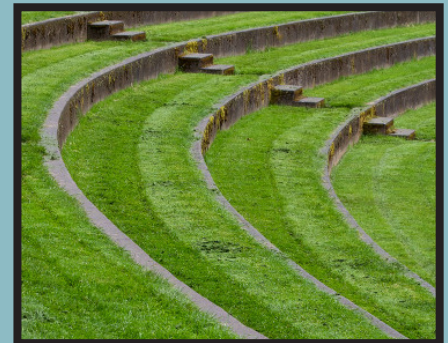

DUMBARTON TOD SPECIFIC PLAN

CITY OF NEWARK

D R A F T





ACKNOWLEDGEMENTS

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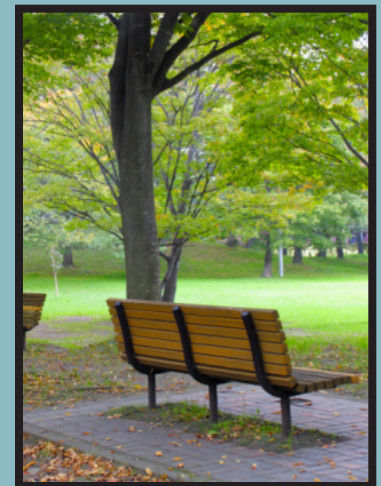
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THE SPECIFIC PLAN WILL STEER THE DEVELOPMENT OF THE APPROXIMATELY 200-ACRE PLAN AREA TOWARDS A TRULY MEMORABLE COMMUNITY; A LIVABLE PLACE WHERE HOUSING, RECREATION, A NEIGHBORHOOD RETAIL CENTER AND EMPLOYMENT OPPORTUNITIES ARE INTEGRATED.

THIS COMMUNITY IS ENVISIONED AS A CONTEMPORARY VERSION OF A SMALL WALKABLE TOWN, WHERE THE AUTOMOBILE CAN BE REPLACED BY WALKING AND BIKING FOR ACCESS TO RECREATION AND EVERYDAY TRIPS.



- 1.1 EXECUTIVE SUMMARY
- 1.2 SPECIFIC PLAN PURPOSE
- 1.3 CONTEXT DESCRIPTION
- 1.4 PROJECT SETTING
- 1.5 RELATIONSHIP OF THE SPECIFIC PLAN
TO GOVERNING DOCUMENTS

D R A F T

1.0 INTRODUCTION

1.1 EXECUTIVE SUMMARY

This Specific Plan is a comprehensive planning document that will enable the Specific Plan (“Plan”) area to be developed according to the objectives and goals described in this Specific Plan. Specific areas regulated by the Specific Plan include land use, streets, parks and infrastructure.

The purpose of the Specific Plan for the Dumbarton TOD Project (Specific Plan) is to provide the City of Newark with a mechanism to support and control development within the Specific Plan area, ensuring that a comprehensive development is adopted to encourage creation of a livable community designed for compatible neighborhoods with connectivity to parks, open space, the future Transit Station and commercial services. The Specific Plan also provides the City of Newark with a mechanism to manage growth, ensuring the installation of adequate infrastructure and public services for the new neighborhoods created within the Specific Plan area.

This document specifically establishes an infrastructure plan, development regulations, and illustrative design guidelines to govern development of a planned community which offers a variety of residential housing types within an open space setting. A network of open space and pedestrian corridors that link the community to the future Transit Station and commercial areas will be provided. Bicycle and pedestrian accessibility is also provided between the residential development and the Transit Station and commercial areas of the Specific Plan.

The City of Newark’s development objectives for the Specific Plan are derived from the City of Newark’s General Plan, previous work prepared for the Plan area, demographic and market research, as well as the physical characteristics of the land. These factors have guided the development of the Plan to allow the City of Newark to expand as a community in a desired direction with a strong sense of place.

To accomplish the vision and intent of this Specific Plan, amendments to the current City of Newark General Plan are necessary. A description of these amendments is included as Appendix B. Development of the property in accordance with this Specific Plan reinforces the City of Newark's image as a town with its own unique character.

This Specific Plan includes the following elements:

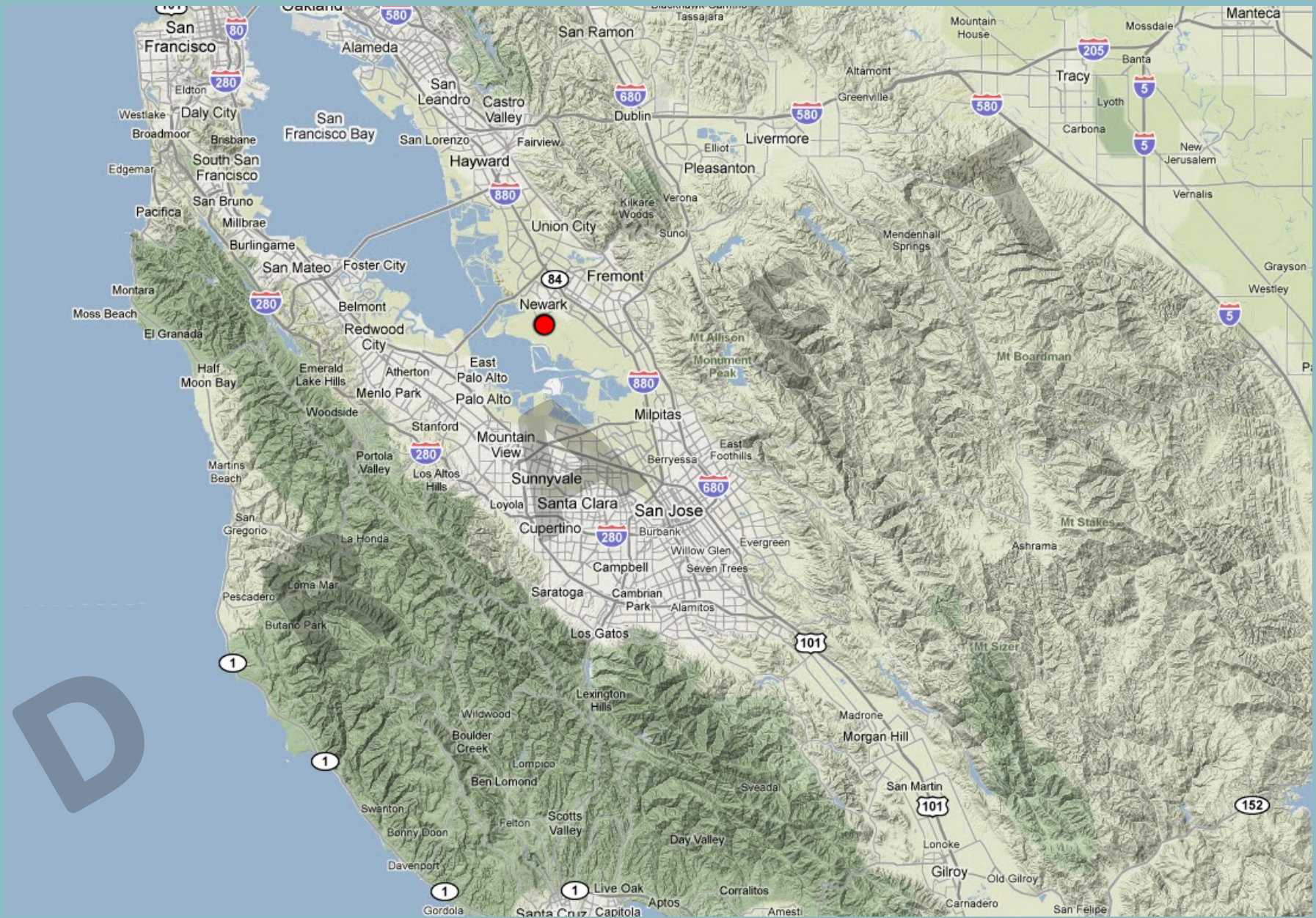
1. A Transit Station that will serve the greater region as well as the neighboring residents.
2. A Neighborhood Center consisting of neighborhood-serving retail, grocery store, visitor-serving uses and residential uses organized in a traditional layout.
3. Up to 2,500 new residential units with a wide range of types and affordability.
4. Necessary infrastructure to support the development including potable water, wastewater, dry utilities, and storm drainage systems.
5. Contribution towards the construction of an overpass on Central Avenue over the Union Pacific Railroad right-of-way east of the Plan area; and,
5. More than 16-acres of parks including a community park and a Bayside Trail.

This Specific Plan provides land uses, development regulations, design guidelines, infrastructure improvements and implementation plan for the creation of a cohesive community.

1.2 SPECIFIC PLAN PURPOSE

Specific Plans are developed to provide a greater level of specificity in planning uses, density and layout of sites of special interest and value to a community. The City of Newark has identified the need for a specific plan for the Plan area in order to provide for appropriate growth management and comprehensive planning of new residential, commercial, open space, and recreational land uses accompanied by adequate infrastructure and public facilities that are compatible with the growth needs of the City and with existing residences and land uses. This Specific Plan contains text and diagrams that call out the following in detail:

1. The distribution, location, and extent of the uses of land within the area covered by the Plan.
2. The proposed distribution, location, extent and intensity of major components of the public and private transportation, sewage, water, drainage, solid waste disposal, dry utilities, and other essential facilities located within the area covered by the Plan and needed to support the land uses described in the Plan.
3. Standards and criteria by which development will proceed, including development standards, design guidelines, and a conceptual phasing program.
4. A program of implementation measures including regulations, programs, public works projects and financing alternatives necessary to carry out numbers 1, 2 and 3 above.



Above: Figure 1.1: Regional Context; Map provided by Google

The purpose of the Specific Plan is to provide a comprehensive program for the Plan areas' approximately 200 acres of industrial land. This will result in a unique and appealing new community that integrates with the existing community and provides the area with a variety of new amenities, such as a grocery store and a pedestrian trail, all the while providing the infrastructure improvements necessary to implement the development.

The Specific Plan establishes the regulations and guidelines that will implement the development concept. All development projects and related activities for which approvals are sought after its adoption by the City Council are required to be consistent with the Specific Plan. Concurrent entitlements to implement the Specific Plan shall include a General Plan Amendment, Zoning Amendment, an Affordable Housing Program, and Design Guidelines and Landscape Guidelines.

1.3 CONTEXT DESCRIPTION

The City of Newark is approximately 15 miles north of San Jose, California, 10 miles east of downtown Palo Alto, and 30 miles southeast of San Francisco, California within Alameda County.

Please see Figure 1.1 on the previous page for a graphic illustration of the regional context.

1.4 PROJECT SETTING

Site Location

Bounded by salt production facilities to the west and the City of Fremont to the east, the project is approximately 1.6 miles from Newark's Historic Center. The location of the site is ideal for a Transit Oriented Development as its proximity to a major transportation route (Highway 84), location adjacent to an existing rail line, and general location within the East Bay and Silicon Valley will serve a larger area for transit ridership.

Please see Figure 1.2 on the following page for a graphic illustration of the local context.

The project is approximately 200-acres in size and generally bordered by the Southern Pacific railroad tracks to the north, Willow Street and existing industrial and residential uses to the east, A.C.F.C. Canal to the south and existing, on-going salt production facilities to the west. There are various manufacturing and light industrial businesses in and around the project site, as well as established single-family residences to the northeast.

Site Characteristics

For almost a century, the Plan area has been a site for industrial production. During World War II, Newark experienced great expansion. At that time, several new companies located here while other companies already operating within the area expanded. Industrial operations were largely phased out by the 1990's, leaving the Plan area mostly vacant and underutilized.



Above: Figure 1.2: Local Context with site shown outlined in red; Map provided by Google

The primary landowners within the Plan area include Torian, FMC Corporation, Ashland Inc., SHH LLC, Newark Enterprise Joint Venture, Enterprise Drive LLC, Cargill, and Gallade Enterprise LLC. In addition, several rights-of-way and easements overlay the Plan area.

Wind Patterns and Air Quality

Newark is within the San Francisco Air Basin, a broad, shallow air basin ringed by hills with several sheltered valleys along the perimeter. Prevailing winds on the site are from the northwest, west and southwest.

Geology and Soils

The Plan area is relatively flat, low-lying alluvial fan. Average topographical elevations on the site range from roughly 4-15 feet above Mean Sea Level Datum (MSL). There are two bedrock outcroppings located on the western portion of the site. The Plan area is not located within an Earthquake Safety Zone for active earthquake faults, so there is little likelihood of actual ground rupture on the site during a seismic event.

Biological Resources

The Plan area may contain habitats that are home to numerous different species of plants and animals. The majority of the land in the Plan area is composed of developed or highly altered terrain. The Environmental Impact Report (EIR) which accompanies and analyzes this Specific Plan describes biological resources within the Plan area and potential impacts to such resources in further detail as required by the California Environmental Quality Act (CEQA).

Environmentally Impacted Sites

Soil and groundwater within the Plan area has been impacted by hazardous substances and must be factored into the land use planning of this area. One form of contamination is a groundwater plume that exists in shallow groundwater beneath portions of the Plan area. The San Francisco Bay Regional Water Quality Control Board (RWQCB) is directing mitigation of this groundwater plume in collaboration with the Alameda County Water District (ACWD). Some properties within the Specific Plan area also contain soils impacted hazardous substances. With the RWQCB or the Department of Toxic Substances Control (DTSC) is directing the remediation of impacted soils at these properties. The EIR for this Specific Plan analyzes the areas of the plan which have been impacted by hazardous substances in greater detail as required under CEQA.

Given these environmental constraints, this Specific Plan proposes land uses for the Plan area which would create enough value to absorb remediation costs or be compatible with existing site conditions. Engineering and institutional controls (such as deed restrictions) may be necessary for certain areas of the Plan area to adequately protect human health and the environment from any residual hazardous substances as determined by the RWQCG or DTSC as responsible agencies and as discussed further in the EIR.

Rights-of-Way and Easements

Several rights-of-way and easements for transportation infrastructure and utilities exist within the Plan area that will affect the type and arrangement of development that can occur. These include the following:

- The Hetch-Hetchy Pipeline

The Hetch-Hetchy Pipeline is within a 110-foot right-of-way owned by the San Francisco Public Utilities Commission (SFPUC), which runs east/west through the northern portion of the Plan area controlled by the SFPUC. All crossings or other uses are tightly controlled by the San Francisco Public Utilities Commission and land owner contract rights that run with the land. The pipeline runs underground through the east half of the Plan area, transitioning to the surface after crossing to the north side of the rail right-of-way.

- The Dumbarton Rail Corridor (DRC)

The DRC also runs in an east/west direction through the northern portion of the Plan area, almost parallel to the Hetch-Hetchy Pipeline. The DRC is a 100-foot wide right-of-way owned by San Mateo County Transit. The DRC is a proposed commuter rail.

- The East Bay Dischargers Authority (EBDA)

The EBDA owns and operates two 36-inch sanitary sewer force mains serving the City of Newark that run through the Plan area within an easement under the Hickory Street right-of-way. Special conditions

on construction within this easement may need to be imposed to preserve the integrity of the mains.

- The Alameda County Flood Control F-1 Canal

The F-1 Canal flows from east to west along the Plan area's southerly boundary, providing the main drainage outlet to San Francisco Bay for a large part of the City of Newark. A tributary to this canal, the F-6 ditch, runs north along the west side of Willow Street for a distance of about 1,300 feet.

- PG&E Transmission Lines

PG&E lines traverse the Plan area from north to south. PG&E maintains strict control regarding use of a 25-foot wide easement underneath the lines and surrounding the towers that support the high-voltage lines. Buildings may not be constructed within the right-of-way, and the ground may not be filled if it reduces the existing line's clearance to less than 32-feet. A representative of PG&E reports that it should be possible to either relocate or raise the existing transmission lines and towers. It is not anticipated that they would be relocated or raised at this time.

Wastewater

The Union Sanitary District (USD) provides wastewater services for the cities of Newark, Fremont and Union City. USD's Alvarado Treatment Plant is located in Union City. Because the Plan area is mostly located within the existing service area, and because it was already zoned for



Above:
Site Photo



Above:
Site Photo



Above:
Site Photo



Above:
Site Photo

development in 1989, the treatment and disposal impacts resulting from development of the Plan area based on the 1999 Area 2 Specific Plan have been incorporated into long-term expansion plans for the District. More detail on Wastewater solutions for the Specific Plan are in Chapter 7-Infrastructure.

Two existing gravity sanitary collection lines, within Enterprise Drive and Willow Street, currently serve the Plan area. It is unknown how much excess capacity for future development is available in either the Willow or the Enterprise sewer lines.

Water Service

The Alameda County Water District (ACWD) provides potable water service for the cities of Newark, Fremont, and Union City. The entire Plan area is located within the District's boundaries, so all properties are eligible for service. The water district has three basic water sources: the State Water Project, local groundwater aquifers, and the San Francisco Public Utilities Commission, which operates the Hetch-Hetchy Water System. ACWD has prepared a Water Supply Assessment which concludes that these water sources are adequate to serve the new uses proposed by the Specific Plan, which are discussed in more detail in the EIR.

Stormwater Drainage

The 100-year flood elevation throughout the project vicinity is 8-feet National Geodetic Vertical Datum (NGVD). According to the Federal Emergency Management Agency Flood Insurance Rate Map for the City of Newark, some of

the Plan area located west of the Hickory alignment currently lies within a Flood Hazard Zone, which indicates ground elevations are lower than 8 NGVD. The Newark General Plan and Municipal Code require that the finished floor of all new residential buildings in the Plan area vicinity must have a minimum elevation of 11.75 NGVD. For commercial buildings, finished floors must only be higher than the designated flood elevation of 8 NGVD.

Power and Communications

Existing power lines extend throughout the Plan area. These lines have been installed to serve the mix of industrial uses that first located in this area of Newark. As a result, the existing power grid consist of 21 kilovolt lines that have sufficient capacity to serve all likely development scenarios.

For natural gas supply, it is likely that new development within the Plan area will be served by an existing low-pressure two-inch line that runs along Willow Street from Central Avenue to just south of Enterprise Drive.

Communications within the Plan area are currently served by overhead AT&T lines on Enterprise Drive and underground lines on Central Avenue and part of Perrin Avenue. In addition, fiber-optic cable now exists along part of Willow Avenue. It can be anticipated that full "high-end" phone, communications, and data services should be available to meet the needs of future development within the Plan area.

According to company representatives, Comcast and other data and communication service providers are very

interested in serving this area.

Immediate Context

To the northeast of the Plan area, existing residential development predominates. Recent residential development, including medium density and single-family residential units, has occurred on the southeast corner of Thornton Avenue and Willow Street and in areas located farther from the eastern boundary of the Plan area. These newer residential developments tend to be more traditional garage-forward homes and are located on streets that typically end in cul-de-sacs. Older residential neighborhoods are found on the blocks surrounding Enterprise Drive and its extension to Wells Avenue due east of the Plan area. These houses primarily consist of one- to two-story single-family homes located on well connected residential streets.

To the east and southeast of the Plan area, industrial and light-industrial uses predominate. The blocks surrounding Central Avenue are built at a much larger scale than the residential neighborhoods previously described. Blocks are much longer between cross streets and buildings are set back from the sidewalk. These characteristics make for a less pedestrian-friendly environment than the nearby residential neighborhoods. The existing light industrial buildings are generally simple single-story buildings of tilt-up concrete construction. Many of these buildings are currently vacant.

To the west of the Plan area there are, and will continue to be, salt production facilities. This salt is harvested and then refined at a plant that is located in Newark.

To the north of the Plan area are industrial buildings and across the SamTrans DRC right-of-way, is the Don Edwards San Francisco Bay National Wildlife Refuge. The Refuge consists of roughly 30,000-acres. The Refuge is managed by the U.S. Fish and Wildlife Service and has an interpretive center located one mile northwest of the Plan area.

Additionally, the San Francisco Bay Trail (Bay Trail), a 240-mile network of bicycle and pedestrian trails, currently runs adjacent to the Plan area. Though the trail currently has a number of gaps, is it ultimately envisioned as a continuous and fully interconnected 400-mile trail network that will encircle San Francisco Bay and San Pablo Bay. The Specific Plan includes construction of an internal trail that would connect to the existing Bay Trail along Willow Avenue, at both the Enterprise/Willow intersection and the Central Avenue/Willow intersection.

1.5 RELATIONSHIP OF THE SPECIFIC PLAN TO GOVERNING DOCUMENTS

The Specific Plan is consistent with the California Government Code and is subject to the conditions noted below.

California Government Code

The Specific Plan has been prepared in accordance with the requirements of the California Government Code, Sections 65450-65457. These sections establish the Specific Plan as a legal mechanism; to allow the City of Newark to separately establish development regulations for a defined subarea and to supersede previous development regulations.

City of Newark General Plan

The City of Newark General Plan “encourages development of remaining vacant land for its highest and best use.” This Specific Plan is consistent with this and other General Plan policies and objectives as discussed in more detail in Chapter 8. The Specific Plan will also concurrently process all amendments necessary to make the Specific Plan consistent with the City of Newark’s General Plan, including General Plan Amendments and amendments to the Zoning Ordinance.

City of Newark Zoning Ordinance

The Specific Plan and Plan area will have new, unique, zoning designations, standards and zoning districts. These new zoning designations, while different from the City’s existing zoning, will be added to and become part of Newark’s Zoning Ordinance.

1999 Area 2 Specific Plan

A prior Specific Plan, the “1999 Area 2 Specific Plan” was adopted for this Plan area. This adopted 1999 Plan includes various types of development land-use approval such as a Community College (Ohlone), and light industrial uses such as R&D (research and development). This Specific Plan will replace the 1999 Area 2 Specific Plan.

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- 2.1 COMMUNITY VISION
- 2.2 PARKS & LANDSCAPING CONCEPTS
- 2.3 REQUIRED PLAN ELEMENTS

D R A F T

2.0 COMMUNITY FORM

2.1 COMMUNITY VISION

The Specific Plan will steer the development of the approximately 200-acre Plan area towards a truly memorable community; a livable place where housing, recreation, neighborhood retail center and employment opportunities are integrated. This community is envisioned as a contemporary version of a small walkable town, where the automobile can be replaced by walking and biking for access to recreation and everyday trips.

Key components of this vision include pedestrian and bicycle friendly streets, public and private recreational open space opportunities and vistas to important community focal points like the Transit Station, and an integration of land uses that give the feeling of development over time. With the Plan as a backdrop, distinctive architecture and landscape elements establish a unique identity.

The following artist's Conceptual Illustrative Plan (Exhibit 2.1) presents the Specific Plan vision within the site context. Precise street alignments, lot locations, lot dimensions, and building type and locations shall be determined at the time of development proposals to implement the Specific Plan. Such alignments and locations will be substantially consistent with the goals and policies of this Specific Plan.

Plan Elements

The Specific Plan creates a unique and memorable community by integrating key elements of community design into the Plan. This Specific Plan creates a vibrant community through the integration of community common areas, housing, recreation, employment and transit.

The following outlines each of those elements and describes how the Plan will achieve those goals.



Exhibit 2.1 Conceptual Illustrative Plan Only
(subject to change based on actual development plans)

Neighborhood Center

The entrance to the Plan area, from Enterprise Drive, is designed to create a high level of activity that established the core of the Plan. This core area, or Neighborhood Center, includes the Transit Station, which serves as the focal point for the Plan area and sets the tone for the community.

The Neighborhood Center envisions an open area in front of the Transit Station that will accommodate a wide range of community uses and activities.

This gathering area is the urban living room for the community. Not as large as a traditional town square, it is intended to create a more intimate setting for items such as kiosks, tables, benches; and for functions such as holiday celebrations, a farmer's market, public events and other public gatherings. It is simply a wonderful place to "hang out" and people watch with a great cup of coffee.

Retail

The eastern side of the Neighborhood Center is targeted for a variety of uses, including but not limited to grocery, personal services, neighborhood services, retail, entertainment, sports and recreation. Restaurants and cafe's could provide outdoor seating, helping to further activate the public space and give it a sense of enclosure.

Also east of the Neighborhood Center is an area designated for a grocery store. Ancillary buildings located adjacent to the grocery store could house retail services such as a coffee shop, wine bar, flower shop, dry cleaners or similar types of uses.

A variety of building heights, facades, and signature detailing throughout this core district will add character and architectural interest to the community.

Transit Station

Access to regional transit is of utmost importance. The Transit Station will provide a fixed platform for transit access with parking for transit riders located in designated parking areas adjacent to and the west of the Platform. An example how the Transit Station could conceptually be designed is shown in Exhibit 2.2.

Commercial

An area west of the Neighborhood Center is designed for future office and retail uses. This site will accommodate up to 195,000 square-feet of office and retail uses. Depending on market demand, this site could house office, a sports center, or a "clean tech" manufacturing or development business. As development of these use types is highly dependant on the market conditions, the phasing and allowable uses for this area must remain flexible.

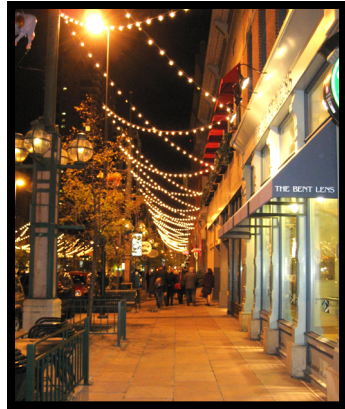
Outdoor Dining*String Lights**Outdoor Seating*



Exhibit 2.2 (conceptual Plan only)

Residential Opportunities inside the Neighborhood Center

Building adjacent to the Neighborhood Center may be mixed-use to energize the area. It is important and appropriate to bring higher density residential opportunities into the core area to create a vibrant district and to support the merchants. Decks and balconies would engage the residents with the outdoor activities along the street and Neighborhood Center.

Residential Opportunities Outside the Neighborhood Center

A wide variety of residential opportunities will be provided within the Specific Plan. Residents will be able to choose from a range of product types such as high medium density units, townhomes, apartments, flats, condominiums and single family detached. This mixing of densities and lifestyles creates a vibrant and engaged community.

**Bicycle Rack**

Design of residential neighborhoods, or districts, will emphasize pedestrian and bicycle connectivity while facilitating dispersed automobile traffic. A modified-grid, street network creates shorter block lengths. The result of this block scaling is that the various home types are woven together within the neighborhood fabric, almost on a block by block basis, rather than separated housing tracts of the same lot configuration.

Depending upon final building design, some homes may face onto pedestrian-oriented streets, community serving parks, and garden courts. This design would eliminate many driveways from the streetscape and create less interruption for walkers utilizing the sidewalk system. These homes would have garages served by carriageways or alleys behind. Combined with traditional street loaded homes, this would provide a variety of choices for future builders and residents.

In keeping with the design philosophy of an integrated community, sound and privacy walls are eliminated where feasible. Appropriate land uses, orientation of structures and appropriate landscaped setbacks are some of the methods the Specific Plan utilizes to mitigate noise without building walls.

2.2 PARKS & LANDSCAPING CONCEPTS**Park Acreage Requirement**

The park requirement derived by the City of Newark for the Specific Plan is that the project shall provide 16.3-acres of parkland for approximately 2,500 housing units. This requirement is based on a requirement for this Specific Plan area, based on 2 acres of park per 1,000 people. Using 2,500 units and the Housing Elements' 3.26 persons per household, this generates 16.3-acres of parkland.

Each of the parks within the Specific Plan should have their own unique character. Detailed designs shall be required as part of the site specific development process.

**Outdoor Seating**

The Specific Plan community is designed to be a fully integrated, walkable mixed-use community. The Plan area utilizes various types of pedestrian links to connect the neighborhood Parks and Transit Station. These pedestrian connections serve to create a cohesive community.

The parks, trail and other public and private recreational areas, within the Specific Plan form an integrated system with a wide variety of options for residents to enjoy. As a mixed-use community, this system is intended to provide more variety than a typical suburban type park dominated by organized play fields. One of the main components within the community will include a neighborhood park directly west of the Transit Station. This park might include trees, open turf and hardscape areas to accommodate events.

Other amenities throughout the parks in the community might include picnic areas, seating, tables, and shaded gathering places. In addition, this pedestrian system includes a perimeter trail within the Plan area that will connect to the existing Bay Trail at its existing location along Willow Street.

The parks and other public and private recreational open space areas (as defined by the City's General Plan, Chapter 7-Recreation) shall serve both to enhance the general character and feeling of the neighborhoods while providing the residents with green space environments. Because the majority of housing will be medium and high densities with limited private yard space, these community spaces represent the resident's outdoor activity areas. The goal is to create

comfortable, accessible, and socially interactive public areas for residents yet maintain an adequate buffer to adjacent homes within the community as well as existing homes at the northwest corner of the site.

A major criteria for all aspects of landscape design is selecting and using materials in a thoughtful and sustainable manner. The land plan establishes a vibrant community that is truly integrated with respect to living and working environments, recreation opportunities, circulation and infrastructure. The arrangement of the uses on the land are a direct response to the existing land uses and circulation, site topography and land form, and site environmental factors.

The desire to create community in accordance with sustainable principles along with sustainable practices, influences the decisions regarding the landscape design, recreational programming and physical layout of the Plan area.

Some of the sustainable practices would include provisions for use of recycled or non-potable water for irrigation if available, the use of water efficient irrigation systems, automatic irrigation controllers, limiting turf to areas where it is functional, selecting native or low water use plant species. The community should be encouraged to also utilize permeable pavements where appropriate and decorative fountains and water features should utilize recycled or non-potable water.

2.3 REQUIRED PLAN ELEMENTS

While the artist's conceptual plan is intended to provide an example of how the plan might lay out, some variations of this layout are expected. There are a number of elements, however, which will be required by this Specific Plan, including:

1. Road improvements, such as Enterprise Drive, Hickory Street and the extension of Central Avenue;
2. Provision for a future grocery store;
3. A linear park/trail that runs interior to the perimeter of the Specific Plan area and connects to the existing Bay Trail at it's current location along Willow Street;
4. Contribution by Specific Plan projects toward the construction of an overpass on Central Avenue over the Union Pacific Railroad right-of-way east of the project area; and,
5. Parks of varying sizes throughout the Plan area. The Plan designates three "park" areas; a) the Gallade site, b) the linear park/trail, and c) the park west of the Transit Station. Additional project park requirements, pursuant to City and State regulations, will be satisfied through the construction of parks or payment of in-lieu fees to the City of Newark.

3.1 OVERVIEW

3.2 LAND USE PRINCIPLES

3.3 GENERAL PROVISIONS

3.4 LAND USE DESIGNATIONS

3.5 ADJUSTMENTS/TRANSFERS REGULATIONS

3.6 PERMITTED USES

3.7 DEVELOPMENT STANDARDS & STREETScape SETBACKS

3.7.1 TRANSIT STATION ENTRANCE ROAD

3.7.2 ENTERPRISE DRIVE (WEST) - NORTH SIDE

3.7.3 ENTERPRISE DRIVE (WEST) - SOUTH SIDE

3.7.4 HICKORY STREET

3.7.5 WILLOW STREET

3.7.6 CENTRAL AVENUE

3.7.7 ENTERPRISE DRIVE (EAST)

3.7.8 NEIGHBORHOOD STREETS

3.7.9 LOT SIZE DIMENSIONS & BUILDING SIZE

3.0 FORM BASED CODE

3.1 OVERVIEW

The Specific Plan includes a blend of residential, neighborhood serving retail services, employment, open space and a transit station. To create a vibrant, thriving and special community, this Specific Plan utilizes the concept of Form Based code to set guidelines for development. Form Based code creates a predictable public realm by establishing guidelines and regulations that focus primarily on the physical form of the environment, with a lesser focus on specific land-use requirements.

Form-based codes address the relationships between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The guidelines and standards in Form Based codes are presented in diagrams and words, to describe the character of the development. This is in contrast to conventional zoning's focus on the management and segregation of land uses.

The Land Use Plan is a graphic representation of policies contained in the Specific Plan. Land use classifications - shown as color/graphic patterns on the plan - allow for a range of uses within each classification. The Specific Plan Land Uses are reflected on Exhibit 3-1 and are summarized on Table 3-1.

3.2 LAND USE PRINCIPLES

The following principles were used to guide the layout of the land use plan:

- Provide a mix of uses that supports transit ridership;
- Integrate new development with existing uses and neighborhoods;
- Limit sensitive receptors' exposure to noise and air quality emissions; and,
- Reduce total vehicle miles traveled and regional greenhouse gas emissions.

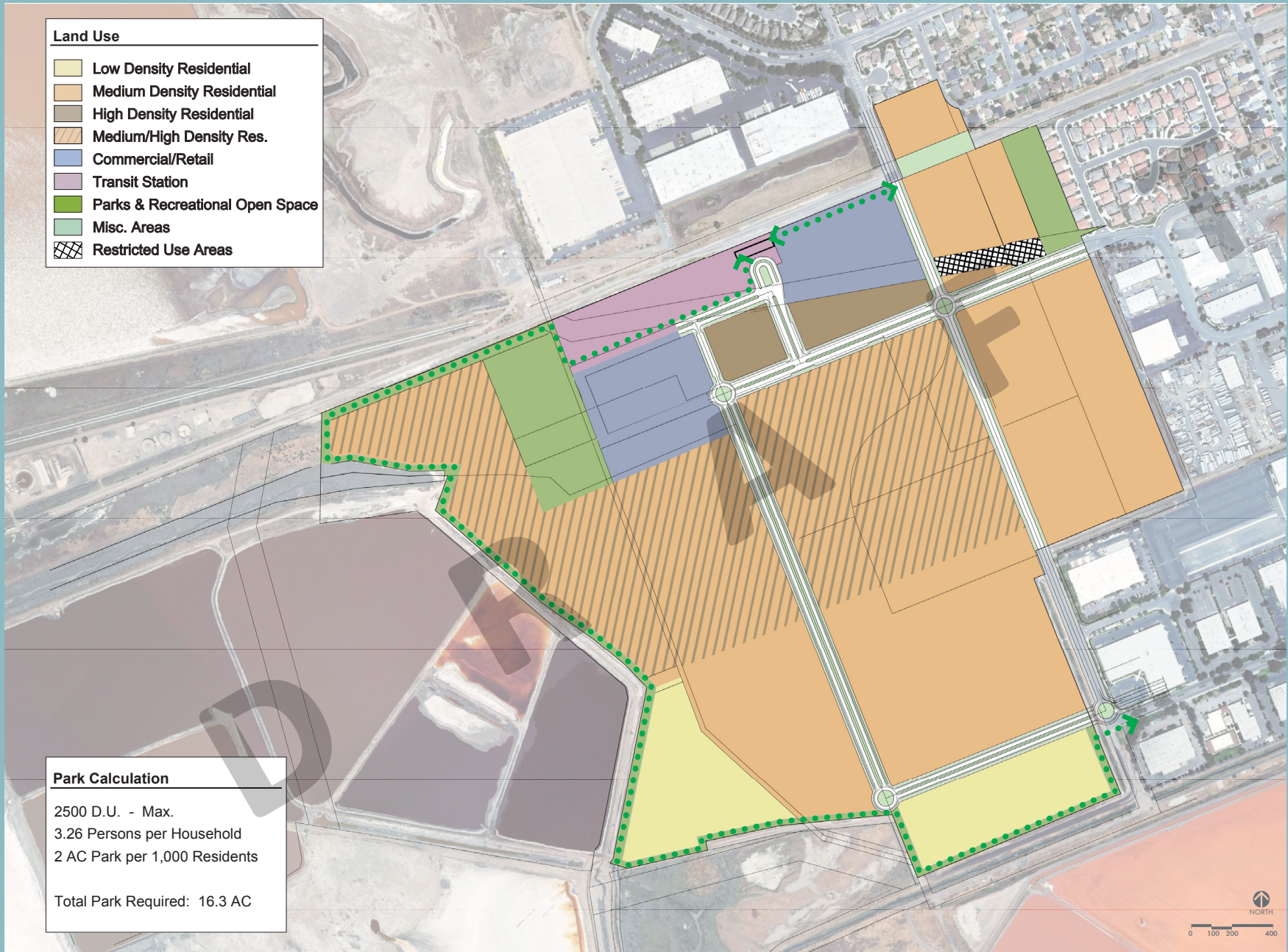


Exhibit 3.1 Land-Use Plan

Adopting a mix of uses around the proposed Transit Station will generate great benefits for the City of Newark and the overall community. Limited neighborhood serving retail uses will serve both the established and the new residents of the area while also providing sales tax revenue for the City of Newark. Residential units within walking distance to the Transit Station provides the riders necessary to support the Station. Studies have shown that residential units within walking distance of transit stations provides the greatest number of riders.

3.3 GENERAL PROVISIONS

Purpose & Intent

The Land Use and Form-Based Regulations chapter set forth in this Specific Plan provide a comprehensive set of regulations governing the use of the land. This chapter, adds to the City of Newark Zoning Code and specifies regulations for the Plan area. Should there be a conflict between this Form Based Code and the Specific Plan for the Plan area and the City of Newark Zoning Ordinance, the provisions of this Form Based Code and the Specific Plan shall govern. Any issue not directly or specifically covered by this Form Based Code or the Specific Plan shall be subject to non-conflicting regulations and procedures of the City of Newark Planning and Zoning Code.

Consistency with Adopted Plans and Codes

As required by Government Code Section 65454, the Specific Plan and Form Based Code are consistent with and implement the City of Newark General Plan as the General Plan is being amended concurrently with this Specific Plan. Chapter 8,

Implementation, discusses the consistency in detail. All land use entitlements and permits approved within the Specific Plan area shall be consistent with the General Plan.

Severability Clause

If any term or provision of this Specific Plan, or the application of any provision of this Specific Plan to a particular situation, shall for any reason be found to be void, invalid, illegal, or unenforceable by a court of competent jurisdiction, such term or provision shall remain in force and affect to the extent allowed by such ruling and all other terms and provisions of this Specific Plan or the application of this Specific Plan to other situation shall remain in full force or effect.

Existing Users

Any lawfully existing land use occurring at the time of the effective date of this Specific Plan may be continued, if they have been in continuous operation, notwithstanding any omission of a particular use in the Permitted Uses Section 3.6.

3.4 LAND USE DESIGNATIONS

The land use designations identified in the Plan area are defined below. They are meant to be broad enough to provide flexibility in implementation, but clear enough to provide sufficient direction to carry out the Specific Plan. Conceptual Land Use acreages (based on APN maps) are shown in Table 3.1 (estimates only). The permitted uses for each land use are set forth in Section 3.6. Also addressed in this section are regulations concerning the adjustment, transfer and conversion of land use designations.

Specific Land Uses Defined

The following are the Specific Plan Land Use designations established by the Specific Plan:

Low Density Residential (LDR)

The LDR district is intended for single-family neighborhoods and the allowable density in this district is between 0 and a maximum of 14 dwelling units per gross developable acre.

Medium Density Residential (MDR)

The MDR district is intended for areas of medium-density detached and attached housing such as duets, duplexes, triplexes, and four-plex units, townhomes and condominiums. The allowable density range is 14-25 dwelling units per gross developable acre.

Medium-High Density Residential (MHDR)

The MHDR district is intended primarily for areas of medium density residential with some pockets of high-density residential units. See description below for the definition of High-Density Residential (HDR). This allowable density range is 16-60 dwelling units per gross developable acre.

High Density Residential (HDR)

The HDR district is intended for higher density multifamily development such as apartments, townhomes, condominiums and live/work units. HDR allocated areas are located along collector roads, adjacent to neighborhood serving land uses such as retail services, and near transit stations. The allowable density range is 25-60 dwelling units per gross developable acres.

Retail (R)

The R designation provides a variety of uses including, but not limited to, grocery, personal services, neighborhood serving retail, and entertainment. Parcels may include multiple land uses as individual buildings or within each building. The allowable square footage for this area is up to 35,000 square feet.

Commercial (C)

The Commercial designation provides a variety of uses including, but not limited to, office, medical, financial, real estate, general business and personal services, food related services and recreation. Parcels may include multiple land-uses as individuals buildings or within each building. The allowable square footage for this area is up to 195,000 square feet.

Transit Station (TS)

The TS designation indicates the location for the Dumbarton Transit Station and associated parking areas.

Parks & Open Space (POS)

The Parks & Open Space designation allows for a variety of recreational uses and open space, including the perimeter trail and various water quality features and associated structures.

Miscellaneous (M)

The M designation is designed to accommodate Parcels that occur within Rights-of-Way (ROW) where uses are limited, or areas that are too small for a specific land use designation. This designation also accommodates the rail station train tracks.

Below is a summary of the proposed land uses and their corresponding acreages based on APN maps.

TABLE 3.1 - PROPOSED LAND USE TABLE	
LAND USE	ACRES*
Low Density Residential (LDR)	16.84
Medium Density Residential (MDR)	67.86
High Density Residential (HDR)	5.03
Medium/High Density Residential (MHDR)	59.34
Retail (R)	6.56
Office (O)	5.87
Transit Station (TS)	6.11
Parks & Open Space (POS)	16.26
Miscellaneous (M)	22.95
TOTALS	206.7 ACRES

*Acreage are estimates only, based on APN maps. Final acreage amounts may vary once surveys are conducted. The maximum unit count shall not exceed 2,500 units.

3.5 ADJUSTMENTS/TRANSFERS REGULATIONS

In order to create the most desirable community possible, a certain amount of flexibility needs to be provided for in this Specific Plan. This flexibility allows for shifts in market demand. The parameters for this flexibility within the Specific Plan are detailed in this section. Submittals for these adjustments shall be made to the City of Newark and the Community Development Director may make determinations at an administrative level.

Planning Area Adjustments

While a Conceptual Land Use Plan (Exhibit 3.1) is contained in this Specific Plan, precise development boundaries and acreages shall be determined through the recordation of Final Maps and with final engineering.

Planning Area Adjustment Policies

FB-1: Adjustments to the boundaries and acreages of a land use area, or areas (as set forth in the Land Use Plan - Exhibit 3.1 and proposed Land Use Table - Table 3.1), may be processed by those property owners owning land within the effected area as of right and without necessitating a Specific Plan Amendment, provided the total gross acreage of a land use planning area does not change by more than 20% from the original gross acreage approved under the Specific Plan.

FB-2: A revised Land Use Plan (Exhibit 3.1) and Proposed Land Use Table (Table 3.1) must be submitted to the City of Newark for each proposed revision or set of revisions to the development area boundaries.

Transfer of Dwelling Units

The transfer of dwelling units between Assessor's Parcel Numbers set forth in Table 3.2 is permitted as of right, as set forth herein, provided that there is no net increase in the approved number of dwelling units in this Specific Plan.

Allocation of Dwelling Units

The Specific Plan shall be limited to a total of 2,500 residential units. To ensure that development within the Specific Plan

occurs in a manner consistent with the policies and objectives of this Specific Plan without exceeding this unit cap, Table 3.2 (Unit Allocation Table) below summarizes the maximum number of residential units each Assessor's Parcel Number ("Parcel") listed therein is entitled to construct under this Specific Plan.

If the existing boundaries of two or more Parcels set forth in Table 3.2 are revised by lot line adjustment, the number of units assigned to each Parcel shall remain the same unless accompanied by a unit transfer as permitted by this Section 3.5. If a Parcel set forth in Table 3.2 is legally subdivided into four or fewer Parcels, as evidenced by a recorded Parcel map of final map approved by the City of Newark pursuant to the Newark Municipal Code and California Subdivision Map Act ("Map Act") or, the Parcel already consists of two or more legal Parcels under the Map Act as evidenced by a certificate of compliance or recorded subdivision map, the dwelling units allocated to such Parcel may be reallocated among the newly created or existing legal Parcels by the property owner in any manner which is consistent with this Specific Plan and the applicable zoning requirements. Such reallocation shall be accomplished by the property owner's submission of a revised Table 3.2 to the Community Development Director of the City of Newark in compliance with this Specific Plan.

Transfer of Dwelling Units

The transfer of dwelling units between owners of legal Parcels is permitted as of right provided that there is no net increase to the total dwelling units, 2,500, permitted in this Specific Plan and provided that such transfer complies

with the applicable zoning requirements for each land use designation involved, including density requirements (i.e. units may not be transferred to a Parcel to the extent that the applicable maximum density would be exceeded).

Transfer of Dwelling Units Policies

FB-3: A revised Land Use Table (3.1) must be submitted to the Community Development Director for the City of Newark for a proposed transfer of dwelling units between Parcels only if the acreages for one or more land use planning areas are being revised as part of such unit transfer. Otherwise, no revised Land Use Table shall be required.

FB-4: A revised Unit Allocation Table (Table 3.2) shall be submitted to the Community Development Director for each proposed transfer of dwelling units as provided in this Section 3.5. Provided such proposed transfer complies with this Specific Plan and applicable zoning requirements, no further submittals or approvals shall be required.

Automatic Transfer of Dwelling Units

Upon the earlier of the rezoning or dedication of a Parcel to a non-residential use, including for park use or open space, a building permit for the construction of dwelling units or approval of a tentative map, vesting tentative map, Parcel map or tentative Parcel map which subdivides a Parcel into five or more Parcels or five or more condominiums as defined in the Map Act (a "Developed Parcel"), any unused dwelling units from such Parcel's allocation in Table 3.2 shall be automatically reallocated to those Parcels in Table 3.2 which are not Developed Parcels (a "Recipient Parcel").

The number of unused dwelling units for a Developed Parcel shall be equal to the number of units allocated to such Parcel in Table 3.2 minus zero, in the case of a Parcel which is rezoned or dedicated to a non-residential use, the number of dwelling units authorized to be constructed pursuant to a building permit to the number of Parcels or condominiums created by the subdivision ("Unused Units"). The formula for such reallocation shall be:

$$X = (Y / (Y + Z))$$

X = Number of Unused Units to be reallocated from a Developed Parcel to a Recipient Parcel

Y = Number of units allocated to Recipient Parcel to date

Z = Total number of units allocated to Parcels within Specific Plan which are not Developed Parcels.

Any applicant seeking to utilize reallocated units for a Recipient Parcel shall submit a revised Table 3.2 setting forth the revised allocation of units to the Community Development Director, which will then become a part of this Specific Plan without the need for amendment or further action by and party.

TABLE 3.2 - UNIT ALLOCATION TABLE					
PROPERTY OWNER	ASSESSOR'S PARCEL NUMBER	PARCEL AREA ZONED FOR RESIDENTIAL USE ¹	LAND USE DESIGNATION/ ZONING	MAXIMUM NUMBER OF UNITS	PERCENTAGE OF TOTAL
Ashland Inc.	092-0115-005	10.29 ACRES	MHDR	243	9.72%
Cargill	PARCEL 1 OF PARCEL MAP 9837 ²	54.53 ACRES	LDR/MDR/MHDR	652	26.08%
Enterprise Drive, LLC	092-0140-008	2.14 ACRES	MDR	35	1.40%
FMC Corporation	092-0100-004-02	3.59 ACRES	MHDR	50	1.98%
FMC Corporation	092-0100-005	0 ACRES	TRANSIT STATION/ RETAIL	0	0%
FMC Corporation	092-0101-001	2.22 ACRES	MDR	31	1.23%
FMC Corporation	092-0115-011	1.98 ACRES	MHDR	47	1.89%
FMC Corporation	537-0852-001-02	5.8 ACRES	PARK/COMMERCIAL/ HDR	246	9.85%
FMC Corporation	537-0852-002-07	0 ACRES	PARK/COMMERCIAL	0	0%
FMC Corporation	537-0852-002-008	9.6 ACRES	MHDR/PARK	173	6.93%
Gallade Enterprises, LLC	092-0140-005	0 ACRES	PARK	0	0%
Jones Hamilton Company	092-0116-058	6.23 ACRES	MDR	86	3.44%
Jones Hamilton Company	092-0116-059	5.92 ACRES	MDR	82	3.27%
Jones Hamilton Company	092-0116-060	9.12 ACRES	MDR	126	5.04%
SHH, LLC	092-0115-012	2.0 ACRES	MHDR	48	1.91%
SHH, LLC	092-0115-013	4.11 ACRES	MHDR	98	3.92%
Torian	092-0115-008	10.0 ACRES	MDR/MHDR	138	5.53%
Torian	092-0115-010	32.22 ACRES	LDR/MDR/MHDR	445	17.81%
Total		159.76 ACRES		2,500	100%

1. Acreages listed are estimates

2. On May 25,2010, Cargill recorded Parcel Map 9837 with the Alameda County, California Recorder's Office, creating three new legal parcels. The County Assessor has not yet updated its Assessors Parcel Numbers assigned to the land which was the subject of the Parcel Map, so the allocation of units in Table 3.2 Refers to Parcel 1 of Parcel Map 9837 rather than by APN.

3.6 PERMITTED USES

Land uses within the Specific Plan will be regulated by the application of permitted and/or administratively verified permitted uses designated by the zoning district applied to each parcel. Except as otherwise provided in the Specific Plan, permitted uses, development standards, processing requirements and other regulations are as specified by the City of Newark Zoning Ordinance.

Permitted Uses	
Direction from the City forthcoming	

P = Permitted Use

DRAFT

3.7 DEVELOPMENT STANDARDS & STREETScape SETBACKS

Oftentimes, the places that stand out the most from our memories all have something in common; the way the streets feel as you move through them. There is something special about gracious tree-lined streets and wrap-around porches that make neighborhoods that have these characteristics so unique. You want to spend time there. You want to revisit them. One of the ways to enhance neighborhood feel is through offering regulations and guidelines for streetscape design (setbacks and character from property line to building).

The following section of the Form-Based Code chapter illustrates just how the Plan area addresses the pedestrian and vehicular relationship to the streets to create memorable neighborhoods. While the plan itself has not been formalized and is still at a predominately conceptual stage, there are also guidelines and recommendations for street cross section (Please see street cross sections in Chapter 6 - Circulation that will set the stage and climate of the Plan area).

Exhibit 3.2 on the following page highlights the streetscape (or setbacks from property line) that are regulated within the Form-Based Code. The cross sections shown in this Chapter (3.7.1-3.7.8) illustrate building placement and setbacks only. Street cross section are addressed in Chapter 6 - Circulation. It is important to note that the buildings on the plan are purely conceptual. Final designs of neighborhoods will occur at a later date and will go through the tentative map process. This Chapter will serve as a guide for those future developments.

- Transit Center Road
- Enterprise Drive (West)
- Enterprise Drive (East)
- Hickory Street
- Central Avenue
- Willow Street
- Neighborhood Streets

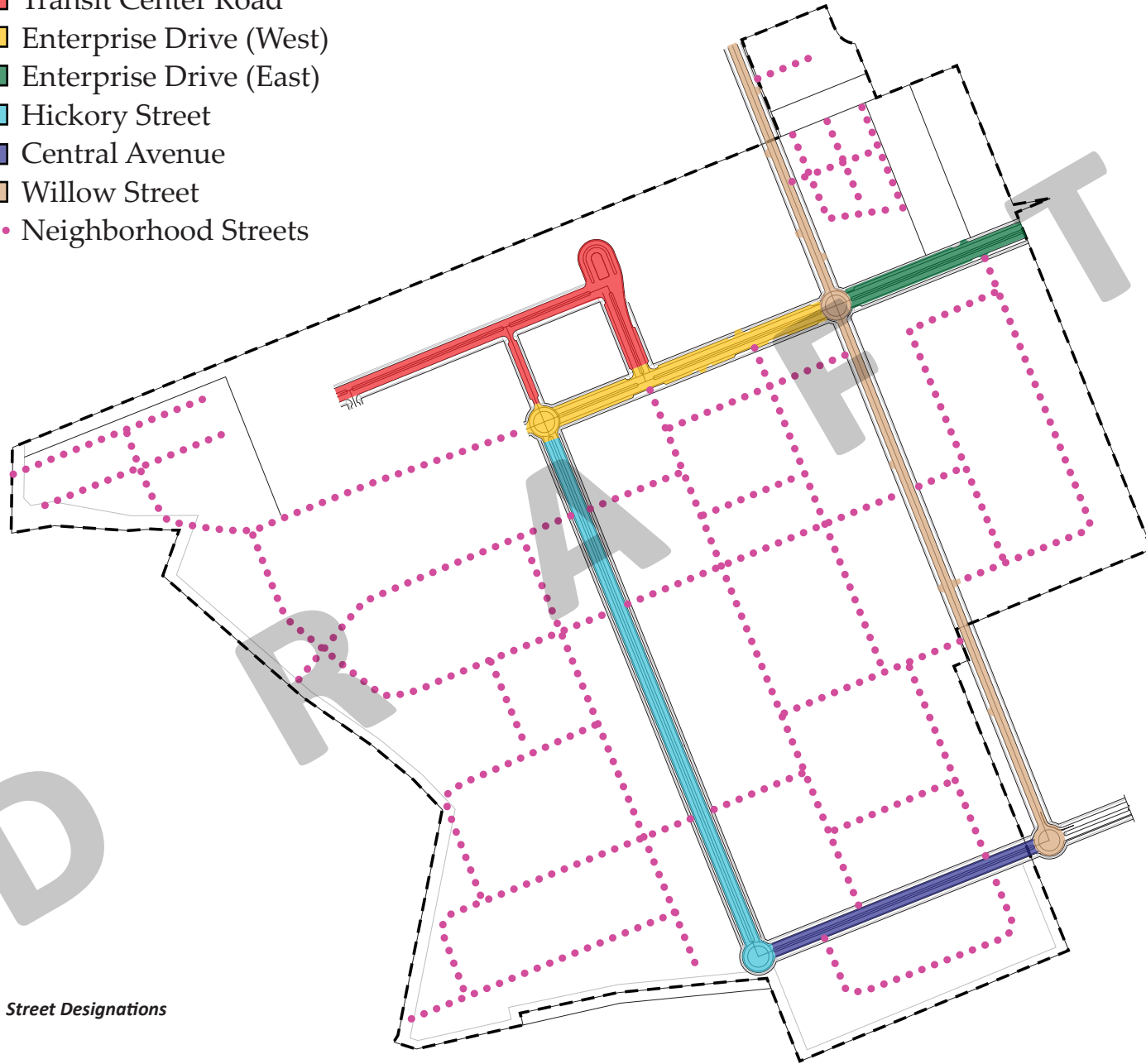
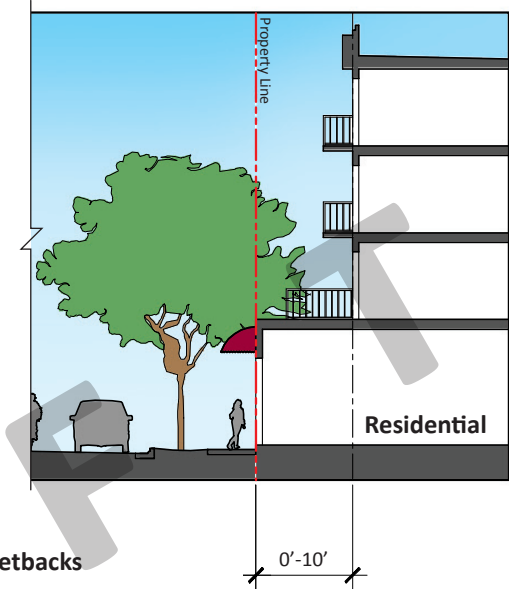
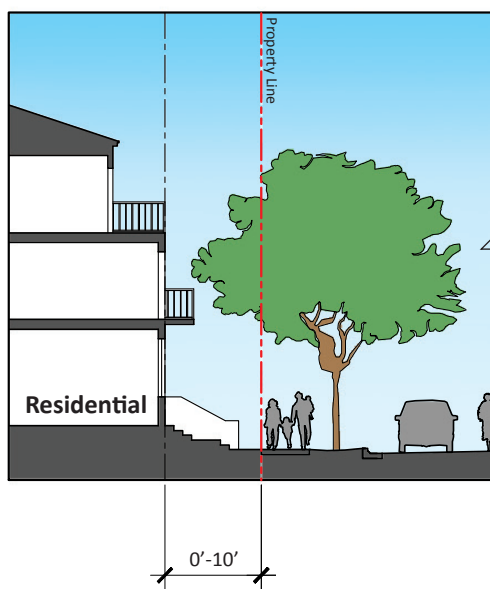


Exhibit 3.2 Street Designations



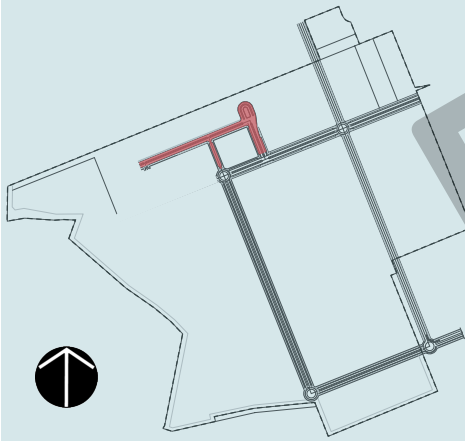
Transit Station Entrance Road - Setbacks

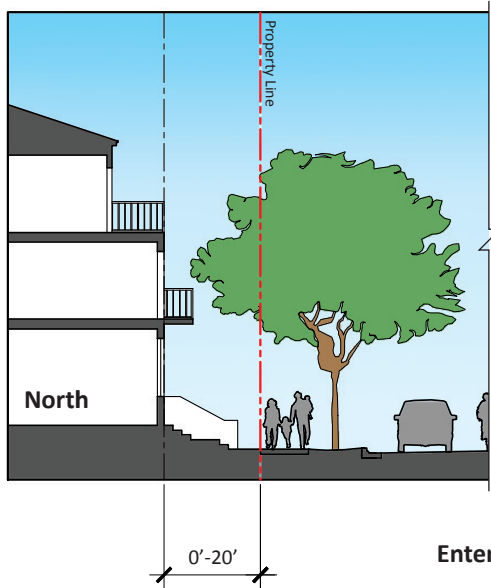
3.7.1 Transit Station Entrance Road

The location of the Specific Plan Transit Station, just off of Enterprise Drive West, has the opportunity to provide an enhanced statement as the entry to the Station. Intended to be a vibrant area, the setbacks and building placement will be more urban in nature with sidewalks that can provide for cafe style seating, setting the tone for this important street.

Building Placement	
Setbacks (from Property Line)	
Front	0' - 10'
Side Street	0' - 10'
Building Form	
Primary Street Facade built to Setback Lines	50% min.
Side Street Facade built to Setback Lines	30% min.

Height	
Building Max.	6 stories or 75' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	





Enterprise Drive West - Setbacks (North Side)
(Willow to Hickory - North Side Only)

3.7.2 Enterprise Drive West (North Side)

Enterprise Drive West will be a main street many of the residents and visitors will use to enter the Plan area. Not only does this street need to feel special, it needs to accommodate the need for various types of residential building forms as well as commercial/retail/office uses.

Building Placement

Setbacks (from Property Line)

Front	0' - 20'
Side Street	5' - 10'

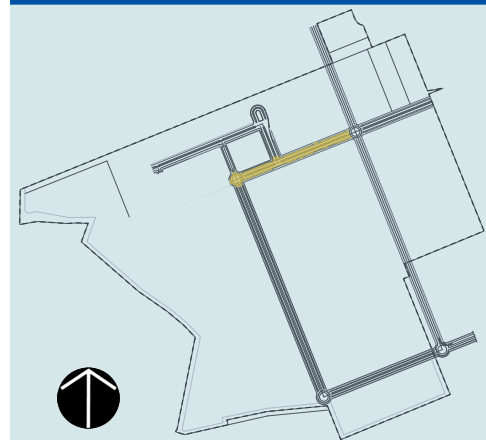
Building Form

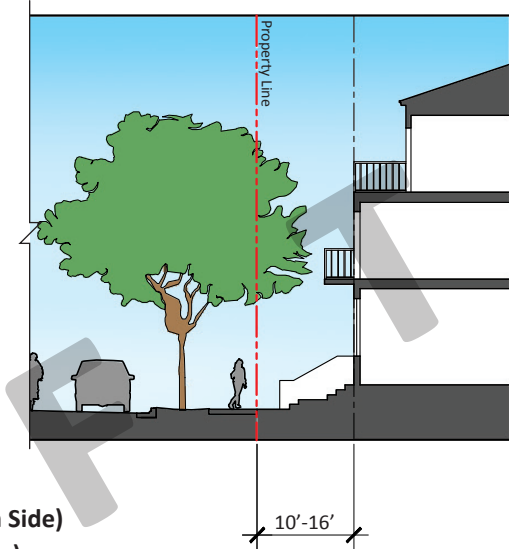
Primary Street Facade built to Setback Lines	50% min.
Side Street Facade built to Setback Lines	30% min.

Height

Building Max.	6 stories or 75' max
---------------	----------------------

* Building height measured from finished grade at entry to the top of the ridge/parapet.





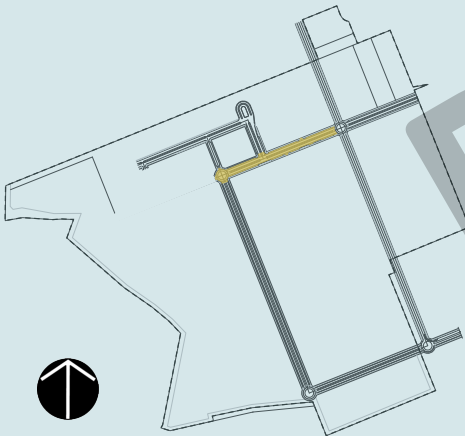
Enterprise Drive West - Setbacks (South Side)
(Willow to Hickory - South Side Only)

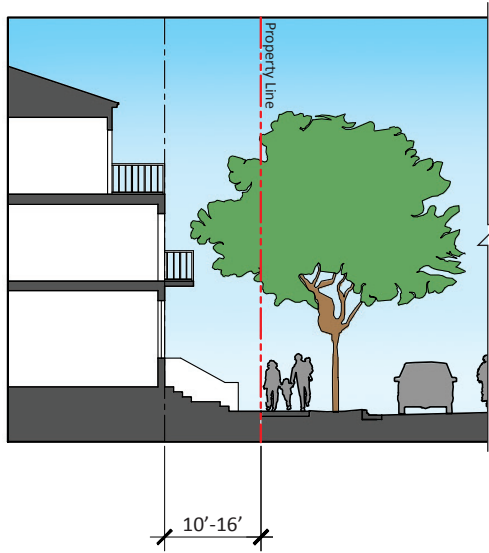
3.7.3 Enterprise Drive West (South Side)

Enterprise Drive West will be a main street many of the residents and visitors will use to enter the Plan area. Not only does this street need to feel special, it needs to accommodate the need for various types of residential building forms as well as commercial/retail/office uses.

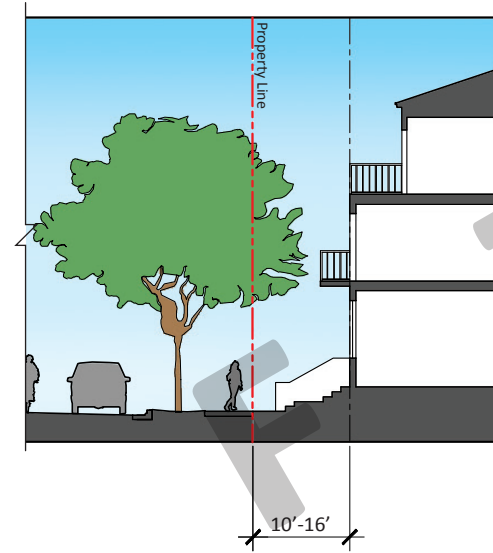
Building Placement	
Setbacks (from Property Line)	
Front	10' - 16'
Side Street	5' min.
Block Form	
Max. Block Length	600'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

Height	
Building Max.	6 stories or 75' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	





Hickory Street - Setbacks



3.7.4 Hickory Street

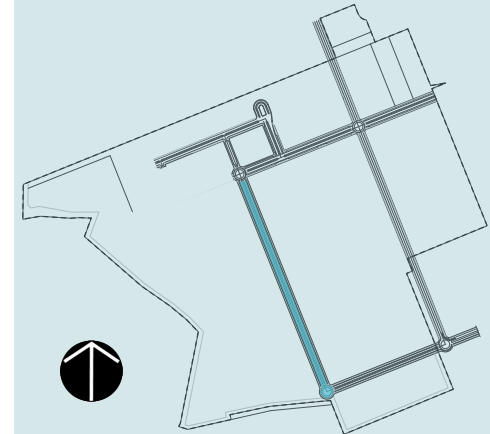
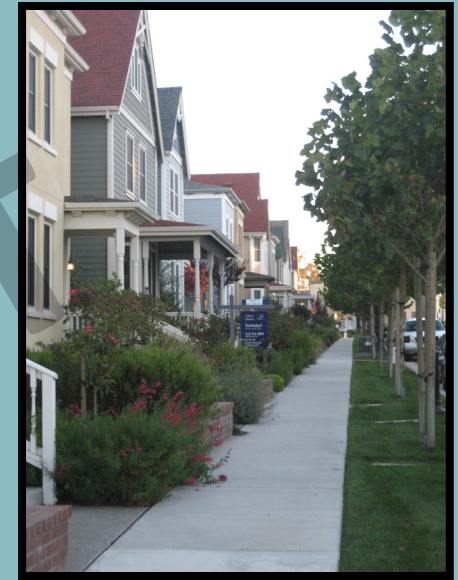
Hickory Street is designed to create a very pleasant residential/pedestrian environment, as Hickory Street & Central Avenue are the main Collector Roads through the Plan area.

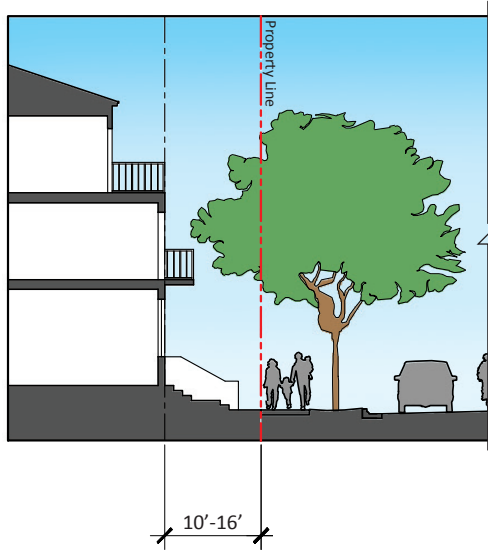
Building Placement

Setbacks (from Property Line)	
Front	10' - 16'
Side Street	5' min.
Block Form	
Max. Block Length	600'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

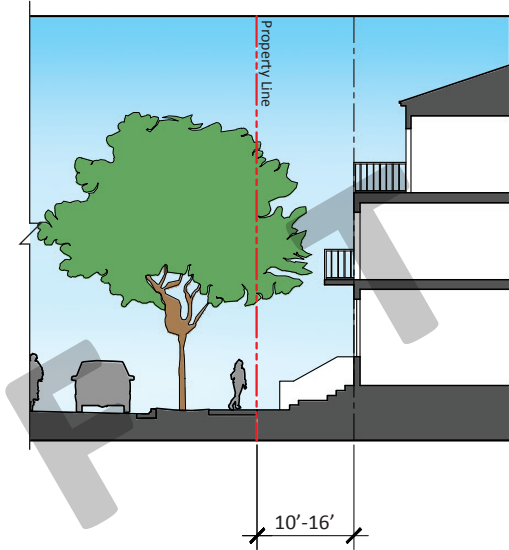
Height

Building Max.	4 stories or 50' max
Ancillary Building Max.	2 stories or 25' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	





Willow Street - Setbacks

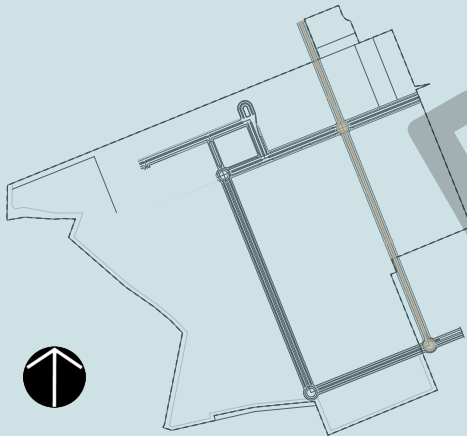


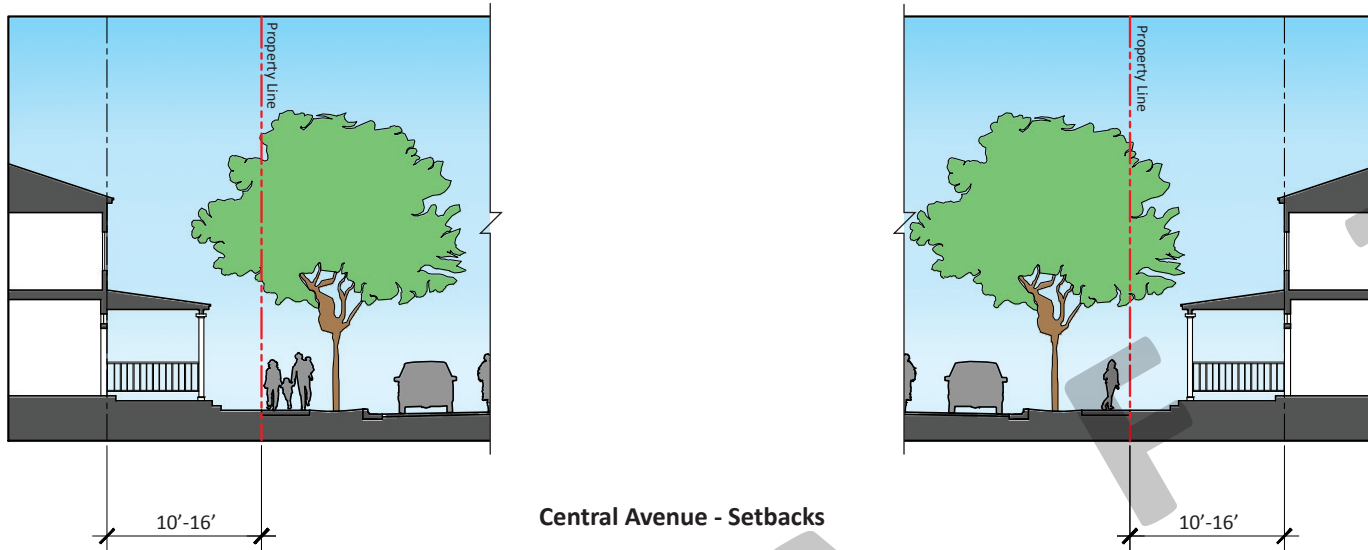
3.7.5 Willow Street

Willow Street is designed to create a very pleasant residential/pedestrian environment, as Hickory Street & Willow Street are the main north-south connectors through the Plan area.

Building Placement	
Setbacks (from Property Line)	
Front	10' - 16'
Side Street	8'3" min.
Block Form	
Max. Block Length	450'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

Height	
Building Max.	4 stories or 50' max
Ancillary Building Max.	2 stories or 25' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	



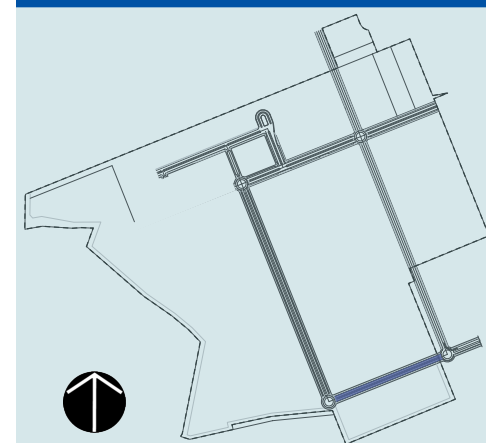


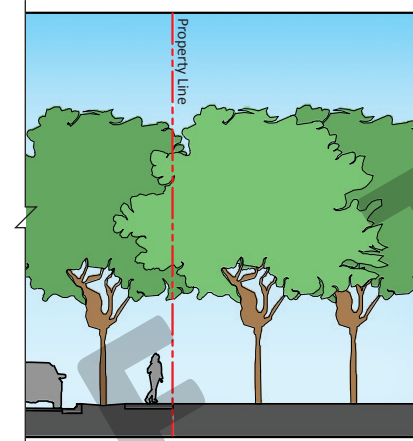
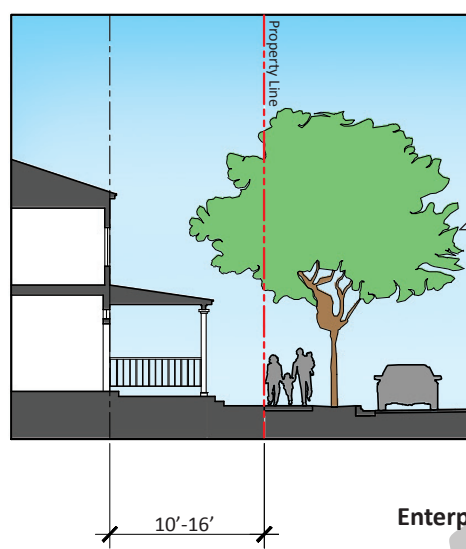
3.7.6 Central Avenue

Central Avenue is designed to create a very pleasant residential/pedestrian environment. Similar in scale to Hickory Street, both Hickory and Central will serve as collector roads through the Plan area.

Building Placement	
Setbacks (from Property Line)	
Front	10' - 16'
Side Street	5' min.
Block Form	
Max. Block Length	600'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

Height	
Building Max.	4 stories or 50' max
Ancillary Building Max.	2 stories or 25' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	





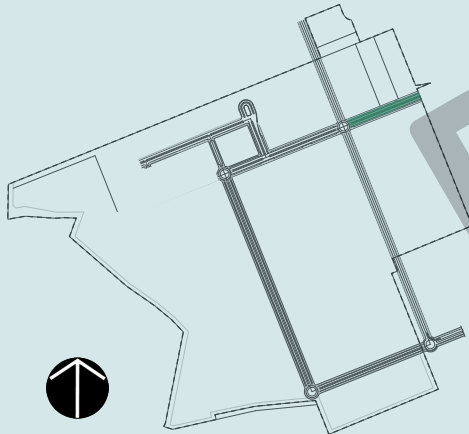
Enterprise Drive East - Setbacks

3.7.7 Enterprise Drive East

The Eastern portion of Enterprise Drive should be similar in character to Enterprise Drive - West. While similar in character, the Eastern portion would be reduced in scale and modified to reflect the traffic patterns and land use categories for this location.

Building Placement	
Setbacks (from Property Line)	
Front	10' - 16'
Side Street	5' min.
Block Form	
Max. Block Length	600'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

Height	
Building Max.	2.5 stories or 30' max
Ancillary Building Max.	2 stories or 25' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	



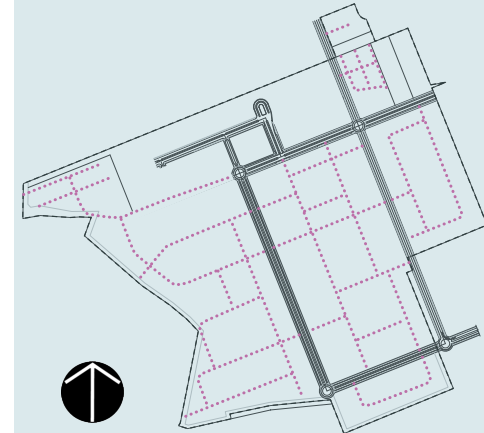
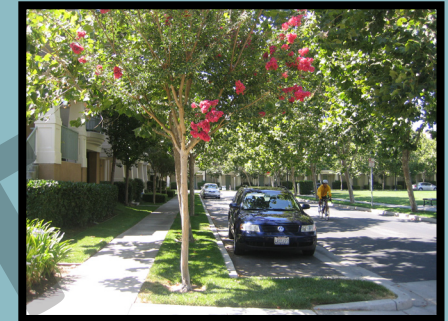


3.7.8 Neighborhood Streets

While Neighborhood streets shall have consistent quality throughout, the streetscape, building placement, and landscaping will vary depending on the specific product type and location.

Building Placement	
Setbacks (from Property Line)	
Front	10' - 16'
Side Street	5' min.
Block Form	
Max. Block Length	600'
Min. Block Width	450'
Max % of Buildings at Min. Setback Lines	80% min.

Height	
Building Max.	4 stories or 50' max
Ancillary Building Max.	2 stories or 25' max
* Building height measured from finished grade at entry to the top of the ridge/parapet.	



3.7.9 LOT SIZE DIMENSIONS & BUILDING SIZE

For neighborhoods not along a street regulated by the Form Based code, the following standards shall apply:

TABLE 3.3 LOT SIZE DIMENSIONS		
	Single Family Detached	Single Family Attached
Lot Size		
Width (min)		
Width (max)		
Depth (min)		
Depth (max)		

* Direction from the City forthcoming

TABLE 3.4 SETBACKS		
	Commercial	Multifamily
Building Size		
Maximum Building Width	300'	300'
Maximum Building Depth	300'	300'

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4.0 DESIGN GUIDELINES

4.1 DESIGN GUIDELINES OVERVIEW

The Design Guidelines illustrate the desired character of the built environment through site, building, and landscape design. They are intended to help the City of Newark and future builders create a mixed-use community with a consistent quality and distinctive sense of place while encouraging flexibility and innovation, diversity, and individual neighborhood character.

The Design Guidelines are provided as a way to achieve that blend of architectural styles in combination with thoughtfully designed public spaces that will distinguish the Plan area. The Guidelines are suggestions intended to be applied as applicable, based on the specific product, location, and site conditions.

4.2 ARCHITECTURAL DESIGN GUIDELINES

Architectural Character

Several building styles are recommended to be used throughout the Plan area:

- Agrarian Rural
- Agrarian Contemporary
- Farmhouse
- Arts & Crafts - Prairie
- Arts & Crafts - Craftsman
- French Country

The elements of each architectural style are outlined below as guidelines intended for application to the residential buildings, where feasible and appropriate, and as a context for other product types, including retail and commercial. In many instances, this may be achieved through extrapolation rather than direct application.

4.2.1 Agrarian Rural

Drawing from homes of the late nineteenth and early twentieth centuries, Agrarian Rural style homes typically have a roof form to the front and a partial or full-width front porch. These homes will have appropriate detailing that adds to the overall refinement of the architecture without detracting from it. Agrarian Rural style homes should be familiar, welcoming residences.

Typical Elements of this Style

Form & Roof:

- Cross-gabled, front gabled or front-to-back main gabled roof forms
- 5:12 to 12:12 roof pitches
- Pitch breaks permitted at porches, minimum slope of 3-1/2 : 12
- Minimum 12 inch eaves and minimum 8 in gable ends
- Flat concrete tile or composition shingle roofing

Walls & Windows:

- Horizontal siding, board and batten siding, stucco or a combination of these
- Square or a minimum 2:1 proportioned vertical rectangular windows
- Grid patterns typically: 1, 2, 4 or 6/1; 2/2; 4/4; 6/6
- Window grids facing all public streets and other locations in clear public view

Details:

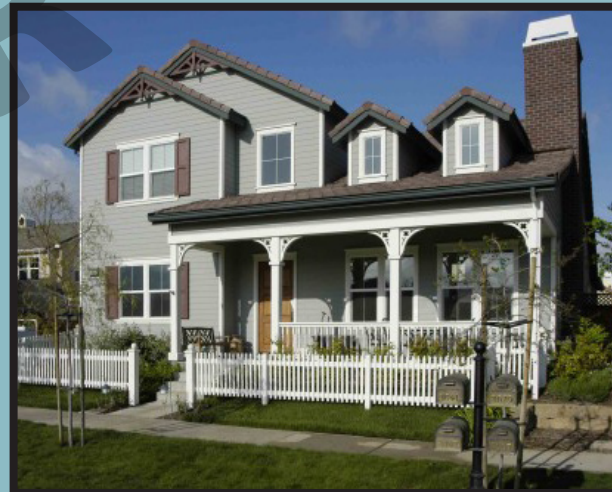
- Porches with simple columns, preferably wood, with bracket and corbel detailing
- Decorative porch railings
- Appropriately proportioned window and door trims, simple in nature
- Wood detailing on siding surfaces, and stucco over foam detailing permitted on stucco surfaces

Colors:

- Body: whites, light-tinted colors, and rich earth tones
- Trim: whites and lighter tinted colors that compliment the body color
- Accent: light or dark shades that contrast to the body color

Enhancement Opportunities for this Style:

- Appropriately scaled dormers, preferably active
- Roof ornamentations such as cupolas and dovecotes
- Lambs legs at gable ends
- Decorative shutters
- Siding at gable end elevations
- Smoother texture on stucco elevations



4.2.2 Agrarian Contemporary

Influenced strongly by the homes of pre-railroad America, the Agrarian Contemporary style should rely on simple form based architecture with strong roof lines and inviting front porches. These homes should not be overly adorned with decoration and attention should be paid to appropriately proportioned fenestration patterns that provide a specific rhythm to the façade of the building. Agrarian Contemporary style homes should be clean, crisp, more contemporary interpretations of the Agrarian Rural style.

Typical Elements of this Style

Form & Roof:

- Simpler plan and form
- Simple roof design; front-to-back gable or side-to-side gable
- 5 : 12 to 12 : 12 roof pitch
- Minimum 8 inch eaves and zero gable ends permitted
- Flat concrete tile or composition shingle roofing

Walls & Windows:

- Horizontal siding, board and batten siding, stucco or a combination of these
- Symmetrical placement and careful attention to developing distinct fenestration rhythms
- Square, circular or minimum 2:1 vertically proportioned rectangular windows
- Grid patterns typically: 1, 2, 4 or 6/1; 2/2; 4/4; 6/6

- Window grids facing all public streets and other locations in clear public view

Details:

- Porches with simple columns with simple trim detailing
- Porch railings should be simple in design when provided
- Minimal door and window trim detailing
- Wood detailing on siding surfaces and stucco over foam detailing permitted on stucco surfaces

Colors:

- Body: whites, light-tinted colors and rich earth tones
- Trim: whites, or light shades complementary to the body color
- Accent: light or dark shades in contrast to the body color

Enhancement Opportunities for this Style:

- Decorative shutters
- Appropriately proportioned dormers, preferably active
- Cupolas
- Exposed rafter tails
- Smooth trowel detailing on stucco elevations



4.2.3 Farmhouse

The American Farmhouse architecture style is a hybrid of varying elements brought together by the regional craftsmen and the building traditions of the early 20th century. Covered porches, dormer windows and white paint are universal Farmhouse features. This architecture embodied the need for basic comfort and is both practical and pleasant in design.

Typical Elements of this Style

Form & Roof:

- Typically two-story
- Asymmetrical, angular design with tall proportions
- Gable roof
- 8 : 12 or greater roof pitch
- Overhanging eaves
- Wood shingled roof
- Composite shingled roof

Walls & Windows:

- Wood cladding
- Horizontal, diagonal or vertical boards give the appearance of sticks
- Vertically hung 1/1 or 2/2 windows
- Tall, rectangular windows with large panes

Details:

- Emphasis on patterns and lines
- Decorative braces and brackets

- Plain trim boards, soffits, aprons, and other similar decorative features
- Crown detailing along roof peaks
- Radiating spindle detailing at gable peaks
- Decorative half-timbering

Colors:

- Multi-colored
- Contrasting paint colors

Enhancement Opportunities for this Style:

- Corbels and gable trusses
- Wrap porches
- Geometric patterns
- Porch railing with embellishment



4.2.4 Arts & Crafts - The Prairie School

Built in the 1920's, the Prairie School style is one that is truly indigenous to America. Derived by an unusually creative group of Chicago architects, notables such as Frank Lloyd Wright and Louis Sullivan helped to pioneer this new and modern architectural style, and in turn form the "Prairie School." Prairie School was also one of the first attempts to design an architectural style that did not share any design elements or aesthetic vocabulary with European classical architecture. Prairie School was also heavily influenced by the Idealistic Romantics, such as Ralph Waldo Emerson, who believed better homes would create better people.

Typical Elements of this Style

Form & Roof:

- Low-pitched roof with widely overhanging eaves
- Massive square porch supports
- Two-stories with one-story porches or wings
- Gable roof edges flattened
- Swept back gable, peak projecting farther than lower edges
- 3-1/2 : 12 or greater roof pitch
- Hipped roof

Walls & Windows:

- Horizontal rows of windows, sometimes wrapping around corners
- Tall casement windows
- Geometric patterns of small-pane window glazing

Details:

- Detail emphasizing horizontal lines
- Contrasting wood trim
- Top half of upper story emphasized

Colors:

- Body: whites, light-tinted colors, and rich earth tones
- Trim: whites and lighter tinted colors that compliment the body color
- Accent: light or dark shades that contrast to the body color
- Contrasting cap on porches, piers and balconies

Enhancement Opportunities for this Style:

- Horizontal patterns in wall materials
- Window boxes
- Sullivan-esque ornament at door or cornice line
- Flattened pedestal urns



4.2.5 Arts & Crafts - Craftsman

Inspired by two California brothers - Charles Sumner Greene and Henry Mather Greene - these homes were the dominant style for smaller houses built throughout the country during the period from about 1905 to the early 1920's. This style originated in Southern California and quickly spread throughout the country by pattern books and magazines. This style is still popular and has continued with numerous architectural renovations and revival projects.

Typical Elements of this Style

Form & Roof:

- Low-pitched gables roof (occasionally hipped) with wide, unenclosed eave overhang
- Roof-rafters usually exposed
- Multiple roof planes
- 4 : 12 or greater roof pitch

Walls & Windows:

- Shed or gable dormers
- Window boxes and balconies
- Multi-pane sash over sash with one large glass pane
- Line of three or more windows
- Transome windows

Details:

- Porches are either full, or partial-width, with roof supported by square columns

- Decorative (false) beams or braces under gables
- Columns, or column bases, frequently continue to ground level without breaks at porch level

Colors:

- Body: whites, light-tinted colors, and rich earth tones
- Trim: whites and lighter tinted colors that compliment the body color
- Accent: light or dark shades that contrast to the body color

Enhancement Opportunities for this Style:

- Triangular knee braces
- Extra stickwork in gables or porch
- Extended and/or elaborated rafter ends
- Sloped, battered foundation
- Oriental (peaked or flared) roof line



4.2.6 French Country

The French Country style has its roots in the sunny hillsides of rural France and includes picturesque examples based on French farmhouses. This style shows many examples of basic French architecture and detailing, but is united by the characteristic roof. This style was found throughout the country in the 1920's and 30's, but has gained more popularity after the 1960's.

Typical Elements of this Style

Form & Roof:

- Tall, steeply-pitched, hipped roof (occasionally gabled)
- Eaves flared upward at wall connection
- Symmetrical or Towered building form

Walls & Windows:

- Brick, stone or stucco wall finish
- Arched windows or dormers
- Casement windows

Details:

- Formal facade detailing
- Decorative (false) beams or braces under gables
- Doors set in arched openings

Colors:

- Body: light-tinted colors
- Trim: warm light tones and colors that compliment the body color
- Accent: high contrast colors and textures that

contrast to the body color

Enhancement Opportunities for this Style:

- Round tower with conical roof
- Use of curves to accentuate details





4.3 NEIGHBORHOOD CENTER & TRANSIT AREA GUIDELINES

Site Design

The goal of the Specific Plan is to create a vibrant mixed-use commercial area for residents within the specific Plan area as well as the greater City of Newark. The Neighborhood Center and Transit area creates a true urban gathering place where retail shops and restaurants can open their doors to the sidewalks and invite people inside. The street leading directly to the Transit Station connects to Enterprise Drive and is intended to intrigue and invite a passerby along Enterprise Drive to turn in and spend some time in this area. Goals for this area are:

- Create a vibrant Neighborhood Center and Transit Area framed by storefronts, awnings and landscaping.
- Provide for a mix of uses within the Plan area that creates a pedestrian friendly atmosphere.

Architecture

The goal of the Specific Plan architecture is to create a character that is distinctive and memorable. Public street facing facades of all buildings should have the same level of articulation and quality of details and materials.

- Loading and service areas should be integrated into the overall building composition and screened from the sidewalk views.

- Architectural enclosures should be designed as integral elements of the building architecture.

- Trellises, pergolas, or permanent awnings should be incorporated where appropriate to serve as shade and weather protection. Arcades, wide overhangs, deep reveals, permanent awnings, etc., should be used.

- Materials should be appropriate to the building's architectural style and character and suited to commercial construction.

- Any changes in materials should occur at the inside corners where the building plane changes direction.

- Mirror glazing should not be used.

Street Furnishings

The sidewalks are an important feature of the Specific Plan. The Neighborhood Center should be furnished with enriched materials and furnishings that create a comfortable and convenient experience, and should be in a similar family of style, color, and finish to create a refined and uncluttered appearance. All street furnishings should be constructed of durable, non-weathering materials. Use recycled and eco-friendly materials when feasible.

- Create sidewalks that are scaled to accommodate pedestrians and cafe style seating where appropriate.

- Newspaper racks, trash receptacles and ash urns should be of one cohesive design and integrated into the landscape design.
- Bicycle parking and utilities should be integrated into the landscape design to place these elements where they are needed in a discrete manner.
- Bollards may be used selectively to provide separation between auto and pedestrian crossings.

Landscaping

The general landscape concept is to provide basic planting direction along streets and other public spaces, while allowing for individual styles. The following information describes suggested landscaping within the Neighborhood Center:

- Select appropriate plant species based on climate and architectural style.
- Use a mix of shrubs and ground cover, as appropriate.
- Use minimal turf.
- Plant shrubs at the base of the building and walls as appropriate.
- Use larger shrubs adjacent to fences, walls and facades.

- Plant vines on walls, enclosures, fences, trellis/ arbor and structures if appropriate.
- Provide access walks to entries.
- Plant accent shrubs to highlight entries.
- Install an automatic irrigation system.
- Plant shrubs and/or ground cover from back of walkways to face of wall or fence.
- Tree planting should shade and mitigate the effects of paving, reflected heat and light, direct and protect pedestrians interacting with parking areas, and visually screen parking areas from peripheral views.

Lighting

Landscape lighting within the Neighborhood Center should be designed to contribute to the daily use of commercial, retail, residential and public spaces. Lighting helps to create welcoming visible spaces and accentuate designs.





Landscape lighting can be utilized for:

- Pole mounted area lighting for gathering and active use areas.
- Ambient lighting for built features such as building entries, stairways and specimen plantings.

General landscape lighting elements for the Neighborhood Center include:

- All pole heights, spacing requirements and installation should comply with Newark Public Works Standard Specifications and Details.
- Lighting placement to maximize extended daily use of vehicular, pedestrian, and bicycle circulation.
- Use of low intensity and shielded lighting design to prevent light spillage.
- Selection of functional, durable materials that follow theme and aesthetics of adjacent architecture in color and detailing.
- Application of multi-use light features where possible, allowing for seasonal and event signage and banners.



- Adequate lighting for commercial, parking and other public areas to enable their use after daylight hours and ensure public safety of property and pedestrians.

4.4 RESIDENTIAL DESIGN GUIDELINES

Site Design

The site planning and layout of the Specific Plan area is encouraged to have a strong pedestrian orientation. Building locations can frame prominent corners and highly visible portions of a site. Parking areas can become less prominent through building enclosures, and creative landscaping can be implemented.

- Reduce private driveway pavement to the minimum functional width.

Relationship Between Buildings

- Use signature detailing to establish the community's architectural character in form, color, and materials.
- Avoid abruptly disharmonious and monolithic architectural style, color, and material.

Building Form

- Where appropriate, front porches sufficiently sized to be usable for sitting when intended to provide outdoor private space for residents.

- Avoid style “appliqué” on inappropriate building forms (i.e. English half-timbering on 4:12 pitch roof of a Tuscan home).
- Articulate the building massing appropriately to minimize boxiness along the front and rear elevations as well as the street, or public/private facing side elevations, and to open space for corner lot units.
- Provide a variety of both single and multi-story elements within multi-story home designs.
- For other homes, porches and/or entries are strongly encouraged on select floor plans and elevations, to be the primary element of each home on the street façade.

Entries

- Entry enhancements that are minimal and subtle, that enhance the community character as a whole rather than encourage discrete, individual walled neighborhoods, are encouraged.
- Entry enhancements may include identification signs, lighting, and enhanced hardscape and plantings which would draw from the palette of adjoining streets.
- Provide entry enhancements that are small in scale and can be incorporated into the entry points

of each project as a form of identification.

- If included, porches, stairs, and decks should be designed to reflect the appropriate scale and detail for the architectural style.
- Exterior stairs, railings, short walls, trellises and roof forms all contribute architectural detail and character of the porch and provide visual interest to homes.
- Porch and entry features should primarily be one-story elements. However, in limited quantities porches may also be incorporated into two-story vertical elements to break up the building mass facing the street or to provide visual interest to the streetscape.
- Where topography allows and where feasible, porches should be elevated above the street level.

Roofs

A variety of roof plans and pitches is desired, dependant on architectural style, as roof forms and materials have a significant impact on the impression of variety within a neighborhood.

- Roof extensions over windows for shading and associated brackets are strongly encouraged to add character and interest to the roof forms as appropriate for the architectural style.





- Roofs over one-story elements, such as those over porches or bays, provide additional articulation of the massing of larger two-story residences and are strongly encouraged.

- Unarticulated roof forms should not be set on a constant wall plate height.

- Variation in ridge line heights and alignments should be incorporated in order to create visual interest.

- A flat or very sloped roof should be appropriate to the architectural style and be screened from view by a parapet that is appropriate to the architectural style.

- Built-up or roll roofing and similar appearing materials that are predominantly used on flat roofs are only permitted if they are not visible from the street or other public area.

- Roof penetrations for vents should be consolidated and located on the rear side of roof ridges whenever possible. All vents should be painted to match the roof color.

- Skylights that are visible from the street are strongly discouraged.

- Where sloping roofs are used, each building should have a variety of roof forms to the extent possible within the architectural style being applied. Roof lines should be broken up and varied within the overall horizontal plane. For instance, a gable or hip configuration should be used with complimentary sheds, dormers, and other minor architectural elements as appropriate to the architectural style.

- Roof forms should be designed to correspond and accentuate building elements and functions such as entrances.

Materials, Finishes & Details

- Integrate gutters, downspouts, and rainwater leader heads into the roof/wall detailing and designed as part of the facade where feasible.

- Select roofing materials to be appropriate to their related style and pitch.

- Change materials at inside corners where the building plane changes direction.

- Provide for homes with a color palette that at a minimum includes a body color, trim color and accent color.

- Provide for window placement that respects the privacy of a neighbor's outdoor area.

Landscaping

The general landscape concept is to provide a basic planting direction along the neighborhood streets, in multi-family residential areas, and other public spaces, while allowing future homeowners to individualize their landscaping.

- Select appropriate plant species based on climate and neighborhood style.
- For each lot use a mix of shrubs, ground cover and minimal turf, as appropriate.
- Plant shrubs at the base of the building and walls where appropriate.
- Use larger shrubs adjacent to fences, walls and facades where appropriate.
- Provide access walks to entries.
- Plant accent shrubs to highlight entries where appropriate.
- Install an automatic irrigation system in the front yard of each residential home site.
- Provide a minimum of one backdrop tree per residential corner side yard home site.
- Plant shrubs and/or ground cover from back of walkways to face of wall or fence if feasible and appropriate.

- Standard 6-foot high privacy fencing of a “good neighbor” type should be used on all fence locations between private lots.

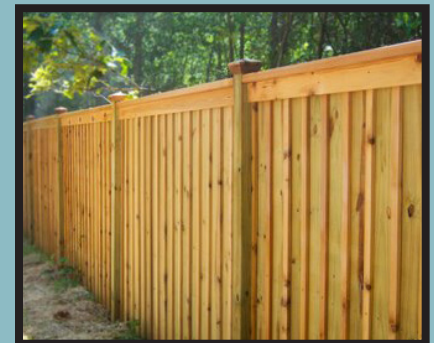
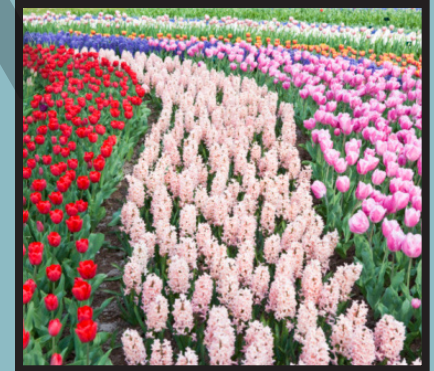
- Fencing should be constructed of weather-resistant wood products and should have a continuous wood cap covering the ends of all posts and fence boards.

Residential Landscape Irrigation

The Specific Plan is committed to water conservation and efficiency through innovative and accepted irrigation practices. Irrigation designers should use current water use guidelines and tables, state-of-the-art irrigation equipment, and automatic controllers capable of multiple programming.

General criteria for residential landscape irrigation are as follows:

- Drip irrigation and/or other effective irrigation systems should be used in planting areas. Overspray onto paving, fences, or walls should be avoided and soil erosion should be minimized.
- Turf areas should be minimized. If used, turf areas should be served by efficient watering systems. Overspray onto paving, fences, or walls should be avoided and soil erosion should be minimized.





- All valves and equipment should be located adjacent to buildings where feasible and visually screened from public view. No irrigation equipment should be located in such a way as to create a safety hazard to persons or property.
- Operating manuals and scheduling charts should be provided to all Homeowners, Maintenance Companies, Associations, or Agencies. In addition, as-built plans should be prepared and provided for any Common Area Systems, such as may be used in HOA or LLD jurisdictions.

4.5 CIRCULATION DESIGN GUIDELINES

The Circulation Design Guidelines provide recommendations for the streets and other circulation areas throughout the Plan area. The street hierarchy is intended to create a pedestrian network through and around the Plan area and into the adjacent community. Walking and biking are encouraged by providing shade trees, minimizing the number of driveway curb cuts, and incorporating traffic calming measures.

Circulation – Vehicular

Streets are not only functional systems that allow vehicles to flow smoothly and safely to and from parking, they are an important building block in creating a rich and vital pedestrian environment. Streetscape design is one of the major components in the creation of connectivity

through a new community, linking the public and private realms and tying them to the fabric of the surrounding neighborhood. Streetscape design improvements can provide scale, separation from traffic, identity, and create a more pedestrian friendly environment for residents and visitors. The following Circulation Guidelines are offered as suggestions for streetscapes in the Plan area:

- Enhance neighborhood quality and bike and pedestrian safety by slowing/calming traffic.
- Provide minimal vehicular lanes where appropriate. Minimal lane sizes will increase the streetscape area for street trees and planting areas and decrease the amount of impervious surface.
- Minimize impervious surfaces and maximize drought tolerant planted areas, which require less water.
- In areas of high vehicle traffic and potential high use by pedestrians, separate pedestrians on the sidewalk from car lanes with a landscape strip and/or street trees where appropriate.
- Street trees can be one of the most important elements of a quality streetscape. A unique way to define residential neighborhoods is to differentiate the type of street trees in each neighborhood.
- Site plans and building designs are encouraged

to be oriented to maximize visibility to and from interior building uses and residences, providing views into the streetscape.

- Connecting the Plan area to the surrounding neighborhoods is important to retaining a clear sense of public access. Access and circulation are intended to be relatively seamless within the Plan area. The project will be an extension of the community.
- Handicap accessible ramps and crosswalks should be installed as required.
- If utilized, traffic circles can be special intersection treatments that form transitional nodes and focal points that calm traffic. Because stop signs may not be required at a traffic circle, crosswalk design becomes very important.
- Enhance neighborhood quality, bike and pedestrian safety by slowing/calming traffic.

Circulation - Pedestrian & Bicycle

This Specific Plan is envisioned to be a mixed-use pedestrian-oriented community. Various elements can provide access and circulation for pedestrians. Likewise, safe and well-planned bicycle routes and facilities can provide connections throughout the site and to the surrounding neighborhoods. The following Circulation Guidelines are suggested:

- Create a system of pedestrian elements that will provide access to key public areas.
- Reduce and combine street crossings.
- Coordinate pedestrian circulation systems with bus and car circulation to minimize potential conflicts.
- Separate traffic lanes from sidewalks and walkways.
- Use CPTED (Crime Prevention Through Environmental Design) principles for pedestrian areas.
- Create accessible walkways that are lit and without any visual obstructions and hiding places.
- Locate crosswalks and stop signs at main roadways to control traffic for pedestrians to safely cross.
- Ensure clear lines of sight at proposed access points by locating utility poles, private signs, and other equipment/fixtures so as not to obstruct sight lines, and by selecting appropriate vegetation.
- Improve and provide safe pedestrian and bicycle connections throughout the Plan area.





- Design all pedestrian facilities to meet Federal, State, and local standards and regulations.
- In the Plan area, sidewalks are encouraged to be constructed of concrete with a rectilinear grid working within 12-foot expansion joint spacing. Between the trowel lines, a textured finish such as light broom is suggested.
- Pedestrian walkways between public buildings, if utilized, are suggested to be at least 10-feet wide. If vehicular access for service vehicles is required, 20-foot wide is the suggested minimum.
- Secure bike parking facilities are encouraged to be provided at key active and passive park facilities. Facilities are intended to be safe, secure, convenient to use, be well lit, and be integrated into the architectural design.

Enterprise Drive, Central Avenue, Willow Street & Hickory Street

This Specific Plan has the opportunity to upgrade landscape, lighting, and other improvements located within certain existing rights-of-way. Landscaping can be enhanced along each side of the road, if and where there is existing right-of-way, to signal one's arrival to the Plan area.

Trees, shrubs, and plants can be clustered and/or used to create a visual rhythm that reinforces a "sense of place."

Plant color, height, density, and variety are all ingredients that be used to create the appropriate effect. Continuation of the lighting and landscape theme within the Plan area or the blending of it with a compatible theme inside the Plan area will further enhance the overall image of the Project.

Parking

Off-Street Parking Guidelines

Off-street parking, including parking lots, can often have an undesirable effect on a community when it disconnects people from public spaces, creates visual and physical barriers, or provides unsafe conditions. The demand for off-street parking is reduced by encouraging the use of non-motorized transportation and bicycle facilities.

- Use appropriate lighting to eliminate dark places, clearly marking any unobstructed access ways for users of parking areas, and increase visibility for users and other security systems that monitor activity.
- Locate parking areas close to facilities to reduce the distance and time it takes to go from parking lots to the facility.
- Provide on-street parking next to active areas, where called for by this Specific Plan in Chapter 6 - Circulation.
- Provide clear visibility, unobstructed by signs, landscape, or buildings from street to parking lots.

- Locate parking areas behind landscaping and out of view.
- Plant parking lots with drought tolerant trees and shrubs to reduce the parking lot's visual impact.
- Pedestrian connections are encouraged to be integrated into the parking lot layout to provide safe, clear, and unobstructed access.
- For pedestrian access areas, special emphasis can be provided through distinctive materials, colors, and patterns.
- Parking stall dimensions, aisle widths, loading areas, and layout should conform with this Specific Plan and City of Newark Regulations.



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- 5.1 OVERVIEW
- 5.2 PARKS & OPEN SPACE GOALS
- 5.3 PARKS & OPEN SPACE PRINCIPALS
- 5.4 PARKS & OPEN SPACE DESIGN CONCEPTS
- 5.5 PARKS & OPEN SPACE POLICIES

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5.0 PARKS & OPEN SPACE

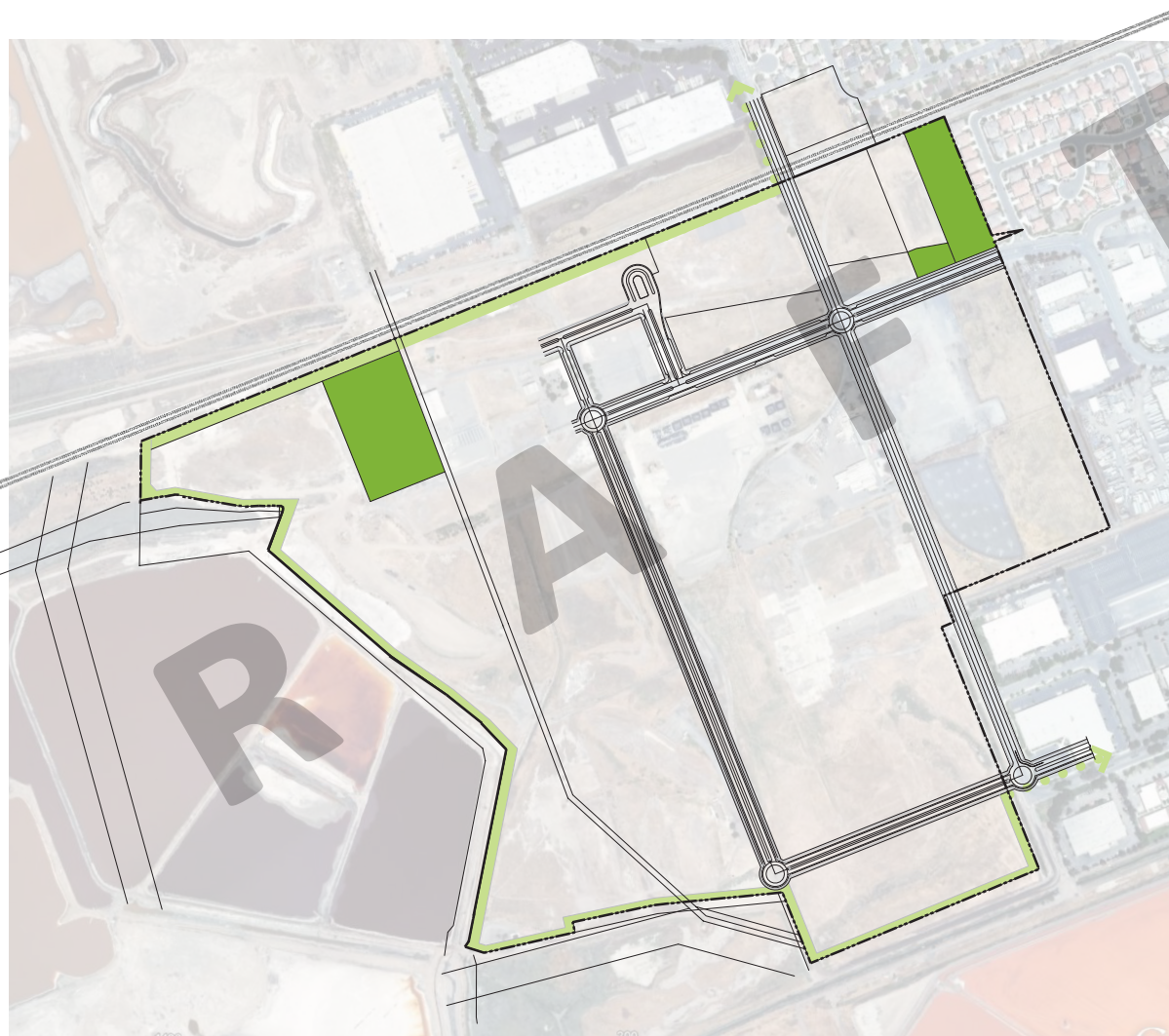
5.1 OVERVIEW

Parks and recreational open spaces are critical features in pedestrian-oriented areas and other high-density areas. They provide greenery and breathing room between buildings and contribute to the overall character of the Specific Plan. Streetscape improvements and landscaping also help to identify major activity centers and primary walking routes. Serving as visual and recreational amenities, these places add to the overall well being of residents and visitors. Landscaped areas can also help manage stormwater by providing some storage and filtering before leaving the Plan area.

Typically, parks in compact, pedestrian-oriented districts are small, ranging from smaller, pocket-sized parks to neighborhood parks of about two acres. The Specific Plan will include a variety of public and private parks and recreational open spaces, distributed throughout the area to ensure that all properties benefit from the amenities (See Exhibit 5.1; Conceptual Plan). Parks and other recreational open spaces

within the Plan area may include a multi-use trail, public and private recreational facilities such as tot lots or picnic areas, passive recreation areas, public parks and gathering places for community events. The ease of pedestrian movement around the Plan area will help to encourage residents to leave their car at home and enjoy the outdoor environment.

- PARK
- TRAIL



PARK CALCULATION

2500 D.U.
3.26 PERSONS PER HOUSEHOLD
2 AC PARK PER 1,000 RESIDENTS

TOTAL PARK REQUIRED: 16.3 AC

Exhibit 5.1 Parks and Trail Conceptual Plan

5.2 PARKS & OPEN SPACE GOALS

The public areas within the Specific Plan include pedestrian and bicycle facilities, public streets, public and private recreational open space, gathering places, a perimeter trail, and various types of sizes of park space.

The vision for parks and recreational open space comes from the inherent beauty of the Northern California region and scenic vistas around the Bay. The vision for the Specific Plan is described in the following Goals below and is to be used as a guide in the design of parks and recreational open space, where feasible and appropriate.

Goal #1: Enhance the Natural Qualities of the Area

- Plant new trees that can continue to build on the quality of the community and region.

Goal #2: Draw from the Regions Climate and Native Plants

- Integrate native plants where feasible. Design for low maintenance or no maintenance areas. Native plants will have a natural tolerance to local climate conditions and require less maintenance than non-native species.

Goal #3: Convey the Identity of the Community and Neighborhoods

- Explore design opportunities to create natural, yet unique outdoor spaces.
- Use indigenous materials where feasible.

Goal #4: Create Flexibility for Community Needs

- Provide parks and recreational open space areas with high quality materials and design that will withstand the test of time.
- Create pedestrian connections where feasible, to integrate the community. This will encourage the use of walking and biking and create a stronger sense of community.
- Provide parks, recreational open space and other areas for impromptu pick-up games, casual unstructured recreation, gathering spaces, picnicking, and a diversity of other activities.
- Use materials that are durable, low maintenance and sustainable.
- Create a palette of materials and colors that provide a cohesive identity for the project.
- Use different materials, colors, and plants in certain areas to create unique places within the community.
- Design for future flexibility so future changes in recreation or special events can be accommodated.
- Use simple architectural structures to embrace the landscape and to create a strong connection between inside and outside. These simple structures can provide transitional areas offering shelter and/or shade.



Goal #5: Landscaping Safety and Security

- Use design to create a safe and secure environment.
- Maintain visibility throughout all public areas, including parking lots.
- Consolidate, define, and clearly mark pedestrian crossing zones.

5.3 PARKS & OPEN SPACE PRINCIPLES

1. Provide park space to meet the recreational needs of the Specific Plan area residents and visitors.
2. Provide attractive, unique public spaces that define the community.

5.4 PARKS & OPEN SPACE DESIGN CONCEPTS

Pocket Parks, Public and Private Recreational Open Space
Additional open space areas may be provided as an element of specific development proposals to serve the recreation needs of residents and employees. These smaller, residential serving landscaped areas (or “pocket parks”) may be provided throughout the Plan area. These smaller park areas should be professionally managed by a homeowners association.

Community Park (mid-size)

A Community Park should be located to best serve the active and/or passive recreational needs of the Community. This park may be multi-functional with minimal hardscape. Visitors and guests should have easy access to parking and/or off-loading areas. The Specific Plan will establish a park area developed directly west of the Transit Station for a Community Park. Flexibility is key. This park must be able to adapt to current community needs and the needs of future generations to come.

Public Gathering Spaces

Urban gathering spaces should be designed to allow for, and encourage interaction among community members. Success full gathering places are comprised of various seating options (natural and built), protection from the environment (shelter and shade), easy means of ingress and egress, and areas large enough to accommodate food service or entertainment, all within a defined area that maintains the human scale of design.

It is anticipated that the area around the Transit Station will take the form of a Public Gathering space for the Community.

Perimeter Trail / Linear Park

This perimeter trail/linear park provides a natural off-street setting for residents and visitors to walk, stroll, run and bike. This trail should have various access points where feasible, and should provide users with more solitude than the other types of parks within the Plan area. This multi-use trail/

linear park should also consider the inclusion of quiet areas or resting places where residents and visitors can “get away” and simply relax.

5.5 PARKS & RECREATIONAL OPEN SPACE POLICIES

Parks

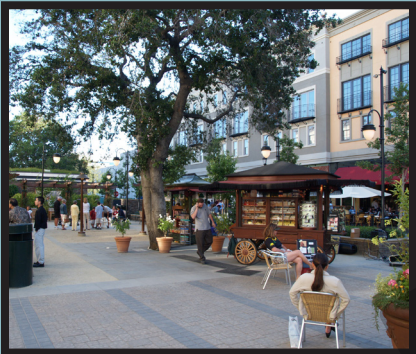
P-1: The following policies apply to the provision form and location of public parks and private recreational open space areas within the Specific Plan area:

- An integrated network of public and private recreational open spaces, parks, and gathering places should be created within the Plan area.
- Recreational open space types and locations should be generally consistent with those described in this chapter and Figure 5.1.
- All residents and visitors should be within a reasonable walk of a park or recreational open space area.
- For all new public parks, the design, program, and facilities must be approved by the City and consistent with this Specific Plan.
- 16.3 acres of park and recreational open space have been designated as part of the Specific Plan,

as set forth in Exhibit 5.1. Development proposals to implement the Specific Plan shall comply with the dedication requirements set forth in Chapter 16.30 of the Newark Municipal Code (the “Parks Ordinance”) and may satisfy such requirements through the following:

- 1) construct and dedicate a park to the City within those areas designated for parks within this Specific Plan and as provided by the Parks Ordinance;
 - 2) construct and dedicate a park to the City outside those areas designated for parks within the Specific Plan if accepted by the City and pursuant to the Parks Ordinance;
 - 3) pay an in-lieu fee to the City at building permit time as provided in the Parks Ordinance; and/or,
 - 4) construct and maintain private recreational open space qualifying as credit for park space as provided by the Newark Municipal Code.
- Three areas within the Plan that are designated for parks planned are:
 - 1) the Gallade site;
 - 2) the area west of the Transit Station; and,
 - 3) the trail/linear park.
 - Provide a comprehensive maintenance program for all private recreational open spaces. Alternatives for maintenance could include options such as; maintenance by private property owners, mechanisms





such as Homeowners' Associations (HOAs) or Street Lighting and Landscaping Maintenance Districts (LLMDs).

- Encourage the use of drought-tolerant and/or native plant materials and trees in all landscaped spaces.

Trail / Linear Park

P-2: Provide a trail/linear park in the Plan area that will connect to the existing Bay Trail along Willow Street as set forth in Exhibit 5.1.

P-3: Public streets, public parks and public spaces should connect, to the greatest extent feasible.

Gathering Spaces

P-4: Incorporate public gathering spaces in commercial and retail areas within the Plan area. Public gathering spaces should be designed with the following criteria:

- The size of public spaces should be in scale with the size of the surrounding uses and should take into account the height and scale of nearby buildings and/or other features.
- Public spaces should be located close to public access.
- Public spaces should be open to the public during all daylight hours.

- Public spaces should be located generally adjacent to retail and restaurant uses.

- Public gathering spaces should be designed to allow for, and encourage, interaction among community members. The public spaces should include various seating options (natural, built or furniture), and should provide some protection from the environment (shade, shelter). In addition, certain public spaces might provide areas to accommodate food service and entertainment.

Landscaping

P-5: The proposed parks and public spaces in the Specific Plan have the potential to become successful and well-used gathering spots available for any combination of pick-up games, play, passive recreation, relaxation, or community gatherings. All landscape materials should be of a type that is both drought tolerant and durable.

Entry Monuments and Features

P-6: Entry monuments are the gateway features that create a community. Functionally, they serve as signs for the Community and they demarcate it as a special place. Aesthetically, their design should reflect the character and high quality of the community. They should be incorporated into the landscape with a rich palette of plantings. These monuments should define the main entry locations. Carefully placed, low level lighting in the landscape would provide nighttime visibility.

P-7: Entry features serve as formalized spaces that define the community. These are encouraged to be dramatic focal points for the community through the use of gentle land sculpting, landscape materials and plantings.

Shelters/Arbors

P-8: Simple structures might be used to provide shade and shelter for residents and visitors to the Plan area.

Active Play / Recreation Areas

P-9: The active recreation areas should be carefully sited to provide good views in and out of the play area. Safety is the most important consideration, but wear and tear and maintenance are also a concern. Structures that meet all applicable safety and durability standards are advised.

Recreational Open Space Typologies

P-10: Every public space should have its own unique character. Public spaces will vary in size and level of activity based on location and use. Locations for public spaces should ensure that all members of the community are in close proximity to some type of public area.

Seating

P-11: Seating can be a welcomed amenity in public places. The design of seating is encouraged to create a variety of social and semi-private areas that allow people to linger and aesthetically enhance the space.

Parks & Recreational Open Space Materials

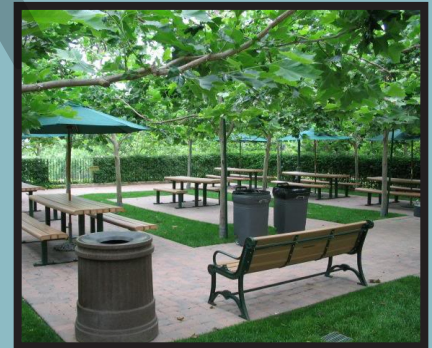
P-12: Quality materials will create exceptional public spaces with unique and timeless character. Products and materials in the public realm are improved when they are durable and easy to maintain, resistant to the bay's variable weather extremes such as wind, heat and rain. They should also be resistant to vandalism through the use of non-breakable parts, and scratch resistant and washable surfaces.

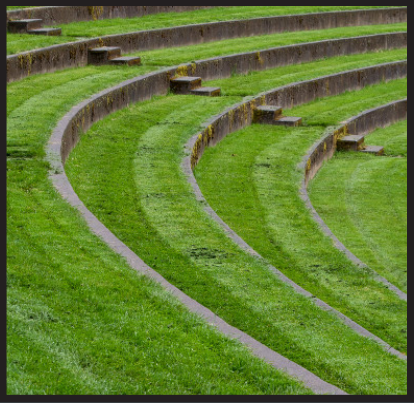
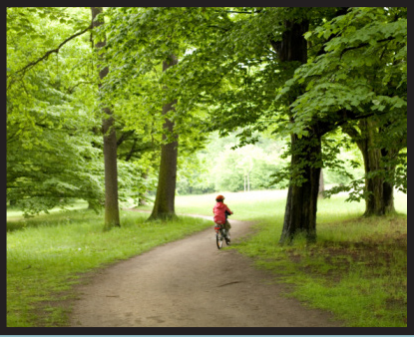
Examples of durable materials and finishes include:

- a. Stainless Steel
- b. Galvanized Steel
- c. Powder coated Steel or Aluminum
- d. Vinyl coated Steel or Aluminum
- e. Painted Steel (multiple coats)
- f. Masonry

Plants & Plantings

P-13: Plants within the Specific Plan area can be a major design element for enhancing character and the quality of place. Plants can define the street edge, Transit Station, public space areas, gathering spaces, and add scale, visual interest, and seasonal change. Layout and plant palette selection is encouraged to reinforce and define the public character of the community. Plants emphasize the unique qualities of their context. Planting can be selected and placed in such a way as to enhance rather than obstruct views. Using plants and materials in interesting ways will create exceptional public spaces with a unique and timeless character and quality.





Water Efficient Planting

P-14: The State of California has guidelines for water efficient landscaping. Conservation and efficiency in water use can be achieved with both water efficient planting and irrigation. For example:

- Use low water use plants on the majority of the landscape area.
- Plant turf only in “Practical Turf Areas” of active play and recreation.
- Use only drought tolerant varieties of turf.

Recommended Trees

P-15: There are a wide variety of deciduous and non-conifer evergreen trees that are encouraged to be planted in areas to reinforce pedestrian connections, define edges and views, provide shade for seating areas, and add seasonal change and visual quality. Along streets, they can be used between the curb and sidewalk or along a walkway. Trees also play a major role in establishing identity and anchoring the corners of special nodes and intersections. All trees are encouraged to be selected for climatic hardiness, longevity, low water use, visual appeal, and desired design intent.

Recommended Understory Planting

P-16: Shrubs, groundcover, grasses and perennials can be used in planting strips, planters, borders, and other special areas of emphasis that can be enhanced with plants. Plants along the street edge can provide a buffer between pedestrians and vehicles and enhance the streetscape by reflecting the

character of the area. Understory plants are encouraged to be selected not just for their form, texture, fragrance, and color, but also for their hardiness, water efficiency, and longevity. Planting of shrubs, groundcovers, grasses and perennials are encouraged to be multi layered to provide 4-season interest

illumination

P-17: Exterior lighting can provide safe and effective evening illumination for the pedestrian and vehicular areas of roads, sidewalks, and walkways throughout the Specific Plan community. Design can reflect the concept and character of the community through illumination level, light fixture type, finish, color, and location. There can be streetlights for roads and sidewalks, pedestrian lighting for sidewalks and walkways, building illumination, and accent lighting on special architectural and landscaping features. Specialty lighting, such as seasonal tree lights, is also encouraged.

Types of Exterior Illumination

P-18: Streetlights and Fixtures are encouraged to be of two types:

- 1) On Enterprise Drive and the entrance to the Community: pole mounted with twin arms that match the architectural style for the community. The roadside arm might hold an extended lamp to illuminate the road. On the sidewalk side, the arm could hold flower baskets, art, or banner arms.
- 2) On secondary streets: single armed on poles that reduce glare and the impact of lighting on

residences. Light is also encouraged to be focused downward and shielded from the night sky.

Path and Stair Lights

P-19: In less traveled areas, footpath lights can be acceptable as a means to illuminate a path. On stairways, inset stairway and stair step lights are encouraged to ensure pedestrian safety.

Building Mounted Lights

P-20: Building mounted lights can be used to light walkways, public spaces, and planted areas where appropriate. Because building lights may be turned off, building lighting can't be depended upon exclusively for walkways and other areas where safety is a concern. Fixtures are encouraged to be selected and located to cast downward and be shielded to minimize glare. Lighting from buildings can be balanced with street lighting to ensure areas are not over lit.

Accent Lighting

P-21: Accent lighting can be used to emphasize special features for decorative effects and can be inconspicuous and durable. Small scale accent lights such as LED based fixtures can be used for way finding or as special design elements.

Special Event Lighting

P-22: Lighting used for special events could include decorative lighting for holiday seasons or other community park event lighting. Special event lighting can be designed

for use during event and non event times. Seasonal decorative lighting during holidays and holiday events is encouraged.

Furnishings

P-23: Exterior furnishings provide public amenities that establish a high quality and consistent urban design in the streetscape, reflecting the context of the area and helping to establish the unique qualities of places within the Plan area. These elements are encouraged to be integrated into the overall site design where appropriate. The amount of exterior furnishings should be appropriate to the level of use rather than creating too much clutter.

Bollards

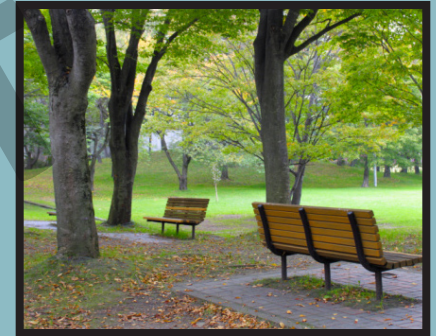
P-24: Bollards can be used selectively, in high traffic areas, to protect pedestrians from vehicles. Bollards can be permanent but placed to allow for emergency vehicles to be able to travel around. Bollards are encouraged to be limited to locations that do not interfere with parking, deliveries, and other functions.

Bicycle Amenities

P-25: Bike racks are encouraged to be placed in areas where bikers might need to park. Although they are primarily utilitarian, the chosen style is encouraged to relate to the aesthetic of the neighborhood.

Fences, Gates, Railings & Walls

P-26: Fences, gates, railings, and walls can provide safety, security, screening and privacy. Their design is encouraged



to be compatible with each other through form, materials, and finishes. Their design can be influenced by the use and neighborhood context to reflect the architectural character of the Plan area.

Gates

P-27: Gates create focal points within a fence. Their design is encouraged to be differentiated from the fence and create an area of emphasis and demarcation.

Hand Railings & Guardrails

P-28: Hand railings are used for stairways, steep ramps, and other areas where a rail will help assist in self-balancing as one transitions along grade changes. Guardrails are also encouraged where there might be a steep grade drop-off or other potential safety hazard.

Tree Grates

P-29: Tree grates are encouraged for all street trees placed along sidewalks that are not part of a planting strip area. ADA compliance is recommended as is a minimum size of 5-feet x 5-feet. Tree guards protect trees in active areas that are vulnerable to damage from vehicle bumpers or door swings.

Planters, Pots, and Boxes

P-30: Planters are encouraged in public spaces. Pots and planter boxes can be used at commercial and retail building entries where building maintenance personnel would care for them.

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6.1 OVERVIEW

6.2 CITY & REGIONAL ROADWAY IMPROVEMENTS

6.3 PARKING

6.4 TRANSIT

6.5 PEDESTRIAN & BICYCLE CIRCULATION

6.6 TRUCK ACCESS

6.7 STREET CROSS SECTIONS

- WILLOW STREET
- ENTERPRISE DR. - WEST
- CENTRAL AVE.
- TRANSIT STATION ENTRANCE ROAD
- ENTERPRISE DRIVE - EAST
- HICKORY STREET
- NEIGHBORHOOD STREETS
- CARRIAGEWAYS
- ROUNDBOUTS
- TRAFFIC CIRCLES
- CUL DE SACS - HAMMERHEADS
- CUL DE SACS - TRADITIONAL

6.8 STREET STANDARDS CHART



6.0 CIRCULATION

6.1 OVERVIEW

The Specific Plan provides a hierarchy of streets, walkways and pedestrian links throughout the Plan area. Streetscape design and street layouts organize the community and slow the traffic. A block pattern will disperse traffic and create local streets that are pleasant to live on and walk or bike along. This street pattern, with its various pedestrian connections, will provide a seamless network of connectivity for pedestrians throughout the Plan area. By providing street trees in the parkways, removing many of the driveway curb cuts, and incorporating traffic calming measures such as narrowing at intersections and roundabouts, the street design encourages walking and biking through the community and to the outlying region.

The streets within the Plan area have been designed as “Complete Streets.” Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, and motorists of all ages and abilities are able to

safely move along and across a Complete Street. Complete Streets play an important role in livable communities, where all people – regardless of age, ability or mode of transportation – feel safe and welcome on the roadways. A safe walking and bicycling environment is an essential part of creating friendly, walkable, healthier and more sustainable communities. In order to create a network of pedestrian and bicycle friendly streets, the Specific Plan establishes street design standards for the Specific Plan area.

The Backbone Circulation Plan (Exhibit 6.2) and Street Standards Table (Table 6.1) near the end of this chapter, illustrate the locations of the various street classifications provided for in this Specific Plan. Residential street alignments are approximated based on the optimal street network to maximize walkability. Final street layouts shall be determined at time of final maps.

PLACEHOLDER

FOR

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Exhibit 6.1 - Regional Circulation Improvements

6.2 CITY & REGIONAL ROADWAY IMPROVEMENTS

There are several ongoing and proposed regional improvements in Alameda County that are intended to address existing and future traffic congestion within or near the City of Newark and which are illustrated on Exhibit 6.1 - Regional Circulation Improvements.

Regional Improvements Outside the Planning Area (including Regional Transit Improvements)

- Per the Alameda County Transportation Commission (Alameda CTC), improvements are planned to the Regional Express Bus Improvements (SR 84 Lane Expansion/HOV, Ardenwood Express Bus Park).
- Altamont Commuter Express Rail.
- Dumbarton Rail Project.

No other improvements to increase transit capacity are identified by the Alameda CTC.

The above improvements are part of the Congestion Management Program administered by the Alameda CTC. If applicable, these improvements would be funded in part by the payment of regional transportation impact fees from applicants of Specific Plan uses as specific development proposals are brought forth.

City Road Improvements Outside the Planning Area

While not a requirement of the Specific Plan project, per the City of Newark's General Plan Circulation Element (1989, updated 2007), the following improvements are planned for the City:

- Roadway Improvements:

- Widen Thornton Avenue, from SR 84/ Dumbarton Freeway to Jarvis Avenue and from Jarvis Avenue to the Union Pacific railroad tracks.
- Complete the Cedar Boulevard extension from Haley Street to Thornton Avenue (including railroad underpass).
- Construct railroad overpass at Union Pacific railroad tracks on Central Avenue.
- Widen and improve Mowry Avenue from Cherry Street to the Union Pacific railroad tracks (including a railroad overpass).
- Widen the Central Avenue overpass of I-880/Nimitz Freeway.

-Intersection Improvements:

- Cherry/Mowry: Re-stripe westbound for shared through and dual left turn; Construct northbound free right; Widen Mowry for eastbound/westbound dual left and two through lanes.
- Mowry/Cedar: Widen Mowry for eastbound dual left.
- Mowry/New Park: Re-stripe southbound for exclusive left-turn lane; Install northbound right-turn arrow; Widen northbound for exclusive left-turn lane, re-stripe for dual right-turn shared with through lane.
- Thornton/Cedar: Lengthen northbound right-turn lane with right-turn overlap.
- Cherry/Central: Widen Cherry for northbound dual left-turn.

ENTERPRISE DR. WEST, HICKORY ST., CENTRAL AVE.

EXISTING ENTERPRISE DR. EAST

TRANSIT STATION ENTRANCE

IMPROVED WILLOW STREET

POTENTIAL NEIGHBORHOOD STREETS

* THERE WILL BE ADDITIONAL RESIDENTIAL STREETS THROUGHOUT THE PLAN AREA AS PER THE TENTATIVE MAP APPROVALS

** NEIGHBORHOOD STREETS ARE NOT PART OF THE BACKBONE CIRCULATION PLAN. THE DESIGN OF NEIGHBORHOOD STREETS SHALL BE AS PROVIDED IN THIS SPECIFIC PLAN, BUT THE LOCATION OF EACH WILL BE DETERMINED PURSUANT TO THE PROCESSING OF PLANS FOR SPECIFIC DEVELOPMENTS WITHIN THE SPECIFIC PLAN AREA.

ROUNDABOUTS

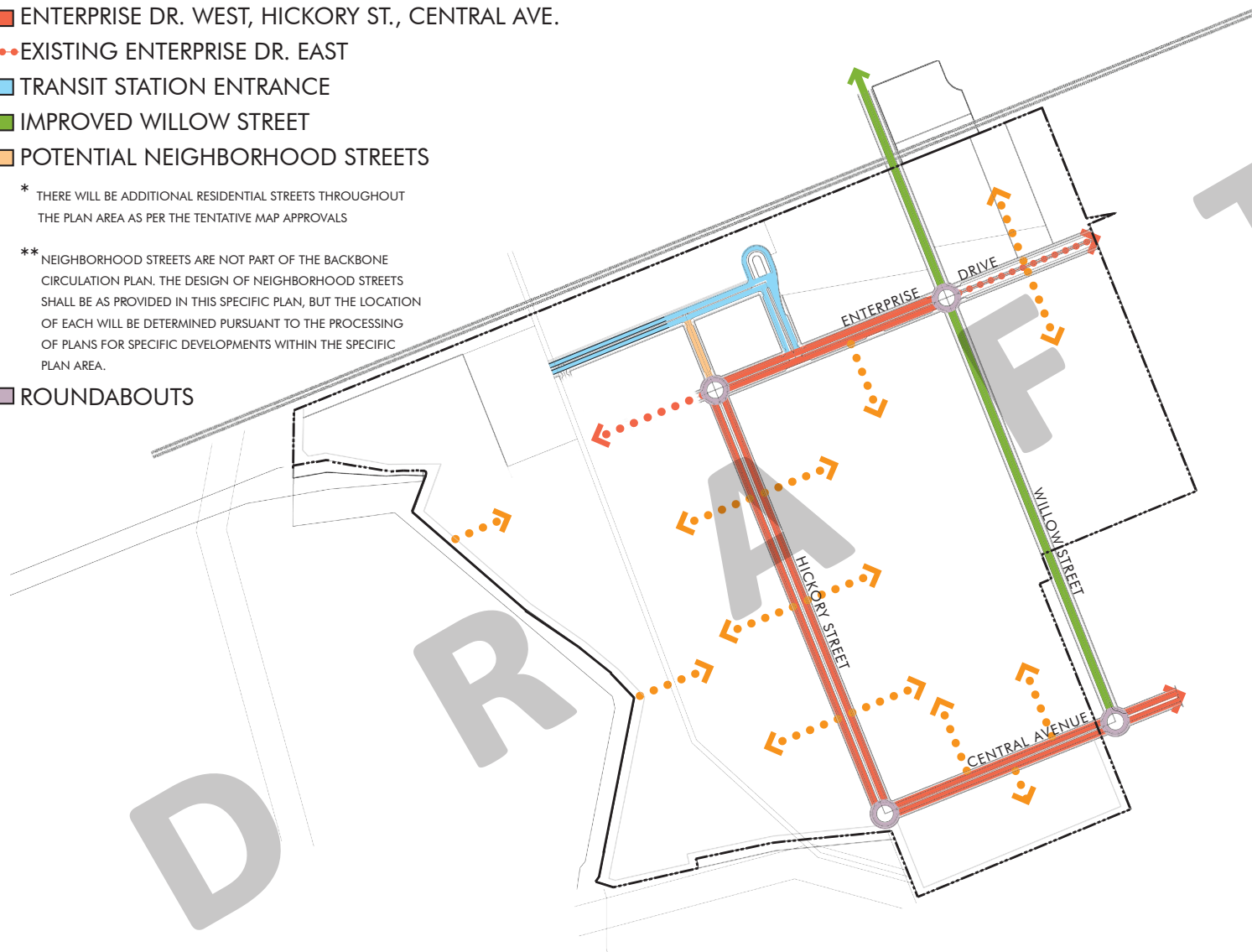


Exhibit 6.2 - Backbone Circulation Plan

City and Regional Transportation Improvements
(Fehr & Peers will expand here at a future date)

Specific Plan Circulation Improvements

The Backbone Circulation Plan for the Specific Plan is shown in Exhibit 6.2.

The Specific Plan will need a connected internal street network with connections to the greater City of Newark. In addition to the street network itself, streetscape design will play an important role in transforming the Plan area into a livable community. As the most pervasive, visual and physical component of the public realm, the design of the street network is an integral part of the image and experience of the area. This chapter details what the street experience will feel like, the street design typologies and character to guide future projects.

The following are General Plan Policies applicable to general circulation policies in the Specific Plan.

Street Network Policy Goals

Street Network Design

C-1 Create a street network that connects with existing local and regional roadways, such as Enterprise Drive, Willow Street, and Central Avenue, and provides for efficient and safe circulation throughout the Plan area.

C-2 Create a street network that is appropriate for a mixed-use, pedestrian-oriented environment that extends to the Transit Station area. This network should establish:

- Blocks that are pedestrian in size, i.e. blocks that around 450-feet have a more pedestrian scale than blocks that are larger, except along major arterials;
- Mid-block pedestrian connections where appropriate, i.e. blocks that are larger than 450-feet should have pedestrian paths to break up the walking plane, except along major arterials; and,
- Where mid-block pedestrian crossings are needed, mid-block crosswalks should be provided per the City's "Bicycle and Pedestrian Master Plan/Crosswalk Guidelines" (upcoming, 2010-2011).

C-3 Medians should occur on streets which comprise the Backbone Circulation Plan where provided in this Chapter 6. All streets should be designed with sidewalks buffered from vehicle traffic by a landscape strip, landscaping, travel lanes, bike lanes, and parking, where appropriate.

C-4 Streets should meet the needs of all users including drivers, bicyclists, pedestrians, persons with disabilities, and transit users.

C-5 Street improvements should be built consistent with the street design standards in this chapter.

C-6 Traffic into existing residential communities should be minimized to the greatest extent possible.

C-7 Culs-de-sac should be minimized to the greatest extent possible.

C-8 The use of permeable paving for parking isles, parking lots, and vehicular entries to residential areas should be used in the greatest extent possible.

C-9 Where applicable, applications for projects shall indicate how streets are connected to existing local and regional roadways, and , if adjacent to the Station Area, how they are connected to the Station Area street network.

C-10 Arterials and collectors should generally be located as shown in Exhibit 6.2 – Backbone Circulation Plan. Exact locations of arterials and collectors may be modified based upon additional engineering. Streets shall be located consistent with the following criteria:

- Enterprise Drive, Hickory Street, Willow Street and Central Avenue are to be located generally as shown on Exhibit 6.2; and,
- Street alignments may vary to accommodate site conditions and specific project needs.

C-11 A street shall connect directly from Enterprise Drive to the Transit Station. This street shall be consistent with the street standard in this chapter for the “Transit Station Entrance Road.”

C-12 Enterprise Drive, Hickory Street, Central Avenue, Willow Street, neighborhood streets and carriageways shall be constructed according to the design standards set forth in this chapter.

Transportation Demand Management

C-13 Provide for a Transportation Demand Management (TDM) program that aims to reduce single-occupant vehicular trips. Components of a TDM program may include:

– Urban Design Projects:

- Short and long-term bicycle parking in highly visible, well lit locations that are convenient to front building entrances; and,
- Direct routes to the Transit Station and other key destinations that are well lit and designed for pedestrian comfort.

– Additional Concepts:

- Free or preferential parking designed for carpool, van pool, low emission vehicles, and car share vehicles; and,
- Passenger loading zones and/or kiss-n-ride areas, and Bicycle and pedestrian friendly site planning and building design.

Employer Based TDM is not large enough and will not have enough employers to implement and manage an employer TDM.

Construction Traffic Management

C-14: Development proposals shall contain the following at a minimum:

- A set of comprehensive traffic control measures, including limiting major truck trip and deliveries

that avoid peak traffic hours, detour plans, if required, lane closure procedures, sidewalk closure procedures, signs, cones for drivers, and designated construction access routes;

- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours and lane closures will occur;
- Notification of construction staging areas for materials, equipment, and vehicles (must be located on the project site);
- Identification of haul routes for movement of construction vehicles that minimize impacts on vehicular, bike, or pedestrian traffic, circulation, and safety;
- Temporary construction fences to contain debris and material, and to secure the site;
- Provisions for removal of trash generated by project construction activity;
- A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager; and,
- Provisions for monitoring surface streets for truck routes so that any damage and debris attributable to the tracks can be identified and corrected.

6.3 SPECIFIC PLAN PARKING

Transit Oriented Developments require substantial amounts of parking near transit to make them feasible and to accommodate passengers as not everyone will walk to the Transit Station. Therefore, parking becomes one of the most critical land use elements of a TOD. If too much parking is provided, the benefits of reducing traffic and congestion with a TOD are negated. If not enough parking is provided, the TOD may suffer as people struggle to find places to park. Parking is also very expensive to build, especially structured parking, and can be an incentive as well as a deterrent for certain types of development.

National studies show that within transit oriented developments, some reductions in off-street parking can be appropriate. The factors influencing reduced parking ratios are primarily based upon (1) the mix of complimentary uses; (2) the availability of pedestrian, bicycle, transit and other non-motorized modes of travel; and (3) the availability of smaller unit sizes near the Transit Station. These factors can also be combined with other parking reduction techniques, such as “shared-use” parking which can reduce the overall amount of parking needed for a development. Reducing parking directly affects cost and saves valuable land.

With mixed-use and residential areas close to the Transit Station (Exhibit 6.3), and the proximity of the Transit Station to adjacent retail and commercial uses, many opportunities to reduce the amount of parking by shared parking arrangements are available. Factors such as: final Transit Station design and access, surrounding land uses, and cooperation between

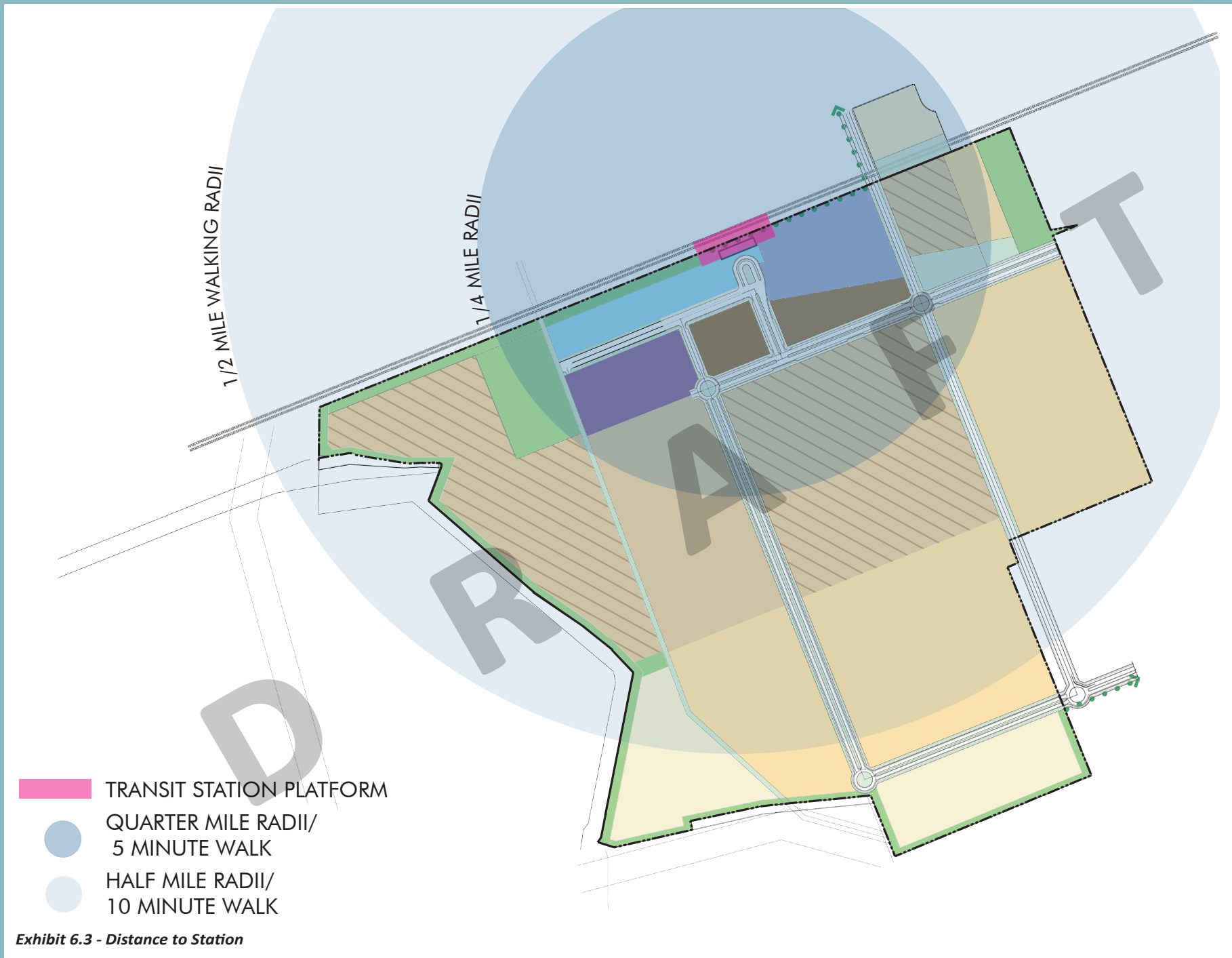


Exhibit 6.3 - Distance to Station

property owners will determine the final parking strategy. These factors will lead the decision on shared parking arrangements, and the phasing and implementation of projects. Parking studies might be needed where a project proposes a shared parking arrangement and/or to reduce or increase the amount of parking otherwise required for the Specific Plan area. These studies will be reviewed by the Community Development Director for the City of Newark. Exhibit 6.4 - Station Parking Potential and Station Circulation illustrates a possible scenario addressing parking needs for the station area.

The Transit Station is expected to serve potential riders beyond residents of the proposed Plan area. To provide regional access to the Station, providing adequate vehicle parking is needed to encourage ridership and provide connections to the regional and citywide transportation networks. Parking design and placement is another critical element to TOD's success. It can strongly affect how drivers accessing that station use the amenities on site.

Parking Policies

Parking Location

C-15: Within the Transit Station area, locate parking behind buildings, to the maximum extent feasible.

General Parking Standards & Guidelines

C-16 Maintain flexible parking standards that balance the need for parking with the broader Transit Station goals of encouraging transit ridership, ridesharing, and enhancing the area's pedestrian appeal.

C-17 Include on-street parking on most streets, consistent with the detailed street design standards in this chapter.

C-18 Adopt parking standards for the Plan area. Consider some or all of the following strategies to prevent oversupply and to encourage the use of alternate modes of transportation:

- Allow shared parking between the various uses with different peak periods of parking demand;
- Reduce minimum off-street parking requirements for multi-family and commercial developments;
- Adopt maximum off-street parking requirements;
- Allow credits for availability of adjacent on-street spaces;
- Allow exemptions for small retail and dining establishments (e.g. less than 2,500 square feet) in pedestrian centers;
- Tandem parking can be utilized for up to 25% of the units in a given area; and,
- Allow permeable pavement use in overflow parking lots.

C-19 Work with property owners to encourage adoption of shared parking arrangements where appropriate to maximize efficient use of parking resources.

C-20 Incentivize parking structures, rooftop parking, and underground parking through flexibility in conditions of approval and in opportunities for any City, State or Federal financial participation in the development.

- 1/4 MILE RADII : 5 MIN WALK
- TRANSIT STATION
- BIKE PATHS
- BUS ROUTES
- PEDESTRIAN ACCESS
- TRANSIT STATION PARKING
- RETAIL PARKING
- COMMERCIAL PARKING

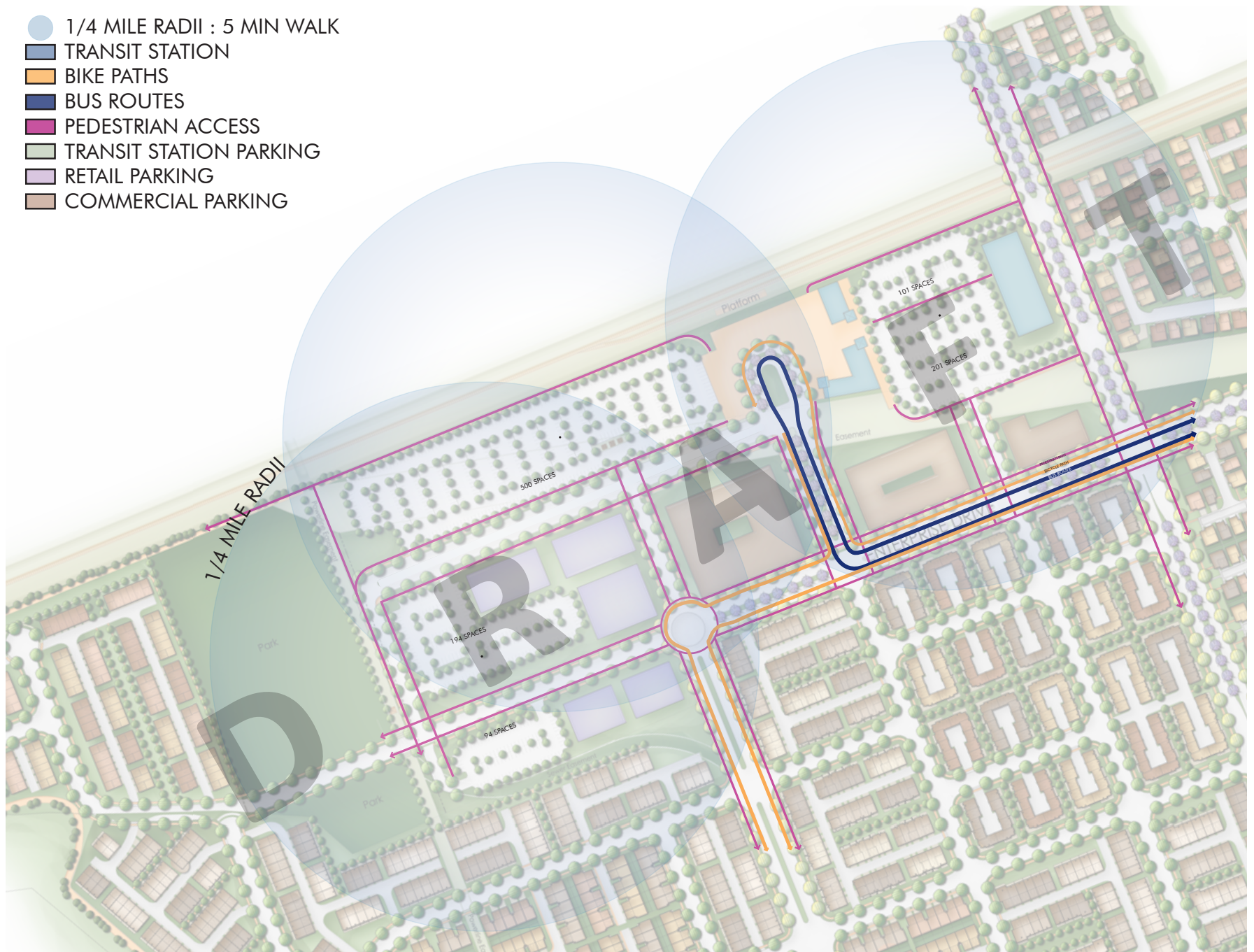


Exhibit 6.4 - Transit Station Parking Potential & Station Circulation Plan

C-21 Work with the Transit Station operator to identify phasing of parking fields for a total of 500 spaces at full build out of the Station.

6.4 TRANSIT

The Dumbarton Rail Line runs parallel to the Dumbarton Bridge and connects the eastern side of the Bay to the Peninsula. Because the rail line is already in place and rights-of-way are intact, the most feasible Transit Station to serve the City of Newark is within the Specific Plan area along the rail line as depicted in Exhibit 6.3. This is both an advantage and a disadvantage for planning purposes. With the rail line already in place, it eliminates the costs associated with acquiring rights-of-way, but limits where the station can be placed. However, the Specific Plan has been designed to take advantage of the Transit Station's location by placing a large number of new residential units in the Specific Plan area within a 1/2-mile (10 minute) walking distance from the station as shown in Exhibit 6.3.

In addition, regional bus service may be established at this location to further enhance the TOD experience of the neighborhood. For this reason, a bus station hub will be included in the overall planning of the Station.

The following policies are recommended to enhance transit opportunities throughout the Plan area and maximize their use by Plan area residents, and visitors.

Transit Policies

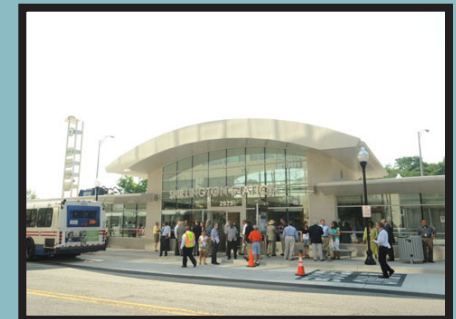
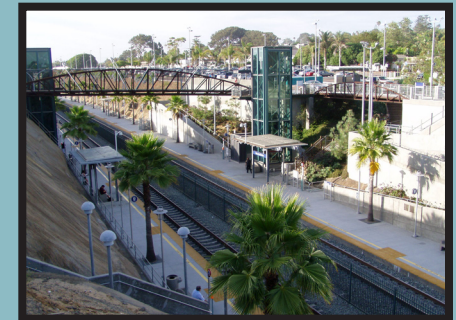
C-22 The City shall continue working with the regional transit agencies to study design, funding and construction options for the Transit Station. The design and location should achieve the following goals:

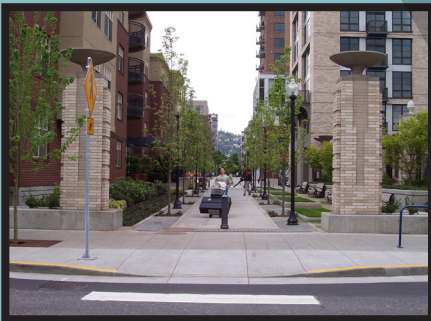
- Provide direct pedestrian and bicycle route from Enterprise;
- Encourage a shared parking agreement between the Station and the future adjacent uses to minimize the amount of overall parking in the Plan area;
- Maximize developable land within the Plan area; and,
- Provide direct line of sight from Transit Station to Enterprise Drive/Willow Street.

C-23 Develop a Transit Station that provides access to the various modes of transit. Design the Station to include:

- Bus pick-up and drop-off bays;
- An area for limited short-term waiting;
- Disabled parking areas;
- Shuttle pick-up and drop-off areas; and,
- Safe and attractive pedestrian and bicycle crossings to and from the Station.

C-24 Where necessary, design streets to accommodate transit services, including bus stops and shelters (Table 6.1).





6.5 PEDESTRIAN & BICYCLE CIRCULATION

The goal of the Specific Plan is to create attractive, safe, inviting and efficient pedestrian and bicycle circulations throughout the Plan area. These connections form an important link for residents, and visitors to the Plan area.

The primary backbone of the pedestrian and bicycle networks will be the internal street network of the community. Designated bicycle lanes will be provided on key internal roadways.

Under the Plan, all new streets shall have sidewalks or other adjacent pedestrian facilities as illustrated in the street cross-sections described in greater detail later in this chapter. The Specific Plan policies seek to ensure that pedestrian and bicycle networks are linked to the Transit Station to the greater City of Newark and to the neighboring communities.

Exhibit 6.5 – Pedestrian and Bicycle Circulation shows key bicycle routes that should be established and maintained. Exhibit 6.6 illustrates Class I, Class II and Class III bicycle paths.

Pedestrian & Bicycle Circulation Policies

C-25 Prioritize pedestrian and bicycle safety at intersections and street crossings of Backbone streets with measures such as:

- Contrasting and/or textured paving crosswalks; and
- In-ground, blinking crosswalk lights where feasible.

C-26 Incorporate signage to indicate pedestrian and bicycle areas where feasible.








C-27 Projects should provide access to direct pedestrian and bicycle routes to the Transit Station as feasible and where appropriate.

C-28 Adopt minimum bicycle parking requirements for residential and commercial projects.

C-29 In the Transit Station Area, design streets and sidewalks consistent with this chapter, including:

- Tree wells or planter strips with trees between the sidewalk and the parking areas;
- Pedestrian scale street lights;
- Limited curb cuts that cross the pedestrian path of travel;
- Outdoor seating for restaurants and cafes where applicable;
- Projections into the right-of-way for awnings, canopies, pedestrian oriented signs, bay windows, and other elements that enhance the pedestrian realm; and,
- Sidewalks should have a minimum five-foot wide path of travel.

C-30 Mid-block crosswalks should be provided per the City's Bicycle and Pedestrian Master Plan/Crosswalk Guidelines (upcoming, 2010-2011).

-  CLASS I SEPARATED BIKEWAY PATHS
-  CLASS II BIKE LANES
-  CLASS III BIKE ROUTES
-  POTENTIAL BICYCLE PARKING
-  TRAIL
-  PEDESTRIAN CIRCULATION
-  POTENTIAL NEIGHBORHOOD STREETS

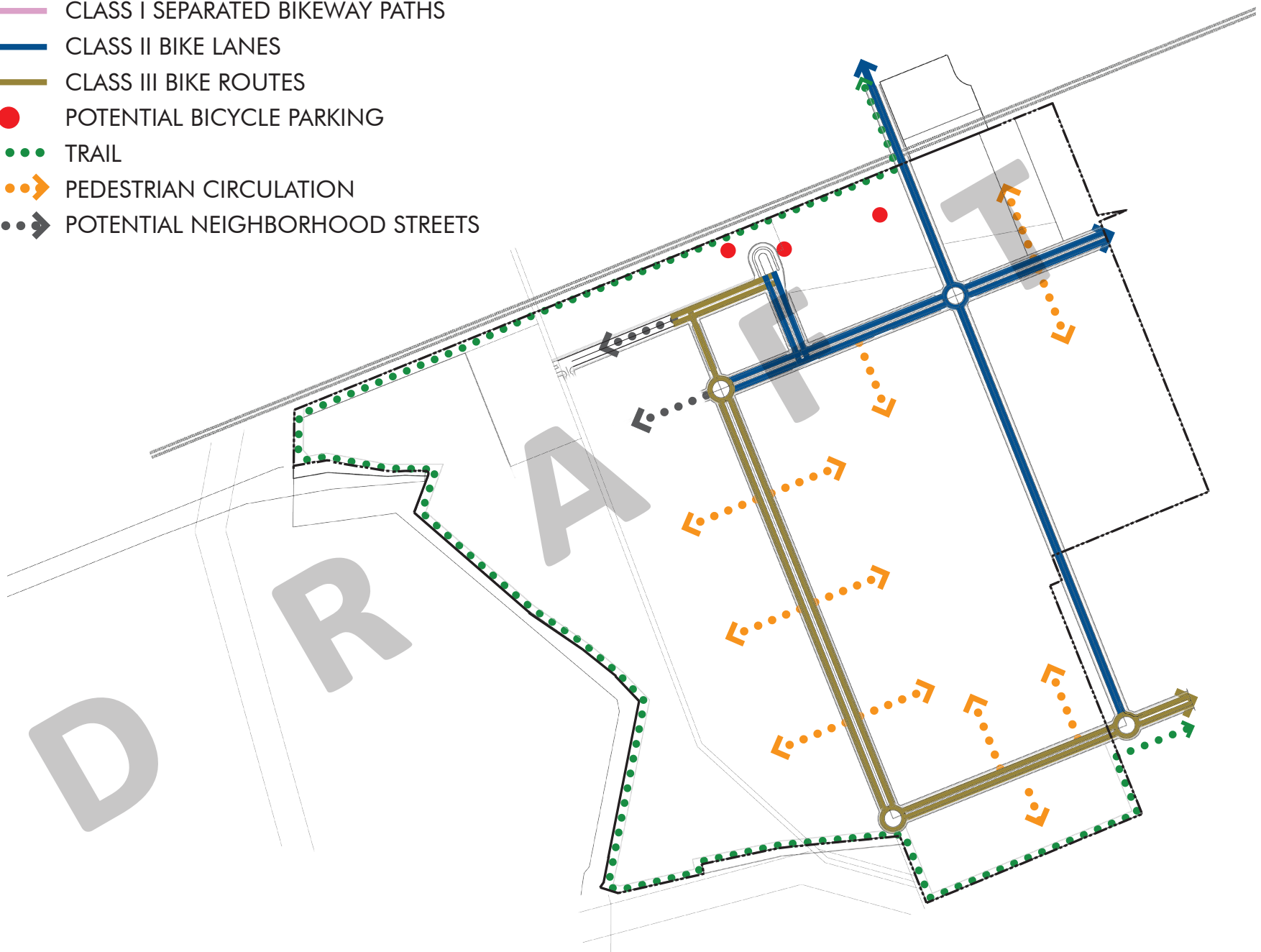
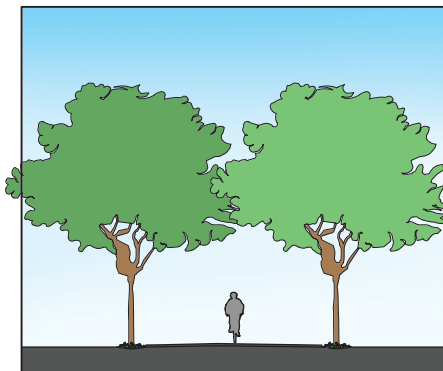
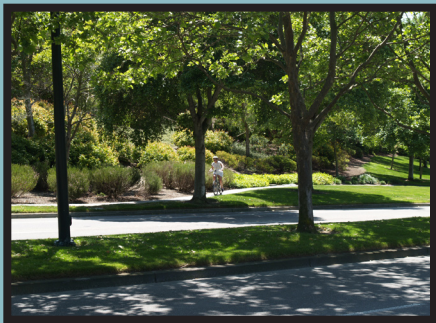
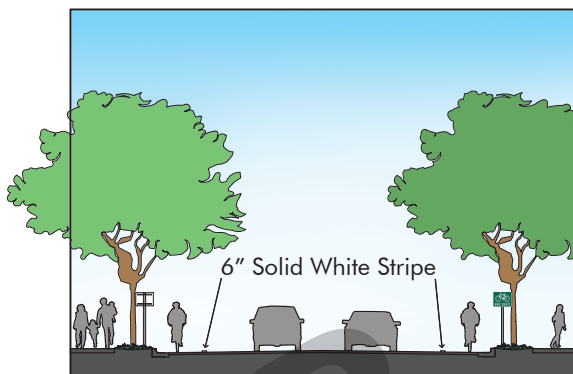
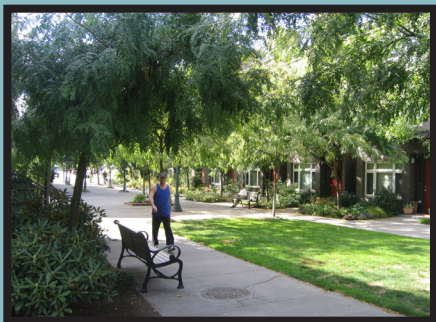


Exhibit 6.5 - Pedestrian & Bicycle Circulation



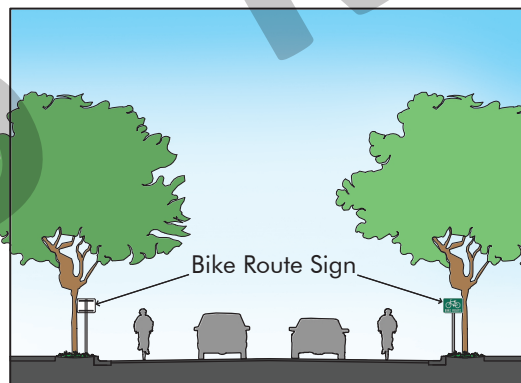
CLASS I BIKEWAY (Bike Path)

Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflow minimized.



CLASS II BIKEWAY (Bike Lane)

Provides a striped lane for one-way bike travel on a street or highway.



CLASS III BIKEWAY (Bike Route)

Provides for shared use with pedestrian or motor vehicle traffic.



Exhibit 6.6 - Bicycle Paths

Pedestrian and Bicycle Circulation Improvements

C-31 Provide bicycle routes throughout the Transit Station area, as illustrated in Exhibit 6.4.

C-32 Allow bicycle circulation on all local streets in the greatest extent feasible.

C-33 Design and implement a trail interior to the Plan area, around the perimeter of the Specific Plan, as feasible.

C-34 To the greatest extent possible, link internal neighborhood to parks and public spaces.

6.6 TRUCK ACCESS

Because of the transit-oriented nature of the Specific Plan, truck routes and loading areas should be carefully considered. Access to garbage and recycling areas should also be considered early in the project design process. Access should be provided in a way that facilitates truck service without detracting from the pedestrian realm.

Truck Access Policies

C-35 Where truck routes are necessary, do not locate them in areas where there are no commercial establishments.

C-36 Service and loading areas should be strategically located and screened so as not to impact the attractiveness and safety of the pedestrian realm. Therefore, they should be located to the side or rear of buildings, away from pedestrian area.

C-37 Loading requirements for smaller businesses may be met through curbside loading zones. For larger developments that required loading docks, the docks should be located in the interior or rear of the building or parking garage, to the greatest extent feasible.

6.7 STREET CROSS SECTIONS

One of the most visible character-defining elements of a community are the streets; people use them on a daily basis to conduct the business of their lives. This section illustrates the design intent of the street network for the Specific Plan. Each exhibit shows the entire right-of-way required, street dimensions, sidewalks, and landscape strip. The number of travel lanes on all streets have been designed to accommodate the ultimate build-out of the Specific Plan through the use of street cross section graphics. All projects and subdivisions should be consistent with the Plan. Minor modifications are anticipated and final design will be made during the mapping process.

Although the following street cross-sections incorporate portions of the current City of Newark standards, these new street cross-sections are more specific than the City's general standards as they address the overall character of each street.





Willow Street (Exhibit 6.7 (a), (b), and (c))

This street's primary purpose is to move and disperse traffic into the Plan area. These are higher volume streets with a design speed of 35 miles per hour.

Existing Willow street consists of a 64-foot wide paved road section within an 80-88-foot wide right-of-way. The proposed Willow Street section consists of two 15-foot vehicular travel lanes, two 5-foot bicycle lanes, and two 8-foot parking bays on either side of a median.

The roadway has a vertical curb and gutter, and curb returns have a 20-foot radius.

A 5-foot sidewalk is provided along with a 3-8-foot wide landscape strip. Direct lot access from single-family lots is not allowed along Willow Street however, curb cuts and all means of ingress and egress are allowed along Willow Street for all other uses.

Landscaping along Willow Street should include continuous street tree planting. Consistent street trees should be utilized in order to provide continuity and orientation along this collector road. Trees should be planted at even intervals and selected for characteristics that include proven durability in street environments, branching at heights greater than 15-feet, and ease of maintenance. The landscaped strip should be planted with a combination of shrubs and groundcovers.



Enterprise Drive West (Exhibit 6.8 (a) and (b))

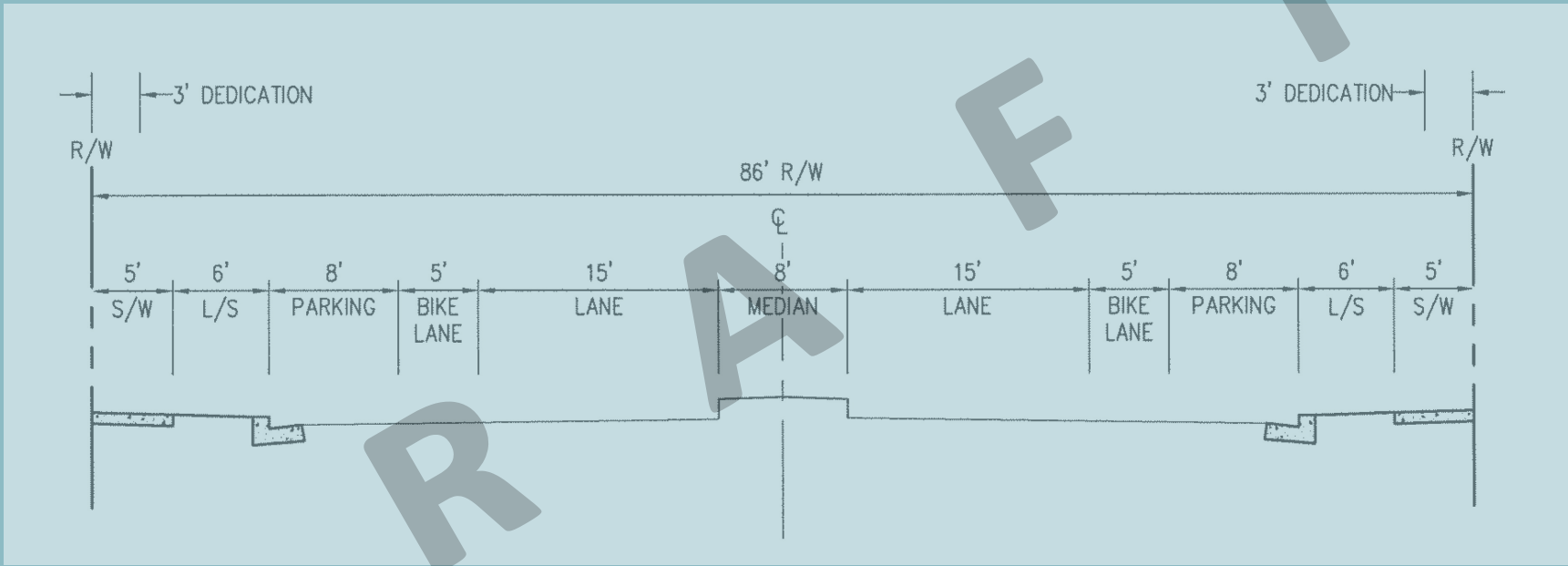
The primary purpose of these streets is to move and disperse traffic into the Plan area. These are higher volume streets with a design speed of 35 miles per hour. On Enterprise Drive West, specifically between Willow Street and Hickory Street, direct lot access for single-family detached homes is not allowed however, curb cuts and all means of ingress and egress are allowed for all other land uses.

Enterprise Drive West consists of a 90-foot wide right-of-way. This is intended to be a divided road with a median in the center that can accommodate trees and landscaping. The paved sections of Enterprise, from Willow to the Transit Station entrance, consists of two 12-foot vehicular travel lanes on either side of the median. The roadway has a vertical curb and gutter.

A 5-foot sidewalk is provided on both sides and separated from the roadway by a 6-foot wide landscape strip.

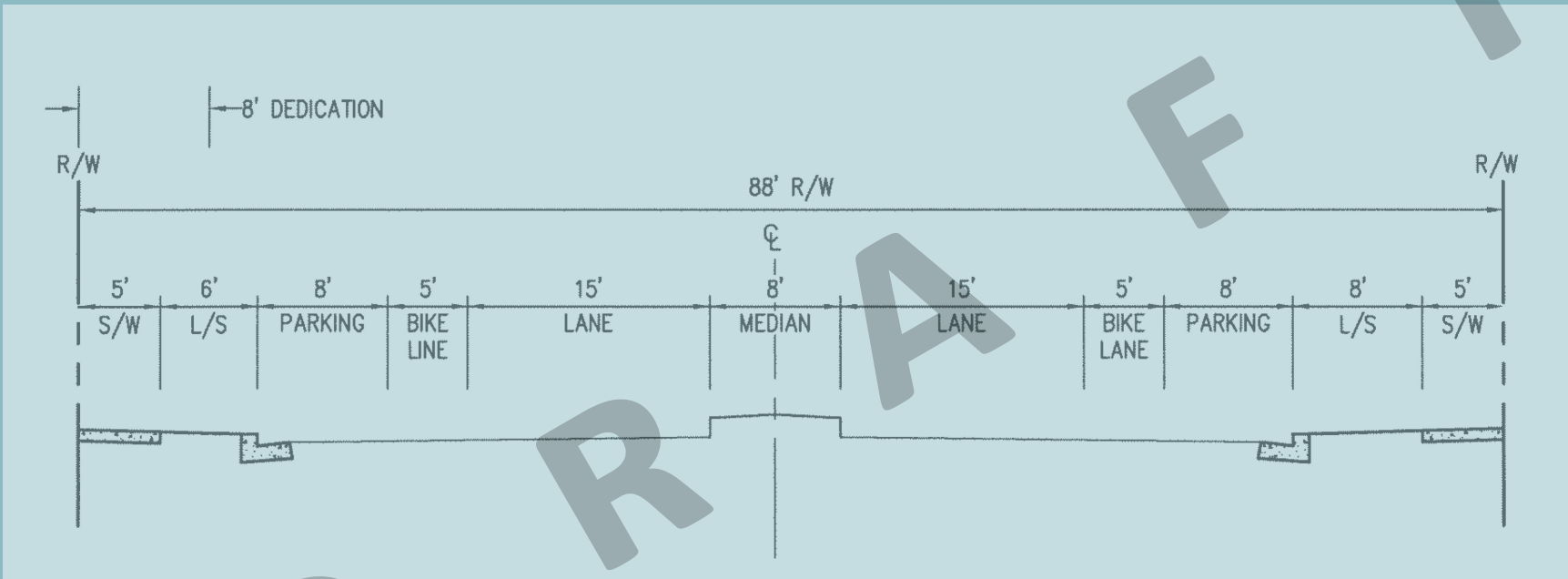
The sidewalks located along Enterprise Drive West are planned to be 5-feet in width, however, when located adjacent to commercial or retail uses, it is encouraged that the sidewalk width be a minimum of 8-feet and a maximum of 16-feet. This will ensure adequate space for outdoor activities, such as cafe style restaurant seating and an increased pedestrian traffic.

Enterprise Drive West serves as the main entry into the site and should have distinctive landscaping.



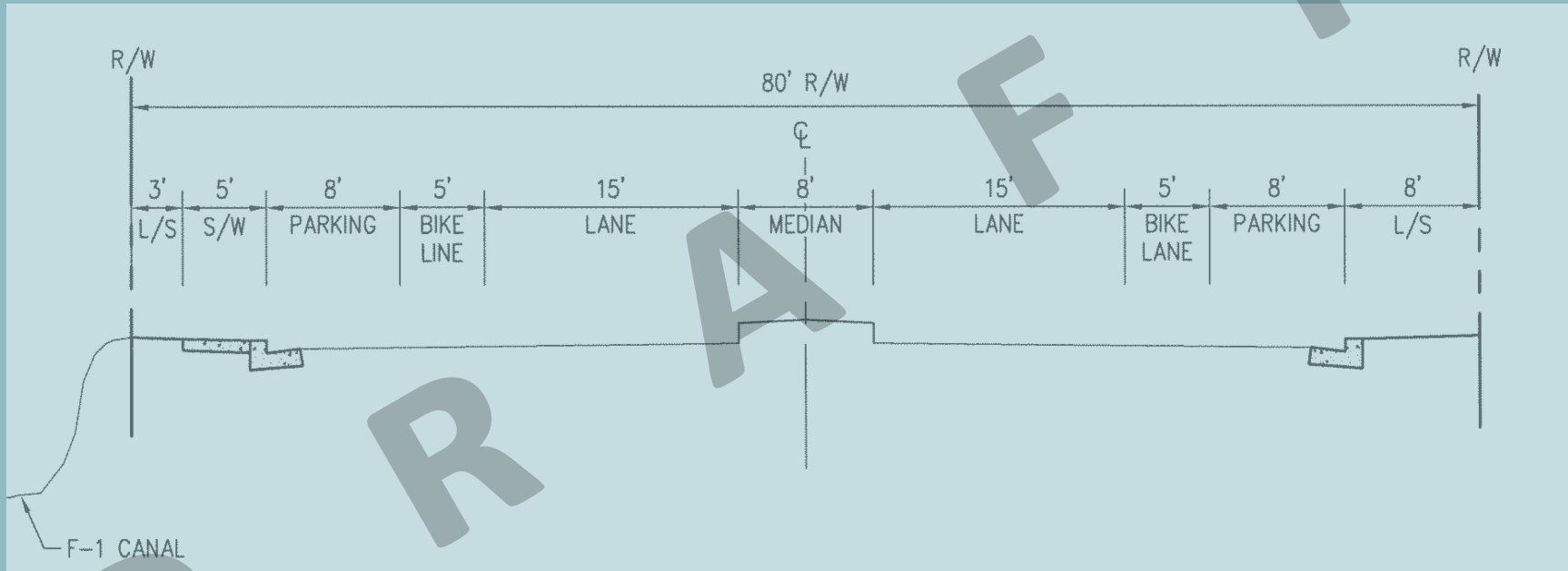
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Exhibit 6.7 (a) - Willow Street (North of Enterprise Drive)



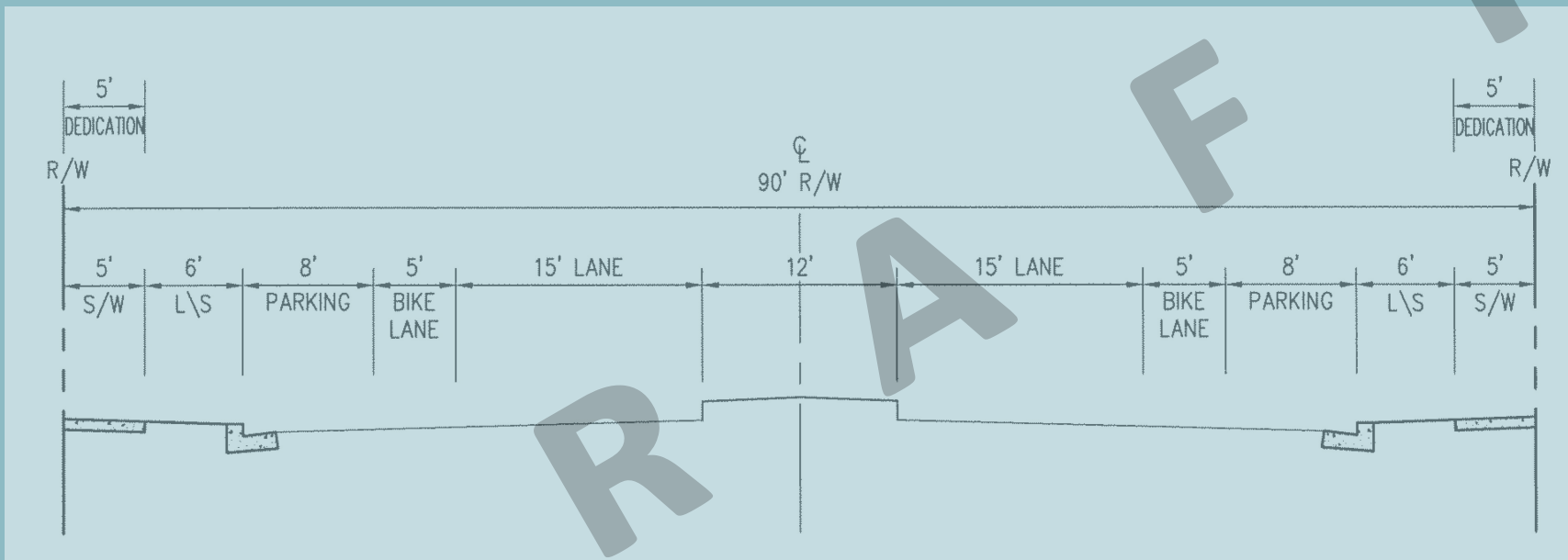
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Exhibit 6.7 (b) - Willow Street (North of F-6 Ditch)



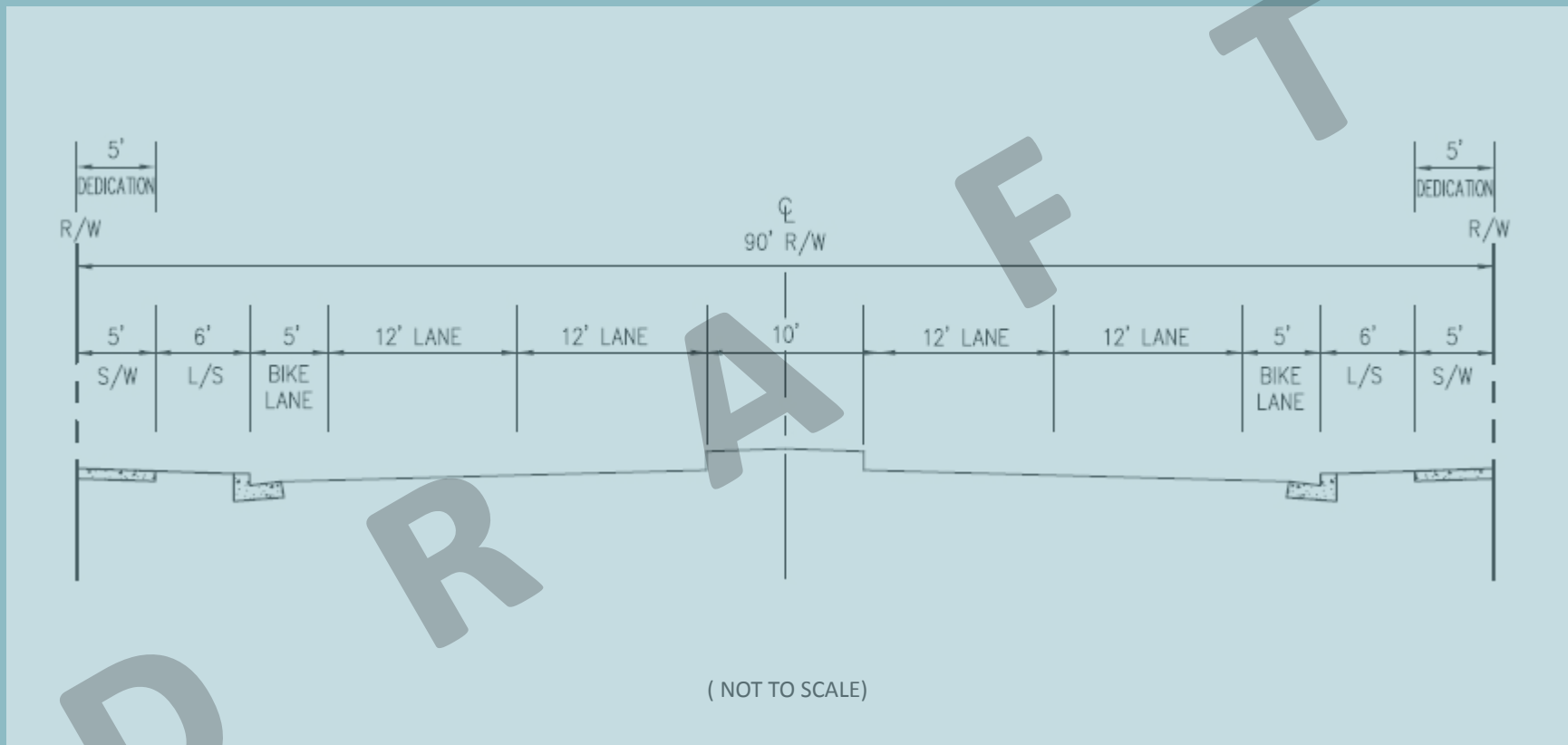
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Exhibit 6.7 (c) - Willow Street (South of F-6 Ditch)



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Exhibit 6.8 (a) - Enterprise Drive West (West of Transit Station Entrance)



Graphic Forthcoming

Exhibit 6.8 (b) - Enterprise Drive West (Transit Station Entrance to Willow Street)

Central Avenue (Exhibit 6.9)

The street consists of a 40-foot paved road within an 60-foot wide right-of-way. The paved section of the right-of-way consists of two 12-foot vehicular travel lanes, and 8-foot parking bays. The roadway has a vertical curb and gutter, and curb returns at a 20-foot radius. Direct lot access is permitted on Central Avenue from residential lots to the street. A 5-foot sidewalk is provided on both sides and separated from the parking areas and roadway by a 5-foot wide landscape strip.

Transit Station Entrance Road and Transit Station Road (Exhibits 6.10 (a) and (b))

The street that leads to the Transit Station from Enterprise Drive needs to be distinctive to give this area a sense of place and to draw people to transit and retail opportunities. This street's purpose is to provide access to the station for cars and buses, plus access to parking and drop-off, and to allow bicycle and pedestrian access to the station. This is a higher volume street with a lower design speed of 25 miles per hour, for safety.

The Transit Station Entrance Road consists of a 90-foot wide right-of-way. This is a divided road with a 10-foot median in the center that can accommodate trees and landscaping. The paved section of the right-of-way consists of four 12-foot vehicular travel lanes, and two 5-foot bicycle lanes as depicted in Exhibit 6.10(a). The roadway has a vertical curb and gutter, and curb returns have a 20-foot radius. The Transit Station Road runs perpendicular to the Transit Station Entrance run as set forth in Figure 6.2 and consists of an 80-foot right-of-way, two 12-foot vehicular travel lanes, two 5-

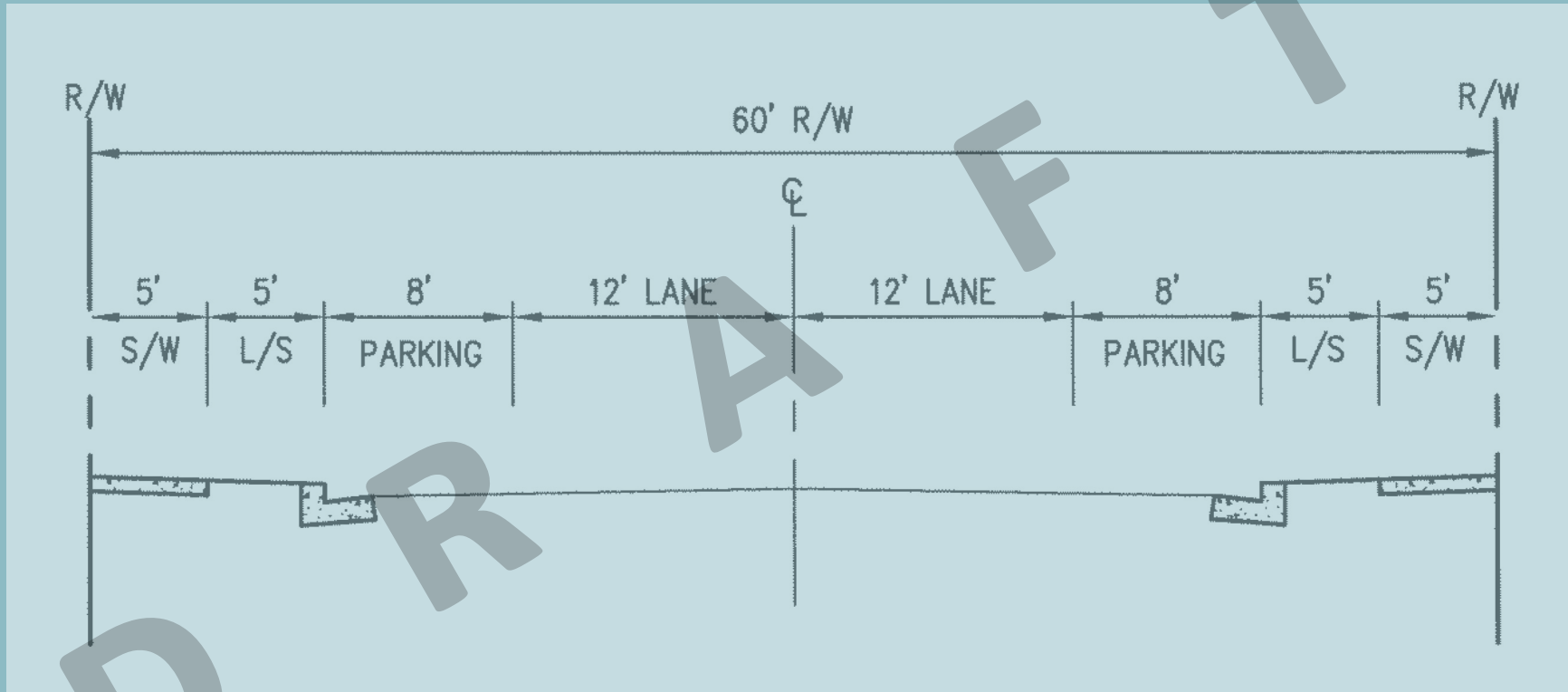
foot bicycle lanes, an 8-foot parking bay on either side and a 14-foot median as depicted in Exhibit 6.10(b). Direct lot access is permitted on the Transit Station Entrance Road and the Transit Station Road. Two 5-foot sidewalks are provided on both sides and separated from the roadway by two 6-foot wide landscape strips for both the Transit Station Entrance Road and Transit Station Road.

To help accentuate the Station, strong simple vertical massing of trees along with low-growing evergreen shrubs and grasses are encouraged. Flowering ground cover and accent trees at corners and intersection should delineate entrances. Visibility of the Transit Station is imperative so trees with branching at heights greater than 15-feet should be utilized. Where adjacent parking lots are planned, a planting screen should be designed through the use of shrubbery, landscape berming, low walls, or a combination of these elements.

Enterprise Drive East (Exhibit 6.11)

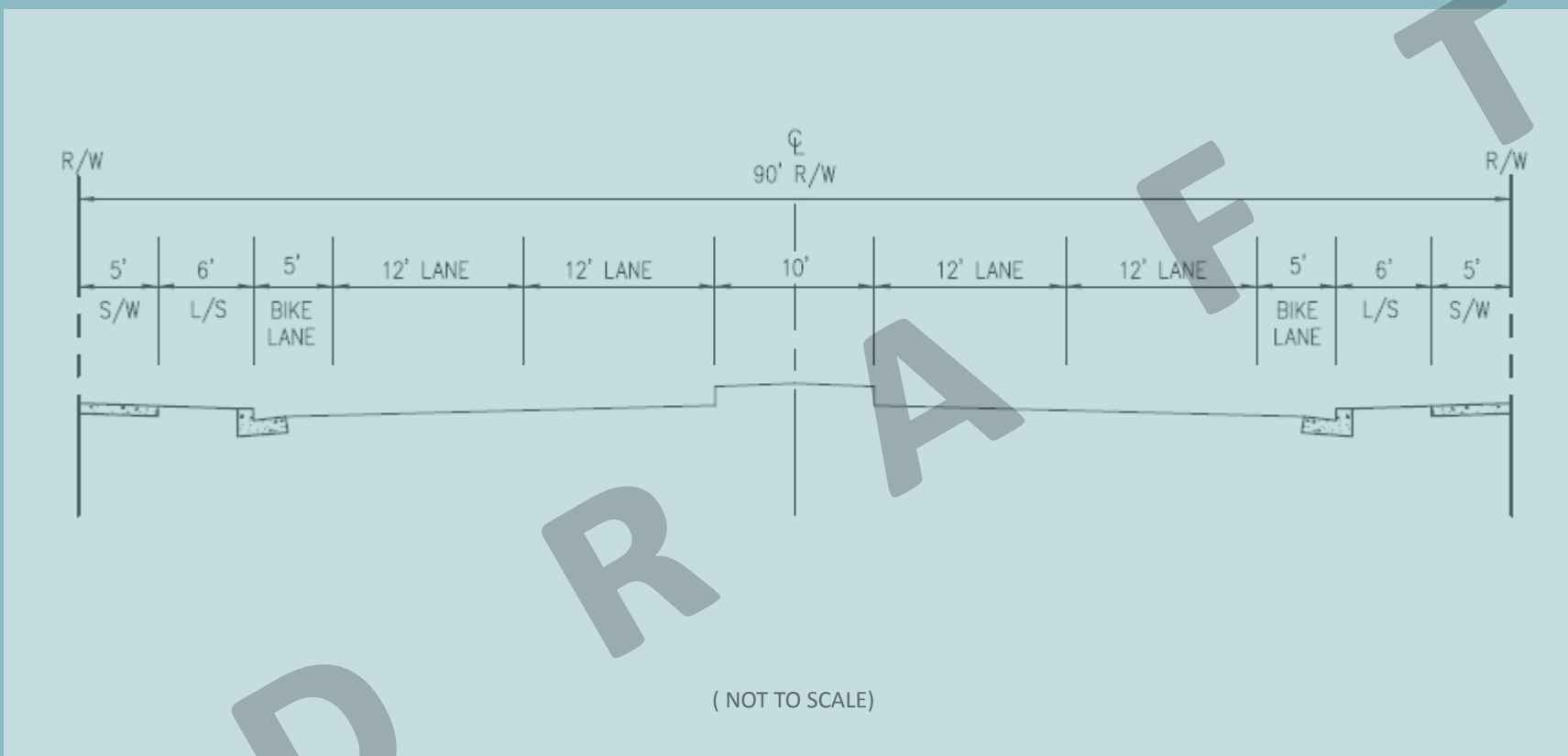
The primary purpose of this street is to move traffic into the Plan area. Enterprise Drive East consists of a 90-foot wide right-of-way. The paved section of the right-of-way consists of a 14-foot vehicular travel lane, a 5-foot bicycle lane and an 8-foot parking bay on either side of the median. The roadway has a vertical curb and gutter, and curb returns have a 20-foot radius.

A 5-foot sidewalk is provided on both sides and separated from the parking areas and roadway by a 6-foot wide landscape strip.



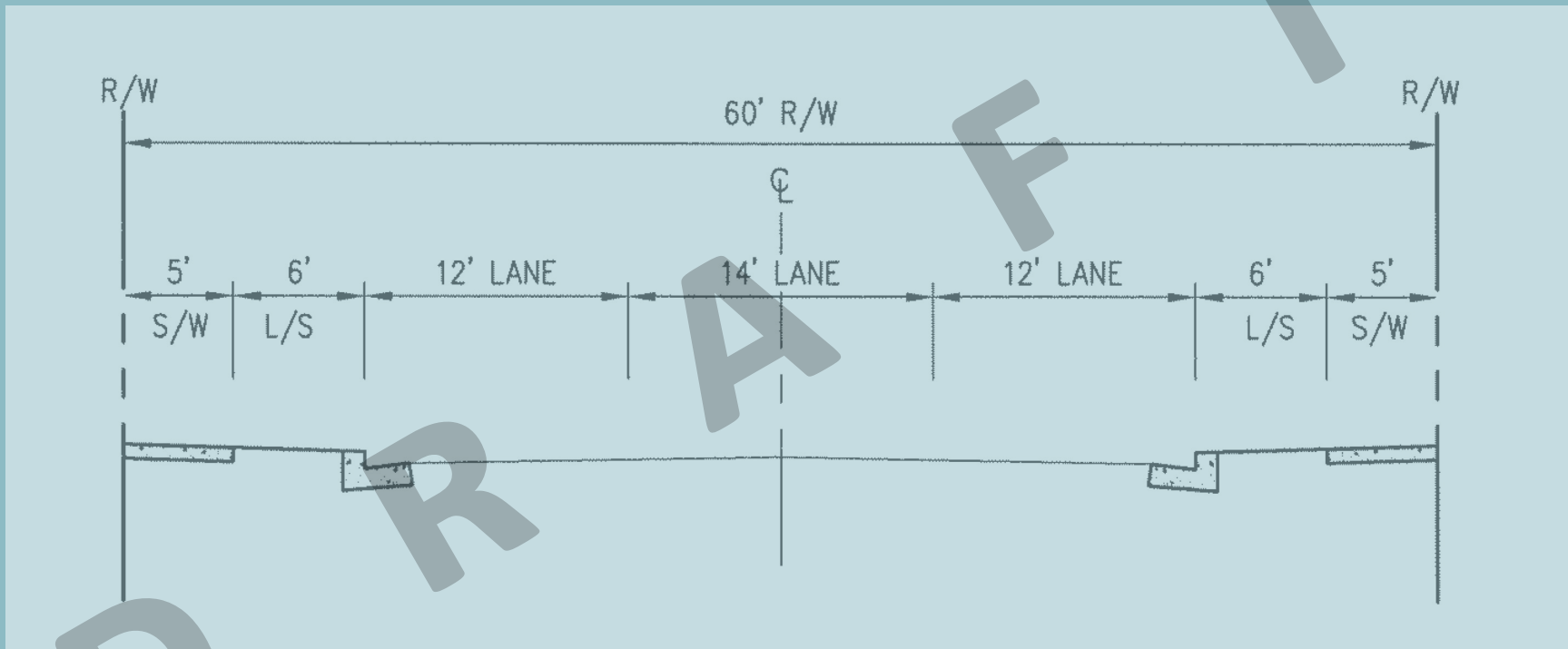
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Exhibit 6.9 - Central Avenue



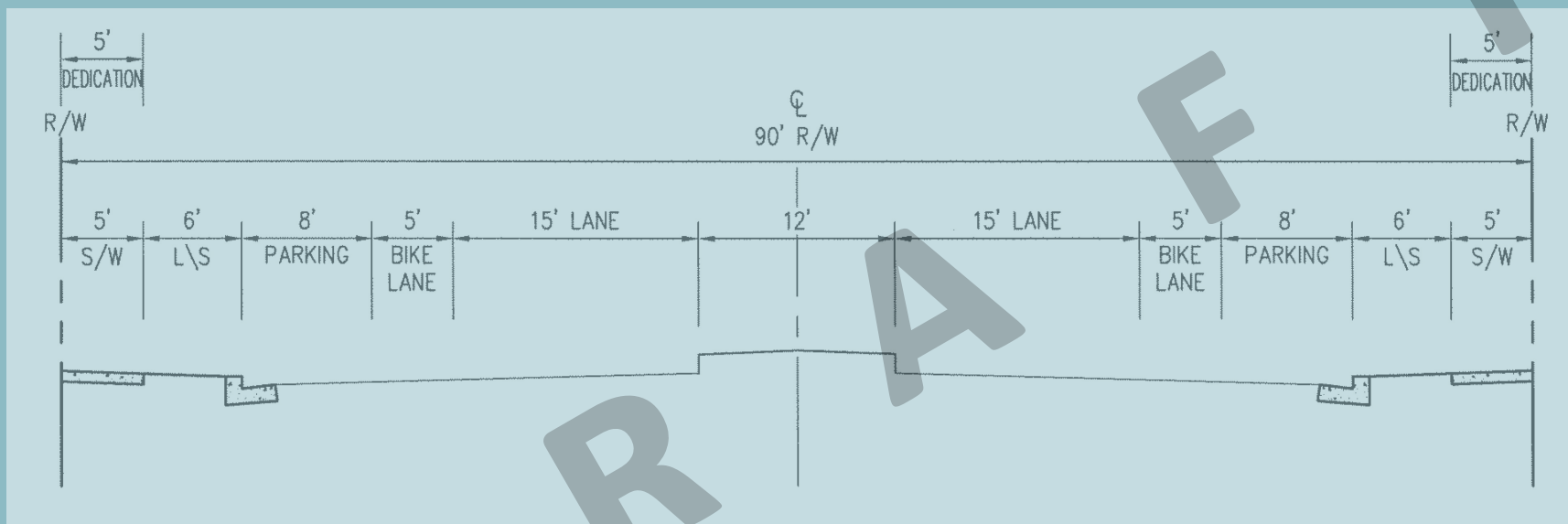
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Exhibit 6.10 (a) - Transit Station Entrance Road



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Exhibit 6.10 (b) - Transit Station Road



Graphic Forthcoming

Exhibit 6.11 - Enterprise Drive East (East of Willow Street)

Hickory Street (Exhibit 6.12)

The street will consist of one lane in each direction with parking, landscaping and sidewalks on each side – similar to other streets in this Specific Plan. Direct vehicular lot access on Hickory Street is permitted from residential lots to the street.

Exhibit 6.12 shows a possible cross-section, depending on final site conditions.

This street's primary purpose is to move and disperse traffic in the Plan area. This is a higher volume street with a design speed of 35 miles per hour.

Neighborhood Streets (Exhibit 6.13)

Neighborhood streets are not part of the Backbone Circulation Plan. The design of Neighborhood streets shall be as provided in this Specific Plan but the location of each will be determined pursuant to the processing of plans for specific developments within the Specific Plan area.

Neighborhood streets are internal residential streets, the primary purpose of which is to provide access between individual residences and collector streets. These are low-volume streets with a design speed of 25 miles per hour.

Neighborhood streets should consist of a 36-foot wide road section within a 56-foot wide right-of-way. The paved section can accommodate two 10-foot wide travel lanes and on-street parking on both sides in designated parking bays. The roadway had vertical curb and gutter, and curb returns have a 20-foot radius.

A 5-foot sidewalk should be provided on both sides and separated from the parking areas by a 5-foot wide landscaping strip. Direct vehicular lot access is permitted on all neighborhood street from residential lots to the streets.

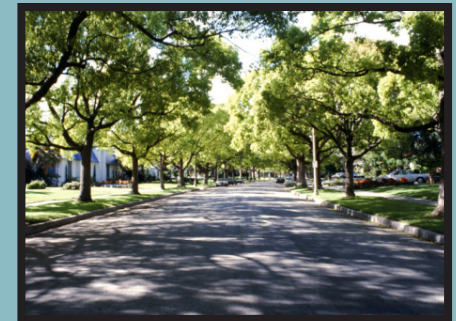
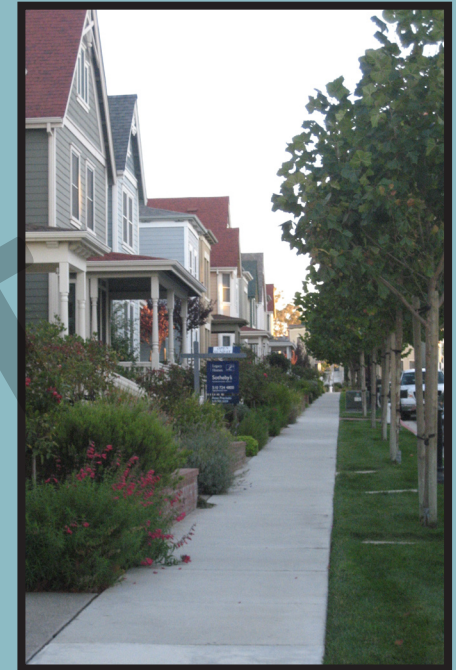
Tree planting along neighborhood streets shall be designed to encourage pedestrian use, shorten the perception of walking distances and provide shade and seasonal interest.

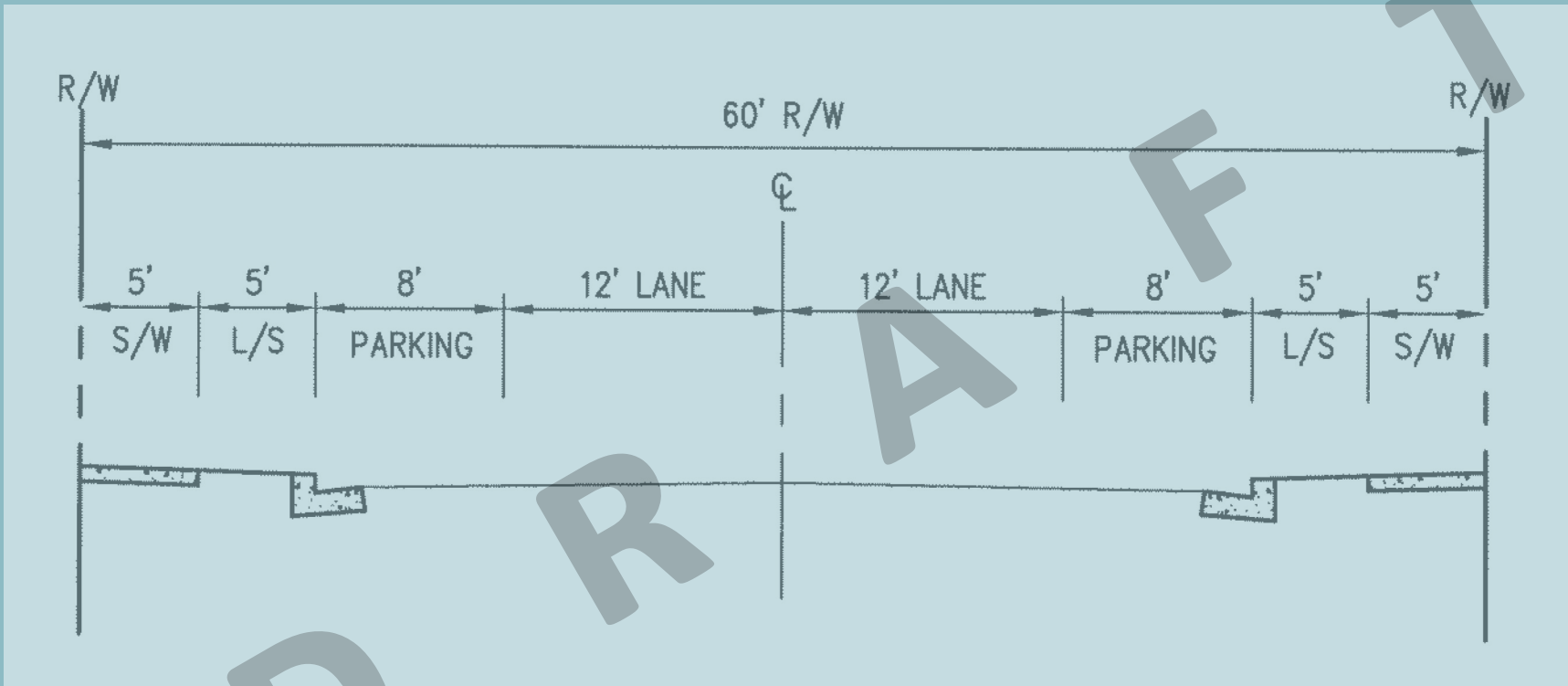
Carriageways (Exhibit 6.14)

Carriageways are generally privately maintained roads associated with residential units where garages are located in the rear of the home and not off the main residential street.

The purpose of the carriage way is to provide service access for garbage trucks and to provide residents vehicular access to their garages. They typically have a paved surface of 20-feet within a 20-foot access easement or right-of-way with the garage doors setback from the street. Direct lot access is permitted on all carriageways/alleys from residential lots to the street. Resident or guest parking is allowed within the carriage way only in designated spaces.

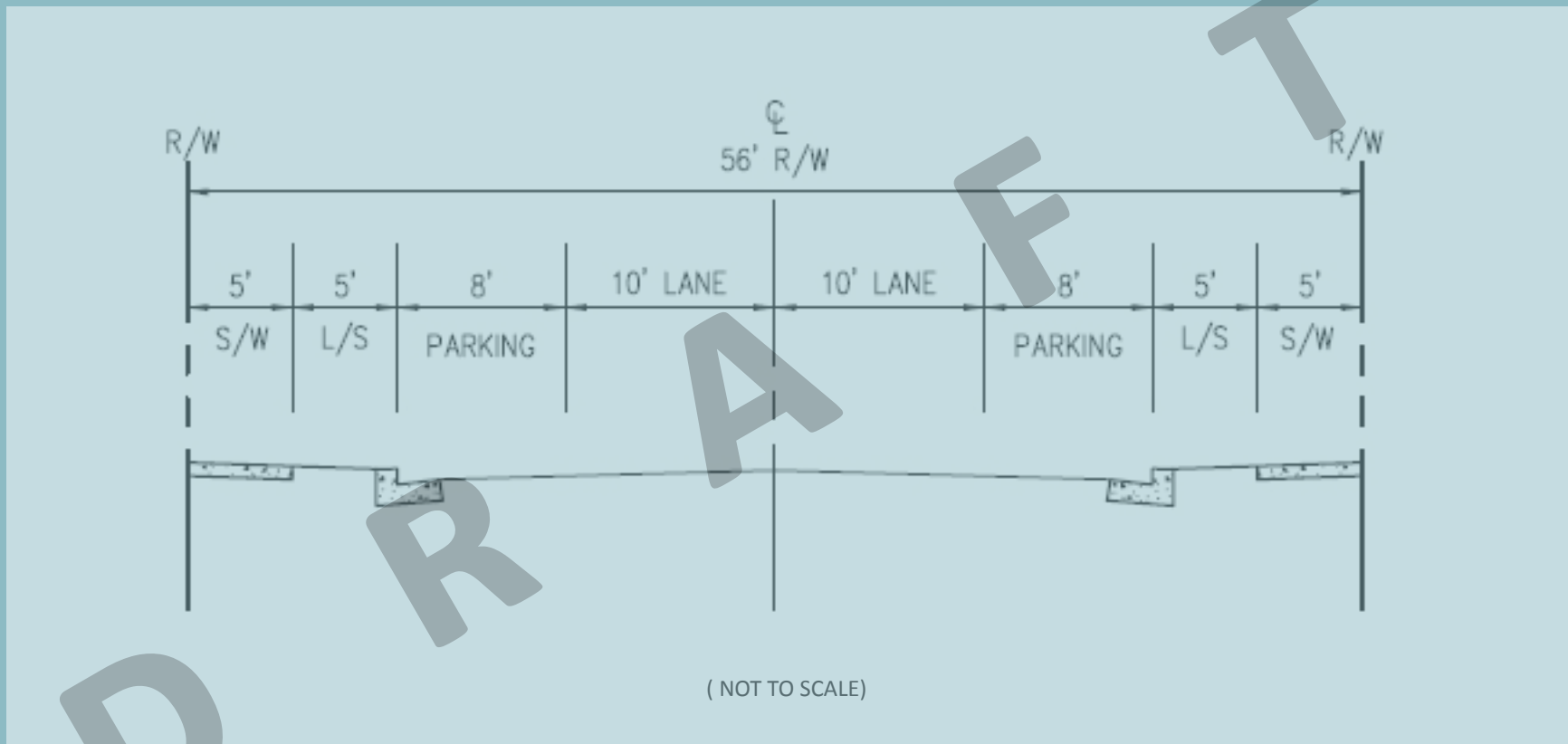
Small accent trees and shrubs are encouraged to be planted in small planting areas within the carriageways. These are typically located between garage doors and building, and soften the edge of the pavement.





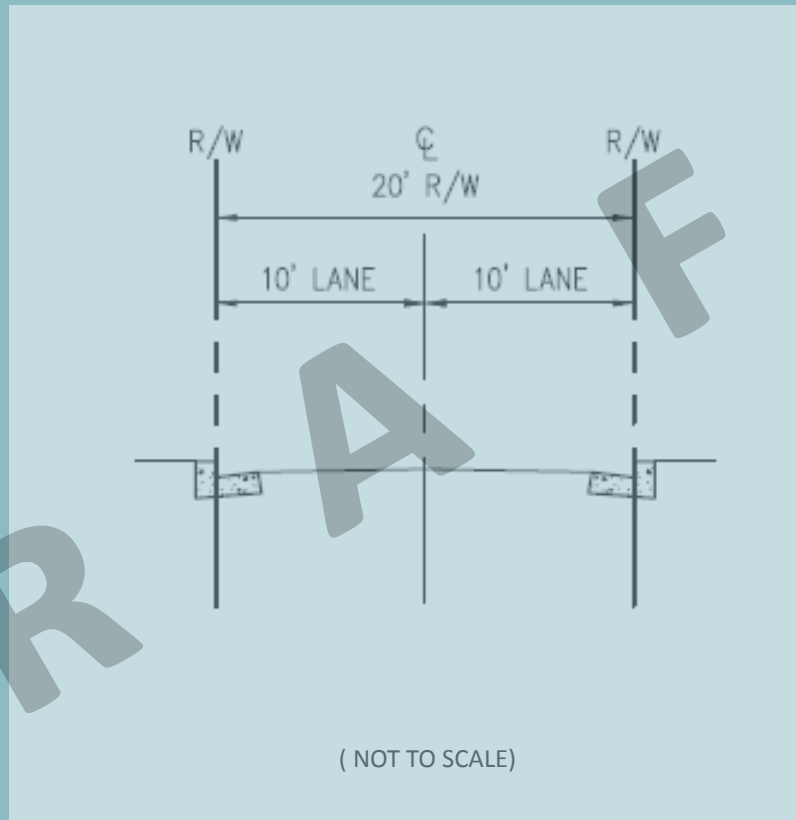
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Exhibit 6.12 - Hickory Street



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Exhibit 6.13 - Neighborhood Streets Typical - Minor



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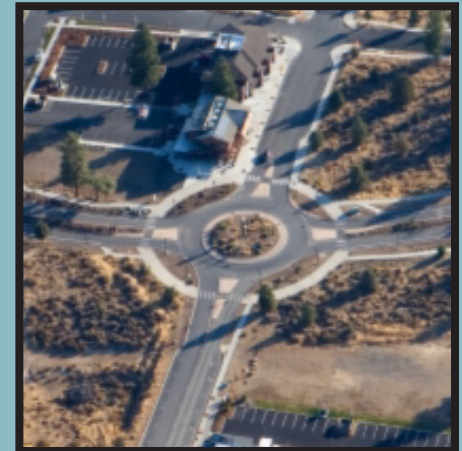
Exhibit 6.14 - Carriageway / Alley

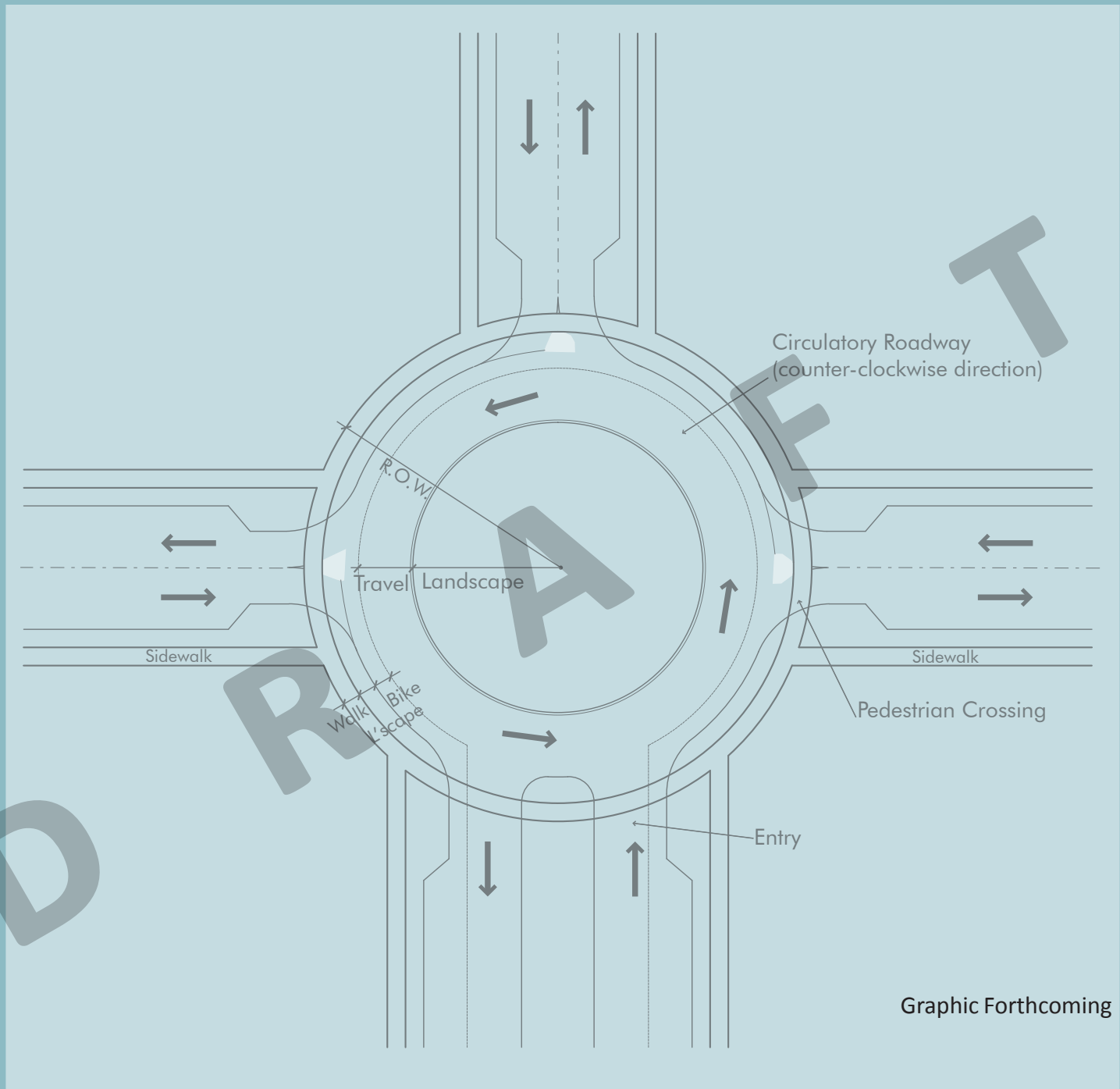
Roundabouts (Exhibit 6.15)

A roundabout is a circular intersection with yield control for entering traffic, channelized approaches, and reduced travel speeds in the circular roadway as vehicles must follow a travel path around the center island. Roundabouts have several safety advantages, as they reduce the number of conflict points between vehicles, and between vehicles and bicyclists and pedestrians. A study of US roundabout sites showed a 39% reduction in total crashes and a 76% reduction in injury crashes. The slower travel speeds compared to traditional signalized intersections also reduce the occurrence and severity of collisions. They also have lower average delays than stop-or signal-controlled intersections when serving less than 20,000 vehicles per day. The reduction in delay and idling time also results in less fuel consumption, lowers air pollution and reduces greenhouse gas emissions.

Roundabouts can sometimes present challenges to bicyclists and pedestrian access, especially for those pedestrians with sight impairments. To improve access for all pedestrians, crosswalks may be raised or, for multi-lane roundabouts, signal-controlled.

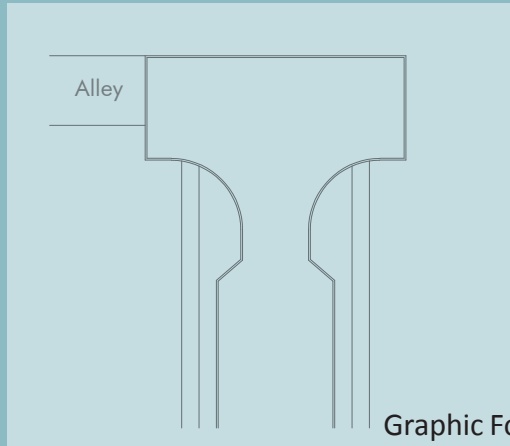
Enterprise Drive, Hickory Street and Central Avenue may have roundabouts. Actual road sections and right-of-way radius will reflect final engineering plans in the context of specific development projects. One example is shown on Exhibit 6.15. Roundabouts should be enhanced with various materials or plants to soften the hard surfaces, however, clear line of sight is required for both pedestrian and vehicular access.





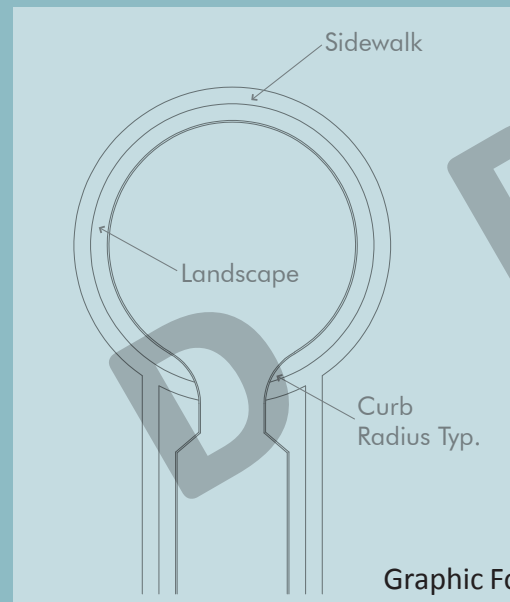
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Exhibit 6.15 - Conceptual Roundabout



Graphic Forthcoming

Exhibit 6.16- Cul de Sac - Hammerhead



Graphic Forthcoming

Exhibit 6.17 - Cul de Sac - Traditional

Cul-de-sac – Hammerhead (Exhibit 6.16)

This type of street is utilized with a neighborhood street that is no more than 300-feet in length. It is primarily intended to serve as a turn around that uses less land than standard cul-de-sac. The hammerhead has a paved driving surface of 75-feet long by 20-feet wide. The curb radius is 20-feet and no parking is permitted, signs will be posted. No sidewalks are required. Direct lot access is permitted on cul-de-sacs from residential lots to the street.

Cul-de-sac – Traditional (Exhibit 6.17)

This type of cul-de-sac is utilized with a neighborhood street that is no more than 450-feet in length. The bulb of the cul-de-sac is 95-feet in diameter. The paved driving surface is 75-feet in diameter. The curb radius to the connecting neighborhood street is 20-feet. A 5-foot wide sidewalk that is separated by a 5-foot wide planting strip is provided. Direct lot access is permitted on cul-de-sacs from residential lots to the street.

This cul-de-sac may be designed with the sidewalks eliminated if used in conjunction with a specific park design.



6.8 STREET STANDARDS CHART

On this page is Table 6.1 - a summation of the street design standards presented earlier in this chapter.

Table 6.1 Street Standards									
Street Names	R.O.W	Pavement Width	No. of Lanes	Median	Sidewalk Within R.O.W.	Landscape Strip within R.O.W.	On-Street Parking Allowance	On-Street Bike Lanes	Direct Lot Access
Willow Street	80'-88'	64'	2	8'	5' both sides for two conditions, 5' one side for third condition	6'-8' both sides for two conditions, 3'-8' both sides for third condition	8' both sides, all conditions	5' both sides, all conditions	Direct lot access from single family detached lots is not allowed along Willow, however, curb cuts and all means of ingress and egress is allowed for all other uses
Enterprise Dr., (West)	90'	68'	2 for one condition, 4 on second condition	10' and 12'	5' both sides, all conditions	6'-8' both sides	8' both sides one condition, none on second condition	5' both sides, all conditions	On Enterprise, specifically between Willow Street and Hickory Street, direct lot access from single family detached lots is not allowed, however, curb cut and all means of ingress and egress are allowed for all other cases
Central Avenue	80'	60'	2	n/a	5' both sides	5' both sides	8' both sides	n/a	Yes
Transit Station Entrance Road	90'	68'	4	10'	5' both sides	6' both sides	n/a	5' both sides	Yes
Transit Station Road	86'	64'	2	14' striped only	5' both sides	6' both sides	8' both sides	5' both sides	Yes
Enterprise Dr., (East)	90'	68'	2	12'	5' both sides	6' both sides	8' both sides	5' both sides	Yes
Hickory Street	80'	36'-60'	2	N/A	5' both sides, all conditions	5' both sides, all conditions	8' both sides, all conditions	n/a	Yes
Neighborhood Streets - typical will vary depending on site conditions	56'	36'	2	n/a	5' both sides	5' both sides	8' both sides	n/a	Yes
Carriageways	20'	20'	2	n/a	n/a	n/a	n/a	n/a	Yes

Note: Landscape strips may be substituted with tree wells and the sidewalk widened adjacent to mixed-use, commercial, retail and podium buildings.

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- 7.1 OVERVIEW
- 7.2 STUDY AREA
- 7.3 PUBLIC UTILITIES
- 7.4 NON-MUNICIPAL UTILITIES

D
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7.0 INFRASTRUCTURE

7.1 OVERVIEW

Public utilities and community services will need to be expanded to support the development in the Specific Plan area. A strong framework of infrastructure, utilities, and amenities is critical to the development of the area. This chapter describes the infrastructure needed to efficiently integrate the new development with the services already provided by the City of Newark. It establishes the policies and describes the improvement projects necessary for upgrading and expanding public facilities.

This chapter also includes General Plan policies to reduce the demand placed on utility systems, thereby promoting environmental and economic sustainability. Private utilities, such as electrical transmission and distribution, are also discussed.

This Specific Plan will be used by preparers of development applications to understand the basic infrastructure and utility

elements of the plan, as well as aid the property owners in basic preliminary design decisions. This conceptual report is intended only to provide an initial overview of the conceptual project layout and the construction of basic infrastructure. It is not intended to be used for final design or construction.

Limitations of Study

This study is limited to brief discussions of existing conditions and identification of “backbone” utility infrastructure needed to support the proposed development of the project site. The initial calculations are estimates only based on APN maps and preliminary land use assumptions provided by the property owners and their consultants. All calculations used to determine sizes of the backbone infrastructure are for preliminary study purposes only. Final design calculations will be required as part of the design process leading to City approval for construction of the project’s infrastructure.

The following polices will be included as a part of the General Plan Amendment for the Specific Plan project.

Utilities and Public Service Principles

I-1: Meet or exceed City standards by providing high-quality, efficient public utilities, services, and facilities to serve the Specific Plan area.

I-2: Encourage sustainable building practices, operations, and maintenance.

I-3: Partner with private utility providers to limit disruptions to existing systems, and ensure comprehensive utility service for all future development.

I-4: Ensure that adequate emergency service facilities and staffing are in place to serve new residents and employees.

I-5: Design new development and public spaces with consideration for public safety.

7.2 STUDY AREA

Topography

The area is a generally flat, low-lying alluvial plain. Elevations in the area vary from approximately 4 to 15 feet above mean sea level (MSL), based on the National Geodetic Vertical Datum of 1927 (NGVD); There are two bedrock outcroppings located on the western portion of the site

Easements

Several rights-of-way and easements for transportation infrastructure and utilities exist within the Plan area that will affect the type and arrangement of development that can occur. (See Exhibit 7.1, Conceptual Utility Plan) These include the following:

- The Hetch-Hetchy Pipeline

The Hetch-Hetchy Pipeline is within a 110-foot right-of-way owned by the San Francisco Public Utilities Commission (SFPUC), which runs east/west through the northern portion of the Plan area controlled by the SFPUC. All crossing or other uses are tightly controlled by the San Francisco Public Utilities Commission (SFPUC) and land owner contract rights that run with the land. The Pipeline runs underground through the east half of the Plan area, transitioning to the surface after crossing to the north side of the rail right-of-way.

- The Dumbarton Rail Corridor (DRC)

The DRC also runs in an east/west direction through the northern portion of the Plan area, almost parallel to the Hetch-Hetchy Pipeline. The DRC is a 100-foot wide right-of-way owned by San Mateo County Transit. The DRC is a proposed commuter rail line.

- The East Bay Dischargers Authority (EBDA)

The EBDA owns and operates two 33-inch sanitary sewer force mains, serving the City of Newark, that run through the Plan area within an easement under the Hickory Street right-of-way. Special conditions

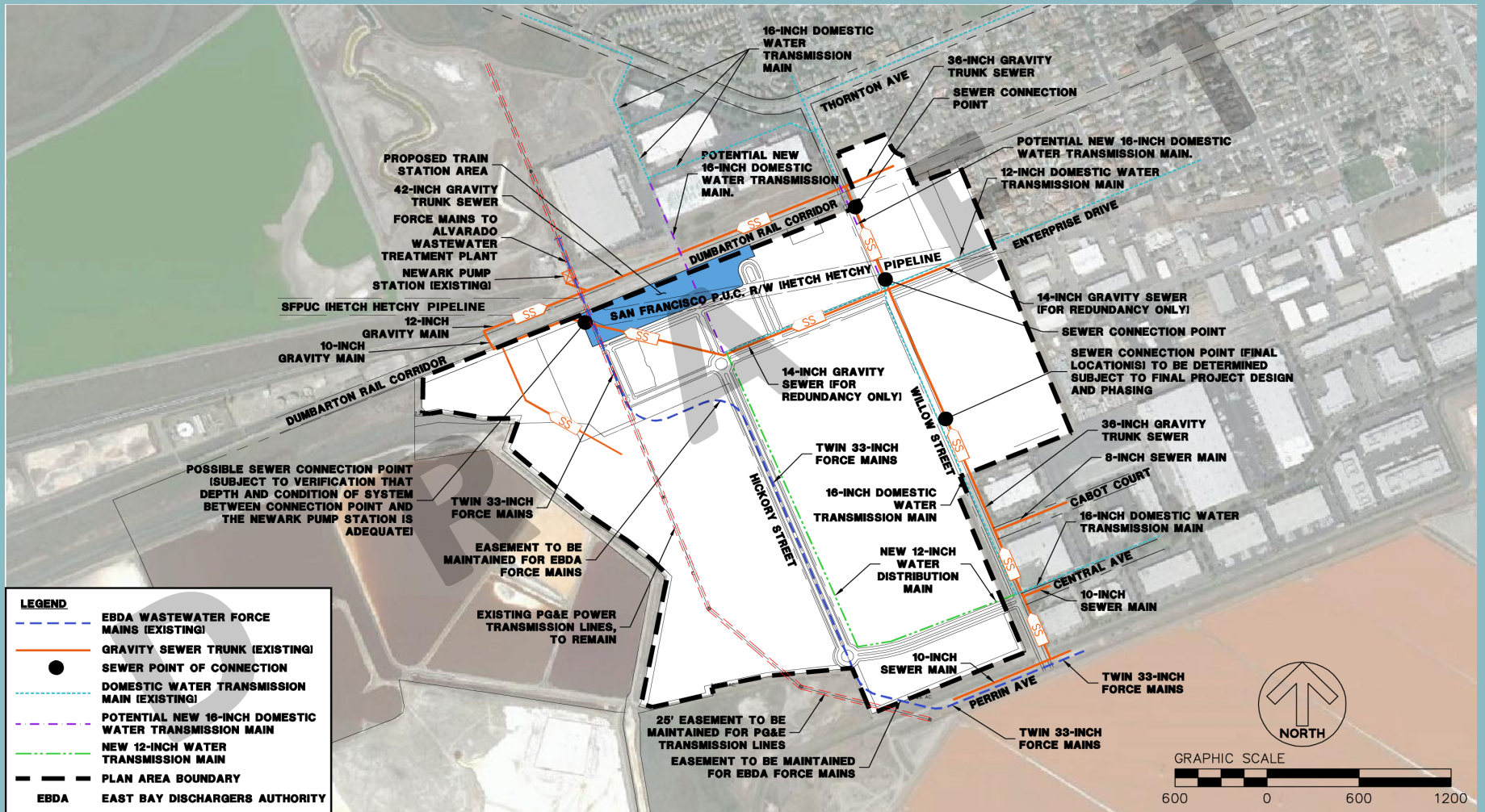


Exhibit 7.1 - Conceptual Utility Plan

on construction within this easement may need to be imposed to preserve the integrity of the mains.

- The Alameda County Flood Control F-1 Canal
The F-1 Canal flows from east to west along the Plan area's southerly boundary, providing the main drainage outlet to the San Francisco Bay for a large part of the City of Newark. A tributary to this canal, the F-6 ditch, runs north along the west side of Willow Street for a distance of about 1,300 feet.

- PG&E Transmission Lines
PG&E lines traverse the Plan area from north to south. PG&E maintains strict control regarding use of a 25-foot wide easement underneath the lines and surrounding the towers that support high-voltage lines. Buildings may not be constructed within the right-of-way, and the ground may not be filled if it reduces the existing line's clearance to less than 32-feet. A representative of PG&E reports that it should be possible to either relocate or raise the existing transmission lines and towers. It is not anticipated that they would be relocated or raised at this time.

Land Use Assumptions

Estimated (based on APN maps) proposed land uses are the following:

- 16.84-Acres Low Density Residential
- 67.86-Acres Medium Density Residential
- 59.34-Acres Medium High Density Residential

- 5.03-Acres High Density Residential
- 18.32-Acres Commercial (Retail, Office and Train Station)
- 16.26-Acres Parks and Open Space
- 23.06-Acres Miscellaneous Roads, Easements, etc.

7.3 PUBLIC UTILITIES

Storm Drainage

Existing Conditions

The Plan area contains various topographic and land use conditions that define existing drainage patterns:

- Willow Street and Enterprise Drive Area
These streets contain city-owned storm drainage lines that convey run-off from fronting developed parcels to the southern limit of the Plan area where they enter the Alameda County Flood Control and Water Conservation District (ACFC) Line F-1. These lines extend to the west in Enterprise Drive to receive runoff from an area outside the limits of ACFC's planned tributary drainage shed to Line F-1. Because the overall area is not built-out to the density that ACFC had planned for, this additional area is accommodated in the regional drainage system. However, as the area develops, designers must provide hydrologic and hydraulic calculations to the City of Newark that demonstrate that runoff to the F-1 channel does not exceed ACFC's design parameters or the capacity of the channel.

- **Undeveloped Areas**

The undeveloped areas are mostly low-lying and do not freely drain to the bay, but in large storm events, release to channels in the northwestern and southwestern corners of the Plan area. Areas in the west discharge predominantly to a ditch that flows south to an existing channel at the southwestern corner of the Specific Plan area. The northern portion of the undeveloped area discharges to a channel in the northwestern corner of the Specific Plan area.

The portion of this Plan area that sits north of the Dumbarton Rail Corridor is low lying and does not freely drain. During large storm events, it currently releases to the northwest into Willow Street, where it eventually enters the City's storm drainage system that serves the adjacent residential development area to the north. This system has been sized to accommodate drainage from the tributary Plan area in its developed condition.

Flood Zone

Federal Emergency Management Agency (FEMA) defines Zone AE as areas below the base flood elevation which is elevation 11 (NAVD 88) for this area which is equivalent to an elevation of 8.24 above MSL (NGVD29). Portions of the area west of the existing Hickory Street right-of-way reservation are below the base flood elevation and have been mapped as such by FEMA's National Flood Insurance Program (NFIP).

The City of Newark has adopted flood elevation standards for lands within special flood hazard areas as defined by FEMA (Section 15.40.51 Newark Municipal Code). Among other things, these standards require building pads of all occupied structures to be a minimum of 11.25-feet above MSL (NGVD29) with the finished floor being a minimum of 6-inches above the building pad. In addition, the City of Newark requires that the top of curb grades for residential streets must be no less than 10-feet above MSL throughout the City (Section 16.08.06 Newark Municipal Code). Existing Willow Street and Enterprise Drive would be exempt from this requirement as well as new streets that must be less than an elevation of 10-feet to conform to existing streets.

Proposed Drainage

The Plan area will be graded to conform with the parameters set forth by the City of Newark and in the Alameda County Flood Control and Conservation District's Hydrology and Hydraulics Summary for Western Alameda County. The grading design should minimize the distance between any particular area and its outfall location. This will in turn serve to allow for the lowest possible elevations and minimize fill requirements at the northern and northeast portions of the Plan area. It is expected that approximately 500k - 1 million cubic yards of fill material will need to be imported to the site to comply with City requirements.

The Conceptual Grading and Drainage Plan presented in Exhibit 7.2 and described in the following sections illustrate one potential grading scheme that meets these criteria. Final grading and drainage patterns may vary from the concepts

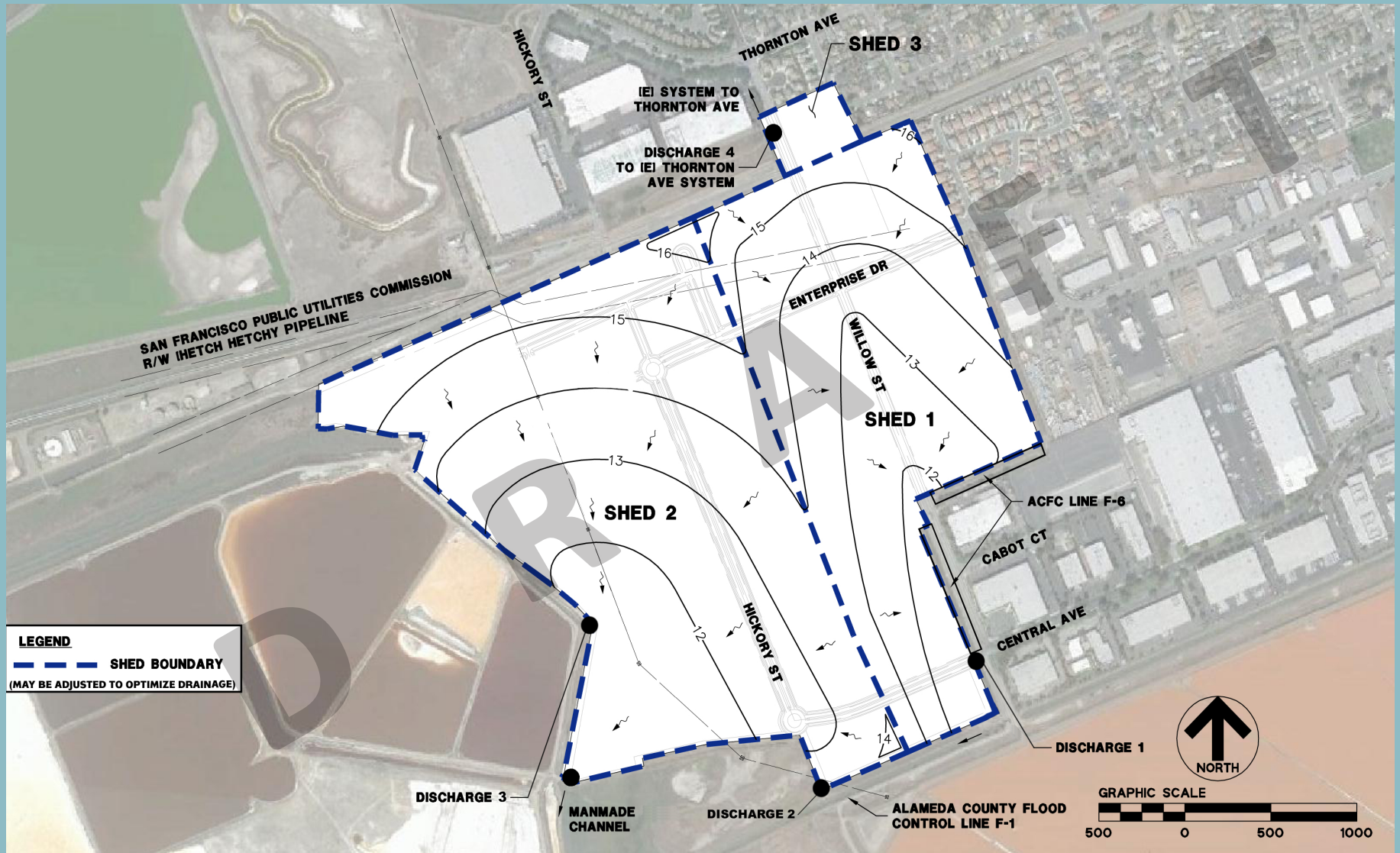


Exhibit 7.2 - Conceptual Grading / Drainage Plan

NOTE: Nothing in this Plan is intended to suggest that the Grades/Elevations of existing Willow Street and Enterprise Drive would change

presented here. Nothing in this plan is intended to suggest that the grades/elevations of existing Willow Street and Enterprise Drive would change.

Proposed Drainage Sheds

The Conceptual Grading and Drainage Plan would create three distinct drainage shed areas within the Plan area as follows (see Exhibit 7.3, Conceptual Drainage/Shed Plan):

Shed 1:

- F-1 East Drainage Area (South of DRC)

The conceptual grading plan anticipates that the drainage patterns in the eastern portion of the Plan area, south of the DRC, will generally match those planned for in ACFC's drainage map for Line F-1. The area is currently largely undeveloped and ACFC's planning anticipated a composite run-off coefficient of 0.64, so there may be available capacity within the Line F-1 channel. Actual available capacity within the channel should be confirmed during development of the final plans, and the existing outfall into Line F-1 should be assessed to verify that it is adequately sized and in adequate condition to serve the area at buildout. The exact location of the watershed boundary between the east and west drainage areas will be adjusted and designed to utilize all available capacity within the F-1 channel and to accommodate phasing within the Plan area. Areas that would produce storm water runoff that extends the capacity of the F-1 line will be included in Shed 2.

Lands north of the San Francisco Public Utilities Commission (SFPUC) right-of-way will likely require crossings of the Hetch-Hetchy Pipeline. Prior to final design, the pipeline must be potholed at any proposed crossings to verify that they are at a sufficient depth to allow the storm drainage lines to pass over them. If they are not at sufficient depth, additional fill material may be required to raise the area.

Shed 2:

- West Drainage Area

The conceptual grading plan intends that the westerly portion of the Plan area drain to an existing man-made channel.

As in Shed 1, a portion of this shed lies north of the SFPUC right-of-way and any proposed crossings would have to be similarly investigated and potentially mitigated with fill material.

Shed 3:

- Willow Street Drainage Area

The portion of the Plan area that is north of the DRC will be tied into the existing City-owned lines in Willow Street. When the final plan is prepared, the City-owned lines will need to be analyzed to ensure that they can accommodate the increased run-off. Detention may be needed so that post-project peak flow rates to not exceed pre-project peak flow rates if the system is not capable of accommodating additional flows.

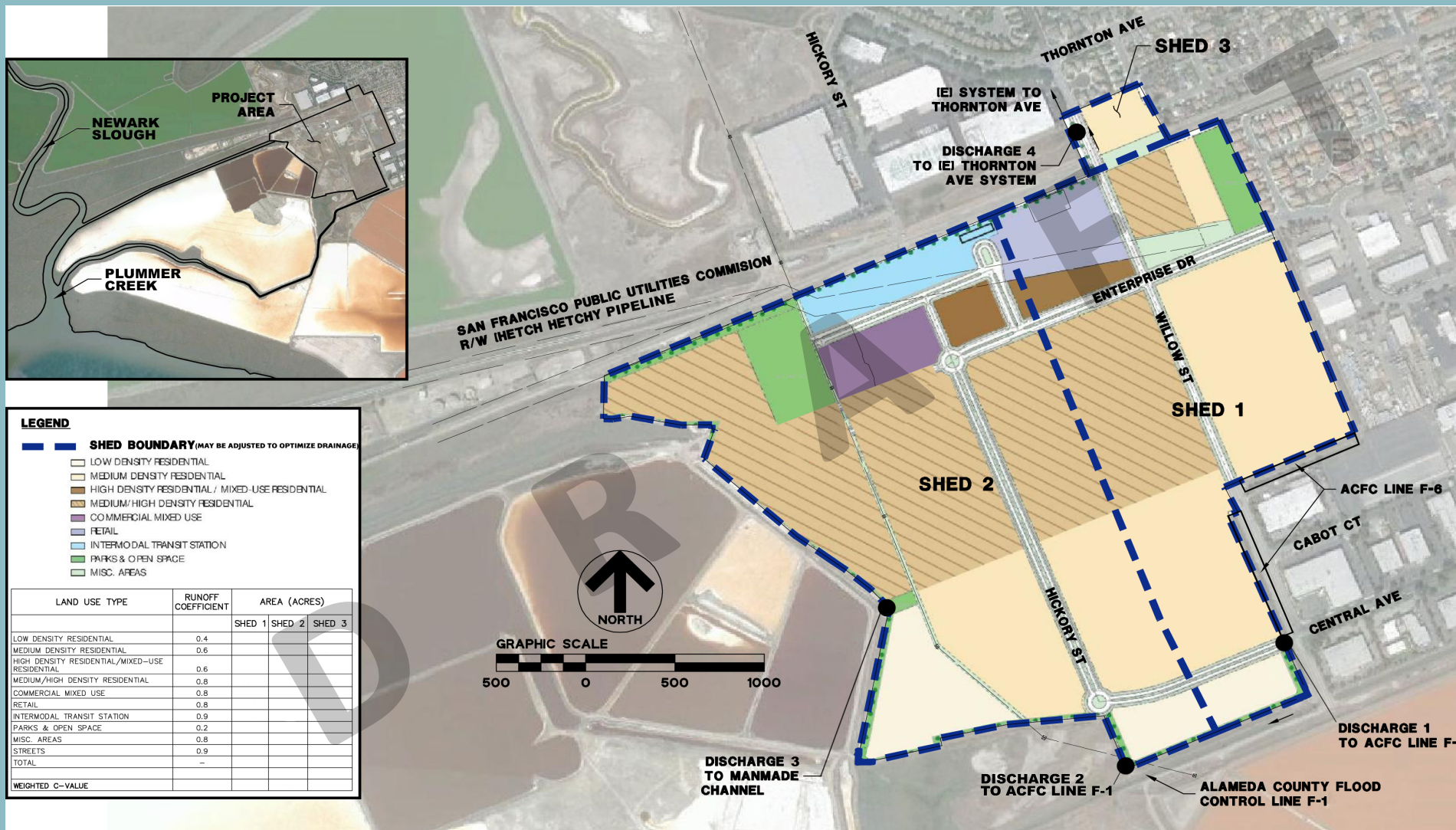


Exhibit 7.3 - Conceptual Drainage / Shed Plan

Outfalls and Detention Requirements

Shed 1 - F-1 East Drainage Area (South of DRC)

The F-1 East Drainage Area will generally connect to existing City of Newark facilities. One or two new outfalls may be required. An assessment will need to be done to determine if regulatory permitting would be required. Detention will not be needed within this area as long as peak discharge rates do not exceed those assumed by ACFC and the City of Newark when planning the receiving facilities.

Shed 2 - West Drainage Area

The Western Drainage Area will require an assessment be done to determine if regulatory permitting would be required.

ACFC requires that primary drainage systems (those serving a drainage area between 50-acres and 10-square miles) convey the 15-year storm, and secondary systems (those serving a drainage area less than 50-acres) convey the 10-year storm event. In addition, a number of different hydraulic conditions must be checked.

Shed 3 - Willow Street Drainage Area

The Willow Street Drainage Area will connect to existing City of Newark facilities and require no new outfalls. Detention will not be needed within this area as long as peak discharge rates do not exceed those assumed by ACFC and the City of Newark when planning the receiving facilities.

Grading

The drainage systems within the Plan area will be designed so that lots, streets and parks will be graded to convey surface runoff to new inlets within the development, which will then transport the storm water through underground piping networks to discharge outlets. All new public and private streets are to be designed to comply with the requirements of the City of Newark. The proposed grading must conform to FEMA and City of Newark requirements where applicable. Final grading plans will reflect final sizing and routing of primary and secondary drainage conveyance lines, which will in turn be a function of the final land plans. Parks or other open areas that are incorporated into the final plan may not need to be filled to the elevations depicted in the conceptual plan, but any depressed area may be subject to inundation during storm events. Final grading plans will be subject to review and approval by the City.

Due to the significant quantity of fill material required to raise elevations across the site, a long-term staged import fill operation may be needed, which may include the need for interim rough grading and stockpiling plans. The rough grading and stockpiling plans should be flexible enough to respond to changing conditions related to individual project identification and phasing, different property ownerships, access and material availability. The plan will thus need to be prepared in conjunction with geotechnical and environmental investigations and recommendations for fill materials, import sources, earthwork guidelines, settlement monitoring, on-site soil remediation and other criteria.

The following polices related to Stormwater Management Practices will be included as a part of the General Plan Amendment for the Specific Plan project.

Stormwater Management Policies

Prior to approval of Final Maps or development projects within the Specific Plan, a Drainage and Flood Management Master Plan shall be prepared for the Plan area or portions thereof if implementation is to be phased. The Master Plan shall be prepared in collaboration with Alameda County Flood Control and Water Conservation District, the City of Newark Public Works Department, the City of Newark Planning Department, and the City of Newark Parks and Recreation Department. The Plan shall:

I-6: Document the overall drainage and flood control concept to be employed within the Plan area to ensure adequate and safe storm flows and to minimize flooding.

I-7: Address funding and responsibility for long-term maintenance of the flood control improvements.

I-8: Demonstrate how the natural hydrologic functions of the site are integrated with the storm drainage system and the overall site design, to the maximum extent feasible.

I-9: Identify how improvements can be phased for each development area.

I-10: Continue the Alameda County Flood Control and Water Conservation District Drainage Area Fee Program to fund

flood control improvements in the Plan area.

I-11: Ensure that the new development provides needed drainage and flood protection improvements in proportion to a project's impacts, to assure an equitable distribution of costs to construct and maintain drainage infrastructure.

I-12: Minimize total impervious areas by allowing narrow road sections and shared driveways, and using pervious materials on driveways, gutters, and off-street parking areas, where appropriate to reduce runoff.

I-13: All new public facilities shall conform to the Plan area details.

I-14: The design of storm water collection and conveyance systems will minimize erosion and other potential problems for on-site and adjacent properties.

I-15: The residential design includes active and passive open spaces, thereby helping to minimize increases in impervious surfaces and associated site runoff.

I-16: Educational flyers and other materials will be supplied to the residential users to increase their understanding of water quality and best management practices.

I-17: The project will include storm drain system signs or stenciling with language to discourage illegal dumping of unwanted materials into the catch basins and field inlets.

I-18: The commercial uses will include on-site sediment and oil filtering devices for the pretreatment of the major paved areas.

Storm Water Quality

During Construction

The project will implement construction Best Management Practices (BMPs) to ensure that water quality is protected. Construction BMPs include the erosion control measures, sediment transfer reduction measures and dust control measures. Training protocols for the site contractor(s) and personnel will help ensure proper construction Best Management Practices prior to construction activity. In addition, the site developer will retain a construction manager familiar with National Pollutant Discharge Elimination System (NPDES) permit requirements to monitor construction activities. These measures would reduce potential construction impacts to water quality.

The project will need to use drought-tolerant landscaping wherever possible. The project will also install efficient irrigation systems, such as drip irrigation and automatic irrigation systems to minimize excess runoff.

Post Construction Water Quality

Each development area within the Plan area will be responsible to meet the requirements of Section C.3 of the Alameda Countywide Clean Water Program's (ACCWP) NPDES permit with the California State Water Board, the City of Newark requirements, and other applicable local, state and federal requirements. Various storm water treatment options for post-development treatment measures

could be appropriate for specific applications. These include bioswales, infiltration trenches, media filtration devices, pervious surface treatments, and bioretention areas.

Implementing storm water treatment measures for run-off from backbone streets will be the responsibility of the project that installs the backbone street. In the event that phasing of projects within the Plan area requires some projects to install backbone improvements beyond their particular project frontage, additional right-of-way may be needed along those backbone streets to accommodate necessary storm water treatment measures. Additional right-of-way needs will be addressed with final phasing and backbone street designs.

The project developer shall provide information and instructions to future residents before moving into their new homes regarding water quality, Best Management Practices, and pollution prevention. Each project should include requirements for the Homeowners Association and Commercial users to implement the following measures within any common landscaping and open space areas:

- Material Use Controls, which include good housekeeping practices (storage, use and cleanup) when handling potentially harmful materials, such as cleaning materials, fertilizers, paint, and where possible using safer alternative products.
- Material Exposure Controls, which prevent and reduce pollutant discharge to storm water by minimizing the storage of hazardous materials (such

as pesticides) on site, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

- Material Disposal and Recycling, which includes storm drain system signs and stenciling with language to discourage illegal dumping of unwanted materials.

The project shall include a prohibition on the dumping of waste (solid waste, liquid, and yard waste) into storm drain systems, open space areas, and creeks.

The project shall include provisions for private street, parking lot and storm drain maintenance activities. These activities control the movement of pollutants and removal of them from the pavement through catch basin cleaning, storm drain flushing, street sweeping, and by regularly removing illegally dumped material from the project site.

The commercial operators shall be responsible for the inspection, maintenance and repair of sediment and oil filtering devices for the pretreatment of the major paved areas.

Potable Water

Water Supply and Demand

Water to the Plan area is supplied by the Alameda County Water District (ACWD), which also serves water to the Cities of Fremont and Union City. ACWD's three primary sources of water supply are: 1) the State Water Project (SWP); 2) San

Francisco's Regional Water System; and 3) local supplies. The SWP and San Francisco Regional Water Supplies are imported into the District service area through the South Bay Aqueduct and Hetch-Hetchy Water System, respectively. Local supplies include fresh groundwater from the Niles Cone Groundwater Basin (underlying the District service area), desalinated brackish groundwater from portions of the groundwater basin previously impacted by seawater intrusion, and surface water from the Del Valle Reservoir south of Livermore. The primary source of recharge for the Niles Cone Groundwater Basin is percolation of runoff from the Alameda Creek watershed. To a lesser degree, a portion of ACWD's SWP supplies are also used for local groundwater percolation. Infiltration of rainfall and applied water within the ACWD service area also contribute to local groundwater recharge.

Fifteen million gallons of storage is provided by an existing potable water reservoir located in the Coyote Hills at approximately elevation 200 for the City of Newark and Union City portions of the District's lower pressure zone ("Zone 1"). The District expects that this volume, together with other existing and planned Zone 1 water storage will be sufficient to accommodate all projected growth within Zone 1.

To comply with the provisions of Senate Bills 610 and 221, which both passed the California State Senate in 2001, ACWD has prepared a Water Service Assessment that verifies that the project is consistent with their planning assumptions and is included in ACWD's forecast and water supply planning.

Water Treatment and Distribution System

ACWD operates two treatment facilities with a capacity totaling nearly thirty (30) million gallons per day (MGD), a Blending Facility with a capacity of fifty (50) MGD, and a Desalination Plant with a capacity of five (5) MGD. The water received directly from the State Water Project, which comes from the Sacramento/San Joaquin River Delta via the South Bay Aqueduct, is treated at these plants before being delivered to customers, primarily in Central and Eastern Fremont. Most of the water purchased from the San Francisco Water Department that is taken directly out of the Hetch-Hetchy System is blended at the District's Blending Facility with water from local groundwater aquifers, though some customers receive San Francisco Regional water directly. San Francisco Regional Water and water recovered from local groundwater aquifers requires no treatment.

Water for the Specific Plan is delivered through a 16-inch transmission main in Central Avenue at the south end of the site that creates a loop by extending up Willow Street and connecting to an existing 12-inch main in Enterprise Drive. There are also 16-inch transmission mains stubbed at the south end of Hickory Street and at Willow Street, just north of the DRC tracks. The existing looped system in Central Avenue and Enterprise Drive will be extended westerly to include Hickory Street. In order to serve the planning area, a 16-inch connection between the transmission mains south and north of the tracks may be required to maintain adequate pressure and redundancy in the system.

Within the Specific Plan, new projects will be required to install distribution mains within the street network to serve fire and domestic water needs. Final sizing of any particular line will be subject to modeling of the system that must rely on water use parameters of any particular project or group of projects. It is expected that new distribution mains in backbone streets will be 10-inch or 12-inch in diameter and distribution mains in local streets will be 8-inch or 10-inch in diameter. A water model will need to be performed based on final land plans, building types, water demands, fire flow requirement, and phasing, to establish final, actual line sizes in each street and to determine whether the 16-inch connection between mains south and north of the railroad tracks describe above will be required.

The following polices related to Potable Water will be included as a part of the General Plan Amendment for the Specific Plan project.

Potable Water Policies

I-19: Expand the water distribution system such that it is adequate to serve new development in the Plan area.

I-20: Work with the Alameda County Fire Protection District to determine required fire flow.

Water Conservation Policies

To reduce water consumption, require the installation of:

I-21: Low-flow showerheads, faucets, and toilets.

I-22: Low-flow irrigation systems in public rights-of-way, public parks, and recreation areas.

I-23: Drought-tolerant plant palettes in all new streetscape areas.

To reduce water consumption, recommend the installation of:

I-24: Low-flow irrigation systems in private landscaped areas.

I-25: Drought-tolerant plant palettes in private landscaped areas.

Recycled Water

Although ACWD does not currently have a recycled water supply, the District's long-term supply strategy includes a recycled water program to be implemented by 2020, which will serve non-potable demands (e.g. landscape irrigation and industrial process water). A potential source of recycled water is from a joint project with Union Sanitary District (USD), which currently discharges the majority of wastewater it treats to the San Francisco Bay via the East Bay Dischargers Authority pipeline facilities. Potentially, recycled wastewater would originate at either the Alvarado Wastewater Treatment Plant, approximately 5-miles north of the Specific Plan, or at a newly constructed satellite recycled water treatment facility in southern Fremont at USD's Irvington Pump Station. Given the lack of any definitive plans to bring recycled water mains to the area, the high density nature of the project, and the

lack of large, concentrated open space areas, it is uncertain if recycled water will be available for the project. However, landscape irrigation systems should be designed and installed to purple-pipe standards, and initially connected to the potable system so that they may be switched over if recycled water becomes available.

Sanitary Sewer and Wastewater Management

Wastewater Collection System

The City of Newark is within the service boundaries of the Union Sanitary District (USD), which also serves the Cities of Fremont and Union City. The District owns and maintains a system that consists of gravity and pressure pipes, pumping facilities, detention facilities and the Alvarado Treatment Plant, which is located at the west end of Benson Road in Union City, north of the Plan area.

The Specific Plan area is primarily served by a 36-inch trunk gravity main in Willow Street (Willow Street 36-inch), which carries wastewater flows from the southwest portion of Newark, north through the Plan area, across (beneath) the Hetch-Hetchy Pipeline and SPRR and into parallel 36-inch and 42-inch trunk gravity main that flows to the west in the Southern Pacific Railroad right-of-way (SPRR Mains). The SPRR Mains combine into a single 48-inch gravity sewer main that continues to the Newark Pump Station near the northwest corner of the Plan area. Wastewater is pumped from the station through twin 33-inch force mains to the Alvarado Treatment Plant, approximately 5-miles to the north. USD last updated their Master Plan in 2000 and it indicated capacity deficiency in the 42-inch trunk main in the

Plan area, just east and west of Willow Street for build-out conditions.

The Newark Pump Station recently underwent an \$11-Million expansion and upgrade project and consists of six submersible pumps. The station is expected to be able to accommodate any increases in flow rates that might occur within the District for the foreseeable future. USD owns land adjacent to the station that it can utilize to construct a wastewater detention facility, in the event that wastewater flows ever exceed the capacity of the pump station. The long term plan is to add a third force main between the Newark Pump Station and the Alvarado Treatment Plant.

In addition to the Willow Street 36-inch, there is a 14-inch gravity line in Enterprise Drive (Enterprise Drive 14-inch) that flows from east to west before turning to the northwest to run diagonally across the FMC property. It then continues to the west adjacent to the south edge of the Hetch-Hetchy easement before turning north to cross under the Hetch-Hetchy Pipeline and enter the Newark Pump Station. This line is in disrepair, is shallow and only serves as a redundant line to the Willow Street 36-inch and the SPRR 42-inch, in the event of excessive surcharging in those lines. The Enterprise Drive 14-inch and the Willow Street 36-inch are the only two sewer lines near the Plan Area to cross the Hetch-Hetchy Pipeline.

Dual 33-inch force mains, owned and operated by the East Bay Dischargers Authority (EBDA), traverse the site generally from south to north. They are at a depth of approximately 5-feet of cover and are located within the existing right-of-

way for Hickory Street between the Torian and Ashland holdings to the east and the Cargill property to the west, then follow FMC's property southern boundary before heading northerly again. The force mains do not serve the Plan area but rather carry wastewater from the Irvington Pump Station, near the Fremont Boulevard Interchange at Interstate 880 to the Newark Pump Station. These pipes are sensitive to movement and its joints are subject to failure should heavy construction occur over or in the vicinity of the pipeline. Because they are a critical backbone infrastructure element serving areas upstream (notably the City of Fremont) and due to their condition, care must be taken so that the implementation of the Specific Plan does not compromise their structural integrity, both in the long term and in the short term during construction. In general, additional structural mitigation measures may need to be installed at selected locations to accommodate any crossings of the pipes by heavy equipment that might be needed during construction, or traffic crossings in the long term. Roadways should be planned to run parallel with an offset that would protect the pipes or designed to mitigate the effects of traffic loads. Pipes should be field surveyed to verify their exact location before final alignments of streets are established. It is anticipated that an average of 5-feet of fill material will need to be placed over the pipes to raise adjacent development areas out of the flood plain and to comply with City of Newark Flood Elevation and minimum street elevation standards.

The City of Newark may consider reducing their standards in this area to lessen impacts to the pipes. For planning purposes, this amount of fill is not expected to be a problem,

but no fill should be placed over the pipes without detailed study and recommendations from a qualified geotechnical engineer. Similarly parking lots should be installed directly over the pipes only with recommendations from a qualified geotechnical engineer.

Alternately, the project proponents can explore the option of replacing the EBDA lines in a new alignment within Hickory Street. This option would require detailed study and proponents would need to demonstrate to the Union Sanitary District and EBDA that the risks inherent in making new connections to active, non-redundant, major wastewater force mains will be adequately mitigated.

The Specific Plan proposes to rezone the area to allow for the development of up to 2,500 residential units, 20 gross acres of commercial space (including the Transit Station area) and approximately 16-gross acres of parks and open space. USD must plan for approximately a 50% increase in wastewater flows from the planning area under the new zoning than they had been planning for with the land as zoned in the City of Newark General Plan. Coupled with the line deficiencies identified in the 2000 USD Master Plan, it is anticipated that improvements may be required to both the 36-inch gravity trunk sewer in Willow Street and possibly the 42-inch gravity trunk sewer in the SPRR.

The redundancy that is provided by the Enterprise Drive 14-inch sewer should be maintained after development of the Specific Plan. This could be done either by saving the Enterprise 14-inch sewer or providing for an auxiliary

redundant line that might better fit the proposed Specific Plan street network. The Enterprise 14-inch crossing of the Hetch-Hetchy Pipeline should be utilized in any case. Furthermore, any new or upgraded crossing of the Hetch-Hetchy Pipeline will require a permit from the San Francisco Public Utilities Commission.

The Newark Pump Station recently underwent an \$11 Million upgrade and it is anticipated that no further upgrades will be needed to serve the proposed Plan. The force mains that convey flow from the station to the Alvarado Treatment Plant may be undersized for the built-out plan. An additional line may be needed or, alternatively, an equalization basin near the pump station may be constructed and utilized to detain wastewater during peak times. The District has land near the Newark Pump Station for this purpose, but has not constructed a basin. Required improvements, schedules for their implementation, and funding options will be addressed in the Union Sanitary Master Plan, which is scheduled for publication in June, 2011.

In general most new connections to the existing wastewater collection system are anticipated to be made to the Willow Street 36-inch gravity main. A new 12-inch gravity sewer main may be required to provide service to the areas located west of the FDBA mains to avoid potential conflict. There will be at least one connection made north of the Hetch-Hetchy Pipeline before the line crosses the Dumbarton Rail Corridor. Connection points south of the Pipeline will be a function of final project designs and phasing. There is no particular limit to the number of connections that can be made, but because

of inherent expense associated with connecting to trunk sewer mains, project proponents will want to plan projects so as to minimize the total number of connections.

The 10-inch line that crosses both the DRC and the Hetch-Hetchy Pipeline at the northwest corner of the Planning Area, as mentioned above, will need to be maintained for redundancy. Direct connections to this line or a new trunk sewer in this location may be necessary to service the Western most portions of the Plan area to avoid potential crossing conflicts with the existing EBDA lines and to minimize the elevation of the finished grades. Project proponents considering direct connections to this line will need to verify its depth and its condition with a video survey.

Treatment and Discharge

The treatment plant is rated to treat and discharge 30 Million Gallons per Day (MGD) and is currently treating an average peak flow of 25.3 MGD in dry weather. Infiltration and inflow is not a significant issue within the District. The District has a National Pollutants Discharge Elimination System (NPDES) permit with the California State Water Board that allows discharges of up to 33 MGD.

The following polices related to Wastewater Management Practices will be included as a part of the General Plan Amendment for the Specific Plan project.

Wastewater Management Policies

I-26: Expand the wastewater collection system such that it is

adequate to serve the new development in the Plan area.

I-27: The Union Sanitary District is scheduled to begin updating their Sewer Master Plan in the Fall of 2010, with a document available by June of 2011. As part of the updating process, USD will gather information on planning activities at each City within its District (Fremont, Newark and Union City) to help guide the Master Plan. It is important that the City of Newark continues to engage in this process and is forthright with respect to the Specific Plan, so that the Sewer Master Plan can provide concrete documentation of the upgrades required to implement the Specific Plan.

The following polices related to Solid Waste Management Practices will be included as a part of the General Plan Amendment for the Specific Plan project.

Solid Waste Management Policies

I-28: All new developments shall participate in all solid waste source reduction and diversion programs in effect at the time of the issuance of building permits.

I-29: All projects in the Plan area shall comply with the City's Construction and Demolition Debris recycling regulations by preparing a Waste Management Plan and diverting at least 50 percent of all construction and demolition debris.

I-30: Restaurants should use on-site composting systems if a food waste recycling program is not available.

I-31: Trees, stumps, vegetation, and soils associated with

excavation and land clearing shall be composted, recycled, or reused, except when soils may be contaminated with hazardous materials, or where other conditions make this infeasible as determined by the City.

7.4 NON-MUNICIPAL UTILITIES

Natural Gas and Electricity

Existing power lines extend throughout the Plan area. These lines have been installed to serve the mix of industrial uses that first located in this area of Newark. As a result, the existing power grid consists of 21 kilovolt lines that have sufficient capacity to serve all likely development scenarios.

For natural gas supply, it is likely that new development within the Plan area will be served by an existing low-pressure two-inch line that runs along Willow Street from Central Avenue to just south of Enterprise Drive.

Telecommunications

Communications within the Plan area are currently served by overhead AT&T lines on Enterprise Drive and underground lines on Central Avenue. In addition, fiber-optic cable exists along part of Willow Street. AT&T anticipates that it will continue to expand its fiber-optic network on an as-needed basis, so it can be anticipated that full “high-end” phone and data services should be available to meet the needs of future development within the Plan area.

There are no existing Comcast facilities within or immediately adjacent to the Plan area. However, according to a company representative, Comcast is very interested in providing new

development in this part of Newark with a full range of entertainment and communications services.

The following polices related to Non-Municipal Utilities will be included as a part of the General Plan Amendment for the Specific Plan project.

Non-municipal Utilities Policies

I-32: Construction/Improvement Plans should show all existing service corridor and utility easements to ensure proper inter-agency coordination prior to issuing any grading permits. Plans should show the location and dimensions of each pipeline within the easement or right-of-way. Coordinate with:

- Chevron to map all active and abandoned petroleum product pipelines.
- PG&E to map all active natural gas pipelines.
- City of Newark Public Works Department to map all stormwater pipelines.
- Union Sanitation District to map all sewer pipelines.
- Alameda County Water District to map all water pipelines.
- Work with Alameda County Water District to provide appropriate levels of environmental review, if the U.S. Bureau of Reclamation water laterals will be impacted by proposed development.
- Coordinate with PG&E to minimize impacts on the natural gas pipelines, electrical transmission towers and power lines in and near the Plan area.

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- 8.1 OVERVIEW
- 8.2 CONSISTENCY WITH CITY GOALS & POLICIES
- 8.3 IMPLEMENTATION POLICIES
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8.0 IMPLEMENTATION

8.1 OVERVIEW

The Specific Plan is a State approved document that establishes regulations and guidelines that will implement the vision of the Plan. The Specific Plan is also a tool utilized by the City to further its major community goals and objectives. All development projects in the Plan area are required to be consistent with the Specific Plan.

8.2 CONSISTENCY WITH CITY POLICIES & PROGRAMS

This Specific Plan furthers two of Newark’s Major Community Goals, pursuant to the City’s General Plan.

Goal #1 Maintain a desirable quality of life in the community through preservation of the small town neighborhood atmosphere and the promotion of balanced land use that takes into account the need for economic diversity and future financial well being of the city.

This Specific Plan will enhance the community by adding amenities available to the community, including parks and open space, and by creating a gathering spot for residents in a walkable scale environment (Program 4). The Specific Plan will also provide for the development of land which is currently vacant and under utilized in line with the General Plan’s Community Goals (Program 7). Finally, the Plan will provide for a mix of uses, including retail, commercial, and residential opportunities, in close proximity to transit (Policy A). At the same time, the Plan area will not result in undue burdens upon the City as the Plan makes provisions for any Plan area increases in services, utilities and traffic through the environmental review process (Goal 1, Program 5).

Goal #2 Promote high-quality development that establishes the City’s character as unique from other cities in the grater Bay Area.

The Specific Plan process offers the City of Newark the opportunity to lay out a vision for its community and to establish specific guidelines to ensure that the intent is correctly implemented. Through this process, the Specific Plan will integrate with and compliment existing neighborhoods while creating a new community with a distinctive character offering enhanced opportunities to live, work and play.

8.3 IMPLEMENTATION POLICIES

Implementation Policies

IM-1: The City of Newark will adopt the Specific Plan by Ordinance. Concurrent entitlements to implement the Specific Plan shall include a Specific Plan Environmental Impact Report (EIR), a General Plan Amendment, a Zoning Amendment, an Affordable Housing Program, and all other governing documents necessary for consistency with the City's General Plan.

IM-2: The Specific Plan, the Plan's "Environmental Impact Report", plus associated documents, identify specific policies, regulations, guidelines and mitigation-measure alternatives, available and applicable to the physical development of the Plan area.

IM-3: Illustrative examples and written descriptions are utilized to convey intent. Details and graphic examples throughout the Plan cover topics such as; design guidelines, landscaping, street layout and streetscape design, building setbacks and size, common area pedestrian links, parks, trails, and public gathering places.

Affordable Housing Implementation Strategy

The Specific Plan will comply with the Affordable Housing elements required by the City of Newark. Implementation of the Plan area will require adoption of an Affordable Housing Program that provided for the funding, and/or development of "affordable units" - totaling 15% of the total number of dwelling units.

The Specific Plan Affordable Housing Program alternatives will likely include a combination of the City's existing requirements, plus new alternatives that better address the City's housing needs.

The following are possible elements of the Affordable Housing Program:

Inclusionary units;

- Affordable units provided by the development within the Plan area.

In-Lieu Fees;

- In-Lieu fees paid to the City to be utilized for the delivery of Affordable Housing Units.
- In-lieu fees shall be an option as of right for meeting the requirements of the Affordable Housing Program.

Off-Site provision for Affordable Housing;

- Off-site alternatives might include the rehabilitation of existing off-site structures, and/or the new construction of off-site units.

8.4 IMPLEMENTATION METHODS AND PROGRAMS

Plan Area Projects - Processing and Approval

The California Environmental Quality Act (CEQA), requires a process of thorough review and study of the environmental impact of a project, project alternatives and feasible measures to mitigate the impacts of a project prior to its approval by a public agency. This Specific Plan and its Environmental Impact Report (EIR), complies with that process. After public review, approval and adoption of the Specific Plan and its EIR, the Plan is deemed to have complied with CEQA. An Applicant for a specific project within the Specific Plan area will then process the proposed project according to the requirements of the State and City's Subdivision Map Act and/or the City's Zoning Ordinance, as amended. The Map Act process (which applies to specific types of land uses) involves the processing of both Tentative and Final Maps for landowners wishing to subdivide legal parcels. The Zoning Ordinance governs the permissible uses within a given zoning area and certain building controls.

As Projects are submitted to the City and processed accordingly depending on the specific for each land use category, which can be through the Subdivision Map Act and/or Zoning Ordinance. Proposed projects within the Specific Plan area will be processed subject to, and consistent with, the concepts set forth in this Specific Plan. If a project is consistent with the EIR certified Specific Plan and Zoning Ordinance, as amended, no further review under CEQA will be necessary.

In the case of this Specific Plan, all Tentative and Final Maps will be processed as set forth in Title 16 of the City of Newark Municipal Code and determinations made thereunder will be consistent with the standards and guidelines enumerated in this Specific Plan document. Any permits needed under the Zoning Ordinance shall be processed as set forth in Title 17 of the City of Newark Municipal Code.

Plan Modifications

All actions or decisions or Plan modifications which are necessary solely to implement the intent and character of this Specific Plan are considered minor and administrative in nature and are not subject to further discretionary approvals. The Planning Director will have authority to approve all such minor actions or decisions or modifications to the Specific Plan within the context and guidelines contained within this Specific Plan document. Any major modifications proposed that go above and beyond implementing the intent and character of this Specific Plan, would require a subsequent EIR or supplement to the Specific Plan EIR, such as an increase in density above or beyond that studied in the EIR. Minor modifications do not require a formal Plan amendment, e.g alterations to the boundaries of planning areas which do not result in a greater than 20% changes in the acreage assigned to an area.

Allocations and Transfers

Provisions for density and residential unit allocation, and provision for future density and unit transfers, have been anticipated, addressed and approved by this Specific Plan in Chapter 4. Such transfers are subject to the specific terms

and conditions outlined in this Plan and its associated documents.

Development Phasing

The Specific Plan is intended to be built over time and in various phases. Phasing is a decision that involves many considerations, some of which are: a) timing of available land, b) market demand for various product types, and, c) availability of financing and funds for the installation of infrastructure. There are no requirements within this Specific Plan for parcels to be developed in any particular order so long as supporting infrastructure is available, or made available, to accommodate new development. The intent of the Specific Plan is to allow each owner to develop their Parcel or Parcels independent of other owners and independent of any regulations imposed upon a particular owner or owners.

This Specific Plan has been created to allow for various alternative methods of phasing. Studies have been completed that identify both existing and future capacity for services and utilities necessary to develop the Plan area. At the time of individual project consideration, during the mapping and permitting process, the project applicant will utilize the studies and other background information in its proposal for development. The applicant will then work in conjunction with the City and other responsible parties, to ensure that the utilities and backbone infrastructure necessary to serve the proposed development will be in place, consistent with this Specific Plan.

Allocation of Specific Plan area Costs

Costs associated with certain common area improvements, certain common area amenities, and other specific items to be constructed as part of the Plan, will be proportionately allocated by the property owners within the Specific Plan area among themselves, in a multi-party cost sharing agreement and based upon a method of cost allocation agreeable to the property owners.

Development of Infrastructure Financing

Implementation of the Specific Plan and ongoing maintenance will involve various financing and funding mechanisms. The EIR for the Specific Plan will identify specific funding mechanisms available for Plan Implementation. Some of the many options available are:

Private Financing for Plan Improvements:

- Private Funds
- Private loans
- Cash
- Reimbursement Agreements
- Private Utility Installation and Reimbursement Agreements

Public Financing Mechanisms created for the Plan are:

- Infrastructure Assessment Districts (to provide Plan area services);
- Lighting and Landscape Maintenance Districts (to provide Plan area maintenance); and,
- Area-wide Benefit Districts (to provide improvements) and Mello Roos Community Facilities Districts.

Financing Mechanisms for Plan area and Beyond

- Regional Benefit Districts; and,
- Area-Wide Impact Fee for contribution to construction of the two lane Central Ave. overpass.

Fee Based Programs

- Development Impact Fees; and,
- Capitol Improvement Programs.

Federal and State Programs

- Transportation Grants - e.g, MTC;
- Housing Grants; and,
- Environmental Clean-Up Program Grants.

Redevelopment Area Benefits

- Tax Incremental Revenue;
- Land Acquisition and remediation provisions; and,
- Property environmental remediation and clean-up provisions.

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