Orizaba Urban Design Plan

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Executive Summary

The site area for the Orizaba Design District is located in central Long Beach, California. Historically the physical development of the area has been heavily influenced by the existence of the Pacific Electric Railroad, which has a right-of-way running diagonally through the site. With the existence of the railroads, as well as the Districts proximity to the Port of Long Beach and major thoroughfares, the area has developed as an industrial site.

Despite the industrial nature of the area, starting in 2007 a small group of creative business owners, including architects, graphic designers, interior designers, and others, started to locate in the District, mainly along Coronado and Gladys Avenues. This private investment spurred further development and led to the identification of the site as having the potential to grow into a unique Design District.

Based on these realities, the Orizaba Urban Design Plan seeks to provide conceptual and design principles that will provide the City of Long Beach and local business owners with insight into development opportunities. The Plan envisions Orizaba has a safe, pedestrian friendly District that builds on the existing character of the City. To accomplish this, the Plan incorporates elements of site analysis and community meetings into conceptual development, which is further refined to create Plan objectives. The Plan objectives address elements of land use and circulation and explore ways the District can utilize sustainable design principles, particularly Low Impact Development. Finally, form-based codes incorporate Plan objectives into clearly defined design standards. The

standards, which address elements of building envelopes, streetscape, visual quality, signage and wayfinding, and street furniture, are provided to aid in implementation and the realization of the District's potential.

1. Orizaba Design District Project Proposal

1.1 Introduction

This study will investigate a sustainable design proposal for the City of Long Beach's proposed Orizaba Design District. It will attempt to incorporate community, private business, and city staff feedback in an effort to develop a comprehensive proposal. The City of Long Beach has undertaken initiatives to implement principles of sustainability, and this proposal asserts that redevelopment is in a unique position to use sustainability as a guide in project development.

1.2 Project Area Background

The Orizaba District is located within the Long Beach Redevelopment Agency's (RDA) Central Project Area, which was adopted on September 21, 1993 in response to the civil disturbances of 1992. Structural damage to buildings in the project area during the disturbances totaled over \$19 million, accounting for 91% of the City's total damages (Long Beach Redevelopment Agency Central Project Area, 2008). In terms of size, the Central Project Area is made up of 2,618 acres, 100 percent of which is urbanized. The majority of the project area is in southern Long Beach, south of the I-405 freeway, north of downtown, east of the I-710 freeway and west of Redondo Boulevard (Central Project Area, 2001). The Orizaba District is located in the eastern portion of the project area and bound by East Anaheim Street on the south,

Redondo Avenue on the east, East 14th Street to the north, and Temple Avenue to the west (Appendix A).

1.3 Design Districts

Looking at the concept of a design district, there are numerous examples throughout the United States where they have been successfully implemented. Although no two districts are the same, there are general characteristics incorporated into their development. A comparison of design districts in New York City, Portland, OR, Miami, FL, and Santa Monica, CA is shown in Table 1.1. Note the similarities between the districts.

Table 1.1: Design District Characteristics

	Mixed-Use Residential/Retail	Artist Exhibits	Restaurants/Bars	Design Studios	Open Space
New York, NY: Meat Packing District	x	x	x	x	-
Portland, OR: The Pearl	x	x	x	x	X
Miami, FL Design District	x	x	x	x	-
Santa Monica, CA Design District	x	x	x	x	-

Source: <http://www.santamonica.com/visitors/what-to-do/arts-and-culture/design-district/>;
<http://www.explorethepearl.com/>; <http://www.meatpacking-district.com/>; <http://www.miamidesigndistrict.net/>

While simply duplicating the appearance and amenities provided in these districts is no guarantee of success, incorporating these characteristics into something unique to Long Beach and the Orizaba District provides a good starting point.

In an effort to create a unique district it is important to define specific characteristics and determine what types of uses they correspond to. Looking at mixed-use development, as the name suggests this refers to buildings and neighborhoods that share uses. While often times this refers to a mix of residential and retail, it can also include offices, shops, or different types of

housing. Along with mixed use developments, other characteristics of successful design districts are artist exhibits, restaurants/bars, and design studios, which can include architecture, landscape, graphic, furniture, or other types of design.

In terms of open space, Berke (2007) identifies six possible purposes for its establishment: 1) Protection of property and people from natural environmental hazards, 2) Protection of natural resources and environmental processes, 3) Protection and management of natural resources for economic production, 4) Protection and enhancement of natural and cultural amenities, 5) Protection or provision of outdoor recreation, education, or cultural facilities, and 6) Shaping urban form. Of these six, “Shaping urban form” most closely resembles the type of open-space currently present in the Orizaba Design District. Berke (2007) notes that this type of open-space can take on many forms. “These areas might be greenbelts, open-space wedges and corridors, buffer areas, plazas and commons, construction setback lines, and other open space to give imageability to a town or city. Together with the provision of natural amenities, this purpose is often associated with urban design” (Urban Land Use Planning, 2006). Given the urban setting of Long Beach, the presence of open space helps provide a distinct identity to the neighborhood and provides Orizaba with one of the amenities that characterizes a successful design district.

1.4 Current Conditions

The decision to investigate the Orizaba District as a potential design district is the result of three realities. First, recent private investment in the area has brought in creative industries such as architecture firms, design studios, and interior designers (Figure 1.1).

Figure 1.1 : Vision Design Studios 1342 Coronado Avenue

Second the Long Beach Redevelopment Agency (RDA) is in the process of completing a \$3.3 million expansion of Orizaba Park. This project will see the park add one acre of park space, improve existing park equipment, and eventually create a community center. Third, and perhaps most importantly, the RDA has identified the East Anaheim Street between Atlantic and Redondo Avenues as carrying significant economic vitality and as having the potential to develop into a Regional Ethnic Corridor. This would help produce a cultural center for the surrounding neighborhoods and the overall city, and

would help cater to the dense communities of Cambodians, Latinos, and African Americans in the area (Strategic Guide for Development, 2005).

Current conditions in the Orizaba District are characterized by light industrial uses. Collision repair shops, canine groomers, and automobile storage are examples of existing businesses (See Figures 1.2-1.4). These uses are counter to what the City has identified as the most desirable uses for the area. "...It is recommended that Anaheim Street retain its primarily commercial orientation. Any incompatible commercial uses such as storage facilities and light industrial should be replaced over time by uses that are more compatible with the adjacent residential neighborhoods." (Strategic Guide for Development, 2005) These incompatible uses underline some of the problems with the neighborhood and demonstrate the opportunity to transition the neighborhood into one more closely aligned with the City's vision.

Figure 1.2. Orizaba Avenue (South View)

Figure 1.3. 1365 – 1389 Gladys (North View to E&L Collision Auto Repair)

Figure 1.4. East 14th St. (East View to Coronado)

1.5 Problem Definition

Based on the current needs of the area there is a clear opportunity to incorporate principles of sustainable design into its development. Although there are many different ideas on what constitutes sustainability, this study will approach it from the standpoint of incorporating the “triple bottom line” first developed by John Elkington. While Elkington (1994) argues for sustainability

from corporations, his insistence on approaching sustainability from ecological, social, and economic aspects can just as easily be applied to development. This approach is best defined by the Minnesota Planning and Environmental Quality Board. In their definition, sustainable development is “development that maintains or enhances economic and community well-being while protecting and restoring the natural environment upon which people and economies depend” (Berke, 2007). To understand this concept in terms of community design, sustainability is an approach that incorporates aspects of economic prosperity, social equity, and environmental protection into the shaping of how communities live and interact with one another.

To further explore this notion of sustainability it is helpful to look at the characteristics of community design that have helped create the need for a new approach to development. In his book *Ecological Democracy*, Randolph Hester addresses this issue.

For the last fifty years, at an ever-accelerating pace, cities, subdivisions, parks, even our houses have diminished our daily lives, often in ways about which we are unaware. Poor city design divides us from others in our communities, undermines our sense of community and place, destroys natural habitats that once gave us immeasurable joy and fails to inspire our spirits. In the name of progress, we destroy the best neighborhoods to build highways that are still unable to relieve traffic congestion. The vehicles that ride on ever wider streets add deadly pollutants to our everyday environments, make neighborhood play unsafe for our children, and turn across-the-street neighbors into strangers. (pg. 2, 2006)

Hester’s analysis is particularly insightful in the manner that it describes how design can truly impact the way that community members live and interact with one another. Not only does poor design diminish our ability to experience

memorable places, but it also acts to divide us, undermine our sense of community, and ultimately turn neighbors into strangers.

One aspect of poor design that has contributed to the separation of communities is development's failure to address issues of walkability. As Leinberger discusses, one of the appeals of living in a traditional urban development is a compact community that enables citizens to experience their surroundings by walking. Described as "walkable urbanism", the concept exists within a finite area of urban space. "Since the rise of cities 8,000 years ago, humans have only wanted to walk about 1500 feet until they begin looking for an alternative means of transport..." (pg. 2, 2005). In addition, as Leinberger goes on to state, walking is only desirable if there are engaging activities along the way. "But the willingness to walk isn't just about the distance...People will walk 1500 feet or more only if they have an interesting and safe streetscape and people to watch along the way—a mix of sights and sounds that can make a pedestrian forget that he is unintentionally getting enjoyable exercise" (pg. 3, 2006). In order to engage pedestrians, community design must be cognizant of both the built environment and the uses being incorporated into its development.

In addition to issues of walkability, David Wann describes three influential factors in the creation of poorly designed communities. Wann states "American cities and communities are environmentally costly and spiritually numbing because of a deadly trio of poor design: the transportation infrastructure, resource consumption by buildings, and the obliteration of open

land and habitat” (pg. 117, 1996). This poor design has far reaching consequences both for cities and their populations, especially the young and elderly. Wann goes on to say “When children cannot walk to activities, they often become television addicts. As for the elderly, when their licenses are revoked because of failing eyesight, they become stranded. Even those that are capable of walking are discouraged because there are few services within walking distance” (pg. 119, 1996). This isolation caused by poor community design reinforces the notion that traditional city development is poor both in design and in the manner that it facilitates community growth.

While it is important to recognize the costs from traditional development, it is equally important to understand the benefits of implementing sustainable principles into community development. As described by the Sustainable Sites Initiative, these benefits can be direct or indirect. A direct economic benefit is something that is easily quantified in a monetary sense, such as in purchasing a less expensive form of roof tiles. On the other hand, an indirect benefit is something which is much more difficult to quantify, such as capturing the economic value of a walk in a park or an endangered species. While capturing the true value of indirect benefits is challenging, they have become increasingly important to promoting sustainable development and to understanding the true benefits of its implementation.

To elaborate on this point, it is helpful to look at some of the benefits to sustainable development. More to the point, because developers are primarily concerned with increasing their profit, it is helpful to look at those areas where

sustainable practice can increase value or decrease spending. In terms of the latter, three specific areas of cost reduction are found in energy savings, water treatment savings, and air cleansing (American Society of Landscape Architects et al, 2008). Examples of these benefits are found in the local climate regulation provided by shade trees that lower air conditioning usage; urban forests that prevent thousands of gallons of stormwater runoff from flowing into municipal sewer systems; and the filtering of carbon and air pollution provided by urban trees. Despite the exact value of these benefits being different for various stakeholders, cities throughout the country have valued them at \$2.8 million per year, \$35 million per year, and \$9.2 million per year respectively (ASLA et al, 2008).

Although direct benefits produce value that is more easily quantified, indirect benefits offer something less tangible, but equally important. One area where indirect benefits can often be seen is through the value that humans derive from a relationship with a healthy environment. Research by social scientists and psychologists shows, for example, that adults and children benefit from encounters with nature through an increased ability to concentrate, and reduced feelings of anxiety and aggression. Views of natural settings can reduce the number of sick days taken by office workers and decrease patient recovery time. Additionally, trees and green space generally are good for property values, increasing them from around 4 percent to as much as 10 percent (ASLA et al, 2008). By providing greater opportunities for citizens to be outside and experience nature, sustainable development

ensures the health of the physical environment as well as the health of its community members.

In light of the benefits of sustainable development, it is worth noting that redevelopment in particular, based on the characteristics of tax-increment financing in project areas, has unique incentives to incorporate sustainable design into projects. As discussed by Einstein, the principles of sustainable design often raise property values, which in turn increases revenue for a Redevelopment Agency.

Tax-increment financing, in particular, enables the redevelopment agency to recapture some of the property value increase that results from their capital investments in a project area, closing a financial loop. Since many neighborhood features that would improve sustainability--such as street trees and vegetated open spaces, for example-- create public amenities that are best reflected economically in the area's property values, the tax-increment financing mechanism could make these a rational investment with direct payoffs... (2001)

Given the potential benefits for Redevelopment Agencies and communities as a whole, the importance of incorporating sustainable principles into redevelopment projects seems clear. While financing the premium that is often associated with sustainable development may serve as a barrier, the long-term benefits may help alleviate this constraint.

In addition to sustainable principles, this study will also explore the importance of public involvement in decision-making. As described by Becker “[Participation] reduces the feeling of anonymity and communicates to the user a greater degree of concern on the part of management of administration. [With] it, residents are actively involved in the development process, there will be a better maintained physical environment, greater public spirit, more user satisfaction and significant financial changes” (Sanoff,

2000). In order to take advantage of the benefits of community participation this study will explore processes of data gathering that incorporate community workshops, individual interviews, and/or focus group meetings.

1.6 Case Study: Portland, Oregon: The Pearl District

In an effort to understand the potential a design district has to revitalize a community it is helpful to look at an example. One example that particularly stands out is The Pearl District in Portland, Oregon. Once a marshland along the Willamette River, during the early 20th century the area thrived as the transportation hub of the City, and later developed into an industrial and warehouse district. However, starting in the 1950s the area began to experience many of the same issues that affected urban areas nationwide. Suburban growth and auto-centric development resulted in citizen migration and ultimately led to urban areas, including The Pearl, vacant and marginalized (Pearl District Development Plan, 2001).

After years of underutilization, the Pearl District became the focus of planning efforts to convert historically industrial areas into mixed-use neighborhoods. Following several studies and plan adoptions, in 1998 the efforts resulted in the establishment of a tax increment financing district which will provide funding for improvements within The Pearl until 2018 (PDDP, 2001). Since this action, The Pearl has experienced various forms of new development, including high profile restaurants, retail activities, and “loft” residences in converted warehouses. This continuing development has resulted in increased land values and a drastic increase in both resident and

jobs within the district. Using 2000 as a base year, the 1,300 residents and 9,000 jobs are expected to grow to 12,500 and 21,000 respectively (PDDP, 2001).

In addition to demonstrating tremendous growth, The Pearl is also taking steps to be a model of sustainable development. In the recently adopted North Pearl Plan there are several initiatives to ensure continued growth follows sustainable principles. Specifically, the plan focuses on four primary areas: sustainable site and building development; social equity and healthy neighborhoods; stormwater management; and multimodal transportation. To ensure these focus areas are properly attended to the plan establishes 12 goals for both the North Pearl neighborhood and the district as a whole (Table 1.2).

Table 1.2. Goals to Promote Sustainability in The Pearl District

Goal 1	Advance Sustainable Site & Building Development
Goal 2	Achieve Carbon Neutral Operations for New Buildings by 2030
Goal 3	Create Diverse Housing Opportunities
Goal 4	Increase Availability of Green Affordable Housing
Goal 5	Mixed-Use & Transit-Oriented Development
Goal 6	Build a Vital, Socially Equitable and Healthy Community
Goal 7	Develop Diverse Regional Economic Opportunities
Goal 8	Project Stormwater
Goal 9	Mode Split
Goal 10	Parking
Goal 11	Green Street and Right-of-Way
Goal 12	Transportation Demand Management

Source: Portland Strategic Guide for Development, 2001

With these goals in mind, The Pearl has set out to become a leader in sustainable development and serve as a model for design districts everywhere.

1.7 Methods

This project will employ a mixed-method approach to data collection and analysis. The methods will include both an archival and public involvement iteration that will focus on using existing resources to influence a design proposal.

Archival exploration will use existing RDA documents and plans to better understand the City's vision and transformation process. In addition this phase will include an exploration of the history of both business and communities in the Orizaba District.

The public involvement phase is anticipated to include a combination of community workshops, interviews, focus group meetings, and/or surveys. As described by Hester, "community designers try to empower people—particularly less powerful members of our society—so that those people can have more control over their lives, and more choice in their home, work, and recreation environments" (1990). Therefore, the most feasible methods of enabling community members to participate in the design proposal will be explored.

2. Site Inventory and Analysis

2.1 Introduction

The Orizaba Design District is located within the Long Beach Redevelopment Agency's (RDA) Central Project Area. The Project Area was adopted on September 21, 1993 in response to the civil disturbances of 1992. Structural damage to buildings in the project area during the disturbances totaled over \$19 million, accounting for 91% of the City's total damages. In total the Project Area is made up of 2,618 acres, 100 percent of which is urbanized (Central Long Beach Strategic Guide for Development, 2005).

2.2 Location

The majority of the project area is in southern Long Beach, south of the I-405 freeway, north of downtown, east of the I-710 freeway and west of Redondo Boulevard (Central Project Area, 2001). The District is located in the eastern portion of the Project Area and bound by East Anaheim Street on the south, Redondo Avenue on the east, East 14th Street to the north, and Temple Avenue to the west.

Figure 2.1. Location Map of Long Beach in Los Angeles County
Source: Wikipedia, March 2009

2.2.1 Location Opportunities and Constraints

The Orizaba District's location within Long Beach offers several opportunities to encourage public and private investment. Chief among these are its proximity to major thoroughfares and the Port of Long Beach. East Anaheim Street connects to both the Pacific Coast Highway and the Harbor Freeway (I-710). Given that the Harbor Freeway connects directly to the Port of Long Beach, any business with shipping needs has very convenient access to one of the largest ports in the United States. Along with this, Redondo Avenue has a northbound exit for the San Diego Freeway (I-405), which provides access to Los Angeles. This ease of access to and from the site is an important consideration for investors looking to locate within Long Beach.

While its proximity to major thoroughfares and freeways offers convenient vehicular access, non-automobile travelers may have difficulty getting to and from the site. Long Beach Transit helps alleviate some of this issue, though for

pedestrians without the means for bus travel or who travel by bicycle or foot, this may serve as a deterrent.

2.3 Existing Land Uses

According to the City of Long Beach's Land Use Map, five land-use districts exist in the site area, including varying intensities of residential, commercial, and industrial uses. Figure 2.2 provides a Land Use Map showing existing uses in the area. The following is a listing and description of land use districts in the site and its surrounding areas:

2.3.1 Residential (Mixed Style Homes; L/U District #2)

The Residential land uses within the study area are characterized as a Mixed Style Homes District, and are the result of high-density residential zoning that never materialized. The purpose of the district is to maintain the existing residential uses without forcing their conversion. Maximum allowable densities within the Mixed Style Homes District are dictated by existing lot sizes.

Figure 2.2. Mixed style homes within site area

Figure 2.3. Orizaba Land Use Map

2.3.2 Commercial (Traditional Retail L/U District #8A; Shopping Nodes L/U District #8N)

In the City's General Plan, there are six types of Commercial Land Use Districts. Two of these Districts are found within the Orizaba Design District. A Traditional Retail District is characterized by small-scale retail intended to serve local and neighborhood needs. These districts are established to provide service and convenience for persons traveling by car that are in need of local services.

The Shopping Nodes District is established to accommodate retail and service uses, primarily in small clusters. They are widely dispersed neighborhood serving centers, which in the City's General Plan, are intended to be within a half-mile of each residential district.

Figure 2.4. Traditional Retail District on E. Anaheim & Obispo Ave.

2.3.3 Industrial (Restricted Industrial L/U District #9R)

The two industrial land use districts defined in the General Plan are designed to allow for a wide variety of industrial uses. Of the two, Restricted Industry District is created to accommodate less intense, or light industrial uses.

In addition, the district can accommodate manufacturing, research and development, warehousing, and large-scale wholesale facilities. Residential units are not permitted within these districts. Industries with minimal environmental impacts, such as clean, non-nuisance industries whose primary activities are confined indoors are desired.

Figure 2.5. Restricted industrial uses

2.3.4 Open Space and Park (L/U District #11)

The Open Space and Park District describes any area of land or water that is devoted to an undeveloped or unconstructed type of use. Table 1.1 summarizes the existing land uses within the Orizaba Park District.

Table 2.1. Existing Land Uses in Orizaba Park District

General Plan Land Use District	Zoning Designation(s)	Primary Usage
LUD-2: Mixed Style Homes	R-2-S, R-2-I, R-2-N, R-2-A, R-2-L, and RM	Single family detached and attached homes
LUD-8A: Traditional Retail Strip	CH, CAN	Automobile-oriented retail and office uses serving local/neighborhood needs
LUD-8N: Shopping Nodes/Districts	CCA	Neighborhood-serving retail
LUD-9R: Restricted Industry	IL, IP, IM	Light and medium industrial uses
LUD-11: Open Space and Park	P	Parks

See Appendix A for Zoning Designation Definitions

Source: Central Long Beach Strategic Guide for Development, 2005

2.3.5 Surrounding Land Uses

The area immediately surrounding the Orizaba Park District includes the area north to the Pacific Coast Highway, east to Redondo Avenue, south to E. Anaheim Street, and west to Cherry Avenue. Table 1.2 summarizes the surrounding land uses.

Table 2.2. Land Use Districts Surrounding Orizaba

General Plan Land Use District	Location	Zoning Designation(s)	Primary Usage
LUD-2: Mixed Style Homes	Adjacent to Orizaba Park and north of E. 14th Street	R-2-S, R-2-I, R-2-N, R-2-A, R-2-L, and RM	Single family detached and attached homes
LUD-4: High Density Residential	Adjacent to Coronado Ave. along Redondo Ave	R-4-N	Larger apartments and condominiums
LUD-8A: Shopping Nodes/Districts	Continuing along E. Anaheim St. outside of Project Area	CH, CAN	Automobile-oriented retail and office uses serving local/neighborhood needs
LUD-7: Mixed Office-Residential Strip with some Retail support	On Redondo Ave.	CO, CNR, CCP, CCR, CCN	Mixed residential and commercial uses along major arterial routes
LUD-8N: Shopping Nodes	South of E. Anaheim St. between Obispo and Redondo Ave.	CCA	Neighborhood-serving retail

See Appendix A for Zoning Designation Definitions

Source: Central Long Beach Strategic Guide for Development, 2005

2.3.6 Land Use Opportunities and Constraints

Given the variety of land uses in and around the Orizaba District, there is potential for development to occur in any number of areas. In particular, the mixture of commercial, residential, and office uses provide the ingredients for a vibrant urban environment. By acknowledging this potential, investment in the area can capitalize on existing resources with little government intervention. This

can allow for growth to occur in a manner that is both familiar and accepted to local residents and business owners.

While the variety of uses in and around the District offers flexibility in terms of growth, some of the existing land uses may deter investors. For one, the high concentration of industrial uses may deter commercial and retail uses from locating in certain areas. Industrial uses also detract from the aesthetics and character of the area. Overcoming this reality will be an important part of changing perceptions of the District.

2.4 Existing Public Facilities

Existing public facilities within the study area include Orizaba Park, Head Start Pre- School, and the Post Office located on Temple Avenue. In addition, a community center has been proposed in the expansion to Orizaba Park. Lee Elementary School, which is located on Temple Avenue north of 16th Street, is located just outside of the project boundary and serves the surrounding neighborhoods.

2.4.1 Public Facilities Opportunities and Constraints

The existing public facilities, as well as the proposed community center, offer the Orizaba District and surrounding neighborhoods with important resources. The Head Start and Elementary School, in addition to providing education, offer after-school programs for students, while the community center at Orizaba Park can provide the same for adults. This provides residents with means to self-improvement and also offers avenues to community involvement.

Along with these resources, Orizaba Park is also an important neighborhood amenity. It offers both recreation opportunities and encourages interaction between community members.

2.5 Topography and Elevation

With the exception of isolated hilly areas, the ground surface elevation in all of Long Beach is generally less than 60 feet above sea level. The site area is characterized by level ground and minimal topography. Figure 2.6 displays the level ground that is predominant throughout the site.

2.5.1 Topography Opportunities and Constraints

The minimum topography and elevation within the District provide an opportunity in the sense that it is one less constraint for developers or construction. In addition, relatively level ground provides for a more pedestrian friendly experience.

Figure 2.6. South View from Orizaba Ave. and E. 14th St.

2.6 Transportation and Circulation

Public transportation is available in the study area from Long Beach Transit. Bus lines that connect the Orizaba Park District to Downtown Long Beach and surrounding cities can be found along E. Anaheim St. (Lines 45 & 46), Pacific Coast Highway (Lines 171, 172, 173, 174) and Redondo Ave. (Line 131). On weekdays service is available approximately every 15 minutes from 6:00 AM to 6:00 PM.

Long Beach is also served by the Metropolitan Transportation Authority (MTA) Blue Line, which connects Long Beach with downtown Los Angeles. The rail runs north to south along Long Beach Boulevard, ending at the Metro Center on Figueroa Street in Los Angeles. Residents of the study area can access the Blue Line at the intersection of E. Anaheim and Long Beach Boulevard, which is approximately two miles, or a 10-minute bus ride on the 46 Line from Redondo Avenue and E. Anaheim Street.

The major arterial serving the study area is E. Anaheim Street, which is a four-lane roadway with a painted centerline and painted left-turn lanes. Current traffic volumes on E. Anaheim Street west of Redondo Avenue are 28,200 vehicle trips/ day (Strategic Guide for Development, pg. 38). The posted speed limit is 30 miles/hour, and there is no parking from 4AM to 8AM on Wednesdays (north side of street) and Tuesdays (south side of street) for street cleaning. There is also a 2-hour curb time limit on parking from 9AM to 6PM. Table 1.3 summarizes the characteristics of E. Anaheim Street.

Table 2.3. East Anaheim Street Summary

Street Segment	No. Traffic Lanes	Median	Posted Speed	Parking
Long Beach Boulevard – Redondo Avenue	4	Painted LTL CL W/LTL	30 MPH	Northside NP 4A - 8A Wed St. Clean 2HR 9A - 6P X-Sun Southside NP 4A - 7A Tue St. Clean 2HR 9A - 6P X-Sun

NP: No Parking ; CL: Center Lane ; LTL: Left-Turn Lane

Source: Central Long Beach Strategic Guide for Development, 2005

As mentioned previously, the District does not accommodate non-automobile traffic well. No bike lanes exist, and very few businesses have bike racks for storage. Along with this, sidewalks in some sections are not accommodating to pedestrians. This is especially true along portions of East Anaheim Street and Obispo Avenue, where the combination of narrow sidewalks and fast moving traffic can make for an unpleasant experience.

Table 2.4. Street Widths

Street	Section	Sidewalk Width
E. Anaheim	North Side of Street	7 ft. 6 in.
E. 14th	Between Orizaba and Gladys	7 ft.
	Between Coronado and Obispo (no sidewalk on south side)	5 ft. 6 in.
Temple	East Sidewalk	12 ft.
	West Sidewalk	10 ft.
Gladys	East Sidewalk	10 ft.
	West Sidewalk	12 ft.
Orizaba	East Sidewalk	12 ft. 2 in.
	West Sidewalk	12 ft. 6 in.
Obispo	East Sidewalk	7 ft. 5 in.
	West Sidewalk	7 ft. 5 in.
Coronado	East Sidewalk	9 ft. 9 in.
	West Sidewalk	9 ft. 9 in.

2.6.1 Transportation Opportunities and Constraints

The existing transportation and circulation situation offers both opportunities and constraints for increasing pedestrian access. Given its location near the intersection of East Anaheim and Redondo, it is a well-traveled area with convenient vehicular access. This provides the area with an opportunity to attract greater numbers of pedestrians if they are given a reason to come to the area. Along with this, the frequency of bus service enables those living within the area to access jobs without relying on a car. It may also provide access to people from outside the neighborhood. An additional opportunity can be found in the proposed conversion of Obispo Avenue to a Bike Boulevard. Increased bicycle access would help reduce automobile reliance and lessen the pressure placed on existing infrastructure.

In terms of constraints to pedestrian access, the lack of bicycle lanes and segments of narrow sidewalks offer challenges for pedestrian traffic. Along with this, wide streets and a lack of traffic calming measures encourage vehicular traffic to move at high speeds in and around the District. These elements encourage automobile traffic, leading to congestion and unfriendly pedestrian experience.

2.7 Open Space

Open space within the study area is found at Orizaba Park. The Parks and Recreation department classifies Orizaba as a Neighborhood Park, meaning it is intended to serve as the recreational and social focus of the neighborhood

(Strategic Guide for Development, 2005). To that end the park has amenities including basketball courts, green space, picnic tables, and a playground.

Although Neighborhood Parks are a rarity within the urbanized areas of Long Beach, the study area falls well short of the one-acre per 125 resident standard set by the Parks and Recreation Department. Orizaba serves approximately 3,179 residents for every acre of open-space. When adjusted for the 1.2 acre expansion at Orizaba Park and the 1.43 acres of green space at Lee Elementary, the number improves to one-acre per 1,698 residents. However, this number is still well below City standards for open space. Table 1.4 summarizes the current open space conditions in the study area.

Table 2.5. Orizaba Open Space Conditions

Park Name	Type	Acres	Population Served	Served/Acre
Orizaba	Neighborhood	2.5 *	8,710	3,179

*An additional 1.2 acres has been acquired and is undergoing maintenance

Source: City of Long Beach Department of Parks, Recreation and Marine Strategic Plan, Draft 2002

2.7.1 Open Space Opportunities and Constraints

The relative lack of open space presents a clear constraint on the ability of residents and workers to experience any sort of urban nature. This can also act as a deterrent for outside pedestrians, who may find little reason to visit the area.

Despite the area not meeting City standards for recommended open space, Orizaba Park offers an amenity that many other neighborhoods do not have access to. As such, the Park can be used as a means to connect segregated portions of the District and surrounding areas. By emphasizing the Park and taking advantage of its ability to draw visitors, the District may create a more vibrant and pedestrian friendly environment.

2.8 Alleys and Streetscape

The sidewalks along many parts of the study area are narrow and have not been well maintained. Many sections have large cracks, weeds, or pieces of cement missing. Along with this, alleys throughout the area have problems with litter, cracked pavement, and poor drainage. Neither the alleys, nor the sidewalks are well lit at night, which creates a perception of unfriendliness.

In addition to issues with street maintenance, there are also problems with pedestrian access. Connectivity is minimized by the existence of the Pacific Electric Right-of-Way, which runs diagonally the site. The Right-of-Way limits east to west connection for both pedestrians and vehicles. There is also a lack of traffic calming measures within the study area. This allows cars traveling to and from East Anaheim to speed. The absence of crosswalks at intersections and pedestrian paths through alleys further exacerbates this problem and creates an uncomfortable and unpleasant experience for pedestrians.

2.8.1 Alleys and Streetscape Opportunities and Constraints

The current conditions of the alleys and streetscape create an unpleasant environment for pedestrians. The lack of lighting, poor drainage, and cracked sidewalks all act as a deterrent to pedestrian traffic.

Despite these constraints, it is worth noting the opportunities that are available. Given the network of alleys, and the presence of sidewalks on each street, there exists the possibility of creating a District that is well linked and pedestrian friendly.

Figure 2.7. Gladys Avenue

Figure 2.8. Coronado Street

Figure 2.9. 14th Street Alleys

Figure 2.10. E. 14th Street and Alley

2.9 Existing Plans, Future Projects, and Applicable Land-Use Regulations

The Central Project Area Redevelopment Plan addresses many general areas of need for the Central Project Area. Among the issues that are specific to the Orizaba District, the Plan identifies the area along Anaheim Street between Redondo Avenue and Cherry Avenue as a future “cultural center”. Given the

diverse population and the high concentration of Cambodians, the area could become a unique neighborhood destination within the City of Long Beach.

In addition to the Redevelopment Plan, current plans in the study area include the expansion of Orizaba Park. The plan will add an additional 1.2 acres to the park and allow for expanded recreational and community amenities. Future plans include the creation of a bike boulevard along Obispo Avenue for the City's Bike Master Plan, and a Sustainable City Action Plan. The Action Plan will address several areas of need for the entire City, specifically drainage issues, urban nature, and energy efficiency.

Finally, the Redevelopment Agency has hired a consulting firm to create an Implementation Plan for the Orizaba District. The intent of the Plan is to determine the best course of action for the City to build upon the private investment that has taken place along Coronado and Gladys Avenues. Interviews with business owners and local stakeholders are being used as the basis for the development of the Implementation Plan.

2.10 Climate and Vegetation

Given its proximity to the Pacific Ocean, temperatures in Long Beach are moderated throughout the year and on average are 64.3 degrees. As in most locations in southern California, rainfall occurs largely in the winter months, and averages 11.8 inches a year. Table 1.5 summarizes important weather trends in the area.

As in many coastal California communities, several non-native plants are predominant throughout the City. Plants such as yellow mustard, eucalyptus

trees, wild radish, and tumbleweed far outnumber indigenous species. In terms of vegetation specific to Orizaba, there is little that currently exists. Trees line Orizaba Park, yet beyond that they can only be found at scattered intervals along streets.

Table 2.5. Summary of Average Monthly Weather

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Avg. Temp	55.9	57.3	58.5	61.7	64.8	68.5	73.1	74.4	72.4	68.1	61.3	56.0	64.3
Avg. Max Temp	66.8	67.7	68.0	71.5	73.3	77.0	82.7	84.0	82.1	78.4	72.1	67.0	74.2
Avg. Min Temp	44.9	46.9	49.0	51.8	56.3	59.8	63.4	64.8	62.7	57.8	50.4	45.0	54.4
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Precipitation (in.)	2.5	2.5	2.0	0.7	0.2	0.0	0.0	0.1	0.3	0.3	1.6	1.7	11.8
Avg. Wind Speed	5.4	6.1	6.8	7.4	7.2	7.0	6.8	6.6	6.2	5.7	5.3	5.1	6.3
Clear Days	12.0	10.0	11.0	12.0	10.0	12.0	18.0	19.0	15.0	13.0	13.0	13.0	159.0
Partly Cloudy Days	8.0	7.0	9.0	10.0	13.0	12.0	11.0	10.0	11.0	11.0	8.0	8.0	119.0
Cloudy Days	11.0	11.0	11.0	8.0	8.0	6.0	2.0	2.0	4.0	7.0	8.0	10.0	87.0

Source: Climate Zone, 2009 (<http://www.climate-zone.com/climate/united-states/california/long-beach/>)

2.10.1 Climate and Vegetation Opportunities and Constraints

As with most Southern California cities, the climate is major opportunity for the entire City of Long Beach. It enables citizens and visitors to enjoy various outdoor amenities during most times of the year, and can play a major role in encouraging pedestrian traffic.

Although the climate offers several opportunities, the lack of mature vegetation detracts from the natural environment and character of the District. Street trees offer several amenities, including increased shade for cooler temperatures, air purification through carbon sequestration, stormwater management, as well as others. Increasing the amount of street trees and

mature vegetation can help draw pedestrians to the area and improve the overall aesthetic of the District.

2.11 Conclusions

The goals created by the Central Project Area Redevelopment Plan have important implications for the Orizaba District. As transformation takes place in the surrounding corridors increased development and investment within Orizaba will become a reality.

Although current and existing plans that include the Orizaba District will help with its growth, planning specifically for the area is also important. Goals relating to pedestrian friendliness, increased parks and open space, improved streetscape, and improved environmental standards, can only be met with direct action. This will encourage private investment and help capitalize on the existing opportunities within the District.

Figure 2.11. Opportunities and Constraints

3. Community Outreach

Figure 3.1. Design District Workshop

3.1 Introduction

The City of Long Beach has sought to ensure that business owners and residents within the Orizaba Design District play a major role in its development. To accomplish this, the Redevelopment Agency, together with Field Paoli of San Francisco, has organized community outreach efforts, including stakeholder interviews and a design charrette. The following is a description of the themes and outcomes that resulted from the community meetings.

3.2 Stakeholder Interviews

On February 25th and 26th 2009 stakeholder interviews were held at Vision Design Studio (1342 Coronado Avenue). The interviewees consisted mostly of business owners operating within the District, but also included residents, members of the East Anaheim Street Business Association, and the City Council representative for the area. The intent of the interviews was twofold. First, the Agency wanted to better understand the elements of the District that had drawn businesses owners to locate there. Second, the Agency wanted to better understand its role in helping further development within the District. A list of sample questions is provided in Appendix C.

3.2.1 Themes

During the interviews, a number of key ideas emerged as having great importance for the current state of the Orizaba District as well as for its future development. Those major themes were safety, parking, infrastructure, affordability, authenticity, location/lifestyle, history, open space, and whether there was a need for additional residential capacity. The following is a discussion of those themes.

3.2.1.1 Safety

Although businesses owners reported very few instances of disturbance, many recognized there is a perception that the area is unsafe. This view is reinforced by the existence of barbed-wire fencing, a lack of lighting at night, cracked sidewalks, and a general appearance that the area is not well cared for. Whether perceived or real, a belief that area is unsafe may serve as a barrier for

new investment in the District, and was identified as the single biggest area where the Agency could aid in development.

3.2.1.2 Parking

The lack of parking was cited numerous times as an issue plaguing the area. To encourage development the Agency needs to provide more parking that will enable business owners and their clients the ability to park with minimal difficulty.

3.2.1.3 Infrastructure

The need for improved infrastructure was also identified as high need for the District. Streets, sidewalks, and alleys can all use improvements, and attention to these areas will help draw pedestrians and potential investors. Discussion was also given on the need for increased street trees, improved walkability, additional support services (coffee shop, restaurants), and addressing the numerous electrical polls throughout the area.

3.2.1.4 Affordability

Among the biggest draws for business owners to the District has been its affordability. Given the prices of real estate throughout Los Angeles and Orange Counties, affordable office space is a top priority. As development continues within the District there is a fear that prices will rise, and as a result some want to maintain the existing low profile.

3.2.1.5 Authenticity

Despite the fact that the interviews were intended to provide a broad vision for implementation, there was discussion on how the area should “feel”

and look once development has taken place. A top priority for the existing business owners is that the District does not develop strict regulations and standards that force a particular image on it. Interviewees stated that it is important for the Agency to allow growth to continue to happen organically, which will enable the development to portray a character that is distinctly Long Beach.

3.2.1.6 Location / Lifestyle

The location of the District within Long Beach allows many of the businesses owners, who also live in Long Beach, to avoid substantial commuting times. The ease of getting to and from work is a very positive draw for those seeking to avoid the congestion issues that are present throughout Southern California, and was a major draw in getting private investors to locate there.

3.2.1.7 History

Given the relative lack of historical references in the District, few business owners felt that the history of the area as a Los Angeles Red Car depot should play much of a role in future development. Many feared this would come across as forced and detract from the authenticity of the District.

3.2.1.8 Open Space

Although nearly every interviewee agreed that there needed to be more open-space, very few were aware of Orizaba Park or the expansion that is taking place to it. This lack of awareness does not deny that more open space is needed, but it does draw attention to the need for improved connection to the existing green space.

3.2.1.9 Residential

Few interviewees expressed a desire to see residential development beyond a flexible conversion space or live-work lofts. The general consensus was that residential in the surrounding neighborhoods was ample, and that with improvements it could accommodate the creative class that the District is trying to attract.

3.3 Design Charette

Following the analysis of data from interviews, on April 22nd 2009 a design charette was hosted at 1330 Gladys Avenue, and was attended by residents, business owners, and City officials from the Orizaba Design District. The charette was intended to build off the interviews and prioritize action items to jumpstart revitalization efforts in the neighborhood. The four main topics of the charette were identity and publicity, building reuse and zoning, parking, and streetscape.

3.3.1 Identity and Publicity

Based on discussions held at the interviews it was clear that a main issue to be addressed surrounded the promotion of the District. Among the topics discussed were what name, if any, should be given to the District, how much promotion should be undertaken, and how defined design guidelines should be. In general, the concerns with large-scale promotion and design parameters are that they will detract from the authenticity of the District. Residents also expressed concern that promotion would lead to gentrification and force them to relocate. The recurring theme was that growth should be allowed to happen

organically, and any design issues should be resolved through discussion amongst business owners, not a rigid set of guidelines.

3.3.2 Building Reuse and Zoning

Business owners cited the restrictions of zoning in the District as a main impediment to growth. They believe that current zoning is preventing more widespread growth, and the planning process is much too complicated and costly for new businesses. To address this, ideas were proposed ranging from an overlay district to assigning a planning staff member to oversee the District. From the business owner's perspective, the easier the development standards, the quicker growth will take place.

3.3.3 Parking

Parking was identified as the biggest issue for space consumption in the District. There is too little parking, and employees of the restaurants and industrial laundry service along Anaheim Street often take what is available. Ideas that emerged from the charette were to establish a parking district, institute shared parking for businesses with excess parking, and issue permits for employees working in the District. Additional street parking by way of reduced no parking areas was also suggested.

3.3.4 Streetscape

Accessibility from street to street, especially moving east and west, is poor throughout the District. This issue is compounded by poor lighting along streets and alleyways, which presents a safety issue for those using the District at night. Among the ideas suggested to address this were to increase pedestrian lighting

throughout the District, and to direct foot traffic toward the commercial district along East Anaheim Street. Each of these approaches would require the improvement of sidewalks and pedestrian paths in alleys, which would enhance pedestrian flow.

3.4 Community Priorities and Concerns

Based on the feedback from interviews and the charette, it was clear that a key concern for the District relates to improving the perception of safety. Based on this, the City priority was placed on improving infrastructure items including lighting, sidewalk and street improvements, and the removal of barbed-wire fencing. It is believed that these improvements would quickly change the perception of the District and improve safety. The City also vowed to examine the zoning within the District and facilitate the transition to a more clear development process.

4. Conceptual Development

4.1 Concept Overview

Based on the information provided from community outreach and site analysis, the objective of the Orizaba Design Plan is to create a District that addresses community needs by adhering to the elements of the triple-bottom-line of sustainability. That is, the plan attempts to promote the ecologic, economic, and social health of the community. As Campbell (1996) asserts, these three elements are essential to sustainable development and can only be addressed through a balancing of values. This requires a mixture of coordination, negotiation, compromise, and design knowledge to address the various problems associated with cities. Through this balance, communities can establish an interrelation among decisions and avoid giving greater importance to certain values, such as promoting economic health above environmental health.

Although recognizing the importance of the triple bottom line is crucial to creating a sustainable community, it does little to define how sustainability will be achieved. The numerous avenues through which sustainability can be pursued compound this issue. Wheeler (2000) identifies nine possible sustainability objectives, including compact urban form, preservation of open space, reduced pollution and automobile use, and improved recycling. He goes on to state that these objectives are by no means exhaustive, but simply represent some of the opportunities available to communities for being sustainable. This variety of objectives can act as a barrier to realizing sustainability goals and underlines the importance of creating focused plans.

With an understanding of the need to have focused objectives, the Orizaba Design Plan proposes to achieve sustainability primarily through the establishment of what Haughton describes as procedural equity. According to the principles of procedural equity, regulatory and participatory systems should be devised and applied to ensure that all people are treated openly and fairly (Haughton, 1999). Although this approach was devised explicitly for the protection of people, it can be broadened to include Haughton's other four principles of equity, which include accounting for the interests of members of inter-species, geographic, and inter-generational groups.

While equity has been identified as the main goal of the Plan, it is understood that it can only be achieved by enhancing the economic and environmental characteristics of the community. To that end the plan focuses on the establishment of equity through the enhancement of pedestrian connectivity, specifically by promoting non-automobile transportation uses and maximizing walkability. Enhanced pedestrian access ensures all members of the community have equal access to neighborhood amenities, regardless of whether they own a car or not.

Additionally, as a means of promoting environmental and economic health, the plan focuses on development that incorporates the standards of Low-Impact Development (LID). By introducing elements to protect and conserve natural resources, LID not only reduces the impact of development on the environment, but it can reduce developer costs and enhance property values (ASLA et al, 2008). Along with this, LID offers many elements of streetscape

improvement, including street trees, planters, swales, and pervious pavements. By incorporating these principles into its design, the Plan not only promotes sustainability but also addresses one of the top priorities of improvement within the Orizaba District.

To better understand why it is important to integrate the concept of the triple-bottom-line into a plan, it is helpful to think about how planning occurs without them. As Berke (2002) states, when goals relating to social equity, economic development, and environmental health are not present, sustainability cannot be promoted. More to the point, when environmental values are not accounted for, the basic life support process that a community depends on cannot be sustained. When economic development values are not represented, the fundamental source of community change and improvement is absent. When social values are not reflected in a plan, places are created which do not meet the needs of local people and do not fairly serve all stakeholders (Berke, 2002). All three values play an essential role in the development of the community, and thus if any is missing, sustainability, and overall community health, cannot be realized.

4.2: The Role of LID and Pedestrian Access in Social Equity

Having established the importance of the triple-bottom-line, it is equally crucial to understand how the promotion of social equity through LID and improved pedestrian access will accomplish this. To clarify, it is useful to look at how each of these elements addresses the three values touted by the triple-bottom-line. In the case of LID, environmental injustices that are often found in

low-income neighborhoods reveal the impact it can have on social equity. In many instances, these neighborhoods are subject to higher levels of flooding, pollution, and an overall degradation of the natural environment. Additionally, stormwater from these communities, which collects debris and other forms of pollution, can play a major role in polluting local rivers and other water bodies. LID addresses these issues by implementing natural design features that improve drainage, properly manage stormwater, and reduce developments overall impact on the natural setting. In the case of the Orizaba District, this can benefit both its residents and the entire City of Long Beach.

Along with environmental benefits, LID can also have positive impacts on local economies. As a result of its employment of natural features, such as enhanced open space, increased vegetation, and pervious surfaces, LID uses numerous amenities that are highly desirable for urban communities and reduce infrastructure needs. This can have important effects on existing property values and development costs. Kathleen Wolf (2008), a noted researcher of urban forests and their impact on human behavior, suggests that urban lots with substantial tree coverage may rise in price by an average of 18 percent. Additionally, as developers look to use natural features instead of concrete curbs and drainage systems, their overall costs may decrease. Although increased street trees and reduced cost may not accompany all LID projects, the improved natural environment can be expected to have benefits for numerous interests groups, the most important being the community as a whole.

In terms of how improved pedestrian access can improve social equity, an example can be found in the improved streetscapes that result from LID. As a reduction in incidences of flooding and pollution occur, streets become more inviting to pedestrians. Additionally, streets and sidewalks that are designed to reduce impervious surfaces will increase open space, vegetation, and the natural environment. Each of these elements can greatly enhance the aesthetics of a community and encourage greater pedestrian traffic. This may improve how an area is perceived, both in terms of safety and overall community health.

Along with drawing more people onto the streets, enhanced pedestrian access can also decrease automobile dependence. As walkability improves, pedestrians have to rely less on cars, a fact that is especially true in areas with mixed and complementary land uses. This not only has the advantage of drawing more people to the streets, but it also reduces traffic congestion and the pollution that is associated with automobiles. The decrease in pollution improves the natural environment, which in turn increases property values and increases the attractiveness of an area to potential investors.

4.3 Sustainable Design Features

The following is a description of the design features that would be appropriate to promote sustainability within the Orizaba District.

4.3.1 Mixed Land Use

A variety of land uses within the District could play an important role in achieving sustainability. Mixed-uses allow for more compatibility among neighboring uses and can decrease the travel distances between activities

(Parker, 1994). This is important for both social and environmental equity purposes as it promotes walkability and diminishes pollution associated with automobiles. Proposed land uses are discussed in greater detail in Chapter Six.

4.3.2 Sustainable Transportation

An additional step to promoting sustainability includes the promotion of alternative forms of transportation. One aspect of this relates to bicycle usage and the implementation of bike lanes to offer an economically and environmentally sound alternative to automobiles. Additional transportation alternatives can be offered through improved and more frequent public transportation options. Although many people rely on their automobiles, providing and encouraging non-automobile transportation is an important aspect of sustainability that can be addressed through design and policy. Further discussion on circulation can be found in Chapter Six.

4.3.3 Health and Safety

An important aspect of social equity within sustainable design relates to the health and safety of citizens. By designing for walking and biking, citizens are encouraged to be more active, which promotes a healthier lifestyle. In addition, physical features such as street trees and on-street parking can help buffer pedestrians from traffic, improving safety. Improved pedestrian lighting can also contribute to improved perceptions of safety. All of these are important elements to health and safety, as well as sustainable communities.

4.3.4 Sustainable Landscaping and Materials

Along with the design features that can contribute the Districts sustainability, materials can also play an important role.

4.3.4.1 Street Trees

Given the importance of transforming streetscape to the development of the District, street trees should play a vital role in the design concept. In addition to providing a buffer between traffic and pedestrians, street trees with large enough canopies can improve shading and provide cooler temperatures during warmer months. Additionally, trees provide impervious surface coverage, which reduces the amount of storm runoff from streets and sidewalks. All of these benefits are in addition to the improved aesthetics and character enhancing qualities that trees provide.

Figure 4.1. Street Trees

4.3.4.2 Pervious Pavements

As a result of the hydrologic impact impervious roadways, driveways, and parking lots have, pervious materials can play an important role in stormwater

management. This may include installing pervious concrete, porous asphalt, and solid unit pavers, such as bricks or stone blocks in place of traditional concrete or asphalt. These materials allow for storage and filtration of rainfall, which reduce demands on drainage systems. In addition, they often improve aesthetics and may help reduce costs associated with stormwater maintenance.

Figure 4.2. Permeable Surfaces

4.3.4.3 Planters

Planters can be employed in a variety of styles to help treat and detain runoff. Where setbacks allow, planters can be used to provide landscaping and aid in stormwater management. Where setbacks or building styles do not allow, contained planters filled with soil and native plants may be used. Planters can aid in site drainage and also improve the character of a site.

Figure 4.3. Street Planters

4.3.4.4 Swales

Swales are gently sloping depressions planted with vegetation or grass that treat runoff from rooftops, streets, and parking lots. The plants in a swale filter and slow stormwater runoff while sediments and other pollutants settle out. Swales are cost-effective, attractive and can provide wildlife habitat and visual enhancement. (Portland Stormwater Solutions Guide, 2007). Swales may also as a traffic calming mechanism when employed as a bulb-out to reduce turning radii (Figure 5.4) Given these benefits, swales are proposed in the street design at the intersections of East Anaheim Street with Coronado, Obispo, Orizaba, Gladys, and Temple Avenues.

Figure 4.4. Vegetated Swale

5. Urban Design Plan Objective

5.1 Objective Statement

The objective of the Orizaba Urban Design Plan is to address social equity through the improvement of pedestrian access. This objective is based on community feedback, a desire to promote sustainability, and the recognition that initial improvements within the District need to focus on streetscape enhancement. With that in mind, particular attention is given to implementing elements of Low Impact Development, which will enhance the existing neighborhood character and encourage pedestrian traffic.

5.1.1 Circulation and Parking

Circulation throughout the project area will be designed pedestrian friendly. The desire amongst community members is to improve flow from East to West, with particular attention given toward improving the East Anaheim Street portion of the District. This plan also includes the development of Obispo Avenue as a Bike Boulevard and seeks to minimize the effects of automobile traffic on pedestrians.

Figure 5.1. Pedestrian Friendly Sidewalks

One method of improving circulation is through the use of crosswalks to clearly delineate where pedestrian traffic should move. Along with this, traffic-calming measures, such as narrowed streets, improved signage, or medians, can also improve pedestrian movement.

Figure 5.2. Crosswalk

Improvement to streetscape is also an important factor of improving circulation. Community members cited narrow, cracked, and uneven sidewalks as an impediment to pedestrian traffic. This was particularly true along East Anaheim Street where the combination of narrow sidewalks and fast moving traffic make for an uncomfortable walking experience. Wider sidewalks, combined with street trees and street furniture for a buffer from automobile traffic, can help improve the pedestrian experience within the District.

Figure 5.3. Enhanced Sidewalks

Non-automobile circulation will be encouraged through the development of a Bike Boulevard, as proposed in the Long Beach Bicycle Master Plan. The Plan calls for a connected network of bike paths and boulevards throughout the City, all with an aim toward promoting transit that is not dependent on vehicles. This will also be promoted through more clearly defined transit stops.

Figure 5.4. Bike Boulevard

The need for parking may be diminished by promoting non-automotive transit, though it remains an issue to be addressed. In light of this, the removal of street loading zones is proposed to increase street parking. Additionally, shared parking at existing lots throughout the site will also be necessary.

Figure 5.5. Shared Parking

5.2.2 Orizaba Park

A great deal of effort and public funds have improved Orizaba Park to its current condition, highlighted by the revitalization and expansion efforts set to be completed by the end of 2009. This plan keeps all facilities and park space as it will be upon the completion of the expansion. Improvements will address the addition of more lighting for park safety, while greater connectivity between the surrounding neighborhoods and existing commercial core is proposed to enhance park usage.

Figure 5.6. Orizaba Park

5.2.3 *Land Uses*

Land uses within the District are desired to remain predominantly commercial and office, with additional residential uses in the form of live/work lofts. To accommodate this, additional office and professional space is proposed along the east side of Obispo Avenue. Commercial uses are proposed to remain along East Anaheim Street, while live/work space is proposed on Gladys Avenue north of the Temple and Gladys alley.

Figure 5.7. Live/Work Lofts

5.2.4 Infrastructure

5.2.4.1 Green Alleys

The existing network of alleys within the Project Area offers an excellent opportunity to improve connectivity and pedestrian flow. To take advantage of this opportunity, the Plan proposes the implementation of Green Alley design standards, as put forth in the City of Chicago's Green Alley Handbook. Design options for Green Alleys, many of which are also encouraged by Low Impact Development, include increased permeable surfaces, increased vegetation, and

use of recycled/energy efficient materials. Use of these design elements is done in an effort to improve storm water management, enhance pedestrian accessibility, and promote sustainability.

Figure 5.8. Chicago Green Alley

Figure 5.9. Vancouver Green Alley

5.2.4.2 Maximized Pervious Surfaces

The design principles touted by Low Impact Development and Green Alleys are also desirable for other portions of the Project Area. As a result of the District being 100 percent urbanized, concrete is pervasive throughout. The implementation of pervious surfaces will aid in drainage improvements, increase vegetation and greenery, and improve the overall aesthetic of the Project Area.

Figure 5.10. Permeable Streets

5.2.4.3 Street and Alley Lighting

Improved street and alley lighting is sought by community members to improve the safety of the area. To achieve this street and alley lights are proposed to be more frequent and more pedestrian friendly. This calls for lighting that is sensitive to the scale of the user, meaning taller lighting for vehicular traffic

and shorter lighting pedestrian traffic. Additionally, lighting should illuminate downward instead of upward, and use white light rather than traditional sodium lighting. This will reduce light pollution while increasing street illumination.

Figure 5.11. Park Lighting

Figure 5.12. Sidewalk Lighting

5.2.4.4 Street Furniture

Street furniture, such as street lights, seating, ballards, and trash receptacles can all be used to enhance the pedestrian experience and make streets more inviting. Furniture should be strategically located within the project area to allow for stopping or meeting places, and should enhance the design qualities of the District.

Figure 5.13. Stainless steel ballards and sidewalk lighting

6. Land Use & Circulation

6.1 Land Use

As shown on the Land Use Map (Figure 6.1) there are six proposed land use categories for the site: Commercial, Residential, Live/Work, Office/Professional, Industrial, and Parks. Of these six, the Live/Work and Office/Professional represent the greatest change to what currently exists. The shift in land uses is proposed in an attempt to encourage growth in creative industries and to provide flexible space capable of supporting a variety of uses. The goal is to facilitate natural growth that will help the District create a unique identity. Below is a discussion of the proposed changes.

6.1.1 Office / Professional

In order to build upon the recent private investment in the District, additional Office / Professional space is proposed along the west side of Coronado Avenue and the east side of Obispo Avenue. The space is intended to be used for the establishment of offices to accommodate creative businesses and anything complementary to those currently existing. This may include architecture, engineering, graphic design, fashion, or other creative industries.

6.1.2 Live/Work

The Live/Work portions within the District begin north of the commercial district and are proposed to be the east side of Temple Avenue, Gladys Avenue to 14th Street, the west side of Orizaba Avenue, and the west side of Obispo Avenue. The space is envisioned to be highly flexible and allow for a variety of uses. Among the uses desired are artist lofts, small-scale carpentry, jewelry, or

furniture manufacturing, and any additional use that encourages creative businesses to locate within the area. The intent of the Live/Work areas is to allow for the organic growth of the District, and to provide housing for the occupiers of the space.

6.1.3 Commercial

The portion of the site along East Anaheim Street is proposed to remain the commercial center of the District. It is the most visible portion of the District and has the potential to attract visitors to the site. With that in mind, building heights are proposed to be raised to three stories. This will better line the street and help signify entrance to the District. Raised buildings will also allow for different type of commercial uses, including pedestrian serving retail, restaurants, cafes, and neighborhood commercial. The storefronts are proposed to maintain a pedestrian scale and will be accessible from the street.

6.1.4 Square Footage Requirements

An important consideration to any development proposal is the demands placed on resources, both physical and natural. For Orizaba, given the desire to create a walkable, pedestrian friendly District, additional attention needs to be given to scale and the interaction between people and the built environment.

One measure that can elaborate on both resource demands and scale is square footage. Square footage describes the built space that a particular land use will occupy and helps define if a particular proposal is appropriate for an area. Given the proposed building heights and depths, as well as the front and side setbacks, and parking requirement, the proposed total square footage

ranges from 440,00 to 1,021,000 (Table 6.1). Given the existing square footage of 480,000, an increase to 1,021,000 may appear severe; however it is important to keep in mind that all changes are proposed within a range. This helps provide a choice that will allow for conscientious decisions to be made with respect to community demands. The proposed development standards are discussed further in the form-based codes of Chapter 7.

Table 6.1. Proposed Square Footage Increases

	Commercial	Industrial	Office	Live/Work	Total
<i>Existing</i>	90,000	270,000	120,000	-	480,000
<i>Proposed</i>	130,000 - 200,000	110,000 - 221,000	75,000 - 225,000	125,000 - 375,000	440,000 - 1,021,000

Figure 6.1. Land Use Map

6.2 Circulation

A main geographic element of the District is the Pacific Electric Railroad right-of-way that cuts diagonally through the site. As a result of the private development along the right-of-way, mobility is restricted within the site, especially when moving east and west. To address this, the Plan includes improvement to streets and sidewalks, as well as alley improvements. The goal is to establish a pedestrian and bicycle oriented District that is enjoyable for those who live, work, and visit it.

6.2.1 *Traffic Calming*

One aspect of streets in the District that make them inhospitable to pedestrians is the speed of traffic and the lack of defined crosswalks. To address these issues the Plan proposes traffic calming measures such as bulb-outs and street medians, as well as clearly established crosswalks. These measures will enable pedestrians to more safely walk through the District and limit the impacts of automobiles on the site.

6.2.2 *Connectivity*

Currently there is a lack of connectivity within the site, especially when trying to move east or west. The Plan addresses this by improving alleys to be safer and more accommodating to pedestrians. In addition, a wider sidewalk and an improved commercial district along East Anaheim Street will both draw people to the site and help connect them to different areas within the District.

6.2.3 *Bicycle Access*

Other than the bus routes along East Anaheim Street, access to the District are limited primarily to automobiles. In an effort to encourage alternative forms of transportation, bike lanes are proposed along all streets, with the exception of East Anaheim. Bike lanes will require the dedication of at least four feet on both sides of the street as well as clearly lined paths and signage. All the bike lanes within the District will be consistent with standards put forth in the City's Bike Master Plan and will help further its goal of becoming a more bicycle friendly community.

6.2.4 *Vehicular Traffic*

There are seven streets within the District, each with a different traffic purpose. Below is a discussion of how individual streets will be impacted by the Plan.

6.2.4.1 East 14th Street

Between Coronado and Obispo Avenues, East 14th is extremely narrow and difficult to navigate. To alleviate this the Plan proposes converting East 14th to one-way, directing traffic east toward Redondo. This will not only address traffic conflict points, but it will also enable greater street parking.

6.2.4.2 East Anaheim Street

As the major thoroughfare for the District, improvements to East Anaheim focus on making people aware that they are entering a unique part of town. As discussed in the Land Use portion of this chapter, East Anaheim represents the initial contact that many visitors will have the District. As such, it should clearly represent the energy that is happening on the streets to the north. While this can

be accomplished through the changes in land use, it can also be demonstrated through sidewalk enhancement, street trees, and street furniture. This will present the District as a more inviting pedestrian area and encourage those traveling along East Anaheim to stop and explore.

6.2.4.3 Coronado, Obispo, Orizaba, Gladys, and Temple Avenues

Changes to these five streets, which move traffic north and south through the District, will focus on becoming more pedestrian orientated, while continuing to accommodate the vehicles that visit the area.

7. Form Based Codes

7.1. Introduction

Traditional zoning patterns have impacted the development of cities and people's experiences with them in numerous ways. By focusing on the segregation of land uses, zoning has helped produce communities that can be characterized as sprawling, automobile dependent, and unfriendly to pedestrians. These elements represent some of the problems associated with poor community design and account for many of the reasons why many communities lack the character and quality of place that citizens desire (Parolek, Parolek, and Crawford, 2008).

One tool available to address these issues is form-based codes. As opposed to traditional zoning's focus on land uses, form-based codes focus on controlling the physical form of development. As described by Paul Crawford, a founding member of The Form Based Code Institute, form-based codes "...Address the details of relationships between buildings and the public realm of the street, the form and mass of buildings in relation to one another, and the scale and type of streets and blocks" (Sitkowski and Ohm, 2006). Crawford goes on to state that form-based should be based on specific urban design outcomes desired by the community and identified through an inclusive, design-focused public participation process. By focusing on form and the implementation of community based design decisions, form-based codes offer a holistic approach to community development that address many of the issues facing communities today.

7.2 Organizing Principles

One of the aspects of form-based codes that make them useful in developing communities is their ability to adapt to different environments. Depending on the size of an area and the difference in urban design outcomes desired, codes may be tailored to meet a variety of needs. This is made possible through the use of various organizing principles, which can create development standards for entire cities or individual neighborhoods.

7.2.1 *Transects*

On a large scale, the most common means of organizing codes is by transect. Transects operate as a standardizing tool that enable communities to differentiate between design intentions in various areas. Classified in a range from rural to urban (Table 7.1), transects identify three important aspects of development patterns, namely the physical intensity of the built form, the relationship between nature and the built environment, and the complexity of uses within an area (Parolek, et al, 2008). As opposed to traditional zoning designations, transects are not intended to be rigid rules of regulations, but rather a guide to help communities make urban design decisions. In this manner they can adapt to fit various needs and be a useful tool in organizing design decisions.

Table 7.1. Transect Descriptions

Transect	Description
T1	Natural
T2	Rural
T3	Sub-urban
T4	General Urban
T5	Urban Center
T6	Urban Core

Source: Parolek, et al, 2007

7.2.2 Building Type, Frontage, and Street-Based Codes

In addition to transects, codes can also be produced using building type, frontage, or streets as an organizing principal. Typically used for smaller communities or project areas, basing design principles on these elements allow communities to address individual aspects of the development process that can help improve character in specific ways.

7.2.2.1 Building Type

In this approach, specific regulations are created for a group of building types, which are then allocated to different transects. For example, during a visioning process a community may decide that a T4 zone is allowed to have townhouses, mid-rise apartments, courtyard housing, and mixed-use buildings (Parolek, et al, 2008). From that point, Building Form Standards sheets are produced that will regulate important characteristics for each building type.

7.2.2.2 Street and Frontage Type

When streets are used as an organizing principle, the regulations focus on the design and location of streets. This can be accomplished in numerous ways, including the definition of dimensional requirements such as width and travel lanes, allocation and width of on-street parking, planting strip width, and sidewalk widths. Along with this, addressing how buildings front the street, both in height, frontage type, and build-to-line, can greatly influence the design and streets are designed. Both the Street and Frontage-Based Codes emphasize the importance of the character of the public realm and often leave what happens beyond it more flexible (Parolek, et al, 2008).

7.3 Form Based Codes in Orizaba

Given the desire of residents and business owners to be less restrictive on building types and architectural details, the focus of the Design Plan is on streetscape. This will allow building form to develop in a unique manner, while also addressing a priority within the community. While there are some guidelines dealing with building siting and form, the intent is to look at how new buildings interact with the street front. Below is a discussion of the codes and the main issues covered within them.

7.3.1 Building Envelope and Siting

This refers to building placement and form within the site area. Standards are used to define physical guidelines such as build-to-lines, heights, and frontage types. Given the variety of uses to take place within the District, each individual zone will have unique building standards.

7.3.1.1 Commercial

Within the commercial zone along East Anaheim Street, build to lines and side setbacks are proposed to be at the property line. This is done in an effort to frame the street and encourage pedestrian traffic. The maximum building height is 32 feet (3 stories), and the maximum building depth is set a 60 feet. This will conform to existing heights and provide for ample parking behind the street front.

7.3.1.2 Office and Professional

Street front build-to-lines within the office/professional zone are proposed between five and ten feet to allow for landscaping. Side setbacks are set at 20 feet. Building depths are allowed to be 100 feet, though beyond 60 feet additional

natural lighting must be provided through side or rear windows. Maximum building height is 22 feet to help maintain the existing scale of the area.

7.3.1.3 Live / Work

The live/work zone is intended to be flexible space that can accommodate a variety of uses. As a result, the codes are designed to be flexible as well. Street build-to-lines are allowed to be between zero and ten feet, while side setbacks are allowed between zero and eight feet. Building height is allowed to be as high as 32 feet, or as low as 12 feet. Both upper and ground floors are allowed to have residential, office, light industrial manufacturing, or artist space.

7.3.1.4 Industrial

Given the nature of the uses within this zone, the street front build-to-line is required to be at least 20 feet. Side build-to-lines are 10 feet when adjacent to other industrial buildings, and 20 feet when the building is adjacent to a street or alley. Maximum building height is 20 feet within 50 feet of a residential area, and 40 feet elsewhere. All of these design standards are intended to limit the impact of industrial uses on the surrounding businesses and residences.

7.3.1.5 Residential

The residential areas in the district and near the park are proposed to remain mixed-style homes. This allows for single-family residences and medium density apartments and condominiums. For all structures, the street front build-to-line is 20 feet, the side build-to-line is 10 feet, and the rear build-to-line is 20 feet. Maximum building height is 28 feet, with the minimum proposed as 16 feet.

BUILDING ENVELOPE AND SITING: *Commercial*

Land Use Description: Commercial

Build to Lines - Street front property line.

Side Setbacks - Side property line.

Building depth - 60'

Ancillary Buildings - Not allowed.

Vehicle access and parking - 1 space per 1000 square feet.

Vehicle access and parking - Street parking as well as *behind the property parking allowed*.

Landscape - Minimum maintenance planting consisting of local/native plants that will have a limited impact on water resources.

BUILDING ENVELOPE AND SITING: *Commercial*

Maximum building height: 3 stories (32')

Minimum building height: 2 stories (22')

Minimum ground floor ceiling height: 12'

Minimum upper floor(s) ceiling height: 8'

Main entrance location: Street front

Pedestrian access - Main access provided in the front, with rear access also provided to enable those parking behind the building to easily enter.

Ground floor land uses: *Commercial*

Upper floor land uses: Office and commercial

BUILDING ENVELOPE AND SITING: *Office and Professional*

Land Use Description: *Office and Professional*

Street Front Build-to-line: *5' minimum, 10' maximum*

Side Build-to lines: *20'*

Maximum building depth: *60'*

Maximum ancillary building size: *n/a*

Required parking spaces- *1 per 1,000 square feet.*

Allowed parking types and locations: *Street parking for visitors, shared parking behind the property for employees.*

Landscape - *Required landscaping or trees on the property. Planters should require minimum maintenance and consist of local/native plants that will have a limited effect on water resources.*

BUILDING ENVELOPE AND SITING: *Office and Professional*

Maximum building height: 2 stories (22')

Minimum building height: 1 story

Minimum ground floor ceiling height: 12'

Minimum upper floor(s) ceiling height: 10'

Main entrance location: *Street front*

Pedestrian access - *Limited to front*

Allowed land uses - *Office, commercial.*

Upper floor land uses: *Office, commercial*

BUILDING ENVELOPE AND SITING: *Live Work*

Land Use Description: Live Work

Street Front Build-to-line: *Maximum 10'*

Side setbacks: Maximum 8'

Maximum building depth: *100'; Beyond 60' additional natural lighting required.*

Maximum ancillary building size: *n/a*

Parking - 1 space per residential unit; 1 space per 1,000 square feet.

Parking types and locations: *Street parking for visitors, on site parking for residents.*

Landscape - *Required landscaping consists of trees or local/native plants that require minimum maintenance and water resources.*

BUILDING ENVELOPE AND SITING: *Live Work*

Maximum building height: 3 stories (32')

Minimum building height: 1 story (12')

Minimum ground floor ceiling height: 12'

Minimum upper floor(s) ceiling height: 10'

Pedestrian access - Main entrance located on street front.

Access to dwellings: Back and side access allowed.

Allowed ground floor land uses - Residential, office, light industrial manufacturing, artist space.

Upper floor land uses- Residential, office, light industrial manufacturing, artist space.

BUILDING ENVELOPE AND SITING: *Industrial*

Land Use Description: *Industrial*

Street Front Build-to-line: *20' minimum*

Side Build-to lines: *10' to other industrial buildings; 20' to side street or alley.*

Maximum building depth: *100'. Beyond 60' additional natural lighting must be provided.*

Maximum ancillary building size: *n/a*

Required parking spaces: *1 per 1,000 square feet.*

Allowed parking types and locations: *Parking provided on site.*

Landscape - *Required landscaping or trees to be provided on the property. Minimum maintenance planting consisting of local native plants that will have a limited impact on water resources.*

BUILDING ENVELOPE AND SITING: *Industrial*

Maximum building height: 20' if located within 50' of a residential zone, 40' elsewhere.

Minimum building height: 20'

Minimum ground floor ceiling height: 20'

Minimum upper floor(s) ceiling height: 20"

Main entrance location: *Street front.*

Pedestrian access - *Limited to front.*

Allowed land uses ground floor: *Office, light industrial.*

Allowed land uses upper floors: *Office, light industrial.*

BUILDING ENVELOPE AND SITING: *Residential*

Land Use Description: *Medium density residential.*

Street Front Build-to-line: 20'

Side Build-to lines: 10'

Rear Build-to lines: 20'

Maximum ancillary building size: 100 square feet

Required parking spaces: 1 spot per residential unit

Allowed parking types and locations: *Parking provided on lot.*

Landscape - *Landscaping required to be local/native plants and have a limited effect on water resources.*

BUILDING ENVELOPE AND SITING: *Residential*

Maximum building height: 28'

Minimum building height: 16'

Minimum ground floor ceiling height: 8'

Minimum upper floor(s) ceiling height: 8'

Main entrance location: *Street front.*

Access to dwellings: *Back access allowed.*

Allowed land uses - Residential

Allowed land uses - Residential

7.3.2 Streetscaping

Streets within the District fall into one of three categories, primary arterial, collector streets, or local streets. Given its role as a major east to west thoroughfare within the City, East Anaheim Street is categorized as the lone primary arterial within the District. East 14th Street is the lone local street, and all other streets can be defined collectors. Given these distinctions, different design principles are applied to each type of street. Below is a discussion of the design principles.

7.3.2.1 Primary Arterial (East Anaheim Street)

Design speed along East Anaheim, which refers to the speed the thoroughfare is designed to accommodate and foster, is proposed to be 35 mph. The five traffic lanes are proposed to remain the same, however, sidewalks widths are proposed to increase to 11 feet. This will allow for street trees to be implemented, which will act as a buffer between pedestrians and traffic. Sidewalks shall use pervious pavement types and be adorned with pedestrian lighting that is between 10 and 12 feet high.

7.3.2.2 Collector Streets (Coronado, Obispo, Orizaba, Gladys, and Temple Avenues)

Proposed design speed along collector streets is 25 mph. Streets will have two traffic lanes for north and south traffic and will each have eight feet of parking lanes. The parking lanes will use pervious pavements so that water from the asphalt may be slowed and captured before entering the drainage system. Sidewalks shall use pervious pavements, have pedestrian lighting, and

incorporate street trees and vegetation. Streets will also have bike lanes of four feet on each side to aid with accessibility and traffic flow.

7.3.2.4 Local Street (East 14th Street)

As a local street serving the surrounding neighborhoods, East 14th Street is proposed to have a design speed of 15 mph. Between Obispo and Redondo it shall be converted to a one-way street with pedestrian lighting, on-street parking, and bike lane moving east with traffic. Sidewalks shall use pervious pavements to aid in drainage.

Between Temple and Orizaba Avenues, East 14th Street shall continue to be two lanes with traffic moving east and west. Sidewalks are proposed to be 11 feet wide with pervious pavements, and as the street is adjacent to Orizaba Park, it shall have extensive pedestrian lighting. The street shall have bike lanes moving with traffic to link up to the collector streets to aid circulation and non-automobile access.

STREETSCAPING: *East Anaheim Street*

Movement Type: *Primary Arterial*

Design Speed: *35 miles per hour*

Right-Of-Way Width: *98'*

Curb Face To Curb Face Width: *76'*

Traffic Lanes: *5*

Bicycle Lanes: *n/a*

Curb Radius: *15' (mitigation measures implemented to reduce turn speeds)*

STREETSCAPING: *East Anaheim Street*

Street Pavement: *Asphalt or concrete*

Sidewalk Pavement: *Pervious asphalt or porous concrete*

Pedestrian Crossing Pavement: *Pervious asphalt, porous concrete, or brick*

Lighting type 1: *Vehicle lighting, 20'*

Lighting type 2: *Pedestrian lighting, 10-12'*

Tree Locations and Types: *20' between trees, 3' from the curb, 12' canopy height*

STREETSCAPING: *Temple Avenue*

Movement Type: *Collector*

Design Speed: *25 miles per hour*

Right-Of-Way Width: *64'*

Curb Face To Curb Face Width: *42'*

Traffic Lanes: *2 lanes moving north and south*

Bicycle Lanes: *2 lanes moving north and south*

Curb Radius: *8'*

STREETSCAPING: *Temple Avenue*

Street Pavement: *Concrete or Asphalt*

Sidewalk Pavement: *Porous Asphalt or pervious concrete*

Pedestrian Crossing Pavement: *Porous Asphalt, pervious concrete, or brick*

Lighting type 1: *20' for vehicles*

Lighting type 2: *10-12' for pedestrians*

Tree Locations and Types: *Trees planted every 20', 3' from curb, with a 12' canopy.*

STREETSCAPING: *Obispo Avenue*

Movement Type: *Collector*

Design Speed: *25 miles per hour*

Right-Of-Way Width: *70'*

Curb Face To Curb Face Width: *48'*

Traffic Lanes: *2 lanes moving north and south*

Bicycle Lanes: *2 lanes moving north and south*

Curb Radius: *8'*

STREETSCAPING: *Obispo Avenue*

Street Pavement: *Concrete or Asphalt*

Sidewalk Pavement: *Porous Asphalt or pervious concrete*

Pedestrian Crossing Pavement: *Porous Asphalt, pervious concrete, or brick*

Lighting type 1: *20' for vehicles*

Lighting type 2: *10-12' for pedestrians*

Tree Locations and Types: *Trees planted every 20', 3' from curb, with a 12' canopy.*

STREETSCAPING: *Gladys Avenue*

Movement Type: *Collector*

Design Speed: *25 miles per hour*

Right-Of-Way Width: *64'*

Curb Face To Curb Face Width: *42'*

Traffic Lanes: *2 lanes moving north and south*

Bicycle Lanes: *2 lanes moving north and south*

Curb Radius: *8'*

STREETSCAPING: Gladys Avenue

Street Pavement: *Asphalt or Concrete*

Sidewalk Pavement: *Porous Asphalt or pervious concrete*

Pedestrian Crossing Pavement: *Porous Asphalt, pervious concrete, or brick*

Lighting type 1: *20' for vehicles*

Lighting type 2: *10-12' for pedestrians*

Tree Locations and Types: *Trees planted every 20', 3' from curb, with a 12' canopy.*

STREETSCAPING: Coronado Avenue

Movement Type: Collector

Design Speed: 25 miles per hour

Right-Of-Way Width: 64'

Curb Face To Curb Face Width: 42'

Traffic Lanes: 2 lanes moving north and south

Bicycle Lanes: 2 lanes moving north and south

Curb Radius: 8'

STREETSCAPING: Coronado Avenue

Street Pavement: Concrete or asphalt

Sidewalk Pavement: Porous asphalt or pervious concrete

Pedestrian Crossing Pavement: Porous asphalt, pervious concrete, or brick

Lighting type 1: 20' for vehicles

Lighting type 2: 10-12' for pedestrians

Tree Locations and Types: Trees planted every 20', 3' from curb, with a 12' canopy.

STREETSCAPING: Orizaba Avenue

Movement Type: Collector

Design Speed: 25 miles per hour

Right-Of-Way Width: 66'

Curb Face To Curb Face Width: 44'

Traffic Lanes: 2 lanes moving north and south

Bicycle Lanes: 2 lanes moving north and south

Curb Radius: 8'

STREETSCAPING: Orizaba Avenue

Street Pavement: Asphalt or concrete

Sidewalk Pavement: Porous asphalt or pervious concrete

Pedestrian Crossing Pavement: Porous asphalt, pervious concrete, or brick

Lighting type 1: 20' for vehicles

Lighting type 2: 10-12' for pedestrians

Tree Locations and Types: Trees planted every 20', 3' from curb, with a 12' canopy.

STREETSCAPING: *East 14th Street (between Temple and Orizaba)*

Movement Type: *Local street*

Design Speed: *25 mph*

Right-Of-Way Width: *66'*

Curb Face To Curb Face Width: *44'*

Traffic Lanes: *2, east and west*

Bicycle Lanes: *2, east and west*

Curb Radius: *8'*

STREETSCAPING: *East 14th Street (between Temple and Orizaba)*

Street Pavement: *Asphalt or Concrete*

Sidewalk Pavement: *Porous Asphalt or pervious concrete*

Pedestrian Crossing Pavement: *Porous Asphalt, pervious concrete, or brick*

Lighting type 1: *Vehicle lighting, 20'*

Lighting type 2: *Pedestrian lighting, 12'*

Tree Locations and Types: *i.e. distance between trees, distance from the curb, canopy height, etc.*

Planter Locations: *3' from curb*

STREETSCAPING: East 14th Street (between Obispo and Redondo)

Movement Type: Local street

Design Speed: 15 mph

Right-Of-Way Width: 35'

Curb Face To Curb Face Width: 22'

Traffic Lanes: 1 moving east

Bicycle Lanes: 1 moving east

STREETSCAPING: East 14th Street (between Obispo and Redondo)

Street Pavement: Asphalt or Concrete

Sidewalk Pavement: Porous Asphalt or pervious concrete

Pedestrian Crossing Pavement: Porous Asphalt, pervious concrete, or brick

Lighting type 1: Vehicle lighting, 20'

Lighting type 2: Pedestrian lighting, 12'

Curb Radius: 8'

7.3.3 Visual Quality and Massing

Building massing refers to the physical shape that a building has. In an effort to create unique and distinct buildings, form-based codes address shape in a manner that allows for individuality while also acknowledging the constraints of construction and composition. To accomplish this, form-based codes set standards for architectural elements such as vertical and horizontal articulation, as well as elements such as balconies and canopies. Given the uniqueness of the various zones, building design standards will vary throughout the District. Below is a discussion of the standards for each zone.

7.3.3.1 Commercial

For buildings over two stories, floors shall be articulated to break up uniform facades. In addition, horizontal massing shall be varied every 40 to 60 feet. Balconies are encouraged on upper level floors, and canopies are permitted at the ground level. The ground floor shall be occupied by restaurants, retail, or other engaging uses, and 75 percent of the frontage shall be openings in the form of windows, doors, or patios that encourage pedestrian traffic.

7.3.3.2 Industrial

As with commercial facades, horizontal and vertical facades shall be differentiated. Canopies are permitted above industrial offices, however balconies are not allowed. Upper levels and ground floors shall be occupied by office or industrial uses, and street frontages shall be at least 20 percent open in the form of windows or doors.

7.3.3.3 Office/Professional

As building heights are proposed to be under 40 feet there is no requirements on vertical articulation. However, façade differentiation is still encouraged. Horizontal building facades shall be varied along a 40 foot grid. Balconies and canopies are allowed and encouraged, and the ground and upper floors shall have 25 and 35 percent of their street frontage open.

7.3.3.4 Live/Work

Vertical and horizontal massing shall be varied at a minimum of every 40 feet. Balconies and canopies are allowed and encouraged. Ground and upper floors shall be occupied by neighborhood commercial, residential units, or light industrial. Commercial street fronts shall have a minimum 70 percent open to the streets to encourage pedestrian traffic, while residential and light industrial units must have at least 20 percent open to the street front.

VISUAL QUALITY AND MASSING: Commercial

Vertical Articulation: In buildings over two stories, floors shall be articulated in a manner that break up uniform facades.

Horizontal Articulation: Massing shall be varied along a 40-60 foot grid to create unique facades. Texture and color changes are encouraged.

Roof Articulation: No regulations for roof articulation, but it should be consistent with the architectural style of the building.

Balconies: Balconies are permitted for upper level offices and residences.

Canopies: Canopies are allowed and can extend a maximum of 4 feet from the building facade.

Corner Treatment: The massing should change on corners and should also vary in color or texture from the bulk of the structure.

Required Ground Floor Openings: The ground floor shall be occupied by retail, restaurants, entertainment, or other lively and engaging uses. To maximize interaction among pedestrians and the street interface, openings shall constitute a minimum of 75 percent of the frontage.

Required Upper Floor Openings: Above ground level, residential, office, and retail is allowed. Openings should constitute a minimum of 35% of the facade and open to rooms dedicated to daytime uses.

VISUAL QUALITY AND MASSING: *Industrial*

Vertical Articulation: Massing shall be varied on buildings higher than 40 feet.

Horizontal Articulation: Building facades shall be articulated if the street frontage is greater than 40 feet.

Roof Articulation: No regulations for roof articulation, but it should be consistent with the architectural style of the building

Balconies: Balconies are not permitted.

Canopies: Canopies are allowed above industrial offices and may extend a maximum of 4 feet from the building facade.

Corner Treatment: The massing should change on corners and should also vary in color or texture from the bulk of the structure.

Required Ground Floor Openings: The ground floor shall be occupied by industrial or office uses. A minimum of 20% of the street frontage for office uses shall be an opening to the street.

Required Upper Floor Openings: Above ground level, office or industrial uses are allowed. A minimum of 20% of wall surface shall be open to the street.

VISUAL QUALITY AND MASSING: Office/Professional

Vertical Articulation: n/a

Horizontal Articulation: Massing shall be varied along a 40 foot grid to create unique facades. Texture and color changes are encouraged.

Roof Articulation: No regulations for roof articulation, but it should be consistent with the architectural style of the building.

Balconies: Balconies are allowed and encouraged for upper level offices.

Canopies: Canopies are allowed and can extend a maximum of 4 feet from the building facade.

Corner Treatment: The massing should change on corners and should also vary in color or texture from the bulk of the structure.

Required Ground Floor Openings: The ground floor shall be occupied by office uses. A minimum of 25% of the frontage shall be openings that provide interaction with the street front.

Required Upper Floor Openings: Above the ground floor, office and retail uses are allowed. A minimum of 35% of the facade shall be opened to the street (may be in the form of windows, glass doors or balconies).

VISUAL QUALITY AND MASSING: *Live/Work*

Vertical Articulation: Massing shall be varied on buildings higher than 40 feet.

Horizontal Articulation: Building facades shall be articulated if the street frontage is greater than 40 feet.

Roof Articulation: No regulations for roof articulation, but it should be consistent with the architectural style of the building

Balconies: Balconies are allowed and encouraged.

Canopies: Canopies are allowed on neighborhood commercial structures and may extend a maximum of 4 feet from the building facade.

Corner Treatment: The massing should change on corners and should also vary in color or texture from the bulk of the structure.

Required Ground Floor Openings: The ground floor shall be occupied by neighborhood commercial, residential units, or light industrial. A minimum of 70% of the street frontage of neighborhood commercial shall be open to the streets to encourage pedestrian interaction. Residential units shall have a minimum of 20% opening to the street.

Required Upper Floor Openings: Above ground level, only residential uses are allowed. A minimum of 20 % of wall surface shall be open to the street.

7.3.4 Signage and Wayfinding

Sign standards help ensure that pedestrians and vehicles can clearly identify and navigate through the District. For Orizaba, four types of signs are proposed, including Freestanding/Ground Mounted, Projecting / Suspended Signs, Window Signs, and Flush Wall Mounted and Awning Signs.

7.3.4.1 Freestanding/Ground Mounted

This type of signage is intended for general public reference and shall be within the eye-level zone (3' – 6' 8"). As a result it is allowed in the commercial, office/professional, live/work, and industrial portions of the District. The lettering on the signs shall be legible from three feet, except for identification text which should be legible from 50 feet. Signs shall be externally illuminated.

7.3.4.2 Projecting / Suspended Signs

These signs are intended for pedestrians and vehicles, and are allowed within the commercial, office/professional, and live/work zones. Signs shall be within the 60 degree horizontal view of traffic and have an eight foot clearance. Signs must be no larger than 12 feet with a maximum text size of 24 inches.

7.3.4.3 Window Signs

These are pedestrian oriented signs permitted within the commercial, office/professional, live/work, and industrial zones. Signs must be no larger than 10 percent of the window they occupy and must be externally illuminated.

7.3.4.4 Flush Wall Mounted and Awning Signs

These signs are intended for pedestrians and vehicles, and are allowed within the commercial, office/professional, live/work, and industrial zones . The

signs shall not exceed 15 percent of the building façade on which it is located, and must extend no farther than six inches from the building.

7.3.5 Street Furniture

Street furniture can be installed on streets and roads for various purposes, including traffic buffers, respites for pedestrians, and public art. For Orizaba, furniture is proposed to take on all of these qualities in the form of pedestrian and vehicle lighting, and street benches. Pedestrian lighting will be provided at a height of 12 feet with a setback of 1.5 feet from the curb. Benches will be provided periodically along sidewalks and will be approximately 2.5 feet high and 5 feet long.

SIGNAGE AND WAYFINDING: *Commercial District*

Sign Type 1: Freestanding/Ground Mounted for Pedestrian Wayfinding. Only allowed for general public reference and is not allowed for private advertisement. A maximum of one sign per block is permitted. Signs shall be positioned within eye-level zones (3' - 6' 8") and lettering shall be legible from 3 feet, except for identification text which should be legible from 50 feet. Signs shall be externally illuminated.

Sign Type 2: Projecting / Suspended Signs for Pedestrians and Vehicles. No restrictions on shape. One sign per use frontage permitted. Signs must have an 8 foot clearance to not interfere with pedestrian traffic, and must be within the 60 degree horizontal view for vehicles. Signs must be no larger than 12 feet with a maximum text size of 24 inches.

Type 3: Window Signs for Pedestrians. Signs must be located within a window and occupy no more than 10 percent of the total window area. No restrictions on shape. Signs must be externally illuminated.

Type 4: Flush Wall Mounted and Awning Signs. No restriction on shape. Signs must extend no farther than 6 inches from the building and be externally illuminated. Sign shall not exceed 15 percent of the building facade on which it is located.

SIGNAGE AND WAYFINDING: *Industrial*

Type 1: Freestanding/Ground Mounted for Pedestrian Wayfinding. This type of signage is only allowed for general public reference and is not allowed for private advertisement. A maximum of one sign per block is permitted. Signs shall be positioned within eye-level zones (3' - 6'8"). Lettering shall be legible from 3 feet, except for identification text which should be legible from 50 feet. Signs shall be externally illuminated.

Type 2: Projecting / Suspended Signs for Pedestrians and Vehicles. No shape restrictions. One sign per use frontage permitted. Signs must have an 8 foot clearance, not interfere with pedestrian traffic, and be within the 60 degree horizontal view for vehicles. Signs must be no larger than 12 feet with a maximum text size of 24 inches.

Type 3: Window Signs for Pedestrians. Signs must be located within a window and occupy no more than 10 percent of the total window area. No restrictions on shape. Signs must be externally illuminated.

Type 4: Flush Wall Mounted and Awning Signs. No restriction on shape. Signs must extend no farther than 6 inches from the building and be externally illuminated. Sign shall not exceed 15 percent of the building facade on which it is located.

SIGNAGE AND WAYFINDING: *Office/Professional*

Type 1: Freestanding/Ground Mounted for pedestrian wayfinding. Only allowed for general public reference and is not allowed for private advertisement. A maximum of one sign per block is permitted. Signs shall be positioned within eye-level zones (3' - 6'8"). Lettering shall be legible from 3 feet, except for identification text which should be legible from 50 feet. Signs shall be externally illuminated.

Type 2: Projecting / Suspended signs for pedestrians and vehicles. No shape restrictions. One sign per use frontage permitted. Signs must have an 8 foot clearance, not interfere with pedestrian traffic, and be within the 60 degree horizontal view for vehicles. Signs must be no larger than 12 feet with a maximum text size of 24 inches.

Type 3: Window signs for pedestrians. Signs must be located within a window and occupy no more than 10 percent of the total window area. No restrictions on shape. Signs must be externally illuminated.

Type 4: Flush wall mounted and awning signs. No restriction on shape. Signs must extend no farther than 6 inches from the building and be externally illuminated. Sign shall not exceed 15 percent of the building facade on which it is located.

SIGNAGE AND WAYFINDING: *Live/Work*

Type 1: Freestanding/Ground Mounted for pedestrian wayfinding. Only allowed for general public reference and is not allowed for private advertisement. A maximum of one sign per block is permitted. Signs shall be positioned within eye-level zones (3' - 6'8"). Lettering shall be legible from 3 feet, except for identification text which should be legible from 50 feet. Signs shall be externally illuminated.

Type 2: Projecting / Suspended signs for pedestrians and vehicles. No shape restrictions. One sign per use frontage permitted. Signs must have an 8 foot clearance to not interfere with pedestrian traffic, and be within the 60 degree horizontal view for vehicles. Signs must be no larger than 12 feet with a maximum text size of 24 inches.

Type 3: Window signs for pedestrians. Signs must be located within a window and occupy no more than 10 percent of the total window area. No restrictions on shape. Signs must be externally illuminated.

Type 4: Flush wall mounted and awning signs. No restriction on shape. Signs must extend no farther than 6 inches from the building and be externally illuminated. Sign shall not exceed 15 percent of the building facade on which it is located.

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Appendices

Appendix A

CENTRAL REDEVELOPMENT PROJECT AREA MAP

Date of Adoption : 9/21/93
Size : 2,619 Acres

TECHNOLOGY SERVICES/GIS/CMU/ER
CENT_REDEV08.MXD/PDF 5/12/08

Appendix B: Existing Land Use/Zoning Districts in Long Beach

Symbol	Use Classification
R-1-S	Single-family Residential, small lot
R-1-M	Single-family Residential, moderate lot
R-1-T	Single-family Residential, townhomes
R-1-N	Single-family Residential, standard lot
R-1-L	Single-family Residential, large lot
R-2-S	Two-family Residential, small lot
R-2-I	Two-family Residential, intensified development
R-2-N	Two-family Residential, standard lot
R-2-A	Two-family Residential, accessory second unit
R-2-L	Two-family Residential, large lot
R-3-S	Low-density Multi-family Residential, small lot
R-3-4	Low-density Multi-family Residential
R-3-T	Multi-family Residential, Townhouse
R-4-H	Dense Multiple Residential, high-rise
R-4-N	Medium-density Multiple Residential
R-4-R	Moderate-density Multiple Residential
RM	Mobile homes, modular and manufactured residential
R-4-U	Dense Multiple Residential, urban
CO	Office Commercial
CH	Highway Commercial
CT	Tourist and Entertainment Commercial
CS	Commercial Storage
CNP	Neighborhood Pedestrian-Oriented Commercial
CNA	Neighborhood Commercial Automobile-Oriented
CNR	Neighborhood Commercial and Residential
CCA	Community Commercial Automobile-Oriented
CCP	Community Commercial Pedestrian-Oriented
CCR	Community R-4-R Commercial
CCN	Community R-4-N Commercial
CHW	Regional Highway Commercial
IL	Light Industrial
IM	Medium Industrial
IG	General Industrial
IP	Port-related Industrial
I	Institutional
P	Park
PR	Public Right-of-Way
PD	Planned Development
(H)	Horse Overlay
(HR)	High-Rise Overlay
(HL)	Height-Limit Overlay

Appendix C: Sample Interview Questions

Why did you pick this area to move your business to?

What are the elements of the area that would draw you to it?

What role do you want to play in the district's development?

How can the City market the district? Should there be a link to government?

Can the business and residential mix?

Is there a strong neighborhood alliance?

What should the city do / not do in order to further development within the district?

How do you see the district in 5 to 10 years?

What is the history of the area and should it play a part in the districts development?

Currently there is energy on Gladys and Coronado. What should happen in between?

What can the district become?

Should the district have a larger, regional identity, or remain "under the radar"?

What organization(s) should facilitate development?

Do you and your employees feel safe walking around the district?

How does the district remain unique?