

Spring 2008

# India Basin Shoreline Development Proposal, Spring 2008

CRP 553 Project Planning Lab

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# INDIA BASIN SHORELINE BAYVIEW HUNTERS POINT AREA C

## PROPOSED DESIGN FOR DEVELOPMENT: ALTERNATIVE #1



CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO  
DEPARTMENT OF CITY AND REGIONAL PLANNING  
JUNE 2008

Colin B. Clarke | Erin M. Cooper | Ulises A. Gonzalez | Sandra V. Knapp | Jeremy B. Neely | Laura A. Pennebaker | Miriam L. Thompson

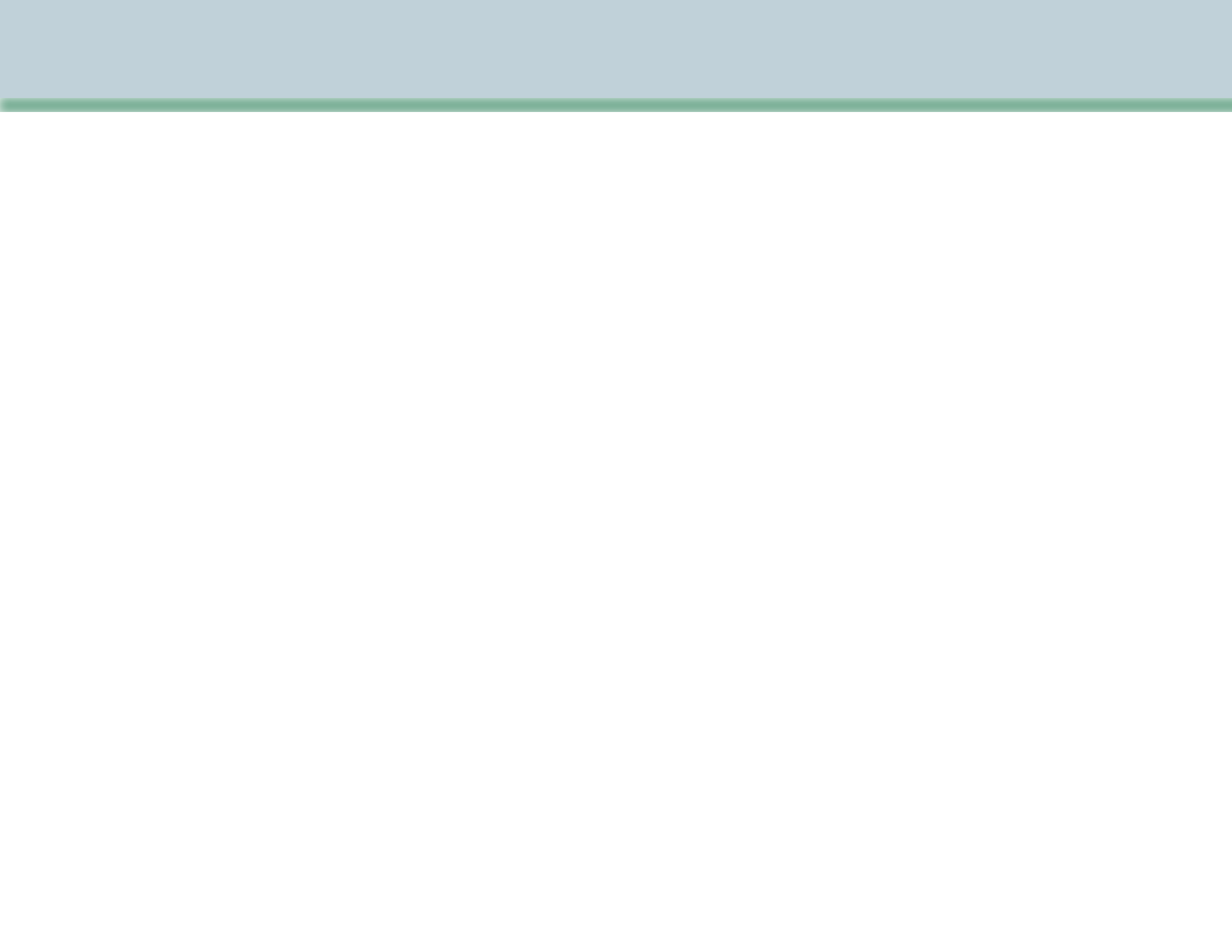




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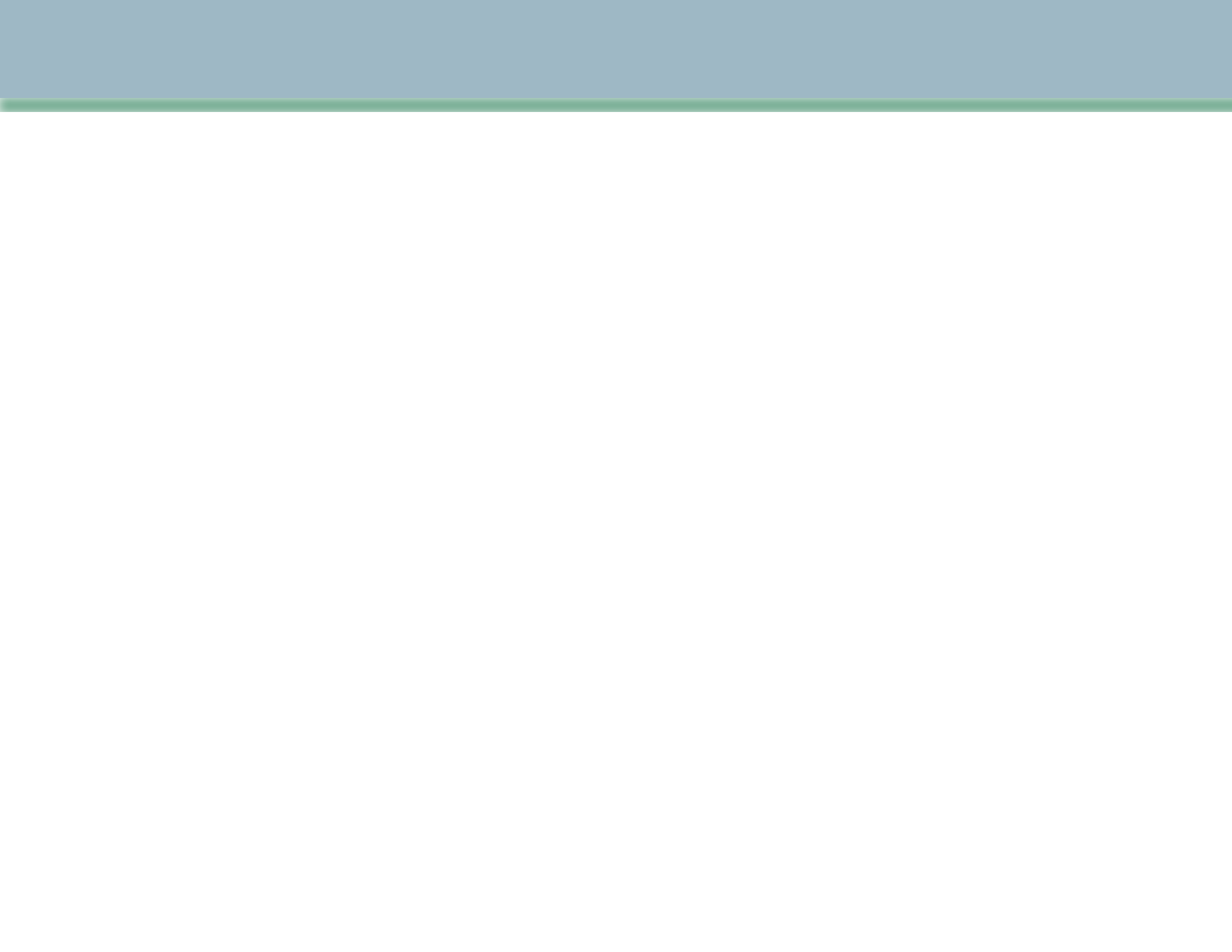




# INTRODUCTION



## CHAPTER 1





## 1.1 GENERAL INFORMATION

The India Basin Shoreline area of San Francisco is in great need of physical improvement. The significantly underutilized waterfront area has remarkable potential to maximize social and economic conditions for its residents. The India Basin Shoreline area is an ideal location for a mix of housing, retail, commercial, and light industrial uses to serve the local community. The objective of this plan is to preserve the breathtaking views of the bay and downtown skyline as well as its local character, while creating new opportunities for the surrounding community (see Figure 1-1 and 1-2). Existing businesses and other active neighborhood organizations will be essential in the revitalization of this area and pivotal in demonstrating to others that the India Basin Shoreline has a bright future ahead. The revival of India Basin Shoreline is a critical link in a series of closely related City-sponsored initiatives that will transform this long neglected area of the city.

### Vision

- 1 – Respect the goals of the local community and San Francisco’s architectural styles, embrace the historic maritime culture, and preserve significant landmarks.
- 2 – Provide a healthy balance of housing, jobs, and open space for the local community, while protecting current community assets, such as vistas and access to the bay.
- 3 – Improve streetscape, pedestrian and bike access, and connect the Bay Trail, all while encouraging cultural and social interaction.
- 4 – Allow opportunities for community and economic development by designing strategic compatible land uses in addition to integrating new industry such as Research and Development.



Figure 1-1. India Basin Shoreline looking toward the PG&E Plant demolition.



Figure 1-2. India Basin Shoreline from the PG&E site looking toward the proposed redevelopment area.

## 1.2 HISTORY

In the late 19th century, India Basin Shoreline was inhabited by a multi-ethnic community primarily dedicated to shipbuilding and a maritime industry (see Figure 1-3). The construction of the California Dry Dock Company on the eastern tip of the Hunters Point peninsula in 1866 (see Figure 1-4) set the stage for the development of the maritime industry in the area (PAC, 2002). The dry dock was the first of its caliber in the Pacific Coast.

“That it is the largest dock in the United States ... it is equal to any in the world, not only in point of size, but in all its appliances and that it can dock a ship as speedily as it can be done anywhere ... All large vessels in the Pacific waters must come here for repairs and, besides the trade which it brings us, our reputation for commercial enterprise will be established wherever a vessel finds a harbor.” (San Francisco Chronicle, November 1868)



Figure 1-3. Hunters Point along the shoreline, 1866.



Figure 1-4. Hunters Point Dry Dock, 1867.

During World War II, the U.S. Navy purchased Hunters Point Shipyard, which influenced the area drastically. The U.S. Navy brought many jobs to the area and created housing for their workers. This marked the beginning of the working class moving into the area (see Figure 1-5).

Post-WWII, the Navy Shipyard sold the housing units to the San Francisco Housing Authority (SFHA). The SFHA converted this housing stock into affordable and public housing, which allowed many lower income residents to move into this area (see Figure 1-6). Since the end of World War II, India Basin has withstood major demographic changes, economic dislocation, riots, and most recently, gentrification. Currently, the demographic characteristics consist mainly of African American, but also include Asian/Pacific Islanders, and Latino communities.



Figure 1-5. Four aircraft carriers at Hunters Point Naval Shipyard, July 3, 1947.



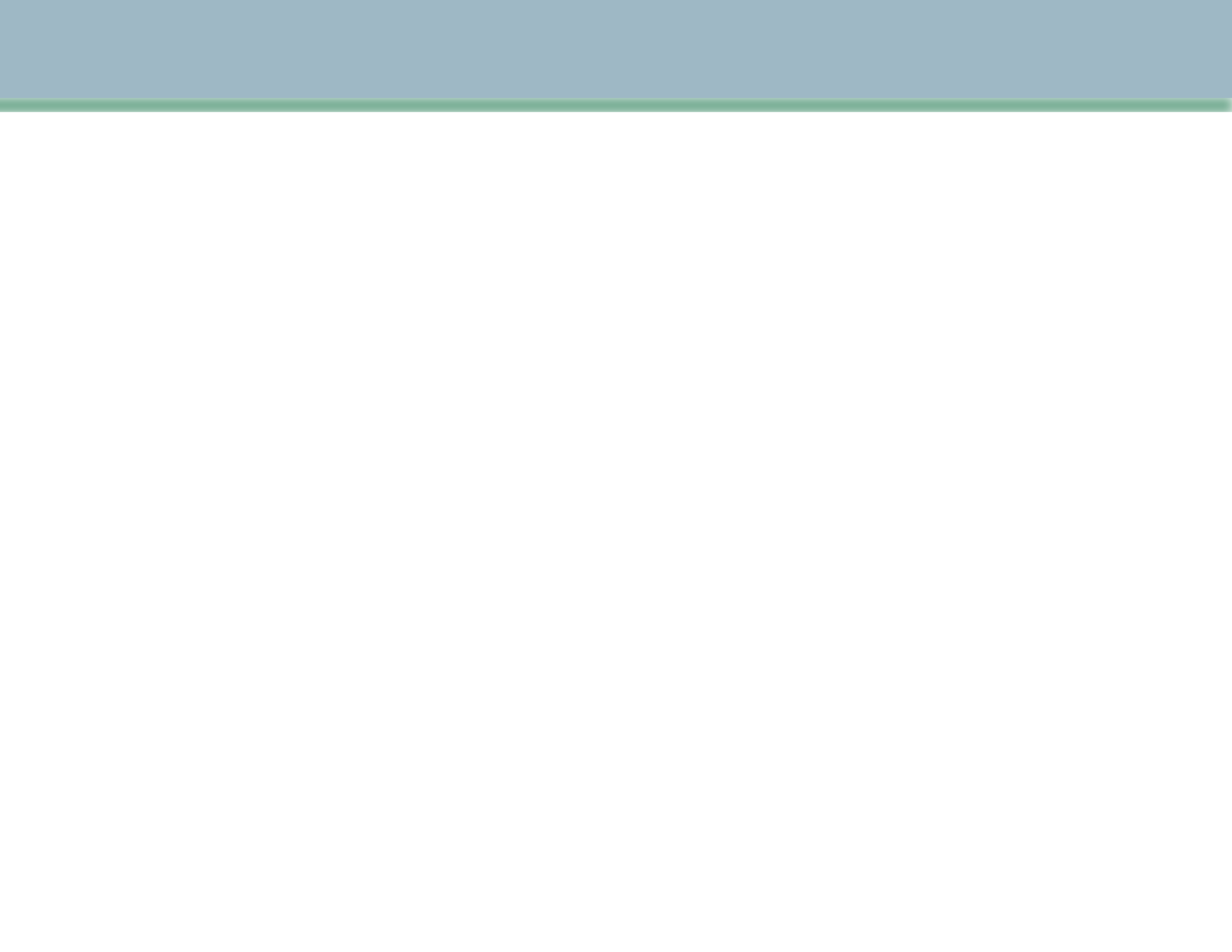


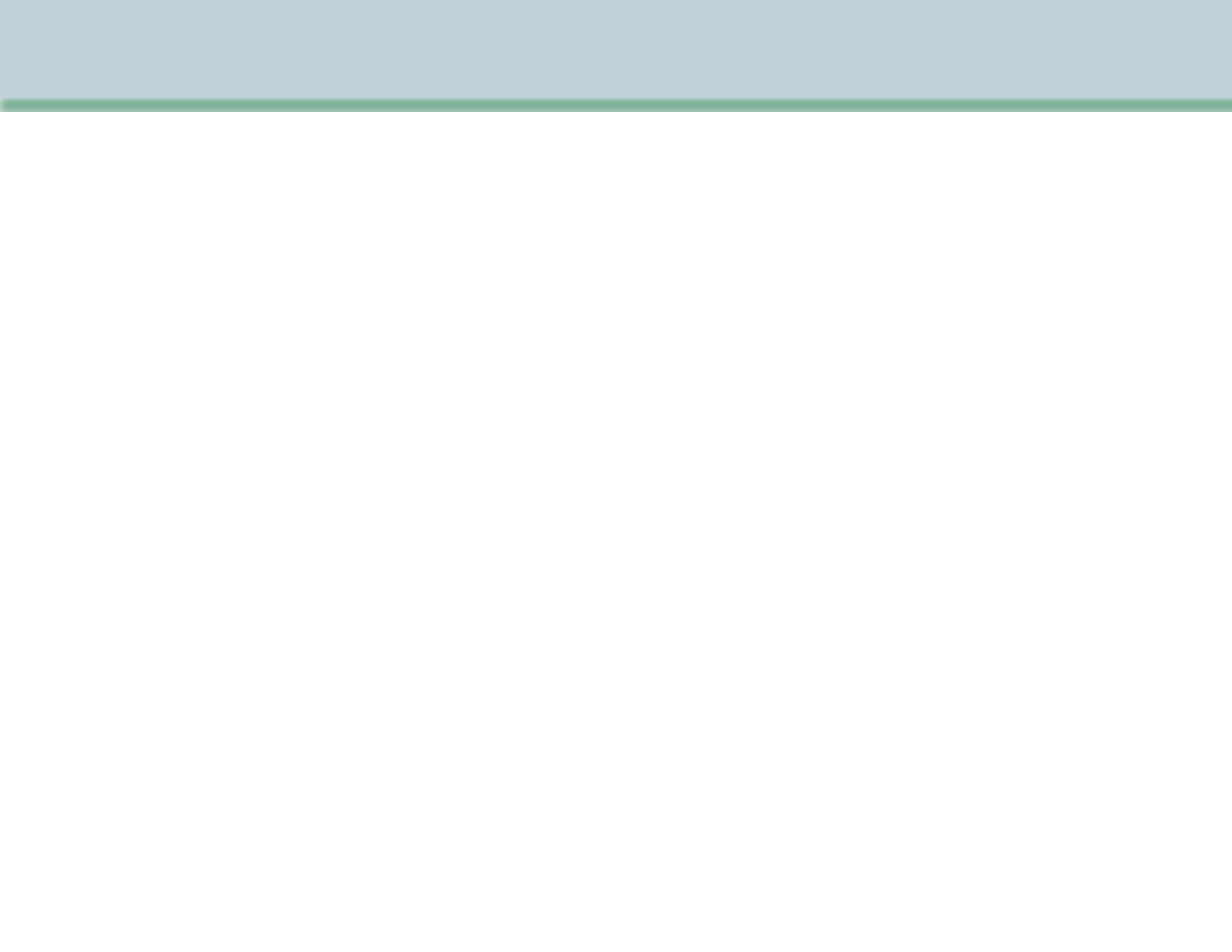
Figure 1-6. Public housing along Innes Avenue.

The Bayview Hunters Point area has been the locus of some of the city's most noxious and unhealthy heavy industries, including steel manufacturing, ship repair, junk yards, and auto-wrecking (see Figure 1-7). While these industries are integral to the area's economic base and an important source of employment, many were established prior to modern land use, coastal, and environmental regulations. This lack of regulation has created negative health and environmental impacts.



Figure 1-7. India Basin Shoreline marina stacked with steel beams.







# SITE INVENTORY & ANALYSIS



## CHAPTER 2



Figure 2-1. Photo of new condominiums on Innes Avenue.



Figure 2-2. Recycling facility across from India Basin Shoreline.



Figure 2-3. Staircases connection to public housing projects.

## 2.1 EXISTING CONDITIONS

Presently, India Basin Shoreline consists of approximately 70 acres of land slated for redevelopment. There are a wide range of land uses and minimal services that need to be expanded. Infrastructure is in a state of deterioration and needs repair. The area is also isolated from public transportation and needs improved access to and from the area. Section 2.1 will elaborate on the issues mentioned above.

### 2.1.1 EXISTING LAND USE

**Residential:** two new 40 foot high condominium buildings; other housing (see Figure 2-1)

**Industrial:** former PG&E power plant, artist studio warehouses

**Commercial:** Literacy for Environmental Justice, Southeast Health Clinic

**Retail:** liquor store

**Parks and Open Space:** India Basin Shoreline Park

### 2.1.2 NEIGHBORING LAND USE

**Residential:** three public housing projects (Hunters Point, Westbrook, Hunters Point East), affordable housing along Innes Avenue (see Figure 2-3)

**Former Naval Shipyard:** currently used by artists and storage for San Francisco Police Fire Department Bomb Squad located south of the project site.

**Industrial:** Port Property Backlands Project and recycling facility to the north (see Figure 2-2)

**Parks & Open Space:** Heron's Head Park and wetlands to the north.

### 2.1.3 CONNECTIONS AND LINKAGES

**Arelious Walker Drive:** cul-de-sac leading to India Basin Open Space

**Innes Avenue:** minor arterial street with limited safe crossing (See Figure 2-6)

**Hudson Avenue and Earl Streets:** Right-of-way (R.O.W.)

**Public Transportation:** Bus #19 and #44 connect to downtown; Third Street Light Rail

**Staircases:** Four along Innes Avenue connect to Westbrook Apartments (see Figure 2-3)

**Highway Access:** Highway-101, and Interstate-280

**Bay Trail:** part of partial bike network (no access beyond PG&E site to the northwest, beyond Earl Avenue R.O.W. at former shipyard to the southwest, or through private properties)

**Non-built Right-of-Ways:** Hawes, Evans, Fairfax, Griffith, Davidson, Custer, and Burke

### 2.1.4 EXISTING PUBLIC FACILITIES

India Basin Shoreline Park (See Figure 2-4)

Bay Trail (incomplete)

Historical land marked cottage (from shipbuilding era) and adjacent donated land

### 2.1.5 EXISTING SERVICES

Southeast Health Clinic

Health and Environment Resource Center

### 2.1.6 EXISTING INFRASTRUCTURE

PG&E switch station/transformer (see Figure 2-5)

### 2.1.7 TRAFFIC AND CIRCULATION: CURRENT STATUS

#### Walking distances:

1.3 miles: Walking distance from Earl Street to Third Street Light Rail Station

0.6 miles: Walking distance from Jennings Street and Evans Avenue to Third Street Light Rail Station

#### Travel Times:

From Innes Avenue to Third Street Light Rail are as follows:

10-15 minute bus ride

20-45 minute walk

5-minute drive



Figure 2-4. India Basin Shoreline Park.



Figure 2-5. PG&E switch station/transformer.



Figure 2-6. Intersection of Innes Avenue and Earl Street.





Figure 2-7. Artist community on Earl Street.

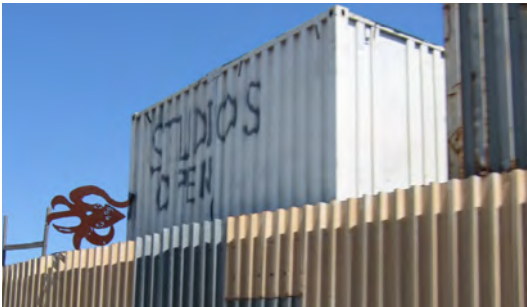


Figure 2-8. Artist community on Innes Avenue and Hunters Point Boulevard.

### 2.1.8 EXISTING CONDITIONS: CONCLUSION

Overall, the site is not very well-connected to the rest of San Francisco via transportation (see Figure 2-9). There are buses that run through the area, as well as a bike network, but they are insufficient compared to many other areas of San Francisco with access to Caltrain or BART stations that provide faster access to the rest of the city.

Additionally, because there are very few public, health, or retail facilities on-site, residents of this area have limited access to these services. The site is also not pedestrian-friendly, and the only connections to the existing residential area are on the other side of a four-lane main road, Innes Avenue.

Some goals can be set to begin to address these issues. First, retaining the artist community in the area provides an opportunity to create a unique atmosphere and constructing a plan that works with the existing community (see Figure 2-7 and 2-8). Second, preserving viewsheds will foster a sense of place. Third, attracting more local serving commercial and retail uses to the area, such as coffee shops and grocery stores with fresh produce will encourage local pedestrian activity. Also there is an opportunity to clarify non-developed right-of-ways. Some of these right-of-ways bisect private parcels, which will require negotiation between the SFRA and property owners to create a Bay Trail connection and other public amenities.



## 2.2 NATURAL ENVIRONMENT

### 2.2.1 CLIMATE

The sharp topography and maritime surroundings of San Francisco, combined with the unique California climate, produce a number of extremely varied microclimates within the city's 46 square miles. San Francisco's climate is further modified by the location of the City on the northern end of the peninsula, surrounded on three sides by the relatively cool waters of the Pacific Ocean and San Francisco Bay. Summertime in San Francisco is characterized by cool marine air and persistent coastal stratus and fog, with average maximum temperatures between 60°F and 70°F, and minima between 50°F and 55°F. Winter temperatures in San Francisco are quite temperate, with highs between 55°F and 60°F and lows in the 45°F to 50°F range (Null, 1978). The main source of wintertime fog in San Francisco is the Great Valley region (Null, 2008).

Spring and fall are transition, cloud-free periods for San Francisco that bring warmer weather. The hottest days in San Francisco's hottest days are in September and October when high pressure builds into the Pacific Northwest and Great Basin, and dry offshore winds replace the Pacific seabreeze (Pericht, 1988). The westerly winds are channeled through the Golden Gate and lesser breaks in the high terrain of the Coast Range, reaching a maximum during the afternoon with typical speeds between 20 and 30 miles per hour (Root, 1960).

### 2.2.2 MICRO CLIMATE

Microclimates are a conventional way of defining climates in terms of a specific geographic area (Null, 2002). There are numerous methodologies for defining climates and microclimates. The Köppen climate system, one such methodology, was developed in the early 20th century and takes into account the average annual and monthly temperatures and precipitation of an area, providing five major climatic types.

Most of California and the Bay Area is in the Type C category, defined on the basis of the coldest month's average temperature being below 64 degrees fahrenheit and above 27 degrees fahrenheit with Mediterranean like dry winters and dry summers (Null, 2002).

### 2.2.3 WIND

In developed areas, buildings about 100 feet or above in height can redirect wind flows around



buildings and divert winds downward to street level, resulting in increased wind speed at street level. The extent and magnitude of wind effects caused by new buildings in the area will depend on the actual design, height, bulk, and placement of each structure in relationship to prevailing winds, adjacent buildings, streets, and open space areas. (SRRAPD, 2008)

The prevailing winds at the India Basin Shoreline are from west to east year-round (WRCC, 2008). Wind evaluations will be required to analyze the potential for hazardous winds and assess the need for building redesign, windbreak features, or further detailed wind-tunnel studies of structures proposed in the future. Figure 2-10 illustrates the dominant wind patterns in the San Francisco Bay Area.

### 2.2.4 CLIMATE CHANGE

On October 5, 2006, the San Francisco Bay Conservation and Development Commission (BCDC) adopted a strategic plan, with a goal of playing “an integral role in developing and implementing a regional proactive strategy for dealing with global climate change” (BCDC, 2006). Staff then developed maps of the bay and shoreline to illustrate sea-level rise scenarios. The sea-level rise maps are generally consistent with the projections in the 2006 California Climate Action Team Report. They illustrate an impact scenario in which sea-level rises one meter by the year 2100 (BCDC, 2006). Although there are limitations in the geospatial data that may affect accuracy, the maps reflect accurately the low-lying areas of the shoreline that are subject to tidal inundation and flooding. However, the maps do not attempt to model sea-level rise or storm activity, but to illustrate the potential impacts. The maps are based on USGS 2005 Urban Areas digital elevations and National Agriculture Imagery Program 2004 aerials. BCDC has the authority and responsibility to act on the impacts of seal level rise due to climate change (BCDC, 2006).

### 2.2.5 NOISE

The proposed Planning Code amendments will help to alleviate land use conflicts in the Bayview district by introducing a number of buffering mechanisms. A “light industrial buffer” zoning designation will apply to certain industrial parcels located in close proximity to existing residential properties. Heavy manufacturing operations are not permitted in these areas, and new residential development is likewise prohibited (SFPD, 2006).

Over time, these land use regulations will help to create greater physical separation between



Figure 2-10. Wind patterns in San Francisco Bay Area.

residential neighborhoods and areas with a greater concentration of industrial activities that can generate noise, emissions, or truck traffic (SFPD, 2006).

A number of recent initiatives seek to reinvest in the area while rectifying problems of access and noise caused by conflicts in land use: the Muni Third Street light rail line began operations in Bayview in 2004; a proposed Bayshore Caltrain station serving the south eastern City; pedestrian improvement projects in the Town Center and along the Third Street Corridor; new truck routes to alleviate noise and traffic conflicts in residential neighborhoods; the construction of wetlands and public open space along the waterfront and at Pier 98; extensions of the Bay Trail and improvements to India Basin Shoreline Park (PAC, 2002).

### 2.2.6 TOPOGRAPHY

San Francisco is an area of “exceedingly diversified topography,” in part due to tectonics. San Francisco, approximately a 7-mile by 7-mile block-shaped area, sits at the northern end of a peninsula, straddling the Coast Range just south of the Golden Gate Bridge. San Francisco’s steep topography is bounded by the Pacific Ocean to the west, San Francisco Bay to the east, and the Golden Gate Bridge to the north. India Basin Shoreline area topography cross sections in Figure 2-11 highlight varied terrain.

### 2.2.7 SOIL

According to the Natural Resources Conservation Service web-soil survey, the prominent soil type on site is known as Urban Land Orthents with Reclaimed Material featuring 0-2% slopes. The site is composed primarily of fill material dredged from the San Francisco Bay, that is well-drained and has low available water capacity. Native soils are very rare on-site, however, they may include the Novato and Reyes series, which are characteristic of salt marshes, tidal flats, and are generally formed by deposition of bay mud. These soils tend to be poorly drained with low permeability. The western boundary of the site also contains Orthents Urban Land complex soils with highly varied slopes ranging from 5 – 75%. Soil conditions on-site have been significantly altered due to the introduction of fill on-site. Due to the fact that this area is predominantly fill material, there is a higher risk of soil liquefaction as well as the need for deep pile driving (upwards of 100 feet) to secure building foundations. The existing conditions are such that construction costs on-site are likely to be considerably higher than sites with more stable soil resources.





Figure 2-12. Annual grasses and noxious weed species in India Basin Open Space



Figure 2-13. Plant communities occurring on serpentine hillside.



Figure 2-14. India Basin/Hunters View (IBHV) Hillside.

### 2.2.8 VEGETATION AND NATURAL CONDITIONS

Vegetation information was obtained from personal site observations as well as the California Native Plant Society. Vegetation on-site consists primarily of annual forbs and grasses within the low-lying areas adjacent to the shoreline. The plant communities supported by fill material throughout the site appear to be largely annual, invasive species characteristic of highly disturbed areas. Figure 2-12 depicts the large presence of annual grass and noxious weed species present on the Earl Street right-of-way leading down to the shoreline and on the large parcels adjacent to Arelious Walker Drive.

The steeper slopes located on the western edge of the site, along Innes Avenue and Hunters Point Boulevard, are characterized by serpentine rock outcrops and the presence of various grass and other plant species. Serpentine is a metamorphic rock present along earthquake fault lines throughout California and is the designated state rock. It forms nutrient poor soil which tends to have rich native plant life. Figure 2-13 illustrates the plant communities occurring within this area of the site (Null, 2008).

Another area of existing vegetation present on-site is the India Basin/Hunters View (IBHV) Hillside on which the Yerba Buena Chapter of the California Native Plant Society has identified approximately 35 species of native plants. Figure 2-14 illustrates the location of the hillside within the site as well as the signage present to indicate its biologically sensitive nature.

The IBHV Hillside is owned by Pacific Gas and Electric (PG&E), which currently uses fencing and signage to protect the hillside from trespassing and vandalism (see Figure 2-15). The Yerba Buena Chapter of the California Native Plant Society has identified many native species within this location including, but not limited to: Purple Needlegrass (the California state grass), California Poppy, Lomatium, Calandria, Miner's Lettuce, Goldfields, Ithural's Spear, Stemless Morning Glory, Dwarf Brodiaea, Blue Dicks, Blue Eyed Grass, Soap Plant, Yellow Mariposa Lily, Buckwheat, Willowherb, and California Plantain. Many of these species, particularly California Plantain, provide excellent habitat for species such as the Mission Blue and Bay Checkerspot butterflies.

The final area of vegetation includes plantings of native species along the completed section of the Bay Trail, which runs parallel to the shoreline at the southeastern portion of the site.



### 2.2.9 WILDLIFE

The India Basin Shoreline is home to several species of migratory birds, many of which inhabit Heron's Head Park just beyond the northern boundary of the site. Heron's Head is owned by the Port Authority and represents a relatively successful wetland restoration effort as measured by the presence of water, wetland plant species, and waterfowl. Figure 2-16 illustrates the presence of bird species within India Basin.

### 2.2.10 HYDROLOGY AND DRAINAGE

Topographic features on-site indicate two main drainage corridors located on the south and north sides of Hunters Point Hill. All stormwater is currently conveyed in a combined municipal storm/sewer system which treats all surface runoff and sewage before discharging to San Francisco Bay. The combined system, however, is unable to handle events of sustained heavy rainfall and does overflow periodically, resulting in direct discharge of sewage into the bay. A separate stormwater system has been recommended as part of redevelopment infrastructure improvements made to the Bayview/Hunters Point Redevelopment Area (SFRA – NOP of EIR for Bayview/Hunters Point, 2007).

The pre-existing hydrologic function of the site has been significantly altered by dredging and filling to create several of the landforms present along the India Basin Shoreline. Historically, the site functioned as a port and was characterized by the presence of salt marshes and wetland ecosystems. Today, much of the shoreline has been stabilized with rip-rap to prevent erosion (see Figure 2-17). Hydrologic conductivity has been drastically reduced by alteration of upland features as well as manipulation of the shoreline. Wetland restoration projects have been conducted along the shoreline in open space areas adjacent to the Bay Trail. These restoration efforts, however, seem limited in their effectiveness as they do not appear to contain the hydrology or plant species commonly seen in wetland habitats. Existing shoreline frontage within the parks and open space areas provides an excellent opportunity for continued restoration of wetland ecosystems.

The waterfront nature of this site makes it susceptible to hazards associated with flooding and sea-level rise. The 100-foot shoreline buffer as well as the 100-year flood zone boundary fall within the India Basin Shoreline. This zone represents a constraint for development.



Figure 2-15. PG&E signage protecting hillside from vandalism and trespassing.



Figure 2-16. Bird species within India Basin.



Figure 2-17. Rip-rap to stabilize shoreline and prevent erosion.

### 2.2.11 VIEW CORRIDORS AND SPECIAL ATTRIBUTES

The India Basin area is characterized by several impressive view corridors, primarily providing vistas of the Downtown San Francisco skyline, Bay Bridge, and a panoramic view of the East Bay and Mount Hamilton. These views can be seen from Earl Street, Innes Avenue, and Aurelius Walker Drive. The Redevelopment Agency has determined that public viewsheds shall take precedence over private ones and recommends a public viewshed study to address this issue. The view corridors present on-site provide excellent opportunities for waterfront-oriented development, however, they also contribute to constraints on building heights and massing.

### 2.2.12 OPPORTUNITIES AND CONSTRAINTS

#### Opportunities:

Art community

Improvement of and continued wetland restoration along the shoreline

Marine recreation

Maritime history and local character

Panoramic vistas and viewsheds

Presence of native plants, unique natural resources on IBHP Hill

Replacement of combined storm/sewer system with a separate system to reduce overflow

Waterfront design taking into account flooding and sea-level rise

#### Constraints:

Large amount of fill on-site creates liquefaction and stability issues

Maintaining affordable housing and preventing gentrification

Soil and water contamination associated with current, former, and adjoining industrial land uses

Potential for flooding and negative impacts from sea-level rise

Political climate associated with protecting viewsheds

Topography

### 2.2.13 NATURAL ENVIRONMENT: CONCLUSION

The goal is to preserve these resources even while promoting economic development. Noise, wind and topography also factors to consider. Other issues of concern are the preservation of native vegetation and wildlife. Overall, the most critical concern for the natural environment is climate change and sea-level rise (see Figure 2-18).





## 2.3 RELEVANT DOCUMENTS/COMMUNITY PERCEPTIONS AND CULTURE

### 2.3.1 LAND USE AND ZONING DOCUMENTS

There are a number of documents that regulate the site in regards to land use and zoning. The following are the most pertinent:

San Francisco Bay Plan (1969)

Coastal Zone Management Act (1972)

Redevelopment Plan for the Mission Bay North Redevelopment Project (1998)

Bayview Hunters Point Redevelopment Plan

San Francisco General Plan: Bayview Hunters Point Area Plan

City and County of San Francisco Municipal Planning Code Codified through 1990, approved March 31, 2008

State-mandated Environmental Impact Reports (EIR)

City-required Historic Resource Evaluation Reports (HRER)

### 2.3.2 JURISDICTIONAL RELATIONSHIPS

“The BVHP Redevelopment Plan would be amended to add the India Basin Shoreline (Survey Area C) to the BVHP Project Area, and to add the zoning and land use controls resulting from the Planning Department rezoning efforts. The BVHP Plan would also be amended to allow public improvements to be financed and implemented” (SFRA, 2007, p. 12 ).

### 2.3.3 PROJECT APPROVALS AND IMPLEMENTATION

The India Basin Shoreline project will require numerous review and approval actions from the San Francisco Redevelopment Agency, the City and County of San Francisco, regional agencies, state agencies, and federal agencies, including:

San Francisco Redevelopment Agency Commission

City and County of San of San Francisco

City of San Francisco Planning Commission

Municipal Transportation Agency

Recreation and Park Commission

Public Utilities Commission

San Francisco Housing Authority

Port Commission

Board of Supervisors

**Regional Agencies:**

- State Regional Water Quality Control Board
- San Francisco Bay Conservation & Development Commission
- Association of Bay Area Governments (ABAG)

**State of California:**

- Department of Parks & Recreation
- Department of Fish & Game
- Department of Transportation (Caltrans)
- State Lands Commission
- Department of Toxic Substances Control

**Federal Agencies:**

- U.S. Navy
- U.S. Army Corps of Engineers (ACOE)
- U.S. Fish & Wildlife Service (USFWS)
- U.S. Department of Housing & Urban Development (HUD)

The India Basin Shoreline EIR will be an entirely new EIR, not to supplement or add onto prior EIRs for the Bayview Hunters Point Redevelopment Plan or the Hunters Point Shipyard Redevelopment Plan. The EIR will include a discussion of the project compatibility with existing plans and zoning regulations.

Recent and future projects, funded both publicly and privately, throughout southeast San Francisco, including the areas of Mission Bay, Hunters Point Shipyard, and the construction of the Third Street Light Rail, are increasing the significance of the Bayview Hunters Point area and India Basin Shoreline.

Other projects completed since the 1995 Plan update include the Portola Place housing development on the former Lucky Lager Brewery site and several affordable housing developments on Third Street. The City has also approved residential projects at the base of Bayview Hill and in the vicinity of the Bayview Playground, in February 1997.

### 2.3.4 LOCAL REAL ESTATE MARKET

Information on the real estate market in and around the India Basin Shoreline is limited due to the small size of the site. The larger Hunters Point area, however, is experiencing a slow-moving market likely due to the recent mortgage crisis. Sales are limited and median prices are significantly lower than surrounding areas and the rest of the City.

India Basin Shoreline is surrounded by a combination of low-income public housing and single-family townhomes, which is then bordered by light industrial/warehousing uses. The area’s most marketable buildings/properties are located along the Innes Street corridor, with single-family homes, light industrial/warehouses, minimal retail, and a pair of mixed-use buildings. Current opportunities for commercial/retail leasing are limited.

### 2.3.5 MEDIAN SALES PRICES

Hunters Point:	Bayview:	San Francisco:
Jan – Mar, 2007: \$460,000	Jan – Mar, 2007: \$570,000	Jan – Mar, 2007: \$775,000
Oct – Dec, 2007: \$224,000	Oct – Dec, 2007: \$560,000	Oct – Dec, 2007: \$795,000
Jan – Mar, 2008: \$189,000	Jan – Mar, 2008: \$448,000	Jan – Mar, 2008: \$750,000

Third Street continues to suffer from an over-concentration of liquor stores and a lack of neighborhood-serving retail. This over-concentration is a significant factor contributing to the leakage of retail dollars from the district, whereby residents avoid Third Street and travel to shopping centers outside the district for most retail needs.

### 2.3.6 CULTURAL LANDMARKS

The influence of this maritime culture is imprinted in the landscape, with historical remnants of a once-active shipbuilding community. The current boat launch area, in close proximity to the 900 Innes Street landmark, is under utilized. This area has the potential to be a cultural and historical asset to the community, thus shall be protected. The San Francisco Redevelopment Agency has established a document entitled the “Revitalization Concept Plan,” addressing the following community needs.

Recommendations:

- Local community pool
- Increased outdoor lighting

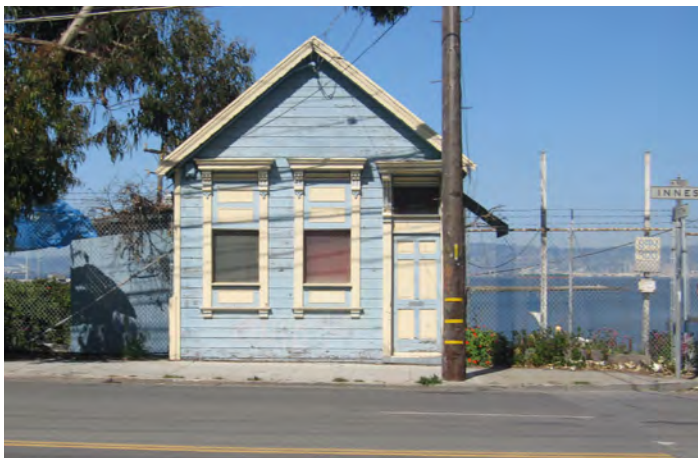


Figure 2-20. 900 Innes Historical Landmark.

- Public restrooms in park
- Improved sidewalks
- Permanent fresh produce market
- Community center and multi-purpose room
- Economic growth
- IBHV Hillside skating area: using existing concrete pads
- Picnic areas with tables and benches
- Outdoor sculpting areas
- Butterfly garden
- Community garden with raised planting beds

### 2.3.7 EXISTING COMMUNITY ORGANIZATIONS

The Area C has a small yet very active set of community organizations. Many of these grassroots organizations were founded in opposition to the negative socioeconomic and environmental characteristics of the area. It is important to note that the organizations with the most impact are the Literacy for Environmental Justice, Hunters Point Boys & Girls Club, San Francisco Food Bank with Front Door Farms, and the San Francisco Recreation and Park Department. The following is a list of community and municipal organizations located in the area:

- Advocates for Youth
- BAYCAT: Bayview Center for Arts and Technology ([www.baycat.org](http://www.baycat.org)) a local organization that provides education in arts, culture, and enterprise – for further skill development and additional opportunities for artistic expression
- The FruitGuys ([www.fruitguys.com](http://www.fruitguys.com)) In 2006, The FruitGuys and Hunters Point Family youth launched a Young Entrepreneurs Program to run their own produce distribution businesses while providing a valuable and much-needed service for the community
- Healing Arts Center ([www.bvhphealingarts.org](http://www.bvhphealingarts.org)) is an education and leadership institution that provides the community with a full-service adolescent health and mental health clinic in a safe and responsive atmosphere
- Hunters Point Boys & Girls Club
- Hunters Point Community Youth Park
- Literacy for Environmental Justice
- Milestonz
- Pacific Coast Farmer's Market



- San Francisco Food Bank ([www.sffoodbank.org](http://www.sffoodbank.org)) fresh produce and groceries distributed weekly to residents of Hunters Point
- San Francisco Recreation and Park Department
- Sisters of the Underground
- UCSF Women's Center for Excellence
- Young Community Developers Recreation and Park Department

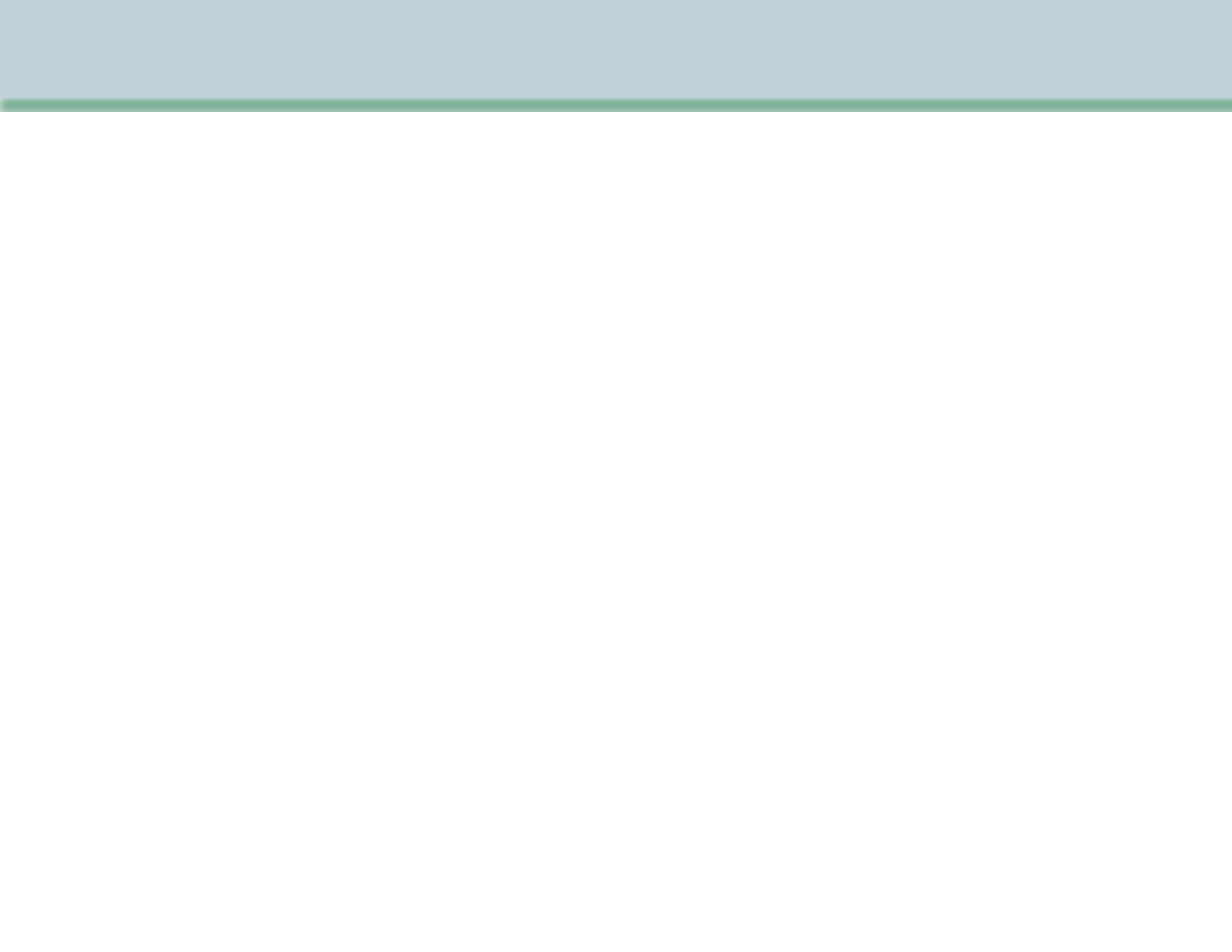
## 2.4 SITE INVENTORY & ANALYSIS: CONCLUSION

Existing conditions within India Basin Shoreline include a mix of various land uses including residential, industrial, retail, and open space. The area is considered blighted, lacking adequate transportation and connectivity to the rest of San Francisco. Very few public, health, or retail facilities exist on-site. Consequently, residents have limited access to most basic services. The site is excessively auto-oriented with few safe pedestrian routes or bicycle lanes. There is also a distinct lack of connectivity between existing public housing located to the west, and the waterfront, park, and open space areas to the east. Nevertheless, the site has several positive qualities, including a vibrant artist community and breathtaking waterfront vistas. Overall goals for redevelopment within the area include attracting local-serving retail, retaining the artist population, encouraging pedestrian linkages, and ultimately creating a walkable, bicycle-friendly community embracing its identity relating to its maritime history and local character.

Climate change, sea-level rise and topography are a key issue that shall be taken into account during the design process. They will affect land use and building placement. The environmental goal is to preserve these resources even while promoting economic development. Noise and industrial hazardous pollution generated locally are also factors to consider. While light industrial development is to be encouraged, the noise must be sufficiently mitigated, as well as the wind that can expel particulates and chemicals into the air.

The evolution of the India Basin Shoreline area has led to significant environmental, political, and economic constraints, but leaves room for positive growth and development. The existing plans and proposed projects for the area aim to produce significant economic growth, bringing in new revenue along with revitalization. The site has the potential to integrate residential, commercial, and light industrial in a pedestrian-scale neighborhood to create an economically productive, environmentally-friendly, and aesthetically-pleasing community.





# CASE STUDY: MISSION BAY NORTH



## CHAPTER 3



Figure 3-1. Map of Mission Bay North

### 3.1 INTRODUCTION

The purpose of this case study is to analyze development efforts carried out by the San Francisco Redevelopment Agency in the Mission Bay North area of San Francisco, CA (see Figure 3-1). The case study will provide for a valuable comparison with what may or may not work in the India Basin Shoreline area. This chapter lays out general project information as well as observations and conclusions regarding implementation of both the Redevelopment Plan for the Mission Bay North Redevelopment Project as well as the Design for Development guidelines. The Redevelopment Plan and the Design for Development apply to all development in the project area, superseding the San Francisco Planning Code. This chapter contains an analysis of the plan documents and LEED criteria, followed by a discussion of local and regional impacts, and conclusions and lessons learned.

### 3.2 GENERAL DESCRIPTION

The Mission Bay North Project area consists of 65 acres between King Street and Mission Creek (see Figure 3-1). It includes mainly residential use, with a mix of rental, for-sale and affordable projects completed and in progress, as well as retail and open space. Active developers include Signature Properties, AvalonBay Communities, Opus Development, the Urban Housing Group, and the Related Companies. To date, eleven projects totaling 2,175 units including 543 affordable units have been completed. In Mission Bay North, more than 600 of the 2,900 units will be affordable with about half built by private developers as inclusionary units within mixed income projects, and half built on development parcels transferred by the primary developer to the San Francisco Redevelopment Agency. A 131-unit first-time affordable homeownership project is being constructed in Mission Bay North. A 236-unit mixed-income affordable housing project on Berry St. is under construction as well. Please refer to the figures below for the land use plan (Mission Bay North Redevelopment Plan, p.20).

### 3.3 TIMELINE OF PLANNING/CONSTRUCTION

In fall 1998, after three years of planning, the current redevelopment plans and related documents were approved by the Redevelopment Commission, Planning Commission, other City Departments, and by the Board of Supervisors. Mission Bay North and South will create a residential community of over 11,000 people and will create over 31,000 permanent jobs, along with hundreds of ongoing construction jobs. Construction began in 2000 and the Redevelopment Agency sponsored a 100 unit, family, very-low income rental project (the Rich Sorro Commons)



which opened in June 2002; it included a child-care center and almost 10,000 square feet of retail space. Full development is expected to take 15 to 25 years, with the timing of projects based on market conditions.

## 3.4 FINANCE

Mission Bay will require \$400 million in new infrastructure including improved streets, traffic lights, street lights, sewer and water systems as well as open space areas. Construction of the infrastructure is the responsibility of the primary developer (initially Catellus, now FOCIL) with new infrastructure built over time to serve adjacent new vertical building development. The new infrastructure is financed through a combination of tax increment financing and special Mello Roos taxes paid by the private property owners in Mission Bay. To date, the Agency has issued over \$117 million in Mello Roos and Tax Increment Bonds to fund Mission Bay infrastructure. Total development costs for the entire Mission Bay area are expected to exceed \$4 billion.

## 3.5 CONTENT AND ANALYSIS

### 3.5.1 PROJECT CONTEXT

The Mission Bay North project area is bounded by Mission Creek, Third Street, Seventh Street, and Townsend and King. Mission Bay originally was part of the bay, but was filled with waste up until 1906. The land was owned and used by railroad companies until the 1950s when the shipping industry began to decline. In 1990, the Santa Fe Pacific Railroad Company transferred the property to Catellus Development Corporation. The area is being developed according to the plans developed in 1998. The North Area is 65 acres, with its own design for development standards and guidelines. The plans goal is to connect the development to the rest of San Francisco through both the character of the development and linkages such as transportation. The site is located within the City and County of San Francisco. It is part of the Southern District of the San Francisco Police Department and is also under the jurisdiction of the Bay Conservation and Development Commission (BCDC).

### 3.5.2 LAND USE

Land uses in the Mission Bay North Project Area consist of the following designations – Mission Bay North Residential, Mission Bay North Retail, Mission Bay North Public Facility and Mission Bay North Open Space.

### Mission Bay North Residential District:

This land consists of residential uses and compatible local-serving retail as well as other uses which can be located in mixed use facilities (Mission Bay North Redevelopment Plan, p.8)

#### **Principal Uses:**

The following principle uses are permitted in the Mission Bay North Residential District:

- Dwelling Units
- Retail Sales and Services (ex. restaurants and arts activity space)
- Office Use (ex. home business and interior decorating shops)
- Other Uses (ex. open recreation and telecommuting)

#### **Secondary Uses:**

The following secondary uses are permitted in the Mission Bay North Residential District:

- Institutions (ex. child care facilities and religious institutions)
- Animal Care (ex. groomers)
- Office Use (ex. local serving business on ground floor)
- Other Uses (ex. ATMs and commercial wireless transmitting)

### Mission Bay North Retail:

This land use district consists primarily of retail sales, destination retail, assembly and entertainment compatible with other uses. Residential uses can be in mixed use facilities with compatible retail and other uses.

#### **Mission Bay North Retail District consists of the following uses:**

- Dwelling Units
- Institutions (ex. child care facilities and religious institutions)
- Retail Sales and Services (ex. aerobic studios, restaurant/bars, arts spaces)
- Office Use (ex. local serving business on ground floor)
- Assembly and Entertainment (ex. amusement enterprises and nighttime entertainment)
- Home and Business Services (ex. catering establishment and repair)
- Automotive (ex. car wash and service station)
- Animal Care (ex. groomers)
- Other Uses (es. child care facility and open space recreation)

### Mission Bay North Public Facility:

This land use district consists primarily of land other than housing sites or open space owned by a governmental agency or other public or semi-public entity and in some form of public or semi-public use. The following principle uses are permitted in the Mission Bay North Public Facility district:

- Open lot or enclosed storage
- Pump Station
- Railroad tracks and related facilities
- Other public structure or use

### Mission Bay North Open Space:

This land use district consists of a comprehensive system of open space including parks, plazas and corridors. Only recreational uses and uses accessory to and supportive of recreational uses are permitted in this district including, but not limited to:

- Accessory Parking
- Kiosks
- Pushcarts

### 3.5.3 MISSION BAY NORTH OPEN SPACE GUIDELINES: EVALUATION

The Mission Bay North open space guidelines cover a wide range of issues pertaining to the preservation of public, private, commercial, and residential open space. Overall open space has been designed according to the guidelines. Furthermore these guidelines have resulted in a very high quality of open space that achieves the goal of attracting pedestrians and providing desirable options for recreation and walkability. More specifically the guidelines state the following:

#### Private Open Space:

The size and quality of open space in Mission Bay varies according to the building density and target inhabitants' income. In the low-income areas, the amount of open space is sacrificed to achieve higher density. The plan states that private open space shall be provided for each dwelling unit in the amount of 70 square feet, except on Blocks N1 & N2 where the amount of private open space provided for each dwelling unit shall be 35 square feet. From the exterior, central courtyard areas were large and quite visible, but not accessible to the public (see Figure



Figure 3-2. Private open space along Berry Street.

3-2). Private open space, where feasible, should enhance public open space areas utilizing design features such as: views to private open space from sidewalks and parks, enhanced walkways and pedestrian linkages, and similar measures. This goal was achieved specifically on the south facing facades of the residential buildings. The podium level gardens were oriented towards the bay and channel, enhancing views and connectivity to the natural environment. From the trail along Mission Bay Park, the open space is visible (above street level), providing visual connectivity but no private access. The sidewalk along Berry Street area is lacking linkages and views to the private open space.

The Mission Bay North Redevelopment Plan States that private residential open space may consist of open space for an individual unit or common usable open space shared by residents. The requirements can be satisfied in a number of ways and in a variety of areas such as:

*Individual unit open space:* patios, terraces, or balconies adjacent to the unit. For individual unit open space to be counted towards the private open space requirement, the minimum horizontal dimension shall be 6 feet.

*Common open space:* mid-block lanes (provided they do not permit through-traffic other than emergency vehicles), gardens, building courtyards at street level, rooftop and parking podium level gardens, decks, solaria, and atria open to sun and air, open terraces or outdoor recreational facilities for use by residents (SFRA, 1998).

#### Public Open Space:

Mission Bay Park as well as a number of mid-block lanes are evenly dispersed and easy to access. The plan suggests that at full build-out, the Plan Area shall include approximately 6 acres of publicly accessible open space. The Mission Bay North open space shall be generally distributed as illustrated on the Land Use Plan, and will consist of linear parks, neighborhood parks, and other parks and plazas (SFRA, 1998).

Our analysis of this section reveals that the proposed residential open space features have been successfully implemented. There was a high level of very visible balconies and terraces punctuating the building façades.

### 3.5.4 CIRCULATION

This section describes the recommended as well as existing circulation and linkages present within the Mission Bay North project site. The City of San Francisco is currently trying to make use of every piece of available land and the Mission Bay North redevelopment area represents the transformation of an industrial pattern to one which welcomes the buildings and open spaces of a living, working, and shopping neighborhood. The urban street grid builds off of the primary existing street grid and traditional pattern of San Francisco streets.

The street system envisioned in the design process has been successfully implemented (Figure 3-3). There are four categories of streets in Mission Bay North. (1) Arterials: 3rd Street and King Street. Both streets include bus and light rail which connect to the Embarcadero, South of Market and Bayview. (2) Minor Arterials: Townsend and 7th Street. (3) Connector streets: for primarily bicycle commuting and local collection are 4th Street and Berry Street. (4) Neighborhood streets for parking and pedestrian use are 5th Street and a portion of Berry Street.

### 3.2.5 BUILDING AREAS AND STANDARDS

The building design standards are complex and primarily aimed at deterring the creation of box-like structures. This goal has resulted in a variety of building forms that have unique sizes, shapes, and interesting architectural details. The following subsections 3.2.6-3.2.10 are a summary of the building standards that were implemented per the Mission Bay North Design for Development Guidelines (pp.22-26).

### 3.2.6 HEIGHT STANDARDS BASED ON LOT COVERAGE

Maximum height for all buildings: 160 feet

Bulk: intention is to control the length and width of space to prevent construction of solid mass blocking viewsheds

Residential: 190 diagonal, 120 feet long, floor plate for all building is 17,000 square feet

Mixed use: 190 diagonal, 165 feet long, floor plate for all building is 17,000 square feet

To some extent, this was achieved on a portion of the units. The waterfront residential units achieved the maximum height requirement while simultaneously maintaining the viewsheds. The façades of residential and mixed use structures along Berry Street, however, did not fully achieve this. As a pedestrian, the scale of buildings seems massive and overbearing. Additionally, the view of the waterfront is limited to a few places through the mid-block lanes.

Proposed Design For Development: Alternative #1

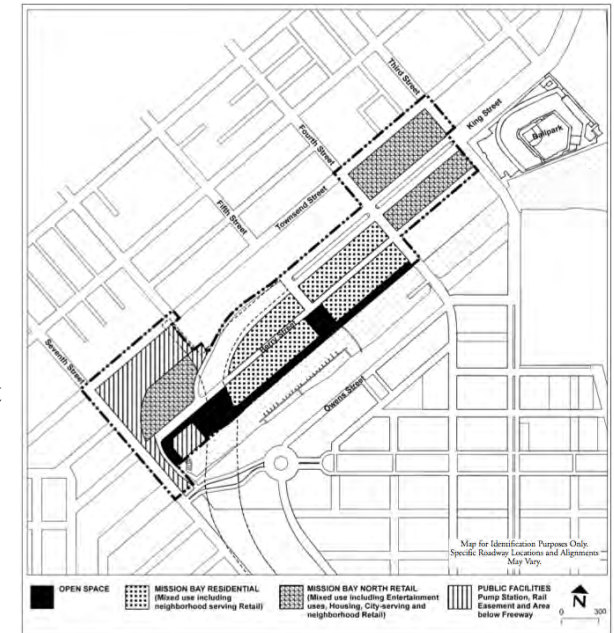


Figure 3-3. Mission Bay North Land Use.



### 3.2.7 LEASABLE AREAS

The following information concerning leasable area within the project site reveals that there is inconsistency in the amount of leasable area proposed and the amount actually built. The document proposed that the number of units should be 3,000 dwelling units in Mission Bay North and 600 of those will be affordable. However, this amount was not fully realized. Only 2,175 dwelling units have been constructed to date, and 543 of those are affordable. In addition, the plan originally anticipated 46 dwellings per acre, but in reality the dwellings per acre is currently 33.46.

### 3.2.8 PARKING

The Design for Development plan assumes that local residents will not have many vehicles and will access local services as pedestrians. Therefore, the Mission Bay North area has a relatively low provision of parking compared to the average San Francisco development. The parking is primarily focused on serving non-residents in inconspicuous parking structures. This aspect of the design seems to have been highly successful. There were very few grade level parking lots and the parking structures that were visible were only noticeable if one knew where to look. The following information summarizes parking requirements and design in the Mission Bay North Project area pursuant to the Design for Development Guidelines (pp.38,79,84).

#### Residential parking:

Maximum one parking space per unit

#### Retail parking:

Maximum one space per 500 gross square feet.

Greater than 20,000 gross square feet must provide 75% of the maximum of spaces.

Greater than 50,000 parking unit space is negotiable.

Restaurants, Bars, Clubs: maximum one space for every 200 square feet if the total space is greater than 5,000 square feet.

Theater: One space for every 8 seats, up to 1,000 seats.

If space over 20,000 square feet must provide 75% of the maximum of parking spaces.

### 3.2.9 OPPORTUNITIES TO MEET NEIGHBORS

Mission Bay Park is a popular place for residents to meet their neighbors and be a part of community life. Along the park and trail, people enjoy passive recreation such as meeting with friends/neighbors, dog walking, sitting, and viewing the water. The close proximity of the residential areas to the park allows connectivity, enhancing the opportunity to meet neighbors.

### 3.2.10 SECURITY OF PUBLIC SPACES

The residential buildings have a high number of windows and balconies overlooking Mission Bay Park, Berry Street, and South Bay. It is important to note that the design of windows along the Fifth Street mid-block pedestrian lane are oriented towards the Bay at a precise angle to maximize views (see Figure 3-4). This feature adds tremendously to the goal of securing public space visibility as does the security guard patrolling on bike.

## 3.3 CITY/REGIONAL IMPACTS AND IMPLICATIONS

### 3.3.1 CULTURAL IMPACT

Mission Bay, a formerly contaminated and under utilized area, has been developed into an upscale mixed-use development that has now become part of San Francisco's thriving metropolis. The area's previous industrial use (shipping and receiving) has been relocated to Oakland, allowing other uses to create a new identity for Mission Bay. The result is a diverse land use pattern that accommodates residents, businesses, public recreation, and economic development. Mission Bay is now a new node that enhances the Baseball Stadium and Bay Bridge, creating pride for the Mission Bay community.

### 3.3.2 HOUSING

Mission Bay development represents a new hub for housing, supporting the new adjacent research and development (R&D) redevelopment to the south. Although Mission Bay does have an inclusionary (affordable) housing policy, we feel that more affordable housing units should be included in this site to accommodate the needs of students and lower income levels to mitigate gentrification.



Figure 3-4. Residential buildings overlooking street.



Figure 3-5. Security guard patrolling Berry Street.

### 3.3.3 ECONOMIC IMPACT

Furthermore, Mission Bay is well-connected to public transit, making Mission Bay more accessible. This accessibility factor and mixed-use development creates a “critical mass,” allowing for a better opportunity for local business to thrive, which in turn, increases the local tax base for the area.

### 3.3.4 ENVIRONMENTAL IMPACT

Although, precautions were taken to mitigate soil contamination and pollution, contaminated soils can have a negative impact on urban runoff affecting the quality of the natural environment. Therefore, the water quality during the rainy season in this area should be closely monitored.

Studies have shown that living in close proximity to freeways, or being exposed to the poor air quality, has a negative impact on human health and their well being. Therefore, the park under the freeway and the housing in close proximity to the freeways could have been placed more strategically.

## 3.4 LEED-ND CRITERIA

Overall, the following LEED-ND criteria: (1) Smart Location and Linkages criteria (SLL credit 4 through SLL Credit 9) are the most applicable to the Redevelopment Plan for Mission Bay North. Under each Credit there are options that meet the credit requirements. In order to get the LEED-ND credit, the project must fulfill at least one of the options.

Smart Location and Linkage (SLL):

Credit 4: Reduce Automobile Dependence

The project fulfills Option 1 because it is located within three miles of the public transportation systems: Bay Area Rapid Transit (BART), Caltrain, and MUNI. Mission Bay’s location within walking distance to these major forms of transit helps reduce automotive dependency.

Credit 5: Bicycle Network

There is not a distinct bicycle network, however Mission Bay Park provides off-road trails for pedestrians and bicycles. Mission Bay Park’s walking trail corridors work toward the Credit 5 goal of having 50% of the dwelling units within three miles of the bicycle network.

#### Credit 6: Housing and Jobs Proximity

Mission Bay North is located in proximity to a research & development center that provide jobs. Also, the project includes at least 25% non-residential units, satisfying the requirement for Option 2.

#### Credit 7: School Proximity

Mission Bay North provides housing options for students, professors, and staff to locate in proximity to the University of California, San Francisco in the adjacent south area of Mission Bay. By facilitating walking to school, this promotes public health through physical activity. The U.S. Green Building Council (USGBC) recommends that the project be 0.5 miles walking distance from an existing or planned school, but the North and South areas are not connected in a way that promotes walkability.

#### Credit 8: Steep Slope Protection

Credit 8 prevents and controls erosion of steep slopes. The LEED-ND states that the project should, “minimize erosion to protect habitat and reduce stress on natural water systems by preserving steep slopes in a natural, vegetated state” (USGBC, 2007, p. 43). Furthermore, Mission Bay has slopes that are greater than 15% along the channel. Currently, the slope is protected with rip-rap which is a common method of erosion control utilizing aggregate material for bank stabilization (see Figure 3-6).

#### Credit 9: Site Design for Habitat or Wetland Conservation

Credit 9 aims to “conserve native wildlife, wetlands and water bodies” (USGBC, 2007, p. 46). The project respects the bay’s water body, which surrounds Mission Bay Park. The park serves as a buffer zone from structures to protect wildlife and the water body.



Figure 3-6. Steep slope protection, LEED credit 8.



Figure 3-7. Conservation of water body, LEED credit 9.



### 3.5 MISSION BAY NORTH CASE STUDY: CONCLUSIONS & LESSONS LEARNED



Figure 3-8. Residential setbacks on Berry Street.



Figure 3-9. Frequent residential entrances along Berry Street.

This Section 3 explores design recommendations made for the Mission Bay North residential, retail and open space districts, with observations made during site visits regarding the degree to which guidelines were reflected in the built environment. (See Figure 3-12 for a summary of our findings.)

The Mission Bay North Residential District features a mix of market-rate and affordable family housing units. The design focus of this area centers on the creation of a tightly knit urban community with a waterfront orientation. A design emphasis includes walkable streets with a network of public and private open space as well as a lively and pedestrian friendly street punctuated by frequent residential entries, neighborhood stores, and sidewalks (Mission Bay North Redevelopment Plan, 1998).

Design guidelines specify that residential buildings should have continuous streetwall frontage with occasional breaks for building entries, courtyards, or mid-block lanes. Streetwall setbacks should be apparent. It was evident that the street frontage design objectives were achieved in the Mission Bay North Residential district. The figure 3-8 illustrates an example of appropriate streetwall and setbacks of residential buildings within the district. Open Space guidelines specify that structures should be set back so that pedestrians cannot see into the structures from open spaces. This goal was successfully achieved from the pedestrian perspective, however a determination was unable to be made about whether privacy was lacking from the residential perspective.

Design guidelines also specify that residential entries should be frequent and should provide visual interest, orientation, and a sense of invitation (Mission Bay North Redevelopment Plan, 1998). Figure 3-9 illustrates desired and achieved frequency of residential entries as well as an ideal residential street entrance. Entries were not perceived as prominent, however the scale was appropriate and the orientation pedestrian friendly. Additionally, entries were recessed and framed by trees and landscaping as well as orientated along the waterfront.



The Mission Bay North Design for Development Plan (Plan) calls for building variety along street frontage, as is typical in San Francisco. Figure 3-10 illustrates varied housing overlooking Mission Creek. This guideline was successfully implemented. The built structures have variety in terms of setback from the path as well as color. Figure 3-10 also illustrates how well “architectural features of interest and utility” were incorporated into the project (Mission Bay North Design for Development, 1998). Moreover, the streetscape design successfully created pedestrian scale with close attention paid to the choice of trees, sidewalk details, and street furniture (Mission Bay North Design for Development, 1998). Finally, the Plan successfully implemented neighborhood-serving retail at street level residential buildings along Berry Street.

The Plan did fail to implement some guidelines. First, the idea is to “foster a sense of community and safety,” however is currently lacking in the development. (Mission Bay North Design for Development, 1998, p. 54) The attention to detail was lacking on Berry Street, but present along the Mission Creek path. Second, Plan failed to implement arcades with sidewalk cafes. Nothing that resembles this was built. In fact, most of the retail on the ground floor of residential buildings along Berry Street is not welcoming. On the contrary, much of the retail built is hidden; the ground floor appears to be business offices at first glance, making one want to continue on the path through the breezeway created by the two very tall buildings leading to AT&T Park as seen in Figure 3-11.



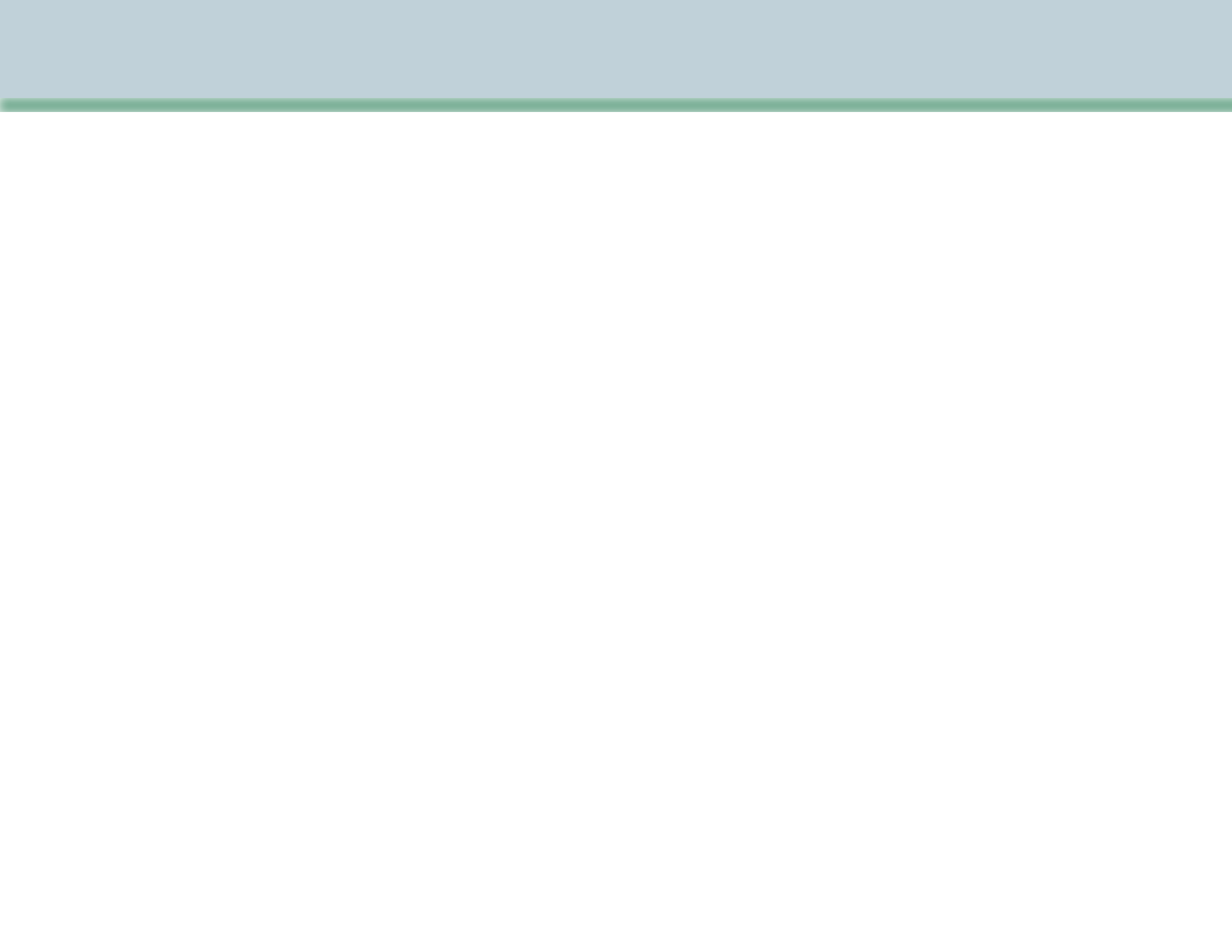
Figure 3-10. Housing overlooking Mission Creek.



Figure 3-11. Breezeway looking toward AT&T Park.







# CONCEPTUAL DIAGRAM

CHAPTER 4



## 4.1 CONCEPTUAL DIAGRAM



Figure 4-2. Aerial view of India Basin Shoreline from Shipyard.



Figure 4-3. Aerial view of India Basin Shoreline from San Francisco Bay.

The main goal of the development is to preserve existing conditions as much as possible. Figure 4.1, India Basin Shoreline Conceptual Diagram exemplifies potential land uses and areas to develop connections for the area.

The existing disconnected portions of the Bay Trail, a region-wide project, will remain and the gaps in the path will be connected to establish continuity of off-street trail space. Private waterfront needs to be acquired for public use to make space for the Bay Trail and kayak center. Open space shall be maximized with the purpose of preserving nature, viewsheds, and recreational & educational opportunities, as well as serving as a buffer for imminent sea-level rise as a result of global climate change. Maintenance will need to be considered an important component of new open space, minimizing the proliferation of overgrown pathways that currently dominate the landscape.

Existing buildings in reasonable condition will be kept to the greatest extent possible, preserving and maintaining what has already been recently invested in the community. The existing community should inform the creation of the new urban structure. Architectural styles reminiscent of the single-family houses on the west side of Innes Avenue, as well as maritime style architecture, shall be maintained throughout the new development in order to be compliant with the General Plan, and to create visual cohesiveness between other parts of San Francisco and this area.

Public views will be given priority over private viewsheds, although private views will be preserved to the greatest extent possible. The steep, sloping topography will make preserving views more effortless, likely using terracing in the building form. Affordable housing will also be included throughout the residential component to meet the needs of the surrounding community and of the greater city of San Francisco.

In terms of physical design, there are major concerns for the entire area. Connectivity will be increased by creating pedestrian and bike paths throughout the various subareas. Pedestrian-scale design will be the model to increase pedestrian activity, with carefully-selected urban street furniture provided to increase the marine/urban experience in the area. Traffic calming

measures such as speed bumps, medians, and trees & vegetation, will be added to the four-lane Innes Avenue to create a more pedestrian-friendly environment and increase safety. This may also include lighting, traffic signals, and signage.

There are also improvements to be made to enhance the existing environment. New nodes for retail, recreation, and transportation will make the area more appealing. Public restrooms will be provided in public spaces. Parking will be provided for commercial and residential uses. Infrastructure improvements will include the enhancement of existing stairways connecting the existing residential uses to the India Basin Shoreline, taking advantage of existing right-of-ways, and the street-greening and beautification of Innes Avenue.

Particular elements of the site must be removed to increase public health, safety, and welfare. Proper remediation and removal of any contamination will take place before development occurs, and human interaction with contamination will be mitigated where removal is not feasible. Overhead utilities will be moved underground when the funds become available. In general, the existing “junky look” of many of the private properties will be removed in favor of a more inviting atmosphere to enhance the overall aesthetic appeal of the area for local residents and to attract outside interest into the area like economic investment in new retail. Vacant and dilapidated structures, especially in close proximity to the waterfront, will be removed or improved to create a clean and well-kept look for the maritime, historical, retail, and entertainment area – with the exception of the historic landmark cottage at 900 Innes Avenue.

In the design process, there are many elements to pay close attention to. The design shall not create barriers or isolated areas, and shall have fewer fences to maintain a safe environment and deter crime. High-rise development known to block viewsheds and create wind tunnels shall be avoided along with big-box retail development, given the relatively small size of the site. Instead, locally and independently-owned shops will be encouraged, fitting in with the current model in many areas of San Francisco, and preserving the local character. In the same way, large hotels and buildings should be avoided. Moreover, given the current level of industrial pollution and severe health impacts that have resulted, restricted uses will include any noxious or toxic industrial uses.

The former PG&E power plant is currently being dismantled, leaving compacted soil good for more dense development. The rest of the former PG&E site will become a Research & Development (R&D) center, with a specific focus on green energy and related technology. The



Figure 4-4. Arellio Walker Drive and mixed-use buildings.



Figure 4-5. Community Center and Research and Development center.





Figure 4-6. Aerial of proposed India Basin Shoreline development.

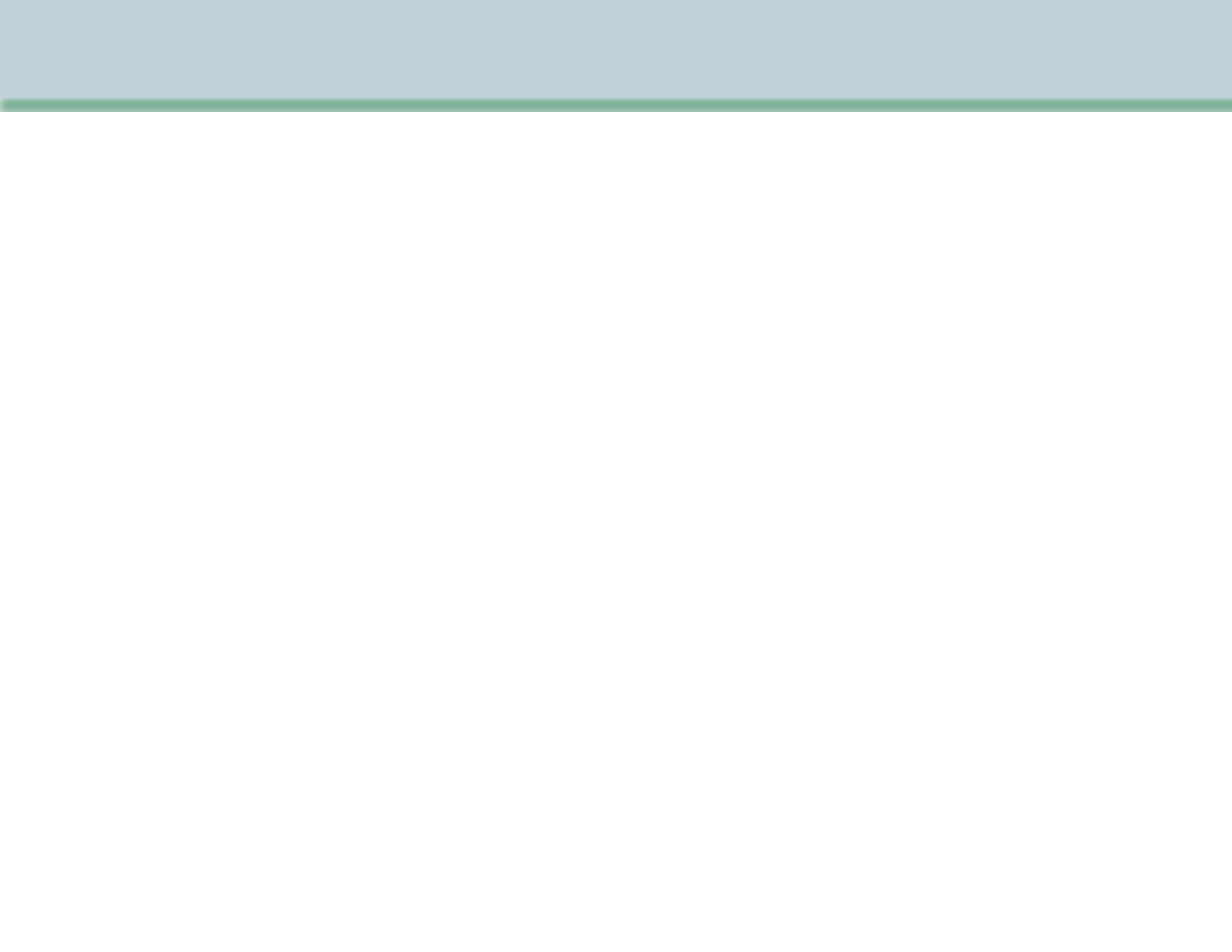
site has the potential to be an ideal testing ground for assessing how alternative energy sources can be used in the existing grid, given that the switch station, or transformer, will remain in use. The R&D park will also have an education and/or employment center to integrate the businesses into the local community, provide training and job placement for local jobseekers, and educate local youth to get excited about our future. Adjacent to this site is the India Basin Shoreline Park, with underutilized areas ideal for a new community center. The community center will include the following amenities: recreation center, pool, youth center, senior services, an amphitheater, library, and community garden.

There will be retail to serve the R&D area and the residential area in the parcel south of Hunters Point Boulevard, on the corner of Evans Avenue and Jennings Street. The medium density residential area is intended to house the workforce from the R&D park. With the intent of creating a transition zone and minimizing the amount of nearby residential uses, there will be light industrial uses extending from the current industrial uses. The grassland hillside is the habitat of endangered native plant and animal species, to be preserved.



Figure 4-7. Aerial of Research and Development area.





# PROJECT PROPOSAL



## CHAPTER 5



## 5.1 LAND USE, HOUSING, AND ECONOMIC DEVELOPMENT

### 5.1.1 LAND USE

The India Basin Shoreline Design for Development plan seeks to incorporate residential, mixed use, retail, office, and industrial space into the 70-acre site to provide a variety of housing and economic opportunities for the community. A Research and Development (R&D) center is proposed for the former Pacific Gas and Electric (PG&E) site with residential and local-serving retail located across Hunters Point Boulevard. A job training facility will be located between the India Basin Shoreline Park and the proposed R&D center to provide professional development opportunities for local residents and to connect employers with a local source of employees. A mix of retail, office and residential uses are proposed along Innes Avenue to create a pedestrian-oriented, local-serving retail node.

The northern end of the site along Evans Avenue will feature light industrial space intended for artists, accompanied by additional artist community space at the corner of Innes Avenue and Hunters Point Boulevard. Retail nodes within the project site will also provide opportunities to market locally-produced art through galleries and exhibits. The historic building located at 900 Innes Avenue will serve as the centerpiece for a maritime-themed recreation area featuring historical exhibits, a kayak center, and shops and restaurants, celebrating the maritime history of India Basin and Hunters Point.

The southern end of the site, along Arelious Walker Drive, will feature primarily residential uses with a strong emphasis on pedestrian-orientation and retail nodes, linking adjacent residential and commercial development of the Hunters Point Shipyard to the south. Several mixed-use components are proposed as well, including a corridor along parts of Hudson and Innes Avenues with ground floor retail and residential uses above. Additionally, a mixed-use corridor featuring ground floor retail with office space above, is proposed along Innes Avenue. Please refer to the India Basin Shoreline Site Plan. Please refer Section 5.4 Land Use Summary tables for detailed uses and dimensions.

### 5.1.2 HOUSING

The intent of the India Basin Shoreline redevelopment plan is to transform a largely dilapidated

and primarily industrial area of the city into a bustling residential mixed-use neighborhood featuring a strong connection to the maritime history and artistic culture of the area. Examples of this design are illustrated in Figures 5-1 and 5-2 on Catalina Island.

The objective is also to provide vital integration of the surrounding public housing developments with the shoreline and open space amenities. Within this context, a variety of housing is proposed with an overall goal of medium residential density (40 dwelling units per acre with a 40-foot maximum building height). This density goal is consistent with the redevelopment plan for the Hunters View neighborhood to the west (Hunters View Design for Development, 2008, p.16). This plan provides for 475 residential units (22 du/acre), including a range of housing types to incorporate a mix of incomes with 25% affordable units. Medium density multi-family units will be located at the southern end of the site with an additional medium density residential component located at the northern end of the site across Hunters Point Boulevard from the proposed R&D facilities.

Housing will be oriented to retain existing views of the downtown skyline, bay bridge and east bay vistas. Residential design will incorporate high-quality materials as well as step-backs, tiering, and façade articulation to provide visual interest and break up the mass of buildings. Design of residential buildings will capture the maritime architectural style currently found in the Hunters Point area and India Basin, featuring details and materials characteristic of waterfront development in Oakland Harbor, CA.

Residential design will also place a strong emphasis on walkability with pedestrian-friendly streets and amenities such as street trees as well as open spaces including courtyards and plazas (see Figure 5-3).

### 5.1.3 ECONOMIC DEVELOPMENT

The India Basin Shoreline Design for Development also seeks to promote economic vitality within the area through proposed R&D and mixed-use development to incorporate residential, commercial, retail, and office uses within a pedestrian-oriented streetscape. A research and development facility is proposed to provide opportunity for development of regionally emerging markets such as green energy and biotechnology to combat global climate change. The close proximity of a functioning PG&E transformer on-site provides an excellent opportunity for connection of green energy sources into the existing grid system. The proposed R&D center will



Figure 5-1. Example of pedestrian orientated retail on Catalina Island.



Figure 5-2. Example of pedestrian streetscape on Catalina Island.



Figure 5-3. Example of a plaza on Catalina Island.



Figure 5-4. Example in Playa Vista, California of mixed-use buildings with residential above retail.

feature flexible building space to provide space for initial research and product development, as well as marketing and sales later on. The proposed R&D center will feature eight buildings and more than 288,000 square feet of flexible space.

Retail nodes at the northern, southern, and central areas of the site will provide much-needed amenities and economic activity for the neighborhood. Ground floor retail uses are proposed at several locations throughout the site particularly along Innes Avenue. A grocery store is proposed at the corner of Arelious Walker and Innes Avenue to serve the dire local need for fresh produce and other food products. Stores along Innes Avenue and within the maritime recreational center will also provide destination-oriented retail, dining, and entertainment opportunities targeted at Bay Trail users, local residents, and visitors as well. This plan provides for several types of mixed-use development, including buildings featuring ground floor retail and second floor office use as well as ground floor retail and upper story residential use (see Figure 5-4). Entirely retail development will be concentrated across from the R&D facility, within the retail node at the end of Arelious Walker Drive overlooking the waterfront, and on Evans Avenue between India Basin Shoreline, and the adjacent Hunters Point Shipyard development. Retail will feature dining, shopping, and local-serving uses. All proposed mixed-use and other retail uses will feature pedestrian-scale, zero setbacks, façade articulation, and genuine ground floor windows to create a walkable pedestrian-oriented streetscape. Mixed-use and commercial design will emphasize pedestrian-scale and encompass the style of retail developments located in Avila Beach, CA and Downtown Avalon on Catalina Island..

## 5.2 CIRCULATION & TRANSPORTATION

The street system includes five categories of streets.

1. Arterials: Innes Avenue, Hunter's Point Boulevard, Evans Avenue
2. Minor Arterials: Jennings Street, Arelious Walker Street, Earl Street
3. Connector Streets: for primarily bicycle commuting and local collection are Griffin Street, Hudson Street Extension, and Jennings Avenue
4. Neighborhood Streets: for parking and pedestrian use are Earl Street - Hudson Avenue
5. Pedestrian Only Streets: in the Arelious Walker Residential Mixed Use Retail area and in the Artist/Maritime Center

### 5.2.1 CIRCULATION AND TRANSPORTATION

In order to prevent areas of inactivity and promote circulation of all traffic, the streets have

been designed to be wide enough to accommodate pedestrians, cyclists, drivers, and public transportation. The design attempts to prevent areas of crime by encouraging motion throughout sections of the development. The street and block pattern attempts to take advantage of the main existing arterials and develop connectivity to the surrounding neighborhoods to further pursue this circulation goal.

The street layout and block patterns aim to embrace San Francisco's traditional streetscape encouraging walkability. Because portions of the site are entirely undeveloped, the streetscape has the opportunity to incorporate plazas and develop a network of open space without having to recreate infrastructure. This clean slate can effectively re-connect different areas of the development. The network of plazas provides a safe place to transition from minor arterials in residential areas to major arterials minimizing the typical auto-orientation. They also provide a safe space for socialization in public areas.

Public transportation into the area consists of Bus #19 and #44 that stop along Innes Avenue. The proposed streetscape of main arterials will accommodate bus transit systems that can share lanes with cyclists and other drivers.

### 5.2.2 STREET FRAMEWORK AND STREET SECTIONS

Tree-lined streets adjacent to wide sidewalks and bike lanes are used to encourage walkability. This design invites pedestrians and cyclists into the heart of neighborhoods as well as the into the commercial, retail, and research and development nodes. The street pattern is designed to be multifunctional, fully accessible to the public, and should be complimented with landscaping that highlights the relationship between sidewalks, bike lanes and vehicular traffic. Landscaping will also be used to calm traffic along the main arterials and then disperse slower traffic into the neighborhoods and commercial nodes.

#### Some Guidelines:

1. The row of mature trees on Arelious Walker Street should be preserved and placement of new street trees should be considered prior to installing new infrastructure. New trees should be planted that will grow in the existing soil conditions and be able to withstand a maritime environment (see Figure 5-5).
2. Street furniture should be placed in the proposed plazas, all public open spaces and at all public transportation stops. Street furniture should also be incorporated along the stretch of the Proposed Design For Development: Alternative #1



Figure 5-5. Example of existing street landscaping on Innes Avenue.







bay trial and complement the design of its surroundings.

3. Lighting should accompany the location of all street furniture. Where possible LED lighting should be used for efficiency. Solar panels should also be incorporated where appropriate.

4. Pervious surfaces, such as pavers and pervious concrete, as indicated by the Regional Water Quality Control Board that should be used where possible to facility effective stormwater management of the development.

### Evans Avenue (65' R.O.W.)

Evans Avenue turns into Hunters Point Boulevard, which becomes Innes Avenue - a street to be preserved and improved. Evans Avenue will become a tree-lined gateway with ample sidewalks to accommodate pedestrians, street furniture, lighting and landscaping (see Figures 5-7, 5-8, and 5-9). The street will remain four lanes with 12-foot lanes. The width from curb to curb will be 65 feet. Nine foot wide parallel parking will exist only on the east side of the R.O.W. Four-foot wide bike lanes will be added in both directions of traffic. Landscaping, street furniture and lighting will also be added to compliment ten foot wide sidewalks that frame the streets. This right of way will also accommodate at least two bus transit stops.

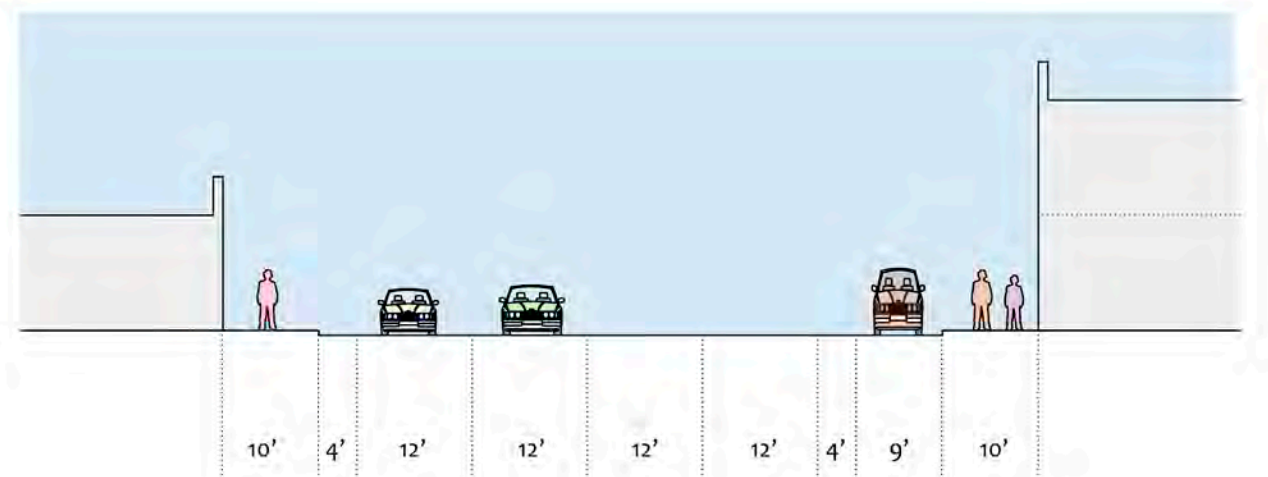


Figure 5-7. Street dimensions of Evans Avenue cross-section.

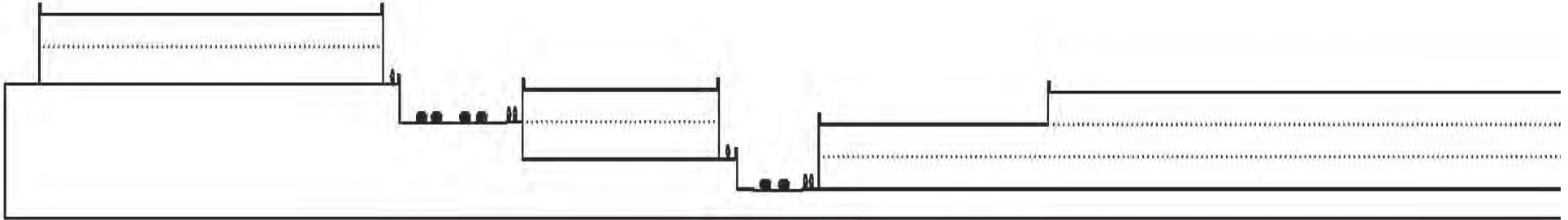


Figure 5-8. Evans Avenue cross-section near Jennings Street showing Research and Development, retail, and residential buildings.

Figure 5-9 is a rendering of Evans Avenue and Jennings Street. The image depicts possible design guidelines envisioned for this residential, retail and light industry.



Figure 5-9 Evans Avenue cross-section at Jennings Street.

### Hudson Avenue (59' R.O.W.)

This right of way will remain a two lane street. The width from curb to curb will be 59 feet. The west side of the Hudson Street will have nine foot wide parallel parking and no accommodations for bus transit stops. This R.O.W. will have ten foot sidewalks that are complemented by landscaping, street furniture, and lighting.

Please see the cross-section of Hudson Avenue in Figures 5-10, 5-11, 5-12 and 5-13. This R.O.W. includes the spatial scaling for Neighborhood Streets and Pedestrian Only streets. Renderings of Neighborhood Streets and Pedestrian Only Streets are provided following the Hudson Street images.

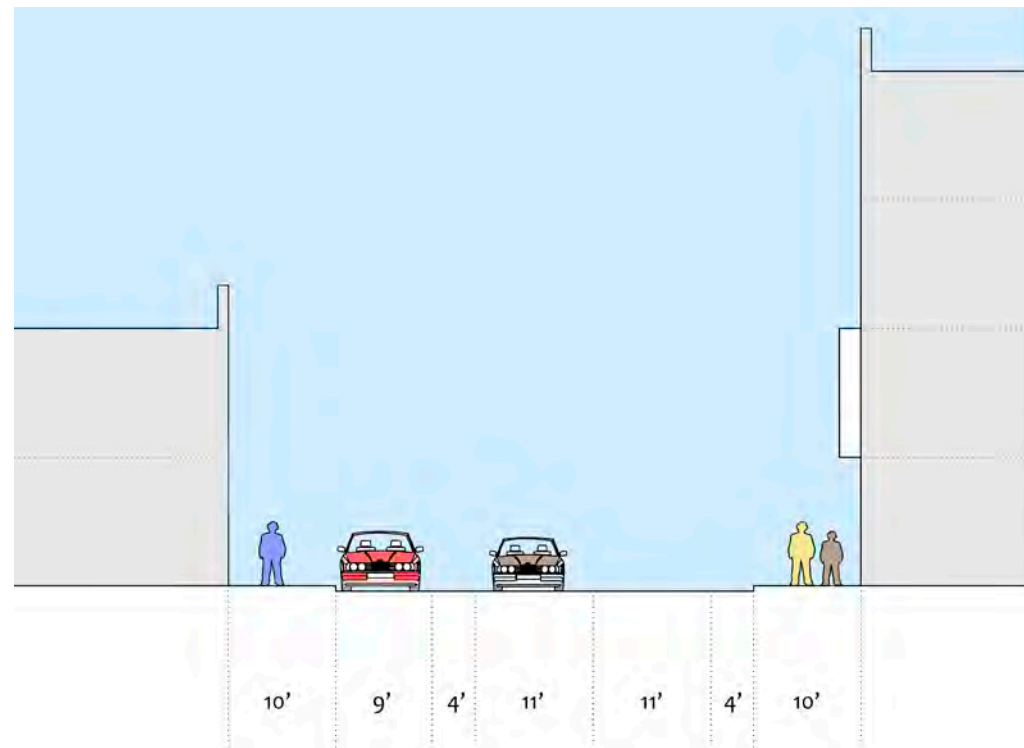


Figure 5-10. Street dimensions of Hudson Avenue cross-section.



Figure 5-11. Hudson Avenue cross-section.

The rendering of Hudson Avenue overlooking the Maritime Center provides a potential representation of the waterfront area (see Figure 5-12).



Figure 5-12. Rendering of Hudson Avenue and Maritime center.

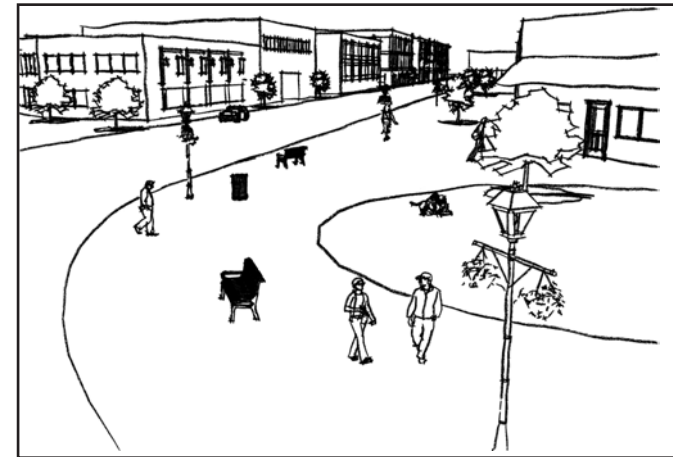


Figure 5-13. Black and white rendering Hudson Avenue from Innes Avenue.

### Neighborhood Streets (42' R.O.W.)

Neighborhood streets within the Arelious Walker Drive Mixed Use Residential are small with only one travel lane for cars in each direction (see Figures 5-14, 5-15 and 5-16). The width from curb to curb will be 42 feet. This right of way will have no parking. Lighting, street furniture and landscaping will compliment ten foot wide side walks.

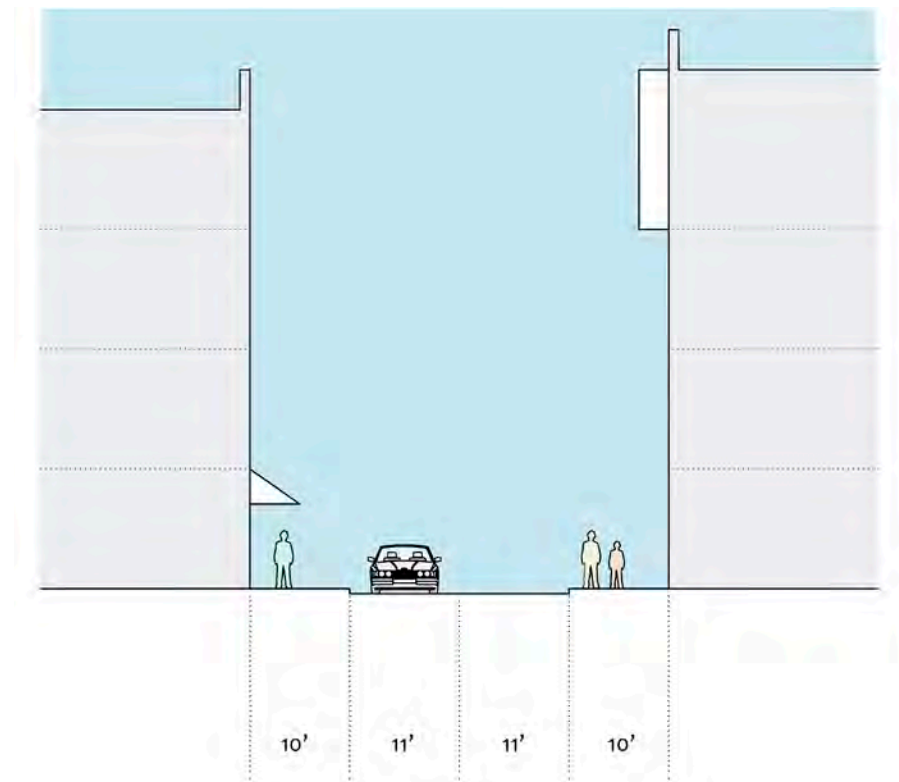


Figure 5-14. Street dimensions of cross-section of Arelious Walker Drive.





Figure 5-15. Rendering of mixed-use buildings near Arelious Walker Drive.



Figure 5-16. Rendering of mixed-use buildings near Arelious Walker Drive and the Bay Trail.



### Pedestrian Only (40' R.O.W.)

The street scene to the right looks outward toward San Francisco Bay from the pedestrian only diagonal within the residential mixed use portion of the development. This R.O.W. will consist of a 20 foot center pedestrian lane flanked by 10 foot sidewalks.

Please see the cross-section for below for a representation of pedestrian only streets.

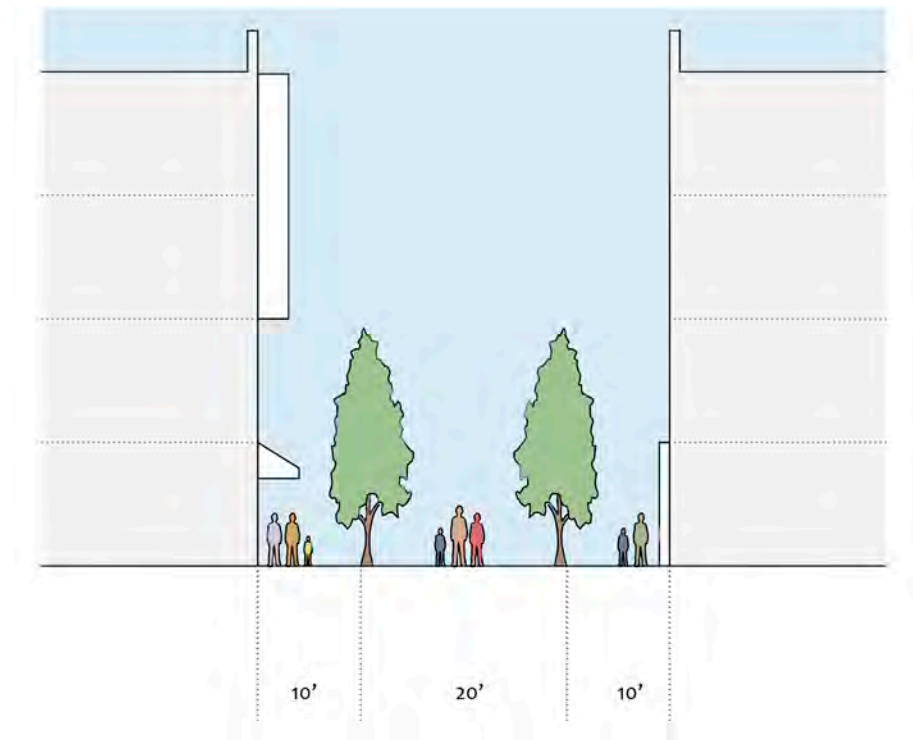


Figure 5-17. Street dimensions of pedestrian only streets.

Figure 5-18 and Figure 5-19 provide further details of the spatial scale of pedestrian only streets.



Figure 5-18. Rendering of pedestrian only streets.



Figure 5-19. Black and white rendering of pedestrian only streets.

## 5.3 PUBLIC REALM

### 5.3.1 GENERAL CHARACTER

The public realm will be a very important aspect of the redevelopment at the India Basin Shoreline. Design will incorporate safe, walkable environments in which pedestrians and bicyclists are given priority over automobiles, with a conscious effort to deter crime and avoid the creation of alleys, fencing, barriers, or isolated areas. Attention will be paid to choosing appropriate urban street furniture and providing public restrooms in public spaces.

The general character of the marina area will be that of a retail, recreation, and entertainment node similar to what people experience in downtown Avalon, Catalina Island, California. There will be a wide pedestrian-only stone path along the restaurant, coffee shop, and retail buildings overlooking the waterfront plazas, Bay Trail, docks and boat launch area, and the San Francisco Bay. One of the driving forces behind this plan is to retain as many public viewsheds as possible, allowing residents and visitors to enjoy views of the waterfront, East Bay hills, and downtown San Francisco skyline. The former PG&E power plant is currently being dismantled, opening up the view to the skyline. High-rise development will be discouraged by a maximum building height of four stories, preventing the blocking of viewsheds. Overhead utilities will be moved underground when funds become available in order to maximize the quality of the public viewshed.

### 5.3.2 OPEN SPACE & RECREATION

Open space shall be maximized with the purpose of preserving nature, viewsheds, recreational and educational opportunities, while also serving as a buffer for imminent sea-level rise. Promoting an active lifestyle is an essential part of the quality of life of the new neighborhood. New plazas and parks will help facilitate physical activity, social interaction and a sense of community, while enhancing the waterfront environment and preserving viewsheds. Tree-lined streets, traffic circles, paseos, wide sidewalks, and bike paths will be designed to encourage pedestrian and bicycle activity, while ensuring the traffic calming, beautification, and greening of all streets, especially Innes Avenue. The open space system will integrate physical and social linkages between residential areas and other land uses, as well as improved connections to the surrounding neighborhoods in Hunters View, Westbrook, and Hunters Point.

The grassland hillside is an important habitat for native endangered plant and animal species, not to be developed. This hillside will be preserved for the benefit of the sensitive species and the aesthetic appeal provided to the greater community.

The India Basin Shoreline Park will be enhanced, with improvements made in the quality of open space and recreation areas. Grass areas will be maintained to be healthy and green, while the proposed community center will be linked with the kayak center, allowing people of all ages to come together, socialize, and stay fit.

While the existing PG&E switch station infrastructure will remain, the proposed R&D area focusing on green energy technology will link residents and visitors with employees. Pedestrians and bicyclists traveling the path along the Bay Trail will be able to see researchers working to create a better future.

There is great potential for a Bay Trail connection. Already a region-wide project, the Bay Trail is required to be at least ten feet wide, with a buffer and public benches along the path. SFRA will work in cooperation with landowners, likely utilizing land-swaps, to acquire privately-owned waterfront, making the waterfront entirely accessible to the public, without interruption, with the possibility of a kayak center and other amenities for all to enjoy. This plan allows for the Bay Trail to connect where it currently ends abruptly with fencing, extending from the former Naval shipyard to Heron's Head Park and the wetlands northeast of the proposed R&D center.

### 5.3.3 COMMUNITY AMENITIES

Presently, there are not many public facilities within close proximity, but there are important resources in the form of community organizations that empower and educate the entire community, especially youth, about various issues. The site is currently served by the Southeast Health Clinic. Already active in the community, the Literacy for Environmental Justice will also be an important partner in community-building for the new neighborhood. The offices of these organizations will be encouraged to relocate to the vicinity of the community center, where there will be the opportunity to expand in order to better serve the community.

The community center will serve as a recreation center with a pool, youth center, senior services. There will be a library to serve the local community. An amphitheater will be a place for local

concerts, shows, and other events. A community garden will be a source of local produce for community members, promoting a healthy diet along with proper nutrition all while interacting socially.

The art community will not only be preserved as a cultural amenity, it will be embraced. There will be no shortage of artist studio space and public art is to be an integral piece of each of the subareas of the development area, including the triangular parcel where Hawes Street meets Innes Avenue. The intent is for the SFRA to acquire the property for public use, ideally an iconic piece of art embodying the identity of the community, its maritime history, and something everyone can be proud of, while serving as a landmark to draw visitors into the waterfront plaza and marina area.

An art gallery will be an important place that local artists can display their work for sale and become known in the community, complimenting the proposed recording studio that will meet an existing need for a high quality facility in the area.

A job training and job placement center will be included as part of the plan to segue from the R&D area to the park and marina area, linking employers with employees from the local community in search of quality jobs.

The cottage from the shipbuilding era at 900 Innes Avenue, with historic landmark status, will be preserved. A plaza will be created between the cottage and the proposed maritime museum, designed with a breezeway in place of the first floor of the building to maintain the connection to the waterfront.





## 5.4 LAND USE SUMMARY

### AREA A: Arelious Walker Drive and Hudson Avenue Residential, Mixed Use and Retail District

Total Area: 21.6 acres

Buildings A1 - A18

Uses:

475 Units Residential (22 du/acre) - ranging from Studios to 2-3 Bedroom units

242,360 ft<sup>2</sup> gross Mixed Use Retail/Residential

40, 250 ft<sup>2</sup> gross Retail

Parking:

475 Residential Spaces

240 Commercial Spaces

### AREA B: Innes Avenue Mixed Use Corridor

Total Area: 6.8 acres

Buildings B1 - B13

Uses:

58 Units Residential (8.5 du/acre) - ranging from Studios to 2-3 Bedroom units

175,845 ft<sup>2</sup> gross Mixed Use Retail/Office

61,395 ft<sup>2</sup> gross Mixed Use Retail/Residential

56,100 ft<sup>2</sup> gross Light Industrial/Artist Space

26,720 ft<sup>2</sup> gross Retail

Parking:

58 Residential Spaces

100 Commercial Spaces

### AREA C: Maritime Recreational Area and Art Center

Total Area: 3.2 acres

Buildings C1 - C12

Uses:

14,830 ft<sup>2</sup> gross Light Industrial/Artist Space

53,910 ft<sup>2</sup> gross Maritime Recreation/Retail

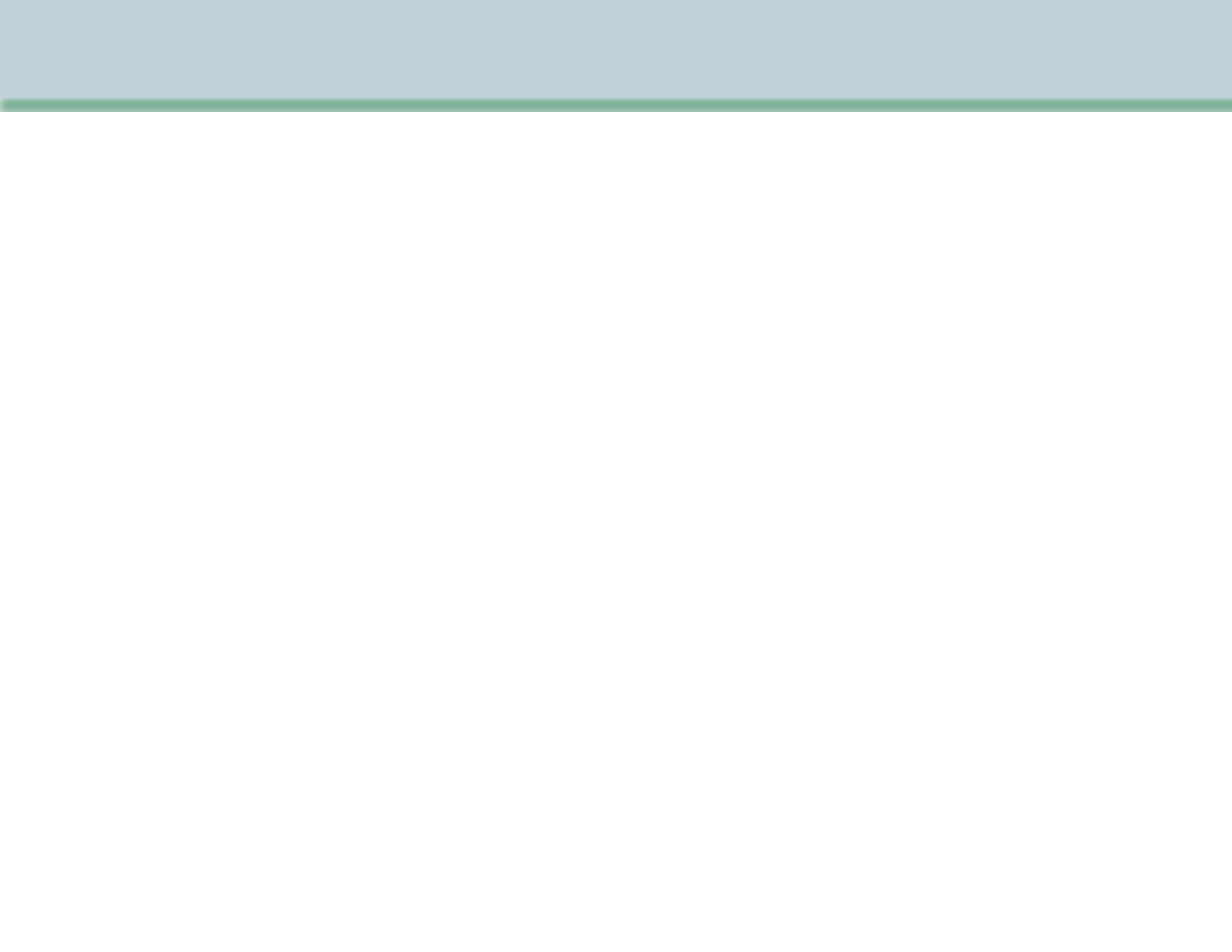
Parking:

100 Commercial Spaces

<b>AREA D: India Basin Shoreline Community Facilities</b>							
<b>Total Area: 11.0 acres</b>							
<b>Buildings D1 and D2</b>							
<b>Building D1:</b>							
23, 633 ft <sup>2</sup> gross Community Center (1 - 2 stories, 15,755 ft <sup>2</sup> building footprint)							
<b>Building D2:</b>							
140,300 ft <sup>2</sup> gross Job Training Center (2 -3 stories, 56,120 ft <sup>2</sup> building footprint)							
<b>Parking:</b>							
70 spaces							

<b>AREA E: Evans Avenue Mixed Use, Residential and Light Industrial Corridor</b>							
<b>Total Area: 7.2 Acres</b>							
<b>Buildings E1 - E7</b>							
167 Units Residential (23 du/acre) - ranging from Studios to 2-3 Bedroom units							
143,720 ft <sup>2</sup> gross Mixed Use Retail/Residential							
55,840 ft <sup>2</sup> gross Light Industrial/Artist Space							
<b>Parking:</b>							
167 Residential Spaces							
235 Commercial Spaces							

<b>AREA F: Heron's Head - PG&amp;E Green Technology Research and Development Park</b>							
<b>Total Area: 16.4 Acres</b>							
<b>Buildings F1 - F8</b>							
<b>Uses:</b>							
288,295 ft <sup>2</sup> gross Research and Development Park - Flexible Space							
<b>Parking:</b>							
280 spaces							



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Figure 5-18. Intimate rendering of pedestrian only streets.

Figure 5-19. Black and white rendering of pedestrian only streets.



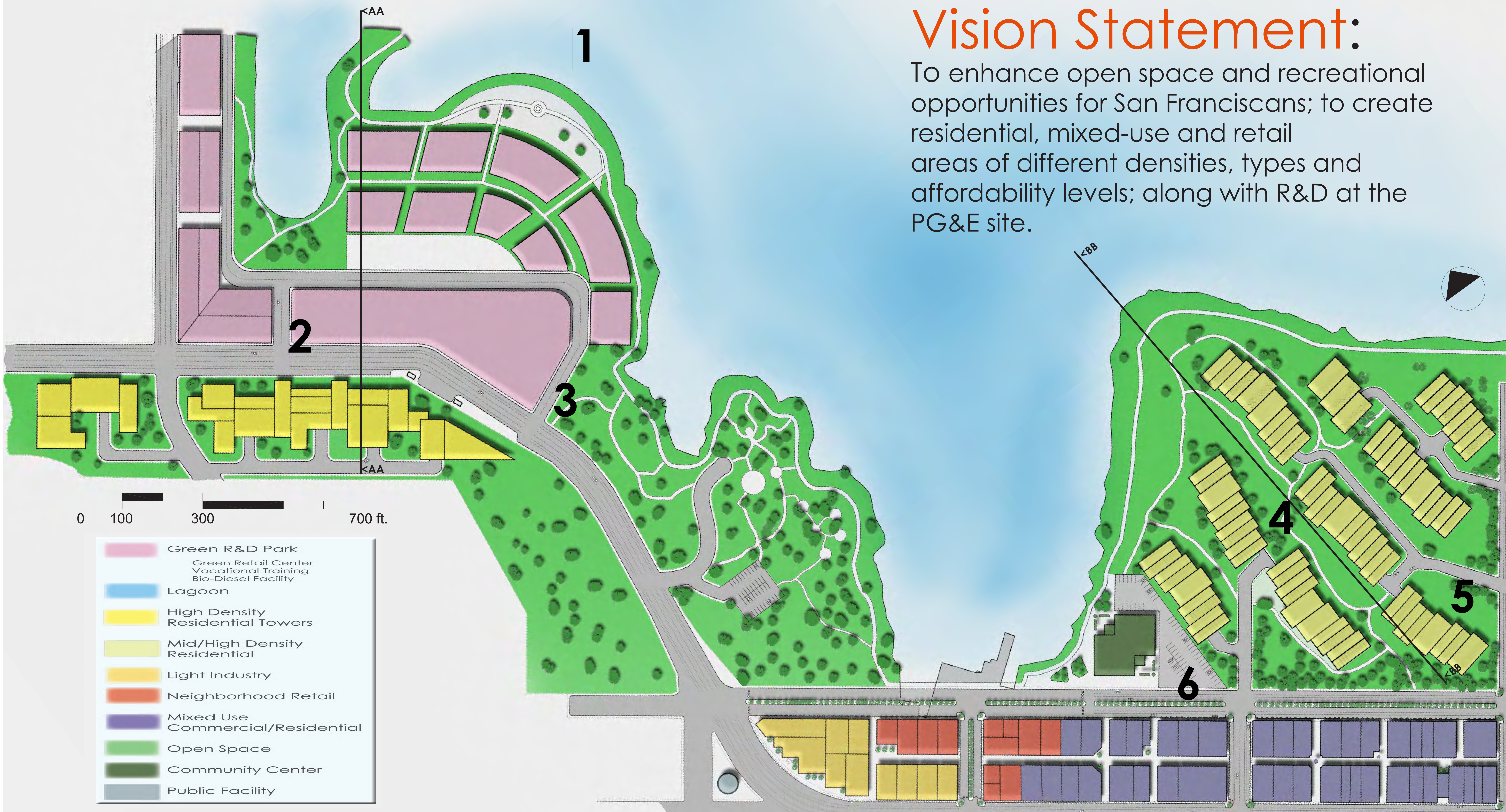
# India Basin BVHP Area C ♦ Proposal 3

Team: MELIORA

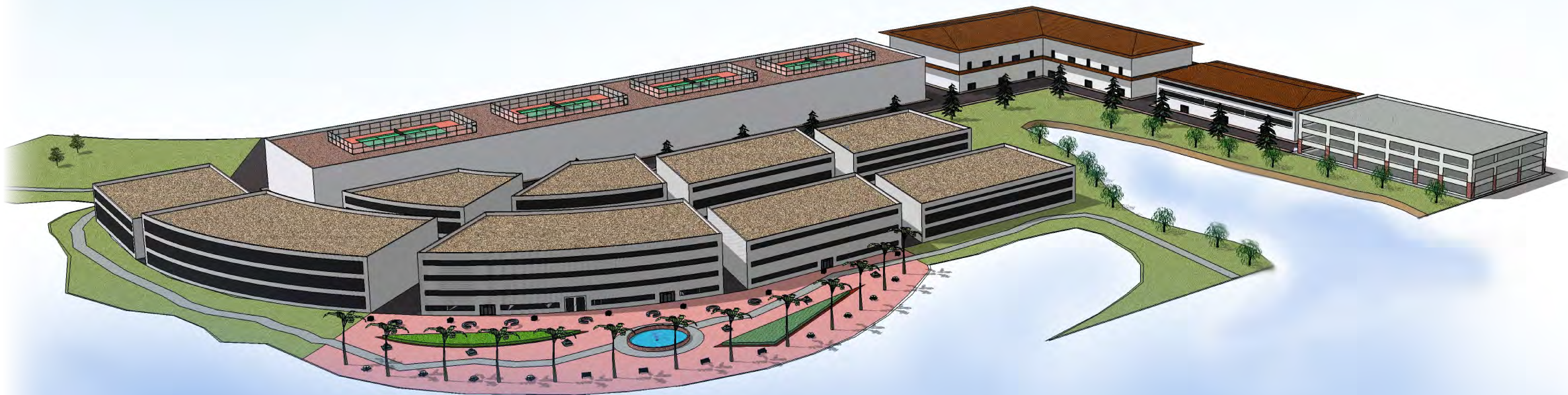
CRP 553 Project Planning Lab, California Polytechnic State University, San Luis Obispo

## Vision Statement:

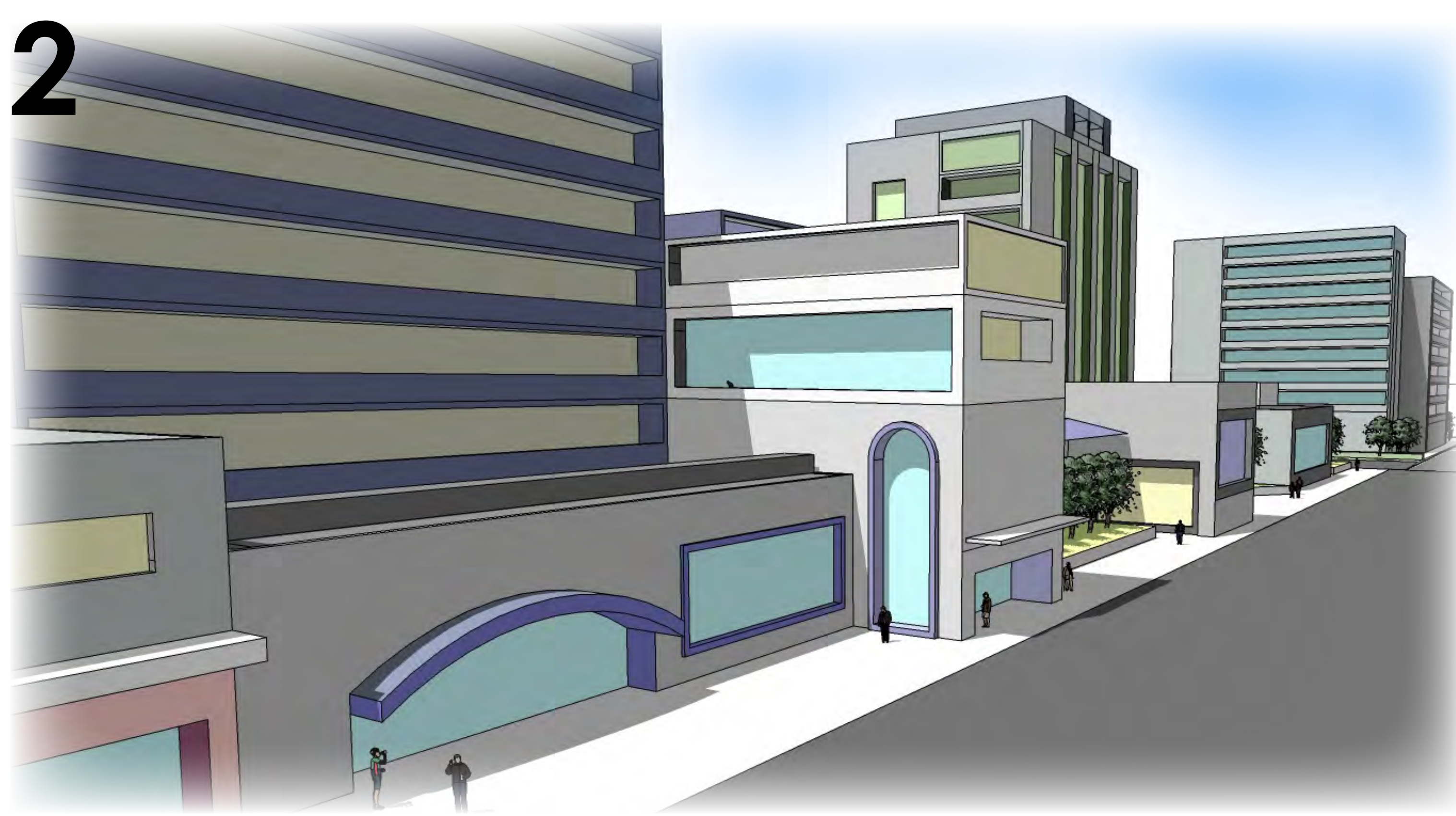
To enhance open space and recreational opportunities for San Franciscans; to create residential, mixed-use and retail areas of different densities, types and affordability levels; along with R&D at the PG&E site.



1



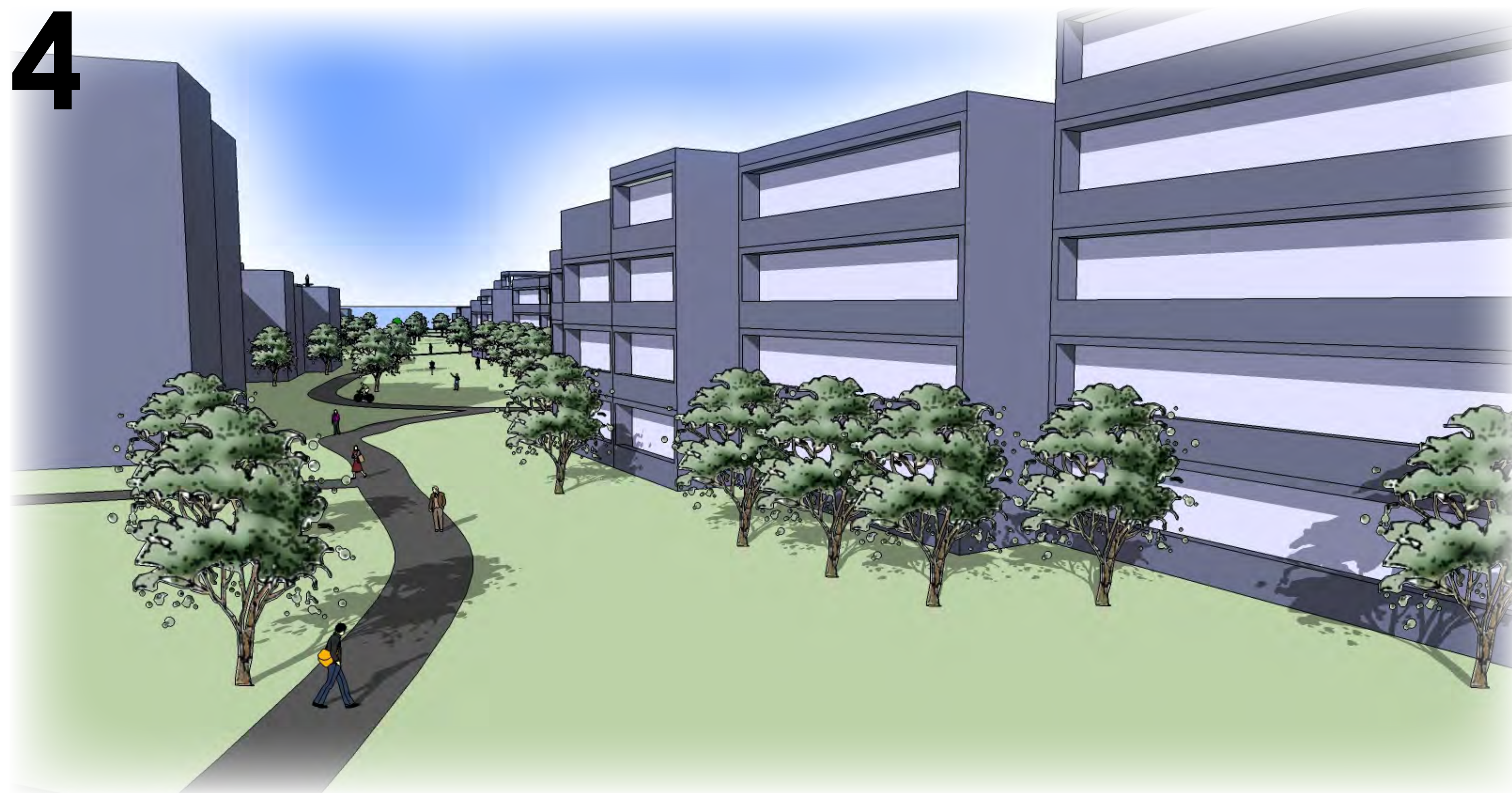
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3



4



5



6



Section AA

Section BB





# INDIA BASIN SHORELINE

## *Proposed Design for Development*

PREPARED BY MELIORA OF CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO  
DEPARTMENT OF CITY AND REGIONAL PLANNING





# INDIA BASIN SHORELINE

Bay View/Hunter's Point Neighborhood

San Francisco, CA

## Proposed Design for Development

*Proposed concept plan prepared for San Francisco Redevelopment Agency  
by MELIORA of California Polytechnic State University, San Luis Obispo.  
Class project for CRP 553, Project Planning Laboratory.*

### MELIORA - latin translation “for the pursuit of betterness”

---

*MELIORA Consists of:*

BENJAMIN ALEXANDER, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*

SHAUNA CALLERY, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Environmental Emphasis*

BRENT CALLOWAY, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Environmental Emphasis*

RICK CASWELL, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*

JOSH CHAPMAN, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*

BRANDON HAYDU, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*

ZACK KERWIN, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*

ERIK SIMON, MCRP Program, California Polytechnic State University, San Luis Obispo  
*First Year Graduate Student, Design Emphasis*



## ACKNOWLEDGEMENTS

The India Basin Shoreline Redevelopment project has thoroughly employed the hearts and minds of Meliora over the last few months. It has been an honor to work with individuals and organizations that continually provide people in the community with services and options.

We would like to acknowledge with great appreciation, the following people and organizations for their selfless donation of time and effort to the development of this proposed design for development:

San Francisco Redevelopment Agency

- ✧ Tom Evans, San Francisco Redevelopment Agency
- ✧ Tracie Reynolds, San Francisco Redevelopment Agency

California Polytechnic State University, San Luis Obispo

- ✧ Umut Toker, PhD.
- ✧ Paul Wack, AICP

Residents of the Bayview and Hunter's Point Neighborhoods

We are grateful for the continual support, encouragement, and understanding of our friends and family during the course of this incredible learning experience.

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# CHAPTER

## introduction

to India Basin shoreline

# 1



*"It's nice to see someone take an interest in this place."*

*-Unknown Neighborhood Resident  
During April 17, 2008 Site Visit*





# 1. INTRODUCTION

This proposed design for development has been developed through a collaboration between the San Francisco Redevelopment Agency and graduate students in City and Regional Planning at California Polytechnic State University, San Luis Obispo. It is intended for educational purposes.



The San Francisco Redevelopment Agency and Department of City and Regional Planning at CalPoly have agreed to work in unison for the development of conceptual plans of the India Basin Shoreline area in the Bayview/Hunter's Point neighborhood area. Three separate conceptual plans were developed through CalPoly's CRP 553, Project Planning Laboratory class featuring different perspectives of potential redevelopment for the India Basin Shoreline area. The San Francisco Redevelopment Agency is encouraged to utilize any of the submitted plans in a way that would be helpful for future development of the area. This plan represents one of those three proposed conceptual plans as compiled by a team of eight graduate students.





# CHAPTER

## site

inventory and analysis

# 2.



*"Site analysis is a fundamental component of site planning. A thorough analysis of a place enables the planner to link conservation and development goals to site-specific characteristics."*

*-Frederick R. Steiner*



## 2. INDIA BASIN: SITE INVENTORY AND ANALYSIS

### 2.1 - INTRODUCTION

Located in the heart of the Hunters Point neighborhood of southeastern San Francisco, the parameters of India Basin are roughly the neighborhood surrounding Cargo Way, Third Street, Evans and Innes Avenues to the Hunters Point Shipyard, from the top of the hill to the water. India Basin's history dates back to the end of the nineteenth century, when it once buzzed with activity from its extensive dry-docks and shipyards. India Basin also boomed again during World War Two, when it was used as a marina by the U.S. Navy, following the purchase of a steel mill in 1939. In its place was Hunters Point Naval Shipyard, which expanded the industrialization of the surrounding area. Over 15,000 people moved to the area in order to work at the shipyard, and the facility quickly became the economic backbone of the community. In 1974, the Navy closed the shipyard, leaving the majority of its former employees jobless. Since this time the area has become blighted and only minimal efforts by the City of San Francisco to improve the area exist at present – notably a children's playground and basketball court. This chapter will provide a detailed analysis of the existing conditions, natural environment, community, and local market of the India Basin (Figure 2.1).



*Figure 2.1  
India Basin Shoreline Existing Conditions*



The following information is drawn from a site analysis conducted on April 17, 2008 and India Basin Shoreline/Area C Asset and Context maps provided by the San Francisco Redevelopment Agency.

## 2.2 - EXISTING CONDITIONS

### 2.2.1 - Existing Land Uses and Structures

The India Basin Shoreline (Area C) consists of approximately 70 acres in southeastern San Francisco. The existing zoning for the India Basin Shoreline (Area C) is divided into the following four zones: Neighborhood Commercial (NC-2), Manufacturing (M-1), Manufacturing (M-2), and Public (P). The northern section of Area C is owned by Pacific Gas and Electric (PG&E) and is the only section within the area zoned as Manufacturing (M-2). The site currently contains remnants of a power plant, which PG&E is in the process of deconstructing. The site also contains a transmission line which connects into the city's power grid and a historic landmark building along Innes Avenue (Figure 2.2).

Moving south from the PG&E site along Hunters Point Boulevard, the coastal side of the street is zoned for Manufacturing (M-1) and Public (P) uses. The primary land owners in this section are PG&E, the Recreation and Park Department, and Shipyard Holdings, LLC (Cassidy) (Figure 2.3). Key uses in this section are recreation and work conducted at the boat harbor. The park contains an asphalt trail which runs along the coastal section of Area C. The land located on the inland portion of Hunters Point Boulevard in this section is zoned Neighborhood Commercial (NC-2). The entire section of land bordering the coastal side of Innes Avenue throughout Area C is zoned Neighborhood Commercial (NC-2). Businesses include Surfside Liquors which is a small grocery store and an office for an environmental justice non-profit. The area has multiple owners.

The southeastern section of Area C (Figure 2.4) is comprised of Manufacturing (M-1) and Public (P) uses. The land is currently vacant open space with the coastal tip being used for park space. The park space is mostly open space which has not been maintained. The asphalt trail which runs along the coast of Area C ends abruptly due to a chain linked fence which separates the area from the adjacent naval base.



Figure 2.2  
900 Innes Avenue  
Historic Boathouse Recently Nominated  
for Historic Landmark Status



Figure 2.3  
Existing PG&E Power Plant Structures  
Electrical Grid Network in Foreground is Remaining  
Building Structure in Background is Under  
De-Construction Process



Figure 2.4  
Southeast Section of Area C

### 2.2.2 - Connections and Linkages

The common theme for Area C in terms of connections and linkages is one of isolation. Area C includes an asphalt trail along the bay which ends abruptly at the southeast section of the property where the naval base begins (Figure 2.5). The area is not maintained which makes the trail more prone to criminal activity. Along Innes Avenue, there are four rundown staircases which connect the existing housing to Area C. These staircases need to be improved.



Figure 2.5  
Bay Trail - Abrupt End at Site Boundary



Figure 2.6  
Innes Avenue - Main Transportation Route

### 2.2.3 - Public Services

Public transit is lacking in the area. There is only one bus route running in the area at this time. Area C possesses basic infrastructure including roads, sewer lines, and power lines. Future bus routes are planned for the area dependant on future development (Figure 2.6).

### 2.2.4 - Opportunities with Existing Land Use

- ✦ Bay trail connection
- ✦ Linkage with existing housing
- ✦ New mixed use commercial/residential
- ✦ Enhance road conditions, especially on Innes Ave
- ✦ Increase defensible space (Improving parks and incorporating new building designs)

### 2.2.4 - Constraints with Existing Land Use

- ✦ Multiple property owners
- ✦ Existing residents
- ✦ Liquefaction
- ✦ Rising Bay Levels (Global Warming and Tide)

### 2.2.5 - Existing Land Use Summary

Area C possesses a variety of opportunities to increase connectivity with

existing housing and to transform vacant open land in to mixed-use development. Constraints such as multiple property owners and existing residents will heavily influence future development. Environmental factors such as rising water levels in the bay due to global warming and possible liquefaction issues will also influence future development. Utilizing new building design to create defensible space would benefit the entire area. See attached map for visual details of existing conditions

## 2.3 - NATURAL ENVIRONMENT

### 2.3.1 - Topography Sources

Area C slopes steeply from Hunter's Point Heights down to the bay shore (Figure 2.7). Existing residential and commercial development is confined to a narrow strip of gently sloping and flat land along Innes Avenue. The PG&E site and the vacant land at the southeast end of the area are flat. The shoreline is a mix of failed wetlands, rip rap, and functioning wetlands. No major creeks drain into the area.



Figure 2.7  
View From Hunters View Projects Overlooking India Basin Shoreline



Figure 2.8  
Infill Land Along India Basin Shoreline

### 2.3.2 - Soil

The large flat areas of the site are infill of unknown origin (Figure 2.8). Due to seismic risks, structures built on these soils will require significant and costly engineering solutions. The steep hillside soils contain serpentine outcrops. The PG&E site is likely to have contaminated soils. The soil in the neighboring shipyard is chemically contaminated and radioactive. Remediation measures must be carefully followed with future development in these areas.



### 2.3.3 - Vegetation

Large areas of the site are dominated by native and non-native invasive plants typical of undisturbed sites in the region. The serpentine hillsides harbor many rare plant species and native flowers. There is potential for threatened and endangered plants to exist on the hillsides as well as associated fauna. Tidal wetlands vegetation exists in a few pockets but most of the shoreline vegetation is upland, non-aquatic. Landscaped areas are planted heavily with eucalyptus. Fitch Street is lined with poplars.



Figure 2.9  
India Basin Shoreline Visitor Enjoying Waterfront Views

### 2.3.4 - Views

Area C has many notable view sheds (Figure 2.9). To the north there are views of the downtown San Francisco skyline. Looking East across the bay, downtown Oakland and Mt. Diablo are visible. Just east of the downtown San Francisco skyline, is an undesirable view of the Port of San Francisco's large waste transfer facility. These views exist across most of the area, including already existing homes along Innes Avenue and along the hills of

Hunter's Point Heights. Preserving existing views could be a constraint to development within the Southeastern portion of the area.

### 2.3.5 - Climate

The macroclimate, as measured by data collected from the San Francisco airport located approximately six miles to the south, is moderate with an average annual temperature of approximately 60 degrees Fahrenheit and annual precipitation of less than 1.9 inches per month. India Basin has a unique microclimate because the area is tucked in behind the downtown core on the west shoreline of the San Francisco Bay, which acts as a natural barrier from the prevailing winds coming down from the North. The India Basin area is less susceptible to fog throughout the year which enhances the views as described above.

### 2.3.6 - Opportunities with Natural Environment

- ❖ Views of San Francisco Bay, downtown San Francisco and mountains
- ❖ Waterfront access
- ❖ Lower levels of fog throughout year
- ❖ Protected estuary at Heron's Head Park prevents future development blocking views
- ❖ Relatively level land in developable areas

### 2.3.7 - Constraints with Natural Environment

- ❖ Tide restrictions prevents building within 25' distance of shoreline
- ❖ Protected natural habitat of the Mission Bay Blue Butterfly
- ❖ Prevailing winds can bring smells from sewer treatment plant
- ❖ Steep rise in topography along southwest edge of Innes Avenue limits connectivity
- ❖ Shoreline limits possibilities for connection of San Francisco Bay Trail
- ❖ Wetlands development restrictions

### 2.3.8 - Natural Environment Summary

Area C provides a unique blend of natural environmental conditions which offer a tremendous amount of opportunity for redevelopment. The natural settings are optimal for a variety of possible end uses that can take advantage of favorable shoreline terrain, protected climate and premium views (Figure 2.10). Each of the constraints listed can be creatively turned into an enhancement of the India Basin location. Incorporating the natural environment with incoming urban design will benefit both existing and future tenants of the area. See attached map for visual details



Figure 2.10  
India Basin Shoreline - Looking South

of natural environment. Cross sections showing existing topography elevations has also been included for visual details.

## 2.4 - RELEVANT DOCUMENTS; COMMUNITY PERCEPTIONS AND CULTURE



Figure 2.11  
Different Land Uses of India Basin Shoreline Area  
Photo Courtesy of San Francisco Redevelopment Agency

### 2.4.1 - Existing Plans / Future Projects / Applicable Land-Use Regulations

The existing land uses in the zoning map for India Basin (Area C) include: M1 Manufacturing, Neighborhood Commercial, and Parks (Figures 2.11 and 2.12). However, current plans for future development call for Residential, Retail, Office and Arts / Light Industry in addition to M1 Manufacturing, Neighborhood Commercial, and Parks / Open Space. Therefore, changes need to be made to zoning regulations in the area for current plans to be carried out. One large change that is being made currently is the deconstruction of the PG&E power plant. This is currently zoned as M1 Manufacturing, though this could easily be changed to accommodate another zoning type – depending on the type of development that is agreed upon for the site. The Bay Trail presently extends into India Basin but is lacking smooth connection around the historic ship building area.

## INDIA BASIN SHORELINE / AREA C CONTEXT



Figure 2.12  
Current Land Use Zoning of India Basin Shoreline Area / Map Courtesy of San Francisco Redevelopment Agency



### 2.4.2 - Local Market

India Basin (Area C) is largely composed of the large PG&E property, open space along the waterfront, and a number of small parcels controlled by number of owners primary concentrated along Innes Avenue and the paper street of Hudson Avenue (Figure 2.13). These parcels include a mix of new housing development, older business and light industrial uses including a light industry/arts complex near to the historic shipbuilding area. Also of significance is the Acosta holdings around Arelious Walker Drive. This area is commonly referred to as the India Basin Flats and is currently zoned M-1 manufacturing (Figure 2.14).

Recently, the holdings owned by Shipyard Holdings, LLC were donated to the non-profit group Tenderloin Housing Clinic and was appraised at between \$17 million to \$19 million with the intention of being developed as housing. [<http://www.bizjournals.com/sanfrancisco/stories/2008/03/10/story4.html?b=1205121600^1601721#1>]

Lastly, the largest land holder in the India Basin shoreline area is PG&E. Holdings include the recently decommission PG&E power plant, existing transmission center and adjacent parcels. These holdings have potential for new commercial/industrial and/or new recreational space.



Figure 2.13  
Industrial Working Complex Located at the Corner of Innes Avenue and Hunters Point Boulevard



Figure 2.14  
Working Waterfront Area Located Between India Basin Shoreline Park and India Flats



Figure 2.15  
Aerial Photograph of Hunters Point Shipyard, October 25, 1945  
Photo Courtesy of San Francisco Public Library

### 2.4.3 - Historic Evolution of the Area and Social and Cultural Factors

The larger Hunters Point Area, named for the original landowners, is associated more recently with the adjacent, now shuttered, Navy Base and the ship building industry (Figure 2.15). The India Basin shore still includes the remnants of this industry and has an extant shipbuilding cottage at 900 Innes Avenue which is being discussed for historic land marking.



Figure 2.16  
Hunters Point Neighborhood, 1960  
Photo Courtesy of San Francisco Public Library

Since World War II, Bayview/Hunters Point has been the home to San Francisco's largest African American community. After the decommissioning of the Hunters Point shipyard in the 1970's (Figure 2.16), the area went into decline with a higher crime rate and lower median income than the City of San Francisco. Recent years has witnessed an increasing diversity in the neighborhood as Asian and Hispanic immigrants, artists and others have found an area of relatively cheap housing and

space. Most recently the opening of the 3rd Street Muni Metro light rail line has brought renewed hopes for revitalization and concerns about gentrification. It remains to be seen if these trends in the larger Bayview/Hunters Point will impact the relatively isolated India Basin.

A dominate presence in the neighborhood is the now closed PG&E plant and facilities (Figure 2.17). Built in 1929, it was considered one of the dirtiest in the state and according to U.S. Environmental Protection Agency reports Bayview/Hunters Point has some of the highest air pollution emissions in the City. The area also experiences high rates of cancer and asthma and though no studies linked the plant directly, its presence was a source of contention with neighbors for decades. [Leslie Fulbright SF Chron As PG&E closes its old, smoky power plant, the neighborhood breathes a sigh of relief]



Figure 2.17  
Entrance to Pacific Gas & Electric Company Steam Plant  
Located at the Corner of Jennings Street and Evans Avenue, 1948  
Photo Courtesy of San Francisco Public Library



Activists succeeded in correcting this environmental justice issue watching the plant close on May 15, 2006.

Inland of India Basin is a mix of public and affordable housing, some of which was built as Navy housing during World War II (Figure 2.18). There are plans to rebuild some of this housing to improve living conditions and reconnect it to the sounding neighborhoods (Figure 2.19). The redevelopment of the Hunters Point shipyards by Lennar Corp. could also have a large impact on the Bayview/Hunters Point with the potential for thousands of new residents, new recreational facilities, and the potential new 49ers stadium. With this comes community concerns about the new housing affordability and the aforementioned issue of gentrification.



Figure 2.18  
Federal Housing at Hunters Point  
Built for Shipyard Employees, 1943  
Photo Courtesy of San Francisco Public Library



Figure 2.19  
Hunters Point Shrimp Co. Building, 1957  
Located at Current 900 Innes Site  
Photo Courtesy of San Francisco Public Library

#### 2.4.4 - Community Needs and Demands (Existing and Projected)

From the Hunters Point Shoreline Community Workshop document (2007) there were several areas of consensus within the community with regards to land use proposals for India Basin. To begin, the general consensus is that the redevelopment efforts should create a mixed-use neighborhood; improve the hillside pathways, reduce conflicts between land uses (namely housing and industrial); and provide neighborhood-serving retail, such as coffee-houses, small shops (Figure 2.20), and fitness studios (p. 54). In addition, other outcomes of the redevelopment should include: an activated waterfront through open space and water-oriented facilities; a community center to serve the neighborhood (especially young people); and an overall increase in open space (p. 55) (Figure 2.21).

There were, however, numerous points of contention that emanated from this community workshop. The areas of uncertainty include the following: the location and type of commercial uses;



Figure 2.20  
Innes Avenue Looking South



Figure 2.21  
Hunters Point Boulevard Looking Northeast



what uses should be located on the old PG&E power plant site; the type and location of housing; the balance between housing and open space; the location of neighborhood serving retail; and the use of grassland/serpentine hillside. What is apparent from this is that over half of these problems relate to the issue of locating certain uses within the site. Much of the broad uses have already been agreed upon in community discussion, but it is now a case of fine-tuning the details of these proposals and attracting the appropriate investment. See attached map for visual details of community perceptions, culture, and local market.

## 2.5 - CONCLUSION

Though relatively isolated and neglected relative to the city as a whole, India Basin has a number of opportunities which, in the land constrained city of San Francisco, make carefully planned redevelopment likely to find success. There is an excellent opportunity to transform the formerly contentious and polluting PG&E site into something positive for the community and the city. In addition, there are a number of underutilized and empty parcels, an opportunity to connect the Bay Trail, increase open space, protect native habitat, and to make better connections to the adjacent communities. This potential can find a balance which can attract development while providing needed public benefits to the area (Figure 2.22).



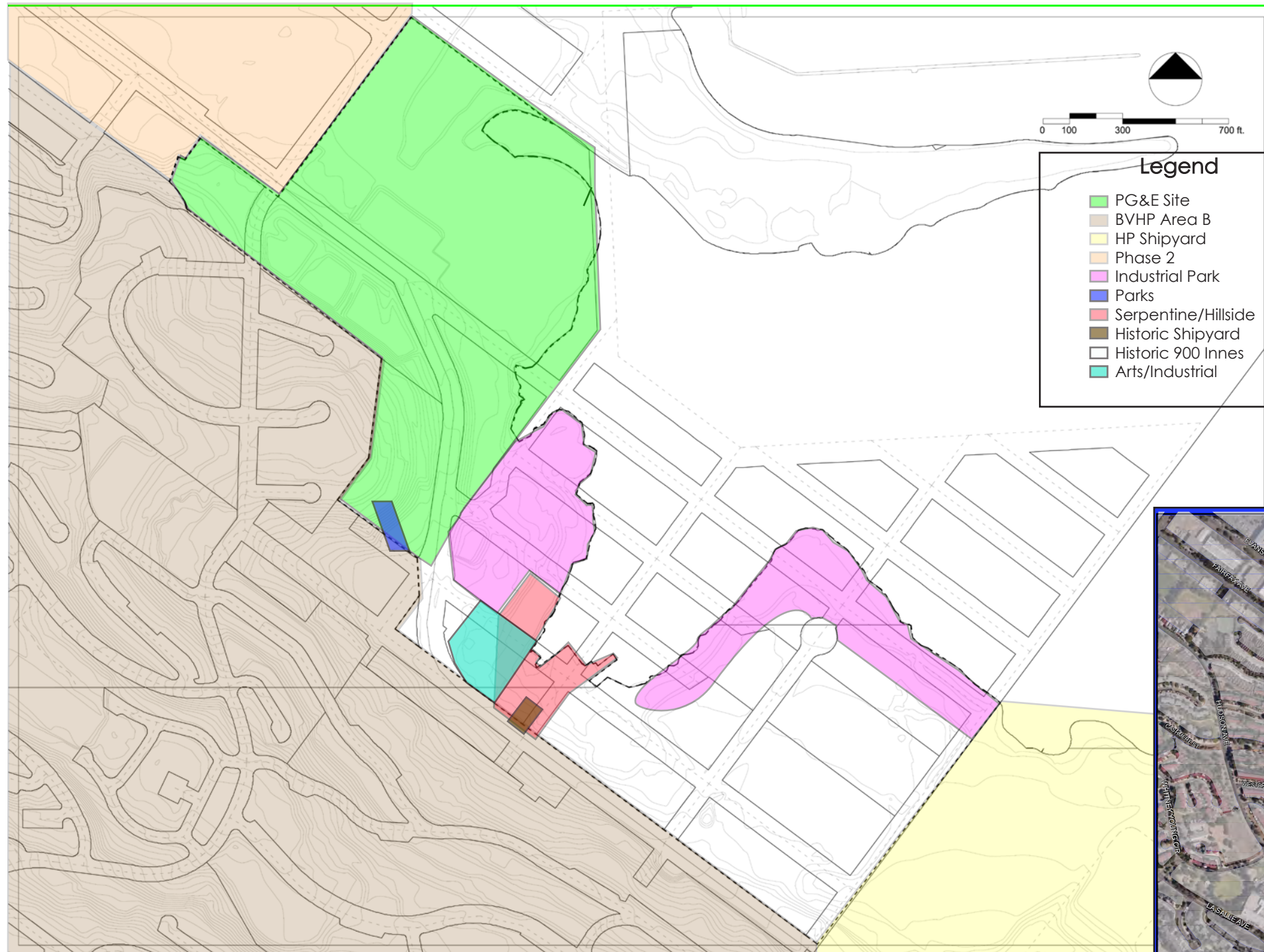
Figure 2.22  
Closed Business Located Along Innes Avenue



# India Basin Shoreline ♦ Community Perceptions, Culture, and Local Market

CRP 553 Project Planning Lab, California Polytechnic State University, San Luis Obispo

Team: MELIORA



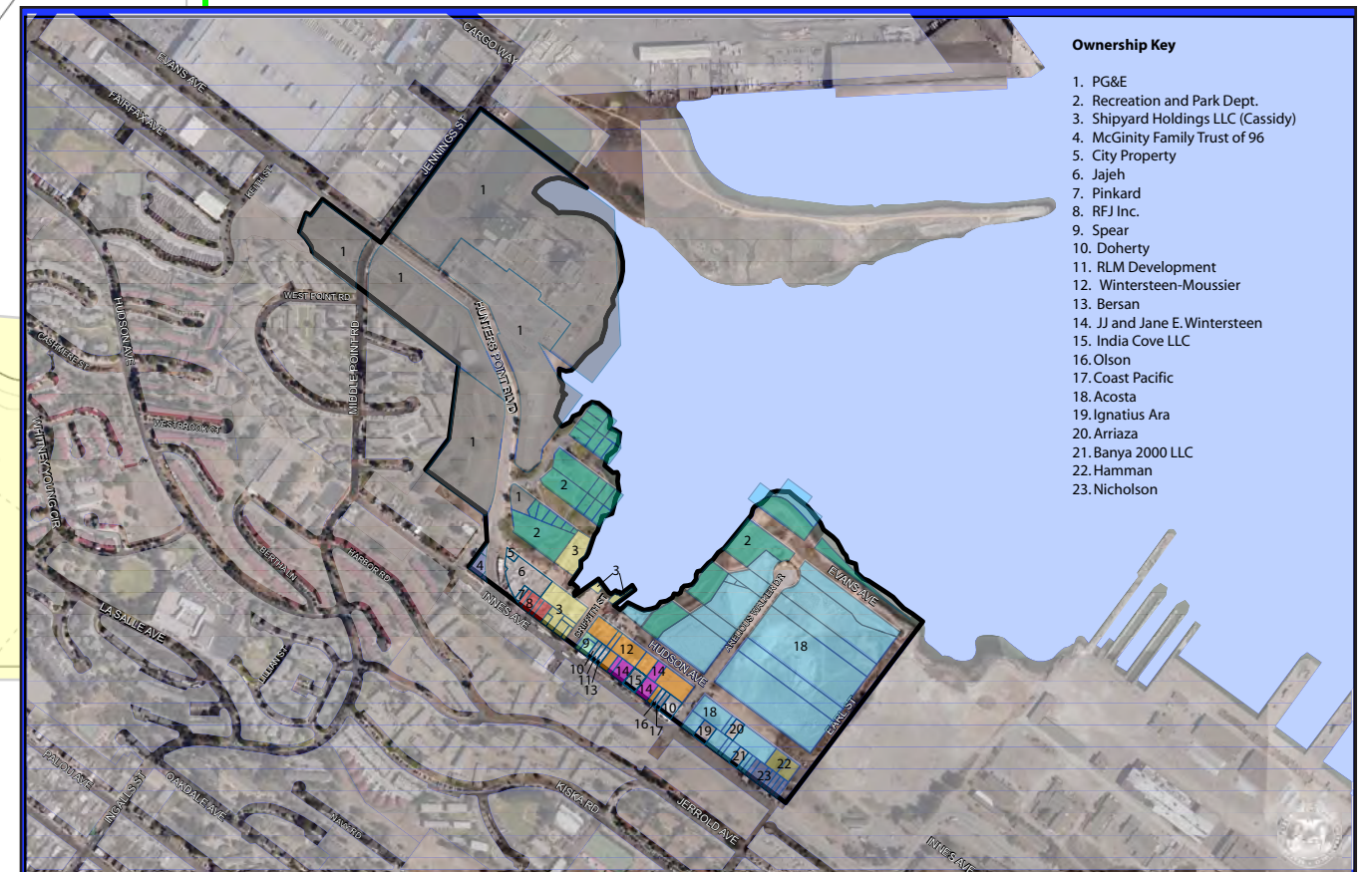
## COMMUNITY PERCEPTIONS, CULTURE AND LOCAL MARKET

### Opportunities

- Waterfront development - recreation
- Connection of the Bay Trail
- PG&E site
- Public facilities
- Mixed-use development
- New open space

### Constraints

- Land marking 900 Innes
- Serpentine hillside
- PG&E power transmission structure
- Multiple landowners



#### Ownership Key

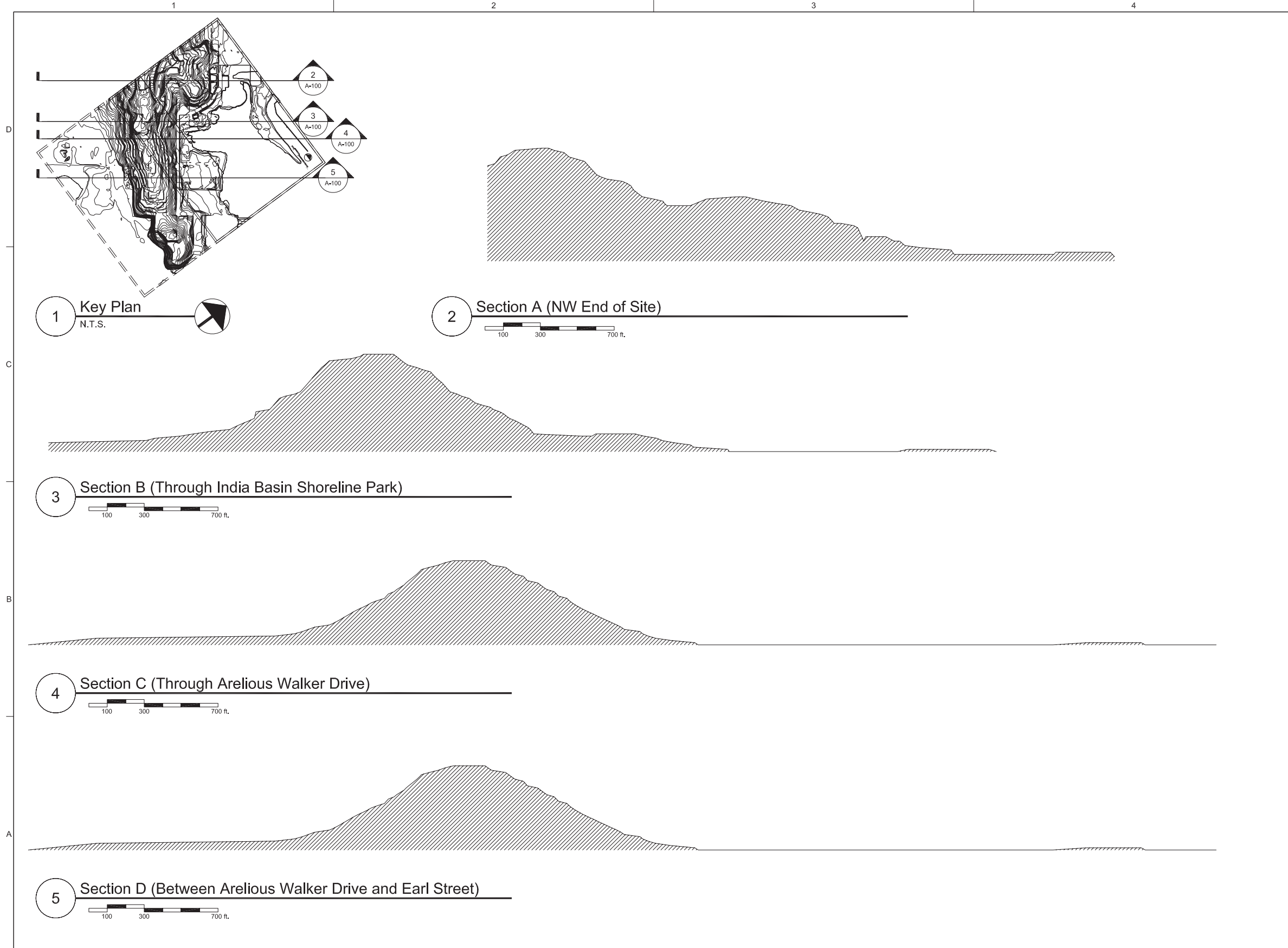
1. PG&E
2. Recreation and Park Dept.
3. Shipyard Holdings LLC (Cassidy)
4. McGinity Family Trust of 96
5. City Property
6. Jajeh
7. Pinkard
8. RFJ Inc.
9. Spear
10. Doherty
11. RLM Development
12. Wintersteen-Moussier
13. Bersan
14. JJ and Jane E. Wintersteen
15. India Cove LLC
16. Olson
17. Coast Pacific
18. Acosta
19. Ignatius Ara
20. Arriaza
21. Banya 2000 LLC
22. Hamman
23. Nicholson

INDIA BASIN SHORELINE / AREA C CONTEXT

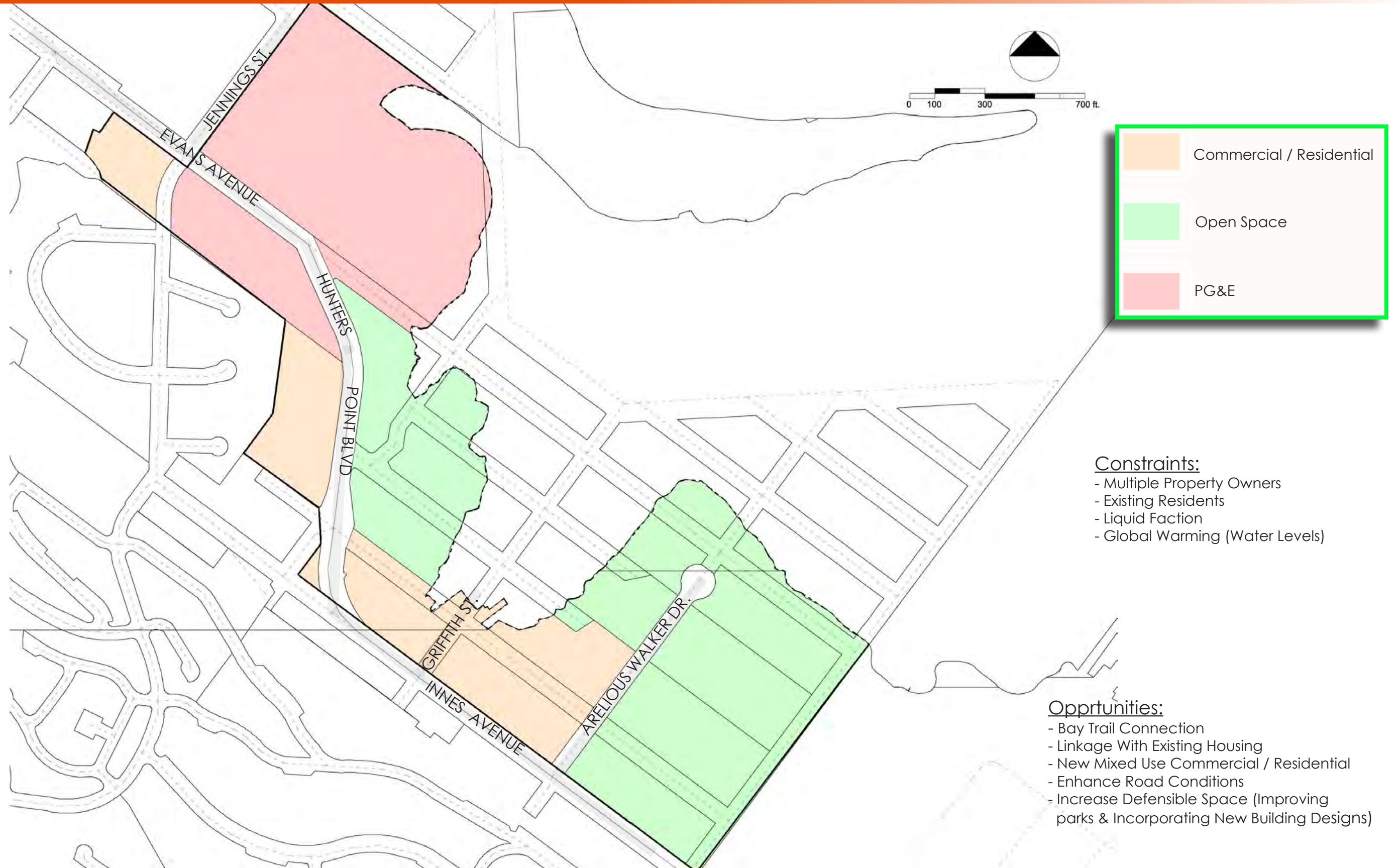
# India Basin Shoreline ♦ Cross-Sectional View

CRP 553 Project Planning Lab, California Polytechnic State University, San Luis Obispo

Team: MELIORA









# India Basin Shoreline ♦ Site Analysis, Natural Environment

CRP 553 Project Planning Lab, California Polytechnic State University, San Luis Obispo

Team: MELIORA

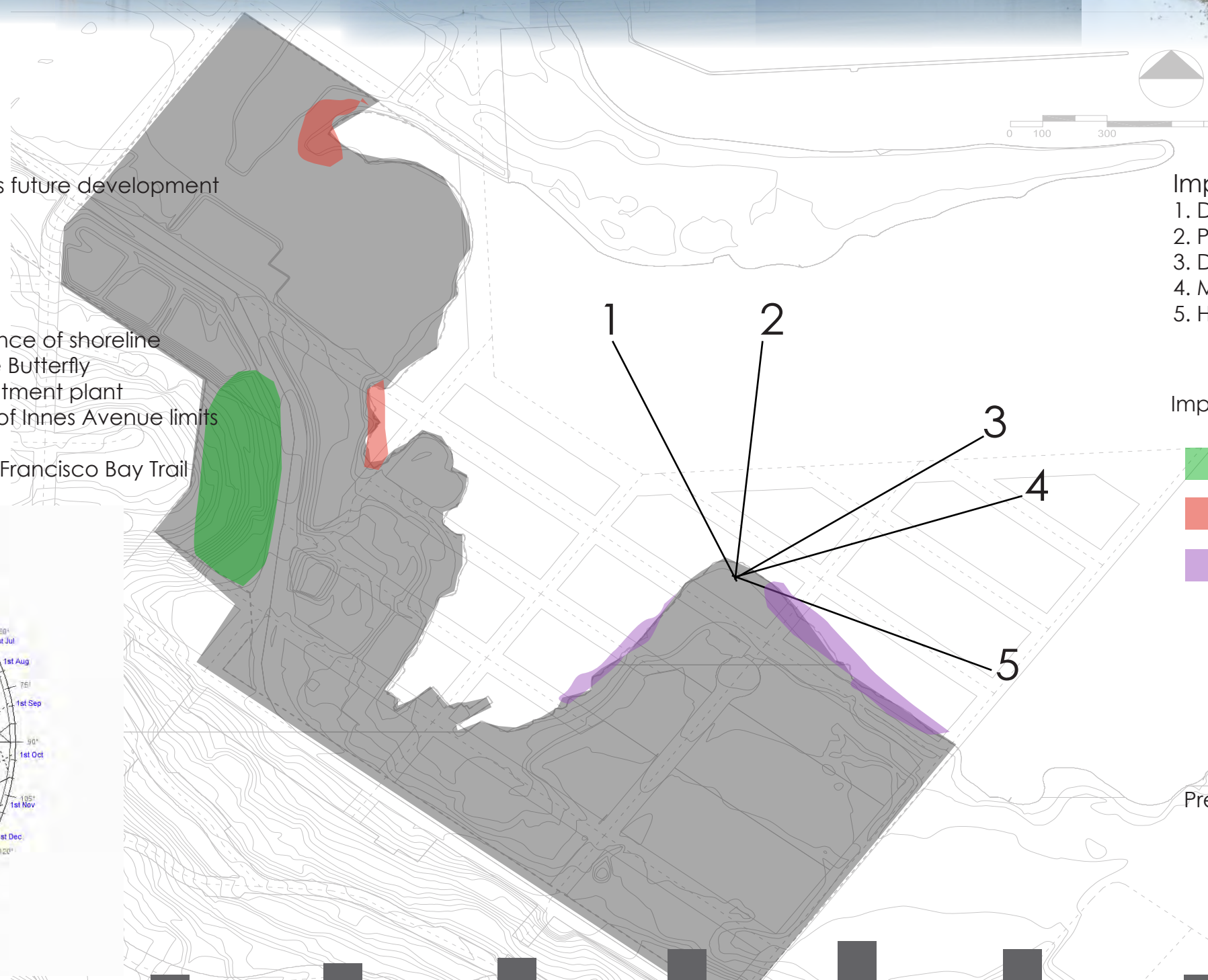


## Natural Environment Opportunities

- Views of San Francisco, bay and mountains
- Waterfront access
- Lower levels of fog throughout year
- Protected estuary at Heron's Head Park prevents future development blocking views
- Relatively level land in developable areas

## Natural Environment Constraints

- Tide restrictions prevents building within 25' distance of shoreline
- Protected natural habitat of the Mission Bay Blue Butterfly
- Prevailing winds can bring smells from sewer treatment plant
- Steep rise in topography along southwest edge of Innes Avenue limits connectivity
- Shoreline limits possibilities for connection of San Francisco Bay Trail



## Important Views

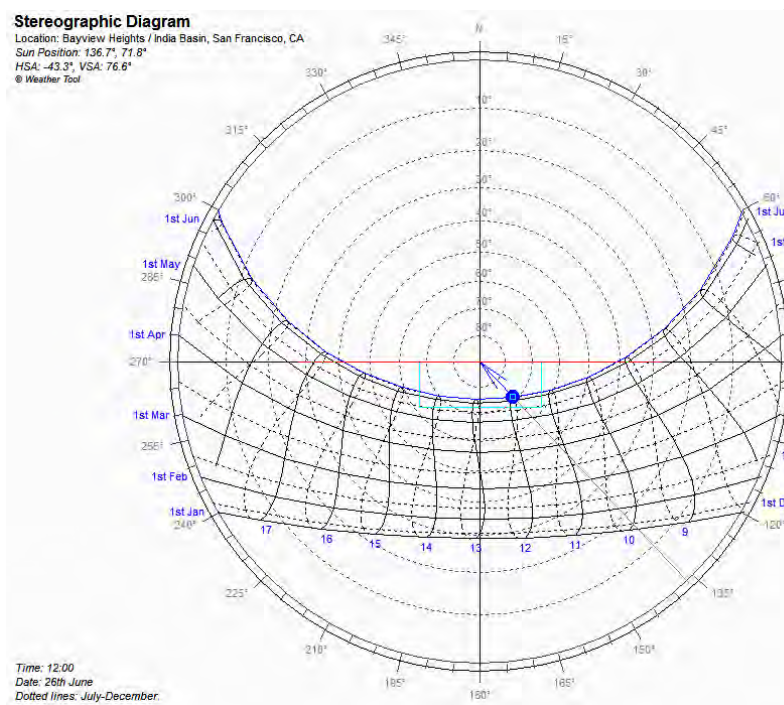
1. Downtown SF
2. Port/Transfer Site
3. Downtown Oakland
4. Mt. Diablo
5. Hunters Pt. Shipyard

## Important Natural Features

- Serpentine Hillside
- Wetlands
- Degraded Wetlands

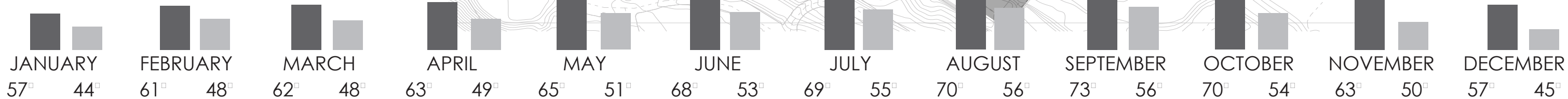
## Stereographic Diagram

Location: Bayview Heights / India Basin, San Francisco, CA  
 Sun Position: 136.7°, 71.8°  
 HSA: -43.3°, VSA: 76.6°  
 © Weather Tool



Time: 12:00  
 Date: 26th June  
 Dotted lines: July-December

Prevailing Winds NW to SE







# CHAPTER

## case study

### Mission Bay Redevelopment

# 3.



*"Mission Bay is the biggest shot in the arm this City has received in more than 30 years, and I'm proud to say that, together, we made it happen."*

*- Former Mayor of San Francisco  
Willie L. Brown*



## 3 - CASE STUDY

### MISSION BAY NORTH REDEVELOPMENT A CASE STUDY IN PLAN IMPLEMENTATION

#### 3.1 - ABSTRACT

This report evaluates the implementation of the Mission Bay North Redevelopment Project Plan on how well it met the planning and design objectives stated in the plan. It begins with an overview of the project history, context, and general objectives. It further analyzes the specific planning and design objectives and addresses how well they were implemented. Finally, this report discusses the city and regional impacts and implications, and ends with the lessons learned from this project.

#### 3.2 - INTRODUCTION

The Mission Bay North Redevelopment Project is a 65 acre neighborhood located on the central bay shore of San Francisco, California (Figure 3.1). The plan area, which includes filled in portions of the bay, lies between the San Francisco Bay and Interstate-280 and is show in Figure 1. The Board of Supervisors established the Mission Bay North and South Redevelopment Project Areas in November 1998. The plan was prepared by the Redevelopment Agency of the City and County of San Francisco. Development is controlled through the Redevelopment Plans and Designs for Development, Owner Participation Agreements between

the Redevelopment Agency and master developer / land owner Catellus Development Corporation, and Interagency Cooperation Agreements, which commit all City departments to the Mission Bay Infrastructure Plans.

The majority of the plan area originally served as a rail yard for the Santa Fe Pacific Railroad Company before it was transferred to Catellus Development Corporation



Figure 3.1  
Aerial photo of Mission Bay project area  
Photo Courtesy of San Francisco Redevelopment Agency



in 1990 (Figures 3.2 and 3.3). Catellus subsequently sold and sub-contracted several parcels to other developers. Developers broke ground on Mission Bay in October 2000.

According to the San Francisco Redevelopment Agency, Catellus will construct over \$200 million in public infrastructure in Mission Bay, to be financed through special assessments and increased property taxes generated by the development. Upon completion, the right-of-way and utility improvements will be accepted for operation and maintenance by the City. The Redevelopment Agency will operate the park system, funded by annual assessments against private property in the redevelopment areas.

In recent years, the plan area has evolved into a vibrant neighborhood that incorporates a variety of uses including office space, business services, retail, entertainment, utility, housing, and recreation and open space. It includes a new public branch library, childcare centers, a senior service complex, and other community facilities. Mission Bay North will be served by Muni's new 3rd Street Light Rail system as well as two bus lines and Caltrain. Mission Bay is expected to create over 31,000 new permanent jobs, in addition to hundreds of ongoing construction jobs. Development will take place over 20 to 30 years. Total development cost for Mission Bay is expected to exceed \$4 billion.

### 3.3 - OVERVIEW OF PROJECT OBJECTIVES

The Mission Bay North Redevelopment Project Plan contains planning and design objectives which serve to guide plan implementation for the redevelopment area (Figure 3.4). The objectives focus on land use, urban design, neighborhood environment, recreation and open space, commerce and industry, and transportation. Specifically, the plan aims to recognize the positive attributes of the city and bay, to enhance and conserve those attributes, and to improve the quality of the living environment based on human needs. The plan seeks to create a vibrant community with an expanding economic base by incorporating a variety of uses including office, business and community services, retail, entertainment, utility, housing, and recreation and open space. Buildings are to be developed on a safe and convenient pedestrian scale that relates to the adjacent buildings and



Figure 3.2  
Kentucky Street (now 3rd Street) grading work  
circa 1870  
Photo courtesy of Glenn Koch



Figure 3.3  
Mission Creek - From 4th and Channel Streets, 1926  
Photo courtesy of San Francisco History Center of  
San Francisco Public Library

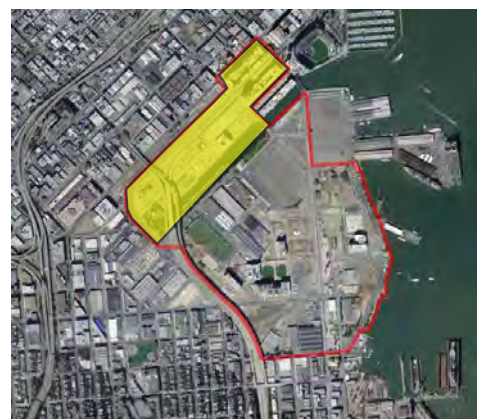


Figure 3.4  
Mission Bay North Redevelopment  
Project Boundaries

waterfront. Meanwhile, street systems should be consistent in function and design with the character and use of adjacent land and efficient traffic flow. The plan area should also accommodate the expansion of transit services to, from, through, and within Mission Bay North.

### 3.4 - PLANNING AND DESIGN ANALYSIS

The Mission Bay North Redevelopment Project Plan possesses detailed land use objectives (Section 104, p. 3) which are consistent to the overall redevelopment objectives (Section 103, p. 2) and the Central Waterfront Plan of the City of San Francisco General Plan. The planning objectives and policies are broken down into key categories including land use, urban design, neighborhood environment, commerce & industry which significantly impact real property development. Other key categories which impact land use such as transportation and open space are also addressed in the document.



Figure 3.5  
 Mission Bay Land Use Plan  
 Developed for Mission Bay Redevelopment Plan  
 Land Use Map Courtesy of San Francisco Redevelopment Agency

#### 3.4.1 - Land Use

The first objective of the plan is to take advantage of the vibrant urban community in Mission Bay North, which incorporates a variety of uses including office, business services, retail, entertainment, utility, housing, and recreation and open space (Section 103, p. 3) (Figure 3.5). Five subsequent policies are given under objective 1 in order to ensure that the objective is met. Policies focus on integrating land use compatibility when placing various services (policies 1-2) in addition to providing services which cater to locals and visitors (policies 3-4). Policy 5 places an emphasis on promoting building forms and uses which will provide visual interaction between building occupants and pedestrians.

The second objective is to assure that adequate community services and facilities are provided for Mission Bay North residents and working population (Section 103, p. 4). The two policies provided call for adequate community services, facilities, and infrastructure for the residents and working population of Mission Bay North. The policies provided in section 103 regarding land use are strengthened by the General Controls and Limitations (Sections 304.1 – 304.9, p. 13 – 15) section in the plan. Key restrictions limiting the maximum number of buildings to 200 (Section 304.3, p. 14) and the number of dwelling units to 3,000 (Section 304.4, p. 14) had played an integral role in the final real property development of Mission Bay North. According to the Mission Bay Redevelopment Summary provided by redevelopment staff, as of February 2008, eleven projects resulting in 2,175 units have been completed (p. 3) (Figure 3.6).

Overall the land use in Mission Bay North has become consistent with the objectives and policies set forth in the plan for the area. The General Controls and Limitations section is an important instrument provided in the plan to strengthen the stated policies. More time will be needed to assess whether the neighborhood will possess the vibrant community completed with local services envisioned in the land use objectives. Current construction on the final residential towers is most likely impeding pedestrian activity in the area. In the future, some ground levels suites utilized for selling new condominiums may be converted to provide other services for locals and the working population (Figure 3.7).

### 3.4.2 - Urban Design

The third objective for Mission Bay North is to emphasize the characteristic San Francisco development patterns (Figure 3.8), which give its neighborhoods an image and means of orientation (Section 103, p. 4). Seven subsequent policies are provided to achieve objective 3. Policies 1 – 4 primarily focus on retaining viewsheds by protecting views of the Bay, the Bay Bridge, and the I-280 freeway. Emphasis is also placed on providing “pedestrian scale and interest in ground floor treatments of buildings through the use of treatments such as clear glass fenestration, cornice treatments and detailed facades” (Section 103, p. 4). Policies 5 – 7 emphasize the quality of design via height variation (density levels)



Figure 3.6  
Mission Bay North Housing  
Waterfront Walkway With Open Plaza Area



Figure 3.7  
Mission Bay North Housing Development



Figure 3.8  
New Mission Bay Development With  
Existing Waterfront Homes in Foreground



and style variations. Policy 7 states “Avoid extreme contrasts in color, shape and other characteristics, which will cause new buildings to stand out in excess of their public importance” (Section 103, p. 4).



*Figure 3.9  
Mission Bay North  
Showing Street Level Retail and Mixed Use*

The fourth objective in the plan is to create a building form for the Mission Bay North area such that the scale of the development relates to the adjacent waterfront and buildings (Section 104, p. 5) (Figure 3.9). Two policies are given which are similar to the policies given for objective 3. Policy 1 states “Building heights should decrease as they approach the water’s edge” (Section 103, p. 5). Policy 2 recommends that building design should vary to reduce perceptions of bulk. Limitations on type, size, and height of buildings (Section 304.5, p. 14) have

been implemented to achieve urban design objectives. In addition to meeting building code requirements, the following section addresses retail space, floor area ratios, and building height.

According to the redevelopment plan, “Approximately 500,000 Leasable square feet of retail space should be allowed within the Plan Area. The floor area ratio for Mission Bay North Retail shall be a maximum of 1.1:1, averaged over the entire Mission Bay North Retail land use district, excluding Dwelling Units. Maximum building height within the Plan Area is 160 feet. In addition to the 500,000 Leasable square feet, a total of up to 5,000 Leasable square feet of Local-Serving retail uses may be constructed on Agency-sponsored affordable housing sites” (Section 304.5, p. 14).

The subsequent real property development present in Mission Bay North reflects the desired outcomes of the stated objectives. A visual survey of the development leads one to believe that the area has been constructed well in terms of design. No one building sticks out profoundly or confuses the pedestrian in terms of use or importance (Figure 3.10). Bulk hasn’t become a



*Figure 3.10  
Open Space Located in  
Mission Bay North*

serious impediment to the design objectives of the development. The majority of the completed developments possess walkways which reduce emphasis on bulk and enhance pedestrian circulation. The enhanced pedestrian circulation contributes to opportunities for an overall increase in pedestrian activity in Mission Bay North (Figure 3.11).

### 3.4.3 - Neighborhood Environment

The fifth objective is to develop new residential neighborhoods in consideration of the character and quality of traditional San Francisco neighborhoods (Section 104, p. 5). Nine policies are provided in order to achieve neighborhood environment goals. Policies are similar to those established for urban design in that their focus is gearing building design to encourage pedestrian activity on the street level. Policy 9 states "Design buildings in consideration of noise and traffic in the area. Such design can include measures such as placing residential units above a podium of parking or commercial uses, installing double-glazed windows and using sound attenuation construction methods and materials along the traffic-facing walls, placing sleeping quarters away from noise sources, and installing varieties of trees that tolerate traffic impacts" (Section 104, p. 5).

The resulting development within Mission Bay North seems to have remained consistent with the stated objectives. As mentioned earlier, current construction of residential towers (Figure 3.12)

may be inhibiting pedestrian activity at this time. Building design has resulted in a neighborhood environment that is perceived to be safe which is consistent with policies 7 and 8 (Section 104, p. 5). It is difficult to ascertain the effectiveness of noise mitigation within dwelling units without surveying current residents. The location of basketball courts under the I-280 freeway is an excellent use of space. The location possesses too much noise to be used as a



Figure 3.11  
Mission Bay North Walkway



Figure 3.12  
Construction Activity in  
Mission Bay North



place of tranquility and leaving the area vacant would most likely result in a threat to neighborhood security and harmony. The kayak storage unit is an excellent instrument to engender a sense of community among residents and visitors alike.



Figure 3.13  
Neighborhood Retail  
Located Adjacent to Mission Bay North

### 3.4.4 - Commerce and Industry

The seventh objective is to maintain, enhance, and diversify a sound and dynamic economic base for Mission Bay North and the City (Section 104, p. 6). The two policies provided emphasize a diverse economic base with businesses which are compatible with adjacent uses (Figure 3.13). Policy 2 states “Encourage complimentary support services to Mission Bay North such as office, business service and neighborhood-serving retail in order to add to the economic diversity of the area and the City” (Section 104, p. 6).

The eighth objective is to expand employment opportunities in Mission Bay North for San Francisco residents (Section 104, p.6). Two policies are given which call for job creation (Figure 3.14). Policy 1 calls for the creation of jobs for highly skilled professionals and Policy 2 calls for the creation and retention of jobs which require little or no specialized skills. These two policies are calling for a diverse workforce which would be consistent with the diverse economic base set forth by objective 7.



Figure 3.14  
University of California, San Francisco - Mission Bay Campus  
Photo Courtesy of UCSF Campus Planning



The Mission Bay North development for the most part has remained consistent with stated objectives and policies. The one difficult task ahead that may not be fully realized is a significant presence of high skilled jobs in Mission Bay North. The location of key skilled centers such as UCSF in Mission Bay South would suggest an agglomeration of high skilled positions in the south versus the north. Another important factor is that the proximity of Mission Bay North to AT&T Stadium and a variety of restaurants would suggest that the majority of jobs located within the development will require employees with minimal skill sets.

### 3.4.5 - Real Property Development

This section analyzes the impact that projected objectives, policies, and implementation have had on real property development in the Mission Bay North Redevelopment Project (Figure 3.15). Particular emphasis is placed on designated land use districts and the resulting effects on key issues including but not limited to: land uses, building types, house types, number of units, density, and leasable area. Specific attention has also been paid towards the low and moderate income housing element of the Mission Bay North Redevelopment Project.

### 3.4.6 - Land Use Districts

The Mission Bay North Redevelopment Project is divided into four categories to direct real property development in order to be consistent with the overall redevelopment objectives (Section 103, p. 2) and the Central Waterfront Plan of the City of San Francisco General Plan. Each district possesses suggested principal (favored) and secondary uses.

#### 3.4.6.a - Mission Bay North Residential

The Mission Bay North Residential land use district consists of



Figure 3.15  
Mission Bay Development Projects Map  
Map Courtesy of San Francisco Redevelopment Agency

residential uses, compatible local-serving retail, and other uses which can be in mixed use facilities. Principal uses permitted in the Mission Bay North Residential district include dwelling units, retail, restaurants, office uses, and home business services. Secondary uses include institutions (child care, social service, church, etc.), animal care services, and retail sales and services such as aerobic studios. The secondary uses are preferred to be located within the Mission Bay North Retail land use district if possible. The Mission Bay North Residential land use district has remained true to the original redevelopment plans. The district is comprised primarily of residential dwellings while possessing some ground level businesses geared towards providing services for locals.

#### 3.4.6.b - Mission Bay North Retail

The Mission Bay North Retail land use district consists of retail sales, destination retail, assembly, and entertainment (Figure 3.16). Residential uses can be mixed in with the aforementioned uses. Principal uses permitted include dwelling units, institutions (child care, social service, church, etc.), retail, and entertainment such as theaters or nighttime recreation

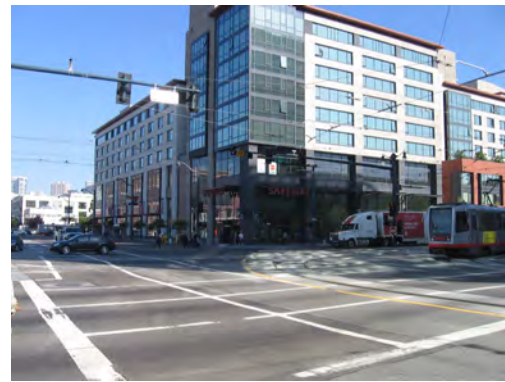


Figure 3.16  
Retail Services  
Located Adjacent to Mission Bay North

(night clubs). Secondary uses include live/work units, parking, or outdoor activity areas. The emphasis in this district is to provide services which will enhance pedestrian activity by drawing locals and visitors into the area to take advantage of shopping and entertainment venues.

The Mission Bay North Retail land use district has remained consistent with stated objectives and goals. Some of the businesses listed as principle uses such as an automobile wash or open recreation area are unlikely to come to fruition due to fiscal constraints. These uses are highly unlikely to generate sufficient revenues in order to occupy the valuable space within Mission Bay North.

#### 3.4.6.c - Mission Bay North Public Facility

The Mission Bay North Public Facility land use district consists of land other than housing sites or open space owned by a public or quasi-public agency designated for public or semi-public use. Uses include storage

lots, pump stations, and railroad facilities. The Mission Bay North Public Facility land use district is aimed to be much smaller than the two aforementioned land use districts. It was established primarily for the location of storage lots and other public service facilities.

#### 3.4.6.d - Mission Bay North Open Space

The Mission Bay North Open Space land use district consists of parks, plazas, and open space corridors within Mission Bay North. Only recreational and related uses are permitted. Mission Bay North contains an adequate amount of open space for locals and visitors to enjoy. Creative uses of space such as the basketball courts underneath the I-280 freeway have contributed to the amount of open space present in Mission Bay North.

#### 3.4.6.e - Open space

The open space requirements were divided into public and private sectors. The plan called for 6 acres of public open space (Figure 3.18), and 35 to 70 square feet of private open space per dwelling unit (p. 30). The public open space was divided into 5 planning units, which had three unique characteristics. Units NP1 and NP3 made up the canal frontage or Mission Creek Park-North Edge, NP2 was a small unit called Mission Creek Park-Fifth Street Square, and NP4 and NP5 comprised Pumphouse Park, the only open space with a recreational component.

#### 3.4.6.f - Mission Creek Park-North Edge

The North Edge open space area was designed as a passive recreational, pedestrian walkway along Mission Creek (Figure 3.19) and includes a bank treatment to protect the sites natural amenities (p. 44). The North Edge open space successfully provided a pedestrian link along the length of the North Mission Bay area. Benches and overlooks offer great views of the waterfront and were



Figure 3.18  
Mission Creek Park  
Located Adjacent in the Heart of Mission Bay North



Figure 3.19  
Watercraft Storage Facility  
Located Adjacent to Mission Bay North



placed as to not impede heavy pedestrian traffic. The space receives plentiful sunlight and was visible from many balconies and apartment windows, giving it a safe, defensible feel. The bank treatment, while difficult to evaluate as the landscaping is immature, did not appear too park-like and many species of birds were seen in the area. Railings and barriers noticeably prevented pedestrians from interacting with the water's edge.

#### 3.4.6.g - Fifth Street Square

The Fifth Street Square open space area, which was designed to be a passive recreational area with unique character, places an emphasis on seating and outdoor community uses such as restaurants and retail, and a pedestrian connection (p. 45). Retail and café activity in this open space was nonexistent. The space was designed to accommodate a lively streetscape but such activity has yet to develop. Landscaping in the park is modest and functional, a large part of the park serves as a landscaped, open storm drain, while the remaining landscaping contains a grassy hill, sidewalk benches, and sidewalk trees. No unique or characteristic sculpture has been erected in the park. The park does perform well as a major pedestrian connection from the North Edge corridor to Berry Street.



*Figure 3.20*  
*Pumphouse Park*  
*Located Adjacent to Mission Bay North*

#### 3.4.6.h - Pumphouse Park

The Pumphouse Park (Figure 3.20) was designed as an active recreation site with courts, toilets, and other facilities and the plans include a pedestrian bridge linking Mission Bay North and South (p. 46). Pumphouse Park was still under construction when we visited the site. The most striking feature of the park is that it is underneath busy freeway interchanges and very noisy. The high noise level of the park lends it well to active recreation uses. A basketball/soccer court had been built but was still behind

a construction fence. The pedestrian bridge was not completed but a small boat launch facility had been constructed and a kayak shelter

was under construction. The park may have some safety concerns as much of space is not visible from nearby apartments and has limited access points.

#### 3.4.6.i - Private Open Space

Private Open Space consisted of individual units (balconies, terraces) as well as shared spaces such as atriums and rooftop courtyards (Figure 3.21). The spaces were planned to be very private from the street and to utilize views, as well as provide security to the streetscape. From the street level, many small balconies and terraces were visible, but the space seemed very private. Podium level courtyards existed in most of the large buildings, yet were very private from the street level. Looking at aerial photos of the area, rooftop courtyards seem to be non-existent and could have been a valuable asset.

#### 3.4.6.j - Pedestrian Scale/Experience

The Pedestrian Scale was planned for by designing at the ground level (Figure 3.22). This was achieved through the character of the building base, and particularly through the use of design features. (p. 58) Furthermore, the plan calls for continuous streetwalls, with openings only of entrances into buildings, courtyards or mid-block lanes. Therefore, the sidewalk were planned to enhance the pedestrian experience by being visually interesting, active and comfortable (p. 54).

From the ground level, there were many features that enhanced the pedestrian experience (Figure 3.23). Most notably was the landscaping, streets furniture, and bay windows. The towers and orientation of living spaces also enhanced the pedestrian experience. Stepbacks above the tower base gave the towers presence at the ground level, and allowed pedestrians to feel secure because of the overlooking of public spaces. The street level was lacking in some areas. Most notably was the lack of rusticated materials, porches, and stoops which were called for in the original plan. Overall, the pedestrian scale was good, and enhanced the pedestrian experience, giving opportunities to meet neighbors, be active and feel comfortable.



Figure 3.21  
Mission Bay Housing With  
Private Open Space Courtyard



Figure 3.22  
Mission Bay North Walkway  
Waterfront Walkway with Open Plaza Space



Figure 3.23  
Mission Bay North Housing  
Open Walkway Between Buildings



*Figure 3.24  
Mission Bay North Housing  
Multiple Housing Types Including Affordable Housing*

### 3.4.7 - Low and Moderate Income Housing

This section looks at the low and moderate income housing objectives of the Mission Bay North Redevelopment Project Plan (Figure 3.24). The plan places a great level of importance on providing low and moderate income housing (Sections 410.1 – 410.3, p. 25 – 27). The affordable housing section places emphasis on replacement housing, affordable housing

production (required percentages of housing stock), and methods to be utilized by the redevelopment agency to increase and improve the affordable housing supply. Requirements such as ensuring that at least 15 % of all new dwelling units being built are affordable are consistent with Community Redevelopment Law (Section 410.2, p. 25).

The real property development present in Mission Bay North has been quite successful (Figure 3.25). According the Mission Bay Redevelopment Summary provided by redevelopment staff, 28% of residential units in the development are affordable. Possessing nearly 1/3 of residential units as affordable is a great accomplishment. Through design and land use objectives and/or policies, Mission Bay North does an excellent job of intertwining low and moderate income residential units with market rate units. When strolling through the Mission Bay North development, one would have a difficult time separating affordable units from market rate units. Successful intermingling of affordable housing with market rate units will most likely enhance opportunities to achieve the objectives set forth in the Neighborhood Environment (Section 104, p.5) section of the Mission Bay North Redevelopment Plan.



*Figure 3.25  
Artistic Rendering of Proposed Building  
Mission Bay Development  
Image Courtest of [www.skyscraperpage.com](http://www.skyscraperpage.com)*



### 3.4.8 - Circulation and Transportation

#### 3.4.8.a - Fourth Street

Fourth Street is one of the main transportation focal points of Mission Bay North (Figure 3.26). The street provides access to the terminal station of the regional Caltrain commuter rail, the T-Third Muni Metro line, and a number of cross-town Muni bus lines all of which converge near to the Caltrain Depot. Fourth Street is a south only one-way street through SOMA to Townsend Street and is also the primary path for vehicular traffic traveling south into Mission Bay before converging with Third Street in Mission Bay South.

The design guidelines make policy statements concerning “fostering a pedestrian environment, and working to avoid conflicts between different modes of transportation”(D4D, p. 96). However, at the intersection of Fourth and King (Figure 3.27), multiple conflicts were observed between transit, pedestrians, and automobiles where the confluence of the three creates a bottleneck. The T-Third line must exit the exiting right-of-way on King Street, cross in front of traffic and travel south down Fourth Street to eventually meet up with Third Street in Mission Bay South. The N-Judah exits the same right-of-way to its eventual terminus. Pedestrians must travel across King and Fourth Streets to make transit connections (Figure 3.28), and there is a high volume of automobiles exiting Interstate 280. This inherent conflict will be mitigated to some extent with the future Central Subway alignment. In February 2008, the MTA selected alternative 3B for the alignment of a future central subway which will travel along Fourth Street with more direct access to downtown. <http://www.sfmta.com/cms/mcentral/centralover.htm>. There should also be consideration for moving the station platform to the north side of King on Fourth to minimize the dangerous cross street transfer situation for pedestrians. Lastly, consideration to signal priority for the multi-occupancy lightrail vehicles might enhance the “Transit First” nature of King Street

The Design for Development document prescribes that the street “should be designed as a bicycle and pedestrian connection through the area to Mission Bay South linking to UCSF” (p.87). The pedestrian connection between Mission Bay North and South is not fully developed yet as there are still large gaps of undeveloped land in Mission Bay South and extensive ongoing construction. The



Figure 3.26  
Intersection of 4th and King Streets



Figure 3.27  
Traffic Flow Along King Street  
Crossing 4th Street



Figure 3.28  
Pedestrian Traffic Along 4th Street

existing bike routes proceed down Fifth Street to Townsend and down Second Street to King Street. The current configuration does not connect to Fourth Street or Mission Bay South but planned future lanes will make this connection with new lanes on Fourth and Berry Streets. [http://www.sfmta.com/cms/bproj/Bicycle\\_Plan\\_Projects\\_000.htm](http://www.sfmta.com/cms/bproj/Bicycle_Plan_Projects_000.htm)



Figure 3.29  
Intersection of 3rd and King Streets

#### 3.4.8.b - Third Street Arterial

Third Street is the main vehicular access point for vehicles traveling north (Figure 3.29) and also, as described in the Design for Development document, the main “arterial connecting to the South of Market and Mission Bay South and Bayview Districts” (p. 36). This is also a transit rich street with accessibility to multiple cross-town bus routes consistent with the “Transit First” policy goal. In SOMA and in Mission Bay to King Street, Third Street is a one-way north.

The Design for Development document describes lightrail on Third Street in anticipation of the future Central Subway project which would provide direct access to downtown. In February 2008, the SFMTA selected alternative 3B for the alignment of a future Central Subway which will instead travel along Fourth Street in Mission Bay North and SOMA. <http://www.sfmta.com/cms/mcentral/centralover.htm>

#### 3.4.8.c - King Street Arterial

King Street (Figure 3.30) is a high volume arterial street which must accommodate vehicular flow exiting Interstate 280 into San Francisco and is also one of the main transportation focal points of Mission Bay North. The Design for Development Document describes King Street as a “mixed-



Figure 3.30  
King Street

use, transit and vehicular street” ( p. 88) and as “the major existing arterial connecting to The Embarcadero” ( p. 36) Both the N-Judah and T-Third Muni Metro lightrail lines travel in a right-of-way on King Street with a grade separated Muni Metro platform at Second and King Streets. This speeds up service and minimizes conflicts east of Fourth Street

The aforementioned conflicts at the intersection of Fourth and King Street were observed between the two light rail lines, pedestrians and automobiles (Figures 3.31 and 3.32). A bottleneck caused by the confluence of the T-Third line exiting and entering the right-of-way from Fourth Street, the N-Judah exiting the right-of-way along King Street to its terminus, and pedestrians traveling across King Street and 4 Street, and the high volume of automobiles exiting Interstate 280 create congestion. The conflicts with the Muni Metro T-Line will be mitigated to some extent by the aforementioned Central Subway. There should also be consideration for moving the station platform to the north side of King on Fourth Streets to minimize the dangerous cross street transfer situation for pedestrians. Lastly, consideration to signal priority for the multi-occupancy light rail vehicles might enhance the “Transit First” nature of King Street.



Figures 3.31 and 3.32  
Automobile, MUNI, Bart, Pedestrian, and Bicycle Traffic all Converge on King Street

#### 3.4.8.d - Neighborhood Streets

The Design for Development document states that smaller neighborhood streets “should be designed to minimize the impacts of vehicular traffic and maximize pedestrian and neighborhood amenities” (p. 88) (Figure 3.33) . Access to residential parking and multiple curb-cuts predominate on Berry Street This street does not exhibit a strong pedestrian character although there are some businesses which do create some pedestrian activity. Vehicular traffic on Berry Street is generally light. 5th Street in the North Mission Bay boundaries provides another access point to King Street for traffic traveling from Berry, but no access from King Street Townsend Street in the North Mission Bay boundaries project area is a moderately trafficked street by both autos and Muni Buses and provides east/west access to the South Beach and Potrero Hill/Showplace Square neighborhoods from Mission Bay North.



Figure 3.33  
Mission Bay Transportation Map  
Courtesy of SFMTA



### 3.4.9 - Parking

According to the Design for Development guidelines for Mission Bay North, parking calculations for the area were to be based on the total aggregate anticipated square footage per structure rather than be applied to any single tenant. In terms of the provision of parking for residents, the guidelines stipulate that there should be a maximum of one parking space per housing unit. Thus it is clear that from this very limited provision of parking spaces, residents of the area will be very self-contained to this vicinity and be dependent on the transit system which exists here in order to access the broader city area.

The General Parking Guidelines of the document are divided into two sections – ‘Street Frontage’ and ‘Architectural Design’. Under Street Frontage, the first guideline under this section stipulates that parking for residential and retail uses may be buffered at grade by street-oriented uses. Second, that openings to parking areas (other than garage doors) should be limited to those required in the San Francisco Building Code for ventilation. Also, these openings should be well above or below eye level and should use disguise the parking with visually pleasing screens (as should residential garages). This guideline is mostly successful though the numbers of parking access points that are clearly visible on Berry Street. Further this street had the feeling of being predominately an access street primary and only secondarily a pedestrian street. There are also a large access points for parking ingress and egress of at the Beacon/Safeway (Block N1) that does degrade the pedestrian environment on the Townsend Street side. Third, curb cuts should be spaced and arranged to maximize on-street parking and minimize sidewalk interruptions. Fourth, access to parking for commercial and residential uses is discouraged on King, Third, and Fourth Streets. Parking access was observed to be minimized on King, 3rd, and 4th Streets to avoid breaking up the continuity of the retail frontages. Fifth, in terms of pedestrian access to parking lots and structures, the guidelines encourage use of public sidewalks to do this, which should be safe (with good lighting) and well landscaped to enhance the experience of this public space. Finally, entrances to parking structures should be conveniently located and accessible by stairs and elevators, as well as being well lit and having a clear sightline.

The first guideline for Architectural Design is that parking structures should include retail or other active uses on the ground floor, where feasible. The second set of guidelines are concerned with the architectural style

of parking garages in the area – which should be compatible in color and materials with adjacent buildings and the development pattern in Mission Bay, and should also avoid large sections of solid wall. Instead, changes of plane, texture and pattern (as well as voids and landscaping) are encouraged to make these structures more aesthetically pleasing.

### 3.5 - LEED-ND EVALUATION

The Mission Bay North and South Redevelopment projects each have separate redevelopment plans as well as design for development criteria outlining recent and future development of the Mission Bay area. For the purposes of this case study, the North Redevelopment Plan will be the central focus in evaluating how LEED-ND criteria have been observed and implemented through that development process. The specific focus will be on the Smart Location and Linkage, credits 4 through 9, and Neighborhood Pattern and Design, credits 1 through 16, elements of the LEED-ND Pilot Version. Each credits have been independently evaluated against the Redevelopment Plan, Design for Development Plan and field observation conducted through a site visit on April, 10, 2008.

Based on the available information and evaluation of LEED credits listed above, the general conclusion is that the Mission Bay Redevelopment Project has done an excellent job in matching end product with required criteria. Careful thought has clearly been given to each of the LEED credits while developing and implementing design strategies for the project area. Further investigation into each building itself would confirm if LEED points were indeed sought after and which precise credits were met. One of the criticisms of LEED criteria has been that the credit points are too generalized and cannot pertain to each individual project as they arise. Evidence from the Mission Bay project area supports this criticism with examples such as the land being infill to begin with and transportation elements that are required within a property footprint rather than directly across the street. Despite these criticisms, the Mission Bay Redevelopment project has set an excellent example of responsible urban infill development that answers a growing call to support green building practices. See accompanying LEED-ND checklist for details of Mission Bay Development.

Credit No.	Description	Perceived LEED-ND Credit Achievement				
		Excellent	Very Good	Good	Fair	N/A
<b>SMART LOCATION AND LINKAGE</b>						
SLL Credit 4	Reduced Automobile Dependence	●				
SLL Credit 5	Bicycle Network	●				
SLL Credit 6	Housing and Jobs Proximity	●				
SLL Credit 7	School Proximity			●		
SLL Credit 8	Steel Slope Protection		●	●		
SLL Credit 9	Site Design for Habitat or Wetland Conservation	●				
<b>NEIGHBORHOOD PATTERN AND DESIGN</b>						
NPD Credit 1	Compact Development	●				
NPD Credit 2	Diversity of Use		●			
NPD Credit 3	Diversity of Housing Types	●				
NPD Credit 4	Affordable Rental Housing	●				
NPD Credit 5	Affordable For-Sale Housing	●				
NPD Credit 6	Reduced Parking Footprint	●				
NPD Credit 7	Walkable Streets	●				
NPD Credit 8	Street Network	●				
NPD Credit 9	Transit Facilities	●				
NPD Credit 10	Transportation Demand Management	●				
NPD Credit 11	Access to Surrounding Vicinity	●				
NPD Credit 12	Access to Public Space	●				
NPD Credit 13	Access to Active Spaces		●			
NPD Credit 14	Universal Accessibility		●			
NPD Credit 15	Community Outreach and Involvement	●				
NPD Credit 16	Local Food Production					●

### 3.6 - CASE STUDY CONCLUSION – CITY AND REGIONAL IMPACTS AND IMPLICATIONS

The North Mission Bay Redevelopment project is uniquely located between the growing job centers of SOMA, Mission Bay South and Interstate Highway 280. It has excellent access to both regional and local transportation and adjacent amenities such as the Embarcadero and AT&T Park. The project has developed a formerly underutilized section of San Francisco into a strong example of a walkable neighborhood, designed to minimize automobile usage, and centered around transit options. The Beacon development (block N1) anchors the Mission Bay North development and includes: 595 condos, 45,000 sq. ft. of neighborhood office space, 83,000 sq. ft. of retail space including Safeway and Borders Books, all adjacent to the Caltrain Depot. The project may act as an exemplary



example for the future redevelopment of other brownfield sites, decommissioned military bases and other underutilized areas in the inner Bay Area. Furthermore, with the strong walkability of this site, there is much potential for it to attract highly profitable commercial and private investment – depending on the success of the initial development and the level of marketing of the area by the City.

The redevelopment has accrued a number of community benefits for San Francisco including a new public branch library, childcare center, a senior service complex, and parks along Mission Creek. In addition, more than 500 affordable housing units have been created from fees and inclusionary affordable requirements, including 139 rental units for very low income seniors and 100 rental units for very low-income families. Additionally, more than 2000 market rate units have been created in a city where housing at all levels is greatly needed. The North Mission Bay Redevelopment project is a great example of revitalization and utilization of valuable land space. This redevelopment project serves as a model for other projects to follow and acts as a foundation to the evolving needs of San Francisco.

# CHAPTER

## programming & conceptual diagramming

# 4.



*"It is necessary to identify with and understand the clients' or users' situations, feelings, and motives."*

- Grant W. Reid, ASLA





## 4. PROGRAMMING & CONCEPTUAL DIAGRAMMING

### 4.1 INTRODUCTION

A conceptual diagram has been created for the India Basin Shoreline area for the purposes of this proposed concept plan. This concept diagram serves as the foundation of a proposed revival to the area and surrounding neighborhoods by offering a vision and development objectives. Planning concepts for the future of the India Basin Shoreline area are reflected in this diagram and act as a guide to future development of the neighborhood.



Figure 4.1  
*Overlooking India Basin Shoreline*

in addition to the immediate neighborhood. Housing is one of the primary components of this vision with a mix of both medium and high density developments. The existing PG&E site, which has been a point of high controversy for so many years, will be redeveloped to serve the needs of its neighbors with employment and services. Open space will be preserved and expanded with the continuation of the San Francisco Bay Trail along the shoreline. Innes Avenue will act as a community enhancement with mixed uses of services, retail and restaurants. This vision of India Basin Shoreline fits into a pursuit of betterness for the area to achieve its full potential.

Development will foster a cohesive sense of community throughout this area that is currently known for its separation (Figure 4.2). New developments in all sections of the area will encourage investment by private businesses.

### 4.2 VISION & DEVELOPMENT OBJECTIVES

Meliora is a Latin phrase that translates to “the pursuit of betterness.” The India Basin Shoreline (Figure 4.1) is an underdeveloped and underutilized section of San Francisco that has tremendous potential. The vision offered in this proposed concept plan is only one of several opportunities that this area can be transformed with. The baseline for this vision is a vibrant mixed use district that meets the needs of the city in



Figure 4.2  
*Potential Mixed Use Building to be Located Along Innes Avenue*

This development will in turn create new opportunities for the community to continue growth at a new pace. The objective for this development is to maximize the area's potential without displacing any of the current residents or businesses. This proposed concept plan offers a vision of development that will allow for current residents and businesses to become actively engaged in the recreation of their neighborhood.

### 4.3 DESIGN AND PLANNING CONCEPTS

The primary concept behind this proposal is to take advantage of the existing conditions and to promote a sense of community throughout the area. The design concept follows this model by utilizing an organic placement of new structures and minimizes any destruction or reorganization of existing features. Opportunities that the site has to offer are maximized while constraints or impacts are taken into account. This design concept allows for a stronger community plan that aims at reconnecting the entire Hunters Point neighborhood. With continued involvement and support from the surrounding community, the India Basin Shoreline will evolve with the needs its residents and neighbors. Figures 4.3, 4.4, and 4.5 have been included to show potential building types that could be incorporated into the final development for India Basin.

#### 4.3.1 P.A.R.K.

In order to develop a comprehensive programming plan for India Basin, Meliora performed a collaborative brainstorming exercise for the area/ This exercise was based off of four principles summarized by the acronym P.A.R.K. These principles outline elements of the neighborhood that are to be preserved (P), added (A), removed (R), and kept out (K) with the new conceptual plan. The diagram on the following page shows some of the key ideas behind this exercise and what Meliora has tried to achieve with the creation of a concept diagram.

Meliora's concept diagram showing proposed programming for the India Basin Shoreline area has been attached for review.



Figure 4.3  
Potential Building Type for R&D Development  
to be Located at Existing PG&E Site



Figure 4.4  
Potential Building Type for  
Neighborhood Commercial Buildings  
to be Located at Existing PG&E Site



Figure 4.5  
Potential Building Type for Mixed Use Buildings  
to be Located Along Innes Street

	<b>What...</b>	<b>Why/How?</b>
<p><b>P</b></p> <p><i>PRESERVE</i></p> <p>What the area has now that is positive</p>	900 Innes landmark building	Preserve connection to past history
	Natural habitat of Mission Bay Blue Butterfly	Preserve natural habitats
	Shoreline trail access	Extend Bay Trail
	Views	Increase property value

<p><b>A</b></p> <p><i>ADD</i></p> <p>What the area does not have that is positive</p>	Bay Trail connections	Increase connectivity by continuig trail
	Community Rec center	Opportunities for community services
	Transportation options	Increases mobility and decreases traffic congestion

<p><b>R</b></p> <p><i>REMOVE</i></p> <p>What the area has now that is negative</p>	Debilitated structures	Eye sores, unsafe
	Emphasis on manufacturing uses	More room for open space and neighborhood commercial
	Heavy industrial uses	Does not promote residential uses that are desired

<p><b>K</b></p> <p><i>KEEP OUT</i></p> <p>What the area does not have that is negative</p>	Gang activity	Dangerous and degrading to neighborhood
	Congested traffic	Direct traffic flow and provide reasonable parking
	High end condominium developments	Drives out existing residents



# India Basin Shoreline ♦ Conceptual Diagram

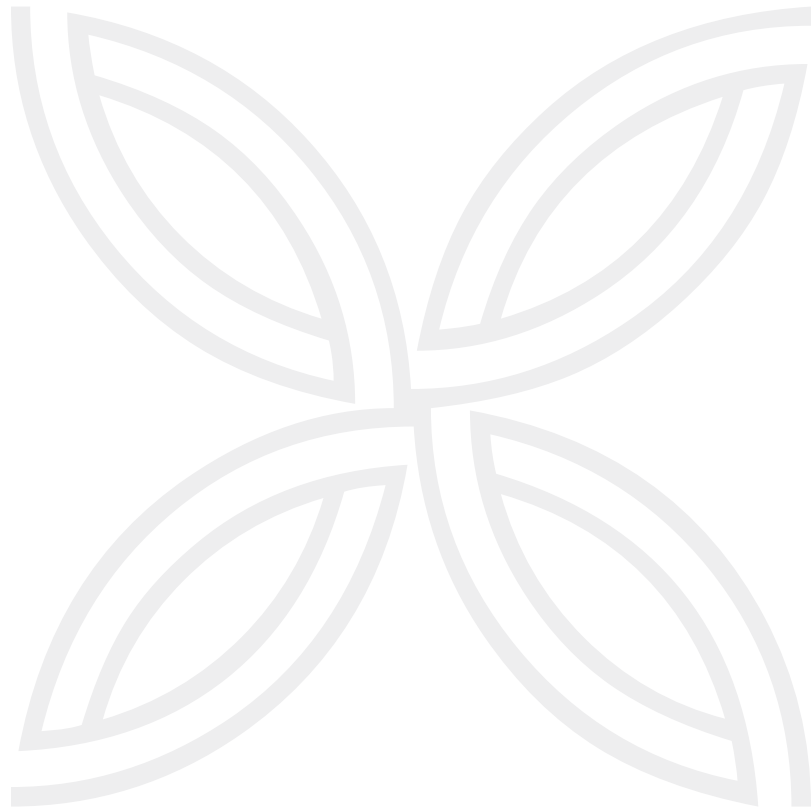
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Team: MELIORA

- Green R&D Park
  - Green Retail Center
  - Vocational Training
  - Bio-Diesel Facility
- Lagoon
- High Density Residential Towers
- Mid/High Density Residential
- Light Industry
- Neighborhood Retail
- Mixed Use Commercial/Residential
- Open Space
- Community Center
- Public Facility
- ▲ Historical Landmark
- ||||| Vehicle Circulation
- Pedestrian Promenade
- - - Trails/Pedestrian Access
- ↪ Viewsheds







# CHAPTER

## project proposal

# 5.



*"Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will not die. "*

*- Daniel Burnham*





## 5. PROJECT PROPOSAL

### 5.1 LAND USE / HOUSING AND ECONOMIC DEVELOPMENT

#### 5.1.1 Land Use

Current land use of the India Basin Shoreline area is divided between four types of zones: Neighborhood Commercial (NC-2), Manufacturing (M-1), Manufacturing (M-2), and Public (P). This proposed concept plan will retain the neighborhood commercial and public area of the current zoning while transforming the area to include multi use and residential zones as well. Light industrial uses will remain in the area at the intersection where Innes Avenue merges with Hunters Point Boulevard. Other manufacturing uses will move south, out of the India Basin Shoreline area to the Hunters Point Shipyard redevelopment or to the existing Candlestick Park area when the stadium is relocated. A land use summary table has been included for review.

#### 5.1.2 Housing

Housing is one of the key components of this proposal with the introduction of both high and moderate density units into the area (Figure 5.1). High density housing is proposed in the form of high-rise buildings located on the southwest side of Hunters Point Boulevard, across from the current PG&E site. This location is ideal for high-rise buildings because the surrounding topography will ensure that views are not blocked. Moderate density housing will be located along the shoreline at the India Flats infill area. Access from Innes Avenue and the Hunters Point Shipyard redevelopment make this location ideal for approximately 400 units of housing. This proposed concept plan offers an organic placement of the moderate density housing that tie in with public spaces and views from surrounding areas.



Figure 5.1  
Potential Housing Types for Medium/High Density  
Residential Development at India Flats

#### 5.1.3 Economic Development

Economic development is vital to the prosperity of the India Basin Shoreline area. This proposed concept plan offers revitalization to Innes Avenue and the PG&E site, which will serve as the economic support for the area. Innes Avenue will serve as the primary location for commercial,

retail, mixed use, and restaurant uses. The existing PG&E site will be transformed into a multi use research and development complex, which will provide jobs for local residents and potential services. The combination of these two areas will provide a tremendous boost to the neighborhood and will act as an economic stimulus for the India Basin Shoreline area.

## 5.2 TRANSPORTATION / CIRCULATION / STREET FRAMEWORK AND STREET SECTIONS

### 5.2.1 Transportation

Public transportation through the India Basin Shoreline area is currently limited to a single bus line (Figure 5.2). As the area expands, additional bus lines will be required to accommodate the growth of the community. Future development of the Hunters Point Shipyard to the south along with residential development of the India Basin Shoreline will introduce additional demands for public transportation in the area. Bus lines are the most reasonable form of public transportation with their flexibility and minimal requirements for additional roads. This proposed concept plan does not assume that either Bart or Muni lines will be introduced to this area of the city.

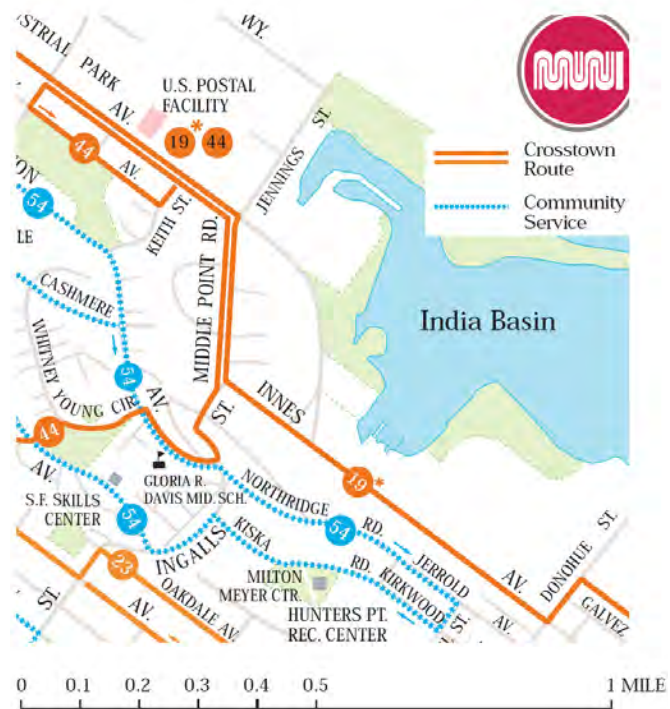


Figure 5.2 Existing Transportation Routes Through India Basin Neighborhood Map Courtesy of SFMTA

### 5.2.2 Circulation

Circulation throughout the India Basin Shoreline area and its surrounding neighborhoods is central to the community development that this plan envisions (Figure 5.3). The existing system of sidewalks and the Bay Trail will be improved to enhance circulation between the different sections of the India Basin Shoreline neighborhood. This concept plan proposes a wider sidewalk that is continuous along Innes Avenue, Hunters Point Boulevard, and Jennings Street, all of which create an outline of the

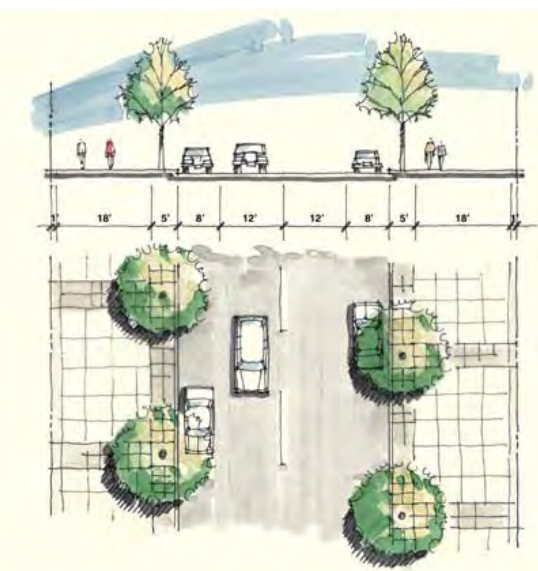


Figure 5.3 Cross section and Plan View of Circulation Streets



neighborhood. This enhanced sidewalk system will be on both sides of the streets and include street trees and improved crosswalk areas to promote walkability throughout the area. The Bay Trail will be connected as a continuous path along the India Basin Shoreline. Although not specifically part of this proposal, revitalizing the connecting stairs to the Hunters Point Neighborhood will significantly enhance circulation through both neighborhoods.

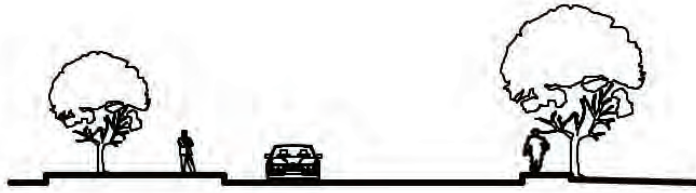


Figure 5.4  
Collector Street  
Cross Section of Innes Avenue



Figure 5.5  
Collector Street  
Cross Section of Hunters Point Boulevard

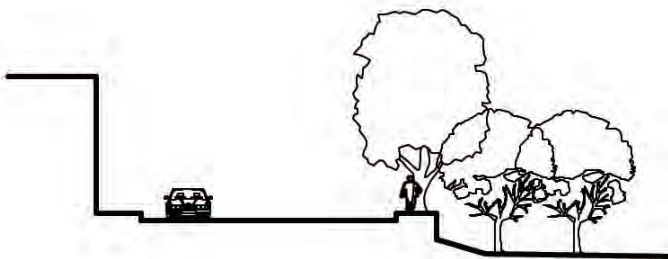


Figure 5.6  
Local Street  
Cross Section of New Entry to Research and Development Site

### 5.2.3 Street Framework and Street Sections

The India Basin Shoreline will be comprised mainly of collector (Figures 5.4 and 5.5) and local streets (Figure 5.6). Highway 101 is the closest principal arterial and 3rd Street is the closest minor arterial. Innes Avenue, Hunters Point Boulevard, and Jennings Street will all act as collector streets for the neighborhood. Local streets will be limited to the existing Earl Street and future streets leading in and out of the newly developed area. This proposed concept plan has reconfigured Arelious Walker Drive to end at Innes Avenue and make way for mixed use and residential development in that area. New roads within the residential development at India Flats will be curvilinear within a low to medium connectivity network to discourage any through traffic. New volumes of traffic from the Hunters Point Shipyard Development and potential stadium relocation will be accounted for through the collector streets. Certain lanes will have the capacity to be diverted in one direction as needed to accommodate special events or other unanticipated traffic flows.

## 5.3 THE PUBLIC REALM: OPEN SPACE / COMMUNITY AMENITIES AND RECREATION

### 5.3.1 Open Sapce

Open space comprises approximately forty percent of the India Basin Shoreline area. The existing India Basin Shoreline Park will be expanded to the north to include additional land currently occupied by PG&E. The patch of land across from Hunters Point Boulevard and Hawes Street will remain as is to protect the natural habitat of the Mission Blue Butterfly. The medium density residential area located at the India Flats will include a good mix of open space with meandering trails to provide connections. The proposed research and development at the PG&E site has an abundant amount of open space with outdoor plazas (Figure 5.7) so that they can be enjoyed by residents and employees.



Figure 5.7  
Open Space Plaza Area Example

### 5.3.2 Community Amenities and Recreation

The Bay Trail (Figure 5.8) connects these elements throughout the India Basin Shoreline as the most prominent amenity of the area. Residents and visitors alike will be able to enjoy this smoothly paved path that follows the coastline of the San Francisco Bay, which is ideal for walking, jogging, or bicycling. The new Community/ Recreation Center located near the medium density residential area (Figure 5.9) will provide other amenities such as basketball courts and a kayak boat launch to the bay.



Figure 5.8  
Connecting San Francisco Bay Trail

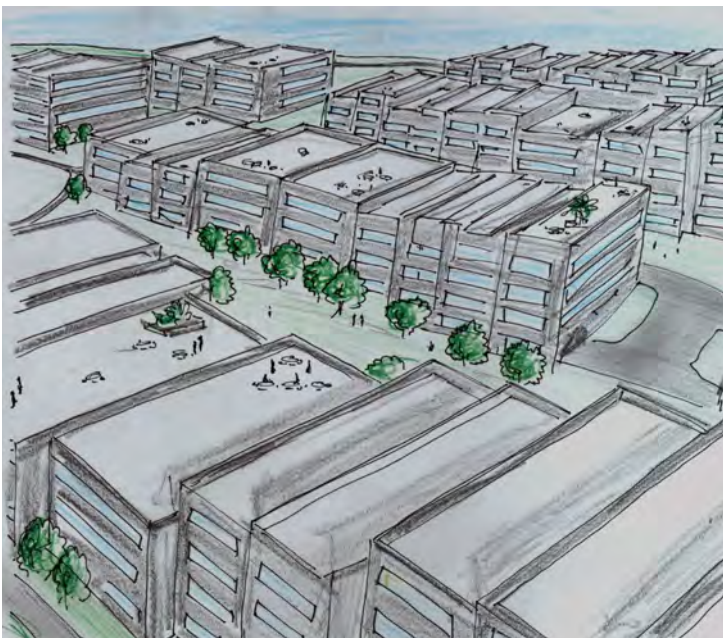


Figure 5.9  
Artistic Rendering of Medium High Density Residential Area  
With Open Space Between Buildings

## LAND USE SUMMARY

<b>Medium High Density Residential</b>	
Total Land Area:	21.6 acres
Total Building Area:	735,000 square feet
Uses:	661 residential units (30.6 du/ac). Dwelling units range from studios to 2 and 3 bedroom units. Community Recreation
Parking:	992 spaces - off street

<b>Mixed Use Commercial</b>	
Total Land Area:	17.74 acres
Total Building Area:	754,600 square feet
Uses:	64 mixed use buildings including commercial, light manufacturing, retail, office, and medium density housing.
Parking:	54 spaces - off street / 232 spaces - on street

<b>High Density Residential</b>	
Total Land Area:	6.78 acres
Total Building Area:	639,602 square feet
Uses:	504 residential units (74.3 du/ac) over 70 floors between 20 buildings with retail and commercial uses.
Parking:	756 spaces - off street

<b>Research &amp; Development</b>	
Total Land Area:	15.8 acres
Total Building Area:	843,500 square feet
Uses:	8 flexible use buildings, 2 administrative office buildings with retail services, 2 parking structures, one equipment enclosure with recreational use.
Parking:	375 spaces - off street

<b>Open Space</b>	
Total Land Area:	9.2 acres
Total Building Area:	N/A/
Uses:	Open space, public use. Bay Trail and park areas. Land conservation for Mission Bay Blue Butterfly.
Parking:	44 spaces - off street

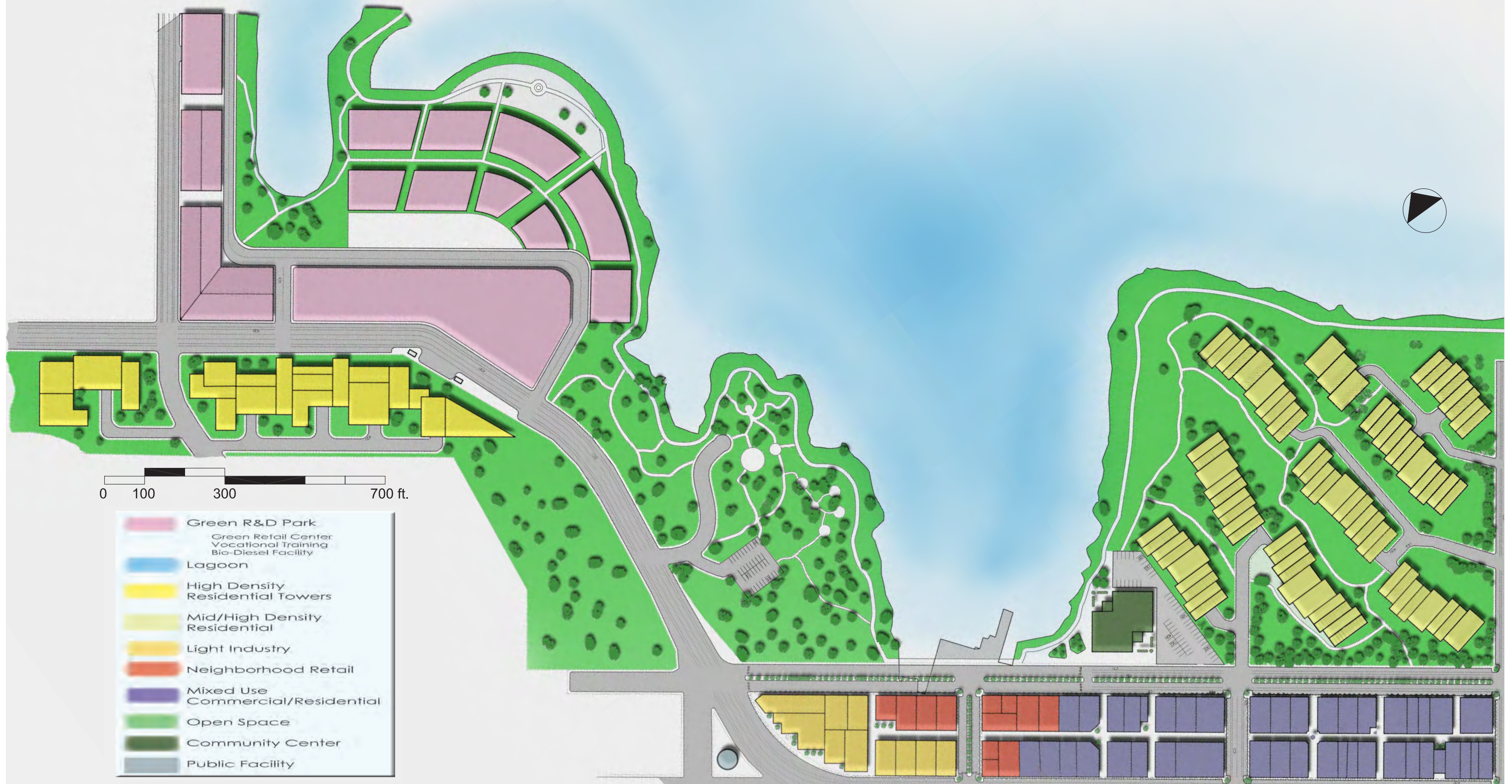
<b>TOTAL LAND USE</b>	
Total Land Area:	71.12 acres
Total Building Area:	2,972,702 square feet
Uses:	Open space, medium high density residential, research and development, high density residential, and mixed use
Parking:	2221 spaces - off street / 232 spaces - on street



# India Basin Shoreline ♦ Land Use Map

CRP 553 Project Planning Lab, California Polytechnic State University, San Luis Obispo

Team: MELIORA





# India Basin Shoreline ✦ Open Space & Community Amenities

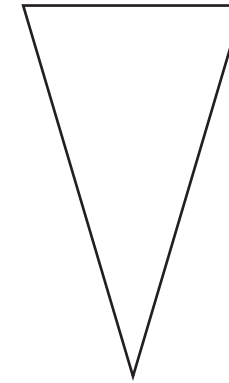
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Team: MELIORA



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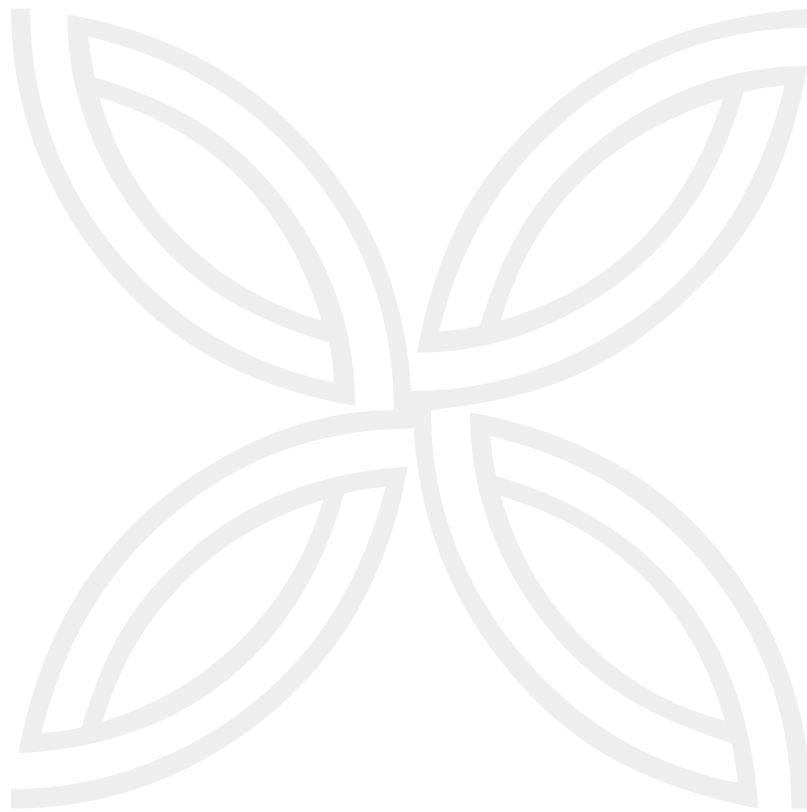
## Open Space



## Community Amenities



0 100 300 700 ft.





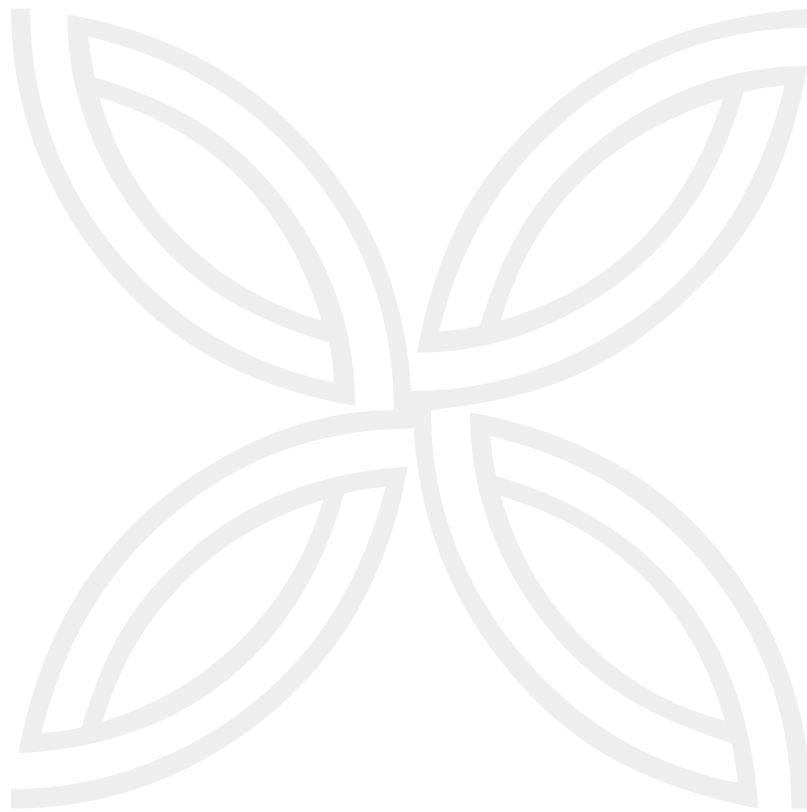
# CHAPTER references

# 6.



*"...let it always be understood that the powers are not in words so much as in the mind and heart of him who uses them as his instruments"*

*- Louis H. Sullivan*



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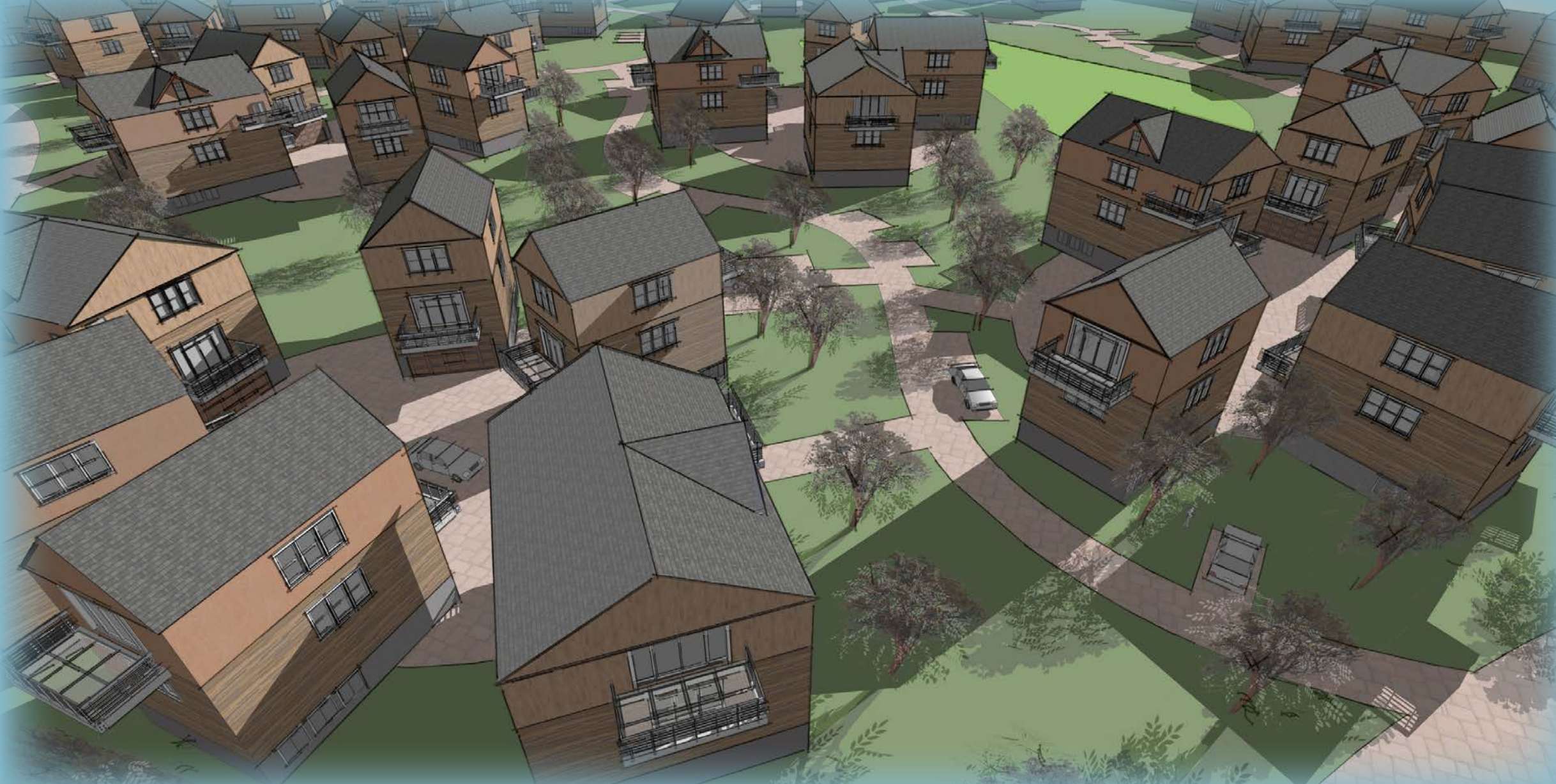
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## proposal 2

### 3D Views

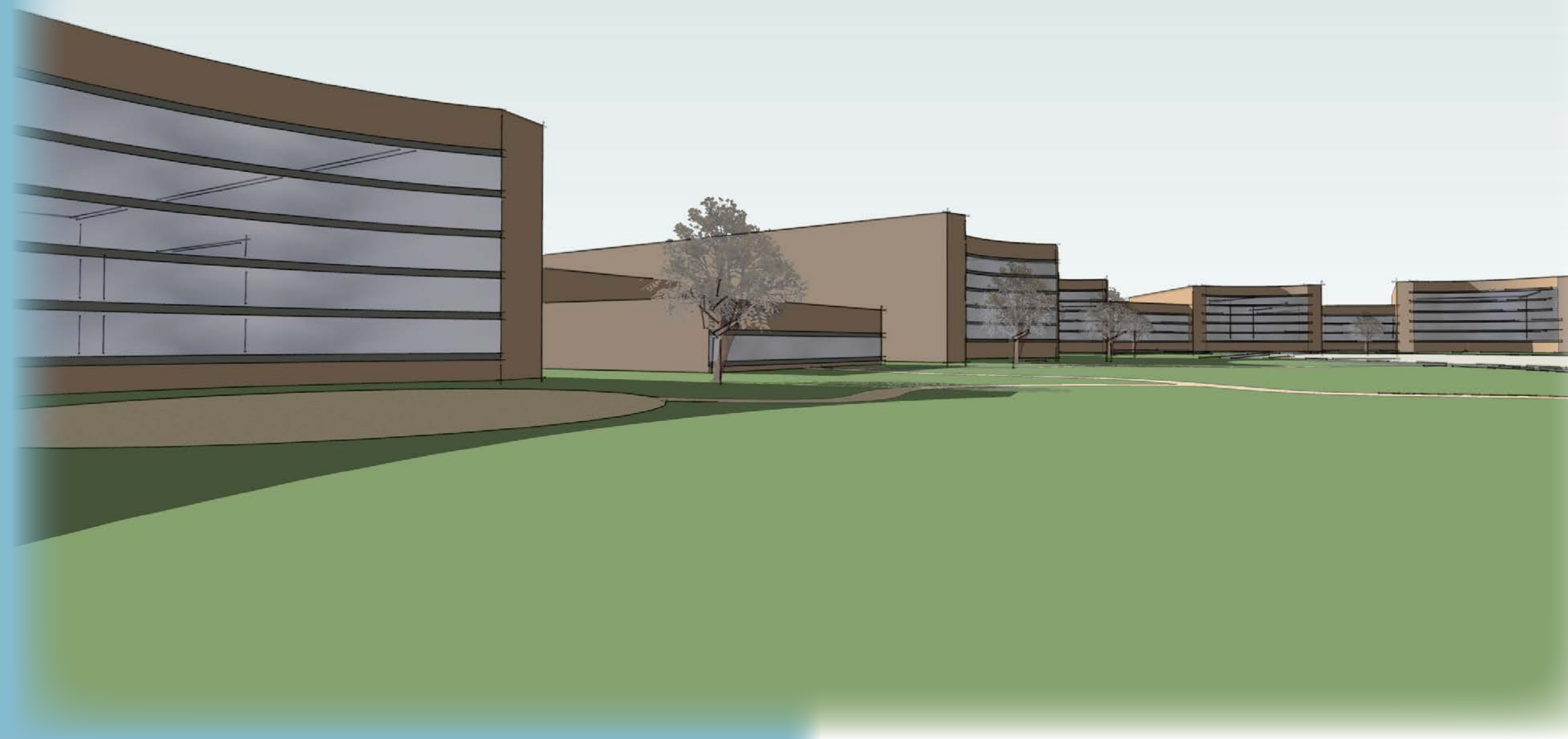
Residential



Create a small community feel with trees and grassy open spaces including paths and trails to encourage walking and biking. Views of the bay, local open space, and community amenities will make the neighborhood an excellent place for people working in the surrounding areas as well as individuals and families looking for a quiet, safe community.



Research & Development

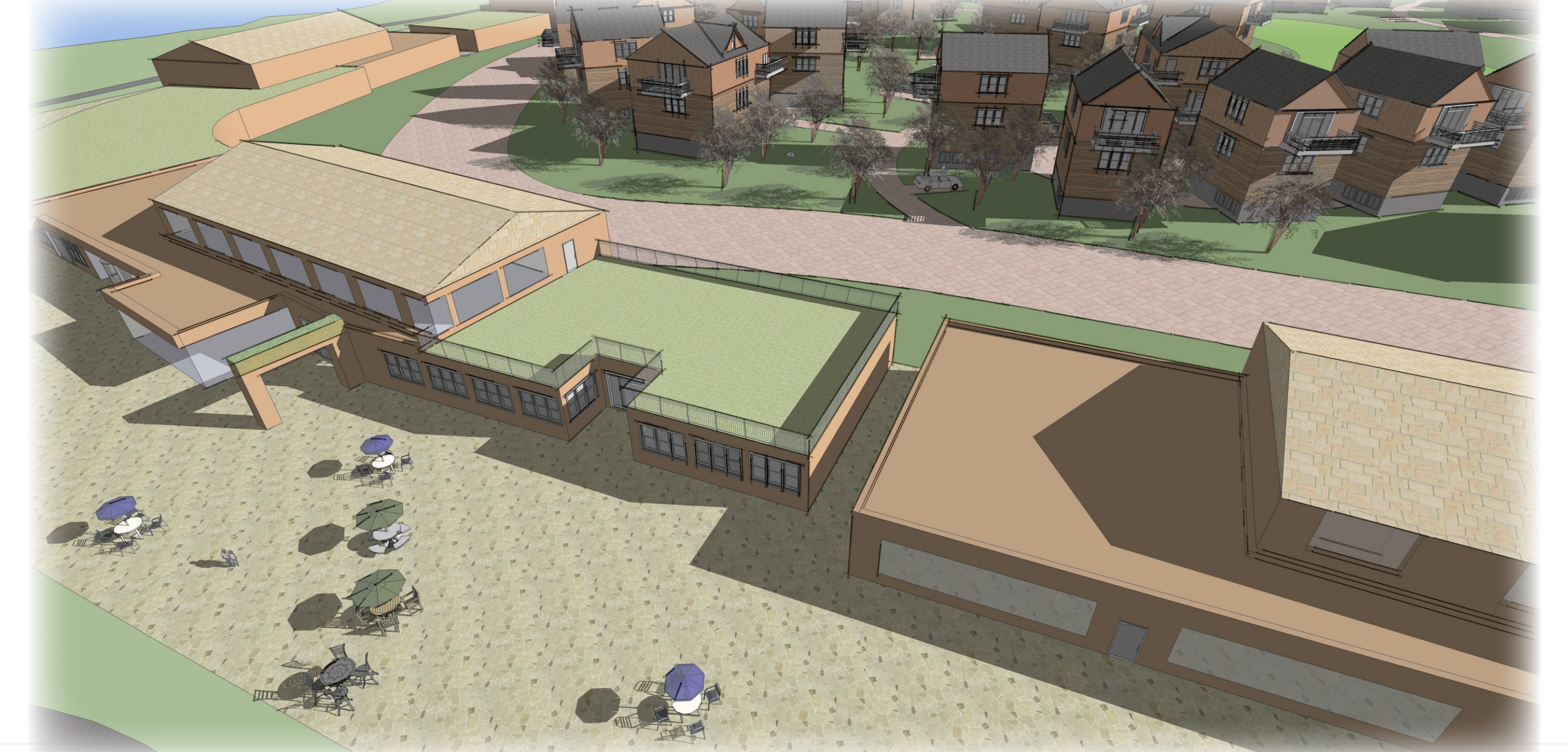


Take a chance to be part of exciting new technology and development. Be on the cutting edge of a new knowledge base, possibly related to clean energy (with PG&E), marine research, or biotech exploration.

Commercial



Form areas that can be enjoyed by visitors along side families and residents, while increasing revenue that supports the local economy. Build comfortable and convenient work places where people can enjoy open space along with views of the bay.



### Site Plan



Vision Statement

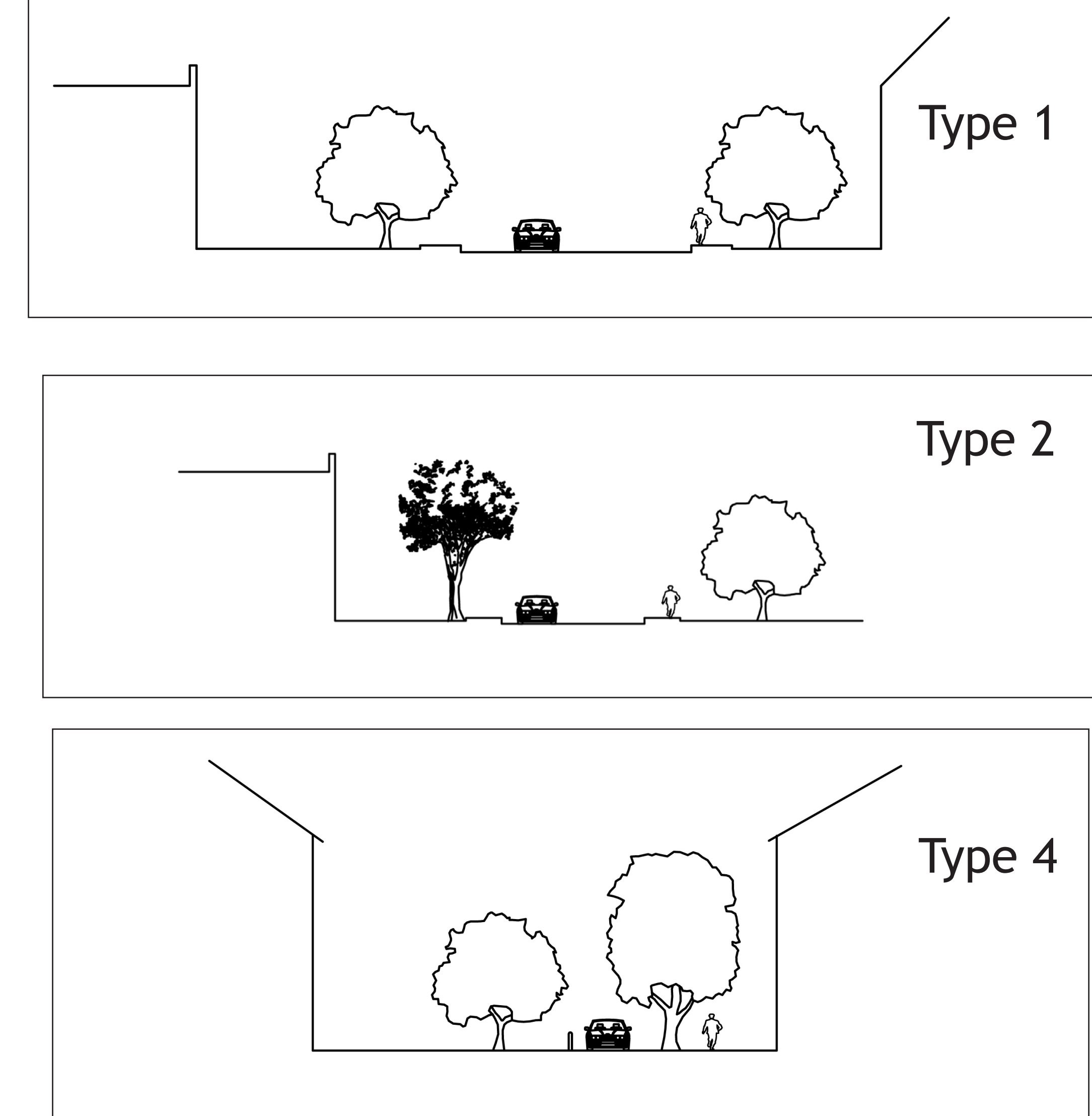
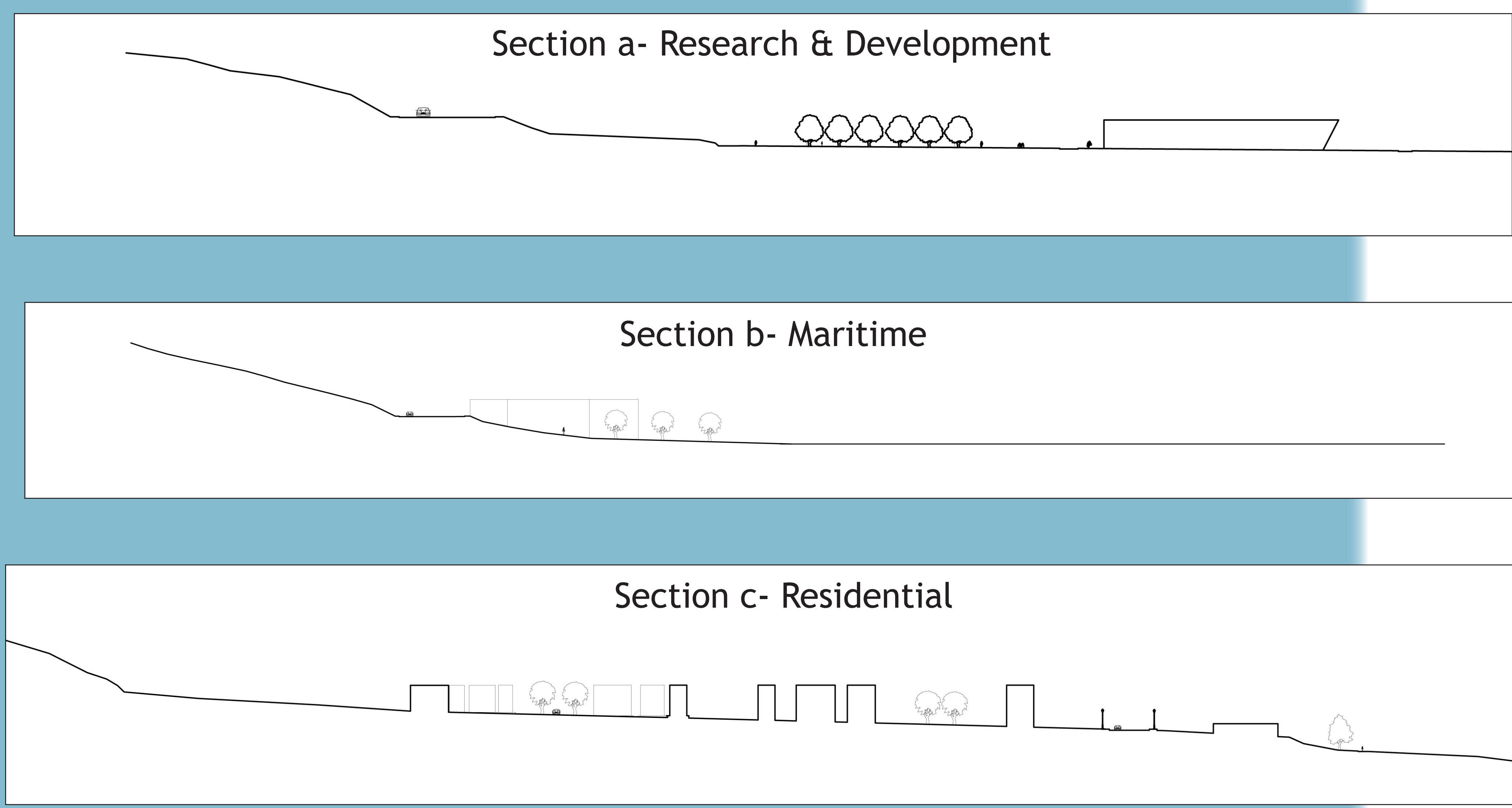
Work with existing residents to create an area that upholds San Francisco's sense of pride and community. Foster public participation in a region that offers multiple activities to locals and visitors, and optimistic involvement in knowledge generation through research and development.

Community Amenities - Offer multiple places for the community to gather and hold activities. Create a safe place for children to spend time after school and during the summer, including educational programs and children's activities. Increase the size of the park area by adding new sports facilities and a community center.

Connections - Connect this area with the existing houses across Innes Avenue and the neighborhoods up on the hill. Provide amenities and activities that will appeal to all residents. Make the waterfront an available area to residents and visitors.

Proposed Building Area	Use	Stories	# Units Per Building	# of Buildings	Total Units	Square feet per unit	Total Square feet	# Parking Spaces Required**
A	Residential	3	2	73	146	900 or 1600	84,600	146
B	Residential	3 to 3	1,2	28	40	900 or 1600	38,800	40
C	Mixed Use	1,2	1,2	6	6	900 or 1,600	8,200	6
D	Mixed Use	1,2	1,2	6	6	2,400 to 5,000	14,000	28
E	Mixed Use	1,2	1,2	4	4	900 or 1,600	6,400	4
F	Mixed Use	1,2	1,2	4	4	2,400 to 5,000	20,000	40
G	Outdoor Art Exhibit Area	-	-	1	1	900 or 1,600	5,000	4
H	Community Center	1	1	3	3	2,400 to 5,000	34,000	68
I	Research & Development	4	1	1	1	900 or 1,600	3,200	2
J	Research & Development	4	1	2	2	2,400 to 5,000	25,000	50
K	Research & Development	4	1	1	1	10,000	10,000	40**
L	Commercial	1 to 3	1	1	1	14,000	14,000	13***

### Cross Sections



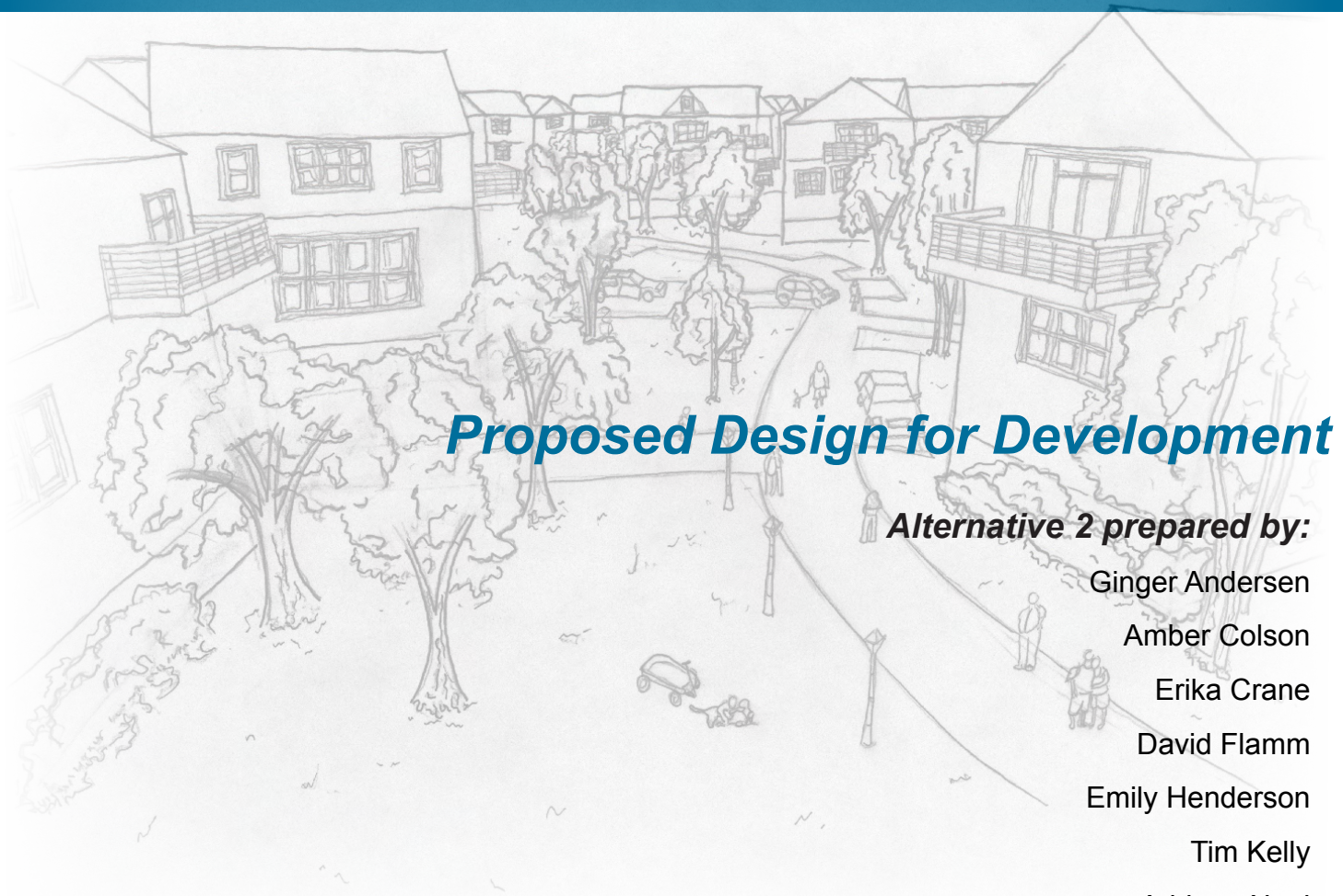
Ginger Andersen  
Amber Colson  
Erika Crane  
David Flamm  
Emily Henderson  
Tim Kelly  
Adriana Neal





# *India Basin*

## Bay View Hunters Point Area C



### *Proposed Design for Development*

*Alternative 2 prepared by:*

Ginger Andersen

Amber Colson

Erika Crane

David Flamm

Emily Henderson

Tim Kelly

Adriana Neal

**California Polytechnic State University**  
*San Luis Obispo, California*  
College of Architecture and Environmental Design  
Department of City and Regional Planning  
*CRP 553 Project Planning Laboratory*  
Spring 2008



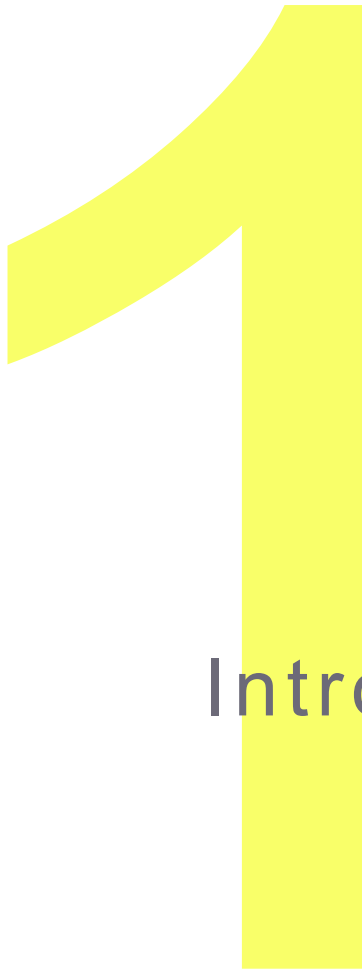


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# Introduction



# 1. Introduction

This document is one of three proposals for the India Basin Bay View Hunter's Point Area C compiled by students of the Master in City and Regional Planning program at California Polytechnic State University during the Spring Quarter of 2008.

This Design for Development proposal, referred to as Alternative 2 throughout the document, attempted to meet the needs of existing residents, while increasing the economic vitality of the area. The development proposal includes new residential, commercial, and Research and Development (R&D) spaces, along with both community and visitor serving amenities. The design was carefully thought out in order to create a connection between new and existing land uses. It is hoped that this connection will foster a strong neighborhood sense of pride.

By incorporating public and private open spaces, completing the Bay Trail through the site, and creating a pedestrian friendly environment, the waterfront and natural landscape will remain open and be more enjoyable to existing and future residents and visitors to the site.

The process for completing this Design for Development included two class trips to San Francisco. The first was dedicated to researching a recent example of a Redevelopment Agency project in Mission Bay, the results of which are outlined in Chapter 2. During the second trip, the class conducted a site inventory and brainstormed ideas for the future. Chapters 3 through 5 outline the results of this second trip, and the details of our Design for Development.





A large, bold, yellow number '2' is positioned on the left side of the page. It is the primary visual element, with the text 'Case Study' and 'Mission Bay North Redevelopment Project' overlaid on its lower portion.

# Case Study

Mission Bay North Redevelopment Project





## 2. Case Study: Mission Bay North

### 2.1 Site History, Project Objectives and General Information

#### 2.1.1 Site History

The Mission Bay North Redevelopment Plan Area (Figure 2.1) is a part of the larger Mission Bay North and South Redevelopment Plan for 303 acres several miles north of the India Basin plan area. The land was historically as a rail yard with industrial and shipping activities occurring on site through the 1950's. In 1990, ownership of the land was transferred from Santa Fe Pacific to Catellus Development Corporation. In 1998, after 3 years of planning, Redevelopment Plans and related documents were approved by the Redevelopment Commission, Planning Commission and other City departments, as well as by the San Francisco Board of Supervisors.

Mission Bay North  
Redevelopment Site

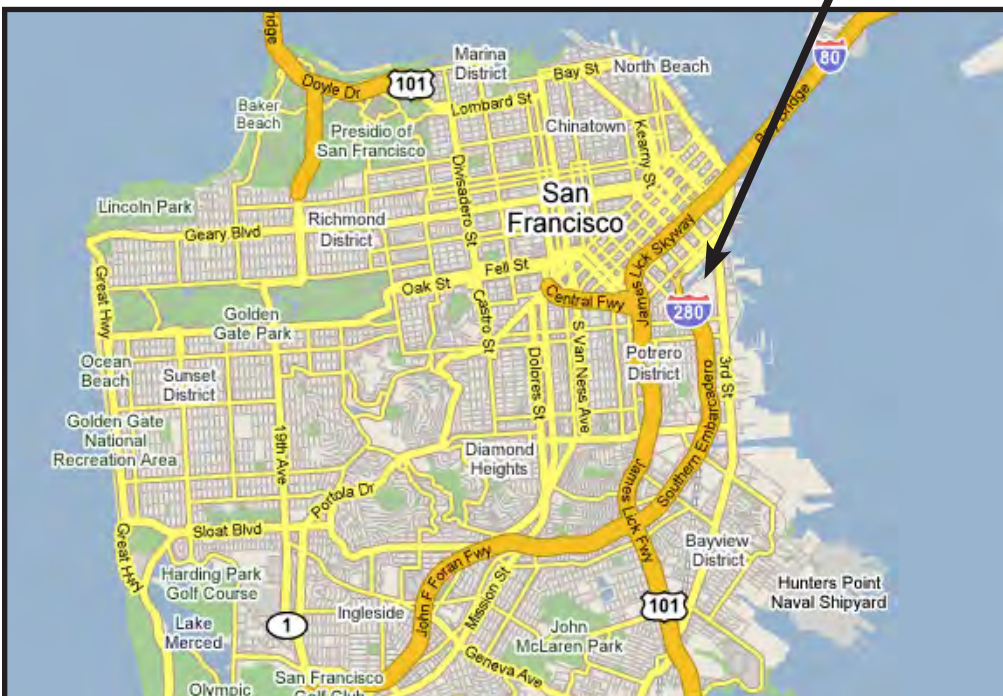


Figure 2.1. Mission Bay North



Figure 2.2. Mission Bay North Aerial

## 2.1.2 Project Objectives

The main objective of the Redevelopment Plan for Mission Bay is to create a “vibrant urban community” which incorporates a variety of uses including office, business services, retail, entertainment, utility, housing, and recreation and open space” (San Francisco Redevelopment Agency, 2008).

## 2.1.3 General Information

Mission Bay North, shown in Figure 2.2, was planned and designed by the San Francisco Redevelopment Agency with input from the public and private developers. The final plan was published in September, 1998, and construction began in 1999. The first buildings were completed in 2002. Catellus Development Corporation was the Master developer of the site until 2004 when the remaining interest was sold to FOCIL-MB. Other developers of the site include Mission Housing Development Corporation, Avalon Bay Communities, Mercy Housing, and Signature Properties. As of 2008, construction is ongoing.

Total development costs for the entire site are expected to exceed \$4 billion. Catellus will construct over \$200 million in public infrastructure, which will be financed through special assessments and increased property taxes generated by the development.

## 2.2 Planning and Design Analysis

### 2.2.1 Land Use

The Mission Bay North Redevelopment Plan calls for several land use designations including open space, mixed use residential, retail and public facilities. During the site visit, the class observed that these uses have taken the form of residential buildings that are mixed-income, a public library, an eatery and office space amongst others.

The class also observed that most of the areas in the designated in the Plan as open space have been constructed. A public walkway that runs along the Channel gives pedestrians a view across the water. Public facilities are provided at the south-west end of the site and include basketball courts, a boat ramp and a kayak storage facility. Locating these facilities and uses in constrained areas under the freeway is an efficient use of land. The areas zoned as retail are currently occupied with a Safeway grocery store, an example of city-serving retail.



Figure 2.3. Market-Rate housing

### 2.2.2 Building Types

The Plan includes a mix of both market-rate and affordable residential units, (Figures 2.3 and 2.4). The Plan also requires building orientation towards the Channel, and designs that at a pedestrian scale. Variations in architectural features and materials, roofscapes, and other design features at the street level are also planned for.



Figure 2.4. Low-Income elderly housing





*Figure 2.5. An interesting and usable oofscape on a residential building.*

The mix of market-rate (Figure 2.3) and affordable housing buildings (Figure 2.4) blend together architecturally. They also have incorporated some visually interesting, usable roofscapes (Figure 2.5). It appears that each of the buildings within the plan area achieves an “interesting” streetscape and some “visual variety.” However, the authors felt that the repetition of design characteristics across each of the buildings in the plan area created a less than varied site overall.

## **2.2.3 Circulation, Parking and Streets**

### **2.2.3.1 Circulation**

Circulation in the North Mission Bay Redevelopment site as constructed is successful. A light rail runs along the north-east edge of the site, and residents have easy access to a city-wide light rail system and a major southbound train. The site has sufficient major and minor arterials as well as pathways that accommodate both pedestrians and bicyclists.

### 2.2.3.2 Parking

The Redevelopment Plan includes design goals for parking. One of these goals is for parking to blend with existing architectural styles. Another is for parking to be screened from view from pedestrians. These two goals have been accomplished, as parking entrances match the façades of the buildings. Parking is well screened from pedestrian view; most of the class was left asking “where was the parking?” after walking through the site.

### 2.2.3.3 Street Design

The design goals for 4th Street include pedestrian scale retail frontage, mixed-use, bicycle usage, light rail and access to CalTrain. These goals were satisfied by creating a pedestrian friendly area through the use of appropriately scaled walkways and commercial frontages. Bicycle and pedestrian access is more than adequate, allowing for a well developed sense of community and walkability.

The design goals for 3rd street are aimed at providing mixed-transit access to the ballpark, and allowing for taller buildings. This area is more focused on transit than on pedestrians.

Like the 3rd Street goals, King Street design goals emphasize consistent building frontages and retail uses related to the density of the surrounding residential areas and Ballpark attendance. King Street was successful in its design goals. Its retail provisions are adequate and plentiful, and its transit options are varied.

The goal for the neighborhood streets are design that provide a more intimate feel and minimize vehicular traffic while maximizing pedestrian and neighborhood amenities. These streets were planted with greenery, and constructed with pedestrian amenities that attempt to emphasize a neighborhood feel. Figure 2.6 shows one pedestrian-only pathway acting as a neighborhood street.



Figure 2.6. A major pedestrian and bicycle path along the Channel



*Figure 2.7. A pedestrian corridor between two residential buildings. The buildings are close, creating a sense of privacy for pedestrians.*

## 2.2.4 Community Feel

### 2.2.4.1 Walking Distance to Services

Mission Bay North has a myriad of transit options within walking distance, as well as grocery stores, restaurants, entertainment areas, bars, and the Ballpark. The area is centrally located in the district and surrounded by services within acceptable walking distances.

### 2.2.4.2 Distances Between Buildings and Privacy

The design criteria for the community call for a sense of continuity between the streets, walkways, and open spaces. This creates a great sense of space between buildings and corridors as well as creates a decent sense of privacy. The terracing on the waterfront side also helps to provide a sense of privacy from waterfront pedestrians. Considering the case study's down town location there is an acceptable sense of privacy.



### 2.2.4.3 Size and Quality of Private Open Space

The design guidelines provide for private open spaces located in enclosed areas in the center of the residential complexes as shown in Figure 2.8. These private areas are adequate considering the amount of available space in the case study area. In each of the four completed residential structures there are second story private courtyards which can be used by the residents. There are also parks scattered amongst the residential buildings as shown in Figure 2.9.



Figure 2.8. Private open spaces enclosed in residential complexes

### 2.2.4.4 Living Space Orientation

The orientation of residences toward the waterfront are well designed. The building levels are terraced down from a maximum height toward on the street, to a minimum height along the waterway. This terracing provides a view from all stories and creates a sense of openness, and enhances the relationship with the water.

The placement of amenities was well designed, as seen in the youth park located at the opposite end of the pedestrian path from the senior residences.

### 2.2.4.5 Opportunities to Meet Neighbors

Many opportunities for neighbors to interact are provided in the Redevelopment Plan. The opportunities exist within private courtyards, public open spaces, walkways with benches, and other seating areas along transit corridors. Additional interaction may occur within the library and other commercial spaces, restaurants and stores.



Figure 2.9. Public park situated between residential buildings

### 2.2.4.7 Public Space Security

The sense of security in the existing public spaces seems adequate with the “eyes on the street” feel. This is in part achieved through placement of residential and commercial buildings overlooking the majority of the surrounding area, including the major walkway, which can be seen from both sides of the Channel.

However, the amount of trees may eventually block the view from the east side of the Channel. Having the youth park at the very end of the site is something that may prove to have inadequate security. The kayak storage area and access to the waterway may provide more pedestrian activity near the park however. Another issue may be the large amount of glass doors and windows at ground level. This could be both a security and safety issue. Overall the area has a secure feeling and the growing number of residents will increase this.

### 2.2.5 Conclusions and Lessons Learned

Overall, the Mission Bay North Redevelopment Plan achieves most, if not all of its goals. As such, some of the characteristics present in the plan for Mission Bay are duplicated within the proposed Alternative 2 Design Concept for India Basin/Hunters Point Area C. These include creating a pedestrian friendly community with access to public transportation, and creating a variety of public open spaces and community amenities. Alternative 2 also emphasizes connection points to the existing surrounding neighborhoods, and allows for a variety of uses including commercial, mixed use, residential, and research and development.









**Site Inventory and Analysis**  
India Basin / Bay View Hunters Point Area C





## 3. Site Inventory and Analysis

### 3.1 Project Description

India Basin/Hunters Point Area C is a site with incredible potential. Its location just east of a series of low-income housing projects offers great opportunity for creating a connection between residents of these housing projects and the new development of the India basin Area C site. One of the goals of Alternative 2 is to work with existing residents and residents of the housing projects to create an area that upholds San Francisco's sense of pride and community. This proposal further aims to foster public participation by providing multiple activity spaces for locals and visitors. Area is also designated for research and development to encourage knowledge generation.

## 3.2 Existing Conditions

### 3.2.1 Land Ownership

There are twenty-three public and private landowners within India Basin Shoreline Area C, with the largest landowners being Pacific Gas and Electric (PG&E), San Francisco Recreation and Parks, and Acosta. Much of the shoreline south of PG&E's holding is owned by the Recreation and Parks Department, while a majority of the western part of the site is privately owned.

The following is a list of land owners on the site:

1. PG & E
2. Recreation and Parks Department
3. Shipyard Holdings LLC
4. McGlincy Family Trust of 96
5. City Propoerty
6. Jajeh
7. Pinkard
8. RFJ Inc.
9. Spear
10. Doherty
11. RLM Development
12. Wintersteen-Moussier
13. Bersan
14. JJ and Jane E. Wintersteen
15. India Cove LLC
16. Olson
17. Coast Pacific
18. Acosta
19. Ignatius Ara
20. Arriaza
21. Banya 2000 LLC
22. Hamman
23. Nicholson

### 3.2.2 Existing Land Uses

#### 3.2.2.1 Heron’s Head Wetland & Existing Open Space

Heron’s Head Wetland is 24-acres of protected wetland to the north of India Basin Shoreline Area C (Figure 3.1 and Figure 3.2). Heron’s Head began as the Pier 98 landfill project, and was to be utilized as a shipping terminal. When the project never fully materialized, the filled area became a Brownfield site, and eventually became an urban wetland. Heron’s Head now acts as an upland and tidal habitat and supports over 78 species of birds, native grass species and wetland flora. Open Space in Area C incorporates a portion of the Bay Trail, and is used as shoreline access for recreational activities. Several types of grasses can be observed on the site, which is also home to coastal birds and mammals (Literacy for Environmental Justice, 2008).

#### 3.2.2.2 900 Innes Avenue

900 Innes is a designated historic landmark. The house exists as a reminder of the city’s working class foundations and ship building history (Figure 3.3)

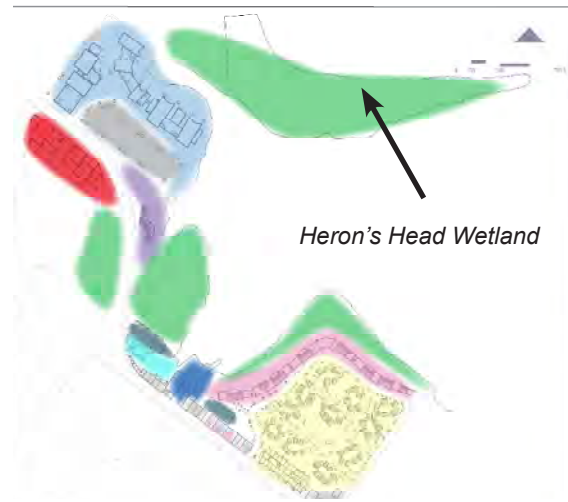


Figure 3.1. Heron’s Head Wetland in Land Use Map



Figure 3.2. Heron’s Head Wetland



Figure 3.3. Historical 900 Innes





Figure 3.4. Old PG&E Power Plant

### 3.2.2.3 PG&E Power Plant

The old PG&E Power Plant is currently being deconstructed and the site is being remediated. The old plant sits on prime coastal land with clear views of downtown San Francisco. The Power Plant site is currently owned by PG&E and shown in Figure 3.4.



Figure 3.5. A prominent feature of the Burning Man Studio

### 3.2.2.4 Burning Man Studio

The site is home to an industrial art and metal shop commonly referred to throughout our design project as “The Burning Man Site.” The site is located south of India Basin Shoreline Park and shown in Figure 3.5.

### 3.2.2.5 Hunter’s Point Naval Shipyard

The Hunter’s Point Naval Shipyard, also known as Parcel A, was an important West Coast Shipyard during WWII, through 1974. The Shipyard site is currently being redeveloped by Lennar, and will feature affordable family and artist housing, parks, open space, and retail space, a research park, and a revitalized housing project.



Figure 3.6. Existing Housing along Innes Ave

### 3.2.2.6 Our Lady of Lourdes Catholic Church

Our lady of Lourdes Catholic Church is a Spanish style community church adjacent to the site, and remains a local asset.

### 3.2.2.7 Innes Avenue

Innes Avenue, which runs along the west edge of the site, is home to several neighborhood commercial, light industrial and residential uses. Innes Avenue acts as one thoroughfare for North-South San Francisco traffic, and is also an important neighborhood asset. Buildings facing east along Innes Avenue have viewsheds of the east bay area and downtown San Francisco.

### 3.2.2.8 Existing Housing

Three housing authority developments, affordable condos along Innes Avenue and several single family homes sit adjacent to Area C (Figure 3.6 and Figure 3.7). Approximately 1,750 new units have been constructed in the Hunter's Point neighborhood, along with 122 rehabilitated units and 22 units under construction (San Francisco Redevelopment Agency, 2008). Every single unit was designed to meet the housing needs of low to moderate income residents (San Francisco Redevelopment Agency, 2008).



Figure 3.7. Existing Housing on Innes Ave.

### 3.2.3 Existing Community Amenities

Several public parks occur in the Hunter's Point neighborhood, including Hilltop Park, Adam Rodgers Park, and Youngblood-Coleman Playing field. Two community facilities and two pre-schools also exist to serve the Hunter's Point residential community. Additionally, the neighborhood supports public two elementary schools- Sojourner Truth Elementary and George Washington Carver Elementary School (San Francisco Redevelopment Agency, 2008).



Figure 3.8. India Basin Shoreline Park

India Basin Shoreline Park, shown in Figures 3.8 and Figure 3.9 is the only natural area in the purview of the San Francisco Regional Parks Department that borders the Bay (San Francisco Redevelopment Agency, 2008). The park has many urban ecological functions and provides salt marsh and mudland habitats for a plethora of coastal flora and fauna (San Francisco Redevelopment Agency, 2006). The park also serves as a coastal access point for water recreation, provides access to the bay trail, and remains an important community asset for families, artists and recreational enthusiasts (San Francisco Redevelopment Agency,

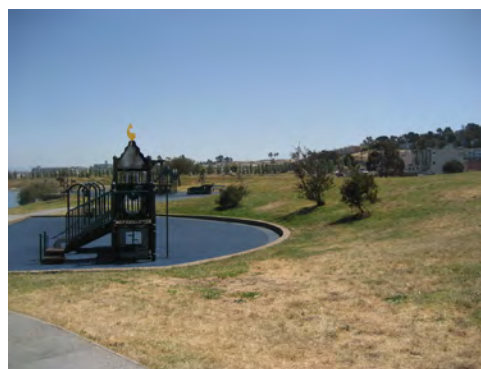


Figure 3.9. India Basin Shoreline Park



*Figure 3.10. View down Innes Ave  
2006).*

### **3.2.3 Transportation and Circulation**

The site contains two major streets: Hunters Point Boulevard and Innes Avenue. This four-lane street, two lanes in each direction, runs through the site. It extends from the northwestern corner at Evans Avenue, to the southwestern corner at Earl Street, an unimproved right of way.



### 3.2.3.1 Streetscape

The sidewalks along Innes Avenue are very narrow and have not been well maintained. Many sections have large cracks or pieces of cement missing, and weeds have sprouted out of the seams. This condition clashes with the very new cement in front of recently constructed buildings. This contrast creates breaks in the sidewalk, between the new buildings and undeveloped areas. This is especially true in the north, where Innes connects with Hunters Point Boulevard.

The sole crosswalk in the plan area is located next to the triangular parcel bound by Innes, Hawes and Hunters Point Boulevard. The narrow width of the sidewalks along Innes Avenue are further highlighted by the height of the buildings on the east side of the street and the high dirt cliff on the west side.

The west side of Innes and Hunters Point Boulevard is largely made up of the dirt cliff, with a few areas covered in shrubs and grass. The wide street, narrow sidewalks, tall buildings, and lack of trees and vegetation make the street uncomfortable and unpleasant from a pedestrian's perspective.

### 3.2.3.2 Transit Access

Two MUNI Crosstown Route buses, the 19 and the 44, currently serve the area. The 19 runs from the south end of the site, and eventually intersects with Third Street before continuing towards downtown. The 44 line runs to and from the other Hunters Point and Bay-View neighborhoods (Figure 3.11).



Figure 3.11. A MUNI Public Bus on Innes Ave.

### 3.2.3.3 Bay Trail and Bike Access

The Bay Trail exists south of the site, and runs along the waterway, past Hudson ROW and Shoreline Park, through PG&E's property to the north, and along a strip on Heron's Head Park. The section passing through PG&E is land that the company set aside for the trail, but is not technically a part of the Bay Trail.

### 3.2.3.4 Transportation and Circulation Opportunities and Constraints

The existing transportation and circulation situation offers both opportunities for development as well as constraints to development.

Opportunities include Innes Avenue, which is a wide street that has the available space for a light rail or rapid bus system. This would be very helpful if plans for a large stadium to the south are developed. There is also the possibility to reduce the width of Innes Avenue by adding a traffic island down the center. PG&E has set aside land that can be developed for the Bay Trail, which will increase connectivity to the area via the Trail. Because Innes is a major thoroughfare, it will bring sufficient traffic to new commercial businesses along the avenue.

Constraints include the steep hill west of Innes Avenue, which reduces the possible number of connections that can be made to the neighborhoods to the west, especially connections that could be ADA approved.

## 3.2.4 Natural Conditions

### 3.2.4.1 Water Systems

The site is supported by a series of water systems which deal with potable water, fire protection water, reclaimed water, sewer, storm drainage and overland flow (Figure 3.13)

- \* **Low pressure water system** - potable water and fire protection water from the University Mound Reservoir.
- \* **Reclaimed Water** - network of reclaimed water mains to serve future availability of reclaimed water used for dual plumbing in buildings and for irrigation of landscaped areas.
- \* **High Pressure Water System** - to serve fire flows and high-rise buildings.
- \* **Seperated Sanitary Sewer** - to collect wastewater flows to be conveyed to the southeast Water Pollution Control Plant.
- \* **Storm Drainage** - storm sewer system separate from the combined sewer system, designed to handle up to a five- year storm and ultimately discharge to San Francisco Bay.
- \* **Overland Flow** - for an event above a five-year storm and up to a 100-year storm, excess stormwater will be routed to San Francisco Bay by overland flow along the network of street gutters and roadway.
- \* **Joint Trenches** - to serve electrical, communications and gas utilities.

Figure 3.13. List of Water Systems serving the site

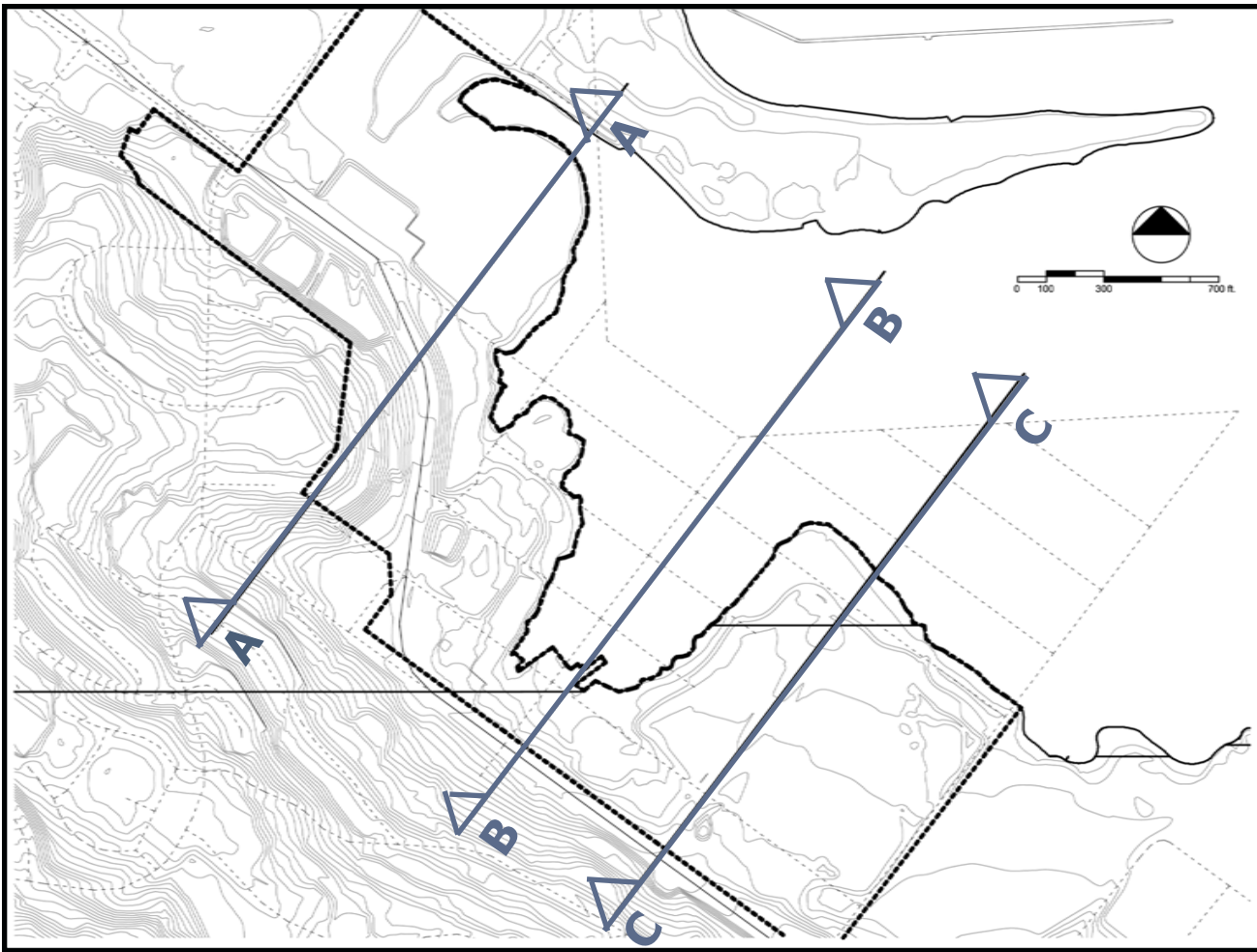


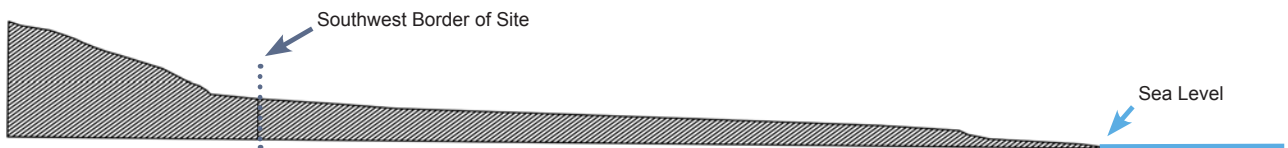
Figure 3.14. Local Topography



Section AA



Section BB



Section CC






### 3.2.4.3 Topography

India Basin's topography is somewhat limiting due to its slopes (Figure 3.14). The west edge of the site is sloped, in some places quite drastically, towards the water. However, new construction can be built into these slopes, which will help preserve viewsheds.

### 3.2.4.2 Soil

There are three types of soils on the site, mapped in Figure 3.15. Most of the soil on the site falls under the category with the least amplification by shaking. However, the soil on the coastal edge will amplify shaking experienced during earthquakes, therefore building in those locations must be avoided (USGS, 2008).

-  Includes water-saturated mud and artificial fill. The strongest amplification of shaking due is expected for this soil type.
-  Includes some Quaternary muds, sands, gravels, silts and mud. Significant amplification of shaking by these soils is generally expected.
-  Includes some Quaternary (less than 1.8 million years old) sands, sandstones and mudstones, some Upper Tertiary (1.8 to 24 million years old) sand stones, mudstones and limestone, some Lower Tertiary (24 to 64 million years old) mudstones and sandstones, and Franciscan melange and

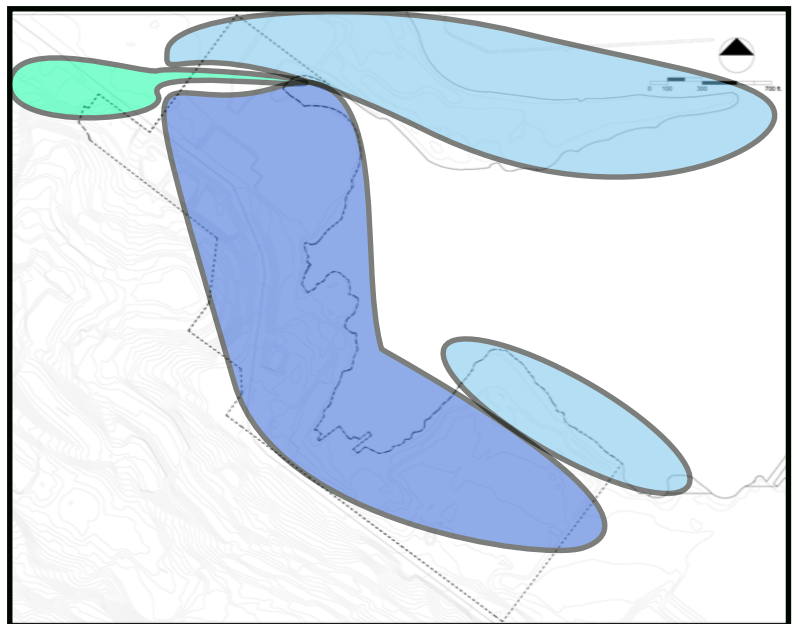


Figure 3.15. Map of Local Soils

### 3.2.4.4 Connections and Linkages

#### *Pedestrian Connection*

Pedestrian linkage between the India Basin Shoreline and neighboring community is limited and challenging. There are four stairways connecting the Bayview neighborhoods with Innes Ave. One of the stairways is shown in Figure 3.16. Once on Innes Avenue, pedestrians have access to the shoreline in four places, as the remaining frontage is either fenced off or a wall of continuous buildings.

One pedestrian entrance point is on the South end of the India Basin site, where there is a dirt path that appears to be cleared for walking which leads around to the end of Arelious Ave. The second pedestrian connection to the Shoreline is by the sidewalk along Arelious Ave., which leads straight to the Bay trail at the end of the road. The third pedestrian pathway is towards the northern area of the site where there is an vehicular entrance to the Indian Basin Shoreline Park, which connects you to the Bay trail as well. The last entrance point is not an obvious connection, as you have to go through an area that appears to be a dirt parking lot but is actually the beginning to Hudson Ave and leads to the Shoreline Park to the west.

#### *Visual Connection*

Besides the physical connections and linkages, the linkages to the India Basin site seem to be visually and perceptually disconnected from the rest of the surrounding residential neighborhoods. Most of the pathways and access points are not visible from the street as you can't see past the wired fences and old dilapidated buildings along Innes Ave. The park is not visible from outside the site, making it feel unsafe and susceptible to crime.



Figure 3.16. Pedestrian Stairway Connecting to Innes Ave.



Figure 3.17. Old Maritime area, closed off to public

### *Vehicular Connection*

Vehicular access from Innes Ave to the site is limited as well. There are only two roadways that are essentially dead ends, as they both go east/west from Innes Ave. to the Bay. Besides Innes Ave., which runs parallel to the top of the site, there were no other major thoroughfares running through the site. The old maritime section on the site (Figure 3.17) is completely closed off to the public, creating a break in the Bay Trail as well as a public right-of-way that used to exist.

### **3.2.4.5 Natural Environment Opportunities and Constraints**

**The natural environment presents a series of opportunities for development as well as a series of constraints.**

#### *Opportunities*

Opportunities for the site include close proximity to the waterfront, which can make the area a site for water recreation. The historical marina area, currently closed off, offers a great site for pedestrian-friendly mixed-use development centered around the area's maritime history. The 35-acre PG&E property is yet another excellent waterfront location as well as a 13.5-acre parcel that already contains some infrastructure for development, including a paved road, sewer, and street lights. Views to the Bay waterfront, downtown San Francisco, downtown Oakland, and Mt. Diablo make the site an enticing location for residents as well as visitors coming for recreation.



## Constraints

There are several constraints to development of the project area associated with the existing condition of the natural environment. One constraint is the high costs of cleaning up polluted soils. Another is finding the financing for the cleanup and other planned improvements.

The site contains several dilapidated or otherwise abandoned structures, especially in and around the marina area. Furthermore, the topography on the west edge of the site has a very steep slope, which may hinder development capabilities.

Finally, due to soil conditions, pile-on foundation construction will be required close to the waterfront. Since this type of foundation is expensive to build, developers will likely push for greater height allowances in their projects.

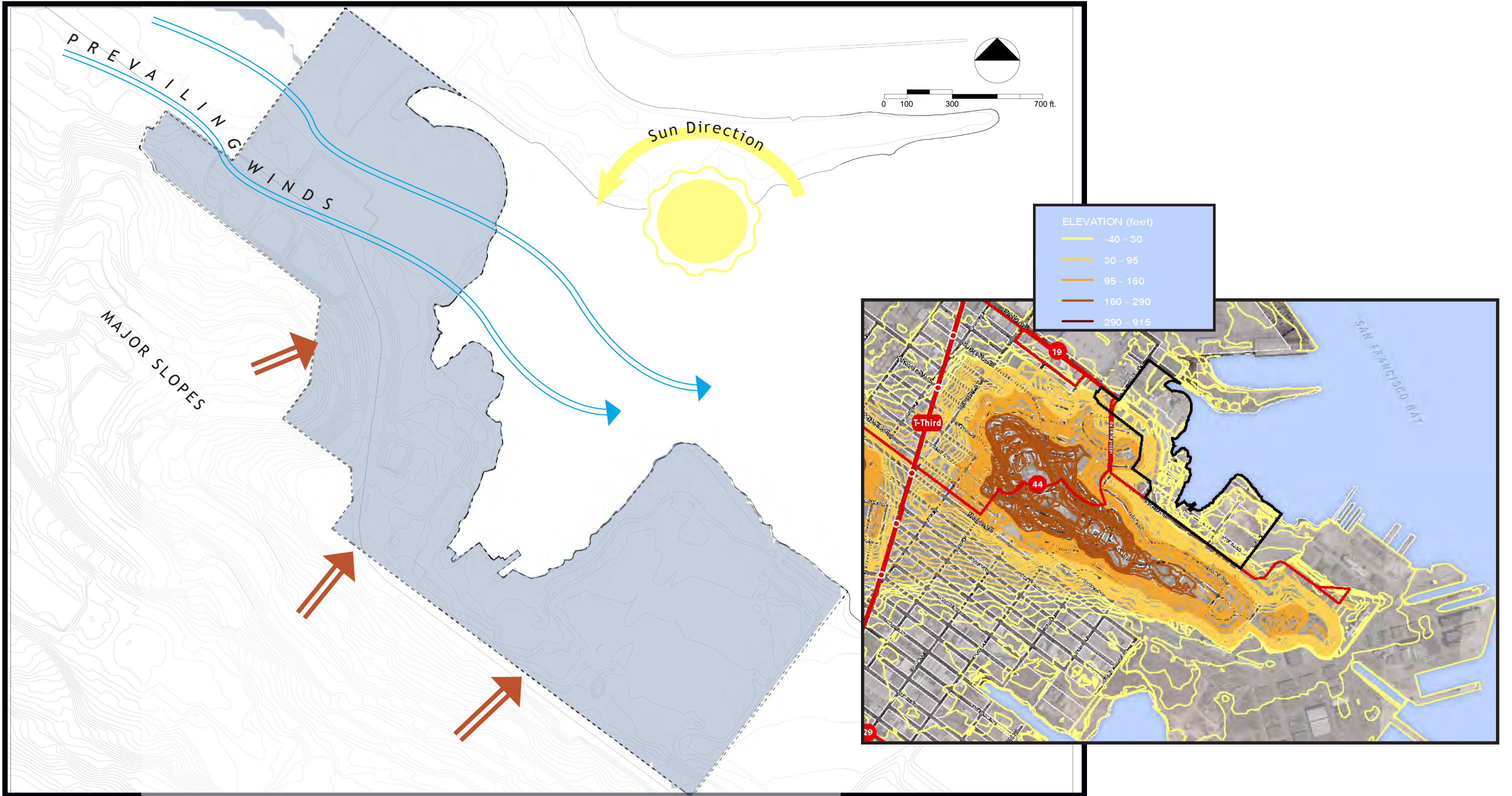
## 3.2.5 Relevant Documents

### 3.2.5.1 Existing Plans, Future Projects, and Applicable Land-Use Regulations

Current plans include the redevelopment of the housing projects directly west of the site. The plans include higher density, preservation of viewsheds and greater connectivity to the India Basin site.

Future plans include a new 49ers football stadium south of India Basin. These future plans may influence design criteria and goals. Definitive local future projects include the redevelopment of the old naval land to the south and the removal of the PG&E Power Plant on the North side of the proposed redevelopment area.

Land-use regulations include the mandatory creation of public open space on the naval “radio-active treatment area” directly south of the site. Coastal regulations will inhibit coastal development proposals that do not strictly adhere to the stated regulations.





### 3.2.5.2 Social and Cultural Factors

Based on the area's industrial past and the reality that 50% of area households are considered low or very low income, a major social issue relates to pollution and a perception of environmental injustice that exists. The idea that the poorest neighborhoods in a community are also the most likely to be exposed to environmental pollution and health risks is on display throughout India Basin /Hunter's Point. It is reflected in the fact that 365 toxic sites exist within the six square miles of the community, as well as the fact that 20% of the children have asthma and chronic illness is four times the state average (Literacy for Environmental Justice, 2008).

Along with the environmental issues the area faces there are additional social problems. Unemployment, crime, and gang activity have all been significant contributors to the economic and social decline in the community. These social factors enhance the negative publicity of the area and demonstrate the importance of community revitalization for the neighborhood.

Although the area is often noted for its social problems there are important cultural aspects that are present within the community. With a population comprised of 50% African American, 30% Asian, and 15% Latino, the neighborhood reflects a diversity that is unique to the area (Literacy for Environmental Justice, 2008). Additionally, the location of artist studios in the community and the residents involvement in the Burning Man festival have created an art culture that has grown into an important cultural aspect of the India Basin / Hunter's point neighborhood.

### 3.2.5.3 Community Needs and Demands

The historic role of urban revitalization as a means of demolishing blighted neighborhoods has created an air of distrust among community members. There is a fear that high rent apartments will drive away the current residents through a wave of gentrification that



has been seen in other areas of the city. These concerns mandate that residents be given assurances of their future in the area, that community members be involved in the redevelopment process, and that decision makers provide the residents a seat at the planning table.

Building on that reality, another major issue has to do with industrial clean-up and the restoration of environmental health. While it is recognized that some sites have been contaminated beyond a point of restoration for residential use, there is a need to provide a more livable community that evokes a sense of identity and pride for the residents.

In terms of social improvement for the community, there is a clear need and demand for a community center with job training and after-school programs for children. This could help provide community members with job skills for economic improvement and programs to help children stay engaged in school.

#### **3.2.5.4 Historic Evolution**

Dating back to the early 20th century the Hunter's Point region was characterized as a center for ship-building and deconstruction (Figure 3.18), with much of the lumber that initially built the city coming from deconstructed ships at the Hunter's Point shoreline. The proposed landmark at 900 Innes is thought to be last remaining tie to this founding industry and is one of the reasons for the contentious debate surrounding its future.

During both World War I and II the Navy made extensive use of what was to become the India Basin / Hunter's Point neighborhood. With the formation of the naval shipyard just to the south, and the existing San Francisco Bay ship traffic, the area developed into one of the busiest shipyards on the west coast. The result of this growth was the creation of local jobs, as well as a need to provide housing for the influx of job seekers. Ultimately this led to the creation of military housing, which eventually became the low-income housing projects that stand today.



*Figure 3.18. Historical Shipbuilding Activities in Hunters Point*

Additional industries sprang up in the community to support Naval activity. Historically, industries ranging from slaughterhouses, to steel mills, to junkyards have been found in the area. In addition to these, and perhaps the most notorious for the area, was a PG&E power plant constructed in 1929. Although it is currently being deconstructed, the plant operated for nearly 75 years, and has often been cited as a major contributor to pollution in the area.





# 4

Conceptual Diagram and  
Programming



## 4. Conceptual Diagram

### 4.1 Concept Overview

The following plan objectives represent a focused approach toward revitalizing Area C on the Hunter's Point / India Basin shoreline. To create our design concept we used the PARK method displayed in Figure 4.1. The intent of the plan is to respond to current resident's needs while also encouraging pedestrian traffic for commercial use. With that in mind, particular attention is given to the preservation and protection of local character as well as the renovation of historical landmarks within the site. Additionally, the incorporation of open space, Bay Trail connection, and pedestrian friendly scale make use of the water front setting and natural landscape.

Along with building upon the natural amenities, the plan objectives also include residential and commercial elements to encourage economic stimulation. Medium density mixed-use housing, commercial development, and an R & D industrial park will provide the area with jobs and a mix of affordable and market rate housing. This will not only provide opportunities for existing residents but will also encourage those who work in the area to make use of their surroundings.

#### 4.1.1 Triangle Parcel

Located at the southwestern edge of the project area is a triangular parcel bound on all sides by surface streets; the north property line fronts Hawes Street, the southern property line fronts Innes, and the northeast edge follows Hunters Point Boulevard. Serving the transition area from Hunter's Point Boulevard to Innes Street, the parcel is in a prime location for artwork serving as a focal point for the redevelopment area. In addition, its location at the intersection of three streets makes it an optimal location for a bus station. The proposed plan suggests a hybrid of the two: a bus stop with a sculpture on the roof. Subjects of the monument piece should be appropriate for the neighborhood character and address its history.







 <b>Preserve</b>	<ul style="list-style-type: none"> <li>• Bay Trail</li> <li>• 900 Innes</li> <li>• Park land and shoreline park</li> <li>• Preserve existing businesses to the highest extent possible</li> <li>• Existing access points to the hillside area</li> <li>• Existing residential on southwest side of Innes</li> <li>• View sheds of downtown and the east bay</li> </ul>
 <b>Add</b>	<ul style="list-style-type: none"> <li>• Community center</li> <li>• Improvements to existing access</li> <li>• Mixed use and retail</li> <li>• Boardwalk along the bay</li> <li>• Street and park lighting</li> <li>• Park improvements</li> <li>• Neighborhood serving retail</li> <li>• Community garden</li> <li>• Public transportation</li> <li>• Pedestrian and vehicle access</li> <li>• A dock or boat launching station</li> <li>• A pedestrian bridge</li> <li>• Strategies for improved streetscape</li> <li>• Strategies for addressing the “triangle”</li> <li>• New design standards for burning man area</li> <li>• Container or creative improvements for PG&amp;E jungle gym</li> </ul>
 <b>Remove</b>	<ul style="list-style-type: none"> <li>• Contamination</li> <li>• Chain link fences</li> <li>• Clutter by docks and 900 Innes</li> </ul>
 <b>Keep Out</b>	<ul style="list-style-type: none"> <li>• Big box stores</li> <li>• Chain link fences</li> <li>• Uses that will lead to gentrification</li> <li>• Gang activity- avoid closed-off, dark, enclosed places; avoid underutilized spaces</li> </ul>

Figure 4.1 The PARK Method of Conceptual Diagramming

### 4.1.2 Community Serving Amenities and Recreation

In order to address current resident needs the design objectives include a community serving amenities area between Shoreline Park and Hunter's Point Boulevard. The proposal includes a structure for youth programs and recreation activities such as basketball and science fairs. In addition, the structure should be designed to include a multi-use sport court, and classroom for vocational training and arts and crafts.

A greenhouse or butterfly house is also appropriate for this site. The butterfly house or other botanical structure would serve an educational purpose and include signs or other information stations that describe the grasses and butterfly habitat on the adjacent hillside.

### 4.1.3 Protected Open Space

The grass hillside across Hunters Point Boulevard from the Community Serving Amenities (Education and Recreation) will be preserved as open space. A vegetation improvement and rehabilitation plan is proposed to carry out improvement habitat – including lupin and coastal sage scrub for the Mission blue butterfly (*Icaroides missionensis*).

### 4.1.4 Shoreline Park

A great deal of effort and public funds have improved the Shoreline Basin Park to its current condition. This plan keeps the majority of facilities and infrastructure as it is today. Improvements will address the addition of more lighting to the park for safety, and the removal of chain link fencing around the sport courts. An additional basketball court is also proposed.

#### **4.1.5 Maritime Hub**

The Maritime Hub is inspired by Cannery Row in Monterey, CA and will mix the historical character of the area with small tourist attractions. The dock will be wide enough for a compact pedestrian arcade and will include benches. 900 Innes will be rehabilitated to address safety concerns and turned into a maritime museum. The plan includes the addition of a small structure for commercial use adjacent to the dock. This can be used for kayak and canoe storage or as a small gift shop.

#### **4.1.6 Mixed Use Along Bay**

The eastern portion of the plan area will support a variety of uses. First floors of the three building footprints will house visitor serving commercial including cafes, outdoor eateries, shops, and neighborhood commercial. The commercial/retail space will include amenities such as public bathrooms for the Bay Trail users. All first floor uses will be designed to include use of the boardwalk, which will be elevated and separated from the bay trail. This will preserve views from the outdoor cafes and improve pedestrian safety.

#### **4.1.7 Housing**

Residential uses will occupy the land to the southeast of the mixed use component described above. Residential types will include 1 to 3 bedroom condominiums and include a minimum of 25% affordable rate units. The affordable units will include 2 and 3 bedroom units for families. First floor of the residential buildings will be designated for tenant parking only and be well lit.

Detached from the residential uses there will be an area for visitor and employee parking that serves the mixed use retail and commercial. This will be a surface parking lot or possibly a two story structure designed to be open and well lit to deter crime.



#### 4.1.8 Community Garden

To the west of the proposed housing between the maritime areas will be a community garden. The garden will be made with raised beds and imported soils to eliminate contamination risk. Each plot will be rented out by the City, with at least one or two reserved for a youth program. Benches will be provided around the garden.

#### 4.1.9 Commercial

The commercial section of the project is envisioned to include a stepped building on the hillside. Entrances to the buildings will be from the top floor – at level with the hilltop, and from the bottom floor on the Hunters Point Boulevard side. The building will therefore serve as a connection point between the hillside and the greater project site.

Commercial buildings will have large open lobby areas, emulating the Ferry Building. The staircases through the buildings will also be open and inviting. Within the building there will be commercial, retail and restaurant spaces to service employees. The restaurants will be a convenient place for lunch and snacks, and a coffee-specific establishment would serve the morning need for breakfast. Included in the commercial or retail could be a book store or gift shop.

Open areas will have tables and chairs, comfortable seating, and be inviting to those taking a break from their jobs. Between the two commercial buildings will be an outdoor staircase that is wide and inviting and provides resting areas with seating.

#### 4.1.10 Research and Development

PG&E will maintain control of much of the industrial site and will therefore have final say over its uses. However it is proposed that the site will grow into a center for green technology with a focus on research and development.

The 'jungle gym' should be enclosed to improve upon the aesthetics of the site. Housing for the structure is proposed to be glass-walled to allow for illumination at night and serve as an artistic focal point for the site. The roof will provide open space and a place to enjoy the views from the project site. As the buildings are situated to maximize views of the downtown and east bay, the roof area will be equipped with benches, plantings, tables, trellises.

Circulation around the industrial park will link pedestrian walkways and the Bay Trail with Hunters Point Way and encourage bicycle commuters to the site. The parking lots for the industrial park should be as tall as the enclosure for the jungle gym with open-air top floors. This will provide pleasant places for people to relax and take in the view of downtown and the east bay. Roofs should have benches, tables, and chairs, as well as trellises for shade.

With the addition of a pedestrian bridge connection between the commercial and R&D portions of the project, parking provided at the R&D site will also help alleviate parking requirements for the commercial buildings.

#### **4.1.11 Circulation and Parking**

Circulation throughout the project was designed to be pedestrian friendly. Our plan includes improvements to the Bay Trail and will contain automobile traffic to the Innes Avenue Corridor and parking areas.

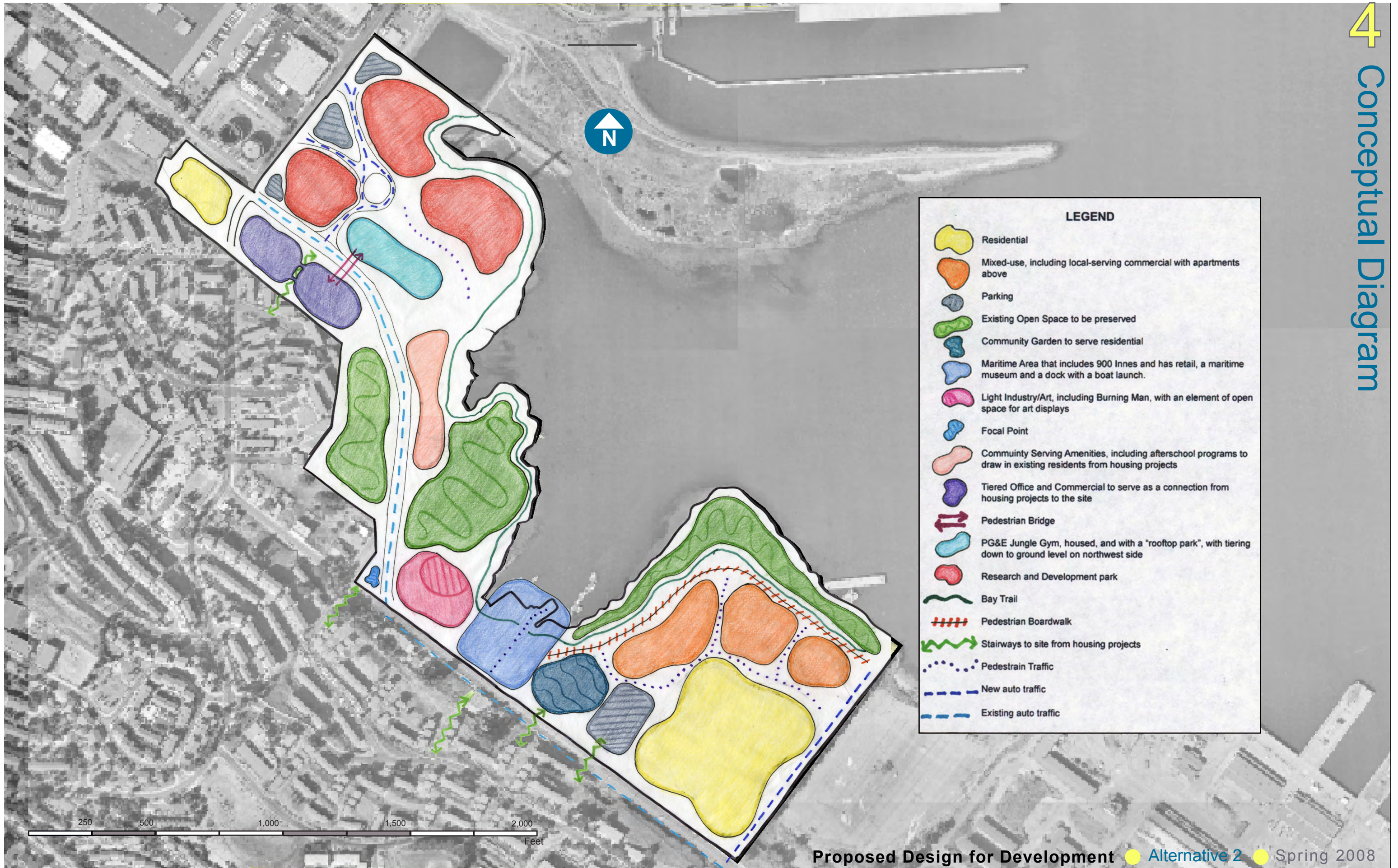
The area should include a boardwalk – a raised element separated from the Bay Trail that connects the maritime site to the eastern boundary and allows for a future connection to the Naval Shipyard. Several well-planned staircases that are designed in a visually pleasing and safe way will provide connections between the boardwalk and Bay Trail.

Circulation between the commercial buildings will be provided in the form of an outdoor staircase with resting areas to take a break or sit and eat. The inspiration for the staircase area are the large staircases in Downtown Los Angeles. These stairway areas are meant to accommodate the neighborhood and employees of the commercial buildings. They will be planted with trees and foliage and have bench seating

Parking will be provided throughout the R&D site and the mixed use/residential portions of the property. The project will ultimately be served by additional parking incorporated into Naval Shipyard improvements.

Public transportation will be provided in the form of bus service and the addition of a bus stop to the triangle parcel.









# Design Proposal





# 5. Design Proposal

## 5.1 Introduction

This chapter describes the design rationale for India Basin Design Concept Alternative 2. The following pages discuss the rationale in three contexts: Land use, housing, and economic development; Transportation, circulation, street framework, and street sections and; The public realm including open space, community amenities and recreation.



Proposed Design for Development ● Alternative 2 ● Spring 2008

## 5.2 Land Use, Housing and Economic Development

### 5.2.1 Land Use

As shown on the Uses Map (Figure 5.1), Alternative 2 proposes eleven land use categories for the site: Residential, Mixed Use, Existing Structures, Research and Development, Office and Commercial, Community Amenities, Parking, Light Industrial/Art, Transportation Hub/Community Artwork, Maritime Area with Commercial, and Existing Open Space.

#### 5.2.1.1 Northern Portion of Site

The northwest portion of the site contains Commercial, Research and Development and an Existing Structure associated with the PG&E power plant. Southeast from there, along Hunters Point Boulevard are Existing Open Space, and proposed Community Amenities to include a community center, community gardens, and sport fields. The intersection of Hunters Point Boulevard, Innes, and Hawes Streets creates an island parcel. This parcel is a prime location for a Transportation Hub and Community Artwork that will create a sense of place for the project area. Across Hunters Point Boulevard from the island parcel are Light Industrial and Art land uses, and an area currently serving as an informal parking. The parking lot will become a designated parking area, and the Light Industrial and Artwork space is proposed for reorganization to create a formal outdoor art exhibition area.

#### 5.2.1.2 Maritime Area and Innes Avenue

Many of the parcels along Innes are developed, and changes are not proposed on these parcels. At the intersection of Griffith and Innes Streets is a historically significant building – 900 Innes. This historic structure is the anchor of the Maritime Area with Commercial land use. The Maritime Hub will have a ‘Fisherman’s



Wharf' feel at a much smaller scale that celebrates the Pacific Theater heritage of the area. The existing dock will be improved to be wide enough for a compact pedestrian arcade, and will include benches. The structure at 900 Innes will be rehabilitated to address seismic and safety concerns, and turned into a maritime museum. The plan includes addition of a small structure for commercial use on or adjacent to the dock to be used as a kayak and canoe storage, or a small gift or snack shop. There will not be a boat launch in this area; instead boats will have access to the Bay in Shoreline Park.

### **5.2.1.3 Southeastern Waterfront**

To the east and south of the Maritime Area is a combination of Open Space, Mixed Use and Residential land uses. The open space component incorporates the Bay Trail and existing habitat area long the waterfront. Serving as a transition from the Bay Trail to the Residential area is area designated for mixed use development. The Mixed Use area will be commercial, retail and restaurant/café spaces on the ground level, with residential above. The retail and commercial spaces will be designed to address the boardwalk that wraps around it. The boardwalk will be separate from the Bay Trail so that recreation and bicycle commuting is not impeded by the casual shopper. A parking structure is planned for this area, to be located near Innes Avenue for easy vehicle access. The structure will serve the boardwalk shopping area, and provide some visitor parking for the adjacent residential use.

### **5.2.1.4 Southern Portion of Site**

At the southwestern corner of the plan area, Alternative 2 proposes two types of residential development discussed in depth in the next section. The two types include residential townhomes and residential apartments. The 146 townhouse units are low-density clusters of three-story buildings around motor courts with open spaces and a centrally located park. The apartment building varies in height from three stories to one story and is located closer to Innes street, providing an additional 40 residential units. A

total of 16 units are proposed to occupy the second story component of the mixed-use buildings.

## 5.2.2 Housing

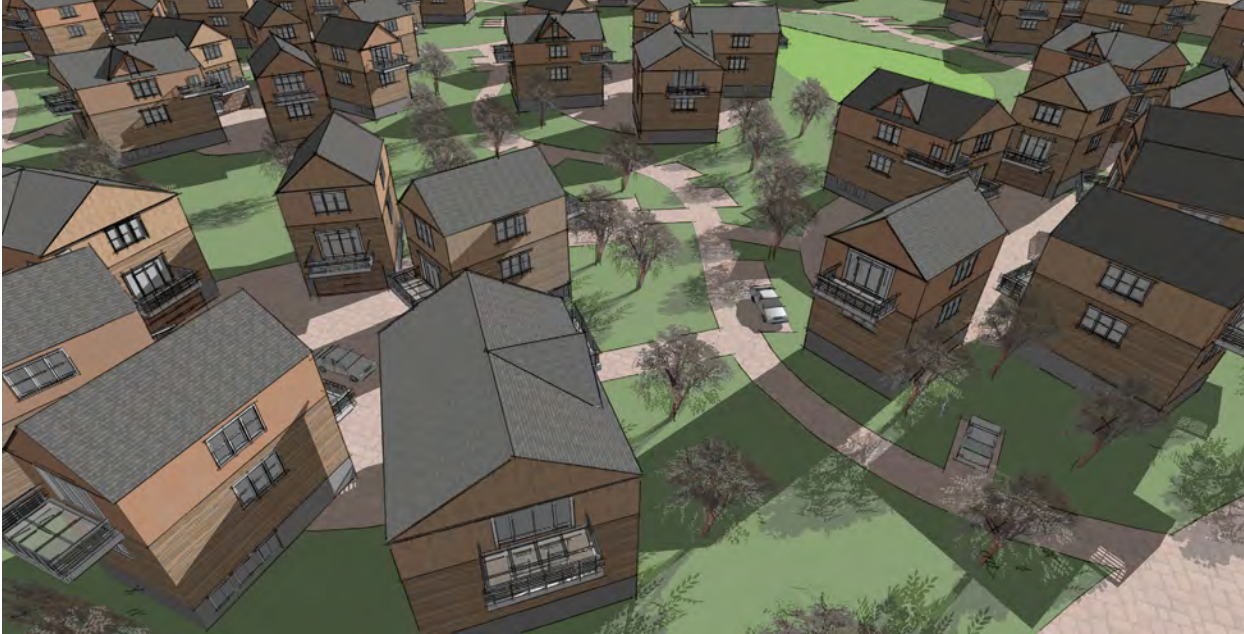


Figure 5.2. Townhomes Concept

The residential component of Alternative 2 is located entirely within the southeast portion of the plan area. In addition to 186 units are proposed townhouse and apartment units are 16 residential units located above retail spaces in the mixed-use component of the plan area. The overall goal will be for 25% of the units to be affordable housing.

### 5.2.2.1 Townhomes

The 146 townhouse-style residential units are contained in three-story buildings situated in clusters around eleven common-area motor courts. Each cluster contains six or seven separate buildings, each with a garage on the ground level (Figure 5.2). (The Boulders, in Seattle Washington (Figure 5.3), were inspiration for the residential element of Alternative 2)



Figure 5.3. The Boulders, Seattle, WA

There are two sizes of townhouse building. The smaller buildings each contain two one-bedroom, 900 square

foot units, while the larger buildings contain two 1,600 square foot, two bedroom units.

In addition to the ground floor of each residential building containing one parking space, visitor parking will be provided. There are five locations for tenant street parking, each with three spaces distributed along the residential streets, or woonerfs. Visitor parking will be provided in the proposed parking structure just south of mixed use building F.

#### 5.2.2.2 Apartments

A 40-unit apartment complex is proposed along Innes Avenue in the southern portion of the residential area. The proposed complex is a stepped structure, with three stories along Innes Avenue, two stories on either side of a central common area courtyard, and a row of one-story units facing the townhouse clusters. The first floor of the two and three-story components will be used for resident parking.

As with the townhouse residences, the apartments will be 900 or 1,600 square foot units. Within the twelve three-story buildings, the second and third floor will each contain one 900 square-foot unit. The four proposed two-story buildings will contain ground level parking and one 1,600 square foot unit above. The single-story component will provide for twelve 900 square foot dwelling units. The materials and overall design for this structure should connect visually to the townhomes. There should be peaked roofs to help distinguish the multiple units of the building. (Figure 5.4)



*Figure 5.4. TA multi-unit complex in the Boulders, in Seattle, Washington. The complex, like the residential structures in Figure 5.3, were the inspiration for the apartment structure in Alternative 2.*



### 5.2.2.3 Residential Above Mixed Use

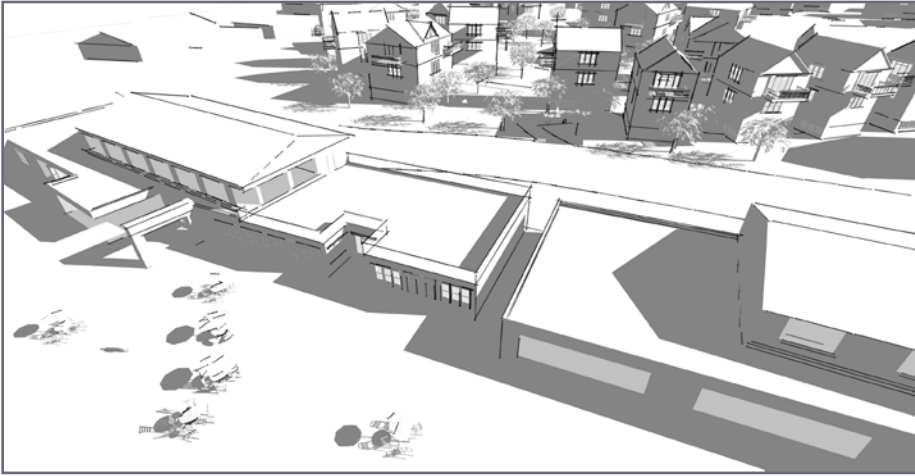


Figure 5.5. Single-story apartments located above commercial along the boardwalk.

A total of 16 residential units are proposed to be located in a second-story component above the retail/commercial and restaurant uses of the mixed-use area. They will be single-story units, and use a portion of the flat roofs of the retail space below as private open space in the form of outdoor patios. Twelve of these units will be 1,600 square feet and the remaining 4 will each be 900 square feet.

### 5.2.3 Economic Development

Retail, Commercial and Research and Development space is proposed in Alternative 2. The retail space is largely found in the mixed-use component of the plan area, while the commercial and R&D uses are concentrated in the northwestern plan area.

The available space will be filled with companies hiring employees at a variety of income levels. The commercial, retail and R&D spaces are proposed to capitalize on the natural amenities of the site including views of Downtown and the East Bay, proximity to the proposed new football stadium, convenient access to public transportation, and the concentration of qualified professionals in the Bay Area.

### 5.2.3.1 Mixed Use

The ground level of the mixed-use component will house visitor-serving commercial and retail, including cafes, outdoor eateries, shops, and neighborhood commercial. These storefronts are proposed to maintain a pedestrian scale, to encourage a leisurely shopping experience. The economic vitality of these spaces will depend both on the residential consumers living in the project area in the townhouses, apartments, second-story residents above the shops, surrounding neighborhood residents, and also tourists and consumers attracted to the site for its natural amenities (Figure 5.6).



*Figure 5.6. Mixed Use  
Commercial and Residential  
along the boardwalk and the Bay Trail*

All first floor uses will be designed to include use of a proposed boardwalk, which will be elevated and separated from the bay trail. This will preserve views from the outdoor cafes and improve pedestrian safety. The overall pedestrian experience will draw consumers from the surrounding neighborhood and from throughout the City.

As the popularity of the retail area increases, so too will the sales tax revenue generated. The sales tax revenue will help offset the cost of public services to the residential portion of the project.

### 5.2.3.2 Commercial

The two proposed commercial buildings will have large open lobby areas, emulating the Ferry Building (Figure 5.7). The staircases through the buildings will also be open and inviting. Within the building there will be commercial, retail and restaurant spaces to service employees. The restaurants will be a convenient place for lunch and snacks, and a coffee-specific establishment would serve the morning need for breakfast. Included in the commercial or retail could be a book store or gift shop.

The building is designed to capitalize on the views of Downtown and across the San Francisco Bay. Those not fortunate enough to have an office overlooking the Bay will enjoy the views from a number of outdoor patios on each level. The buildings will be attractive places to work, both inside and out, as the grand staircase proposed between the buildings will have space to sit and enjoy the climate and the view.

Entrances to the buildings will be from the top floor – at level with the hilltop, and from the bottom floor on the Hunters Point Boulevard side. The building will therefore serve as a connection point between the hillside and the greater project site.

### 5.2.3.3 Research and Development

The existing Pacific Gas and Electric power plant and related infrastructure creates a technological and industrial context for the northwest portion of the project site. The removal project underway for some existing facilities creates opportunity for introducing a new site design and building layout on the parcel.

In light of the City's expressed interest in encouraging green technology and building design, the timing is right for introducing a Research and Development park on the site that explores the possibilities for green energy and technology. Due to the regulatory processes involved with converting the



Figure 5.7. Inside of Ferry building, San Francisco.



land to private ownership, it is reasonable to expect that PG&E will maintain control of much of the site. Therefore, Alternative 2 proposes that this portion of the project will be refined and implemented by PG&E or a subsidiary.

The R&D site is comprised of three main building blocks totaling sq ft. Each block consists of three major occupancy areas, with a 'backbone' structure connecting them in a curvilinear pattern (Figure 5.8). The building exteriors are proposed to be constructed mostly of glass panels. The concave layout of the north-facing façade of each of the main occupant areas will compliment exterior seating areas, and pathways.



*Figure 5.8. R&D building design concept*

The buildings are proposed to have flat roofs to be improved with green roofs to provide open space areas for employees to enjoy the views from the project site. As the buildings are situated to maximize views of the Downtown and East Bay, the roof area will be equipped with benches, plantings, tables, trellises (Figure 5.9 and 5.10).

In addition to the open space amenity, the flat roofs will accommodate solar panels and provide spaces where alternative power technologies can be tested.

Parking for the R&D uses will be split between surface parking throughout the development, and a parking structure proposed for the southern-most building facing Evans Avenue. As seen in Table 5.1 a minimum of 362 spaces will be provided.



Figure 5.9. Useable roof top



Figure 5.10. Useable roof top

# LS Land Use Map



Proposed Design for Development ● Alternative 2 ● Spring 2008



## 5.2.4 Transportation, Circulation and Streets

### 5.2.4.1 Transportation

Public transportation to the site will include addition of a bus station at the intersection of Innes, Hawes, and Hunters Point Boulevard. We also propose an increase in service along existing bus lines. Additional service and improvements to public transportation along Hunters Point Boulevard and Innes Streets should be implemented with development of the new football stadium and continued development at the Naval Shipyard.

### 5.2.4.2 Circulation

Circulation throughout the project is pedestrian-oriented and encourages pedestrian and bicycles over automobile use. Alternative 2 includes construction of a boardwalk, improved pedestrian access, and improvements to the Bay Trail. Car traffic is limited to Evans Ave, Hunters Point Boulevard, Innes Ave, Hawes Street, and a proposed residential street around the eastern edge of the project area.

In addition to the existing street framework, circulation patterns through the site include staircases from the hilltop to the project area, an unfinished portion of the Bay Trail, and a proposed Boardwalk connecting the mixed-use land uses with the maritime area around 900 Innes.

#### *Connectivity to Existing Housing Developments*

Currently the connection between the hilltop residents and the project area occurs along four cement staircases and several informal dirt trails. These staircases are proposed for rehabilitation as part of a separate redevelopment effort. To provide an additional connection, a large staircase is proposed through the commercial area of the project. Circulation through the buildings themselves will also connect the hilltop with the rest of the project area, as there are entrances to the buildings on the top floor, level with the hilltop, and the bottom floor level with Hunters Point Boulevard.

### *Bay Trail*

The Bay Trail has not been completed through the project area. Alternative 2 proposes completion of the trail along the waterfront next to the mixed-use boardwalk, through the marine district and along the water next to the R&D area. To provide connection points from the boardwalk to the Bay Trail, several wide staircase and other connections are proposed to be designed in a visually pleasing and safe way that will provide unambiguous visual clues to both pedestrians and trail users.

### *Mixed-Use Boardwalk*

As mentioned in the Mixed Use discussion in the Economic Development section, the mixed use area of the project site will be served by a pedestrian boardwalk. The boardwalk will be elevated above, and separate from the Bay Trail. The boardwalk will extend from maritime area to the eastern end of the row of mixed use buildings. The end of the boardwalk should be designed for easy connection to the Naval Shipyard, should future connection be desired.

The boardwalk is proposed to be an average of 50 feet wide on both sides to provide adequate area for outside eateries and cafes, pedestrians, tables and benches, and organized street fairs or outside art displays.

### **5.2.4.3 Street Framework**

Alternative 2 provides for six street types. Each is designed to serve different design components. Streetscapes range from two lanes in each direction on Innes Ave and Hunters Point Boulevard, to single-lane woonerf within the residential area.

### *Evans Avenue, Hunters Point Boulevard, an Innes Avenue*

These three connected streets will continue to be 4-lane thoroughfares. The 55-foot wide street will be flanked on either side by a 6 foot wide sidewalk and bike lane.

### *Hawes Street*

Hawes Street will remain unchanged, as the proposed bus station will benefit from multiple points of entry and exit.

### *Griffith Street*

Griffith Street will be closed to through traffic, and be redeveloped into a 35-foot wide pedestrian pathway. The Bay Trail will cross Griffith Street in the form of a bicycle roundabout with pedestrian refuge in the center. Use of bollards and differentiated pavement or paver types will be varied in this area to clearly delineate where pedestrian vs. bicycle travel is appropriate (Figure 5.11).

### *Hudson Avenue*

Hudson Avenue is an unimproved public right of way that is impeded at several points by fences and gates constructed by adjacent private property owners. Alternative 2 proposes to remove impediments to this thoroughfare, and use portions for improving the Bay and other pedestrian pathways. The western end of Hudson Avenue is partially improved and being used as an informal parking lot. This portion is proposed for proper improvements into a public parking lot to serve the project area. The eastern end of Hudson Avenue will not be formally improved along the existing alignment, instead the right of way will be absorbed and incorporated into the proposed surrounding land uses.



*Figure 5.11. Bike and pedestrian path with differentiated pavers to delineate direction and transportation type.*



### *Arelius Walker Drive/Fitch Street*

Arelius Walker Drive, also known as Fitch Street, will be removed in favor of a new residential street wrapping around the exterior of the residential area (Figure 5.12). The street will run between the residential and the mixed-use portions of the project and be 26 feet wide, with a 6 foot sidewalk and 4 foot wide bike lane.

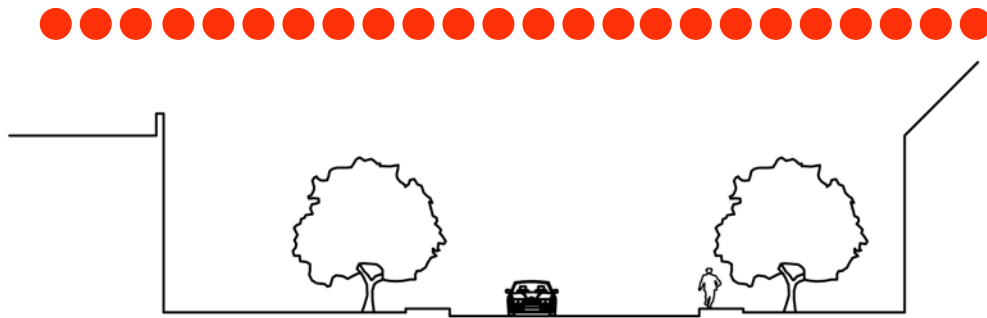
### *Woonerf*

To serve the residential townhouses, a narrow street system called a woonerf will be constructed. A woonerf is a type of residential street that integrates pedestrian sidewalks and car traffic in one common lane. Lack of a continuous curb and introduction of street furniture and landscaping on either side of the street creates a yard area feeling. Woonerfs, at 11-feet wide are narrower than the traditional residential street, resulting in a traffic-calming affect that contributes to a neighborhood feel. Designed as woonerfs, the street pattern will discourage outside traffic from driving through private residential areas (Figure 5.15 and Figure 5.16).

### *Proposed R&D Streets*

Throughout the Research and Development area, the streets are proposed to be 30 feet wide, with 6 foot wide sidewalks. This will allow for one lane of traffic in each direction, and a comfortable width for pedestrian circulation on the sidewalks. Pedestrian and bicycle transit is well accommodated and encouraged around the perimeter of the R&D park, as many pedestrian path connections are made to the Bay Trail. It is anticipated that the pedestrian and bike pathway around this portion of the project will encourage employees to commute to work by bicycle (Figure 5.13).

## 5.2.4.4 Street Sections



**Type 1**  
Street Width: 36 ft.  
Sidewalk Width: 6 ft.  
Bike Lane Width: 4 ft.

Figure 5.12.



**Type 2A**  
Sidewalk Width: 6 ft.  
Street Width: 30 ft.



**Type 2B**  
Sidewalk Width: 6 ft.  
Street Width: 15 ft.

Figure 5.13



**Type 3**  
Walkway Width: 35 ft.  
Pedestrians only  
No automobiles

Figure 5.14

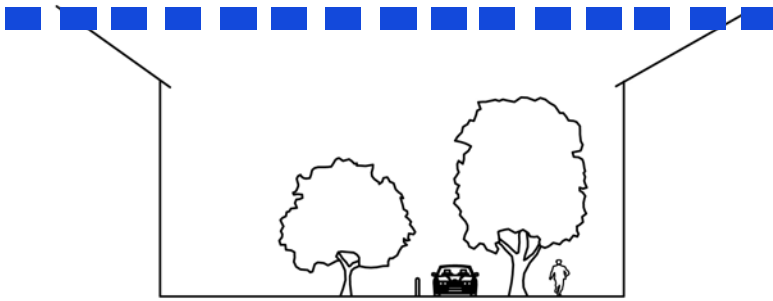


Figure 5.15

**Type 4A**

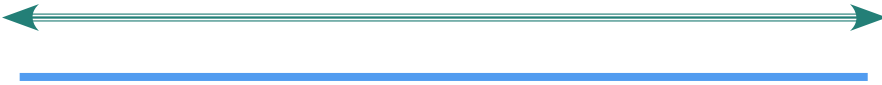
Street Width: 11 ft.  
 Single Lane  
 Landscaped  
 Pedestrian friendly  
 Connected to walking pathways located throughout neighborhood



Figure 5.16

**Type 4B**

Street Width: 11 ft.  
 Single Lane  
 Landscaped  
 Pedestrian friendly  
 Connected to walking pathways located throughout neighborhood



**Type 5**

Boardwalk: 50 ft  
 Bay Trail: 10 ft  
 Distance between Bay Trail and Boardwalk seperated by open space; connected by occassional stairways



Figure 5.17



# 5 Circulation Map



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### 5.2.4.5 Parking

As seen in Table 5.1 and Figure 5.18, the minimum amount of parking provided for each of the land uses in Alternative 2 has been established. Alternative 2 adopted the parking regulations found in the Mission Bay Design for Development. For retail space, a maximum of one space for each 500 gross square feet is required, while one parking space is provided per residential unit. The Mission Bay guidelines establish a requirement of one parking space per 1,000 square feet of commercial space, and two spaces per 1,000 square feet of commercial space used for certain industries, which Alternative 2 has adopted for the Research and Development portion of the project.



Figure 5.18. Lettered Site Plan

Table 5.1. Building Square Footage and Parking Details

Building/Use Area	# Stories	Per Building # Units	# of Buildings	Total Units		Square feet per unit	Total square feet	# Parking Spaces Required*
				Residential	Mixed Use			
A Residential	3	2	73	146	900 or 1600 sf	84,600 sf	146	
B Townhomes Residential Apartments	1 to 3	1, 2	28	40	900 or 1600 sf	38,800 sf	40	
C Mixed Use	1, 2	1, 2	6	Residential 6 Retail 6	900 or 1,600 sf 2,400 to 5,000 sf	8,200 sf ~14,000 sf	6 28	
D Mixed Use	1, 2	1, 2	6	Residential 4	900 or 1,600 sf	6,400 sf	4	
E Mixed Use	1, 2	1, 2	4	Retail 6 Residential 4	2,400 to 6,000 sf 900 or 1,600 sf	~20,000 sf ~20,000 sf	40 4	
F Mixed Use	1, 2	1, 2	3	Retail 4 Residential 2	2,400 to 5,000 sf 900 or 1,600 sf	~34,000 sf 5,200 sf	68 2	
G Outdoor Art Exhibit Area Community Center	-	-	-	Retail 3	2,400 to 5,000 sf	~25,000 sf	50	
H	1	-	-	Community Serving		10,000 sf	40**	
I R&D	4	Variable	6	Research & Development		Variable	30	
J R&D	4	Variable	6	Research & Development		Variable	106	
K R&D	4	Variable	4 R&D and 1 Garage	Research & Development		Variable	126	
L Commercial	1 to 3	Variable	2	Commercial		Variable	123	

\*One parking space per residential unit, one space per 500 sf of mixed use retail, one space per 1,000 sf commercial, two spaces per 1,000 sf R & D.

\*\* Spaces to serve art exhibit area and Maritime Area.

\*\*\* New spaces created – Additional spaces existing in Shoreline Park



## 5.2.5 Public Realm, Open Space, Community Amenities and Recreation

### 5.2.5.1 Public Realm

#### *Maritime Area*

The Maritime Hub is inspired by present day Cannery Row in Monterey, California or pier 39 in San Francisco, California (Figure 5.19) and will mix the historical character of the area with small tourist attractions. The dock will be wide enough for a compact pedestrian arcade and will include benches. 900 Innes will be rehabilitated to address safety concerns and turned into a maritime museum. Alternative 2 includes the addition of a small structure for commercial use adjacent to the dock. This can be used for kayak and canoe storage or as a small gift shop.



Figure 5.23. Pier 39 in San Francisco, California

### *Area L Staircase*

Between the two commercial buildings at the western edge of the project (Area L in Figure 5.18) will be an outdoor staircase that is wide and inviting and provides resting areas with seating. These areas will be comfortable and inviting to those taking a break from their jobs

### *Art Displays*

Located at the southwestern edge of the project area, west of Area G, is a triangle-shaped parcel bound on all sides by surface streets. Serving the transition area from Hunter's Point Boulevard to Innes Street, the parcel is in a prime location for artwork to serve as a focal point for the redevelopment area. In addition, its location at the intersection of three streets makes it an optimal location for a bus station. The proposed plan suggests a hybrid of the two. Subjects of the monument piece should be appropriate for the neighborhood character and address its history.

Parcel 6, the 'Jajeh' property, is currently used for art production (Area G in Figure 5.18). The current layout and use is visually confusing. Alternative 2 aims to open the space and add visual organization. This would be accomplished through creation of an outdoor art exhibit space where visitors could meander through and enjoy the artist's works. Existing shipping containers could be organized at points around the perimeter of the site and used as materials storage. The ground surface at the center of the space could be treated with visual interest to organize the artwork into separate display areas.

### 5.2.5.2 Open Space

The 3.8 acre grass hillside across Hunters Point Boulevard from the Community Serving Amenities (Education and Recreation) will be preserved as open space. The plant life, including lupin and coastal sage scrub, provides a potentially valuable habitat for the Mission blue butterfly (*Icaroides missionensis*).

Additional open space can be found in the existing India Basin Shoreline Park. There is also an area of open space in the center of the housing development in Area A.

### 5.2.5.3 Recreation

#### *Parks*

A great deal of effort and public funds have improved the Shoreline Basin Park to its current condition. Alternative 2 keeps existing facilities and infrastructure. Improvements will include the addition of more lighting to the park for safety, and an additional basketball court and soccer field.

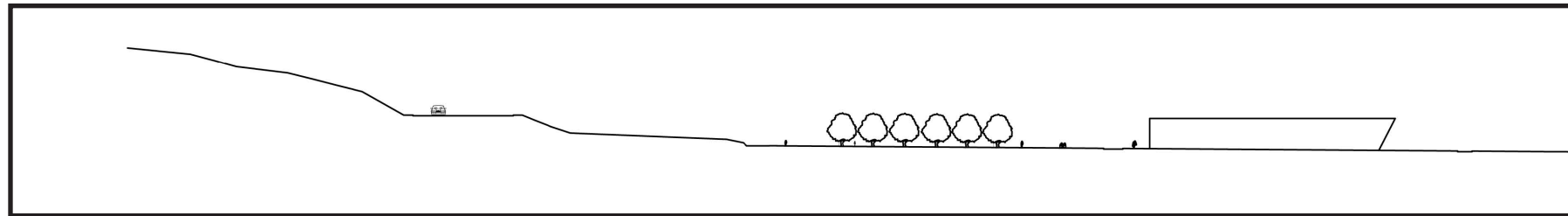
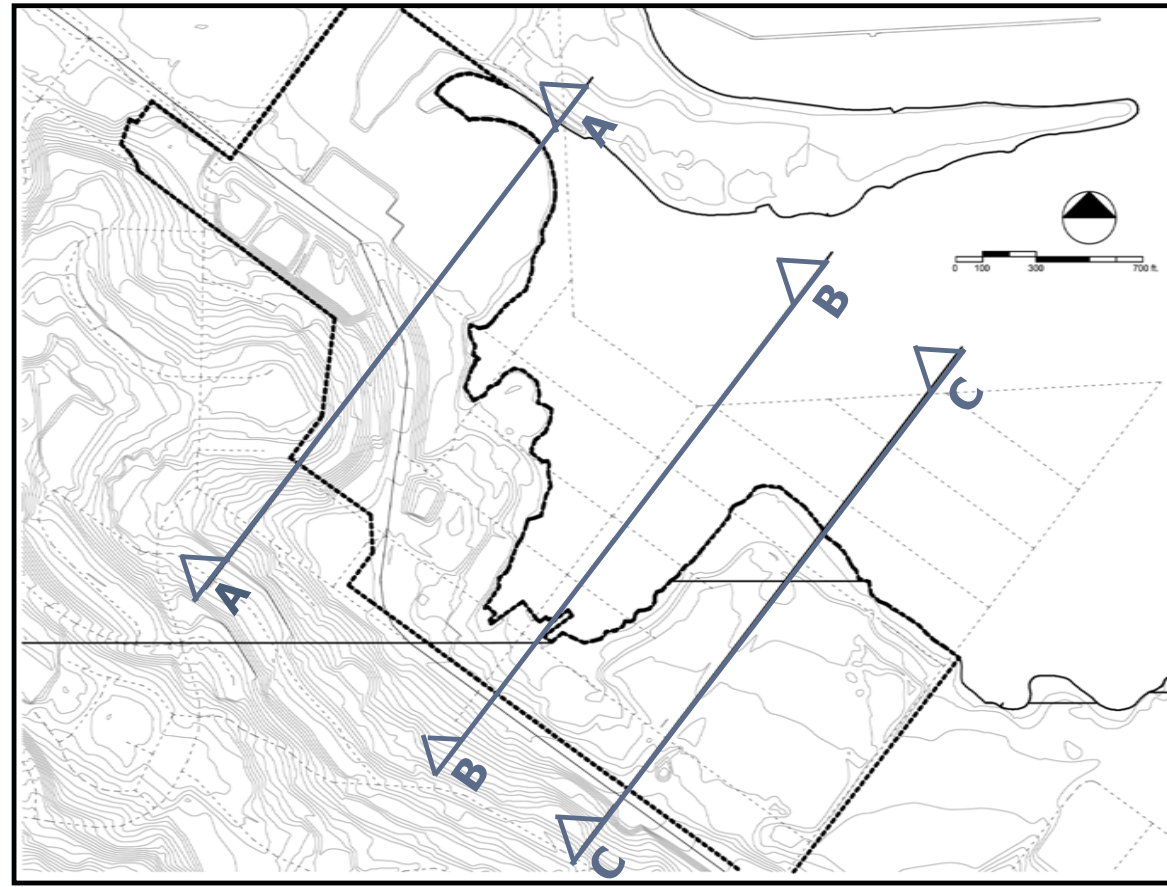
In the residential component of Alternative 2, Area A, a small park is proposed for resident use.

#### *Community Center*

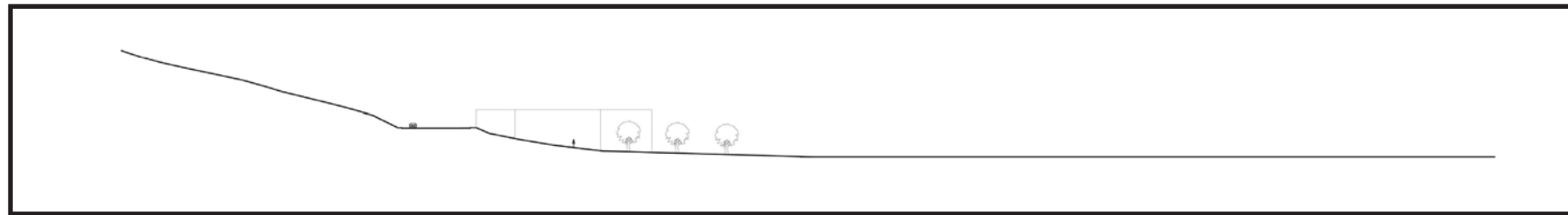
Additional recreation opportunities can occur both within and adjacent to the proposed Community Center. Within the center will be a multi-sport court, and adjacent to the Center, a soccer field and basketball court. The goal is to have the community center sponsor afterschool programs including basketball tournaments and educational opportunities for local children and the children living in the housing projects across Innes Avenue.



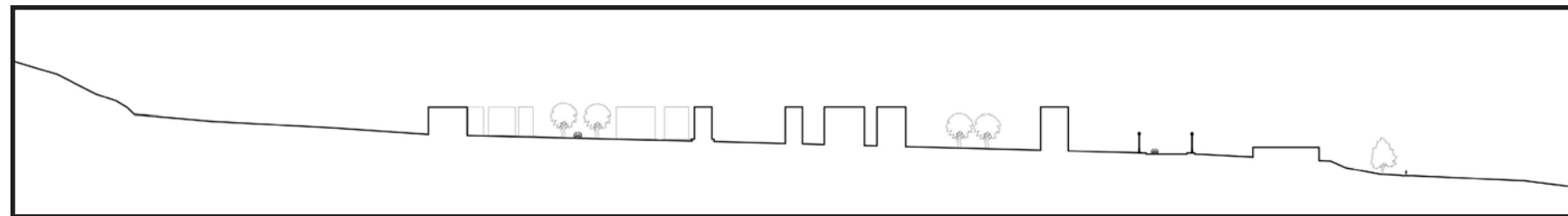
# LS Site Cross Sections



Section AA



Section BB



Section CC

### 5.3 Next Steps

The proposed Design for Development Alternative 2 is one option for future development of the India Basin shoreline.

It is hoped that the San Francisco Redevelopment Agency will use this proposal as an idea generation tool in future design efforts.





## References

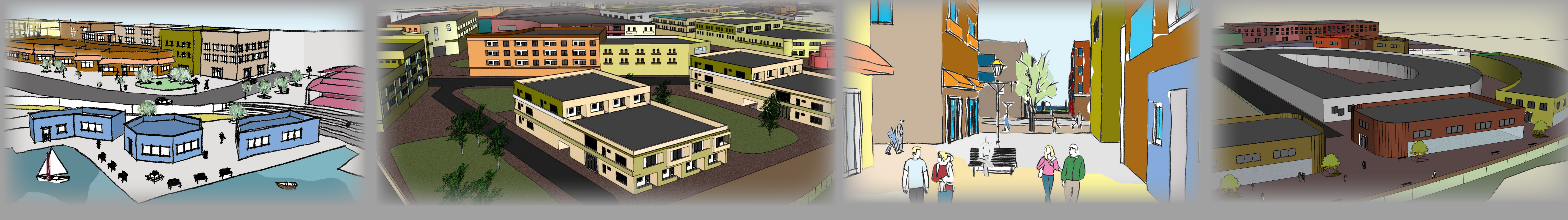
*San Francisco Redevelopment Agency and San Francisco Planning Department Notice of Preparation of an Environmental Impact Report.* Prepared August 31, 2007. Retrieved on April 22, 2008 from <http://www.sfgov.org/site/uploadedfiles/sfra/Projects/BayviewNOP.pdf>.

*Soil Type and Shaking Hazard in the San Francisco Bay Area.* Prepared by USGS. Retrieved April 22, 2008 from <http://earthquake.usgs.gov/regional/nca/soiltype/map>.

Literacy for Environmental Justice. Retrieved April 22, 2008 from <http://www.lejyouth.org>.



# INDIA BASIN SHORELINE BAYVIEW HUNTERS POINT AREA C



## Maritime Center

1: Respect the goals of the local community and San Francisco's architectural styles, embrace the historic maritime culture, and preserve significant landmarks.

## Residential

2: Provide a healthy balance of housing, jobs, and open space for the local community, while protecting current community assets, such as vistas and access to the bay.

## Pedestrian Only Street

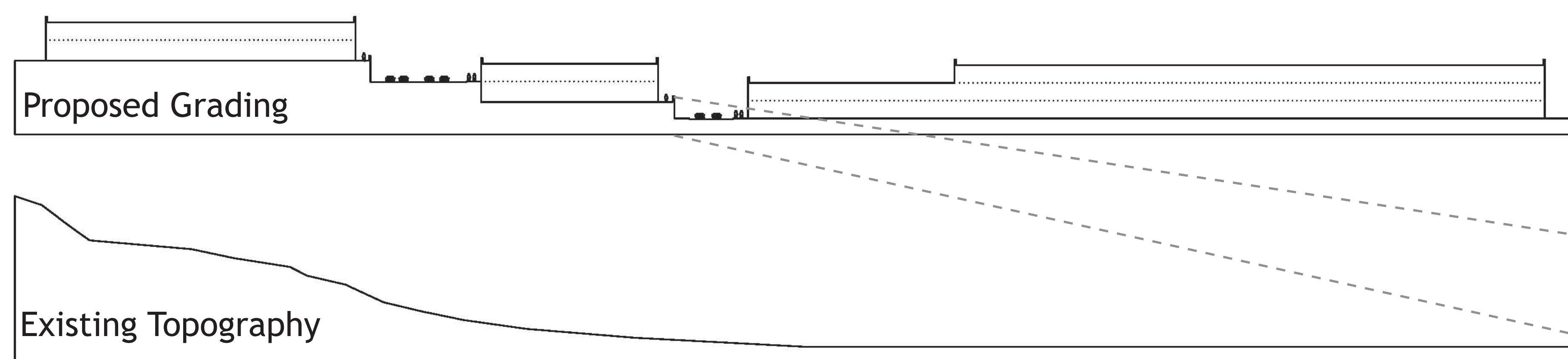
3: Improve streetscape, pedestrian and bike access, and connect the Bay Trail; all improvements will encourage cultural and social interactions.

## R & D Center

4: Allow opportunities for community and economic development by designing strategic compatible land uses in addition to integrating new industry such as the Research and Development.

## Cross-Sections

### Section AA



### Section BB

