San Pedro Urban Greening Implementation Plan

SAN PEDRO GREEN
OUTLETS & PATHWAYS

ACKNOWLEDGMENTS

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Members of the Central San Pedro Neighborhood Council

Members of the Coastal San Pedro Neighborhood Council

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EXECUTIVE SUMMARY

This San Pedro Urban Greening Implementation Plan is the culmination of a multi-year community-based planning effort that began in the Spring of 2013 with the creation of the San Pedro Urban Greening Advisory Committee (UGAC), and was completed with the publication of this Plan in December 2017.

GOALS:

Funded with a grant from the State of California Resources Agency to the Los Angeles Conservation Corps at the behest of local stakeholders, the original goal as stated within that grant proposal was:

"…. the identification of synergistic downtown green space linkages that run from the waterfront connection points, through downtown community sites, and to upland park area connection points. The resultant San Pedro 'waterfront to hills' green space planning effort would truly bind the San Pedro community to its vital and distinctive San Pedro natural and historical legacy".

This original goal was expanded by the UGAC to include three (3) other goals:

1. That the Plan be created through a robust community based planning process;
2. That the planning process identify and map green pathway and outlet opportunities that accomplish Goal #1; and
3. That the final plan characterize these opportunities and provide direction for their implementation

CONTENT:

These goals have been accomplished and this document describes the process by which this was done and the results of that process, the Urban Greening Opportunities (Section 4). The Plan is divided into four (4) Sections with seven (7) Appendices. Section 1—Introduction, describes the background, goals and objectives for the plan. Section 2—Community Outreach, describes the community based planning process and includes results from the public opinion survey and the needs assessment. Section 3—Design Workshops, describes in more detail the process and results of those workshops. Section 4—Pathways & Outlets Opportunities, identifies, maps and characterizes the 32 "Opportunities" and gives implementation recommendations. The Appendices provide resource references and additional implementation recommendations to support development of the opportunities.

USE OF THIS DOCUMENT:

This document should be considered a "living document", and should be managed as such. It is not just a "vision" plan. It should be used as "road map" for green development that can "evolve" as each of the "Opportunities" move towards development. This Plan will remain available online as both a single downloadable PDF, and, in its various parts (by Section, and by individual Opportunity) so that each Opportunity can be updated in real time. The goal is to continue to mobilize community, regional, state and federal support for these urban greening opportunities. It may also be used to guide appropriate development in San Pedro.

SECTION 2: COMMUNITY BASED PLANNING PROCESS

This process mobilized an extensive list of local stakeholders to participate in the planning, design and opportunities se - lection during the many UGAC meetings, design workshops, a public opinion survey, and other local stakeholder meetings. They included: Council Office District 15; local neighborhood councils—Northwest, Central, Coastal; Chamber of Commerce; Port of LA (POLA); San Pedro Historic Waterfront Business Improvement District (PBID); Harbor Community Benefit Foundation (HCBF); local park advisory boards (PABs); local high schools; local community garden interests; and other local community activists. The process involved extensive information gathering from the various government agencies related to guidelines, standards, best management practices, and their respective permitting processes for implementation of the green enhancements proposed in this plan. Finally, the process involved review and analysis of the local existing conditions. The Needs Assessment sub-section summarizes the approach and the results of the needs assessment that culminated with the Green Street Typologies Matrix.

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SECTION 3: DESIGN WORKSHOPS PROCESS

There were three (3) Design Workshops. Each workshop had a defined set of goals and methodology. Each one also utilized information gathered during other phases of the overall community based planning process, including the public opinion survey and the needs assessment. The first workshop was a brainstorming exercise designed to introduce participants to the process, define what is meant by green pathways/green streets and outlets/nodes, further document existing conditions and identify community expectations for green enhancements. The second workshop presented drafts of green pathways and outlets, green street typology maps (See Needs Assessment Results), and conceptual drawings for select downtown green street typologies. Participants were tasked to comment on each of these representations. During the third workshop participants were asked to comment on the revised regional and downtown plans and individual green street typologies and to provide suggestions for specific project opportunities.

SECTION 4: GREEN PATHWAY & OUTLET OPPORTUNITIES

This section is the culmination of the entire community based planning effort. It describes each of 32 Green Pathway & Outlet Opportunities that were identified during this process. This section provides the "Road Map" for urban greening development for the San Pedro Community. The beginning of the Section contains a series of "Road Map Matrices" that list the Opportunities in the order in which they are presented in the Plan. For each listing there is a summary of the key implementation requirements. This is followed by a series of Key Maps showing the location of the Opportunities within San Pedro. Each Opportunity sub-section then contains a conceptual description of the proposed project with implementation recommendations. Please note that successful fund raising will require additional site-specific plan-ning, design, and sometimes engineering, before the improvements will either qualify for funding and/or be "shovel-ready" for construction.

Each of the 32 Opportunities is characterized as either a "pathway" or "outlet" or both. Pathways represent existing streets that can be transformed into "Green Streets". There are also dedicated off-street path- ways, such as hiking trails or alleys that are dedicated to pedestrian use. Green Streets are much more than streets with trees planted on them. They are streets that are transformed to become more pedestrian and environmentally friendly. Such streets have "active transportation encouraging facilities and enhancements" (bicycle lanes, traffic calming measures, and bus stops), pedestrian lighting, landscape bulb-outs and outdoor dining platforms, and storm water capture enhancements (bioswales or rain gardens). Outlets represent "areas" of environmental enhancement—typically parks of various scales (regional, community, neighborhood, or pocket parks), other unimproved but dedicated open space areas, and community gardens.

The order in which the Opportunities are presented is based on funding and development status. The first 10 Opportunities are projects that have been funded (or partially funded, e.g., Opportunity #10 – Gaffey Great Street) and are in some stage of development as of December 31, 2017. Some of the funding consists of existing City of Los Angeles funded programs (Opportunities #8, 9). Some of the funding was in place prior to the beginning of this planning effort (Opportunities #5, 6, and 7). Some of the opportunities were funded while the Plan was being developed (Opportunities #1, 3, 4).

One of them, Opportunity #3— Western Ave. Median Tree Planting (CD 15 funded), has already been completed. A second, Opportunity #1—Urban Forest Ecosystem Restoration (CalFire grant funding), is well underway. Some of these represent efforts that had begun before the first UGAC Meeting had been convened—Opportunity #5—Sampson Way Realignment (POLA funded), Opportunity #6—North Gaffey Parkway Phase II (Neighborhood Council project funded by POLA), and Opportunity #7—Front Street Beautification (POLA funded). Some involve the utilization of existing City of Los Angeles environmental enhancement programs— Opportunity #8—Private Property Tree Adoption Program (LADWP funded City Plants Program), Opportunity #9— Residential Turf Replacement (LADWP funded). Opportunity #2— Priority Green Streets Tree Planting Strategies—is a somewhat unique "opportunity". It is listed as #2 because the tree planting "strategies" it describes transcends any other more site-specific opportunity and should govern tree species selection for any project.

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The remaining opportunities—#11-32—were not funded as of December 31, 2017. However, it is hoped that the information provided in each of them can be used to develop funding for their implementation over the next five to ten years. The descriptions provided are conceptual with implementation recommendations. The following is a brief summary of each of these Opportunities:

11. **Interstate 110 Harbor Approach Beautification**—Project would provide environmental enhancement and beautification within open space areas along Interstate 110 between the W. Channel St. off-ramp and Harbor Blvd. terminus.

12. **N. Pacific Ave. to John S. Gibson Bicycle Parkway Connection**—Project would create bicycle lanes and green enhancements between O'Farrell at the terminus of the existing bike lanes along N. Pacific to the beginning of the John S. Gibson Scenic Highway at Channel.

13. **John S. Gibson Parkway Enhancement**—Project would provide green enhancements along the existing John S. Gibson Scenic Highway between Channel and Harry Bridges.

14. **Bandini Canyon Park to Peck Park Greenway**—Project would provide pedestrian safety and green enhancements between the Peck Park entrance on Elberon, along Bandini St. to Bandini Canyon Trail, and through to Summerland Place and the Caltrans Triangle (See Opportunity #1). This Greenway will include bicycle route, lanes and pathway improvements that will ultimately connect to the existing northbound bike lane on N. Gaffey St. at Summerland and to a to be created bike route through Black Hill to N. Pacific (Opportunity 16).

15. **Peck Park to Leland Park Pedestrian Pathways**—Project would provide enhanced pedestrian pathways that connect Peck Park to Leland Park West and Leland Park East.

16. **Summerland to N. Gaffey & N. Pacific Bike Path Connections**—Project would close the bike lane/route gap along Summerland between Cabrillo St. and N. Gaffey and on to N. Pacific through the Black Hill Neighborhood.

17. **Leland Park Slopes Environmental Enhancement**—Project would provide environmental enhancement along the slopes of Leland Park West and Leland Park East.

18. **N. Gaffey Pedestrian Path—Elberon Bridge to Miraflores**—Project would construct a safe pedestrian path/sidewalk along the west side of N. Gaffey between the existing sidewalk that ends under the Elberon Bridge to Miraflores with spur connections into the existing Leland Park West terraces

19. **N. Gaffey—Summerland Landscape Median**—Project would create a raised landscape median along N. Gaffey between Summerland and Channel where a median lane currently exists, close a sidewalk gap on the east side of N. Gaffey between Summerland and the Elberon Bridge, enhance the existing slope along the same segment, landscape existing medians along Summerland east of N. Gaffey, and provide bus stop enhancement at the Summerland/N. Gaffey intersection

20. **N. Gaffey St. Parkway Phase III Channel to Anaheim St.** —Project would create raised landscape medians, install parkway enhancements, and construct missing sections of curb, gutter, and sidewalk along N. Gaffey between Channel and Anaheim Streets, thereby completing a continuous "green pathway" between Downtown San Pedro and Machado Lake (Harbor Regional Park).

21. **Pacific Coast Trail Connections**—Project would complete the Pacific Coast Trail Connections from South San Pedro to Anaheim St. along N. Gaffey, to Harry S. Bridges along Harbor Blvd. and John S. Gibson, along Pacific Ave. to Knoll Hill, within the Port of LA, and along connectors between the Harbor and upland San Pedro.

22. **Pacific Ave. Metropolitan Green Street**— Project would transform Pacific Ave. between 5th St. and 13th St. as per the recommendations for the Pacific Ave. Metropolitan Green Street Typology (See Needs Assessment Results). Enhancement would include raised landscape medians, rain gardens, landscape/outdoor dining bulb-outs, pedestrian lighting.

23. **Downtown Core Green Streets**—Project would transform 6th and 7th Streets between Pacific and Harbor into a one-way couplet with a full suite of Green Street enhancements designed to create a vibrant pedestrian-oriented environment with outdoor dining opportunities.

24. **Downtown Parking & Alley Paseos**—Project would convert existing alleys and parking lots into a network of urban paseos with pedestrian-oriented landscape enhancements that will "activate" underutilized pedestrian connections in Downtown San Pedro.

25. **Channel Green Street—Park Western to N. Gaffey**—Project will convert the unimproved parkway along Channel St. from N. Gaffey and John S. Gibson and Park Western Drive. The primary improvements would include construction of curbs & gutters, pedestrian pathways (sidewalks) and green parkways planted with trees and rain gardens as technically feasible. This pathway would connect the residents above Gaffey to the transit stops on Gaffey and at John S. Gibson/N. Pacific and shoppers from the transit stops to the stores on Western Ave.

26. **22nd St. Brownfield Reclamation**—Project would convert an existing brownfield along 22nd St. near Miner St. into a park-type environment like that which exists at the 22nd St. Park.

27. **Alma Park Historic Restoration**—Project would restore the "natural watershed functionality" that once existed at Alma Park and the existing cut stone retaining and seat walls in the upper and lower "grotto" areas, while protecting the existing historic landscape elements.

28. **N. Pacific Hillside Restoration**—Project would restore the south side hillside area long N. Pacific between Front St and Channel. This would include re-purposing of the current industrial land use to open space.

29. **San Pedro Canyon Restoration and 1st & 6th Green Streets**—Project would restore "nature's services" along 6th Street following the natural drainage pattern of San Pedro Canyon prior to the installation of storm drains, and providing viable pedestrian connections between the remnants of San Pedro Canyon, and existing streets/ sidewalks all the way to Pacific Ave. This is perhaps the major "upland" connection to Downtown San Pedro. Improvements include rain gardens within existing parkways along both 1st and 6th Streets from Western Ave. to Pacific Ave.

30. **S. Pacific Traffic Calming & Green Street Enhancements**— Project would address traffic safety issues between 26th St. and Shepard by constructing traffic calming measures such as bulb-outs and textured paving at key intersections as well as bioswales in the wide parkways.

31. **San Pedro Recycled Water Connection from Machado Lake and Terminal Island**—Project would construct a line to bring recycled water from the newly installed line between Terminal Island and Machado Lake into San Pedro along N. Gaffey St.

32. **Bandini Canyon/Caltrans/Leland Park East Stormwater Capture & Re-use**—Project would construct stormwater capture improvements to collect water from the Bandini Canyon and Leland Park East sub-watersheds for ground- water recharge and re-use.

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APPENDICES:

The following Appendices are included in the Plan to provide more detailed explanations of tree selection and design criteria and guidelines and standards required for the development of the proposed Opportunities:

Appendix A—Plant Species List

Appendix B—Tree Species Selection Criteria

Appendix C—Street Tree Location Selection for Large Stature Trees

Appendix D—Los Angeles Green Streets & Alleys Design Guidelines

Appendix E—Los Angeles Planning & Land Development for LID (Low Impact Development)

Appendix F—Los Angeles Complete Streets Design Guide

Appendix G—Environmental Clearance Process Guidelines

SECTION 1: INTRODUCTION - BACKGROUND, GOALS & OBJECTIVES

Although downtown San Pedro is blessed with a rich maritime history unique to the greater Los Angeles region, green space and other connections that improve access to and consolidate the numerous natural and historical heritage and community sites are markedly absent. Considerable attention is currently being devoted to the restoration of the San Pedro waterfront. The "San Pedro Waterfront and Promenade Master Development Plan (2004)" notes that "the San Pedro waterfront is currently disconnected from the downtown, including inland residential neighborhoods." This waterfront partition from downtown San Pedro has also been echoed in the Port of Los Angeles: Ports O'Call Plan (2008) developed by the Urban Land Institute for the Port of Los Angeles. As a result of this context, the Los Angeles Conservation Corps was able to acquire State funding for the "San Pedro Green Streets and Waterfront Linkages Plan Project". The Plan is focused on the Greater Downtown Area of San Pedro, but also includes the identification of linkages and connection points to the existing upland and south coastal open space areas. In addition, the City of Los Angeles Harbor Department has developed a Climate Action Plan (2007). Greenhouse gas reduction measures have been prioritized and include water conservation, tree plantings, stormwater and dry weather runoff capture and use BMPs, brownfield remediation and creation of open space.

This community-based planning portion of the San Pedro Urban Greening Project began in the Spring of 2013 and was completed in December 2017 with the "Adoption" of the "San Pedro Urban Greening Implementation Plan" by community stakeholder groups. An Open House, held in June 2014 and attended by several hundred community stakeholders, officially kicked off this planning process. Three (3) Design Workshops, followed and were attended by over 150 stakeholders, and 17 Urban Greening Advisory Committee (UGAC) Meetings took place over the length of this Project. The Urban Greening Opportunities identified in this Plan are a direct outgrowth of the input received from the open house, workshops, UGAC meetings, and numerous other neighborhood council, local parka advisory board, and other local stakeholder meetings, as well as the Public Opinion Survey and Needs Assessment.

The actual steps/process used to create this Plan are as follows:

1. Identify stakeholders for the Urban Greening Advisory Committee (UGAC)
2. Convene the UGAC
3. Establish Draft Goals & Objectives
4. Perform preliminary data collection/graphic documentation of existing baseline conditions — i.e., open space/parks, schools, landmarks, etc.; green development opportunities already underway — i.e., Port of LA, City of LA, etc. green improvement projects that were already in some phase of the design/engineering/permitting process; bike paths, lanes, routes; major street connectors between the Greater San Pedro Community and the Port, schools, major landmarks, existing open space and parks
5. Create and implement the Community Based Planning Process for the Project that would consisted of:

a. Identify the various stakeholders groups, agencies, and political jurisdictions that would take part in the Community Based Planning Process
b. Convene regular meetings of the UGAC
c. Conduct the Public Opinion Survey through the various local stakeholder groups, including the UGAC, neighborhood councils, Chamber of Commerce Economic Development Committee, and local Park Advisory Boards (PAB)
d. Hold Community Design Workshops (3)
e. Host key Public Events - Open House to kick-off the process

6. Compile the results of the Design Workshops
7. Develop Draft Urban Greening Opportunities
8. Develop Draft Urban Greening Implementation Plan
9. Distribute and review Draft Urban Greening Opportunities with the local stakeholder groups and various governmental jurisdictional agencies and political offices
10. Finalize Urban Greening Opportunities
11. Distribute and review Draft Urban Greening Implementation Plan with the local stakeholder groups and various governmental agencies and political offices
12. Finalize San Pedro Urban Greening Implementation Plan
13. Have local stakeholder groups adopt San Pedro Urban Greening Implementation Plan

SECTION 1: INTRODUCTION - BACKGROUND, GOALS & OBJECTIVES

San Pedro Urban Greening Project Goals & Objectives

The initial Goal as stated in the original Grant Proposal was as follows:

"The Plan's goal would include the identification of synergistic downtown green space linkages that run from the waterfront connection points, through downtown community sites, and to upland park area connection points. The resultant San Pedro 'waterfront to hills' green space planning effort would truly bind the San Pedro downtown community to its vital and distinctive San Pedro natural and historical legacy."

This was used as the starting point for discussions with Clean San Pedro, the local Community Based Organization Project Partner for this Project, and with prospective Urban Greening Advisory Committee members at various meetings that took place in 2013-2014. At the same time it was determined that the Project Goals and Objectives needed to be measurable. The resulting Goals for this Project were as follows:

Goal #1: The Final "San Pedro Urban Greening Plan" shows green space linkages and nodes that will functionally and synergistically connect the downtown community to the key waterfront connection points and the upland park area connection points in a way that binds the San Pedro downtown community to its vital and distinctive San Pedro natural and historical legacy

Goal #2: The Final "San Pedro Urban Greening Plan" is created through a robust Community Based Planning Process through involvement of the following groups of Community Stakeholders:

a. Urban Greening Advisory Committee (UGAC) meeting regularly beginning in October 2013 through Winter 2017 – UGAC was tasked with the following:

i. Review deliverables produced by the Grantee Project Team (comprised of LA Corps, Clean San Pedro, and Melendrez Associates)

ii. Mobilize their respective constituents to participate in the Design Workshops (Neighborhood Meetings) and the Public Events

b. Community Stakeholders Design Workshop Group - this group participated as follows:

i. Providing input during the Design Workshops—Task 3.20)

ii. Providing input through the Public Opinion Survey – Task 3.40

iii. Providing input on the identification, characterization and prioritization of the "Green Pathways and Outlets";

iv. Providing input on implementation requirements for each of the "Green Pathways and Outlets Opportunities";

c. Community Open House (Task 3.30 "Public Events") – this event was attended by members of the UGAC, Design Workshop participants, and at-large residents of the community who live, work and/or recreate in San Pedro;

Goal #3: All potential green space linkages between the waterfront and the upland park areas of San Pedro and the downtown area of San Pedro will be identified, characterized and mapped and included in the Final Plan

Goal #4: That the Final "Implementation" Plan include direction in the following areas for the prioritized opportunities so that the Plan can adequately support "future opportunity development grant proposals":

a. Resource Development = Development Funding Opportunities; identify potential funding sources for priority opportunities

b. Land Tenure = identify property ownership/ jurisdiction where possible; all public funding sources now require evidence by the funding applicant that it has permission from the property owner to develop the project as proposed

c. Operations & Maintenance = identify options for what entities will be best suited (defined as able and willing) to ultimately operate and maintain the developed green linkages and nodes

d. Programming = identify how the proposed opportunities will be used once developed/improved/enhanced

e. Environmental Clearance (CEQA) = identify what types of clean-up and CEQA process/documentation will be required, if any, for the priority opportunities before they will be eligible for development

SECTION 2: COMMUNITY OUTREACH - COMMUNITY BASED PLANNING PROCESS

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COMMUNITY OUTREACH - COMMUNITY BASED PLANNING PROCESS

Community Outreach for this Project focused on creating an inclusive Community Based Planning Process (Process), as it was felt that the key to the implementation and sustainability of that implementation would be a process that created the most inclusive local ownership of the Final Plan. In other words, the Plan would ultimately need to be "Adopted" by the local stakeholders. Therefore, it was critical to identify the local stakeholders, and devise a process that would provide ample opportunity for their input.

After the initial setting of the Goals and Objectives of the Plan, this became the first task of the UGAC. The list of local stakeholders became the following:

1. Council Office District 15
2. San Pedro Neighborhood Councils: Central, Northwest and Coastal San Pedro Neighborhood Councils
3. San Pedro Chamber of Commerce (Economic Policy and Development Committee)
4. Park Advisory Boards (PABs)
5. Port of Los Angeles (POLA)
6. San Pedro Historic Waterfront Business Improvement District (PBID)
7. Harbor Community Benefit Foundation (HCBF)
8. Local High School Education Representatives
9. Local Community Garden Interests
10. Local Community Activists

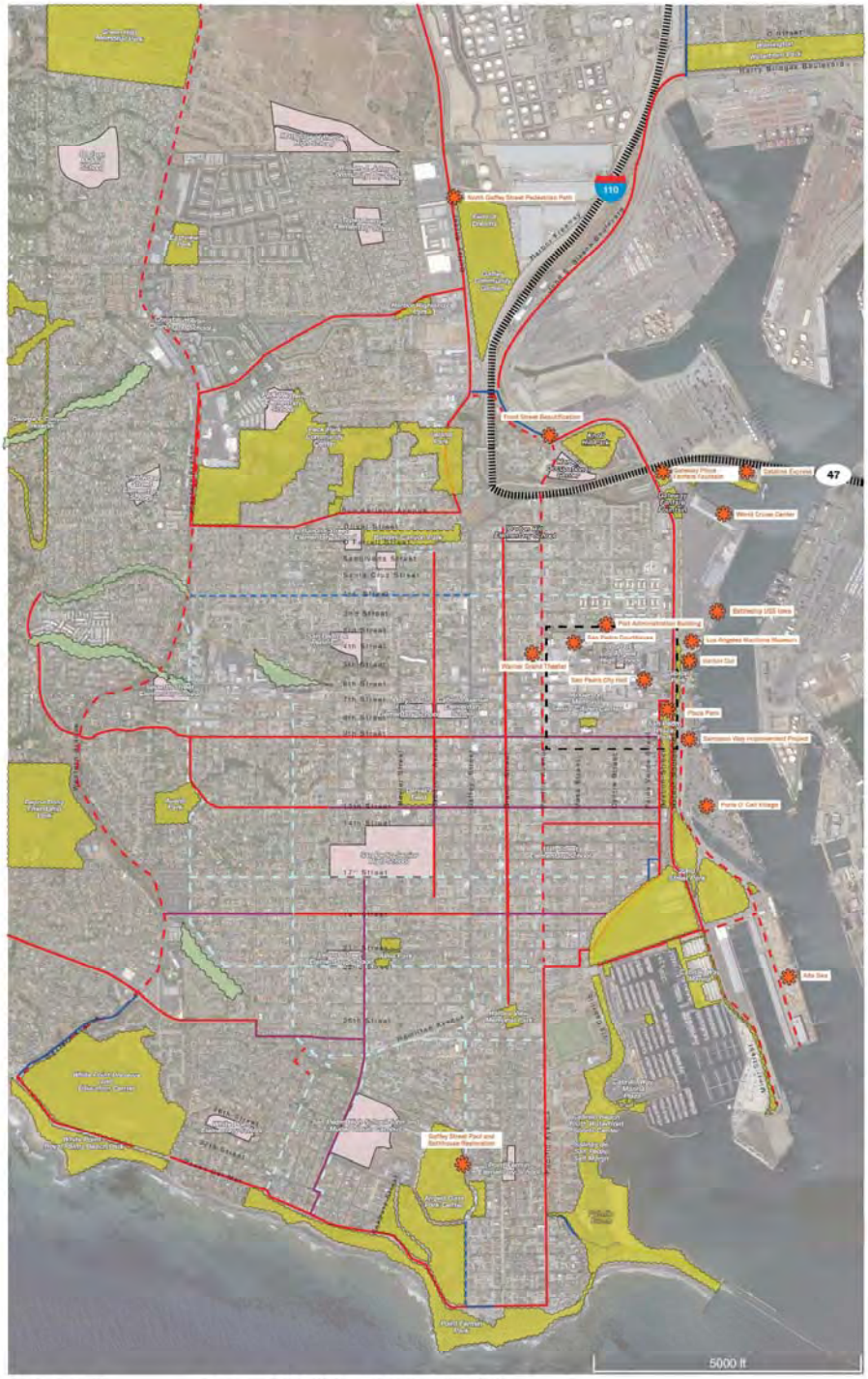
The UGAC also wanted to make sure that local residents in general would have the opportunity to provide their views on the Plan. It would be important to involve other local political jurisdictions - LA County Supervisorial, State Assembly, State Senator, Congressional District Representative. Then finally, it would be critical to have local and a key state agency to be involved. This included:

1. City of Los Angeles Dept. of Recreation & Parks (RAP)
2. City of Los Angeles Dept. of Public Works (DPW)
3. City of Los Angeles Dept. of Transportation (LADOT)
4. California State Dept. of Transportation (CALTRANS District 7)

These stakeholders were then invited to participate in the Process that consisted of the following:

1. Regular UGAC Meetings beginning in late 2013 and continuing through early Winter 2017 (key representatives of the various stakeholders)
2. Open House (June 2014) to kick-off the Process at which the stakeholders were introduced to the Project, and asked to help identify and characterize existing key landmarks, and existing/planned projects
3. Design Workshops - there were a total of three (3) of these conducted between July 2014 and December 2014
4. Public Opinion Surveys conducted with UGAC, the local Neighborhood Councils, the local PABs, the Chamber of Commerce Economic Policy Committee, and online with community residents (July - December 2014)
5. Needs Assessment to identify and characterize existing conditions, and the policies, regulations, engineering and design standards and guidelines, and other information needed to determine implementation requirements for the "Pathway and Outlet Opportunities" (SEE SECTION 4)

EXISTING CONDITIONS - OPEN SPACE, PARKS, SCHOOLS, BIKE PATHS



One of the first steps in the Community Based Planning Process was to collect and compile information related to the existing conditions in the San Pedro Community. The map to the left represents the compilation of that information. The Open House held on the 1st Thursday Event in June 2014 was the official "Kick-Off" of the overall San Pedro Urban Greening Plan process and, in particular, the Community-Based Planning effort.

Existing conditions included both on the ground conditions and existing projects that were in some stage of their own planning/design/ construction process.

As the title indicates it was important to identify key places—e.g., open space & parks, schools, historically significant places, as well as the existing bike paths, lanes and routes that connect these places. The following pages discuss a few of the key places and projects.

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EXISTING CONDITIONS - COMPLETED & PLANNED PROJECTS

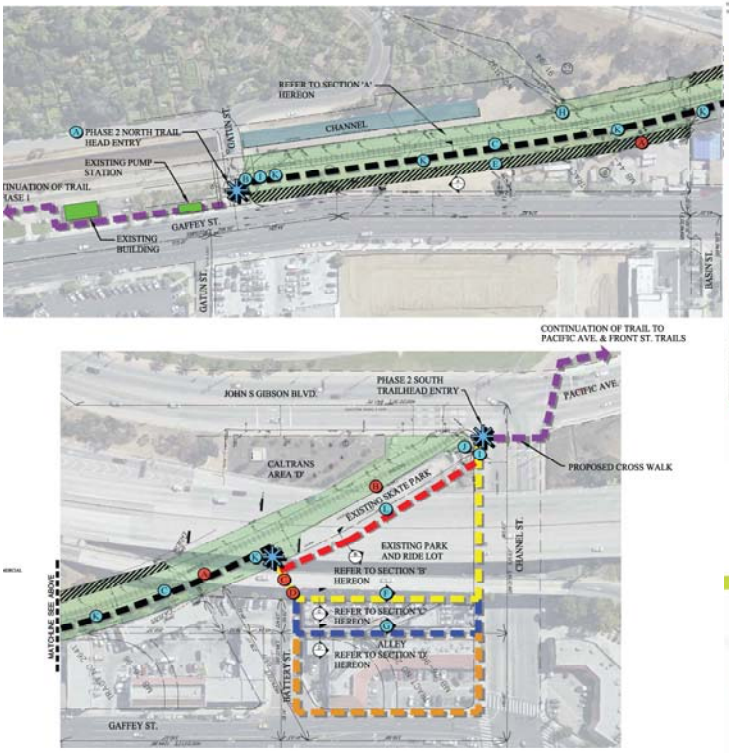

Image: Schematic drawing of the N. Gaffey Greenway Phase II extension down to W. Channel St. SEE OPPORTUNITY #6

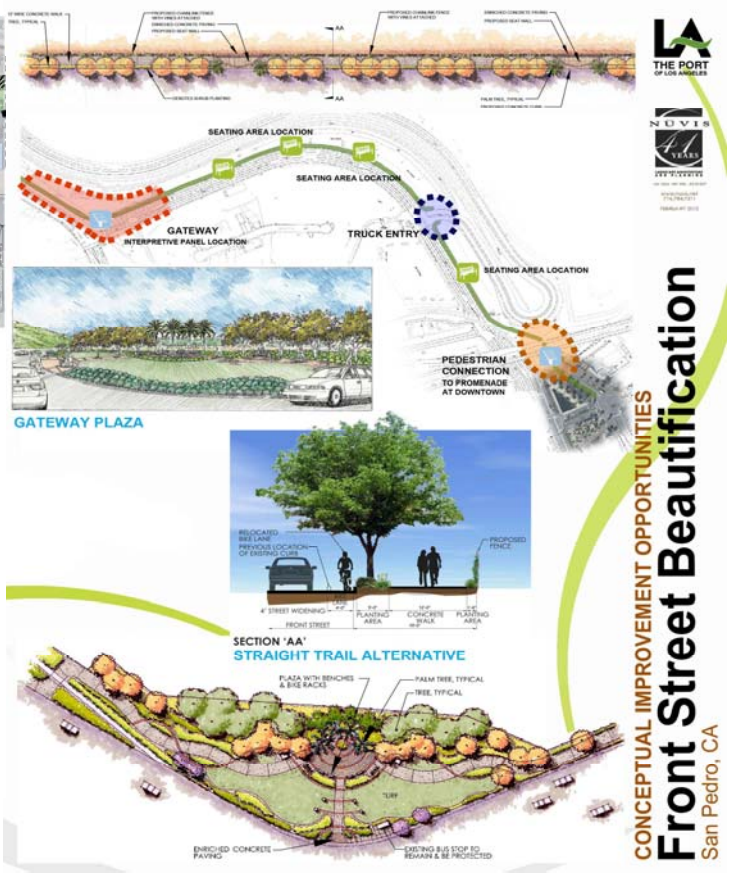

Photo: Shows active use of N. Gaffey Greenway Phase I

Image: Above graphics depict the design for the Front Street Beautification Project, There remain some existing infrastructure issues to resolve before construction can continue in earnest for this beautification project. SEE OPPORTUNITY #7

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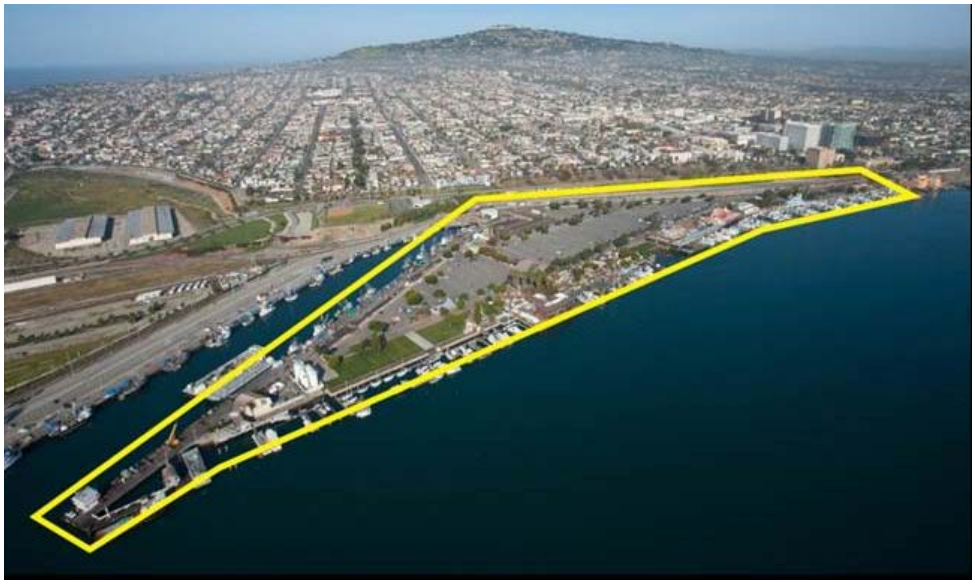
EXISTING CONDITIONS - COMPLETED & PLANNED PROJECTS

The design for the realignment of Sampson Way into the San Pedro Public Market re-development can be seen below. Construction is underway, and is expected to be completed in 2018. Following the completion of construction, the re-development of the San Pedro Public Market is expected to begin. The goal is to link up/connect the Port through the various Greenway pathways that have been identified and characterized in the "Opportunities" section of the Implementation Plan.

The view outlined in yellow to the right shows the extent of the redevelopment planned for the Port. A final development plan has yet to be finalized at the time of the publication of this San Pedro Urban Greening Plan, though there appears to be increased momentum towards that end.



The Sampson Way Re-Alignment project is under construction and is designed to provide the much needed infrastructure improvements that can support the San Pedro Public Market redevelopment.

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PUBLIC OPINION SURVEY

During the summer of 2014 a Public Opinion Survey was created and used to collect information from a wide spectrum of community stakeholders related to the vision, goals, urban greening opportunities, and implementation priorities. The Preliminary Goals of the Survey were to:

1. Validate the project/gain quantitative support for the project
2. Find common paths of travel to/from Downtown area for the Greater San Pedro Area
3. Assess areas where it is most convenient and comfortable to travel by foot or bike
4. Assess problem areas
5. Assess gaps in connections

The opportunities included: green streets, green alleys, paseos, open spaces/parks and planting, enhancing open or underutilized space, and adding more environmentally-sustainable features.

The survey was primarily distributed at community meetings with the following key stakeholder groups:

1. Central San Pedro Neighborhood Council
2. Northwest San Pedro Neighborhood Council
3. San Pedro Chamber of Commerce Economic Policy Committee
4. Leland Park PAB (Park Advisory Board)
5. Alma Park Neighborhood PAB (forming stage)

It was also made available via an online survey website.

The results are as follows:

QUESTION #1—GOALS RANKING:

1. Beautify neighborhoods
2. Provide green, open spaces for people to gather
3. Improve air and water quality
4. Enhance walking and biking connections
5. Encourage economic benefits
6. Improve public health

CONCLUSION:

As there was very little % difference in the rankings (19% to 14%), the conclusion is that all of these goals have fairly comparable importance.

QUESTION #2—WOULD DOWNTOWN SAN PEDRO AND THE AREAS SURROUNDING IT BENEFIT FROM THE INTRODUCTION OF NEW GREEN SPACES SUCH AS PARKS, MINI-PARKS, PLAYGROUNDS, AND PLACES FOR PEOPLE TO RELAX AND RECREATE?

RESULT:

Overwhelmingly YES— 75% yes to 25% no or no answer

CONCLUSION:

Plan should include addition of new green spaces within the downtown and greater downtown areas of San Pedro.

QUESTION #3—WOULD DOWNTOWN SAN PEDRO AND THE AREAS SURROUNDING IT BENEFIT FROM MORE AMENITIES THAT MAKE IT EASY AND PLEASANT TO WALK OR BIKE ALONG THE STREET (FOR EXAMPLE TREES FOR SHADE, PLACES TO SITE, AMPLE SIDEWALK SPACE, CONSISTENT LIGHTING, BIKE PARKING)?

RESULT:

Overwhelmingly YES—75% yes to 25% no or no answer

CONCLUSION:

Plan should include the various aforementioned amenities that make it easy and pleasant to walk or bike along the streets in downtown and greater downtown San Pedro.

QUESTION #4— WHAT SORT OF GREEN ELEMENTS WOULD YOU LIKE OT SEE ADDED TO SAN PEDRO STREETS?

RESULT:

Participants were asked to check all that applied, and not surprisingly, of the eight (8) amenities listed, nearly all were pretty closely ranked—7 from 15% to 10% with the lowest ranking, transit

shelters, still getting 7%.

1. Energy-efficient lighting for pedestrians
2. Benches, trash cans, bike racks, enhanced paving
3. More landscaping
4. More trees
5. Low water use plants
6. Permeable paving
7. Bioswales and other planting systems that help clean stormwater
8. Transit shelters

CONCLUSION:

While all of these elements should be well represented in the Urban Greening Plan, other factors will need to be used to differentiate where and to what degree the various amenities/elements will be represented. Those other factors should arise from the Needs Assessment.

QUESTION #5—HOW SHOULD THE PATHWAYS/ NODES BE USED?

RESULTS:

Again, respondents were asked to check all that applied, and the results once again showed a list of fairly closely ranked priorities (in order of priority from 15% down to 7%):

1. Gathering areas (e.g., seating, picnic areas)
2. Play areas for children
3. Community gardens
4. Water treatment (e.g., rain gardens, stormwater management)
5. Fitness loops and stations
6. Outdoor games (e.g., chess tables, bocce)
7. Educational components (e.g., plaques, signage)
8. Sports and other "active" uses

CONCLUSION:

Final Urban Greening Plan should include all of these things. However, as there are obvious differences between types of green pathways and nodes, where these uses are manifest will depend on the nature of each pathway and node opportunity.

QUESTION #6—WHICH ARE THE MOST IMPORTANT STREET TO GREEN IN SAN PEDRO?

RESULTS:

Respondents were asked to list five (5) streets, and the results showed two (2) streets that clearly dominated: Gaffey St. and Pacific Ave. (62 and 53 responses), with Harbor Blvd., (24) 6th St. (18), 7th St. (18), 5th St. (14), Western Ave. (12), and Summerland Ave. (10) coming in with double digit responses.

CONCLUSION:

Not surprisingly the priority streets are the most heavily and prominent north-south and east-west streets that traverse the San Pedro Community, and include all of the major streets that go in and out of downtown and the Harbor area, and are major commuter routes to and from Interstate 110 and SR47 highways. Again, like with results from other questions, the exact mix of greening elements will require additional data from the Needs Assessment.

QUESTION #7— IDENTIFY THE TOP THREE (3) DESTINATIONS THAT YOU CURRENTLY ACCESS IN DOWNTOWN SAN PEDRO

RESULTS:

Respondents were asked to list their top three (3) destinations. As there were a number of different restaurants, we ended up lumping all specific restaurants into a "restaurant" category. The next four (4) highest number belonged to downtown streets—6th St. (34), 7th St. (18), Harbor Blvd. (17), Pacific Ave. (15). The next actual non-street location was the Warner Grand (12).

CONCLUSION:

Given that the "Downtown" area of San Pedro is a relatively small area, perhaps this question and the subsequent responses were not particularly enlightening.

PUBLIC OPINION SURVEY

QUESTION #8— IDENTIFY THE TOP THREE (3) DESTINATIONS THAT YOU CURRENTLY ACCESS OUTSIDE OF DOWNTOWN IN SAN PEDRO (SUCH AS KNOLL HILL, PECK PARK COMMUNITY CENTER, LELAND PARK, PT. FERMAN PARK, CABRILLO BEACH, ETC.).

RESULTS:

There were three (3) responses that clearly stood out from the others.

1. South San Pedro—Pt. Fermin, Paseo del Mar, Angels Gate, Korean Bell, White Point
2. Southeast San Pedro/Cabrillo Beach—Cabrillo Beach, Cabrillo Marina, 22nd St. Park
3. Peck Park

CONCLUSION:

This information was helpful in better understanding what type of meaningful regional connection enhancements would make the most sense.

QUESTION #9—IDENTIFY THREE (3) DESTINATIONS THAT YOU CURRENTLY ACCESS SPECIFICALLY WITHIN THE PORT OF SAN PEDRO.

RESULTS:

Respondents very clearly identified Port O'Call (43) as the #1 Port destination, with Cabrillo Beach-Marina-Aquarium, Fish Market/Restaurants (which probably should be lumped in with Ports O'Call), Promenade/Fountain, and Catalina Express/Cruise Terminal clustered together in a distant #2 priority.

CONCLUSION:

As this is an Urban Greening Plan, then it would seem logical that these primary Port of San Pedro destinations would be high priority candidates for urban greening enhancements.

QUESTION #10—IDENTIFY THREE (3) DESTINATIONS IN SAN PEDRO THAT YOU WOULD ACCESS BY FOOT OR BIKE IF THE ROUTES WERE MADE MORE PEDESTRIAN AND/OR BIKE FRIENDLY.

RESULTS:

A total of 17 different destinations were identified, with no one or a few really standing out from the rest, and with some being entire lengths of major streets. Presumably, respondents identifying such destinations were likely identifying the primary commercial or open space stretches of these streets/pathways. The 5-6 were: Gaffey St. (13), Harbor/Waterfront (13), Pt. Fermin/White Point/Korean Bell, Paseo Del Mar (10), Knoll Hill/Front St. (10), Peck Park/Leland Park (9), Downtown San Pedro (8).

CONCLUSION:

This information reinforces the goal of providing "greening" enhancements, including "active transportation" type enhancements along the major priority streets/pathways identified earlier in the Survey.

QUESTION #11—WHAT ARE THE BARRIERS THAT PROHIBIT YOU FROM WALKING OR BIKING MORE THROUGHOUT SAN PEDRO?

RESULTS:

The three (3) top responses were: Safety (e.g., crime, lighting, crosswalks) - 26%; Maintenance, comfort, cleanliness—23%; Vehicular traffic and/or speed—19%.

CONCLUSION:

Clearly there are issues impacting whether residents will choose to walk or bike to destinations in San Pedro that are not related to new green enhancements. Rather they are related to whether they feel safe or whether the existing streets/pathways are being adequately maintained. Translated this means that operations and maintenance budgets for existing and new pedestrian-friendly/green enhancements either need to be increased or the existing budgets more efficiently allocated to address these concerns.

NEEDS ASSESSMENT & DATA COLLECTION - PROTOCOLS & PARAMETERS

Needs Assessment protocols were developed to characterize the physical condition of existing pathways/streets. The first step was to identify the 'needs categories". These are:

1. Physical – what are the missing green elements in the Project area? These needs can be inventoried in some fashion within the geographical area of focus for the Project
2. Policy – what, if any, are the missing policy or regulatory framework elements that, if present could make it easier to install the missing green elements that are determined to be the highest priority within the Final Implementation Plan? These needs can be determined through a review of existing "urban greening policies" within the City of Los Angeles jurisdiction
3. Public Opinion – what do you the community stakeholders who live, work and recreate in San Pedro feel are the urban greening needs/priorities—SEE PUBLIC OPINION SURVEY SECTION

To capture the information needed to assess the needs in each of these categories required three (3) different data collection methods:

1. Physical – there are two (2) aspects to this category: 1) which elements needed to be quantified/estimated; and 2) how to characterize the results of this quantification/estimation exercise
2. Policy – primarily requiresdresearch and review of the existing policies and regulatory framework within the City of Los Angeles, and determining how they should be incorporated into implementation of the "Opportunities" identified in Final Urban Greening Plan for San Pedro
3. Public Opinion – this was accomplished by developing a Public Opinion Survey and the methodology for conducting the Survey—SEE PUBLIC OPINION SURVEY SECTION

For the "Physical" needs assessment category the following urban green and gray infrastructure elements/systems were located and "typed" for use in characterizing the pathways and outlets:

1. Elements to Locate and Characterize from Existing Maps:
   a. Existing Schools
   b. Existing Bike Paths, Lanes, Routes
   c. Existing Park & Open Space Locations
   d. Existing Landmark/Significant Places
2. Elements to Identify from Agency & Development Stakeholders
   a. Planned Community Improvement Projects
3. Elements to Characterize from Other Field Observation & Documentation – the data collected in this particular section was used to create the "Green Pathways Typologies Matrix", the final version of which follows this summary; each "Typology" is shown to have it's own particular suite of "amenities & treatment" recommendations that are best suited for the "character" of that Green Pathway "Type":
   a. Sidewalk Width
   b. Parkway Width (as applicable)
   c.Land Use
   d. Street Right-of-Way Width, No. of Lanes, Parking, Medians, etc.
   e. Curb Cuts (for driveways or alleys)
   f. Building Setback from Property Line
4. Elements to Inventory
   a. Street Trees – the following attributes should were characterized:
      i. Tree Species – this includes identifying vacant or available tree planting sites where no tree currently exists, but could be planted
      ii. Physical Location – ideally includes street address and GPS coordinates
      iii. Tree Condition – Good, Fair, Poor, Dead
      iv. Tree Size – DBH, Height, Canopy Spread
      v. Tree Grow Space (e.g. tree well, parkway, etc.) Type and Size
      vi. Tree Maintenance Need
      vii. Sidewalk & Curb Condition at the tree location

NEEDS ASSESSMENT & DATA COLLECTION - PROTOCOLS & PARAMETERS

For the "Policy" needs category, research and review was done for the existing policies and regulatory framework within the City of Los Angeles, and determining how they could best be incorporated into the implementation of the "Opportunities" identified in the Final Urban Greening Plan for San Pedro. The relevant policies and regulations fell into one of the following categories:

1. Tree Planting
2. Parkway and Other Public Right-of-Way Landscaping
3. Private Property Landscaping
4. Water Conservation
5. Storm water Management Low Impact Development (LID)
6. Climate Change & Green House Gas (GHG) Reduction and/or Emission Avoidance
7. Other Green Infrastructure Related, e.g. green roofs, green walls
8. Community Gardens

Policies included:

1. Permitting Requirements
2. Ordinances/ Municipal Code
3. Best Management Practices
4. Design Guidelines
5. Specific Plans
6. Community Plans
7. General Plans

NEEDS ASSESSMENT - GIS BASELINE & DATA DICTIONARY

The GIS Baseline data used to develop the base maps that were used to compile the geographic information ultimately used during the design workshop process included the following data layers:

1. Federal and State Highways
2. City Streets & Alleys
3. Congressional, State, County and City Political Boundaries
4. Building footprints
5. Waterways
6. Schools
7. Bike Paths, Lanes, Routes
8. Park & Open Space Locations
9. Historic Landmarks and Significant Places
10. Locations of Planned Community Improvement Projects
11. Planning and special districts, e.g., Downtown San Pedro Business Improvement District
12. Census Tracts, e.g., Disadvantaged Community (DAC) Census Tracts

These layers were then used to compile the base maps used during the Design Workshop Process. The full size map was printed as 22"x34" sheets for display and use during the workshops. These layers were also used during the characterization and graphic depiction of urban greening "opportunities". The attached "opportunity" sheets from the "San Pedro Urban Greening Draft Implementation Plan" are an example of the use of the DAC Census Tracts layer/data.

The Data Dictionary included the following layers used to create the project base maps:

1. Federal and State Highways
2. City Streets & Alleys
3. Congressional, State, County and City Political Boundaries
4. Building footprints
5. Waterways
6. Schools
7. Bike Paths, Lanes, Routes
8. Park & Open Space Locations
9. Historic Landmarks and Significant Places
10. Locations of Planned Community Improvement Projects
11. Planning and special districts, e.g., Downtown San Pedro Business Improvement District
12. Census Tracts, e.g., Disadvantaged Community (DAC) Census Tracts

In addition, the following elements were characterized qualitatively through field observations and photo documentation, and used to create the "Green Pathways Typologies Matrix". The results depicted in the Matrix were then utilized to develop specific "amenities & treatment" recommendations that are best suited for the "character" of that Green Pathway "Type".

1. Sidewalk Width
2. Parkway Width (as applicable)
3. Land Use
4. Street Right-of-Way Width, No. of Lanes, Parking, Medians, etc.
5. Curb Cuts (for driveways or alleys)
6. Building Setback from Property Line
7. Existing Trees
8. Relative condition of existing sidewalks, curbs and gutters

NEEDS ASSESSMENT - POLICY, STANDARDS, GUIDELINES REVIEW

A review of urban greening related policies and best practices, with a particular focus on low impact development methods of managing stormwater runoff, yielded the following relevant documents. Select relevant information found in these documents related to the prioritized urban greening opportunities identified by San Pedro community stakeholders were incorporated into the Final San Pedro Urban Greening Implementation Plan. The following is a full list of the documents that were reviewed during this part of the process (As the total number of pages for the following documents would approach 1000 pages, links to the most relevant documents can be found in the APPENDICES):

1. Tree Planting, Pruning, & Protection Related Policies, Programs, Guidelines & Standards
   a. City of Los Angeles City Plants Program
   b. ANSI A300 Standards – these are "generally accepted industry standards for tree care practices" - Planting & Transplanting; Pruning; Soil Management; Root Management; Tree Risk Assessment
2. Parkway and Other Public Right-of-Way Landscaping
3. Private Property Landscaping
4. Stormwater Management Low Impact Development (LID)
   a. Green Infrastructure for Los Angeles: Addressing Urban Runoff and Water Supply Through Low Impact Development, by Haan-Fawn Chau, April 1, 2009 – Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standards, 1st Edition, Septtember 4, 2009
   b. Development Best Management Practices Handbook: Low Impact Development Manual – Part B Planning Activities 4th Edition, June 2011
      - Appendix A: City of Los Angeles LID Ordinance
      - Appendix B: CEQA Mitigation Measures
      - Appendix D: Plan Check Review Forms
      - Appendix E: Small Scale Residential Prescriptive Measures
      - Appendix F: Small Design Calculations & Worksheets
      - Appendix G: Standard Urban Stormwater Mitigation Plan (SUSMP) for Los Angeles County & Cities in Los Angeles County
      - Appendix H: Site Specific Mitigation Measures
      - Appendix I: City of Los Angeles Dept. of Building & Safety Guidelines for Stormwater Infiltration
      - Appendix K: County of Los Angeles Dept. of Public Health Policy & Operations Manual
   d. Design Standard Sheets for Small Scale Residential
      - Rain Barrel
      - Stormwater Planter
      - Permeable Paving Stone
      - Drywell
      - Rain Garden – No Liner
      - Rain Garden – With Liner
5. Climate Change & Green House Gas (GHG) Reduction and/or Emission Avoidance
   a. Climate Change Scoping Plan, A Framework For Change, Pursuant to AB 32 The California Global Warming Solutions Act of 2006, December 2008
   b. First Update to Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32 The California Global Warming Solutions Act of 2006, May 22, 2014
   c. Draft Cap-and-Trade Auction Proceeds Funding Guidelines for Agencies that Administer California Climate Investments, Released June 16, 2015 – these are still under review, and are expected to be finalized in Spring 2016
   d. Cal Fire Urban and Community Forestry GGRF Procedural Guides – 2014/15 Guides are available at Cal Fire Grants Page; procedural guides may vary with future grant funding cycles
6. Community Gardens
   a. Little Green Fingers Program Los Angeles County
   b. Community Garden Council

NEEDS ASSESSMENT - RESULTS

The results from the Needs Assessment are best represented by the "Typologies" matrix and maps that were produced and presented at Design Workshop #3 on December 4, 2014. These were also accompanied by vignette sketches depicting potential "Green Street" improvements for the following Typologies:

- Downtown Core Green Street
- Downtown Transition Green Street
- Metropolitan Transition Green Street
- Port Commercial Green Street

The distribution of these "Green Streets" are depicted on the "Downtown Green Street Typologies Plan" that is bordered generally by 3rd Street to the North, Pacific Ave. to the West, 9th Street to the South and Harbor Blvd. to the East.

The distribution of the following list of Green Street "Typologies" are depicted on the "Regional Green Streets Typologies Plan":

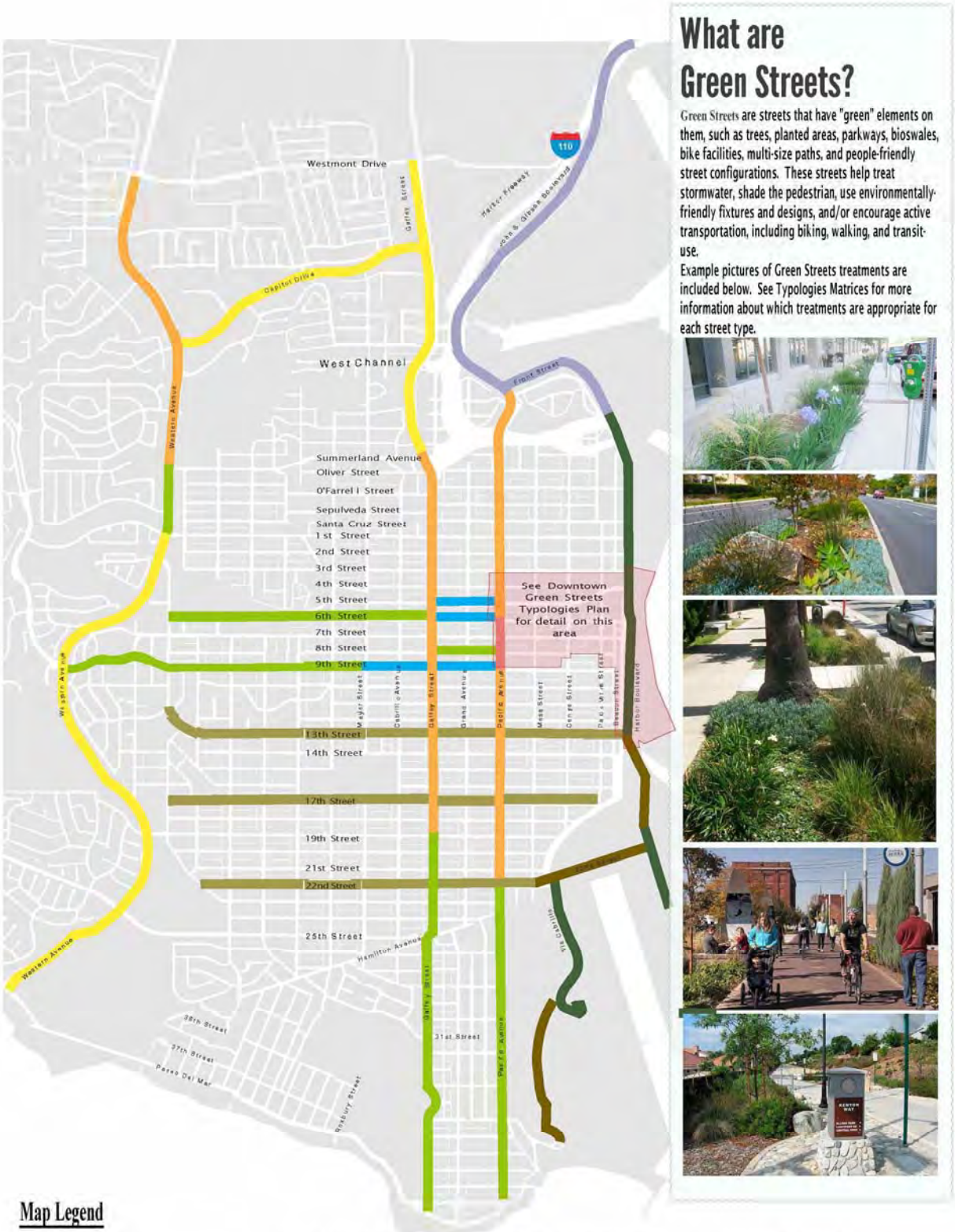
1. Downtown Core Green Street
2. Metropolitan Transition Green Street
3. Downtown Transition Green Street
4. Auto Commercial Green Street
5. Auto Open Space Green Street
6. Residential With Parkways Green Street
7. Residential No Parkways Green Street
8. Port Industrial Green Street
9. Port Commercial Mixed-Use Green Street
10. Port Open Space Green Street

The following pages show both the distribution maps of these Typologies and the associated more detailed description of each typology in a "matrix/spreadsheet" format. The Matrix provides the following categories of information for each "Typology":

- Key Characteristics
- Green Pathway/Street Opportunities
- Green Outlet Opportunities
- Proposed Elements/Changes [for each type of Pathway or Outlet]

SAN PEDRO GREEN OUTLETS & PATHWAYS

NEEDS ASSESSMENT RESULTS - STRATEGY & TYPOLOGIES—REGIONAL STREET TYPOLOGIES



NEEDS ASSESSMENT RESULTS - STRATEGY & TYPOLOGIES—DOWNTOWN STREET TYPOLOGIES

Green Street Types

All Green Streets to be "greened" with trees and landscaping. In addition to these base improvements, street types in Downtown will include the following:

DOWNTOWN CORE GREEN

- Road configuration
- Pedestrian lighting
- Parklets
- Street trees
- Rain capture
- Street furniture

DOWNTOWN TRANSITION GREEN

- Pedestrian lighting
- Parklets
- Street trees
- Rain capture
- Benches

METROPOLITAN TRANSITION GREEN

- Road configuration
- Potential landscpe bulb-outs
- Pedestrian lighting
- Parklets
- Street trees
- Rain Capture
- Landscaped medians
- Benches

PORT COMMERCIAL GREEN

- Road configuration
- Street trees
- Pedestrian lighting
- Exercise stations
- Regional trails
- Multi-use path

NEEDS ASSESSMENT RESULTS - STRATEGY & TYPOLOGIES—MATRIX PART I

#	Green Streets Typology Key:	Typ. Abbrev	Key Characteristics	Street Opportunities	Outlet Opportunities	Proposed Elements/ Changes
1	**Downtown Core Green Street**	**DCG**	0' Building Setbacks	Small to Medium Stature Street Trees	Parklets	Road Configuration
			Lots of Small Business Retail	Landscape Planters	Outdoor Seating	Separate Pedestrian Lighting from Roadway Lighting
			Pedestrian Focus	Rain Capture	Pocket Parks	Parklets
			Wider Sidewalks			Street Trees
			No Driveways (Except at Alleys)			Other Landscaping
			No Parkways - but wider sidewalks allow for expanded tree wells for planting trees			Rain Capture
						Benches
2	**Downtown Transition Green Street**	**DTG**	Variable Building Setbacks	Small to Medium Stature Street Trees	Pocket Parks	Pedestrian Lighting
			Mixed Use - Small Businesses/ Retail, & other Commercial	Planters	Parklets	Parklets
			Pedestrian Focus	Rain Capture	Outdoor Seating	Street Trees
			Wider Sidewalks			Other Landscaping
			Very Few Driveways (Alleys & Some Parking)			Rain Capture
			No Parkways - but sidewalks wide enough to allow for tree wells			Benches
3	**Metropolitan Transition Green Street**	**MTG**	0' Building Setbacks	Small to Medium Stature Street Trees	Parklets	Road Configuration
			Mixed Use - Small Businesses, Retail, and other Commercial	Planters	Outdoor Seating	Potential Landscape Bulb-outs
			Mixed Focus - Pedestrian & Auto	Rain Capture		Pedestrian Lighting
			Higher Traffic Speeds	Bike Lanes		Parklets
			No to Very Few Curbcuts (Driveways)			Street Trees
			Wider Sidewalks			Other Landscaping
			No Parkways - but wider sidewalks allow for expanded tree wells for planting trees			Rain Capture
						Landscape Medians
						Benches

NEEDS ASSESSMENT RESULTS - STRATEGY & TYPOLOGIES—MATRIX PART II

#	Green Streets Typology Key:	Typ. Abbrev	Key Characteristics	Street Opportunities	Outlet Opportunities	Proposed Elements/ Changes
4	Auto Commercial Green Street	ACG	Variable Building Setbacks; Frontage Dominated by Surface Parking Lots	Street Trees		Road Configuration
			Larger Commercial Shopping & Auto-oriented Uses; can include Multi-Family Residential Use Mix	Planters		Street Trees
			Auto Focus	Rain Capture		Other Landscaping
			Higher Traffic Speeds			Landscape Medians
			High # of Curbcuts (Lots of Driveways)			
			Wider Sidewalks			
			No Parkways			
5	Auto Open Space Green Street	AOSG	No Buildings Near Street - Frontage Dominated by Open Space	Street Trees	Open Space Improvements	Street Trees
			Open Space Land Use	Rain Capture	Habitat Restoration	Other Landscaping
			Primarily Auto Focus	Pedestrian Paths	Regional Park	Landscape Medians
			Higher Traffic Speeds	Bike Paths or Lanes	Community Park	Bioswales or Landscape Water Retention Basins
			No Curbcuts		Neighborhood Park	
			Sidewalks Variable Width to Non-Existent			
			Parkways Contiguous with Open Space Behind Sidewalk			
6	Residential with Parkways Green Street	RPG	Variable Building Setbacks - though Single-Family Units have at least some front yard green space	Street Trees		Street Trees Possible in Parkways
			Single or Multi-Family Residential Use; can include open space on one side of street	Planters		
			Mixed Focus - Pedestrian & Auto	Rain Capture		Other Landscaping Possible
			Variable Traffic Speeds	Bike Lanes		Exercise Stations
			Variable Curbcuts - None to One Per Residential Building	Enhanced Parkway Landscape		Rain Gardens in Parkways Possible
			Generally Narrower Sidewalk Widths with Exceptions			
			Parkways of 4 ft. or Wider on At Least One Side of Street			

SAN PEDRO GREEN OUTLETS & PATHWAYS

NEEDS ASSESSMENT RESULTS - STRATEGY & TYPOLOGIES—MATRIX PART III

#	Green Streets Typology Key:	Typ. Abbrev	Key Characteristics	Street Opportunities	Outlet Opportunities	Proposed Elements/ Changes
7	**Residential No Parkways Only Green Street**	**RNPG**	Variable Building Setbacks - though Single-Family Units have at least some front yard green space	Street Trees		Possible Shade Tree Adoption Program
			Single or Multi-Family Residential Use	Rain Capture		
			Mixed Focus - Pedestrian & Auto			No Street Trees Possible
			Variable Traffic Speeds			
			Variable Curbcuts - None to One Per Residential Building			
			Narrow Sidewalks			Possible DWP Turf Conversion Program
			No Parkways or Parkways 3 ft. or less in width			
8	**Port Industrial Green Street**	**PING**	Industrial Structures Far from Street; Freeways and/or Rail Close to Street	Street Trees	Brownfield Conversion to Open Space Use	Identify Vacant Lots/ Parcels for Heavy Tree Planting
			Industrial Port-Related Use	Landscape Screening		
			Truck and Auto Focus			Street Trees
			Higher Traffic Speeds			
			Variable Curbcuts - Mostly Driveways to Port Cargo Areas or Other Port Industry			
			No Sidewalks to Narrow Sidewalks			
			No Parkways			
9	**Port Commercial Mixed Use Green Street**	**PCG**	0' Building Setbacks	Street Trees	Civic Plazas	Road Configuration
			Mixed Use - Small Businesses, Retail, and other Commercial	Planters	Community Parks	Street Trees
			Mixed Focus - Pedestrian & Auto	Rain Capture		Pedestrian Lighting
			Higher Traffic Speeds	Bike Lanes		Civic Plazas
			No to Very Few Curbcuts (Driveways)			Community Parks
			Wider Sidewalks			Exercise Stations
			Some Parkways & Landscape Medians			Enhanced Landscape Medians
						Multi-Use Path
10	**Port Open Space Green Street**	**POSG**	No Buildings	Street Trees	Civic Plazas	Road Configuration
			Waterfront Open Space Use	Parkway Enhancements	Community Parks	Street Trees
			Mixed Focus - Pedestrian & Auto		Regional Open Space/ Parks	Pedestrian Lighting
			Higher Traffic Speeds	Rain Capture		Bike Lanes
			No to Very Few Curbcuts (Driveways)	Bike Lanes		Exercise Stations
			Wider Sidewalks			Regional Trail
			Some Parkways & Landscape Medians			Multi-Use Path

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOPS—PROCESS AND RESULTS

As has been discussed earlier, community stakeholder input into the development of the San Pedro Urban Greening Plan was designed to come through three (3) different elements of the overall "community-based planning" process. The first was through representatives of the various community stakeholder groups in the form of the Urban Greening Advisory Committee (UGAC). The second was through the Public Opinion Survey, which was done directly through these community stakeholder groups. The process utilized for acquiring input from these two (2) elements has been discussed in earlier sections of the Plan.

The third was through design workshops attended by members of the community. The protocol involved taking input from the UGAC and that acquired through the public opinion surveys, add in the results of the needs assessment process, and bring it all together through the design workshops.

Three (3) Design Workshops were held between June—December 2014. The following is a description of the intent of each and the format/protocols that were followed. The subsequent pages will present the results of each.

DESIGN WORKSHOP #1—BRAINSTORMING

Workshop Goals:

1. Define/explain the difference between pathways and outlets/nodes and align goals and expectations for the Project
2. Gather information about existing opportunities and constraints as defined by the community
3. Review precedent images to discuss what sorts of improvement are desired and where they should be located
4. Get participants excited about the possibilities of the Urban Greening Plan

Methodology:

1. Part 1—presentation by consultant team from Melendrez that outlined the project process and establishes the framework for developing a San Pedro Urban Greening Plan
2. Part 2—break up into small groups to allow participants to provide direct input to identify opportunities and constraints on base maps by type and location, and to indicated preferences for urban greening "amenities"

Post-Workshop #1:

Design consultant and LA Corps Project Manager compiled and analyzed the results; use results from Public Opinion Survey, and Needs Assessment to prepare Draft "Pathway Typologies" for Design Workshop #2.

DESIGN WORKSHOP #2— PRESENT DRAFT GREEN OUTLET & PATHWAYS PLANS, DRAFT TYPOLOGY MAPS, AND DRAFT VIGNETTES TO ILLUSTRATE SELECT DOWNTOWN TYPOLOGIES

Workshop Goals:

The goal of this Workshop was to present the combined findings from Workshop #1, the Public Opinion Survey and the Needs Assessment in a graphic format that illustrates the overall Greater San Pedro green connectivity to Downtown San Pedro and the Harbor Area, to present the "Typology" concept for the regional and downtown green pathways, and to illustrate how these typologies can be used to actually create prototypical pathway designs replete with the "menu" of urban greening enhancements and amenities appropriate for each typology. This way participants of this Workshop would be able to see the overall green pathways plan that connect important green nodes or outlets at the Greater San Pedro scale and the Downtown San Pedro scale, as well as a more detailed look at how each typology would look once improved. Therefore, the specific goals of this workshop were:

DESIGN WORKSHOPS—PROCESS AND RESULTS

1. Get comments on the efficacy of the overall Regional and Downtown Pathways & Outlets Plans
2. Get comments on the specific menu of enhancements and amenities for each of the typologies and prototypical design solutions (vignettes)

Methodology:

1. Used an "Open House" type format, where information tables and displays were set up and attendees/participants were able to circulate around to each station to view the displays, get clarification from the design team members at each station, and then provide their written comments directly onto the maps with post-its, and/or in writing via questionnaire handouts
2. Select a date and location for the Open House that would maximize voluntary community stakeholder participation. In consultation with the UGAC this was determined to be the 1st Thursday Monthly Arts Festival in the early evening hours at the Warner Grand Theater Lobby on 6th Street.
3. There were individual stations for the Regional and Downtown Pathways and Outlets Plans, the Pathway Typologies, and the Design Vignettes illustrating specific pathway design solutions

Post Workshop #2:

Design Consultant, Melendrez, and LA Corps Project Manager compiled and analyzed results, and prepared revised graphic presentation materials for Workshop #3.

DESIGN WORKSHOP #3—UNVEIL REVISED REGIONAL AND DOWNTOWN PATHWAYS AND OUTLETS PLANS, REGIONAL AND DOWNTOWN TYPOLOGIES MAPS FOR FINAL FEEDBACK AND DISCUSSION

Workshop Goals:

1. Get final validation of regional and downtown pathways and outlets plans
2. Unveil and get final comments on typologies maps and prototypical design solutions (vignettes)
3. Get community stakeholder input on priority pathways and outlets specific "opportunities"

Methodology:

Utilize the same "open house" format as used for Workshop #2.

RESULTS:

THE FOLLOWING PAGES ARE DEVOTED TO PRESENTING THE RESULTS OF EACH OF THE DESIGN WORKSHOPS.

DESIGN WORKSHOP #1—RESULTS

WORKSHOP #1 SUMMARY

San Pedro's Green Outlets and Pathways

Workshop #1 for the Green Outlets and Pathways Plan, was held on Saturday, June 21st, 2014 at the Croatian Cultural Center in San Pedro. The purpose of Workshop #1 was to brainstorm with community stakeholders to identify potential pathways and nodes that may help create opportunities to 'Green' San Pedro and to discuss goals for the plan.

The workshop began with a presentation that gave an introduction to the project as well as a outline of the project's process. The presentation also included a discussion of various project types that may be incorporated into the plan. After the presentation, workshop attendees broke out into two smaller groups to participate in smaller discussions.

The groups first discussed visions and goals for the plan. These goals were then prioritized on a scale of 1 to 5 (1 being the least important and 5 being the most important). The second group activity was a review of an Existing Conditions Map. Each group member added to the map by adding their own key destinations and community assets. Participants placed a blue sticker on where they live, green stickers on where they work, and yellow stickers on any other key destinations. The final group activity was identifying opportunities and constraints in the study area. Participants highlighted areas that were problematic and were encouraged to discuss these areas. Each group then came up with a vision for a network of green streets and green spaces with a focus on Downtown San Pedro.

The following is a summary of the findings from Workshop #1.

SAN PEDRO GREEN OUTLETS & PATHWAYS

PRIORITIZING GOALS

WORKSHOP SUMMARY

The following is a ranking of goals by each group. Goals that received a 5 are considered to be the most important while a 1 is considered to be least important.

GROUP 1

AVERAGE SCORE
(1-5 From Least to Most Important)

Promote Environmental Stewardship	5
Beautify the Neighborhood	5
Encourage Economic Benefits	5
Enhance Walking and Biking Connectivity	4.6
Create "Active" Areas for People to Gather	4.5
Improve Health and Active Living	1
Create "Passive" Areas for People to Gather	1

Group 1 felt that these should not be goals of the Plan.

GROUP 2

- Promote Environmental Stewardship
- Beautify the Neighborhood
- Enhance Walking and Biking Connectivity
- Encourage Economic Benefits
- Create Safe Environments
- Maintain all Improvements
- Create/Connect Consistency
- *Improve Health and Active Living
- **Create 'Passive' Areas for People to Gather

5

Group 2 felt that all of these goals are important for inclusion in the Plan.

* Members of Group 2 felt that accomplishing the other goals of the plan would contribute to an overall improvement of Health and Active Living
** Although this goals were ranked as a 5, members in Group 2 had reservations regarding its location and application.

SAN PEDRO GREEN OUTLETS & PATHWAYS

GROUP 1 - GOALS OF THE PLAN

WORKSHOP SUMMARY

Participants in Group 1 were encouraged to add, edit, or remove ideas of each of the Plan Goals. Group 1 had the following and notes during their discussion:

Promote Environmental Stewardship

- Focus on water and air quality
- Choose projects that teach about environmental sustainability
- Drought tolerant plants should be the emphasis
- Involve kids, educational aspects
- Sustainability is key
- Community ownership is key in design and maintenance

Beautify the Neighborhood

- Provide consistent tree, lighting, planting, paving, signage, and furnishing palette
- Develop community groups
- Community responsibility and ownership are critical
- Planting pallette should be native/adaptive
- Downtown focus area should have more green gathering spaces/places
- Currently, Downtown San Pedro does not have open spaces

Encourage Economic Benefits

- Prioritize greening projects that have a direct impact on San Pedro's economy (e.g. prioritize downtown projects)

Enhance Walking and Biking Connectivity

- Provide pedestrian amenities (e.g. seating, trash cans, lighting)
- Prioritize walking and skateboarding (Make it multi-purpose), must plan and design for skateboarders
- Already enough biking infrastructure, this should not be a priority for the plan

Create 'Active' Areas for People to Gather

- Pocket parks for neighborhoods need the most attention, design it to activate the space
- Create a reason for people to go there
- Use planting softscapes and shade to make it friendly and welcoming
- Play areas for children area a great draw, design them with swings, structures, and other activites

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Improve Health and Active Living *(should not remain a goal for the Plan)*

- Already has been a focus in the area
- This plan can focus on other aspects of greening

Create 'Passive' Areas for People to Gather *(should not remain a goal for the Plan)*

- Places need things to do and people to see
- Attracts homeless
- All places should be thoughtfully designed as more than just a paved areas with seating

GROUP 2 - GOALS OF THE PLAN

WORKSHOP SUMMARY

Participants in Group 2 were encouraged to add, edit, or remove ideas of each of the Plan Goals. Group 2 had the following goals and notes during their discussion:

Promote Environmental Stewardship

- Focus on water and air quality
- Choose projects that demonstrate about environmental sustainability
- Consider creative capture of water (e.g. creative use of roof runoff)
- Drought tolerant/native use of planting

Beautify the Neighborhood

- Provide consistent theme (e.g. consistent plan for: trees, lighting, planting, paving, signage, and furnishings)
- Encourage art/public art components by engaging artists and capitalizing San Pedro's art community

Enhance Walking and Biking Connectivity

- Provide pedestrian amenities (e.g. seating, trash cans, lighting)
- Provide bike amenities (e.g. bike lanes, bike racks, fix it stations)
- Find locations for off street bike pathways

Improve Health and Active Living

- Introduce running trails and/or cycling paths
- Provide outdoor fitness stations
- Design streets and spaces with edible planting
- Add signage to mark distance traveled

Create 'Passive' Areas for People to Gather

- Utilize temporary trials of parklets and outdoor dining
- Design flexible spaces with moveable furniture
- Ensure passive areas are in visible locations and have eyes on the street
- Consider safety and security when proposing "passive areas"

Encourage Economic Benefits

- Prioritize greening projects that have a direct impact on San Pedro's economy
- Prioritize downtown projects
- Introduce outdoor dining in the downtown area

Safety

- Encourage walking, biking in the evening by creating safe, well lit streets

Maintenance

- Partner with San Pedro groups to coordinate graffiti clean up, watering, trash, etc.

GROUP 1 - EXISTING CONDITIONS MAPPING

WORKSHOP SUMMARY

Group participants were asked to place a blue sticker on where they live, a green sticker on where they work, and a yellow sticker on any additional destinations. Participants also mentioned potential regional connections and improvements that could be made.

Additional destinations that were added to the map by Group 1 participants included: Rancho San Pedro Housing Project; Target; Home Depot; the Wetlands at 22nd Street Park; two skate parks; and Blockfield sports park. Group members also identified several neighborhood on the map which were, South Shores, Palisades, Point Fermin, and Vista del Oro.

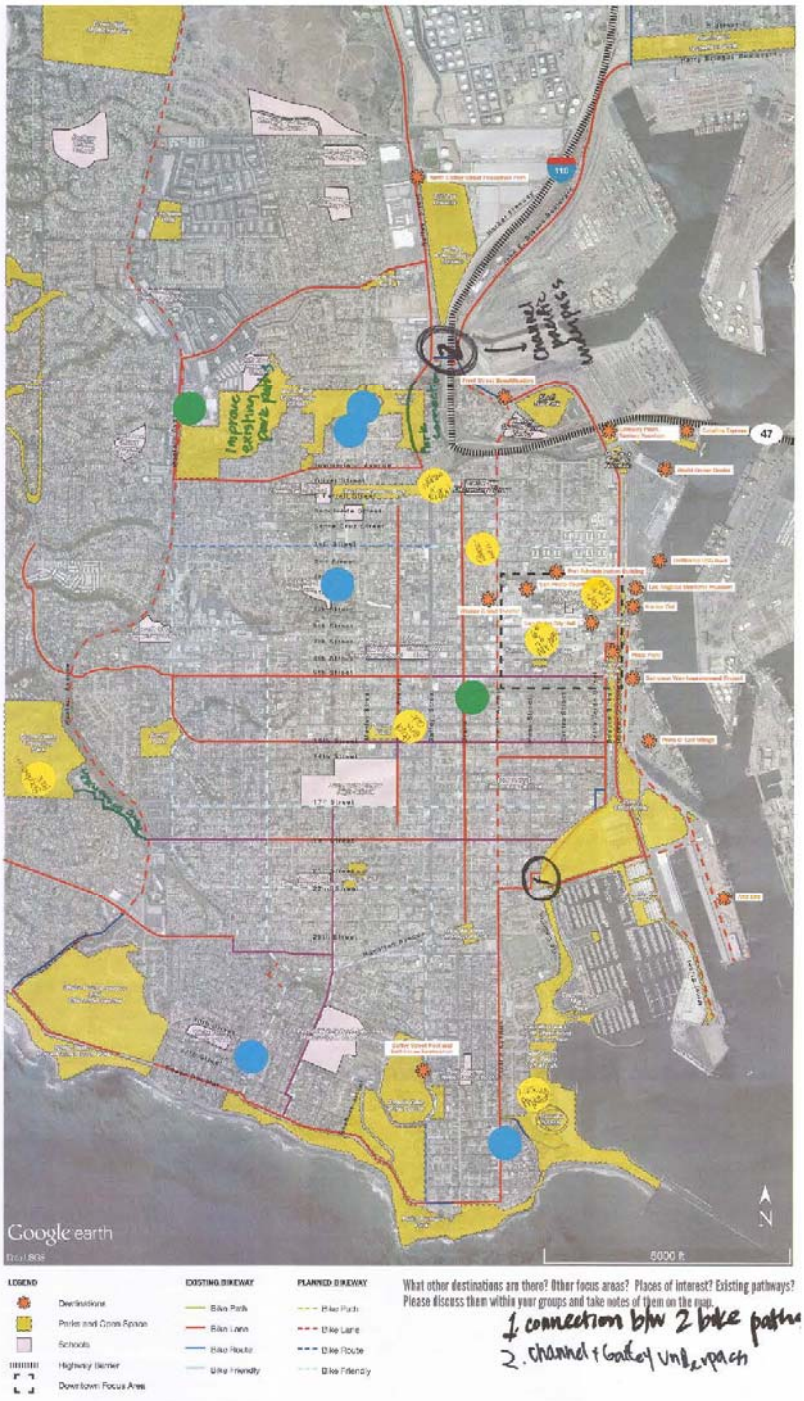
Workshop groups mentioned that San Pedro is divided into two segments of the population. Neighborhoods along the southern coast of San Pedro tended to be higher income areas, while residents living in Northeast San Pedro tended to have lower incomes. Group 1 felt that the Urban Greening Plan should focus on these areas in Northeast San Pedro and also in downtown, in terms of provision of parks and green streets.

Group 1 members would like to see a multi-use pathway along the coast, connecting coastal open space areas from White Point Beach all the way to San Pedro Plaza. Participants also noted opportunitites for creating pedestrian pathways along Pacific Avenue, Grand Street, and Gaffey Street. Group 1 would also like to see neighborhood-scaled parks in the residential neighborhoods north and south of downtown.

SAN PEDRO GREEN OUTLETS & PATHWAYS

GROUP 2 - EXISTING CONDITIONS MAPPING

WORKSHOP SUMMARY



Group participants were asked to place a blue sticker on where they live, a green sticker on where they work, and a yellow sticker on any additional destinations. Participants also mentioned potential regional connections and improvements that could be made.

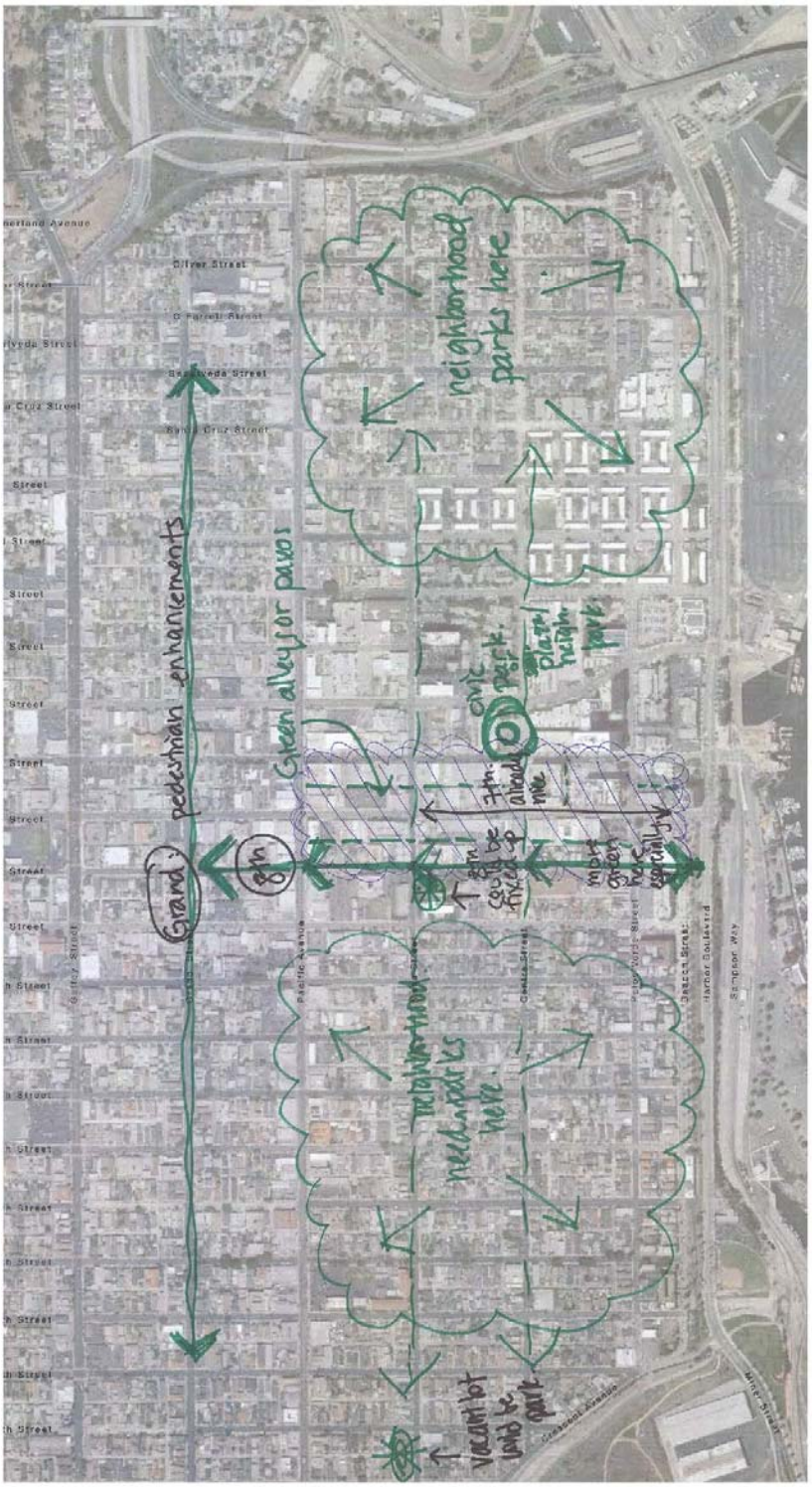
The following were destinations added by Group 2: San Pedro Welcome Park; Toberman Neighborhood Center; art galleries on 6th and 7th Street; Port of Los Angeles; San Pedro Boys and Girls Club; Bogdanovich Recreation Center; and the Cabrillio Beach Marine Aquarium.

The pathway and network improvements that Group 2 suggested were: improving the existing park pathways at Peck Park; enhancing the park connections along Gaffey Street into Leland Park; better bike connections around 22nd Street Park; and creating a better underpass for Gaffey Street.

SAN PEDRO GREEN OUTLETS & PATHWAYS

GROUP 1 - OPPORTUNITIES AND CONSTRAINTS MAPPING

WORKSHOP SUMMARY



Group 1 would like to see the Plan focus on locations and project types that would help benefit neglected areas within the study area. Project types and locations suggested by Group 1 have been identified and are summarized below.

PATHWAYS

Grand Street was identified as a good candidate for a "Green Street." This corridor was selected because of its lower volume of vehicular traffic which contributes to a more pedestrian friendly environment. Participants thought that by providing more pedestrian enhancements, it would help increase walkability and foster pedestrian connections into the downtown area.

Another potential pathway for improvement and greening, that Group 1 identified was a segment of 8th Street from Harbor Boulevard to Grand Street. Citing its poor condition and concerns for safety, group members thought that by improving this street segment, it would help facilitiate better pedestrian connections and encourage economic development.

Green alleys or paseos were also identified as potential project types that could create vital connections within the downtown area. Group 1 identified alleyways and paseo connections along the blocks of 7th and 8th Street, between Beacon Street and Pacific Avenue.

NODES

Group members suggested that a plaza or a Civic Park could be appropriate at the northwest corner of 5th and Centre Street.

Group 1 identified residential neighborhoods north and south of downtown as park poor areas. They indicated that these areas would benefit from "Neighborhood Parks." This project type could be placed throughout these neighborhoods on existing vacant lots. One potential park location was identified at 17th and Mesa Street.

SAN PEDRO GREEN OUTLETS & PATHWAYS

Members of Group 2 considered planning projects in the pipeline as a way to identify appropriate locations for new potential greening project types. Rather than creating a new plan, members in the group felt that this project should build upon existing improvement efforts. Members of the group also wanted streetscape designs to be consistent throughout the project area. They supported the notion of creating pathways and nodes that are unique to San Pedro.

PATHWAYS

Pacific Avenue and Harbor Boulevard were both selected as potential "Green Streets" that could help facilitate north and south connections. 13th and 7th Street were two major pathways that participants thought would improve east and west connections in San Pedro.

Group 2 also envisioned "Green Streets" along 5th, 6th, and 7th Streets, between Centre Street and Pacific Boulevard in the Downtown core. Group members felt that by introducing consistent "Green Streets" would help unify the Downtown district.

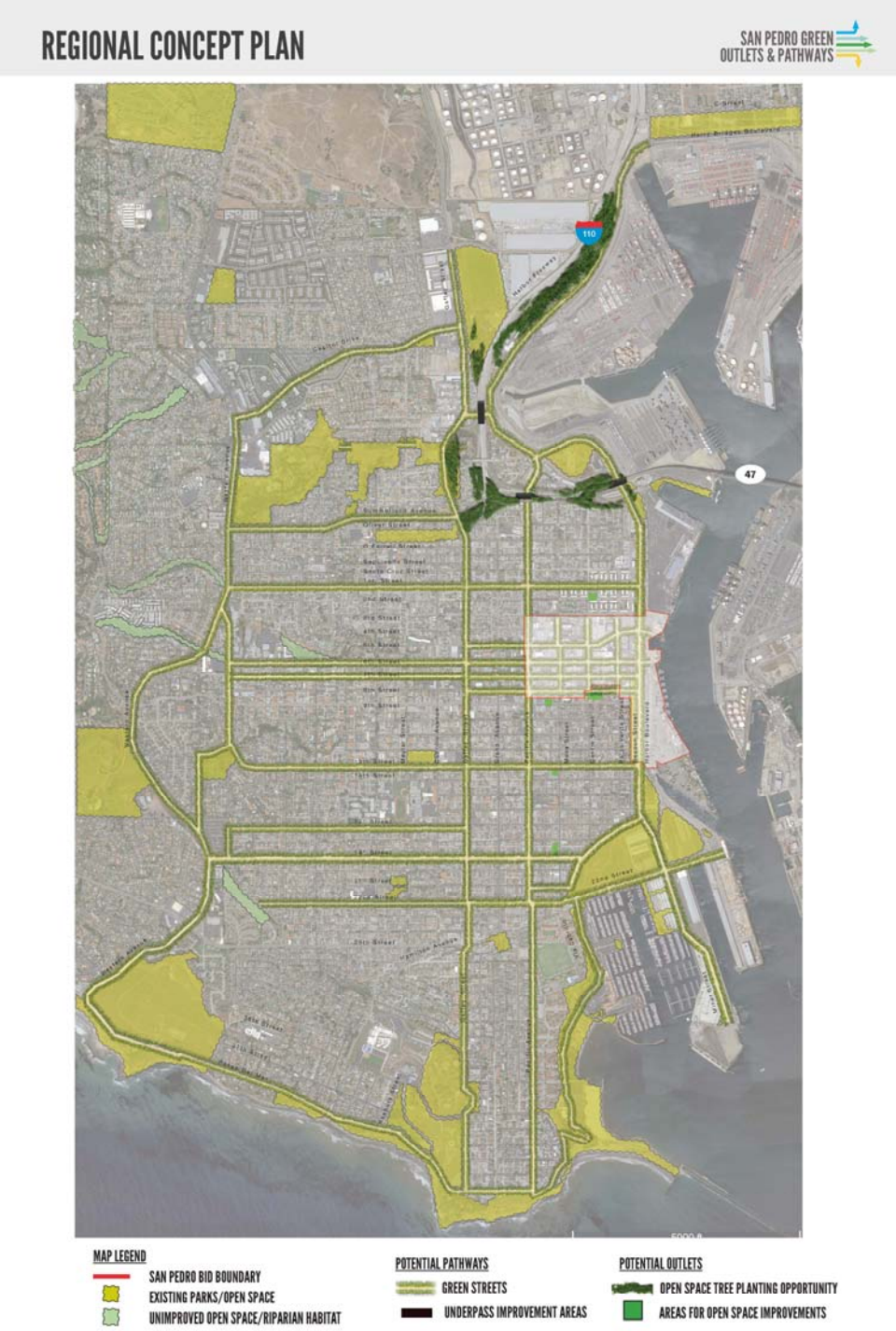
Participants also suggested incorporating "Green Alleys" to provide connections within the Downtown area. The alleyway along 5th and 6th Street between Pacific Avenue and Mesa Street, was deemed ideal for a "Green Alley" improvement. Another location for a "Green Alley" was identified between Mesa and Centre Street along the 6th and 7th Street alleyway.

"Underpass" improvements were identified under the 47 Freeway at Harbor Boulevard and under the pedestrian bridge at Gaffey Street.

NODES

"Parklets" that are programmed for outdoor dining were identified as opportunities to create economic benefits and to improve Downtown San Pedro. Participants suggested further investigation to identify businesses downtown that would partner with the city to maintain parklets there. A potential "Pocket Park" location was identified on a vacant lot at Mesa Street and 9th Street. At the southern end of Harbor Boulevard, The City Land Victory Garden has been proposed for planting. "Green screening" opportunites were also identfied along the northern end of Harbor Boulevard to screen the views of harbor activity. Another screening opportunity was identified for the retaining wall on the 47 Freeway off-ramp. Group members wanted to improve that wall with a mosaic art mural.

DESIGN WORKSHOP #1 - RESULTS REGIONAL CONCEPT PLAN—LINKAGES



This Regional Concept Plan illustrates a Draft of the regional green pathways for the Greater San Pedro Community. The northern most extent of the Plan includes the south edge/boundary of Wilmington at Harry Bridges Blvd. and shows the Interstate 110 Highway as the major regional pathway into San Pedro that connect the Greater Los Angeles Area into San Pedro. N. Gaffey St.is also shown as a significant regional connector that connects the Lomita and Harbor City Communities to San Pedro. Pacific Ave. is also the major connector that connects Wilmington to San Pedro.

This Plan was created from input from Design Workshop #1 participants, results from the Public Opinion Survey, and results from the Needs Assessment.

The major north-south pathways are starting from east to west: Harbor Blvd., Pacific Ave., Interstate 110 via Gaffey St., Pacific Ave., and Harbor Blvd. into Downtown San Pedro and ultimately the southern most reaches of San Pedro. On the far west of the Community is Western Ave., which is a primary pathway connecting the southern most reaches of San Pedro and the Palos Verdes Peninsula to Torrance and the South Bay Communities to the North.

The major east-west pathways into and out Downtown San Pedro and the Harbor are 1st, 6th, 7th, 13th, 19th Streets and 22nd Ave. All of these streets connect from Western Ave. directly all the way to the Harbor.

Most, if not all, of the aforementioned streets/pathways are heavily auto-oriented. A major issue to resolve with this Plan through Workshops #2 & 3 was which of these pathways best lend themselves to becoming “active transportation” corridors better oriented to pedestrian bicycle transportation modes.

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #1 - RESULTS—DOWNTOWN CONCEPT PLAN—LINKAGES

This Downtown San Pedro Concept Plan illustrates the significant pathways that connect the downtown area to both the Harbor, and the Greater San Pedro Community. The boundary lines shown are actually those of the San Pedro Historic Waterfront Business Improvement District (PBID).

Pacific Ave. is considered the western edge of Downtown San Pedro, while Harbor Blvd. and the Port of LA is considered its eastern boundary. Third St. is considered the north boundary. The southern boundary is obviously much more variable, and generally runs along 9th Street from Pacific Ave., jogs upt to 8th Street by Centre St. and then jogs down Beacon St. to Gulch Rd. to include all of the Ports O'Call Village area.

One of the urban greening goals for Downtown is how to better design and connect existing parking lots within the Downtown urban fabric. There are a number of under-utilized surface parking lots that could be re-designed to both increase parking capacity while increasing the permeable and higher-functioning green space. Input from the Public Opinion Survey indicated that pedestrian lighting and public safety was a significant barrier to increased pedestrian activity Downtown during evening hours. Creating more vibrant pedestrian activity at these parking areas and along the pathways in Downtown would address this issue.

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #2 - RESULTS—RECURRING THEMES—REGIONAL

The purpose of Design Workshop #2 was to get feedback from the participants on Draft Regional Greening Plan and Draft Downtown Greening Plan, and to introduce participants to the concept of Green Street Typologies. To do this attendees were asked to use sticky post-its to give their comments on both of those Plans (pages 41,42) and the graphic cross-sections that were produced to depict select Typologies. The results were then summa-rized graphically and are de-picted here on pages 46-50.

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #2 - RESULTS—RECURRING THEMES—DOWNTOWN

MAP LEGEND

- SAN PEDRO BID BOUNDARY
- EXISTING OPEN SPACE

POTENTIAL PATHWAYS

- GREEN STREETS
- DOWNTOWN CORE GREEN (DCG)
- DOWNTOWN TRANSITION GREEN (DTG)
- PORT COMMERCIAL GREEN (PCG)
- METROPOLITAN GREEN (MTG)
- ALLEYWAYS AND PASEOS

POTENTIAL OUTLETS

- POTENTIAL PARKLET DISTRICT
- EXISTING PARKING LOTS - POTENTIAL ENHANCED GREEN PARKING STRUCTURE OPPORTUNITIES
- POTENTIAL OPEN SPACE AREAS

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #2 - RESULTS - DOWNTOWN TYPOLOGIES

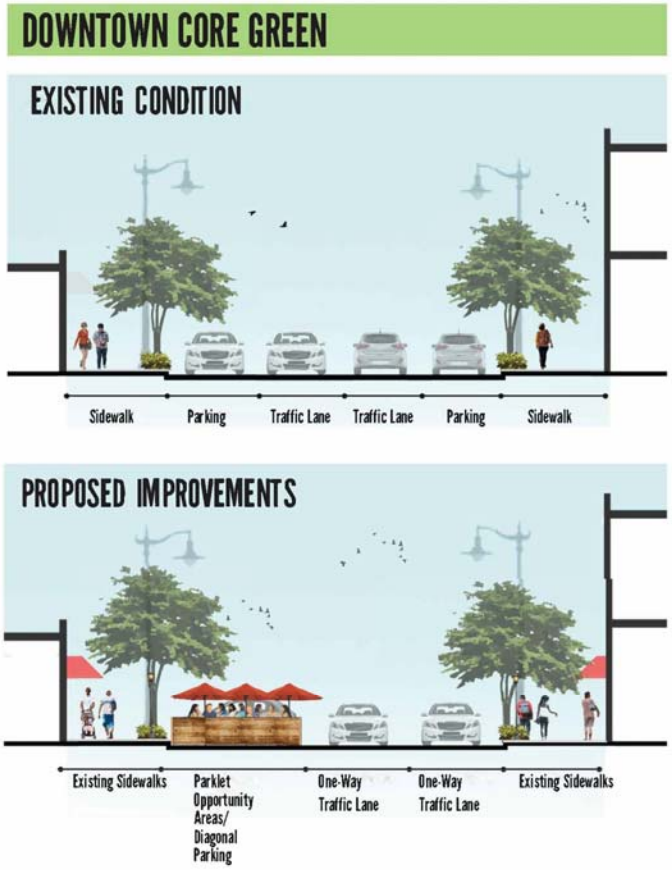
KEY MAP:

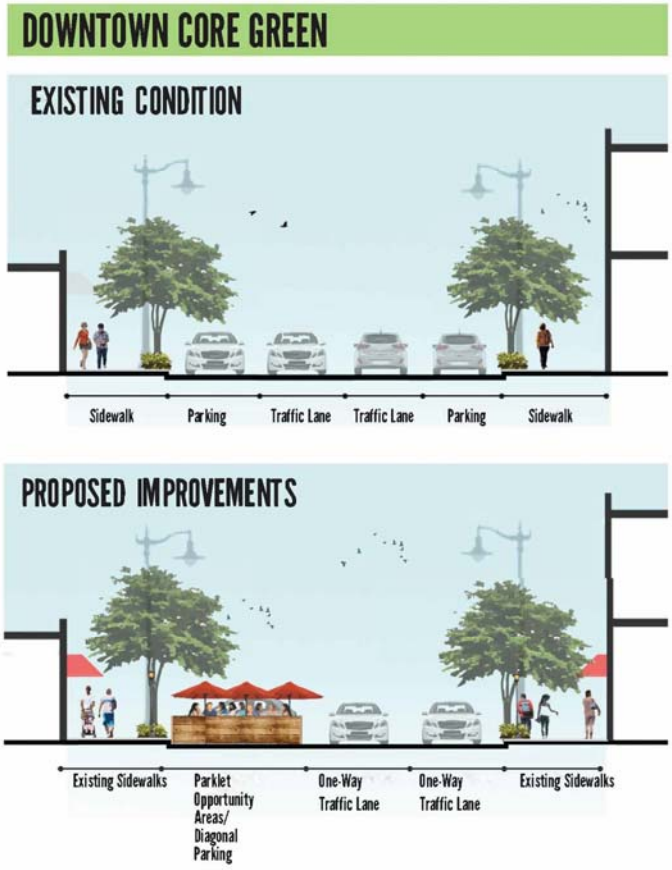
*See typologies reference sheet for more information regarding street typologies.

This Key Map shows all of the types of Green Streets (Typologies) that have been characterized and mapped for the Downtown San Pedro Area.

The following pages contain cross section graphics that depict the proposed "character" of each of this Typologies, including the list and proposed placement of the green and pedestrian oriented elements and improvement.

DESIGN WORKSHOP #2 - RESULTS - DOWNTOWN CORE GREEN STREET





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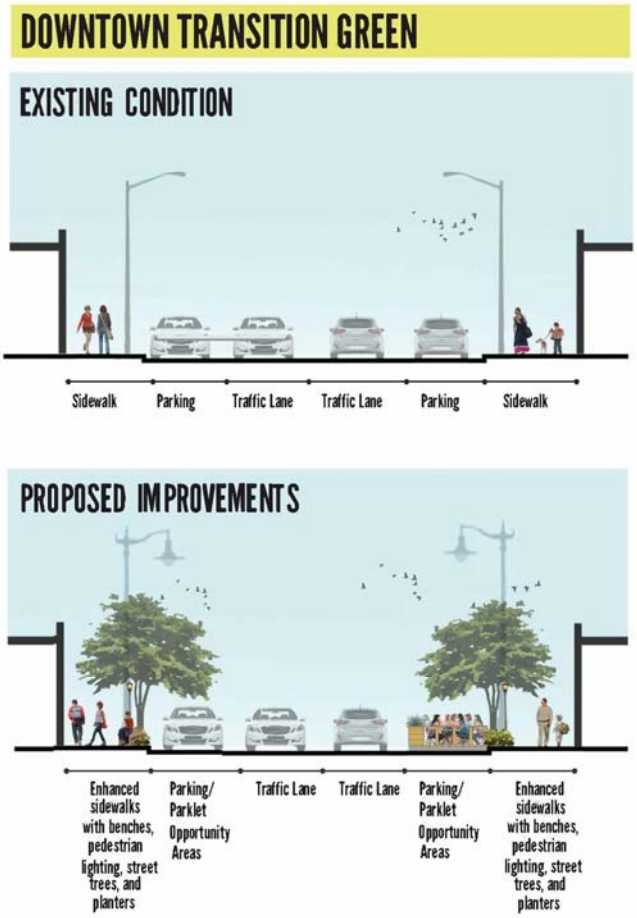
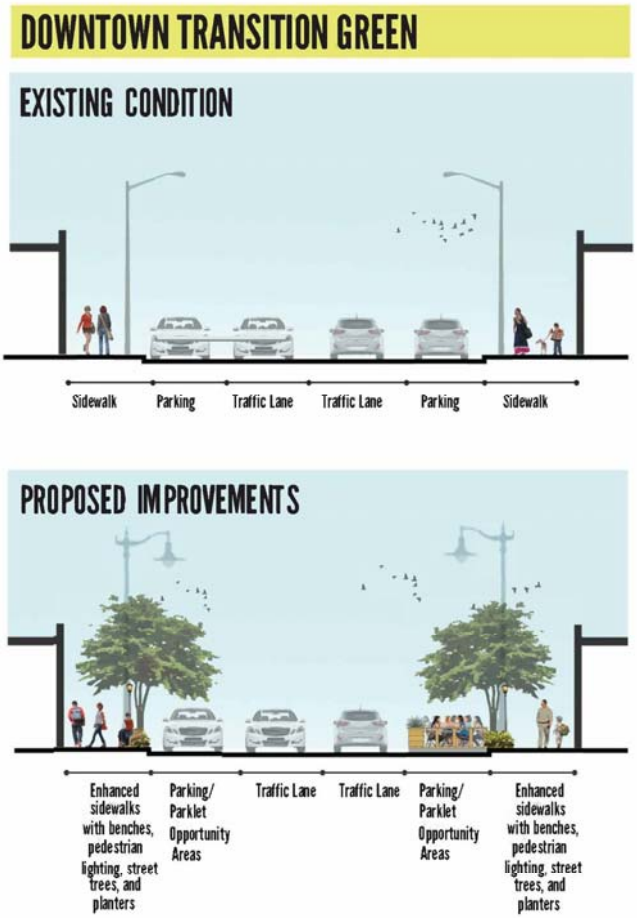
DESIGN WORKSHOP #2 - RESULTS - DOWNTOWN TRANSITION GREEN STREET





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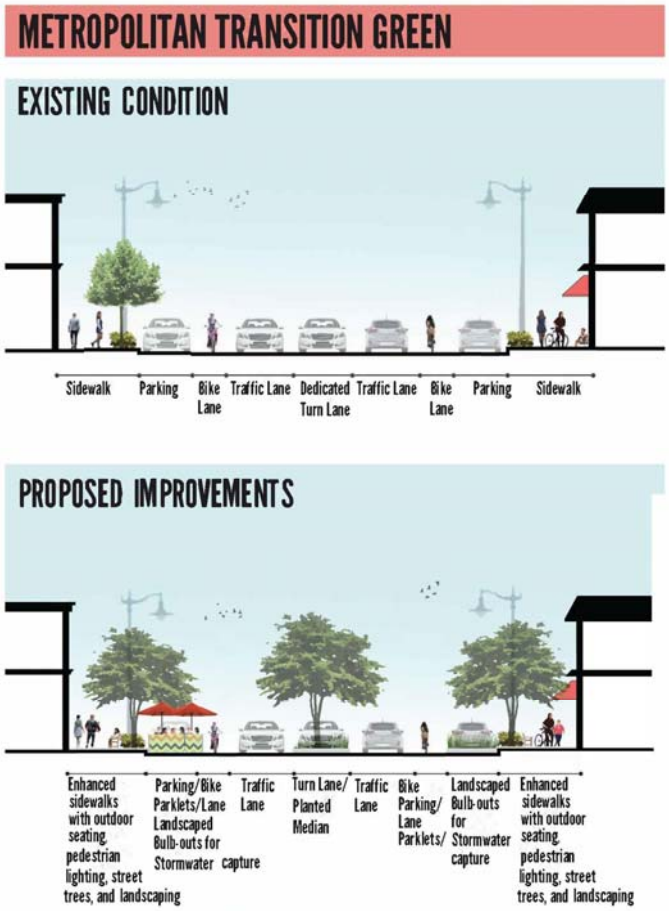
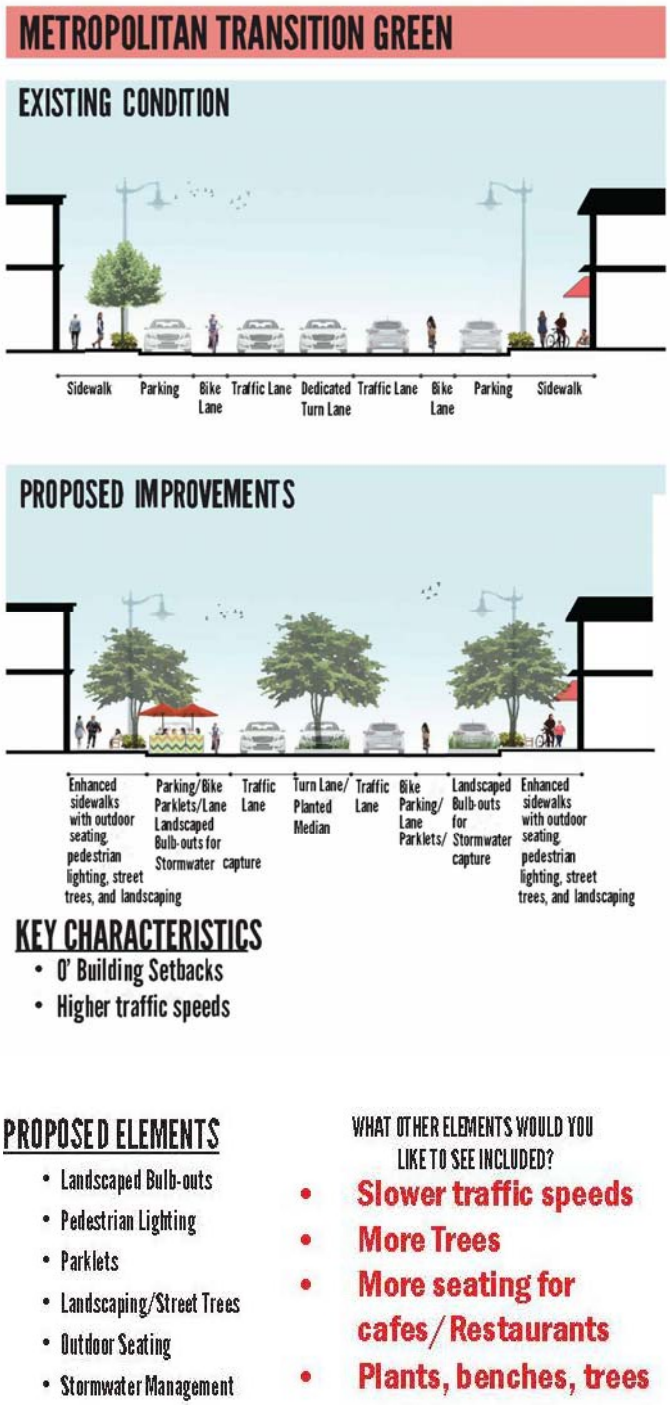
DESIGN WORKSHOP #2 - RESULTS - METRO TRANSITION GREEN STREET





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DESIGN WORKSHOP #2 - RESULTS - PORT COMMERCIAL MIXED USE GREEN

Reoccurring Theme Single Comment

WORKSHOP #2 SUMMARY

COMMENTS/ANNOTATIONS BY THE COMMUNITY

The original graphic is shown on the left of the page, while the graphic on the right above shows the public comments received in red.

DESIGN WORKSHOP #2 - RESULTS - PASEOS/ PARKING PATHWAYS

The original graphic is shown on the left of the page, while the graphic on the right above shows the public comments received in red.

DESIGN WORKSHOP #3 - RESULTS—FINAL REGIONAL TYPOLOGIES

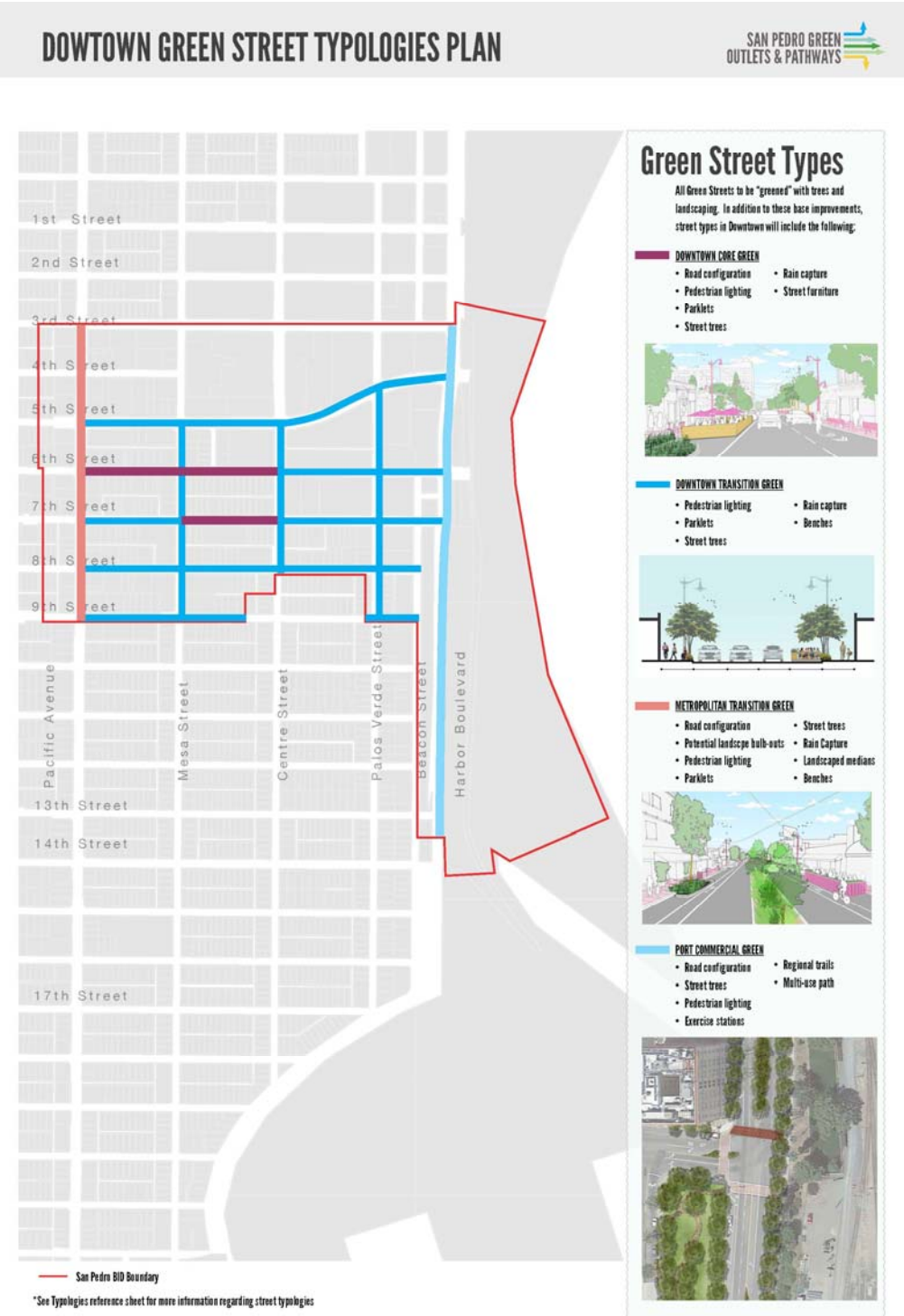
The purpose of Design Workshop #3 was to present the Final Regional and Downtown Green Streets Typologies Plans as a result of input during Design Workshop #2, and to get input for specific "Pathway and Outlets Opportunities".

In addition, additional design graphics were presented depicting the revisions made to select typologies as a result of input during Design Workshop #2. These results are presented on pages 53-56.

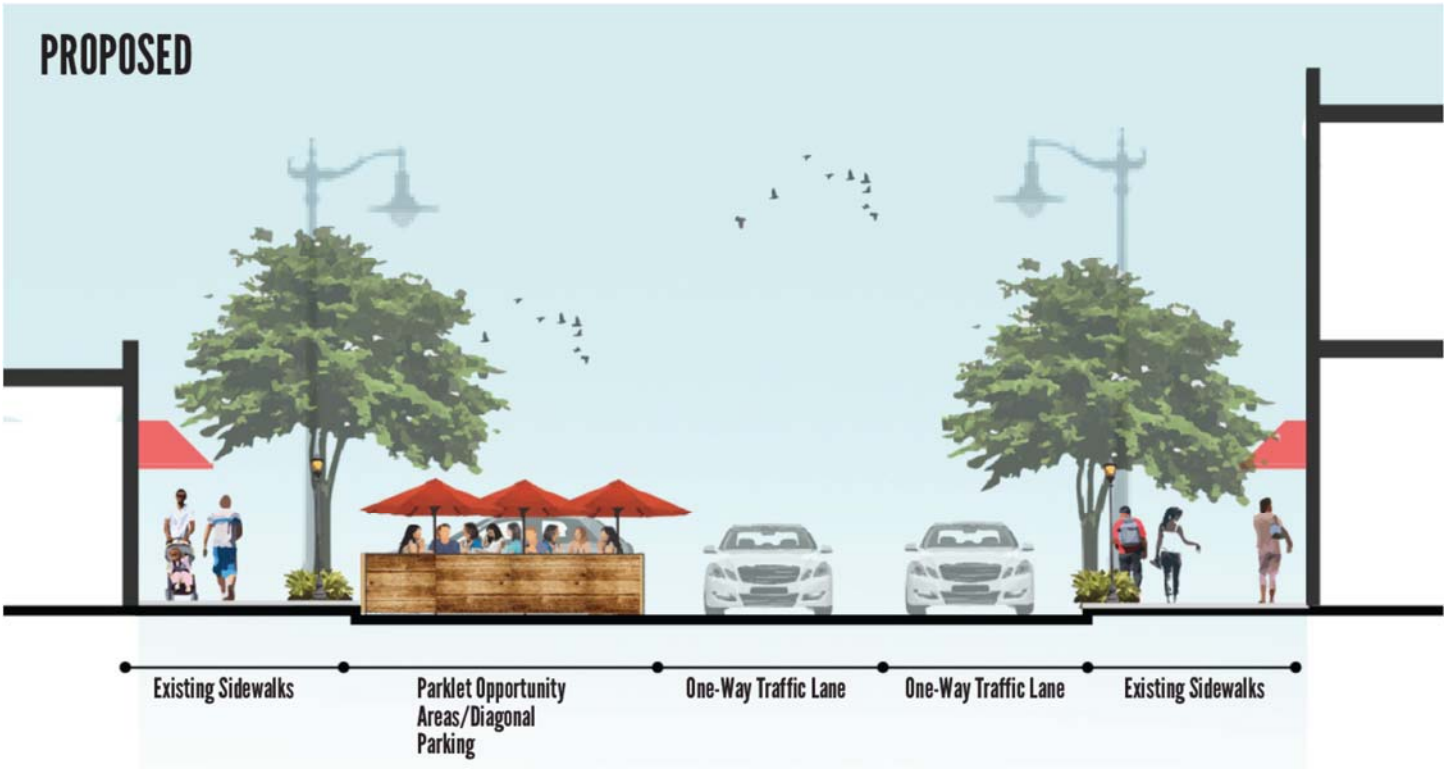
The resultant "Urban Greening Opportunities" were developed and presented to the Urban Greening Advisory Committee (UGAC) at a meeting in Spring 2015. Input from the UGAC and subsequent discussions with various stakeholder representatives and additional needs assessment were used to create the "Opportunities" presented later in this Plan.

SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #3 - RESULTS—FINAL DOWNTOWN TYPOLOGIES

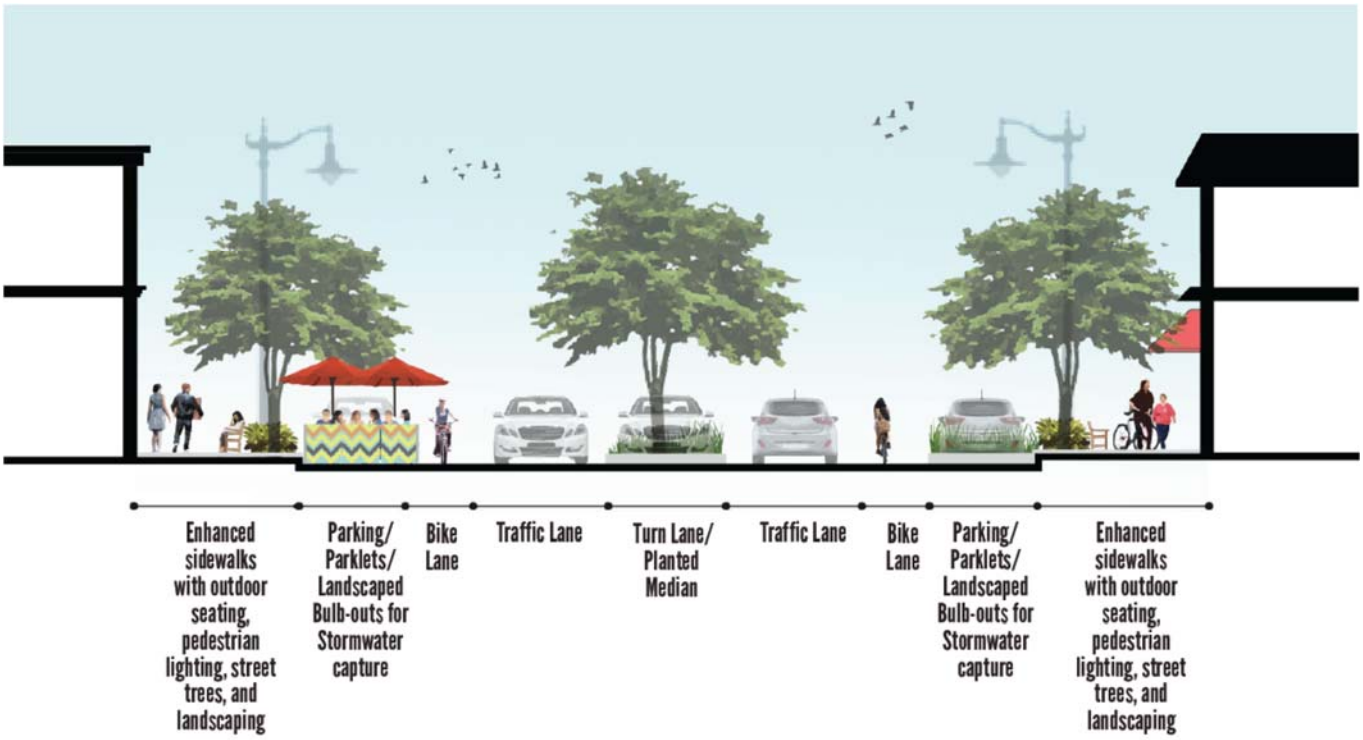


DESIGN WORKSHOP #3 - RESULTS—DOWNTOWN CORE—6TH & 7TH STREETS

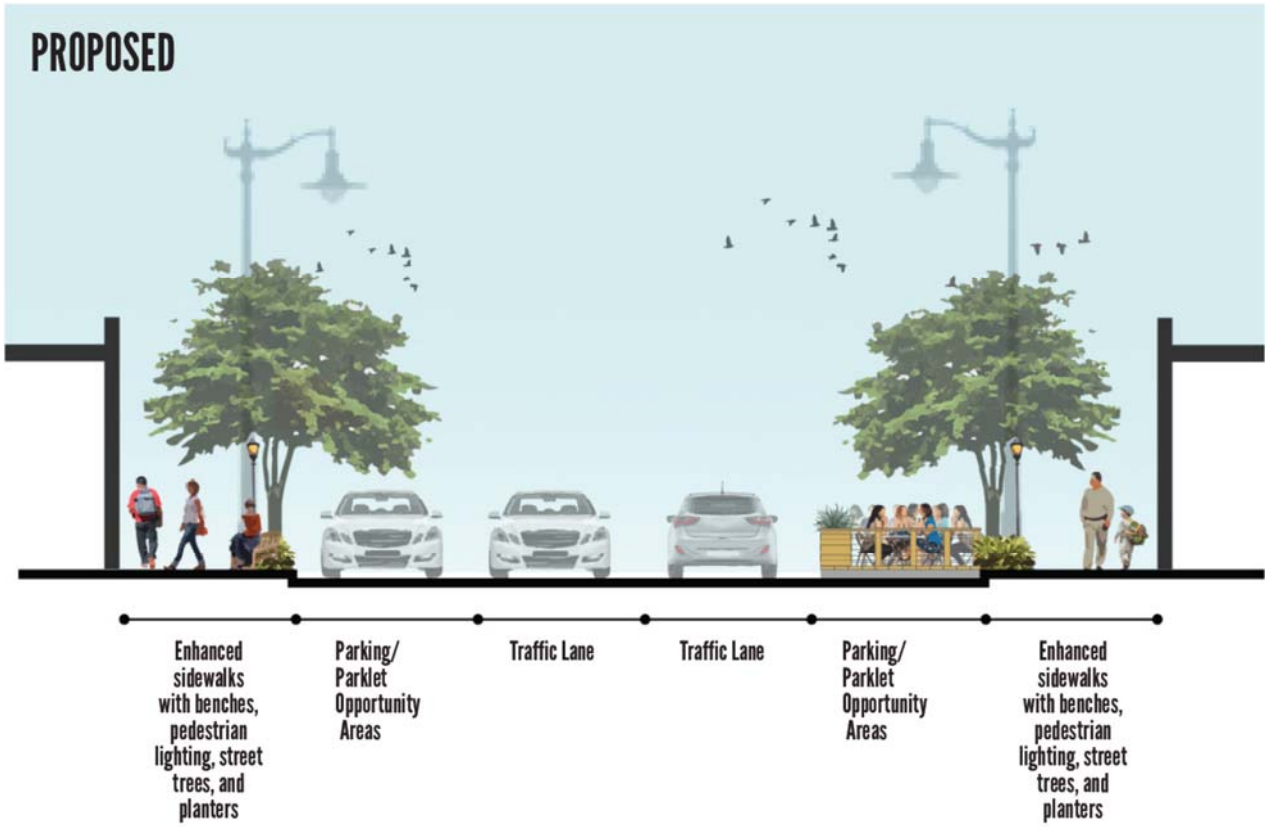


SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #3 - RESULTS—METROPOLITAN—PACIFIC AVE.



DESIGN WORKSHOP #3 - RESULTS—DOWNTOWN TRANSITION



SAN PEDRO GREEN OUTLETS & PATHWAYS

DESIGN WORKSHOP #3 - RESULTS—PARKING PASEOS

THIS GRAPHIC IS NOT SITE SPECIFIC AND IS INTENDED TO REFLECT THE FULL RANGE OF POTENTIAL IMPROVEMENTS *

KEY CHARACTERISTICS

- 0' Building Setbacks
- Opportunities for Business Store Fronts
- Pedestrian Focus
- Opportunity to Connect Parking and Storefronts
- Limited Vehicular Activity

PROPOSED ELEMENTS

1. PERMEABLE BRICK PAVING WITH CONCRETE BANDING
2. PLANTERS FOR STORMWATER RUNOFF
3. ADDITIONAL LANDSCAPING IN PARKING LOT
4. OUTDOOR SEATING OPPORTUNITIES

SAN PEDRO GREEN OUTLETS & PATHWAYS

GREEN OUTLET & PATHWAY OPPORTUNITIES - OVERVIEW & IMPLEMENTATION

Arguably, the primary component of the San Pedro Urban Greening Implementation Plan is the list of "Green Outlet and Pathway Opportunities". This is the culmination of the entire "community-based planning" process—the numerous meetings of the Urban Greening Advisory Committee (UGAC), the design workshops, the public opinion survey, and an array of additional meetings with the neighborhood councils and their committees, variouos park advisory boards (PABs), and the business community—and finally the needs assessment.

As a refresher, and for those readers who have jumped directly to this section, "outlets" refers to "areas" like enhancement of existing parks (ranging from larger regional parks to single city lot pocket parks), creation of outdoor dining opportunities (seating and eating areas that extend beyond the sidewalk/curb line to occupy one or more otherwise curbside parking spaces), and the improvement of other types of neglected non-park open space into higher "performing" open space (e.g., habitat conservation, water conservation, passive recreation, or active recreation "green spaces"). Pathways can be existing streets that are enhanced in such a way that they become true "Green Streets", dedicated off-street pedestrian paths/hiking trails, or even an alleyway network of "paseos".

"Green Streets" are much more than streets that have street trees planted along them. They are in fact: streets that have "green" elements on them, such as trees, planted areas, bioswales, bike facilities, multi-use paths, and people-friendly street reconfigurations. In addition, these streets help treat storm water, shade pedestrians, use environmentally-friendly fixtures and designs, and/or encourage active transportation, including biking, walking and transit-use.

One of the main goals of this Plan is to identify those "outlets" and "pathways" that represent the best opportunities to make them "greener". The challenge is defining what we mean by "best". This Project utilized several different methods for determining "best":

1. Design Workshops - community stakeholders were invited to participate in a design workshop setting to give their input on what they felt were the most important areas to "green", and then asked what types of "greening" elements, treatments or amenities they would prefer
2. Public Opinion Surveys - community stakeholders were asked very similar questions as those posed at the Design Workshops; the idea was to extend the reach of the Design Workshops to a larger segment of the community stakeholder base. The purpose was to have participants help define the goals and guiding principles for the project, the kinds of amenities that should be included, and where the improvements should be located.
3. Needs Assessment - this involved making actual field observations within the Project's geographical area to determine the limits of what was "physically" possible in the way of urban greening along pathways and within outlets that were identified as priority locations for greening enhancements by the community
4. Implementation "Feasibility" - this involves a value judgment on the feasibility of achieving: 1) what was identified as preferred through the design workshops and public opinion surveys; 2) what was physically possible as determined through the needs assessment; and 3) what was feasible within the constraints presented by a host of other factors related to "implementation".

It is not enough that something is preferred and that it is physically appropriate and possible. One also has to consider the following:

1. Development Funding - both pre-construction & construction costs
2. Environmental Assessment & Mitigation
3. Property Owner Approval
4. Regulatory Requirements
5. Necessary Design & Engineering
6. Permitting Process
7. "Sustainability" = Operations & Maintenance

For example, an existing brownfield (land that has had

some form of chemical or other type of waste contamination, e.g., unexploded military ordinance, or former landfill, non-sanctioned dumping site, etc.) may represent a great large scale open space opportunity. However, the "environmental assessment and mitigation" could take many years before any type of open space development could be designed, permitted, approved and funded. On the other hand, getting a tree planting permit could take only a month or two once the planting sites have been identified.

Hence, "prioritization" once the opportunity is deemed desirable, needed and feasible, comes down to how doable it is, and includes funding availability and identifying the means for taking care of the improvement (operations and maintenance) once it is installed.

With that in mind, the following pages describe a long list of "San Pedro Outlet and Pathway Urban Greening Opportunities". Each has been characterized as to its geographic location and extent within the community, and the specific urban greening elements and enhancements that are being proposed to be developed for that opportunity.

Each opportunity has a number of steps that will be required to move it forward from concept through any required design and/or engineering, environmental compliance, and permitting. For any opportunity, public funding sources will require three (3) things to be resolved before they will judge the actual "merit" of the opportunity. These are described below:

1. **LAND TENURE**—Does the applicant for funding have permission of the land owner to perform the enhancements proposed in the funding application? Of course, if the applicant is the owner of the property to be enhanced, then it will need approval from it's governing body to submit the application. If the applicant is a non-profit, non-governmental or community-based organization, it will need approval from its board of directors. WITHOUT APPROVAL FROM THE LAND OWNER TO ACCESS THE PROPERTY TO PERFORM THE WORK, THE PUBLIC FUNDER WILL NOT CONSIDER THE MERITS OF THE REMAINDER OF THE APPLICATION.
2. **ENVIRONMENTAL CLEARANCE**— This usually refers to satisfying California Environmental Quality Act (CEQA) requirements. Most of the Opportunities listed in this Plan will only require a "Categorical Exemption" (they are shown as "None Required" in the Road Map Matrix shown in the following pages). There are a few that will require more "environmental assessment" and clearance documentation, and this is indicated as appropriate within the Matrix.
3. **OPERATIONS & MAINTENANCE (O&M) -** Pretty much all public grant funders require that the grant applicant demonstrate that O&M funding and means has been secured for their proposed project. In the absence of documentation of another O&M agreement, it is expected that the Land Owner will be responsible for maintaining the project improvements once the project is completed. Grant applicants will need a letter from the land owner confirming that either they will operate and maintain the new facilities/improvements, or other documentation of at least an intent to enter into an agreement with another entity to do so.

The "Opportunity Road Map Matrix" that follows this narrative has information on "Land Owner", "CEQA", "Permits", and "O&M". There is also a column with "Notes" to help clarify what is needed to move the project through the permitting process.

The listing of the Opportunities begins with those projects that have been funded and are underway, then moves to projects that are funded but not yet under construction, and then finally moves into projects that are not yet permitted or funded. The listing is not meant to imply project "importance". The projects near the end of the list are generally those that are more complex and/or will require a more involved environmental clearance process.

One important overarching opportunity is that of creating unifying "wayfinding" signage for the overall network of green pathways and outlets.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITY 1

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
1.	**Urban Forest Ecosystem Restoration**	LA City - BOS, BSS, RAP; Caltrans	None required								SEE SUB-OPPS BELOW	As this opportunity is comprised of multiple "projects", PLEASE SEE "SUB-OPPORTUNITIES" BELOW FOR APPLICABLE INFORMATION
a.	**Planting Street Trees in Existing Parkways or Tree Wells - no concrete cutting or removal**	LA City - BSS	None required	X							CSP - 1st 3 years only	
b.	**Planting Street Trees in locations (City of LA only) requiring concrete removal**	LA City - BOE, BSS	None required	X	X						CSP - 1st 3 years only	
c.	**Planting Open Space Trees and Landscape/ Irrigation Project - RAP Property**	LA City RAP	None required						X		TBD - Project x Project basis	Recommend starting with Park Advisory Board (PAB), then working with local park supervisor; RAP Urban Forester will need to approve tree species
d.	**Planting Open Space Trees - POLA Property**	POLA	None required						X		TBD - Project x Project basis	Recommend starting with local neighborhood council, and working with POLA representative to the NC; will eventually need approval of POLA Landscape Architect
e.	**Planting Open Space Trees - Caltrans Property**	Caltrans	None required					X			TBD - Project x Project basis	Caltrans will require landscape improvement plan stamped by licensed professional to go with Standard Encroachment Permit
f.	**Bioswale and/or Rain Garden construction along streets**	LA City - BOE, BOS, BSS	None required	X	X	X	X					Type of Permit will depend on the scale, location, technology deployed. SEE GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS

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SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITIES #2-9

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
2.	**Priority Pathways & Outlets Tree Planting Strategies**	LA City - BOE, BSS	None required	X	X							A-Permit for sidewalk removal + Tree Planting Permit
3.	**Western Ave. Median Tree Planting**	Caltrans	None required					X	X		CSP - 1st 3 years only	Project Completed - CSP providing maintenance for 1st 3 years
4.	**Harbor Blvd. Median Turf Replacement & Beautification**	LA City - BOE, BSS	None required	X	X						TBD	A-Permit required, submitted and acquired. Tree Planting Permit still needed
5.	**Sampson Way Realignment, Plaza & Central Parks**	POLA	Done							X	POLA	Construction Underway - Elements other than roadway and utility construction should be considered separate projects for separate permitting
6.	**North Gaffey Parkway Phase II**	POLA, Caltrans	Done					X		X	POLA	POLA property self-permitted; Encroachment Permit required for Caltrans Park & Ride lot
7.	**Front Street Beautification**	POLA	Done							X	POLA	Self-permitted by POLA
8.	**Private Property Tree Adoption Program**	LA City - City Plants Program	None required								Property Owner	No Permit required; property owner requests trees from City Plants Program and complies with requirements
9.	**Residential Turf Replacement**	LADWP - Turf Replacement	None required								Property Owner	Requires LA DWP Application - SEE OPPORTUNITY WRITE-UP

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SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITIES #10-16

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
10.	**Gaffey Great Street**	LA City - BOE, BSS	None required	X	X	X	X				TBD - Project x Project basis	SEE GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS
11.	**Interstate 110 Harbor Approach Beautification**	CALTRANS	None required					X			TBD	Design & engineering plans stamped by appropriate licenses professionals will be required to obtain Permit. Non-standard elements/treatments will require negotiation with Caltrans, e.g., public art/sculptures
12.	**N. Pacific to John S. Gibson Bicycle Parkway Connection**	LA City - BOE, BSS, LA DOT, POLA	None required		X							Comply with CA Manual on Uniform Traffic Control Devices (MUTCD), LA Municipal Code Sign Regs; amenities behind curb will require A-Permit
13.	**John S. Gibson Parkway Enhancement**	LA City - BOE, BSS, LA DOT, POLA	None required	X	X			X	X			Tree Planting Permit required to prune existing trees or plant new trees; A-Permit required to enhance existing raised medians; Caltrans Encroachment Permit required to enhance right of way (ROW) behind existing chain link fence at 110 Freeway ROW
14.	**Bandini Canyon Park to Peck Park Greenway**	LA City - RAP, BOE, BSS	None required		X				X		RAP in Bandini Park; TBD for rest	Any tree planting is included in Opportunity #1; A-Permit required for bicycle or wayfinding signage or concrete cutting/SW repair; Bandini Park trail enhancement requires approval from RAP
15.	**Peck Park to Leland Park Pedestrian Pathways**	LA City - BOE, BSS	None required		X						TBD	A-Permit required for wayfinding signage or SW repair
16.	**Summerland to N. Gaffey & N. Pacific Bike Connections**	LA City - BOE, BSS, LA DOT	None required		X					X	BSS	Bike route signage & other SW bicycle amenities will require A-Permit. Bike lane striping will require approval by BOE and LA DOT

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SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITIES #17-22

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
17.	**Leland Park Slopes Environmental Enhancement**	LA City - RAP	None required						X	X	RAP	Will require design & engineering by licensed professional; could be done by RAP design staff as workloads and budget allow; should include designs for both west and east Leland Park slopes
18.	**N. Gaffey Pedestrian Path - Elberon Bridge to Miraflores**	LA City - BOE, BSS	None required		X	X					BSS	Will require design & engineering by licensed professional; likely to require B-Permit whether pathway is behind existing curb or in dedicated protected path in roadway
19.	**N. Gaffey - Summerland Landscape Medians**	LA City - BOE, BSS	None required		X	X					BSS	A-Permit to landscape existing raised medians; B-Permit to construct raised medians where only median lane exists;
20.	**N. Gaffey Parkway Phase III W. Channel to Anaheim St. Medians, Parkway, Pedestrian Path**	LA City - BOE, BSS	None required	X	X	X					BSS	Will need B-Permit to convert median lane into a raised median; planting street trees behind the curb on both sides of the street will require Tree Planting Permit if planting in parkway; A-Permit required if cutting concrete
21.	**Pacific Coast Trail Connections**	Variable - LA City, POLA, RAP, Caltrans	None required		X					X	TBD	Assumes only signage & bicycle/ pedestrian type amenities required. Additional striping will require LA DOT and BOE approval. Fixing sidewalks requires A-Permit
22.	**Pacific Ave. Metropolitan Green Street**	LA City - BOE, BSS, LA DOT	None required	X	X	X	X				PBID	SEE GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS

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SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITIES #23-28

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
23.	**Downtown Core Green Streets**	LA City - BOE, BSS, LA DOT	None required	X	X	X	X				PBID	SEE GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS
24.	**Downtown Parking & Alley Paseos**	LA City - BOE, BSS, LA DOT	None required	X	X	X	X				PBID	SEE GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS
25.	**W. Channel Green Street - Park Western to N. Gaffey**	LA City - BOE, BSS, LA DOT	None required		X	X	X				BSS	Sections involving street widening will require B-Permit; if just cutting concrete to plant trees, repairing existing sidewalk or installing new sidewalk behind existing curb will require A-Permit. Planting trees requires Tree Planting Permit
26.	**22nd St. Brownfield Reclamation**	POLA, EPA, CalEPA	EIR							X	Property Owner or Leasee	Property will need to go through a Phase I environmental assessment and likely a Phase II assessment to develop a remedial action plan before proceeding to any type of redevelopment. SEE APPENDIX __ FOR MORE INFO.
27.	**Alma Park Historic Restoration**	LA City - RAP, BOS	TBD							X	TBD	Major long term project. Will require design & engineering docs signed by licensed Civil Engineer; will likely need to find funding for both design & construction; will need to be coordinated between RAP and BOS
28.	**N. Pacific Hillside Restoration**	LA City - Planning, Building & Safety, BOE, BSS; POLA; CalEPA	TBD		X	X				X	TBD	Major long term project. Need to confirm property ownership of lots in this area. Vacating existing land use will require involvement of City Planning & Building & Safety & likely compensation to current property owners.

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SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES IMPLEMENTATION ROAD MAP MATRIX-OPPORTUNITIES #29-32

#	Opportunity	Land Owner/ Permitting Agencies	CEQA	Tree Planting Permit	A-Permit	B-Permit	R-Permit	Encroach Permit	Design Layout & Species Approval	Other	O & M	Notes
29.	**San Pedro Canyon Restoration & 1st & 6th St. Green Street Bioswales & Rain Gardens**	LA City - Planning, BOE, BOS, BSS; CalEPA	TBD	X	X	X				X	TBD	San Pedro Cyn. Restoration components (SEE MULTIPLE SEGMENTS ON OPP. #29 PAGE) will require more extensive design/ engineering process. Use GREEN STREETS & ALLEYS DESIGN GUIDELINES FOR BIOSWALES AND/OR RAIN GARDENS
30.	**S. Pacific Traffic Calming & Green Street Enhancements**	LA City - LADOT, BOE, BOS, BSS	None	X	X	X				X	TBD	Traffic study should be done to help determine best locations for bulb-outs, and textured paving crosswalks. Design & engineering plans will be needed to pull B-Permit. Use GREEN STREETS & ALLEYS DESIGN GUIDELINES FOR BIOSWALES AND/OR RAIN GARDENS
31.	**San Pedro Recycled Water Connection from Machado Lake/ Terminal Island**	LA City - BOE, BOS, BSS, LADWP; CalEPA	TBD			X				X	TBD	Will require extensive coordination for design & engineering of the pipeline down N. Gaffey from Anaheim St./ Machado Lake and onto public property for water re-use, and determination of available capacity from Terminal Island. Payment for water use will need to be determined prior to approval of project.
32.	**Bandini Canyon/Caltrans/Leland East Sub-watersheds Storm Water Capture & Re-use**	LA City - BOE, BOS, BSS, LADWP, RAP; CalEPA;CAL TRANS	TBD			X				X	TBD	Will require extensive coordination & reconciliation of regulatory & design/engineering requirements across multiple City & State Agencies.

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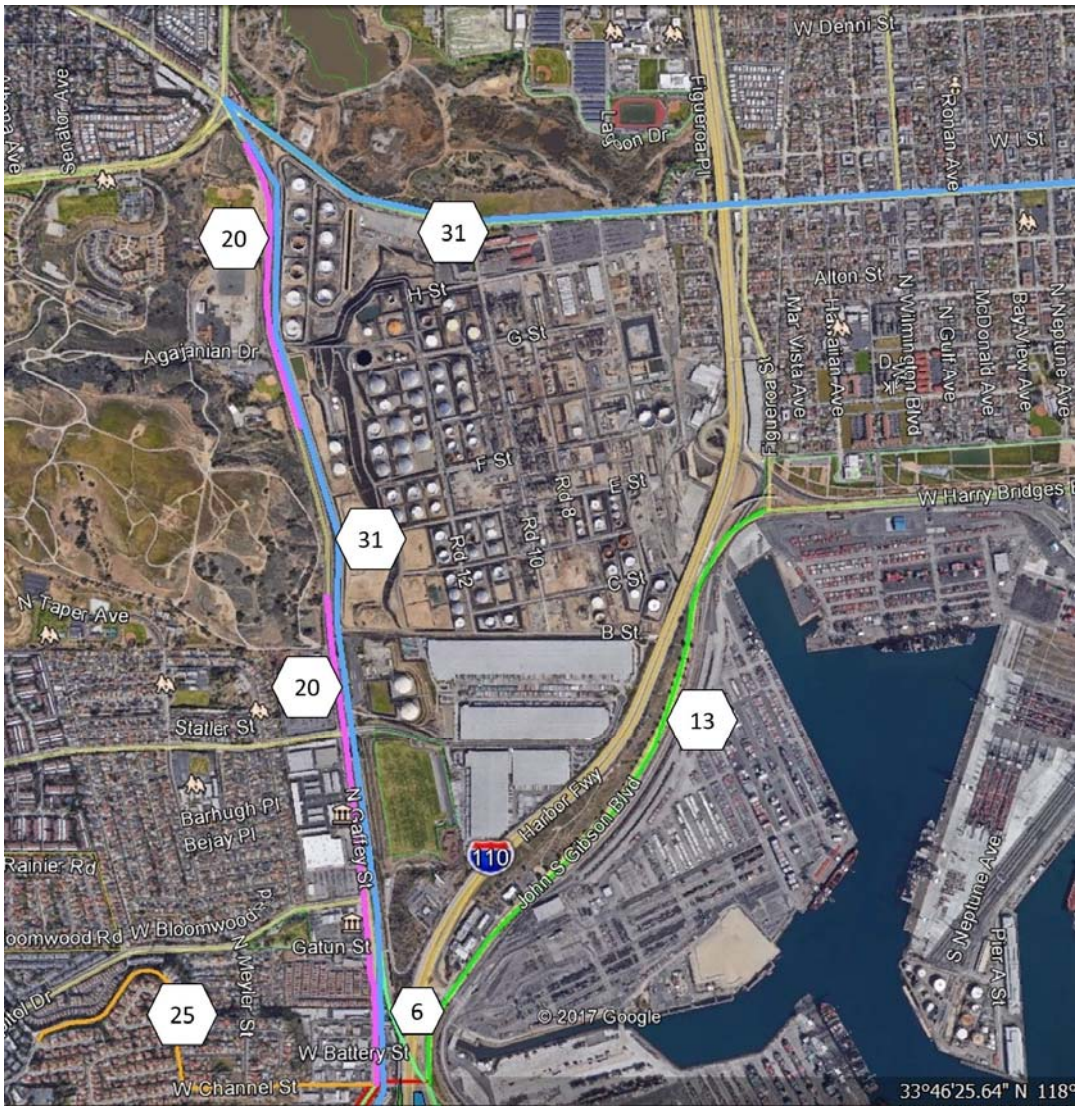
SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES KEY MAPS- SAN PEDRO NORTH-CHANNEL TO ANAHEIM

The following pages contain maps showing the locations of each of the "Opportunities" listed in the Road Map Matrix shown on the previous pages. The only exceptions are for Opportunity #1—Greater Downtown Urban Forest Restoration, and for Opportunity #21—Pacific Coast Trail Connections. The former is an opportunity that geographically spans the Greater Downtown San Pedro Area, and consists of several "sub-opportunities" that are dispersed over that area. Therefore, the reader should consult the section devoted to that Opportunity for relevant maps. The same applies to Opportunity #2. Please consult that section for relevant maps showing locations for each of the distinct "connections".



The map on this page shows the Opportunities for the area north of W. Channel St. only. Please refer to the "Road Map Matrix" on the previous pages for the "Road Map" steps needed to implement each of the Opportunities represented on the Key Map. The "Key" below lists the title of each of the represented Opportunities.

OPPORTUNITIES KEY:

6. **North Gaffey Parkway Phase II**
13. **John S. Gibson Parkway Enhancement**
20. **N. Gaffey Parkway Phase III W. Channel to Anaheim St.—Medians, Parkway, Pedestrian Path**
25. **W. Channel Green Street - Park Western to N. Gaffey**
31. **San Pedro Recycled Water Connection from Machado Lake/Terminal Island**

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES KEY MAPS- "OUTLET" OPPS CHANNEL TO BANDINI CYN

This map shows locations of “Outlet” Opportunities only between Channel St.. and just north of 1st Street. Please refer to the “Road Map Matrix” on the previous pages for the “Road Map” steps needed to implement each of the Opportunities represented on the Key Map below. The “Key” below lists the title of each of the represented Opportunities.

OPPORTUNITIES KEY:

7. **Front Street Beautification**
11. **Interstate 110 Harbor Approach Beautification**
17. **Leland Park Slopes Environmental Enhancement**
28. **N. Pacific Hillside Restoration**
32. **Bandini Canyon/Caltrans/Leland East Sub-watersheds Storm Water Capture & Re-use**

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES KEY MAPS- "PATHWAY" OPPS CHANNEL TO BANDINI CYN

This map shows locations of "Pathway" only Opportunities between Channel St. and just north of 1st Street. Please refer to the "Road Map Matrix" on the previous pages for the "Road Map" steps needed to implement each of the Opportunities represented on the Key Map below. The "Key" below lists the title of each of the represented Opportunities.

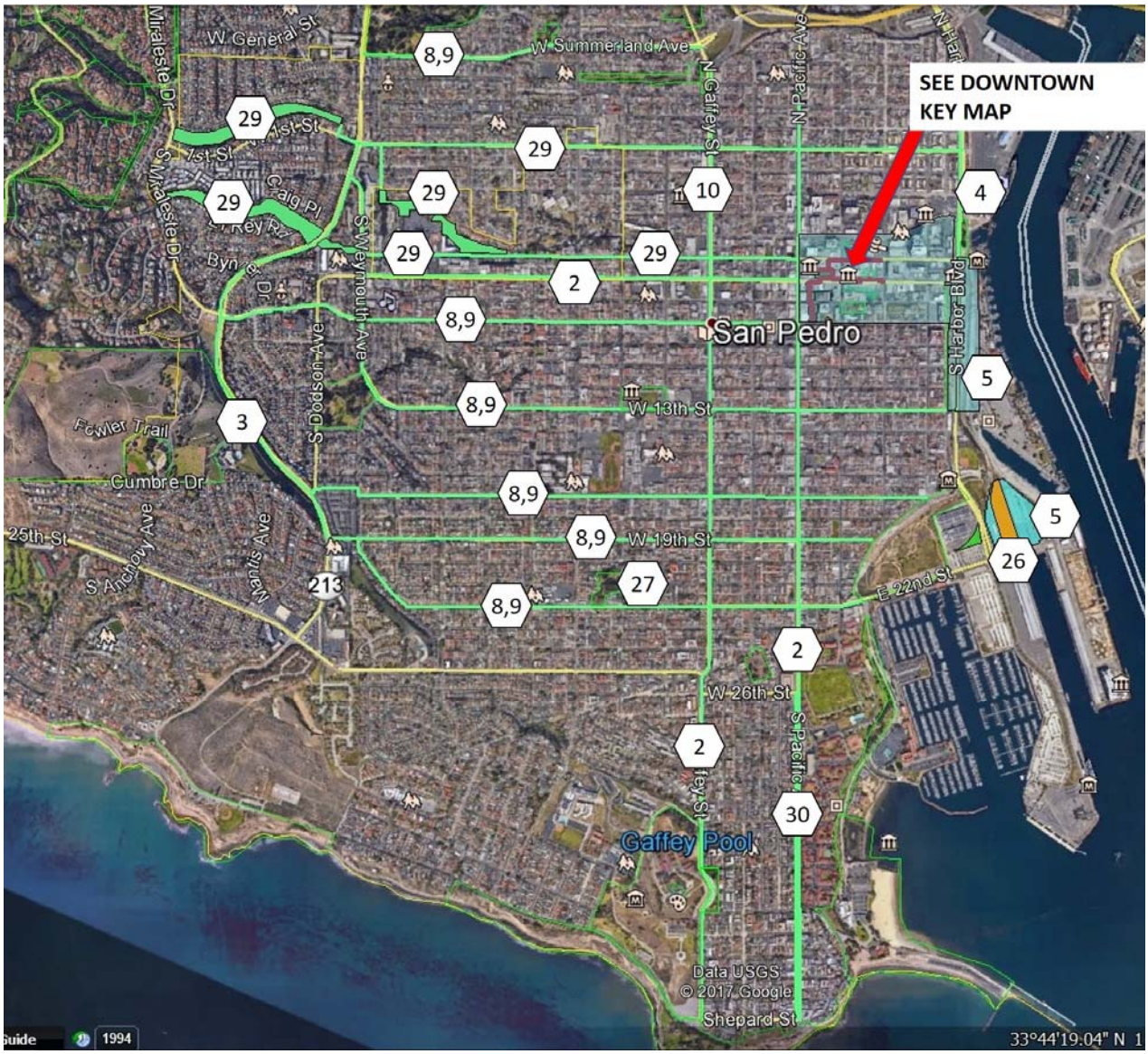
OPPORTUNITIES KEY:

12. N. Pacific to John S. Gibson Bicycle Parkway Connection
14. Bandini Cyn Park to Peck Park Greenway
15. Peck Park to Leland Park Pedestrian Pathways
16. Summerland to N. Gaffey & N. Pacific Bike Connections
18. N. Gaffey Pedestrian Path - Elberon Bridge to Miraflores
19. N. Gaffey - Summerland Landscape Medians

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES KEY MAPS- CENTRAL, SOUTH, COASTAL SAN PEDRO

This map shows locations of Opportunities from 1st Street south to Paseo Del Mar. Please refer to the "Road Map Matrix" on the previous pages for the "Road Map" steps needed to implement each of the Opportunities represented on the Key Map below. The "Key" below lists the title of each of the represented Opportunities.



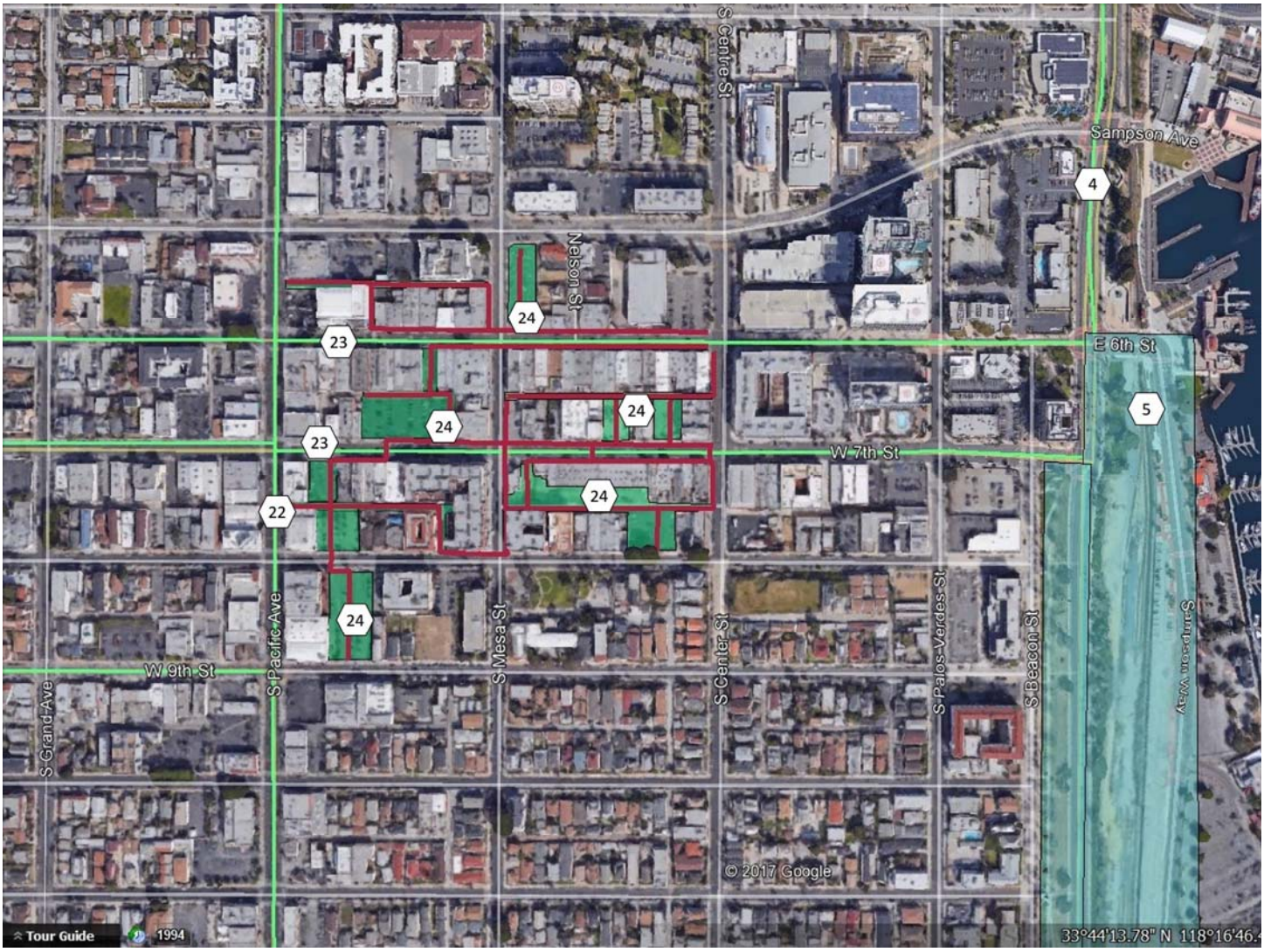
OPPORTUNITIES KEY:

2. **Priority Pathways & Outlets Tree Planting Strategies**
3. **Western Ave. Median Tree Planting**
4. **Harbor Blvd. Median Turf Replacement & Beautification**
5. **Sampson Way Realignment, Plaza Park & Central Park**
8. **Private Property Tree Adoption Program**
9. **Residential Turf Replacement**
10. **Gaffey Great Street**
26. **22nd St. Brownfield Reclamation**
27. **Alma Storm Water Park**
29. **San Pedro Canyon Restoration & 1st & 6th St. Green Streets**
30. **S. Pacific Traffic Calming & Green Street Enhancements**

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITIES KEY MAPS- DOWNTOWN SAN PEDRO

This map shows locations of Opportunities for the Downtown San Pedro Area only. Please refer to the "Road Map Matrix" on the previous pages for the Opportunity represented by each number. Please refer to the "Road Map Matrix" on the previous pages for the "Road Map" steps needed to implement each of the Opportunities represented on the Key Map below. The "Key" below lists the title of each of the represented Opportunities.



OPPORTUNITIES KEY:

4. **Harbor Blvd. Median Turf Replacement & Beautification**
5. **Sampson Way Realignment, Plaza & Central Parks**
22. **Pacific Ave. Metropolitan Green Street**
23. **Downtown Core Green Streets**
24. **Downtown Parking & Alley Paseos**

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #1— URBAN FOREST ECOSYSTEM RESTORATION

The goal of this opportunity is to enhance the existing urban forest within the Greater San Pedro Community. This will be achieved by planting new street trees and open space trees, and by facilitating the planting of trees on private property fronting streets with too little public spaces along particular high profile streets. It also includes, addressing sustainability issues presented by existing mature trees within this community. These issues include pruning mature trees, removing dead or dying trees and replacing them with appropriate tree species, fixing broken sidewalks and curbs and gutters associated with mature trees, and expanding tree wells (the grow space around the base of street trees) whenever possible. Normally, these types of actions are the responsibility of the Bureau of Street Services Urban Forestry Division (street trees), and the Dept. of Recreation and Parks (park and open space trees); however, the City has not allocated sufficient funding for these activities for a number of years. Given the prospect of continued budget shortfalls devoted to these activities, it is prudent to consider alternative means for addressing these needs in San Pedro.

Towards that end, the LA Conservation Corps secured grant funding from CALFIRE that will fund the following improvements of the Urban Forest Ecosystem Restoration Project: 1) Placing between 1500-2000 trees in open space, parkway and private property front yards (this includes trees that are "adopted" by property owners (See also Opportunity #8— Private Property Tree Adoption Program); 2) installation of Water Conservation Irrigation System at select locations where open space trees are being planted; 3) installation of a Bioswale in partnership with LA Bureau of Sanitation within the Caltrans "Triangle" (See Map on Page 66) ; 4) installation of Rain Gardens within existing parkways on qualifying residential streets that will divert, retain and treat storm water runoff; 5) removal of approximately 7500 SF of concrete that will be used for expanded street tree grow space; 6) one time young tree training pruning during Year 2 of the Maintenance Period on the street trees planted as part of this Project;

Photo of broken sidewalk from wrong tree planted in the wrong place. Where possible the broken sidewalk can be cut out and the tree planting area expanded by cutting out additional sidewalk as seen in the next photo

7) replacement of approximately 37,500 SF of turf with drought tolerant new landscape - this will include both larger scale projects as well as residential lots along priority Residential Green Streets;

Photo of an expanded tree well that was created by removing broken sidewalk and then cutting out additional sidewalk to expand the tree grow space so roots don't continue to uplift the sidewalk

Photo of existing Caltrans "triangle" property between Summerland Ave., Gaffey Street and the SR 47 offramp - size is approx. 3 acres - which would allow the planting of up to 120 large stature drought tolerant trees at 33 ft. spacing. The primary groundcover should be wood mulch that will help conserve water Other elements will include a bioswale, and walking/jogging/ exercise path.

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and 8) Placement of mulch for erosion control and to conserve water in select open space and parkway locations.

Photo example of an existing open space area along the Los Angeles River in the Burbank/Glendale area of LA County that has a grove of mature California Sycamore and Coast Live Oak trees - This is an example of what is possible in open space areas in San Pedro with one alteration—installing mulch around the trees in an area that extends to the edge of the canopy of each tree thereby conserving water and providing better soil conditions for optimum root growth

The illustrations on this page show just some of the possible results from high quality open space trees plantings, rain garden and bioswales installations, and conversion of residential front yards from turf to drought tolerant landscapes.

The diagram below illustrates how water flows into and through a bioswale treatment along a Green Street.

Photo to the right shows a before and after view of a front lawn that has been converted into a more water conserving landscape by removing some turf and replacing with mulch

Photo of one example of a Rain Garden where stormwater runoff coming down the street at the curb can be directed into a planting area for use by plants and groundwater recharge

Illustration of a number of different versions of green street treatments. The cutaway shows how water flows into a rain garden and then flows through the rain garden

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #1— URBAN FOREST ECOSYSTEM RESTORATION

These two (2) aerial views show the potential major open space tree planting opportunities in the disadvantaged census tracts of the San Pedro Community:

1) Leland Park West; 2) Caltrans "Triangle"; and 3) Knoll Hill. The total estimated tree plantings within each of these areas is as follows:

1. Leland Park West = 100 trees
2. Bandini Canyon = 50 trees
3. Caltrans "Triangle = 50 trees
4. Knoll Hill Open Space = 150 trees

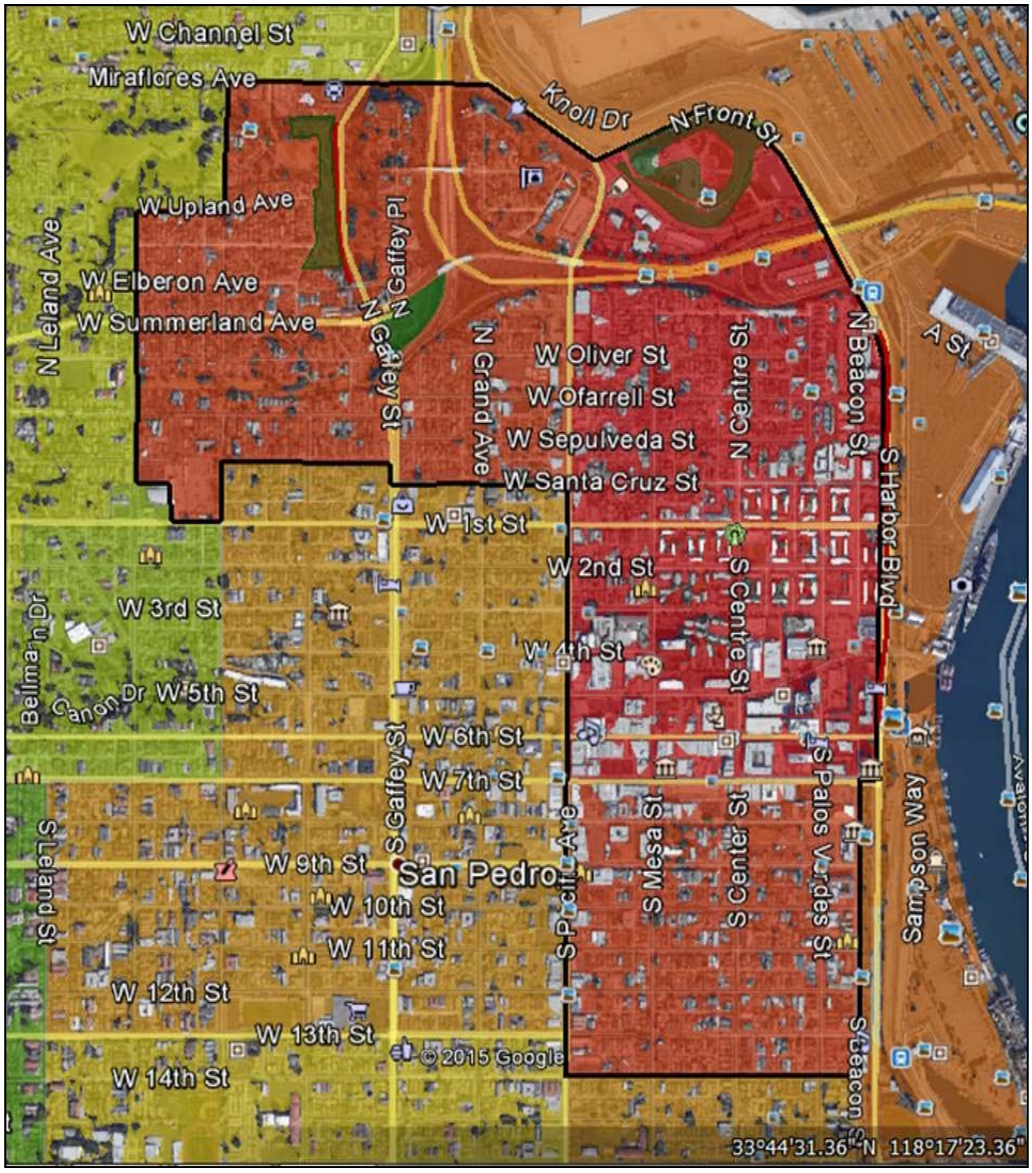
The remaining trees could be planted in the following areas (the final totals and species composition to be planted will need to be coordinated with the public land property owners): 1) existing medians along Harbor Blvd. and at Gulch Rd. just south of the Plaza Park slope areas also along Harbor Blvd; 2) along open space areas along the west side of Western Ave. between 9th St. and 17th St.; 3) Peck Park; and 4) within other Caltrans properties along the Interstate 110 corridor between Channel St. and Harbor Blvd.

"Smart" irrigation systems control the timing of the watering cycles based on soil moisture content, weather conditions and breaks in the pipes that supply the water to the planting areas. It also means using low flow non-spray (e.g., drip emitters or bubbler heads) or micro-spray sprinkler heads instead of larger spray heads. The control systems can be programmed to irrigate the planting areas for specified lengths of time that can be changed with the seasons, so the water cycle is appropriate for the time of year.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #1— URBAN FOREST ECOSYSTEM RESTORATION

The map on this page (the color coding shows aggregated census tracts boundaries based on percentile levels of "Disadvantaged Community" (DAC)" - the more disadvantaged the darker the shading of red) shows the geographic boundary for this Urban Forest Ecosystem Restoration Opportunity. The area totals 608 acres inside a perimeter that encompasses all of the Downtown San Pedro Area, and continues north to include all of Knoll Hill, the Caltrans open space area known as the Caltrans Triangle, and all of Leland Park. Tree planting can also extend well beyond this boundary to the north, west, and south.



Overall, the Urban Forest Ecosystem Restoration Opportunity will fulfill the following objectives:

1) Demonstrate how a "community-based urban greening planning project" can lead directly to the implementation of the priority projects identified by community stakeholders in that planning process—this opportunity was identified and characterized early on in the planning process, and funded prior to completion of this San Pedro Urban Greening Plan;
2) Increase the urban forest and the associated ecosystem benefits in the highly disadvantaged neighborhoods of San Pedro (because the majority of the tree planting will be in DAC census tracts);
3) Sequester (store) Greenhouse Gas (GHG) and reduce GHG significantly over the next 40 years (by virtue of the fact that over 10,000 metric tons of carbon dioxide emissions is projected to be sequestered/reduced);
4) Promote an ecosystem management approach to urban forestry by demonstrating that by providing more grow space area for large stature trees to grow optimally the urban forest can function as highly productive "Green Infrastructure" (by removing concrete in sidewalks to create that additional grow space, allowing the planting of large stature trees);

SAN PEDRO GREEN OUTLETS & PATHWAYS

5) Advance the practice of urban forestry by showing how performing a "training pruning" on young trees can help optimize the tree's ability to grow and provide the GHG sequestration and emissions avoidance benefits; and
6) Simultaneously achieve GHG, water conservation, water quality, water supply, air quality, public health and beautification benefits that will be well documented and replicable by other communities;

In addition to the aforementioned objectives, the proposed deliverables for this Project will accomplish the following:

1) Mitigate the very high levels of air pollutants generated by Port of LA shipping, trucking and rail activities;
2) Capture, retain, clean, re-use and re-supply the local water supply that would otherwise flow untreated and wasted to the ocean through traditional storm drains;
3) Protect hillside open space areas from erosion and loss of sediment that would otherwise pollute our waterways;
4) Provide shade in several of the most Port of LA impacted residential neighborhoods; and
5) Beautify several of the "gateways" into the Community of San Pedro

This opportunity will be integrated with the residential "Turf Replacement Program" (See Opportunity #9) and the "Adopt-A-Tree" opportunity (See Opportunity #8). These opportunities apply to all property owners - residential or commercial - as long as the respective Program requirements are met.

PROJECT TIMELINE:

- Funding for this Project was obtained in Fall 2015 by the Los Angeles Conservation Corps = $1.5 Million
- Outreach activities needed to secure the tree planting sites began in Winter and Spring 2016.
- Concrete removal for planting street trees began in Summer 2016.
- Tree Planting began in late Summer 2016, and will continue through 2018.
- Bioswale grading began late Spring 2017 at the Caltrans Triangle, and construction is expected to be completed in 2018.
- Smart Irrigation installation is expected to begin in 2018 within the Harbor Blvd. Median Turf Replacement & Beautification Project (as a match to that HCBF funded project—SEE OPPORTUNITY #4)
- Rain Gardens planning and design is expected to begin in 2018 with construction to be completed by end of 2019.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #2 - PRIORITY PATHWAYS & OUTLETS TREE PLANTING STRATEGIES

The Urban Forestry Opportunity (OPPORTUNITY #1) is a major project that will ultimately result in a total of between 1500-2000 trees planted within San Pedro along streets, within parks and open space areas, and on private property (See also OPPORTUNITY #8). The recommenda-tions in this Opportunity cover geographic areas that may not be covered specifically by Opportunity #1, but may be covered by the other City programs and/or other fund-ing sources.

In addition, it is important to utilize this Opportunity to discuss tree species selection in general, as there are a number of considerations that should be addressed when selecting tree species for planting projects regardless of which Opportunity the actual tree planting would fall into. Perhaps the biggest consideration is to make sure that the species selected are not vulnerable to any major pests. At the time of this writing there are two (2) very closely related but distinct species of beetles that are attacking a lengthy list of locally planted tree species and spreading a lethal disease. They are the polyphagous shot hole borer (PSHB) and Kuroshio Shot Hole Borer (KSHB), and they both spread Fusarium Dieback (FD) disease. Normally, an urban greening plan would not delve into this much detail related to threats to tree species. However, due to the speed with which this pest/disease complex is spreading within urban tree populations it is critical to understand the threat and plan accordingly when it comes to tree species recommendations.

The first thing to know is which commonly found and planted tree species in Southern California act as reproductive hosts for these two (2) pest/disease complexes. That list includes the following tree species:

1. California Sycamore (Platanus racemosa)
2. Coast Live Oak (Quercus agrifolia)
3. London Plane Tree (Platanus x. acerifolia)
4. Fremont or Western Cottonwood (Populus fremontii)
5. White Alder (Alnus rhombifolia)
6. Valley Oak (Quercus lobate)
7. Coral Tree (Erythrina corallodendron)
8. Blue Palo Verde (Parkinsonia aculeate)
9. Mimosa/Silk Tree (Albizia julibrissin)
10. Avocado (Persea Americana)
11. Red Willow (Salix laevigate)
12. Weeping Willow (Salix babylonica)
13. American Sweetgum (Liquidambar styraciflua)
14. Red Flowering Gum (Eucalyptus ficifolia)

Photo of mature group of California Sycamore—species best suited for open space plantings

Photo of rows of London Plane Trees planted in sidewalk cut-outs; species is well-suited in urban settings as street trees

15. Tree of Heaven (Ailanthus altissima)
16. Carrotwood (Cupaniopsis anacardioides)

Of the species listed above, several were recommended for the Cal Fire grant project (part of OPPORTUNITY #1) that was funded in November 2015. These are:

1.California Sycamore (Platanus racemosa)

2.Coast Live Oak (Quercus agrifolia)

3.London Plane Tree (Platanus x. acerifolia)

Photo of Coast Live Oak—species is best suited to be planted in parks and open space settings. Ground cover under tree should be mulch rather than turf.

These species were initially selected because they are considered “large stature” trees, and can therefore store more carbon thereby reducing Greenhouse Gas (carbon dioxide) in a more significant way. They are also well-adapted to the type of micro-climate found in the Greater San Pedro Community. While it is important to take the threat to these species seriously,

Photo of Canary Island Pine trees planted as street trees; species is well-suited in urban settings and performs quite well in San Pedro.

given the high amount of species diversity generally found in the existing street tree and park tree population, it is not necessary to over react and completely remove these species from the approved tree species list. However, it is prudent to make sure that we introduce additional tree species, not so prone to risk represented by the shot hole borer and associated Fusarium dieback disease.

Photo of Deodar Cedar trees planted as street trees in Los Angeles; species does well in Los Angeles in wide parkways along streets. It also performs well as majestic tree in open space environments

There are a number of other viable large stature tree species that could be planted in San Pedro. From the original approved Cal Fire tree species list, there remain the following species:

Photo of Fern Pine planted as street tree. This species is currently planted throughout San Pedro and performing well.

1. Canary Island Pine (Pinus canariensis)
2. Deodar Cedar (Cedrus deodora)
3. Fern Pine (Podocarpus gracilior)
4. Holly Oak (Quercus ilex)

All of these are considered large stature trees and can provide significant GHG reduction benefits. They are well adapted to the micro-climates found in San Pedro. All of them do require large grow spaces, which means that to plant them in a street tree environment they will need a minimum of a 5 ft. x 10 ft. tree well space, or a 5 ft. wide parkway. In addition, as with any tree planting project there are other factors that should be considered when selecting the appropriate tree species. A full list, including what has already been discussed would look like this:

1. Street tree vs. open space tree
2. Grow Space
3. Infrastructure
4. Safety, Wind, Fire
5. Climate/Micro-Climate Zone
6. Invasive Tree Species
7. Species Diversity
8. Pest and Disease Issues
9. Availability at Nurseries
10. Water Needs
11. Tree Function
12. Leaf, Seed & Fruit Production
13. Beautification

A full discussion about each of these factors and how to use them can be found in APPENDIX B.

For the purpose of this Plan, we recommend using the aforementioned factors to determine the best and most appropriate tree species for your projects. At the same time, it is important to utilize native tree species whenever possible with due consideration to their adaptability to micro-climates found in San Pedro. This should apply to the selection of shrubs and groundcover plant species for park and open space, and rain garden and bioswale type projects. A good starting point for a list of native plant species are those that were recommended as part of the Peck Park Canyon Prop. O Project. SEE APPENDIX A for a full list of trees and other species.

In addition, it is important to understand the permitting or approval process to follow. This will very much de-

pend on which city agency regulates tree planting on the project property.

1. Streets—any trees proposed to be planted in the within City streets or alleys come under the jurisdiction of the Urban Forestry Division (UFD) within the Los Angeles Bureau of Street Services (BSS). All such projects require a Tree Planting Permit. In addition, if you are proposing to cut any concrete to create or extend the tree planting grow space, you will need an A Permit.

2. Parks & Open Space on City-Owned Land—any trees proposed for planting in these areas come under the jurisdiction of the Department of Recreation and Parks (RAP). Approval to plant trees in these areas will require approval of a proposed tree layout plan and species list. Assume the submittal and approval process will take a minimum of 60 days.

Photo of Gold Medallion Tree as a very versatile small stature street tree that can perform well in more confined grow spaces.

3. Port of Los Angeles (POLA)-Owned Land—any trees proposed for planting in these areas require permission from POLA.

4. State or Federal Highway Open Space—this includes sidewalks, parkways and medians within state and federal highway corridors. Such spaces fall under the jurisdiction of Caltrans. In San Pedro, this includes portions of Western Ave., and lands within the Interstate 110 and SR 47 right of ways. Caltrans requires a planting plan submitted by a licensed Landscape Architect.

The remainder of this section relates to the priority "green pathways" that were identified through the Public Opinion Survey. They are as follows:

1. Gaffey St.
2. Pacific Ave.
3. Harbor Blvd.
4. 6th Street
5. 7th Street
6. 5th Street
7. Western Avenue
8. Summerland Avenue

It is important to note that through primarily the Cal Fire Urban Forest Ecosystem Restoration Project, nearly all remaining street tree planting sites that can accommodate large stature trees (not including palm trees) will be planted by December 2019. However, there will remain a number of street tree planting sites that can accommodate medium or small stature trees that may remain unplanted. It is also important to note that this Plan does not address the planting of palm trees. This is not to say that they should never be planted, as there are many iconic streetscapes in Los Angeles dominated by palm trees. However, from an urban forestry and arboriculture perspective, palm trees provide very few, if any, of the environmental benefits or active transportation pathway benefits associated with planting broadleaf or coniferous (needle type leaf) trees. Therefore, this Plan will not include recommendations for planting palm trees. At the same time, there are recommendations for in-

Photo of Purple Orchid Tree as street tree. This species has recently been planted in downtown San Pedro.

terplanting broadleaf and/or coniferous trees between palm trees along select streets.

Two of the priority streets fall into this category—Gaffey St. and Harbor Blvd. Both of these streets already have a significant presence of palm trees, and, in fact, the San Pedro "gateway" median section of Gaffey for a block south of the Gaffey Street Bridge at the 110 Freeway offramp was recently (Spring 2017) planted with date palms.

Photo of Chitalpa Tree. This is a very hardy species well adapted to the San Pedro area.

GAFFEY STREET:

The tree recommendations for the stretch of Gaffey St. falling between Summerland Ave. and 13th St. can be found in the recently completed Gaffey Great Street Conceptual Plan (OPPORTUNITY # 10 of this Plan). The exact distribution or layout of these species should be determined as final construction documents are developed for each of the five (5) design segments of the Gaffey Great Street Plan.

PACIFIC AVENUE:

For Pacific Ave. from John S. Gibson/Front St. to 13th St. the following species have already been selected for enlarged concrete cut-outs that are at least 5 ft. x 10 ft. in dimension and are being planted as part of the Cal Fire sponsored Urban Forestry Project (SEE OPPORTUNITY #1):

- Platanus acerifolia, London Plane Tree
- Podocarpus gracilior, Fern Pine
- Quercus ilex, Holly Oak

For smaller cut-outs the following tree species are recommended:

- Bauhinia variegata, Purple Orchid Tree

HARBOR BLVD:

For Harbor Blvd. from the SR 47 overpass south to 22nd St. we recommend the following large stature tree species for sidewalk cut-outs of 5 ft. x 10 ft. or larger dimension:

- Pinus canariensis, Canary Island Pine
- Podocarpus gracilior, Fern Pine

For spaces that are 4 ft. wide or cut-outs that are 4 ft. x 4 ft. in dimension, the following small stature species are recommended:

- Cassia leptophylla, Gold Medallion Tree
- Chitalpa tashkentensis, Chitalpa
- Geijera parviflora, Australian Willow
- Chionanthus retusus, Chinese Fringe Tree
- Metrosideros excelsa, New Zealand Christmas Tree

No trees should be planted in spaces that are less than 4 ft. wide.

For the landscape medians along Harbor Blvd. between the SR 47 overpass and Gulch Rd. we recommend the following tree species be planted in available spaces between the existing palm trees:

- Pinus canariensis, Canary Island Pine
- Podocarpus gracilior, Fern Pine
- Cassia lepto-

Photo of Australian Willow Tree. This is a very hardy species well adapted to the San Pedro area, and will grow well in 4 ft. wide planting spaces

phylla, Gold Medallion Tree
- Chitalpa tashkentensis, Chitalpa

Photo of Chinese Fringe Tree. This small stature tree is well adapted to the San Pedro environment. This species was recently planted in Western Ave. medians.

- Chionanthus retusus, Chinese Fringe Tree
- Metrosideros excelsa, New Zealand Christmas Tree

To best mitigate the impact of GHG emissions from Port of LA activities, we strongly recommend that a high percentage of large stature tree species be selected. The final selection will depend on the outcome of the project specific design process.

6TH & 7TH STREETS

These are the two (2) primary east-west downtown streets that connect Gaffey and Pacific to the Port at Harbor Blvd. While there are several existing tree species along these streets, there are two (2) that are not performing particularly well, or are ill-suited to the spaces in which they are planted:

- Ficus microcarpa var. nitida, Indian Laurel Fig
- Cupaniopsis anacardioides, Carrotwood

There are also some palm trees, primarily Syagrus romanzoffiana, Queen Palm, that seem to be performing well. Along the portions of 6th and 7th Streets closer to Harbor Blvd. there are relatively newly planted Purple Orchid Trees that seem to be doing well.

The selection of new street tree species should be done in conjunction with developing overall streetscape plans for each of these streets. The recommendation is to develop a replacement program for the Indian Laurel Fig and Carrotwood trees as sections of these streets go through a design development process. As both of these streets have been designated as "Downtown Core Green Streets" that would include an array of rain gardens, landscaped bulb-outs and outdoor dining platforms, the street tree component should include provisions to enlarge the existing cut-outs to allow for installation of some large stature trees interspersed with Queen Palms and small stature trees.

A recommended tree species palette for these streets could include:

- Podocarpus gracilior, Fern Pine (Large Stature)
- Bauhinia variegata, Purple Orchid Tree (Small Stature)
- Cassia leptophylla, Gold Medallion Tree (Small Stature)
- Syagrus romanzoffiana, Queen Palm

Photo of New Zealand Christmas Tree. This small stature tree does well in marine type environments similar to those found in San Pedro, and in the smaller grow spaces typical along urban sidewalks.

5TH STREET

The stretch of 5th Street between Pacific Ave. and Harbor Blvd. has a number of existing street trees, many of which, especially the Carrotwoods, are in poor to fair condition at best. Given the scale of this street environment—the widest roadway and sidewalks of the downtown east-west streets—the streetscape would be considerably enhanced by the introduction of a large stature tree species. As this street is also one of the primary east-

west auto access streets to Harbor Blvd. and the Port, and given the presence of well-performing Canary Island and Aleppo Pines along portions of private property of both 5th Street (at the former courthouse), and Harbor Blvd. (east side of the street), either species would be a good choice. However, we recommend only using Canary Island Pine, as this tree has a more upright form and performs better in a tree well environment. In fact, as of the writing of this Plan, a few of these have already been planted between Mesa St. and Pacific Ave.

Therefore, the program should include removal of the existing Carrotwoods, enlarging the existing sidewalk cut-outs to a 5 ft. x 10 ft. or 6 ft. x 12 ft. (as has been done elsewhere along 5th St.), and planting Canary Island Pines. These cut-outs should be done in a way that maintains/reconstructs the existing sidewalk decorative paving pattern present on the segment between Centre St. and Harbor Blvd.

WESTERN AVE.

The focus here is the stretch of Western Ave. between Summerland Ave. to the north and 22nd St. to the south, as these are the northernmost and southernmost streets that provide direct access to the Port and Downtown San Pedro. The Western Ave. Median Tree Planting Project

Photo of Jacaranda Tree. This large stature tree is well adapted to the San Pedro environment, and will do well in larger growing spaces. It blooms profusely in late spring.

Photo of Holly Oak Tree. This largel stature tree is well adapted to the San Pedro environment, and is currently being planted as a street tree in the Greater Downtown Area

(OPPORTUNITY #3) covers the median between 1st and 19th Streets. There are existing Fern Pines planted as street trees in sidewalk cut-outs and existing parkways on both sides of the street from Summerland south to 5th St. However, there remain vacant available planting sites, primarily in parkways and sidewalks along the western side of Western Ave. The apparent reason for these sites remaining vacant is that there are lower hanging overhead utility wires on this side, as compared to the east side of Western. While both sides have high voltage overhead wires, on the east side they are apparently considered high enough to allow for the planting of Fern Pines. The only difference between the two sides of the street is that the west side also has telecommunications cables at a lower elevation. However, as these pose no high voltage hazard, small stature street trees could still be planted on this side in otherwise available planting sites.

In stretches of Western Ave. south of the existing sidewalks, there is ample open space both within the Caltrans and outside the Caltrans right-of-way to plant large stature street trees. However, due to Caltrans guidelines that prohibit the planting of large stature trees within their rights-of-ways where the speed limit exceeds 35 mph (speed limit south of 1st Street is 40 to 45 mph), we recommend that large stature trees be planted in segments outside of the Caltrans right-of-way. We have not deter-

mined the ownership of these areas has not been determined.

The recommended street trees for the unimproved parkway along Western Ave. south of 1st Street outside of the Caltrans right-of-way are the large stature trees species of:

- Pinus canariensis, Canary Island Pine
- Quercus ilex, Holly Oak

These can be interplanted with the following large stature flowering tree species, as it has already been planted in other locations that can accommodate large stature trees along Western Ave. north of 1st Street—and it has been performing well:

- Jacaranda mimosifolia, Jacaranda

SUMMERLAND AVE.

Summerland Ave. is a significant vehicular pathway between Western Ave. and Gaffey St., and is primarily lined with single family homes. It links Peck Park on the approach to Western, and is the primary thoroughfare from which other north-south streets provide additional connections to other sections of Peck Park and Leland Park, as well as Bandini Canyon Park. There is a bike lane that runs from just west of Cabrillo Ave. to just east of Western Ave. However, the sidewalk is too narrow to allow for either sidewalk cut-outs or the addition of parkway strips for the planting of trees. Whatever trees that exist, and present a strong green edge to the right-of-way, exist on either park property or within the front yards of the homes along the street. There are significant sections lined with trees planted on park property—Peck Park and Rena Park—that create a strong "tall green edge" in those areas along the western stretch of Summerland Ave.

Given all of this, it seems that the most significant urban greening opportunity along this street would be the addition of more trees being planted in front yards. Such spaces provide the large grow space needed for large stature trees that would shade both the homes and the sidewalk.

Therefore, we recommend working with both the Central and Northwest San Pedro Neighborhood Councils to facilitate "tree adoptions" through the Los Angeles City Plants Program (SEE OPPORTUNITY #8). Recommended trees species would include the following:

- Pinus canariensis, Canary Island Pine
- Quercus ilex, Holly Oak
- Cassia leptophylla, Gold Medallion Tree
- Chitalpa tashkentensis, Chitalpa
- Chionanthus retusus, Chinese Fringe Tree
- Metrosideros excelsa, New Zealand Christmas Tree

OPPORTUNITY #3 - WESTERN AVE. MEDIAN TREE PLANTING

Construction was completed for this Opportunity Summer 2017. The images on this page are taken from the Construction Documents that that were used to guide the installation of 43—24 inch box size trees in raised medians between 1st Street in the north to 19th Street in the south along Western Ave.

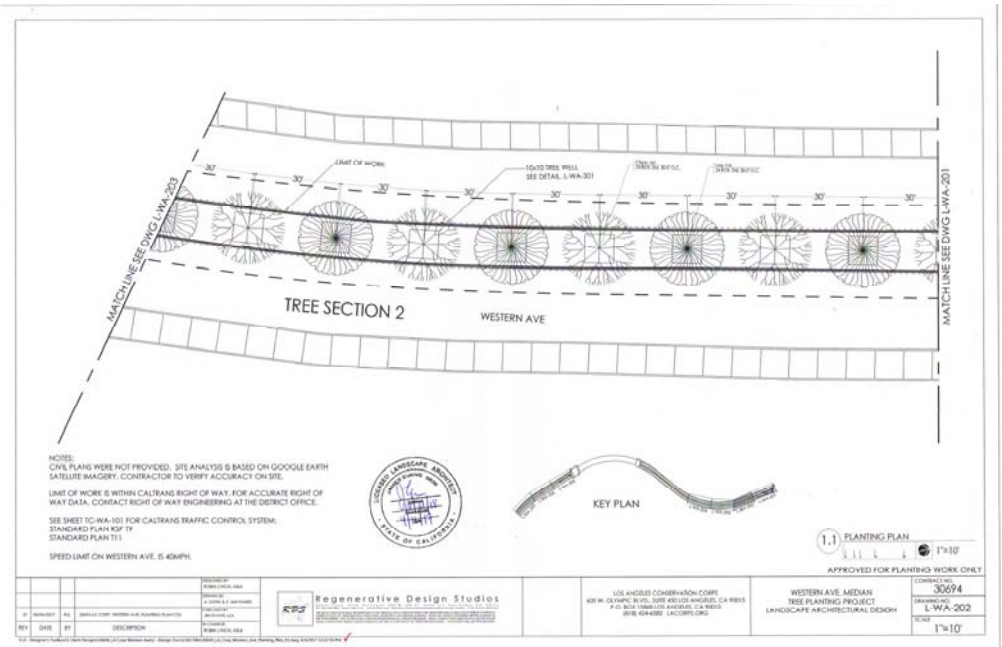
The project was funded by Council District 15 at approximately $150,000 to remove 10 ft. x 10 ft. sections of asphalt paving within these raised median areas. Two (2) species of small stature trees were selected in coordination with CD 15, and planted in an alternating pattern approximately 30 ft. apart. The planting area was then covered with 3 inches of shredded cedar mulch to conserve moisture within the soil.

Each tree will be watered from a water truck by Clean San Pedro 33 times per year for the first 3 years of establishment.

The two (2) species are:

1.Chinese Fringe tree

2.Crape Myrtle



Chinese Fringe Tree

Crape Myrtle

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #4 - HARBOR BLVD. MEDIANS TURF REPLACEMENT & BEAUTIFICATION

HARBOR BLVD. & GULCH RD. MEDIANS

Funded by a Harbor Community Benefit Foundation (HCBF) grant for approx. $75,000, this project involves rehabilitating the existing landscape medians along Harbor Blvd. between O'Farrell and 6th St. The existing Mexican Fan Palms will remain, but the remaining landscape will be replaced with a drought tolerant landscape that will include:

- Large stature broadleaf trees planted between palms
- Flowering shrubs and groundcover that can provide year round color
- "Smart" irrigation system (matching funds from CalFire Grant (SEE OPPORTUNITY #1)
- Natural Wood Chip Mulch

"Smart" irrigation involves using systems that control the timing of the watering cycles based on soil moisture content, weather conditions and breaks in the pipes that supply the water to the planting areas. It also means using low flow non-spray or micro-spray sprinkler heads instead of larger spray heads. The control systems can be programmed to irrigate the planting areas for specified lengths of time and on a calendar schedule that can be

changed with the seasons, so the water cycle is appropriate for the time of year.

This project also includes rehabilitating the landscape on the slopes along Gulch Rd. at Harbor Blvd. The photos show the area for this Project Opportunity. Project treatments/ elements will include:

- Pruning existing palms
- Installing "Smart" irrigation system
- Planting large stature drought tolerant trees

- Installing drought tolerant shrubs & groundcover
- Installing mulch

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #5 - SAMPSON WAY REALIGNMENT, PLAZA & CENTRAL PARKS

SAMPSON WAY

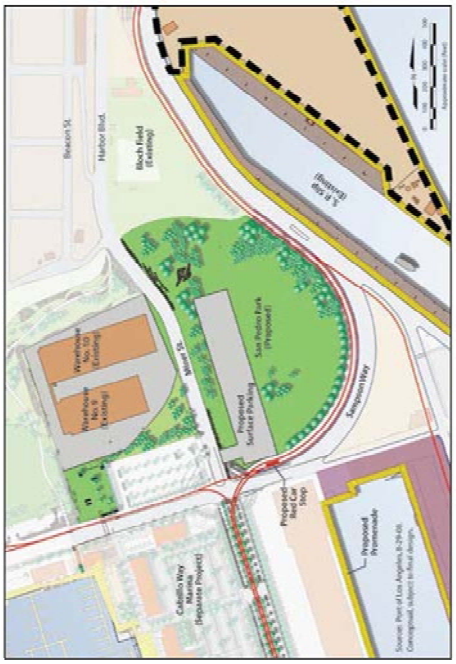
Construction began in Spring 2017 on this fully funded Project (POLA). The Project realigns Sampson Way and Harbor Blvd. to improve connectivity between the Port and Downtown San Pedro. Final design includes extensive opportunity for additional urban greening within the Port, within an expanded Plaza Park and along 6th &7th Streets as they terminate into the Port. It will also facilitate introduction of active transportation alternative solutions for accessing downtown from the Port, including transit use, walking and biking.

PLAZA PARK

The landscape on the slopes below the recently completed Plaza Park Parkway along Beacon Street will be rehabilitated. The Sampson Way reconfiguration actually expands the hillside portion of the Park site area, and offers the opportunity to add walking trail connections from the Port to Beacon Street along the hillside. Project elements include: 1) planting large stature drought tolerant trees; 2) planting drought tolerant shrubs & groundcover; 3) installation of Smart irrigation system. It is important to not rely solely on palm trees when selecting trees for the Park. Strategically placed broadleaf or coniferous tree species already used along the Waterfront would provide shade for rest and picnic areas while still enhancing the vistas.

This Plan recommends adding landscape "node" treatments where 8th, 9th, 10th, 11th, and 12th Streets dead end into upper Plaza Park along Beacon Street.

SAN PEDRO CENTRAL PARK



Existing underutilized vacant land south of Miner St. and north of Sampson Way would be converted to a total of 18 acres of open space park immediately adjacent to existing Bloch Field. This Project (not currently funded) is already proposed as part of the proposed San Pedro Waterfront Project, and, in fact, a portion of the acreage has already been converted to passive recreation open space.

As a portion of this land is an existing brownfield, coordination with various agencies with oversight responsibilities for assessment and clean-up of this land will need to occur in the early stages of planning for this Park (SEE OPPORTUNITY #26 FOR ADDI-TIONAL INFORMATION ON BROWN-FIELD OPPORTUNITY).

SAN PEDRO GREEN OUTLETS & PATHWAYS

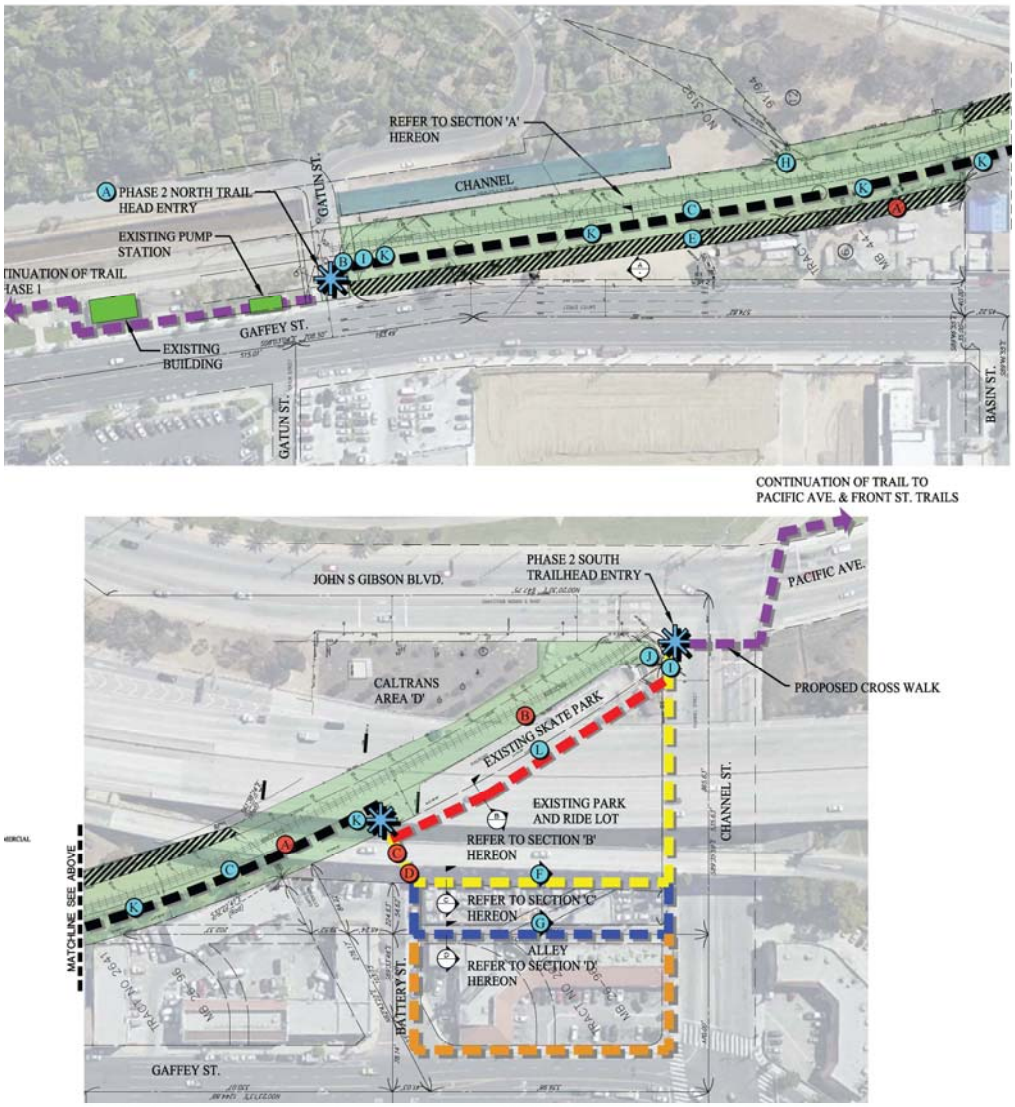
OPPORTUNITY #6 - NORTH GAFFEY PARKWAY PHASE II

Funding for this opportunity comes from China Shipping Mitigation Funds in response to a proposal from the Northwest San Pedro Neighborhood Council. The Port of LA (POLA) will do the construction.

This opportunity involves a 1/4 mile extension of North Gaffey Phase I Parkway and multi-use trail to West Channel/John S. Gibson. The elements include: 1) lighting (poles will match poles and lamps used in Phase I; 2) drought tolerant plants; 3) low flow irrigation system; 4) use of crushed rock mulch; 5) vines along fencing around parking lot; and 6) planter along inside length of fence around this parking lot.

This project when combined with Opportunity #7 will provide a multi-use pathway for walkers and cyclists connecting Westmont on the north to the Waterfront Promenade at the Vincent Thomas Bridge.

Funding for this Phase II has been earmarked by the Port of LA in the amount of $2.95 Million.



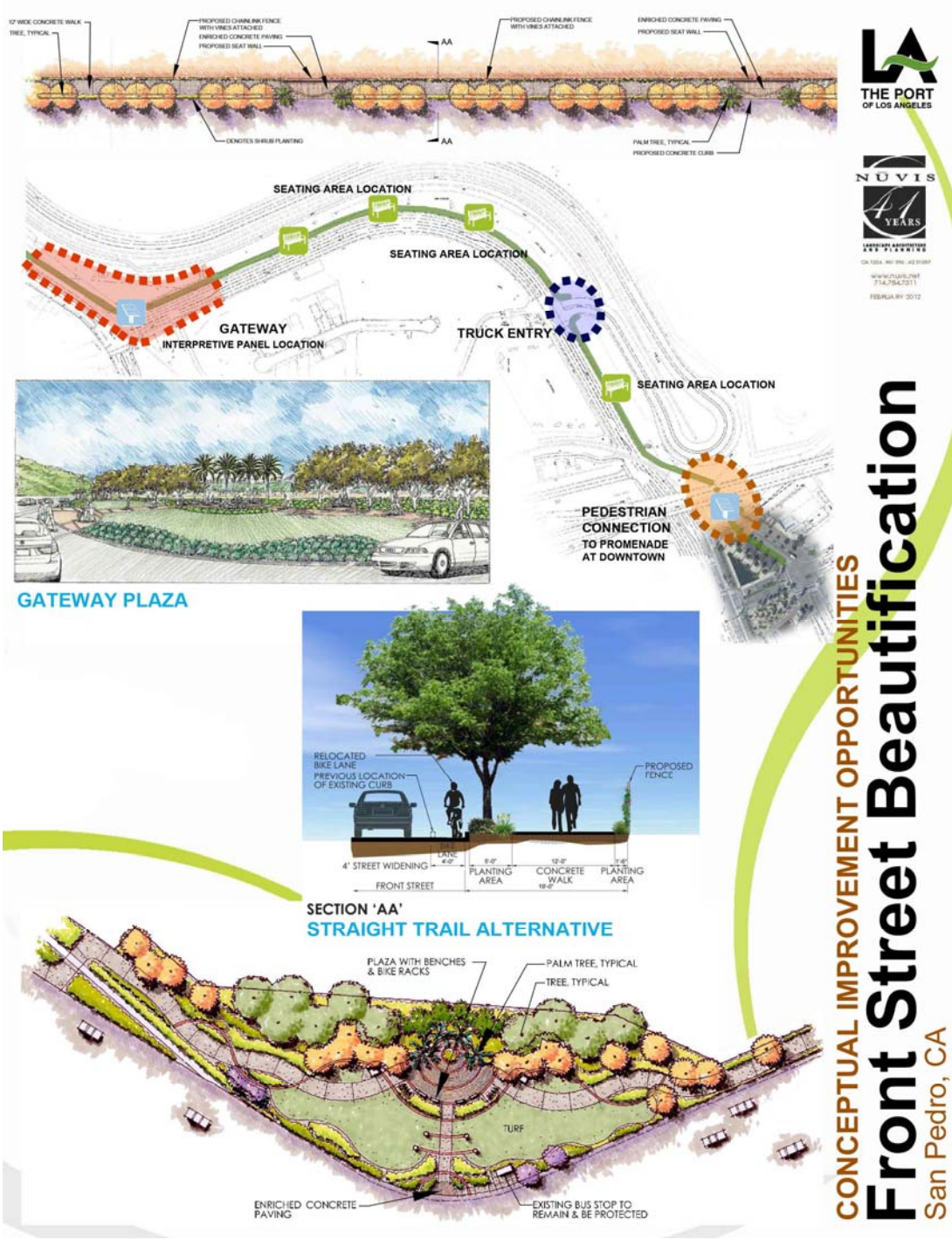
The construction plans and documents are completed. The Project is awaiting resolution of ownership issues with the Port of Long Beach. Resolution is expected by the time this Plan is published.

OPPORTUNITY #25 contains recommendations for improving the connection from this Pathway/Parkway through the Gaffey St. – W. Channel intersection and on through the Gaffey St. – Miraflores intersection to the existing bike lane and up to Leland Park West.

OPPORTUNITY #7 - FRONT STREET BEAUTIFICATION

This project will beautify both sides of Front St. from Pacific Ave. east to Harbor Blvd.

Construction documents have been completed for this project and the project is fully funded by the Port of Los Angeles. Environmental remediation has been completed.



However, the project has been on hold to resolve issues with existing rail. We anticipate that by the time this Plan is published those issues will have been resolved, and the project will be ready to go out to bid for construction.

Once completed this project will provide a key green pedestrian link that will provide a continuous green parkway from the Promenade at Downtown at the north end of Harbor Blvd. all the way to Channel St. and then on up to N. Gaffey St. all the way to Westmont Dr.

OPPORTUNITY #20, once implemented will complete this green parkway along N. Gaffey all the way to Ana-heim St.

Implementation of OPPORTUNITY #12—John S. Gibson Parkway Enhancement will complete a continuous parkway all the way to Harry Bridges Blvd.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #8—PRIVATE PROPERTY TREE ADOPTION PROGRAM

Five (5) largely residential east-west streets have been identified as priority streets. They are Summerland Ave., 9th St., 13th St., 17th St., and 22nd Ave. These streets, for most of their length between Western Ave. and Downtown San Pedro, do not have sufficient sidewalk width or existing parkways in which to plant trees or install rain gardens. However, there are two (2) Los Angeles City-Wide existing "urban greening programs" that can be utilized by residents to "green" their front yards in a more water conserving manner if they so wish. They are the City of Los Angeles "City Plants Tree Adoption Program, which is discussed below, and the LA DWP "Turf Replacement Rebate Program", which is the subject of Opportunity #9. The photo shown on this page is just a typical view from one of the streets that has been identified as a RNPG (Residential No Parkway Green Streets) on the Regional Green Street Typology Plan.

LOS ANGELES "CITY PLANTS" PROGRAM - City Plants is a public-private partnership between the City of Los Angeles, local non-profit organizations, community groups, residents, and businesses. This is a continuation of the former Million Trees LA Program, though the program priorities have been changed to focus on getting trees planted in low canopy areas and to plant in a way that maximizes the benefits trees provide rather than on reaching a specific number of trees.

Trees Save Energy—Funded by LA DWP because "trees save energy", City Plants is able to provide free shade trees for residents and property owners in the City of LA, along with important information on where to plant those trees to maximize energy efficiency in homes or businesses. If planted to the south and west of a building, trees will provide shade during the hottest parts of the day, cooling the building and lessening the need for air conditioning. Less a/c use saves energy and money on electricity bills, and using less energy also helps reduce the need to generate energy, which helps combat climate change.

P**lant Trees in Your Yard—** Residents are eligible to receive up to seven free trees to plant on their property if they agree to take proper care of them. Instructions on how to plant the trees and take care of them are provided as part of the tree "adoption" process. City Plants also has fruit tree adoption events, where residents can take home one fruit tree to plant on their property. It is recommended to plant them on the south or west side of the building to maximize tree shading and energy savings.

Residential Green Streets -
This happens to be a section of 13th St., but this could be any similar section of any of the many residential streets within San Pedro that have been identified as priority Green Streets. Property owners on these types of streets can take advantage of existing City-wide urban greening programs to plant trees or replace their turf at no cost to themselves.

OPPORTUNITY #9 - RESIDENTIAL TURF REPLACEMENT PROGRAM

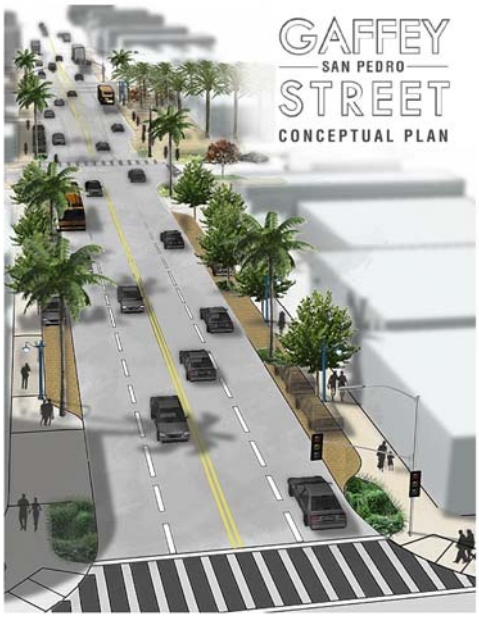
LA DWP first launched their turf replacement program in 2009, and it has gone through several incarnations. Currently called the "California Friendly Landscape Incentive Program", it pays property owners to replace turf grass with California Friendly plants, mulch, permeable pathways, and drip irrigation. Effective September 1, 2017, applicants are eligible to receive $2.00 per square foot for up to 1,500 square feet maximum for turf replacement. All applications must be submitted online through the SoCal Water$mart website: http://socalwatersmart.com/?page_id=2967.

The LA DWP website, www.ladwp.com, has a link to the program page that also includes links to landscape design information on what type of California Friendly plant species can be used in the turf replacement program.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #10 - GAFFEY GREAT STREET

Gaffey St. and Pacific Ave., were identified by community stakeholders as the two (2) most important "pathways" in San Pedro. This dovetails nicely with a parallel development—Mayor Eric Garcetti's 2013 Los Angeles Great Streets Initiative. Through the efforts of Councilman Joe Buscaino, a portion of Gaffey Street (from the pedestrian bridge at the Harbor Freeway terminus south to 13th Street) has been designated as one of the 15 Great Streets in the City of Los Angeles. The goals of the Great Streets Initiative are to:



- Increase economic activity
- Improve access and mobility
- Enhance neighborhood character
- Provide for greater community engagement
- Improve environmental resilience, and
- Create a safer and more secure community

Gaffey is the primary arterial that connects San Pedro via the Harbor Freeway to the Greater Los Angeles Area. In addition, Gaffey continues north beyond the Harbor Freeway terminus as an important pathway connecting Northwest San Pedro to Central San Pedro, including the Downtown and Harbor areas. As such there is a tremendous amount of daily traffic traversing this main thoroughfare.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #10 - GAFFEY GREAT STREET

The "San Pedro Gaffey Street Conceptual Plan" was funded by City of Los Angeles Council District 15 (CD 15) —utilizing AB1290 funds. The Los Angeles Neighborhood Initiative (LANI) was selected by CD 15 to administer the project, The Consultant Team, under the direction of the Prime Consultant, RRM Design Group, was selected through a competitive qualifications process by Steering Committee community members. Full acknowledgement of participants at all levels of the development of the Plan can be found within the Conceptual Plan document available for viewing online at the URL shown below on this page.

Within the Plan, there are a number of solutions proposed to address the aforementioned goals related to transforming Gaffey Street. These include:

- Redirecting traffic to/from the Harbor Freeway via alternative streets
- Way-finding signage coordinated with Port of LA format
- Pedestrian bulb-outs at corners
- Permeable paving under street-side parking
- Storm water infiltration and harvesting
- Enhancements to all bus stops (shelter, lighting, seating, and trash receptacles)
- Coordinated street furnishings (pedestrian lighting, benches, bike racks, trash receptacles, and bus shelters)
- Drought resistant plants to conserve water use
- Additional street trees (broad leaf and palm trees)
- Accent trees leading into neighborhoods
- Landscape medians (selected locations)
- Uniform sidewalk paving throughout
- Public/private partnership for a Transit Plaza at 13th and Gaffey Street

With the exception of "Implementing a Road Diet from 5th Street to the freeway", which was deleted as a result of strong community opposition, the remaining goals listed above are represented in the Final Concept Plan. The Plan can be viewed on the Issuu.com website at the following link: ***https://issuu.com/la15th/docs/gaffey_street_conceptual_plan_final***

The Conceptual Plan is presented as five (5) distinct segments of Gaffey between Summerland and 13th St. as follows:

- Summerland to Sepulveda
- Sepulveda to 2nd St.
- 2nd to 6th Street
- 6th to 10th Street
- 10th to 13th Street

The Plan includes recommendations for a "Landscape Tree Palette" as follows:

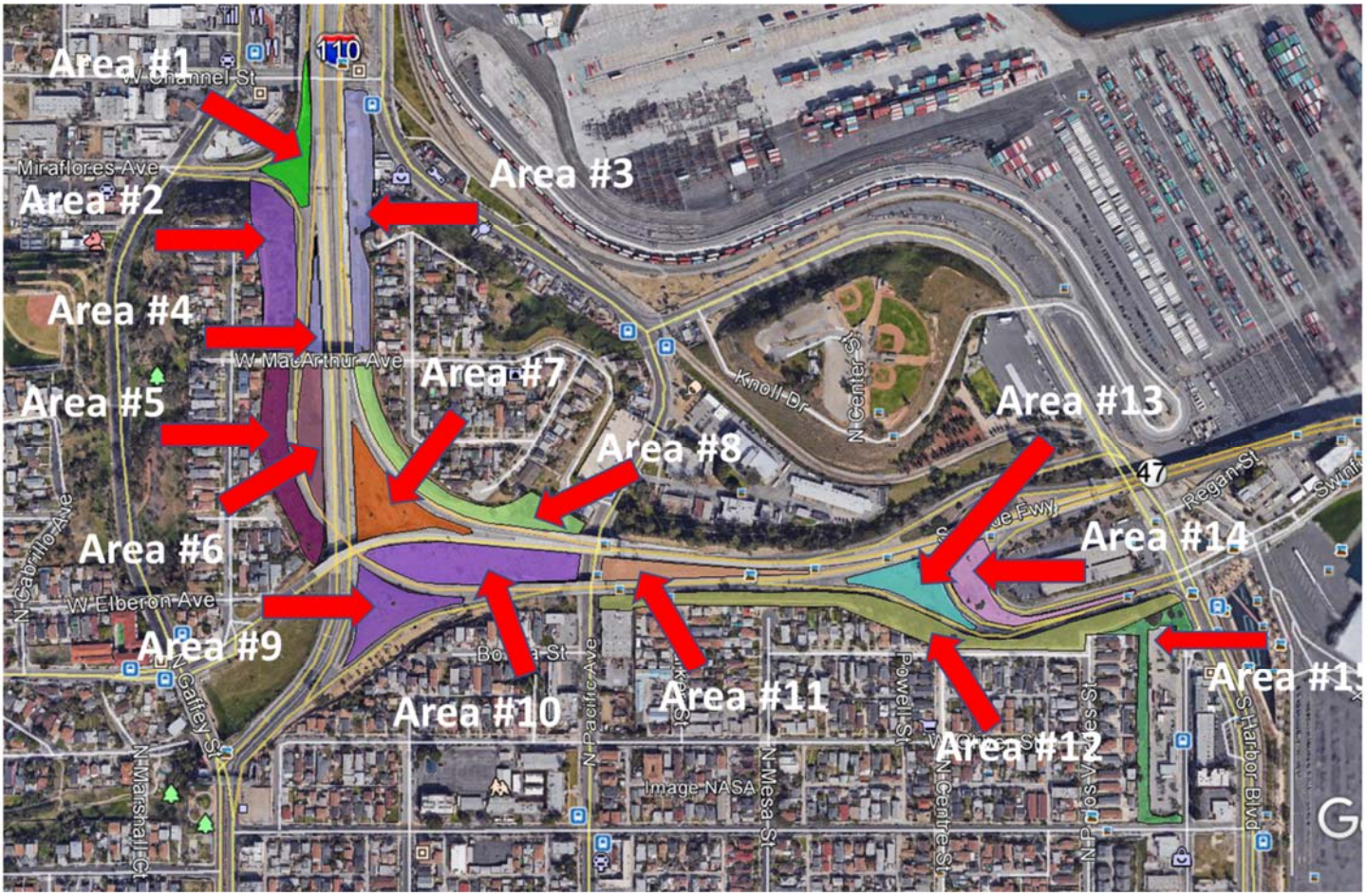
- Phoenix canariensis, Canary Island Palm
- Prunus cerasifera, Purple Leaf Plum
- Prunus serrulata, Japanese Cherry
- Syagrus romanzoffiana, Queen Palm
- Jacaranda mimosifolia, Jacaranda

The total estimated preliminary budget for the full project build-out is anticipated at just over $7,200,000 with the average cost of $1,200 per lineal foot, and the average cost for a typical intersection improvement estimated at just over $180,000 each.

These estimates are approximations only, and can vary based on the final designs as represented in final construction documents. However, these figures can be used for the purpose of funds procurement.

Improvements have already begun. Phase I included new median planting and lighting from the end of the Harbor Freeway to Santa Cruz along with distinctive signage.

OPPORTUNITY #11 - INTERSTATE 110 HARBOR APPROACH BEAUTIFICATION



The Harbor Approach Environmental Enhancement & Mitigation Project is a multi-phased project opportunity to provide environmental enhancement, mitigation, and beautification of the primary freeway approaches to the San Pedro Harbor Area along Interstate 110 Freeway and SR 47 State Highway from just north of the West Channel Street offramp to Harbor Blvd. The goal is to create an iconic entryway into the Port of Los Angeles/San Pedro Community. Overall project elements could include iconic Port of Los Angeles/Maritime/Marine large scale custom thematic sculpture elements, water conserving landscape treatments, storm water/water supply treatment areas, large-stature tree planting, continuous litter abatement programming, and environmental education and training programs for local at-risk young adults.

Phase I would be a 12-month program that would provide education and training for up to 60 at-risk adults.

This Phase I Initiative would be a collaboration between Clean San Pedro (CSP), Atlas Green Works (AGW), Caltrans, LA County Supervisorial District 4, LA Conservation Corps (LACC), Beacon House, and Port of LA (POLA). The initiative involves delivering 400 hours of the "California Tree Academy" to at-risk adults from Beacon House and employed by Clean San Pedro. As part of this education and training, these same crews of at-risk adults would perform 1600 hours of tree planting and maintenance, and weed and trash abatement. This work would cover approximately 22 acres (SEE ABOVE GRAPHIC) of Caltrans right-of-way along the Interstate 110 and SR 47 approach to Harbor Blvd. from the W. Channel St. southbound exit down to Harbor Blvd.

This project would mitigate the following Port impacts: air quality, water quality, aesthetics, health risks, and marine life. Air quality would be improved through the

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #11 - INTERSTATE 110 HARBOR APPROACH BEAUTIFICATION

Greenhouse Gas (GHG) emission reduction and absorption of pollutant gases (nitrogen oxides, ammonia, sulfur

dioxide and ozone), as well as filter particulates out of the air from the planting of large stature trees. Water quality would be improved through the removal of trash that would otherwise end up in the Harbor and through the construction of bioswales that filter storm water runoff thereby removing pollutants before the water enters

the Harbor. Aesthetics would be improved by removing weeds and trash, placing mulch, and planting trees along a main gateway into the Port of LA. Strategically placed trees can help to mitigate the harsh view of the cranes and stacked cargo containers within the Harbor.

The education and training element would be a modified version of the California Tree Academy curriculum, developed by Larry Smith on behalf of the LA Conservation Corps with funding from Cal Fire (2010-2012). Organized around the principle of "planting the right tree in the right place the right way", the subject matter begins with basic tree biology, covers the carbon and water cycles and the role of trees in both; then moves into the practice of arboriculture & urban forestry, including how to know which trees to plant and how to plant & maintain them; and then covers watershed and storm water management, and how proper management increases clean water storage and improves the water quality of storm water that ultimately ends up in the ocean, and how that ultimately improves the marine en-

vironment. Adult participants will also be introduced to the numerous career pathways that are possible within the urban forestry/watershed management world.

While it is expected that most of the 22 acres will be

"enhanced" in some fashion with the Phase I Project, the

OPPORTUNITY #11 - INTERSTATE 110 HARBOR APPROACH BEAUTIFICATION

treatments for each of the designated areas (there area a total of 15 designated areas) will vary both in Phase I

and in future phases. One primary example would be the introduction of large scale thematic sculpture/public art elements within some of these areas. Ideas to stimulate the discussion of the possibilities for such elements are presented on these pages. The photos are of actual elements that have been installed in public spaces

around the world. These examples are by no means exhaustive. Of course, there are a number of issues that will need to be examined to introduce such elements within Caltrans or Port of Los Angeles open space properties along the Harbor Approach.

Since most, if not all, properties along this "approach" are Caltrans owned, their permit process guidelines and design and engineering standards for such elements will need to be adequately addressed. In addition, this repre-

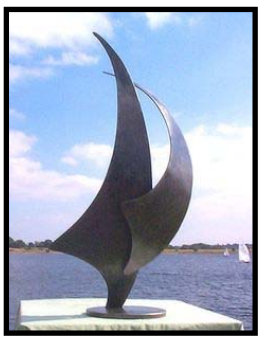
sents an excellent opportunity for community engagement and input. One idea would be to develop the ideas for the public art through some sort of public competition organized through the local San Pedro arts community.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #11 - INTERSTATE 110 HARBOR APPROACH BEAUTIFICATION

Prior to such a public process, due diligence should be conducted to determine the design standards and guidelines that would need to be used to construct this type of

public art. Types of materials, treatments, safety elements, size and setback guidelines are just some of the examples. As these would be very highly visible elements that really would define this major portal into San Pedro, it would be advisable to create a very inclusive advisory committee that is representative of all commu-



nity-based and public agency stakeholders.

Besides the public art elements just discussed, there are other environmental enhancement and beautification elements/treatments that could vary across the areas. While it would be ideal to create a plant palette that can be used across all areas to contribute to a strong "sense of place" for this "Harbor Approach", it will be important to make sure there is enough species diversity, especially in the selection of trees. These should "large stature" tree species. They should also be vetted as to their known susceptibility to pests and disease. They should be water conserving and observed to perform well in the type of marine-

influenced micro-climate found in the San Pedro Harbor area.

Similar considerations should be used to develop the shrub and groundcover palette with the caveat that it

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #11 - INTERSTATE 110 HARBOR APPROACH BEAUTIFICATION

may be advisable to limit the use of plant groundcover to the steeper slopes where rock mulch groundcover may not be technically possible without considerable engineering cost. Besides the capital cost consideration, utilizing rock mulch as groundcover can be very aesthetically pleasing, conserve water and be easier and less costly to maintain. Given the typically low and inconsistent budget allocations for maintenance, and the long term need to limit water needed to maintain landscape, the latter two (2) criteria are especially important.

Finally, the steepness of the slopes within some of these areas will preclude the type of rock mulch treatment that is possible in the flatter portions of these areas. The steeper hillsides will still be maintained free of litter and debris, but modifications to the existing landscape will need to ensure that removal and replacement of any existing plant material will not destabilize the slope. In addition, repair/ replacement/ and/or installation of irrigation equipment will likely require more "above-ground" elements than would be required or necessary in flatter areas.

Determination of which existing trees would remain and need to be protected in place during construction would be determined through the design, engineering and permitting process. There are a number of palm trees within some of the areas that, if they are designated to remain, would need to be pruned to remove the dead fronds that can be seen in some of the photos on these pages.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #12 - N. PACIFIC TO JOHN S. GIBSON BICYCLE PARKWAY CONNECTION

This opportunity is designed to close the gaps between existing and/or planned bike/pedestrian pathways along N. Pacific Ave. from O'Farrell St. north to Channel St. This would connect to existing bike lanes along N. Pacific Ave. at O'Farrell St. It would also connect to the existing pedestrian path that runs on the northeast side of N. Pacific Ave. from Channel St. to where it ends just north of the Front St.-N. Pacific Ave. intersection.

There is also ample opportunity to beautify the section of N. Pacific Ave. from O'Farrell St. to Front St. with street tree plantings. It would appear that the sidewalks along both sides of N. Pacific Ave. in this segment are wide enough to create concrete cut-outs to accommodate large stature trees. We would recommend creating at least 5 ft. x 10 ft. cut-outs and then plant these with Canary Island Pines. The photos on this page show some views of this pathway. The underpass also provides an opportunity for a mural.

OPPORTUNITY #13 - JOHN S. GIBSON PARKWAY ENHANCEMENT

While John S. Gibson is a designated scenic highway that has existing bike lanes on both sides of the street and a number of trees planted in sidewalk cut-outs, especially on the east side of the street, there remains ample opportunity for significant environmental and aesthetic improvement between Channel St. and Harry Bridges Blvd. This is especially true now that the various Interstate 110 ramp construction improvements have been completed.

This opportunity dovetails nicely with the proposed bike lane connections shown in Opportunity #11 that will provide the much needed connections to N. Pacific Ave. from the existing parkway/greenway improvement just north of where N. Pacific Ave. intersects Front St. The goal should be to create a "green screen" along the east side of John S. Gibson Blvd. that will also provide a "shaded parkway" for both bicyclists and pedestrians jogging or walking along this stretch of the Boulevard. As part of this enhancement, it is recommended that street trees along John S. Gibson receive regularly scheduled pruning utilizing local private community-based resources.

While some trees have been planted along the Caltrans right-of-way as part of the Interstate 110 ramp improvements there is still ample opportunity for additional tree planting, especially on the west side of John S. Gibson and within the median. This would include hillside areas that are on Port of Los Angeles property.

It is recommended that the remaining chain link fence at the northwest corner of Channel and John S. Gibson be removed and the area fully landscaped. This scenic highway would also be greatly enhanced by undergrounding the utilities along it.

This project should be eligible for State Resources Agency Environmental Enhancement & Mitigation Program (EEMP) funding beginning with the 2018/19 grant cycle.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #14 - BANDINI CANYON PARK TO PECK PARK GREENWAY

This opportunity would connect Bandini Canyon Trail & Park to Peck Park and Rena Park via an enhanced pedestrian pathway along Bandini Street to Elberon St. and the south entryway into Peck Park (green line). This would also connect Bandini Street School to these two (2) parks (green line). This would also complete a connection to another new opportunity—the Caltrans Greenway to the east via a trail that runs underneath the Gaffey St. Bridge at Summerland Place (green line). This pathway would also provide an alternative east-west route to connect to the existing N. Gaffey St.

bike lane (red line) that runs north from Summerland Ave. up to Channel St., which connects to John S. Gibson Blvd.

Enhancements suggested for this Pathway include bike route signage along Bandini, converting the Summerland Ave.—Bandini Street intersection from a two-way stop to a full four-way stop to improve the safety of pedestrians crossing Summerland Ave. either on foot or on bicycle, additional small stature (there are overhead utilities along both sides of the street that preclude the use of large stature trees) flowering street trees along Bandini St., and some way-finding signage related to the Peck Park—Bandini Park connection. In addition, we recommend that the trail through Bandini Canyon Park be renovated to improve the stability of the path and to make it wide enough to accommodate both bicyclists and walkers/joggers.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #15 - PECK PARK TO LELAND PARK PEDESTRIAN PATHWAYS

The opportunity here is to create a pedestrian pathway between Peck Park and Leland Park. Although the eastern boundary of Peck Park and western boundary of Leland Park are, in fact, very close, there currently is no continuous path connecting the two parks. Due to existing land ownership issues at other potential connection points, some closer linkages between the two parks do not appear feasible.

Therefore, the proposal is to link the south entrance of Peck Park at W. Elberon Ave. just west of N. Bandini St. to Leland Park at three (3) different locations (SEE CALL-OUTS ON MAP TO LEFT):

.1The first path would follow Elberon to Meyler St. and then proceed north to S. Herbert Ave. where it will veer east to the west entrance of Leland Park at the active play area.

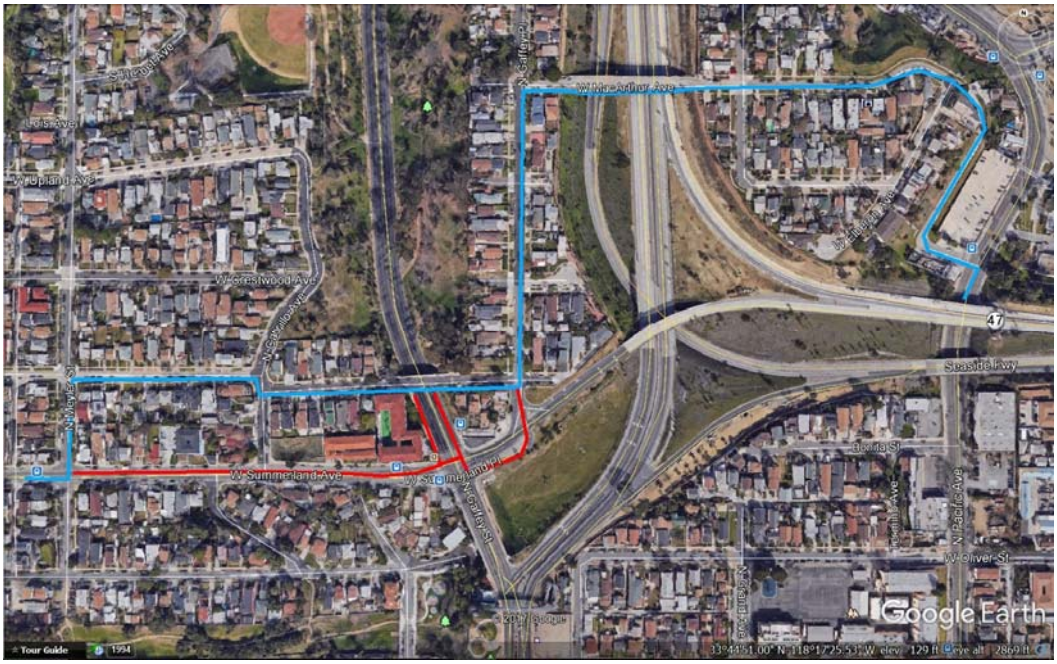
2. The second path would continue east on Elberon past Meyler St. to Cabrillo Ave. and then turn north to the currently unimproved portion of Leland Park south of the developed portion of the park. A new improved trail would need to be added in this portion of Leland Park to connect to the terraces downhill from the ballfield on the approach to Miraflores Ave.

3. The third path would continue east past Cabrillo Ave. across the W. Elberon Bridge over N. Gaffey St. to Leland Park East. This portion of the park is used by joggers and people to walk their dogs; however, there is also ample opportunity to work with the existing Leland Park Advisory Board (PAB) to develop ideas for improvements to this section of Leland Park.

As an added value these various pathways would connect to other proposed pathway opportunities— Opportunity #13—the Peck Park to Bandini Canyon Park pedestrian and bicycle pathway and Opportunity #18—the proposed sidewalk along N. Gaffey St. from the Elberon Bridge to Miraflores Ave.

OPPORTUNITY #16 - SUMMERLAND TO GAFFEY & PACIFIC BIKE CONNECTIONS

The opportunity here is to create bicycle, as well as enhanced pedestrian, path connections between the end of the bicycle lanes on W. Summerland Ave. just east of Meyler St. and the existing bicycle paths on N. Gaffey St. and the proposed new bicycle path extension on N. Pacific Ave. The blue lines on the adjacent map show the W. Summerland to N. Pacific pathway connection, while the red lines show the W. Summerland to N. Gaffey St. connection.



First, let's look at the Summerland to N. Pacific pathway. There are actually two (2) different alternative routes proposed to accomplish this. The blue-lined path would direct cyclists to turn left at Meyler St., go north to Elberon Ave. and then head east along Elberon Ave. over the bridge to N. Gaffey Pl. Then the route would proceed north to McArthur Ave. over the bridge at the 110 Freeway, and wind down the hill to W. Upland Ave. to N. Pacific Ave. At this point the cyclist could proceed south on the proposed southbound bicycle lane along N. Pacific Ave. (Opportunity #11) and eventually turn at 6th or 7th Street into Downtown San Pedro and continue on to the Port of LA as desired, or, of course, continue south on Pacific Ave. beyond those streets towards the San Pedro Coastal Area. As the residential streets along this pathway are not wide enough to create a dedicated bike lane, this pathway would be designated a bicycle route with wayfinding signage to assist with directions.

Now let's look at the red-lined pathway. This functions as both an alternative connector from the end of the W. Summerland bike lanes just east of Meyler to the blue-lined pathway that goes from N. Gaffey Pl. to N. Pacific Ave., and as a separate connector to the existing bike lanes at N. Gaffey St. As with the blue-lined pathway there is not enough room for a dedicated bike lane; however, this portion of the pathway could be designated a bike route with wayfinding signage to both the N. Pacific bike lanes and the N. Gaffey bike lanes.

As an added value, both of these alternative pathways connect to the proposed pedestrian pathways between Peck Park and Leland Park, as well as the proposed pedestrian pathway between Peck Park and Bandini Canyon Trail.

OPPORTUNITY #17 - LELAND PARK SLOPES ENVIRONMENTAL ENHANCEMENT

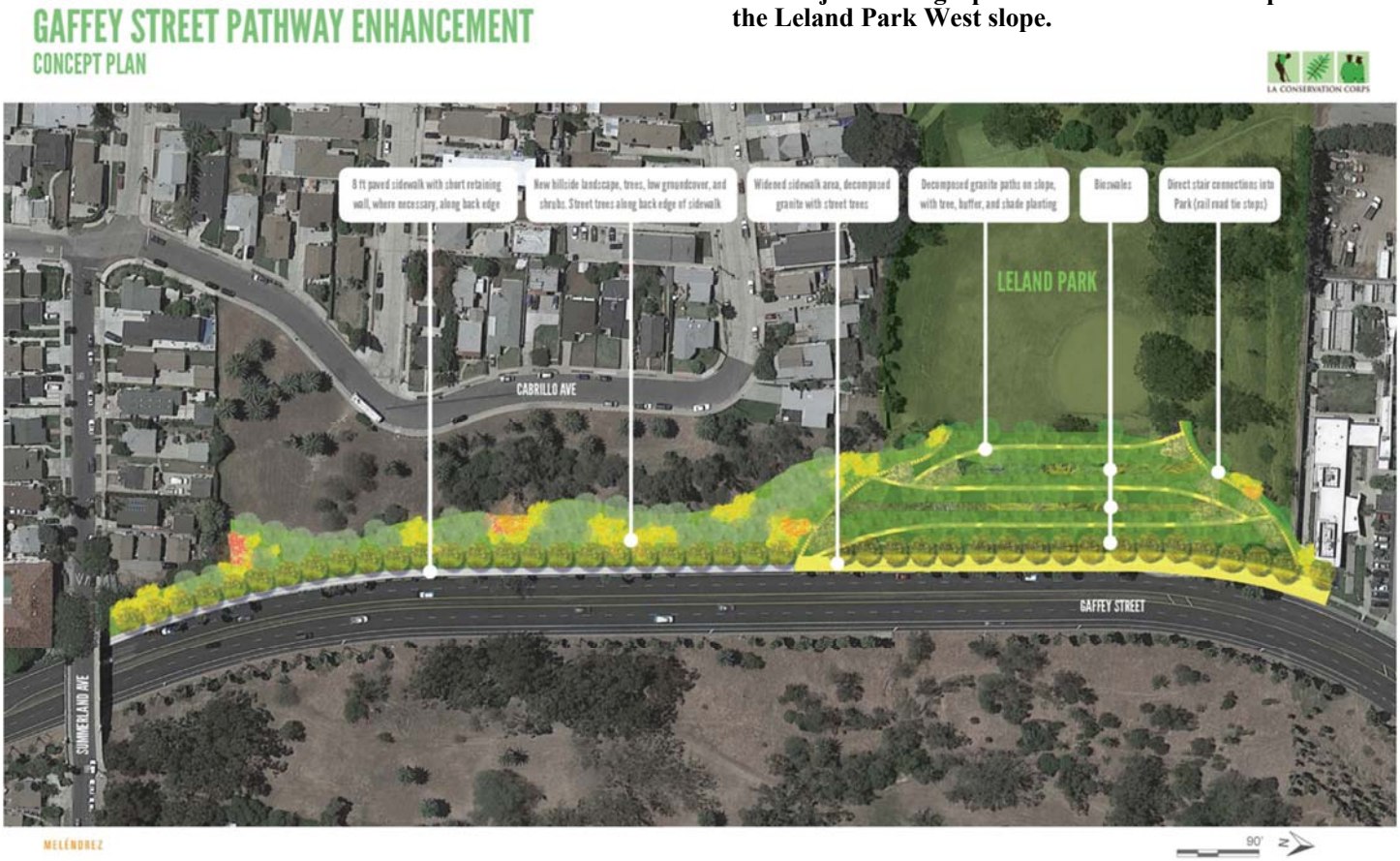
This opportunity will address several issues along the slopes and terraces at Leland Park along the west and east side of N. Gaffey Street. The specific improvements proposed for this opportunity include:

1. Planting approx. 200 - 15 gal. large stature trees and a "to be determined" number of drought tolerant shrubs
2. Installation of "smart irrigation" water conservation system to help establish the drought tolerant trees and shrubs
3. Spreading approximately 3 acres of water conserving natural mulch

These improvements will:

1. Restore native habitat and increase species diversity
2. Provide enhanced hillside erosion protection
3. Protect resource lands that have fallen into derelict condition
4. Improve water quality
5. Improve air quality
6. Enhance the scenic vista along N. Gaffey St.

Blue areas in map above show both east & west slopes of Leland Park along N. Gaffey St. The areas in green represent the area covered by Opportunity #10, and are shown here for reference, and to show that the slope along the SR 47 On Ramp at the north edge of Leland Park East would be enhanced as part of the Opportunity #10 Project. The graphic below shows a Concept Plan for the Leland Park West slope.



OPPORTUNITY #18 - N. GAFFEY PEDESTRIAN PATH - ELBERON BRIDGE TO MIRAFLORES

This opportunity will remedy the fact that there is no pedestrian pathway along North Gaffey Street from the Elberon Bridge along Leland Park West to Miraflores. Pedestrians who wish to access Leland Park or traverse up to the animal shelter and commercial area that begins at Miraflores have no way to safely do so. Leland Park is a wonderful community resource that until recently had fallen into some disrepair. Recent actions by the City of Los Angeles Dept. of Recreation and Parks to restore a four (4) acre portion of the park with an enhanced baseball field, children's playground, and adjacent pathways and community center have made the park a very attractive community resource once again.

The proposed sidewalk on the west side of Gaffey will create a safe and easy pedestrian access to the recreational resources at Leland Park. This will connect into the Park at the two (2) locations shown on this map and extend further into the Park via the proposed new pathways shown in Opportunity #17.

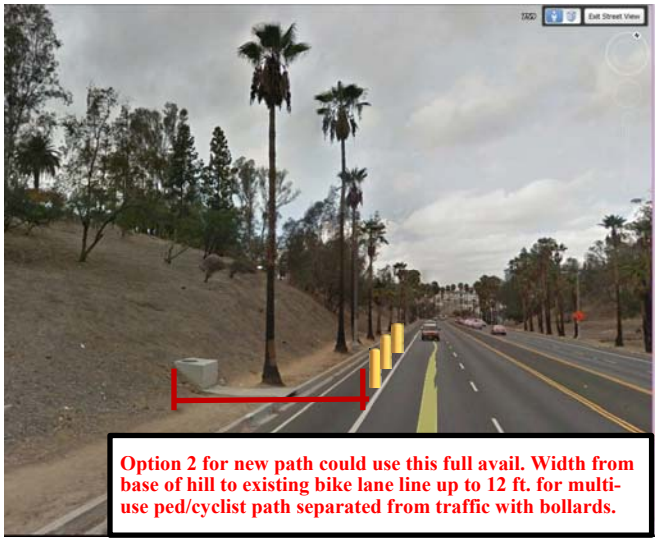
There are two (2) options for installing a new sidewalk that would not require either the removal of the iconic palm trees or the construction of a very expensive retaining wall. One option is to meander the sidewalk around the palm trees. This option would likely still require retention of soil on the uphill side of each palm tree, but not a full length retaining wall the entire length of the path along the hillside. The second option would be to convert the existing bike lane into a dedicated protected (with bollards) pedestrian and bicycle pathway. Implementation of either option will require a B-Permit for the work within the street right-of-way. This project would also have two short pathway connector branches to connect the path to the terrace pathways within the park. These connectors will require approval by the Dept. of Recreation and Parks, and is covered by Opportunity #17.

The photos on this and the next page depict different locations along the proposed path with additional observations as applicable.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #18 - N. GAFFEY PEDESTRIAN PATH - ELBERON BRIDGE TO MIRAFLORES

Slope drainage will need repair. Edge of hillside may allow sidewalk meander around palm trees with minimal retention.



Option 2 for new path could use this full avail. Width from base of hill to existing bike lane line up to 12 ft. for multi-use ped/cyclist path separated from traffic with bollards.

Maintenance driveway/road—proposed sidewalk should include branch up hill to connect to Leland Park terraces. New sidewalk along N. Gaffey could meander back to run behind palm from this point north

Location where new ped path will connect with existing sidewalk.

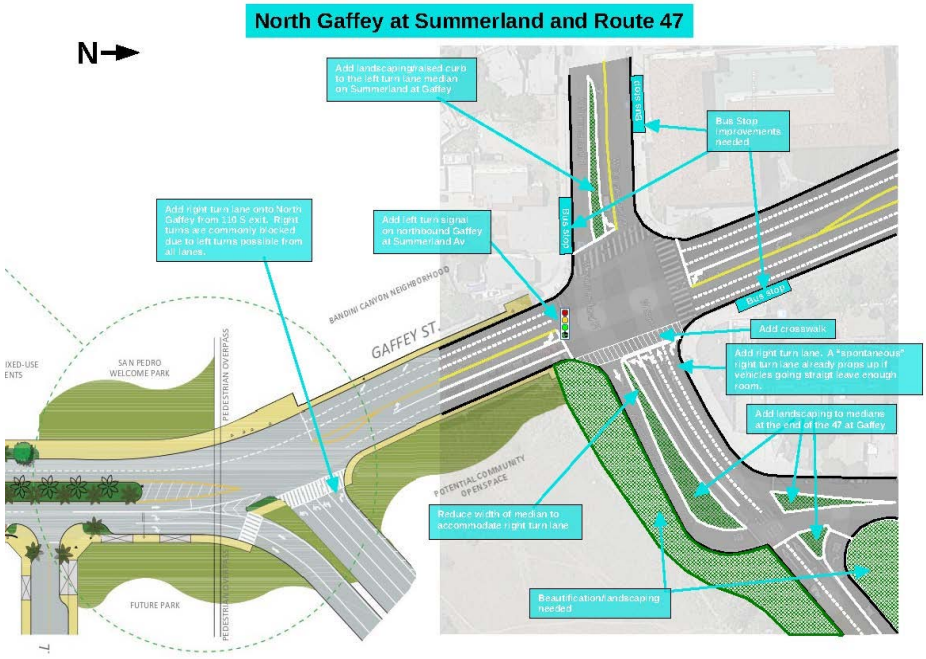
SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #19 - N. GAFFEY —SUMMERLAND LANDSCAPE MEDIANS

This opportunity addresses the "gap" between where the Gaffey Great Street Project begins at the Harbor Freeway terminus and where Phase II of the N. Gaffey Greenway Project will end at W. Channel St. It complements the proposed pedestrian pathway along the west side of Gaffey St. from the Elberon Bridge to Miraflores St., and it calls for traffic safety and beautification improvements at the Gaffey St./Summerland Ave. intersection.

Specifically, the improvements include:

1. Raised landscaped median on Gaffey St. from Elberon St. Bridge to Miraflores St.— given the additional retail shopping north of this project area and the High Park development coming on line, this section of Gaffey will see increasing traffic. More visitors will be exiting at W. Channel St. to reach north Gaffey Street. Ideally, this project should be developed in conjunction with adding the pedestrian path along the west side of Gaffey St. between the Elberon Bridge and Miraflores St. (Opportunity #18).



2. Landscaped medians along Summerland Ave. at the intersection approach
3. Bus stop improvements
4. Additional crosswalk at the east Summerland crossing
5. New sidewalk on the east side of N. Gaffey between Summerland and the staircase up to Leland Park East just north of the Elberon Bridge.
6. Landscape slope on the east side of N. Gaffey just north of Summerland up to the Elberon Bridge.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #19 - N. GAFFEY —SUMMERLAND LANDSCAPE MEDIANS

The photos on the left from top to bottom are looking north along N. Gaffey St. from just south of the Elberon St. bridge towards Miraflores St. In order to convert the center median lane to a raised landscape median while still being able to create a pedestrian path along the west side of the street without removing the iconic palm trees, the path will need to meander around the palm trees. In addition, there will need to be some level of retention of the hillside immediately adjacent to the path until the path reaches the maintenance road driveway about halfway up the block towards Miraflores. From that point forward, there is room to construct the path sans any hillside retention. Another option that was mentioned in Opportunity #18 would be to convert the existing bike lane on the west side of N. Gaffey into a protected (with bollards) combined pedestrian and bicycle bike path.

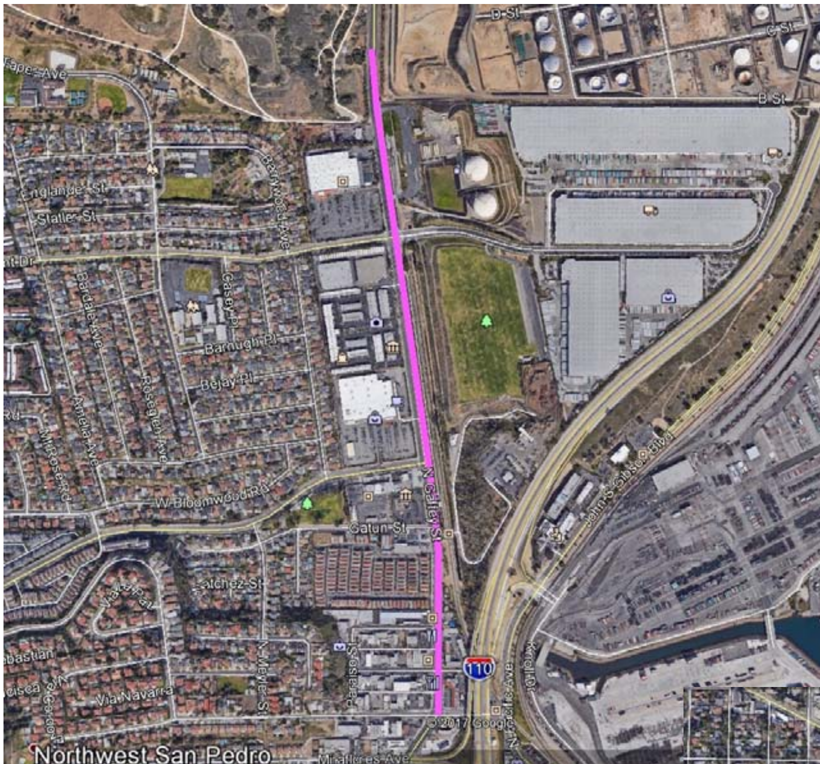
The bottom four (4) photos on this page show the Summerland Ave. median landscape opportunities along the SR 47 offramp as it merges into Summerland Ave. The larger open space area seen on the left side of the photos is an area that could be "enhanced" with a larger bioswale running down the middle from east to west and then landscape with large stature trees—a mix of Coast Live Oaks, Canary Island Pines and Western Cottonwoods. The ground plane can be landscaped with drought tolerant shrubs, boulders and mulch.

This project will require a B-Permit and will need to go through a thorough design/engineering and permitting process that would involve input and approval from Caltrans, LA City Department of Public Works., and LA DOT.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #20 - N. GAFFEY PARKWAY PHASE III W. CHANNEL TO ANAHEIM ST. MEDIANS, PARKWAY, PEDESTRIAN PATH

The opportunity here is to enhance the parkway environment along N. Gaffey St. between W. Channel St. and Anaheim St. There is an existing median lane of approximately 12 feet in width along most of the approximately 1.5 miles of N. Gaffey St. within this stretch. The median project would comprise two (2) separate lengths of N. Gaffey. The southern 12 ft. wide median lane runs from Channel St. to just north of the Home Depot at the southern edge of a tank farm. There the median narrows for a while, and then widens again to the approx. 12 ft. width until it narrows again on the approach to Anaheim St.



The very southernmost section along the east side of N. Gaffey between Channel and Gatun is an opportunity to construct a new sidewalk and curb and gutter where none currently exists.

Besides the opportunity for a raised landscape median, there is also opportunity for an improved pedestrian parkway on the eastern side of the street from Westmont Dr. north all the way to Anaheim St. This would need to be a much narrower parkway improvement then the existing N. Gaffey St. Phase I Greenway, and the tree planting along that stretch would have to address the presence of underground oil and/or gas pipelines. Right now much of that length is covered in mulch.

There is also opportunity to plant trees along much of the west side of N. Gaffey from Westmont north, but these would need to be small stature trees due to the presence of overhead high voltage electrical distribution lines.

The newly proposed raised median itself could accommodate large stature trees, which would greatly improve the vista from both the north and south bound lanes of traffic.

OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

L.A. Harbor Coastal Trail
Master Map

The opportunity here is to identify and close the gaps that remain along the Pacific Coast Trail (See "2005 LA Harbor California Coast Trail Access Analysis Report") after accounting for the other Opportunities already represented in this San Pedro Urban Greening Plan. Only those connections that fall within the "regional" geographic focus of this Plan are herein included. This is the area bounded by Paseo Del Mar to the south, Gaffey Street to the west, Anaheim St. north along Gaffey, and Harry Bridges to the north along John S. Gibson. The Master Map of the Pacific Coast Trail is shown on this page to show the overall context for the "LA Harbor Coastal Trail".

The Pacific Coast Trail (PCT) "gap" segment opportunities included in this Plan are grouped into three (3) categories that mirror the categories described in the 2005 Report. These are:

1. Lower Coast Trail San Pedro
2. Upper Coast Trail San Pedro
3. Spur Roads San Pedro
4. Connectors San Pedro

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

LOWER COAST TRAIL SAN PEDRO:

Most of these sections already have pedestrian and bicycle lanes/routes in pretty good condition. However, improvements needed include: additional access support facilities and signage—both directional and interpretive (NOTE—THE NUMBERING BELOW MATCHES THE MAP ON THIS PAGE):

11. "The Crescent" from 22nd to Miner/S. Harbor—this is a designated bike path that provides access to the coast, marinas, and Ports O'Call and Bloch Field with existing amenities, i.e., decorative lights, benches, water fountain and landscaping. Additional opportunities include:
    - Directional signage to northbound bike route
    - Directional signage to fishing marinas, San Pedro Public Market and Cabrillo Beach
    - Destination signage at Bloch Field or Bloch overlook
    - Increased native plants
    - Connection to southern Red Car terminus, or trolley stop
12. Gulch, from Miner/S. Harbor to Beacon
    - Normally, cyclists would come from Crescent to travel up Gulch to the Beacon bike route, but since this is a short steep uphill climb, the opportunity here is to create an alternative bike route/path north along Harbor with directional signage from Crescent bike lane
13. Beacon, from Gulch/14th to 7th
    - Continue bike route from Beacon and 7th to Harbor and 5th
14. 7th, from Beacon to Harbor; Harbor, from 7th to 5th
    - This needs to be coordinated with Sampson Way Realignment Project
15. Harbor from 5th Street to Front Street— NOTE—MOST OF THIS STRETCH INCLUDED IN OPPORTUNITY #4
    - Improve directional bike signage
16. Front Street, from Harbor to John S. Gibson—COVERED WITHIN OPPORTUNITY #7- FRONT STREET BEAUTIFICATION PROJECT
17. Knoll Hill, from N. Front to Harry Bridges— COVERED WITHIN OPPORTUNITIES #7, 12, 13
18. John Gibson, from N. Front to Harry Bridges Parkway/Wilmington Buffer—Covered within Opportunity #12

UPPER COAST TRAIL SAN PEDRO—GAFFEY:

These are sections along Gaffey St. However, "Green Street" type enhancements have been previously proposed for nearly the entire stretch of Gaffey St. shown in the map (SEE NEXT PAGE except for south of 13th St. Those "other" opportunities are noted as appropriate in the descriptions below:

25-26. Gaffey from 13th St. to LA Harbor Waterfront Gateway Park – COVERED IN GAFFEY GREAT STREET OPPORTUNITY #10

28. Bandini Canyon Trail from Bandini Canyon to Gaffey St. and Harbor – SEE OPPORTUNITIES #13, 15
29. Gaffey from LA Harbor Waterfront Gateway Park to Channel – SEE OPPORTUNITIES #18, 19

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

30. Peck Park and Canyon to Leland Park and Waterfront Gateway – SEE OPPORTUNITIES #15, 16

31-32. Gaffey from Channel to Anaheim Street – SEE OPPORTUNITY #20

UPPER COAST TRAIL SAN PEDRO—PACIFIC:

SEE MAP BELOW

21—22. Pacific Ave. from 13th St. to O'Farrell—New bike lanes and median lanes were installed recently. SEE OPPORTUNITY #22 METROPOLITAN GREEN STREET for additional pedestrian oriented enhancements that have been proposed for the "Downtown" section of Pacific.

23. Pacific Ave. from O'Farrell to Front St.—SEE OPPORTUNITY #12 for the proposed bike lanes exten-sion and additional tree planting enhancements

SPUR ROADS SAN PEDRO

SEE MAP BELOW. These include connections from the base of Crescent and Miner to the working waterfront, marinas, fishing wharves and the harbor. ALTHOUGH THERE ARE RECOMMENDATIONS IN THE PCT REPORT, THESE WILL NEED TO BE COORDINATED WITH THE SAMPSON WAY REALIGNMENT ALREADY UNDERWAY AND FUTURE SAN PEDRO MARKET REDEVELOPMENT.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

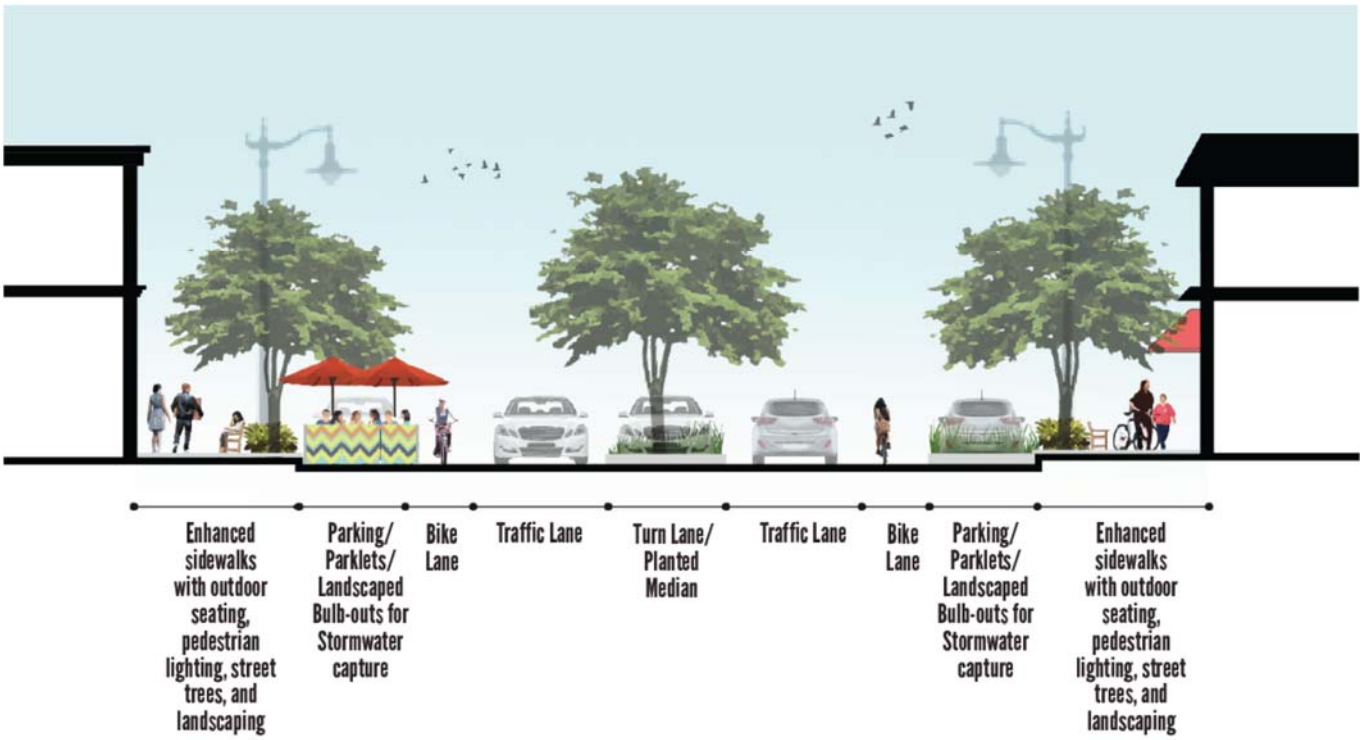
CONNECTORS SAN PEDRO

SEE MAP THIS PAGE. These connect the Upper Coast Trail along Gaffey St. to the Lower Coast Trail along the Harbor, and include the following:

45. 22nd Street from Crescent to Gaffey—
    - Add bike oriented amenities at corner of Pacific and 22nd
    - Extend bike route/lane to Gaffey
46. 13th Street from Beacon to Gaffey
    - Designate as Bike Route from Beacon to Gaffey & repair sidewalks as needed
47. 9th Street from Beacon to Gaffey
    - Designate and add Bike Route signage between Pacific and 9th Street
    - Add directional signage to Downtown San Pedro
48. 6th Street Downtown San Pedro
    - Incorporate bike lanes as shown in Downtown Core Green Streets Opportunity #23
49. 1st Street from Harbor to Gaffey
    - Add bike lanes to connect Pacific Ave. to Harbor Blvd.
50. O'Farrell from Harbor to Bandini Canyon
    - Add bike lanes to connect LA Harbor Gateway Park to Harbor Blvd.
51. Harbor View Trail
    - Runs parallel to SR 47 freeway from Harbor Blvd. to LA Harbor Waterfront Gateway Park
    - Pedestrian only hiking path
    - Install wayfinding signage
52. Channel from John S. Gibson to Gaffey— ADDRESSED IN OPPORTUNITY #25;

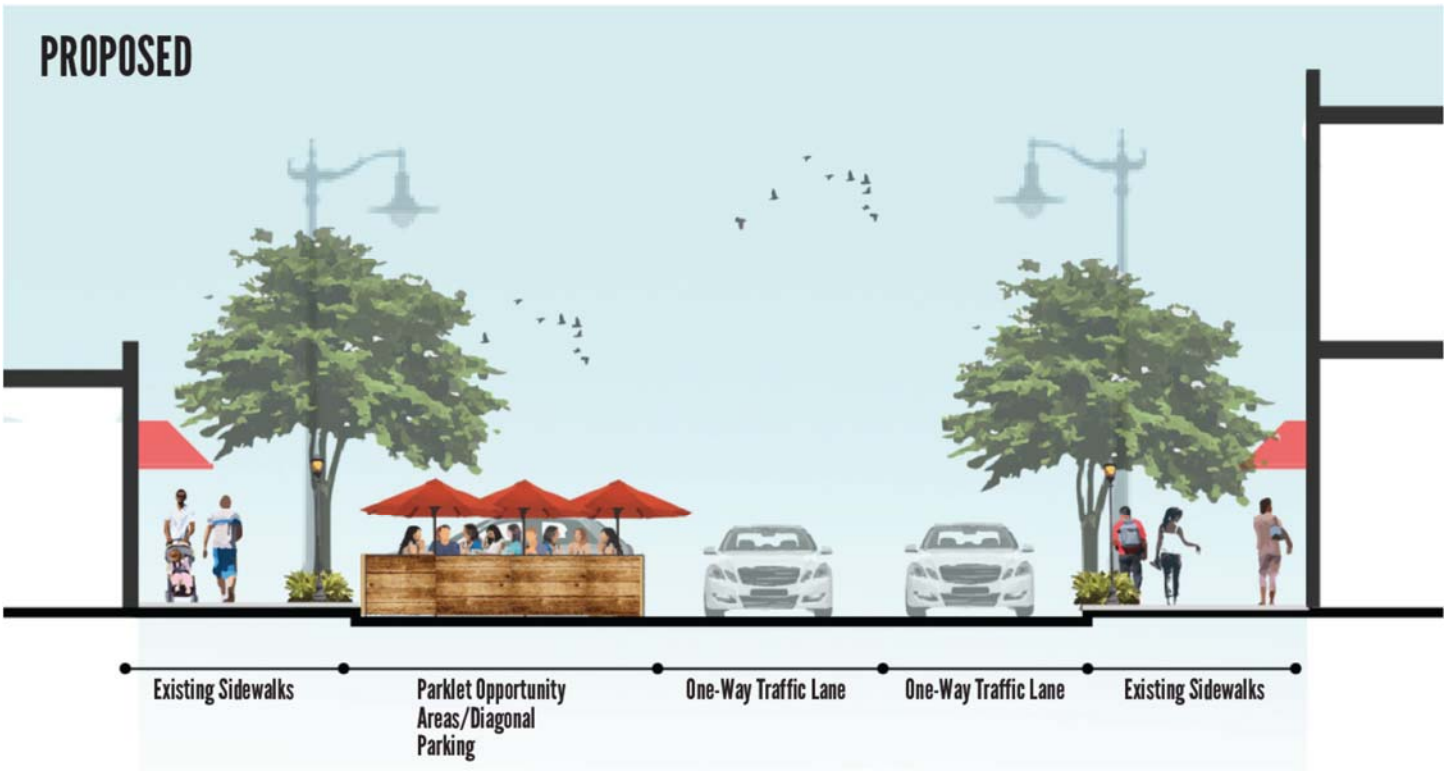
SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #22 - PACIFIC AVENUE METROPOLITAN GREEN STREET



This opportunity applies to the segment of Pacific Ave. that acts as the western boundary of the Downtown San Pedro Area from 5th St. south to 9th St.. This is considered the most heavily used pedestrian section of Pacific Ave., and as such, should be enhanced with streetscape elements delineated for this street "typology". Those elements and improvements are identified in a prototypical street cross-section shown in the above graphic and depicted in the drawing to the left. These types of enhancements are possible where you have building edges located immediately back of the sidewalk and there are no surface parking lots or lots of driveways along the streets. The goal is to create a vibrant and cozy type pedestrian-oriented environment while also implementing water and energy conserving practices associated with "green streets" that have been described earlier in this Plan. The recent extension of bike lanes into these area is another one of those "practices". Landscape medians with landscaped bulb-outs and parklets and pedestrian lighting are still other "practices". All of these serve to also create a safer environment for pedestrians because vehicular traffic is slowed down through this stretch of Pacific Ave. These types of improvements are more easily implemented on a street like Pacific Ave. than on a street like Gaffey because the land use along Gaffey and its associated street configuration are more oriented to moving "regional" as well as local vehicular traffic.

OPPORTUNITY #23 - DOWNTOWN CORE GREEN STREETS



This opportunity would best be implemented if 6th and 7th Streets could be configured as a one-way couplet—in this case, 6th Street would be one way towards Pacific Ave. from the Port and 7th Street would be one way towards the Port. In addition, this would likely work best if implemented along with the conversion of select existing alleys and surface parking lots into a series of interconnecting network of "green alleys/paseos" along with "green parking structures" in place of the existing surface parking lots (SEE OPPORTUNITY #24—DOWNTOWN PARKING & ALLEY PASEOS"). One reason is that the one-way couplet would involve eliminating curbside parking on one side of each street. The other reason is that additional retail opportunities would be created with the conversion of existing of alleys and parking lots into more vibrant pedestrian pathways and outlets.

The elements, enhancements and amenities with this Opportunity would include distinctive decorative sidewalk paving, landscape bulb-outs, outdoor dining bulb-outs, bike lanes and racks (perhaps rent-a-bike racks), rain gardens (built into bulb-outs), pedestrian lighting, and new street trees. City regulations at the time of this Plan publication require that "parklets" be accessible to the general public rather than solely patrons of an adjacent business. A distinction will need to be made between "parklets" and privately accessible "outdoor dining bulb-outs". SEE NEXT PAGE FOR FURTHER CLARIFICATION. As of this writing, it appears that there is greater community interest in "outdoor dining" opportunities.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #23 - DOWNTOWN CORE GREEN STREETS

6TH & 7TH STREET

While the images on this page are examples of "Parklets" in other communities, the community-preferred concept here in San Pedro would be to construct "bulb-outs" or platforms for outdoor dining and landscaping. These areas would be leased by the restaurants and subject to design guidelines. Such improvements will require both a B-Permit and an R-Permit.

These can be installed on two-way or one-way streets; on streets with transit, streets without transit.

They help create a more vibrant pedestrian experience that complements existing downtown businesses.

They can also be coordinated with landscape only "bulb-outs".

This could be done with the current 6th Street roadway configuration, or as part of conversion of 6th Street and 7th Street into a one-way couplet. The adjacent sketch illustrates what 6th Street would look like if so configured. Other images illustrate different ways these could be utilized.

PACIFIC AVE.

Similar project to what is described for 6th Street. Project would be done in conjunction with adjustments to roadway configuration that is shown in the adjacent sketch.

This particular type of treatment is consistent with the treatments proposed for "Metropolitan Transition Green Street Typology" segment along Pacific Ave. between 6th Street and 9th Street. SEE OPPORTUNITY #22.

Exact locations would be determined through community and agency outreach process involving local merchants, local residents, and City of LA public agencies.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #24 - DOWNTOWN PARKING & ALLEY PASEOS

This particular opportunity involves converting existing surface parking lots and select alleys into enhanced active pedestrian pathway linkages to 6th and 7th Streets in Downtown San Pedro.

This "transformation" would entail conversion of existing retail establishments such that existing "backdoors" would become alternative "front doors". Select parking lots could also be converted from existing surface only parking to multi-story "green" parking structures with rooftop garden areas.

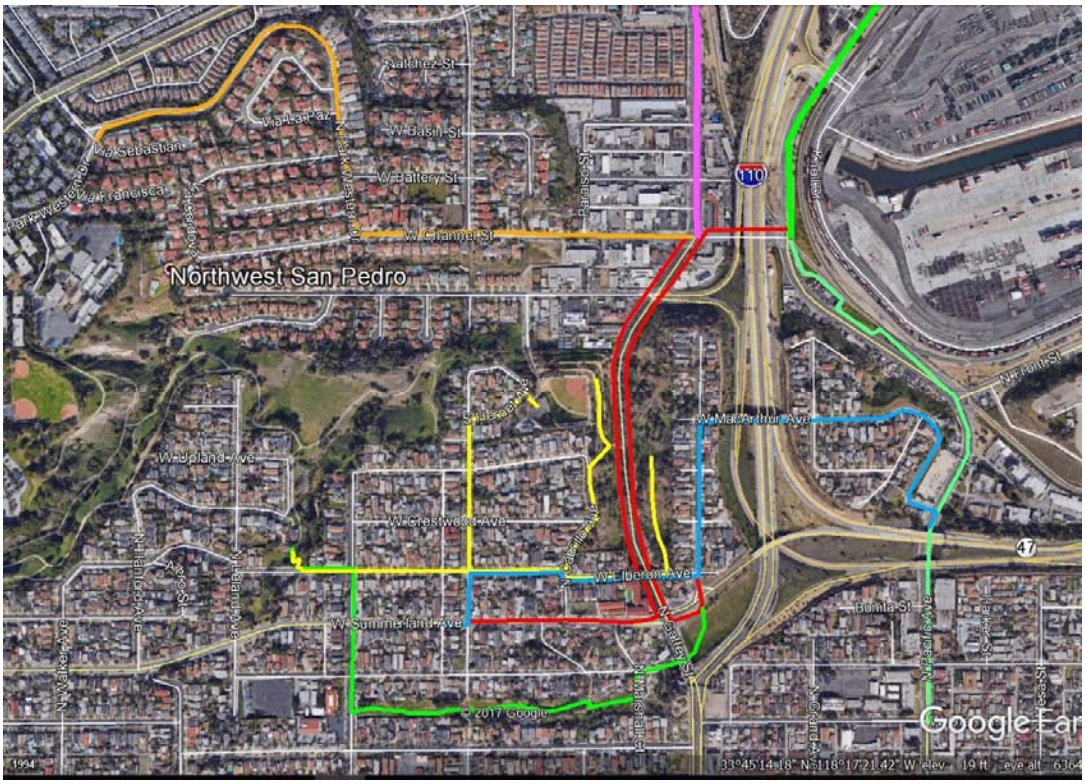
Proposed elements would include pedestrian lighting, landscaped planters, enhanced permeable ground surface paving, rain gardens, outdoor seating opportunities, and public art.

The goal is to provide additional parking with enhanced pedestrian access to help create a more economically vibrant downtown environmentally-friendly experience.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #25 - W. CHANNEL GREEN STREET—PARK WESTERN TO N. GAFFEY

This opportunity (ORANGE PATHWAY) would greatly improve a pedestrian and bicycle connection from Park Western to W. Channel to the existing bike lanes along N. Gaffey (RED PATHWAYS), the N. Gaffey Phase II Greenway (NOT SHOWN), and the bike lanes on John S. Gibson (GREEN PATHWAY). The extension of the John S. Gibson Bike Lnaes is also shown as a GREEN PATHWAY extension from W. Channel to Front St. and then south on N. Pacific to connect to the existing bike lanes at O'Farrell.



The map shows all of these connections plus the Peck Park to Leland Park Pedestrian Connection (YELLOW PATHWAYS), the Peck Park to Bandini Canyon Trail Connection (GREEN PATHWAY), the Summerland to N. Gaffey Bike Connection (RED PATHWAY), and the Summerland to N. Pacific Pedestrian and Bike Connection (BLUE PATHWAY). The PURPLE PATHWAY represents Opportunity #20 - N. Gaffey Median Landscape Enhancement (there are existing bike lanes along this stretch of N. Gaffey.

The photos below depict portions of this new pathway along W. Channel and along portions of Park Western. The primary improvements would include converting the unimproved parkway portions of W. Channel and Park Western to improved parkways with curbs & gutters, pedestrian pathways (sidewalks) and green parkways that can be planted with trees and rain gardens as technically feasible.

This pathway would also connect the residents above Gaffey to the transit stops on Gaffey and John S. Gibson, N. Pacific and shoppers from the transit stops to the stores on Western Ave.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #26 - 22ND AVE. BROWNFIELD RECLAMATION

There are actually two (2) opportunities depicted in the map to the left. Both of these properties are owned by POLA, and any development discussed here will need to be approved by POLA. The first, shown shaded in orange is the conversion of an existing brownfield on 22nd Ave. that is situated between the Red Car terminus storage yard to the west and an overflow parking lot to the east. Owned by POLA, this property is across the street and northwest of the Alta Sea development area.

The second opportunity, shown in green, is an undeveloped portion of the parking lot associated with the Crafted development on Miner St. Converting this land to some sort of rain garden or nature area will likely also require the approval of the Leasee.

Also shown on this map to the left of the green area is the 22nd Street Park to the west of the Crafted development area. 22nd Street Park is an 18-acre park on the site of a former tank farm in San Pedro across from 22nd Street Landing at the Port of Los Angeles. It offers walking and biking trails, shade trees, a bocce ball court, restrooms, ample parking and more than four-acres of flat grassy area for recreation — all with a water view.

Completed several years ago, the new park by POLA, bounded by 22nd Street, Crescent Avenue and Miner Street in San Pedro, has 500 trees, 1,700 shrubs and 4.5 acres of sod. The park includes a sloped area near Crescent Avenue and 22nd Street, that was rehabilitated to preserve and enhance the freshwater marsh and native plants while creating the new park. In addition, a pedestrian path was created from the elevated Crescent Avenue area down into the park flatlands to provide an up-close view of this native habitat. Other environmental features of the park include use of recycled water for landscaping maintenance ("purple pipe") and bioswales for stormwater management.

The idea is to re-create a similar type environmental remediation and enhancement at both the existing brownfield and open space opportunities depicted here. While the land at the Crafted parking lot location could be converted relatively quickly, the brownfield may need to go through at least one level of environmental site assessment, and then an approved clean-up program before any kind of landscape development plan could be formulated and implemented.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #27- ALMA PARK HISTORIC RESTORATION

Alma Park presents a unique water conservation and stormwater management opportunity for San Pedro. Located in the southern reaches of the community the park cascades down a hillside with a spectacular view of the Port of Los Angeles. The upper part starts at W. 22nd St. and flows down towards W. 21st St. which bisects the park. The lower half of the park is a deep grotto that was once a pond. Like many similar stretches of the hills of San Pedro on the east side of the Palos Verde Peninsula, this was once a natural creek with a series of cascading ponds on its way to the Pacific Ocean at what is now the Port of Los Angeles.

The concept embodied by this opportunity is to restore a portion of the natural "watershed functionality" that once existed at Alma Park while also restoring such historically constructed design elements as the cut stone retaining walls and seat walls in both the upper and lower "grotto" areas of the Park.

Photo looking south towards 22nd St. at the upper "grotto" or pond

Photo looking west at the north side of the park at 21st St.

Photo looking west along the south edge of Alma Park at 22nd St.

Restoration of the natural "watershed functionality" would involve re-designing and reconstructing how stormwater and dry-weather runoff from 22nd St., 21st St., and Alma St., and from within the Park itself, is managed. Currently, stormwater and any irrigation runoff is directed to storm drains and flushed out to the Pacific Ocean. This opportunity would "restore nature's services" by intercepting this water and infiltrating it into the local groundwater. The infiltration/percolation of this water through the soil and underlying rocks will clean the water and replenishment the local water supply.

Photo looking west - view takes in the edge of the park at 21st St. and the lower "grotto", which was once filled with water during rainfall events.

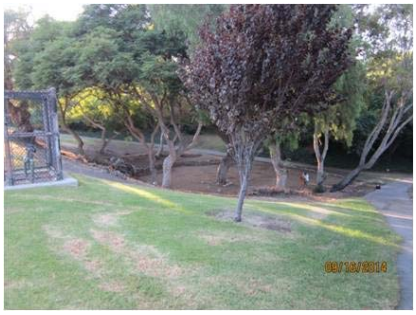
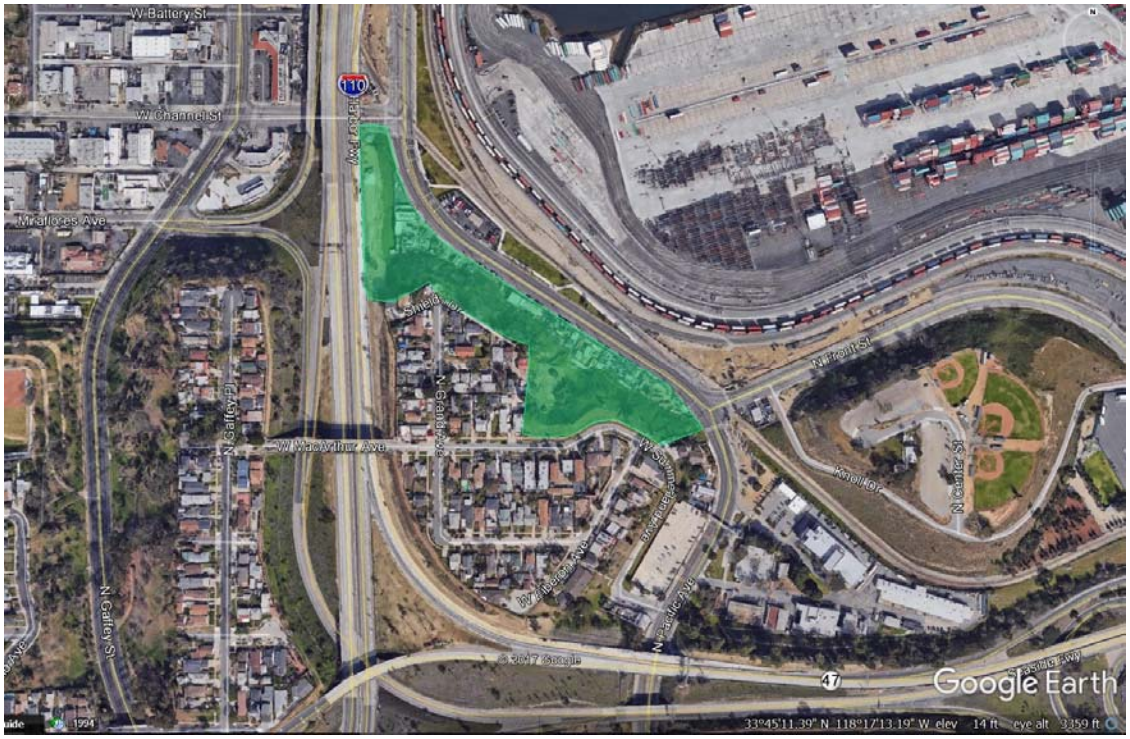


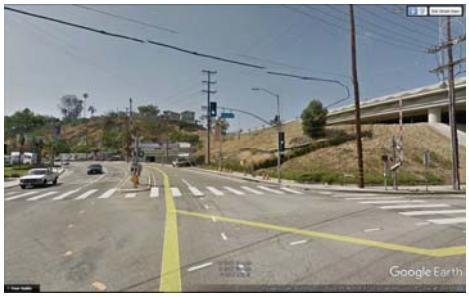
Photo looking into the upper "grotto" just north of 22nd St.

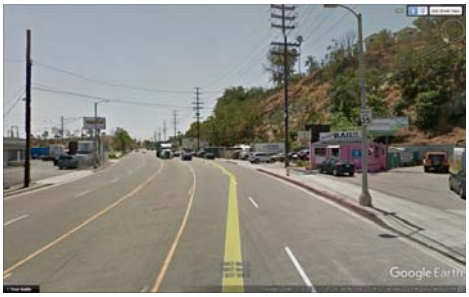
OPPORTUNITY #28– N. PACIFIC HILLSIDE RESTORATION

This opportunity would restore the south side hillside area along N. Pacific between Front St. and W. Channel. This restoration would include the re-purposing of the current industrial land use along this segment, and the designation of the land as open space. The lower portion along N. Pacific would be converted into a parkway similar to what exists across the street, and would include a pedestrian walkway all the way to Front St., and a bike lane that would connect to the existing bike lanes along John S. Gibson, and the proposed bike lanes along W. Channel, and N. Pacific south of Front St.

The photos below show views along this stretch of N. Pacific depicting the existing conditions.

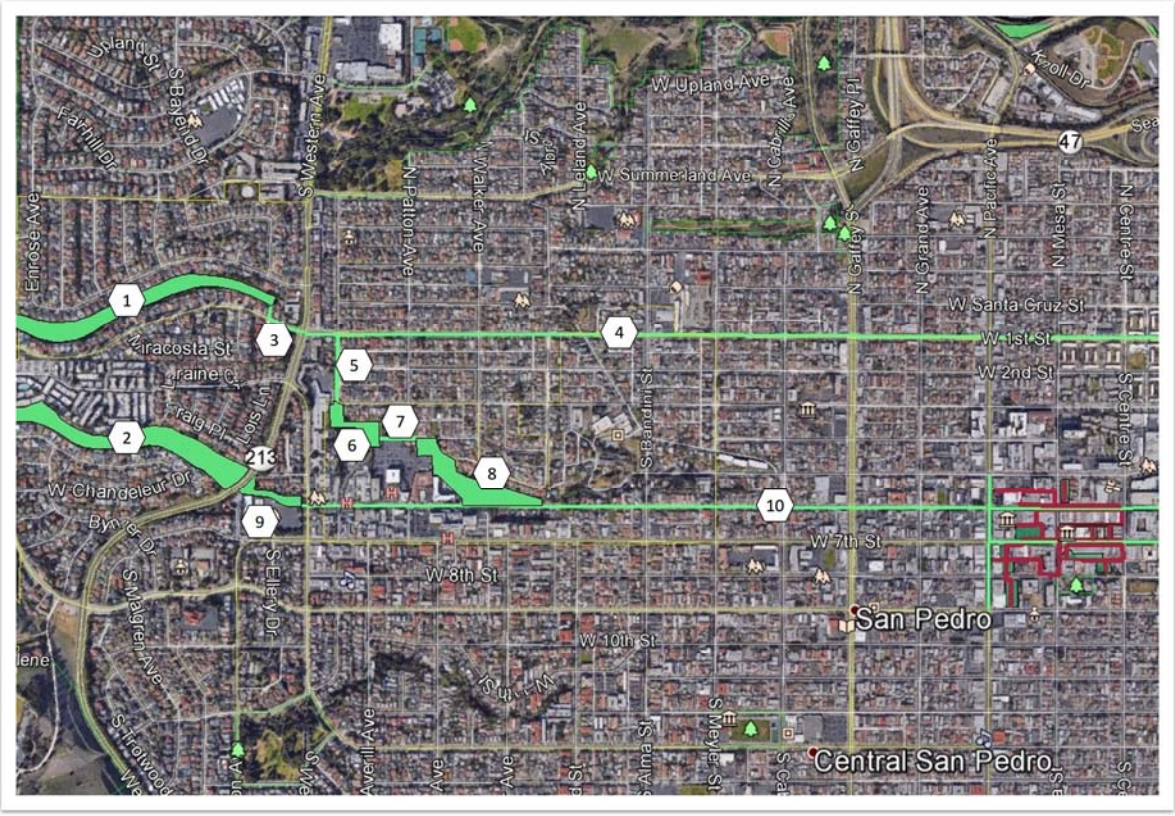






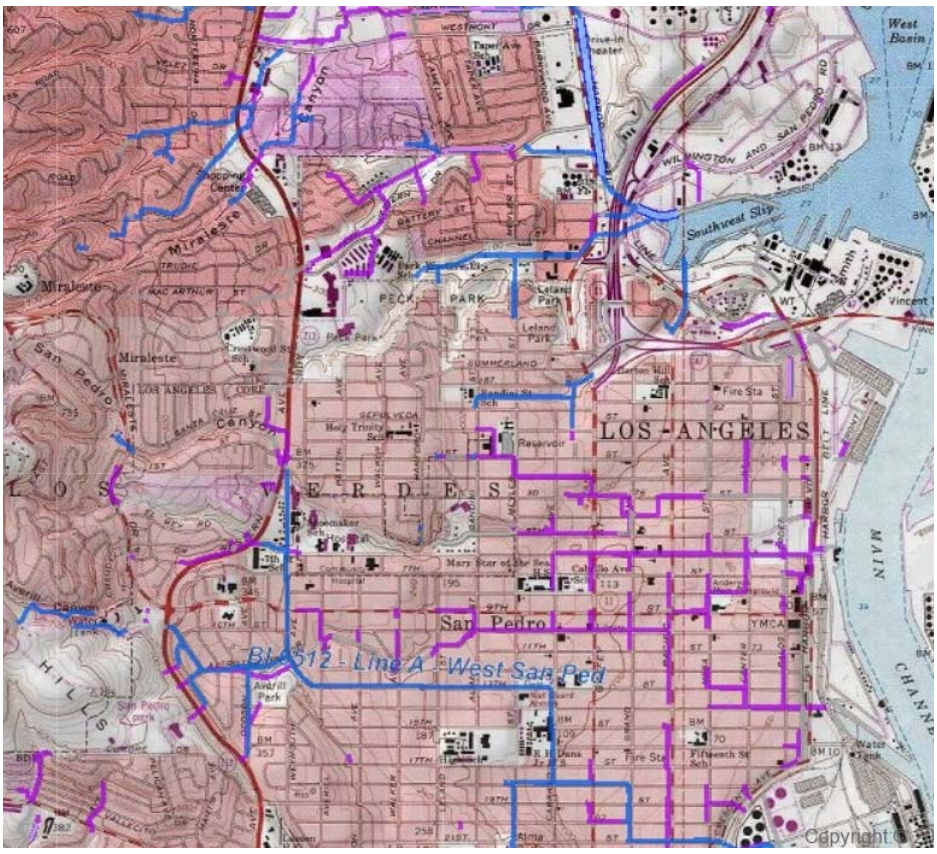
OPPORTUNITY #29– SAN PEDRO CANYON RESTORATION AND 1ST & 6TH STREET GREEN STREET BIOSWALES AND RAIN GARDENS

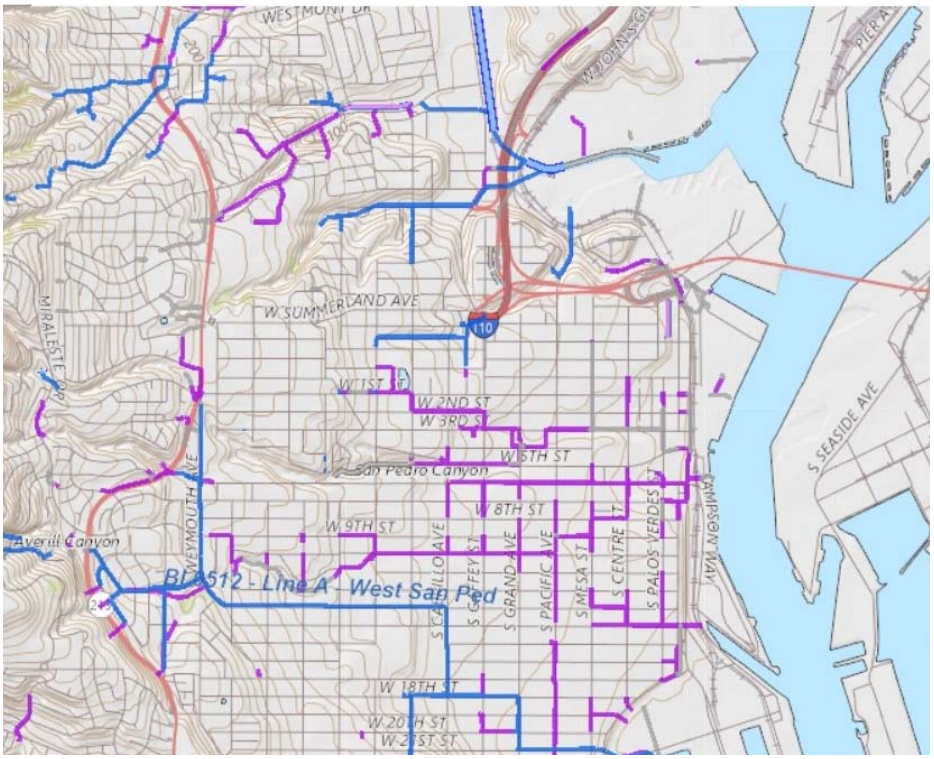
This opportunity involves restoring "nature's services" along 6th Street following the natural drainage pattern of San Pedro Canyon prior to the installation of storm drains, and providing viable pedestrian connections between the remnants of San Pedro Canyon, and existing streets/sidewalks. There are several components to this opportunity. The first would restore native habitat within the semi-natural remnants of San Pedro Canyon that lie within the San Pedro Community to the east of Miraleste Dr. There are several trails and parks to the west of these areas within the Rancho Palos Verdes that are outlined in light green, and fall into the Rancho Palos Verdes jurisdiction. Therefore, this Opportunity is to both connect to these existing "natural" areas with the remnants of natural areas within San Pedro and to extend and enhance these connections all the way into Downtown San Pedro, along both 1st & 6th Streets. The sections of this Opportunity are as follows:



1. Section of the Canyon that flows from Miraleste Dr. to Western Ave. and that is sandwiched between Santa Cruz St. and 1st St.
2. Southern remnant of this Canyon that lies south of Miraleste Canyon Estates and north of El Rey Rd. that also flows between Miraleste Dr. and Western Ave.
3. Connection along 1st St. from Section #1 to Harbor View Dr.
4. 1st Street from Harbor View Dr. to Harbor Blvd.
5. Connection along Harbor View Dr. from 1st St. to 3rd St.
6. Small section of the Canyon that runs from the intersection of Harbor View Dr. and 3th St to 4th St.
7. Short connection along 4th St.
8. Remnant of San Pedro Canyon from 4th St. down to 6th St.
9. Small section of the Canyon between Western Ave. and Weymouth Ave. that stops at the western terminus of 6th St.
10. 6th St. from Weymouth to Pacific where 6th St. becomes a Downtown Core Green Street to the Harbor

OPPORTUNITY #29– SAN PEDRO CYN. RESTORATION/ 6TH STREET GREEN STREET





The maps on this page show two (2) different topographic views of the Los Angeles County Storm Drain System in San Pedro. The key to both maps is shown above. The point of these maps is to show the primary natural drainage patterns from the hills/canyons on the Palos Verdes hillsides into the plains of San Pedro and the harbor. Upon examination therefore, one can see that starting from the north, Peck Canyon, San Pedro Canyon and then Averill Canyon are the primary drainage networks into San Pedro.

As Peck Canyon lies within Peck Park, and has been the subject of a recent Prop. O improvement project, and Averill Canyon flows into an already improved park with a remnant of natural drainage, that leaves San Pedro Canyon as the main remaining opportunity. As it turns out this Canyon drains into a storm drain network that runs down 6th Street, which is the center of Downtown San Pedro.

SAN PEDRO GREEN OUTLETS & PATHWAYS

OPPORTUNITY #29– SAN PEDRO CYN. RESTORATION/ 6TH STREET GREEN STREET

Specific enhancements envisioned with this Opportunity include:

1. Restoration of native habitat within the remnant portions of San Pedro Canyon
2. Restoration of natural water flow as can be done safely, and that does not already exist within the remnant portions
3. Connecting these remnant portions with pedestrian paths/hiking trails
4. Install as many bioswales and rain gardens within parkways along both 1st Street and 6th Street as feasible and possible

There are a number of steps that will be needed before such enhancements can be implemented. They are:

1. Determine agency and/or private ownership of the targeted remnant segments
2. Conduct geotechnical investigation of each of the areas, including the parkway along both target streets to determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
3. Determine the CEQA documentation required for the project
4. Complete CEQA for the project
5. Develop design & engineering documents as needed—this would include prototypes for bioswale/rain garden segments that can be used along 1st and 6th Streets
6. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
7. Secure necessary permits

Some recommended guidelines should include:

1. Using a native plant palette
2. Using “smart irrigation” practices where irrigation is needed to establish plants
3. Use recycled/reclaimed water for supplemental irrigation as feasible
4. Utilize City of Los Angeles “Green Streets and Alleys Design Guidelines” as starting point of design of the prototype parkway bioswales/rain gardens

OPPORTUNITY #30– S. PACIFIC AVE. TRAFFIC CALMING GREEN STREET ENHANCEMENTS

This opportunity focuses on creating traffic calming and other green street enhancements on S. Pacific Ave. south of 26th Street to Shepard. This section of Pacific was identified as a "Residential with Parkways Green Street" because of a high frequency of wide landscape parkways. Besides providing for the streetscape enhancements appropriate for this type of Green Street, this "Opportunity" addresses a concern for pedestrian safety along a stretch of Pacific that is a key link from South San Pedro to Downtown San Pedro and beyond. The traffic calming would be achieved through the construction of landscape bulb-outs at key intersections with textured paving crosswalks. These landscape bulb-outs, as well as intervening sections of parkways would be designed as bioswales and/or rain gardens.

Implementation will require a B-Permit for the landscape bulb-outs, an A-Permit for bioswales and/or rain gardens within the existing parkways, and a Tree Planting Permit for any tree planting. Unless there are overhead high voltage wires most of the parkways along this segment could be planted with large stature trees.

There are a number of steps that will be needed before such enhancements can be implemented. They are:

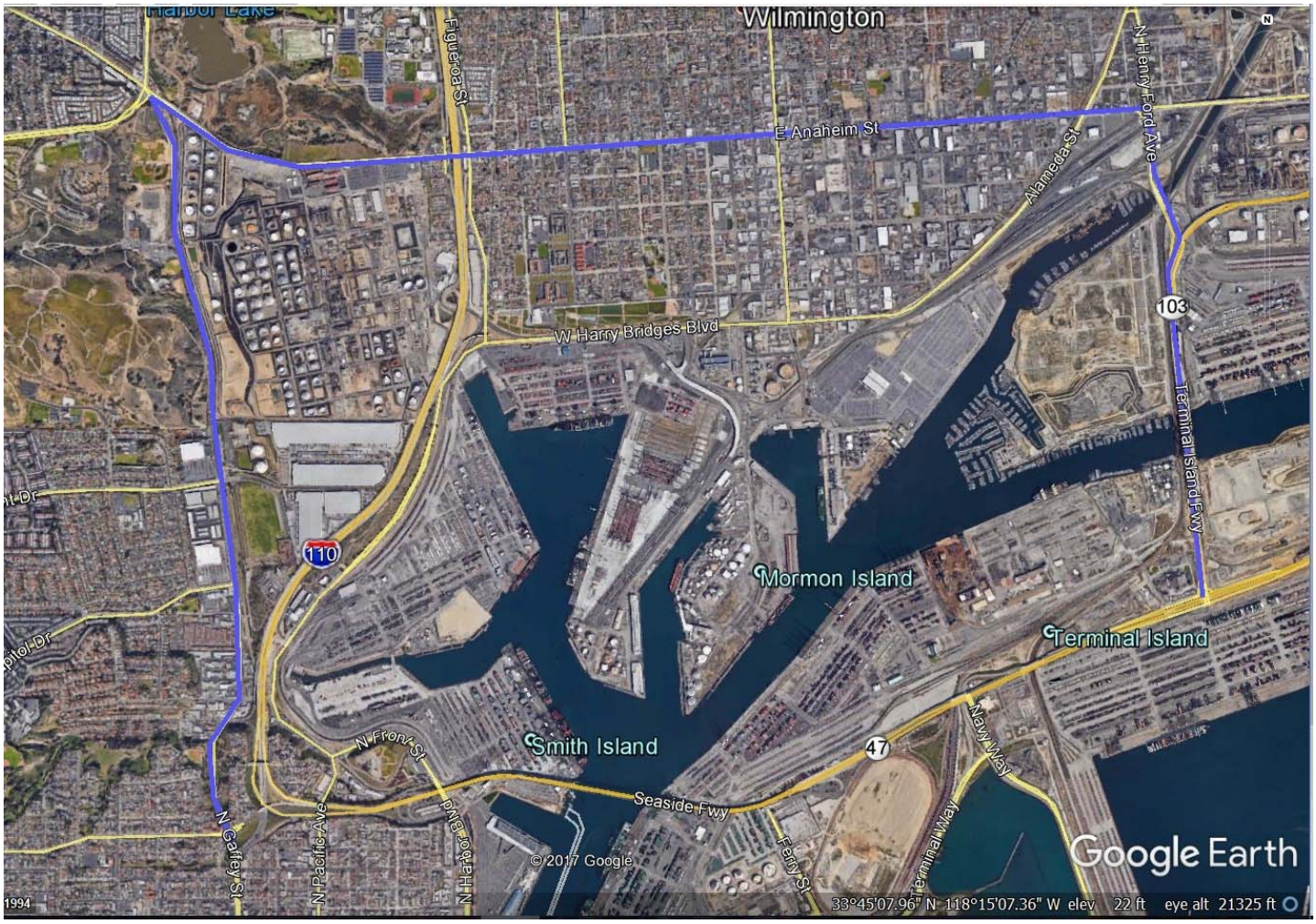
1. Conduct geotechnical investigation of each of the areas, including the parkway along both target streets to determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
2. Develop prototypical design & engineering documents as needed—this would be primarily prototypes for the landscape/bioswales bulb-outs
3. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
4. Secure necessary permits

Some recommended guidelines should include:

1. Using a native plant palette for the bioswales and trees as practical
2. Using "smart irrigation" design where irrigation is needed to establish plants
3. Use recycled/reclaimed water for supplemental irrigation as feasible
4. Utilize City of Los Angeles "Green Streets and Alleys Design Guidelines" as starting point of design of the prototype parkway bioswales/rain gardens

OPPORTUNITY #31– SAN PEDRO RECYCLED WATER CONNECTION FROM MACHADO LAKE/TERMINAL ISLAND

This opportunity would leverage the recycled water supply line that connects Terminal Island Recycled Water Plant to Machado Lake by installing a new recycled water distribution line that runs south down N. Gaffey St. into San Pedro. This water would be used for irrigation of open space and street trees, and possibly other public landscape treatments. The final distribution layout will require coordination between multiple City of Los Angeles agencies responsible for design & engineering, construction and operations and maintenance. This is a very long term project due to its cost and the amount of interagency coordination that will be required for environmental clearance, design, permitting and operations and maintenance. Perhaps the biggest challenge will be determining appropriate mechanisms to pay for this water supply. Nevertheless, the potential benefits warrant including this Opportunity in this San Pedro Urban Greening Plan.



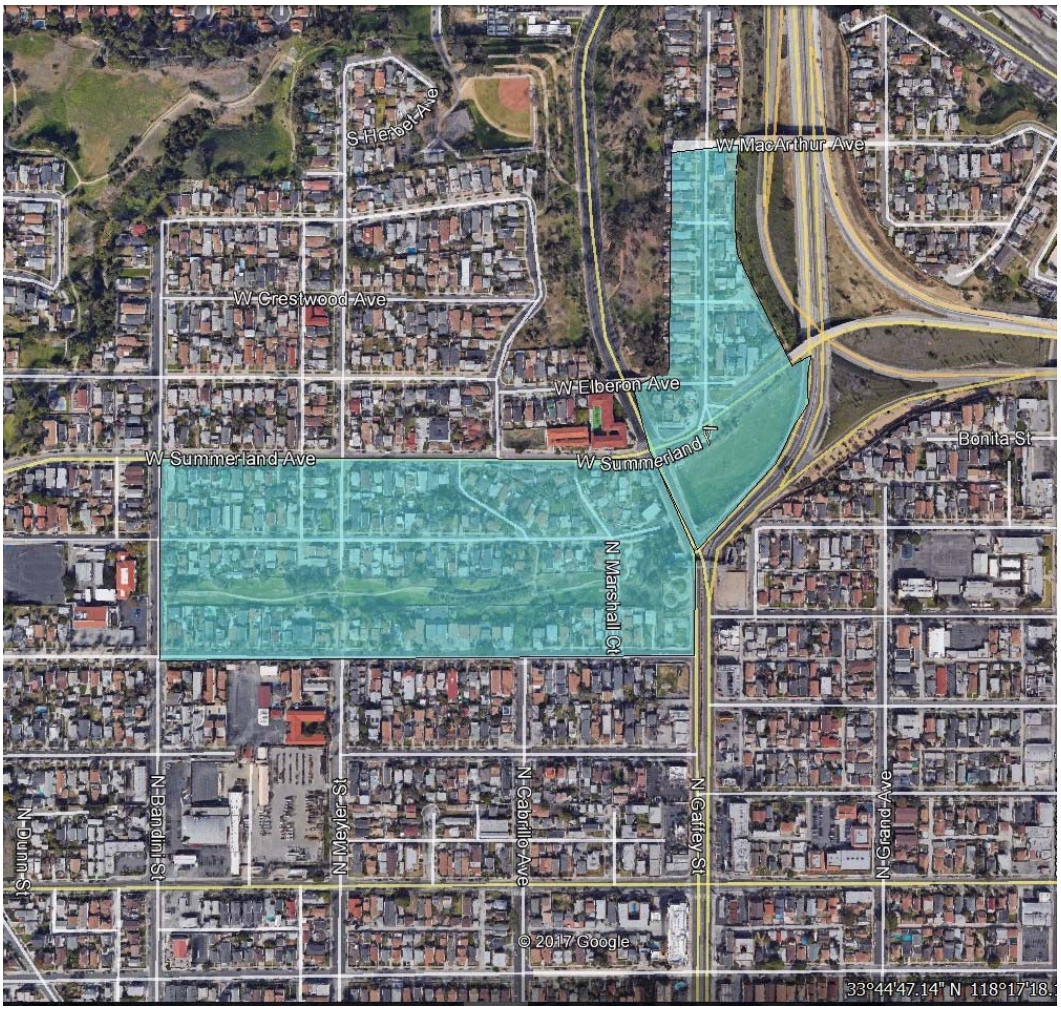
The map above shows the extent of both the existing recycled water line from Terminal Island to Machado Lake at the intersection of Anaheim and N. Gaffey and the proposed extension from that location south to the Caltrans Triangle under the Gaffey Street Bridge at Summerland Place.

OPPORTUNITY #32– BANDINI CANYON/CALTRANS/LELAND EAST SUB-WATERSHEDS STORM WATER CAPTURE & RE-USE

This opportunity involves capturing the water that drains down Bandini Canyon and surrounding streets in that sub-watershed into an underground storage facility at or near the convergence of Oliver St., Summerland Pl. and Marshall Ct., and to the storm drain that is located in the Caltrans Triangle. This storm water would be infiltrated and treated naturally within the substrate of the bioswale that will be constructed in the Caltrans Triangle. Phase I of that bioswale facility is part of Opportunity #1—Greater Downtown Urban Forest Restoration.

There are a number of steps that will be needed before this project can be implemented. They are:

1. Conduct geotechnical investigation of each of the sub-watershed determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
2. Determine the CEQA documentation required for the project
3. Complete CEQA for the project
4. Develop design & engineering documents as needed
5. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
6. Secure necessary permits



The map to the left shows the approximate extent of the sub-watershed that would drain into the area of the intersection of Summerland Pl., Marshall Ct. and the Caltrans Triangle.

SAN PEDRO GREEN OUTLETS & PATHWAYS

APPENDIX A—PLANT SPECIES LIST

The following pages contain a plant species list that can be used when selecting plants for specific landscape project opportunities and elements included in this Plan. Most of the non-tree plants on this list are native to Southern California. All are well-adapted for the use indicated in the Plant List Chart.

The Chart includes quite a number of tree species, including those that have been discussed in Opportunity #2—Priority Green Streets Tree Planting Strategies. It is highly recommended that whenever possible all tree species selected for planting in parks and open space be native trees. The Chart includes a column that identifies which of these trees are considered "large stature". As such trees provide considerable "Greenhouse Gas Reduction" (GHG) benefits, we strongly recommend that they be used whenever possible in your tree planting projects. Site suitability for large stature trees can be determined using the Street Tree Selection Flow Chart in Appendix B. While a number of the large stature trees are not considered native to Southern California, they, and some other non-large stature trees are listed because they are well-adapted to the micro-climates, considered drought tolerant and can handle the harsh street conditions found in San Pedro

APPENDIX A—PLANT SPECIES LIST

Scientific Name	Common Name	Woodlands	Bioswales/ Rain Gardens	Riparian	Meadows	Open Space Trees	Street Trees	Large Stature Tree?
Acer macrophyllum	Big leaf maple			X				
Alnus rhombifolia	White alder			X				
Aquilegia formosa	Red columbine	X						
Artemisia douglasiana	California mugwort			X				
Bauhinia variegata	Purple Orchid Tree						X	
Bouteloua gracilis	Blue grama grass				X			
Cardamine californica	Milkmaids			X				
Carpenteria californica	Bush anemone	X						
Cassia leptophylla	Gold Medallion Tree						X	
Castillehas orthocarpus	Narrow-leaved owl clover				X			
Cedrus deodora	Deodar Cedar					X	X	X
Chilopsis linearis	Desert Willow		X				X	
Chionanthus retusus	Chinese Fringe Tree						X	
Chitalpa tashkentensis	Chitalpa		X				X	
Eschscholzia californica	Golden poppy		X		X			
Geijera parviflora	Australian Willow		X				X	
Gilia leptalea bicolor	Bridges gilia				X			
Hordeum brachyantherum	California meadow barley				X			
Iris douglasiana	Coast iris	X	X					
Jacaranda mimosifolia	Jacaranda					X	X	X
Juglans californica	Southern California Black Walnut			X		X		
Keckiella cordifolia	Heartleaf penstemon			X				
Layia platyglossa	Tidy tips				X			
Lupinus bicolor	Blue and white lupine		X		X			
Lyonothamnus floribundus subsp. asplenifolius	Catalina Ironwood			X		X		X
Melica imperfecta	Coast range melic				X			
Metrosideros excelsa	New Zealand Christmas Tree						X	

APPENDIX A—PLANT SPECIES LIST

Scientific Name	Common Name	Woodlands	Bioswales/ Rain Gardens	Riparian	Meadows	Open Space Trees	Street Trees	Large Stature Tree?
Muhlenbergia rigens	Deergrass		X		X			
Penstemon spectabilis	Showy penstemon	X						
Pholistoma auritum	Blue fiestaflower			X				
Pinus canariensis	Canary Island Pine					X	X	X
Platanus racemosa	Western sycamore			X		X		X
Platanus x. acerifolia	London Plane Tree						X	
Podocarpus gracilior	Fern Pine						X	X
Populus fremontii	Western Cottonwood	X				X		X
Prunus ilicifolia, subsp. Lyonii	Catalina Cherry			X		X		
Quercus agrifolia	Coast live oak			X		X	X	X
Quercus ilex	Holly Oak						X	X
Quercus tomentella	Island Oak			X		X		
Rhus trilobata	Squawbush			X				
Ribes indecorum	White-flowering currant	X						
Ribes speciosum	Fuschia-flowered gooseberry	X						
Romneya coulterim	Matillija poppy	X	X					
Rubus ursinus	California blackberry			X				
Salvia apiana	White sage		X					
Salvia clevelandii	Fragrant sage	X	X					
Salvia dorrii	Dorr's sage		X					
Salvia leucophylla	Purple sage		X					
Salvia mellifera	Black sage		X					
Syagus romanzoffiana	Queen Palm						X	
Washingtonia filifera	California Fan Palm		X			X	X	
Woodwardia fimbriata	Giant chain fern			X				

APPENDIX B—SPECIES SELECTION CRITERIA

When selecting tree species to use on a Project, use the "principle" of "Right Tree Right Place". Basically, this means select a tree that works for the space after considering all applicable selection criteria. The reason this is so critical is that most of the tree "conflicts" with other infrastructure can be traced back to having selected and planted a tree that was ill-suited for the space in which it was planted. At the same time, it is highly recommended to "alter" the space whenever possible. A good example of this is cutting out existing concrete to create a larger grow space for trees. This, in fact, is precisely what was recommended and has/is being done during the implementation of Opportunity #1.

The following is a list of criteria that should be used when selecting tree species for any project, including those "opportunities" that include tree planting of any kind as described in this Plan:

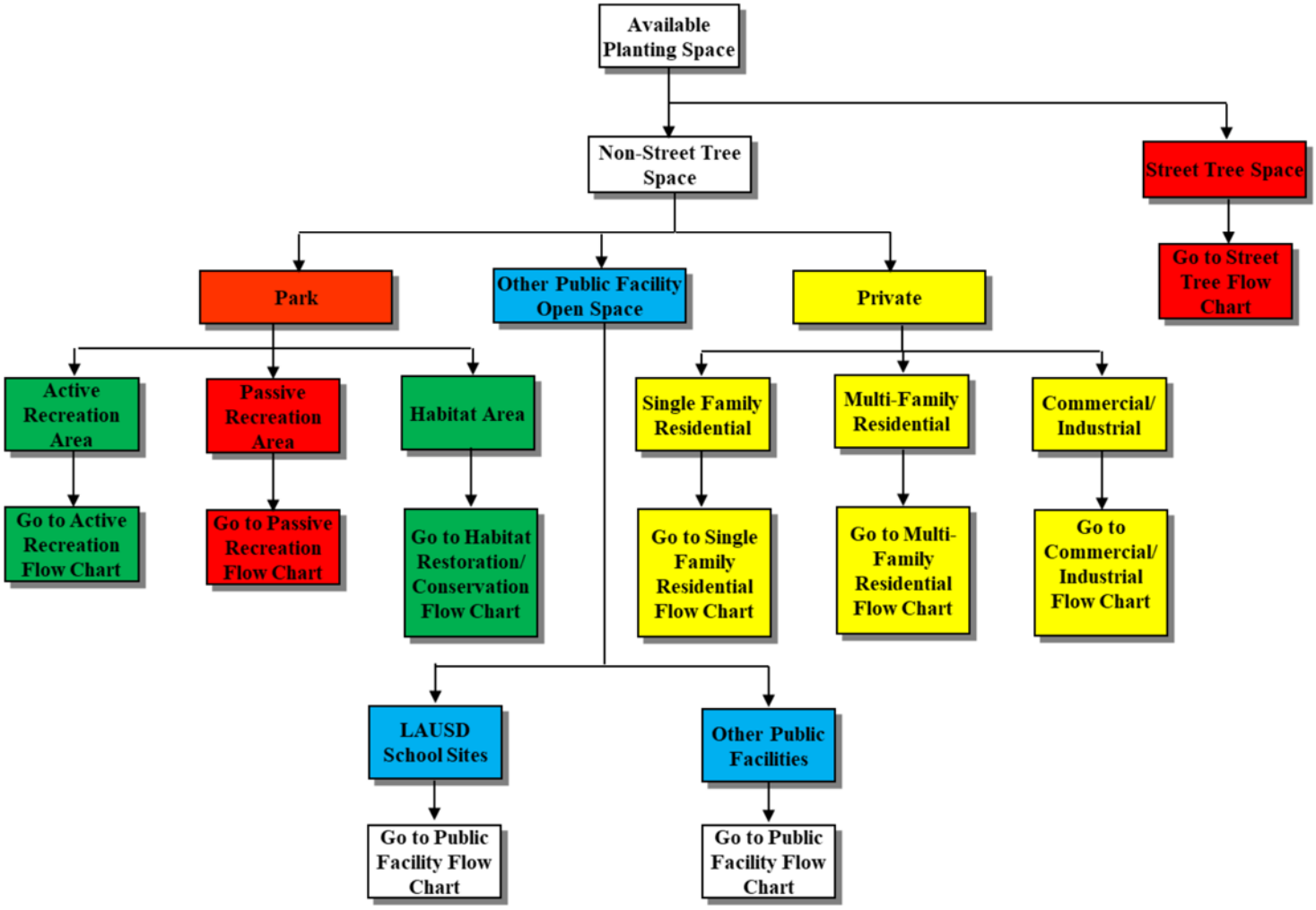
1. Street trees vs. Open Space trees—what is the land use of the land on which you are planting the tree(s)? This will have an important bearing on the functions or "services" you expect the tree to perform. It will also point you to the requisite design criteria and permitting requirements to plant your trees.
2. Grow Space—this refers to the ground area in which you are planning to plant your trees, and correlates with the amount of soil that will be available for tree roots to grow into. The larger and better quality spaces can accommodate larger stature (refers to the maximum height the tree will reach at maturity) trees. Larger trees generally provide more environmental benefits, so this is important.
3. Infrastructure— this refers to the overhead, at ground level and underground infrastructure, i.e., wires, light, power, and traffic signals & signage, pipes, concrete and other hardscape, utility vaults & boxes, buildings and building signage. It also refers to the need to maintain certain height clearances for pedestrians, bicyclists and vehicles. All public spaces have design criteria that must be met related to clearances of trees—canopy, roots and trunks— from this infrastructure.
4. Safety, Wind, Fire— Safety considerations are linked to maintaining the required clearances from existing infrastructure, but also addresses the presence of people around and under trees, e.g, playgrounds, picnic areas. The most important characteristic in those instances is to select trees with strong branch attachments. In other words, the trees selected should not be prone to branches falling in moderate to high winds expected in the area. Wind refers to the ability of tree species to function well as a windbreak. Fire refers to evaluating the risk of the tree species to burn in a fire and where the trees are located on fire prone property relative to buildings and land use.
5. Climate Zone—This refers to the "Sunset Western Garden" Climate Zones. See http://www.sunset.com/garden/climate-zones/. There are three (3) climate zones within the San Pedro area. They are: Zones 22, 23, 24. It is recommended to select tree species that are adapted to grow well in these Zones.
6. Invasive tree species—The rule here is: DO NOT SELECT KNOWN INVASIVE TREE SPECIES.
7. Species Diversity—This refers to the number of different tree species that are planted/present in a given community. The greater number the better. This is because too much dependence on one or a few species in an areas makes the urban forest population vulnerable to catastrophic loss if hit by a pest or disease. Therefore, it is always best to have a diverse tree species palette. As can be seen in Appendix A, the recommendations in this Plan do provide for that.
8. Pest and Disease Issues— The basic principle to apply here is to avoid selecting tree species that have known serious pest and/or disease problems. However, this needs to be handled judiciously through consultation with local tree experts, such as Certified Arborists or Consulting Arborists. This is because it is important to consider the latest scientific information available with the Arboriculture profession before categorically eliminating use of particular tree species—SEE DISCUSSION IN OPPORTUNITY #2 SECTION OF THIS PLAN FOR MORE INFO.

9. Availability at nurseries— This is here to make sure that tree species you wish to use on a given project are actually available at tree nurseries in the quantities you need when you need them. This can be tricky for projects with a long lead time from concept design to construction documents to construction because it can be several years from the time you select trees in a design before they will be planted at the end of a construction project. Nevertheless, it is highly recommended to check in with several nurseries about whether they are and will continue to grow the species you want to use on your project.
10. Water Needs– This is pretty obvious, and is especially important in that Southern California, and San Pedro, in particular has recently gone through a prolonged drought period, and because the region is generally considered to be semi-arid to begin with. This is where selecting species that are native or indigenous to the region is highly advisable. However, there are nuances to application of this criteria. As an example, trees planted on south or west facing slopes in a more inland area will experience a different micro-climate than those planted in riverine or riparian areas on north and east facing areas. It is also important to consider whether there will be a supplemental "smart" irrigation system to support the trees, and what kind of water source will be used. For example, recycled water is likely to become more available in the future (SEE OPPORTUNITIES #31 & 32). As this water often has a higher salt content relative to potable water, you will need to select tree species that are more salt tolerant when using such water.
11. Tree Function— This refers to the function(s) you expect the trees to provide for your project. This commonly is shade, but can include "greenhouse gas reduction" (GHG)/energy conservation, erosion control, habitat restoration, water conservation/storm water flow mitigation, and/or fruit production.
12. Leaf, Seed, & Fruit Drop— All trees, even evergreen trees, drop things. These can be leaves, fruit, or flowers. It is important to UNDERSTAND YOUR PROJECT LOCATION. If you are planting trees someplace where flower or fruit drop could be considered a nuisance, you need to either adequately provide for timely removal and, hopefully, recycling of this material, or select a species with less of this material drop. As this material is often a good source of natural mulch we recommend allowing this material to remain on the ground in either "unimproved" (wild) or passive recreation open space applications.
13. Beautification— This is the most visually compelling reason to plant trees. Seasonal flower displays, size and shape of the tree canopy, leaf color, evergreen vs. deciduous and fall leaf color displays are call important considerations. The tree size relative to the scale of the street environment is another one. Using trees to screen unsightly views is another important consideration.

The following pages illustrate some tree selection flow charts that apply some of the selection criteria described above. This is not meant to be all inclusive, but rather just some examples of how to apply the criteria while selecting tree species for you projects.

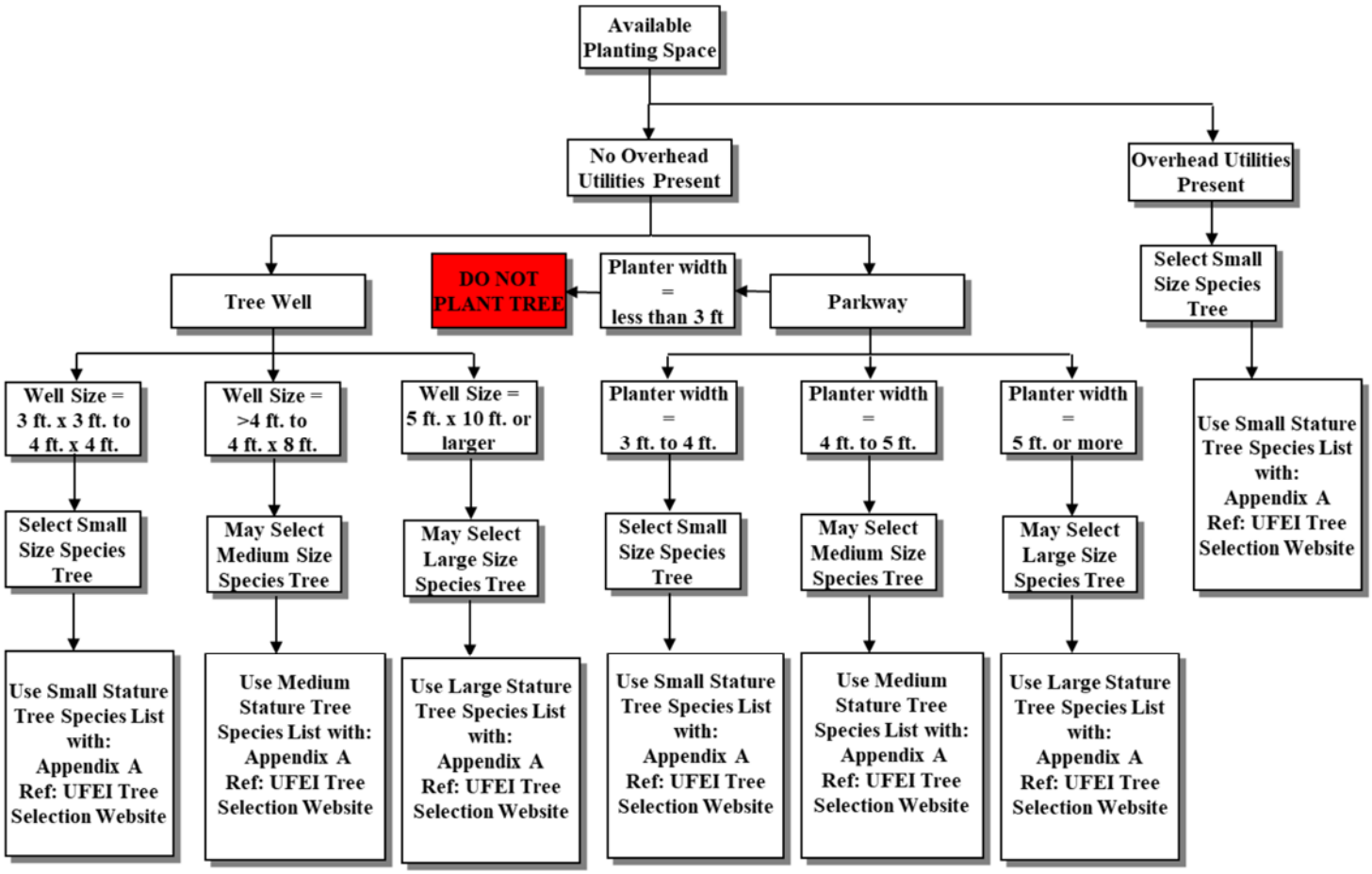
APPENDIX B—SPECIES SELECTION CRITERIA

The flowchart on this page just shows the possible decision trees that can be created to facilitate the selection of tree species for different types of land use situations. The two (2) shown in red are shown in greater detail on the next two pages.



APPENDIX B—SPECIES SELECTION CRITERIA

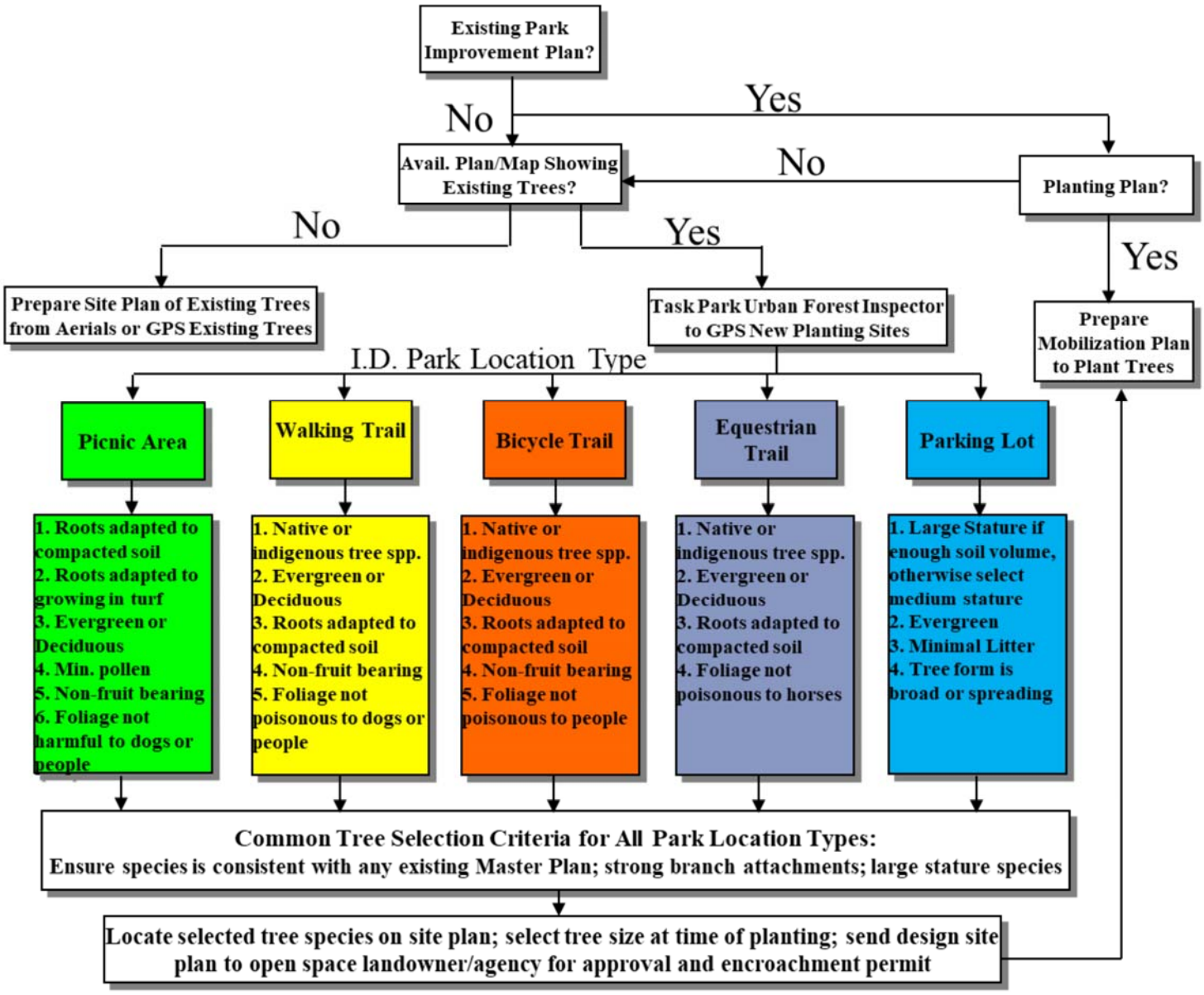
This is the flowchart "decision tree" created for street trees in San Pedro. The primary decision point is the size of the grow space, which determines whether the locations are suitable for small vs. medium vs. large stature trees. The species list in Appendix A contains trees that fall into all of those categories. The remaining criteria to use to finalize your selection can be found in the preceding pages of this Appendix B. UFEI refers to the "Urban Forest Ecosystems Institute SelecTree Tree Selection Guide" website, https://selectree.calpoly.edu. The criteria shown on the preceding pages can be used to refine your search for suitable trees for street tree locations, as well as the other types of locations shown on the flowchart on the preceding page and the following page.



SAN PEDRO GREEN OUTLETS & PATHWAYS

APPENDIX B—SPECIES SELECTION CRITERIA

The flowchart on this page can be used for selecting suitable trees for parks or open space type sites, and illustrates the kind of distinctions that can be made when choosing trees for picnic areas vs. walking trails vs. bicycle trails vs. equestrian trails vs. parking lots. In all such locations large stature trees can be considered suitable because the grow space available is more than adequate for the placement of such trees. Once again the other criteria shown earlier in this Appendix should be used in conjunction with the UFEI website to refine your search.



APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

Appendix B showed a decision tree flowchart for identifying suitable sites for different size trees at maturity (large, medium, or small). However, when actually doing site surveys along city streets to identify sites suitable for large stature trees, we often find that the existing available grow space is not adequate. This Appendix illustrates how such a constraint can be overcome by identifying the POTENTIAL for available tree planting sites to be transformed into suitable sites by removing additional concrete. This is the focus of the tree planting effort within Opportunity #1.

The map on this page shows the DAC (Disadvantaged Communities) census tracts outlined by percentile ranges, with those illustrated with the red overlay as being in the 85% or greater percentile of DAC criteria. This was the initial focus of the tree planting portion of Opportunity #1. The following pages show how available tree planting sites suitable for large stature trees were determined and/or created within this area.

APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

The chart below shows how "block sides" of Centre Street West, was analyzed from Amar to 14th Street for suitability for planting large stature street trees. The objective was to determine whether there were either existing suitable locations or the POTENTIAL to create suitable locations by removing concrete. The block sides highlighted in red were not suitable. There were two (2) criteria used to determine the potential. One was the presence of overhead powerlines. If yes, then the sites along that block did not have potential regardless of whether the sidewalk was wide enough to cut out a larger grow space area.

If no overhead powerlines then the "Potential Grow Width" column became the determining factor. The minimum grow space width to accommodate large stature trees was 5 ft. Blocks with that potential are highlighted in green.

Blocks	Centre West							Notes/ Analysis - Pot. Large Stature/ Reasons Not	Conc. Cut Req.?	Approx. Conc. Cutting Req. - Grow Space "Goals"
	Grow Space Characterization									
	Grow Type	Actual Grow Width	Potential Grow Width	SW Width	OH Util.	Dist. Struct	Azimuth			
Amar to Oliver	TW	<3	5	9	Y	<20	E	Util=Y	N	
Oliver to O'Farrell	P	3	5	9	N	20-40	E	Yes	Y	5 x 10
O'Farrell to Sepulveda	P	3	4	8	N	20-40	E	Maybe	Y	4 x 8
Sepulveda to Santa Cruz	P	4	5	9	N	<20	E	Yes	Y	5 x 10
Santa Cruz to 1st	S	None	5	9	Y	<20	E	Util=Y	N	
1st to 2nd	RP		5	9	Y	<20	E	Util=Y	N	
2nd to 3rd	P	4	5	9	N	20-40	E	Yes	Y	5 x 10
3rd to 4th	NA	NA	NA	NA	NA	NA	NA	NA	N	
4th to 5th	P	4	5	9	N	20-40	E	Yes	Y	5 x 10
5th to 6th	TW	3	<3	6	N	>40	E	PGW=<4	N	
6th to 7th	S	None	<3	6	N	<20	E	PGW=<4	N	
7th to 8th	S	None	<3	6	Y	<20	E	Both	N	
8th to 9th	P	3	4	8	Y	<20	E	Util=Y	N	
9th to 10th	P	3	4	8	Y	<20	E	Util=Y	N	
10th to 11th	P	3	4	8	Y	<20	E	Util=Y	N	
11th to 12th	S	3	4	8	Y	<20	E	Util=Y	N	
12th to 13th	S	3	4	8	Y	20-40	E	Util=Y	N	
13th to 14th	P	3	4	8	Y	<20	E	Util=Y	N	

KEY: Enter one value only for each cell. Enter NA only if there if the block "row" does not exist. Grow Space Width is the *POTENTIAL* width based on the width of the existing sidewalk.										
	P = Parkway	None	<3 ft.	4 ft.	Y	<20 ft.				
	RP = Reverse Parkway	3 ft.	3 ft.	5 ft.	N	20-40 ft.	S = South			
	TW = Tree Well	4 ft.	4 ft.	6 ft.	Y-C = Yes Cable	>40 ft.	E = East			
	S = Sidewalk	5 ft.	5 ft.	7 ft.	DO = Drops Only		S = South			
	P-S = Pkwy/ SW	6 ft.	6 ft.	8 ft.						
	P-TW-S = Pkwy/ Tree Well/SW	>6 ft.	>6 ft.	9 ft.						
	RP - S = Rev Pkwy, SW			>= 10 ft.						

APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

The chart below shows how "block sides" of Centre Street East, was analyzed from Amar to 14th Street for suitability for planting large stature street trees. As with Centre Street West shown on the previous page, the objective was to determine whether there were either existing suitable locations or the POTENTIAL to create suitable locations by removing concrete. As can be seen there were significantly more suitable blocks (highlighted in green) on this side of Centre Street. That was primarily because of the ABSENCE of overhead powerlines. The minimum grow space width to accommodate large stature trees was 5 ft. Blocks with that potential are highlighted in green. The last column shows the maximum size of the tree planting sites that can be created within a given block. Those shown as 4 ft. x 8 ft. are highlighted in yellow because they can only accommodate medium stature trees. The "Distance to Structure" and "Azimuth" columns are used as part of the calculations to determine the amount of "Greenhouse Gas Reduction" (GHG) that can be achieved once trees are planted. Those determinations are required for the CalFire Grant that funded Opportunity #1.

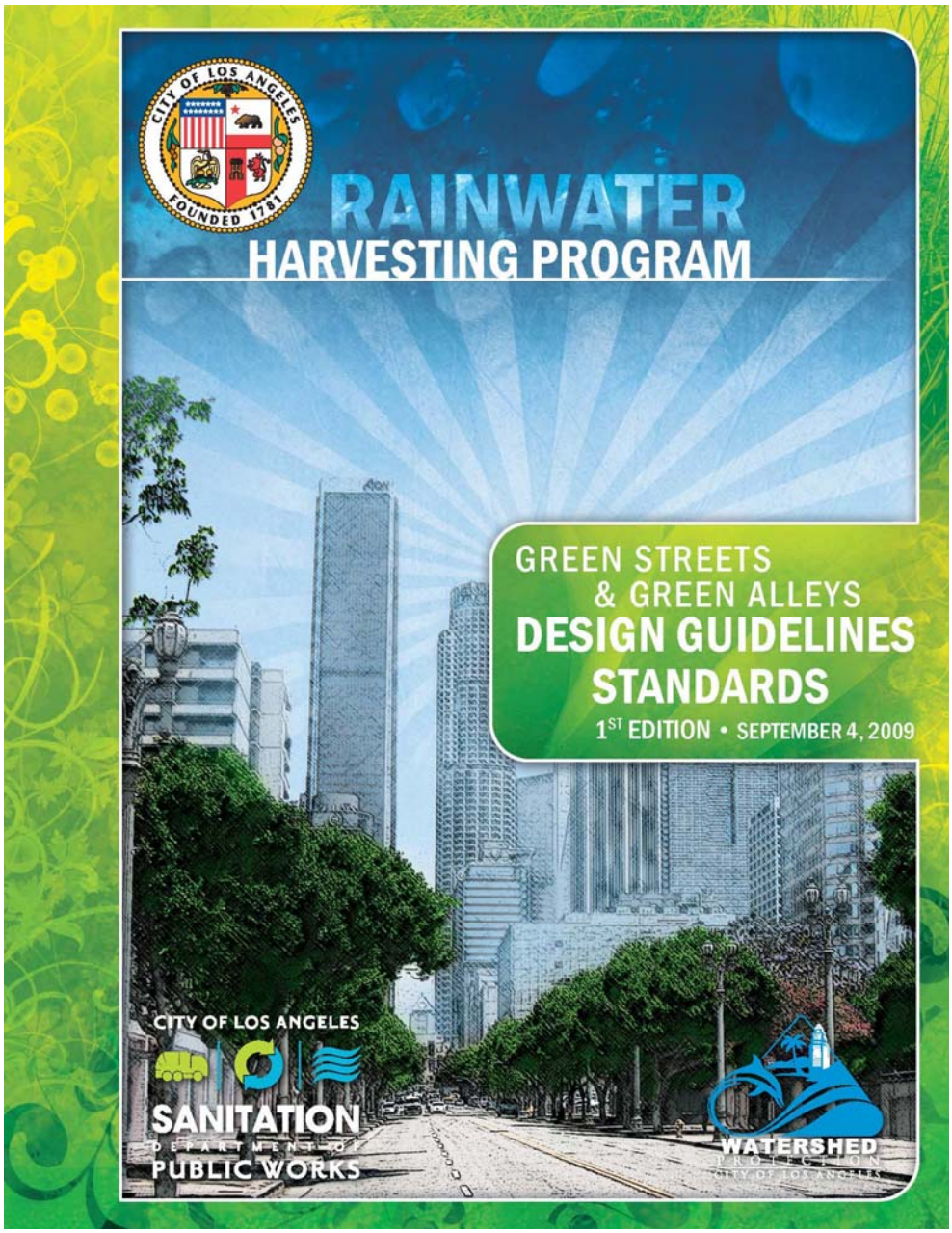
Blocks	Centre East							Notes/ Analysis - Pot. Large Stature/ Reasons Not	Conc. Cut Req?	Approx. Conc. Cutting Req. - Grow Space "Goals"
	Grow Space Characterization									
	Grow Type	Actual Grow Width	Potential Grow Width	SW Width	OH Util.	Dist. Struct	Azimuth			
Amar to Oliver	S	None	4	8	Y-C	<20	W	Maybe	Y	4 x 8
Oliver to O'Farrell	S	None	4	8	N	<20	W	Maybe	Y	4 x 8
O'Farrell to Sepulveda	P	4	5	9	N	<20	W	Yes	Y	5 x 10
Sepulveda to Santa Cruz	P	4	4	8	DO	<20	W	Maybe	N	4 x 8
Santa Cruz to 1st	RP	6	6	10	N	<20	W	Yes	N	NA
1st to 2nd	RP	6	6	10	Y-C	20-40	W	Yes	N	NA
2nd to 3rd	TW	4	4	8	N	<20	W	Maybe	N	4 x 8
3rd to 4th	TW	4	>6	>10	N	<20	W	Yes	Y	6 x 12
4th to 5th	TW	4	5	9	N	<20	W	Yes	Y	5 x 10
5th to 6th	TW	4	5	9	N	<20	W	Yes	Y	5 x 10
6th to 7th	TW	4	5	9	Y	<20	W	Util=Y	N	
7th to 8th	P-S	3	4	8	Y	<20	W	Util=Y	N	
8th to 9th	TW	3	3	7	DO	<20	W	PGW=<4	N	
9th to 10th	P	3	4	8	DO	<20	W	Maybe	Y	4 x 8
10th to 11th	S	None	5	9	DO	<20	W	Yes	Y	5 x 10
11th to 12th	S	None	5	9	DO	<20	W	Yes	Y	5 x 10
12th to 13th	P	3	4	8	DO	<20	W	Maybe	Y	4 x 8
13th to 14th	P	3	4	8	DO	<20	W	Maybe	Y	4 x 8

KEY: Enter one value only for each cell. Enter NA only if there if the block "row" does not exist. Grow Space Width is the POTENTIAL" width based on the width of the existing sidewalk.										
	P = Parkway	None	<3 ft.	4 ft.	Y	<20 ft.	N = North			
	RP = Reverse Parkway	3 ft.	3 ft.	5 ft.	N	20-40 ft.	S = South			
	TW = Tree Well	4 ft.	4 ft.	6 ft.	Y-C = Yes Cable	>40 ft.	E = East			
	S = Sidewalk	5 ft.	5 ft.	7 ft.	DO = Drops Only		S = South			
	P-S = Pkwy/ SW	6 ft.	6 ft.	8 ft.						
	P-TW-S = Pkwy/ Tree Well/SW	>6 ft.	>6 ft.	9 ft.						
	RP - S = Rev Pkwy, SW			>= 10 ft.						

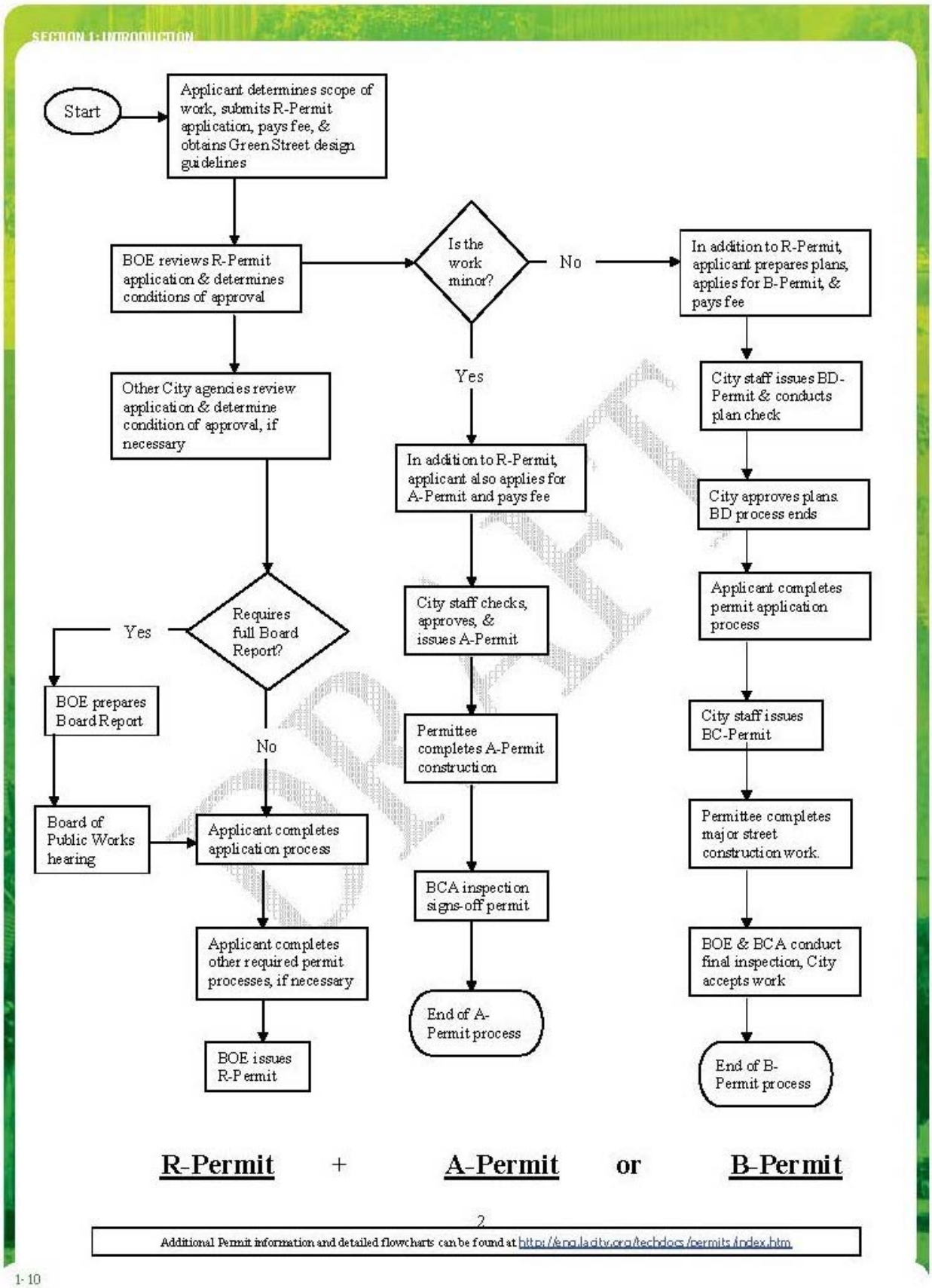
APPENDIX D— LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES

The "Green Streets & Green Alleys Design Guidelines Standards 1st Edition" is the primary guide to use for any of the bioswale or rain garden type opportunities within public streets or alleys identified in this Plan. This can also be used for design guidelines on such projects on private property, though such projects will not require an R, A or B-Permit. The guidelines for doing such projects on private property can be found in Appendix E, and within the LADWP's Residential Turf Replacement Program website pages that are referenced in Opportunity #9. The following pages in this Appendix show the flowchart/decision tree that should be used to determine what type(s of permit will be required and the check-list to use for obtaining such permits. This full document can be downloaded from the following web link:

https://nacto.org/docs/usdg/green_streets_and_green_alleys_la.pdf



APPENDIX D— LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES



APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES

Below are checklist items designed to assist the applicant in the implementation of Green Infrastructure Projects:

R-Permit

- ☐ Applicant obtains copy of Green Infrastructure BMP Design Guidelines from any public counters or at www.lastormwater.org
- ☐ Applicant submits R-Permit application and pays fees
- ☐ Applicant submits encroachment plan
- ☐ Applicant obtains plan check & approval from BOS
- ☐ City staff checks R-Permit application and determines appropriate permit type and fees. If work is minor, applicant is also directed to obtain A-Permit. If work involve major street improvements, applicant to obtain B-Permit in lieu of A-Permit (please see respective permit sections below).
- ☐ Applicant pays fees
- ☐ BOE staff conducts field investigation if required
- ☐ BOE staff reviews R-Permit application and determines conditions of approval.
- ☐ Other city agencies review R-Permit application & determine conditions of approval, if necessary (BSS, DOT, BSL, etc)
- ☐ BOE prepares full Board Report, if necessary
- ☐ Board of Public Works conducts public hearing and approves R-Permit, if necessary
- ☐ Applicant completes Waiver of Damages Agreement and provides liability insurance including covenant and agreement for the BMPs with O&M
- ☐ Applicant completes other required permit processes, if necessary
- ☐ BOE issues R-Permit

A-Permit (minor repair/replacement work)

- ☐ Applicant applies for A-Permit
- ☐ Applicant pays fees
- ☐ City staff checks & approves A-Permit
- ☐ City staff issues A-Permit
- ☐ Applicant & City staff sign permit
- ☐ Applicant calls BSA prior to start of construction
- ☐ Applicant completes construction
- ☐ Applicant calls BCA for final inspection
- ☐ BCA inspection signs off permit

B-Permit (major street improvement work)

- ☐ Applicant hires Licensed Private Engineer to prepare B-Permit Plans and application
- ☐ Applicant's Private Engineer applies for B-Permit

APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES

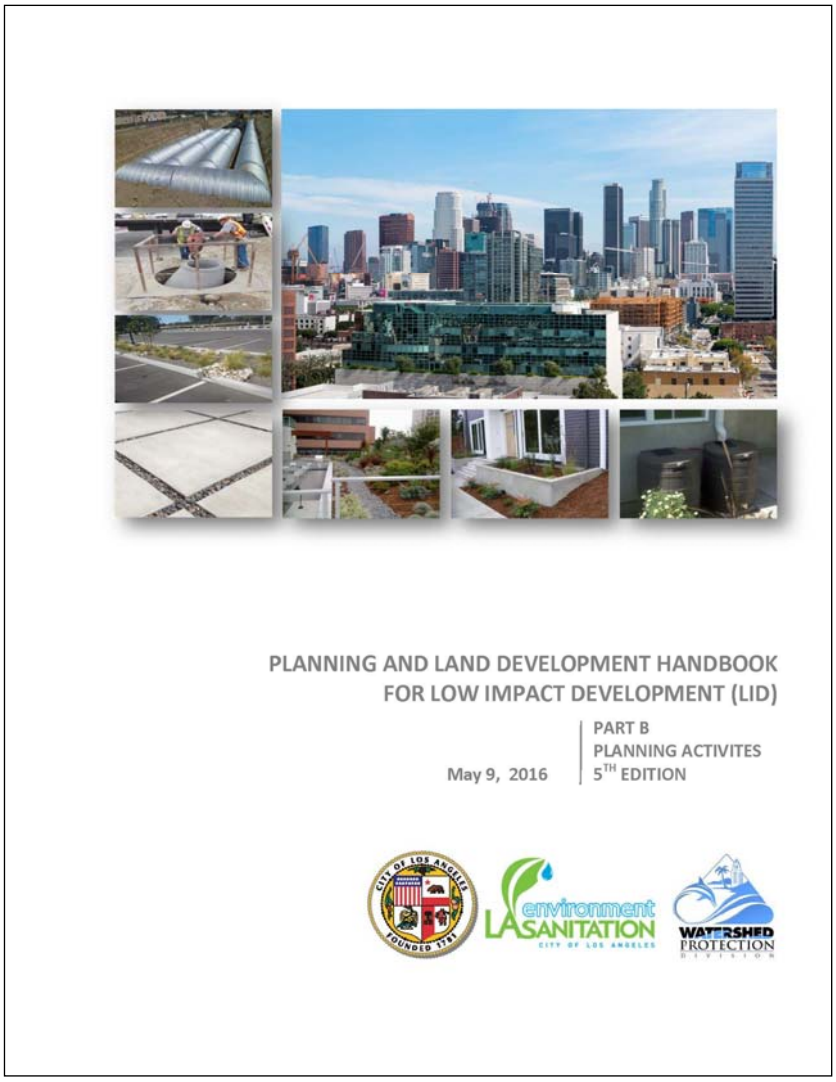
- [ ] Applicant/Private Engineer pays fee deposit
- [ ] City staff issues BD-Permit
- [ ] Applicant/Private Engineer posts bond and pays total plan check fee amount
- [ ] City staff checks, approves, and transmits approved plans to Private Engineer
- [ ] Applicant obtains liability insurance for construction work and pays inspection fees deposit
- [ ] City staff issues BC-Permit
- [ ] Applicant's contractor calls BCA to begin work
- [ ] Contractor completes major street construction work.
- [ ] BOE & BCA conducts final inspection, City accepts work
- [ ] Private Engineer submits "As-Built" plans to City

APPENDIX E—LOS ANGELES PLANNING & LAND DEVELOPMENT FOR LOW IMPACT DEVELOPMENT (LID)

The document referenced on this page contains guidelines and requirements for designing and constructing what are called "Low Impact Development (LID)" improvements to ***private property***. These improvements convert impervious surfaces, e.g. concrete, to pervious surfaces such as landscape and permeable paving that are used to capture/harvest rainwater for infiltration or re-use on the property to reduce storm water runoff from the site. It is available at the following link for download:

http://www.lastormwater.org/wp-content/files_mf/lidmanualfinal.pdf

As stated in the publications introduction: "The purpose of this handbook is to assist developers in complying with the requirements of the Development Planning Program regulations of the City's Stormwater Program. This handbook summarizes the City's project review and permitting process, identifies stormwater mitigation measures, and references source and treatment control BMP information. It provides guidance for individuals involved in new development and redevelopment projects. The target audience for this handbook includes developers, designers, contractors, homeowners, and City staffs that are engaged in plan-checking, permitting, and inspections related to land development activities. This handbook also contains the necessary forms and worksheets required to be completed by the developer for approval."



This generally does not apply to those homeowners who wish to take advantage of Opportunity #9—[LADWP's] Residential Turf Replacement Program if they are simply removing and replacing landscaped areas currently covered in turf with a drought tolerant landscape that may include simple infiltration bioswales and/or rain gardens. However, it may apply if such conversions would include re-use of the harvested rainwater within a piped irrigation system.

PLEASE USE THE STANDARDS AND GUIDELINES FOUND IN APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES.

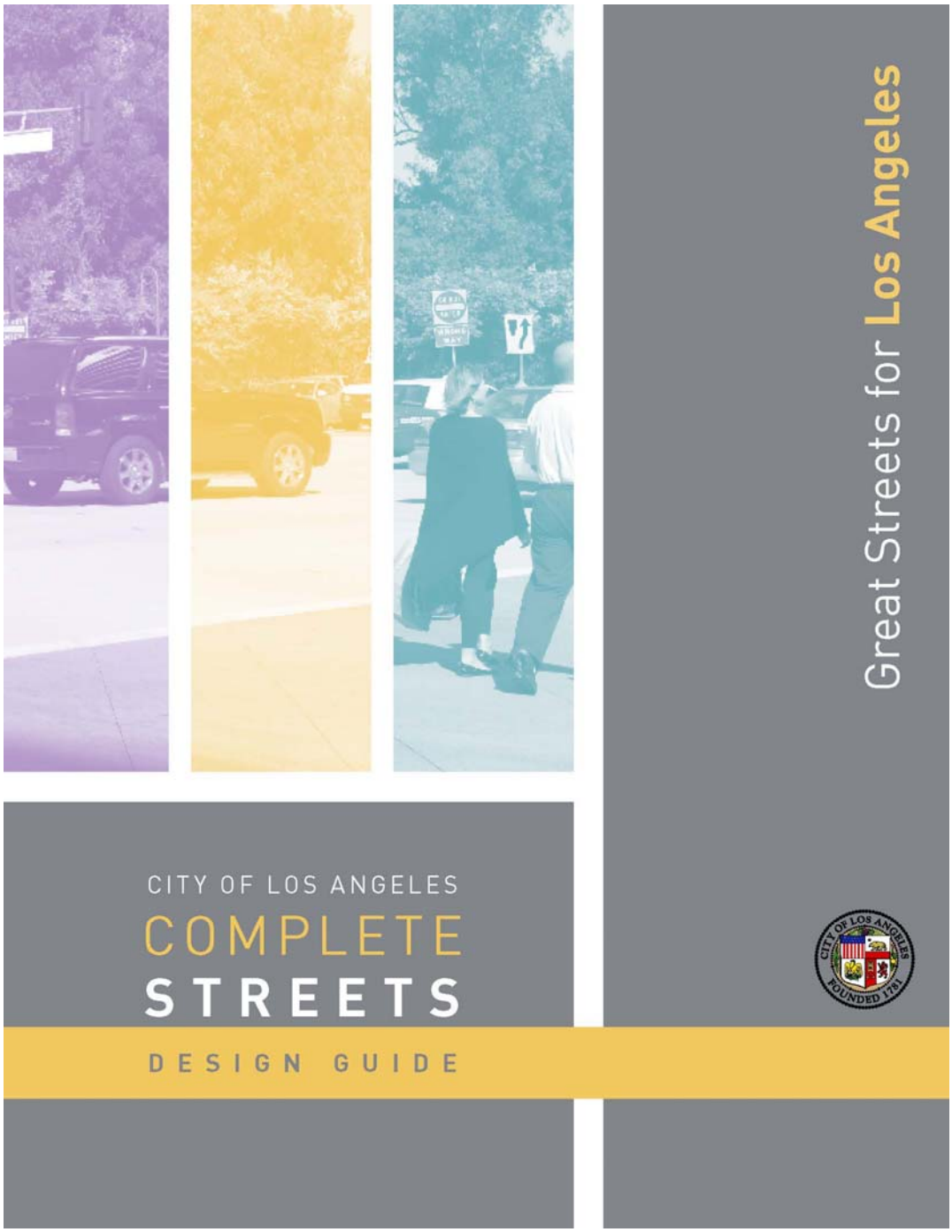
SAN PEDRO GREEN OUTLETS & PATHWAYS

APPENDIX F—LOS ANGELES COMPLETE STREETS DESIGN GUIDE

The document shown on this page is a very comprehensive guide that should be used when developing designs for traffic calming measures, pedestrian and bicyclists oriented improvements, transit-oriented improvements, and landscape and outdoor dining opportunity bulb-outs.

This document can be found and downloaded at the following link:

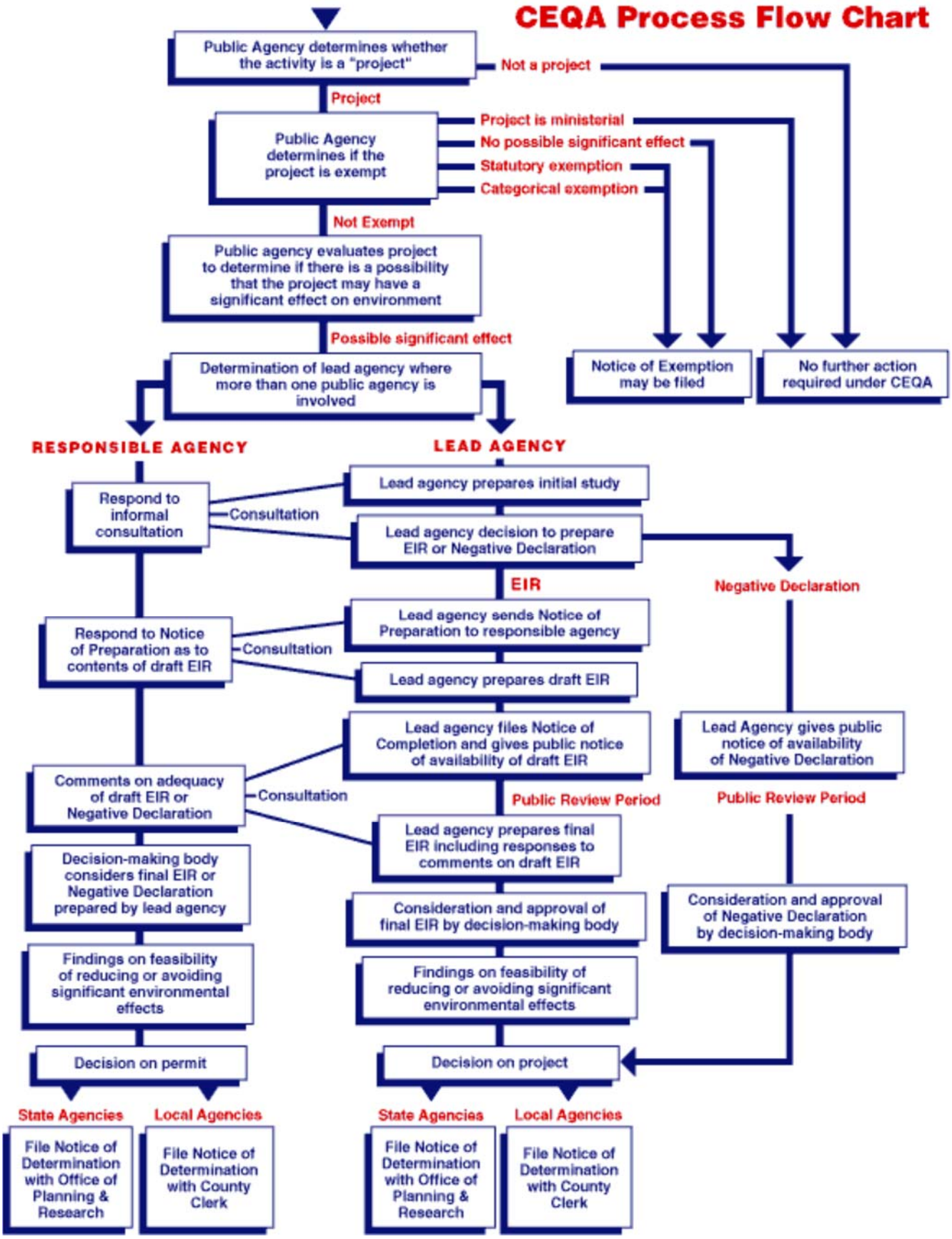
https://planning.lacity.org/documents/policy/CompleteStreetDesignGuide.pdf



APPENDIX G—ENVIRONMENTAL CLEARANCE PROCESS/GUIDELINES

The chart on the following page shows how to decide what type of CEQA (California Environmental Quality Act) filing is required for a given project. Most of the "Opportunities" identified in this Plan would be considered "Categorically Exempt" for one of the reasons listed in this chart. However, there are a few that will require more extensive environmental assessment documentation. We recommend that project proponents work with their local jurisdictional agency representatives to determine what is required and how best to complete that documentation. It is very important to complete this process or have the process well in hand before applying for any type of grant funding, as most government grant programs will require completion of the environmental assessment/documentation process before awarding grant funds.

APPENDIX F—ENVIRONMENTAL CLEARANCE PROCESS/GUIDELINES



APPENDIX F—ENVIRONMENTAL CLEARANCE PROCESS/GUIDELINES

Brownfield redevelopment has more stringent environmental assessment, clean-up and documentation requirements than any other type of land use development project. A good resource for what is required for such development can be found in EPA's publication, "Anatomy of Brownfields Redevelopment". This publication is available for download at:

https://www.epa.gov/sites/production/files/2015-09/documents/anat_bf_redev_101106.pdf

This applies specifically to Opportunity #6—22nd St. Brownfield Reclamation. In this particular case the brownfield redevelopment would be for creating a park.

Anatomy of Brownfields Redevelopment

Brownfields Solutions Series

A *brownfield* is a property on which expansion, redevelopment, or reuse may be complicated by the presence, or perceived presence, of contamination. EPA's Brownfields Program provides grants to fund environmental assessment, cleanup, and job training activities. Additionally, EPA seeks to strengthen the marketplace and encourages stakeholders to leverage the resources needed to clean up and redevelop brownfields.

This *Brownfields Solutions Series* fact sheet is intended to provide an overview of the brownfields redevelopment process. The brownfields real estate redevelopment process, along with key challenges, critical participants, and example redevelopment scenarios are discussed. Key real estate terms are highlighted in bold text. These terms are explained on page 7. The information in this fact sheet is based on stakeholders' experiences in the brownfields cleanup and redevelopment process and does not represent the views of EPA.

Key Challenges in Brownfields Redevelopment

Several challenges make brownfields cleanup and redevelopment unique compared to other real estate development projects. These challenges include:

- **Environmental Liability Concerns:** Developers and property owners want to manage past and future liabilities associated with the property's environmental history.
- **Financial Barriers:** Private lenders are often reluctant to give loans for potentially impaired lands. In some cases, cleanup costs for a property may ultimately be more than the property's value.
- **Cleanup Considerations:** A brownfields redevelopment timeline may take longer than typical real estate development due to environmental assessment and cleanup activities.
- **Reuse Planning:** A reuse plan based on community goals or sound economic and environmental information (e.g., market potential) may be lacking.

In spite of these challenges, significant opportunities exist for successful brownfields redevelopment. A redevelopment idea that works to bring new life to an area, enhanced by public support for the project, can create the momentum necessary to overcome the challenges associated with brownfields transactions.

Critical Participants in a Brownfields Transaction and Redevelopment Effort

Property owners, public- and private-sector stakeholders, and other parties (e.g., attorneys, regulators) have roles and interests in brownfields cleanup and redevelopment efforts. There is no specific point in the brownfields project that these participants must be identified and involved, but the more participants involved in the upfront planning, the smoother the project planning process. Included on the following page is a table that summarizes the roles each participant plays in a brownfields transaction and their interest in a successful transaction.

– 1 –