived from implementation of the master plan;
- 113 – 115 (E) How development under the Master Plan conforms to the Mauka Area Plan and the purposes and standards of Subchapter 8;
- 121 – 125 (F) The areas for which variances or amendments to the Mauka Area Plan and Rules may be necessary;
- 118 – 119 (G) Fulfillment of public facility dedication requirements;
- 121 – 125 (H) Any exception of the applicable rules of this chapter as provided under §15-22-203(b) of Subchapter 8;
- 113 – 117 (I) Public benefits to be provided by the landowner in return for the vesting of development requirements for a specific period, and the terms for delivery of such public benefits;
- 62, 125 (J) Master plan implementation, including the responsibilities of the authority and the landowner, and the proposed phasing of development;
- 63 – 72 (K) Urban design guidelines or controls; and
- 125 (L) Proposed instruments to ensure appropriate development character, quality or usage.



LEGEND

- MASTER PLAN LAND BLOCK BOUNDARY
- MASTER PLAN TMK PARCEL BOUNDARY
- LAND COURT LOT LINE
- NON-MASTER PLAN PARCELS / EXISTING ROADWAY

MASTER PLAN AREA	
LAND BLOCK	AREA (Sq Ft)
1	919,760
2	355,130
3	270,159
4	230,706
5	777,167
6A	20,000
6B	20,000
6C	26,626
TOTAL	2,611,675



The Ward Neighborhood Master Plan includes eight land blocks totalling 2,619,548 square feet.

The five major parcels are bordered by:

Mauka Side:
Queen Street and
Halekauwila Street

Diamond Head Side:
Queen Lane and
residential towers

Makai Side:
Ala Moana Boulevard

‘Ewa Side:
‘Ohe Lane

The three smaller parcels are located between Queen and Waimanu Streets, and on the corner of Kapi‘olani Boulevard and Ward Avenue.

THE TEAM





Jordan Creek Town Center, West Des Moines, Iowa

THE TEAM

The Ward Neighborhood Master Plan has been prepared by General Growth Properties, Inc., which is a leading developer of master planned communities and mixed-use properties. GGP has assembled a planning and design team that represents some of the most progressive talents in mixed-use development in the United States.

Team Overview

As Master Developer, GGP will be responsible for the implementation of the Ward Neighborhood Master Plan. The design team consists of:

Development Design Group, urban design

Sasaki Associates, landscape architecture and infrastructure

Arup, transportation and sustainability

Belt Collins, civil engineering



The Design Team

Development Design
Group, urban design

Sasaki Associates,
landscape architecture
and infrastructure

Arup, transportation
and sustainability

Belt Collins,
civil engineering

THE TEAM

WARD NEIGHBORHOOD

MASTER PLAN | 129



The Shops at La Cantera, San Antonio, Texas

General Growth Properties, Inc.

Brothers Martin and Matthew Bucksbaum transformed their family-owned grocery store into one of the country's first shopping malls in 1954, ultimately building one of the country's most admired and respected corporations now publicly traded on the New York Stock Exchange under the symbol GGP.

Today, General Growth Properties has ownership interest or management responsibility for a portfolio of more than 200 regional shopping malls in 45 states as well as ownership interest in master-planned communities in Texas, Maryland and Nevada and mixed-use properties. General Growth's international portfolio includes ownership and management interest in shopping centers in Brazil and Turkey. Its shopping center portfolio totals approximately 200 million square feet of retail space and includes more than 24,000 retail stores nationwide.

Following the 2004 acquisition of The Rouse Company and the Howard Hughes Corporation, GGP has become a leader in the development of mixed-use property creating human scale, live-work-play neighborhoods. Its master-planned projects such as Summerlin in Nevada, The Woodlands

and Bridgeland in Texas, and Columbia in Maryland, have set a new standard for urbane, vibrant and integrated town centers.

GGP is setting new standards for the redevelopment of its existing properties into sustainable, mixed-use neighborhoods.

At The Woodlands north of downtown Houston, GGP is the steward of a 28,000-acre forested, master planned community with nine residential villages, a Town Center, the Woodlands Waterway, a resort and conference center, a luxury hotel and convention center, schools, hospitals and health care facilities. The Woodlands was planned to be a self-sustaining community where people can live, work, play and learn in harmony with nature. Since 1990, The Woodlands has been the number one community in Texas in terms of new home sales, and is currently ranked third in the nation.

Houston's newest master-planned community, Bridgeland, is a living environment of unsurpassed natural beauty that inspires its residents to "find balance in their lives." Bridgeland encompasses more than 10,000 acres and features an extensive lake and trail system connecting residential,



Pinnacle Hills Promenade, Rogers, Arkansas

recreational, retail, religious and health and fitness offerings. The Bridgeland retail and mixed-use center will be a regional destination for shopping, offices, entertainment, hotel and healthcare facilities. After just one year, more than 350 families reside in Bridgeland. The Shores and First Bend are growing rapidly and two new neighborhoods—The Cove and Lakeland Heights—will begin greeting new residents in 2008. Bridgeland has become the most desirable development in the Houston market, with the highest percentage of new-home seekers considering Bridgeland as their community of choice for their new home purchase.

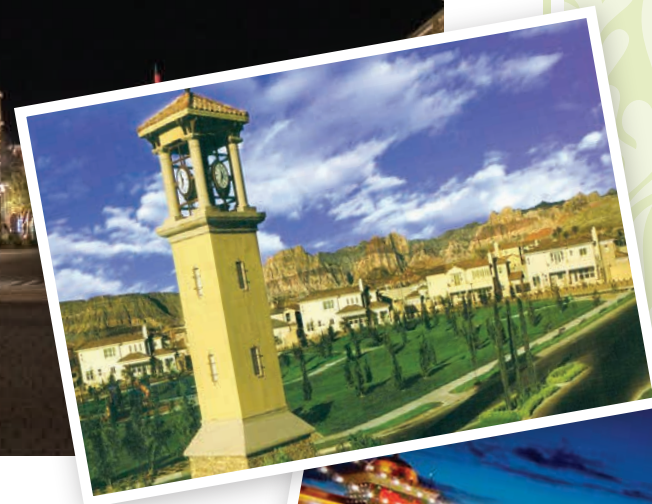
The 22,500-acre master planned community of Summerlin is located twelve miles from downtown Las Vegas and is home to nearly 95,000 residents, with more than 7,500 acres left to develop. Since its inception in the early 1990s, Summerlin has consistently ranked as one of the top ten master planned communities in the nation. Summerlin includes hundreds of neighborhoods and dozens of villages connected by a 150-mile long trail system and more than 100 parks. It boasts 22 public and private schools, four institutions of higher learning, nine golf courses, major health and medical centers, business parks, shopping centers and cultural facilities. Its strong tradition of environmental

stewardship includes a Nature Conservancy exchange of 5,000 acres of sensitive land that contributed to the establishment of the the Red Rock Canyon National Conservation area, and establishment of a Desert Tortoise habitat.

Today, near Salt Lake City, GGP is redeveloping Cottonwood Mall. The Master Plan for the new Cottonwood community contemplates transforming a traditional enclosed mall into a 57-acre live-work-play community that includes 534 residential units, 700,000 square feet of retail and 100,000 square feet of office space.

For more information, please visit the company web site at <http://www.ggp.com>.

Inset Photos: Top – Summerlin Master Planned Community, Las Vegas, Nevada
Bottom – Woodlands Mall, Houston, Texas



THE TEAM

WARD NEIGHBORHOOD

MASTER PLAN | 131



DESIGN TEAM

The vision for the redevelopment of Ward Neighborhood has been shaped by a world class design team dedicated to multi-disciplinary collaboration and problem solving. Each firm has solid and tested experience in creating complex and multi-faceted development projects that have become unique and well-loved communities and neighborhoods.

Development Design Group (DDG)

Development Design Group Inc. is an internationally renowned planning, architecture and design company that delivers dynamic solutions to place-making all over the world. DDG has a strong history of applying an innovative approach to successful commercial endeavors—notably Atlantic Station in Atlanta, Georgia; SouthSide Works in Pittsburgh, Pennsylvania; Town Square in Las Vegas, Nevada; and the ICSC award-winning Easton Town Center near Columbus, Ohio, among others. The firm's successful track record is reinforced by more than 75 national and international design awards over the past decade.

DDG's multilingual team creates projects from the firm's Baltimore, Maryland headquarters, offering extensive experience in virtually every aspect of development. DDG's portfolio includes unique office, residential and town center designs, large mixed-use destinations, innovative retail and entertainment concepts, first-class hotel, leisure and resort facilities—inspired destinations which offer a wide range of elements and activities.

A host of domestic and international clients seek DDG's multi-disciplinary professional services for retail/entertainment, regional planning, waterfront development, urban design and revitalization, specialty center development and creative concept generation for land and project feasibility. With each project, DDG works to create destinations harmoniously integrated with their surroundings and culturally attuned to the lifestyles of their clients, customers and communities.

THE TEAM

WARD NEIGHBORHOOD



Sasaki Associates, Inc.

Sasaki Associates, Inc. is an award-winning, international design firm with expertise in planning and urban design, landscape architecture, architecture, interior design, civil engineering, graphic design and strategic planning, with each discipline represented in the ownership and management of the firm. This year, Sasaki received the 2007 ASLA Firm of the Year Award, which recognizes landscape architecture firms that have produced bodies of distinguished work influencing the professional practice of landscape architecture.

The scope of the firm's projects is extensive and includes campus planning and design, recreation resort design, urban waterfronts, master planned communities, urban mixed-use districts, transit oriented developments and brownfield revitalization. Some notable projects include: The Presidio Trust Management Plan in San Francisco; Reston Town Center in Virginia; The Charleston Waterfront Park in South Carolina; and Disneyland® Resort Paris. In 2007, Sasaki was awarded the design of the Olympic Green, the central public open space of the 2008 Beijing Olympic Games. With offices

in Boston and San Francisco, the firm continues to serve its clients world-wide.

The firm's philosophy asserts that the best designs emerge not from preconceived notions, but from a thoughtful, collaborative process tied to real world conditions. As a result, Sasaki Associates' 300-person staff approaches their work with a spirit of critical thinking and collaboration so that the social, cultural, and environmental attributes unique to each project may be fully understood.

Sasaki approaches each project with a critical eye towards creating sustainable development strategies. The firm's methodology is holistic in nature, and involves all stakeholders in a collaborative dialogue that seeks to solve problems and craft well-designed solutions to address specific site and environmental issues. The firm is distinguished by its commitment to creating memorable environments, and by its interdisciplinary approach to problem solving.

THE TEAM

WARD NEIGHBORHOOD

MASTER PLAN | 133



Belt Collins Hawai'i Ltd.

Belt Collins is an international design firm, founded in Honolulu, that provides planning, civil engineering, landscape architecture and environmental consulting services. Founded in 1953, the firm is comprised of over 450 professional and support staff practicing in nine offices in Asia and the United States, including Honolulu, Seattle, Boulder, Hong Kong, Shenzhen, Singapore, Bangkok, Guam and the Philippines. In its projects, Belt Collins strives to integrate the built environment with the natural environment, being mindful of addressing sustainability issues.

Belt Collins was the first in the Asian-Pacific region to combine urban and land planning, civil engineering, landscape architecture and environmental consulting within one professional organization.



Stressing at all times the interdependence of its design services, Belt Collins has grown to become one of the world's leading design and consulting firms, having completed over 16,000 projects in 70 countries. Several factors have led to these achievements. First is enlightened leadership that spends an enormous amount of time developing and mentoring upcoming talent. Second is Belt Collins' sensitivity to local cultures, customs and natural environments. Third is the firm's work on seminal studies that have created new ways of looking at large land parcels and their uses.



Arup

Arup was founded in 1946 as an interdisciplinary design, engineering and planning firm on the principle that design must have a social purpose best achieved through multi-disciplinary collaboration. Today, Arup has more than 9,000 employees working in 37 countries, with a U.S. staff of over 900 specialists.

The scope of master planning expertise in the San Francisco office includes transportation planning, sustainability consulting and environmental planning. Arup's planners are supported by a wide range of specialists in the fields of structural, geotechnical, mechanical, electrical and acoustical engineering, as well as risk, civil infrastructure and fire protection. They complement their local knowledge by leveraging the expertise of the company's global staff.

Arup has been at the forefront of delivering sustainable developments in many countries, including the carbon-neutral Beddington Zero Energy Development (or BedZed) in the United Kingdom, the unique Beijing Olympic Swimming Center (or "water cube") and Dongtan Eco-City in

Shanghai, China. Arup has also played an integral role in the delivery of many sustainable buildings across the United States, including the LEED certified California Academy of Sciences and the Federal Building in San Francisco.

In Honolulu, Arup used its design expertise to assist the Punahou Case Middle School to achieve LEED Gold certification and provided design consulting and peer review services for the new 85,000 square foot school campus. Arup also authored Sustainability Guidelines for the University of Hawai'i-West O'ahu, which identified solutions and metrics for the development aimed at reducing short and long-term environmental impacts through appropriate design, construction and operation of the development.

THE TEAM

WARD NEIGHBORHOOD

MASTER PLAN | 135

