Sept. 17, 2012

Location:	Central Estuary Area which is bounded by 19th Avenue to the north, 54th Avenue to the south, I-880 to the east and the Bay to the west.
Proposal:	Per the City Council's direction, the City of Oakland is creating the Central Estuary Implementation Guide (CEIG) for the Oakland Central Estuary Area, as called for in Policy MF-2 of the Estuary Policy Plan (an Element of the City of Oakland General Plan). Staff will present the Draft CEIG and associated Draft Zoning Chapter, Draft Design Guidelines and Draft General Plan Estuary Policy Plan Amendments and highlight historic preservation issues.
Applicant:	Department of Planning, Building and Neighborhood Preservation
Planning Permits Required:	Environmental Impact Report (**ER11-0016);** General Plan Amendment (**GP12-110);** Zoning Text Amendment (**ZT12-109)**
General Plan:	Estuary Policy Plan Area
Estuary Policy Plan:	Light Industry-2, Waterfront Commercial Recreation-2, Planned Waterfront Development-2, Residential Mixed Use, Heavy Industrial, and General Commercial-1, Light Industry-3, Planned Waterfront Development-3, Parks
Zoning:	M-30 General Industrial, M-40 Heavy Industrial, and HBX-3 Housing and Business Mix
Historic Status:	Four Areas of Secondary Importance in the Project Area plus Local Register Properties
Service Delivery District:	3, 4, 5
City Council District:	5
Action to be Taken:	Review proposal and provide preliminary feedback to planning staff
For Further Information:	Contact Alicia Parker at **510-238-3362,** aparker@oaklandnet.com

SUMMARY

As called for in Policy MF-2 of the Estuary Policy Plan, the City of Oakland is preparing the Central Estuary Implementation Guide (CEIG) and related documents to guide future development in the Central Estuary Area. The project focuses on ten sub-districts within the larger Estuary area where some land use change from existing conditions is anticipated. The project includes the rezoning of these areas consistent with direction from the Estuary Policy Plan, as well as General Plan (GP) Amendments to: (1) update existing General Plan goals and strategies to reflect the direction established in the Central Estuary Implementation Guide; and (2) increase the allowable Floor Area Ratios (FARs). In addition, the Draft CEIG includes proposed design guidelines and development standards for the various subareas. A Supplemental Environmental Impact Report (EIR) is currently in preparation.

The Landmarks Board is being asked to provide preliminary feedback on the Draft CEIG, draft design guidelines, draft zoning and draft GP amendments to planning staff. The drafts of these documents were

also recently presented to the Zoning Update and Design Review Committees of the Planning Commission, as well as to the Bicycle and Pedestrian Advisory Committee, each of which provided comments unique to their topic area. Once a public review draft of the Supplemental EIR is prepared, staff will be presenting the project again to the Landmarks Board and to the Planning Commission (along with the Draft CEIG, design guidelines, zoning and GP amendments). At that point, all comments received from the advisory boards and Planning Commission will be compiled, reviewed, and incorporated where feasible into the final documents. Once final documents are prepared, the formal adoption process will commence beginning with the Planning Commission and continuing onto the Community and Economic Development Committee of the City Council and the full City Council.

BACKGROUND

The Central Estuary Implementation Guide (CEIG) that is currently being prepared is intended to serve as a companion to the City of Oakland's **Estuary Policy Plan (EPP)**, which was adopted in 1999. The Estuary Policy Plan (EPP) is an element of the Oakland General Plan, and sets forth policies and principles to guide development in the Estuary waterfront area. An "Implementation Guide" is called for in Policy MF-2 of the Estuary Policy Plan. The CEIG identifies specific steps to be undertaken to implement the recommendations of the EPP. These include detailed strategies and work programs to create and implement projects, site design and development standards, funding and institutional strategies, and other administrative steps necessary to carry out EPP recommendations.

In 2008, the City established a **Citywide Industrial Land Use Policy,** based on Council direction, aimed at preserving certain industrial areas and establishing a more integrated and predictable approach to the management of industrial lands in Oakland. In the final 2008 report recommending the adoption of the Industrial Land Use Policy, staff recommended that the City Council not make a recommendation about the future of the Policy Sub-Areas that fall within the Central Estuary, as the CEIG planning process would analyze them in depth and make recommendations regarding appropriate uses.

On December 9, 2008, the Oakland City Council initiated a planning process for the Central Estuary to develop a coordinated vision for the future development of the area that would address infrastructure deficiencies and conflicting land uses. The CEIG and the related zoning and Estuary Policy Plan amendments and Supplemental Environmental Impact Report will provide the policy framework for improving the Central Estuary area.

As part of the public outreach effort, six community workshops were held between March and November 2009. Initial workshops focused on developing a shared vision statement for the area, and subsequent workshops involved hands-on small group activities to develop and evaluate land use and transportation alternatives and reach consensus on a community-preferred alternative. Technical analysis of the alternatives included land use, transportation, sustainability, public health and fiscal impact analyses.

The three alternative concepts and a draft community-preferred alternative were presented for comment at hearings before the Parks and Recreation Advisory Commission, Landmarks Preservation Advisory Board, Planning Commission, Community & Economic Development (CED) Committee, and City Council between December 2009 and July 2010.

The CED Committee discussed modifications to the community-preferred alternative, including the proposed land uses envisioned for the Owens Brockway site and the south of Tidewater area; there was general consensus about the proposals for the areas west of Fruitvale Avenue that were part of the community-preferred alternative.

On July 20, 2010, the City Council adopted the following land use alternative (in Resolution 82944; illustrated in **Attachment A**) which represents less change from existing conditions than envisioned during the community outreach process of 2009:

(1) West Subarea: mixed-use infill, strengthening the existing specialty food producing industrial area;
(2) Central West Subarea: preservation of the existing neighborhood including live/work uses;
(3) Central-East Subarea: no change from existing conditions at the Owens Brockway site and retail/commercial use between High Street and (the new alignment for) 42nd Street; and
(4) East Subarea: commercial-industrial mix, similar to the existing CIX-1 zone, in the area at the tip of Tidewater Ave., adjacent to Martin Luther King Jr. Regional Shoreline Park, with research and development (R&D) uses to the north and west.

Planning Context

The Oakland Estuary waterfront is a significant citywide and regional resource that connects the City of Oakland and the surrounding region to the San Francisco Bay. The Central Estuary, the focus of the Draft Central Estuary Implementation Guide (CEIG), is an area generally encompassed by 19th Ave. to the north, 54th Ave. to the south, I-880 to the east and the Oakland Estuary to the west. The landside portion of the Central Estuary area is roughly 416 acres.

The Oakland Estuary waterfront has experienced significant development interest in recent years. However, a number of physical and policy challenges, including conflicting land use priorities and essential infrastructure deficiencies, have highlighted the need for a district-wide planning process. A significant citywide challenge of the last decade has been the importance of preserving a healthy diversity of employment and industry in Oakland. Historically, many industries have depended on waterfront access for raw materials or distribution, and some of the industrial uses in the Estuary Area do to this day. As a result, the area was historically predominantly zoned for industrial use, and a number of well-established industrial uses remain.

In recent years, residential development interests have focused on industrial areas throughout the City because of the relative affordability of large land parcels, and the Central Estuary waterfront has been particularly appealing because of its attractive views and central location. At the same time, the desire to increase public access to, and recreational use of, the City's waterfront adds another potentially conflicting demand on this area. The CEIG is intended to address these many demands by clarifying City policy for this dynamic area.

Planning for the Central Estuary is further complicated by the complexity of the area, where conditions vary markedly across the district. For the purposes of the Draft CEIG, the area has been divided into 10 sub-districts, as shown in **Attachment B** and described below:

- **Embarcadero Cove** - this waterfront area currently includes a number of commercial and recreational uses, predominantly oriented to the waterfront. Among these are office spaces, commercial retail and services including Port of Oakland-owned offices and Quinn's Lighthouse. There are also a number of marine activity-related facilities. The waterfront orientation and constrained parcel depth make this area well suited for continued commercial-recreational and water-dependent uses.
- **Mixed-Use Triangle** - this area includes an office development owned by Alameda County, a private school, and other commercial and industrial uses. Many of the early industrial and warehouse buildings have remained intact, salvaged by adaptive reuse into lofts, live-work, offices and educational facilities. The pattern of land uses is relatively fine-grained, with some older structures

and smaller increments of development oriented to the street. Additional adaptive reuse, and new educational, office and commercial uses should be encouraged, as well as multi-family residential and work/live units, where these uses would not create land use conflicts with existing industrial activities.

- **Food Industry Cluster** - this area is generally characterized by light industrial and service uses, and larger scale food processing and food warehousing/distribution operations. Food processing is a major source of employment in this portion of the waterfront, with some 450 individuals employed, many in skilled positions. Manufacturing and food processing/distribution should be encouraged, both for incubator businesses as well as for established and growing concerns.
- **Con-Agra** - this area, primarily in heavy industrial use, is dominated by the 11-acre Con-Agra facility, which mills grain for flour that is distributed throughout the Bay area and Northern California. Cemex and Star Marine are two other large operators immediately adjacent to the Con-Agra facility. While the area historically attracted construction-related uses because of barge access via the Estuary, these business operations remain in the area today largely because of its central location and good freeway accessibility, and because of investments in existing facilities. Policies encourage heavy industry in the vicinity of the Con-Agra plant to continue, while providing for the transition to a mix of new uses if heavy industrial users choose to relocate.
- **Union Point Park** - a 10-acre waterfront park that was completed in late 2005 and expanded in 2010, offering spectacular views of the marina and Estuary, waterfront access, park activities and open space.
- **Jingletown/Elmwood** - the area between 23rd and Fruitvale Avenues, and along Elmwood Avenue east of Fruitvale Avenue, includes a substantial amount of residential mixed in with lower-intensity and smaller scale industrial and commercial uses. The area is home to an increasingly vibrant residential and artist population. Housing includes work/live spaces in renovated warehouses as well as single-family bungalows, houses and more recently developed multi-family housing. A mixture of residential, live/work, work/live, light industrial and neighborhood-serving uses should be maintained in the future, with an emphasis on affordability, livability, and an enhanced relationship with the Estuary.
- **Owens/Brockway** - this site consists of approximately 28 acres of land devoted entirely to the business of glass recycling and manufacturing. These operations are expected to remain viable for the foreseeable future. Improvements along the edges of the Owens-Brockway plant should be undertaken to establish a more positive relationship with surrounding uses, including the neighborhood and the waterfront.
- **High Street Retail** - this commercial center includes a Home Depot and various other commercial uses, including a gym. This is a relatively successful regional commercial destination that capitalizes on its close proximity to the I-880 and High Street, capturing traffic from both the Estuary area and Alameda. At the 42nd Street interchange, there is the opportunity for the expansion and development of new commercial activities that are oriented to both regional and local markets. Specific uses that should be encouraged in this area include region-serving retail, office, general commercial, and light industrial. Street-facing retail uses along High Street, and landscaping and streetscape improvements should be incorporated into all new development, subject to development standards and design guidelines developed for the Central Estuary Area.
- **High Street Warehouse Wedge** - On the east side of Alameda Avenue, the Brinks warehouse and a cluster of small-scale light industrial uses and warehouses are located along the Estuary, impeding public access opportunities. While Bay Trail segments have been completed along some of these uses, a portion of the waterfront remains inaccessible. Public access opportunities should be pursued over time along the shoreline.

- **Tidewater North** - This portion of the Central Estuary District functions as a service support area, with links to the adjacent Coliseum area. It supports wholesale and retail businesses, container storage, and smaller industrial uses. In addition, Pacific Gas & Electric (PG&E) and East Bay Municipal Utility District (EBMUD) have service facilities within this area. Current uses and activities should be maintained and encouraged, but there are opportunities to intensify underutilized sites, now used for equipment and container storage. These sites should be targeted for redevelopment as industrial and service-oriented uses, which would contribute to the overall viability of the area.
- **Tidewater South** - This area is unique in that it adjoins Martin Luther King Jr. Regional Shoreline, one of the larger assemblies of waterfront open space within the Estuary. The East Bay Regional Parks District (EBRPD) continues to develop the MLK Regional Shoreline, including the Tidewater Aquatic Center completed in 2009. Economic development objectives for this sub-district can be realized by deemphasizing service, storage and heavy industry and focusing more on employment-intensive uses that are more complementary with the public nature of the waterfront. Successful development will require an effort to balance competing objectives brought about by the proximity of the sites to regional park and nearby utility facilities.

REGULATORY AND POLICY FRAMEWORK

Citywide policies, such as the City General Plan and zoning, as well as a number of other plans and studies that have focused on the Estuary area, define the potential future for the Central Estuary:

General Plan and Estuary Policy Plan

The **Land Use and Transportation Element (LUTE)** of the Oakland General Plan, entitled *Envision Oakland*, outlines a long-range vision for land use and transportation in the City of Oakland. Adopted in 1998, the General Plan LUTE was designed to emphasize integration of planning, economic development, and implementation, and spur a commitment to action while serving as the ongoing policy guide regarding physical development for the City. The LUTE defined a number of subsequent planning efforts that would be required to complete this process and further delineate the vision for certain areas, including the waterfront in particular. The General Plan LUTE includes policies and detail applicable to the Central Estuary, most notably the recommendation for a subsequent planning effort that created the Estuary Policy Plan.

The General Plan LUTE also recommends that future residential growth in Oakland be targeted to areas with high transit connectivity (Transit Oriented Districts) and the waterfront, and suggests that land uses, densities, and transportation systems be planned to support increased development in these areas. It identifies the importance of regional commercial uses in Oakland's future, and suggests the waterfront as one opportune location for these uses. Key goals and policies address the importance of increasing public access to the waterfront and better connecting waterfront areas to the rest of the city, integration of mixed-use development with adjacent land uses, and defining the type, density, and quality of development that should be encouraged along the waterfront.

The City of Oakland's **Bicycle and Pedestrian Master Plans** provide important policy guidance for bike and pedestrian connections throughout the City. The Bicycle Master Plan includes policies and implementation measures to create safe bicycling opportunities. The Pedestrian Master Plan sets forth the policy, design standards and implementation plan to create a pedestrian friendly environment. Both of these plans contain recommendations applicable to the Central Estuary Area.

The ***Shoreline and Creeks*** section of the **Open Space, Conservation and Recreation (OSCAR) Element** of the Oakland General Plan includes policies and actions that emphasize the Jack London to High Street waterfront as an opportunity area for improved public access, recreational amenities, and land uses which capitalize on the waterfront's presence. This section recognizes two significant challenges to improving the waterfront: (1) the tenuous balance between the importance of increasing access to the waterfront without interrupting active and essential maritime uses, and (2) the challenge of creating linkages to bring the rest of the City to the waterfront. The section proposes the promotion of some beneficial waterfront uses, such as maritime industry, and coordinated waterfront planning in balance with the increased dedication of accessible shoreline.

Because of the long history of the Central Estuary as a vibrant industrial and residential district of the City, a number of policies of the **Historic Preservation Element** of the Oakland General Plan also apply to the area. The Historic Preservation Element encourages the preservation and enhancement of significant historic properties that contribute to Oakland's economy, affordable housing stock, overall image, and quality of life.

The General Plan LUTE established important general goals and policies for the waterfront and created a single broad land use designation, "Waterfront," which is applied to the entire Estuary waterfront, including the Central Estuary. The **Estuary Policy Plan** (EPP), adopted in June 1999, is an element of the General Plan that sets forth policies and principles to guide development in the Estuary area, refining and superseding the policy guidance for this area contained in the City's General Plan LUTE. Since the 1999 Estuary Policy Plan was adopted, two other districts included the EPP, the Jack London District and Oak to Ninth, have undergone significant redevelopment and planning.

The EPP divided the Estuary Area into three districts: Jack London, Oak to Ninth, and 'San Antonio/Fruitvale' (since re-named the Central Estuary). The EPP also recommended nineteen unique land use designations for the Estuary Waterfront, which supersede and subdivide the broad Waterfront designation of the General Plan LUTE into more fine-grained land use areas. The existing EPP land use designations for the Central Estuary consist of Light Industrial, Planned Waterfront Development, Residential Mixed Use, Heavy Industrial, and General Commercial and variations thereof.

Zoning Regulations
With the exception of the Housing and Business Mix (HBX-3) zone adopted in 2006, much of the existing zoning for the Central Estuary was put in place in the 1960's, and has not yet been updated to be in conformance with the EPP land use designations. The existing zoning for the Central Estuary is primarily M-40 Heavy Industrial, with a sliver of M-30 General Industrial, and the designation of HBX-3 Housing and Business Mix, in the residential area known as Jingletown/Elmwood. The Housing and Business Mix (HBX-3) zone is intended to provide development standards for areas that have a mix of industrial, heavy commercial and higher density residential development. This zone is intended to promote housing with a strong presence of commercial and industrial activities.

Citywide Industrial Land Use Policy
As numerous areas throughout the region and the City have converted from industrial to residential use, industrial land has become increasingly important to maintaining the city's diversity. In 2008, the City established a Citywide Industrial Land Use Policy, based on Council direction, aimed at preserving certain industrial areas and establishing a more integrated and predictable approach to the management of industrial lands in Oakland.

In the recommendations of the Industrial Land Use Policy, the Central Estuary was divided between two different Policy Sub-Areas (4 and 11a). Policy Sub-Area 4, which falls within the eastern portion of the Central Estuary, was identified in the Estuary Policy Plan (EPP) as moving towards industrial business park. The Industrial Land Use Policy, on the other hand, found that industrial uses on the upper part of High Street between Tidewater and the 1-880 will likely remain, as more intense uses including residential would further aggravate the existing traffic congestion at High Street and Interstate 880 caused by commuters crossing the High Street Bridge from the City of Alameda. The Industrial Land Use Policy also recommended that the Central Estuary retain the core industrial uses south of Embarcadero Cove through Jingletown/Elmwood north (Park Street Bridge), due to the importance of the existing food production, warehousing and distribution sector in the area, a strong and growing part of the Oakland industrial economy. It also cites the growing presence of craftsmen and artisans in the Jingletown/Elmwood area and their growing importance in Oakland, as well as the need for the material industries that support them.

In the final 2008 report recommending the adoption of the Industrial Land Use Policy, staff recommended that the City Council not make a recommendation about the future of the Policy Sub-Areas that falls within the Central Estuary, as the CEIG planning process would analyze them in depth and make recommendations regarding appropriate uses. Although the Industrial Land Use Policy was never formally adopted by City Council, it remains the City's only industrial land use guidance.

Regional and Other Agency Regulation and Planning Efforts

The San Francisco Bay Trail
One of the most significant current regional planning efforts, the creation of a continuous San Francisco Bay Trail, has many direct implications for the Central Estuary. The *Oakland Waterfront Trail: Bay Trail Feasibility and Design Guidelines* (2003) includes a detailed feasibility study, site plans and design standards for development of a waterfront promenade and Bay Trail alignment along the Oakland Estuary shoreline. Significant resources were invested to develop and partially implement these improvements. Construction of new parks and trail connections is on-going throughout Oakland, but is particularly pronounced within the Central Estuary, as the waterfront is rapidly being transformed by new projects.

Army Corps of Engineers
The Oakland Inner Harbor Tidal Canal (OIHTC), which includes areas of the Estuary to the east of Coast Guard Island, is federal property governed by the United States Army Corps of Engineers (USACE). Some additional waters of the Estuary not considered part of the OIHTC are still regulated by the USACE, though the federal government is not the owner. The USACE is responsible for overseeing, managing, developing and maintaining the nation's water and related environmental resources, including its navigable waterways. As such, any improvements to facilities that come into contact with the Estuary, such as bridges and piers, will require the cooperation of the USACE. Docks, piers and other structures abutting from private parcels along the Estuary are considered encroachments into federal property where they stretch into the OIHTC and require permits, called Section 404 Permits, and licensing from the USACE for repair, modification, or any new construction.

Bay Conservation and Development Commission
Waterfront development in the Central Estuary, as throughout the Bay Area, is regulated by the San Francisco Bay Conservation and Development Commission (BCDC). BCDC is dedicated to the protection and enhancement of San Francisco Bay and to the encouragement of the Bay's responsible use, through governance of the Bay and its adjacent areas to ensure compliance with federal, State, and

regional laws and policies governing the Bay. BCDC has review and permit authority over all land areas in the entire San Francisco Bay that lie within a 100-foot 'Shoreline Band.' Within the Shoreline Band, BCDC ensures that development is consistent with the *San Francisco Bay Plan* and *San Francisco Bay Area Seaport Plan,* as well as the Public Trust Doctrine. BCDC also works to improve public access to the waterfront and along the water's edge as waterfront projects are developed.

Port of Oakland
The Port of Oakland is a major landowner in the Central Estuary. The Oakland City Charter gives the Port the responsibility to own, develop and manage lands along the Estuary on behalf of the California State Lands Commission under the Tidelands Trust. Through this role, the Port has the ability to plan for, permit, and manage development in parts of the Central Estuary governed by the Tidelands Trust. Specifically, the Port acts as the owner of Embarcadero Cove and areas on either side of Embarcadero to the west of Dennison Street. Also, the Port owns Union Point Park, including the Cryer Site Waterfront Park expansion; these properties are leased to the City of Oakland to provide this park.

OVERVIEW OF THE CENTRAL ESTUARY IMPLEMENTATION GUIDE

The Draft Central Estuary Implementation Guide (CEIG) presents recommendations related to land use, development, urban design, shoreline access, public spaces, regional circulation, and local street improvements for the Central Estuary waterfront and individual districts within it. **Attachment C** contains the Draft CEIG.

The Visions, Goals and Objectives of the Estuary Policy Plan (EPP) and Draft CEIG aim to retain, encourage and support a diverse and vibrant mix of uses; a destination waterfront; complete, safe and clear transportation connections; and infrastructure to support development.

The Draft CEIG includes the following sections:

- **Section I** includes introductory elements, which provide an overview and summary of the planning process, the planning area and surrounding context, as well as the vision for the Central Estuary and the goals and objectives established for implementation.
- **Section II** describes the land use context and includes an overview of existing land uses, zoning, and General Plan designations, along with a discussion of planned land use changes.
- **Section III** includes a review of existing transportation conditions and recommendations for near-term and long-term improvements, including an introduction to transportation policy and issues.
- **Section IV** describes the existing conditions of infrastructure throughout the Central Estuary and provides recommendations for required upgrades that should occur along with new development in the area.
- **Appendix A** provides policy-level recommendations for future transportation projects throughout the Central Estuary.

Concurrently with the Draft CEIG, proposed **new zoning** has been prepared for the area (See **Attachment D**), consistent with direction from the EPP, as well as proposed General Plan Amendments (See **Attachment E**), to increase the allowable Floor Area Ratios (FARs) in some areas and update policy language. The Draft CEIG also includes a related document under separate cover, a **Design Review Manual for the Central Estuary** (See **Attachment F**), that contains proposed design guidelines for the various sub-districts.

The following sections outline the historic resources in the project area.

POTENTIAL FOR CHANGE ANALYSIS

As part of the planning process, a range of qualitative and quantitative data was utilized to identify the parcels in the project area that represent the greatest opportunities for change over the short- and long-term horizons. This assessment is based on the level of future change endorsed by the Oakland City Council. The physical and economic characteristics of individual properties were assessed, with a focus on identifying the opportunity sites with the fewest barriers to redevelopment and those that are most likely to support higher intensity uses.

Sites identified as opportunity sites were overlaid with Areas of Secondary Importance (ASIs) and Potential Designated Historic Properties (PDHPs) from the Oakland Cultural Heritage Survey (OCHS), and the Local Register of Historic Places and are indicated on the Cultural Resource Map included in **Attachment G** of this report. As the environmental review of the Central Estuary Implementation Guide commences, any significant environmental impacts of the development program on historic resources will be identified, along with appropriate mitigation measures.

PRESENCE OF KNOWN SENSITIVE ARCHEOLOGICAL RESOURCES

Less than 15% of the Central Estuary Study Area has been inspected to date for prehistoric and historic cultural resources. While the southeastern portion of the study area has been the subject of several projects, including subsurface testing, very little is known about the archaeology of the northwestern portion of the study area. It is expected that several types and classes of archeological sites may be present in the project area, particularly along the bayshore and in close proximity to drainages and geomorphic features. The Cultural Resource Map attached (**Attachment G**) shows the locations with moderate potential for the presence of buried prehistoric resources.

Two historic archeological sites are located within the project area, including the Southern Pacific Railway rail spur that runs through the West Subarea of the project area and a cluster of 10 historic period features near High Street and I-880, four of which were determined eligible for the National Register of Historic Places. The mix of residential and commercial uses in the Project area also suggests that there is a likelihood of encountering historic-era archeological resources, including the archeological remains of building foundations beneath the existing potentially historic structures. Historic-era archaeological resources may include, but are not limited to: the archaeological remains of both commercial and residential building foundations and walls and transportation systems such as railroad sidings, roadways, wharves, or railroad tracks. Archaeological features most likely to be abundant would be archaeological artifact accumulations containing bottles, cans, ceramics and other materials found in trash pits or privies.

PRESENCE OF KNOWN HISTORIC RESOURCES

The Oakland Cultural Heritage Survey (OCHS) rates historic resources such as Landmarks, Areas of Primary Importance (API), Areas of Secondary Importance (ASI), and Local Register properties, the presence of each of which is described below. The OCHS study was a reconnaissance level survey,

performed in 1997, and many buildings and structures in the project area were given ratings indicating potential historic significance and potential eligibility for listing in local, state or federal registers of historic properties. The Jingletown/Elmwood residential neighborhood is considered to have a potential for historic resources in need of further historic review in subsequent environmental analysis. The residential and industrial buildings within Jingletown, as well as bridges (i.e. Park Street Bridge, Fruitvale Bridge, and High Street Bridge), wharves, and piers are also considered potential historical architectural resources in the project area (because OCHS has not yet intensively surveyed these structures, and these resources have potential for significance for association with the tidal canal and the Oakland inner harbor and waterfront history, the area has a high sensitivity for historic architectural resources).

Historic architectural resources sensitivity considerations include, but are not limited to the following:

- Businesses that produced material for the World War II effort (e.g., Owens-Brockway);
- Some of the earliest local railroads in the 1850's and 1860s (e.g., Alameda Wharf Railroad, Central Pacific, Southern Pacific);
- The possibility that areas within the Jingletown neighborhood could qualify, upon further study, as a Potential Designated Historic District, Area of Secondary Importance;
- A few properties close to the freeway, along E. 7th Street have been identified as possibly being significant;
- Properties associated with early industrial developments, and Oakland's role as the largest grain port on the West Coast (e.g. Con Agra); American Can Company (currently Home Depot site);
- Remaining wharf, pier and bridge structures, descendents of the original USACE tidal canal dredging project and subsequent industrial development it encouraged.

A Supplemental EIR in compliance with the California Environmental Quality Act (CEQA) is currently being prepared. This review will include the identification of historic resources under CEQA and is supplemental to the Estuary Policy Plan EIR adopted in 1999.

Landmarks
The Project area contains no known properties listed in the National Register of Historic Places, California Register of Historic Places, or City Landmarks designated (or "listed") by the Landmarks Preservation Advisory Board.

Areas of Primary Importance
The Project area does not contain any Areas of Primary Importance (API) identified by the OCHS.

Areas of Secondary Importance
At least three Areas of Secondary Importance (ASI) are present in the Project area, including:

The 36th Ave./East 8th residential district: There are a handful of parcels within the ASI known as the 36th Av/East 8th St. residential district encompassing the Jingletown neighborhood, which is located between Fruitvale and 37th Avenue, south of I-880 north of the Owens Brockway plant. The buildings are not considered to be part of the Oakland Local Register of Historical Resources and therefore are not currently considered to be historical resources for the purposes of CEQA. No alteration of the existing buildings is proposed as part of the Implementation Guide, and infill development in this area would reflect direction contained in the design guidelines to ensure appropriate design and scale.

California Cotton Mills (CCM): The California Cotton Mills ASI includes multiple parcels that are located on both sides of I-880. Although the main CCM building is on the other side of I-880 there is one

building in the CCM ASI that is a Local Register Property (see below), there are other related buildings in the Project area: (APN 019_004900303) is rated C2+; (APN 019_004900306) is rated C2+. C2+ = of Secondary Importance and contributing to the ASI. These ratings make them Potential Designated Historic Properties (PDHPs) that are not considered part of the Oakland Local Register of Historical Resources.

Embarcadero Cove: The OHCS identifies Embarcadero Cove as an ASI. There are at least 9 moved properties at Embarcadero Cove, including four residences on the east side of Embarcadero (APN 019_049000200). On the west side of Embarcadero (APN 019_00490001000), there are several moved buildings, including Quinn's Lighthouse, three Italianate residences, and the former East Oakland (Brooklyn) Railroad Station building. These buildings are all rated by the OCHS as C2+, of Secondary Importance, and are in the Embarcadero Cove ASI. The buildings are not considered to be part of the Oakland Local Register of Historical Resources.

California Wire Cloth (CWC): The property (including two parcels: APN 019_004800400 and 019_004800300) is rated by OCHS as an ASI. It is not considered to be part of the Oakland Local Register of Historical Resources.

Property of Major Importance with potential for Highest Importance (Local Register)

California Cotton Mills (CCM): The building at 1010 22nd Avenue (APN 019_004900201) is rated by the OCHS as B+a2+, which is a property of Major Importance with potential for Highest Importance, and is a contributor to the CCM Area of Secondary Importance. A Potential Designated Historic Property (PDHP) that has an existing rating of "A" or "B" is considered part of the Oakland Local Register of Historical Resources.

Properties of Secondary Importance, Not in a District

Owens-Brockway, aka Owens-Illinois: This property is rated by the OCHS as Cb+3, which is a property of Secondary Importance that is not in a district, but the OCHS considers it to be potentially eligible for the National Register if restored or re-evaluated (b+). As currently rated, however, this property is of Secondary Importance, and is not in a district. The buildings are not considered to be part of the Oakland Local Register of Historical Resources.

ConAgra, aka Western Milling - Oakland Elevator & Mill Co.: This property (APN 019_007100106) is rated by the OCHS as a C3, which is a property of Secondary Importance that is not in a district. It is not considered to be part of the Oakland Local Register of Historical Resources.

Numerous other properties with OCHS ratings of C3, of Secondary Importance, that are not in a district, are present in the Jingletown area. Some of these properties may be investigated further for potential reuse to preserve their historically significant architectural features and revitalize their use where appropriate.

Scope of Work for Environmental Review

As part of the Environmental Impact Report (EIR), an assessment will be made as to whether the Implementation Guide development program will cause a substantial adverse change (CEQA significant impact) to historical resources as identified in the description of current conditions. If a substantial

adverse change to historical resources is identified, proposed mitigation measures will be developed that would reduce or eliminate those impacts.

KEY ISSUES AND IMPACTS

I. Zoning Changes

The following table summarizes the zoning changes and resulting possible impacts to historic resources.

Subdistrict	Draft Zone	Proposed Changes to Existing Zoning	Possible Impacts to Historic Resources
Embarcadero Cove	CE-1	**Intent:** promote marine, office and commercial uses. **Activities**: Residential, and many consumer services, wholesale sales, building material sales, surface parking lots and heavy industrial activities would be *prohibited.* Custom and light manufacturing, transient habitation (hotels) and boat and marine-related activities (boat repair, etc.) would be *conditionally permitted.* **Development Standards:** 45' ht limit, FAR increase from 1.0 to 2.0	The area includes the Embarcadero Cove ASI. The proposed allowed activities reflect and update current land uses. Existing businesses would generally be permitted by the new zoning, thereby reducing displacement potential and pressure to convert or demolish historic buildings for other uses. The FAR and height limit would allow buildings taller than those that exist today, however, the design guidelines include guidance to consider surrounding context (see discussion under the "Compatible Development" section below).
High Street Retail	CE-2	**Intent**: commercial uses with direct access to the freeway. **Activities:** encourage large format retail and prohibit heavy manufacturing, auto fee parking medical service and residential uses. **Development Standards:** 85' ht limit, FAR increase from 1.0 to 3.0.	No identified historic resources present.
Jingletown/ Elmwood	CE-3	**Intent**: mix of industrial, heavy commercial and residential uses. **Activities:** permit fewer consumer services (medical service and dry cleaners, etc.); R&D and warehousing would be *permitted*; bed and breakfast activities would be *conditionally permitted.*	Many C3 rated properties (PDHP properties) are found in this subdistrict including the 36th Ave./East 8th St. residential district (an Area of Secondary Importance). While the Implementation Guide does not contemplate redevelopment of the existing resources in the ASI, some vacant parcels in the area would likely be developed. The

Subdistrict	Draft Zone	Proposed Changes to Existing Zoning	Possible Impacts to Historic Resources
		Development Standards: 45' ht limit (reduced from existing 50'), FAR increase from 2.5 to 3.0 (3.0 currently CUP)	proposed zoning regulations allow for the continuation of existing uses, thus reducing pressure to modify existing buildings to make way for new uses. The reduction in height helps to ensure that new development is compatible with existing development. Possible impacts from an outright permission of a 3.0 FAR will be mitigated through design guidelines which call for consideration of surrounding buildings when designing new development. The design guidelines prepared for this area will help to address the design and character of future development.
Mixed Use Triangle	CE-4	**Intent**: mix of industrial and heavy commercial activities; higher density residential. **Activities**: multi-family residential and commercial and less intense industrial uses would be *permitted* or *conditionally permitted*; consumer service (medical service, dry cleaning), general and heavy manufacturing and auto related uses would be *prohibited.* **Development Standards**: 85' ht limit; FAR increase from 1.0 to 3.0.	The California Cotton Mills (CCM) ASI and CCM Local Register Property are located in this subdistrict. The proposed zoning regulations further objectives to continue the custom production activities (e.g., olive oil, wine, and tea production) currently operating in the subdistrict. The zoning regulations bolster the area's role as a food processing hub within the City of Oakland. It is likely that future development will continue the current pattern of adaptively reusing existing warehouse buildings. The height limit and FAR increase would allow for significantly taller buildings than exist today. For new buildings locating in this and all subdistricts, the Design Review Manual for the Central Estuary contains guidelines that address the compatibility of new development with the existing context.
Food Industry Cluster	CE-5	**Intent**: Heavy commercial and industrial. **Activities:** general manufacturing would be *permitted*; heavy manufacturing and large scale hazardous waste storage and transfer would be *prohibited.*	A small amount of peripheral properties have been designated as PDHPs in this subdistrict. The zoning regulations will continue to allow the same types of uses that exist in the area today. Therefore, it is anticipated that conversion pressure will be minimal.

Subdistrict	Draft Zone	Proposed Changes to Existing Zoning	Possible Impacts to Historic Resources
		Development Standards: 85' ht limit; FAR increase from 0.5 to 3.0 (FAR change from 1.0 to 3.0 in High St. Warehouse Wedge subdistrict) *Additional standards would apply to address landscaping, driveways and site access (to CE-5 and CE-6)	The development standards will allow for the increased intensity of commercial/industrial activities to strengthen the area's role as an employment generating and food production area. Design guidelines are proposed to provide for the compatibility of new development with existing buildings.
High Street Warehouse Wedge	CE-5	Same as Food Industry Cluster above.	No identified historic resources present.
Tidewater South	CE-5	Same as Food Industry Cluster above.	Two properties designated as PDHP in this subdistrict; see discussion of impacts to historic resources under the Food Industry Cluster subdistrict above.
Con Agra	CE-6	**Intent** heavy industrial uses with potential for off-site impacts. **Activities:** few changes from current M-40 zoning; *prohibit* general retail sales currently allowed (unless an accessory use), as well as consumer service; auto sales would be *conditionally permitted.* **Development Standards:** no ht limit; FAR increase from 0.5 to 2.0 (FAR change from 0.75 to 2.0 at Owens-Brockway subdistrict)	Some PDHP properties including Con Agra (rated as C3) are located in this subdistrict. Very few changes from the existing range of uses are proposed, thereby reducing conversion pressure due to changes in use. The increase in development intensity will be mitigated through design guidelines that include provisions for relating new buildings to existing buildings and surroundings. Additionally, limitations are designed to protect waterfront resources. For example, the proposed limitation for open storage would require a conditional use permit if the open storage were located within 300 ft of the shoreline.
Owens-Brockway	CE-6	Same as Con Agra above.	The Owens-Brockway facility has a Cb+3 rating which is a property of secondary importance, not in a district. See discussion of impacts to historic resources under the Con Agra subdistrict above.
Tidewater North	CE-6	Same as Con Agra above.	Some properties designated as PDHP. See discussion of impacts to historic resources under the Con Agra subdistrict above.

Subdistrict	Draft Zone	Proposed Changes to Existing Zoning	Possible Impacts to Historic Resources
Union Point Park	OS-NP	No changes to this sub-districts are contemplated as part of the new Central Estuary zoning	No designated historic resources are located in this subdistrict.
Martin Luther King Jr. Regional Shoreline	OS-RSP	No changes to this sub-districts are contemplated as part of the new Central Estuary zoning.	No designated historic resources are located in this subdistrict.

II. Compatible Development

The zoning changes described above would allow for increased density and intensity of future development to enhance the area's role as a working waterfront. Updated development standards that take into account the needs of modern industrial and research and development facilities, will, in part, make the area more competitive and attractive to these types of businesses. The compatibility of higher-intensity future development is addressed through existing policies, standards, proposed mitigation measures and proposed design guidelines.

Impacts from new development within areas of historic significance are addressed by policies in the Historic Preservation Element of the Oakland General Plan and the Standard Conditions of Approval applied to development projects. The Supplemental EIR to be prepared for this project will identify any additional measures to mitigate potential impacts from development contemplated as part of the development program. Furthermore, the design guidelines prepared for the Central Estuary will help address the appropriate design of new or altered buildings.

The general intent of the design guidelines is to retain the eclectic mix of industrial, warehousing, residential, and retail uses that define the character of the area, while encouraging its on-going informal evolution into a unique set of sub-districts that also take advantage of and enhance the area's waterfront, its historic character, and the fine-grained fabric of streets that define much of the Central Estuary. The guidelines define ways to minimize land use incompatibilities and their resulting impacts; guide appropriate employment-intensive and commercial development; and promote the enhancement of frontages along streets and the waterfront.

III. Urban Design

In addition to designing compatible development, new development must create a distinct sense of place. The Central Estuary area is diverse and eclectic. New development should reflect inspiration taken from the surrounding early industrial warehouse buildings and the spirited resident artist population. Specific guidelines and photo examples are used in the design guidelines to express ways to integrate character-defining features of surrounding development into new development. Some examples include:

Specific guidelines (for integrating neighborhood and historical context):

- Bay Trail development guidelines include emphasizing connections to the existing street grid, and retaining and integrating historic elements into shoreline protection.
- The Frontage Types include elements of the surrounding environment (such as the waterfront) to emphasize when designing new development.

- The Façade Articulation section includes a guideline to consider branding buildings with artistic elements.

Photo examples (using inspiration from surrounding structures and environmental elements):

- Guidelines for Walls and Fences contains a guideline that screens, walls and fences should be built out of attractive materials (wood, masonry, stone, metal) and the photo example shows a fence that has an industrial character.
- The Lighting section contains a photo example of integrated exterior lighting in an industrial building.

IV. Historic Preservation Incentives

As **Attachment G** illustrates, various identified historic resources are found throughout the Central Estuary area. The City's Mills Act offers potential property tax reductions in exchange for doing work that will extend the lifespan of historic buildings and/or improve their exterior physical appearance.

Adaptively reusing early industrial warehouse buildings for lofts, live/work, offices and educational facilities in the Mixed Use Triangle subdistrict is a pattern anticipated to continue in the Central Estuary area. This not only preserves historic buildings, but also enhances the unique character of the area. Strategies for adaptively reusing historic resources include the following:

- ***Conversion to a Different Use.*** Buildings no longer well-located or well-suited for its original use can be converted to new uses, as is common in Mixed Use Triangle subdistrict.
- ***Incorporate Existing Low-Scale Development into New Structures.*** This would involve incorporating denser and larger development while preserving the existing low-scale buildings.
- ***Relocation of Historic Buildings.*** Preservation can also be facilitated by the relocation of some of the historic buildings that are scattered throughout the Planning Area into a district with similar character. These buildings could fill in the smaller vacant lots within the existing historic districts. Relocation is already facilitated via a CEQA exemption (City of Oakland Historic Preservation Element, Action 3.8.1.2) and could be further facilitated by establishment of a relocation assistance fund from financial mitigations for significant and unavoidable CEQA impacts on historic resources.

NEXT STEPS

The Draft Central Estuary Implementation Guide (CEIG), new Central Estuary zoning, and General Plan amendments were presented to the Zoning Update Committee, Design Review Committee and the Bicycle and Pedestrian Advisory Committee for review and comment in July 2012. The CEIG, new Central Estuary zoning, General Plan amendments and Supplemental Environmental Impact Report (SEIR) will be presented to the Landmarks Preservation Advisory Board and Planning Commission in the fall/winter. After the Final EIR/Response to Comments Document and the final planning-related documents are presented to the full Planning Commission, further public hearings will be held before the Community & Economic Development Committee of the City Council and the City Council will consider final adoption.

RECOMMENDATIONS

Provide preliminary feedback on the Draft Central Estuary Implementation Guide, Draft Estuary Policy Plan amendments, Draft Zoning Code, and Draft Central Estuary Design Guidelines Manual to planning staff.

Prepared by:

Alicia Parker, Planner II

Reviewed by:

Ed Manasse, Strategic Planning Manager

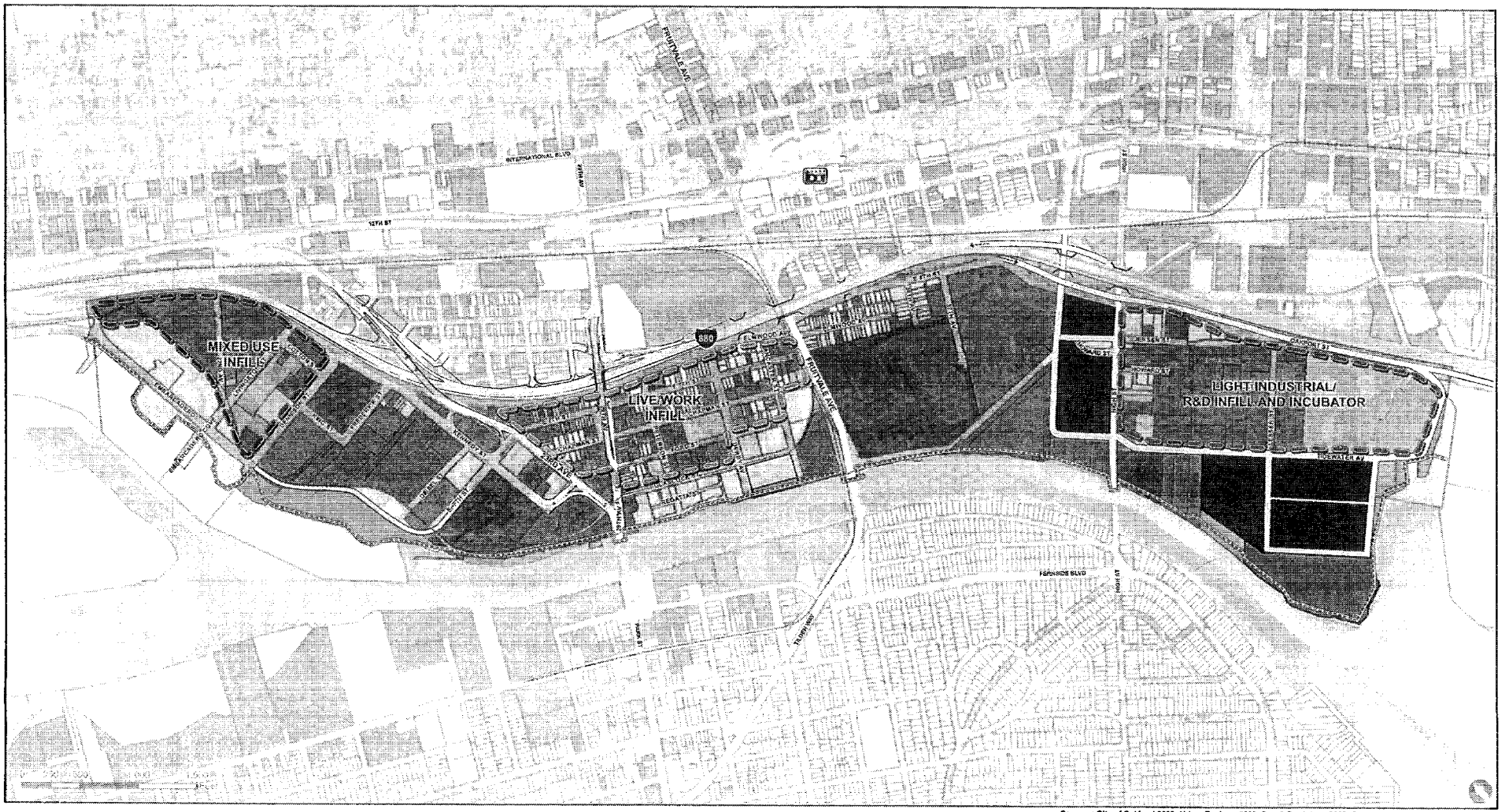
Approved for forwarding to the
Zoning Update Committee:

SCOTT MILLER
Interim Planning Director

Attachments:

A. City Council Adopted Land Use Alternative
B. Sub-districts Map
C. Draft Central Estuary Implementation Guide
D. Draft Zoning Chapter
E. Draft General Plan Amendments
F. Draft Design Review Manual for the Central Estuary
G. Cultural Resource Map

Attachment A



Sources: City of Oakland 2009; Urban Explorer 2009; Dun & Bradstreet 2009; Community Design + Architecture 2010

Preferred Land Use Alternative

July 7, 2010

Existing Land Use

- Industrial (Heavy)
- Industrial (Light) / R&D
- Industrial (Warehouse)
- Vacant or Parking Lot
- Single Family Res
- Medium Density Res
- Live/Work
- Mixed Use
- Retail/Commercial
- Commercial-Industrial Mix
- Office
- Institutional
- Publicly Owned
- Automotive
- Utilities
- Parks

- Live/Work Infill
- Mixed Use Infill
- Light Industrial/ R&D Infill and Incubator

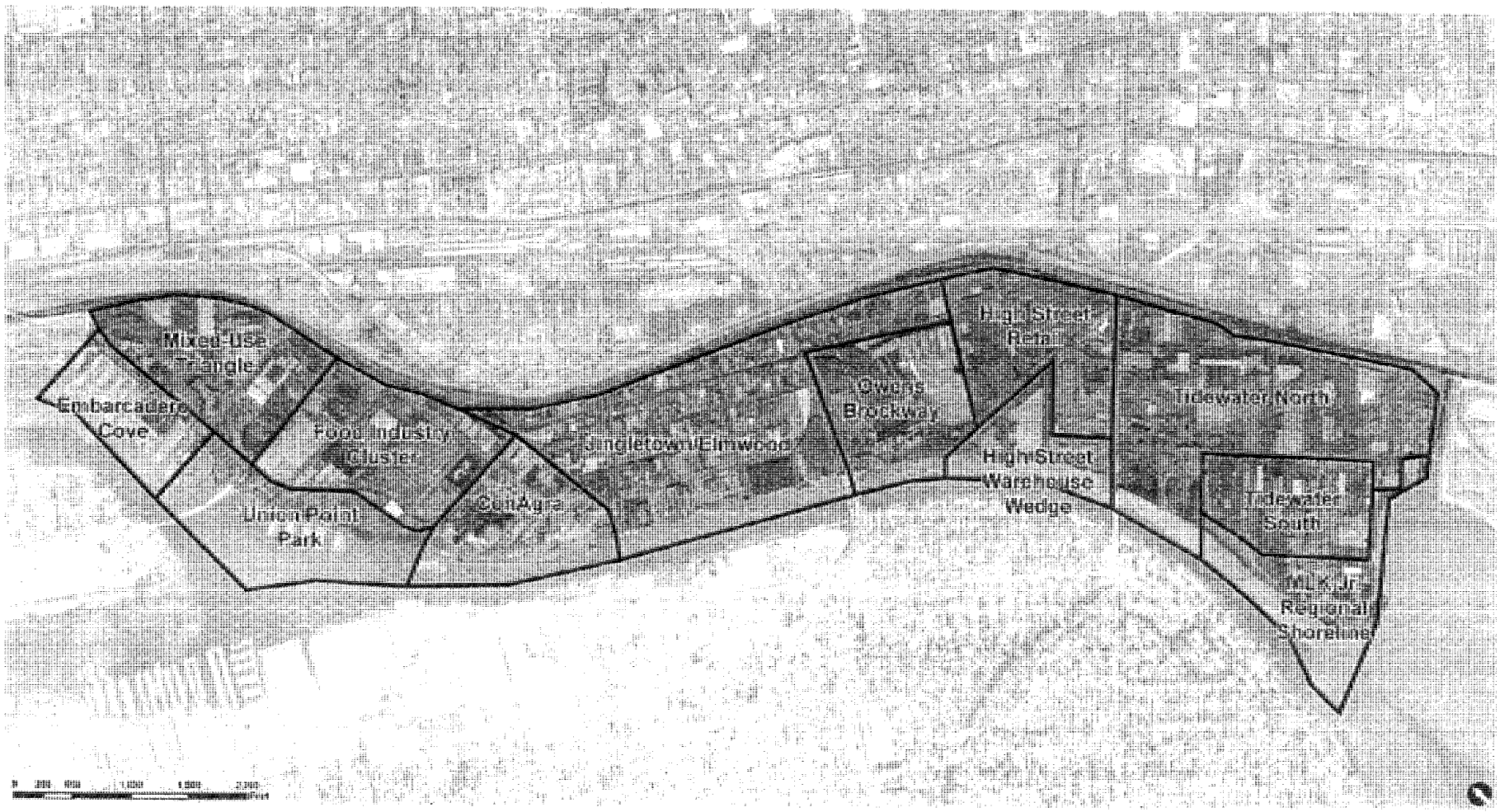
Other Features

- Bay Trail
- Rail (non-BART)
- Public Street
- Underpass
- Ped/Bike Underpass

CITY OF OAKLAND

CENTRAL ESTUARY PLAN
A Vision for Oakland's Waterfront
COMMUNITY DESIGN + ARCHITECTURE

Attachment B



Central Estuary Sub-districts

Sub-district Boundaries

Source: CD+A, City of Oakland

June 2012

CITY OF OAKLAND

CENTRAL ESTUARY Implementation Guide

COMMUNITY DESIGN + ARCHITECTURE

DRAFT

Attachment C

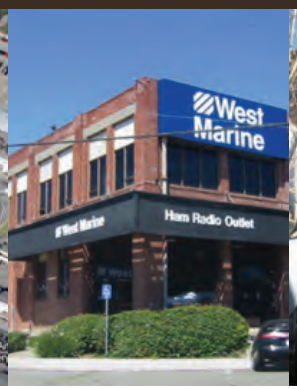
Prepared for

CITY OF OAKLAND
Department of Planning, Building, and Neighborhood Preservation

June 19, 2012

CENTRAL ESTUARY IMPLEMENTATION GUIDE



Prepared by:

Community Design + Architecture

with

ARUP
Strategic Economics
Human Impact Partners
CirclePoint

Prepared for

CITY OF OAKLAND
Department of Planning, Building, and Neighborhood Preservation

June 19, 2012

CENTRAL ESTUARY IMPLEMENTATION GUIDE

Prepared by:

Community Design + Architecture

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CirclePoint

DRAFT

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I. INTRODUCTION AND OVERVIEW

INTRODUCTION

PURPOSE & ROLE OF THE IMPLEMENTATION GUIDE

The City of Oakland Central Estuary Implementation Guide has been prepared to address issues and concerns that have arisen related to land use policy, the quality and character of new development, and the relationship of the Central Estuary shoreline with surrounding districts and neighborhoods.

The Central Estuary Implementation Guide provides guidance for designated areas within the larger Central Estuary area where some land use change from existing conditions is anticipated. Concurrently with the Implementation Guide, new zoning will be adopted for the area consistent with direction from the Estuary Policy Plan (EPP), as well as General Plan Amendments to increase the allowable Floor Area Ratios (FARs) in some areas. In addition, the Implementation Guide includes a related document under separate cover that contains design guidelines and development standards for the various sub-districts.

The Central Estuary Implementation Guide is intended as a companion to the City of Oakland's 1999 Estuary Policy Plan (EPP). The EPP serves as part of the Oakland General Plan for pertinent areas. An "Implementation Guide" is called for in Policy MF-2 of the Estuary Policy Plan. The Implementation Guide identifies specific steps to be undertaken to implement the recommendations of the EPP. These include detailed strategies and work programs to create and implement projects, site design and development standards, funding and institutional strategies, and other administrative steps necessary to carry out EPP recommendations.

Figure I-1: Location of the Oakland Estuary Implementation Guide area within the greater San Francisco Bay

Compared to the Estuary Policy Plan, the Central Estuary Implementation Guide has a more focused geographic scope and is therefore more specific in nature. This Guide is accompanied by a Design Review Manual, both of which apply only to the Central Estuary Area.

ORGANIZATION OF THE IMPLEMENTATION GUIDE

The Central Estuary Implementation Guide presents recommendations related to land use, development, urban design, shoreline access, public spaces, regional circulation, and local street improvements for the Central Estuary waterfront and individual districts within it.

Section I includes introductory elements, which provide an overview and summary of the planning process, the planning area and surrounding context, as well as the vision for the Central Estuary and the goals and objectives established for implementation.

Section II describes the land use context and includes an overview of existing land uses, zoning, and General Plan designations, along with a discussion of planned land use changes and zoning and General Plan amendments.

Section III includes a review of existing transportation conditions and recommendations for near-term and long-term improvements, including an introduction to transportation policy and issues, explanation of existing and proposed streets, and the recommended roadway network improvements.

Section IV describes the existing conditions of infrastructure throughout the Central Estuary and provides recommendations for required upgrades that should occur along with new development in the area.

Appendix A provides policy-level recommendations for future transportation projects throughout the Central Estuary.

PLANNING CONTEXT

The Oakland Estuary waterfront is a significant citywide and regional resource that connects the City of Oakland and the surrounding region to the San Francisco Bay. The Central Estuary, the focus of this study, is an area generally encompassed by 19th Ave. to the north, 54th Ave. to the south, I-880 to the east and the Oakland Estuary to the west (see Figure I-1). The landside portion of the Central Estuary area is roughly 416 acres, of which approximately 319 acres are made up of individual parcels and the remainder are public rights-of-way.

The Oakland Estuary waterfront has experienced significant development interest in recent years. However, a number of physical and policy challenges, including conflicting land use priorities and essential infrastructure deficiencies, have highlighted the need for a formal and district-wide planning process. A significant citywide challenge of the last decade has been the importance of preserving a healthy diversity of employ-

ment and industry in Oakland. Historically, many industries have depended on waterfront access for raw materials or distribution, and some of the industrial uses in the Estuary Area do to this day. As a result, the area was historically predominantly zoned for industrial use, and a number of well-established industrial uses remain. In recent years, residential development interests have focused on industrial areas throughout the City because of the relative affordability of large land parcels, and the Estuary waterfront has been particularly appealing because of its attractive views and central location. At the same time, the desire to increase public access to and recreational use of the City's waterfront adds another potentially conflicting demand on this area. The Central Estuary Implementation Guide (this Guide) is intended to address these many demands by clarifying stakeholder desires and City policy for this dynamic area.

Planning for the Central Estuary is further complicated by the complexity of the area, where conditions vary markedly by sub-district. For the purposes of this Guide, the area has been divided into 10 sub-districts, as delineated in the Sub-districts map shown in Figure I-2.

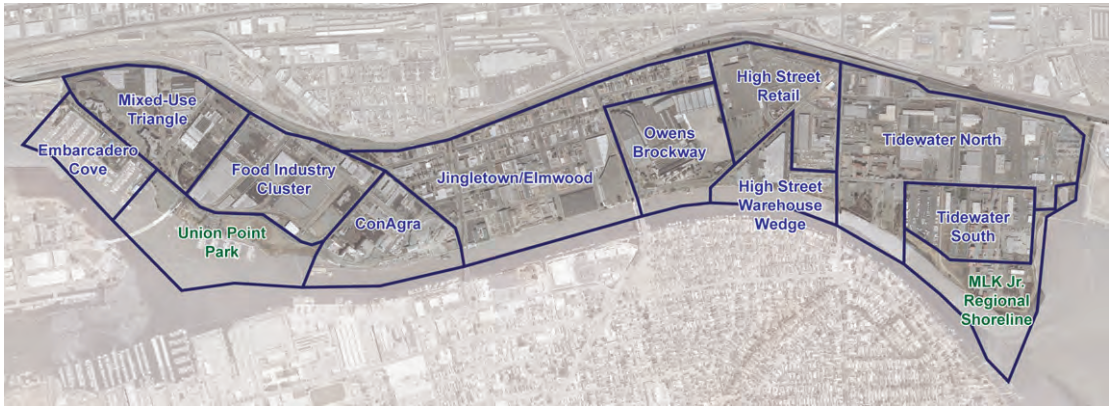


Figure I-2: The Central Estuary District is divided into ten (10) Sub-districts: (Embarcadero Cove, Mixed Use Triangle, Food Industry Cluster, ConAgra, Jingletown/Elmwood, Owens-Brockway, High Street Retail, High Street Warehouse Wedge, Tidewater North, and Tidewater South.)

EXISTING CITY OF OAKLAND PLANS, POLICIES AND REGULATIONS

Citywide policies, such as the City General Plan and zoning, as well as a number of other plans and studies that have focused on the Estuary area, define the potential future for the area. General Plan and Estuary Policy Plan (EPP) policies and current zoning districts applicable to each Sub-district are further described in the Land Use and Urban Form section of this report.

GENERAL PLAN AND ESTUARY POLICY PLAN

The Land Use and Transportation Element (LUTE) of the Oakland General Plan, entitled *Envision Oakland*, outlines a long-range vision for land use and transportation in the City of Oakland. Adopted in 1998, the General Plan LUTE was designed to emphasize integration of planning, economic development, and implementation, and spur a commitment to action while serving as the ongoing policy guide regarding physical development for the City. The LUTE defined a number of subsequent planning

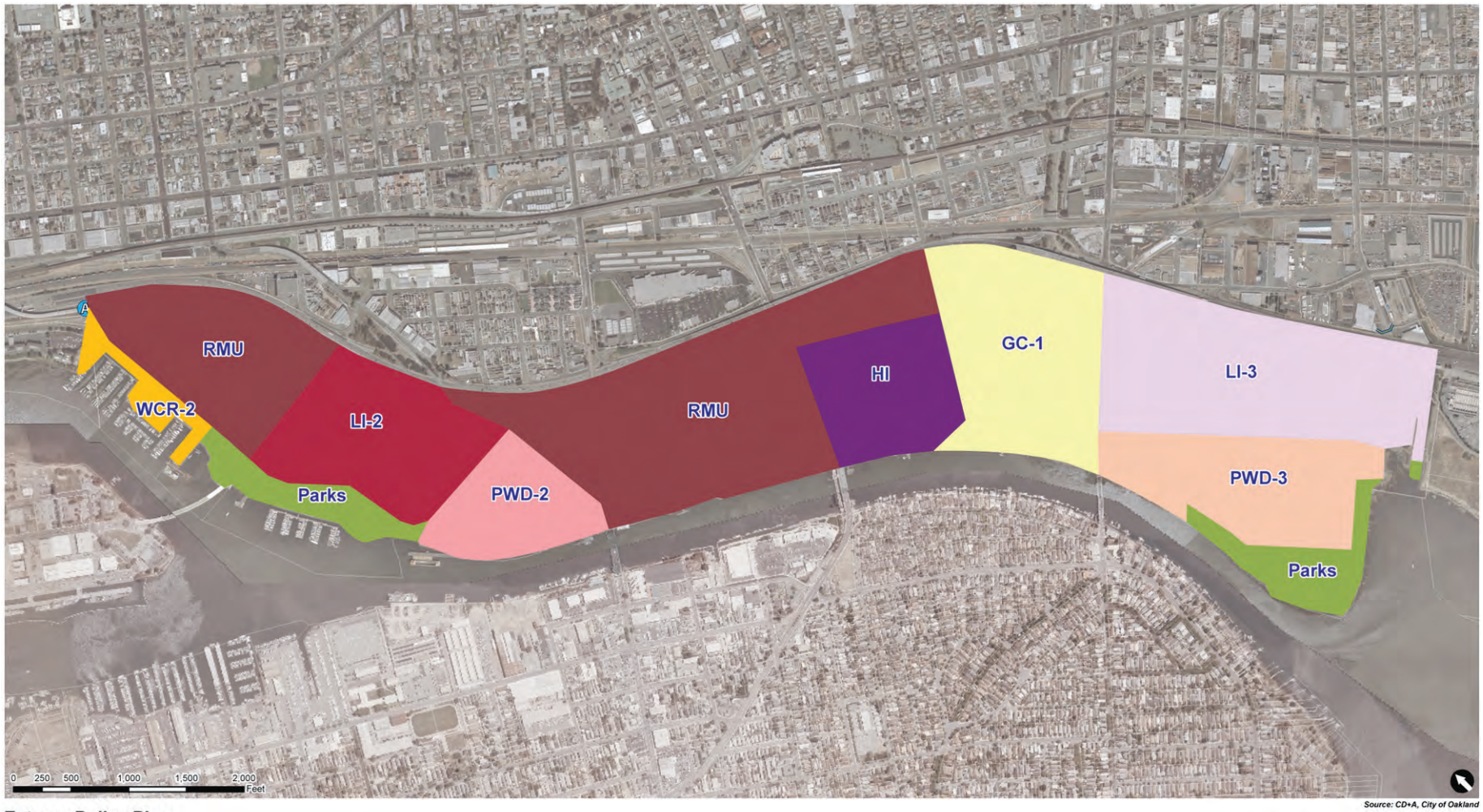


Figure I-3: Estuary Policy Plan Land Use Designations

efforts that would be required to complete this process and further delineate the vision for certain areas, including the waterfront in particular. The General Plan LUTE includes policies and detail applicable the Central Estuary, most notably the recommendation for a subsequent planning effort that created the Estuary Policy Plan (see Figure I-3).

The Land Use and Transportation Element (LUTE) of the General Plan also recommends that future residential growth in Oakland be targeted to areas with high transit connectivity (Transit Oriented Districts) and the waterfront, and suggests that land uses, densities, and transportation systems be planned to support increased development in these areas. It identifies the importance of regional commercial uses in Oakland's future, and suggests the waterfront as one opportune location for these uses. A number of goals and policies related to the waterfront are elaborated in Chapter II, Policy Framework, of the LUTE. Key goals and policies address the importance of increasing public access to the waterfront and better connecting waterfront areas to the rest of the city, integration of mixed-use development with adjacent land uses, and defining the type, density, and quality of development that should be encouraged along the waterfront.

The City of Oakland's Bicycle and Pedestrian Master Plans provide important policy guidance for bike and pedestrian connections throughout the City. The Bicycle Master Plan includes policies and implementation measures to create safe bicycling opportunities. The Pedestrian Master Plan sets forth the policy, design standards and implementation plan to create a pedestrian friendly environment. Both of these plans contain recommendations applicable to the Central Estuary Area.

The Shoreline and Creeks section of the Open Space and Conservation and Recreation Element (OSCAR) of the Oakland General Plan includes policies and actions that emphasize the Jack London to High Street waterfront as an opportunity area for improved public access, recreational amenities, and land uses which capitalize on the waterfront's presence. This section recognizes two significant challenges to improving the waterfront: (1) the tenuous balance between the importance of increasing access to the waterfront without interrupting active and essential maritime uses, and (2) the challenge of creating linkages to bring the rest of the City to the waterfront. The section proposes the promotion of some beneficial waterfront uses, such as maritime industry, and coordinated waterfront planning in balance with the increased dedication of accessible shoreline.

Because of the long history of the Central Estuary as a vibrant industrial and residential district of the City, a number of policies of the Historic Preservation Element of the Oakland General Plan also apply to the area. In recent decades, large numbers of Oakland's historic properties have been allowed to deteriorate, experience adverse alterations or be demolished. The Historic Preservation Element envisions that preservation and enhancement of significant historic properties could contribute to Oakland's economy, affordable housing stock, overall image, and quality of life. The Historic Preservation Element also aims to clarify and revise many of the

City's past historic preservation regulations that created unnecessary burdens and uncertainties for property owners and developers.

The General Plan LUTE established important general goals and policies for the waterfront and created a single broad land use designation, "Waterfront," which is applied to the entire Estuary waterfront, including the Central Estuary. The Estuary Policy Plan, adopted in June 1999, is an element of the General Plan that sets forth policies and principles to guide development in the Estuary area, refining and superseding the policy guidance for this area contained in the City's General Plan LUTE. The Estuary Policy Plan (EPP) divided the Estuary Area into three districts: Jack London, Oak to Ninth, and 'San Antonio/Fruitvale' (since re-named the Central Estuary). The EPP also recommended nineteen unique land use designations for the Estuary Waterfront, which supersede and subdivide the broad Waterfront designation of the General Plan LUTE into more fine-grained land use areas. The existing EPP land use designations for the area consist of Light Industrial, Planned Waterfront Development, Residential Mixed Use, Heavy Industrial, and General Commercial and variations thereof.

Figure I-4: The Estuary Policy Planning Area Districts
Source: Estuary Policy Plan, 1999; Revised 2012

Policy MF-2 of the Estuary Policy Plan included a recommendation to prepare an "implementation guide" to provide specific strategies and standards to guide the initiation and evaluation of waterfront-related projects. This document is intended to serve as that implementation guide for the Central Estuary waterfront area generally bounded by I-580, 16th and 54th Avenues.

Since the 1999 Estuary Policy Plan was adopted, the two other districts included in this planning effort, the Jack London District and Oak to Ninth, have undergone significant redevelopment and planning (see Figure I-4) The transformation of the Jack London district is well underway. The area is now home to a number of new residential, retail and mixed-use developments, enjoys improved waterfront access, and has become a significant regional destination. Extensive planning for the Oak to Ninth district, which includes a number of industrial uses, has resulted in a formal development plan and supporting environmental documentation. The 64-acre project is envisioned as a vital pedestrian-oriented mixed-use neighborhood.

On December 9, 2008, the Oakland City Council initiated a planning process for the Central Estuary to develop a coordinated vision for the future development of the area that would address infrastructure deficiencies and conflicting land uses. This Implementation Guide and the related Supplemental Environmental Impact Report will provide the policy framework and for improving the area. Taken with the improvements to the Jack London District and planning for the

Oak-to-Ninth District, the Implementation Guide for the Central Estuary District provides a critical link in transforming Oakland's waterfront into a vibrant destination for residents, visitors and businesses.

REDEVELOPMENT PLANS

The Central Estuary District is primarily located within the Coliseum Redevelopment Area, but a small portion of the Central Estuary is also located in the Central City East Redevelopment Area. The Coliseum Redevelopment Area characterized portions of the Central Estuary Area as "blighted" or in deteriorated or dilapidated condition or exhibiting disinvestment. Both of these Redevelopment Areas contain goals for improving the area including stimulating business opportunities, improving infrastructure, and improving public safety and quality of life in the area.

The California Supreme Court's decision to eliminate Redevelopment Agencies became effective on February 1, 2012. Although the City's Redevelopment Agency was dissolved, Redevelopment Plans and Redevelopment Areas still exist. However, without the ability to finance the goals and objectives of Redevelopment Plans through tax increment financing and staff to manage projects, the future implementation of those goals and objectives remains perilous.

ZONING REGULATIONS

With the exception of the Housing and Business Mix (HBX-3) zone, adopted in 2006, much of the zoning for the Central Estuary, largely put in place in the 1960's, was never updated to be in conformance with the EPP land use designations. The existing zoning for the Central Estuary is primarily M-40, Heavy Industrial, with a designation of HBX-3, Housing and Business Mix in the residential area known as Jingletown/Elmwood.

The Housing and Business Mix (HBX-3)zone is intended to provide development standards for areas that have a mix of industrial, heavy commercial and higher density residential development. This zone is intended to promote housing with a strong presence of commercial and industrial activities. The specific purposes of the Housing and Business Mix (HBX-3) zone are to:

- Allow for mixed use districts that recognize both residential and business activities.
- Establish development standards that allow residential and business activities to compatibly co-exist.
- Provide a transition between industrial areas and residential neighborhoods.
- Encourage development that respects environmental quality and historic patterns of development.
- Foster a variety of small, entrepreneurial, and flexible home-based businesses.

In order to bring other sections of the Estuary into compliance with the Estuary Policy Plan and planned future development, rezoning has been necessary. For example, the Oak to 9th area was rezoned from M-40, Heavy Industrial to PWD-4, Planned Waterfront Zoning District-4 and OS-RSP, Open Space-Regional Serving Park.

Similar creation of appropriate zoning districts is necessary to implement the Estuary Policy Plan (EPP) and recommendations of the Central Estuary Implementation Guide in some parts of the Central Estuary.

CITYWIDE INDUSTRIAL LAND USE POLICY

As numerous areas throughout the region and the City have converted from industrial to residential use, industrial land has become both increasingly scarce and increasingly important to maintaining the city's diversity. Maintaining a diversity of good jobs in Oakland is a priority for policymakers and residents, as it is key to maintaining the city's attractiveness to employers, social and economic diversity, and livability. As a result, in 2008 the City established a Citywide Industrial Land Use Policy, based on Council direction, aimed at preserving certain industrial areas and establishing a more integrated and predictable approach to the management of industrial lands in Oakland.

Both the City's Industrial Land Use Policy and the Estuary Policy Plan (EPP) provide flexible guidance on future land uses, which has resulted in conflicting opinions about how these policies might be interpreted. While the EPP suggested that many industrial areas might eventually change from industrial to other uses, such as residential or office, it also afforded the flexibility for existing industrial uses to stay and for other industrial uses to replace them. The Industrial Land Use Policy respects the prescriptions of the EPP, but the policy is structured to encourage preservation of remaining industrial lands, while calling for the development of a structured basis by which to approach decisions to allow conversions to other uses. The Central Estuary Implementation Guide (this Guide) is designed to develop the structured, or criteria-based, approach to making conversion decisions and to refine the EPP policies regarding which areas should remain industrial and which areas should convert to other uses, if and when the existing industrial uses depart.

The Industrial Land Use Policy divided the industrial areas of the city into Sub-Areas for analysis purposes. The Central Estuary is divided between two different Policy Sub-Areas (4 and 11a) in the recommendations of the Policy (see Figure I-5). Policy Sub-Area 4, which falls within the eastern portion of the Central Estuary, was identified in the Estuary Policy Plan (EPP) as moving towards industrial business park. The Industrial Land Use Policy, on the other hand, found that industrial uses on the upper part of High Street between Tidewater and the 1-880 will likely remain, as more intense uses including residential would further aggravate the existing traffic congestion at High Street and 880 caused by commuters crossing the High Street Bridge from the City of Alameda.

The Industrial Land Use Policy also recommended that the Central Estuary retain the core industrial uses south of Embarcadero Cove through Jingletown/Elmwood north (Park Street Bridge), due to the importance of the area for the food production, warehousing and distribution sector, a strong and growing part of the Oakland industrial economy. It also cites the growing presence of craftsmen and artisans in the Jingletown/Elmwood area and their growing importance in Oakland, as well as the need for the material industries that support them.

In the final 2008 report recommending the adoption of the Industrial Land Use Policy, staff recommended that the City Council not make a recommendation about the future of the Policy Sub-Areas that falls within the Central Estuary, as this Central Estuary Implementation Guide planning process would analyze them in depth and make recommendations regarding appropriate uses.

REGIONAL AND OTHER AGENCY REGULATION AND PLANNING EFFORTS

THE SAN FRANCISCO BAY TRAIL

One of the most significant current regional planning efforts, the creation of a continuous San Francisco Bay Trail, has many direct implications for the Central Estuary. The Bay Trail is intended to create not just a continuous transportation connection throughout the Bay Area, but also to provide better access to perhaps the Bay Area's greatest amenity, the San Francisco Bay waterfront. The *Oakland Waterfront Trail: Bay Trail Feasibility and Design Guidelines* (2003) includes a detailed feasibility study, site plans and design standards for development of a waterfront promenade and Bay Trail alignment along the Oakland Estuary shoreline. Significant resources were invested to develop and partially implement these improvements. Construction of new parks and trail connections is on-going throughout Oakland, but is particularly pronounced within the Central Estuary, as the waterfront is rapidly being transformed by new projects, as detailed under the Land Use and Urban Form chapter of this Implementation Guide. This Guide organizes and prioritizes the City's prior funding commitments to construct the Bay Trail, including Measure DD, the Oakland Trust for Clean Water and Safe Parks, a bond passed by voters in 2002 that is projected to provide $53 million in funding for activities related to the development of the Bay Trail. Bay Trail standards have been included in Chapter III of this Guide. Additionally, Appendix A recommends land uses and new streets that will complement and improve public access to the East Bay Regional Park District's waterfront park and boathouse at the tip of the Tidewater area.

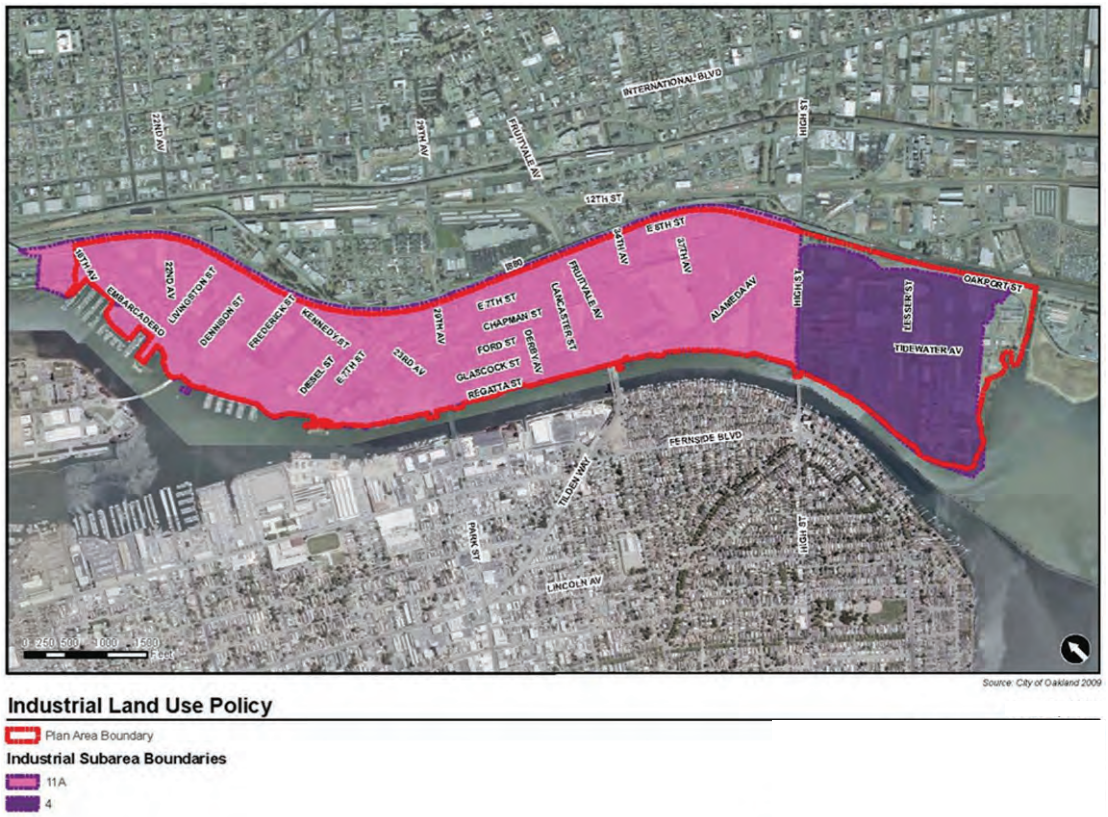


Figure I-5: Industrial Land Use Policy

ABAG/MTC FOCUS PRIORITY DEVELOPMENT AREAS

The Central Estuary is part of the area of Oakland designated as a *Potential* Priority Development Area (PDA) as part of the regional effort led by the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) to promote a more compact land use pattern for the Bay Area. Potential PDAs are locally-identified, infill development opportunity areas where there is local commitment to developing more housing, along with amenities and services to meet the day-to-day needs of residents, in a pedestrian-friendly environment. Additionally, PDAs should be served by existing or planned fixed transit or comparable bus service. The City of Oakland has broadly identified all of the City's "Corridors & Station Areas" as a PDA or Potential PDA, which includes the areas within one half mile radius around the BART Stations in Oakland, and the area within one quarter mile of the major transportation corridors in and along the BART system tracks and the AC Transit routes on major arterials like San Pablo Ave., Telegraph Ave., and International Blvd. that connect to regional transportation corridors. Being designated as a PDA will allow the City to pursue various incentives offered by the regional agencies to local governments for meeting PDA goals.

MTC GOODS MOVEMENT/LAND USE PROJECT

The MTC Regional Goods Movement Study (2004) found that goods movement industries play a critical role in the Bay Area's economy. As the volume of population and business grow in the Bay Area, other land uses are displacing the infrastructure and space that the goods movement industry requires to efficiently support residents and businesses. The Goods Movement/Land Use Project (2008) followed the Goods Movement Study with more detailed analysis and recommendations about the importance of and challenges to goods movement in the Bay Area. Efficient goods movement ensures that businesses can operate efficiently, provides goods more affordably because less transport is necessary, creates a diversity of jobs, and decreases greenhouse gas emissions because goods transport is more efficient.

The Goods Movement Project found that the I-880 corridor is one of the most critical corridors for goods movement supporting business in the entire Bay Area and that its foremost challenge is the need to preserve central locations along the corridor where land uses such as warehousing and distribution centers can support the goods movement industry. Additionally, the Project found that the "continuing viability of industrial areas along (I-880) will be enhanced where industrial operations are separated from nearby neighborhoods and commercial districts and are located in industrial districts that accommodate truck traffic and provide relatively direct access to the freeway network." In other words, the Project highlights the importance of maintaining and enhancing some of the industrial uses that have historically thrived and currently thrive in the Central Estuary Area, and that these areas need clear separation from residential and commercial areas to ensure that the specialized infrastructure and access needs can be efficiently met. The study cites the Central Estuary as important, due to its central location, but largely at risk of conversion.

ARMY CORPS OF ENGINEERS

The Oakland Inner Harbor Tidal Canal (OIHTC), which includes areas of the Estuary to the east of Coast Guard Island, is federal property governed by the United States Army Corps of Engineers (USACE) (see Figure I-6). Some additional waters of the Estuary not considered part of the OIHTC are still regulated by the USACE, though the federal government is not the owner. The USACE is responsible for overseeing, managing, developing and maintaining the nation's water and related environmental resources, including its navigable waterways. As such, any improvements to facilities that come into contact with the Estuary, such as bridges and piers, will require the cooperation of the USACE. Docks, piers and other structures abutting from private parcels along the Estuary are considered encroachments into federal property where they stretch into the OIHTC and require permits, called Section 404 Permits, and licensing from the USACE for repair, modification, or any new construction.

In August of 2007, the United States Army Corps of Engineers (USACE) notified the Bay Conservation and Development Commission (described below) of its intention to divest of its ownership and authority over the Oakland Inner Harbor Tidal Canal (OIHTC). The initial intention was that the federally owned waters would be divided into two parcels at the center of the canal and distributed to the adjacent cities of Oakland and Alameda. As of July 2009, negotiations were still underway and final resolution of this process was as yet undetermined.

Figure I-6: Federally-owned Oakland Inner Harbor Tidal Canal

BAY CONSERVATION AND DEVELOPMENT COMMISSION

Waterfront development in the Central Estuary, as throughout the Bay Area, is regulated by the San Francisco Bay Conservation and Development Commission (BCDC). BCDC is dedicated to the protection and enhancement of San Francisco Bay and to the encouragement of the Bay's responsible use, through governance of the Bay and its adjacent areas to ensure compliance with federal, State, and regional laws and policies governing the Bay. BCDC has review and permit authority over all land areas in the entire San Francisco Bay that lie within a 100-foot 'Shoreline Band.' Within the Shoreline Band, BCDC ensures that development is consistent with the *San Francisco Bay Plan* and *San Francisco Bay Area Seaport Plan,* as well as the Public Trust Doctrine. BCDC also works to improve public access to the waterfront and along the water's edge as waterfront projects are developed.

THE PUBLIC TRUST DOCTRINE/TIDELANDS TRUST

The Public Trust Doctrine protects publicly-owned property rights in the tidal and submerged lands and navigable waters of the State on behalf of the people of California. The Doctrine, also referred to as the Tidelands Trust, is built on legal principles dating back millennia and established in the United States in the American Revolution, when states were designated the trustees of the navigable waterways within their boundaries for the common use of the people. These uses historically included water-related commerce and supporting facilities, navigation, and fishing, but have been extended to include open space, ecological preservation, scientific study, water-dependent or water-oriented recreation and facilities to serve waterfront visitors such as hotels, restaurants and parking lots. Uses that do not comply include residential, general commercial, retail that is not visitor serving, public schools or hospitals. Guidelines for compliance with the public trust include:

- The primary use must be water-dependant or water-related.
- The use must directly promote or support uses authorized by the Public Trust Doctrine and if the trust is managed by a local or regional governmental entity, be authorized by the statutory trust grant.
- The use must accommodate or enhance the statewide public's enjoyment or benefit from the trust lands, not merely provide a local or municipal public benefit.

Since 1938, the State Lands Commission, which consists of the Lieutenant Governor, State Controller and Director of Finance, has been the primary administrator of the Tidelands Trust. Agencies within the state that have jurisdiction over development or other activities that can impact public trust lands and resources are responsible for compliance. In the Bay Area, the Bay Conservation and Development Commission is the primary agency responsible for compliance, but all agencies with jurisdiction over waterfront lands, including the Port and the City of Oakland, are responsible for ensuring compliance.

PORT OF OAKLAND

The Port of Oakland is a major landowner in the Central Estuary (see Figure I-7). The Oakland City Charter gives the Port the responsibility to own, develop and manage lands along the Estuary on behalf of the California State Lands Commission under the Tidelands Trust. Through this role, the Port has the ability to plan for, permit, and manage development in parts of the Central Estuary governed by the Tidelands Trust. Specifically, the Port acts as the owner of Embarcadero Cove and areas on either side of Embarcadero to the west of Dennison Street. Also, the Port owns Union Point Park, including the Cryer Site Waterfront Park expansion; these properties are leased to the City of Oakland to provide this park.

Previous to the year 2000, the Port also had jurisdiction over much of the Central Estuary, including areas on the water-side of the Embarcadero and Glascock Street, Alameda Avenue, and nearly all of the area north and south of Tidewater Avenue. However, following the adoption of the Estuary Policy Plan, the Port transferred jurisdiction and land use authority over these areas to the City of Oakland.

OTHER PUBLIC LAND OWNERS

In addition to the Port, a number of City, Regional, and State agencies own properties in the Central Estuary. These parcels are highlighted in Figure I-8.

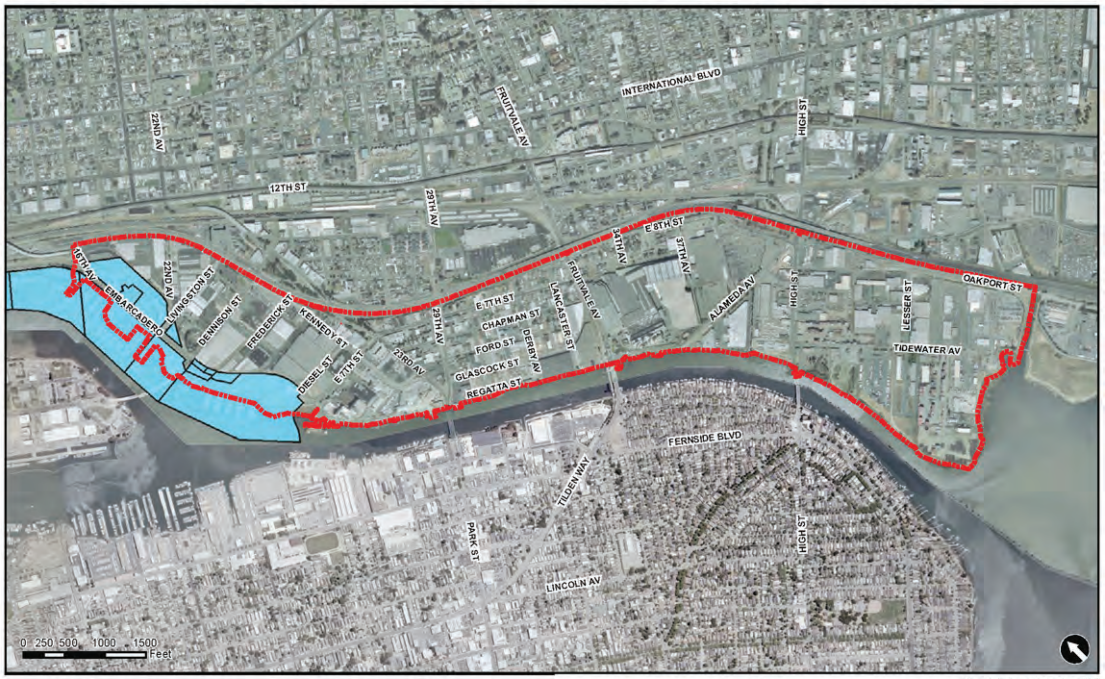
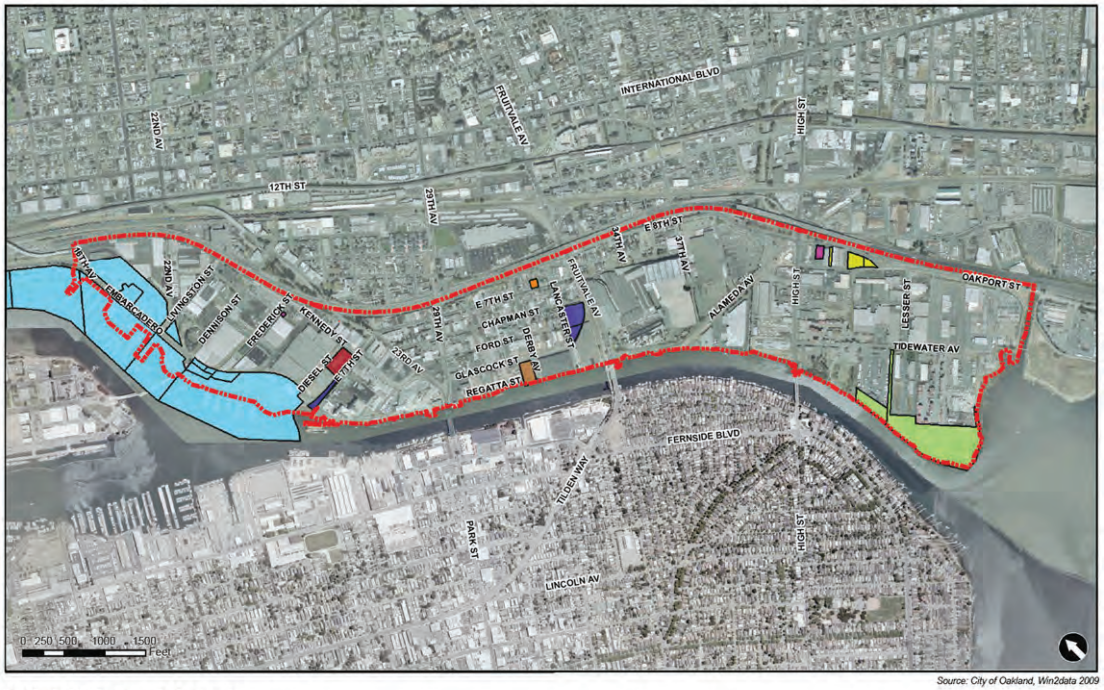


Figure I-7: Port of Oakland Ownership



Source: City of Oakland, Win2data 2009

Publicly Owned Parcels

- Plan Area Boundary

Agency of Ownership

- CITY OF OAKLAND
- PORT OF OAKLAND
- EAST BAY MUNICIPAL UTILITY DISTRICT
- EAST BAY REGIONAL PARK DISTRICT
- ALAMEDA COUNTY FLOOD CONTROL DISTRICT
- COUNTY OF ALAMEDA
- REGENTS OF THE UNIVERSITY OF CALIFORNIA
- STATE OF CALIFORNIA

Figure I-8: Publicly Owned Parcels

VISION

This Implementation Guide is intended to further a vision for the Central Estuary developed in previous plans and from community input gathered in a series of public workshops held in 2009. The vision statement follows:

DIVERSE AND VIBRANT MIX OF USES

The Central Estuary area has a diverse and vibrant mix of uses linked by waterfront open space. Its unique neighborhoods include artists and artisans, retail and civic uses, and businesses and industries that support the local economy and provide well-paying jobs to area residents. The land use pattern and development standards provide for appropriate integration of these diverse uses, as well as appropriate transitions between residential areas and freeways and industrial uses, creating a safe and healthy environment for residents, employees and visitors.

DESTINATION WATERFRONT

The Bay Trail and its connections create a regional and local destination, linking the area's diverse uses with continuous public open space and access along or near the waterfront. The Estuary waterfront is a focus of marine activity, boating and water recreation, with restaurants and retail uses that attract visitors and capitalize on the waterfront setting. Existing and new parks and open spaces along the Estuary include educational and interpretive opportunities and are linked to surrounding neighborhoods by open space, trails and walkable streets. Natural areas and wildlife habitat along the waterfront are preserved and enhanced.

COMPLETE, SAFE AND CLEAR TRANSPORTATION CONNECTIONS

Complete streets that provide for different modes of travel create safe, secure, attractive and comfortable pedestrian, bicycle and transit circulation within the Central Estuary area and connect across the Estuary to surrounding neighborhoods and destinations, including the City of Alameda and Fruitvale BART. Vehicular circulation for autos, trucks and railroads is safe, well connected and comprehensible.

INFRASTRUCTURE TO SUPPORT DEVELOPMENT

Improved, upgraded and well-maintained infrastructure supports both new development and the preservation and adaptive reuse of existing structures of historic value and architectural significance. New residential development is compatible with the existing neighborhood character and fosters a mix of housing options, including affordable housing. New industrial and commercial development emphasizes marine uses, food production, green technology and other industries important to the City's economy.

WATERFRONT AREA-WIDE OBJECTIVES

The following objectives and policies are a subset of those in the Estuary Policy Plan (EPP). The objectives are grouped into those that apply to the entire waterfront and those that are specific to the Central Estuary District. The objectives and policies have been amended to reflect changes in the on-the-ground conditions since adoption of the EPP, as well as to reflect the objectives discussed during the 2009 community visioning process.

LAND USE OBJECTIVES

Objectives for land use recognize the Estuary as an attractive location for development opportunities and intensification of a variety of activities. They are based on and reinforced by the objectives in the General Plan Elements addressing the Estuary waterfront (1999), Land Use & Transportation (1998), Open Space, Conservation & Recreation (OSCAR; 1996), Historic Preservation (1994) and Housing (1992).

OBJECTIVE LU-1: PROVIDE FOR A BROAD MIXTURE OF ACTIVITIES WITHIN THE ESTUARY AREA.

As the waterfront changes away from industrial, warehousing and maritime support uses, a broader range of new uses should be encouraged that are complementary with the existing uses that remain. Development should build upon the value of the waterfront as a community amenity and attraction. A variety of uses can contribute in making the Estuary of value to Oakland's community and an attractive regional destination. A balance of uses and activities such as commercial, recreation, and residential - both traditional and non-traditional - will add to a dynamic waterfront. Additionally, innovative mixes of cultural arts, institutions, and events that entice people to experience and enjoy the waterfront in a variety of ways should be included. Measures should be established to protect against incompatibilities between diverse uses.

OBJECTIVE LU-2: PROVIDE FOR PUBLIC ACTIVITIES THAT ARE ORIENTED TO THE WATER.

The Estuary waterfront should be developed in keeping with the spirit of the public trust doctrine. This doctrine, established in constitutional law, provides certain public access rights and restrictions for waterways, tidelands, and lands created by filled waterways. The permitted uses of lands which come under the jurisdiction of the Public Trust are commerce, navigation, fisheries, ecological habitat protection, water-oriented recreation and preservation of land in its natural condition.

Oakland's waterfront includes several regions of filled land that are protected under the Public Trust. The Port of Oakland serves as trustee of these lands under authority granted by the California State Lands Commission, composed of the Lieutenant Governor, the State Controller and the Director of Finance.

OBJECTIVE LU-3: EXPAND OPPORTUNITIES AND ENHANCE THE ATTRACTIVENESS OF THE ESTUARY AS A PLACE TO LIVE.

The Estuary has been a place for people to live, with neighborhoods established close to jobs on inland sites. The mix of jobs and housing is characteristic of urban waterfront locations, and provides a precedent for modern day mixed use. It should remain so. In the future, opportunities to develop housing should be supported in the Estuary study area. An expanded residential population and associated services would support commercial and recreational uses, and over time generate neighborhoods. A larger day and night population would add to the safety and livability of the waterfront. Development should be designed to avoid the feeling of 'gated' or private communities.[1]

OBJECTIVE LU-4: DEVELOP THE ESTUARY AREA IN A WAY THAT ENHANCES OAKLAND'S LONG-TERM ECONOMIC DEVELOPMENT.

The waterfront has historically been, and continues to be, an important place to promote economic development and employment opportunity in Oakland. Waterfront locations are attractive areas for businesses and commercial uses. Oakland's Estuary can accommodate a wide variety of uses, which will add to the economic health, and well being of the City. Opportunities range from hotels, restaurants, and entertainment venues to retail, general office space, cultural facilities, and business parks. At the same time, existing commercial and industrial uses that are already established and which also contribute to the City's tax and employment base should be encouraged to expand. These are all 'growth industries', which present the opportunity for Oakland's residents and business community to receive direct and indirect economic benefits. Employment opportunities, the tax base, and spin-off activities should expand with the introduction of new waterfront developments. In addition, the tax revenue derived from new development will add to the ability to develop the open space and other amenities which are envisioned. All of this economic activity will succeed in the Estuary area because of the unique business environment created by the waterfront's amenities. Strong economic links should be forged between the waterfront and the rest of the City, so that the benefits derived from waterfront development are realized in the Estuary study area and beyond.

OBJECTIVE LU-5: PROVIDE FOR THE ORDERLY TRANSFORMATION OF LAND USES WHILE ACKNOWLEDGING AND RESPECTING CULTURAL AND HISTORICAL RESOURCES.

Transformation of the Estuary should take place in an orderly fashion, incrementally, and in consideration of the long-range goals of the city. The Estuary Policy Plan calls for changes in land use and new development projects that will be implemented

1. See Oakland General Plan, Land Use Transportation Element, Policy W9.3.

over an extended time frame, within the context of a dynamic urban environment. Infill of vacant and underutilized parcels, as well as demolition or buildings adapted for reuse should occur while respecting cultural and historic resources.

The waterfront is one of the city's most historic areas. There are several districts, sites and/ or buildings of significance, which should be respected, assessed, and preserved.

OBJECTIVE LU-6: CREATE GREATER LAND USE CONTINUITY BETWEEN THE ESTUARY WATERFRONT AND ADJACENT INLAND DISTRICTS.

The Estuary shoreline is an ideal site for learning about nature, the history of the city, the economic activities supporting it, and the unique recreational and leisure activities available to residents. In order to enhance public awareness and understanding of the contribution the Estuary makes to the quality of life in Oakland today, all waterfront facilities should be considered as potential visitor centers. Significant historic sites and buildings should be preserved, adapted for reuse, and explained. Open space and shoreline access areas should be programmed to include educational and interpretive elements. Activities such as historic walks and self-guided tours should continue to be offered. Plaques or appropriate markers that recognize and commemorate the waterfront's history should be encouraged.

Significant historic sites and buildings should be preserved, adapted for re-use, and explained. Open space and shoreline access areas should be programmed to include educational and interpretive elements.

SHORELINE ACCESS & PUBLIC SPACE OBJECTIVES

Objectives for access and public spaces recognize the emerging role of the waterfront as a key place for open space and recreation within the city and region. It builds upon the objectives for public access, open space, and recreation articulated in various planning documents, most notably the Estuary Policy Plan (1999), Open Space, Conservation and Recreation Element (1996) and the Land Use and Transportation Element (1998) of the General Plan.

OBJECTIVE SA-1: CREATE A CLEAR AND CONTINUOUS SYSTEM OF PUBLIC ACCESS ALONG THE ESTUARY SHORELINE.

Provision of continuous shoreline access is an important goal embraced by both regional and local communities. Furthermore, it is a specific mission of BCDC and ABAG's Bay Trail program, and a prime objective of the East Bay Regional Park District. In the Oakland segment, the intention is to provide a continuous system of public waterfront spaces, and to provide for a continuous open space network which connects all waterfront elements, which provides a variety of waterfront experiences.

Within the parameters of safety and security, development of public facilities should be undertaken according to site-specific standards, based on the physical capacities and programming needs of the particular site.

There is a diverse sequence of spaces along the shoreline, including the protected nature of the Lake Merritt Channel; the marshy habitat that extends to Damon Slough; the expansiveness of the Fifth Avenue Point shoreline edge; the sheltered character of the Embarcadero Cove, The Food Industry Cluster and Coast Guard Island; and the lively areas within the Jack London District. Each of these special qualities should be reflected in the design of parks, promenades, and open spaces.

General objectives for the provision/enhancement of open space and associated facilities at all locations include:

- Preservation and protection of the natural features, wildlife and vegetation;
- An easily identifiable standard sign system that can be implemented throughout the open space system, to provide directional/ orientation/interpretive information;
- Physical improvements to increase visitor comfort, safety, and pleasure (eg. separated paths, landscaping, lighting, observation pads, comfort stations, trash receptacles, furniture, emergency services, vehicular parking, etc.)

OBJECTIVE SA-2: PUNCTUATE THE SHORELINE PROMENADE WITH A SERIES OF PARKS AND LARGER OPEN SPACES.

A number of parks and larger open spaces are proposed that would build on the intrinsic character of the shoreline and provide for a wide range of recreational experiences. The intent is to create series of parks and other publicly accessible spaces, capable of accommodating a wide variety of recreational activity, connected by a shoreline promenade. These could include:

- A portion of the “Meadow” in front of the Port Building in Jack London Square;
- A new “Green” to anchor Phase 2 developments at Jack London Square;
- A new “Greenway” extending along Webster Street to connect Jack London Square to the inland neighborhoods;
- Expansion of Estuary Park;
- A series of parks in the 5th-9th Avenue area;
- A new park at Union Point; and
- Expanded and improved facilities along the MLK Regional Shoreline.

OBJECTIVE SA-3: EMPHASIZE VISUAL CORRIDORS AND OPEN SPACE LINKS TO SURROUNDING INLAND AREAS.

To make the Estuary shoreline more accessible, links to inland areas should be strengthened. Visual corridors and physical links to the water should be provided at regular intervals along the shoreline, using the grid of city streets in their full widths, to enhance the connection between inland areas and the water. In addition, the design of open spaces should promote opportunities to appreciate views and waterfront amenities from inland areas. At the same time, key corridors should be extended outward to the Estuary itself, to provide viewing experiences that are unique to the Estuary.

OBJECTIVE SA-4: DEVELOP OPPORTUNITIES FOR RECREATIONAL ACTIVITIES THAT ARE ORIENTED TO THE WATERFRONT AND SERVE IDENTIFIED NEIGHBORHOOD NEEDS.

Recreational areas along the waterfront should meet the needs of the region and the city as a whole, as well as specific adjacent neighborhoods and districts. Programming of larger recreational areas should be undertaken in conjunction with the EBRPD, neighborhood organizations and other interested parties to ensure that the recreational activities provided help to meet identified needs.

OBJECTIVE SA-5: ENHANCE NATURAL AREAS ALONG THE SHORELINE.

There are significant opportunities along the Estuary shoreline and Lake Merritt Channel to enhance remnant tidal marshes and other natural areas. These areas can add to the visual enjoyment and diversity of the shoreline, and expand wildlife habitat for birds and other species. They can also create outdoor areas for direct learning and experiences related to nature.

OBJECTIVE SA-6: ENCOURAGE THE DEVELOPMENT OF EDUCATIONAL AND CULTURAL PROGRAMS AND INTERPRETIVE FACILITIES THAT ENHANCE UNDERSTANDING OF THE WATERFRONT ENVIRONMENT.

The Estuary shoreline is an ideal site for learning about nature, the history of the city, the economic activities supporting it, and the unique recreational and leisure activities available to residents. In order to enhance public awareness and understanding of the contribution the Estuary makes to the quality of life in Oakland today, all waterfront facilities should be considered as potential visitor centers. To the extent feasible, significant historic sites and buildings should be preserved, adapted for reuse, and explained. Open space and shoreline access areas should be programmed to include educational and interpretive elements. Activities such as historic walks and self-guided tours should continue to be offered. Plaques or appropriate markers that recognize and commemorate the waterfront's history should be encouraged.[2]

2 See Oakland General Plan, OSCAR Element, OS 7.3.

To the extent feasible, significant historic sites and buildings should be preserved, adapted for re-use, and explained. Open space and shoreline access areas should be programmed to include educational and interpretive elements.

REGIONAL CIRCULATION & LOCAL STREET NETWORK OBJECTIVES

Objectives for regional circulation and local street networks recognize the importance of circulation and access to support the objectives for land use, public access and public spaces. These add specificity to a number of objectives reflected in the Estuary Policy Plan, General Plan Land Use & Transportation Element and Bicycle & Pedestrian Plan.

OBJECTIVE C-1: IMPROVE AND CLARIFY REGIONAL ACCESS TO OAKLAND'S WATERFRONT.

Interchanges along the I-880 freeway should be consolidated at arterial roadways and brought up to current standards to improve access to and within the Estuary area.

The I-980 connection to the Alameda Tubes at the Jackson Street off-ramp and the I-880 – 16th Street off ramp currently routes traffic through city streets, and should be improved to alleviate congestion on local streets and clarify access routes to Alameda and on Oakland local streets.

Improved freeway interchanges are currently under construction or planned at 23rd/29th Avenues and 42nd Avenue/High Street. These projects will improve local access and circulation and help reduce congestion on I-880. Additional improvements should be considered at 5th Avenue and Fruitvale Avenue. A new interchange should be investigated to provide direct access from I-880 to Jack London Square and downtown Oakland.

OBJECTIVE C-2: ESTABLISH A CONTINUOUS WATERFRONT ROADWAY SYSTEM; A SAFE PROMENADE FOR PEDESTRIANS, BICYCLES, AND SLOW-MOVING AUTOMOBILES.

For the most part, vehicular circulation should be accommodated on existing roadways. However, a continuous waterfront roadway system is a top priority in the Estuary Policy Plan. The waterfront roadway system should take advantage of the Embarcadero right-of-way, extending from Jack London Square to Park Street.

Beyond Park Street, it may be necessary to purchase additional right-of-way to allow the waterfront roadway system to be connected through to Fruitvale Avenue and beyond to Tidewater Avenue and 66th Street.

West of Oak Street, the waterfront roadway system should meet the city grid, providing several routes west to Mandela Parkway.

The configuration and cross-sectional character of the waterfront roadway system will likely vary, depending on availability of right-of-way, adjoining

land uses, and traffic conditions. All waterfront roads should treated with appropriate landscaping, lighting, signage, rest/ overview areas, and, where appropriate, parking, and other features which provide a continuous character for pleasant driving, walking, and cycling. Waterfront roads should be slow-moving, and accompanied by separate or contiguous bicycling and pedestrian paths where feasible.

OBJECTIVE C-3: BALANCE THROUGH MOVEMENT WITH LOCAL ACCESS ALONG THE WATERFRONT.

In many urban waterfronts, shoreline transportation corridors have been allowed to become freeway-like environments, providing through movement at the expense of local access. The concept of the waterfront roadway system, described above, aims to properly balance local access with through movement.

Traffic-calming methods should be incorporated into roadway design throughout the study area, to ensure that vehicular movement is managed in consideration of recreational and aesthetic values. The waterfront roadway system should not become an overflow or alleviator route to the I- 880 freeway, however, it will remain part of the City's heavy-weight truck route.

OBJECTIVE C-4: STRENGTHEN LOCAL CIRCULATION CONNECTIONS BETWEEN OAKLAND NEIGHBORHOODS AND THE WATERFRONT.

With anticipated improvements to the regional transportation system, better connections can be made between the waterfront and inland neighborhoods.

Specifically, emphasis should be placed on improving those connections which already exist: Washington, Broadway, Webster, Franklin, Oak, 5th, 16th, 23rd, 29th Avenues, Fruitvale and High Streets. These links can be strengthened through alterations of street alignments or extensions of existing roadways, relocating parking areas, and improving pedestrian facilities.

OBJECTIVE C-5: PROMOTE TRANSIT SERVICE TO AND ALONG THE WATERFRONT.

Land and water-based transit services should be extended to and along the waterfront. Transit services should be focused along Broadway, Washington, Franklin, Third, and Fruitvale.

A special transit loop linking Jack London Square with other significant activity centers (eg., Old Oakland, the Oakland Museum, and the Lake Merritt and City Center BART stations), should also be encouraged. High capacity transit service between Fruitvale BART and Alameda should be studied further.

Redevelopment on both the Oakland and Alameda sides of the Estuary may, in the future, warrant increased ferry and water taxi service. Water taxis can link activity centers on both sides of the Estuary, transforming the waterway into a viable boulevard that brings together the Oakland and Alameda waterfronts.

OBJECTIVE C-6: IMPROVE PEDESTRIAN AND BICYCLE CIRCULATION.

Bicycle and pedestrian networks should be extended throughout the waterfront. By enhancing the Embarcadero and the streets parallel to the waterfront, a continuous pedestrian path and bicycle route can be established along the waterfront. Links from the waterfront roadway system to upland neighborhoods are proposed along connecting routes, including Oak, Lake Merritt Channel, 2nd Street to 3rd Street, Fifth Street and Fifth Ave, Fruitvale, and Alameda Avenue to High Street, as well as the grid of streets in the Jack London District.

OBJECTIVE C-7: PROVIDE ADEQUATE PARKING WITHOUT DIMINISHING THE QUALITY OF THE URBAN ENVIRONMENT.

In the Jack London District in particular, provision of adequate parking is critical to accommodate both existing and future demands. Several sites currently used for surface parking are subject to future development. In addition, parked vehicles are 'spilling over' into pedestrian areas, to the detriment of the District's attractiveness. To resolve this, a comprehensive parking management strategy should be developed to plan for and provide adequate parking.

CENTRAL ESTUARY AREA POLICIES

LAND USE

The Estuary Policy Plan's land use policies for the Central Estuary are intended to establish a more compatible pattern of land uses that supports economic development, and at the same time enhance neighborhood amenities. The waterfront is a feature which binds disparate activities and provides a destination within these neighborhoods. Land use policies reinforce access to the waterfront, while promoting opportunities for neighborhood preservation and enhancement. Emphasis should be put on the reuse of existing structures of historic value and architectural significance.

For ease of discussion, the Central Estuary has been subdivided into 10 sub-districts. Land use policies for the Central Estuary sub-districts are presented as follows:

EMBARCADERO COVE

POLICY CE-L: ENCOURAGE THE DEVELOPMENT OF WATER-ORIENTED COMMERCIAL USES WITHIN EMBARCADERO COVE.

Embarcadero Cove is bounded by the Ninth Avenue Terminal on the west, the Livingston Street pier on the east, and the Embarcadero. It is defined by the unique geography of a small bay, with an indented shoreline tracing a broad arc which surrounds Coast Guard Island. The combination of its distinctive shape and proximity to the freeway results in a very narrow and constricted shoreline, which averages about 200 feet in width to the Embarcadero. The narrow shoreline provides an opportunity for views to the water; this is the only area along the Estuary where the water can be seen from the freeway.

This is a highly visible portion of the waterfront, but it is narrow and constrained by the close proximity of the I-880 freeway. The waterfront orientation and constrained parcel depth make this area well suited for continued commercial-recreational and water-dependent uses.

New commercial uses within this sub-district should build upon the existing character and create connections to the water's edge. Improvements that maximize accessibility and visibility of the shoreline should be incorporated into new development through boardwalks, walkways and points of public access.

FOOD INDUSTRY CLUSTER

POLICY CE-2: MAINTAIN THE INDUSTRIAL CHARACTER AND ROLE OF THE FOOD INDUSTRY CLUSTER AS A PLACE FOR FOOD PROCESSING AND MANUFACTURING, AND RETAIN LIGHT INDUSTRIAL USES.

The Food Industry Cluster comprises the area south of Dennison Street and inland of Union Point Park, extending to East 7th Street. This area is generally characterized by light industrial and service uses, and larger scale food processing and food warehousing/distribution operations.

Food processing is a major source of employment in this portion of the waterfront, with some 450 individuals many in skilled positions. Within Oakland, relatively few sectors, particularly in new small to mid-sized companies, have generated a comparable level of employment. Significant activity is continuing within this sector of the economy, particularly in the area of niche/specialty markets.

The Food Industry Cluster is a place where manufacturing and food processing/distribution should be encouraged, both for incubator businesses as well as for established and growing concerns. While food processing and manufacturing/distribution continue to dominate uses within the area, existing light industrial uses should be maintained as well.

MIXED-USE TRIANGLE

POLICY CE-2.1: ENCOURAGE DEVELOPMENT OF COMPATIBLE INFILL OFFICE, SUPPORT COMMERCIAL, MULTI-FAMILY RESIDENTIAL, INSTITUTIONAL, AND LIGHT MANUFACTURING USES.

The Mixed-Use Triangle, bounded by the Embarcadero, Dennison Street and Highway 880, includes a mix of uses: offices housed in both mid-size 1970s buildings and remodeled Victorian-style houses, restaurants, artist studios, educational, office, and commercial uses. North of Dennison and along the waterfront, the pattern of land uses is relatively fine-grained, with some older structures and smaller increments of development oriented to the street. Additional adaptive reuse, and new educational, office and commercial uses should be encouraged, as well as multi-family residential and work/live units, where these uses would not create land use conflicts with existing industrial activities.

CON AGRA

POLICY CE-3: ALLOW HEAVY INDUSTRY IN THE VICINITY OF THE CON-AGRA PLANT TO CONTINUE, WHILE PROVIDING FOR THE TRANSITION TO A MIX OF NEW USES.

A portion of the Central Estuary District located between Diesel and the Park Street Bridge and south of 29th Street, is an area that is primarily in heavy industrial use.

It is dominated by the 11-acre Con-Agra facility, which mills grain for flour that in distributed throughout the Bay area and Northern California.

Cemex and Star Marine are two other large operators immediately adjacent to the Con-Agra facility.

While the area historically attracted construction-related uses because of barge access via the Estuary, these business operations remain in the area today largely because of its central location and good freeway accessibility, and because of investments in existing facilities. Nevertheless, Con-Agra has its own pier, and other companies maintain direct water access that could be used again if economic and market conditions change.

It is recognized, however, that market forces may go in a different direction as well, making these sites functionally obsolete and difficult to maintain. If this comes about, the City should be prepared to promote new uses for these valuable waterfront sites.

The area surrounding and including Con-Agra has long been in heavy industrial use related to the agricultural/food and construction/transportation sectors of the economy. It is not the intention of the *Estuary Policy Plan* to suggest displacement of these activities. Above all, this policy is intended to convey the importance of maintaining these labor-intensive industrial operations for as long as it is feasible for them to stay.

However, it is also recognized that some of these companies may wish to relocate on their own accord. In that event, new uses should be encouraged that build on the unique qualities of the waterfront location and promote public access to the Estuary shore and transportation access through the site.

CE-3.1: INITIATE MORE SPECIFIC PLANNING OF THE ENTIRE CON-AGRA AREA, IF AND WHEN INDUSTRIAL USES PHASE OUT OF THE AREA.

The Con-Agra reach of the waterfront, although composed of different businesses and ownerships, should be planned as an integral unit to create the most positive effect and the optimal relationship with the Estuary.

Planning should be based on the need to gradually transform the uses and intensities from heavy industrial to a mixture of commercial, light industrial, and residential uses. It should account for the need to maintain the operations of these businesses while planning and redevelopment activities are underway. Future development planning should incorporate the following principles:

CE-3.2: REDEVELOP THE AREA WITH A MIXTURE OF WATERFRONT-ORIENTED RESIDENTIAL AND /OR COMMERCIAL ACTIVITIES, WHICH ARE COMPATIBLE WITH THE SCALE AND CHARACTER OF SURROUNDING AREAS.

New uses that are compatible with the public nature of the waterfront and with the adjacent Jingletown/Elmwood residential neighborhood should be encouraged in this area, if and when industrial uses phase out.

Specific land uses which should be encouraged include residential, retail, restaurant, office, research and development, and light industrial uses that are configured to complement the waterfront orientation of the site.

New uses should be developed in a manner consistent with the surrounding character and scale of the area. Building mass, height, and all other design aspects should be subject to standards developed in conjunction with the preparation of a more specific development plan. Parking should be screened from view or contained within new buildings.

CE-3.3: PROVIDE FOR STRONG LINKS TO SURROUNDING AREAS, AND ORIENT NEW DEVELOPMENT TO THE WATER.

Development should be configured to provide at least two points of public access to the shoreline, and view corridors from Kennedy Street to the Estuary.

A publicly accessible and continuous waterfront open space should be developed along the shoreline. This open space should also be visible and accessible from Kennedy Street and if possible consider bicycle/pedestrian connection to the City of Alameda.

JINGLETOWN/ELMWOOD

POLICY CE-4: ENCOURAGE PRESERVATION AND EXPANSION OF THE AFFORDABLE RESIDENTIAL NEIGHBORHOOD IN THE JINGLETOWN/ELMWOOD SUB-DISTRICT.

The Jingletown/Elmwood neighborhood is a unique sub-district within the Central Estuary. It is a remnant of a once-more-cohesive urban neighborhood extending from Oakland into Alameda. Today, the area is predominantly occupied by a mix of residential, warehousing and service-oriented uses.

With recent development and new Bay Trail connections, waterfront access and visibility has increased significantly. The Glascock Lofts and Signature Properties developments include Bay Trail segments and access points, and a Bay Trail segment has been completed adjacent to the Oakland Museum Women's Board White Elephant warehouse. The Derby and Lancaster Street overlooks have also been improved.

Currently, there are several hundred housing units within the Jingletown/Elmwood, including work/live spaces in renovated warehouses as well as single-family bungalows, houses and more recently developed multi-family housing. In addition to this residential development, there are a number of smaller scale industrial and commercial uses, creating a one-of-a-kind neighborhood.

The housing that exists in this area should be maintained, reinforced and promoted, despite the preponderance of non-residential uses. Special efforts should be undertaken to reinforce the integrity of the residential history of the sub-district.

CE-4.1: PROVIDE FOR A MIXTURE OF COMPATIBLE USES WITH EMPHASIS ON A VARIETY OF AFFORDABLE HOUSING TYPES, WHILE MAINTAINING THE AREA'S CHARACTER OF SMALL SCALE BUILDINGS.

A mixture of residential, work/live, light industrial and neighborhood-serving uses should be maintained in the future, with an emphasis on affordability, livability, and an enhanced relationship with the Estuary.

To maintain the attractive, small-scale character of the area, buildings should be constructed to complement the existing scale and massing of existing sites. Parcel size should not exceed the predominant pattern of existing parcels.

OWENS-BROCKWAY

POLICY CE-5: ALLOW THE EXISTING INDUSTRIAL USE OF THE OWENS-BROCKWAY SITE.

The Owens-Brockway site consists of approximately 28 acres of land devoted entirely to the business of glass recycling and manufacturing. These operations are expected to remain viable for the foreseeable future.

The company should be supported and encouraged to remain and expand.

CE-5.1: IMPROVE THE COMPATIBILITY BETWEEN INDUSTRIAL AND RESIDENTIAL USES, AND ENHANCE THE RELATIONSHIP OF THE OWENS-BROCKWAY PLANT WITH THE WATERFRONT.

Improvements along the edges of the Owens-Brockway plant should be undertaken to establish a more positive relationship with surrounding uses, including the neighborhood and the waterfront.

More specifically, a landscaped street edge on Fruitvale Avenue and Alameda Avenue should be developed to create a more attractive public environment around the plant. Measures such as landscape sound barriers should be investigated to reduce noise and visual conflicts with single-family houses along Elmwood Avenue.

HIGH STREET RETAIL AREA AND WAREHOUSE WEDGE

POLICY CE-6: ENCOURAGE THE REUSE OF EXISTING WAREHOUSE PROPERTIES SOUTH OF ALAMEDA AVENUE AND WEST OF HIGH STREET FOR HIGH-QUALITY RETAIL USES THAT COMPLEMENT ADJACENT COMMERCIAL USES.

The Home Depot, on a former cannery site, is a major presence within this sub-district, benefiting from its proximity to and visibility from the freeway and accessibility to the nearby populations in Oakland and Alameda.

On the east side of Alameda Avenue, the Brinks warehouse and a cluster of small-scale light industrial uses and warehouses are located along the Estuary, impeding public access opportunities. While Bay Trail segments have been completed along some of these uses, a portion of the waterfront remains inaccessible. Public access opportunities should be pursued over time along the shoreline.

CE-6.1: PROVIDE FOR NEW COMMERCIAL ACTIVITIES ADJACENT TO THE 42ND STREET INTERCHANGE.

At the 42nd Street interchange, there is the opportunity for the expansion and development of new commercial activities that are oriented to both regional and local markets. Commercial development and intensification of this area should be pursued.

Specific uses that should be encouraged in this area include region-serving retail, office, general commercial, and light industrial. Street-facing retail uses along High Street, and landscaping and streetscape improvements should be incorporated into all new development, subject to development standards and design guidelines developed for the Central Estuary Area.

TIDEWATER

POLICY CE-7: NORTH OF TIDEWATER AVENUE, MAINTAIN EXISTING VIABLE INDUSTRIAL AND SERVICE-ORIENTED USES, AND ENCOURAGE THE INTENSIFICATION OF UNDERUTILIZED AND VACANT PROPERTIES.

This portion of the Central Estuary District functions as a service support area, with links to the adjacent Coliseum area. It supports a number of different types of uses, including wholesale and retail businesses, container storage, and smaller industrial uses. In addition, Pacific Gas & Electric (PG&E) and East Bay Municipal Utility District (EBMUD) have service facilities within this area.

In areas north of Tidewater Avenue, current uses and activities should be maintained and encouraged. However, there are opportunities to intensify underutilized sites, now used for equipment and container storage. These sites should be targeted for redevelopment as industrial and service-oriented uses, which would contribute to the overall viability of the area.

CE-7.1: SOUTH OF TIDEWATER AVENUE, PROVIDE FOR CONTINUED INDUSTRIAL USE, BUT ALSO ENCOURAGE NEW RESEARCH AND DEVELOPMENT AND LIGHT INDUSTRIAL ACTIVITIES WHICH ARE COMPATIBLE WITH THE ADJACENT EBMUD OAKPORT FACILITY AND EBRPD'S MARTIN LUTHER KING JR. REGIONAL SHORELINE PARK.

Economic development objectives for this subdistrict can be realized by deemphasizing service, storage and heavy industry and focusing more on employment-intensive uses that are more complementary with the public nature of the waterfront.

This area is unique in that it adjoins Martin Luther King Jr. Regional Shoreline, one of the larger assemblies of waterfront open space within the Estuary. The East Bay Regional Parks District (EBRPD) continues to develop the MLK Regional Shoreline adjacent to and along both sides of East Creek, including the Tidewater Aquatic Center completed in 2009. EBRPD's parks and open spaces represent a valuable resource for the city—one that should be reinforced appropriately by adjacent development.

At the same time, the nearby Oakport Facility is EBMUD's primary infrastructure support base and maintenance center, serving the Estuary area and the city as a whole.

Successful development will require an effort to balance competing objectives brought about by the proximity of the sites to regional park and utility facilities. (See Policy CE-7.2)

CE-7.2: INITIATE MORE SPECIFIC PLANNING OF THE AREA SOUTH OF TIDEWATER AVENUE.

The area east of High Street and South of Tidewater Avenue should be comprehensively planned to ensure that all objectives are met. With the preparation of an Implementation Guide for the Central Estuary, this goal of the Estuary Policy Plan to plan for the area east of High Street and south of Tidewater Avenue has been achieved.

Planning for the area south of Tidewater has been based on the need to infuse the area with a more intense mix of office, R&D, commercial, and light industrial uses. It accounts for East Bay Municipal Utility District's (EBMUD's) expansion needs, and takes special consideration of East Bay Regional Park District's (EBRPD's) plans for MLK Regional Shoreline Park, and the Bay Conservation Development Commission's (BCDC's) 100' shoreline band, which will require that the shoreline be used for recreational purposes.

As this area redevelops, publicly accessible open space should be created with an emphasis on educational and interpretive experiences, including wildlife habitat in lowland or marshy areas and the development of recreation facilities in the uplands.

SHORELINE ACCESS AND PUBLIC SPACES

Compared to other areas of the Estuary, the Central Estuary District appears to have a relatively large supply of open space. Although there are several opportunities to approach and enjoy the shoreline, much of the existing open space is not highly utilized, relates poorly to its surroundings, and is generally fragmented and discontinuous.

The Martin Luther King, Jr. Regional Shoreline, which occupies approximately 22 acres north of Damon Slough, is a regional facility which is the primary waterfront recreational asset in the area. The Bay Trail, which is planned to ultimately connect around the entire bay shoreline, enters the study area at 66th Avenue, but abruptly ends approximately 7,000 feet westward. At the western end of the Central Estuary District, within Embarcadero Cove, there is a series of small public access improvements that were built as part of development projects, but these are also very limited in extent.

The access and open space policies for this district emphasize the continuation of a cohesive and interrelated waterfront system advocated by the previous chapters of this plan.

POLICY CE-8: DEVELOP A CONTINUOUSLY ACCESSIBLE SHORELINE, EXTENDING FROM NINTH AVENUE TO DAMON SLOUGH.

A continuous system of public open space and connecting networks to inland areas should be completed within this reach of the Estuary, extending from Ninth Avenue to Damon Slough. The system should link the Martin Luther King Jr. Regional Shoreline with the other elements of the waterfront system of open spaces proposed by this plan.

CE-8.1: EXTEND THE BAY TRAIL FROM EMBARCADERO COVE.

The Bay Trail should be incorporated as part of the continuous open space system along the water's edge. Gaps in the trail should be filled in, so as to achieve the continuity of the trail and provide better bicycle/pedestrian access to the expanded MLK Shoreline (See Policy CE-8.3).

While the developed portion of the Bay Trail currently combines both pedestrian and bicycle movement, it is recommended that separate bicycle and pedestrian paths be developed in other areas, with the pedestrian movement adjacent to the shoreline edge and the bicycle lane on the inland side of the open space. At each of the bridges, special provisions should be made to ensure continuity along the shoreline.

CE-8.2: DEVELOP A MAJOR NEW PUBLIC PARK AT UNION POINT.

With the construction of Union Point Park in 2005, this objective of the Estuary Policy Plan to develop a new park between Dennison Street and the existing Con-Agra facility, south of the Embarcadero at Union Point, has been met. The nine-acre Union Point Park is intended to serve the adjacent neighborhoods, as well as provide an important citywide amenity along the Estuary.

The design of the park provides for flexible use, including passive recreational activities as well as field sports and activities that take advantage of the water. A continuous pedestrian promenade is provided along the shoreline edge. A Class I or II bicycle path is incorporated within the park, where it can be separated form the Embarcadero. (See Policy CE-9).

CE-8.3: EXTEND THE MARTIN LUTHER KING, JR. REGIONAL SHORELINE.

The MLK Regional Shoreline should be extended from High Street to Damon Slough. Within this area, the existing public open space between the East Creek and Damon sloughs should be expanded westward to include existing industrial properties owned by EBRPD.

EBRPD's planning objectives identify this portion of the Estuary as an important component of the regional shoreline park system, as well as a potential open space resource for the adjacent Central East Oakland and Coliseum neighborhoods. It should be designed to preserve the significant wetlands

between the Damon and East Creek sloughs. In addition, extending Tidewater Avenue across the East Creek Slough to the 66th Avenue interchange would significantly improve visibility and accessibility to the park.

Areas on the shoreline side of the railroad tracks should be subject to a planning effort, coordinated among the City of Oakland, EBMUD, and the EBRPD, to address EBMUD expansion needs and the extension of the shoreline park. (See Policy CE-7.2).

REGIONAL CIRCULATION & LOCAL STREET IMPROVEMENTS

Objectives for regional circulation and local street networks recognize the importance of circulation and access to support the objectives for land use, public access and public spaces. These add specificity to a number of objectives reflected in the Estuary Policy Plan, General Plan Land Use & Transportation Element and the Bicycle & Pedestrian Master Plan.

POLICY CE-9: PROVIDE FOR CONTINUOUS STREET CONNECTIONS FROM NINTH AVENUE TO DAMON SLOUGH.

Consistent with the Central Estuary Implementation Guide Appendix A, Recommendations for Future Transportation Projects, as individual properties are redeveloped, continuous street connections should be developed to parallel the entire shoreline; ultimately extending from Broadway to 66th Avenue. In the Central Estuary, the Embarcadero should be upgraded between Ninth Avenue and Kennedy Street, and Ford Street should be extended via a new right-of-way to connect to Fruitvale Avenue. If the Owens Brockway site is redeveloped, one or more street connections between Fruitvale Avenue and High Street should be created, with at least one new street connecting directly to Tidewater Avenue.

The proposed street connection points (see Appendix A) are illustrative only. Specific alignments (and their potential impacts on adjacent property owners) should be evaluated through a coordinated planning effort involving property owners, the City of Oakland, and the Port.

The streets adjacent to or paralleling the waterfront should provide access to the diverse waterfront experiences that exist in the Central Estuary. They should be designed to promote slow-moving vehicular access to the waterfront, and provide continuous sidewalks. They should not be designed as through-movement traffic carriers, or frontage-road relievers for I-880.

In addition, traffic management programs should be developed to protect the Jingletown/Elmwood neighborhood against unnecessary truck traffic.

CE-9.1: PROVIDE A CONTINUOUS BIKEWAY FROM NINTH AVENUE TO DAMON SLOUGH.

The Bay Trail should be extended and completed in this reach. Also, as streets are created or improved, provisions should be made to accommodate a continuous pedestrian trail and bikeway paralleling the shoreline.

A bikeway should be extended along the shoreline, ultimately connecting to the existing trail system in the MLK Regional Shoreline.

POLICY CE-10: WORK WITH CALTRANS, BART, AND OTHER TRANSPORTATION AGENCIES TO UPGRADE CONNECTING ROUTES BETWEEN INLAND NEIGHBORHOODS, I880, AND LOCAL STREETS, TO ENHANCE EAST OAKLAND ACCESS TO THE WATERFRONT.

This segment of the I-880 freeway, between 66th Avenue and Oak Street, is substandard, with partial interchanges spaced at random intervals. Freeway on and off-ramps are difficult to find, and have no strong relationship with arterial roadways. As part of the I-880 Corridor Improvement Project, some freeway ramps are being reconfigured to improve operations and reduce impacts on adjacent neighborhoods.

As part of future projects, the freeway ramps should be modified in a manner that complements and reinforces the land use and open space objectives for the area and provides a more legible circulation system. All should be investigated with Caltrans, to test the feasibility of redesigning the interchanges, and to insure that local access needs are also being addressed in Caltrans' upgrade efforts.

CE-10.1: IF FEASIBLE, CONSTRUCT A NEW FULL-MOVEMENT INTERCHANGE AT 23RD AVENUE, WITH DIRECT LINKAGES TO THE PARK AVENUE BRIDGE.

The upcoming I-880 Operational and Safety Improvements at 29th/23rd Avenue project will replace the existing overcrossings at both 23rd and 29th Avenues, and reconfigure the on and off-ramps serving northbound I-880. While this project does not create a full-movement interchange at 23rd Avenue, the project will provide various local circulation and safety benefits and will reduce congestion on I-880 by improving the spacing of freeway ramps.

CE-10.2: IF FEASIBLE, CONSTRUCT AN URBAN DIAMOND INTERCHANGE AT 42ND AVENUE, WITH FRONTAGE ROAD CONNECTIONS TO FRUITVALE.

With the seismic upgrade of the I-880 bridge over High Street that has created an urban diamond interchange with two new at-grade intersections at 42nd Avenue and frontage roads connecting to High Street, this goal has been partially met. The southbound off-ramp to Fruitvale Avenue remains. No extension of the frontage roads north from 42nd Avenue to Fruitvale Avenue is currently planned, but could be pursued in the future. The current project involves the extension of 42nd Avenue south, connecting to Alameda Avenue.

CE-10.3: ENHANCE 29TH AVENUE AS A LOCAL CONNECTING STREET.

The planned project to reconstruct the overcrossings at 23rd and 29th Avenues will utilize 29th Avenue as a partial freeway interchange. The new overcrossing at 29th Avenue will consist of three travel lanes, include wider sidewalks, and feature an off-ramp that will serve northbound traffic exiting I-880. The off-ramp will terminate at a new intersection on the overcrossing. The existing northbound off-ramp to East 8th Street/East 9th Street will be closed when the new off-ramp is constructed. This will improve circulation and reduce through traffic on local streets. The existing southbound on-ramp from 29th Avenue on the west side of the freeway will remain in operation. While 29th Avenue will still serve as a partial freeway interchange, the new overcrossing and ramp configuration will have local benefits.

CE-10.4: IMPROVE THE FRUITVALE AVENUE CORRIDOR AS A PEDESTRIAN AND TRANSIT LINK BETWEEN THE WATERFRONT AND THE FRUITVALE BART TRANSIT VILLAGE.

As industries that require rail spur access relocate or convert entirely to trucking, the existing rail corridor along Fruitvale Avenue should be converted to provide stronger pedestrian, transit or bicycle links between the Fruitvale BART transit village and the waterfront. In addition, the existing rail bridge parallel with the Fruitvale Avenue Bridge to Alameda should be investigated for transit and pedestrian/bicycle use.

The Fruitvale Avenue corridor should be improved to accommodate and enhance pedestrian circulation along both sides of the street. Class II bicycle lanes should be provided along Fruitvale Avenue to the waterfront and BART. The potential for high-capacity transit service connecting Alameda and the Estuary with BART service should also be considered.

CE-10.5: ENHANCE HIGH STREET AS A LOCAL CONNECTING STREET.

High Street should be enhanced with improved pedestrian and bicycle facilities. As part of redevelopment of the area south of I-880, pedestrian and bicycle facilities should also be extended along High Street to the shoreline trail and bridge to Alameda.

CE-10.6: IF FEASIBLE, CONSTRUCT A NEW CONNECTION BRIDGE AROUND 50TH AVENUE.

The new bridge would cross I-880 and provide a waterfront connection between the east-side neighborhoods and the estuary area.

II. LAND USE

Once a predominantly industrial waterfront, the Central Estuary area today has evolved into a more mixed-use group of unique districts. Although commercial and industrial uses occupy a significant amount of acreage in the Central Estuary area, residential neighborhoods continue to expand. Over the years, the development of work/live housing and artist studio space has been introduced into traditional commercial manufacturing and industrial areas, resulting in increasing diversity of uses, form, and character throughout the Central Estuary, a trend which is expected to continue.

This section of the Implementation Guide includes a summary of existing land uses within the four Subareas (groupings of sub-districts) in the Central Estuary, and goes on to identify the locations where land use policy changes are recommended to support the above-discussed goals and objectives established for future development throughout the area (see Figure II-1 for the 10 sub-districts grouped into subareas). This section closes with a discussion of the tools to implement land use policy changes, including updating General Plan designations and creating new zoning districts.

WEST SUBAREA

The West Subarea contains the following sub-districts: Embarcadero Cove, Mixed Use Triangle, Food Industry Cluster and ConAgra.

Existing land uses in the portion of the Central Estuary west of 23rd Avenue include a mix of well-established industrial uses and warehouses, more recent commercial activities and a sizeable waterfront park (see Figure II-2).

Embarcadero Cove, at the western end of the Central Estuary, currently includes a number of commercial and recreational uses, predominantly oriented to the waterfront. Among these are office spaces, commercial retail and services including Port of Oakland-owned offices and Quinn's Lighthouse. There are also a number of marine activity-related facilities as shown in Figure II-3.

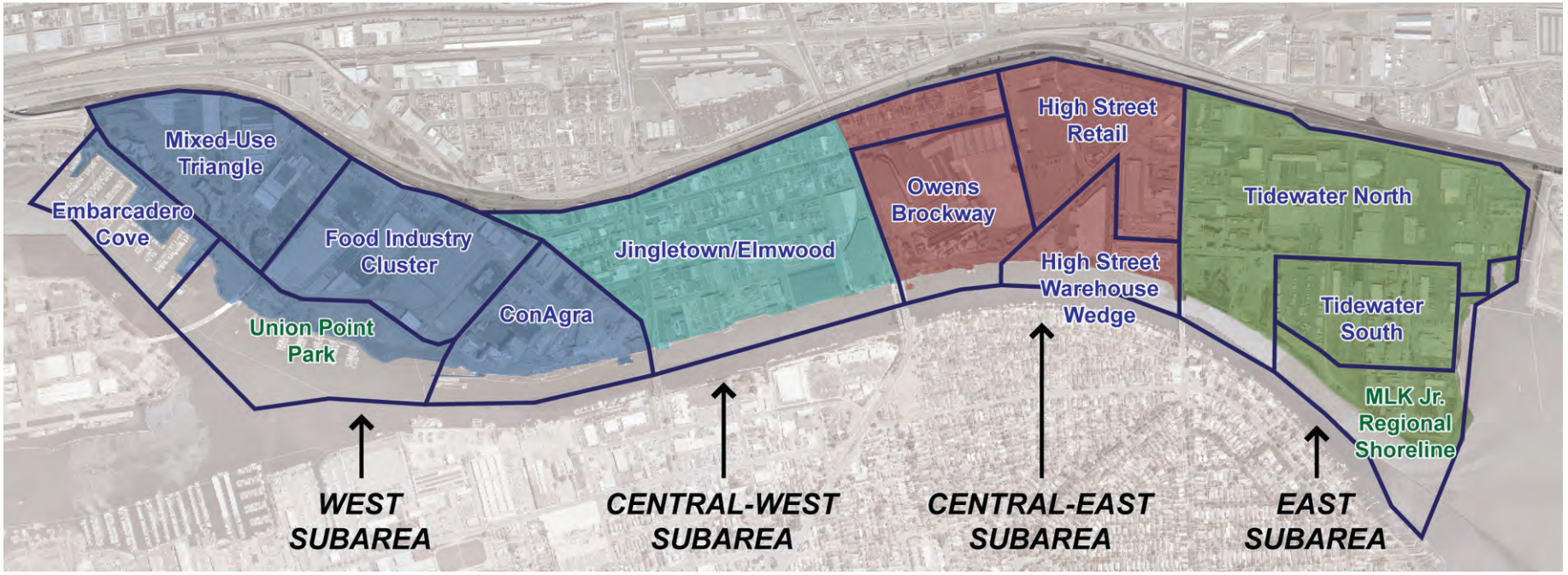


Figure II-1: The Central Estuary is divided into 10 sub-districts which have been grouped into four subareas.

Several larger industrial activities occur in the area, including the 11-acre Con-Agra industrial flour milling facility and a number of other food- and beverage-related producers and distributors. These industrial facilities comprise the dominant use by land area within the West Subarea.

Union Point Park is a 10-acre waterfront park that was completed in late 2005 and expanded in 2010, offering spectacular views of the marina and Estuary, waterfront access, park activities and open space (see Figure II-4). Approximately 3.5 acres of additional waterfront recreational open space is planned for a capped former brownfield site west of Dennison Street.

Of all the subareas in the Central Estuary, the West Subarea has the strongest focus on the waterfront. This is largely due to the fact that the area's main thoroughfare, the Embarcadero, closely hugs the waterfront, forming a strong relationship between the waterfront and interior lands and giving high visibility to the waterfront, a characteristic that is not present in other parts of the Central Estuary. Reinforcing this relationship, are two distinctive features, Union Point Park, and the Embarcadero Cove Marina and associated commercial uses, which draw people to the waterfront with active uses, The other predominant characteristic of the West Subarea is its numerous industrial warehouses and manufacturing facilities, which house many food-related industries that have clustered around the Con-Agra facilities.

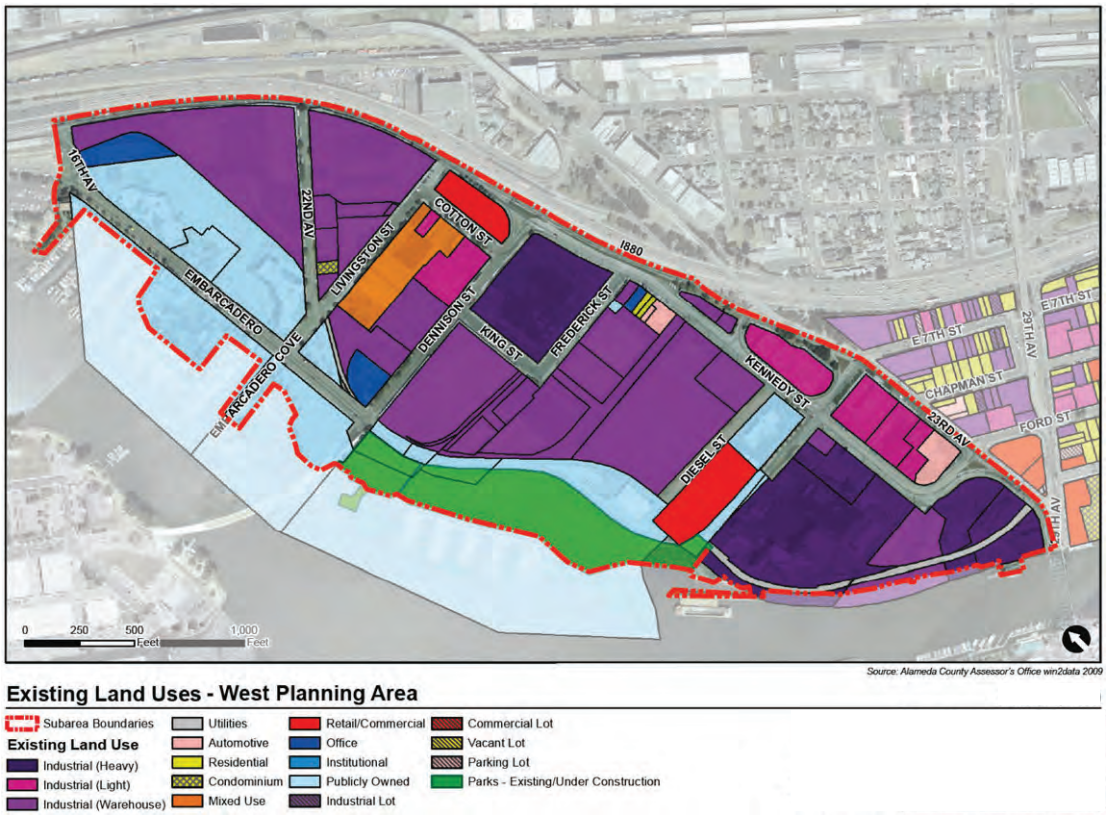


Figure II-2: Existing Land Uses – West Planning Area

Figure II-3: Marine related retail in Embarcadero Cove

Figure II-4: Young people playing soccer at the new Union Point Park, with the Con-Agra industrial facility in the background.

Many of the early industrial and warehouse buildings have remained intact in this area, salvaged by adaptive reuse into lofts, live-work, offices and educational facilities. They often directly address the street, with parking lots mainly at the sides or interior of sites.

Goals for the West Subarea include encouraging redevelopment that strengthens the uses currently found here, but at higher intensities and with greater focus towards the waterfront. The Estuary Policy Plan calls for improved access and business orientation to the waterfront, with water-oriented commercial uses concentrated in Embarcadero Cove; encourages additional light industry, especially food-related industry in the Food Industry Cluster sub-district area; and promotes compatible office, support commercial and institutional uses. Additional waterfront improvements are in the works, which will enhance the rest of the shoreline.

CENTRAL-WEST SUBAREA

The Central-West Subarea encompasses the Jingletown/Elmwood sub-district, between 23rd and Fruitvale Avenues, is unique within the Central Estuary, as it includes a substantial amount of residential mixed in with lower-intensity industrial use (see Figure II-5). The area is home to an increasingly vibrant residential and artist population and is the site of significant new residential development and community reinvestment including live/work space as seen in Figure II-6. The area is also the home of the Voila Juice factory outlet and café and the Institute of Mosaic Art.

The waterfront itself is an evolving model of the kind of access and open space that is envisioned for the whole Estuary waterfront, with a well-developed and

attractively landscaped stretch of the Bay Trail that was completed with the construction of condominiums and a new boathouse for the University of Berkeley. Two segments of the Bay Trail have also been built on piers over the banks of the Estuary, adjacent to industrial warehouses in this Subarea.

The Central-West Subarea has the potential to be the most pedestrian-friendly district within the Central Estuary. To a high degree, it has retained its historic, well-connected and compact street grid and a fine-grained fabric of development. Lots are smaller in size, as is the scale of buildings, which tend to address the street directly, typically with little or no setback.

These characteristics coupled with an eclectic mix of building types and the area's relative affordability, have kept many residents in the neighborhood and has attracted artists, who often reuse the small-scale warehouses as live-work space. Artists have also contributed to the neighborhood's livability by introducing a lively and "funky" presence, as seen on the facades of buildings such as the Institute of Mosaic Art (Figure II-7) and small businesses like Voila Juice, the many public art installations on walls and roadways, and the unconventional artwork embellishing the occasional building frontage. All of these factors are contributing to a more dynamic neighborhood. What is left of the more industrial uses could be redeveloped or enhanced with more engaging frontage treatments.

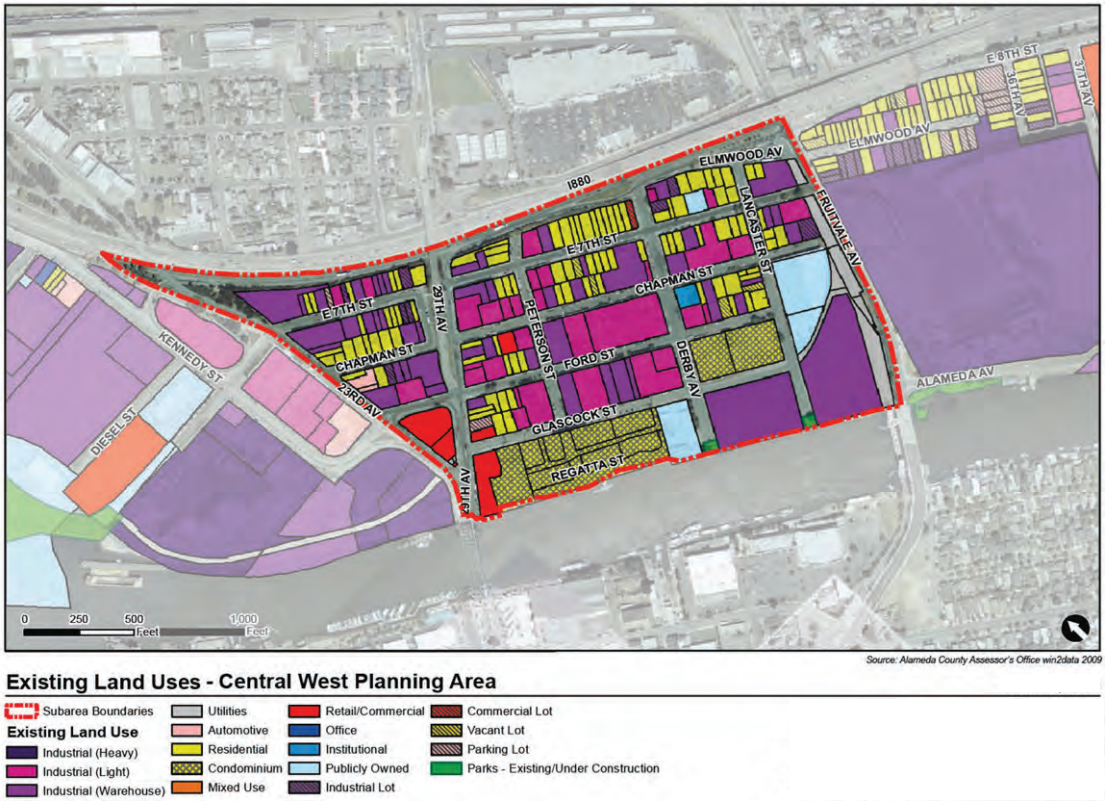


Figure II-5: Existing Land Uses – Central West Planning Area

Figure II-6: A typical Central-West Subarea industrial warehouse converted to live/work space

Figure II-7: The Institute of Mosaic Art

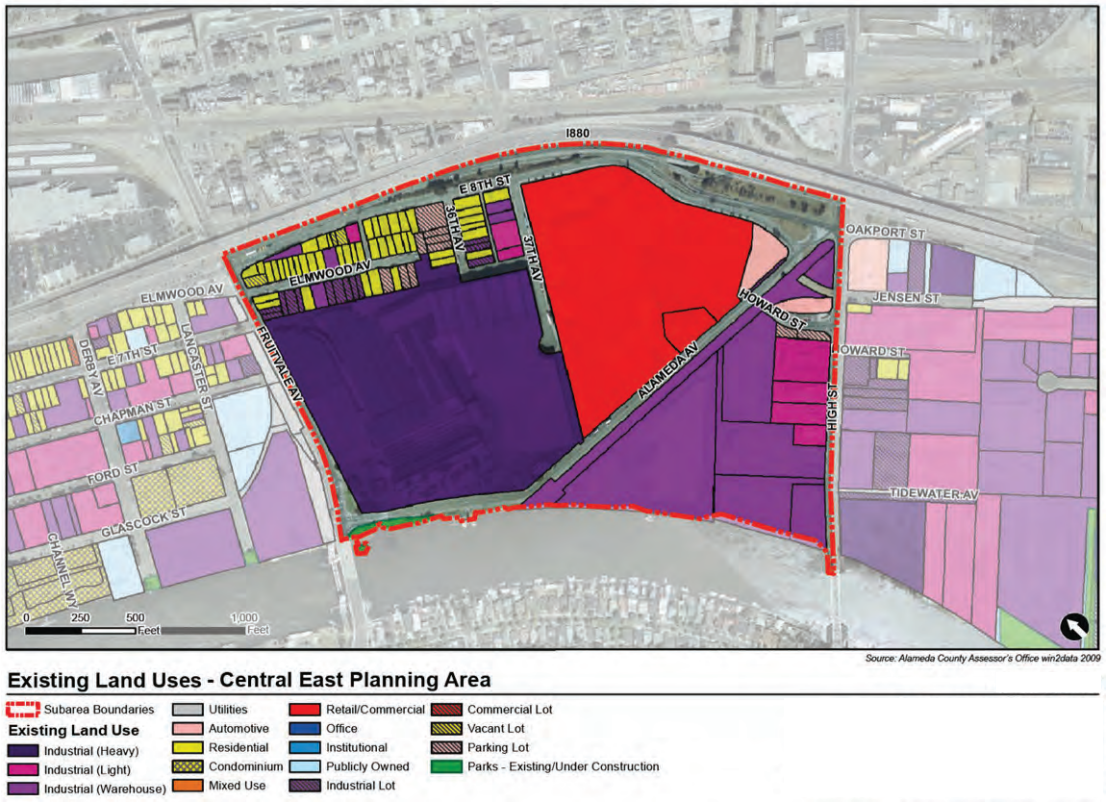


Figure II-8 Existing Land Uses – Central East Planning Area

Figure II-9: Owens Brockway Industrial Facility

CENTRAL-EAST SUBAREA

The Central-East Subarea, between Fruitvale Avenue and High Street, has perhaps the most diverse mix of uses, including a small extension of the Jingletown residential neighborhood; heavy industry centered on the large Owens Brockway facility; a major commercial center, and a large area of light industrial uses and warehousing (see Figure II-8). This area includes the following sub-districts: a small segment of Jingletown/Elmwood, Owens-Brockway, High Street Retail Area and High Street Warehouse Wedge.

Another large parcel in this subarea is the commercial center that includes a Home Depot and various other commercial uses, including a sports club. This is a relatively successful regional commercial destination that capitalizes on its close proximity to the I-880 and High Street, capturing traffic from both the Estuary area and Alameda.

The Owens Brockway glass recycling facility dominates much of this subarea, as it consumes a large part of its geography (see Figure II-9 and Figure II-10). These operations are expected to remain viable for the foreseeable future. Second to the Owens Brockway plant in size and presence is the Home Depot site, which fronts its surrounding streets with a large parking lot. Wedged between the Owens Brockway plant and the I-880 freeway is the Elmwood district, a peninsula of what remains of the Jingletown/Elmwood neighborhood east of Fruitvale Avenue. Though much more eroded than the portion west of Fruitvale, the configuration and character of streets, blocks and homes is still apparent and it still serves as home to many residents. East

of Alameda Avenue are mid-sized light industrial and warehouse uses, vacant parcels and a popular car wash located on a triangular site fronting Howard Street between Alameda Avenue and High Street.

EAST SUBAREA

The East Subarea (Figure II-11) consists of the portion of the Central Estuary east of High Street, and encompasses the Tidewater North and Tidewater South subdistricts. The East Subarea contains a number of businesses in the manufacturing and construction sectors, including two sizable aggregate producers of fill materials for public roads (see Figure II-12), a hardwood lumber company, and mini-storage and trucking uses. These businesses benefit from close proximity to major transportation routes, including I-880 and the Bay for transporting raw materials by barge. The Malat/Lesser Street area has a significant supply of relatively new warehouses and light manufacturing uses.

The East Bay Regional Park District (EBRPD) is developing a waterfront park along the waterfront from on the southern point of the Central Estuary. The inland portion of the land owned by the Park District is currently leased for outdoor trailer storage.

Pacific Gas & Electric (PG&E) owns a 13.6-acre site at the eastern edge of this Subarea which is used as a local operations center, including a vehicle yard, dispatch, and customer service facilities.

LAND USE POLICY CHANGE IMPLEMENTATION TOOLS

The land use policy framework outlined in Chapter I is illustrated in the map on the following page. The land use designations presented will guide development and contribute towards achieving the vision described in this document. This guidance will have to be closely coordinated with the transportation improvements envisioned for the area presented in Chapter III and Appendix A.

The Estuary Policy Plan provides eight (8) land use designations for the Central Estuary Area which depict the type and intensity of allowable future development. These designations may be used to evaluate future development because they reflect the on-the-ground conditions, areas identified for greater intensity and areas slated for infill development. Taken together the eight land use designations describe the development pattern for the Central Estuary. See Table II-1for a description of each land use designation. The zoning ordinance implements the direction of the land use designations by establishing maximum densities for individual properties.

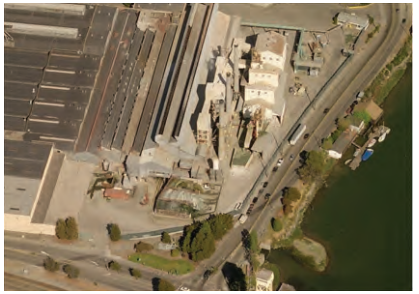


Figure II-11 Existing Land Uses – East Subarea

Figure II-12: Hanson Aggregate's facility in the East Subarea

ESTUARY POLICY PLAN

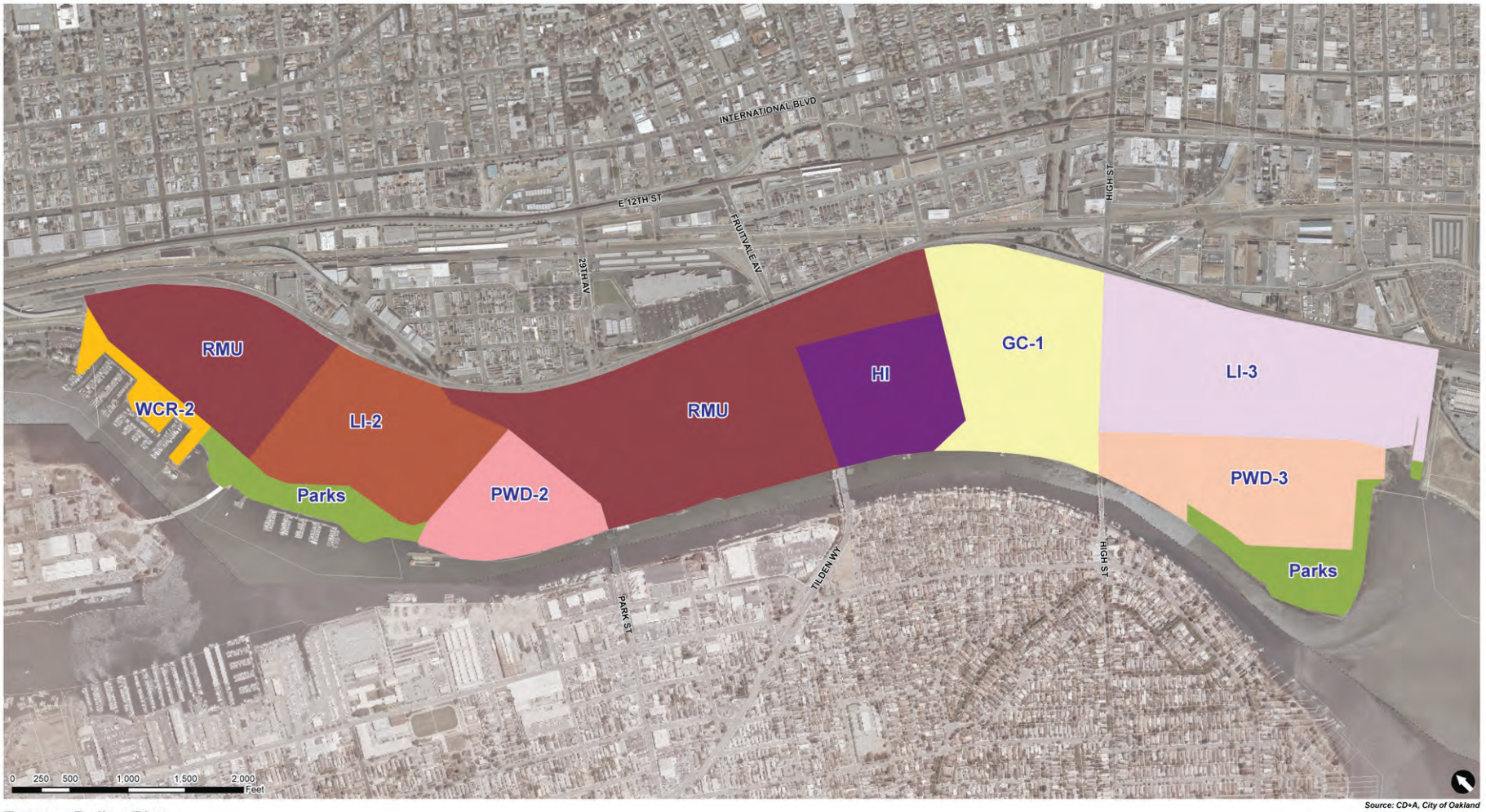


Figure II-13: Estuary Policy Plan Designations

Table II-1: Estuary Policy Plan Land Use Classifications

LAND USE CLASSIFICATION	INTENT	DESIRED CHARACTER	MAXIMUM INTENSITY
PWD-1: Planned Waterfront Development (Estuary Park to 9th Ave)	Provide for the transformation of maritime and marine industrial uses into a public-oriented waterfront district that encourages significant public access and open space opportunities. Encourage a unique mix of light industrial, manufacturing, artist lofts and workshops, hotel, commercial recreation, cultural uses, and water-oriented uses that complement the recreational and open space character of the waterfront.	Future development in this area should be primarily public recreational uses including boating clubs, community and cultural uses, parks, and public open spaces; with primary uses including light industrial, manufacturing, assembly, artist workshops, cultural, work/live studios, offices, neighborhood commercial, and restaurants; and including hotel, conference, restaurant, commercial-recreational, and cultural. Water uses also included.	FAR of 1.0 and 30 units per gross acre for privately owned parcels. Average FAR over entire area of 1.0. Average 30 units per gross acre.
WCR-2 : Waterfront Commercial Recreation (Embarcadero Cove)	Encourage a mix of hotel, commercial-recreational and water-oriented uses that complement the recreation and open space character of the waterfront, enhance public access, and take advantage of highway visibility.	Future development in this area should be primarily hotel, restaurant, retail, marine services and boat repair, boat sales, upper level office, parks and public open paces with water uses	Average FAR over entire area of 2.0
RMU: Residential Mixed Use (Mixed Use Triangle)	Create, maintain and enhance areas of the Central Estuary that have a mix of industrial and heavy commercial activities. Higher density residential development is also appropriate in this zone.	Additional educational, office and commercial uses should be encouraged, as well as multi-family residential and work/live units or adaptive reuse, where these uses would not create land use conflicts with existing industrial activities.	FAR of 3.0 per parcel, 60 units per gross acre.

Table II-1 (cont.): Estuary Policy Plan Land Use Classifications

LAND USE CLASSIFICATION	INTENT	DESIRED CHARACTER	MAXIMUM INTENSITY
LI-2 : Light Industrial (Food Industry Cluster)	Maintain light industrial, food processing and manufacturing uses, allowing a limited amount of office, residential, institutional or commercial uses.	Future development in this area should be primarily light industrial, food processing, wholesale, distribution, work/live, residential, parks and public open spaces	FAR of 3.0 per parcel, 30 units per gross acre.
PWD-2 : Planned Waterfront Development (Con-Agra/)	Provide for the continuation of existing industrial uses, allowing for their future transition to a higher density mix of urban uses if the existing uses prove to be no longer viable in this area.	Future development in this area should be primarily industrial, manufacturing in nature, and other uses that support the existing industrial uses.	FAR of 2.0 per parcel. 40 units per gross acre.
RMU: Residential Mixed Use (Jingletown/Elmwood)	Enhance and strengthen the viability and attractiveness of the Jingletown/Elmwood as a mixed use residential neighborhood of low to medium-density housing within a fine-grained fabric of commercial and light industrial uses.	Future development in this area should be primarily residential, work/live, light industrial, neighborhood-serving retail, offices, public parks, and open spaces.	FAR of 3.0 per parcel. 60 units per gross acre.
HI: Heavy Industrial (Owens-Brockway)	Allow the existing glass recycling and manufacturing functions within this area, and promote an enhanced relationship with the adjoining Jingletown/Elmwood neighborhood, Fruitvale Avenue, and the waterfront	Future development in this area should be primarily heavy industrial uses.	FAR of 2.0 per parcel.

Table II-1 (cont.): Estuary Policy Plan Land Use Classifications

LAND USE CLASSIFICATION	INTENT	DESIRED CHARACTER	MAXIMUM INTENSITY
GC-1: General Commercial (High Street Retail Area and Warehouse Wedge)	Provide for the expansion of regional-serving retail and commercial uses that can benefit from freeway accessibility.	Future development in this area should be primarily retail, office, general commercial, hotel, light industrial, parks, and public open spaces.	FAR of 3.0 per parcel.
LI-3: Light Industrial (Tidewater North)	Maintain light industrial, wholesale/retail, manufacturing, and public utility uses while providing for enhancement of the waterfront environment.	Future development in this area should be primarily industrial, manufacturing, commercial, and a variety of other uses.	FAR of 2.0 per parcel.
PWD-3: Planned Waterfront District (Tidewater South)	Provide for the continuation of existing industrial uses on properties south of Tidewater Avenue, allowing for their transition to light industrial, research and development, and office uses in a waterfront business park setting.	Future development in this area should be primarily industrial, manufacturing, commercial, office, research and development, public parks, and open spaces.	FAR of 3.0 per parcel.
GC-2: General Commercial (from Oakport site to 66th Ave)	Provide for commercial or light industrial uses that are sensitive to the area's proximity to the Martin Luther King Jr. Shoreline Park, the I-880, 66th Avenue, sports fields, and adjacent industrial facilities.	Future development should be primarily light industrial, commercial, public utilities, park, or open space.	FAR of 1.0 per parcel.

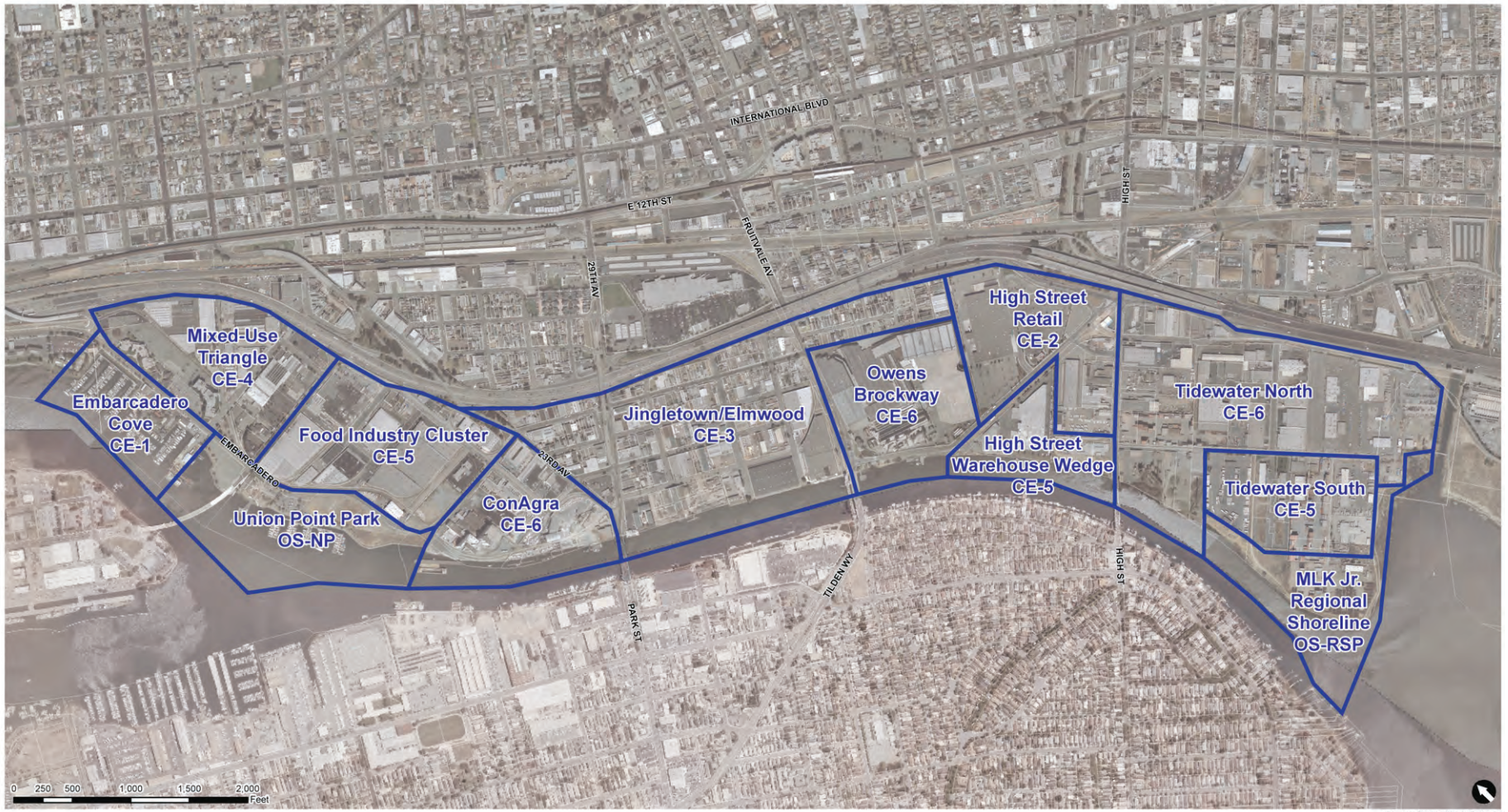


Figure II-14: Zoning

ZONING

The Zoning Ordinance will regulate densities, intensities and allowed activities (such as residential, commercial and industrial uses). Zoning will further refine direction provided by the eight land use designations by determining which activities are permitted as-of-right, and which will be permitted conditionally with careful consideration of possible impacts to adjacent properties. Limitations on uses have been designed to reduce the impacts on more sensitive residential uses in the Jingletown/Elmwood area, while providing maximum flexibility for operations in more heavy industrial areas such as in the Tidewater area. Zoning also establishes detailed development standards (such as height limits and permitted and conditionally permitted density, etc.).

The zoning designations within the Central Estuary are contained in a Chapter I7.66 of the Oakland Zoning Code. The intent of each zone is described below. Refer to Figure II-14*: Zoning* for the location of each zoning district within the Central Estuary.

The applicable zones follow:

- **CE-1** (Embarcadero Cove) – The CE-1 zone is intended to create, maintain, and enhance the marine, office and other commercial uses in the Central Estuary area.
- **CE-2** (High Street Retail) – The CE-2 zone is intended to create, maintain, and enhance areas of the Central Estuary with a wide range of commercial and residential uses with direct street frontage and access to the freeway.
- **CE-3** (Jingletown/Elmwood) – The CE-3 zone is intended to provide development standards for areas of the Central Estuary that have a mix of industrial, heavy commercial and residential development. This zone is intended to promote housing with a strong presence of commercial and industrial activities.
- **CE-4** (Mixed Use Triangle). The CE-4 zone is intended to create, maintain and enhance areas of the Central Estuary that have a mix of industrial and heavy commercial activities. Higher density residential development is also appropriate in this zone.
- **CE-5** (Food Industry Cluster, Warehouse Wedge, Tidewater South) – The CE-5 zone is intended to create, preserve, and enhance areas of the Central Estuary that are appropriate for a wide variety of heavy commercial and industrial establishments. Uses with greater off-site impacts may be permitted provided they meet specific performance standards.
- **CE-6** (Con Agra, Owens Brockway, Tidewater North) – The CE-6 zone is intended to create, preserve and enhance areas of the Central Estuary that are appropriate for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate off-site impacts such as noise, light/glare, odor, and traffic. This zone allows heavy industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related supporting uses. Uses that may inhibit such uses, or the expansion thereof, are prohibited. This district is applied to areas with good freeway, rail, seaport, and/or airport access.
- **OS-NP** (Union Point Park) – The OS-NP zone is intended to create, preserve, and enhance land for permanent open space to meet the active and passive recreational needs of Oakland residents and to promote park uses which are compatible with surrounding land uses and the city's natural environment.
- **OS-RSP** (Martin Luther King Jr. Regional Shoreline Park) – The OS-RSP zone is intended to create, preserve, and enhance land for permanent open space to meet the active and passive recreational needs of Oakland residents and to promote park uses which are compatible with surrounding land uses and the city's natural environment.

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III. TRANSPORTATION

This section of the Guide includes the following:

- A description of the existing transportation network components, including regional and local components and transit, pedestrian and bicycle components.
- A discussion of transportation issues, constraints, and opportunities.
- A description of the planned transportation network for the Central Estuary. The transportation network includes planned streets and pedestrian/bicycle facilities to fulfill the objectives and actions set forth in the EPP. Parking strategies are also included.
- Standards for the Bay Trail/Oakland Waterfront Trail.

Appendix A provides a list and map of recommended future transportation projects that would improve connectivity and travel choices within the Central Estuary. This appendix provides the City with a set of additional projects that could be explored to help serve proposed developments or if additional transportation funding becomes available.

REGIONAL AND LOCAL TRANSPORTATION COMPONENTS

The Central Estuary and the surrounding regions of Oakland and Alameda are centrally located within a robust network of regional and local transportation infrastructure. Interstate 880 (I-880), critical local transportation corridors such as International Boulevard, major freight rail tracks, and a wide range of public transit options serve the study area and its environs.

The *Oakland General Plan LUTE – Transportation Diagram* (City of Oakland, 1998) segments the transportation system into two components:

Figure III-1: A wide freight rail right-of-way running parallel to Fruitvale Avenue contributes to a poor pedestrian environment

- Facilities serving "Local Access" needs
  - Streets and roads ranging from the classic urban grid downtown to winding hilly roads
  - Pedestrian and bicycle facilities from the Oakland hills stairways to waterfront promenades
- Facilities serving "Regional Access" needs
  - Public transit centering on the AC Transit system hub and confluence of BART routes
  - Regional Bikeways System
  - Passenger ferry service to Alameda and San Francisco
  - Freeways providing access north via I-80, south via I-880, west to San Francisco and Peninsula via the Bay Bridge, and east via State Route 24 and I-580

The major transportation facilities in the vicinity of the Central Estuary are summarized below:

- **Interstate 880**: I-880 is a critical component of the Bay Area freeway network that links the communities of the East Bay from Oakland to San Jose. Within the study area, I-880 is an eight-lane access controlled freeway with several closely spaced sub-standard interchanges and ramp junctions. I-880 provides access to downtown Oakland, the Port of Oakland, Oakland International Airport, and major industrial and distribution centers throughout the East Bay. The I-880 corridor traverses many densely populated residential areas and serves several large office and retail centers.
- **International Boulevard**: International Boulevard is a four-lane arterial roadway that parallels I-880 and E 12th Street and stretches from E 14th Street in downtown Oakland to the City of Hayward. It is an important north-south connection that also serves many heavily used AC Transit bus routes, including the 1 Rapid bus line. International Boulevard is also an important commercial corridor for many neighborhoods in East Oakland.
- **East 12th Street**: East 12th Street (E. 12th Street) is a four to six-lane arterial roadway that travels parallel to I-880 and International Boulevard from downtown Oakland to just west of the Coliseum. E. 12th Street predominately serves industrial and warehouse land uses and has much less transit service and commercial activity than International Boulevard. For these reasons, E. 12th Street is characterized by higher speeds and less pedestrian activity. E. 12th Street's greater capacity, fewer pedestrians, and higher speeds results in traffic volumes (west of Fruitvale Avenue) that are approximately 5 to 10 percent higher than International Boulevard.
- **Fruitvale Avenue**: Fruitvale Avenue is a major east-west arterial that stretches from I-580 and MacArthur Boulevard in East Oakland to the Fruitvale Avenue Bridge and Tilden Way in Alameda. Throughout most of the Central Estuary, Fruitvale Avenue has two westbound lanes and one eastbound lane. Outside of the

Central Estuary, Fruitvale Avenue is a four-lane roadway. Fruitvale Avenue provides one of the three bridge crossings of the Oakland Estuary. Fruitvale Avenue has no direct freeway access to I-880 and very little transit service. Only two AC Transit bus routes serve Fruitvale Avenue within the Central Estuary limits. See Figure III-1.

- **High Street**: High Street is a major four-lane east-west arterial roadway that runs from I-580 to Alameda and parallels Fruitvale Avenue. High Street traverses major industrial sections of the study area and therefore handles a large amount of trucks and other heavy vehicles. High Street provides access to I-880 via the 42nd Avenue ramps. High Street also provides another bridge connection across the Estuary.
- **16th, 23rd, and 29th Avenues**: These three roadways provide critical east-west connections from Oakland to Alameda through the Central Estuary. All three of these facilities have bridges that span I-880 and the freight rail tracks just east of the freeway. Ramps to/from I-880 are provided at 23rd Avenue. At 29th Avenue, an indirect set of on and off-ramps provide access to I-880 through the residential neighborhoods east of the freeway. The 23rd and 29th Avenue bridges have sub-standard vertical clearances over the I-880 road surface. 23rd and 29th Avenues also make up part of the "Park Street Triangle", which is a complex one-way system of three intersections at the heart of the Central Estuary (see Figure III-2). 23rd and 29th Avenues converge at the Park Street bridge, which provides another Estuary crossing.
- **42nd Avenue**: 42nd Avenue (State Route 77) is a four-lane State designated highway that serves as a direct ramp connection from I-880 to International Boulevard and East 12th Street.
- **Public Transit**: BART's Fruitvale station is located approximately 1/4-mile from the edge of the Central Estuary. International Boulevard, which is a major service corridor for several AC Transit bus routes, is less than 1/2-mile. The Central Estuary itself is served directly by only a few bus routes (three local and one Transbay route).
- **Bay Trail**: The regional Bay Trail for bicycles and pedestrians follows an alignment along the Estuary shoreline through approximately half of the Central Estuary (see Figure III-3).

Despite the close proximity of the Central Estuary to these major transportation facilities, the access to these facilities and their overall quality of service is poor. In particular, I-880 and the freight rail tracks serve as a major physical barrier between the study area and adjacent neighborhoods, BART, the International Boulevard transit corridor, and the local Oakland street grid. The design and alignment of I-880 utilizes a system of local interchanges with confusing and inefficient ramps. The substandard nature of the interchange and ramp designs translates into an inefficient local street network.

Figure III-2: The 29th Avenue overcrossing leads to the Park Street Triangle

Figure III-3: The Bay Trail follows the shoreline behind a commercial facility near the Fruitvale Bridge

BICYCLE AND PEDESTRIAN COMPONENTS

Bicycle facilities include any dedicated off-street paths where bicycles are permitted and all local streets and public rights-of-way. There are three primary classes of bicycle infrastructure in Oakland defined in the *City of Oakland Bike Master Plan* (City of Oakland, December 2007):

- **Bicycle Paths (Class 1)** are off-street paths that are available for use by cyclists. They are typically shared with pedestrians and often called mixed-use paths. They are often located in parks, along waterways, former railways and freeways.
- **Bicycle Lanes (Class 2)** are on-street lanes, designated for exclusive use by cyclists. Bicycle lanes are often installed on arterial and collector roads that have relatively high vehicle volumes and speeds.
- **Bicycle Routes (Class 3)** are streets that provide signage, but no dedicated space for cyclists. Instead, cyclists share a mixed use lane with other traffic. Streets with Class 3 bicycle routes usually have relatively low levels of auto traffic and may be provided with traffic calming or other physical measures to support bicycle travel.

Two types of Class 3 bike lanes used in Oakland that incorporate enhanced bicycle amenities include:

- Arterial Bicycle Routes (Class 3A): Bicycle routes may be used on some arterial streets where bicycle lanes are not feasible and parallel streets do not provide adequate connectivity. These streets should promote shared use with lower posted speed limits (preferably 25mph), shared lane bicycle stencils, wide curb lanes, and signage.
- Bicycle Boulevards (Class 3B): Bicycle boulevards are bicycle routes on residential streets that prioritize through trips for bicyclists. The route should appeal to cyclists of varied skill levels by providing direct connections on streets with low traffic volumes. The route should reduce delay to bicyclists by assigning right-of-way to travel on the route. Traffic calming should be introduced as needed to discourage drivers from using the boulevard as a through route. Intersections with major streets should be controlled by traffic signals with bicycle actuation.

The *City of Oakland's Pedestrian Master Plan* (City of Oakland, 2002) designated certain pedestrian routes of significance at the citywide level. The Pedestrian Master Plan identifies International Boulevard as the primary pedestrian corridor in the study area, along with a section of Fruitvale Avenue and Foothill Boulevard. Other designated routes include High Street, San Leandro Street, and adjacent sections of Foothill Boulevard and Fruitvale Avenue. District level routes of

relevance include Park Street-29th Avenue and E. 12th Street. The Bay Trail is also identified as a regional pedestrian facility.

TRANSPORTATION ISSUES, CONSTRAINTS, AND OPPORTUNITIES

The following list provides more detail on the existing transportation issues:

- On many segments of I-880, traffic volumes exceed the design capacity during peak hours of travel. This results in significant congestion and travel time delays along the entire corridor. In the AM peak hour, the major bottlenecks exist at the western approaches to the Bay Bridge. Bottlenecks also occur on northbound I-880 near the 23rd Avenue interchange and on southbound I-880 near the San Mateo Bridge. I-880 through many sections of Oakland is not built to current geometric standards, which results in lower capacity.
- I-880 within the study area has several closely spaced interchanges. Closely spaced ramps result in many potentially unsafe merging/diverging and weaving maneuvers as vehicles enter and exit the mainline traffic stream on I-880. In addition to safety, the closely spaced ramps also degrade freeway capacity. The on and off-ramps serving I-880 at 23rd Avenue, 29th Avenue, and 42nd Avenue/High Street also have very short acceleration/deceleration lanes. Short acceleration and deceleration lanes pose a safety issue for vehicles entering and exiting I-880.
- There are only five north-south connections through the Central Estuary: 16th, 23rd, 29th, Fruitvale, and High Street. These five connections funnel traffic through the Central Estuary and onto the three bridges that cross the Estuary to the City of Alameda. Closely spaced intersections with non-standard geometries and many driveway curb cuts reduce capacity and degrade traffic flow along these roadways. The substandard interchange configurations throughout the study area put additional pressure on the roadway network at locations where local streets provide access to the I-880 ramps.
- The local street grid is confusing and difficult to navigate. The Park Street Triangle is an excellent example of this (see Figure III-4). The Park Street Triangle consists of three closely spaced intersections that force traffic into a counter-clockwise one-way traffic flow. A traffic signal at the 23rd Avenue / Ford Street / Kennedy Street intersection helps to regulate traffic flow through the triangle. However, a number of uncontrolled "free" movements and the need to weave across one or two lanes of traffic to exit the Triangle, creates a confusing situation that can be difficult to navigate. The Central Estuary lacks a continuous east-west roadway connection. All users trying to

Figure III-4: Park Street Triangle presents a confusing traffic configuration to motorists

Figure III-5: The Bay Trail is discontinuous within the Central Estuary, often interrupted by existing industrial uses that require access to the waterway

Figure III-6 The Central Estuary includes many local streets with poor pedestrian and cycling facilities

navigate the study area in a east-west direction must utilize an indirect route along several different streets.

- There is a lack of vehicular access to the Estuary waterfront. The lack of a continuous pedestrian, bicycle, and vehicle travel way abutting the Estuary shoreline is a major deficiency within the study area.The Bay Trail is an enormous asset for bicyclists and pedestrians throughout the Bay Area. However, the Bay Trail is discontinuous and difficult to access within the Central Estuary (see Figure III-5). This forces Bay Trail users to follow an indirect route through the Central Estuary on local streets.

The overall pedestrian and bicycle environment throughout the study area is poor (see Figure III-6). Local streets and the bridges crossing the Estuary lack dedicated bike lanes and many street segments lack sidewalks. Several signalized intersections have prohibited pedestrian crossings, and many lack amenities such as striped pedestrian crosswalks with pedestrian signal heads and push buttons. The long distances required to cross I-880 and the freight rail tracks, combined with the poor physical condition of the sidewalks and streets that traverse these barriers, contribute to the poor pedestrian and bicycle environment.

Table III-1 summarizes the transportation issues by mode and includes traffic (which includes automobile circulation), transit, bicycle / pedestrian, and freight (which includes truck and rail users):

Table III-1: Transportation Issues by Mode

TRAFFIC (AUTO)		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
High Street Congestion: High traffic volumes (including a large number of trucks) and closely-spaced intersections on High St from I-880 to the Oakland Estuary results in traffic congestion and queuing along this segment of the street network.	Existing land uses, right-of-way (ROW) limitations, and Caltrans control of much of the ROW limits the options for widening or improving High St.	Take advantage of Caltrans' pending High Street Overhead Retrofit project and the City's High Street Access Improvements project to improve circulation.
Freeway and Freight Tracks as a Barrier: I-880 and the freight rail tracks east of the freeway are a significant physical barrier that limits North-South connectivity.	Caltrans and Union Pacific Railroad (UPRR) controlled ROW limit the options for spanning these barriers. Also, the need to attain sufficient vertical clearance over or under these facilities results in significant cost.	Take advantage of pending projects at High Street and 29th/23rd Avenue to improve north-south connectivity for all travel modes. Look for additional opportunities to improve existing crossing points.
Freeway Access: The access to and from I-880 is confusing. The ramp locations and configurations are sub-standard, which affects freeway traffic flow and local circulation. Also, ramps connect directly to local streets.	Caltrans controlled ROW, the existing alignment of I-880, and the adjacent communities all limit the options for providing additional freeway ramps.	The pending projects at High Street and 29th/23rd Avenue will provide improved freeway access that is safer and limits the impacts on local streets. Potential to improve ramp terminal intersections.
Lack of East-West Connectivity: There is no direct east-west connection through the study area. All of the east-west streets create barriers that are difficult to cross.	Existing land uses, the complex street network, and the high traffic volumes on the existing east-west streets (23rd/29th, Fruitvale, and High) are a constraint to providing more east-west connections.	Look for an opportunity to extend Embarcadero east to the Park Street Triangle. An additional east-west connection could exist at E 7th St under the 29th Ave overcrossing.
Confusing Street Network: The existing street grid is complex and difficult to navigate. Many travel paths take motorists through residential neighborhoods to access I-880.	Existing uses, I-880, the freight rail tracks, and the Estuary all limit the ability to rationalize the street grid.	Take advantage of the various freeway projects and any redevelopment to add new street segments and connections.
Intersection Safety: Within the study area, collisions are an issue at the Park Street Triangle, Fruitvale Ave, and High St.	Limited ROW constrains the options for making intersection geometric upgrades.	Apply street standards that address vehicle access, sight distance, and intersection traffic control. The Park Street Triangle is being studied and improved as part of the 29th/23rd Avenue project.
Through Traffic From Alameda: The three Oakland Estuary bridges within the study area carry a considerable amount of Alameda traffic through the site.	Competing users with different objectives: Alameda motorists want fast reliable access to I-880; study area residents want safe streets; industrial users want adequate access to their businesses	The projects at High Street and 29th/23rd will provide opportunities to improve circulation for all users. Additional street improvements at the Park Street Triangle and High Street would better serve all users.
Parking Discipline and Conflicts: The mix of users within the study area can create parking issues, particularly in the mixed residential/light industrial Jingletown area.	Existing uses and a lack of consistent street designs and standards results in parking conflicts and a lack of on-street parking in the Jingletown/Elmwood area.	Look for opportunities to provide additional on-street parking that addresses the needs of industry, commerce and residents

Table III-1 (cont.): Transportation Issues by Mode

TRANSIT		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Lack of Transit Service: The overall quality of the transit service is poor. Only a few bus routes serve the study area directly. The entire study area only has five bus stops, and the bus stop amenities are lacking. Also, there is no direct late-night route that serves the study area.	Lack of existing ridership and development densities within the study area reduces the likelihood of additional service.	Increase densities and transit supportive uses. Locate new residential and commercial developments close to the existing transit routes to maximize ridership.
Transit Operations and Reliability: The freeway and street grid issues discussed in the Traffic section degrades transit operations and reliability.	The large number of closely spaced signalized intersections within the study area makes signal coordination and bus signal priority difficult.	The planned Bus Rapid Transit service on International Blvd. Improved AC Transit Line 51 service to and from the City of Alameda.
No Direct East-West Service: Most bus service through the study area connects to the Fruitvale BART station or follows a circuitous route through Alameda. The existing east-west routes all run along International Blvd.	Lack of existing ridership and development densities within the study area reduces the likelihood of additional service.	If justified by future land uses, use Embarcadero for a new east-west bus route that connects the study area to the Oak to Ninth development and Jack London Square. Locate new uses near Embarcadero to maximize transit ridership on this potential route.
Poor Pedestrian Environment: The overall poor pedestrian environment and lack of direct routes makes walking to transit less attractive.	The industrial character of the area and the I-880/freight rail tracks create a significant deterrent to walking.	Take advantage of the High St and 29th/23rd Ave projects to improve pedestrian access across I-880 to BART and the International Blvd transit corridor. Improve other existing freeway crossing points.

Table III-1 (cont.): Transportation Issues by Mode

BICYCLE/PEDESTRIAN		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Poor Bicycle and Pedestrian Environment: Narrow sidewalks, gaps in the sidewalk network, lack of crosswalks, prohibited pedestrian crossings at some intersections, and many curb cuts produce an overall environment that is not friendly for bikes and pedestrians.	Existing land uses, ROW limitations, and competition from auto and truck users limits the options for improving the overall pedestrian and bicycle environment.	Use the City's Transportation Services Division street design guidelines and standards that promote bicycle and pedestrian users. Take advantage of the High St and 29th/23rd Ave projects to improve pedestrian connectivity.
Access Across the I-880/Freight Rail Tracks: The existing north-south connections are not bicycle and pedestrian-friendly. The grades on the I-880 overcrossings at 23rd and 29th Aves are steep. The Fruitvale Ave and High St crossings lack adequate bike lanes and sidewalks.	Existing land uses, ROW limitations, and the Caltrans and UPRR control of the ROW limits the ability to provide additional bike and pedestrian-friendly crossings.	Use the 29th/23rd Avenue and the Fruitvale Ave and High St seismic retrofits to provide better north-south bike and pedestrian connectivity. Improve other existing freeway crossing points.
Bay Trail Gaps: Several gaps exist in the Bay Trail shoreline alignment at existing land uses and the three Estuary bridges.	Many of the businesses in the study area require direct access to the water. Accommodating water and trail users will be difficult. Constructing trail segments under the Park, Fruitvale, and High St bridges will require permission from the Army Corps of Engineers. The vertical clearance under the bridges is also a constraint.	Continue to negotiate with the interested parties along the shoreline to obtain permission to route the Bay Trail through their properties. The seismic retrofitting of the three bridges provides an opportunity to evaluate options for continuing the Bay Trail under the structures.
Access Across the Estuary: The three bridges have narrow pathways for bicyclists and pedestrians. No dedicated bike lanes are provided on the bridges.	There are no current plans to redesign the pedestrian sidewalks or restripe the bridge decks to better accommodate bicyclists and pedestrians.	The pending bridge seismic retrofits provide an opportunity to stripe bike lanes, particularly on the Fruitvale Ave bridge.
Park Street Triangle Bike and Pedestrian Access: The Park Street Triangle provides a formidable obstacle for bicyclists and pedestrians traveling east and west through the study area.	The Park Street Triangle's design, the lack of traffic control at two of the Triangle's three intersections, and the free-flow nature of traffic all limit the ability to provide better bike and pedestrian access.	Improvements to the intersections on Ford St, which include a traffic signal at 29th Ave / Ford St, provide an opportunity to locate better east-west crosswalks. The Park Street Triangle is being studied and will be improved as part of the 29th/23rd project.

Table III-1 (cont.): Transportation Issues by Mode

FREIGHT		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Truck Routes are Poorly Designed: The defined truck routes within the study area, most notably High St from I-880 to the Estuary, are not designed to handle the high volume of trucks.	Existing land uses, ROW limitations, and competition from other users (autos, bike, and pedestrians) limit the ability to provide facilities that better serve trucks and rail.	Use the City's Transportation Services Division street design guidelines and standards that clearly define the needs of trucks (e.g., wider turning radius, areas for trucks to queue) will help accommodate the study area's industrial users.
Freight Rail Conflicts: Provide direct rail connections to existing and future industrial users within the study area that does not disrupt other land uses.	The existing rail ROW and the limited number of rail connections to the major lines north of I-880. The closing of the 5th Ave spur is a major constraint.	Use City's Standard Conditions of Approval for addressing rail crossing conflicts. Work with Union Pacific Railroad and California Public Utilities Commission to improve the crossings.
Source: Arup, 2009		

PENDING AND PROPOSED TRANSPORTATION PROJECTS

Pending and proposed projects within the Central Estuary are listed below in Table III-2:

Table III-2: Pending and Proposed Projects withing the Central Oakland Estuary

PROJECT NAME, AGENCY, AND ESTIMATED COMPLETION DATE	PROJECT DESCRIPTION	POTENTIAL EFFECTS ON THE CENTRAL ESTUARY IMPLEMENTATION GUIDE
1. I-880 Operational and Safety Improvements at the 29th and 23rd Ave Overcrossings ACCMA, Caltrans Est. Completion: 2012 Funding: Fully funded	Remove and reconstruct the overcrossing structures at 23rd and 29th Avenues, reconfigure several on/off ramps, and extend the NB aux lane.	The project will improve access to and from NB I-880 by combining and closing ramps at both 23rd and 29th Avenues. Local circulation is improved by simplifying some intersections and providing interim improvements at the base of the 29th Avenue bridge where it intersects the Park Street Triangle.
2. Park Street Triangle Improvements City of Oakland Est. Completion: n/a Funding: Fully Funded	Reconstruct the three intersections in the Park Street Triangle on 23rd Avenue, 29th Avenue, and Ford Street.	The overcrossing improvements at 29th Avenue described in #1 will include improvements to the Triangle.
3. High Street Overhead Seismic Retrofit Project Caltrans Est. Completion: 2012/2013 Funding: Fully funded	Replace the overhead structures on I-880 from Fruitvale Avenue to south of High Street and reconfigure the I-880 / SR 77 / 42nd Avenue interchange.	The project will reconfigure the ramps at 42nd Avenue to create two at-grade intersections on 42nd Avenue that serve the NB 880 on-ramp and SB 880 off-ramp. The E 8th Street frontage road will terminate south of 37th Avenue to accommodate the retrofit.
4. 42nd Avenue/High Street Access Improvements City of Oakland Est. Completion: 2015+ Funding: Fully funded	This project will follow on the heels of #3 and includes extending 42nd Avenue south from 880 to intersect Jensen Street and widening High Street under 880.	This project, when combined with the 42nd Avenue interchange improvements included as part of #3, will improve the overall east-west street connectivity across I-880. These changes will result in 42nd Avenue serving as a parallel route to High Street that connects to Alameda Avenue. The bridge work in #3 will allow High Street to be widened to eight lanes under 880. This will allow for two full left-turn lanes in both directions and two through travel lanes.

Table III-2 (cont.): Pending and Proposed Projects withing the Central Oakland Estuary

PROJECT NAME, AGENCY, AND ESTIMATED COMPLETION DATE	PROJECT DESCRIPTION	POTENTIAL EFFECTS ON THE CENTRAL ESTUARY IMPLEMENTATION GUIDE
5. Citywide Intelligent Transportation System Program City of Oakland Est. Completion: 2009 – 2012 Funding: Fully funded for this portion	Install cameras and detectors to monitor and manage traffic and transit on major corridors throughout the city.	The cameras and detectors are planned for segments of High Street and Fruitvale Avenue within the study area.
6. AC Transit East Bay Bus Rapid Transit (BRT) AC Transit Est. Completion: 2014-2016 Funding: Partially funded	BRT service would be introduced along the Broadway, International, and E 14th Street corridor between 20th Street in Oakland and San Leandro BART. The project includes new stations, vehicles, bus signal priority, and dedicated bus-only lanes, as well as bicycle and pedestrian improvements.	BRT would not directly serve the Central Estuary, but could travel along International Boulevard less than one-half mile from the Central Estuary boundary. The enhanced frequency, speed, and quality of the BRT service could make transit a much more attractive mode to reach destinations in downtown Oakland and areas to the south. There is the potential that one travel lane along International Boulevard in each direction could be dedicated to BRT service. This would potentially reduce auto travel lanes and parking in certain areas.
7. Bay Trail/Waterfront Trail Projects City of Oakland, ABAG Est. Completion: Ongoing Funding: Partially funded	There are a series of pedestrian and bicycle trail projects within the Central Estuary study area that are funded by the City of Oakland's Measure DD bond measure.	Projects where easement agreements have been reached and design is ongoing include the Cryer Site (SW corner of Embarcadero/ Dennison St), and the US Audio / NEU site (south of Alameda Ave). Additional sites to complete the shoreline alignment have been studied, but no agreements have been reached. Challenges include bridge crossings at the Park Street, Fruitvale and High Street Bridges.
8. Seismic Retrofit of the Three Estuary Bridges Alameda County Est. Completion: 2010 Funding: "No Collapse" fully funded; "Lifeline" partially funded	Phase 1: "No Collapse" retrofits of the Park St, and High St bridges crossing the Estuary. Phase 2: "Lifeline" retrofit of the Fruitvale Ave bridge.	The "No Collapse" retrofits are funded and currently in design. A "No Collapse" retrofit ensures that the bridge will not collapse. However, it may not be functional for a long time. A "Lifeline" retrofit ensures that a bridge will sustain only minimal damage and it may be functional with a short time. The retrofits do not provide any additional capacity for autos, bicycles, or pedestrians.

Table III-2 (cont.) : Pending and Proposed Projects withing the Central Oakland Estuary

PROJECT NAME, AGENCY, AND ESTIMATED COMPLETION DATE	PROJECT DESCRIPTION	POTENTIAL EFFECTS ON THE CENTRAL ESTUARY IMPLEMENTATION GUIDE
9. Estuary Crossing Study City of Alameda Est. Completion: Complete Funding: No funding for implementation	Developed estuary crossing alternatives to the existing Posey Tube. The boundaries of the study area are outside the Central Estuary area.	The report documents the lack of adequate crossings for pedestrians and bicyclists. Improving these connections across the three bridges is a key goal of this Guide.
10. Fruitvale Alive! Master Transportation Plan City of Oakland Est. Completion: Complete Funding: No funding	The Fruitvale Alive! Plan was funded by a Caltrans Environmental Justice Grant. The Plan identifies pedestrian, bicycle, traffic, transit, and parking improvements in the Dimond and Fruitvale Districts in Oakland.	The Fruitvale Alive! study area extends along Fruitvale Avenue to the edge of the Central Estuary at E 9th Street. The recommendations include a number of corridor-wide pedestrian crosswalk enhancements, bulbouts, improved signal coordination, and focused improvements at several intersections. Most of these improvements would fall outside the Central Estuary and are not currently funded.
11. Measure DD Projects City of Oakland Est. Completion: ongoing Funding: Partially funded	The City's Measure DD program financed the Union Point Park project and is working to fill in the Bay Trail gaps through the Central Estuary.	Measure DD funding will support completion of some Bay Trail gaps.
12. E 12th St Bikeway City of Oakland Est. Completion: 2011 Funding: Fully funded	Add bike lanes on E 12th Street from 2nd Avenue to Fruitvale Avenue.	The new bike lanes along E 12th Street will improve east-west connectivity from the Central Estuary to downtown Oakland.
Source: As noted in the table. Compiled by Arup.		

OFF-STREET PARKING

As development occurs within the Central Estuary, off-street parking should be provided in accordance with City regulations. Table III-3 provides a qualitative summary of the current on and off-street parking supply within each Central Estuary sub-area.

Table III-3: Parking Supply

CENTRAL ESTUARY SUB-AREA	PARKING SUPPLY	PARKING DEMAND
West	▪ 60 spaces of diagonal parking provided along the west side of Embarcadero (16th Ave to Livingston St) ▪ 40 spaces of perpendicular parking provided on the south side of Denison St (Embarcadero to King St) ▪ Union Point Park has 67 dedicated off-street spaces in a lot on the north end of the Park and 48 spaces in a lot at the south end ▪ Office buildings in the Embarcadero Cove area have large off-street lots containing several hundred parking spaces ▪ Parallel on-street parking spaces are provided along Embarcadero, Livingston St, Kennedy St, and 23rd Ave	▪ Based on information obtained during field observation during multiple site visits, the existing supply appears adequate to meet parking demand on most streets. ▪ Based on information obtained during field observation during multiple site visits, the off-street lots serving the Embarcadero Cove office complex are typically not filled to capacity.
Central-West	▪ The Jingletown/Elmwood area has on-street parking on all block faces. Approximately 40 perpendicular parking spaces are provided on Glasscock St (Derby Ave to Lancaster St), and 15 perpendicular spaces are provided on Derby Ave (Glasscock St to the Estuary) ▪ The area is characterized by a mix of land uses including residential, light industrial, institutional (e.g., School of Mosaic Arts), and some retail	▪ The existing land uses generate considerable parking demand that is not fully accommodated by existing off-street lots. ▪ Near businesses that require frequent truck access, the various parking demands and vehicle types (cars versus trucks) compete for the available on-street spaces ▪ A lack of parking restrictions and informal use of setbacks for parking can result in a somewhat chaotic parking situation

Table III-3 (cont.): Parking Supply

CENTRAL ESTUARY SUB-AREA	PARKING SUPPLY	PARKING DEMAND
Central-East	▪ This area consists mostly by large industrial users and the Home Depot. The large industrial users have dedicated off-street parking. ▪ The Home Depot has a large off-street lot with several hundred spaces. ▪ The sub-area's small residential section has on-street parking along most block faces.	▪ Based on information obtained during field observation during multiple site visits, the existing supply appears adequate to meet the parking demands at the industrial sites and at Home Depot.
East	▪ This area's industrial users have large off-street parking areas for employees and large trucks.	▪ The parking supply appears adequate to meet demand.
Source: Arup, 2009		

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IV. INFRASTRUCTURE

The infrastructure section provides guidance on utility requirements within the Central Estuary study area. The Estuary Policy Plan (EPP) calls for the Central Estuary and its surrounding areas to gradually transform its land uses from heavy industrial to a mixture of commercial, light industrial, and residential uses. This process will have an impact on the utility demand as uses redevelop and will provide various opportunities for improving the existing utility infrastructure.

The EPP does not provide specific policies related to utility infrastructure. However, a number of other guiding documents have been adopted by the City that address issues related to storm water, solid waste, and energy usage. The infrastructure improvements should be consistent with all existing City policies and standards.

The infrastructure plan includes the following components:

- A discussion of the existing context and City policies guiding utility infrastructure, the projected utility demand, and issues, constraints, and opportunities
- A discussion of storm drainage, sanitary sewer, water, electricity, gas and telecommunications infrastructure
- The infrastructure cost estimate in the Implementation Guide assumes a series of utility upgrades required to serve the additional land use program. The type, quantity, and estimated cost for major utility categories is provided in the cost estimate.

UTILITY DEMAND

The land use changes associated with the EPP will likely require improvements to storm drainage, sanitary sewer, water, electricity, gas and telecommunications infrastructure. Table IV-1 compares the water, natural gas, and electricity demand estimates for the existing land uses and a reasonably foreseeable development scenario (illustrated in Figure A-1 in Appendix A). The existing calculations for the utility demands do not represent actual usage,

but represent the potential demand for the existing zoning within the Central Estuary. The utility demand calculations with the development scenario apply the same demand rates used in the existing utility estimate. This assumes that the future utility demand rates do not incorporate any reductions associated with conservation or efficiency programs. The calculations are intended for comparative purposes only.

The development of the Central Estuary is not expected to negatively impact existing infrastructure systems with the study area. The development should incorporate infrastructure improvements that are consistent with City standards and the City of Oakland's Sustainable Community Development Initiative. The extent of the infrastructure improvements is anticipated to be proportional to the size of the development.

Table IV-1: Utility Demand

UTILITY DEMAND ESTIMATES	EXISTING	EPP	DIFFERENCE	
Indoor Water Demand (mgd)[1]	0.28	0.45	0.18	(63%)
Irrigation Water Demand (mgd)	0.12	0.13	0.01	(6%)
Waste-water (mgd) [peak wet weather flow][2]	0.53	0.86	0.33	(63%)
Natural Gas Demand (Therm/yr)3	1,278,000	1,721,000	443,000	(35%)
Electricity Demand (MW)[4]	22.3	27.3	5.0	(22%)
Electricity Consumption (MWh/yr)[5]	83,000	114,000	31,000	(37%)
Solid Waste Demand (Tons/yr)	5,700	10,400	4,700	(82%)

Notes:

(1) mgd = millions gallons per day

(2) Assumed wet weather flow peaking factor (PF) = 2. Peak Wet Weather Flow = PF * Average Daily Dry Weather Flow.

(3) Therm/yr = thermal units per year

(4) MW = megawatts

(5) MWh/yr =megawatt-hours per year

Source: Arup, 2011

ISSUES, CONSTRAINTS, AND OPPORTUNITIES

Table IV-2 summarizes the infrastructure issues, constraints, and potential opportunities associated with the redevelopment of the Central Estuary.

Table IV-2: Issues, Constraints, and Opportunities

STORM DRAINAGE		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Storm Drainage Capacity: Two existing major storm drainage lines, along Fruitvale Ave and 37th Ave, conveying storm water from offsite watersheds, are near capacity.	▪ The two existing storm drains cannot take additional run-off from plan area. ▪ The City's Storm Drain Master Plan recommends upgrades to the two major storm drainage lines to improve storm drainage capacity. ▪ The Fruitvale Ave drain belongs to Alameda County Flood Control and Water Conservation District (ACFCWCD).	▪ Upgrading the two existing storm drainage lines may provide opportunities for creek regeneration/improvement (e.g., day-lighting Sausal Creek) to improve storm drain capacity while restoring natural habitat and providing public recreation opportunities. ▪ The volume of run-off from plan area will likely be reduced due to a likely increase in permeable surface area and due to new regulations and storm drainage guidelines.
Impaired Waterbodies: Run-off from the existing watersheds draining into Oakland Estuary, including the plan area, is sufficiently contaminated to result in the Oakland Estuary being listed as an impaired water body in the 2006 303(d) list prepared by the State Water Resources Control Board. Sausal Creek and Damon Slough were recently added to the list of impaired water bodies due to trash.	▪ Most of the existing watershed cannot be directly influenced by the redevelopment of the plan area. ▪ Certain pollutants are being monitored and their discharge to the Oakland Estuary is being restricted. ▪ The plan area may continue be a contributor of pollutants of concern, due to historical and existing industrial land uses. ▪ Portions of development sites may require to be cleaned up if they are identified as the sources of contaminants. ▪ Development will be required to comply with new Municipal Regional Permit (MRP) regulations including: providing 100% trash control into waterbodies by 2020, providing bio-based storm water treatment, and meeting numerical standards for storm water treatment.	▪ New development that creates or replaces 10,000 SF or more of impervious surface is required to implement storm water treatment measures in accordance to provision C.3 of the City of Oakland's National Pollutant Discharge Elimination System (NPDES) permit. ▪ Development will be required to comply with new storm water regulations stated in the Municipal Regional Permit (MRP). ▪ New development will provide opportunities for improving the quality of stormwater run-off from the plan area discharging into the Oakland Estuary, e.g. installing trash screens, green roofs, creating wetlands, ponds, biofiltration planters, raingardens, swales, etc. ▪ If new on-site wetlands are created, these may be able to improve the quality of water entering the plan area from off-site, upstream sources.

Table IV-2 (cont.): Issues, Constraints, and Opportunities

SANITARY SEWER		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Wet Weather Flows: Groundwater infiltration and rainfall-dependent inflow (I/I) entering the existing sanitary sewer system significantly impacts the water quality in the Bay due to partially treated sewage being discharged.	▪ EBMUD has to meet the requirements from the new NDPES Wet Weather Discharge Permit to reduce the I/I flows during wet weather events. ▪ EBMUD recommends that new developments be responsible for the rehabilitation of existing sanitary sewer pipes or installation of new pipes to reduce I/I.	▪ Use of high efficiency fixtures and appliances would mitigate the volume of sanitary sewage discharges and reduce the impact on peak wet weather flows. ▪ Minimize potable/irrigation water use to decrease impact on sanitary sewer mains.
Sanitary Sewer Discharge Demand: The existing land uses within the plan area are mainly industrial. Depending on the amount of additional program planned, the redevelopment may increase the volume of sewage being generated in the plan area.	▪ The discharge limit and water quality constituent limits stated on EBMUD's and the City's NPDES permits may limit the allowable increase of sanitary sewage from the plan area. This may limit the amount of additional program permitted within the plan area, or require the permits to be amended. ▪ The existing flow capacities of EBMUD South Interceptors and the City's sewer collection system have a limited additional capacity. ▪ The development in the plan area may require upsizing of existing sanitary sewer mains and interceptors.	▪ Use high efficiency fixtures and appliances to reduce the rate and volume of sanitary sewage entering the sewer system. ▪ Should upsizing of existing pipes be required, this will likely reduce I/I and hence peak wet weather flows.

Table IV-2 (cont.): Issues, Constraints, and Opportunities

WATER		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Water Demand: New development program within the plan area may increase the demand for water.	▪ Increased water demand could affect the water supply and pressure within the plan area and in adjacent communities. ▪ EBMUD may be required to perform a Water Supply Assessment (WSA) to determine whether adequate water supply is available for the redevelopment. Depending on the results of the WSA, alternative water supply sources may need to be implemented. ▪ Cost associated with providing additional water supply and upgrading the water distribution system.	▪ Minimize potable/irrigation water use to decrease impact on water mains and the plan area's water demand (e.g. utilize high efficiency fixtures and irrigation systems, utilize water-wise landscaping techniques,). ▪ Future potable water demands may be met by providing alternative water supply sources, e.g. rainwater harvesting, use of recycled water for irrigation and toilet flushing.
Recycled Water Demand: If the future potable water demand in the plan area is significantly greater than the existing demand, use of recycled water may be desirable.	▪ There is no existing recycled water service within the vicinity of the plan area. ▪ New on-site and off-site recycled water infrastructure would be required. ▪ Cost of installation recycled water distribution system and connecting to existing facilities.	▪ Recycled water could be supplied from the closest existing recycled water facility at the north near Laney College. ▪ Use of recycled water would mitigate potable water demands and reduce the impact on potable water distribution system. ▪ Recycled water could be integrated with on-site district heating / cooling system if appropriate. ▪ An on-site recycled water system may be feasible provided sufficient water is available for recycling.

Table IV-2 (cont.): Issues, Constraints, and Opportunities

GAS, ELECTRICITY, OIL PIPELINES		
ISSUE	**CONSTRAINTS**	**OPPORTUNITIES**
Gas Demand: Future development may increase gas demand. The need to upgrade is to be determined.	▪ Cost of installation	▪ Development within the plan area could be an opportunity to upgrade or relocate the existing gas mains to improve the overall gas distribution system reliability.
Electricity Demand: Future development may increase electricity demand.	▪ Electricity is transmitted by overhead cables at most of the site, which may restrict future development unless moved or undergrounded. ▪ The capacity of existing electrical equipment may be limited. The development of the plan area may require the installation of additional facilities, e.g. substations, transformers, switchgear, upgrading or relocation of existing cable/conduit ▪ Cost of installation	▪ New development may provide opportunities for undergrounding electrical cables to improve the reliability of electrical transmission system and quality of the streetscape. ▪ The upgrading and installation of electrical equipment may improve the reliability of the electrical transmission system. ▪ Development may incorporate district systems, creating significant efficiency improvements and limiting potential demand increases. ▪ The feasibility of implementing a renewable energy generation systems that utilizes solar or biomass/organic waste may be considered.
Existing Abandoned Petroleum and Oil Transmission Pipelines: There are two Shell oil pipelines, probably abandoned, running across the site.	▪ If the pipelines cannot be removed, their easements may constrain development unless moved. ▪ If the pipelines are being used, special precautions may be needed during adjacent construction operations. ▪ If the pipelines have been abandoned, care should be taken during the removal process to minimize the risks of ground contamination or explosions.	▪ If the pipelines can be removed / abandoned, their easements should be quitclaimed so that development improvements are not constrained.
Source: Arup, 2009		

TRANSPORTATION INFRASTRUCTURE CARRYING CAPACITY AND COSTS

The process of creating this Guide included an assessment in an approximate way of the extent to which it is likely that future development in the Central Estuary would be able to carry the cost burden of needed transportation improvements. This assessment was based on a reasonably foreseeable potential development scenario and this Guide's recommendations for midterm transportation network enhancements, both of which are illustrated in Figure A-1 in Appendix A of this Guide.

The cost of road improvements only for the recommended midterm network enhancements was compared to the total market value of potential development on the sites considered likely candidates for new development. The cost of utility improvements was assumed to be handled by the city and/or utilities, and only the currently unfunded street improvements in areas where development was assumed to occur were assumed to be allocated to development.

The results of this initial assessment were that the cost of midterm network improvements in these areas (labeled as Recommended Midterm Improvements in Figure A-1 in Appendix A) is estimated at $15 million. This figure is about 3 percent of the potential value of the development ($515 million). This amount is less than the rule-of-thumb for the amount that a developer can pay for infrastructure costs, which assumes that a 5 percent cost burden is the maximum that new development can carry. Therefore, it is assumed that new midterm infrastructure improvements could be financed by new development.

It should be noted that this evaluation did not include the costs for utilities or parks improvements – it was assumed that those costs will not be borne by the new development. This initial evaluation was based on the market values for development and is in nominal dollars. It did not take into consideration any phasing of development or the infrastructure improvements.

DESIGN REVIEW MANUAL FOR THE CENTRAL ESTUARY (UNDER SEPARATE COVER)

An illustrated layout of the Design Guidelines has been provided as a separate PDF document.

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APPENDIX A – RECOMMENDATIONS FOR FUTURE TRANSPORTATION PROJECTS

INTRODUCTION

As discussed in Chapter III of this Guide, improvements are currently undertaken that will improve transportation connections between the Central Estuary and I-880 (specifically the 42nd Avenue/High Street Access Improvements and the I-880 Operational and Safety Improvements at the 29th and 23rd Ave Overcrossings), as well as neighborhoods and destinations north of the freeway.

This appendix discusses additional recommended network, multimodal, and streetscape improvements that go beyond the already funded projects described in Chapter III. The provided recommendations are intended for consideration as funding for additional improvements becomes available and the land use changes described in the Estuary Policy Plan (EPP) and this Implementation Guide occur over time.

The aim of these recommended network and street improvements is to:

- Build on the already funded improvements mentioned in Chapter III;
- Further address deficiencies and issues identified in the Estuary Policy Plan and the Existing Conditions Report for the Central Estuary Implementation Guide;
- Provide initial design guidance for new streets and the enhancement of existing streets associated with future land use changes indentified in the EPP and this Implementation Guide;
- Provide an initial discussion of the general location and design parameters of "policy connections" – future new streets desirable to further enhance multimodal connectivity whose implementation currently is not feasible due to conflicts of the alignment of such streets with economically viable uses.

RECOMMENDATIONS FOR FUTURE TRANSPORTATION NETWORK ENHANCEMENTS

Recommendations in this section are intended to address the shortcomings of the Central Estuary's existing circulation network identified in Chapter III, including poor connectivity to the waterfront, lack of direct routes parallel to the waterfront, and the generally poor connectivity among local streets. The recommendations are separated into two categories:

1. **Mid-term network enhancements**, which are contingent on the potential development of sites considered likely candidates for new uses or structures.

2. **Long-term network enhancements,** which are deemed desirable at the transportation network policy level but are contingent on the future development of sites occupied by currently economically viable uses.

MID-TERM NETWORK ENHANCEMENTS

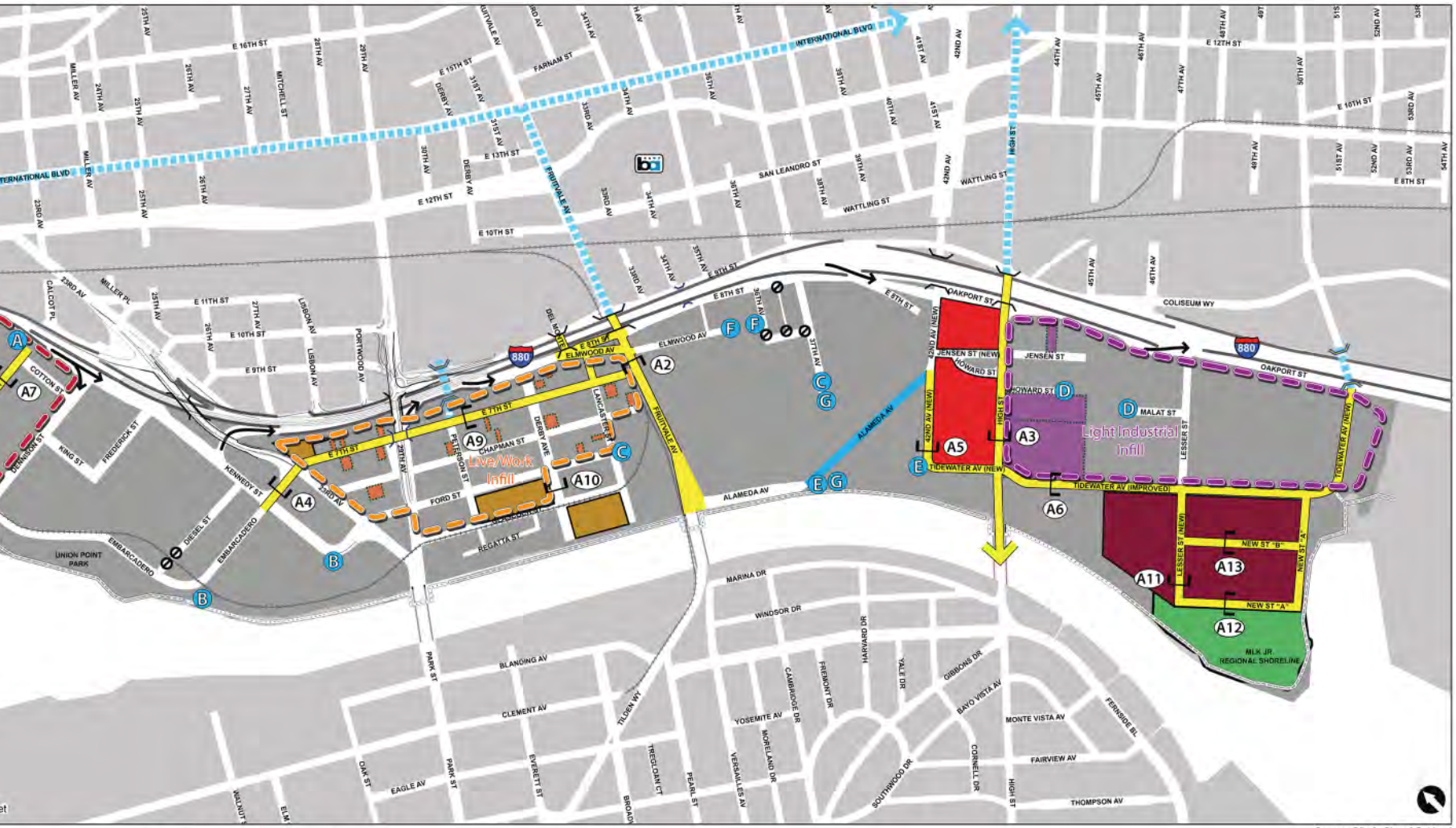
This section discusses enhancements to the Central Estuary's local street network that are closely associated with potential future land use changes and development activity on sites considered to be likely candidates for new development. Specifics associated with the design of these new street segments and enhancements of existing rights-of-way are discussed further in the *Description of Recommended Improvements* section of this Appendix. These enhancements are shown in yellow on Figure A-1, which is a pull-out map.

42ND AVENUE EXTENSION AND TIDEWATER AVENUE EXTENSION (WEST)

This recommended new street would consist of a southern extension of 42nd Avenue and western extension of Tidewater Avenue.

Implementation of this connection would:

- Provide important multimodal circulation around and access to potential future development on properties west of Howard Street and north of High Street.
- Provide relief to High Street by providing a parallel route for traffic to and from the Tidewater area.
- Provide the eastern tie-in point for Policy Connection E- E (see following section).



Source: CD+A, City of Oakland

ture Transportation Improvements

Street segment to be removed from network after completion of potential future E-E connection

undary Bay Trail (proposed) Bay Trail (existing)

(#) Street Section Numbers (see Appendix A for Street Section Figures)

ing Ped/Bike Underpass - Future (A)→(A) Future Roadway Policy Connection Points

Potential Future Land Use

- Retail/Commercial
- Commercial-Industrial Mix
- Medium Density Res
- Infill: Live/Work
- Parks
- Infill: Light Industrial/R&D

TIDEWATER AVENUE EXTENSION (EAST)

This new network segment would extend the eastern end of Tidewater Avenue to Oakport Street at the location of a potential future pedestrian/bicycle crossing of I-880, connecting to 50th Avenue.

Implementation of this connection would:

- Change Tidewater Avenue from a cul-de-sac into a through street;
- Enhance emergency access;
- Provide relief to High Street by creating a loop road (with Oakport Street) that creates an alternative ingress/egress route for traffic to and from existing and potential future development in the Tidewater area; and,
- Create an opportunity for providing enhanced non-vehicular access to places of employment and the Martin Luther King Jr. Regional Shoreline from the neighborhoods across I-880 by a potential pedestrian/bicycle crossing that could be implemented in the future (see Figure A-1).

LONG-TERM NETWORK ENHANCEMENTS

The following paragraphs describe policy-level recommendations for future enhancements to the Central Estuary's local street network that are contingent on major, long-term changes in existing land uses currently occupied by economically viable uses, such as Con-Agra or Owens-Brockway. Figure A-1 illustrates these long-term network enhancements by identifying recommended connection points. These points are represented by pairs of letters, e.g. location 'A' would be connected to the other location denoted by 'A,' 'B' to 'B,' and so on.

The term "policy connection" (or "policy-level connection") was chosen in order to convey that a street connection between two points would significantly advance the goal of enhancing the Central Estuary's transportation network, while at the same time acknowledging that no specific alignment is suggested at this time, because the required right-of-way for such connections would cross private property occupied by currently viable businesses. No specific timeline can therefore be given for when the recommended connections can be implemented. The alignment, configuration, and design of each of these new network segments would require further study in the future on a case-by-case basis.

POLICY CONNECTION A – A

Policy Connection A – A: from the southern end of the 16th Avenue Overpass to the northern end of Livingston Street. Potential addition to the local street network in the Mixed-Use Infill area at the western end of the Central Estuary. Requires right-of-way acquisition or negotiation of an easement.

Implementation of this connection would:

- Change 22nd Avenue from a cul-de-sac into a street with an outlet;
- Enhance emergency access;

- Add choices for local access to the infill area and therefore divert some traffic from the Embarcadero;
- Enhance access to new development and parking in rear of development fronting onto 22nd Avenue, Livingston Street, the Embarcadero and this new street.

POLICY CONNECTION B – B

Policy Connection B – B: from the Embarcadero rail crossing at the southern end of Union Point Park to Kennedy Street just southwest of the Park Street Triangle. Requires right-of-way acquisition.

Implementation of this connection would:

- Constitute a new segment of the waterfront roadway system envisioned in the Estuary Policy Plan.
- Enhance multimodal access to the Central Estuary waterfront.

POLICY CONNECTION C – C

Policy Connection C – C: from the eastern end of Ford Street to the southwestern end of 37th Avenue. Requires right-of-way acquisition.

Implementation of this connection would:

- Provide a central connector between Fruitvale Avenue and 37th Avenue from which new development could be accessed if large-scale properties in the area were to develop in the future.

POLICY CONNECTION D – D

Policy Connection D – D: from the eastern end of Howard Street to the western end of Malat Street. Potential addition to the local street network in the Light Industrial Infill area south of High Street. Requires right-of-way acquisition or negotiation of an easement.

Implementation of this connection would:

- Change Howard Street and Malat Street from cul-de-sacs to through streets;
- Enhance emergency access;
- Enhance general accessibility of properties located in the infill area.

POLICY CONNECTION E – E

Policy Connection E – E: from the eastern end of the segment of Alameda Avenue that parallels the Estuary to the western end of the recommended extension of Tidewater Avenue. Requires right-of-way acquisition.

Implementation of this connection would:

- Constitute a new segment of the waterfront roadway system envisioned in the Estuary Policy Plan;
- Enhance multimodal access to the Central Estuary's waterfront.

POLICY CONNECTION F – F

Policy Connection F – F: from the eastern end of Elmwood Avenue to 36th Avenue. Requires right-of-way acquisition or negotiation of an easement.

Implementation of this connection would:

- Change Elmwood Avenue and 36th Avenue from cul-de-sacs into through streets;
- Enhance emergency access;
- Enhance local connectivity and access.

POLICY CONNECTION G – G

Policy Connection G – G: from the southeastern end of 37th Avenue to Alameda Avenue (or Policy Connection E – E, when this is implemented). Requires right-of-way acquisition or negotiation of an easement.

Implementation of this connection would:

- Change 37th Avenue from a cul-de-sac into a through street;
- Enhance emergency access;
- Enhance local connectivity and access (if implemented prior to Policy Connection C – C);
- Provide access to new development if large-scale properties in the area were to develop in the future (if implemented in conjunction with Policy Connection C – C)

PARTIAL REMOVAL OF ALAMEDA AVENUE

Partial Removal of Alameda Avenue: Alameda Avenue from its eastern end to the western terminus of Policy Connection E – E. Contingent on completion of Policy Connection E – E and construction of the extensions of 42nd and Tidewater Avenues (see Figure A-1).

Abandonment of this street right-of-way would:

- Allow for more efficient land use in the area currently bisected by the diagonal alignment of Alameda Avenue;
- Eliminate redundant access function of this street with the recommended implementation of a 42nd Avenue Extension.

INITIAL RECOMMENDATIONS FOR FUTURE IMPROVEMENTS TO SELECTED EXISTING AND NEW STREETS

INTRODUCTION

This section provides initial recommendations for improvements to selected existing and potential future streets in the Central Estuary. The streets for which recommendations are provided were selected based on the following criteria:

1. New street is likely needed to serve sites considered likely candidates for development;

2. Existing street should be redesigned to enhance pedestrian and bicycle safety and comfort in light of the potential future mix of existing and new land uses and expected additional pedestrians and bicyclists;

3. Existing street should be improved to enhance pedestrian and bicycle safety and comfort in light of its importance within the pedestrian/bicycle circulation network in the Central Estuary; and

4. Existing street can be enhanced to better accommodate on-street parking for residential, commercial or industrial uses, as appropriate.

   Note – consult with the City's Public Works Agency regarding the current specific design requirements.

Based on the above, this section of the appendix provides recommendations for the following streets:

1. New street is likely needed to serve sites considered likely candidates for development:

   - 42nd Avenue Extension (South)
   - Tidewater Avenue Extension (West)
   - Lesser Street Extension
   - New Street "A"
   - New Street "B"
   - Tidewater Extension (East)

2. Existing street should be redesigned to enhance pedestrian and bicycle safety and comfort in light of the potential future mix of existing and new land uses and the resulting additional pedestrians and bicyclists:

   - 22nd Avenue in the Mixed-Use Infill Area
   - Livingston Street in the Mixed-Use Infill Area
   - High Street (also see 3.)
   - Tidewater Avenue (also see 3.)

3. Existing street should be improved to enhance pedestrian and bicycle safety and comfort in light of its importance within the pedestrian/bicycle circulation network in the Central Estuary:

   - East 7th Street east of 23rd Avenue
   - East 7th Street in the Live/Work Infill Area
   - High Street (also see 2.)
   - Fruitvale Avenue
   - East 8th Street
   - Tidewater Avenue (also see 2.)

4. Existing street can be enhanced to better accommodate on-street automobile parking (not including trucks):

   - Derby Avenue

DESCRIPTIONS OF RECOMMENDED FUTURE IMPROVEMENTS

In order to facilitate a clear understanding of the recommended improvements in the context of existing City of Oakland plans and standards, the streets listed above have been organized into the three major street type categories used by the Oakland General Plan: Arterials, Collectors, and Local Streets.

Please also refer to Table A-1 – *Central Estuary Street Types Characteristics* and Table A-2 – *Central Estuary Design Recommendations*, both of which provide a summary of the described improvements and recommended design characteristics.

ARTERIALS (GENERAL PLAN)

1. FRUITVALE AVENUE

Existing Conditions and Users

Fruitvale Avenue is an important connector between Alameda, the Central Estuary and neighborhoods to the northeast. Currently, the street's limited right-of-way is optimized for the throughput of vehicular traffic, although continuous sidewalks and bike lanes exist. Pedestrians are accommodated on 5-foot (east side) and 8-foot (west side) sidewalks, located directly adjacent to the street. Bicyclists travel on 5-foot wide bike lanes adjacent to 12-foot travel lanes. Safer and more comfortable connections for pedestrians and bicyclists to BART and the future East Bay Bus Rapid

Transit (BRT) on International Boulevard are desirable but challenged by the limited available right-of-way (60 feet) and the need to maintain vehicular capacity for automobile and truck traffic to and from Alameda.

Current Plans

The EPP has designated Fruitvale Avenue as the primary bicycle and pedestrian connection to BART. The recommended future improvements listed below are consistent with these designations.

Recommendations for Future Improvements

Recommendations for future improvements of Fruitvale Avenue include widening the existing bike lanes and sidewalks along Fruitvale in order to strengthen bicycle and pedestrian connectivity between Alameda, the Central Estuary and neighborhoods to the northeast. In particular, the improvements would enhance non-motorized connectivity to Fruitvale BART and the future East Bay BRT on International Boulevard. In order to achieve the latter, it is recommended to also improve pedestrians travel connections underneath I-880 at Elmwood Avenue and E 9th Street.

Figure A-2 illustrates the recommended improvements, which are achieved within the existing right-of-way by narrowing the existing travel lanes by one foot.

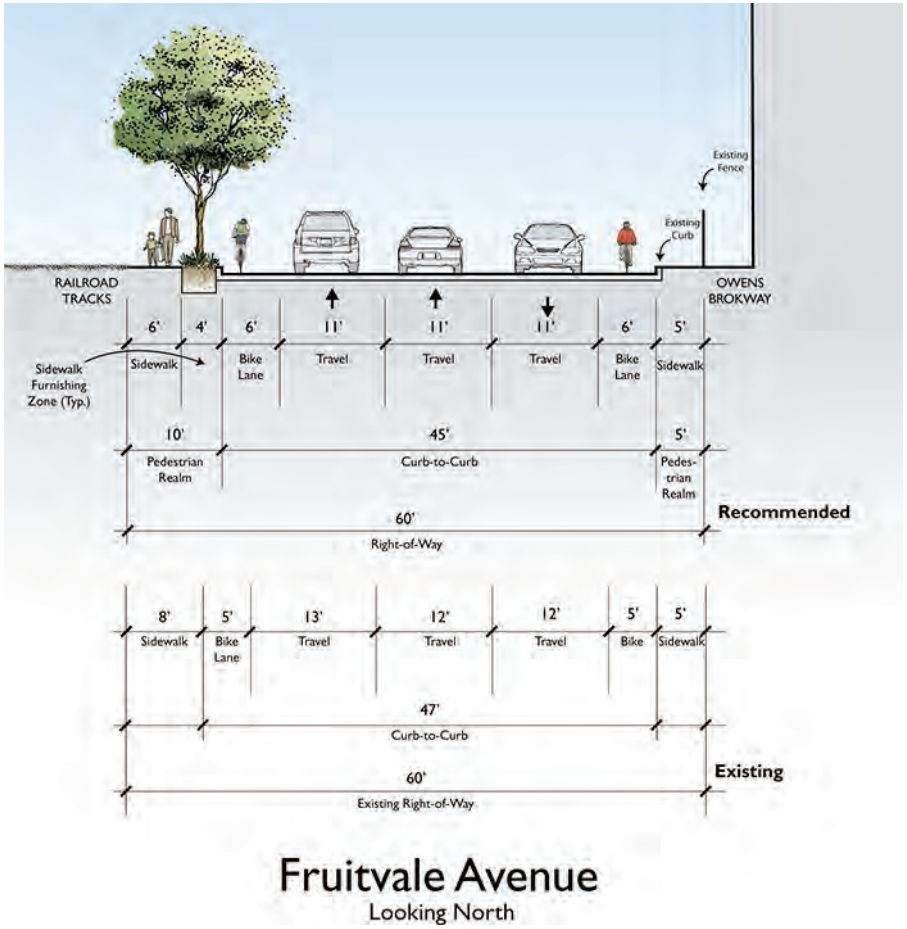


Figure A-2. Recommendations for Fruitvale Avenue Improvements

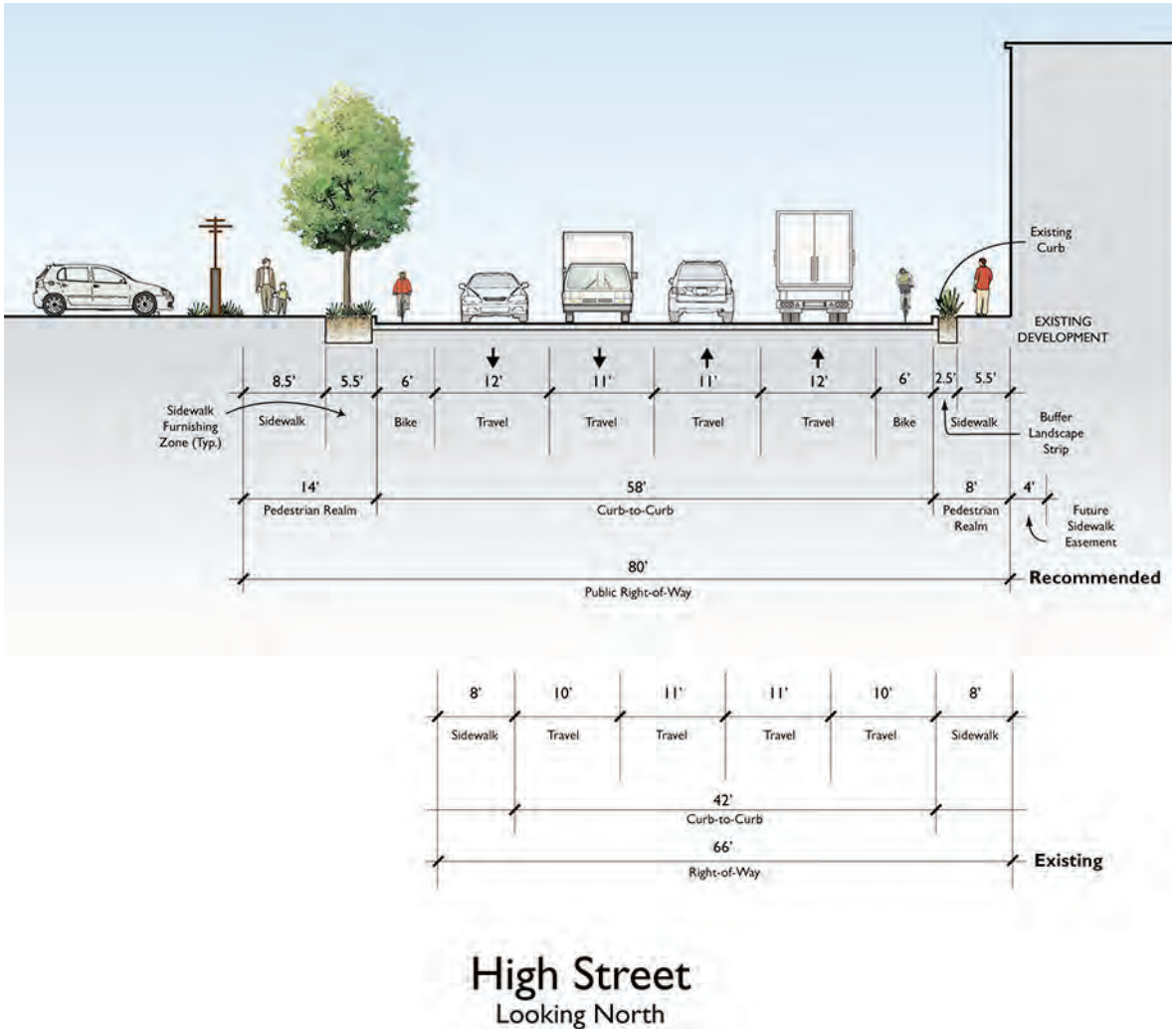


Figure A-3. Recommendations for High Street Improvements

2. HIGH STREET

Existing Conditions and Users

High Street serves as one of the primary access points to the City of Alameda and the Tidewater industrial area. High Street is a designated truck route in Oakland's 2010 Municipal Code (Chapter 10.52). It also serves as an important local connector between the Central Estuary and neighborhoods to the northeast.

The street currently has no bike lanes. Pedestrians are accommodated on 8-foot sidewalk on either side of the street.

Current Plans

The EPP identifies High Street as a local connector, which indicates that pedestrians and bicycles need to be accommodated. The City's Bicycle Master Plan identifies High Street between East 12th Street and the High Street Bridge as a proposed Class 2 bike facility, acknowledging the importance of providing a bicycle connection to the Bay Trail and into Alameda.

Recommendations for Future Improvements

The planning for the segment of High Street between I-880 and the Estuary is challenging because it needs to accommodate continuing high use by automobiles and trucks, new Class 2 bicycle facilities, and the potential for increases in pedestrian volumes based on future land use. Land use designations along this segment of High Street include new retail/commercial between High Street and 42nd Avenue, but also the preservation of industrial/commercial on the southeastern side of High Street.

The recommended configuration for High Street considers the ongoing and pending improvement projects along High Street and 42nd Avenue at I-880, which will improve traffic operations and access to the Central Estuary. High Street will continue to serve as a primary truck route.

The recommended cross-section strikes a balance maintaining vehicular capacity and better incorporating non-motorized travel. It also works in tandem with the recommended cross-section for a 42nd Avenue Extension (see below). The cross-section maintains four travel lanes (two in each direction) and includes Class 2 bike lanes in both directions, but no on-street parking. The pedestrian environment is improved by widening the sidewalk on the west side of the street and by buffering pedestrians on the east side through a narrow planting strip.

The cross-section in Figure A-3 illustrates the recommended improvements. The additional right-of-way needed to accommodate all desired improvements is achieved by widening the right-of-way along its north-western edge as part of future development of the parcels located there. The curb on the south-east side is maintained in its current location.

COLLECTORS (GENERAL PLAN)

1. EAST 7TH STREET BETWEEN KENNEDY STREET AND 23RD AVENUE

Existing Conditions and Users

This segment of East 7th Street acts as the easterly extension of the Embarcadero, connecting the Embarcadero, Kennedy Street, and 23rd Avenue. 23rd Avenue is an important arterial street that establishes north-south connection across I-880. East 7th Street is the only direct connection between the residential areas of Jingletown/ Elmwood and Union Point Park, the Bay Trail, and other recreational and commercial destinations along the waterfront adjacent to the Embarcadero. Formerly, East 7th Street between and including the intersections at Kennedy Street and 23rd Avenue was difficult to maneuver for bicyclists because it lacked bicycle lanes. This unsafe gap between the existing bicycle lanes on Embarcadero and the Bicycle Boulevard on East 7th Street east of 23rd Avenue was recently closed by a restriping project that introduced bicycle lanes on this block.

Current Plans

The Bicycle Master Plan shows proposed Class 2 bike lanes on 23rd Avenue and a Bicycle Boulevard on East 7th Street east of 23rd Avenue (recently striped by the City of Oakland). The Pedestrian Master Plan shows E 7th Street as a Neighborhood Route. The East 7th Street alignment serves as temporary alignment of the Bay Trail until gaps in the Bay Trail along the Estuary waterfront can be closed.

Recommendations for Future Improvements

Although new bicycle lanes were recently established through a restriping project between Kennedy and 23rd Avenue, the temporary Bay Trail function and importance of this block as sole direct link for non-motorized travel between Union Point Park and residences in the Jingletown/Elmwood neighborhood has motivated development of the recommended cross section shown in Figure A-4. The recommended improvements go farther than the recent restriping by narrowing the westbound travel lanes on East 7th Street approaching 23rd Avenue in order to provide a Class 2 bike lane. The eastbound travel lane is shifted slightly to the south. The “free” right-turn movement from southbound 23rd Avenue to Kennedy Street is channelized into its own lane to prevent any conflicts with bicyclist traveling eastbound on East 7th Street. The right-turn movement from southbound 23rd Avenue to eastbound East 7th Street is still permitted; however, the movement would occur at the intersection instead of at the “free” channelized right-turn.

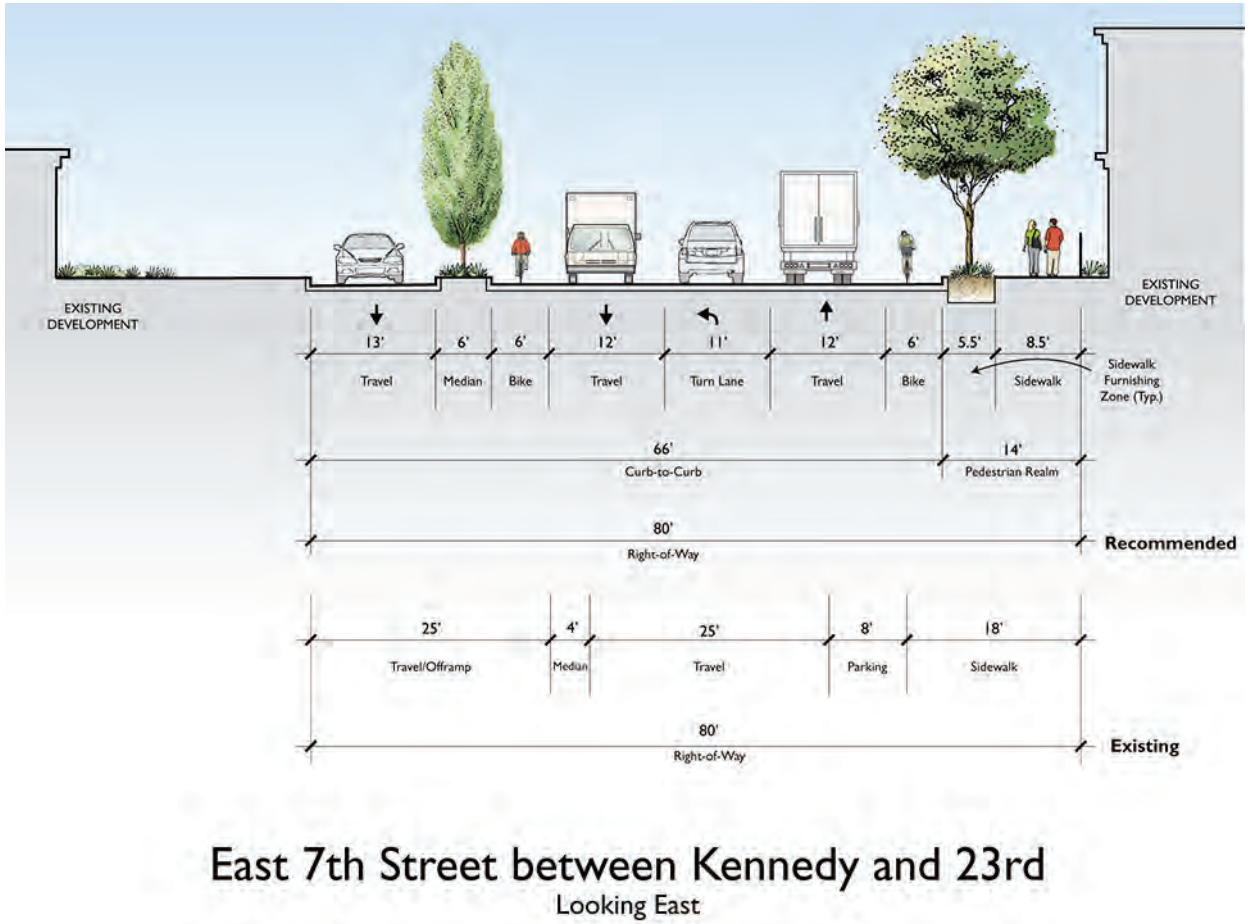


Figure A-4. Recommendations for East 7th Street Improvements

2. 42ND AVENUE EXTENSION

Existing Conditions and Users

Currently, 42nd Avenue does not extend into the Central Estuary.

Current Plans

Caltrans and the City of Oakland are completing improvement projects at 42nd Avenue and High Street at I-880, designed to improve traffic operations and access to the Central Estuary. The 42nd Avenue extension into the Central Estuary will create increased connectivity within the Study area and provide additional access to the Estuary and waterfront. The current improvements are described in greater detail in Chapter III of the CEIG.

Recommendations for Future Improvements

Similar to the reconfiguration recommended for High Street, the recommendations for 42nd Avenue consider the ongoing improvement projects along 42nd Avenue and High Street at I-880 while accounting for the 42nd Avenue to serve a variety of functions based on potential future land use changes. The recommended future improvements include an extension of 42nd Avenue beyond Howard Street and aligning its terminus such that it parallels High Street and intersects with the Tidewater Extension (West); see discussion of this street below. The 42nd Avenue Extension would create a direct path for vehicles exiting southbound I-880 to reach High Street and Alameda. It will also provide access to the new retail parcels along High Street and improve bicycle connectivity between Alameda Avenue and Tidewater Avenue.

The recommended cross-section includes two travel lanes (one lane in each direction) with bike lanes provided on the segment between Tidewater and Alameda Avenues. The bicycle lanes can be removed and converted to on-street parking if desired after the potential Policy Connection E – E and attendant bicycle lanes have been built.

The cross-section in Figure A-5 illustrates the recommended improvements.

3. TIDEWATER EXTENSION (WEST)

Current Plans

There are no plans for Tidewater Extension (West) in current policy documents.

Recommendations for Future Improvements

Tidewater Extension (West) will serve to connect 42nd Avenue Extension to High Street at Tidewater Avenue. Recommendations and cross section are the same as for 42nd Avenue Extension (see discussion above and the cross-section in Figure A-5). If and when Policy Connection E-E is implemented, this will become a further continuation of Tidewater Avenue eastbound, turning the intersection with 42nd Avenue into a T-intersection.

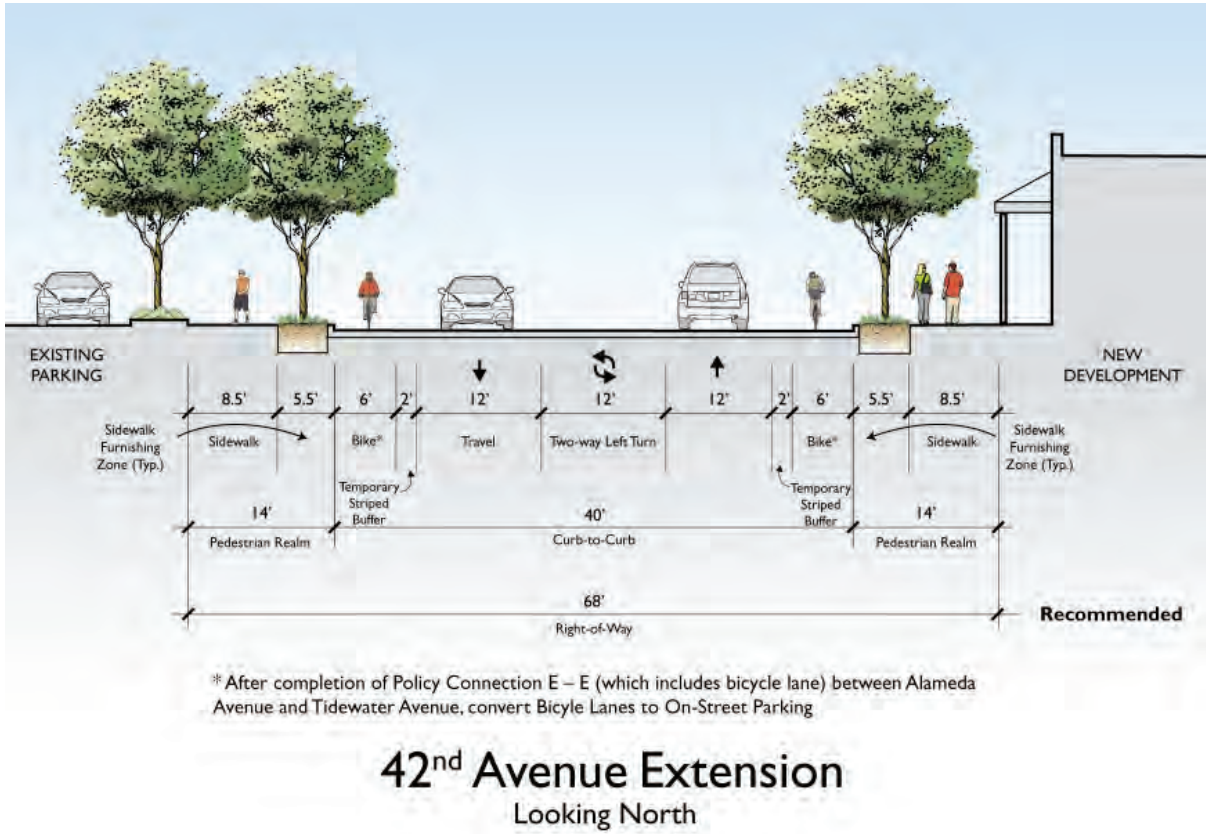


Figure A-5. Recommendations for 42nd Avenue Extension

4. TIDEWATER AVENUE AND TIDEWATER EXTENSION (EAST)

Existing Conditions and Users

Tidewater Avenue currently is a 50-foot wide street built on a "non-exclusive driveway easement"[1] and therefore not a public street in the common sense. The street primarily serves industrial users and is heavily used by trucks. The pavement of the street is in poor condition, and pedestrians and bicyclists – although permitted to use the Tidewater Avenue easement for access to the waterfront and the Tidewater Boating Center via a second easement just east of ABF U-Pack Moving – are poorly accommodated.

The alignment for the Tidewater Extension (East) to Oakport Street as shown in Figure A-1 is currently occupied by the PG&E Oakland Service Center.

Current Plans

The *City of Oakland Industrial District Strategy Support – Public Infrastructure Assessment and Recommendations* report, commissioned by the City of Oakland in 2008 in support of its Industrial District Strategy, includes a range of cross section alternatives for the reconfiguration of Tidewater Avenue. These include varying approaches for accommodating truck travel, parking, pedestrian travel, landscaping, and overhead utilities within both 50- and 60-foot rights-of-way/easements. None of the concepts specifically address the accommodation of bicycles.

The Estuary Policy Plan discusses Tidewater Avenue as a future segment of the Waterfront Parkway envisioned in that document to continue south beyond the borders of the Central Estuary. The Bicycle Plan shows Class 2 bike lanes on Tidewater. This designation is consistent with the function of the street as a temporary alignment of the Bay Trail until gaps in that facility at the High Street Bridge and along industrial uses south of the bridge can be closed in the future.

Neither of the two documents includes the concept of a Tidewater Avenue extension to Oakport Street to connect to a potential future I-880 underpass at or near 50th Avenue to 55th Avenue.

Recommendations for Future Improvements

The recommended future improvements for this street can be applied to either a private driveway easement or a newly dedicated public right-of-way. In light of the importance of Tidewater Avenue for multimodal access to the public MLK Jr. Regional Shoreline and amenities, such as the Tidewater Boating Center and Bay Trail, the Implementation Guide recommends converting Tidewater Avenue to a public street. The recommended cross section accommodates not only truck and auto traffic as well as truck parking but also bicycle

1 Industrial District Strategy Support – Public Infrastructure Assessment and Recommendations report, City of Oakland, 2008.

and pedestrian travel in accordance with the street's function as a temporary Bay Trail connection route. Because the safe accommodation of bicyclists on a street with heavy truck traffic can only be achieved through Class 2 bike lanes, these are recommended as program elements for the street. The recommended 70-foot cross-section therefore includes Class 2 bike lanes, two 12-foot travel lanes, a wider sidewalk with landscape buffer (on the south side only), and 9-foot on-street parking to accommodate trucks.

The cross section was developed with the narrowest distance between existing buildings on either side of Tidewater in mind, in order to avoid conflicts with major existing structures. Adjustments to the cross section may need to be made in order to accommodate local obstructions or high value private improvements. The amount of actually available space for dedication as a public right-of-way will need to be verified by the City and negotiated with the local property and business owners.

The recommended cross section could also be used for a potential Tidewater Avenue Extension (East) to Oakport Street. If a pedestrian/bicycle underpass is implemented around 50th Avenue to 54th Avenue and Oakport Street in the future, the Tidewater Avenue Extension would provide a direct and safe connection for non-motorized users to access the MLK Jr. Regional Shoreline and Bay Trail.

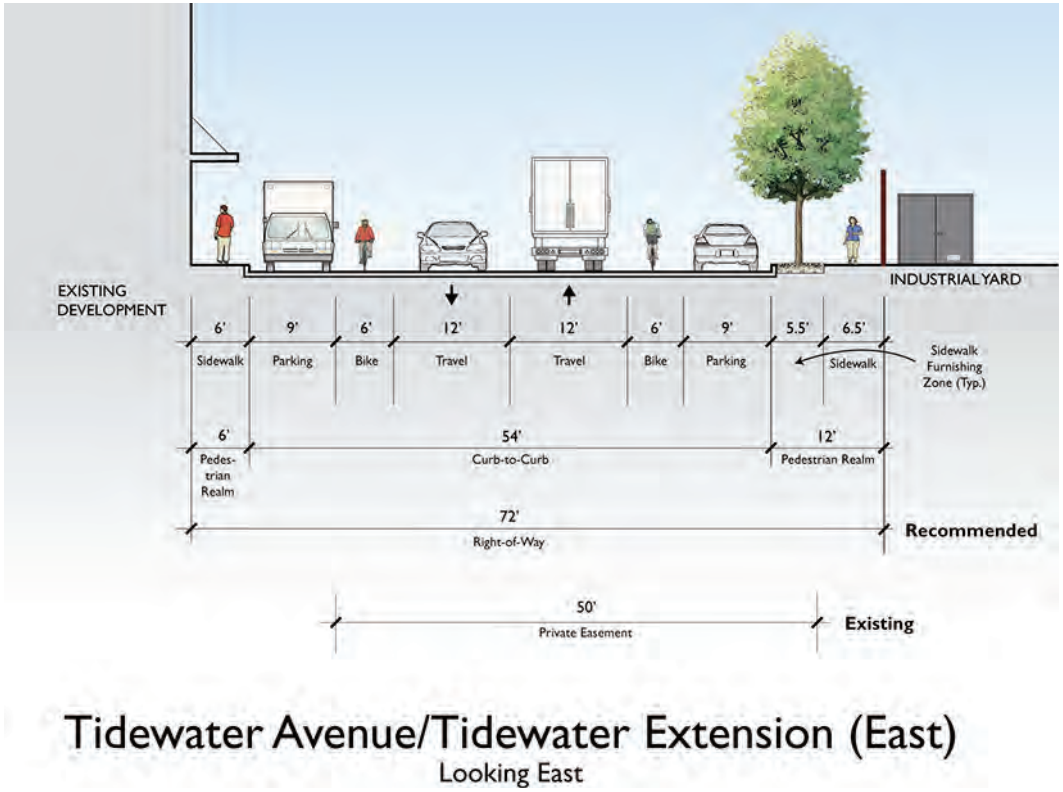


Figure A-6. Recommendations for Tidewater Avenue Improvements and Tidewater Extension (East)

Figure A-6 illustrates the recommended improvements.

Recommended Interim Improvement:

Independent of a future comprehensive redesign of High Street or Tidewater Avenue, it is recommended to immediately implement the following improvement recommended in the *Oakland Industrial District Strategy Support – Public Infrastructure Assessment and Recommendations* report in order to address a concern over large truck turning movements at the High Street/tidewater intersection:

The report recommends that the southeastern corner of the Tidewater/High Street intersection be improved, with the corner reconfigured to allow eastbound trucks to make this turn without entering westbound lanes on High Street.

LOCAL STREETS (GENERAL PLAN)

1. LIVINGSTON STREET

Existing Conditions and Users

Livingston Street extends southeast from Embarcadero adjacent to Embarcadero Cove, opposite the Livingston Pier. Livingston Street provides access to a broad mix of uses including light industrial, as well as some converted residential, commercial and institutional uses. The existing street includes 18-foot sidewalks on both sides, with some segments having narrower pedestrian through-zones due to the encroachment of landscaping along certain building edges. The street supports two lanes of traffic (one in each direction) with on-street parallel parking on both sides.

Near the intersection with Embarcadero, just south of the railroad tracks that cross Livingston, the sidewalk is eliminated on the east side of the street, where vehicles park on loose gravel in informal perpendicular spaces.

Current Plans

The General Plan and Estuary Policy Plan designate Livingston Street as a local street.

Recommendations for Future Improvements

In light of anticipated potential infill development and adaptive reuse for more intensive uses, including multi-family residential, on adjacent properties, improvements to pedestrian conditions are recommended along Livingston Street. These include the introduction of landscaping zones at the curb side of existing sidewalks to provide space for planting and street trees. Furnishings may be provided based on the initiative of property owners. Corner curb extensions of sidewalks are recommended, but curb radii must be designed to accommodate turning trucks. No changes are recommended for the on-street parking or the traveled way.

The cross-section in Figure A-7 illustrates the recommended improvements.

2. 22ND AVENUE

Existing Conditions and Users

22nd Avenue extends north from Livingston Street, just east of Embarcadero, near Embarcadero Cove. 22nd Avenue provides access to a mix of light industrial, office, and limited residential uses. The existing street section includes a sidewalk on the west side of the street, parallel parking on both sides and a generous two-lane traveled way (one in each direction). No sidewalk is provided on the existing east side of the street.

Current Plans

The Estuary Policy Plan designates 22nd Avenue as a local street.

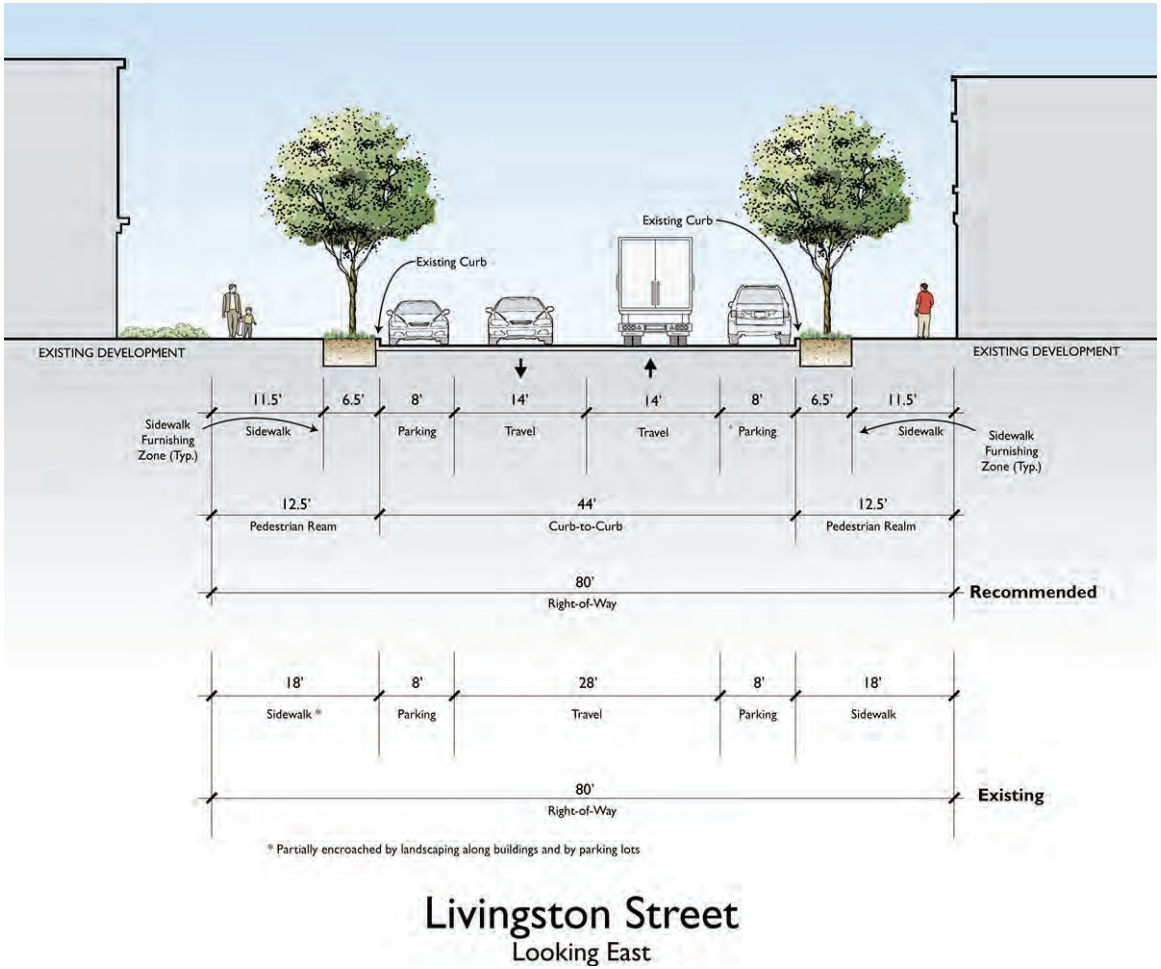


Figure A-7. Recommendations for Livingston Street Improvements

Recommendations for Future Improvements

In light of anticipated potential infill development and adaptive reuse, improvements to pedestrian conditions are recommended along 22nd Avenue. These include the introduction of a widened sidewalk on the west side of the street, and a new sidewalk on the east side, along with landscaping zones at the curb side of both sidewalks that provide space for planting and street trees. Furnishings may be provided based on the initiative of property owners. Corner curb extensions of sidewalks are recommended, but curb radii must be designed to accommodate turning trucks. The existing, over-sized traveled way is narrowed to two standard truck-accessible 12-foot lanes (one in each direction) to accommodate the sidewalk improvements, while parallel parking remains on both sides of the street at a slightly narrower, but still standard depth of 7 feet.

The cross-section in Figure A-8 illustrates the recommended improvements.

3. EAST 7TH STREET BETWEEN 23RD AVENUE AND FRUITVALE AVENUE

Existing Conditions and Users

East 7th Street, which begins as an extension of the Embarcadero at Kennedy Street and ends at Fruitvale Avenue, consists of two segments. The first segment of East 7th Street runs from Kennedy Street and to 23rd Avenue (this is discussed above under the category Col-

lectors). The second segment begins at 23rd Avenue, continues through the pedestrian/bicycle only undercrossing at 29th Avenue, and runs through the Jingletown/Elmwood neighborhood parallel to I-880 until it terminates at Fruitvale Avenue. Together with the Embarcadero, the two segments of East 7th Street constitute an important connection between the mostly residential Jingletown/Elmwood neighborhood and Union Point Park and other destinations along the Embarcadero. East 7th Street is also the only direct through-route between the Embarcadero and Fruitvale Avenue, which connects to important transit and retail destinations located just beyond the Central Estuary and along International Boulevard. This makes East 7th Street an important route for both pedestrians and bicyclists.

Current Plans

The Oakland Pedestrian Master Plan shows East 7th Street as both a segment of the Bay Trail and as a Neighborhood Route. The Oakland Bicycle Master Plan designates East 7th Street east of 23rd Avenue as a Class 3 B Bicycle Boulevard. In recognition of this, the City recently completed a restriping project for East 7th Street, which included markings such as "sharrows," speed hump striping, and other bicycle related markings. In conjunction with the striping of new Class 2 bike lanes on East 7th Street between Kennedy and 23rd Avenue, this completes a bicycle priority connection between the Embarcadero and Fruitvale Avenue, which both have Class 2 bike lanes.

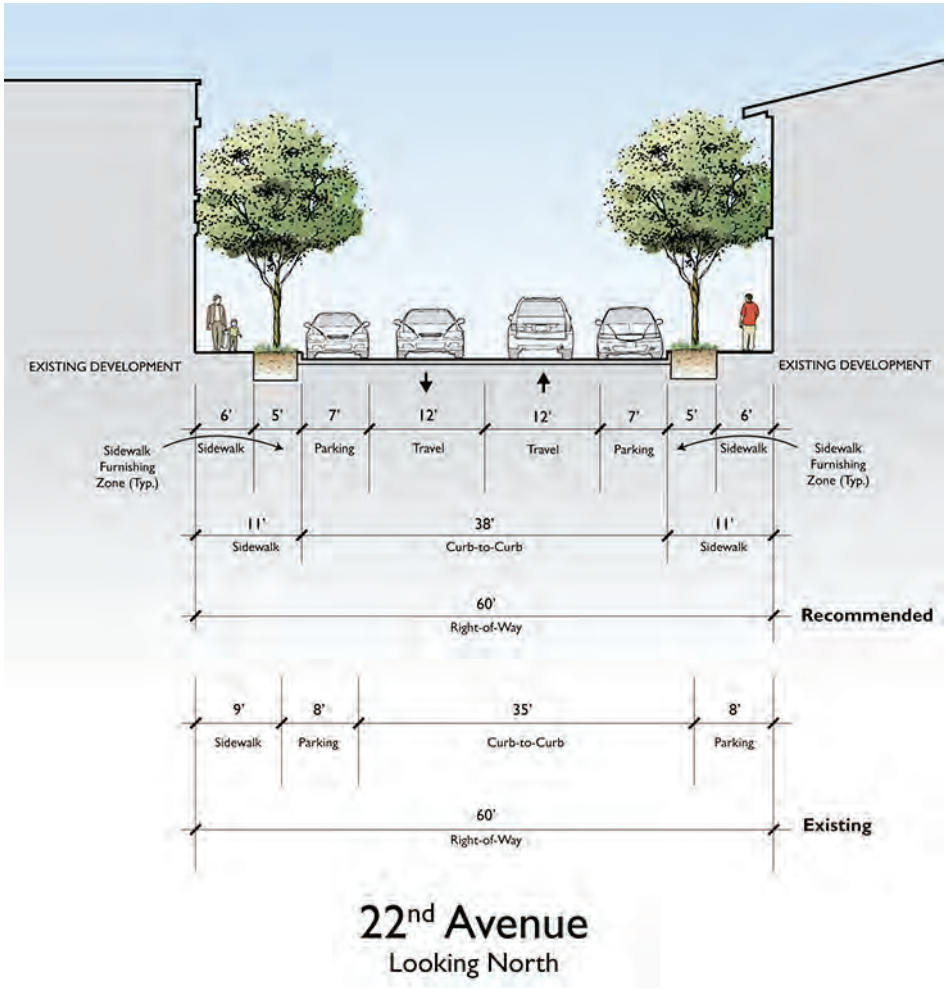


Figure A-8. Recommendations for 22nd Avenue Improvements

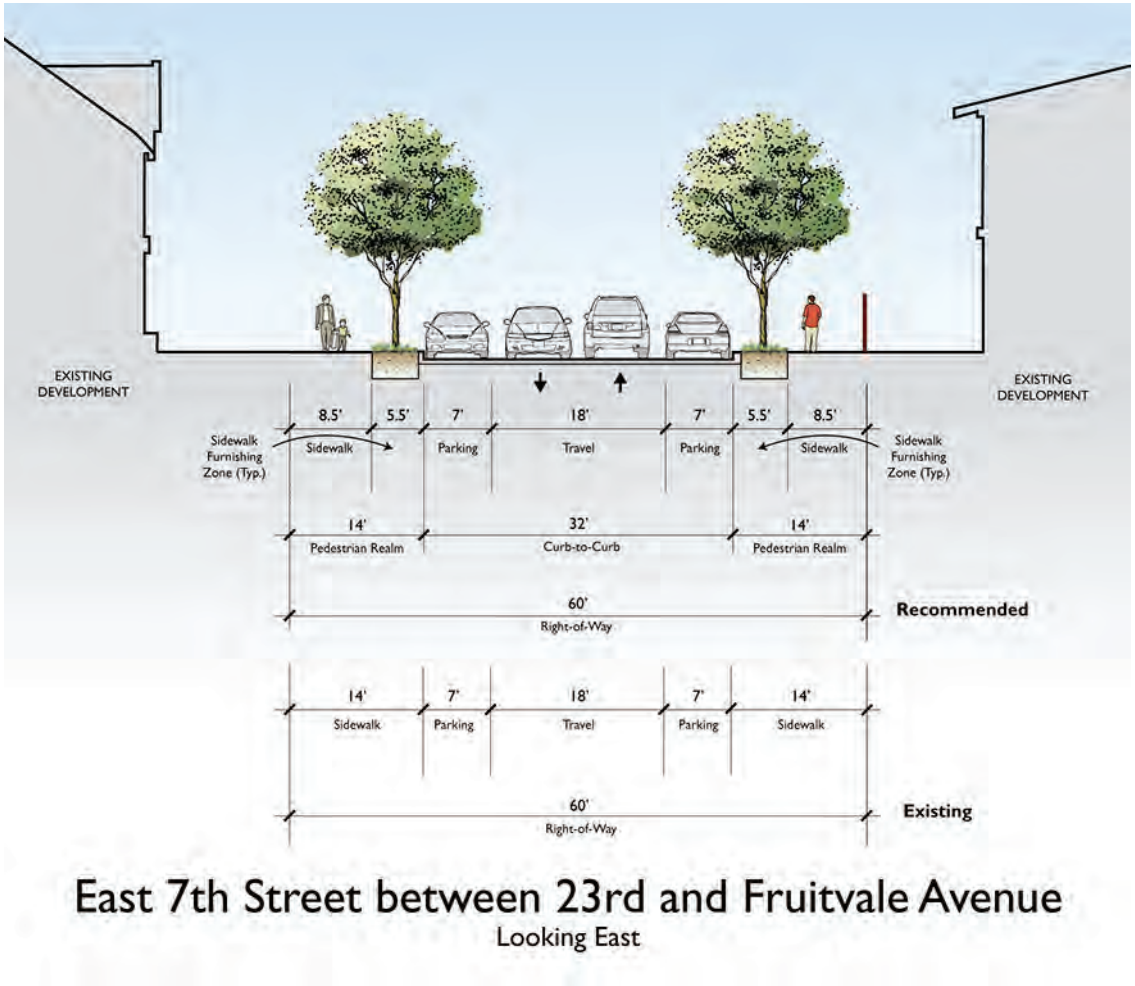


Figure A-9: Recommendations for East 7th Street Improvements

Recommendations for Future Improvements

In addition to the recent restriping of East 7th Street as a Bicycle Boulevard, the recommended cross-section (see Figure A-9) illustrates how the pedestrian realm of the street should be upgraded through the introduction of street trees and other landscaping to increase pedestrian comfort along this important Neighborhood Route. All roadway elements are maintained as existing.

4. DERBY AVENUE

Existing Conditions and Users

Derby Avenue is an east-west local street that also provides access to the Estuary waterfront. The street is the only local street in the Jingletown/Elmwood neighborhood with an 80-foot wide right-of-way. Due to the lack of continuous sidewalks on several blocks, the space typically occupied by sidewalks is utilized for perpendicular parking. On the east side of Derby Avenue between Glascock and Ford Streets, angled parking has been constructed along with a new sidewalk as part of a development project. The lack of continuous sidewalk inhibits pedestrian travel from within the neighborhood to the waterfront.

Current Plans

Derby Avenue is a Local Street in both the General Plan and the Estuary Policy Plan.

Recommendations for Future Improvements

The existing example of angled parking in conjunction with an adjacent sidewalk between Ford and Glascock Streets was used to develop the recommended cross section in Figure A-10. Parking on the side opposite from the 30-degree angled spaces is arranged as parallel. This treatment, if applied to all blocks of Derby Avenue, would establish continuous sidewalks between East 7th Street and the waterfront and Bay Trail. At the same time, it utilizes the relatively wider right-of-way of Derby Avenue (80 feet vs. 60 feet on other local Jingletown/Elmwood streets) to formally accommodate additional parking beyond the typical arrangement of parallel parking on both sides of a given street.

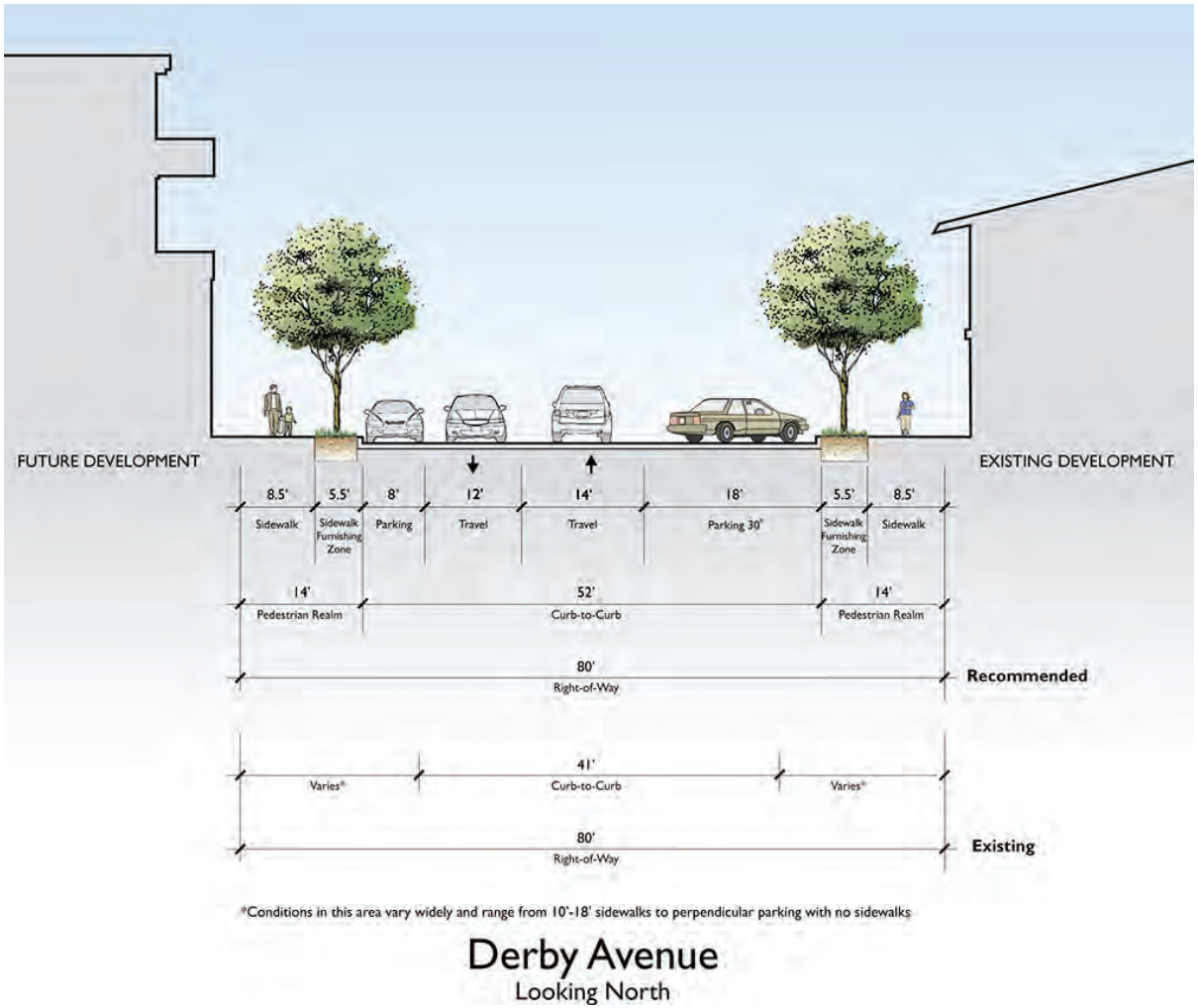


Figure A-10a. Recommended Derby Avenue Improvements (section)

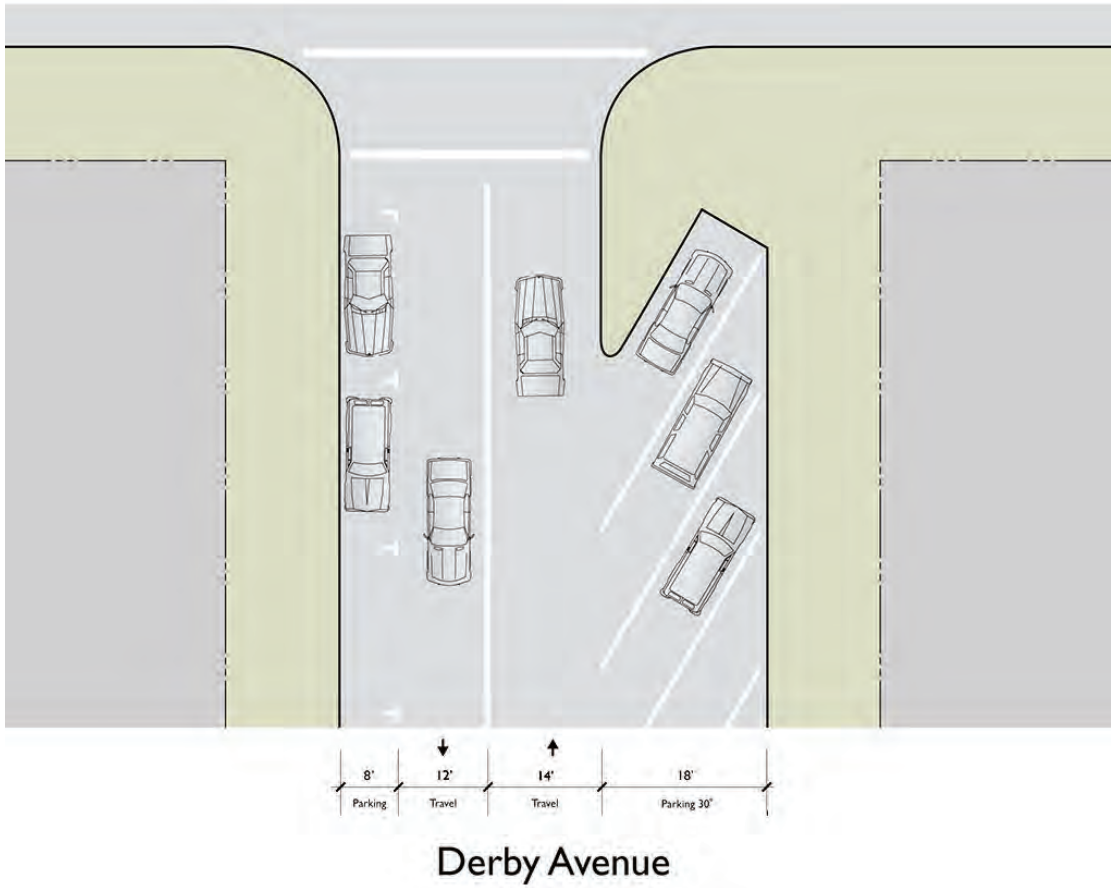


Figure A-10b. Recommended Derby Avenue Improvements (plan)

5. LESSER STREET EXTENSION (NEW)

Existing Conditions and Users

The existing Lesser Street currently provides a connection between Oakport Street near I-880 and Tidewater Avenue, providing access to the light industrial and warehouse uses in this part of the Central Estuary. There is also an existing unnamed access road from Tidewater Avenue to the waterfront located roughly opposite, but slightly to the west of the existing Lesser Street. This unnamed access road has a width of 33 feet (25-foot roadway and 8-foot sidewalk) and appears to be located on an access easement across private property. It provides access to the Martin Luther King, Jr. Regional Shoreline, the Bay Trail, and the recently constructed Tidewater Boating Center.

Current Plans

There are no plans for a Lesser Street extension in current policy documents.

Recommendations for Future Improvements

In light of anticipated future infill development of commercial-industrial mixed uses in this part of the South of Tidewater subarea, construction of a new street to replace the existing unnamed access road is recommended. This new street, Lesser Street Extension, is shifted to the east of the current unnamed access road to create a four-way intersection with Tidewater Avenue and the existing segment of Lesser Street. This realignment is devised to improve circulation within the larger street network, as more truck, auto, and non-motorized traffic is anticipated as a result of the introduction of more intensive land uses in the area. However, the character and facilities provided along Lesser Street Extension are tailored specifically to the unique demands of this new street, and differ from the existing segment of Lesser Street, north of Tidewater Avenue.

Specifically, the recommended cross-section allows for two travel lanes (one in each direction), as well as bike lanes, on-street parking, and wider sidewalks with landscape buffers that include street trees, all on both sides of the street. Corner curb extensions of sidewalks are recommended, but curb radii must be designed to accommodate turning trucks. Improving the street to better accommodate not only truck and auto traffic, but also ensure improved pedestrian and bicycle access, safety and comfort are important facility upgrades to those provided on the existing unnamed access road. This is because the new Lesser Street Extension serves as a segment of the Bay Trail, providing access from Tidewater Avenue to the Bay Trail and other recreational destinations along the Estuary shoreline.

Figure A-11 illustrates the recommended street section.

6. NEW STREET A

Existing Conditions and Users

There is no existing street in this location. The existing uses include temporary trailer storage on leased East Bay Regional Park District land and light industrial, warehouse and office uses. Commercial-industrial mixed uses are anticipated as future infill development occurs in this part of the South of Tidewater subarea.

Current Plans

There are no plans for a New Street A in current policy documents.

Recommendations for Future Improvements

The New Street A segments are located adjacent to the waterfront and the Martin Luther King, Jr. Regional Shoreline, bordering anticipated future commercial-industrial mixed-use development between the shoreline recreation areas and Tidewater Avenue. The recommended cross-section for these segments includes two travel lanes (one in each direction), ample sidewalks with landscape buffers that accommodate street trees, and 30-degree angled parking along the shoreline side of the street. The angled parking is provided to accommodate the anticipated higher volume of visitors to this part of the Martin Luther King, Jr. Regional Shoreline once the parkland has been expanded to include the portion currently leased to accommodate truck trailer storage.

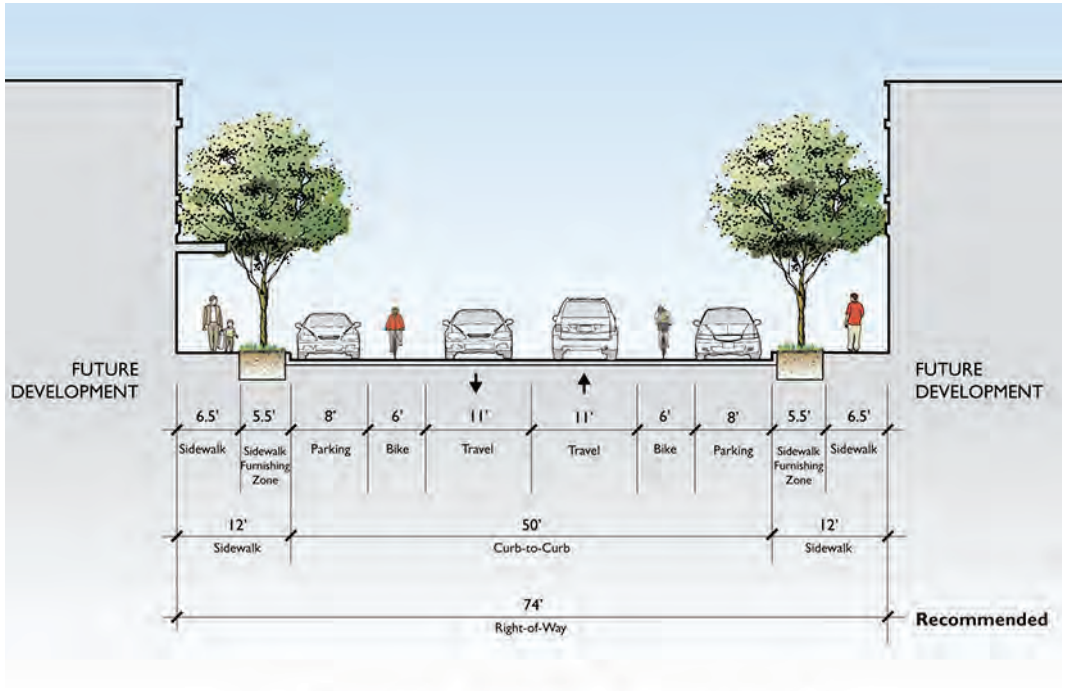


Figure A-11. Recommended Section for Lesser Street (Extension)

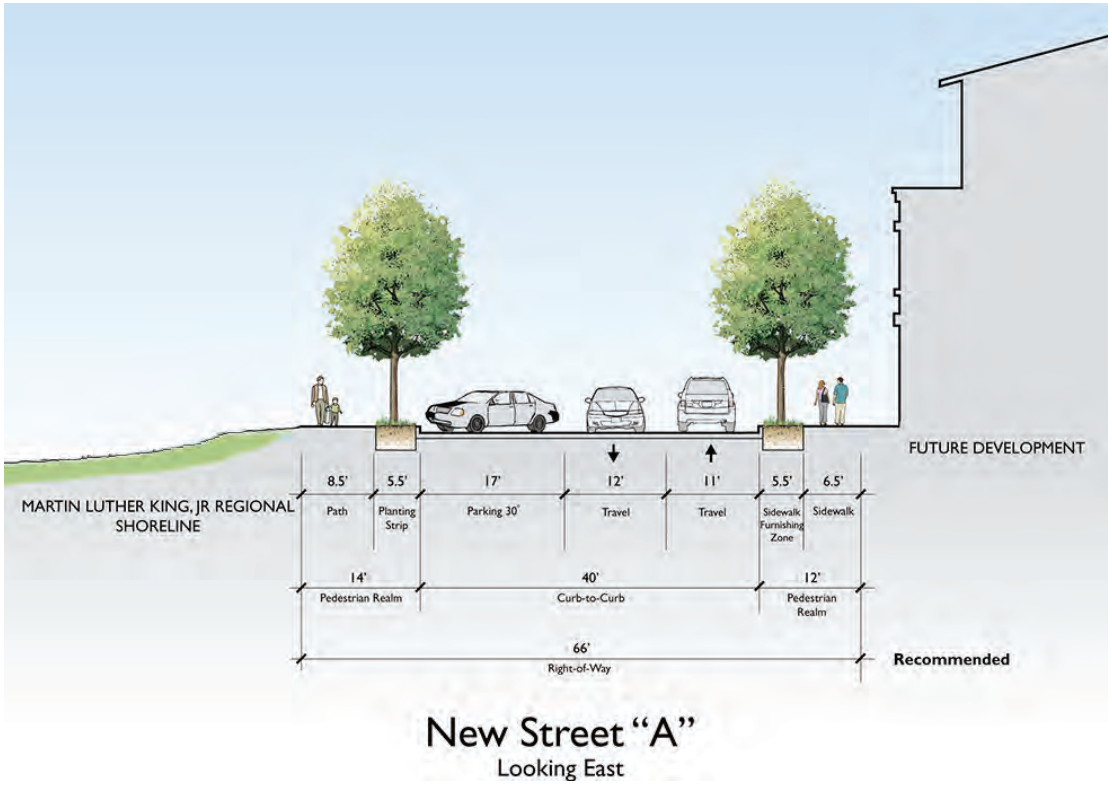


Figure A-12. Recommended Section for New Street "A"

As with Lesser Street Extension, these streets provide an important pedestrian-oriented connection and create the inland edge to the Martin Luther King, Jr. Regional Shoreline, and they should be designed with well planned landscaping and abundant street trees. In addition, corner curb extensions are appropriate at intersections, although the radii of such curb extensions must be sized to accommodate truck traffic to serve the anticipated infill uses in the area.

Figure A-12 illustrates the recommended section.

7. NEW STREET B

Existing Conditions and Users

There is no existing street in this location. The existing uses include light industrial, warehouse and office uses. Commercial-industrial mixed uses are anticipated as future development in this part of the Tidewater area.

Current Plans

There are no plans for a New Street B in current policy documents.

Recommendations for Future Improvements

New Street B is intended to serve the anticipated future commercial-industrial mixed-use infill development located between the shoreline and Tidewater Avenue. The cross-section for this street is designed to accommodate a greater level of truck traffic and loading than

the nearby New Street A. As such, New Street B includes two 12-foot travel lanes (one in each direction), and above standard width parallel parking facilities of 9-feet. Nevertheless, ample sidewalks with landscape buffers that accommodate street trees are also incorporated into the design of this new street. Corner curb extensions are appropriate at the intersections with New Street A, although the radii of such curb extensions must be sized such that they accommodate truck traffic to serve the anticipated infill uses in the area.

Street cross-section A-13 illustrates the recommended improvements.

8. JINGLETOWN/ELMWOOD NEIGHBORHOOD CONNECTION IMPROVEMENTS

Existing Conditions and Users

The existing Jingletown/Elmwood neighborhood is home to a broad mix of uses that include a great deal of single, duplex and multi-family residences, live/work, light industrial, and commercial uses, among others. The small block sizes in this part of the Central Estuary are conducive to walking and bicycling, and with the recommended improvements to East 7th Street and Fruitvale Avenue, detailed in this section, non-motorized activity is expected to increase. To take advantage of this trend and facilitate greater non-motorized accessibility to local destinations such as the Fruitvale BART station and the Fruitvale Station shopping center, improvements to the existing street network connecting the Central Estuary and areas north of I-880 are recommended.

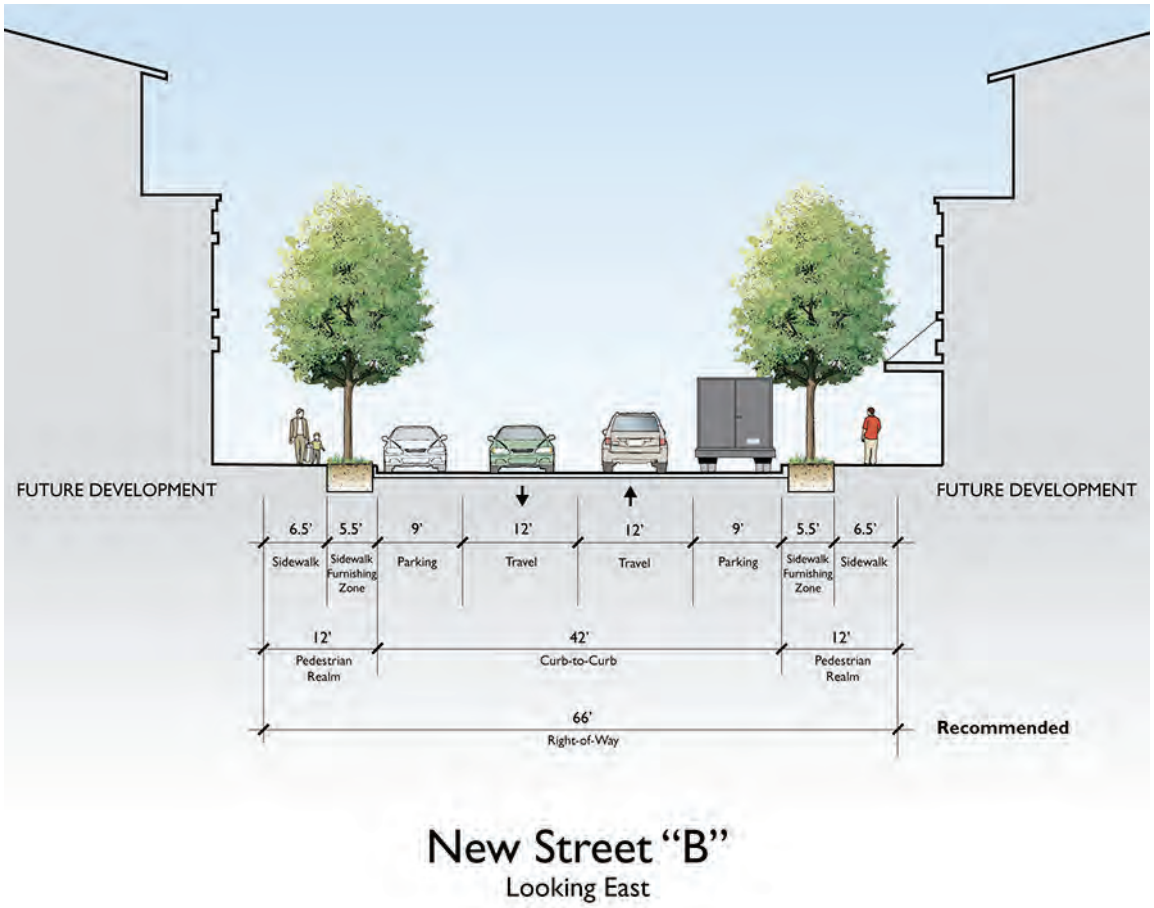


Figure A-13. Recommended Section for New Street "B"

While specific designs have not been provided, a range of pedestrian improvements are recommended along Elmwood Avenue, Del Monte, and Lancaster Street: widened sidewalks with landscaped buffers and street trees, improved pedestrian crossings with improved traffic controls and traffic calming measures, more visible crosswalks, and corner curb extensions. In addition, a future additional pedestrian/bicycle undercrossing of I-880 that extends from the Peterson Street dead end to the Fruitvale Station shopping center is recommended. For all of these recommended improvements, further study is required.

APPLICABILITY TO OTHER STREETS IN THE CENTRAL ESTUARY

The section above described recommended improvements for a selection of streets in the Central Estuary. However, the fluidity of the development process may require the consideration of streets improvements on one of the streets not discussed here. Since some of the recommended street improvements can be applied or readily transferred to similar streets (in terms of right-of-way width and land use context), the final column in Table A-1 – *Central Estuary Street Types Characteristics* provides an overview of which streets can serve as examples for other streets in the Estuary in transferring the recommendations.

Table A-1: Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	**Street Function[1]**	**Urban Context**	**Policy Classification[2]**	**Number of Through Lanes[3]**	**Desired Operating Speed[4]**	**Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates**	**On-Street Parking[6]**	**Bicycle Facilities[7]**	**Sidewalks[8]** Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	**Design Recommen-dations could also be applied to:**
Arterial (General Plan)										
Fruitvale Avenue	**Primary:** Provide high volume automobile and truck connection to destinations in Alameda and other jurisdictions beyond the Central Estuary Provide connection to other neighborhoods and districts in Oakland **Secondary:** Provide pedestrian, bicycle and auto access to BART and East Bay BRT	Predominantly large-scale light industrial, industrial, and commercial use frontage	General Plan: *Arterial* Estuary Policy Plan: *Arterial Roadway* *Class I Bikeway* Bicycle Master Plan: *Class II – Bicycle Lanes* Pedestrian Plan: *City Route*	3	30 to 35 mph	Present: 19,500 Future: 22,600	No	Bicycle Lanes	West Side: 5' (T) / -- East Side: 10' (T) / 4' (F) / 6' (C)	N/A

NOTE: When implementing the design recommendations, consult with the City's Public Works Agency for current specific design requirements.

[1] Description based on Policy Classifications and Estuary Policy Plan goals.

[2] 1998 Oakland General Plan, City of Oakland, 1998; Estuary Policy Plan, City of Oakland, 1999; Oakland Bicycle Master Plan, 2007; Oakland Pedestrian Master Plan, 2002.

[3] For Arterials and Collectors based on capacity needed to accommodate traffic volumes based on 2035 estimates (where available). Local Streets are two-lane streets per the Oakland General Plan.

[4] Recommendations based on Street Function and Policy Classifications. Arterials serving multiple modes have lower targets for desired operating speeds than maximum but fall within the speed range discussed in the General Plan (30 to 45 mph).

[5] Present: based on counts by Arup, National Data & Surveying Services (2009); Future: based on 2035 estimates - Arup, Alameda County Transportation Commission Travel Demand Model (2012).

[6] Recommendation based on existing conditions and potential future land uses discussed in the Estuary Policy Plan.

[7] Based on 2002 Bicycle Master Plan.

[8] Clear Zone meets of exceeds City of Oakland minimum standard of 5 ft. Furnishing Zone is defined as the space between face of curb and edge of clear zone. Furnishing zone may accommodate landscape strips, trees in individual tree wells, light posts, trash receptacles, and signposts. Recommendations adapted from best practices described in *Designing Walkable Urban Thoroughfares A Context Sensitive Approach*, Institute for Transportation Engineers (ITE), 2010.

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
High Street	Primary: Provide high volume automobile and truck connection to destinations in Alameda and other jurisdictions beyond the Central Estuary Provide connection to other neighborhoods and districts in Oakland Secondary: Provide pedestrian, bicycle and auto access to commercial retail along High Street and to BART and East Bay BRT	A mix of light industrial and warehouse to the east and commercial retail and automotive to the west	General Plan: *Arterial* Estuary Policy Plan: *Arterial Roadway* Bicycle Master Plan: -- Pedestrian Plan: --	4	30 to 40mph	Present: 27,600 Future: 32,700	No	Bicycle Lanes	West Side: 14' (T) / 5.5' (F) / 8.5' (C) East Side: 8' (T) / 2.5' (F) / 5.5' (C)	N/A

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
Collector (General Plan)										
E 7th Street (Kennedy Street to 23rd Avenue)	Primary: Provide access to and from 23rd Ave overpass and to I-880N Secondary: Provide auto access and safe bicycle and pedestrian access as an inland Bay Trail connection between Embarcadero and E 7th Street East of 23rd Ave	Light industrial and live/work	General Plan: *Arterial* EPP: *Arterial Roadway* Bicycle Master Plan: *Class II – Bicycle Lanes (Proposed)* Pedestrian Plan: *Bay Trail*	2	30 to 35 mph	Not Available	No	Bicycle Lanes	East Side: 14' (T) / 5.5' (F) / 8.5' (C) West Side: --	N/A
42nd Avenue / Tidewater Extension (North)	Primary: Provide enhanced auto, bicycle and pedestrian access to businesses in this area and across I-880 Secondary: Accommodate portion of traffic volume previously limited to High Street	Retail commercial and warehouse	General Plan: -- EPP: -- Bicycle Master Plan: -- Pedestrian Plan: --	2	30 to 35 mph	Present: Not Available Future: 17,500	Parallel parking on both sides (after completion of Policy Connection E – E)	Bicycle Lanes (until Completion of Policy Connection E – E)	Both Sides: 14' (T) / 5.5' (F) / 8.5' (C)	N/A
Tidewater Avenue / Tidewater Extension (East)	Primary: Distribute truck and auto traffic to businesses within this area of the Central Estuary Secondary: Facilitate safe bicycle pedestrian travel to built portion of Bay Trail	Predominantly large-scale light industrial and industrial use frontage	General Plan: -- Estuary Policy Plan: *Waterfront Parkway* Bicycle Master Plan: *Class II – Bicycle Lanes (Proposed)* Pedestrian Plan: --	2	25 to 30 mph	Not Available	Parallel parking on both sides	Bicycle Lanes	East Side: 6' (T) / -- West Side: 11' (T) / 5' (F) / 6' (C)	N/A

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
Local Street (General Plan)										
22nd Avenue	Primary: (balance the following:) Provide low speed access to local businesses for trucks and autos Provide safe and pleasant pedestrian realm	Mix of light industrial, residential, office	General Plan: -- EPP: *Local Street* Bicycle Master Plan: -- Pedestrian Plan: --	2	25 mph	Not Available	Parallel parking on both sides	No	Both Sides: 11' (T) / 5' (F) / 6' (C)	Diesel Street
Livingston Street	Primary: (balance the following:) Provide low speed access to local businesses for trucks and autos Provide safe and pleasant pedestrian realm	Mix of light industrial, commercial, residential, institutional	General Plan: *Local Street* EPP: *Local Street* Bicycle Master Plan: -- Pedestrian Plan: --	2	25 mph	Not Available	Parallel parking on both sides	No	Both Sides: 18' (T) / 6.5' (F) / 11.5'' (C)	Dennison Street, King Street, Frederick Street, Cotton Street

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
E 7th Street (East of 23rd)	Primary: (balance the following:) Provide low speed access to local businesses and residences for small trucks and autos Provide safe and pleasant pedestrian realm Provide safe and pleasant pedestrian and bicycle route through Jingletown to open space (Union Point Park) and other destinations in adjacent Central Estuary districts	Residential Mixed-Use, small-scale commercial uses	General Plan: *Local Street* Estuary Policy Plan: *Local Street* Bicycle Master Plan: *Bicycle Boulevard- Class 3B (Proposed)* Pedestrian Plan: *Segment of Bay Trail*	2	25 mph	Not Available	Parallel parking on both sides	Bike Route Marked with "Sharrows"	Both Sides: 14' (T) / 6' (F) / 8' (C)	Chapman Street, Ford Street, Glascock Street, Peterson Street, Lancaster Street
Derby Avenue	Primary: Provide low speed access for autos and small trucks to residences and businesses in the Jingletown neighborhood Provide safe and pleasant pedestrian realm Secondary: Provide additional on-street parking	Primarily medium density residential with mixed uses including light industrial, warehouse, live/work, institutional, and single family	General Plan: *Local Street* EPP: *Local Street* Bicycle Master Plan: -- Pedestrian Plan: --	2	25 mph	Not Available	West Side: Parallel parking; East Side: 30° head-in angle parking	No	Both sides: 14' (T) / 5.5' (F) / 8.5' (C)	N/A

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
New Local Street (CEIG)										
Lesser Street Extension	Primary: Provide auto and truck access to businesses south of Tidewater Secondary: Provide safe pedestrian and bicycle access and low speed auto access to the MLK Jr. Regional Shoreline and related amenities (i.e. Tidewater Boat Center) and Bay Trail	Commercial-industrial mix	N/A	2	25 mph	Not Available	Both sides: Parallel parking	Bicycle lanes	Both sides: 12' (T) / 5.5' (F) / 6.5' (C)	N/A
"New Street A"	Primary: Provide auto and truck access to businesses south of Tidewater Secondary: Provide safe pedestrian and bicycle access and low speed auto access to the MLK Jr. Regional Shoreline and related amenities (i.e. Tidewater Boat Center) and Bay Trail	Commercial-industrial mix	N/A	2	25 mph	Not Available	South/East sides: 30º head-in angle parking	No	North/West sides: 12' (T) / 5.5' (F) / 6.5' (C) South and East sides: 14' (T) / 5.5' (F) / 8.5' (C)	N/A
"New Street B"	Primary: Provide auto and truck access, as well as safe pedestrian access to businesses south of Tidewater	Commercial-industrial mix	N/A	2	25 mph	Not Available	Both sides: Parallel Parking	No	Both sides: 12' (T) / 5.5' (F) / 6.5' (C)	N/A

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
Policy-Level Street Connections (CEIG)										
A to A	Primary: Provide auto and truck access, as well as safe pedestrian access to existing or future uses	Mix of light industrial, commercial, residential, institutional	CEIG: Local Street	2	25 to 30 mph	T.B.D.	Likely: Parallel Parking (both sides)	No	Depending on future use context; Likely 10' to 12' (T)	N/A
B to B	Primary: (balance the following:) Provide multimodal access to Estuary waterfront Provide auto and truck access to future uses in the area	T.B.D.	EPP: *Waterfront Parkway segment* CEIG: Collector	2 (plus potential two-way, center left-turn lane)	30 to 35 mph	T.B.D.	Likely: Parallel Parking (one or both sides)	Yes (but requires coordination with implementation status of Bay Trail)	Depending on future use context; Generous pedestrian accommodation shoreline-side	N/A
C to C	Primary: Provide auto and truck access, as well as safe pedestrian access to existing or future uses	T.B.D.	CEIG: Collector	2 (plus potential two-way, center left-turn lane)	25 to 30 mph	T.B.D.	Likely: Parallel Parking (both sides)	T.B.D.	Depending on future use context; Likely 12' to 14' (T)	N/A
D to D	Primary: Provide auto and truck access, as well as safe pedestrian access to existing or future uses	Commercial-industrial mix	CEIG: Local Street	2	25 to 30 mph	T.B.D.	Likely: Parallel Parking (both sides)	No	Depending on future use context; Likely 10' to 12' (T)	N/A
E to E	Primary: (balance the following:) Provide multimodal access to Estuary waterfront Provide auto and truck access to future uses in the area	T.B.D	EPP: *Waterfront Parkway segment* CEIG: Collector	2 (plus potential two-way, center left-turn lane)	30 to 35 mph	T.B.D.	Likely: Parallel Parking (one or both sides)	Yes (but requires coordination with implementation status of Bay Trail)	Depending on future use context; Generous pedestrian accommodation shoreline-side	N/A

Table A-1 (cont.): Street Type Characteristics

TABLE A-I STREET TYPE CHARACTERISTICS				Design Recommendations for Future Improvements (for additional details see recommendations in Table A-II)						
Street	Street Function[1]	Urban Context	Policy Classification[2]	Number of Through Lanes[3]	Desired Operating Speed[4]	Traffic Volume (2-Way Average Daily Traffic)[5] Present: 2011 counts Future: 2035 estimates	On-Street Parking[6]	Bicycle Facilities[7]	Sidewalks[8] Total (T) / Furnishing Zone (F) / Clear Zone (C) Width	Design Recommen-dations could also be applied to:
F to F	Primary: Provide auto and truck access, as well as safe pedestrian access to existing or future uses	Residential Mixed-Use, small-scale commercial uses	CEIG: Local Street	2	25 to 30 mph	T.B.D.	Likely: Parallel Parking (both sides)	No	Depending on future use context; Likely 10' to 12' (T)	
G to G	Primary: Provide auto and truck access, as well as safe pedestrian access to existing or future uses	T.B.D	CEIG: Local Street	2	25 to 30 mph	T.B.D.	Likely: Parallel Parking (both sides)	No	Depending on future use context; Likely 10' to 12' (T)	

Table A-2: Recommendations for Design Details

TABLE A-II RECOMMENDATIONS FOR DESIGN DETAILS	Countdown Pedestrian Signals[1]	Corner Curb Extensions [1]	Street Trees [1]	Linear Sidewalk Planters [1]	Pedestrian Lighting [1]	Site Furnishings / Other Streetscape Treatments
Arterial (General Plan)						
Fruitvale Avenue	At 8th Avenue/Elmwood and Alameda	No	Yes (see cross section)	No	On east side only	Transit Stops
High Street	At Tidewater and Howard	No	Yes (see cross section)	On east side only (see cross section)	Yes	Trash Receptacles
Collector (General Plan)						
E 7th Street (West of 23rd)	At Kennedy Street and 23rd Avenue	On E 7th Street: on south side of block between Kennedy and 23rd Avenue	Yes, wherever feasible while maintaining 4-foot minimum ADA sidewalk width	Yes, where sidewalk width of 11 feet or more can be achieved	On south side only	Trash Receptacles between Kennedy and 23rd Avenue
42nd Avenue/Tidewater Extension (North)	At Howard/Alameda	On 42nd Avenue: At corners of blocks with parking On Cross Street: Look up Cross Street	Yes (see cross section)	Yes	Yes	Trash Receptacles
Tidewater Avenue/Tidewater Extension (East)	At High Street	On Tidewater Avenue: At corners of blocks with parking On Cross Street: Look up Cross Street	On south side only (see cross section) On north side: consider requiring trees in landscape easement on private property	No	Along south side sidewalk only	Trash Receptacles along south side sidewalk
Local Street (General Plan)						
22nd Avenue	n/a	On 22nd Street: Yes, but curb radius needs to accommodate turning trucks On Cross Street: See Livingston Street	Yes, wherever feasible while maintaining 4-foot minimum ADA sidewalk width	No	No	Furnishings appropriate if based on initiative by property owners

NOTE: When implementing the design recommendations, consult with the City's Public Works Agency for current specific design requirements.

[1] Recommendation based on anticipated main pedestrian travel routes within the Central Estuary network

Table A-2 (cont.): Recommendations for Design Details

TABLE A-II RECOMMENDATIONS FOR DESIGN DETAILS	Countdown Pedestrian Signals[1]	Corner Curb Extensions [1]	Street Trees [1]	Linear Sidewalk Planters [1]	Pedestrian Lighting [1]	Site Furnishings / Other Streetscape Treatments
Livingston Street	n/a	On Livingston Street: Yes, but curb radius needs to accommodate turning trucks On Cross Street: see 22nd Avenue	Yes, wherever feasible while maintaining 4-foot minimum ADA sidewalk width	No	No	Furnishings appropriate if based on initiative by property owners
E 7th Street (East of 23rd)	At 23rd Avenue	On E 7th Street: At corners of blocks with angled parking On Cross Street: Yes	Yes	Yes	Yes	Trash Receptacles Additional furnishings appropriate if based on initiative by property owners
Derby Avenue	No	On Derby Avenue: At corners of blocks with angled parking On Cross Street: See E 7th Street (East of 23rd)	Yes	Yes, on blocks without angled parking	Yes	Furnishings appropriate if based on initiative by property owners
New Local Streets (CEIG)						
Lesser Street Extension	No	On Lesser Extension: Yes, but curb radius needs to accommodate turning trucks On Cross Street: Look up Cross Street	Yes (see cross section	Yes	No	No
"New Street A"	No	On New Street A: Yes, but curb radius needs to accommodate turning trucks On Cross Street: see New Street "B" and Tidewater	Yes (see cross section	Yes	No	No
"New Street B"	No	On New Street B: Yes, but curb radius needs to accommodate turning trucks On Cross Street: see New Street "A"	Yes (see cross section)	Yes	No	No

Table A-2 (cont.): Recommendations for Design Details

TABLE A-II RECOMMENDATIONS FOR DESIGN DETAILS	Countdown Pedestrian Signals[1]	Corner Curb Extensions [1]	Street Trees [1]	Linear Sidewalk Planters [1]	Pedestrian Lighting [1]	Site Furnishings / Other Streetscape Treatments
Connections (CEIG)						
A to A	No	T.B.D.	Yes	T.B.D.	T.B.D.	No
B to B	Where pedestrians cross B – B to access Bay Trail	T.B.D.	Yes	Yes	Yes	Trash Receptacles
C to C	At Fruitvale	T.B.D.	Yes	Yes	Yes	Trash Receptacles
D to D		T.B.D.	If available ROW allows	No	No	No
E to E	Where pedestrians cross B – B to access Bay Trail; At 42nd Avenue	T.B.D.	Yes	Yes	Yes	Trash Receptacles
F to F	No	T.B.D.	If available ROW allows	No	No	No
G to G	No	T.B.D.	If available ROW allows	No	No	No

Attachment D

Chapter 17.60
CE CENTRAL ESTUARY DISTRICT ZONES REGULATIONS

SECTIONS:

17.60.010 Title, Intent, and Description

A. **Title and Intent.** The provisions of this chapter shall be known as the CE Central Estuary District Zones Regulations. The intent of the CE zones are to:

1. Preserve and enhance opportunities for business and employment development in uses that can benefit from proximity to existing commercial, industrial and mixed use facilities in the area;
2. Implement the Estuary Policy Plan in the Central Estuary District;
3. Encourage the creation of mixed-use districts that integrate various combinations of residential, industrial, commercial, public open space and civic uses;
4. Establish development standards that allow residential, industrial, commercial, public open space and civic activities to compatibly co-exist;
5. Provide convenient access to public open space and the waterfront;
6. Improve access to the waterfront and recreational opportunities along the waterfront, including boat launches and marinas;
7. Encourage quality and variety in building and landscape design as well as compatibility in use and form;
8. Encourage development that is respectful of the environmental qualities that the area has to offer;
9. Provide a framework of development standards that takes into account the scale, massing and content of the surrounding community; and
10. Provide a set of procedures and practices to review and consider future design of new building construction.
11. Preserve and enhance distinct neighborhoods in the Central Estuary District. .

B. **Description of Zones.** This Chapter establishes land use regulations for the following six zones:

1. **CE-1 Central Estuary District Commercial Zone – 1** (Embarcadero Cove). The CE-1 zone is intended to create, maintain, and enhance areas of the Central Estuary that have a mix of marine, office and other commercial uses.

2. **CE-2 Central Estuary District Commercial Zone – 2** (High Street Retail). The CE-2 zone is intended to create, maintain, and enhance areas of the Central Estuary with a wide range of commercial with direct street frontage and access to the freeway.

3. **CE-3 Central Estuary District Mix Zone – 3** (Jingletown/Elmwood). The CE-3 zone is intended to create, preserve, and enhance areas of the Central Estuary that have a mix of industrial, heavy commercial and residential development. This zone is intended to promote housing with a strong presence of commercial and industrial activities.

4. **CE-4 Central Estuary District Mix Zone – 4** (Mixed Use Triangle). The CE-4 zone is intended to create, maintain and enhance areas of the Central Estuary that have a mix of industrial and heavy commercial activities. Higher density residential development is also appropriate in this zone.

5. **CE-5 Central Estuary District Industrial Zone – 5** (Food Industry Cluster/Warehouse Wedge/Tidewater South). The CE-5 zone is intended to create, preserve, and enhance areas of the Central Estuary that are appropriate for a wide variety of heavy commercial and industrial establishments. Uses with greater off-site impacts may be permitted provided they meet specific performance standards.

6. **CE-6 Central Estuary District Industrial Zone – 6** (Con Agra/Owens Brockway/Tidewater North). The CE-6 zone is intended to create, preserve and enhance areas of the Central Estuary that are appropriate for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate off-site impacts, such as noise, light/glare, odor, and traffic. This zone allows industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related supporting uses. Uses that may inhibit such uses, or the expansion thereof, are prohibited. This district is applied to areas with good freeway, rail, seaport, and/or airport access.

17.60.020 Required Design Review

A. Except for projects that are exempt from design review as set forth in Section 17.136.025, no Building Facility, Designated Historic Property, Potentially Designated Historic Property, Telecommunications Facility, Sign, or other associated structure shall be constructed, established, or altered in exterior appearance, unless plans for the proposal have been approved pursuant to the design review procedure in Chapter 17.136, and when applicable, the Telecommunications regulations in Chapter 17.128, or the Sign regulations in Chapter 17.104.

B. In addition to the design review criteria listed in Chapter 17.136, conformance with the design review guidelines in the Design Guidelines Manual for the Central Estuary is required for any proposal in the CE zones subject to the design review procedure in Chapter 17.136.

C. Where there is a conflict between the design review criteria contained in Chapter 17.136 and the design review guidelines contained in the Design Guideline Manual for the Central Estuary, the design objectives in the Design Guidelines Manual for the Central Estuary shall prevail.

17.60.030 Permitted and Conditionally Permitted Activities

Table 17.60.01 lists the permitted, conditionally permitted, and prohibited activities in the CE zones. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates activities subject to certain limitations or notes listed at the bottom of the table.

"--" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.60.01 Permitted and Conditionally Permitted Activities

Activities							Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
Residential Activities							
Permanent	--	--	P(L1)	P(L1)	--	--	
Residential Care	--	--	P(L1)	P(L1)	--	--	17.102.212
Service-Enriched Permanent Housing	--	--	C(L1)	C(L1)	--	--	17.102.212
Transitional Housing	--	--	C(L1)	C(L1)	--	--	17.102.212
Emergency Shelter	--	--	C(L1)	C(L1)	--	--	17.102.212
Semi-Transient	--	--	C	C	--	--	17.102.212
Bed and Breakfast	--	--	C	--	--	--	17.10.125
Civic Activities							
Essential Service	P	P	P	P	P	P	
Limited Child-Care Activities	--	--	P	--	--	--	
Community Assembly	--	--	P (L2)	--	C	--	
Recreational Assembly	P	C	P (L2)	C	C	--	
Community Education	P	P	C	C	C	--	
Nonassembly Cultural	P	P	P (L3)	P(L3)	C	--	
Administrative	P	P	P (L3)	P(L3)	C	--	
Health Care	--	--	C	C	--	--	
Special Health Care	--	--	--	--	--	--	
Utility and Vehicular	C	C	C	C	C	C	
Extensive Impact	C	C	C	C	C	C	
Commercial Activities							
General Food Sales	P	P	P (L4)	P (L4)	P (L5)	P (L5)	
Full Service Restaurants	P	P	P (L4)	P (L4)	P (L5)	P (L5)	
Limited Service Restaurant and Café	P	P	P (L4)	P (L4)	P (L5)	P (L5)	
Fast-Food Restaurant	--	C	--	--	C	--	17.102.210 and 8.09
Convenience Market	C	C	C	C	--	--	17.102.210

Table 17.60.01: Permitted and Conditionally Permitted Activities							
Activities							Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
Alcoholic Beverage Sales	C	C	C	C	C	--	17.102.21 & 17.102.040
Mechanical or Electronic Games	C	C	C	C	--	--	17.102.210
Medical Service	--	--	--	--	--	--	
General Retail Sales	P	P	P (L5)	P (L5)	P (L5)	--(L6)	
Large-Scale Combined Retail and Grocery Sales	--	C	--	--	--	--	
Consumer Service	P	P	P	P	P	--	
Consultative and Financial Service	P	P	P (L3)	P	C	--	
Check Cashier and Check Cashing	--	C	--	--	--	--	17.102.430
Consumer Cleaning and Repair Service	--	P	C	C	C	--	
Consumer Dry Cleaning Plant	--	C	--	--	C	C	
Group Assembly	C	C	C	C	C	C (L8)	
Personal Instruction and Improvement Services	P	P	C	C	C	C (L8)	
Administrative	P	P	P (L3)	P (L3)	P	--(L9)	
Business, Communication, and Media Services	P	P	P	P	P	P	
Broadcasting and Recording Services	P	P	P	P	P	P	
Research Service	P	P	P(L3)(L10)	P(L3)(L10)	P	P	
General Wholesale Sales	--	P (L7)	P (L3)	P (L3)	P (L3)	P(L11)	
Transient Habitation	C	C	C	C	--	--	17.102.370
Building Material Sales	--	P	P (L12)	P (L12)	P	--	
Boat and marine related sales, rental, repair and servicing	P	C	--	--	--	C	
Automobile and Other Light Vehicle Sales and Rental	--	C	--	--	--	C	
Automobile and Other Light Vehicle Gas Station and Servicing	--	C	--	--	C	P	
Automobile and Other Light Vehicle Repair and Cleaning	--	C (L13)	--	--	C	P	
Taxi and Light Fleet-Based Services	--	--	--	--	--	C	
Automotive Fee Parking	--	--	--	C	C	C	
Animal Boarding	--	C	C	C	--	--	
Animal Care	--	P	C	C	--	--	

Table 17.60.01: Permitted and Conditionally Permitted Activities							
Activities							Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
Undertaking Service	--	--	--	--	C	C	
Industrial Activities							
Custom Manufacturing	C	P	P (L3)	P (L3)	P	P	17.102.040
Light Manufacturing	C	P	P(L2)(L10)	P(L3)(L10)	P	P	17.102.040
General Manufacturing	--	--	--	--	P	P	
Heavy/High Impact	--	--	--	--	--	C	
Research and Development	P (L2)	P(L3)(L10)	P(L3)(L10)	P(L3)(L10)	P	P	
Construction Operations	--	--	--	C	P (L14)	P (L14)	
Warehousing, Storage, and Distribution							
A. General Warehousing, Storage and Distribution	C	--	P (L2)	P (L3)	P	P	
B. General Outdoor Storage	--	--	--	--	P (L14)	P (L14)	
C. Self- or Mini Storage	--	--	--	C	C	--	
D. Container Storage	--	--	--	--	P (L14)	P (L14)	
E. Salvage/Junk Yards	--	--	--	--	--	C	
Regional Freight Transportation							
A. Seaport	--	--	--	--	--	C	
B. Rail Yard	--	--	--	--	C	C	
Trucking and Truck-Related							
A. Freight/Truck Terminal	--	--	--	--	P (L14)	P(L14)	
B. Truck Yard	--	--	--	--	C	P(L14)	
C. Truck Weigh Stations	--	--	--	--	P	P	
D. Truck & Other Heavy Vehicle Sales, Rental & Leasing	--	--	--	--	P(L14)	P(L14)	
E. Truck & Other Heavy Vehicle Service, Repair, and Refueling	--	--	--	--	P(L14)	P(L14)	
Recycling and Waste-Related							
A. Satellite Recycling Collection Centers	--	P (L15)	P (L15)	P (L15)	P (L15)	P (L15)	17.10.040
B. Primary Recycling Collection Centers	--	--	--	--	--	C (L16)	17.73.035
Hazardous Materials Production, Storage, and Waste Management							

Table 17.60.01: Permitted and Conditionally Permitted Activities							
Activities							Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
A. Small Scale Transfer and Storage	--	--	--	--	C	C(L14, L17)	
B. Industrial Transfer/Storage	--	--	--	--	--	C(L14, L17)	
C. Residuals Repositories	--	--	--	--	--	C(L14, L17)	
D. Oil and Gas Storage	--	--	--	--	--	C(L14, L17)	
Agriculture and Extractive Activities							
Crop and animal raising	C (L18)	C (L18)	C (L18)	C (L18)	C (L18)	C (L18)	
Plant nursery	--	C	C	C	P	P	
Mining and Quarrying	--	--	--	--	--	--	17.102.220
Accessory off-street parking serving prohibited activities	C	C	C	C	C	C	17.102.100 & 17.102.110
Additional activities that are permitted or conditionally permitted in an adjacent zone, on lots near the boundary thereof.	C	C	C	C	C	C	17.102.110

Limitations on Table 17.60.01:

L1. No Residential Care, Service-Enriched Permanent Housing, Transitional Housing, or Emergency Shelter Residential Activity shall be located closer than three hundred (300) feet from any other such activity. See Section 17.102.212 for other regulations regarding these activities.

L2. The total floor area devoted to these activities by a single establishment shall only exceed ten thousand (10,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

L3. The total floor area devoted to these activities by a single establishment shall only exceed twenty-five thousand (25,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

L4. The total floor area devoted to a grocery store shall only exceed twenty thousand (20,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure). The total floor area devoted to a restaurant shall only exceed three thousand (3,000) square feet upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure).

L5. These activities are only allowed on the ground floor of a building. Except in CE-4, the total floor area devoted to these activities by any single establishment may only exceed five-thousand (5,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

L6. Retail is only allowed as an accessory use per Section 17.10.040.

L7. The total floor area devoted to these activities by a single establishment shall not exceed five thousand (5,000) square feet.

L8. Entertainment, educational and athletic services are not permitted.

L9. Administrative activities accessory to an existing industrial activity are limited to twenty percent (20%) of floor area in CE-6.

L10. Not including accessory activities, this activity shall take place entirely within an enclosed building. Other outdoor activities shall only be permitted upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure).

L11. These activities are only allowed in the Tidewater South area of CE-5, not permitted in any other areas of CE-5.

L12. This activity is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134) if it is the principal activity on a lot that is twenty five thousand (25,000) square feet or larger or covers twenty five thousand (25,000) square feet or more of floor area.

L13. This activity is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) and that all repair and servicing is performed in an enclosed building.

L14. A Conditional Use Permit is required if located within 300 feet of the shoreline; the CE-3 zone; or any Open Space zone (see Chapter 17.134 for the CUP procedure). This activity is permitted if beyond 300 feet.

L15. Permitted within a grocery store or other large associated development, but if it is a stand alone collector center than a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) is required. If the recycling collection is placed within the parking lot the overall parking requirements for the principal activity shall still be met.

L16. A Conditional Use Permit (see Chapter 17.134 for the CUP procedure) is required for this activity, but is not permitted within 300 feet of: a) the shoreline; b) the CE-1, CE-2, CE-3, or CE-4 zone; or c) any Open Space zone. All special regulations for primary collection centers in the industrial zones must be met as listed in Section 17.73.035.

1. L17. This activity is only permitted upon determination that the proposal conforms to the general use permit criteria set forth in the Conditional Use Permit procedure in Chapter 17.134 and to all of the following additional use permit criteria: That the project is not detrimental to the public health, safety, or general welfare of the community;
2. That the project is or will be adequately served by roads and other public or private service facilities;
3. That the project is consistent with the regional fair-share facility needs assessment and siting criteria established in the Alameda County Hazardous Waste Management Plan;
4. That the cumulative effects of locating the project within the proposed area have been analyzed and where applicable, measures that minimize adverse impacts to the surrounding community have been incorporated into the project.

L18. Crop and Animal Raising is only permitted upon determination that the proposal conforms to the general use permit criteria set forth in the Conditional Use Permit procedure in Chapter 17.134 and to all of the following additional use permit criteria:

1. The proposal will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood in terms of noise, water and pesticide runoff, farming equipment operation, hours of operation, odor, security, and vehicular traffic;
2. Agricultural chemicals or pesticides will not impact abutting properties or the surrounding neighborhood; and

3. The soil used in growing does not contain any harmful contaminants and the activity will not create contaminated soil.

17.60.040 Permitted and conditionally permitted facilities

For the purposes of this chapter only, the following definitions are added as facility types. Definitions for the other facility types listed in Table 17.60.02 are contained in the Oakland Planning Code Chapter 17.10.

A. Definitions

1. **"Live/Work"** means a room or suite of rooms that are internally connected maintaining a common household that includes: (a) cooking space and sanitary facilities that satisfy the provisions of other applicable codes; and (b) adequate working space reserved for, and regularly used by, one or more persons residing therein. A Live/Work unit accommodates both residential and nonresidential activities. This definition is the equivalent to the definition for Residentially Oriented Joint Living and Working Quarters (JLWQ) contained in the Building Code, Chapter 3B, Section 3B.2.4.

2. **"Work/Live"** means a room or suite of rooms that are internally connected maintaining a common household that includes: (a) cooking space and sanitary facilities that satisfy the provisions of other applicable codes, and (b) adequate working space reserved for, and regularly used by, one or more persons residing therein. A Work/Live unit accommodates a primary nonresidential activity with an accessory residential component.

Table 17.60.02 lists the permitted, conditionally permitted, and prohibited facilities in the CE zones. The descriptions of these facilities are contained in Chapter 17.10.

"P" designates permitted facilities in the corresponding zone.

"C" designates facilities that are permitted only upon the granting of a Conditional Use Permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates facilities subject to certain limitations listed at the bottom of the Table.

"--" designates facilities that are prohibited.

Table 17.60.02: Permitted and Conditionally Permitted Facilities

Facilities	Zones						Additional Regulations
	CE-1	**CE-2**	**CE-3**	**CE-4**	**CE-5**	**CE-6**	
Residential Facilities							
One-Family Dwelling	--(L1)	--(L1)	P	--(L1)	--(L1)	--(L1)	
One-Family Dwelling with Secondary Unit	--(L1)	--(L1)	P	--(L1)	--(L1)	--(L1)	17.102.360
Two-Family Dwelling	--(L1)	--(L1)	P	--(L1)	--(L1)	--(L1)	
Multifamily Dwelling	--(L1)	--(L1)	P	P	--(L1)	--(L1)	
Rooming House	--(L1)	--(L1)	P	P	--(L1)	--(L1)	
Mobile Home	--	--	--	--	--	--	
Live/Work	--	--	P	P	--	--	
Nonresidential Facilities							
Enclosed Nonresidential	P	P	P	P	P	P	
Open Nonresidential	P	P	C	C	P	P	
Work/Live	--	--	P	P	C	--	

Table 17.60.02: Permitted and Conditionally Permitted Facilities							
Facilities	Zones						Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
Sidewalk Café	P	P	P	P	C	--	17.102.335
Drive-In	C	C	--	C	--	--	
Drive-Through	C	C	--	C (L3)	C	C	17.102.290
Telecommunications Facilities							
Micro Telecommunications	C	P(L4)	C	C	P(L4)	P(L4)	17.128
Mini Telecommunications	C	P(L4)	C	C	P(L4)	P(L4)	17.128
Macro Telecommunications	C	C	C	C	C	P(L4)	17.128
Monopole Telecommunications	C	C	C	C	C	P(L4)	17.128
Tower Telecommunications	--	--	--	--	--	P(L4)	17.128
Sign Facilities							
Residential Signs	--	--	P	P	--	--	17.104
Special Signs	P	P	P	P	P	P	17.104
Development Signs	P	P	P	P	P	--	17.104
Realty Signs	P	P	P	P	P	P	17.104
Civic Signs	P	P	P	P	P	P	17.104
Business Signs	P	P	P	P	P	P	17.104
Advertising Signs	--	--	--	--	--	--	17.104

Limitations on Table 17.60.02:

L1. See Chapter 17.114 – Nonconforming Uses, for additions and alterations to legal nonconforming Residential Facilities.

L2. If a vacant lot is greater than 5,000 square feet, a new one-family dwelling unit may not be constructed without the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

L3. Drive through facilities are not allowed to locate between the front property line and the building.

L4. See Section 17.128.025 for restrictions on Telecommunication Facilities near residential or CE-3 and CE-4 zones.

17.60.050 Property Development Standards

Table 17.60.03 below prescribes development standards specific to individual zones. The number designations in the "Additional Regulations" column refer to the regulations listed at the end of the Table. "N/A" designates the regulation is not applicable to that zone.

Table 17.60.03 Property Development Standards

Development Standards	Zones						Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
Minimum Lot Dimensions							
Width mean	25 ft	25 ft	35 ft.	35 ft.	25 ft.	25 ft.	1
Frontage	25 ft	25 ft	35 ft.	35 ft.	25 ft.	25 ft.	1
Lot area	4,000 sf.	4,000 sf.	4,000 sf.	4,000 sf.	10,000 sf.	10,000 sf.	1
Minimum/Maximum Setbacks - See Design Guidelines Section 3.3.							
Minimum front	0 ft	0 ft	10 ft	10 ft	5 ft.	5 ft.	2
Minimum interior side	0 ft	0 ft	4 ft	0 ft	0 ft.	0 ft.	2
Minimum street side of a corner lot	0 ft	0 ft	4 ft	5 ft	5 ft	5 ft	2
Rear (residential facilities)	N/A	N/A	10 ft	10 ft	N/A	N/A	3
Rear (nonresidential facilities)	0 ft	0 ft	0 ft	0 ft	0 ft	0 ft	2
Height Regulations - See Design Guidelines Section 4.2.							
Maximum height	45	85	45/55	85	85	N/A	4, 5, 6, 7
Fence heights & other regulations	See Chapter 17.108.140 for fences, dense hedges, barriers, & free standing walls; and Design Guidelines Section 3.8.						
Minimum fence height in yards adjacent to open space zones	See Chapter 17.108.140 for fences, dense hedges, barriers, & free standing walls; and Design Guidelines Section 3.8.				8 ft	8 ft	8
Maximum fence height adjacent to open space zones	8	N/A	8	8	12 ft	12 ft	8
Maximum Residential Density (square feet of lot area required per dwelling unit) - See Design Guidelines Section 4.3.							
Regular Units	N/A	N/A	700	700	N/A	N/A	9, 10
Rooming Units	N/A	N/A	350	350	N/A	N/A	9, 10
Maximum Nonresidential FAR - See Design Guidelines Section 4.3.	2.0	3.0	3.0	3.0	3.0	2.0	10
Minimum Usable Open Space - See Design Guidelines Section 3.10.							
Group Usable Open Space per regular unit	N/A	N/A	150 sf	100 sf	N/A	N/A	11
Group usable open space per regular unit when private open space substituted	N/A	N/A	30	20 sf	N/A	N/A	11
Group usable open space per rooming unit	N/A	N/A	75 sf	50 sf	N/A	N/A	11
Group usable open space per rooming unit	N/A	N/A	15 sf	10 sf	N/A	N/A	11

Table 17.60.03 Property Development Standards							
Development Standards	Zones						Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
when private open space is substituted							
Minimum Parking and Loading Requirements	See Chapter 17.116 for loading and automobile parking; Chapter 17.117 for bicycle parking; and Design Guidelines Sections 3.2, 3.5, 3.6 and 3.8.						12
Courtyard Regulations	N/A	N/A	See Section 17.108.120	See Section 17.108.120	N/A	N/A	
Landscaping Regulations - See Design Guidelines Section 3.8 and 5.							
Site Landscaping (including parking lot)	See Chapters 17.110, 17.124 and 17.102.400 for buffering, landscaping and screening standards.						13, 14, 15
Site landscaping (% of lot area)	See Chapters 17.110, 17.124 and 17.102.400				5%	5%	14
Parking lot landscaping (% of lot area)	See Chapters 17.110, 17.124 and 17.102.400				10%	10%	14
Driveway and Site Access Regulations - See Design Guidelines Sections 3.4 and 3.7.							
Minimum Distance of driveway or site access from any residential or open space boundary	See Section 17.116.210 Driveways and Maneuvering Aisles for Parking				50 ft	50 ft	16
Driveway Width Maximum	See Section 17.116.210 Driveways and Maneuvering Aisles for Parking				35 ft	35 ft	17
Pedestrian Walkway	N/A	N/A	N/A	N/A	Required	Required	18
Frontage Type Standards	See Table 17.60.04. - See Design Guidelines Section 4.1.						

Additional Regulations for Table 17.60.03:

1. See Section 17.106.010 and 17.106.020 for exceptions to lot area, width mean, and street frontage regulations.
2. See also Section 17.108.130 for allowed projections into setbacks, and see the Design Review Manual for the Central Estuary, Sections 3.3 and 4.1.
3. In the CE-3 and CE-4 zones, see Section 17.108.080 for the required interior side and rear yard setbacks on a lot containing two or more living units and opposite a legally required living room window. Wherever a rear lot line abuts an alley, one-half (1/2) of the right-of-way width of the alley may be counted toward the required minimum rear setback; provided however, that the portion of the minimum rear setback actually on the lot itself shall not be so reduced to less than ten (10) feet. Also, see Section 17.108.130 for allowed projections into setbacks.
4. Buildings shall have a thirty (30) foot maximum height at the setback line associated with any lot line that directly abuts a lot with a residential building. This maximum height increases one (1) foot for every foot away from the applicable setback line if the residential building on the abutting lot has a height of thirty (30) feet or less. If the residential building on the abutting lot has a height of greater than thirty (30) feet, the maximum height increases four (4) feet for every foot away from the applicable setback line. An increase in allowable height resulting from construction away from a setback line shall not result in a

height greater than the maximum height allowed in the zone. See Section 17.108.030 for allowed projections above height limits and 17.108.020 for increased height limits for civic buildings.

5. In the CE-3 zone, the fifty-five (55) foot height maximum may only be achieved if the proposed building is scaled to a context that will be compatible with adjacent uses. See the Design Guidelines Manual for the Central Estuary, Section 3.1.

6. In the CE-3 zone, the maximum heights may be exceeded in the following situations: Structures that are either: 1) on lots adjacent to, or directly across the street from a freeway right of way or Bay Area Rapid Transit (BART) right of way that contains above-ground tracks; and 2) located within the closest one hundred twenty five (125) feet of the lot from the freeway or BART right of way are eligible for a seventy five (75) foot height limit. This additional height is permitted only upon the granting of a conditional use permit (see Chapter 17.134) and approval pursuant to the regular design review procedure (see Chapter 17.136). See also the Design Guidelines Manual for the Central Estuary, Section 3.1.

7. In the CE-3 Zone, the outdoor storage of materials shall not exceed sixteen (16) feet in height on a lot. Further, outdoor storage may not be higher than eight (8) feet if both: (1) the storage is within fifteen (15) feet from any property line of a lot containing residential activities and (2) the storage faces any windows of a residential facility. Outdoor storage may also not be higher than eight (8) feet if it is within fifteen (15) feet from the front property line. The height of all outdoor storage shall also be restricted according to the Oakland Fire Code regulations. Sites with outdoor storage shall be screened in conformance to the Design Guidelines Manual for the Central Estuary. In the CE-5 and CE-6 zones, the height of outdoor materials stored within the required side or rear setback shall be no higher than eight (8) feet. However, outdoor materials may be stored up to ten (10) feet if they are no higher than a solid masonry wall that is located between the materials and the property line associated with the required setback in which the materials are located. In this case, buffer planting must be installed between the storage area and the masonry wall. The aisle width and material composition of all stored material, and the ultimate height of all outdoor materials stored beyond the required setback shall be according to the Fire Code regulations.

8. In the CE-5 and CE-6 zones, this regulation applies to all property lines which directly abut a residential or open space zone, except those fronting a public street. Buffering requirements also apply to: a) new development; or expansion of an industrial or commercial building by more than 20 percent (20%) of total floor area, or b) addition or expansion of an existing building so that the lot coverage exceeds 35 percent (35%), whichever is greatest. The planting requirement may be reduced but not eliminated if appropriate and approved by the Planning Director. The twelve (12) foot maximum fence height may only be achieved with additional screening. The fence or wall design shall be approved by the Planning Director. See also Design Guidelines Manual for the Central Estuary, Section 3.8 and 4.1.

9. In the CE-3 and CE-4 zones, see Chapter 17.107 and Section 17.106.060 for affordable and senior housing incentives. A Secondary Unit may be permitted when there is no more than one unit on a lot, subject to the provisions of Section 17.102.360. Also applicable are the provisions of Section 17.102.270 with respect to additional kitchens for a dwelling unit, and the provisions of Section 17.102.300 with respect to dwelling units with five or more bedrooms. New construction on a vacant lot that is greater than five thousand (5,000) square feet shall only result in a total of one unit on the lot upon the granting of a conditional use permit (see 17.134) for conditional use permit process. This requirement does not apply to the expansion of the floor area or other alteration of an existing Single Family Dwelling.

10. No portion of lot area used to meet the residential density requirements shall be used as a basis for computing the maximum nonresidential FAR unless the total nonresidential floor area on the lot is less than 3,000 square feet.

11. In the CE-3 and CE-4 zones, usable open space is not required for Work/Live, and is only required on lots with two residential or Live/Work units or more, and not required for single family homes with secondary units. Each square foot of private usable open space equals two square feet towards the total

usable open space requirement. All usable open space shall meet the standards contained in Chapter 17.126, except that group usable open space may be located anywhere on the lot, provided the Frontage Type design guidelines are followed (see Section 4.1 of the Design Guidelines Manual for the Central Estuary).

12. In the CE-5 zone, parking for new development shall be located at the rear of the site or at the side of the building except for drop-off areas, which may be at the entry, except where access to existing loading docks and/or rail lines is required. New truck loading docks shall not be located closer than fifty (50) feet from property line as measured from the subject dock to any property boundary if located within three hundred (300) feet of a residential zone, unless such a distance requirement will impede direct access to a rail line. Truck docks shall be located such that trucks do not encroach into the public right of way. All existing loading docks are not subject to this requirement.

13. Any new principal residential building or addition over five hundred (500) square feet requires submittal and approval of a landscaping and buffering plan for the entire site, excluding secondary units of five hundred (500) square feet or less. The landscaping and buffering plan shall contain the following:

    a. Landscaping and buffering that is consistent with the "Design Guidelines Manual for the Central Estuary";

    b. An automatic system of irrigation for all landscaping shown in the plan;

    c. A minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping as approved by the Director of City Planning, for every twenty-five (25) feet of street frontage or portion thereof. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees shall be street trees to the satisfaction of the City's Tree Division.

    d. At least one (1) fifteen (15) gallon tree in the parking lot for every six (6) parking spaces for projects that involve new or existing parking lots of three thousand (3,000) square feet or greater.

    e. A minimum of five (5) feet of landscaping shall be required adjacent to the front and street side property lines for parking lots of three thousand (3,000) square feet or greater. Where parking stalls face into this required buffer area, the width of the required landscaping shall be increased by two (2) feet unless wheel stops are installed.

14. In the CE-5 and CE-6 Zones, the following landscape requirements apply:

    a. Submittal and approval of a landscape plan for the entire site and street frontage is required for the establishment of a new Nonresidential Facility and for additions to Nonresidential Facilities of over one thousand (1,000) square feet (see Section 17.124.025). A minimum of five percent (5%) of the lot area shall be landscaped. Landscaping and buffering must be consistent with guidelines in the "Design Guidelines Manual for the Central Estuary".

    b. Required parking lot landscaping: For all lots associated with new construction with more than 25,000 sf. of floor area, a minimum of ten percent (10%) of parking lot area shall be landscaped accompanied by an irrigation system that is permanent, below grade and activated by automatic timing controls; permeable surfacing in lieu of irrigated landscaping may be provided if approved through design review procedure in Chapter 17.136. Shade trees shall be provided at a ratio of one (1) tree for every ten (10) spaces throughout the parking lot. Parking lots located adjacent to a public right-of-way shall include screening consistent with the landscaping and buffering guidelines in the "Design Guidelines Manual for the Central Estuary".

15. For all non-residential projects over 1,000 square feet street trees are required. In addition to the general landscaping requirements set forth above, a minimum of one fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty (20) feet of street frontage or portion thereof and, if a curbside planting strip exists, for every twenty-five (25) feet of street frontage. On streets with sidewalks where the

distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Tree Division.

16. In the CE-5 and CE-6 Zones, the site and driveway access requirement applies to new development; or expansion of industrial or commercial buildings by more than 20 percent (20%) floor area; or b) addition or expansion of an existing building so that the building to land ratio exceeds 35 percent (35%), which ever is greater; and all new driveway projects. This requirement may be waived administratively if such distance requirement will impede direct access to a rail line. Also applicable are the provisions of Section 17.116.
17. In the CE-5 and CE-6 Zones, a driveway shall not exceed thirty-five (35) feet in width without obtaining approval from the Engineering Department of Building Services through the Driveway Appeal Process. Also applicable are the provisions of Section 17.116.
18. In the CE-5 and CE-6 Zones, a clearly defined and lighted walkway, at least four (4) feet wide, shall be provided between the main building entry and a public sidewalk for all new development. On-site walkways shall be separated from on-site automobile circulation and parking areas by landscaping, a change in paving material, or a change in elevation. See the Design Guidelines Manual for the Central Estuary, Section 3.4 and 3.7.

17.60.060 Permitted Frontage Types

A. Applicability.

The frontage types described below are only applicable to the Central Estuary zones.

B. Definitions. (See the Design Guidelines Manual for the Central Estuary, Section 4.1)

The following definitions apply to this chapter only:

1. **Public Frontage** - The Public Frontage type accommodates very public uses, where interaction with the street and open spaces is desirable and welcomed, requiring little or no transition between the two. The Public Frontage is fully open to the street with large amounts of glazing. Windows may go from ground floor to ceiling and may be operable to promote a close indoor/outdoor relationship. Entries and windows are frequent, creating an inviting visual and physical connection with activity along the street. This frontage type is often associated with shopfronts and dining establishments. Live/Work facilities where retail shopfronts are a component may also be associated with this frontage type.
2. **Semi-Public Frontage** - The Semi-Public Frontage is defined by a moderate amount of permeability. This frontage type requires some transition from the public realm, which may be in the form of a landscaped setback, vertical separation or less transparency. This frontage type maintains a fair amount of glazing, though in a configuration that offers more privacy to interior uses that require some separation from the street, such as higher window sills, than the Public Frontage type. Building access may be less frequent than the Public Frontage or defined by a singular entry lobby and though generally still open and welcoming, may be somewhat more restricted than the Public Frontage. Entries may be characterized by porches, stoops, terraces, or lobbies. It is most often associated with employment uses, though it is flexible enough to accommodate Work/Live, warehousing, distribution and manufacturing, as it allows ample amounts of natural light balanced with a greater sense of privacy and buffer from street activity.
3. **Private Frontage** – This frontage requires the most privacy and buffering between interior uses and adjacent streets, the waterfront, public plazas, and open spaces. A transition zone is

necessary to provide a clear distinction between public and private space. This frontage type is closely associated with residential and Live/Work facilities.

4. **Service Frontage** - Service Frontages are defined by large expanses of blank walls with few doors and windows, mostly broken by garage doors and truck bays. Building entries are minimal with few pedestrian amenities and are not elaborately detailed. This frontage is associated with warehousing, distribution, and sometimes manufacturing businesses. This frontage is also utilized by large-format, warehouse style retailers such as Costco and Home Depot. This frontage is commonly found in the Central Estuary area, but should be avoided or used sparingly along public spaces.

C. Table 17.60.04 below prescribes development standards specific to frontage types allowed. The number designations in the "Additional Regulations" column refer to the regulations listed at the end of the Table. Intent, guidance and application of building Frontage Types can be found in the CE Design Guidelines Manual.

Table 17.60.04: Frontage Type Standards See Design Guidelines 4.1.

	Blank Wall (maximum length in feet)		Transparency min. glazed area (percent of building façade)	Access (spacing in feet or per unit)	Additional Regulations
	Primary lot frontage	Secondary lot frontage			
Public Frontage	10 ft.	15 ft.	50%	50 ft. max.	1, 2
Semi-Public Frontage	20 ft.	20 ft.	40%	75 ft. max.	1, 2
Private Frontage	25 ft.	25 ft.	N/A	Min. 1 per unit or lobby	1, 2
Service Frontage	35 ft.	35 ft.	N/A	Min. 1 per primary lot frontage	1, 2, 3

Additional Regulations for Table 17.60.04:

1. Minimum glazed area is measured between 2' - 0" and 9' – 0" above adjacent interior finished floor elevation.
2. Glazed garage doors and entry doors, transom windows and display windows may be counted toward minimum glazed area.
3. Not required to be interrupted by windows and doors, but shall incorporate other blank wall elements as described in the Façade Articulation (Section 4.7) and Building Frontage Types (Section 4.1) in the CE Design Guidelines Manual for the Central Estuary.

17.60.070 Special Regulations for Work/Live Units.

A. Applicability.

1. Work/Live space shall be considered Commercially/ Industrially Oriented Joint Living and Working Quarters under the Building Code. Any building permit plans for the construction or establishment of work/live units shall: (1) clearly state that the proposal includes Commercially/Industrially Joint Living and Working Quarters and (2) label the units intended to be these units as Commercially/ Industrially Joint Living and Working Quarters. This

requirement is to assure the City applies building codes that allow industrial activities in work/live units in the industrial zones.

2. Work/Live units are nonresidential facilities and counted towards the nonresidential floor area ratio, not the residential density.

3. CE-3 and CE-4 Zones. A Work/Live unit in the CE-3 and CE-4 zones must meet all applicable regulations contained in this section. The CE-3 and CE-4 zones regulations in this section supersede regulations contained in Section 17.102.190 relating to the conversion of buildings originally designed for commercial or industrial activities into joint living and working quarters.

4. CE-5 Zone. A Work/Live unit in the CE-5 zone must meet all applicable regulations contained in this section. The CE-5 zones regulations in this section supersede regulations contained in Section 17.102.190 relating to the conversion of buildings originally designed for commercial or industrial activities into joint living and working quarters for work/live units.

5. CE-1, CE-2, and CE-6 Zones. Work/Live units are not allowed in the CE-1, CE-2, or CE-6 zones.

B. Definition.

The following definitions apply to this chapter only:

1. For purposes of Work/Live conversion, an "existing building" must be at least ten (10) years old and originally designed for industrial or commercial occupancy.

2. "Residential floor area" shall be considered areas containing bedrooms, sleeping areas, kitchen areas and bathrooms and hallways serving such areas.

3. "Nonresidential floor area" shall include floor areas designated for working.

C. Regular design review required. Establishment of a Work/Live unit shall only be permitted upon determination that the proposal conforms to the regular design review criteria set forth in the design review procedure in Chapter 17.136 and to all of the following additional criteria:

1. That the exterior of a new building containing primarily Work/Live units in the industrial zones has a commercial or industrial appearance. This includes, but is not necessarily limited to, the use of nonresidential building styles or other techniques;

2. That units on the ground floor level of a building have a business presence on the street. This includes, but is not necessarily limited to, providing roll-up doors at the street or storefront style windows that allow interior space to be visible from the street, a business door that is oriented towards the street, a sign or other means that identifies the business on the door and elsewhere, a prominent ground floor height, or other techniques;

3. That the layout of nonresidential floor areas within a unit provides a functional and bona fide open area for working activities;

4. That the floor and site plan for the project include an adequate provision for the delivery of items required for a variety of businesses. This may include, but is not necessarily limited to, the following:
   a. Service elevators designed to carry and move oversized items,
   b. Stairwells wide and/or straight enough to deliver large items,
   c. Loading areas located near stairs and/or elevators,
   d. Wide corridors for the movement of oversized items; and
   e. That the floor and site plan for the project provide units that are easily identified as businesses and conveniently accessible by clients, employees and other business visitors.

D. Table 17.60.05 below prescribes special regulations for Work/Live units. The number designations in the "Additional Regulations" column refer to the regulations listed at the end of the Table.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"--" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

"N/A" designates the regulation is not applicable to that zone.

Table 17.60.05 Special Regulations for Work/Live Units

Development Standards	Zones						Additional Regulations
	CE-1	**CE-2**	**CE-3**	**CE-4**	**CE-5**	**CE-6**	
Activities Allowed							
Work/Live - new construction	--	--	P	P	--	--	
Work/Live - conversion of existing building	--	--	P	P	C	--	1
Activities allowed in a Work/Live unit	N/A	N/A	Same permitted and conditionally permitted activities as described in Section 17.60.030	Same permitted and conditionally permitted activities as described in Section 17.60.030	Same permitted and conditionally permitted activities as described in Section 17.60.030	N/A	
Minimum Size of Work/Live Unit	N/A	N/A	800 sf	800 sf	800 sf	N/A	
Maximum Nonresidential FAR - See Design Guidelines Section 4.3.	N/A	N/A	3.0	3.0	N/A	N/A	2
Work/Live Unit Type Permitted See Table 17.60.06 for definitions of the different types of Work/Live units.							
Type 1	--	--	P	P	C	--	
Type 2	--	--	P	P	--	--	
Minimum Usable Open Space - See Design Guidelines Section 3.10.							
Group Usable Open Space per Work/Live unit	N/A	N/A	75 sf	75 sf	N/A	N/A	3
Parking and Loading Requirements - See Design Guidelines Sections 3.2, 3.5, 3.6 and 3.8.							
Minimum parking spaces required per Work/Live unit	N/A	N/A	1	1	N/A	N/A	4
Unassigned visitor or employee parking space required per 5 Work/Live units	N/A	N/A	1	1	N/A	N/A	4
Required Bicycle Parking with Private Garage							
Short-term space per 20 Work/Live units	N/A	N/A	1	1	N/A	N/A	5
Minimum short-term spaces	N/A	N/A	2	2	N/A	N/A	5
Required Bicycle Parking without Private Garage							
Short-term space per 20 Work/ Live units and long-term space per 4 units	N/A	N/A	1	1	N/A	N/A	5
Minimum short-term	N/A	N/A	2	2	N/A	N/A	5

Table 17.60.05 Special Regulations for Work/Live Units							
Development Standards	Zones						Additional Regulations
	CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	
spaces and minimum long-term spaces							
Required Loading - See Design Guidelines Section 3.6							
< 25,000 sf	N/A	N/A	No berth	No berth	N/A	N/A	6
25,000 – 69,999 sf	N/A	N/A	1 berth	1 berth	N/A	N/A	6
70,000 – 130,000 sf	N/A	N/A	2 berths	2 berths	N/A	N/A	6
Each additional 200,000 sf	N/A	N/A	1 more berth	1 more berth	N/A	N/A	6
Public Entrance to Nonresidential Floor Area	N/A	N/A	Yes	Yes	Yes	N/A	7

Additional Regulations for Table 17.60.05:

1. Use Permit Criteria. A conditional use permit for a work/live unit may be granted only upon determination that the proposal conforms to the general use permit criteria set forth in the conditional use permit procedure in Chapter 17.134 and to both of the following additional use permit criteria:
   a. That the workers and others living there will not interfere with, nor impair, the purposes of the particular zone; and
   b. That the workers and others living there will not be subject to unreasonable noise, odors, vibration or other potentially harmful environmental conditions (Ord. 12872 § 4 (part), 12289 § 4 (part), 2000; prior planning code § 7020).
2. Work/Live units are nonresidential facilities and counted towards the nonresidential floor area ratio, not the residential density.
3. See Table 17.60.06 for definitions of the different types of Work/Live units.
4. Open space standards apply to new construction only. For conversion of existing buildings, maintaining existing open space is required to at least these minimum standards. All required usable open space shall meet the useable open space standards contained in Chapter 17.126, except that all useable open space may be provided on roof tops, podiums or other non ground-level areas. Further, each square foot of private useable open space equals two square feet towards the total usable open space requirement.
5. Parking standards apply to new construction only. For conversion of existing buildings, maintaining existing parking is required to at least these minimum standards. See Chapter 17.116 for other off-street parking and loading standards.
6. See Chapter 17.117 for other bicycle parking requirements.
7. See Chapter 17.116 for other loading standards.
8. Each CE-3 and CE-4 Work/Live unit shall have at least one public entrance that is directly adjacent to nonresidential floor area. A visitor traveling through this business entrance shall not be required to pass through any residential floor area in order to enter into the nonresidential area of the unit.

E. Table 17.60.06 below describes the different types of Work/Live units. Each new Work/Live unit shall qualify as at least one of the following Unit Types:

Table 17.60.06 Definitions of the Different Types of Work/Live Units

Unit Type	Maximum residential floor area	Special requirements	Separation between residential and nonresidential floor area	Additional Regulations
Type 1	One-third	All remaining floor area to be used for the primary non-residential activity.	Nonresidential floor area and residential floor area shall be located on separate floors (including mezzanines) or be separated by an interior wall.(see Note 2, below, for an exception for kitchens)	1, 2
Type 2	50 percent	1. At least 75%of the ground floor must be dedicated to nonresidential floor area; and 2. The ground floor must be directly accessible to the street and have a clearly designated business entrance.	Nonresidential floor area and residential floor area shall be located on separate floors (including mezzanines) or be separated by an interior wall. (see Note 2, below, for an exception for kitchens).	1, 2, 3

Additional Regulations for Table 17.60,06:

1. All required plans for the creation of Work/Live units shall: (1) delineate areas designated to contain residential activities and areas designated to contain nonresidential activities, and (2) contain a table showing the square footage of each unit devoted to residential and nonresidential activities. See 17.102.190 for regulations regarding converting facilities originally designed for industrial or commercial occupancy to joint living and working quarters.
2. For Work/Live in CE-3 and CE-4 zones, a kitchen may be open to non-residential floor area if the kitchen is adjacent to and directly accessible from a residential floor area or stairs that lead to residential floor area. In these kitchens not separated by an interior wall, the kitchen is only required to be separated from the nonresidential floor area by a partition that can be opened and closed.
3. Each CE-3 and CE-4 Work/Live unit shall contain no more than one fully equipped kitchen. A CE-3 and CE-4 Work/Live unit may contain a second sink and counter to serve the nonresidential floor area.

F. Additional Regulations for all Work/Live units

1. Each Work/Live unit shall contain at least one tenant that operates a business within that unit. That tenant shall possess a valid and active City of Oakland Business Tax Certificate to operate a business out of the unit.
2. For any Work/Live unit, a statement of disclosure shall be: (1) provided to prospective owners or tenants before a unit or property is rented, leased, or sold, and (2) recorded with the County of Alameda as a Notice of Limitation and in any other covenant, conditions and restrictions associated with a facility. This statement of disclosure shall contain the following acknowledgments:
    a. The Work/Live unit is in a nonresidential facility that allows commercial and/or industrial activities that may generate odors, truck traffic, vibrations, noise and other impacts at levels and during hours that residents may find disturbing.
    b. Each Work/Live unit shall contain at least one tenant that operates a business within that unit. This tenant must possess an active City of Oakland Business Tax Certificate for the operation out of the unit.

2. That, where appropriate for the type of businesses anticipated in the development, the floor and site plan for the project include an adequate provision for the delivery of items required for a variety of businesses. This may include, but is not necessarily limited to, the following:
   a. Service elevators designed to carry and move oversized items,
   b. Stairwells wide and/or straight enough to deliver large items,
   c. Loading areas located near stairs and/or elevators and
   d. Wide corridors for the movement of oversized items.

E. Table 17.60.07 below prescribes special regulations for Live/Work units. The number designations in the "Additional Regulations" column refer to the regulations listed at the end of the Table.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"--" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

"N/A" designates the regulation is not applicable to that zone.

Table 17.60.07 Special Regulations for Live/Work Units in CE-3 and CE-4 Zones

	Zones		
Development Standards	**CE-3**	**CE-4**	**Additional Regulations**
Activities Allowed			
Live/Work new construction and conversion of existing building	P	P	
Commercial Activities			
Personal Instruction and Improvement Services	C	C	
Business, Communication and Media Service	P	P	
Consumer Service	P	P	
Consultative and Financial Service	P(L1)	P(L1)	
Administrative	P(L1)	P(L1)	
Industrial Activities			
Custom	C(L1)(L2)(L3)	C(L1)(L2)(L3)	
Light	C(L1)(L2)(L3)	C(L1)(L2)(L3)	
Maximum Residential Density	Same as Table 17.60.03	Same as Table 17.60.03	1
Minimum Usable Open Space See Design Guidelines Section 3.10.	Same as Table 17.60.03	Same as Table 17.60.03	
Parking and Loading Requirements See Design Guidelines Sections 3.2, 3.5, 3.6 and 3.8.			
Minimum parking spaces required per work/live unit	1	1	2
Required Bicycle Parking with Private Garage			
Short-term space per 20 Live/Work units	1	1	3
Minimum short-term spaces	2	2	3

3. Each building with a Work/Live unit shall contain a sign that: (1) is permanently posted; (2) is at a common location where it can be frequently seen by all tenants such as a mailbox, lobby, or entrance area; (3) is made of durable material; (4) has a minimum dimension of nine by eleven inches and lettering at least one-half an inch tall. This sign shall contain the following language: "This development contains work/live units. As such, please anticipate the possibility of odors, truck traffic, noise or other impacts at levels and hours that residents may find disturbing."

4. The development of Work/Live units in the industrial zones shall not be considered adding housing units to the City's rental supply, nor does it create "conversion rights" under the City's condominium conversion ordinance, O.M.C. Chapter 16.36, nor are the development standards for work/live units intended to be a circumvention of the requirements of the City's condominium conversion ordinance, O.M.C. Chapter 16.36.

17.60.080 Special Regulations for Live/Work Units in the CE-3 and CE-4 Zones.

A. Applicability.

1. Live/Work units are residential facilities and shall be counted towards the residential density, not the nonresidential floor area ratio, and may create "conversion rights" under the City's condominium conversion ordinance, Chapter 16.36. The same requirements contained in the City's condominium conversion ordinance that relate to residential units shall apply to Live/Work units.

2. CE-3 and CE-4. A Live/Work unit in the CE-3 and CE-4 zones must meet all applicable regulations contained in this section. Regulations in this section supersede regulations contained in Section 17.102.190 relating to the conversion of buildings originally designed for commercial or industrial activities into joint living and working quarters.

3. CE-1, CE-2, CE-5, and CE-6. Live/work units are not allowed in the CE-1, CE-2, CE-5, or CE-6 zones.

B. Definition.

The following definitions apply to this chapter only: For purposes of Live/Work conversion, an "existing building" must be at least ten (10) years old and originally designed for industrial or commercial occupancy.

1. "Residential floor area" shall be considered areas containing bedrooms, sleeping areas, kitchen areas and bathrooms and hallways serving such areas.

2. "Nonresidential floor area" shall include floor areas designated for working.

C. New Floor Area. (applies only to Live/Work conversions of existing buildings). New floor area may be created that is entirely within the existing building envelope; however, in no case shall the height, footprint, wall area or other aspect of the exterior of the building proposed for conversion be expanded to accommodate Live/Work area, except to allow dormers not exceeding the existing roof height and occupying no more than ten (10) percent of the roof area, and incremental appurtenances such as elevator shafts, skylights, rooftop gardens or other facilities listed in Section 17.108.130.

D. Regular Design Review Required. Regular design review approval for CE-3 and CE-4 Live/Work units may be granted only upon determination that the proposal conforms to the regular design review criteria set forth in the design review procedure in Chapter 17.136 and to all of the following additional criteria:

1. That the layout of nonresidential floor areas within a unit provides a functional and bona fide open area for working activities;

Table 17.60.07 Special Regulations for Live/Work Units in CE-3 and CE-4 Zones			
	Zones		
Development Standards	**CE-3**	**CE-4**	**Additional Regulations**
Required Bicycle Parking without Private Garage			
Short-term space per 20 Live/Work units and long-term space per 4 units	1	1	3
Minimum short-term spaces and minimum long-term spaces	2	2	3
Required Loading See Design Guidelines Section 3.6			
< 50,000 sf	No berth	No berth	4
50,000 – 149,999 sf	1 berth	1 berth	4
1500,000 – 299,000 sf	2 berths	2 berths	4
Each additional 300,000 sf	1 more berth	1 more berth	4

Limitations on Table 17.60.07:

L1. The total floor area devoted to these activities by a single establishment shall only exceed five thousand (5,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

L2. Not including accessory activities, this activity shall take place entirely within an enclosed building. Other outdoor activities shall only be permitted upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure).

L3. Activities must be limited in scale and intensity; construction of units to accommodate these activities must meet stringent Building Code regulations. (See Building Code Chapter 3B Section 3B.2.4.)

Additional Regulations for Table 17.60.07:

2. Live/Work units are residential facilities and shall be counted towards the residential density, not the nonresidential floor area ratio.
3. See Chapter 17.116 for other off-street parking and loading standards.
4. See Chapter 17.117 for other bicycle parking requirements.
5. See Chapter 17.116 for other loading standards. However, the minimum height or length of a required berth listed in Chapter 17.116 may be reduced upon the granting of regular design review approval (see Chapter 17.136), and upon determination that such smaller dimensions are ample for the size and type of trucks or goods that will be foreseeably involved in the loading operations of the activity served. This design review requirement shall supersede the requirement for a conditional use permit stated in Section 17.116.220.

F. Additional Regulations for Live/Work units

1. The amount of floor area in a CE-3 and CE-4 Live/Work unit designated as residential floor area is not restricted.
2. Any building permit plans for the construction of CE-3 and CE-4 Live/Work units shall: (1) clearly state that the proposal includes Live/Work facilities, and (2) label the units intended to be Live/Work units. This requirement is to assure the City applies building codes appropriate for a Live/Work facility.

3. For any Live/Work unit in a CE-3 and CE-4 zone, a statement of disclosure shall be: (1) provided to prospective owners or tenants before a unit or property is rented, leased, or sold, and (2) in any covenant, conditions, and restrictions associated with a facility. This statement of disclosure shall contain an acknowledgment that the property is in a facility that allows commercial and/or light industrial activities that may generate odors, truck traffic, vibrations, noise and other impacts at levels and during hours that residents may find disturbing.
4. Each building with a Live/Work unit in the CE-3 and CE-4 zone shall contain a sign that: (1) is permanently posted; (2) is at a common location where it can be frequently seen by all tenants such as a mailbox, lobby, or entrance area; (3) is made of durable material; (4) has a minimum dimension of nine by eleven inches and lettering at least one-half an inch tall. This sign shall contain the following language: "This development contains Live/Work units. As such, please anticipate the possibility of odors, truck traffic, noise or other impacts at levels and hours that residents may find disturbing."

17.60.090 Special Regulations for Mini-lot and Planned Unit Developments.

A. Mini-lot Developments. In mini-lot developments, certain regulations that apply to individual lots in the CE-3 and CE-4 zones may be waived or modified when and as prescribed in Section 17.102.320.

B. Planned Unit Developments. Large integrated developments shall be subject to the Planned Unit Development regulations in Chapter 17.142 if they exceed the sizes specified therein. In developments which are approved pursuant to said regulations, certain uses may be permitted in addition to those otherwise allowed in the CE-3 and CE-4 zones, and certain of the other regulations applying in said zone may be waived or modified.

17.60.010 Other Zoning Provisions

The following table contains referrals to other regulations that may apply:

A. General Provisions. The general exceptions and other regulations set forth in Chapters 17.102, 17.104, 17.106, and 17.108 shall apply in the CE zones.

B. Nonconforming Uses. Nonconforming uses and changes therein shall be subject to the nonconforming use regulations in Chapter 17.112.

C. Home Occupations. Home occupations shall be subject to the applicable provisions of the home occupation regulations in Chapter 17.112.

D. Recycling Space Allocation Requirements. The regulations set forth in Chapter 17.118 shall apply in the CE zones.

E. Landscaping and Screening Standards. The regulations set forth in Chapter 17.124 and Chapter 17.102.400, screening of utility meters, etc., shall apply in the CE zones.

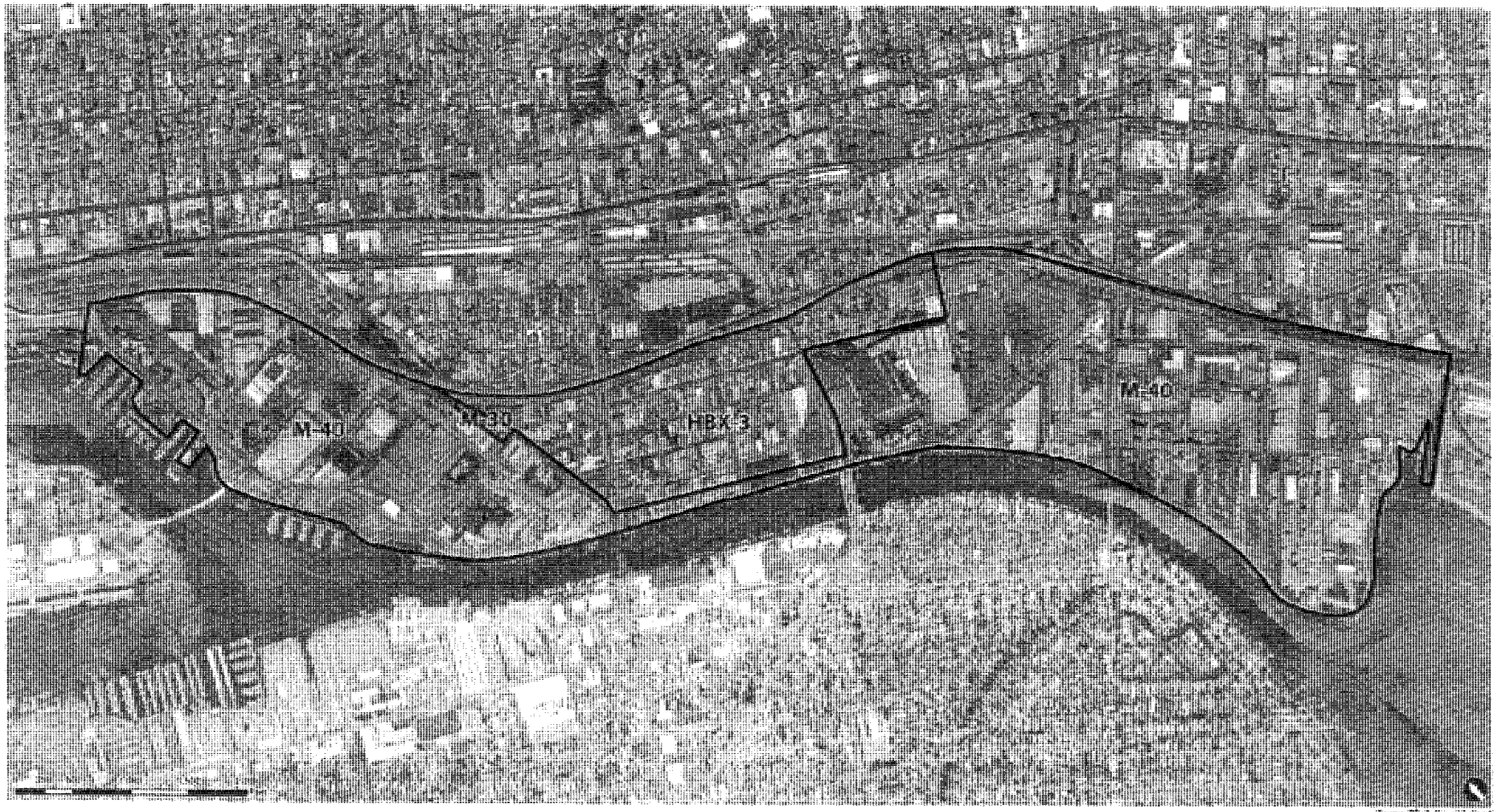
F. Buffering. All uses shall be subject to the applicable requirements of the buffering regulations in Chapter 17.110 with respect to screening or location of parking, loading, storage areas, control of artificial illumination, and other matters specified therein.

G. Noise, odor, smoke. Performance standards regarding the control of noise, odor, smoke, and other objectionable impacts in Chapter 17.120 shall apply in the CE zones.

H. Microwave dishes and energy production facilities regulations in Chapter 17.102.140 shall apply in the CE zones.

I. Electroplating activities. Special regulations applying to electroplating activities in Chapter 17.102.340, shall apply in the CE zones.

J. S-19 Health and Safety Overlay Zone regarding proper location, handling and storage of hazardous materials, particularly in close proximity to residents living adjacent to industrial areas.



Zoning - Existing

Zoning Boundaries

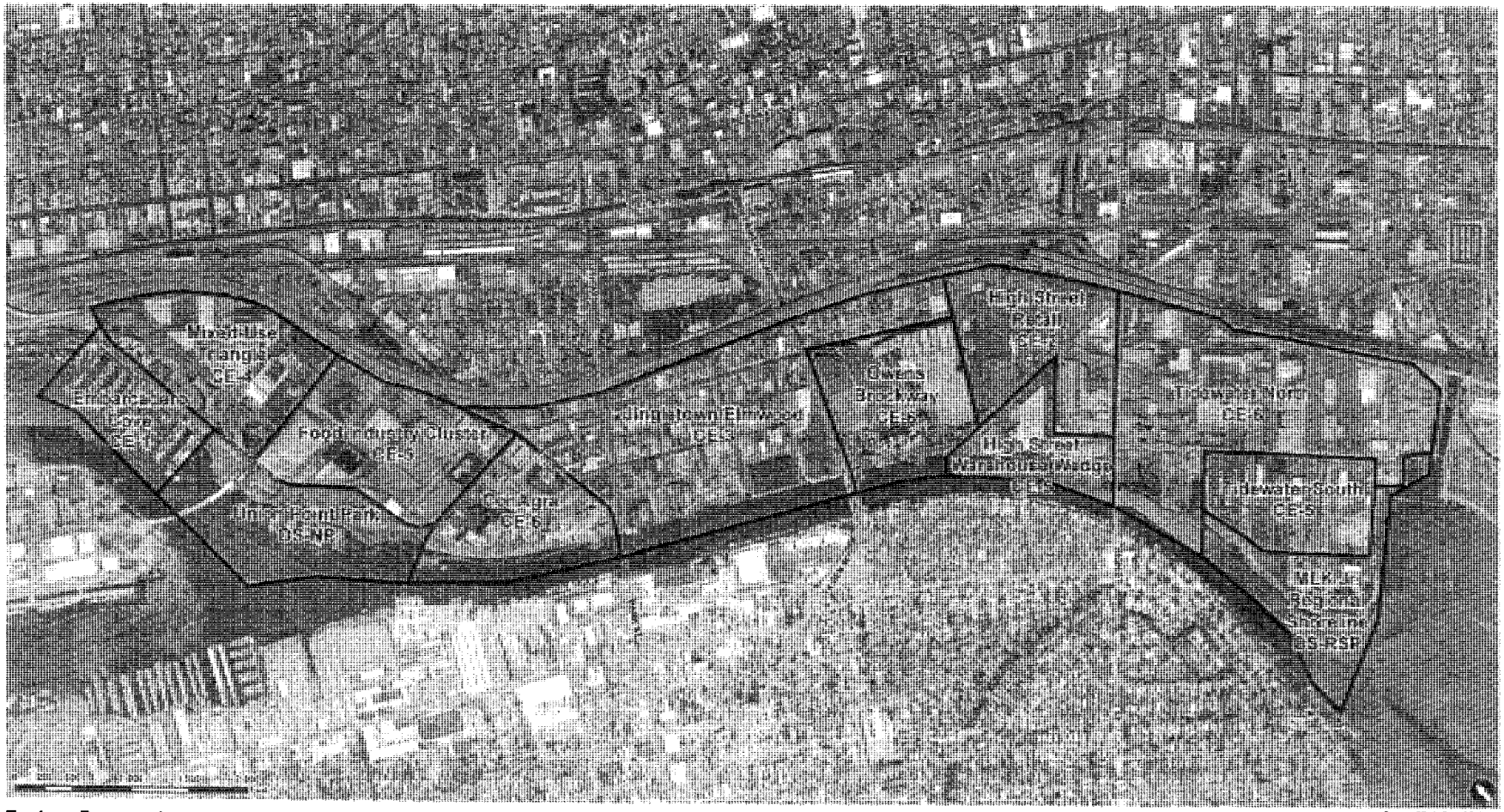
June 2012

CITY OF OAKLAND

CENTRAL ESTUARY Implementation Guide

COMMUNITY DESIGN + ARCHITECTURE

Part 1 of 2



Zoning - Proposed

Zoning Boundaries

Source: CDA, City of Oakland

June 2012

CITY OF OAKLAND

CENTRAL ESTUARY Implementation Guide

COMMUNITY DESIGN + ARCHITECTURE

Part 2 of 2

Attachment E

The *Oakland Estuary Policy Plan* is amended as follows:

Executive Summary

Page ~~viii~~vi

The plan recommends strengthening the livability of existing and future residential development within the ~~Kennedy Tract~~Jingletown/Elmwood area, and suggests new opportunities for small-scale office, business and commercial establishments. In certain areas (e.g., around the Con-Agra facility in the ~~San Antonio/Fruitvale~~ Central Estuary District), the plan supports the retention of existing industries, but acknowledges that they may relocate for a variety of reasons. If that occurs, the plan suggests land use priorities for an appropriate transition to new urban development in the future.

Section I: Background

Introduction

Page 8

- '~~San Antonio/Fruitvale~~ Central Estuary~~Central Estuary~~ District', from 9th Avenue to 66th Avenue~~.~~

Section II: Objectives

Issues & Opportunities

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Objective C-1: Improve and clarify regional access to Oakland's waterfront.

Interchanges along the I-880 freeway should be consolidated at arterial roadways and brought up to current standards to improve access to and within the Estuary area.

The I-980 connection to the Alameda Tubes at the Jackson Street off-ramp and the I-880 – 16th Street off ramp currently routes traffic through city streets, and should be improved to alleviate congestion on local streets and clarify access routes to Alameda and on Oakland local streets.

Improved freeway interchanges are currently under construction or planned at 23rd/29th Avenues and 42nd Avenue/High Street. These projects will improve local access and circulation and help reduce congestion on I-880. Additional improvements should be considered at 5th Avenue~~, 23rd Avenue,~~ and Fruitvale Avenue. ~~, and High Street/42nd Avenue.~~ A new interchange should be investigated to provide direct access from I-880 to Jack London Square and downtown Oakland.

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Objective C-2: Establish a continuous waterfront ~~parkway~~roadway system; a safe promenade for pedestrians, bicycles, and slow-moving automobiles.

For the most part, vehicular circulation should be accommodated on existing roadways. However, a continuous waterfront ~~parkway~~ roadway system is a top priority in the Estuary Policy Plan. The waterfront roadway system ~~Parkway~~ should take advantage of ~~and stay within~~ the Embarcadero right-of-way, extending from Jack London Square to Park Street.

Beyond Park Street, it may be necessary to purchase additional right-of-way to allow the waterfront roadway system ~~parkway~~ to be connected through to Fruitvale Avenue and beyond to Tidewater Avenue and 66th Street.

West of Oak Street, the waterfront roadway system ~~parkway~~ should meet the city grid, providing several routes west to Mandela Parkway.

The configuration and cross-sectional character of the waterfront roadway system ~~roadway~~ will likely vary, depending on availability of right-of-way, adjoining land uses, and traffic conditions. ~~The parkway and a~~All ~~other~~ waterfront roads should treated with appropriate landscaping, lighting, signage, rest/ overview areas, and, where appropriate, parking, and other features which provide a continuous ~~parkway~~ character for pleasant driving, walking, and cycling. ~~The~~ Waterfront roads ~~parkway~~ should be slow-moving, and ~~. The roadway should be~~ accompanied by separate or contiguous bicycling and pedestrian paths where feasible.

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Objective C-3: Balance through movement with local access along the waterfront.

In many urban waterfronts, shoreline transportation corridors have been allowed to become freeway-like environments, providing through movement at the expense of local access. The concept of the ~~Embarcadero Parkway~~waterfront roadway system, described above, aims to properly balance local access with through movement.

Traffic-calming methods should be incorporated into roadway design throughout the study area, to ensure that vehicular movement is managed in consideration of recreational and aesthetic values. The ~~parkway~~ waterfront roadway system should not become an overflow or alleviator route to the I- 880 freeway, ~~and it should prohibit through truck movement.~~however, it will remain part of ~~on~~ the City's heavyweight truck route.

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Objective C-5: Promote transit service to and along the waterfront.

Land and water-based transit services should be extended to and along the waterfront. Transit services should be focused along Broadway, Washington, Franklin, Third, and Fruitvale.

A special transit loop linking Jack London Square with other significant activity centers (eg., Old Oakland, the Oakland Museum, and the Lake Merritt and City Center BART stations), should also be encouraged. ~~Passenger rail~~High-capacity transit service between Fruitvale BART and Alameda should be studied further.

Redevelopment on both the Oakland and Alameda sides of the Estuary may, in the future, warrant increased ferry and water taxi service. Water taxis can link activity centers on both sides of the Estuary, transforming the waterway into a viable boulevard that brings together the Oakland and Alameda waterfronts.

Objective C-6: Improve pedestrian and bicycle circulation.

Bicycle and pedestrian networks should be extended throughout the waterfront. By enhancing the Embarcadero and the streets parallel to the waterfront, ~~Parkway,~~ a continuous pedestrian path and bicycle route can be established along the waterfront. Links from the ~~parkway~~ waterfront roadway system to

upland neighborhoods are proposed along connecting routes, including Oak, Lake Merritt Channel, 2nd Street to 3rd Street, Fifth Street and Fifth Ave, Fruitvale, and Alameda Avenue to High Street, as well as the grid of streets in the Jack London District.

Section III: District Recommendations

Pages 103-122

~~San Antonio-Fruitvale~~~~Central Estuary District~~ Central Estuary District

LAND USE

The Estuary Policy Plan's land use policies for the ~~San Antonio-Fruitvale~~ Central Estuary District are intended to establish a more compatible pattern of land uses that supports economic development, and at the same time enhance neighborhood amenities. The waterfront is a feature which binds disparate activities and provides a ~~needed~~ destination within these neighborhoods. Land use policies reinforce access to the waterfront, while promoting opportunities for neighborhood preservation and enhancement. Emphasis should be put on the reuse of existing structures of historic value and architectural significance.

For ease of discussion, the ~~San Antonio-Fruitvale~~ Central Estuary District has been subdivided into ~~8 12~~ 10 sub-districts. Land use policies for the ~~San Antonio-Fruitvale~~ Central Estuary ~~District~~ sub-districts are presented as follows:

Embarcadero Cove

Policy ~~SAF-~~CE-1: Encourage the development of water-oriented commercial uses within Embarcadero Cove.

Embarcadero Cove is bounded by the Ninth Avenue Terminal on the west, the Livingston Street pier on the east, and the Embarcadero. It is defined by the unique geography of a small bay, with an indented shoreline tracing a broad arc which surrounds Coast Guard Island. The combination of its distinctive shape and proximity to the freeway results in a very narrow and constricted shoreline, which averages about 200 feet in width to the Embarcadero. The narrow shoreline provides an opportunity for views to the water; this is the only area along the Estuary where the water can be seen from the freeway.

This is a highly visible portion of the waterfront, but it is narrow and constrained by the close proximity of the I-880 freeway. The waterfront orientation and constrained parcel depth make this area well suited for continued commercial-recreational and water-dependent uses.

New commercial uses within this sub-district ~~subarea~~ should build upon the existing character and create connections to the water's edge. Improvements that maximize accessibility and visibility of the shoreline should be incorporated into new development through boardwalks, walkways and points of public access.

~~Brooklyn Basin~~Food Industry Cluster

Policy ~~SAF-~~CE-2: Maintain the industrial character and role of ~~Brooklyn Basin~~the the Food Industry Cluster as a place for food processing and manufacturing, and retain light industrial uses.

~~Brooklyn Basin~~The Food Industry Cluster comprises the area south of Dennison Street and inland of ~~Embarcadero Cove~~Union Point Park, extending to ~~Diesel Street~~the Embarcadero and East 7th Street. ~~on the east.~~ This area is generally characterized by ~~a mix of uses: offices housed in both mid-size 1970 buildings and remodeled Victorian-style houses, restaurants, a school, artist studios,~~ light industrial and service uses, and larger scale food processing and food warehousing/distribution operations.

Food processing is a major source of employment in this portion of the waterfront, with some 450 ~~00~~ individuals many in skilled positions. Within Oakland, relatively few sectors, particularly in new small to mid-sized companies, have generated a comparable level of employment. Significant activity is continuing within this sector of the economy, particularly in the area of niche/specialty markets.

~~Brooklyn Basin~~The Food Industry Cluster is a place where manufacturing and food processing/distribution should be encouraged, both for incubator businesses as well as for established and growing concerns. While food processing and manufacturing/distribution continue to dominate uses within the area, existing light industrial uses should be maintained as well.

Mixed-Use Triangle

Policy ~~SAF-~~CE-2.1: Encourage development of compatible infill office, support commercial, multi-family residential, ~~and~~ institutional, and light manufacturing uses.

The Mixed-Use Triangle, bounded by the Embarcadero, Dennison Street and ~~the freeway~~Highway 880, ~~Brooklyn Basin also~~ includes a mix of uses: offices housed in both mid-size 1970s buildings and remodeled Victorian-style houses, restaurants, artist studios, educational, office, and commercial uses. North of Dennison and along the waterfront, the pattern of land uses is relatively fine-grained, with some older structures and smaller increments of development oriented to the street. Additional adaptive reuse, and new educational, office and commercial uses should be encouraged, as well as ~~the possibility for~~multi-family residential and work/live units, ~~or adaptive reuse,~~ where these uses ~~would result in the rehabilitation of existing structures and where they~~ would not create land use conflicts with existing industrial activities.

Con Agra

Policy ~~SAF-~~CE-3: ~~Encourage~~ Allow heavy industry in the vicinity of the Con-Agra plant to continue, while providing for the transition to a mix of new uses.

A portion of the ~~Fruitvale neighborhood~~ Central Estuary District located between Diesel and the Park Street Bridge and south of 29th Street, is an area that is primarily in heavy industrial use.

It is dominated by the 11-acre Con-Agra facility, which mills grain for flour that in distributed throughout the Bay area and Northern California.

~~Right Away Ready Mix~~Cemex and ~~Lone Star, Inc., sand and gravel operations~~Star Marine~~,~~ are two other large operators immediately adjacent to the Con-Agra facility.

While the area historically attracted construction-related uses because of barge access via the Estuary, these business operations remain in the area today largely because of its central location and good freeway accessibility, and because of investments in existing facilities. Nevertheless, Con-Agra has its own pier, and other companies maintain direct water access that could be used again if ~~in~~ economic and market conditions change.

It is recognized, however, that market forces may go in a different direction as well, making these sites functionally obsolete and difficult to maintain. If this comes about, the City should be prepared t o promote new uses for these valuable waterfront sites.

The area surrounding and including Con-Agra has long been in heavy industrial use related to the agricultural/food and construction/transportation sectors of the economy. It is not the intention of the *Estuary Policy Plan* to suggest displacement of these activities. Above all, this policy is intended to convey the importance of maintaining these labor-intensive industrial operations for as long as it is feasible for them to stay.

However, it is also recognized that some of these companies may wish to relocate on their own accord. In that event, new uses should be encouraged that build on the unique qualities of the waterfront location and promote public access to the Estuary shore and transportation access through the site.

~~SAF-~~CE-3.1: Initiate more specific planning of the entire Con-Agra area, if and when industrial uses phase out of the area.

The Con-Agra reach of the waterfront, although composed of different businesses and ownerships, should be planned as an integral unit to create the most positive effect and the optimal relationship with the Estuary. ~~A Central Estuary Specific Plan or Implementation Guide should be prepared prior to development. Because the area is within the coliseum Redevelopment Area, redevelopment tools should be considered to facilitate development.~~

Planning should be based on the need to gradually transform the uses and intensities from heavy industrial to a mixture of commercial, light industrial, and residential uses. It should account for the need to maintain the operations of these businesses while planning and redevelopment activities are underway. ~~Redevelopment-oriented~~ Future ~~property~~ development planning should incorporate the following principles:

~~SAF-~~CE-3.2: Redevelop the area with a mixture of waterfront-oriented residential and /or commercial activities, which are compatible with the scale and character of surrounding areas.

New uses that are compatible with the public nature of the waterfront and with the adjacent ~~Kennedy Tract~~ Jingletown/Elmwood residential neighborhood should be encouraged in this area, if and when industrial uses phase out.

Specific land uses which should be encouraged include residential, retail, restaurant, office, research and development, and light industrial uses that are configured to complement the waterfront orientation of the site.

New uses should be developed in a manner consistent with the surrounding character and scale of the area. Building mass, height, and all other design aspects should be subject to standards developed in conjunction with the preparation of a more specific development plan. Parking should be screened from view or contained within new buildings.

~~SAF-~~CE-3.3: Provide for strong links to surrounding areas, and orient new development to the water.

Development should be configured to provide at least two points of public access to the shoreline, and view corridors from Kennedy Street to the Estuary.

A publicly accessible and continuous waterfront open space should be developed along the shoreline. This open space should also be visible and accessible from Kennedy Street and if possible consider bicycle/pedestrian connection to the City of Alameda.

~~Kennedy Tract~~Jingletown/Elmwood

Policy ~~SAF-~~CE-4: Encourage preservation and expansion of the affordable residential neighborhood in the ~~Kennedy Tract~~Jingletown/Elmwood sub-district.

The ~~Kennedy Tract~~Jingletown/Elmwood neighborhood ~~district~~ is a unique sub-district ~~subarea~~ within the ~~San Antonio/Fruitvale District~~Central Estuary. It is a remnant of a once-more-cohesive urban neighborhood extending from Oakland into Alameda. Today, the area is predominantly occupied by a mix of residential, warehousing and service-oriented uses. ~~that have little relationship with the Estuary.~~

~~Because large, old industrial structures line the waterfront access and visibility to the Estuary is limited to the ends of two streets, Derby and Lancaster. Several of these structures appear to be only marginally used for storage, warehousing and repair. Several are vacant or underutilized, and in disrepair.~~With recent development and new Bay Trail connections, waterfront access and visibility has increased significantly. The Glascock Lofts and Signature Properties developments include Bay Trail segments and access points, and a Bay Trail segment has been completed adjacent to the Oakland Museum Women's Board White Elephant warehouse. The Derby and Lancaster Street overlooks have also been improved.

Currently, there are several hundred housing units within the Jingletown/Elmwood, including work/live spaces in renovated warehouses as well as single-family bungalows, ~~and~~ houses and more recently developed multi-family housing. In addition to this residential development, there are a number of smaller scale industrial and commercial uses, creating a one-of-a-kind neighborhood.

The housing that exists in this area should be maintained, reinforced and promoted, despite the preponderance of non-residential uses. Special efforts should be undertaken to reinforce the integrity of the residential history of the sub-district.

~~SAF-~~CE-4.1: Provide for a mixture of compatible uses with emphasis on a variety of affordable housing types, while maintaining the area's character of small scale buildings.

A mixture of residential, work/live, light industrial and neighborhood-serving uses should be maintained in the future, with an emphasis on affordability, livability, and an enhanced relationship with the Estuary.

To maintain the attractive, small-scale character of the area, buildings should be constructed to complement the existing scale and massing of existing sites. Parcel size should not exceed the predominant pattern of existing parcels.

Owens-Brockway

Policy ~~SAF-~~CE-5: Allow ~~Retain~~ the existing industrial use of the Owens-Brockway site.
The Owens-Brockway site consists of approximately 28 acres of land devoted entirely to the business of glass recycling and manufacturing. ~~Owens-Brockway is one of the largest private employers in Oakland, currently supporting almost 800 jobs.~~ These operations are expected to remain viable ~~in~~ for the foreseeable~~the~~ future.

The company should be supported and encouraged to remain and expand.

~~SAF-~~CE-5.1: Improve the compatibility between industrial and residential uses, and enhance the relationship of the Owens-Brockway plant with the waterfront.
Improvements along the edges of the Owens-Brockway plant should be undertaken to establish a more positive relationship with surrounding uses, including the neighborhood and the waterfront.

More specifically, a landscaped street edge on Fruitvale Avenue and ~~the proposed Estuary Parkway~~ Alameda Avenue should be developed to create a more attractive public environment around the plant. Measures such as landscape sound barriers should be investigated to reduce noise and visual conflicts with single-family houses along Elmwood Avenue.

~~42nd Street and High Street~~High Street Retail Area and Warehouse Wedge

Policy ~~SAF-~~CE-6: Encourage the reuse of existing warehouse properties south of Alameda Avenue and West of High Street for high-quality retail uses that complement adjacent commercial uses.
The ~~Super K-Mart~~Home Depot, on a former cannery site, is a major presence within this sub-district, ~~subarea,~~ benefiting from its proximity to and visibility from the freeway and accessibility to the nearby populations in Oakland and Alameda.

On the east side of Alameda Avenue, the Brinks warehouse and a cluster of small-scale light industrial uses and warehouses are located ~~ion~~ along the Estuary, impeding public access opportunities. While Bay Trail segments have been completed along some of these uses, a portion of the waterfront remains inaccessible. Public access opportunities should be pursued over time along the shoreline.

~~SAF-~~CE-6.1: Provide for new commercial activities adjacent to the 42nd Street interchange.
At the 42nd Street interchange, there is the opportunity for the expansion and development of new commercial activities that are oriented to both regional and local markets. Commercial development and intensification of this area should be pursued.

Specific uses that should be encouraged in this area include region-serving retail, office, general commercial, and light industrial. ~~Generous landscaped setbacks~~Street-facing retail uses along High Street, and landscaping and streetscape improvements should be incorporated ~~around~~ into all new development, subject to development standards and design guidelines developed for the Central Estuary Area.

Tidewater ~~East of High Street~~

Policy ~~SAF-~~CE-7: ~~East of High Street~~North of Tidewater Avenue, maintain existing viable industrial and service-oriented uses, and encourage the intensification of underutilized and vacant properties.

This portion of the ~~San Antonio/Fruitvale~~ Central Estuary District functions as a service support area, with links to the adjacent Coliseum area. It supports a number of different types of uses, including wholesale and retail businesses, container storage, and smaller industrial uses. In addition, Pacific Gas & Electric and East Bay Municipal Utility District (EBMUD) have service facilities within this area.

In areas ~~both~~ north ~~and south~~ of Tidewater Avenue, current uses and activities should be maintained and encouraged. However, there are opportunities to intensify underutilized sites, now ~~occupied by rail spurs or~~ used for equipment and container storage. These sites should be targeted for redevelopment as industrial and service-oriented uses, which would contribute to the overall viability of the area.

~~SAF-~~CE-7.1: South of Tidewater Avenue, provide for continued industrial use, but also encourage new research and development and light industrial activities which are compatible with the adjacent EBMUD Oakport Facility and EBRPD's Martin Luther King Jr. Regional Shoreline Park.

Economic development objectives for this sub-district ~~area~~ can be realized by deemphasizing service, storage and heavy industry and focusing more on employment-intensive uses that are more complementary with the public nature of the waterfront.

This area is unique in that it adjoins Martin Luther King Jr. Regional Shoreline, one of the larger assemblies of waterfront open space within the Estuary. The East Bay Regional Parks District (EBRPD) ~~plans to~~has continue~~s~~d to develop the MLK Regional Shoreline adjacent to and along both sides of East Creek, including the Tidewater Aquatic Center completed in 2009. EBRPD's parks and open spaces represent a valuable resource for the city—one that should be reinforced appropriately by adjacent development.

At the same time, the nearby ~~EBMUD has expansion plans. The~~ Oakport Facility is EBMUD's primary infrastructure support base and maintenance center, serving the Estuary area and the city as a whole.

Successful development will require an effort to balance competing objectives brought about by the proximity of the sites to regional park and utility facilities. (See Policy ~~SAF-~~CE-7.2)

~~SAF-~~CE-7.2: Initiate more specific planning of the area south of Tidewater Avenue[p1]**.**

The area ~~East~~ east of High Street and South of Tidewater Avenue should be comprehensively planned to ensure that all objectives are met. With the preparation of an Implementation Guide for the Central Estuary, this goal of the Estuary Policy Plan to plan for the area east of High Street and south of Tidewater Avenue has been achieved. ~~A plan should be prepared prior to development. This goal of the Estuary Policy Plan to plan for the area east of High Street and south of Tidewater Avenue has been achieved through the preparation of an Implementation Guide for the Central Estuary.~~

~~Because the area is within the Coliseum Redevelopment Area, redevelopment tools should be considered to facilitate development.~~

Planning for the area south of Tidewater has been ~~should be~~ based on the need to infuse the area with a ~~livelier and~~ more intense mix of office, R&D, commercial, and light industrial uses. It ~~should~~ accounts for East Bay Municipal Utility District's (EBMUD's) expansion needs, and takes special consideration of East Bay Regional Park District's (EBRPD's) plans for MLK Regional Shoreline Park, and the Bay Conservation Development Commission's (BCDC's) 100' shoreline band, which will require that the shoreline be used ~~exclusively~~ for recreational purposes.

~~This goal of the Estuary Policy Plan has been achieved through the preparation of an Implementation Guide for the Central Estuary.~~

As this area redevelops, publicly accessible open space should be created with an emphasis on educational and interpretive experiences, including wildlife habitat in lowland or marshy areas and the development of ~~active sport and~~ recreation ~~fields~~ facilities in the uplands.

SHORELINE ACCESS & PUBLIC SPACES

Compared to other areas of the Estuary, the ~~San Antonio/Fruitvale~~ Central Estuary District appears to have a relatively large supply of open space. Although there are several opportunities to approach and enjoy the shoreline, much of the existing open space is not highly utilized, relates poorly to its surroundings, and is generally fragmented and discontinuous.

The Martin Luther King, Jr. Regional Shoreline, which occupies approximately 22 acres north of Damon Slough, is a regional facility which is the primary waterfront recreational asset in the area. The Bay Trail, which is planned to ultimately connect around the entire bay shoreline, enters the study area at 66th Avenue, but abruptly ends approximately 7,000 feet westward. At the western end of the ~~San Antonio/Fruitvale~~ Central Estuary District, within Embarcadero Cove, there is a series of small public access improvements that were built as part of development projects, but these are also very limited in extent.

The access and open space policies for this district emphasize the continuation of a cohesive and interrelated waterfront system advocated by the previous chapters of this plan.

Policy ~~SAF-~~CE-8: Develop a continuously accessible shoreline, extending from Ninth Avenue to Damon Slough.

A continuous system of public open space and connecting networks to inland areas should be completed within this reach of the Estuary, extending from Ninth Avenue to Damon Slough. The system should link the Martin Luther King Jr. Regional Shoreline with the other elements of the waterfront system of open spaces proposed by this plan.

~~SAF-~~CE-8.1: Extend the Bay Trail from Embarcadero Cove.

The Bay Trail should be incorporated as part of the continuous open space system along the water's edge. Gaps in the trail should be filled in, so as to achieve the continuity of the trail and provide better bicycle/pedestrian access to the expanded MLK Shoreline (See Policy ~~SAF-~~CE-8.3).

While the developed portion of the Bay Trail currently combines both pedestrian and bicycle movement, it is recommended that separate bicycle and pedestrian paths be developed in other areas, with the pedestrian movement adjacent to the shoreline edge and the bicycle lane on the inland side of the open space. At each of the bridges, special provisions should be made to ensure continuity along the shoreline.

~~SAF-~~CE-8.2: Develop a major new public park at Union Point.
With the construction of Union Point Park in 2005, this objective of the Estuary Policy Plan to develop a ~~A~~ new park ~~should be developed~~ between Dennison Street and the existing Con-Agra facility, south of the Embarcadero at Union Point, has been met. ~~This objective has been met, following a planning process under the auspices of the Unity Council, the University of California, the Trust for Public Lands, the Port of Oakland, and the Oakland Parks and Recreation Division.~~ The nine-acre Union Point Ppark is intended to serve the adjacent ~~San Antonio and Fruitvale~~ neighborhoods, as well as provide an important citywide amenity along the Estuary.

The design of the park ~~should~~ provides for flexible use, including passive recreational activities as well as field sports and activities that take advantage of the water. ~~A site of approximately two acres should be reserved for the Cal Crew boathouse on the eastern portion of the park.~~ A continuous pedestrian promenade ~~should be~~ is provided along the shoreline edge. A Class I or II bicycle path ~~should be~~ is incorporated within the park, where it can be separated form the Embarcadero. (See Policy ~~SAF~~CE-9).

~~**It should be noted that early planning for this park is already underway, under the auspices of the Spanish Speaking Unity Council, he University of California, the Trust for Public Lands, the Port of Oakland, and the Oakland Parks and Recreation Division.**~~

~~SAF-~~CE-8.3: Extend the Martin Luther King, Jr. Regional Shoreline.
The MLK Regional Shoreline should be extended from High Street to Damon Slough. Within this area, the existing public open space between the East Creek and Damon sloughs should be expanded westward to include existing industrial properties owned by EBRPD.

EBRPD's planning objectives identify this portion of the Estuary as an important component of the regional shoreline park system, as well as a potential open space resource for the adjacent Central East Oakland and Coliseum neighborhoods. It should be designed to preserve the significant wetlands between the Damon and East Creek sloughs. In addition, extending Tidewater Avenue across the East Creek Slough to the 66th Avenue interchange would significantly improve visibility and accessibility to the park.

Areas on the shoreline side of the railroad tracks should be subject to a planning effort, coordinated among the City of Oakland, EBMUD, and the EBRPD, to address EBMUD expansion needs and the extension of the shoreline park. (See Policy ~~SAF-~~CE-7.2).

REGIONAL CIRCULATION & LOCAL STREET IMPROVEMENTS

Objectives for regional circulation and local street networks recognize the importance of circulation and access to support the objectives for land use, public access and public spaces. These add specificity to a number of objectives reflected in the General Plan Land Use & Transportation Element and the Bicycle & Pedestrian Master Plan.

~~**A key objective of the Estuary Policy Plan is to enhance the continuity of movement along the shoreline in order to enhance public access and the public perception of the waterfront as a citywide resource. To accomplish this objective in the San Antonio-Fruitvale District, the circulation policies recommend a basic restructuring of the modes of circulation.**~~

Policy ~~SAF-~~CE-9: Provide for ~~a~~ continuous ~~Embarcadero Parkway~~ street connections from Ninth Avenue to Damon Slough.

Consistent with ~~recommendations of the *Estuary Policy Plan* in other subdistricts~~ the Central Estuary Implementation Guide Appendix A, Recommendations for Future Transportation Projects, as individual properties are redeveloped, ~~the Embarcadero Parkway should be a continuous parkway,~~continuous street connections should be developed to parallel the entire shoreline; ultimately extending from Broadway to 66th Avenue. In the Central Estuary, ~~it~~ the Embarcadero should be upgraded between Ninth Avenue and Kennedy Street, and Ford Street should be extended via a new right-of-way to connect to ~~between Kennedy Street and High Street~~Fruitvale Avenue. ~~, to connect directly into Tidewater Avenue.~~ If the Owens Brockway site is redeveloped, one or more street connections between Fruitvale Avenue and High Street should be created, with at least one new street connecting directly to Tidewater Avenue.

The ~~alignment of the proposed parkway~~proposed street connection points (see ~~Figure 19~~Appendix A) ~~is~~ are illustrative only. Specific alignments (and their potential impacts on adjacent property owners) should be evaluated through a coordinated planning effort involving property owners, the City of Oakland, and the Port.

The ~~Embarcadero Parkway~~ streets adjacent to or paralleling the waterfront should ~~be developed as a recreational street, providing~~ provide access to the diverse waterfront experiences that exist in the Central Estuary. ~~It~~ They should be designed to promote slow-moving vehicular access to the waterfront,~~; limited to two traffic lanes,~~ and provide continuous sidewalks. ~~and one-sided parking (in bays). It~~ They should not be designed as ~~a~~ through-movement traffic carriers, or frontage-road relievers for I-880.

In addition, traffic management programs ~~that prohibit through movement of trucks between 23rd and Fruitvale Avenues~~ should be developed to protect the Jingletown/Elmwood neighborhood against unnecessary truck traffic.

~~SAF-~~CE-9.1: ~~In conjunction with the extension and enhancements of the Embarcadero Parkway, P~~provide a continuous bikeway from Ninth Avenue to Damon Slough.

The Bay Trail should be extended and completed in this reach. ~~In developing the Embarcadero Parkway~~Also, as streets are created or improved, provisions should be made to accommodate a continuous pedestrian trail and bikeway paralleling the ~~parkway~~ shoreline.

~~It~~ A bikeway should be extended along the shoreline, ~~adjacent to the Con-Agra site and follow the new Embarcadero Parkway, providing a separated bike path along the shoreline. East of High Street, it should follow the shoreline,~~ ultimately connecting to the existing trail system in the MLK Regional Shoreline.

Policy ~~SAF-~~CE-10: Work with Caltrans, BART, and other transportation agencies to upgrade connecting routes between inland neighborhoods, I-880, and local streets, to enhance East Oakland access to the waterfront.

This segment of the I-880 freeway, between 66th Avenue and Oak Street, is substandard, with partial interchanges spaced at random intervals. Freeway on and off-ramps are difficult to find, and have no strong relationship with arterial roadways. As part of the I-880 Corridor Improvement Project, some freeway ramps are being reconfigured to improve operations and reduce impacts on adjacent neighborhoods.

As part of ~~the seismic upgrades to the I-880 freeway being undertaken by Caltrans,~~future projects, the freeway ramps should be ~~reconfigured~~ modified in a manner that complements and reinforces the land use and open space objectives for the area and provides a more legible circulation system. All should be investigated with Caltrans, to test the feasibility of redesigning the interchanges, and to insure that local access needs are also being addressed in Caltrans' upgrade efforts.

~~SAF-~~CE-10.1: If feasible, construct a new full-movement interchange at 23rd Avenue, with direct linkages to the Park Avenue Bridge.

The upcoming I-880 Operational and Safety Improvements at 29th/23rd Avenue project will replace the existing overcrossings at both 23rd and 29th Avenues, and reconfigure the on and off-ramps serving northbound I-880. While this project does not create a full-movement interchange at 23rd Avenue, the project will provide various local circulation and safety benefits and will reduce congestion on I-880 by improving the spacing of freeway ramps.

~~The 23rd Avenue Bridge should be reconstructed to create a full-movement interchange, which could include retention of the existing eastbound off-ramp to Kennedy Street, reconstruction of the westbound on and off-ramps at 23rd Avenue, and a new eastbound on-ramp at 23rd Avenue and the Embarcadero. Traffic circulating between Alameda's Park Street Bridge and I-880 would utilize 23rd Avenue and Kennedy Street, providing more direct access and reducing regional traffic on adjacent local streets, including 29th Avenue.~~

~~SAF-~~CE-10.2: If feasible, construct an urban diamond interchange at 42nd Avenue, with frontage road connections to Fruitvale.

~~This goal has been partially met. The~~ With the seismic upgrade of the I-880 bridge over High Street that has created an urban diamond interchange with two new at-grade intersections at 42nd Avenue and frontage roads connecting to High Street, this goal has been partially met. The southbound off-ramp to Fruitvale Avenue remains. No extension of the frontage roads north from 42nd Avenue to Fruitvale Avenue is currently planned, but could be pursued in the future. The current project involves the extension of 42nd Avenue south, connecting to Alameda Avenue.

~~In order to provide efficient regional circulation to the freeway from Oakland and Alameda, a diamond interchange should be investigated at 42nd Avenue, connected by frontage roads parallel with the freeway corridor to Fruitvale Avenue. The existing ramps at Fruitvale Avenue and at High Street should be replaced with these improvements.~~

~~High Street south of I-880 should be realigned to connect directly to the 42nd Avenue interchange, with the segment north of the freeway serving as a local roadway connection to the waterfront area.~~

~~SAF-~~CE-10.3: Enhance 29th Avenue as a local connecting street.
The planned project to reconstruct the overcrossings at 23rd and 29th Avenues will ~~still~~ utilize 29th Avenue as a partial freeway interchange. The new overcrossing at 29th Avenue will consist of three travel lanes, include wider sidewalks, and feature an off-ramp that will serve northbound traffic exiting I-880. The off-ramp will terminate at a new intersection on the overcrossing. The existing northbound off-ramp to East 8th Street/East 9th Street will be closed when the new off-ramp is constructed. This will improve circulation and reduce through traffic on local streets. The existing southbound on-ramp from 29th Avenue on the west side of the freeway will remain in operation. While 29th Avenue will still serve as a partial freeway interchange, the new overcrossing and ramp configuration will have local benefits.

~~With regional traffic between the Park Avenue Bridge and the I-880 freeway diverted to the Kennedy and 23rd Avenue corridors, 29th Avenue should be converted to a local street connecting the San Antonio, Fruitvale and Jingletown neighborhoods. The street should be improved to provide enhanced bicycle and pedestrian access across the freeway.~~

~~SAF-~~CE-10.4: Improve the Fruitvale Avenue corridor as a pedestrian and transit link between the waterfront and the Fruitvale BART transit village.
As industries that require rail spur access relocate or convert entirely to trucking, the existing rail corridor along Fruitvale Avenue should ~~can~~ be converted to provide stronger pedestrian, transit or bicycle links between the ~~planned~~ Fruitvale BART transit village ~~at the Fruitvale station~~ and the waterfront. In addition, the existing rail bridge parallel with the Fruitvale Avenue Bridge to Alameda should be investigated for transit and pedestrian/bicycle use.

The Fruitvale Avenue corridor should be improved to accommodate and enhance pedestrian circulation along both sides of the street. Class II bicycle lanes should be provided along Fruitvale Avenue to the waterfront and BART. The potential for ~~rail~~ high-capacity transit service connecting Alameda and the Estuary with BART service should also be considered.

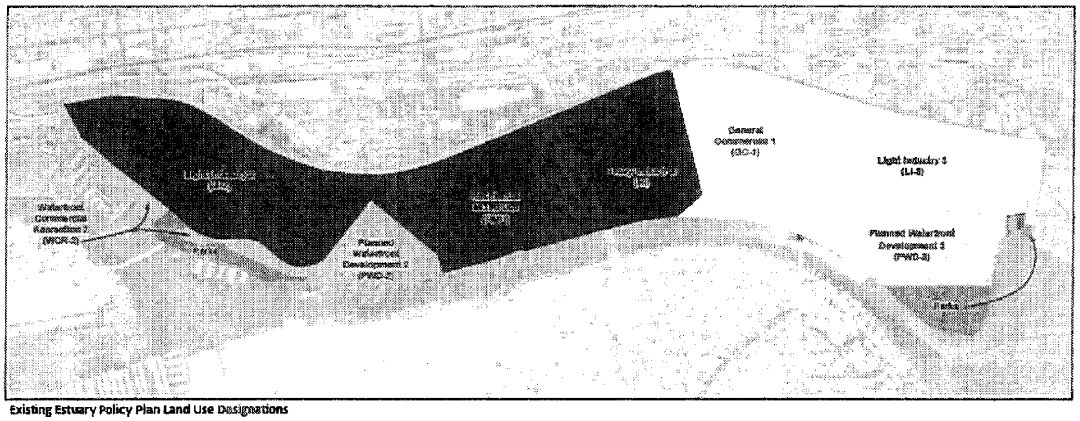
~~SAF-~~CE-10.5: Enhance High Street as a local connecting street.
~~With regional traffic diverted to 42nd Avenue north of I-880,~~ High Street should be enhanced with improved pedestrian and bicycle facilities. As part of redevelopment of the area south of I-880, pedestrian and bicycle facilities should also be extended along High Street to the shoreline trail and bridge to Alameda.

CE-10.6: If feasible, construct a new connection bridge around 50th Avenue.
The new bridge would cross I-880 and provide a waterfront connection between the east-side neighborhoods and the estuary area.

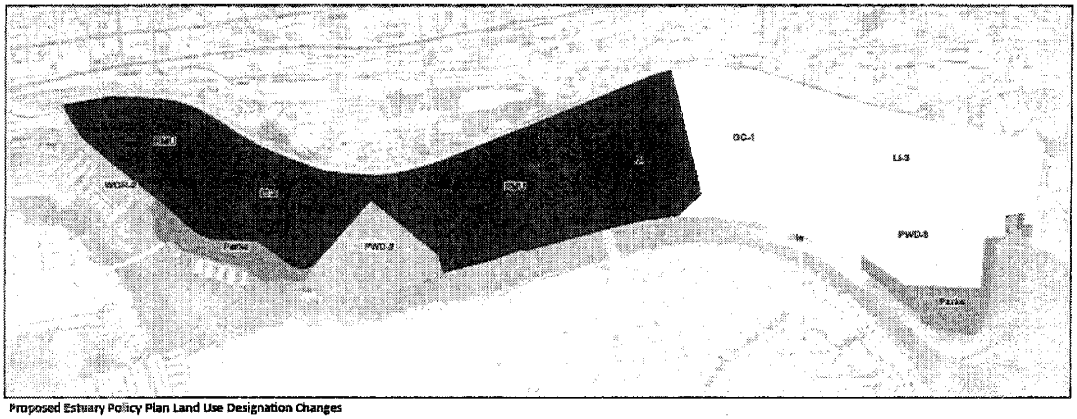
Section IV: Moving Forward

Pages 130-131

Figure IV-1. Land Use Classifications



Existing Estuary Policy Plan Land Use Designations



Proposed Estuary Policy Plan Land Use Designation Changes

Legend

EPP Land Use

- General Commercial 1 (GC-1)
- Heavy Industrial (HI)
- Light Industry 2 (LI-2)
- Light Industry 3 (LI-3)
- Parks
- Planned Waterfront Dev 2 (PWD-2)
- Planned Waterfront Dev 3 (PWD-3)
- Residential Mixed Use (RMU)
- Waterfront Commercial Rec 2 (WCR-2)

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Summary of Estuary Policy Plan Land Use Classifications

Land Use Classification	Intent	Desired Character	Maximum Intensity
PWD-1: Planned Waterfront Development (Estuary Park to 9th Ave)	Provide for the transformation of maritime and marine industrial uses into a public-oriented waterfront district that encourages significant public access and open space opportunities. Encourage a unique mix of light industrial, manufacturing, artist lofts and workshops, hotel, commercial recreation, cultural uses, and water-oriented uses that complement the recreational and open space character of the waterfront.	Future development in this area should be primarily public recreational uses including boating clubs, community and cultural uses, parks, and public open spaces; with primary uses including light industrial, manufacturing, assembly, artist workshops, cultural, work/live studios, offices, neighborhood commercial, and restaurants; and including hotel, conference, restaurant, commercial-recreational, and cultural. Water uses also included.	FAR of 1.0 and 30 units per gross acre for privately owned parcels. Average FAR over entire area of 1.0. Average 30 units per gross acre.
WCR-2 : Waterfront Commercial Recreation (Embarcadero Cove~~/Union Point~~)	Encourage a mix of hotel, commercial-recreational and water-oriented uses that complement the recreation and open space character of the waterfront, enhance public access, and take advantage of highway visibility.	Future development in this area should be primarily hotel, restaurant, retail, marine services and boat repair, boat sales, upper level office, parks and public open paces with water uses	Average FAR over entire area of ~~1.0~~2.0

Land Use Classification	Intent	Desired Character	Maximum Intensity
~~LI-2: Light Industrial (Brooklyn Basin)~~ RMU: Residential Mixed Use (Mixed Use Triangle)	~~Maintain light industrial, food processing and manufacturing uses, allowing a limited amount of office, residential, institutional or commercial uses.~~ Create, maintain and enhance areas of the Central Estuary that have a mix of industrial and heavy commercial activities. Higher density residential development is also appropriate in this zone.	~~Future development in this area should be primarily light industrial, food processing, wholesale, distribution, work/live, residential, parks and public open spaces~~ Additional educational, office and commercial uses should be encouraged, as well as multi-family residential and work/live units or adaptive reuse, where these uses would not create land use conflicts with existing industrial activities.	FAR of ~~2.0~~ 3.0 per parcel, ~~30~~ 60 units per gross acre.
LI-2 : Light Industrial (~~Brooklyn Basin~~Food Industry Cluster)	Maintain light industrial, food processing and manufacturing uses, allowing a limited amount of office, residential, institutional or commercial uses.	Future development in this area should be primarily light industrial, food processing, wholesale, distribution, work/live, residential, parks and public open spaces	FAR of ~~2.0~~3.0 per parcel, 30 units per gross acre.
PWD-2 : Planned Waterfront Development (Con-Agra/~~Lone Star/Ready Mix~~Cemex/Star Marine)	Provide for the continuation of existing industrial uses, allowing for their future transition to a higher density mix of urban uses if the existing uses prove to be no longer viable in this area.	Future development in this area should be primarily industrial, manufacturing in nature, and other uses that support the existing industrial uses.	FAR of 2.0 per parcel. 40 units per gross acre.
RMU: Residential Mixed Use (~~Kennedy Tract~~Jingletown/Elmwood)	Enhance and strengthen the viability and attractiveness of the ~~Kennedy Tract~~Jingletown/Elmwood as a mixed use residential neighborhood of low to medium-density housing within a fine-grained fabric of commercial and light industrial uses.	Future development in this area should be primarily residential, work/live, light industrial, neighborhood-serving retail, offices, public parks, and open spaces.	FAR of ~~1.0~~3.0 per parcel. ~~40~~ 60 units per gross acre.

Land Use Classification	Intent	Desired Character	Maximum Intensity
HI: Heavy Industrial (Owens-Brockway)	Allow ~~Retain~~ the existing glass recycling and manufacturing functions within this area, and promote an enhanced relationship with the adjoining ~~Kennedy Tract~~Jingletown/Elmwood neighborhood, Fruitvale Avenue, and the waterfront	Future development in this area should be primarily heavy industrial uses.	FAR of ~~0.75~~2.0 per parcel.
GC-1: General Commercial (~~42nd/High Street/Super K-Mart~~High Street Retail Area and Warehouse Wedge)	Provide for the expansion of regional-serving retail and commercial uses that can benefit from freeway accessibility.	Future development in this area should be primarily retail, office, general commercial, hotel, light industrial, parks, and public open spaces.	FAR of ~~1.0~~3.0 per parcel.
LI-3: Light Industrial (~~East of High Street/North of Tidewater~~Tidewater North)	Maintain light industrial, wholesale/retail, manufacturing, and public utility uses while providing for enhancement of the waterfront environment.	Future development in this area should be primarily industrial, manufacturing, commercial, and a variety of other uses.	FAR of ~~0.5~~2.0 per parcel.
PWD-3: Planned Waterfront District (~~East of High Street/South of Tidewater~~Tidewater South)	Provide for the continuation of existing industrial uses on properties south of Tidewater Avenue, allowing for their transition to light industrial, research and development, and office uses in a waterfront business park setting.	Future development in this area should be primarily industrial, manufacturing, commercial, office, research and development, public parks, and open spaces.	FAR of ~~0.5~~ 3.0 per parcel.
GC-2: General Commercial (from Oakport site to 66th Ave)	Provide for commercial or light industrial uses that are sensitive to the area's proximity to the Martin Luther King Jr. Shoreline Park, the I-880, 66th Avenue, sports fields, and adjacent industrial facilities.	Future development should be primarily light industrial, commercial, public utilities, park, or open space.	FAR of 1.0 per parcel.

Oakland Design Review Manual for the Central Estuary

Attachment F











JULY 2012

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Table of Contents

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1. Intent

1.0

The Central Estuary has served as part of Oakland's industrial employment base for over a century. More recent activity has seen another transformation of the area, in which artistic elements have brought in adaptive reuse, encouraged live-work uses and installed novel, decorative public art. This evolution came about specifically as the existing mix of industrial, warehousing, residential, and retail uses made the area inexpensive, and provided vacant buildings with large floor plates where artists could stretch their artistic muscles and have the freedom to insert their own custom manufacturing activities. The area is now seeing another transformation in which artisanal industries have followed the artistic path. The development of several open spaces and the extension of the Bay Trail have made the area more livable, and highlight one of the Central Estuary's defining characteristics, its adjacency to the waterfront.

In an effort to create a cohesive district out of the disparate neighborhoods, the following Central Estuary Design Guidelines (and separate zoning regulations) will be used to direct future development. The general intent of the design guidelines is to retain the eclectic mix of industrial, warehousing, residential, and retail uses that define the character of the area, while encouraging its on-going informal evolution into a unique set of sub-districts that also take advantage of and enhance the area's waterfront, its historic character, and the fine-grained fabric of streets that define much of the Central Estuary. The sub-districts are referred to in the CE Zoning District chapter as: *Embarcadero Cove, Mixed Use Triangle, Food Industry Cluster, Jingletown/Elmwood, ConAgra, Owens Brockway, High Street Retail, Warehouse Wedge, Tidewater North,* and *Tidewater South (see Figure 2.1).*

The Central Estuary Design Guidelines embody the Visions, Goals and Objectives of the Estuary Policy Plan and the Central Estuary Implementation Guide, which aim to retain, encourage and support:

- A diverse and vibrant mix of uses;
- A destination waterfront;
- Complete, safe and clear transportation connections; and
- Infrastructure to support development.

These guidelines define ways to minimize land use incompatibilities and their resulting impacts; guide appropriate employment-intensive and commercial development; and promote the enhancement of frontages along streets and the waterfront.

2. Applicability

Figure 2.1: Central Estuary sub-districts

The Central Estuary Design Guidelines are applicable to the area bound by I-880, the intersection of 16th Avenue and Embarcadero, the Estuary shoreline, and East Creek. The Central Estuary Design Guidelines are part of the Central Estuary Implementation Guide, which serves as a companion to the City's 1999 Estuary Policy Plan (EPP), and identifies steps to implement the EPP's policies.

The Central Estuary Design Guidelines shall apply to all projects in the applicable area requiring design review, as set forth in Chapter 17.136 of the Oakland Zoning Code.

The Central Estuary Design Guidelines have incorporated many of the existing guidelines contained in the HBX Design Guidelines Manual. These Central Estuary Design Guidelines shall supersede those in the HBX Design Guidelines Manual for the former HBX District located within the Central Estuary plan boundary, which is identified in the CE Zoning District chapter as the *Jingletown/Elmwood* sub-district.

2.1 Purpose of the Design Guidelines

These design guidelines supplement the regulations set out in the zoning districts for the Central Estuary, by providing further direction for project designs to meet the goals expressed for the character of new construction and alteration of existing facilities in the area. They highlight general considerations and offer examples, solutions, and techniques to address issues that may arise in the design process. These guidelines are not meant to supersede the regulations in the Municipal or Zoning Code. Conformance with these guidelines, and the design review criteria contained in Chapter 17.136 of the Oakland Zoning Code, is required to receive City approval for projects in the Central Estuary. Applicants may submit design proposals that deviate away from these guidelines, but must offer clear explanations that proposed solutions meet their intent.

2.2 How to Use these Guidelines

The Central Estuary Design Guidelines are intended to give residents, building designers, property owners, and business owners a clear guide to achieving development that improves the area's livability while retaining its diverse character. City staff will utilize these guidelines to determine project conformance in meeting the goals set for the Central Estuary.

3.0

3. Site Planning

Site Planning refers to the placement and relationship of buildings, open spaces, parking, and service areas on a site.

Projects in the Central Estuary will generally fall into one of two categories:

- Infill projects inserted into a recognizable context
- Projects that will set a new precedent

The design of infill projects should consider the discernible and predominant character of the area, which can include block size, lot size, massing, building height, and the context of existing uses. Projects that set a design precedent, which may occur on larger sites or in underutilized areas with few buildings, may deviate from the existing context to shape future development. For these projects, applicants should work closely with the City to ensure that the project appropriately responds to the future vision for the area, as defined in the Estuary Policy Plan, the Central Estuary Implementation Guide, and as further detailed in these guidelines.

3.1 Site Context

3.1

INTENT

Create a more cohesive development pattern.

Infill projects should account for the surrounding context. Smaller scaled lots and buildings dominate the Jingletown/Elmwood Area, which also falls under the CE-3 zone and new development should respect the compact feel of this part of the Central Estuary. The remaining land area is characterized by larger properties where new construction can set a precedent.

GUIDELINES

3.1.1 An infill project should not be designed in isolation when there is a discernable and predominant neighborhood development pattern along the block or across the street. A new building should respond to the desirable characteristics of the surrounding area based on its location within the Central Estuary. Characteristics may include neighboring block size, lot size, scale of buildings, massing and articulation, setbacks (front, side and rear), building placement, location of yards and windows, and use. See Figure 3.1.a.

3.1.2 Infill projects that span one block or more than one block should develop in distinct segments that reflect the scale of the neighboring blocks, lots and buildings. This is particularly important where smaller lot sizes predominate, such as in the Jingletown/Elmwood Area, Embarcadero Cove, the Mixed-Use Triangle, and the Food Industry Cluster, but are encouraged in other locations where a more pedestrian-oriented environment is desirable. See Figure 3.1.b.

- Projects spanning more than one block should be broken up by streets, pedestrian pass-throughs or open spaces.
- Projects spanning one or more blocks should orient buildings to address all sides of each block with active frontages.

ENCOURAGE

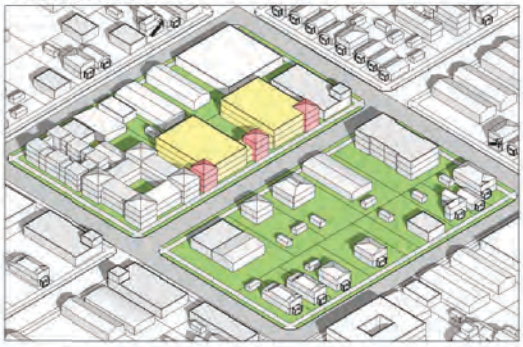


Figure 3.1.a: Projects on lots that are larger than neighboring lots should break up buildings into units that match the scale of existing neighboring buildings.

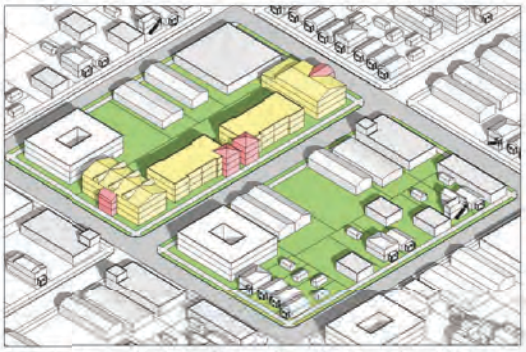


Figure 3.1.b: Orient buildings to different streets in order to break up the building into smaller segments as well as address all primary street frontages with the primary facade of the building.

Figure 3.1.c: New buildings that are similar in scale and character create a cohesive street frontage in the Jingletown neighborhood.

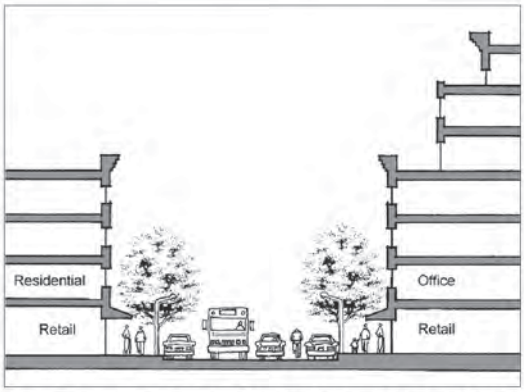


Figure 3.1.d: Disparate building scales that can result where a land use change occurs at a street can be harmonized by stepping back the facade of taller buildings.

3.1.3 To maintain a unified streetscape and a coherent sense of enclosure along a street with a recognizable positive context, both sides of a street should consist of buildings with complementary or comparable frontages (i.e., building length, height, massing, articulation, etc.). Taller buildings should be designed to step back their upper floors from the street frontage where they significantly exceed the height of buildings next door or across the street in order to harmonize building scales. See Figure 3.1.c and 3.1.d.

3.1.4 Projects that set a new precedent should determine the appropriate site plan and design in cooperation with the City to ensure that the envisioned development pattern is compatible with the surrounding area and the vision established for a given location in the Central Estuary.

3.2 Building Orientation

3.2

INTENT

Define and activate streets and public spaces with active and engaging building frontages.

Building orientation refers to the manner in which buildings and site amenities are sited on a lot and how buildings address adjacent outdoor spaces such as streets, open spaces, parking lots and yards.

Lot Frontage – The Building Orientation guidelines that follow provide guidance for two types of lot frontages, which determine the location and orientation of buildings and site amenities:

- Primary frontages
- Secondary frontages

Primary lot frontages address public spaces that will likely see the most pedestrian activity or serve as important gateways. The primary lot frontage is the most public frontage that is adjacent to the waterfront, public open spaces, and streets. The primary frontage should contain the primary building façade and main entrance.

Secondary lot frontages include those that front onto pedestrian passthroughs and secondary streets on corner lot conditions. Secondary frontages are less public spaces that see less activity than primary frontages. They may or may not be addressed by a building, and facades may not be as highly articulated. Corner lots or sites that encompass a block may have more than one primary frontage. Where primary and secondary frontages are unclear, applicants should work closely with the City to make a determination. See Figures 3.2.a and 3.2.b.

Building Frontage Types – These design guidelines also discuss the architectural design of four building frontage types that are appropriate for the Central Estuary. For standards for building frontage types refer to the CE zones. For further guidance on building frontage types, see the Building Design section of these design guidelines.

Figures 3.2.a and 3.2.b: Corner buildings should reflect their prominent location by directly addressing both streets they front. The building at top presents a clear primary frontage, but also provides a level of articulation on the secondary frontage. The building at the bottom shows a building that addresses both sides of the block with highly articulated primary frontages.

3.2

ENCOURAGE

Figure 3.2.c and 3.2.d: Punctuate corners with prominent building features such as main entries, stair towers or other architectural details.

GUIDELINES

General Guidelines

3.2.1 The primary frontage should be maximized by active building walls and addressed by the most active, articulated and public façade of a building.

3.2.2 The more active uses in a building should orient to the primary lot frontage. This includes storefronts, dining areas, lobbies, offices, living rooms, and the work portion of live-work and work-live units. More passive uses, such as parking lots and storage, should be relegated to the area of the lot generally away from the primary frontages or along secondary frontages.

3.2.3 Corner buildings should reflect their prominent location by directly addressing both streets they front. Where two streets are equally important, both streets should be considered as primary frontages unless a determination is made by the case planner and the Zoning Administrator to choose one as the primary frontage.

3.2.4 Sites that have primary lot frontages at opposite ends are encouraged to orient towards both frontages by:

- Breaking up a project into multiple buildings and orienting their primary frontages to address each lot frontage;
- Addressing both frontages with primary facades that contain multiple entrances to individual units;
- Planning and orienting interior uses to allow dual primary facades and entrances where each can address the frontages; or
- Creating interest on secondary facades with attractive massing and articulation.

3.2.5 Massing at street corners should visually define the space of the intersection. Prominent elements that are integral to the building, such as towers, chimneys, stairs, entries, etc.), can be used to create landmark features, which should be of an attractive and notable design. Any such elements should be well proportioned in relation to the average height of the building, other buildings at the intersection and the span of the intersection. See Figures 3.2.c and 3.2.d.

3.2.6 If buildings do not come directly up to street corners, buildings must form a comfortable and interesting space for the public to use, such as a plaza, outdoor seating area, or retail or building entrance.

Guidelines for Specific Uses

3.2.7 To the greatest extent possible, buildings containing warehousing, distribution and similar uses should front the street with a Public or Semi-Public Frontage type by placing more active uses such as offices, lunch rooms, conference rooms, etc. along the street. See Building Design guidelines and the individual zones for standards and guidelines on Frontage Types.

3.2.8 Orient residential buildings to lessen noise intrusion, with living space and outdoor spaces buffered from noise sources by the building mass.

3.2.9 Design units exposed to high noise levels with interior courtyards and patios that open into acoustically protected and shielded areas.

3.2.10 Waterfront buildings should create a public open space along the waterfront and treat it as a primary frontage. See Figure 3.2.e.

ENCOURAGE

Figure 3.2.e: The waterfront should be considered a primary frontage. Buildings should address the waterfront with active interior uses and primary entrances to the maximum extent feasible.

3.3 Setbacks

AVOID

Figure 3.3.a: New buildings should avoid breaking an established historic building setback line.

ENCOURAGE

Figure 3.3.b: Consistent setbacks allow space for a semi-public zone of stairs, porches and yards that provide a clear transition between the public space of the street and sidewalk, and the private spaces inside residences.

INTENT

Create a predictable rhythm along the street that can impart a sense of harmony, cohesion and enclosure through consistent setbacks.

A setback establishes the distance between buildings at the front, rear, and side property lines. The setback is one tool to protect privacy, buffer impacts and create interest where necessary.

Existing front setbacks in the Central Estuary can vary greatly, from building walls at the property line to deep setbacks to vacant lots; these inconsistencies often create a muddled presence along streets due to their extreme variation.

Front setbacks require careful consideration in all conditions as they are part of the public face of a project and can vary greatly in their purpose and appearance. Front setbacks can accommodate a transition zone for uses that require some privacy and buffer from public spaces. Where privacy is not an issue, setbacks can accommodate activity such as dining, seating, display and gathering space. Rear and side setbacks need careful consideration where adjacent use are incompatible.

GUIDELINES

General Guidelines

3.3.1 Where there is a discernible and predominant front or side setback along a street, new buildings should respect the surrounding context. This is particularly important for new development in the Jingletown/Elmwood area. See Figure 3.3.a.

3.3.2 Where there is no discernible and predominant front or side setback along a street, new buildings should provide a sufficient setback that allows for the applicable treatments presented below. Refer to the Frontage Types for additional guidelines.

3.3.3 Frontage onto streets should include a legible series of transitions from public to private space. Porches, stoops, forecourts, lobbies, awnings and stairs provide opportunities for an inviting transition as well as allow for social interactions and more "eyes on the street" to increase safety. See Figure 3.3.b.

3.3.4 Where industrial buildings abut residential uses, setbacks should be of a depth that ensures that industrial buildings do not overwhelm the residential use and that noise, odors, noxious fumes and other such impacts are of a sufficient distance to minimize their effect.

Guidelines for Specific Uses

3.3.5 A front setback should define residential frontages to allow for a transition space between the public sidewalk and the private living area. Residential setbacks should be generously landscaped to create interest and buffer living spaces. Refer to the Private Frontage Type for additional guidance.

3.3.6 Non-residential buildings that are set back from the front property line should create interest along the sidewalk that is appropriate for the context of the street. Architectural elements (e.g., awnings, arcades, etc.), planters, landscaping, outdoor display, active uses such as seating and dining, or other elements can be utilized to create engaging frontages along the street. Refer to the Public and Semi-Public Frontage Types for additional guidance.

3.3.7 Extensive blank wall frontage, such as on distribution, manufacturing and warehousing uses, should be set back from the street to allow for accompanying landscaping. Refer to the Façade Articulation – Architectural Detailing section and the Service Frontage Type for guidance.

3.4 Building Access Location

ENCOURAGE

Figure 3.4.a: Corners are important meeting points for pedestrians. Corner buildings should take advantage of this by siting main entrances at corners

Figures 3.4.b and 3.4.c: Where parking lots will be a main access point to a building, design parking lots to allow main entrances to also locate at the street or provide a secondary entrance at the parking lot.

INTENT

Locate main pedestrian entrances to directly address adjacent streets, the waterfront, public plazas, and open spaces.

Building entrances should be designed with an appropriate level of amenity and attractiveness for the intended use and user. Main entrances that directly address sidewalks and open spaces emphasize walking and bicycling by making buildings easily accessible to people using these modes of transportation, and even drivers are pedestrians once they leave their car. See the Building Access Design section under Building Design for further guidance.The inclusion of sidewalks, where they currently don't exist or are inadequate, will create a more attractive environment for walking and encourage on-street parking. In such cases, the location of entrances becomes essential in providing direction to persons approaching a building.

GUIDELINES

General Guidelines

3.4.1 The primary frontage of a building should contain the primary entrance(s) to the uses within the building. Secondary or more minor entrances may be located on secondary frontages along secondary streets, parking lots, alleys and pedestrian pass-throughs.

3.4.2 Primary entrances for multifamily, commercial, retail and industrial buildings are encouraged at important corners, where streets, the waterfront or plazas meet, to create definition at intersections. See Figure 3.4.a.

3.4.3 Building entrances should be directly connected (i.e., using the shortest practical path) to sidewalks, courtyards, pedestrian paths, walkways internal to the site from parking lots, pedestrian pass-throughs, transit stops, and public plazas and open spaces in areas of the Central Estuary where pedestrian activity is encouraged or will occur.

3.4.4 Increase natural surveillance and "eyes on the street" using Crime Prevention Through Environmental Design (CPTED) strategies such as locating doors/entrances and windows to look out on to streets and parking areas.

Guidelines for Specific Uses

3.4.5 Where the majority of visitors will access a building from the parking lot, locate building entrances so that they can address both the parking lot and the street. See Figure 3.4.b. and 3.4.c.

3.5 Off-Street Parking

INTENT

Locate and design off-street parking to minimize the presence of inactive frontages along streets and public open spaces.

The Central Estuary's industrial uses typically require a significant amount of surface area for auto and truck circulation and parking. Locating these areas away from public spaces is preferred. Where this is infeasible, vehicular spaces should be designed with attractive and engaging frontages that provide a high level of interest along streets, the waterfront, public plazas, and open spaces.

Pedestrian walkways should be clearly distinguished from vehicular circulation. This is particularly important in areas where these various travel modes intersect, such as at driveway entrances and exits, loading docks, and in parking lots. Design solutions should always be sought that can help the driver see and take responsibility for exercising caution. Installation of a buzzer or horn sound is not an acceptable solution, as this puts the onus on the pedestrian.

GUIDELINES

Parking Location – General Guidelines

3.5.1 Minimize parking fronting onto streets, the waterfront, public plazas, and open spaces to the greatest extent feasible. Instead, the majority of the frontage facing a street, public open space and waterfront should be lined with buildings or other elements that activate the street. Options for parking locations, from most to least preferred, are:

1) At the rear of the property, where it may front onto an alley but does not front onto the waterfront, public plazas and open spaces, or pedestrian pass-throughs (See Figure 3.5.a);

2) At the interior of the lot and lined with active uses

3) Within a parking podium partially below grade (See Figure 3.5.b);

4) At the side of the property;

5) Fronting a secondary street; or

6) Parking (exterior and interior) fronting a primary street, but only if options 1 through 5 above are not feasible, due to the proposed use of the building.

ENCOURAGE

Figure 3.5.a: These attractively articulated garage entrances are accessed from an interior driveway, minimizing inactive frontage along the street.

ENCOURAGE

Figure 3.5.b: The stairs, porches and landscaping and the below-grade parking podium create a vertical and horizontal transition for the Private Frontage type, providing privacy for the living units and interest at the sidewalk.

AVOID

Figure 3.5.c: A bank of three, closely-spaced, single-car garages creates too much inactive frontage along the street.

ENCOURAGE

Figure 3.5.d: The articulated frontage and separation of these two one-car garage entries minimize their prominence along the street.

ENCOURAGE

Figure 3.5.e: This parking podium is designed as an integral part of the balcony and screened from the sidewalk by landscaping and a decorative grill.

3.5.2 Parking frontage along the waterfront, public plazas and open spaces and pedestrian pass-throughs is strongly discouraged.

3.5.3 Bicycle parking should be provided in accordance with the Planning Code and located adjacent to and visible from the primary building entrance wherever possible.

Parking Location – Guidelines for Specific Uses

3.5.4 For warehouse and distribution facilities, provide adequate on-site truck parking to prevent double parking and idling.

3.5.5 For parking garage entries serving multi-unit residential (i.e., duplexes, triplexes, etc.) fronting a primary street, apply a combination of the following:

1) Limit parking entries fronting a street where feasible to a maximum of two-car width residential garages per primary frontage (See Figure 3.5.c);

2) Minimize the impact of multiple garages by locating them away from each other and separated by a building with active uses such as living or working space (See Figure 3.5.d);

3) On corner lots, distribute garage entries along multiple sides of the lot, rather than all along one side.

Podium Parking

3.5.6 Parking podiums along sidewalk, waterfront, public plazas and open space frontages should be lined with active ground floor uses, porches, stoops, or stairs and a landscaped setback. See Figure 3.5.e.

3.5.7 The landscape setback should screen the podium with a high level of detail and a variety of elements such as tall shrubs, landscape structures (e.g., decorative fences, walls, trellises, etc.), trees and ground cover to create a dynamic frontage.

3.5.8 Podiums should not extend beyond the main building façade unless they are designed as balconies and meet blank wall standards as defined for the associated frontage type in the zoning regulations.

3.5.9 Podiums should be designed as an integral, aesthetic frontage of the building. Openings may use decorative grills or landscape screens to create interested and prevent large, blank voids along the street.

Surface Parking

3.5.10 Incorporate safe, accessible, and distinct walkways within surface lots. See Figure 3.5.f.

- The pedestrian walkway network should be clearly distinguished from vehicular circulation. This is particularly important in areas where these various travel modes intersect, such as at driveway entrances and exits, loading docks, and in parking lots. Design solutions should always be sought that can help the driver see and take responsibility for exercising caution. Installation of a buzzer or horn sound is not an acceptable solution, as this puts the onus on the pedestrian.
- Walkways within parking lots should be raised to standard sidewalk height of 6 inches and provide a minimum 6-foot clear through-space from car bumpers, utilities, site furnishings, and landscape materials.
- Where walkways bisect parking lots, travel lane crossings should be clearly delineated by at least one of the following methods: a contrasting color, pattern, material change, and/or a crossing that is raised slightly to form a "speed table." Paving materials should continue the material used for the pedestrian path.

3.5.11 Walkways within parking lots should lead directly to meaningful destinations, such as building entrances, sidewalks, plazas, open spaces and the waterfront.

3.5.12 Walkways within parking lots should be shaded by trees or landscape structures to provide comfortable pedestrian environments.

3.5.13 Parking lots greater than 24 stalls (approximately one quarter acre) should provide a tree canopy that will cover 50% of the lot at the time of the trees' maturity (approximately 10 years). This will affect the spacing of the trees depending upon the species and their growing habits. To effectively achieve this coverage, trees should be planted "orchard style" (i.e., evenly spaced throughout the parking lot).

3.5.14 Buffer elements and interior landscaping should be protected from car bumpers with wheel stops or a 6-inch curb. See Figure 3.5.g.

3.5.15 Decorative paving materials, such as stamped concrete or faux brickwork, can soften the appearance of driveways and parking areas. Also, the use of light-colored paving materials to help reduce heat islands and porous pavement to facilitate infiltration is also encouraged. See the Stormwater Management section of these guidelines.

ENCOURAGE

Figure 3.5.f: This attractively landscaped and curbed parking lot walkway leads pedestrians from their cars to a plaza, shops and restaurants.

ENCOURAGE

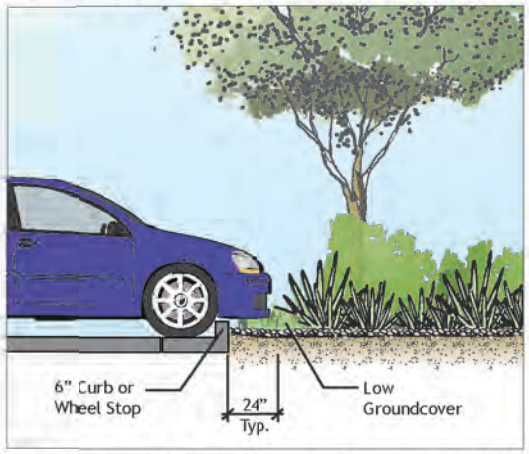


Figure 3.5.g: Ensure the survival of plants by protecting them with wheel stops or curbs.

3.6 Off-Street Loading, Service and Storage

INTENT

Locate and design off-street loading, service and storage areas to minimize the presence of inactive frontages along streets and public open spaces.

The Central Estuary contains an extensive amount of off-street loading, service, and storage areas. These areas often create dead frontages along streets, the waterfront, public plazas, and open spaces. (See Figure 3.6.a). For new construction, off-street loading, service and storage areas should be minimized along streets, the waterfront, public plazas, and open spaces. Where off-street loading, service and storage areas must front onto streets, the waterfront, public plazas, and open spaces, they should be designed with attractive or engaging frontages that provide a high level of interest, as well as safety for pedestrians.

AVOID

Figure 3.6.a: Storage facilities should be sited away from the waterfront, streets and other public spaces.

ENCOURAGE

Figure 3.6.b: This building on High Street fronts the street with the active uses, in this case offices, at the street.

ENCOURAGE

Figure 3.6.c: Ancillary loading area tucked into the building envelope.

GUIDELINES

Loading Location

3.6.1 To the extent feasible, warehousing and distribution facilities should locate the more active uses of the building (e.g., offices, lobbies, conference rooms, etc.) along streets, especially primary frontages, public open space, and the waterfront with loading areas located along secondary frontages or to the rear of the lot behind the building. See Figure 3.6.b.

3.6.2 Ancillary loading and service facilities – For loading and service areas that are ancillary to another use, preference for locations, from most to least preferred, should be in the order of:

1) At the rear of the property, where it may front onto an alley but does not front onto the waterfront, public plazas and open spaces, or pedestrian pass-throughs;

2) Within the building envelope (See Figure 3.6.c);

3) Within parking lots;

4) Along secondary frontages; or

5) At the primary curbside street frontage but only if options 1 through 4 above are infeasible (double parking is not permitted by Oakland Municipal Code).

3.6.3 Frontage along the waterfront, public plazas and open spaces, and pedestrian pass-throughs is strongly discouraged.

3.6.4 Early in the design of a building and its site, ancillary loading and service area location should also be coordinated with the appropriate service provider and the City's Public Works Agency.

Loading Design

3.6.5 Where feasible, one-way or direct-through access for loading and services is encouraged to effectively reduce their presence along street frontages. See Figure 3.6.d.

3.6.6 Clear right-of-way and parking restrictions signage should be provided where truck, auto, bicycle and pedestrian conflicts may occur within a parking lot or along the curb of a public street.

3.6.7 Loading areas and access lanes should be physically separated from parking via curbs, bollards, walls, raised planters, landscaping, distance and/or elevation changes in order to break up the perceived amount of paving. See Figure 3.6.e.

3.6.8 Bumper guards should be considered as part of the design of the building, not as an afterthought.

ENCOURAGE

Figure 3.6.d: Integrated into the building envelope, this one-way loading facility exits on the other side of the building, minimizing its impact on the street.

AVOID

Figure 3.6.e: Although the parking is separated from the loading area by a curb, buffer planting would create a more pleasant environment and the opportunity for stormwater features to mitigate the amount of paving .

3.7 Driveways

ENCOURAGE

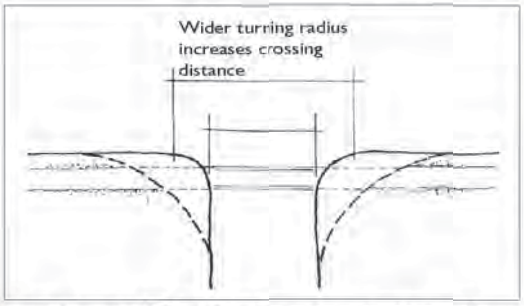
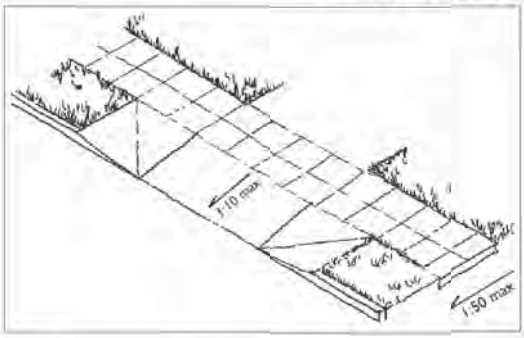
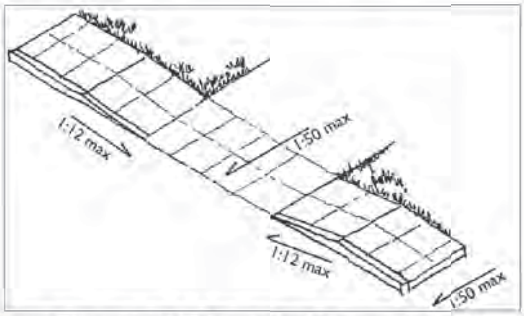


Figure 3.7.a: Reducing curb radii where possible minimizes the pedestrian crossing distance across driveway areas, and requires cars and trucks to drive more slowly as they enter.

ENCOURAGE





Figures 3.7.b and 3.7.c: Alternatives for driveway treatments at sidewalks that create even walking surfaces. The alternative at top is preferable.

INTENT

Minimize the number and width of driveways to reduce potential conflict points between cars, pedestrians and bicyclists and create more even and continuous sidewalk surfaces.

Driveways to parking lots, off-street loading, service, and storage areas should be minimized in number and size as much as possible. Wide and frequent driveways take up a larger portion of the sidewalk, so driveway location and design should be addressed to minimize conflicts, ensure pedestrian and bicycle safety, and create more attractive frontages.

GUIDELINES

3.7.1 Locate and design driveways and ramps to minimize conflicts between vehicles, pedestrians and bicyclists, as well as with vehicles on adjacent streets. Minimizing driveways also creates more space for on-street parking, street trees, and street furnishings.

3.7.2 Driveway and entry widths should be narrowed in order to minimize their presence along streets. Encourage businesses to narrow driveway widths to reduce potential conflicts and create shorter crossing distances for pedestrians across driveway entrances. See Figure 3.7.a.

3.7.3 Uneven sidewalk surfaces should be avoided where driveway slopes cross sidewalks. Allow sidewalks to remain level and continuous to signal to drivers that they are crossing the pedestrian realm and must yield accordingly. See Figure 3.7.b.

3.7.4 Similarly, sidewalk paving patterns, color and materials should be continued across driveways to strengthen the understanding that cars are crossing the pedestrian space. See Figure 3.7.c.

3.7.5 The number of driveways to a site should be minimized.

3.8 Landscaping and Screening

3.8

INTENT

Landscaping, screens, walls and fences should create active, engaging and attractive street frontages and continue to define the enclosure of a street where buildings are not present.

Landscaping, screens, walls and fences can act as an effective buffer from less attractive uses fronting streets, the waterfront, public plazas, and open spaces. Typical cyclone and razor-wire fencing create an oppressive and unsightly barrier. See Figure 3.8.a. Since much of the area is fronted by inactive uses, screens, walls, and fences within the Central Estuary should be designed to engage streets, the waterfront, public plazas, and open spaces with a variety of detail and color, appropriate materials, diverse landscape elements, and ample lighting to improve the character of the Central Estuary. The area's artist and artisan community and the waterfront provide ready themes and inspiration for a higher level of design of these elements.

GUIDELINES

General Guidelines for Landscaping and Screening

3.8.1 To the maximum extent feasible, public open spaces, such as the waterfront, plazas and parks should have a perimeter that is unobstructed by fences or walls, to allow the free flow of activity to be seamless with surrounding active uses. See Figure 3.8.b.

3.8.2 Where inactive uses such as parking lots and service areas must be located adjacent to streets, the waterfront, public plazas, and open spaces, design landscaping, fences and walls to provide interest and a sense of enclosure. See Figure 3.8.c.

3.8.3 Landscaping and screening should provide a buffer, create a more attractive, shaded and comfortable microclimate at the street, and prevent glare from car and truck headlights and security lighting where pedestrian activity is expected.

3.8.4 Buffers should also incorporate a combination of elements such as trellises, arbors, art pieces and diverse planting to create variety and interest.

AVOID

Figure 3.8.a: Neglected cyclone fencing along the Estuary frontage.

ENCOURAGE

Figure 3.8.b: An unobstructed interface between the waterfront, Bay Trail, and uses that front them creates an inviting public space.

AVOID

Figure 3.8.c: The lack of a buffer at this parking lot creates an unattractive pedestrian environment along the street.

ENCOURAGE

Figure 3.8.d: Landscaping, a variety of materials and a well-articulated screen create interest along the sidewalk in front of this parking lot.

AVOID

Figure 3.8.e: The side yard fence breaks up the public transition zones of neighbors and creates a more privatized individual front yard that does little for neighborhood cohesion.

ENCOURAGE

Figure 3.8.f: Low fences and open front yards allow the semi-public transition zone to define a more friendly and cohesive frontage along this neighborhood street.

General Guidelines for Walls and Fences

3.8.5 Visible screens, walls, and fences should contain a high level of articulation with a varied palette of elements including color, materials, lighting and changes in plane. See Figure 3.8.d.

3.8.6 Encourage artistic creativity in the design of screens, walls and fences throughout the Central Estuary, and maritime-related designs at the waterfront.

3.8.7 Screens, walls, and fences should be built out of attractive, long-lasting materials, such as wood, masonry, stone and/or metal. Materials to avoid include unfinished concrete block. Chain link and razor-wire fencing should also be avoided, except where the Planning Director determines that trespassing may present a public safety hazard. See Figure 3.8.d.

3.8.8 Where walls and fences separate incompatible uses, they should take on the character of the more sensitive use. Walls and fences should be of an adequate height and thickness to buffer but not overwhelm the more sensitive use.

3.8.9 Walls greater in length than the blank wall maximums given for the associated Frontage Type in the zoning regulations should be articulated with architectural offsets, landscape pockets, or other similar features.

Guidelines for Specific Uses

Residential Screening and Fencing

3.8.10 For residential facilities, walls or fences higher than 3-1/2 feet should be avoided along primary frontages facing pedestrian pass-throughs to allow public surveillance and maintain openness where passages are narrow.

3.8.11 Where more consistent residential landscape setbacks occur, side yard fences should not extend past the main façade of the building in order to preserve continuous landscape setbacks where they exist. However, side yard fences may extend beyond the façade to modulate frontages where extreme disparities in setbacks occur. For example, where a residential building that is set back from the front property line is located adjacent to a warehouse built to a zero lot frontage, the fence may be used to average the setbacks in order to relieve this condition. See Figures 3.8.e and 3.8.f.

Screening Surface Parking

3.8.12 Parking lots fronting onto streets, public spaces, and the waterfront should be effectively screened to reduce their visual presence and screen vehicle headlights from these spaces. Use the shortest, least sight-limiting fence or wall appropriate for the situation.

3.8.13 Parking lot screening should be designed with a varied palette of landscape elements (as opposed to the mass use of a single plant) in order to create an interesting and attractive frontage for pedestrians. Elements can include landscape structures, low planting, trees, and lighting. See Figure 3.8.g and 3.8.h.

3.8.14 Screening of parking lots should not rely solely on a wall or landscape structure without vegetation. Shrubs, hedges and low walls should be at least 3 feet in height in order to screen the grill and headlights of vehicles.

3.8.15 The minimum width for a landscape buffer should generally not be less than 3 feet on the street, waterfront or open space side of any wall or fence.

3.8.16 Landscape structures, such as a trellis or a fence, should generally not be more than 8 feet tall. At a minimum, structures above 4 feet in height should be visually permeable and/or provide interest.

Screening Loading, Service and Storage

3.8.17 Sidewalks should be buffered from loading, service and storage areas with a landscaped setback and vertical screening by a wall or fence. Setback depths and screen heights should be sized to adequately buffer the type of truck activity planned for the site, with an encouraged minimum setback depth of 5 feet and minimum screen height of 6 feet. For example, large warehousing facilities serving semi trucks require a deeper setback and a taller screen than smaller scale businesses utilizing single-unit trucks.

3.8.18 Buffering should not rely solely on a wall or fence without landscaping along the sidewalk frontage. See Figure 3.8.i.

3.8.19 Fences should be articulated with a combination of materials, color, changes in plane, and landscape elements to provide complexity and interest along streets, the waterfront, public plazas, and open spaces.

3.8.20 All outside storage and utilities should be screened from view using fencing, walls and/or landscaping.

AVOID

Figure 3.8.g: This condition is an improvement over a parking frontage with no buffer, but a hedge may not create sufficient interest along large stretches of parking.

ENCOURAGE

Figure 3.8.h: Dynamic planting creates more detail, color and shadow for a more interesting frontage.

AVOID

Figure 3.8.i: A solid metal wall communicates that there is no surveillance of activity on the sidewalk.

3.9 Waterfront Access & Bay Trail

AVOID

Figure 3.9.a: This nondescript and narrow waterfront access hides, rather than announces the connection to the waterfront.

ENCOURAGE

Figure 3.9.b: The ample width and attractive landscaping of this pedestrian pathway in the Jingletown/Elmwood area creates an inviting access point to the waterfront.

INTENT

Take advantage of the Central Estuary's proximity to the waterfront by highlighting and facilitating access to the waterfront and by extending the Bay Trail along the waterfront.

The waterfront is an important visual, recreational and social amenity that new development should promote and take advantage of. Locations adjacent to the waterfront should provide public access along waterfront sidewalks or boardwalks. Locations where streets terminate at the waterfront provide an opportunity to bring attention to these public access points and celebrate them.

GUIDELINES

3.9.1 All development within 100 feet of the shoreline is regulated by the San Francisco Bay Conservation and Development Commission (BCDC) and is required to provide public waterfront access either on-site or in-lieu public access near the site where on-site public access is not possible. See the BCDC website for more information: www.bcdc.ca.gov

3.9.2 New waterfront development should minimize impacts (i.e., visual, access and environmental) on the waterfront as well as to adjacent private properties.

3.9.3 New development adjacent to the waterfront should be designed to increase opportunities for the public to both view and access the waterfront area.

- Where new development encompasses more than 300 feet of street frontage, mid-block pedestrian pass-throughs should be provided where feasible, to allow access to the waterfront.
- Pedestrian pass-throughs should be a straight configuration that allows visibility from streets and the waterfront for safety and to highlight the waterfront access.
- Pedestrian pass-throughs should be designed as an attractive space, at the very least containing attractive lighting and landscaping and, if possible, art installations. See Figure 3.9.a and 3.9.b. Seating and dining can be incorporated into larger spaces where appropriate for adjacent uses.
- The minimum width for pedestrian pass-throughs should generally be no less than 15 feet to allow for a minimum clear through space of 10 feet and landscaping on either side.

3.9.4 Where access points terminate at the waterfront, special focus should be provided in order to clearly highlight and announce access points. Artistic elements that reflect the community's artist and artisan population are encouraged.

3.9.5 Uses in the Embarcadero Cove area should create more inviting outdoor spaces by consolidating parking lots and utility areas located adjacent to the water and the street to make space for plazas or pocket parks.

3.9.6 Adjacent waterfront developments should link waterfront open spaces and associated pedestrian circulations systems.

3.9.7 View corridors to the waterfront area from adjacent public right-of-ways should be provided wherever feasible through the careful organization of building and landscape placement.

3.9.8 Waterfront open spaces should provide attractive amenities for residents and visitors, which can include seating, tables, lighting, landscaping, bicycle racks and interpretive signage to activate the waterfront and encourage social cohesion amongst residents and users. Functional artistic and custom elements are encouraged.

3.9.9 Guidelines for construction of the Bay Trail should be followed. These can be found below:

BAY TRAIL DEVELOPMENT GUIDELINES

Introduction

The purpose of these Bay Trail Development Guidelines is to establish guidelines for the design of the Oakland Waterfront Trail. Owners and developers of waterfront property are subject to the regulations of the San Francisco Bay Conservation and Development Commission (BCDC).

In April 2005, BCDC published Shoreline Spaces: Public Access Design Guidelines for the San Francisco Bay. This document (and any amendments) provides general design criteria for public access, and includes examples of successful designs that have been built around the Bay. The City of Oakland concurs with the basic design criteria established by BCDC and adopts Shoreline Spaces as a baseline document.

These Bay Trail Development Guidelines are intended to supplement the BCDC guidelines in order to highlight Oakland-specific issues and raise the overall quality of trail design in Oakland. See Figure 3.9.c.

Figure 3.9.c: Design the Bay Trail to be Oakland-specific and raise the overall quality of design.

Figure 3.9.d: Provide a wide landscaped buffer for the Bay Trail.

Figure 3.9.e: Asphalt is allowable if contained within flush Portland Cement headers. Provide attractive landscaping along the edges of the Bay Trail pathway wherever practicable.

Figure 3.9.f (at right): The Bay Trail travels through four character areas along the Oakland Estuary, Downtown, Marina, Industrial and Mash.

The Bay Trail Development Guidelines include:

- Minimum trail and buffer width
- Minimum trail material quality
- Oakland neighborhood and historical context
- Shoreline bank protection
- Examples of guardrails

Trail Width and Material Guidelines

3.9.10 The minimum width of the landscaped buffer should be 100 feet where practicable (measured landward from the mean high tide line). Buildings or parking areas are generally not allowed within this buffer area.

3.9.11 The minimum width of the Oakland Waterfront Trail Corridor should have a total minimum width of 40 feet where practicable, and contain separate bike and pedestrian paths with a landscaped median. See Figure 3.9.c. Even in physically constrained areas, the trail width should generally not be less than 12 feet.

3.9.12 A durable and attractive trail material is desired. Ordinary asphalt concrete paving is generally not acceptable. Asphalt concrete paving should be contained within flush Portland cement concrete headers. Special plazas or other areas can be made completely of Portland cement concrete. Colored concrete, special score line patterns, and special paving surface textures are preferred.

3.9.13 An additional minimum three-foot wide path of decomposed granite or other relatively soft running surface should be installed along one side of the hard trail where practicable. See Figure 3.9.d.

Neighborhood and Historical Context Guidelines

The Oakland Waterfront Trail passes through a variety of neighborhoods. Four general character areas are: Downtown, Marina, Industrial, and Marsh. See Figure 3.9.e. The design of the trail should reflect these character areas.

3.9.14 Connections to the existing grid of City streets should be emphasized and enhanced.

3.9.15 Connections should be coordinated with the City's Pedestrian and Bicycle Master Plan.

3.9.16 Historic elements should be retained and integrated into the Shoreline Protection

Shoreline Protection Guidelines

3.9.17 Ordinary riprap shoreline protection is unattractive, doesn't allow access to the water, and doesn't promote establishment of vegetation. Whenever possible, the use of riprap should be minimized along the Oakland Waterfront. See Figure 3.9.g.

3.9.18 Consider the use of concrete steps into the water, vertical retaining walls with promenades above, or naturally planted flatter slopes with riprap only at the toe. See Figure 3.9.h.

3.9.19 Use vegetated geo-grids, vegetated engineered soil lifts, or other "soft" bank stabilization techniques where practicable design where practicable, and interpretive signage provided. See Figure 3.9.i.

Guardrail Guidelines

3.9.20 Guardrails should be strong, durable and low maintenance.

3.9.21 Guardrails should be as transparent as possible to allow water views. See Figures 3.9.j. and 3.9.k.

3.9.22 Guardrails should be designed to reflect the character of the neighborhood. See Figures 3.9.f., 3.9.j. and 3.9.k.

Figure 3.9.g: Riprap is not accessible.

Figure 3.9.h: Steps provide access.

Figure 3.9.i: Attractive planted slope.

Figure 3.9.j. and 3.9.k: Guardrails should be as transparent as possible and reflect the character of the neighborhood.

3.10 Open Space

Figure 3.10.a: Rooftop gardens create gathering spaces for visitors and residents. A similar application could be used for multi-family residential and office buildings.

Figure 3.10.b: Stairs lead to an upper level deck that provides communal open space for residents in this multi-family residential project.

Figure 3.10.c: This outdoor office open space is directly accessible from the street and provides employees with an outdoor gathering and lunch area.

INTENT

Integrate safe and inviting open space into projects that is accessible to all users and that responds to a variety of needs.

Integrating public and private open space into development increases a sense of community by providing appealing and comfortable spaces for social interaction, civic engagement, and recreation. Urban open spaces can be created on roof gardens, on upper story stepbacks, within rear yard setbacks, as internal common courtyards and play areas, and as entry and forecourts.

GUIDELINES

General Guidelines

3.10.1 Integrate functional and active open space into the design of the site in the form of public plazas, entry courts, courtyards, roof gardens and terraces, and rear and side yards. See Figures 3.10.a through 3.10.c.

3.10.2 For safety, open spaces should be visible from adjacent streets, the waterfront, public plazas, and/or other open spaces; or in the case of internal courtyards, visible from commonly occupied living or working areas within the building.

3.10.3 Locate open spaces within access of all users to encourage social cohesion. Make at least one space a communal space that all users can access. Consolidate open space into one larger area rather than dispersing into smaller pieces, if possible.

3.10.4 Private open space should be located at the interior of the site. Except for for balconies and other above-ground spaces, avoid locating private open space adjacent to a street as it unnecessarily breaks the building wall.

3.10.5 Design open spaces to create a variety of climate environments to facilitate activity in different seasons and weather conditions.

3.10.6 Provide lights on plazas, courtyards, walkways and active play areas to extend opportunities for physical activity into the evening.

Guidelines for Specific Uses

Residential

3.10.7 Design open spaces and recreational facilities to complement the cultural preferences of the local population, and to accommodate a range of age groups, including both children and the elderly, in addition to other users.

3.10.8 Open spaces should promote a variety of activities, both passive and active, and provide supportive amenities, such as landscaping that can be both attractive and sheltering, seating (both fixed and movable such as benches, seat walls and chairs), tables, drinking fountains, and outdoor fireplaces.

3.10.9 When designing playgrounds, include ground markings indicating dedicated areas for sports and varied use.

3.10.10 Preserve or create changes in elevation to make children's outdoor play areas more dynamic.

Non-Residential

3.10.11 Plazas associated with restaurants and shops should accommodate dining and seating as well as gathering space, as appropriate, to promote a high level of activity in these spaces.

3.10.12 Entry plazas are encouraged for office buildings.

3.11 Stormwater Management

INTENT

Integrate urban stormwater management facilities into projects to minimize pollutant runoff while creating attractive landscape features that add to the aesthetic environment of the Central Estuary.

Figure 3.11.a: Integrate stormwater facilities that create amenities for users and residents and enhance the urban environment.

The systems presented below have the capabilities to fulfill the EPA's National Pollutant Discharge Elimination System (NPDES) requirements for stormwater management, while at the same time providing ways to insert facilities into projects that will enhance the aesthetics and livability of an urban environment. See Figures 3.11.a and 3.11.b. The main objectives of stormwater management facilities are to hold water, convey and slow its movement, remove sediments and impurities, and allow it to infiltrate. Implementation must address concerns over mosquito borne illnesses, such as West Nile Virus, and other vector control and public health issues associated with standing water. The stormwater facilities presented here should be properly designed in accordance with the guidelines of the Alameda County Clean Water Program.

Reduction of impervious surfaces is the most direct way to reduce stormwater flows. Concerted efforts to reduce parking and make the impervious surfaces used for service and storage more efficient are equally important.

Figure 3.11.b: This facility gathers rooftop runoff and funnels it to a ground level water feature before it reaches the storm drain system, slowing and filtering the flow.

GUIDELINES

Tree Planting and Preservation

Tree planting and preservation should be encouraged along streets and within private property for new developments to enhance livability. Trees perform several important functions, including reducing runoff, improving water and air quality, mitigating the heat island effect, reducing noise, and elevating the character of a place.

3.11.1 Along with street trees, tree planting within properties should be encouraged particularly along parking lots. Planting within parking lots should follow guidelines provided in the Off-Street Parking section. Tree planting should also be encouraged within setbacks, buffers, courtyards and other spaces within private property.

3.11.2 During the design phase, work with project applicants to preserve significant on-site trees. During construction, ensure that remaining trees are protected from damage and that soil and other conditions are improved.

Structural Soils

Structural soils may be utilized to provide spaces more conducive to tree and root growth while also increasing stormwater-holding capacity. Structural soils create a load-bearing medium that has a greater ability to maintain necessary voids for root growth, air circulation and stormwater containment in more urban conditions. See Figure 3.11.c.

3.11.3 Where planting space available for trees is constrained, consider using engineered products such as root barriers and structural soils to greatly increase the success rate and life span of new and existing trees or using large containerized bio-retention gardens that receive and treat stormwater

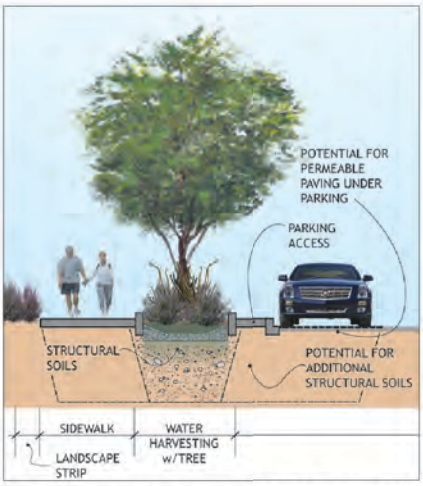


Figure 3.11.c: Structural soils provide a load bearing medium that also has the ability to maintain necessary voids for root growth.

Green Roofs

Green roofs can provide multiple benefits to the Central Estuary, where an extensive percentage of the area is impervious. These include stormwater benefits and reduced heating and cooling costs, as well as open space for users.

3.11.4 Incorporate intensive green roofs with usable open space and extensive green roofs wherever practicable. See Figures 3.11.d and 3.11.e.

Figure 3.11.d: The Kaiser roof garden is an example of an intensive green roof.

Figure 3.11.e: This office building in San Bruno is an example of an extensive green roof.

Figure 3.11.f: This stormwater channel serves a dual purpose of containing runoff and providing visual interest at the street level.

Figure 3.11.g: The flow-through planter provides seating along the sidewalk and a planting buffer next to the building.

3.11.h: This vegetated swale collects runoff from the adjacent parking lot and sidewalk and slows and treats the stormwater prior to release into the storm drain system.

Bio-Retention

Bio-retention facilities slow and treat stormwater by temporarily retaining it using soil, vegetation, hardscape elements and other materials to support and enhance the infiltration and bioremediation processes. Bio-retention facilities include artificial wetlands, swales, rain gardens, and flow-through planters. See Figure 3.11.f and 3.11.g.

3.11.4 Incorporate bio-retention facilities in projects and particularly in communal open spaces where they can provide habitat and aesthetic value.

3.11.5 To prevent clogging by construction debris, these facilities should be built last or runoff should be diverted around them until two months after construction is completed.

Bio-Filtration

Bio-filtration facilities filter runoff through soils and plant material to remove suspended sediments. The design solutions in this category differ from bio-retention facilities in that their primary purpose is usually to convey stormwater rather than to retain or store it. Often, bio-filtration facilities can be used to pre-treat runoff before it enters bio-retention facilities or infiltration basins/trenches, which require low sediment loads to prevent clogging. Bio-filtration facilities include grass filter strips and vegetated swales. See Figure 3.11.h.

3.11.6 Incorporate bio-filtration facilities into surface parking lots and other large, paved circulation, service and storage areas.

Infiltration

Infiltration facilities slow and filter runoff, improving the water quality and reducing the volume of runoff leaving the site. Infiltration trenches and basins can be designed with larger reservoirs and some degree of exfiltration to compensate for compacted soils. Infiltration facilities include infiltration basins, trenches, sand filters, and French drains.

3.11.7 Review the potential to incorporate infiltration capacity into the design of street tree trenches.

Permeable Paving

Permeable paving is used to reduce runoff and imitate the natural process of stormwater infiltration into the soil.

3.11.8 The use of permeable paving to reduce surface run-off is encouraged wherever feasible for parking stalls, plazas and courtyards. See Figure 3.11.i.

3.11.9 Where possible, drainage should be directed to planting areas to maximize percolation.

Figure 3.11.i: This multi-family project utilizes gravel driveways and concrete slabs in its adjacent parking lot that allow stormwater to infiltrate.

4.0

4. Building Design

The eclectic character of the Central Estuary provides a challenge to the design of buildings. Designs must respect the area's informal setting, yet at the same time create a sense of cohesion. Regardless of the form, scale or character of new development, projects should respect the public realm: streets, the waterfront, and open spaces such as pocket parks or plazas.

This section provides guidelines for the design of buildings without strictly defining a style or set of styles. However, cues should be taken from the surrounding context of a project, particularly where a defined character is presented, such as the fine-grained qualities of the Jingletown/Elmwood area, or the maritime- and food-oriented uses in the Embarcadero Cove/Food Industry Cluster area. Where the character of a district is less defined, projects may set new precedence within the context of the Central Estuary's overall goals.

4.1 Frontage Types

INTENT

Create cohesive and engaging frontages along streets, the waterfront, public plazas, and open spaces by providing consistency in the massing and articulation of building facades, and creating interest in the spaces that front them.

The four Frontage Types defined in the zoning regulations section 17.66.060 provide standards for developing appropriate street level frontages relative to a project's context and the intended character of adjacent streets:

- Public Frontage
- Semi-Public Frontage
- Private Frontage
- Service Frontage

Architectural features and entry and site elements help define each Frontage Type. Setbacks can accommodate frontage treatments as well as utilities and active uses such as seating, dining, display, and plazas. The Frontage Types should be considered along with the accompanying overall Building Design guidelines in this section.

GUIDELINES

In addition to the building frontage standards contained in the zoning regulations, the following discussion provides additional guidance on the design of the four frontage types. Figure 4.1.a (fold-out map) shows locations where particular frontage types are recommended based on the character of the street and surrounding existing development.

Public Frontage

The Public Frontage type accommodates very public uses, where interaction between ground floor uses and the street and open spaces is desirable and welcomed, requiring little or no transition between the two. This frontage type is often associated with shopfronts and dining establishments. See Figure 4.1.b to 4.1.d.

4.1.1 The Public Frontage type should be built up to the property line or allow active uses such as seating, dining, display of goods and/or gathering space where there is a setback.

4.1.2 Frontage treatments such as awnings, canopies, arcades and galleries are encouraged to increase articulation and provide sheltering elements for customers and pedestrians.

ENCOURAGE

ENCOURAGE

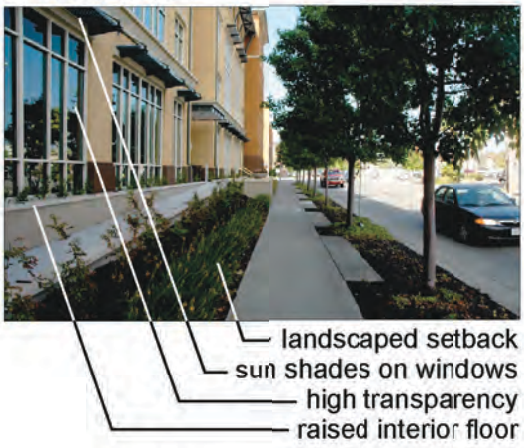
ENCOURAGE

Figures 4.1.b to 4.1.d: The top and middle examples above demonstrated some elements of a public frontage type. The bottom example shows a warehouse adapted for retail.

AVOID

Figure 4.1.e: Smoked glass compensates for the lack of separation and privacy from the sidewalk. Along with minimal articulation, this building creates an unengaging frontage.

ENCOURAGE



ENCOURAGE

Figures 4.1.f to 4.1.g: The top example shows vertical and horizontal separation from the sidewalk. This adaptive reuse of a warehouse (bottom) compensates for the lack of setback with higher sills and window shades. Landscaping, large windows and interesting garage doors provide a high level of articulation.

4.1.3 Frequent entries are encouraged to create a high level of activity between the public and private realm.

4.1.4 The Public Frontage type is most appropriate along highly traveled non-residential streets where commercial uses rely on pass-by traffic, along the gateways into the Central Estuary, and fronting the waterfront.

4.1.5 The Public Frontage type is encouraged along streets and open spaces as shown in Figure 4.1.a, but is appropriate anywhere within the Central Estuary where a more dynamic, pedestrian-friendly and inviting frontage is desired.

Semi-Public Frontage

The Semi-Public Frontage type balances privacy with interaction. It is defined by a moderate amount of visual and physical permeability. This frontage type requires some transition from streets and is most often associated with employment uses, but also accommodates work/live, warehousing, distribution and manufacturing.

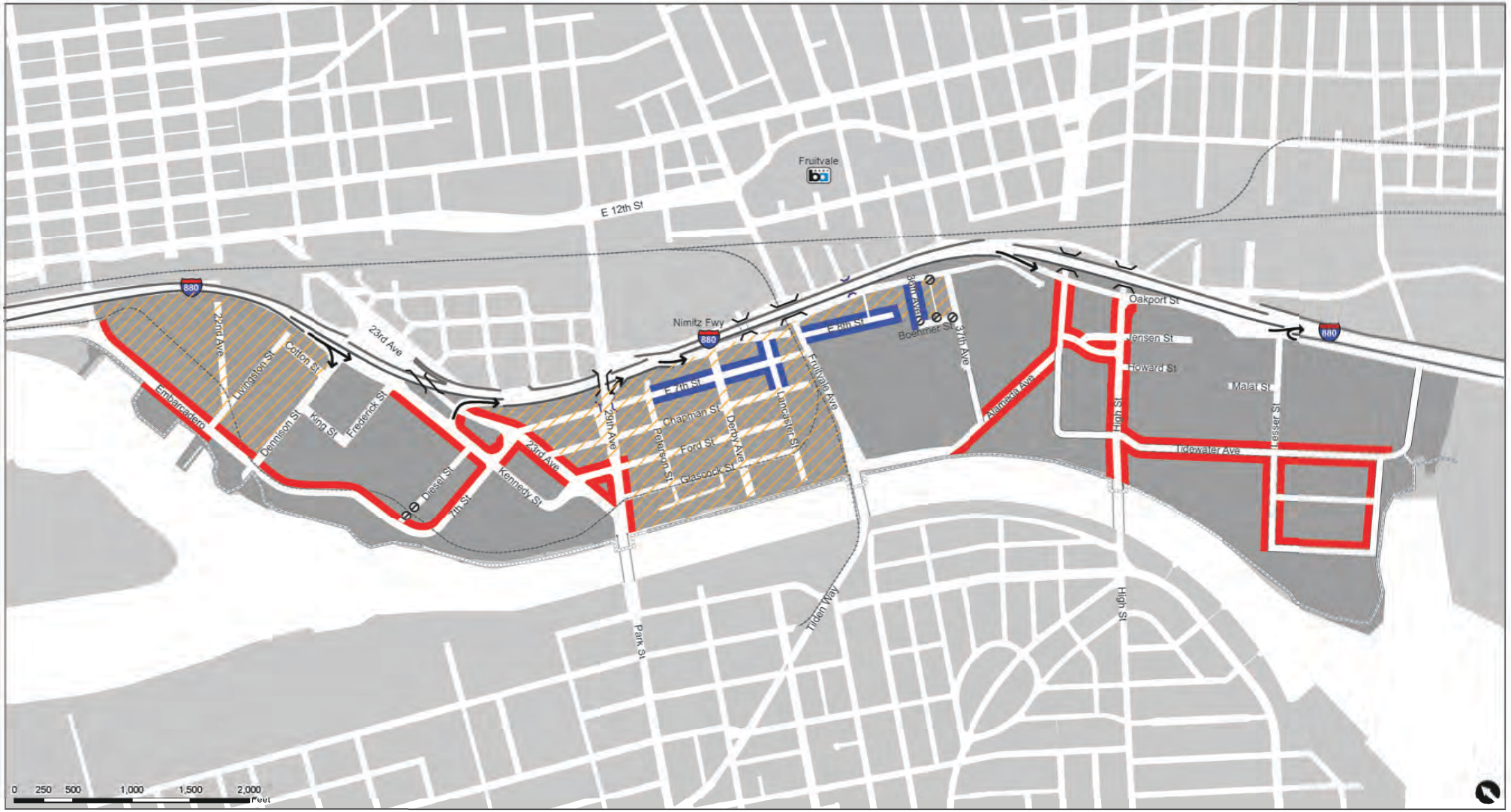
4.1.6 Semi-public frontage types may contain a higher amount of blank wall area than Public Frontages because there is typically less interaction with streets, the waterfront, public plazas, and open spaces. However, ensure that frontages do not create long stretches of inactive space along the public realm. See Figures 4.1.e through 4.1.g.

4.1.7 The Semi-Public Frontage type can be built up to the property line or allow a shift in floor elevations (i.e., raise interior floors above sidewalk grade) or a setback to increase privacy.

4.1.8 Setbacks should be landscaped, but can also accommodate stairs, seating, gathering space, and/or utilities.

4.1.9 Building access may be less frequent than the Public Frontage or defined by a singular entry lobby. Entry types may include stoops or lobbies, which should be sheltered from the elements with an awning or arcade. Residential awnings should be structural rather than fabric.

4.1.10 The Semi-Public frontage is appropriate throughout the Central Estuary, but is highly encouraged in areas as shown in Figure 4.1.a.



Source: CD+A, 2008-2011; City of Oakland, 1999

Figure 4.1.a Frontage Types Locations

June 2012

Recommended Locations for Public and Semi-Public Frontage Types

Recommended Locations for Private Frontage Types

Recommended Locations for Semi-Public and Private Frontage Types

Bay Trail (proposed) | Bay Trail (existing) | Gated or closed street | I-880 On/Off Ramps | Underpass - Existing | Ped/Bike Underpass - Existing | Ped/Bike Underpass - Future

CITY OF OAKLAND

CENTRAL ESTUARY Implementation Guidelines

COMMUNITY DESIGN + ARCHITECTURE
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This page intenti

Private Frontage

This frontage requires the most privacy and buffering between interior uses and adjacent streets, the waterfront, public plazas, and open spaces. A transition zone is necessary to provide a clear distinction between public and private space. This frontage type is closely associated with residential and live/work uses. See Figures 4.1.h through 4.1.j.

4.1.11 Increased privacy for the Private Frontage can be addressed by a shift in floor elevations (i.e., raise interior floors above sidewalk grade) and/or a setback.

4.1.12 Setbacks should be sufficient to allow a sense of separation between private living spaces and public spaces, accommodate landscape elements to provide a buffer and increase security for first-floor units, utilities, as well as entry features and sheltering elements.

4.1.13 Entry types for Private Frontages may include porches, stoops or lobbies, which should be sheltered from the elements with an awning or other overhead structure. Residential awnings should be structural.

4.1.14 This frontage type is most appropriate and encouraged in the CE-3 districts, particularly along frontages as shown in Figure 4.1.a.

AVOID

Figure 4.1.h: This development fronts the street with dull concrete walls that provide little transparency or interest.

ENCOURAGE

Figure 4.1.i: Residential uses require a separation from public spaces. Here planted containers and a collection of objects buffer this residence.

ENCOURAGE

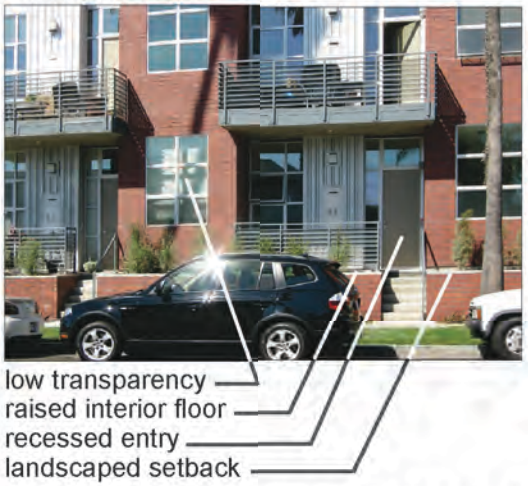


Figure 4.1.j: Fronting streets with a variety of architectural elements such as stoops, windows, balconies, and landscaping creates proper transitions between the public and private realm.

AVOID

Figure 4.1.k: Service Frontages typically create forbidding and stark environments along the public realm.

ENCOURAGE

Figures 4.1.l to 4.1.m: Service frontages should incorporate a variety of techniques to articulated the facade. The example above scales facade elements to the size of the building. Smaller-scale changes, such as complex materials and color help create to break up the facade of the building at bottom.

Service Frontage

Service Frontages are typically defined by large expanses of blank walls with few doors and windows, mostly interrupted by garage doors and truck bays. Building entries are minimal with few pedestrian amenities and are not elaborately detailed (See Figure 4.1.k). This frontage is associated with warehousing, distribution, and sometimes manufacturing businesses. Large-format, warehouse style retailers such as Costco and Home Depot also utilize this frontage. This frontage is commonly found in the Central Estuary area, but should be avoided or used sparingly along public spaces. As stated in the Building Orientation section of these guidelines, the more active uses of the business should front streets and other publicly accessible spaces.

4.1.15 Service frontages along streets should be minimized to the greatest extent possible by fronting streets and other publicly accessible spaces with the more active uses of the business, essentially maximizing the frontage along streets with a Public or Semi-Public frontage.

4.1.16 This frontage should be avoided along the waterfront, pedestrian pass-throughs and publicly accessible plazas and open spaces.

4.1.17 Service Frontages should be highly articulated, particularly along primary lot frontages and for buildings greater than 50 feet in length. See the Blank Wall and Façade Articulation - Architectural Detailing sections for further guidance.

4.1.18 Articulation should include a combination of entries, windows, awnings, arbors, trellises, screens, varying and highly tactile materials, changes in plane and color, landscaping, and other features (such as art and sculptures) to avoid uninteresting and monotonous streetscapes and open spaces. See Figures 4.1.l and 4.1.m.

4.1.19 Whether the Service Frontage type is built up to the property line or provides a setback, landscape elements, including "green screens" should be used to articulate and soften extensive blank walls.

4.1.20 Entry types may include a stoop or lobby, which should be sheltered from the elements with an awning or other overhead structure. Awnings should be structural, rather than fabric alone.

4.2 Building Height

INTENT

Avoid abrupt transitions in height between neighboring buildings so as not to overwhelm adjacent uses.

New buildings should consider the heights of existing surrounding buildings in order to respect the context created by neighboring properties. See Figure 4.2.a. This is particularly critical in areas where infill development will occur, which is largely, but not exclusively, pertinent in the Jingletown/Elmwood area where sensitive residential uses exist.

GUIDELINES

4.2.1 New buildings should respect and be compatible with the scale of buildings within their immediate context and avoid abrupt and disparate changes in the building line. Heights should transition smoothly and not create extreme disparities that can break the silhouette of the streetscape and overwhelm an adjacent use. See Figures 4.2.b and 4.2.c.

4.2.2 New buildings should step down in height to closely relate to the height of existing adjacent buildings. This is particularly important in the Jingletown/ Elmwood area where there is a predominance of small-scale single-family homes along Chapman Street, E. 7th Street, Elmwood Avenue, 36th Avenue, and E. 8th Street. Appropriate transitions can be achieved by:

4.2.3 Allowing the more compatible, lower-storied building in a multi-structure development to transition to the taller buildings by locating it near the existing building;

4.2.4 Stepping building heights down such that they are no taller than half to one-story above the lower-storied, existing building; or

4.2.5 Providing a landscaped separation between buildings that allows landscape elements to transition heights. This is preferred over utilizing these separations as parking lots, which only accentuate the differences in building heights.

AVOID

Figure 4.2.a: The siting, massing, articulation and height of the office building on the right disregards the existing character of the adjacent residential neighborhood.

ENCOURAGE

Figures 4.2.b and 4.2.c: The new residential building (top) is scalled to match the surrounding single-family homes, and is composed of varied scales and articulation of height and massing; another residential building (bottomw) transitions in height and setback to match the existing single-family home next door.

4.3 Massing

AVOID

Figure 4.3.a: The blocky massing of the commercial building is discordant with the massing established by the adjacent single family houses.

ENCOURAGE

Figure 4.3.b: Example of a building with simple and rhythmic volumes that impart a sense of order.

ENCOURAGE

Figure 4.3.c: The wood fence, landscaping and trees used here transition the building's massing from three stories to a human scale at the sidewalk level.

INTENT

Massing should be simple in form and respond to the existing context by anchoring the building to the site and imparting a human scale.

GUIDELINES

4.3.1 Building massing should not be overly complicated. Simple volumes in a well-organized, clear hierarchy should define the main building form. See Figures 4.3.a and 4.3.b.

4.3.2 Buildings should reflect any positive context along and across the street by breaking up massing into volumes that reflect the volumetric scale of surrounding buildings.

4.3.3 In general, building form should provide a "base" and a "top" that are human-scaled both in terms of form and articulation. The base may include thicker walls, richly textured or special materials such as ceramic tile, granite, marble and/or darker colored materials and/or panels. A recognizable top may utilize roof overhangs, simple parapets and/or differently colored materials to distinguish from the base.

4.3.4 Providing articulation through human-scale elements (e.g., architectural elements and detailing, fenestration, materials, and/or variation in materials) is highly recommended on large, continuous building masses to provide visual interest. See blank wall standards for Frontage Types in the zoning regulations and guidelines in the Blank Wall section of these guidelines. See Figure 4.3.c.

4.3.5 Exterior building massing should reflect and make visible the use or activity within the building. For example, the use of bays and vertical elements should reflect an interior change of use or function, such as a stairwell, lobby, or more public rooms.

4.3.6 Ground floor levels for non-residential buildings and multi-family lobbies should be proportionally higher and distinguished from upper façades to create generous and inviting ground floor spaces and to distinguish uses in mixed-use buildings.

Guidelines for Specific Uses

4.3.7 Building walls of industrial buildings visible from adjacent streets, the waterfront, public plaza and open spaces should contain changes in massing, height, colors and/or materials.

4.3.8 Tilt-up buildings should incorporate decorative trim, recessed/projecting panels, recessed windows and doors, accent materials, and/or varied roof heights to increase visual interest.

4.4 Building Access Design

INTENT

Provide a clear hierarchy of entrances that are delineated by distinct transitions between public and private space.

A prominent main entrance that features articulation and is appropriately scaled to the building can facilitate user access to interiors by clearly differentiating it from service or rear entrances. Providing a readable series of zones that use semi-public space and frontage treatments to transition from the public to the private space can create a sense of welcome by providing shelter and a place for waiting and social interaction outside of interior spaces. See Figure 4.4.a.

GUIDELINES

4.4.1 Entrances should include a legible series of zones that utilize entry spaces and architectural features to transition from public to private spaces. Semi-public transitions include porches, stoops, arcades, forecourts, lobbies, awnings, canopies and stairs, even garage doors.

4.4.2 A clear, hierarchical distinction should be made between primary entrances and secondary entrances. Primary entrances should be located on the primary façade of a building and should be clearly expressed to impart a sense of prominence through scale, detailing and ornamentation that clearly denotes their stature as the main access to a building.

4.4.3 Primary entries should be framed by sheltering elements such as awnings, arcades, porches or stoops. This creates a protected space for visitors to pause as they enter or leave the building.

4.4.4 The design of entrances, entrance elements and garage doors should complement the architectural style and scale of the building and its architectural elements.

4.4.5 Porches and stoops should be designed as integral architectural features of the main structure rather than as afterthoughts, which can create architectural elements that look "tacked-on." Posts and rail should be substantial in appearance to match the architectural character of the main facade. Railings should be visually permeable, which creates a more inviting appearance. See Figures 4.4.b through 4.4.e.

ENCOURAGE

Figure 4.4.a: The stair and portico act as the semi-public transition zone into the building.

AVOID

Figure 4.4.b: The porches on this building look tacked on because they have little relationship to its architecture and scale.

ENCOURAGE

Figure 4.4.c: Open railings on these entry stairs preserve the sight line along the building setback creating an open, inviting transition by creating a continuous semi-public space.

ENCOURAGE

Figure 4.4.d: The stair and portico act as the semi-public transition zone into the building.

ENCOURAGE

Figure 4.4.e: The project features of the building help to delineate access points.

ENCOURAGE

Figure 4.4.f: A recessed, single-car garage door contributes to the street frontage with a high level of articulation and transparency.

4.4.6 De-emphasize garage doors and entrances and/or make them a decorative element to increase the perception of active frontages. See Figure 4.4.f. Single-car width garage doors and entrances are preferred, particularly for residential uses. Garage doors should be recessed from the front façade to create shadow lines. See the Off-Street Parking section of these guidelines. Other techniques may include the following:

- Include windows on the garage door;
- Recess the bottom floor façade containing the garage door from the upper stories;
- Place living space above the garage;
- Embellish garages with landscape structures such as arbors and trellises;
- Use materials that provide visual interest.

4.5 Windows and Transparency

4.5

INTENT

Create attractive building facades and encourage appropriate levels of interaction between persons inside and outside of buildings.

Windows allow indoor activity to be seen or perceived from the outside, offering a presence or "eyes on a street" and imparting a sense of safety.

GUIDELINES

4.5.1 Window materials, placement, configuration and proportions should fit with the chosen architectural style of the overall building.

4.5.2 Windows should be set in a logical, rhythmic pattern with a clear relationship between ground floor and upper floor windows. See Figure 4.5.a.

4.5.3 Ground floor windows should be maximized to allow greater interaction between the public and activity within a building. See Frontage Types regulations for appropriate minimum areas for transparency of ground floor frontages. See Figure 4.5.b.

4.5.4 Upper floor uses should orient the more public spaces along the primary frontage and frontages that face streets, the waterfront, public plazas, and open spaces. Windows should reflect this relationship through appropriate sizing, thus also maximizing the amount of glazing on upper floors.

4.5.5 Window design should maximize interior daylighting while reducing glare through the use of passive shading devices to maintain visibility between the exterior and interior of the building.

4.5.6 Mirrored or smoked glass is strongly discouraged. Other products, such as special 'Low-E' films, can be used to maintain transparency while awnings and overhangs can provide solar protection and heat reduction for building interiors. See Figures 4.5.c and 4.5.d.

4.5.7 Windows and window frames should be set to provide a reveal (i.e., they should generally not be flush with the exterior face of the wall) to form a visible shadow line that creates visual interest along the facades of buildings.

ENCOURAGE

Figure 4.5.a: Example of window placement that shows a clear pattern and relationship between upper and lower windows.

ENCOURAGE

Figure 4.5.a: Example of maximizing ground floor windows to create interest at along the street.

AVOID

Figure 4.5.c: The smoked glass frontage of the building's street level facade provides privacy for interior offices, but does little to create a visibly active frontage along the sidewalk. It essentially creates a blank wall condition.

ENCOURAGE

Figure 4.5.d: Integral upper story awnings shade windows without reducing visibility.

AVOID

Figure 4.5.e: Excessive signage reduces the level of transparency along this storefront.

4.5.8. Window and door signage, and interior displays should be carefully considered along public frontages such that windows meant for public viewing are not significantly diminished by these elements, which can create a haphazard sense of the frontage. See Figure 4.5.e.

4.5.9 Garage doors are encouraged to incorporate transparency elements such as clear or frosted glass windows.

4.6 Blank Walls

INTENT

Engage streets, the waterfront, and open spaces with active building frontages or provide highly articulated walls, particularly where long stretches of wall are unavoidable along these frontages.

Blank walls are a prevalent feature in the Central Estuary. The issue of blank walls is particularly important along the waterfront, public open space, and streets that will see pedestrian activity, although attention should be given to all streets, in order to improve the overall appeal of the Central Estuary.

GUIDELINES

4.6.1 Minimize large segments of blank building facades and freestanding walls fronting streets, the waterfront, public plazas, and open spaces.

4.6.2 Blank wall sections should not exceed the maximum lengths defined in the zoning regulations for each frontage type without relief through changes in massing and articulation. Relief should include a combination of building entries, windows, stairs, porches, awnings, architectural detailing, landscaping, murals, a change in material, color and/or plane, artistic elements, or other feature that gives the wall complex texture, depth and interest. See Figures 4.6.a and 4.6.b.

4.6.3 Where the total length of a freestanding wall or building exceeds 50 feet, walls should be broken up into modules no longer than 50 feet or module lengths that reflect the massing of surrounding buildings, whichever is less, by a shift in vertical plane of at least 12 inches.

4.6.4 Avoid repetitive articulation. Excessive blank wall lengths should be accompanied by stronger and more varied architectural articulation and landscaping to intensify the level of complexity and texture to overcome such vast expanses and avoid a sense of "flatness" and monotony. See Figure 4.6.c.

AVOID

Figure 4.6.a: The articulation on this long stretch of blank wall is too repetitive in form, color and material to create an engaging façade along the sidewalk.

ENCOURAGE

Figure 4.6.b: The articulation on this wall is appropriately scaled to the amount of wall surface on this warehouse. Varied materials, changes in plane and color, a variety of architectural elements, and landscaping crate texture and shadow.

AVOID

Figure 4.6.c: The scale of the trellis and the architectural detail on this facade are too insubstantial to provide relief for such a large amount of blank wall.

4.7 Façade Articulation and Architectural Detailing

AVOID

Figure 4.7.a: False fronts are typically tacked on to the front facades of buildings with little attention paid to secondary, yet visible frontages.

AVOID

Figure 4.7.b: A change in materials, recessed windows and/or a higher level of architectural detail could reduce the "flatness" of this building, which relies solely on large blocks of color to create interest.

INTENT

Articulate building facades to create engaging and dynamic human-scaled frontages to enhance the streets, the waterfront, public plazas, and open spaces of the Central Estuary.

In combination with scale and massing, articulation (i.e., architectural detailing and materials) is key to creating buildings that provide interest and engage the streets, waterfront, public plazas, and open spaces at an appropriate level.

GUIDELINES

4.7.1 Articulation should be distinct and provide enough contrast to create a dynamic façade.

4.7.2 Façade articulation and detail should be in harmony with that of other uses along the street. Careful consideration should be given to the design of facades (i.e., scale and level of architectural detail) in order to attune both sides of a street with building walls that are compatible with each other.

4.7.3 All visible sides of a building should have a consistent style and use of articulation. "False" fronts are strongly discouraged. For example, the primary exterior finish should be used on all façades of a building visible from a street, waterfront, pedestrian pass-through, or publicly accessible plaza. See Figure 4.7.a.

4.7.4 Façade elements (e.g., windows, doors, bays, joints, balconies, etc.) should display a logical rhythm and order.

4.7.5 Color change alone does not convey a sense of permanence, real variety or interest, as facades tend to be flat without complex shadows and textures. Murals excepted, articulation and detailing should not consist solely of color changes without changes in material or planes. Color changes should create enough contrast to have a clear visual distinction. See Figure 4.7.b.

4.7.6 Materials should complement the architectural character of adjacent buildings and convey a sense of durability.

4.7.7 Material changes should impart an authentic appearance, as opposed to a veneer-like quality, and correspond with the overall architectural design.

4.7.8 To the greatest extent feasible, avoid the following materials:

- Reflective building materials that may create glare along the ground level;
- Materials that do not age well;
- Materials that impart a sense of impermanence, such as scored plywood (i.e., T-111) siding, vinyl siding, thin brick materials, lower quality 'Drivit' type systems, and foam details;
- Excessive stucco as the primary material.

4.7.9 Articulation of building facades should provide visual interest and shade, and create a sense of enclosure along streets, the waterfront, public plazas, and open spaces with features such as awnings, canopies and/or overhangs. See Figure 4.7.d.

4.7.10 Awnings and canopies should be proportional to the façade on which they are placed and not obscure architectural elements and details. They should be no wider than a single storefront or architectural bay, whichever is narrower, and should not be dominant or overwhelming elements.

4.7.11 The height of awnings and canopies should provide pedestrian scale to the building.

4.7.12 Awnings should not be internally illuminated.

4.7.13 Balconies and entry porticos should avoid heavy walls and small openings. Visually permeable railings create a more inviting appearance and allow light into spaces.

4.7.14 Consider opportunities to "brand" buildings with architectural details and facade treatments that reference the Central Estuary's artistic nature. See Figure 4.7.e.

ENCOURAGE

Figure 4.7.c: Changes in color, material, planes and texture break this facade into a human scale and create interest along the street.

ENCOURAGE

Figure 4.7.d: Awnings provide protection from the sun and create a sense of enclosure, creating a comfortable walking environment for pedestrians.

ENCOURAGE

Figure 4.7.e: Artistic elements could be used to "brand" the funky artistic nature of the Central Estuary area.

4.8 Roofs

Figures 4.8.a to 4.8.c: Simple forms define the Central Estuary's rooflines.

AVOID

Figure 4.8.d: The massing of this building's roofs is overly complex.

INTENT

Respond with roof designs that are compatible with the area's simple roof forms.

Buildings in the Central Estuary are defined by simple roof forms that follow the buildings' simple massing. Roofs do not exhibit excessive jogs or setbacks, but are occasionally broken by gabled or hipped dormers. See Figures 4.8.a through 4.8.c.

GUIDELINES

4.8.1 Encourage roof forms that reflect the character of existing buildings, such as those roof forms listed in the intent. Roofs such as mansards and gambrels are discouraged.

4.8.2 The roof forms should demonstrate a simple composition that is defined by a clear rhythm and order with few breaks and changes in height and plane. See Figure 4.8.d.

4.8.3 Roof configurations should reflect a building's floor plan and massing.

4.8.4 The roofs of buildings on corner lots should give emphasis to the building corner.

4.8.5 Roof materials should be comparable to what is typically found in the neighborhood, which can include concrete and asphalt shingle.

Guidelines for Specific Uses

4.8.6 The tops of industrial and commercial buildings may be defined by distinct roof forms and parapet designs.

4.9 Utilities

4.9

INTENT

Ensure that service elements and utilities are appropriately addressed and integrated into the site and building design so they do not detract from the aesthetics of the project or block bicycle or pedestrian access.

Inappropriately placed or improperly designed utilities can create conflicts with other building features and landscaping, and present accessibility issues for pedestrians. Service elements and their design should be coordinated during site and building design to prevent these unwanted consequences. Depending on the amount of pedestrian activity anticipated, sidewalks should allow for clear passages of 6, 8 or 10 feet, free of utility boxes, lighting standards or other structural blockages. See Figure 4.9.a.

GUIDELINES

4.9.1 Loading and service areas, outdoor equipment, and refuse enclosures should be oriented away from street view to the maximum extent feasible, and screen from public view with a combination of landscaping and walls.

4.9.2 Rooftop equipment should be grouped to minimize its impact and should be screened from public view.

4.9.3 Consider the proper location of utilities during the design process of the site and building. To the greatest extent possible, these facilities should be accommodated within the building envelope or within parking areas away from streets, the waterfront, pedestrian pass-throughs and publicly accessible plazas. They should not be an afterthought.

4.9.4 Where utilities cannot be accommodated within the building envelope, they should be screened from view by an enclosure. Enclosures should be designed as an integral part of the building architecture and be made of finished materials to match the primary building. See the Landscaping and Screening section for further guidance. See Figures 4.9.b and 4.9.c.

AVOID

Image Credit: Flickr user Richard Drdul

Figure 4.9.a: Avoid placing utilities within the pedestrian through zone on sidewalks or other pedestrian and bicycle access ways.

ENCOURAGE

Figures 4.9.b and 4.9.c: An attractive utility screen creates an element that engages the eye.

5.0

5. Lighting

ENCOURAGE

Figures 5.a and 5.b: Integrated exterior building lighting design complements the architectural design of the building.

INTENT

Create safe and comfortable environments for all users through the use of an appropriate scale, location and level of lighting.

For areas that expect any amount of pedestrian traffic, a standard "cobra head" street light fixture does not provide appropriate illumination for pedestrians, who require more focused lighting. Good lighting discourages unwanted activity and attracts desirable activity to gathering places and along streets, promoting vibrant, safe places into the evening.

GUIDELINES

5.0.1 Ample, attractive lighting should be incorporated into spaces where people will gather, linger or walk, including open spaces, play areas, courtyards, parking lots, transit stops, walkways and the landscaping that surrounds them.

5.0.2 Parking lots, and in particular walkways, should be well lit for the safety and comfort of users.

5.0.3 Parking lot lighting should be sized appropriately for the type of use. Light standards for parking lots catering to the automobile should include pedestrian-scaled lights throughout, but in particular alcng walkways. Lighting standards for industrial and warehousing lots should, at a minimum, provide pedestrian-scaled lighting along walkways and at entrances.

5.0.4 Decorative fixtures are encouraged for pedestrian-scaled lighting.

5.0.5 It is preferable for fixtures to be spaced close together with lower light levels than further apart with more intense light levels.

5.0.6 Lamps should provide "natural" whiter light, which increases comfort and safety.

5.0.7 LED lighting is strongly encouraged. Low-pressure sodium lights are strongly discouraged as they create an unnatural cast.

5.0.8 All exterior building and landscape lighting should be shielded, and directed downward on the site so as not to produce glare onto pedestrian spaces and adjacent uses.

5.0.9 All exterior building lighting should be an integral part of a building's architectural design. See Figures 5.a and 5.b.

5.0.10 Where appropriate, consider accent lighting to highlight interesting architectural features, signs, and storefront displays.

6. Signage

6.0

INTENT

Much like the character of its buildings, signage should reflect the character of a place.

GUIDELINES

6.0.1 Signage should follow a hierarchy that clearly indicates the importance and/or size of the associated use, building, or place.

6.0.2 Signage should be coordinated and aligned with adjacent and surrounding buildings in order to achieve a unified appearance rather than visual confusion.

6.0.3 Creative and highly individualized signs, with a high level of detail and craftsmanship are encouraged. See Figure 6.a.

6.0.4 Within the parameters of the sign ordinance, flexibility should be allowed for artisans and craftspeople that wish to create unique signage that may contribute to the sense of place. See Figure 6.b.

6.0.5 Signage should reflect the character of the building and should be integrated within its architecture.

6.0.6 Signs should not obscure architectural elements such as transom windows or columns, nor should they appear cluttered.

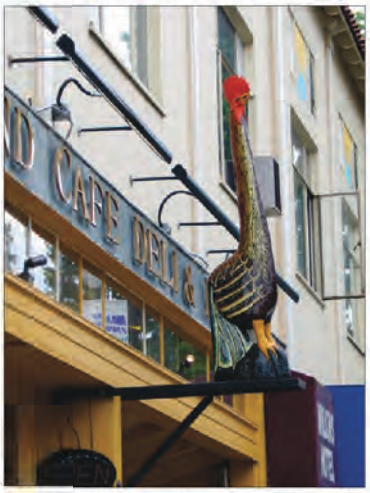
6.0.7 Internally illuminated signs, with the exception of neon, are strongly discouraged.

6.0.8 Signs should be constructed of high-quality and durable materials.

6.0.9 Externally illuminated signs should be designed and installed so that their lighting elements are directed at the sign without spillover onto streets and adjacent properties, to minimize glare.

6.0.10 Civic and landmark signage (e.g., district signs, waterfront signage, etc.) should be used to announce an important place, gateway, or feature and should be more prominent in scale.

ENCOURAGE



Figures 6.a and 6.b: Unique signage should be encouraged in the Central Estuary to take advantage of the many artisan businesses in the area.

7.0

7. Green Building Design

INTENT

Comply with City of Oakland Green Building Ordinances to advance city goals towards a more sustainable environment.

In 1998, the City of Oakland adopted the Sustainable Community Development Initiative, effectively advancing city policies and programs closer to its goal for a more sustainable future. Since then, the City Council has adopted various policies in support the initiative. Since 2001, the city has been ranked amongst the 10 greenest cities in the U.S. and has won awards for its efforts.

APPLICABLE REGULATIONS

Below is a summary of current ordinances that affect new building construction, adaptive reuse, and certain additions and alterations that will affect projects within the city, including the Central Estuary.

City of Oakland Green Building Ordinance

In October of 2010, the city adopted the Green Building Ordinance for Private Development Projects. The ordinance affects a wide range of projects, including:

- Residential and non-residential new construction, additions and alterations;
- Removal of a historic resource and new construction;
- Historic residential and non-residential additions and alterations;
- Affordable housing construction receiving city or redevelopment funds;
- Mixed use construction; and
- Construction requiring a landscape plan

Certain types of projects are required to receive certification through a non-governmental green rating agency, including:

- All new residential construction and residential additions and alterations over 1,000 square feet certified through Build It Green's GreenPoint Rated program.
- All new non-residential construction and non-residential additions and alterations.

City resources are abundant and easily accessible to assist developers and property owners in complying with the ordinances and many are provided at no cost. Further information and downloadable documents can be accessed from the city's website at http://www2.oaklandnet.com/GreenBuilding/index.htm.

CALGreen

As of January 2011, new construction projects are required to comply with the California Green Building Standards Code also known as CALGreen. CALGreen requires all new buildings in the state to be more energy efficient and environmentally responsible through comprehensive regulations that include a mix of prescriptive and performance based standards. Like California's existing building code provisions, which regulate all construction projects throughout the state, the mandatory CALGreen provisions will be inspected and verified by local and state building departments, thereby not adding certification costs to builders.

In addition, starting July 1, 2012, existing non-residential additions over 2,000 square feet and alterations with a construction cost of greater than $500,000 will require compliance with CALGreen. Further information is available through the California Building Standards Commission website: www.bsc.ca.gov/home/calgreen/aspx.

Construction and Demolition Ordinance

In July 2000, the City adopted the Construction and Demolition Ordinance to encourage development and redevelopment at higher intensities and in hopes of supporting its efforts towards a more sustainable future. The ordinance promotes reusing, salvaging, and recycling of construction and demolition debris to conserve natural resources and reduce the need for landfill space as well as to stimulate markets for recycled materials, which may reduce construction costs related to debris disposal.

Projects affected meet one or more of the following criteria:

- New construction;
- Non-residential or apartment house (3+ units) demolition; and
- Non-residential or apartment house (3+ units) addition or alteration valued at or greater than $50,000 adjusted to year 2000 dollar values.

Documentation must be submitted calculating itemized and total volumes or weights of the material that is proposed for reuse or salvage, and that which is proposed for landfill by type of material, showing that at least 50 percent of the volume will be diverted. The proposal must be approved prior to obtaining a demolition and building permit. Follow up monitoring is performed through inspections and audits.

Recycling Space Allocation Ordinance

This ordinance is a result of another State Assembly Bill (AB 1327), which added Chapter 18, known as the California Solid Waste Reuse and Recycling Access Act of 1991, to the State's Public Resources Code. In June 1995, the city adopted the Recycling Space Allocation Requirements ordinance, which requires certain developments to provide space for the collection and loading of recyclable materials in conformance with the standards established by the Integrated Waste Management Board.

Projects affected are required to provide adequate, accessible and convenient areas for collecting and loading recyclable materials. Depending on certain permit application submittal(s) criteria, projects affected may include:

- New construction of public facilities where solid waste is collected and loaded and improvements to existing areas where solid waste is collected and loaded;
- New construction of residential (5+ units) where solid waste is collected and loaded for five or more living units, and additions to existing residential (5+ units) adding 30 percent or more to the gross floor area;
- New construction of marinas, commercial and industrial uses and additions to existing commercial and industrial adding 30 percent or more to the gross floor area;
- Multi-tenanted residential, commercial and industrial uses where applications are submitted for the entire project or by a single tenant, which singly or collectively add 30 percent or more to the gross floor area.

8. Active Design

8.0

INTENT

Promote active lifestyles through the design of landscape and building environments to facilitate daily physical activity.

The goal of Active Design is to address the ways that architecture, landscape architecture and urban design can create spaces that encourage stair climbing, walking, bicycling, transit use, active recreation, and healthy eating. Many of the above guidelines encourage pedestrian activity and the following guidelines provide additional steps to create building interiors that promote a more active lifestyle.

Image Credit: Flickr user tombdmot

Figure 8.a: Creating an easily accessible stair case that serves as an attractive, central design feature can help encourage active use of a building.

GUIDELINES

Building Circulation

8.0.1 Design and locate stairs as a feature for everyday use rather than a utilitarian building system by locating stairs in direct sight of the building's entrance and integrating them as the building's principal path of travel, such as a grand staircase that serves as a central feature of the building's architecture.

8.0.2 Design the staircase as a sculptural and artistic element of the building. Showcase stairways with natural and/or artificial light; vary materials to create texture and modulation; use color as an effect, integrate sound and natural ventilation; and offer views to the inside and outside. Include corridors and landings as an integral part of the architectural character of the stairs.

8.0.3 Design stairs with ample room to accommodate travel in both directions, for different speeds, and for small and large groups of people.

8.0.4 Design stairs to facilitate maintenance by using durable, high-quality materials that are easy to clean and maintain, resist wear and tear, and discourage graffiti and vandalism.

8.0.5 Plan the spaces within the building to encourage walking by considering frequent origins and destinations. Design walking routes as attractive spaces with ample amenities such as natural light, drinking fountains, seating, and signage.

Building Program

8.0.6 Incorporate building facilities that support exercise. Provide spaces for secure bicycle parking, showers and locker rooms, and workout rooms. Make these spaces attractive, central, easily accessible, and provide clear signage and information to facilitate their use.

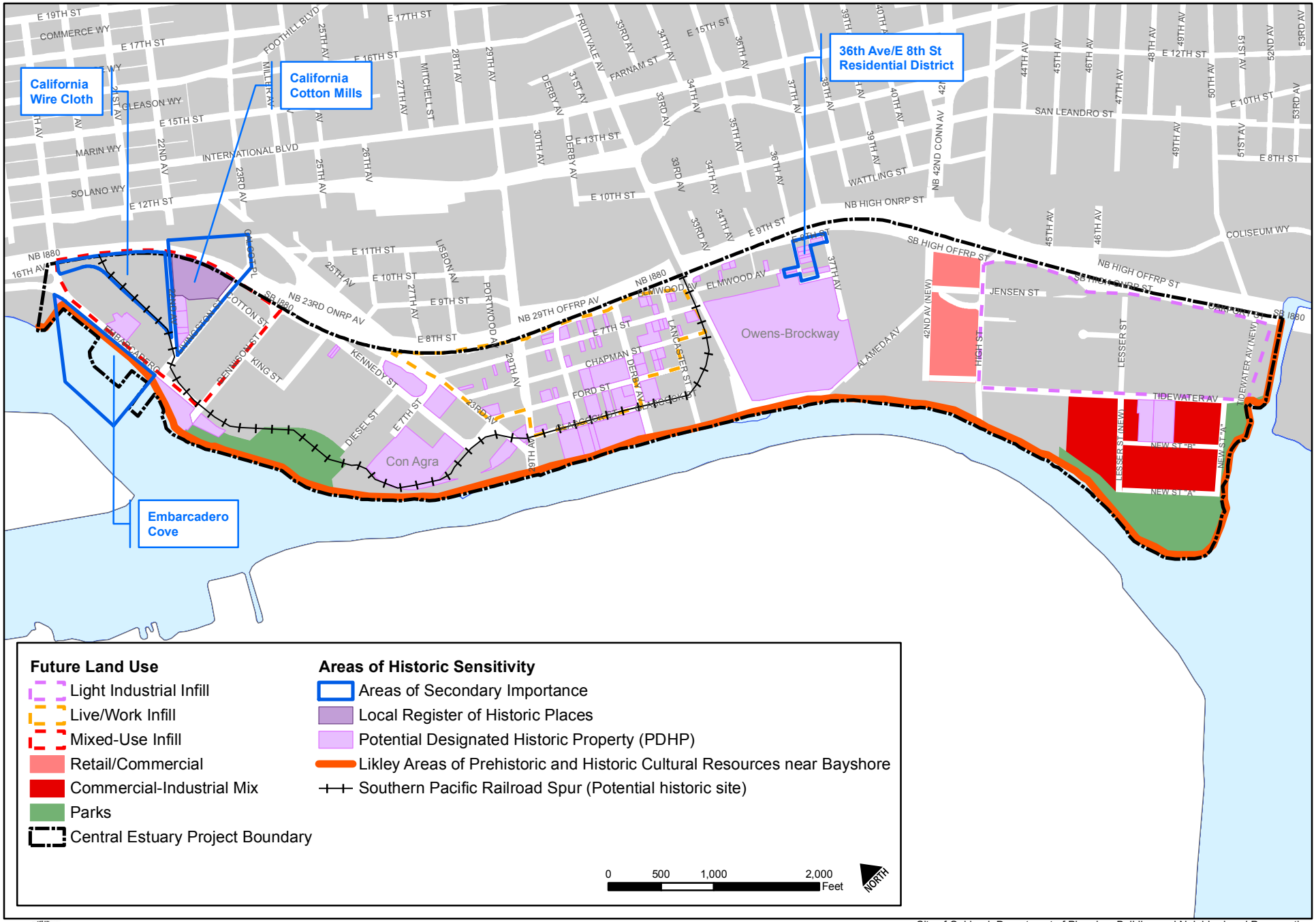
8.0.7 Locate common areas that have access or views to attractive outdoor spaces.

8.0.8 Locate commonly used community spaces at a distance that is also comfortably close, to increase walking distances when using these spaces. For example, locate kitchens, lunchrooms, copy rooms, and other such spaces at a distantly comfortable extent from personal office spaces.

8.0.9 Provide spaces that encourage personal communication, face-to-face, rather than digital communication, by incorporating spaces where people can gather and engage in productive, pleasant, and safe social interaction.

8.0.10 Incorporate space in building design that could be used for community meetings, afterschool programming, tutoring/ mentoring, senior activities or other social programs.

Attachment G



CITY OF OAKLAND

CENTRAL ESTUARY IMPLEMENTATION GUIDE

Areas of Historic Sensitivity

City of Oakland, Department of Planning, Building and Neighborhood Preservation
September 2012