

4 URBAN DESIGN

Urban Design Framework

The Urban Design Framework for the Kaka `ako TOD Overlay Plan builds upon the vision established by the Mauka Area Plan to promote street-level activity, with safe, comfortable public spaces and a diverse array of uses. Urban Design strategies in this chapter clarify HCDA priorities for the relationships between people, the landscape, and the built environment. Particular to the achievement of the TOD Overlay Plan goals and objectives will be the selective introduction of additional height and density into this already urban location. This chapter designates a framework and a set of design principles that will guide the placement and design of new building forms, balancing additional capacity with elements that help to create a comfortable, livable urban location.



Development scenario of build-out under the TOD Overlay Plan. An array of taller, slender towers are envisioned near by the Civic Center, and Kaka`ako Transit Stations.

Image from VIA Architecture



Building Height, Tower Floorplates, and Skyline

The Island of O`ahu is known as "the Gathering Place," and Honolulu is its center of activity." Its skyline, set against a forested mountain backdrop and the curve of Mamala Bay, is unmatched by many of the world's metropolitan areas. Kaka`ako is located centrally between the downtown core and Waikiki, and is well positioned to accommodate taller buildings. Adding to Honolulu's skyline here will visually connect these two recognizable areas, while providing a skyline that will be seen by visitors and residents from vantage points across the south shore of O`ahu.

The careful placement and design of tall buildings can help to create a sense of place by framing and focusing views between the built and natural environments. Even now, there are limited views to either the Ko`olau ridge or the ocean from the heart of the district, however, vertical development strategies have the potential to cultivate new views for residents, employees and visitors while also aligning to street end vistas identified in the Mauka Area Rules Mauka-Makai View Corridor (see Figure 4-2).

The TOD Overlay Plan will utilize best practices in urban design to encourage exemplary buildings and advance the development of well-sited, tall, slender towers. Together, these buildings will create a skyline of framed peek-a-boo views through and between towers, as well as green spaces on podiums that will enhance views down from neighboring buildings and residential areas on the slopes of Punchbowl, Makiki and Pauoa. The sensitive application of height allowance paired with quality streetscape design can produce the characteristics of a comfortable pedestrian-oriented environment on the ground plane, while adding to the overall capacity in Honolulu's primary urban center.

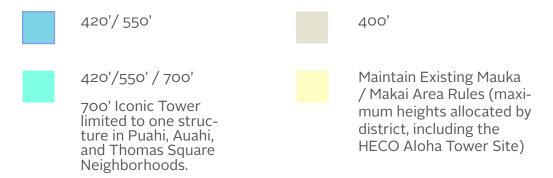
Current Mauka area tall buildings consist of a preponderance of 200' long and 400' tall "slab" towers that tend to create a monotonous form and height. The TOD Overlay provides adjustments that help temper this form of development by encouraging both a diversity of high rise types, and a hierarchy of building form. Also, the new rules help establish better livability by concealing exposed parking garages and responding to the transit investment in the district.

The proposed set of High Rise Building Types aim to strike the right balance between constraints on building mass and volume, aesthetics and market feasibility. This is because smaller tower floor plates (below 11,000 SF) can become more luxury-oriented as the ratio between surface skin (the exterior facade) and interior is increased, bringing up the cost of the building envelope per interior salable square foot. Too heavy of an emphasis on narrow floor plates means that fewer towers will be built, and goals for making Kaka `ako a Hawai `i resident-focused, high-capacity neighborhood would not be achieved. This is why the TOD Overlay Plan includes more affordable building options, together with a tall floor plate option of a mid-range of 11,000 SF untethered from the previous lot size requirements found in the Mauka Rules (It is still required that all buildings must have a parcel at a minimum lot size of 40,000 SF to participate in the TOD Overlay height and density increases).

The TOD Overlay Plan also identifies a limited number of opportunities for the placement of iconic buildings (see Figure 4-1). These 700' towers will only be allowed with the provision of exceptional public benefits and with progressive green building practices and high architectural quality. Allowing these icons, HCDA is adding a sculptural element to the skyline, while condensing the building footprint. A variety of controls listed in the following table are explored, including tower floor plate maximums and spacing requirements, but perhaps the most important is the introduction of a design review program that can respond to the specific context and will begin to develop a culture of urban design quality in Kaka`ako.

Figure 4-1 Maximum Heights

Maximum allowable heights are established by High Rise Building Types, including limitations on bulk and massing. The base height in Mauka Area will be increased to 420' in areas illustrated on the map below. Towers of 550' are limited to development lot sizes of 90,000 SF or greater, with one tower allowed per development site. One iconic building with a maximum height of 700'is allowed in each of the Auahi, Pauahi and Thomas Square Neighborhoods.



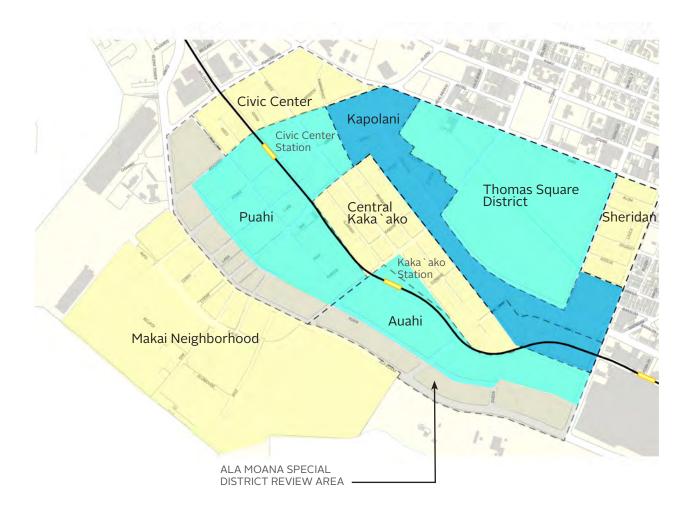






Figure 4-2 Building Siting and View Preservation

Control	Mauka Rule (2011)	TOD Overlay Recommendation
Mauka - Makai Corridor	Orient towers with long side of axis parallel to mauka-makai corridor. Min. 50' setback above 65' ft. Allows for 20% deviation from the view corridor per HCDA review.	Maintain the principle of short side axis orientation and test mauka-makai corridor in the EIS. Existing corridors may be altered or new corridors introduced. Any identified public views will be clearly defined and mitigating criteria established.
Solar Access	Not explicitly required	Provide guidance to ensure solar access for designated public spaces. Conduct a shade impact study to ensure that shadows from new buildings above 400' in height are minimized on identified parks and key pedestrian areas between 9AM and 3PM.
Tower Floorplate Controls	Towers maximum horizontal plan projection is 150' in one direction, with a maximum of 210' allowed between two farthest points of a tower floor plate. Specific floorplate controls are tied to block size.	High-rise Building Types (4-4) identified on page 4-15 are subject to identified tower floorplate controls. A minimum block size of 40,000 SF is required for all High Rise Building Types designated by the TOD Overlay Plan. Consider the exclusion of balconies from floorplate controls.
Tower Spacing	All towers maintain a spacing of 80'. When any portion of a proposed tower falls within the mauka-makai zone, a minimum of 300' separation between the long parallel sides of neighboring towers is required.	Maintain minimum 80' separation between all towers below 240'. Consider creating new spacing rules on taller tower typologies to allow more towers per block. Additionally, ensure significant separations between the Iconic Towers (with a maximum of three buildings in the Mauka District with heights ranging from 550' - 700').
Building Orientation	65% of one edge of a tower must be flush with a façade of the building or street element.	Add flexibility to street frontage setbacks. Encourage towers to be offset and horizontally staggered within a block. Include strategies to accommodate wind-down draft conditions. Consider guidelines for tower orientation associated with rear laneway and alley conditions.
Design Review	Not required Mauka (Makai only) For projects greater than 20,000 SF, as part of the Mauka Area Development Permit Process a discretionary Design Review committee reviews designs and provides comment within 30 days. Buildings in Makai are also subject to a set of guidelines produced in 2002.	Set thresholds for a design review process for taller buildings (over 240') to ensure quality of design. Principles should ensure that complimentary relationships between buildings are developed and that significant views are preserved. (see Strategy UD3)
Vertical Articulation + Tower Tops	Not required	Rely on design review as a tool to encourage articulation of building forms of taller buildings (>240'), reduction of the mass of upper portions and neighborly transitions in both height and scale between adjacent buildings.
Vertical Transitions	Not required	TOD Overlay provides performance based measures to produce harmonious combinations of varying heights within the same development block. Special rules apply to Iconic Towers.

Figure 4-3 Proposed Build-Out under TOD Overlay Plan



Figure 4-4 Mauka Area Rules Build-Out



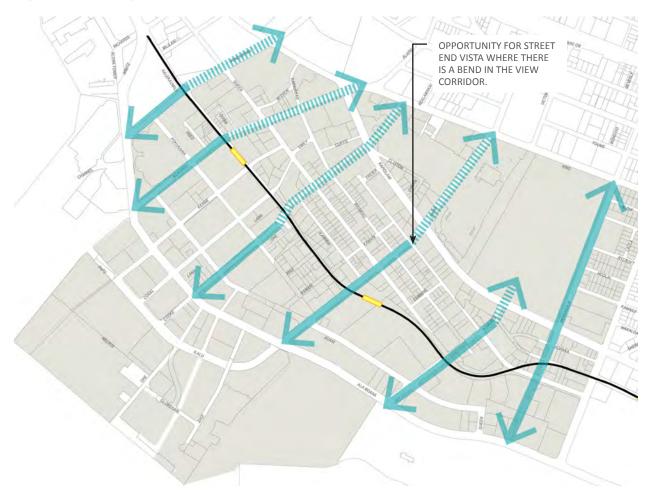


MAUKA-MAKAI CORRIDORS

All structures, even those that are a single story have an impact on pedestrian views, obstructing sight lines to the ridgeline and the ocean. Establishing view corridors that maintain and frame future views is of critical importance. The Mauka-Makai corridor is defined in the PUC Plan and HCDA Mauka Area Rules (see Figure 4-2.). Buildings adjacent to a view corridor street must set all portions of the building above 65' back 50' (transitional height setback). Tower Elements are also required to be aligned parallel to the closest maukamakai axis. Every development permitted under the Mauka (2011) Rules must submit a view impact study demonstrating that the ideal tower orientation was selected in order to maximize views.

The TOD Overlay Plan will also consider the treatment of streetend vistas on portions of view corridors that shift angles. As noted in Figure 4-2.

Figure 4-5 Designated Mauka Makai View Corridors and Streetend Vistas



550'

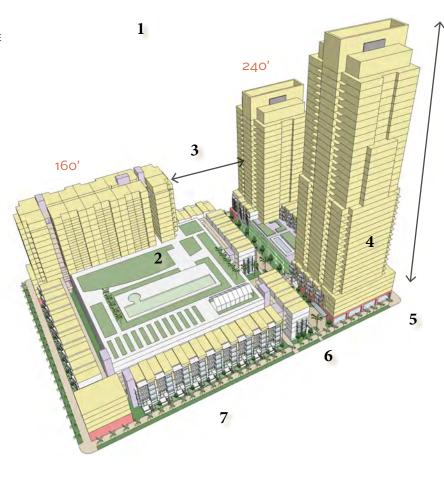
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Strategy UD1 A high-rise neighborhood with a variety of development types

Design of the built environment is the result of development economics, regulatory design standards and site geometries within the context of complex market realities. To participate in the TOD Overlay High-rise building types, a development block must be at least 40,000 SF or greater. With a potential for increased capacities, the TOD Overlay Plan anticipates a redevelopment pattern that, depending on the size of the parcel, can accommodate multiple, inter-related buildings on a single development block. To avoid monolithic or overly uniform buildings and to encourage a skyline hierarchy that is both interesting and unique, larger-scale TOD developments with multiple tall buildings should be composed of at least two building types with significant height transitions between buildings (6-8 stories), as well as changes in architectural character, volumes and massing. An exploration and analysis of proposed Building Types is included on page 4-14 of this chapter. A prototypical block development is shown below (Figure 4-6).

Figure 4-6 Typological Block Development (120,000 SF consolidated lot)

- MULTIPLE BUILDINGS MAY BE
 SITED ON A CONSOLIDATED
 PARCEL. DESIGN REVIEW ENSURES
 NEIGHBORLY RELATIONSHIPS
 BETWEEN TOWERS
- 2 INTERNAL PARKING STRUCTURES ARE EFFICIENT AND SHARED BETWEEN USES. PARKING PODIUMS CONTAIN ACTIVATED PUBLIC SPACE FOR BUILDING USERS
- 3 DISTANCES BETWEEN BUILDINGS ARE CONTROLLED FOR PRIVACY AND LIVABILITY AND CONSISTENCY WITH MAUKA-MAKAI VIEWS
- 4 BUILDINGS OF DIFFERENT HEIGHTS AND TENANCIES ANTICIPATE A VARI-ETY OF CONTEXTS AND CONDITIONS.
- 5 RETAIL IS PRIORITIZED IN CORNER LOCATIONS AND COMMERCIAL AREAS AND IS DESIGNED TO ENGAGE THE STREET AND ENHANCE THE PEDESTRIAN EXPERIENCE.
- INTERNAL BLOCK CONNECTION FOR
 VEHICULAR AND PEDESTRIAN ACCESS ARE ACTIVATED WITH THE INCLUSION OF PEDESTRIAN FRIENDLY
 DESIGN, LANDSCAPING, AND ACTIVATING USES WHERE POSSIBLE
- THE GROUND PLANE IS HUMAN SCALED. NON-COMMERCIAL STREETS ARE ACTIVATED
 WITH TOWNHOUSES, STOOPS,
 STREETSCAPE AND LANDSCAPING
 ENHANCEMENTS

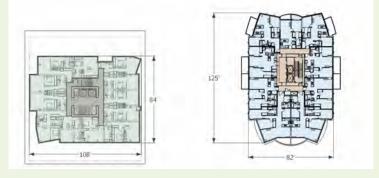




BUILDING CODE CONSIDERATIONS

While the City of Vancouver is often cited as a precedent for smaller floor plate towers, these building types result from different building codes, in particular, a more consolidated core of both elevators and exit stairs made possible through the application of a "Scissor Stair." The scissor stair design is set of two intertwined stairs (like a double helix) located within one stairwell enclosure separated by a fire wall. Two adjacent flights connect the same floors in opposite direction, crossing each other like a scissor. In an enclosed scissor stairs it is possible for two people to climb or descend simultaneously without ever having to meet each other.

The scissor stair innovation provides for more leasable area to offset construction costs, while also allowing for a condensed footprint. Although scissor



Typical IBC Tower Core Alto - Seattle 8,000 SF Floorplate 12 units per floor 672 ave. unit (gross) 551 SF ave. unit (net) 1387 SF Core = 17%

Scissor Stair Innovation Plaza 88 - Vancouver, BC 8,000 SF Floorplate 9 units per floor 666 ave. unit (gross) 670 ave. unit (net) 1072 SF Core = 13%

stairs are used throughout the eastern part of the US and in Vancouver, BC, building codes in the western US and Hawai'i treat them as a single exit for fire and life safety purposes, discouraging their use. Recently however, there has been increased interest in locally modifying building code for the scissor stair, beginning with Portland, Oregon where it has been used in the South Waterfront project.

One of the first projects to use the scissor stair is The Strand (shown below) located on the Willamette River. The scissor stair allowed developers to the reduce floorplates from 14,000SF to a "skinny" 10,000SF with each unit having a view.



The Strand, Portland



Vancouver Tower

Strategy UD2 Encourage climate responsive design

Current Mauka Rules require the base level of US Green Building Council's LEED Certification (or equivalency) on any new building in the Mauka District that increases existing floor area by 25%. With the TOD Overlay, HCDA should explore the incorporation of climate responsive design, sustainability performance measures and subsequent development incentives to encourage exemplary buildings. Green building practices may focus on the following:

- Windows and facade treatments for shading, daylighting and reducing heat gain
- Open air ventilation, and circulation including exterior corridors, stairways, internal gaps between podium liner uses and parking structures
- Arcades and breezeways and outdoor circulation at the street level, in courtyards and on ground floors that maximize access to the outdoors and takes advantage of the Hawaiian climate
- Provision of elegant and integrated shade structures on podiums, such as awnings and porticos and landscaping
- Orient tall buildings to manage the tradewinds through and around structures so that open space elements are comfortable
- Use of solar renewables, geothermal and wind energy, and district cooling opportunities
- Locally sourced and/or renewable materials, and diverting construction materials from the landfill



Outdoor Circulation and green roofs are a core elements in the sustainability guidelines for Vancouver's South East False Creek



Portland's South Waterfront Ecodistrict, the City's newest high rise neighborhood with Platinum LEED buildings.



Strategy UD3 Provide for sunlight access

In the tropical yet temperate climate of the central Pacific, shading has both positive and negative qualities in the urban environment. Shade cools the streets, improves comfort of public spaces, and reduces heat island effect. However, access to filtered sunlight and skyviews are also positives, providing air circulation, breathing room and a sense of place. With the TOD Overlay's emphasis on taller buildings, guidelines to understand the impact and influence of shade should be considered. It is advisable that taller buildings (over 400') do not overly shade key pedestrian areas. Solar access can be included as a performance-based measure in the design and placement of tower footprints. The design of tall buildings should seek to reduce shading impact according to the following hierarchy of spaces:

- (i) active public spaces
- (ii) semi-private street edges or open spaces
- (iii) private open spaces

ACTIVE, GREEN PODIUMS

The potential to incorporate landscaped podiums and other green roof elements in Kaka'ako that will help to meet usable public open space requirements is enormous. In addition to providing open space, green roof systems also provide public benefits of absorbing rainfall, reducing storm water loads and with careful plant selection, adding to biodiversity and local wildlife habitat. A successful green roof requires technical expertise and the integration of a considerable number of building and site elements, early design decisions and trade-offs.

To encourage green roofs as a best practice within Kaka'ako, HCDA will consider a green roof policy and provide technical support appropriate to the Hawaiian climate, with resources and guides for developers. HCDA will consider appropriate incentive mechanisms as necessary.



The 55-story Washington Mutual Tower in Seattle has an ASLA Award winning public roof garden (by Philips Farevaag Smallenberg) located on 17th floor. Landscape design was developed to reinterpret a regional "sense of place" with windswept grasses, planting pathways and wood decking. Open to the public, this area also provides an outdoor social space for employees.

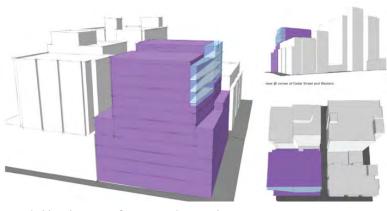
Image from Flickr user Rchapman

Strategy UD4 Introduce design review

HCDA has developed a design review process for projects located in both the Mauka and Makai Areas. This Plan expands the Design Review process to cover all projects that meet or exceed the following thresholds:

- 1. Residential or mixed-use building of 125,000 SF or greater and/or
- 2. Heights of greater than 240'.

A Design Review Board will be engaged to assist in the design and siting of the three Iconic Towers. The Design Review Board may provide a variety of perspectives on the built environment, such as an architectural professor, a developer, a local architect and a local artist or cultural representative, a landscape architect and a member of the community.





Areas in blue do not conform to zoning envelope

EARLY DESIGN GUIDANCE BUILDING MASSING ALTERNATIVES

FINAL DETAILED DESIGN

Community Benefits for Design Review

- Reviews and analyzes proposed projects to provide early design guidance
- Provides a forum for public feedback
- Allows developers to respond to unique site conditions

Developer Benefits for Design Review

- Provides relief from prescriptive dimensional requirements such as setbacks and bulk
- Promotes community participation and acceptance of projects
- Encourages more flexible, creative and site specific design solutions
- Action UD4.1 Implement a design review program for TOD Supplementary density buildings with guidelines that address site planning and massing, architectural building expression, streetscape, public amenities, and vehicular access/parking.
- Action UD4.2 Establish design guideline principles and collect a set of precedent project images, diagrams and/or case studies showcasing of exemplary buildings and solutions for Kaka`ako.



Building Elements: Street, Middle and Tower

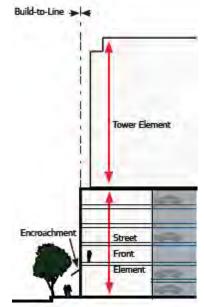
The Mauka Rules (2011) Regulating Plan establishes a set of Buildings Types ranging from low rise to high rise. These Building Types prescribe setbacks, building envelope and relationship to the street. The Plan includes a description of Street Elements, Midrise Elements and Tower Elements. The TOD Overlay is consistent with and builds upon this process.

Guiding the Design of Street Elements for Tall buildings

The lower stories of buildings (the Street Element) have the greatest influence on the experience of walking and being in a place. Comfort in the urban realm is provided by the presence of strong edges along the walking path. Whether built form, walls, or terraced green, these elements create 'urban rooms' that reinforce and set the stage for complementary sociable activity in both the public and private realm. Attention to and design of the urban landscape provides the spatial structure that encourages pedestrians to choose to walk along the street.

The Mauka Rules defines a **Street Element** for all buildings as well as specific parameters for allowed building frontages, building placement and orientation and limitations on podium heights. The TOD Overlay maintains these basic guidelines while providing for flexibility in new building types. Generally:

- Podiums of tall buildings align with adjacent building facades.
 Some strategic setbacks are encouraged, for example at building entrances, at plazas, courtyards or to create architectural interest.
- Characteristics of the podium should relate to the dimensions of the street. In smaller access lanes and internal block connectors, podium height should be reduced, generally no more than 1.5 times the street width is advised.
- Stoops and garden elements help taller residential buildings
 transition to the street, minimizing the impact of larger
 buildings above. In these instances, residential front doors should be made visible, whether used
 as a primary entrance or not. Townhouse frontages that can accommodate families should be
 encouraged for street level and on green, livable podiums.
- Floor-to-floor heights should be generous, particularly in commercial buildings, to ensure high quality adaptable spaces. Double-height first floors in all commercial buildings are preferred.



Mauka Area Rules 1-12 A.



While a walking path and landscaping are provided, a lack of building edge activation makes this location in Kaka`ako undefined and under utilized.

- Ground floor facades should maintain a high degree of permeability for both commercial and residential uses.
- Views between ground floor spaces and the street are particularly important to ensure the safety and security of pedestrians. Buildings should open up to the street and create the indoor-outdoor relationships present in plantation era Hawaiian architecture.

Figure 4-7 Street Elements

Control	Mauka Rules	TOD Overlay Recommendation
Building Siting Regulating Plan Build-to Lines	Regulating Plan controls building siting and placement by block; i.e. 75% of Street Element façade to be within 5-10' of the build-to line. This provision for property line setbacks requires private sector contributions to public realm improvements such as sidewalks.	Maintain as guideline, but allow deviations that respond to site geometries and context and public realm opportunities such as plazas and courtyards. Set clear characteristics in coordination with street types as defined in the TOD Overlay Plan.
Podium Height	The Mauka Plan generally maintains a maximum height of 65'. Setbacks are designated by building type. Mid-rise Building Types (i.e. Urban Block and Lei Buildings) require significant stepping back of upper storeys.	Alter setback requirements to accommodate additional capacity and allow flexibility to accommodate parking liners with top level uses. Align podium heights to coordinate with internal passages; i.e. podium heights are preferred to be not more than 150% to the street width.
First Floor Uses	Uses are mixed throughout Mauka. Retail uses are required on identified Promenade Streets.	Maintain, coordinate with new TOD Overlay Street Types. Ensure that first floor uses are not over-regulated, producing unmarketable spaces.
First Floor Height	Controls are differentiated by Frontage Types and by Use. Currently, the first floor minimum for retail on Thoroughfare Streets is 12'.	Enhance existing regulations. Generous first floors and high quality architectural treatments should be required for mixed-use and commercially focused TOD buildings with ground level retail. Double height first floors (16-22') should be considered for civic scale and flexibility of use.
Street Level Residential	The Stoop Frontage Type is defined and allowed according to neighborhood. However, the Terrace Frontage type is required for building frontages >100'.	Revise requirements to better encourage the Stoop Frontage type on High Rise buildings, and give livability/ amenity "credit" for setbacks associated with their stoops and semi-public gardens.
Parking Garage Screening / Blank Facades	Requires that the first three stories of parking garages are screened at a depth of 40'-80', with potential for dividing walls every 30'.	Parking must be accessed from an alley where feasible. Add flexibility to screening, consider a 75% screening requirement for all bounding streets, but allow deviations at midblock crossings. Unconcealed portions of garages should have enhanced landscape or other screening treatments.
Transparency	This is controlled according to retail use, i.e. 70% of a retail Thoroughfare Frontage Element to be transparent with views into storefronts.	Ensure that variances allow flexibility for mechanical spaces or where no alley is possible .



New Building Types

The TOD Plan introduces a new set of building types for this urban infill location. Building a comfortable, cosmopolitan, diverse Kaka`ako means that each new building should be context sensitive; is of an appropriate scale; respects adjacent public spaces, buildings and businesses and contributes to an improved pedestrian environment. In particular, with more density, matters of light, sky views and privacy must be resolved to ensure that one building does not negatively impact an adjacent site. In an urban environment, each side of the building is designed to reflect the character and context of its street.

1. High Rise Commercial/Office Buildings



South Lake Union Seattle: Image from Graphite Design Group

2. Efficiency Residential Buildings



Colman Building, Seattle, Image from Weber Thompson

3. Center Core



One Rincon Hill, San Francisco Image from Flickr user dsleeter_2000

4. Point Tower



5th and Madison Tower, Seattle: Image from Seattle Times

5. Iconic Tower

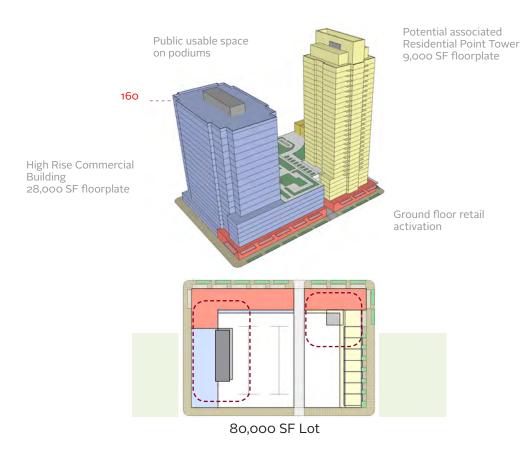


Shanhai Tower, Toronto Image from Gensler

The following section is intended to guide a set of future implementing rules for high density development and outline building key heights and design attributes. This series of simple massing models examines the application of these types on prototypical lot sizes of 40,000 SF, 80,000 SF and 120,000 SF. The series of diagrams helps to illustrate potential build-out of each lot at a maximum of 12.0 FAR, assuming average unit sizes and parking requirements. Real world geometries and contexts would likely result in reduced FARs of 10-11.

High Rise Commercial/Office (Maximum Height: 160')

A limited number of commercial buildings provide highly desirable, efficient floor plates allowing a developer to accommodate one employer on fewer floors. Including office buildings in the TOD Overlay also ensures activity during the day and evening hours to support street level businesses. Limitations on total GFA of High Rise Employment Buildings in Kaka`ako allows for diversity of use in the district, without overly competing with downtown's commercial core. High Rise Employment buildings are desired within proximity to Civic Center Station, Kapolani Boulevard and on major arterials.



Design Criteria

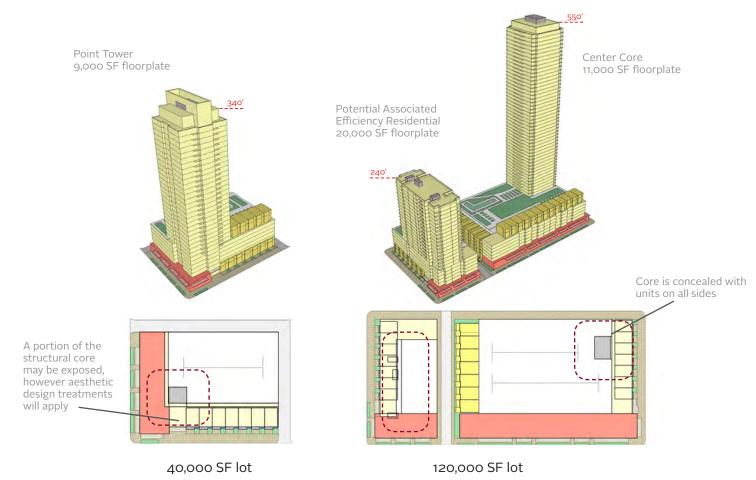
- Floorplate maximum size 28,000 SF
- Height limit: 160' or approximately 12 stories
- Height limits mitigate impact on the skyline
- Generous ceiling height at the first story

- Courtyards and indoor-outdoor spaces for employees
- Introduce passive ventilation for heating and cooling and daylighting of indoor spaces through courtyards or light wells
- Provide access to green roofs on podiums or to landscaped, street-level common areas
- Facilities for bicycles, participation in transit pass programs reduce impact on traffic and parking footprint
- Consider activated first floors that complement the commercial nature of the project and provide useful services for building users and guests.



Center Core/ Point Towers (Maximum Height: 420' - 550')

Center Core and Point Towers help ensure that a building is aesthetically pleasing when viewed from all sides. Center Core Towers house units with high quality façade treatments, concealing the concrete core at the center. Point Towers, while allowed to expose the core must incorporate aesthetic treatments such as glass or high quality skins. Both Building Types ...must have a smaller, must have a smaller, streamlined structure width aligned with the Mauka-Makai Axis. FAR controls balance between taller heights and building volumes on smaller parcels while providing for enough flexibility for multiple towers to be developed on larger lots. Tall heights ensure that revenue from salable area offsets the costs of high-rise construction while maximizing the use of Oahu's limited land area.



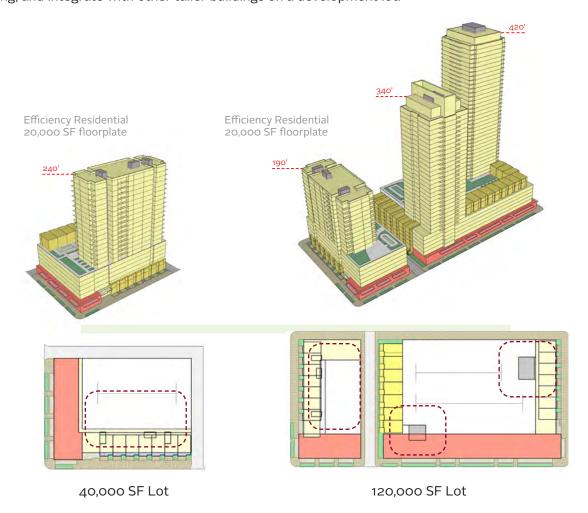
Design Criteria

- Center Core Tower:
 12,000 SF Floorplate
 Maximum/Structure width
 120'/concealed core
- Point Tower: 9,000 SF Floorplate Maximum Structure width 100' unconcealed core or concealed core

- Design Review protocols for buildings over 240' should provide guidance and requirements for shaping buildings
- Encourage operable windows and balconies
- Podiums are landscaped and provide recreational amenities for tenants
- Relationship between buildings should ensure privacy and livability
- Podiums heights are coordinated to street types; 75' along Boulevards, Avenues, and other streets.

Efficiency Residential (Maximum Height: 240')

The Efficiency Residential building has a double-loaded corridor (apartments located on both sides of an interior hall) intended to provide for workforce and affordable market rate housing with a range of unit sizes. Whether on a single site, or combined with other towers, this building type allows developers to respond to many conditions. These buildings have an efficient envelope, address context and siting, and integrate with other taller buildings on a development lot.



Design Criteria

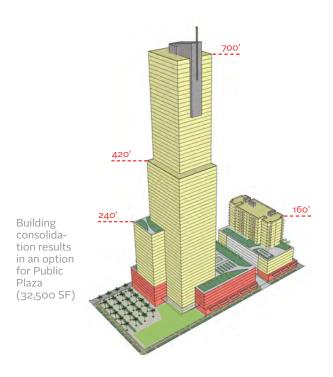
- Larger floorplates up to 20,000 SQ FT
- Height 240'
- Maximum length 250'
- Consider measures to reduce apparent bulk and mass from the street level

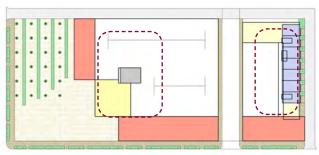
- More affordable construction type reduces overall unit cost
- Larger facade on podium, garden and streetscape enhancements creates opportunities for family-friendly units
- Shorter, more affordable buildings are an optional companion to luxury towers on the same block



Iconic towers (Maximum Height: 700')

The TOD Overlay introduces a limited number of very tall buildings, (up to three) within the District. These buildings are intended to provide for the possibility of iconic buildings that provide a change in scale to the Kaka`ako and Honolulu skyline. Treated as a special case, the Iconic towers will require a process for design review guidance and negotiations for exceptional public benefit. Design guidance should provide flexibility and sufficient allowance for the structural core of tall buildings (taller than 600'), while helping to ensure elegant proportions and iconic architecture. In particular it may be necessary to permit flexibility from design standards, such as the podium scale at the base of tall buildings to provide for place-based design solutions at the street level.





120,000 SF lot

Design Criteria

- Do not limit the floor plate or dimensions of the lower podiums for buildings taller than 550'.
- See diagrams on opposite page for details.

- Design ground floors and building bases to welcome the public, and include retail or other uses that welcome the public into the building base. (Should not feel exclusive.)
- All tall buildings > 550' should include publicly accessible retail or other uses on the ground floor as an extension of the sidewalk.
- Provide for public viewing areas on upper stories of very tall buildings (650' – 700'), such as a public observation deck, a lobby or restaurant for public use. (Viewing opportunities may be located on mid-levels not necessarily the top floor).

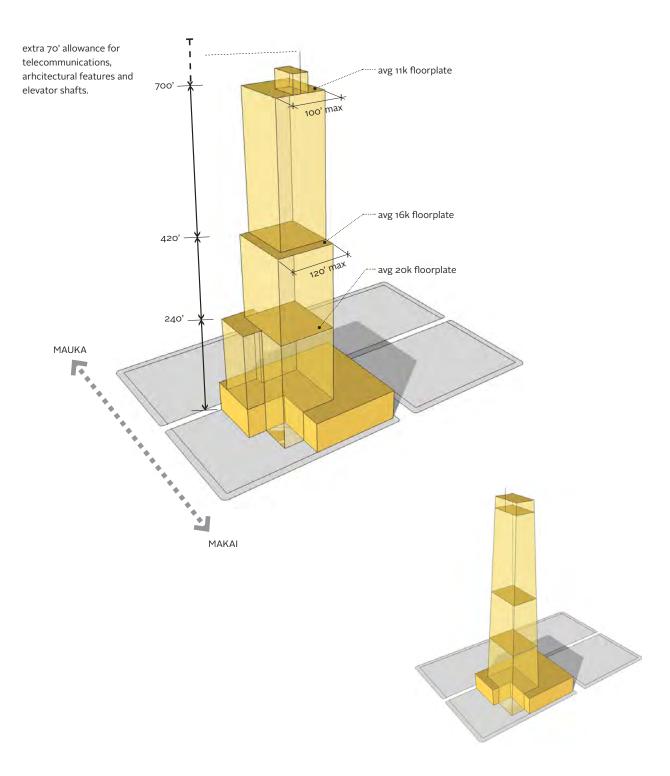


Diagram above shows an acceptable alternative tapering tower form.





Parks, Public Realm and Active Space

As Kaka`ako evolves, the provision of legible, accessible, and multi-functional public spaces is essential to neighborhood livability. New community-oriented public spaces will serve many functions. These are outdoor living rooms where social interaction creates a sense of belonging, provides variety in the built environment and respite from city life. Usable green spaces on podiums will be particularly important in this vertically-oriented district, not only for the use of building tenants, but also to preserve and enhance views from other tall buildings.

In high intensity areas such as Kaka`ako, each development may not be able to accommodate adequate public open space on site. In these instances, provisions should be made to allow developers to allocate in-lieu fees for public spaces off-site, and a plan for contributing to a series of coordinated green spaces within the District.

Public Parks

The City of Honolulu Department of Parks and Recreation's Standards and Design Precepts for Future Park Development (2004) provides recommendations and standards for various park types (e.g. two acres of neighborhood parkland per 1,000 residents). In the Kaka`ako District, HCDA will use this standard as a guide, but recognizes that many of the future park lands will be located makai of Ala Moana Boulevard. Kaka`ako Waterfront Park, and any future associated enhancements to the Kewalo Basin Area are within close walking distance for new Mauka residents. In the Mauka area, as associated with the TOD Overlay, assessments will be allocated to improvements for existing District parks and the provision of possible new public spaces, and other identified cultural amenities (see figure 4-8).

Additionally, both Kamehameha Schools and the Ward Neighborhood Master Plan will build new distinctive public open spaces as part of their master plan developments. Negotiated individually with HCDA, both of the Master Plans have applied Public Facilities credits (allocated at 3% commercial and 4% of residential GFA) towards local improvements. The Kamehameha Schools Master Plan has also proposed lands for a Gateway Park in the Makai area (Cooke and Ala Moana Boulevard) as a significant linear greenway as part of Cooke Street's beautification.

Figure 4-8 Public Open Spaces in KCDD

- 1. Green landscaped park associated with a Blaisdell redevelopment
- 7. Mother Waldron Park

Public spaces associated with redevelopment

- 2. HECO Site public open space option associated with redevelopment
- (existing)

6. Kolowalu Park (existing)

Major planned or existing public spaces

- 3. Transit Plaza Associated With Civic Center Station
- 8. Gateway Park (existing)

Public space improvements associated with major Master Plans

- 4. Kewalo Basin Area waterfront public space improvements
- 9. Cooke Street beautification park to park connection (Proposed in KS Master Plan)
- 5. Kaka`ako Waterfront Park and planned extensions
- 10. Public open space and linear park (Proposed in Ward Center Neighborhood Plan)





The Howard Hughes Corporation, Ward Neighborhood Master Plan includes designs for a new linear greenway and park ending with a street connection to Ala Moana Boulevard. Designs connect these Mauka area active spaces to the Ala Moana Regional Park.

In addition to the above, HCDA envisions two additional coordinated park spaces in the Mauka District that could be established with TOD Overlay associated redevelopment:

- a) Additional Public Park on a redeveloped Blaisdell Center Site
 - A primarily landscaped park designed to reflect and extend the existing Historic Thomas Square Park (across King Street). This opportunity would create an active public destination adjacent to cultural institutions, the Blaisdell Arena and Performing Arts Center, and create a significant central green space for the area.
- b) Small Transit Plaza associated with Civic Center Station
 - A small transit plaza (1/4 block) should be developed within one to two blocks of the Civic Center Station to act as a meeting point and destination (to be confirmed by HCDA).
- c) Improvements to Mother Waldron Park
 - Improvements to Mother Waldron Park are conceptualized as part of the 690 Pohukaina Project
- d) Potential linear greenbelt under the transit guideway and pocket park on remnant transit parcels.



Figure 4-9 Conceptual Plans for Mother Waldron Park

Illustrative site plan of potential Mother Waldron Park programming and improvements associated with the 690 Pohukaina project. Image from Forest City

Spaces for People

As noted, in Kaka`ako it is expected that a majority of new public usable open spaces will be built as part of redevelopment projects. These spaces will be found not only in civic-scaled public parks, but also in small pocket parks on streets (promenades), semi-public courtyards, publicly accessible interior spaces, public viewing plazas, and community gardens. These public spaces that are developed concurrently with individual sites may have full or partial public access (such as a grade-level or elevated courtyard, residential stoops or gardens) and may be either publicly or privately owned. In all instances, public spaces must be usable, neighborly, and provide for multiple functions where feasible.

General Guidelines

This section documents the types of public community spaces encouraged within the Kaka `ako District. New public community spaces should include the following attributes, for more information see Chapter 5 (to be coordinated).

- Provide signage identifying place
- Support sociability by including some or all of the following: moveable seating: tables, chairs, sit walls, shade structures, trees and a balanced blend of hardscape and softscape surfaces.
- Locate public spaces where they will be visible from adjacent units or occupied spaces to ensure safety.
- Locate bike racks at the perimeter of public spaces where feasible and appropriate.
- Water and electrical outlets should be provided to allow for more flexible uses.
- Include shade structures / trees to protect seating and activity areas where feasible.
 The spacing location and type of required trees may be modified when adjacent to a plaza or other identified community space.
- Manage 75% of stormwater on site in community spaces, through permeable pavers, bio-filtration units or other low impact



Small courtyard, Kaka`ako



Tamarind Square





development features that drain to planted areas.

- Use a blend of both hardscape and softscape features to provide a rich and varied texture.
- Consider any special user groups (such as seniors or children) when designing new community spaces.
- Consider design elements that will extend a community space's hours of use.

Public Plazas and Squares

Plazas are tucked between two- or three sides of building facades, while Squares are bounded by streets on all sides. This type of community space may consist of primarily hardscape elements such as pavers or concrete. Including changes in plane are encouraged to add variety and visual interest. Landscape materials and art can be used to both provide texture and make it attractive. A portion of a plaza can also be used for reserved seating for a cafe or restaurant. Permanent structures may also be included within the plaza provided they do not preclude access by the general public. Structures in plazas may be enclosed or open air or potentially leased for commercial use.

Features and attributes for a Public Plaza:

- A variety of seating opportunities including moveable and fixed seating/ Options such as sit walls, boulders and other multi-use objects are also appropriate,
- Design opportunities for special events or small scale gatherings,
- Mounted or suspended lighting, or decorative lit bollards
- Architectural feature that will provide a sense of place

Community Gardens

Community gardens provide valuable space for Kaka `ako dwellers to create urban agriculture. In addition to locations on the ground, parking podiums can also be actively used as rooftop gardens. In these instances, buildings should incorporate load bearing capacity sufficient to allow their intensive utilization including human



Director Park Plaza, Portland



Civic Center's existing public spaces are associated with City historic landmarks

occupancy, gardening and significant landscaping.

Features and attributes for a Community Garden:

- Sited with good sun exposure. Sheds or storage for tools
- Access to water such as hose bibs or rain barrels
- Adequate soil, planters and locations for garden plots
- Electricity
- Lighting over gardens, and pedestrian lamps in gathering areas
- Composting facilities, recycling and rubbish bins
- Rainwater catchment system
- Benches, seating, public art, community gathering or bar-be-que area

Promenades

Promenades are linear public spaces that enhance a circulation facility or internal block pedestrian connection. These areas are urban scaled environments that encourage social interaction and provide amenities for pedestrians including architectural features, water features or fountains, seating, landscaping, and hardscape. Promenades may incorporate low impact development features for water infiltration and detention. (See also Chapter 6 - Promenade - to be coordinated).

Features and attributes for Promenades:

- Pedestrian lighting
- Elements such as bollards, benches, seating or architectural features that provide separation
- Landscaping or planters
- Shade structures or trees
- Drinking fountains and water features
- Stormwater and rain garden enhancements



Small pedestrian resting area in South East False Creek, Vancouver



Planter boxes, community garden area





Packard Foundation in Los Altos, CA offices include a courtyard for socializing, and access to light and air. To reduce energy use, the building's offices are daylit with skylights and clerestories.

Image from Jeremy Bitterman, EHDD Architecture

Activity Areas

Activity grounds may be incorporated into other community spaces. These areas include children play areas, outdoor exercise equipment, active dog parks and runs, games such as bocce courts or chess sets. Natural creative play elements for free and unstructured play can also be included. Elements do not have to be designed overtly for play, but should support and encourage play by children, examples include water that can be manipulated, outdoor rooms made from rocks, landscape berms, or hills.

Features and attributes for Activity Grounds:

- Fixed benches facing play activity or game or equipment
- Drinking fountains
- Adequate lighting
- Measures necessary to protect children's safety from vehicular traffic such as low fences or landscaping to provide a physical barrier
- Places where pets can be outdoors and use spaces



Outdoor activities for families