

Prepared For: San Diego Association of Governments (SANDAG)

California Department of Transportation (CALTRANS)

Prepared By: Estrada Land Planning

January, 2008







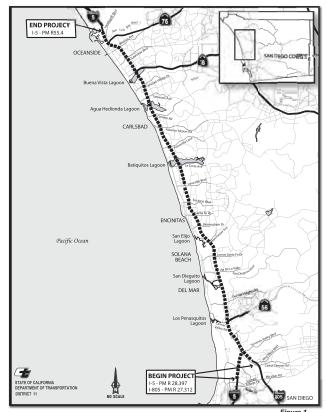
Contents

Chapter 1.1	INTRODUCTION AND PURPOSE	1	Chapter 4.1	CITY OF ENCINITAS	29
1.1.1	Overview	1	4.1.1	Overview	29
1.1.2	Context Sensitive Design	2	4.1.2	Recommended Synergy Projects	
1.1.3	Definition of Synergy Projects	2		for Encinitas	29
1.1.4	Synergy Project Goals	3	4.1.3	Preliminary Design Considerations	46
1.1.5	Types of Synergy Projects	3	4.1.4	Soliciting Input from Stakeholders	47
1.1.6	Conclusions and Recommendations	4	4.1.5	Public Input	48
			4.1.6	Conclusions and Issues	49
Chapter 2.1	CITY OF SAN DIEGO	5	4.1.7	Next Steps	49
2.1.1	Overview	5			
2.1.2	Recommended Synergy Projects		Chapter 5.1	CITY OF CARLSBAD	51
	for San Diego	5	5.1.1	Overview	51
2.1.3	Preliminary Design Considerations	15	5.1.2	Recommended Synergy Projects	
2.1.4	Soliciting Input from Stakeholders	16		for Carlsbad	51
2.1.5	Public Input	17	5.1.3	Preliminary Design Considerations	62
2.1.6	Conclusions and Issues	18	5.1.4	Soliciting Input from Stakeholders	63
2.1.7	Next Steps	18	5.1.5	Public Input	64
			5.1.6	Conclusions and Issues	65
Chapter 3.1	CITY OF SOLANA BEACH	19	5.1.7	Next Steps	66
3.1.1	Overview	19			
3.1.2	Recommended Synergy Projects		Chapter 6.1	CITY OF OCEANSIDE	67
	for Solana Beach	19	6.1.1	Overview	67
3.1.3	Preliminary Design Considerations	26	6.1.2	Recommended Synergy Projects	
3.1.4	Soliciting Input from Stakeholders	26		for Oceanside	67
3.1.5	Conclusions and Issues	27	6.1.3	Preliminary Design Considerations	90
3.1.6	Next Steps	27	6.1.4	Soliciting Input from Stakeholders	91
	•		6.1.5	Public Input	92
			6.1.6	Conclusions and Issues	93
			6.1.7	Next Steps	94

1.1 Introduction and Purpose

1.1.1 Overview

The I-5 North Coast freeway corridor is a key transportation route for trade, commerce, commuting and recreation connecting Camp



I-5 North Coast Corridor Project Location Map

Pendleton with the City of San Diego. The corridor is heavily utilized, resulting in high rates of traffic and congestion that are projected to increase. The California Department of Transportation (Caltrans) has undertaken the I-5 North Coast Corridor Freeway Project in an effort to reduce traffic congestion. The project bisects six lagoon systems as it passes through diverse coastal communities in San Diego County. Five cities are directly affected by the I-5 North Coast Corridor Project; including San Diego, Solana Beach, Encinitas, Carlsbad and Oceanside.

The I-5 North Coast Corridor Project proposes to construct two carpool/managed lanes in each direction on I-5 from La Jolla Village Drive in the City of San Diego to Harbor Drive in the City of Oceanside, and from Mira Mesa Boulevard to the I-5/I-805 merge. The project also proposes to add one general purpose lane in each direction from Del Mar Heights Road to the I-5/SR-78 interchange. Auxiliary and truck climbing lanes would be added where needed. Four "build" alternatives and one "no-build" alternative are being studied under this project.

The four "build" alternatives are as follows:

 8+4 with Buffer - eight general purpose lanes and four high occupancy vehicle (HOV) lanes separated by four foot wide striped buffer zones.

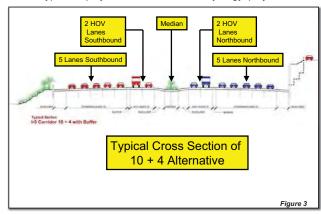


The I-5 freeway corridor as it exists today.

- 8+4 with Barrier eight general purpose lanes and four HOV lanes separated by concrete barriers and standard shoulders.
- 10+4 with Buffer ten general purpose lanes and four HOV lanes separated by four foot wide striped buffer zones.
- 10+4 with Barrier ten general purpose lanes and four HOV lanes separated by concrete barriers and standard shoulders.

Figure 3 represents one of the possible build alternatives. In this alternative, the freeway would consist of five northbound lanes, five southbound lanes, and two HOV/managed lanes running in either direction for a total of fourteen lanes.

In conjunction with the I-5 North Coast Corridor Project, Caltrans District 11 has engaged Dokken Engineering and Estrada Land Planning to study the feasibility of development project concepts that, if implemented, would improve how the project would interface with adjacent communities. At the same time, these projects would enhance the communities by incorporating context sensitive design. These types of projects are known as "synergy projects". The



purpose of the I-5 North Coast Community Enhancement Plan is to look at ways that the proposed freeway project could improve the urban design character of the I-5 North Coast Corridor Project through the implementation of synergy projects. This report would chronicle the process of developing the synergy project and would describe the components of each synergy project in detail.

The I-5 North Coast Community Enhancement Plan builds on previous studies completed by Caltrans District 11. The I-5 North Coast Community Enhancement Plan distills the information gathered through Caltrans' previous studies and presents conceptual synergy projects that are feasible to construct as part of the I-5 North Coast Corridor Project.

Funding has been set aside by SANDAG for synergy projects within the I-5 North Coast Corridor Project from Sorrento Valley Road through Oceanside. The funds are part of a Federal Highway Administration Grant for District 11 enhancement projects. These funds would be supplemented by additional grants, and funding procured by each City. Depending on the funds available, the construction may need to be prioritized and phased. Long term maintenance of the synergy projects would be paid for by the City in which the project is located, in conformance with future maintenance agreements with Caltrans.

Two documents chronicle the development of synergy projects proposed along the I-5 North Coast Corridor Project. First, the I-5 North Coast Community Enhancement Plan presents the proposed synergy projects for each city. Second, the I-5 North Coast Community Enhancement Plan Project Notebook, documents the methodology and the decision making process that has led up to the final recommendation of synergy projects for each city. These documents work together to describe the reasoning and conceptual design of each synergy project.

The synergy projects described in this document are candidate projects only. Their implementation is dependent on the approval of each respective agency and also on each agency's commitment to maintain each project in perpetuity.

A brief overview of context sensitive design follows in section 1.1.2. Section 1.1.3 of the report describes synergy projects in greater detail. Synergy projects chosen for implementation throughout the I-5 North Coast Corridor Project would be implemented along with freeway

construction. Maintenance agreements would be organized with each city allowing future maintenance to become the responsibility of the city enhanced by the respective synergy project.

1.1.2 Context Sensitive Design

The Federal Highway Administration has defined the term *context* sensitive design as being "a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility". In other words, context sensitive design is an approach that considers the overall framework within which a transportation improvement project would exist.

Context sensitive design is a recent concept in the planning of major transportation routes. It encourages increased public participation in the making of final design decisions. The three areas of focus in context sensitive design include: actively seeking public involvement throughout the design process; the development of designs that meet the needs of specific sites, rather than standardized solutions; and flexibility in typical design approaches if environmental, historic and neighborhood concerns can be resolved through the implementation of a unique solution.

Throughout the 1990's, legislation was enacted and publications produced that encouraged alternative design solutions integrating highways with communities and the environment, while maintaining safety and performance at high standards. This legislation includes the Intermodal Surface Transportation Efficiency Act of 1991 and the National Highway System Act of 1995. Another important publication that has contributed to the development of the context sensitive design approach is the American Association of State Highway and Transportation Official's Green Book. In 1998 the 'Thinking Beyond the Pavement' workshop facilitated the development of the qualities and characteristics that have become the principles of context sensitive design (please refer to Caltrans Director's Policy 22).

The context sensitive design approach has been applied to freeway development throughout the I-5 North Coast Corridor Project through extensive public involvement resulting in the development of synergy projects that would implement community goals along with freeway project goals.

1.1.3 Definition of Synergy Projects

The American Heritage Dictionary defines the word synergy in the following way:

- The interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects.
- Cooperative interaction among groups, especially among the acquired subsidiaries or merged parts of a corporation, that creates an enhanced combined effect.

In simple terms a synergy project is a project that incorporates **Caltrans project goals** with **community goals** to achieve an enhanced result.

Park De La Cruz (Figure 4), located along I-15 in the City Heights community of San Diego is a good example of a synergy project. This project was developed through extensive public involvement and a mutual cooperation between Caltrans and the local community. Caltrans was able to implement freeway improvements, while providing community connectivity and public park facilities.



Park De La Cruz is an example of a synergy project. This park is a result of the I-15/40th Street freeway project and helps to connect the community across the freeway corridor.

"Synergy Projects"

A Synergy Project is a community development project that:

- a) implements community goals
- b) implements freeway project goals

Figure 5

The I-5 widening project would "enhance" the corridor much the same way the I-15/40th Street project enhanced the Mid-City community of San Diego.

Tasks include identifying any opportunities for enhancement and involve applying principles learned from the 40th Street project to the I-5 freeway corridor







These two images are examples of slides presented during the community meetings. These slides were used to describe the concept of a 'synergy' project, and how such projects could be implemented throughout the project corridor.

Synergy projects have specific qualities that make them unique from other development projects. There is a cooperative element to the synergy project that requires that members of the community, city officials and the Caltrans design team work together to implement and maintain these projects for the future. The I-5 North Coast Community Enhancement Plan proposes opportunities to enhance communities as part of the I-5 North Coast Corridor Project. The development of synergy projects would directly benefit the five cities affected by the I-5 North Coast Corridor Project. Synergy projects would be built by Caltrans and maintained by each responsible local agency.

The preparation of the I-5 North Coast Community Enhancement Plan included the following tasks:

- Participating in project development team meetings.
- Researching and documenting an inventory of existing conditions.
- Preparing and developing preliminary design concepts.
- Meeting with city officials and community stakeholders.
- Hosting community workshops.
- Documenting design development input and decisions.
- Recommending synergy projects that could be implemented along the I-5 North Coast Corridor.
- Developing cost estimates for synergy projects.
- Compiling findings into a summary document.

1.1.4 Synergy Project Goals

The overall goal in the development of synergy projects for the I-5 North Coast Corridor Project is to enhance the areas adjacent to I-5. This major goal can be further categorized into four groups: community, environmental, circulation and physical/aesthetic goals.

1. Community Goals:

- · Preserve existing community character.
- Provide amenities (trails, overlooks, interpretive facilities).
- Be consistent with city general plans, community plans, park master plans, lagoon foundation plans, etc.
- · Respect historical resources.
- Minimize impacts to adjacent businesses and residents.

Utilize community input during the project development process.

2. Environmental Goals:

- · Preserve sensitive habitat areas.
- · Preserve existing visual resources.
- Minimize negative visual impacts.
- · Minimize noise impacts to adjacent residential areas.
- · Minimize drainage/stormwater impacts.

Circulation Goals:

- Provide pedestrian / bicycle access to transit centers.
- Minimize conflicts between vehicles and pedestrians.
- Provide connections between the east and west sides of the freeway.
- Improve pedestrian / bicycle circulation.

4. Physical/Aesthetic:

- Preserve scenic views from the freeway.
- Buffer views of freeway from residential areas and public
 use areas
- Preserve the existing natural character of the corridor.
- Provide increased public access to scenic resources.
- Avoid or minimize visual impacts.

1.1.5 Types of Synergy Projects

There are primarily two types of synergy projects: those that deal with land use improvements; and others that deal with circulation improvements.

Land Use Improvement Projects:

- Projects that have the potential to improve existing land uses.
- Projects that may include design elements such as community parks, educational centers at lagoons, wetland restoration, open space buffers, mini parks, enhanced view corridors and improved scenic vista points.

Introduction - 3

Circulation Improvement Projects:

- Pedestrian or bicycle corridors.
- Pedestrian or bicycle connections to public transit centers.
- Enhancement of east/west connections across the freeway.
- · Recreational and educational trails.
- The implementation of regional and local bike routes, pedestrian and equestrian trails.

1.1.6 Conclusions and Recommendations

This document describes potential synergy projects. These proposed projects are listed below and are described in greater detail later in this document. A wide range of potential synergy projects were studied and presented to the public, stakeholders and city officials. After extensive review and consideration, the following projects have been chosen for inclusion in the I-5 North Coast Community Enhancement Plan. The selection process and further discussion of the types of projects not considered appropriate for inclusion in the enhancement plan can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Proposed Synergy Projects:

City of San Diego -

- #1 Penasquitos Creek Trail Connection
- #2 A Carmel Valley Bicycle/Pedestrian Trail Connection
- #2 B Enhanced Park and Ride at Carmel Valley Road
- #3 Pedestrian Overpass Connection North of Del Mar Heights Road

City of Solana Beach -

- #1 Streetscape Enhancements on Ida Avenue
- #2 Trailhead at Solana Hills Drive

City of Encinitas -

- #1 Manchester Avenue Pedestrian Bridge and Trail
- #2 Villa Cardiff Drive Improvements
- #3 Hall Property Park Trail Connecting to Santa Fe Drive
- 4 Trail Connecting Santa Fe Drive to Requeza Street with Wetland Revegetation
- #5 Trail Connecting Requeza Street to Encinitas Boulevard
- #6 Union Street Pedestrian Overpass and Trail Connection with Wetland Revegetation

City of Carlsbad -

- #1 Park and Ride Enhancement/Nature Center at La Costa Avenue
- #2 Trail on East Side of I-5 at Batiguitos Lagoon
- #3 Trail on West Side of I-5 at Agua Hedionda Lagoon
- #4 Trail on East Side of I-5 at Agua Hedionda Lagoon

City of Oceanside -

- #1 Pocket Park and Pedestrian Access at California Street
- #2 Oceanside Boulevard Pedestrian Streetscape Enhancement
- #3 Enhancements to Division Street Overpass
- #4 Enhanced Pedestrian Overpass Connection on Mission Avenue
- #5 Enhanced Pedestrian Overpass Connection on Bush Street
- #6 Community Open Space Park
- #7 Parking/Staging Area at SR76
- #8 Pedestrian Underpass Improvements at San Luis Rey River
- #9 Regional Gateway Feature at Harbor Drive

Issues Common to all Projects:

- · Night amenities would be utilized.
- Landform grading would be included where space allows.
- Drought tolerant and low maintenance planting concepts would be utilized.
- Environmental impacts would be minimized or mitigated if minor impacts occur.
- Cost effective building materials would be utilized.
- Context sensitive architectural details (such as color, texture and form) would be determined after futher discussion with the community.
- Projects would be built to comply with ADA.
- Pedestrian/bicycle barriers would be located accordingly to provide pedestrian/rider safety.

2.1 City of San Diego

2.1.1 Overview

The I-5 North Coast Corridor Project directly affects the northwestern edge of the city of San Diego. Starting at Sorrento Valley, the project corridor passes through the communities of Torrey Pines, Torrey Hills and Carmel Valley on its way north towards Oceanside. The area is characterized by undulating mesas and valleys, with Torrey Pines State Reserve, Los Penasquitos Canyon Preserve and Penasquitos Estuary in close proximity. This northern entry to the City of San Diego is an area of science research, light industrial, commercial and residential land uses. A confluence of transportation routes occur here, including State Route 56, Sorrento Valley Road, I-805 and I-5.

There is potential for synergy project development in the northern regions of San Diego. More details regarding synergy projects proposed for the City of San Diego are outlined in this section of the I-5 North Coast Community Enhancement Plan.

2.1.2 Recommended Synergy Projects for San Diego

Three synergy projects are recommended for further development in cooperation with the City of San Diego. *Figure 7* shows the synergy project locations through the City of San Diego.

The synergy projects recommended for implementation in the City of San Diego are:

- #1 Penasquitos Creek Trail Connection
- #2 A Carmel Valley Bicycle/Pedestrian Trail Connection
- #2 B Enhanced Park and Ride at Carmel Valley Road
- #3 Pedestrian Overpass North of Del Mar Heights Road

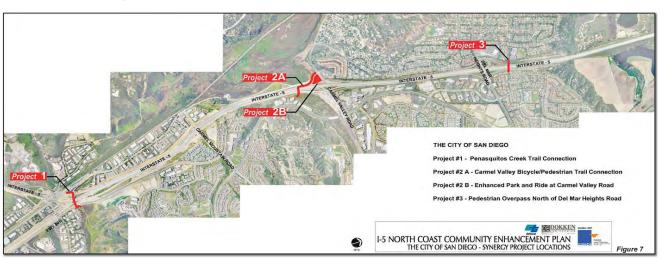
These projects are trail connections and enhancements that would provide pedestrians and bicyclists with greater and safer accessibility across I-5. Project concept plans, descriptions and design examples have been compiled for each project and can be found in this section of the report. The following is a description of each project along with a brief rationale for its development. For more detailed information about the process used in the development of these synergy projects, please refer to the I-5 North Coast Community Enhancement Plan Project Notebook.



View west across Los Penasquitos Lagoon.

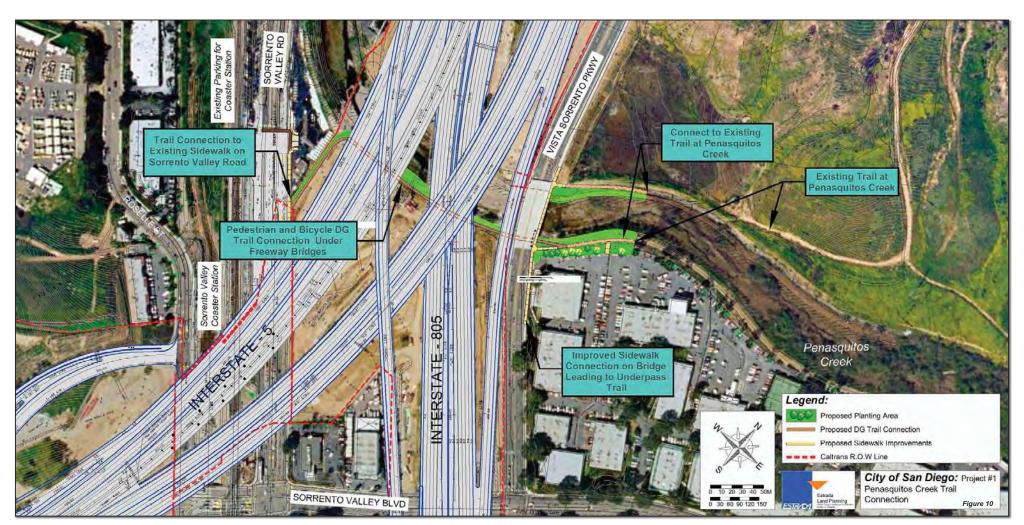


View over I-5, looking southwest towards Del Mar Heights Road overpass.



City of San Diego Synergy Project Locations

San Diego - 5



Project # 1: Penasquitos Creek Trail Connection

Project # 1: Penasquitos Creek Trail Connection

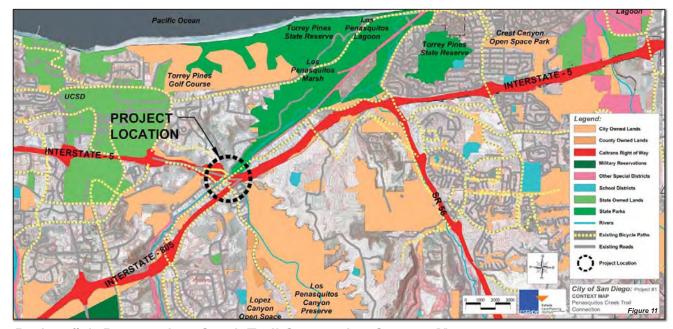
Description:

A trail connection would be constructed under the freeway structures from Penasquitos Creek to Sorrento Valley Road to create a better linkage between the Sorrento Valley Coaster Station, the residential and commercial developments near Sorrento Valley Road, and the existing trails at Penasquitos Creek.

The project would include:

· Construction of a new decomposed granite (DG) bicycle/

- pedestrian trail under Vista Sorrento Parkway, I-805 and I-5 to the existing sidewalk at the signalized intersection at the Coaster Station on Sorrento Valley Road. The trail would be located under the bridge against the south abutment, with soil graded down to provide 8' vertical clearance.
- Construction of sidewalk/trail connections at Vista Sorrento Parkway by adding an accessible concrete paving extension at both sides of the creek, from the existing sidewalk to the trail below.
- Revegetation of disturbed areas with plant species native to the area.
- The trail could also act as a potential wildlife corridor.



Project # 1: Penasquitos Creek Trail Connection Context Map



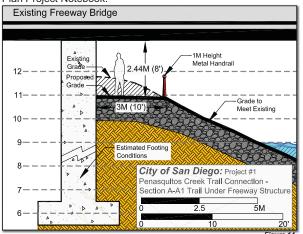
View facing east towards Los Penasquitos Canyon Preserve at Penasquitos Creek. The proposed trail connection would extend the existing trail along the creek and under the I-5/805 freeway ramps.



View of the existing construction road facing northeast from Sorrento Valley Road on the western side of the I-5/805 freeway ramps. This road would be a part of the proposed trail connection linking the Penasquitos Canyon Preserve trail system directly to Sorrento Valley.

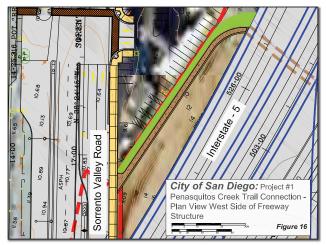
Rationale:

The recent residential and commercial development in the region has generated a need for an east/west pedestrian connection between opposite sides of the freeway. The proximity of the freeway bridges over Penasquitos Creek to the Sorrento Valley Coaster Station provide an opportunity for the development of such a crossing. The trail improvements would allow people to walk or bike from the Sorrento Valley Coaster Station, travel under the I-5/805 freeway ramps and connect directly to the commercial businesses on the northeast side, without having to travel out of their way to safely traverse the area. The viability of the Coaster as a preferred mode of transportation would be enhanced if users feel safe and secure and if getting to and from a desired destination is efficient and convenient. The proposed trail connection would also establish a connection to the existing trail system through Los Penasquitos Park. Through discussions with City of San Diego Trails Department staff, and staff from Torrey Pines State Reserve, Estrada Land Planning learned that this underpass could be utilized as a wildlife corridor by animals crossing the freeway. For more information regarding the rationale of this proposed project, see the I-5 North Coast Community Enhancement Plan Project Notebook.



This figure depicts a cross-section of the proposed pedestrian trail connection under the freeway structures at Penasquitos Creek.

Penasquitos Creek Section Line - See figure 13 City of San Diego: Project #1 Penasquitos Creek Trail Connection - Plan View East Side of Freeway Structure Figure 15



Figures 15 and 16 show plan views of the integration of the proposed trail with existing conditions on either side of the proposed freeway structures.

Design Examples:

Other communities have developed similar trail connection projects. One example is shown below to help illustrate how the Penasquitos Creek trail connection might appear.

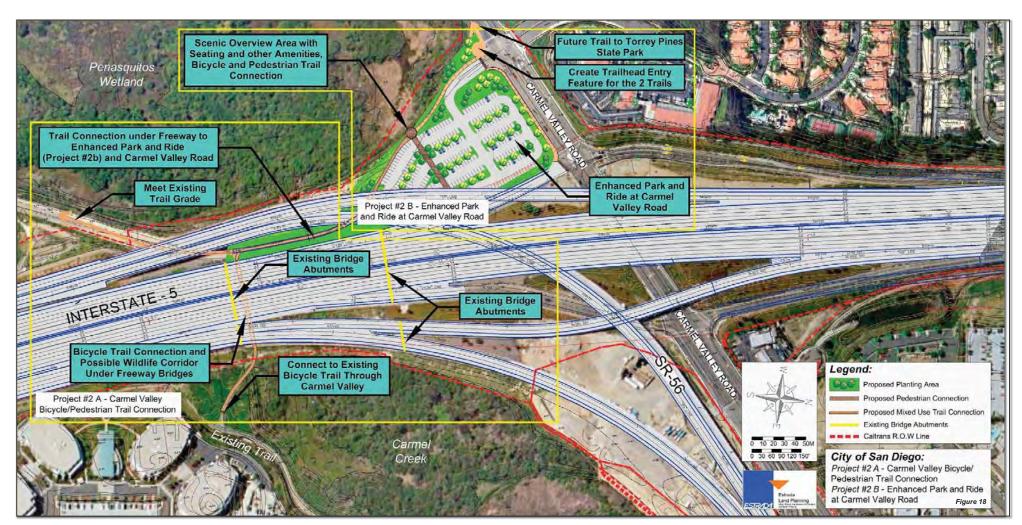
Trinidad, Colorado - Riverwalk Trail Project

A similar underpass was completed by the City of Trinidad, Colorado. A concrete pedestrian/bicycle trail along a riparian corridor passes under an enhanced road bridge. A low retaining wall helps prevent flooding of the trail. Interpretive signs describe the wetland.

Further details are provided on the City of Trinidad website: www.historictrinidad.com/trail.htm



Riverwalk trail, Trinidad Colorado.



Project # 2 A and B: Synergy Projects Recommended for I-5 at Carmel Valley Road

Projects # 2 A and B: Synergy Projects Recommended for I-5 at Carmel Valley Road

Description:

There are two projects included in Project #2. These projects would be constructed in coordination with the Carmel Valley Road bridge construction and associated hydrological improvements.

#2 A - Carmel Valley Bicycle/Pedestrian Trail Connection

A trail connection would be constructed under the I-5 freeway structures from the existing trail along Penasquitos Lagoon, east, to the existing Carmel Valley trail, leading to the ocean through Carmel

Valley. This connection would provide a critical link between three regional trail systems, and the proposed Carmel Valley park and ride trailhead. The project would include:

- Construction of a new paved bicycle/pedestrian trail from the existing CVREP (Carmel Valley Restoration Enhancement Project) trail, under I-5, to the proposed trail along Carmel Valley Road (linking to Torrey Pines State Park) and the existing Sorrento Valley Road trail.
- Provision of separate lanes for bicycles and pedestrians to match the CVREP trail.
- Removal of sediment under freeway bridges to promote movement of wildlife.

Re-vegetation of disturbed areas with plant species native to

Torrey Pines
Golf Course

Penasyutos
Marsh

Carmel
Valley

Soa To Sea Trail

Trail

Los
Renasquitos
Carmel
Valley

Torrey Pines
Golf Course

Carmel
Valley

College Table

Convented Lands
Conv

Project # 2 A and B: Synergy Projects Recommended for I-5 at Carmel Valley Road Context Map

San Diego - 10

the area.

#2 B - Enhanced Park and Ride at Carmel Valley Road

The existing Park and Ride site, on the west side of the freeway at Carmel Valley Road, would be enhanced to provide an improved experience for trail users, and commuters.



View under I-5 freeway structures facing southwest towards Penasquitos Lagoon and Torrey Pines State Park.



View of I-5 freeway structure showing path of proposed pedestrian/ bicycle trail on the west side of I-5.

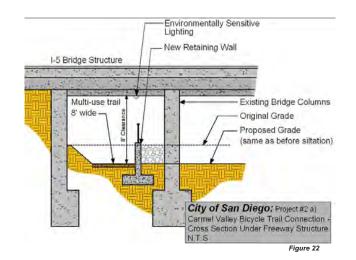
The project would include:

- Enhanced paving corridor through the park and ride leading to the trailhead.
- Enhanced landscaping, including shade trees and thematic accent planting that reflects the natural environment and enhances the visitor's experience.
- Planting to create a visual buffer between the trail and the parking area.
- A trailhead and scenic overlook at Penasquitos Lagoon at the west edge of the Carmel Valley park and ride, including enhanced paving, interpretive exhibits, benches, and other site furnishings. This project could be constructed by the City.

Rationale:

#2A-The Sea to Sea Trail Foundation has proposed a trail connection through San Diego County that would directly link the Salton Sea to the Ocean. This trail is known as the "Sea to Sea" or "Trans County" Trail. Through Carmel Valley it is referred to as the SR-56 Regional Bike Trail. One of the last remaining major obstacles to completing this important link is crossing I-5. Over the years, several alternative concepts have been developed studying ways to cross the freeway including a study by URS in June, 2007. With the implementation of this synergy project, the long awaited trail connection across the I-5 would be completed. Providing a link for bicycles and pedestrians under the freeway would complete the Sea to Sea trail through San Diego, fulfilling a major community need. This project could also incorporate an enhanced wildlife corridor.

#2 B - An enhanced park and ride facility at Carmel Valley Road would facilitate access to the bicycle trail, and provide additional parking for people wishing to access the beach at Torrey Pines State Reserve. Trailhead facilities and pedestrian amenities within Caltrans R.O.W would be integrated into the park and ride for improved access to the existing trail systems along the Penasquitos Lagoon, Sorrento Valley Road and Carmel Valley Road.



Pedestrian and Bicycle
Sidewalk Connection to
Carmel Valley Road

Pedestrian Scenic
Overview with Benches
and Interpretive Panels

Perfect and Ride

Pedestrian Connection
through Park and Ride

City of San Diego: Project #2 B
Enhanced Park and Ride at Carmel Valley
Road - Plan View

Figure 23

and Bicycles

Concept Sketches:

Figure 22 is a detailed cross-section showing the trail as it passes under the freeway structures near Carmel Valley. Figure 23 depicts a more detailed expression of the Scenic Overview proposed as part of project #2 B for the City of San Diego.

Design Example:

Sunnyvale, California - San Tomas Aquino Creek Trail

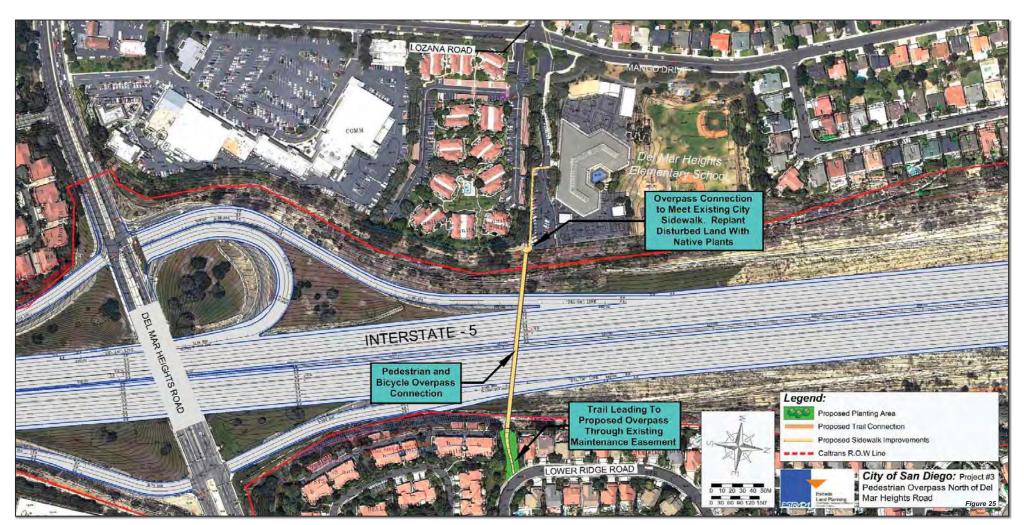
A similar bicycle path connection to that recommended at Carmel Valley Road can be found along the San Tomas Aquino Creek in Sunnyvale, California. The trail connects under the freeway bridges at Hwy-237. This trail is part of a network of bicycle trails in the San Francisco Bay Area. San Tomas Aquino Creek Trail has connections to the Bay Trail, an ongoing bicycle trail connection that proposes over four hundred miles of bicycle trail upon completion.

More information regarding this trail can be found on the following

www.abag.ca.gov/bayarea/baytrail/vtour/map3/access/Syvlblds/syvlblds3.htm



San Tomas Aquino Creek, Sunnyvale California.



Project # 3: Pedestrian Overpass Connection North of Del Mar Heights Road

Project # 3: Pedestrian Overpass Connection North of Del Mar Heights Road

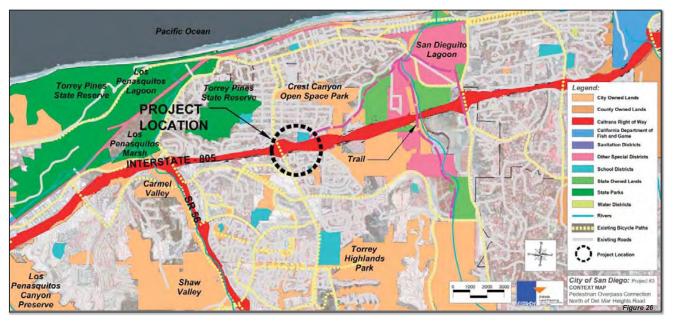
Description:

A new bicycle/pedestrian bridge over I-5 would be constructed north of Del Mar Heights Road, connecting Lozana and Lower Ridge Road. This bridge would connect adjacent neighborhoods currently divided by the freeway, and allow an improved route to school for students living on opposite sides of the freeway. The bridge would incorporate aesthetic enhancements to improve the visual linkage between the

communities, and provide the opportunity for a dramatic gateway marking the northern entry to San Diego.

The project would include:

- Construction of the pedestrian/bicycle bridge from Lozana to Lower Ridge Road with a concrete surface, pedestrian lighting, safety fencing and enhancements. It would slope up to meet grades on the west side.
- Construction of sidewalk/trail connections at Lozana Road on the west and Lower Ridge Road on the east by adding an accessible concrete paving extension at both ends of the pedestrian over-crossing, from the existing sidewalk to the bridge.



Project # 3 Pedestrian Overpass North of Del Mar Heights Road Context Map



View looking west over the I-5 towards the potential western landing location of the pedestrian overpass. A pedestrian connection would be built to join the overpass with the existing sidewalks along Lozana Road on the west side of the interstate.



View looking east over the I-5 towards the eastern landing location of the pedestrian overpass. The overpass would line up with an existing public easement between the residences on the east side of the interstate allowing connections to the sidewalk on Lower Ridge Road.

Rationale:

The existing pedestrian conditions at Del Mar Heights Road are congested and unpleasant. A significant need exists to create an improved and a more pleasant pedestrian connection between the east and west sides of the freeway near this interchange. The topography north of the interchange is such that a pedestrian bridge could be constructed at Lower Ridge Road. This concept would provide a safe walking and bicycle connection for the community across the I-5. This proposed pedestrian bridge would be located in an existing maintenance easement on the east side of I-5 at Lower Ridge Road, and would connect to Lozana Road on the western side just south of the existing Del Mar Hills Elementary School. This bridge could be enhanced to provide a gateway feature, signifying the north entrance to San Diego. For more information regarding the rationale of this proposed project, see the I-5 North Coast Community Enhancement Plan Project Notebook.

Concept Sketches:





Design Examples:

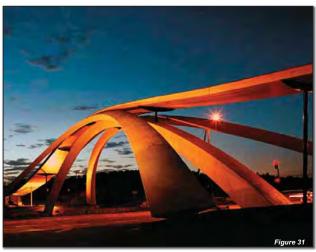
City of As, Norway - The Leonardo Bridge Project

This pedestrian overpass was originally designed by Leonardo Da Vinci in 1502 but was not built until Norwegian artist Vebjorn Sand revisited the original design drawings in 1996. Working in conjunction with the Norwegian Public Roads Administration and Selberg Architects this historic bridge design was modified into a pedestrian overpass in the City of As, Norway.

The original design is based on a 'pressed bow' shape that can be narrowed and widened without losing structural integrity.

The artist hopes to see bridges, similar to this one, built in other cities around the world in order to continue the Leonardo Bridge Project as a cultural outreach initiative.

More information about this overpass connection can be found at: www.vebjorn-sand.com/leonardo.html

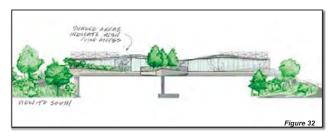


Leonardo Pedestrian Bridge; As, Norway.

Windsor, Ontario Canada - Green Corridor Pedestrian Bridge

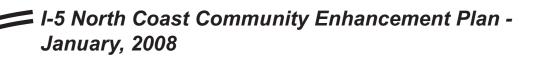
An example of a pedestrian bridge that incorporates natural features in the structure of the span itself is this bridge developed by Canadian artist Noel Harding in conjunction with the University of Windsor Visual Arts Department.

More information about this project can be found at: www.greencorridor.ca





Green Corridor Pedestrian Bridge, Windsor Ontario.



Synergy Project Selection Process

The following sections: 2.1.3, 2.1.4 and 2.1.5 describe the process used to define synergy projects in the City of San Diego.

2.1.3 Preliminary Design Considerations

The development of synergy projects for the City of San Diego has been achieved through the integration of the findings of the site analysis phase and the outcomes of the site synthesis phase into preliminary design concept plans. Examples of the conceptual design panels developed for the City of San Diego can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Preliminary design concepts have been presented in meetings with City of San Diego staff in order to determine the final synergy projects for the City. Comments gathered in the City Staff review meeting and their effects on the development of synergy projects for San Diego have been summarized in the Preliminary Design Consideration Matrix.

Preliminary Design Consideration Matrix

Potential Synergy	Project Location and Existing	Relation to	Land Use and Site Planning	Land Use and Site Planning
Project Area	Conditions	Caltrans R.O.W.	Issues	Recommendations
Potential Project Area near the I-5/805 Merge.	Area under I-5/805 bridge. Sorrento Valley Blvd. is the southern border with Vista Sorrento Pkwy. to the east and Roselle St. to the west. Penasquitos Creek bounds the area on the north. Mix of transportation uses and structures, busy streets, freeway ramps, pedestrian movement, train tracks and transit station.	Within Caltrans R.O.W	Penasquitos Creek trail system dead ends under freeway ramps, breaking natural connection with Los Penasquitos Lagoon. Siltation is building up in the creek under the freeway ramps. Connecting pedestrians and commuters to the train station from local business and residential areas is desirable.	Improve bicycle and pedestrian connections from the train station to Torrey Pines State Reserve; continue Penasquitos trail systems under freeway bridges and improve creek conditions; improve pedestrian safety and accessibility under freeway bridges to keep pedestrians away from busy traffic conditions. Possible wildlife corridor use under freeway bridges.
Potential Project Area near Carmel Valley Road and SR-56.	Area near Carmel Valley Rd. bounded by El Camino Real to the east and Sorrento Valley Road to the west. Busy street conditions with few provisions for pedestrians and cyclists; on/off ramps for SR-56 are located at this intersection. Close proximity to existing bicycle path through Carmel Valley.	Within and Adjacent to Caltrans R.O.W with connections to City R.O.W.	Bicycle path from Carmel Valley dead-ends at I-5 freeway corridor; few amenities exist for pedestrian traffic traveling east/west across I-5. This connection would be desirable. Potential for enhancements to the existing park and ride at Carmel Valley Road. Sorrento Valley Road bridge to be replaced resulting in improved creek flow.	Complete bicycle connection from Carmel Valley under I-5 to Sorrento Valley Rd. Improve pedestrian streetscape safety at the I-5/Carmel Valley intersection. Enhance existing park and ride.
Potential Project Area near Del Mar Heights Road.	Area near Del Mar Heights Rd, bounded by I-5 R.O.W. Busy street conditions with minimal provisions for pedestrians and cyclists. Similar elevation conditions on either side of I-5.	Within Caltrans R.O.W	Residential and commercial uses on each side of I-5. Schools are also located on either side of I-5. Potential recreational trail connections from area east of I-5 to Crest Canyon and the San Dieguito Lagoon trail system.	Improve bicycle/pedestrian connections east/west across the I-5.
				Table 1

2.1.4 Soliciting Input from Stakeholders

Meetings were held with interest groups and stakeholders from San Diego during the development of synergy projects. These meetings have been invaluable to the formation of the proposed projects. The meeting dates and participating stakeholders are described below.

Feb 22, 2005 -	City of San Diego staff, Caltrans, Dokken and Estrada Land Planning (at City of San Diego)
Jan 12, 2006 -	City of San Diego staff, Caltrans and Estrada Land Planning (at City of San Diego)
Jan 26, 2006 -	San Dieguito Park Joint Powers Authority representatives, Caltrans and Estrada Land Planning
Jan 27, 2006 -	City of San Diego - Parks and Rec Dept., Torrey Pines State Reserve, Caltrans, Estrada Land Planning (at Estrada Land Planning)
Feb 3, 2006 -	City of San Diego Trails manager , Caltrans, Estrada Land Planning (on site, Sorrento Valley and Carmel Valley/56)
Feb 14, 2006 -	Carmel Valley Community Planning Group, Caltrans, Estrada Land Planning (at Carmel Valley Library)
Feb 21, 2006 -	Torrey Hills Community Planning Group, Caltrans, Estrada Land Planning (at Torrey Hills Elementary School)
Mar 9, 2006 -	Torrey Pines Community Planning Group, Caltrans, Estrada Land Planning (at Del Mar Elementary School)

Comments offered for the development of synergy projects for the City of San Diego have been summarized into a stakeholder contribution matrix (see *table 2*). More information in regards to the stakeholder meetings can be found in the I-5 North Coast Corridor Enhancement Plan Project Notebook.

Preliminary design considerations have been presented to stakeholders and then, based on feedback, have been distilled into viable project concepts prior to being presented at the public meeting. Some of the preliminary concept ideas have not been pursued due to constraints and perceived design barriers as discussed in the stakeholder meetings.

Stakeholder Contribution Matrix

Potential Synergy	Preliminary Concept Design	Comments From	Ideas to be further
Project Area	Recommendations	Stakeholders	developed
Potential Project Area near the I-5/805 Merge.	Sorrento Coaster Station accessibility enhancements, trail connections along Penasquitos Creek, bicycle paths and 'bike and ride' on Flintcote Ave., bicycle and pedestrian path along Sorrento Valley Rd.	Bicycle trail improvements would be encouraged, pedestrian/ bicycle/wildlife corridors through Penasquitos Canyon encouraged, interest in completing a cross-county trail through the area.	Penasquitos Creek Trai Connection
Potential Project Area near Carmel Valley Road and SR-56.	A) Bicycle/pedestrian/wildlife corridor underpass near SR-56 and I-5, improved bicycle connections in the area.	Bicycle trail connection to trans-county trail is desired (this is a missing link currently); compatibility with pedestrian trail/wildlife corridor not seen as an issue. This project is consistent with past plans for the area.	Carmel Valley Bicycle Trai Connection
	B) Enhance park and ride facility to include paving enhancements, trail head, interpretive exhibits and additional planting.	Not reviewed.	Park and Ride Enhancements.
Potential Project Area near Del Mar Heights Road.	Pedestrian overpass connection north of Del Mar Heights Road.	Pedestrian overpass well received by resource groups and City staff, mixed reactions from the community planning groups.	Pedestrian and Bicycle Overpass Connection North of Del Mar Heights Road
Potential Project Area near San Dieguito Lagoon.	Bike path on San Dieguito Drive to connect existing trails; N-S path along edge of I-5 to complete trail circuit around San Dieguito River; providing additional funding for existing plans for trail connection and nature center.	Least Tern habitat in this area would be a constraint to the development of a trail system in R.O.W.	None. Determined to be unfeasible due to potentia impacts to wildlife.



2.1.5 Public Input

The design team presented preliminary design solutions to public stakeholders at planning board meetings for the communities of Carmel Valley, Torrey Hills and Torrey Pines. These preliminary designs were modified and redefined according to feedback received by the community during these meetings. Updated plans for the remaining three synergy projects were then made available for public viewing and input at a subsequent meeting. *Table 3* outlines the information received throughout the public input process.

Community Input Process:

- Community meeting held April 19, 2006 from 6-8 pm at Sycamore Ridge School in the City of San Diego.
- Approximately 25 people attended the community meeting.
- Members of the community were able to see the enhancement projects, view the proposed footprint of the freeway, ask questions and voice their concerns.
- Comment sheets were provided for the public to submit their comments.
- The community was able to vote on their preferred synergy projects.
- Representatives from Estrada Land Planning were present in order to answer any questions about the proposed synergy projects.
- Caltrans staff members were available to answer more specific questions concerning the I-5 widening.

More information regarding the Community meetings held in the City of San Diego can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Public Input Matrix

	Major Project Elements	Rationale	Major Community/Agency Comments	
#1 Penasquitos Creek Trail Connection	Pedestrian/bicycle trail connection under freeway bridges at Sorrento Valley Road. Native riparian planting improvements along Penasquitos Creek. Reconfigure rock slope protection to meet minimum trail clearance of (8') under bridges. Lighting along trail for improved safety under freeway bridges.	Allows access and connection for pedestrians traveling between business and residential uses on either side of I-5. Connects commuters on either side of I-5 to the Coaster Station at Sorrento Valley Road. Allows access across freeway corridor for Penasquitos Trail connections.	Keep trails / path areas as "green" (vegetated or natural) and pleasing as possible. Does have some merits if wildlife corridor can be improved. Aesthetics are positive for hikers. The creek trail connection would help make the trail more accessible for employment use and UCSD students. Make access for both (pedestrian and bicycle) and minimize impact of periodic flooding. Consider vagrant migration as passive design issue. Excellent, like the Penasquitos paths and loop to Torrey Pines parks. Carmel Mountain Road used to be a good cycle access to Sorrento Valley Road and bike path	
# 2				
A) Carmel Valley Bicycle Trail Connection	Pedestrian/bicycle trail connection under freeway bridges south of Carmel Valley Road. Dredging of silt buildup under freeway bridges to meet minimum trail clearance of (8'), in coordination with proposed Sorrento Valley Road culvert replacement.	Allows continuation of the existing bicycle path from Carmel Valley under the freeway to allow pedestrian and bicycle access to the ocean.	There must be an overpass linking Carmel Val neighborhoods north of SR-56 to the Carmel Valley trail make this linkage accessible. It is way too dangerous fo family to access Carmel Valley trail from Carmel Creek Carmel Country Road. This is a chance to also improve cre flow as part of the project. Obviously the best of the three lots of reasons, I like the green route better. The Carr Valley pedestrian connection would make the trails me accessible. The Carmel Valley Road intersection under I-5	
B) Park and Ride Enhancements near Carmel Valley Road	Park and ride enhancements added after public meetings.	Allows for an improved parking facility near Carmel Valley Road. Interpretive signage, native planting and pedestrian amenities will also be included in order to enhance the visitor experience.	VERY dangerous for pedestrians and cyclists. There is no way for families to walk/cycle to the beach from Carmel Valley at the moment. This project is vital to create a link to the Sorrento Valley path / beach from Carmel Valley. It needs to be completed before someone is killed. We also need access to the SR-56 bike path from the Carmel Valley neighborhoods via bridge to linear park.	
# 3 Pedestrian and Bicycle Overpass Near Del Mar Heights Road	Pedestrian and bicycle overpass connection north of Del Mar Heights Road. Sidewalk connections to join to the surrounding neighborhoods. Overpass structure to be designed to match the surrounding community character.	Provide a safe pedestrian and bicycle connection across the freeway. Allows an alternative to crossing the freeway at the busy Del Mar Heights Road overpass. Symbolic gateway to the City of San Diego	A "green" or park-like bridge would be better used. Del Mar Heights Road is not a viable pedestrian or cycle access route over the freeway. Recommend improving pedestrian access over Del Mar Heights Road even in a limited fashion if possible: add landscaping, potted plantings, green medians, etc. This path will bring children, adults and bikers onto Mango Drive at a point which is already dangerous to kids living in the neighborhood because of high traffic. "All for" the pedestrian bridge near Del Mar Heights Road. There are problems with traffic at the bridge ends. Crossing I-5 on Del Mar Heights Road as a pedestrian is very dangerous. A bridge would be wonderful! Please design it to fit with the neighborhood.	

2.1.6 Conclusions and Issues

Three potential synergy projects have been identified for the City of San Diego. These projects are pedestrian and bicycle connections that would allow for improved access across I-5. Each project would be maintained by the City in perpetuity.

More information about the methodology utilized during the synergy project development process can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Synergy Project Major Issues and Costs:

In order for these projects to be realized, the following major issues need to be resolved.

Project #1 - Issues Affecting the Penasquitos Creek Trail Connection:

- Structural effects of siltation removal around the bridge foundations need to be determined.
- Hydrological requirements and potential improvements need to be determined so that occasional flood conditions can be accommodated.
- Environmentally sensitive lighting needs to be provided in the underpass to avoid impact on wildlife.
- Easy maintenance access needs to be provided. Potential easements for access may be required.

This project would have an approximate cost of \$2.500.000.00

Project #2 A - Issues Affecting the Carmel Valley Bicycle/ Pedestrian Trail Connection:

- Structural effects of siltation removal around the bridge foundations need to be determined.
- Hydrological requirements and potential improvements need to be determined so that occasional flood conditions can be

accommodated.

- Environmentally sensitive lighting needs to be provided at the trailhead and park and ride to avoid impacts to wildlife.
- Plant materials must be compatible with adjacent wetland and natural areas.

This project would have an approximate cost of \$3,000,000.00

Project #2 B - Issues Affecting the Enhanced Park and Ride at Carmel Valley Road:

· Improvements need to be coordinated with the City.

This project would have an approximate cost of \$2,500,000.00

Project#3 - Issues Affecting the Pedestrian Overpass Connection Near Del Mar Heights Road

- Community impacts need to be determined and discussed with members of the neighborhood prior to the final design.
- There will need to be coordination with the City and SDG&E regarding access easements on either side of the proposed bridge.
- · Lighting need to be provided under the overpass.
- Determine gateway image and develop consensus.
- The value of the cost as it relates to the community benefits needs to be further evaluated.

This project would have an approximate cost of \$7,000,000.00

2.1.7 Next Steps

The next steps in the development of the conceptual synergy projects for the City of San Diego are:

- Obtain formal approval for each project from City of San Diego. This would include obtaining approvals from affected Community Planning Groups, California Coastal Commission, City committees and boards, and approval by the City Council.
- Any R.O.W issues will need to be addressed.
- Execute maintenance agreements for approved projects.
- 4. Allocate funding.
- 5. Develop detailed design plans.
- 6. Construct as part of phased I-5 improvements.

3.1 City of Solana Beach

3.1.1 Overview

Located on the northern edge of the City of San Diego, Solana Beach is a small coastal city with a population of approximately 13,000, boasting 1.3 miles of beaches along the Pacific coast. The City encompasses approximately 1.95 miles of freeway along the I-5 corridor between Via De La Valle in San Diego and the southern edge of San Elijo lagoon. Solana Beach is known for beaches, quiet neighborhoods and an active, downtown shopping area and adjacent Design District. This informal residential beach community is home to a Coaster and Amtrak commuter rail station allowing for increased access to other cities along the I-5 corridor by rail.



Lomas Santa Fe/l-5 intersection facing east. This is the only vehicular access to and from l-5 within the Solana Beach city limits.

3.1.2 Recommended Synergy Projects for Solana Beach

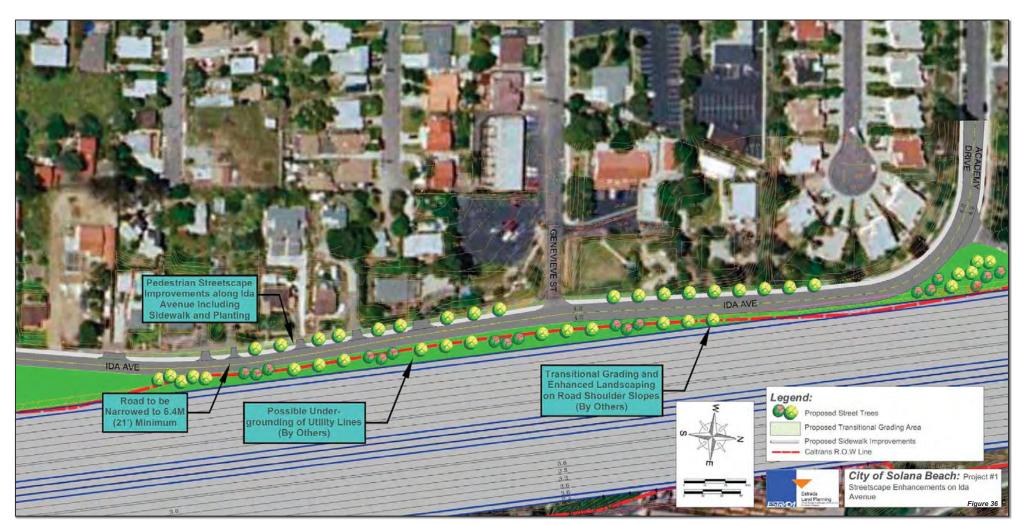
There is limited potential for implementing synergy projects through the City of Solana Beach due to the existing developed land adjacent to Caltrans right-of-way. Available land is scarce along the freeway edge, leaving little room for the types of synergy projects proposed for the other cities along the corridor. Despite the constraints, two synergy projects have been identified and are recommended for further development in cooperation with the City of Solana Beach:

#1 Streetscape Enhancements on Ida Avenue

#2 Trailhead at Solana Hills Drive



City of Solana Beach Synergy Project Locations



Project #1: Streetscape Enhancements on Ida Avenue

Solana Beach - 20

Project # 1: Streetscape Enhancements on Ida Avenue

Description:

Streetscape enhancements would be constructed along Ida Avenue from Academy Drive to south of Genevieve Street. The improvements would enhance the existing street, and would accommodate a sidewalk on the west side, and travel lanes in both directions. The improvements would provide curbs, a sidewalk for pedestrians, landscaping and screen planting between the neighborhood and the freeway.

The project would include:

- A consistent minimum 22' street width for Ida Avenue, with curbs, and a concrete sidewalk on the west side.
- Contour grading to cover the lower sections of the freeway retaining wall, making it less visually intrusive.
- Enhanced color and texture of retaining wall surface to reduce scale and impact of wall.
- · Street tree planting on both sides of the street.
- · Slope planting adjacent to the freeway.



Project # 1: Streetscape Enhancements on Ida Avenue Context Map



Existing conditions along Ida Avenue facing north towards Academy Drive. The I-5 enhancements would encroach into the vegetated shoulder along the eastern edge of Ida Street from Academy Drive to south of Genevieve Street.



Currently there is a wide variety of landscape elements making up the streetscape along Ida Avenue. With the implementation of synergy project #1 in the City of Solana Beach, sidewalk conditions and street conditions would be improved, landscaped and made consistent in accordance to the Fden Gardens Master Plan

in 1995.

- · Planting in the parkways where space permits.
- · Irrigation to sustain the proposed planting.

Rationale:

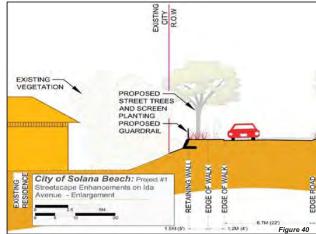
Ida Avenue is an important street within the Edens Gardens community. The street currently has a rural feeling with drainage issues. Sidewalks, curbs, and landscaping would improve the character of the street. In addition, the improvements would provide visual mitigation for the adjacent freeway improvements.

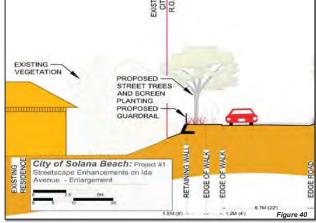
Concept Sketches:

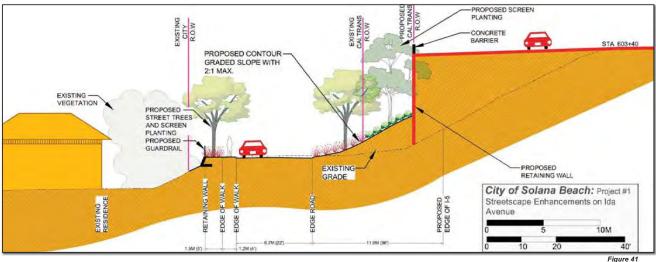
Design Guidelines:

City of Solana Beach - Eden Gardens Master Plan

The concepts presented in the Streetscape Enhancements along Ida



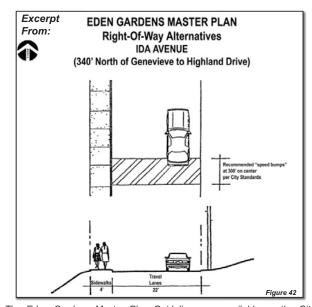




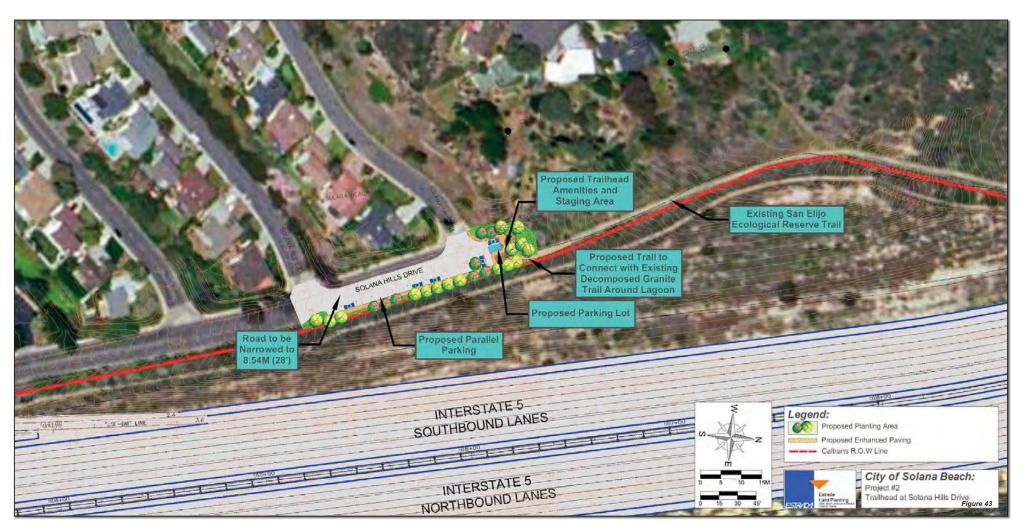
The street right-of-way improvements recommended in the Eden

Avenue are consistent with the Final Report of the Eden Gardens Master Streetscape Plan as produced by the City of Solana Beach

Gardens Master Plan include: 22' minimum proposed street pavement width, sidewalks proposed on the west side of the street, and 4-1/2" rolled concrete curbs on either side of Ida Avenue. The alternatives proposed in synergy project #1 are consistent with these recommendations, and are enhanced by the addition of street trees and a planting buffer as shown in alternative 2.



The Eden Gardens Master Plan Guidelines are available on the City of Solana Beach web site: www.ci.solana-beach.ca.us/uploads/CD EdenGArdensMaster Plan.pdf



Project #2: Trailhead at Solana Hills Drive

Project #2: Trailhead at Solana Hills Drive

Description:

Street improvements along the northern end of Solana Hills Drive, and construction of a new trailhead at the south entrance to San Elijo Lagoon Ecological Reserve would provide a new amenity to enhance public access to the Reserve. Street trees and landscaping would provide shade, visual relief, and improve the appearance. The project would include:

- Reduced 28' road width to allow accommodation of sidewalk and parking.
- Parallel parking along the east side of Solana Hills Drive for trailhead visitors.

- Accessible, paved pedestrian drop-off zone to facilitate trail access.
- Shade structure, picnic tables, litter receptacles, pet waste station and other amenities to support trailhead uses.
- · Interpretive displays and information board.
- · Street trees for shade.
- Planting compatible with the adjacent ecological reserve.
- · Screen retaining wall with planting.
- · Street/security lighting.



Project # 2: Trailhead at Solana Hills Drive Context Map



Existing conditions at the mouth of the San Elijo Lagoon Ecological Reserve and trail system.



View facing north of the entrance to the San Elijo Lagoon Reserve and trail system from the end of Solana Hills Drive. The development of a trailhead is proposed at this location, with facilities such as benches, shade structures and additional informative signage.

Rationale:

The north end of Solana Hills Drive provides access to the San Elijo Lagoon Ecological Reserve. Parking and access is currently poorly defined, and does not encourage public use. This project uses a portion of the Caltrans right-of-way to provide parking, drop off and trailhead facilities to enhance public use and enjoyment of the trail. The trailhead would provide an opportunity to educate the public regarding the natural systems, and fragility of the lagoon environment. The trailhead would also provide the opportunity to experience a portion of the Reserve from accessible facilities. This trailhead would allow for an enhanced pedestrian connection from the residential communities to the north of Solana Beach, to the existing trail systems surrounding San Elijo Lagoon.

Example Images: Design Example:

City of Treasure Island, Florida - Sunset Vista Trailhead Park



Trailhead Sign and Interpretive Exhibits - Mount Whitney, CA

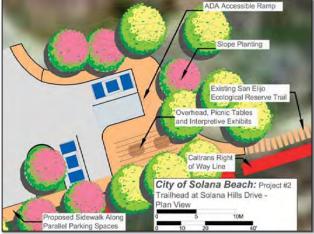


Figure 47

Plan view of the proposed trailhead at Solana Hills Drive, including a shade structure, picnic tables, parking spaces and native planting on any disturbed surfaces.



A similar trailhead project has been completed in the City of Treasure Island in Florida which provides a parking and staging area for a boardwalk trail system through a salt marsh landscape. Although Sunset Vista trailhead park is larger in scale than the one proposed at Solana Hills Drive, the amenities of improved pedestrian paths, shade structure, informative signage and improved parking and drop-off areas would be similar.

This project is further detailed on the City of Treasure Island web site: www.mytreasureisland.org/beach_trail/home.htm.



Figure 49



Synergy Project Selection Process

The following sections: 3.1.3 and 3.1.4 describe the process used to define synergy projects in the City of Solana Beach.

3.1.3 Preliminary Design Consideration

The development of synergy projects for the City of Solana Beach has been achieved through the integration of the site analysis findings and the outcomes of the site synthesis phase into preliminary design concepts.

Comments gathered in the City meeting and their effects on the development of synergy projects for Solana Beach have been summarized in the Preliminary Design Concept Matrix (table 4).

Examples of the design exhibits presented in the City meetings can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

3.1.4 Soliciting Input From Stakeholders

Meetings were held with stakeholders from Solana Beach during the development of the synergy projects. Projects for the City of Solana Beach have been developed with the help of the Planning Department, City staff and the City Manager. These meetings have been invaluable to the formation of projects that could enhance the city. The meeting dates and participants are described below.

Feb. 4, 2005 - City of Solana Beach Staff, Caltrans, Dokken Engineering and Estrada Land Planning (at City of Solana Beach)

July. 6, 2006 - City of Solana Beach Staff, Caltrans and Estrada Land Planning (at City of Solana Beach)

Comments received regarding the development of synergy projects for the City of Solana Beach have been summarized into a stakeholder contribution matrix (table 5).

Solana Beach - 26

Preliminary Design Consideration Matrix

Solana Beach	Project Location and Existing Conditions	Relation to Caltrans R.O.W.	Land Use and Site Planning Issues	Land Use and Site Planning Recommendations
Potential Project Area Near Ida Avenue	Frontage road on west side of I-5 stretching between Academy Drive and just south of Genevieve Street. Residential neighborhood with unique character.	Within and Adjacent to Caltrans R.O.W	Eden Gardens Master Plan dictates design development for streets and sidewalks throughout the Eden Gardens neighborhood of Solana Beach. Widening of freeway will affect road width near Academy Drive. Scenic views from the freeway should be preserved.	Improve streetscape conditions along Ida Ave, accommodate road narrowing, improve pedestrian amenities in accordance with Eden Gardens Master Plan document.
Potential Project Area Near Solana Hills Drive	Dead end street on northwest side of I-5, just north of Solana Hills Court. Street abruptly dead-ends; trails have developed from this point into San Elijo Lagoon.	Within Caltrans R.O.W	Dead end street may be slated for future development. Close to passive recreational uses, sensitive habitat and environmental conditions.	Provide amenities for pedestrians using the trails through San Elijo Lagoon.
Potential Project Area Near Santa Inez Drive	Dead end street on northeast side of I-5. Between I-5 and residential neighborhood bordering the City limits to the north of Solana Beach. Street abruptly dead-ends; trails have developed from this point into San Eliio Lagoon on east side of I-5.	Within and Adjacent to Caltrans R.O.W	Could be opposition to the added pedestrian traffic in the residential neighborhood. Close to passive recreational uses, sensitive habitat and environmental conditions. Very close to Encinitas City limits.	Provide amenities for pedestrians using the trails through San Elijo Lagoon. Table 4

Stakeholder Contribution Matrix

Solana Beach	Preliminary Concept Design Recommendations	Comments From Stakeholders	Ideas to be further developed	Miscellaneous Comments
Potential Project Area Along Ida Avenue	Changes to street width and alignment along Ida Ave. to mitigate possible freeway encroachments. Alternative soundwall treatments along the freeway edge to preserve scenic views from the interstate. Streetscape amenity improvements.	Eden Gardens Community has been divided by the I-5. Development in this area should be in keeping with the Eden Gardens Master Plan. City staff are opposed to ROW takes throughout the City. Views of the lagoons from the freeway are more important than sound mitigation.	Streetscape improvements along Ida Avenue frontage road	25' road widths should be standard on Ida Avenue, with 21' as an absolute minimum width.
Potential Project Area Near Solana Hills Drive	Trailhead to accommodate parking and pedestrian amenities for San Elijo Lagoon trails.	Trails in the northeast quadrant of the city would be desired. Trail overlooks near the lagoons would also be desired. HOA support would be needed for this project to be implemented successfully.	Trailhead connection to existing trails through San Elijo Lagoon at Solana Hills Drive	
Potential Project Area Near Santa Inez Street	Trailhead to accommodate parking and pedestrian amenities for San Elijo Lagoon trails.	The trail connection would lie primarily outside of City of Solana Beach jurisdiction		
				Table 5

3.1.5 Conclusions and Issues

Two synergy projects have been recommended for the City of Solana Beach. These projects consist of streetscape enhancements along Ida Avenue and a trailhead at Solana Hills Drive. Initial responses by City staff to these projects have been favorable in the City of Solana Beach, but public consensus should be sought in order to achieve public support for these proposals. Both of the recommended projects will be constructed within the City R.O.W. and will be maintained by the City.

More information about the methodology utilized during the synergy project development process can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Synergy Project Major Issues and Costs:

In order for these projects to be realized, the following major issues need to be resolved.

Project #1 - Issues Affecting the Streetscape Enhancements on Ida Avenue

- Select Alternative A (no planting adjacent to sidewalk), or Alternative B (narrower road width to allow planting adjacent to sidewalk).
- Resolve grading transition between the homes and the proposed road.
- Resolve maintenance agreement to allow City to maintain portions of Caltrans right-of-way.

Project #2 - Issues Affecting the Trailhead on Solana Hills

- · Obtain neighborhood consensus for trailhead amenities.
- Determine appropriate levels of lighting in relation to neighborhood and reserve.

 Protect the adjacent ecological reserve and sensitive species during construction.

This project would have an approximate cost of \$1,200,000.00

3.1.6 Next Steps

The next steps in the development of the conceptual synergy projects for the City of Solana Beach are:

- Obtain formal approval by City of Solana Beach. This would include obtaining approvals from affected Community Planning Groups, California Coastal Commission, San Elijo Park, City committees and boards, other resource agencies, and approval by the City.
- Conduct Public Meetings with the Citizens of Solana Beach and other interested citizens.
- Allocate funding.
- 4. Develop detailed design plans.
- Construct as part of phased I-5 improvements.



This Page Intentionally Left Blank

4.1 City of Encinitas

4.1.1 Overview

The City of Encinitas is located on the Pacific Coast between the San Elijo Lagoon to the south, and Batiquitos Lagoon to the north. Encinitas occupies a uniquely diverse setting, characterized by ocean beaches, saltwater lagoons, flat-topped coastal bluffs, steep canyons, and relatively flat mesas, with rolling hills to the east. The City is home to many artists, surfers, and is known for its beaches, commercial flower fields, quiet neighborhoods and an active, beach themed downtown shopping area. The City incorporated in 1986, joining five distinct communities of diverse character: Leucadia, Old Encinitas, New Encinitas, Cardiff and Olivenhain. The current population is approximately 60,000, with continuing growth and increasing density expected. The City features a "Coaster" commuter



The City of Encinitas projects the image of its origins as a coastal beach town. The combination of suburban communities that make up the City create an eclectic blend of architectural themes.

Project 4

Project 5

Project 5

Project 4

Project 5

Project 4

Project 5

Project 5

Project 5

Project 4

Project 5

Project 5

Project 5

Project 4

Project 5

Project 5

Project 7

Project 8

Project 8

Project 8

Project 9

City of Encinitas Synergy Project Locations

rail station. There are 6.75 miles of I-5 freeway corridor within the City limits.

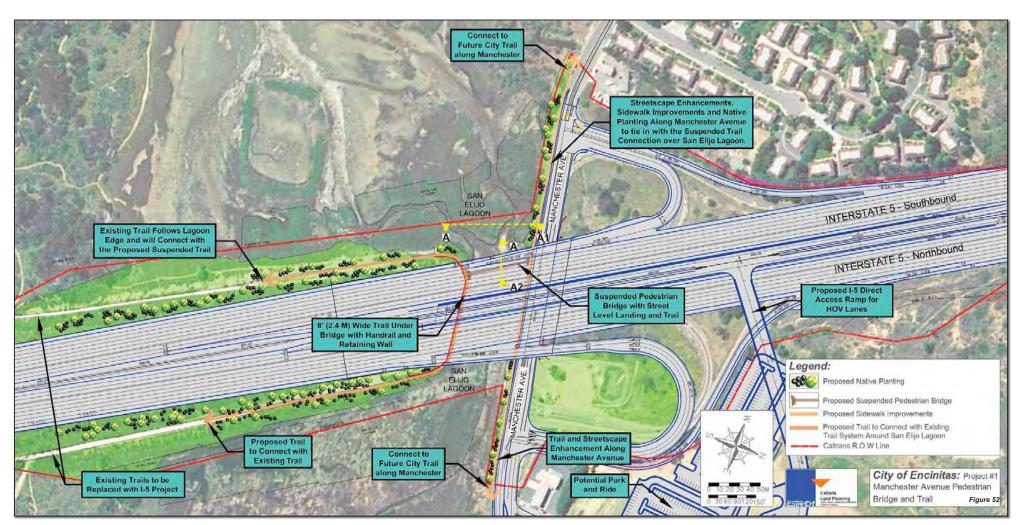
Throughout the I-5 corridor in the City of Encinitas, there is sufficient space available within, or adjacent to the Caltrans right-of-way for the development of synergy projects. These projects would combine to provide a trail system throughout the City, helping unite communities along the freeway corridor. The synergy projects recommended for the City of Encinitas include trails, pedestrian overpass connections, and suspended trails at freeway bridges to create pedestrian linkages through the community.

4.1.2 Recommended Synergy Projects for Encinitas

Six synergy projects are recommended for development in the City of Encinitas. These projects are:

- #1 Manchester Avenue Pedestrian Bridge and Trail
- # 2 Villa Cardiff Drive Improvements
- #3 Hall Property Park Trail Connecting to Santa Fe Drive
- # 4 Trail Connecting Santa Fe Drive to Requeza Street with Wetland Revegetation
- #5 Trail Connecting Requeza Street to Encinitas Boulevard
- # 6 Union Street Pedestrian Overpass and Trail Connection with Wetland Revegetation

These projects are predominantly trail connections and linkages that would provide pedestrian and bicycle access from east to west, across the I-5, as well as north to south, parallel to the freeway. For more detailed information about the process used in the development of these synergy projects, please refer to the I-5 North Coast Community Enhancement Plan Project Notebook.



Project #1: Manchester Avenue Pedestrian Bridge and Trail

Project # 1: Manchester Avenue Pedestrian Bridge and Trail

Description:

A new trail and associated sidewalk improvements would be constructed under the I-5 bridge structure at Manchester Avenue across San Elijo Lagoon connecting the existing trail segments, currently separated by the lagoon and freeway. These trail connections are identified in the Encinitas General Plan. This project consists of 3 basic components. 1) Improving the trail adjacent to the south bridge abutment with connecting trails on the east and west freeway slopes. 2) Constructing a trail structure suspended under the proposed I-5 bridge widening. 3) Constructing a sidewalk and streetscale improvements on the south side of the proposed Manchester Avenue within the Caltrans R.O.W.

The project includes:

- Construction of a pedestrian walkway structure across San Elijo Lagoon, suspended from the west side of the widened freeway bridge.
- Construction of an 8' wide paved trail along the south side of the lagoon. A retaining wall would be constructed to allow the trail to fit into the existing space. Pedestrian guardrails would be provided.
- Construction of a paved trail on the south side of Manchester Avenue north of the lagoon.
- Enhancement of the existing trails on both sides of freeway on the south side of the lagoon on graded slopes within the Caltrans R.O.W.

- Revegetation of disturbed areas with plant species native to the vicinity.
- Installation of enhanced streetscape planting along Manchester Avenue between the freeway ramps, including street trees, and shrubs in a naturalistic layout.
- Lighting is to be provided for the trail along Manchester Avenue and the suspended walkway.



Project #1: Manchester Avenue Pedestrian Bridge and Trail Context Map



A suspended pedestrian connection at this location on the west side of proposed I-5 Bridge widening at the San Elijo Lagoon would provide a new trail linkage across the lagoon.

Project Rationale:

The existing trails surrounding the San Elijo Lagoon are widely used by the public, but lack continuity, since there is currently no trail connection over the lagoon, and across I-5. This implements the City of Encinitas trails element of the General Plan. This lack of connection prevents the trail systems around San Elijo Lagoon from forming a circuit and interrupts the existing trail system. Project #1 was conceived to promote key trail linkages connecting existing trails, allowing better access and trail continuity. Combined with the other synergy projects, these trail connections would promote a unified, and effective trail system. Preliminary structural and hydrological analysis has been performed and indicates the bridge is feasible to construct and would be located above the 100 year flood plain.

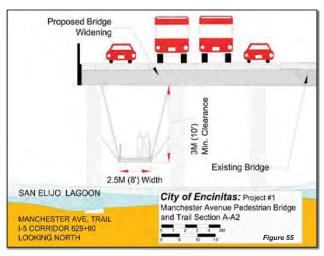


Figure 55 depicts a north facing sectional view of the suspended pedestrian trail in relation to the structure of the freeway bridge. The suspended bridge would connect pedestrians and cyclists over the open water of San Elijo Lagoon from the south shore to Manchester Avenue.

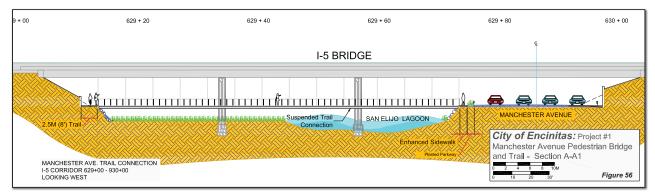


Figure 56 depicts the suspended trail viewed from the east side. The trail would be suspended from the bridge structure and join the trail system around San Elijo Lagoon, with improved pedestrian and bicycle conditions along Manchester Avenue.

Design Example:

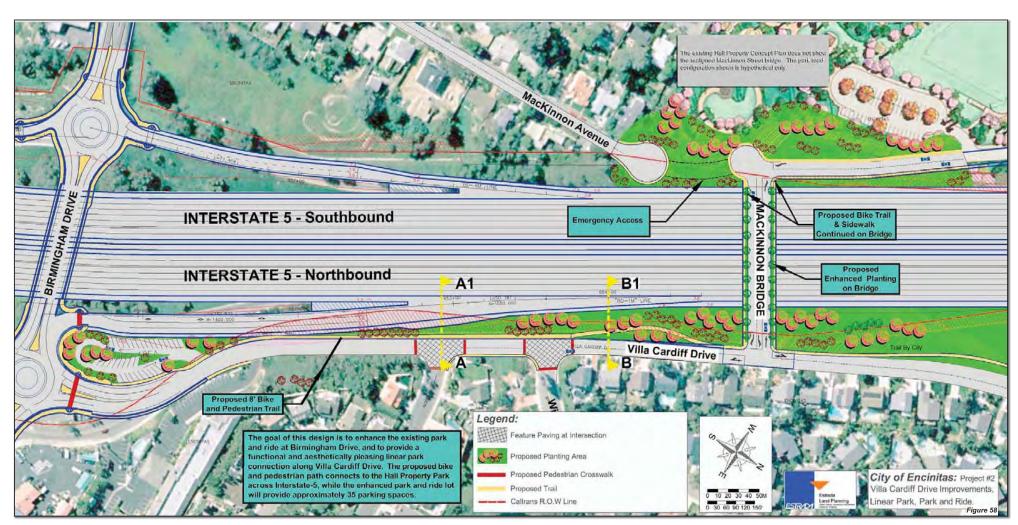
Richmond, Virginia - Belle Isle, Suspended Pedestrian Trail Connection

A similar suspended bridge connection has been constructed in the City of Richmond, Virginia. The trail is located under the Lee Bridge, where it connects foot traffic from the mainland to recreational facilities and trails on Belle Isle. The concrete trail surface is suspended from steel cables attached to the freeway bridge.

This project is further detailed on the City of Richmond website: www.ci.richmond.va.us/departments/parks/james.aspx



Suspended pedestrian trail connection to Belle Isle in Richmond Virginia. Photograph from contextsensitive solutions.org.



Project #2: Villa Cardiff Drive Improvements

Project # 2: Villa Cardiff Drive Improvements

Description:

Sidewalks and trails would be constructed connecting the Hall Property Park with the east side of the freeway across MacKinnon Bridge, and south along Villa Cardiff Drive. The trail would pass through an enhanced landscape that would provide screening of the freeway, and enhancement of the existing park and ride lot. Project number 2 is bounded on the south by Birmingham Drive, and on the northern edge by the intersection of the MacKinnon Bridge with Villa Cardiff Drive. In project #2 the park and ride located at the corner of Birmingham Drive and Villa Cardiff Drive would be retained and enhanced with park-like amenities, new trees and a greater pedestrian connection to the north.

The project includes:

- Installation of a combined bike and pedestrian trail on both sides of the MacKinnon Bridge, accenting the bridge with tree and vine planting.
- Construction of an 8' wide bike and pedestrian trail on the east side of the freeway along Villa Cardiff Drive, including enhanced planting, and street crossings.
- Enhancement of the existing park and ride lot at Birmingham Drive with enhanced landscaping.



Existing pedestrian conditions on the MacKinnon Avenue Bridge facing east towards Villa Cardiff Drive are constricted and uncomfortable. There is a potential to improve the pedestrian experience on the bridge strengthening the connection between Villa Cardiff and the proposed park on Hall Property



Project #2: Villa Cardiff Drive Improvements Context Map



Rationale:

The proposed Hall Property Park would provide recreational facilities and attractive landscape themes in the area north of Birmingham Drive. However, the lack of existing trail connections would not allow easy access to the park, and it would be physically separated from the east side neighborhoods by the freeway. The long walk across the MacKinnon Avenue Bridge is currently uninviting and uncomfortable. The physical and thematic connections between neighborhoods on opposite sides of the freeway are weak. The goal of project #2 is to extend the park themes and amenities from the Hall Property Park across the MacKinnon Bridge and along the western edge of Villa Cardiff Drive south towards Birmingham Drive, and to provide a trail connection between Birmingham Drive, and the MacKinnon Bridge. This project would also function as a pedestrian improvement independantly from park development and serve to implement the trails element of the Encinitas General Plan.

Concept Sketches:

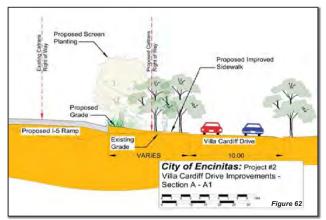


Figure 62 depicts a cross section of the streetscape improvements along Villa Cardiff Drive on the east side of I-5.

Screen Wall Proposed Screen Planting Proposed Bike Trail and Sidewalk Improvements Proposed I-5 Ramp City of Encinitas: Project #2 Villa Cardiff Drive Improvements Section B - B2 Figure 63

Figure 63 depicts a cross section of the streetscape improvements along Villa Cardiff Drive on the east side of I-5.

Design Example:

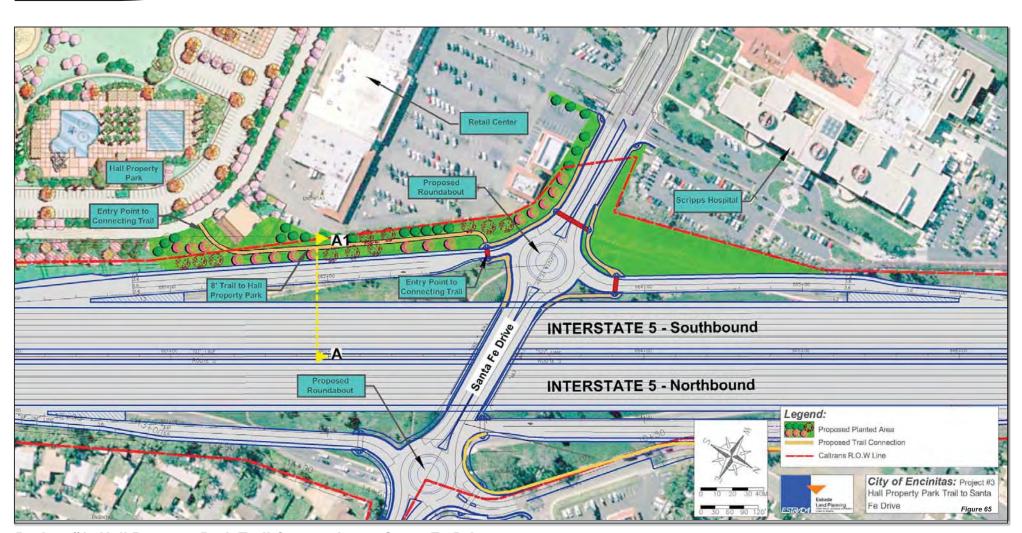
Philadelphia, Pennsylvania - Schuylkill River Trail

A similar linear trail connection exists in Philadelphia, Pennsylvania. The trail passes through diverse landscape conditions, from urban to industrial uses. The Schuylkill River Trail is located along a river, but the linear form and the park-like setting of the trail is similar to the improvements proposed along Villa Cardiff Drive in Encinitas.

This project is further detailed on the Schuylkill River Trail website: www.http://www.schuylkillriver.org/Detail.aspx?id=548



Schuylkill River Trail.



Project #3: Hall Property Park Trail Connecting to Santa Fe Drive

Project # 3: Hall Property Park Trail Connecting to Santa Fe Drive

Description:

This project would provide a pedestrian connection between the Hall Property Park, and Santa Fe Drive, allowing pedestrians from the neighborhoods to the east of I-5 to walk more directly to the park through a thematic landscape setting. This linear park connection would be located between the proposed freeway on-ramp, and the parking facilities of the existing commercial lot to the west. Minor redesign of the walkways on the Hall Property plans would be necessary in order to connect the trail as it intersects the park edge. The design of this trail would need to take into account the proximity of car traffic from the southbound on-ramps with guardrails, fencing or the provision of planted berms to provide protection for pedestrians.

The project includes:

- Construction of an 8' wide trail from the Santa Fe Drive traffic circle on the west side of I-5, along the Caltrans right-of-way, to the edge of the Hall Property Park.
- · Installation of way-finding signs to guide pedestrians.
- Planting based on park themes to enhance, and create a visual connection with the park.

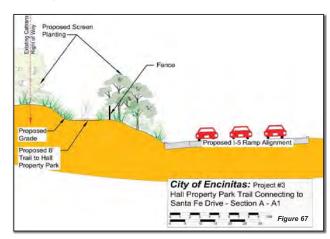
Rationale:

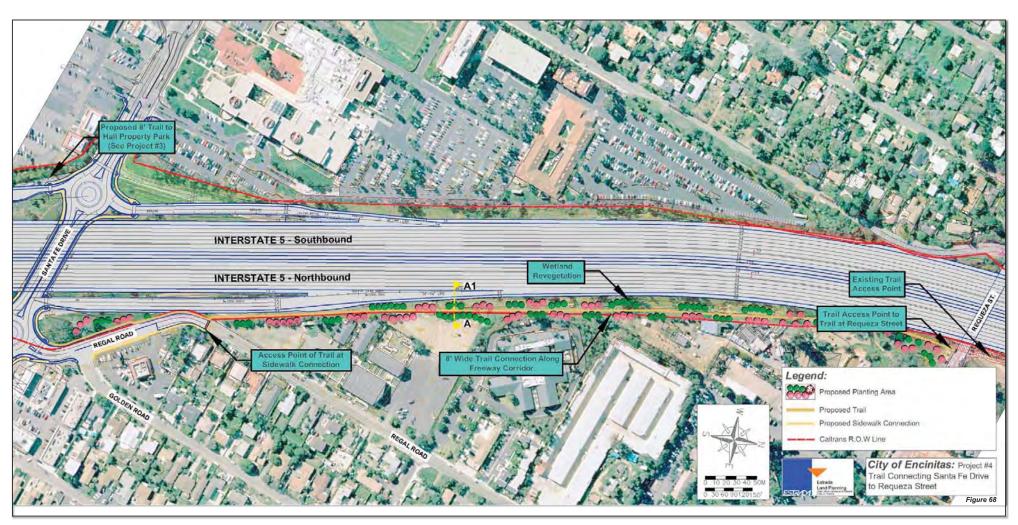
The planned recreational facilities of the Hall Property Park would provide an attractive amenity for the adjacent neighborhoods. However, there is currently no connection between Santa Fe Drive and the proposed Hall Property Park. The park would benefit from a better pedestrian connection with the neighborhoods to the east.

Controlled Carding Carding

Project #3: Hall Property Park Trail Connecting to Santa Fe Drive Context Map

Concept Sketch:





Project #4: Trail Connecting Santa Fe Drive, Requeza Street with Wetland Revegetation

Project # 4: Trail Connecting Santa Fe Drive to Requeza Street with Wetland Regetation

Description:

Project #4 would construct a north/south trail connection on the east side of I-5 between Santa Fe Drive on the southern edge and Requeza Street on the north. The trail would be constructed with drainage improvements and wetland vegetation restoration. The trail connection would be generally located within the Caltrans right-of-way, with appropriate planting and grading. This trail connection would allow pedestrians and bike riders to go from Santa Fe Drive to

Requeza, thereby creating a connection to the trail improvements of project #3 on the south and project #5 on the north. This would allow residents north of Santa Fe and east of I-5 to readily access the Hall Property Park.

The project includes:

- Construction of an 8' wide trail on the east side of the I-5 between Santa Fe Drive and Requeza Street.
- Contour grading, mounding and berms to provide interest and a sense of separation from the freeway.
- Enhanced planting to provide a comfortable walking environment.

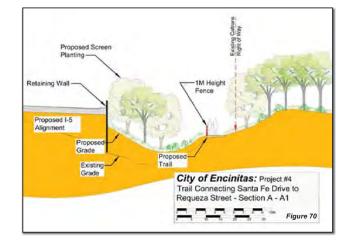
Rationale:

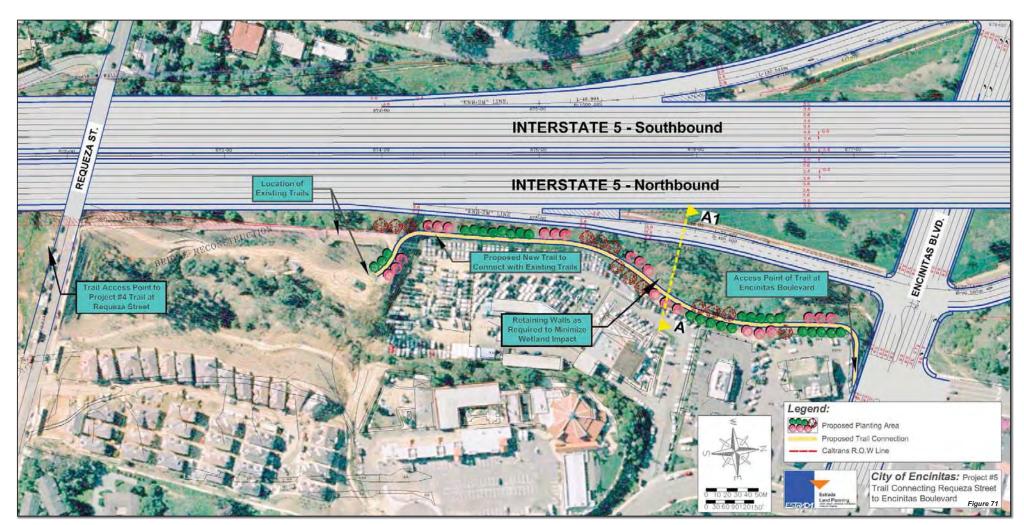
There is currently no direct pedestrian access from Santa Fe Drive to Requeza Street. A pedestrian and bicycle trail along the freeway would allow convenient access, and an opportunity to connect areas of the neighborhood to the Hall Property Park. This project would create a direct pedestrian connection, enhanced with a park-like landscape.



Project #4: Trail Connecting Santa Fe Drive to Requeza Street with Wetland

Revegetation Context Map





Project #5: Trail Connecting Requeza Street to Encinitas Boulevard

Project # 5: Trail Connecting Requeza Street to Encinitas Boulevard

Description:

A new trail would be constructed along the south side of I-5 connecting Requeza Street with Encinitas Boulevard. The trail would be located within the space between the freeway and the existing car dealerships and commercial businesses to the east. Impacts to the existing wetlands would be minimized. Where possible, the wetland areas would be vegetated with native planting.

The project includes:

 Construction of an 8' wide bicycle/pedestrian trail from Encinitas Boulevard to just south of the automobile dealership, where it would connect with an existing unimproved trail that leads to Requeza Street.

- · Revegetation of existing wetland.
- Installation of shade tree planting and groundcover along the trail.

Rationale:

There is currently no pedestrian connection along I-5 from Requeza Street to Encinitas Boulevard. A connection is necessary to complete the trail linkage. On the east side of the freeway an existing dead end trail traverses the lot north of Requeza Street, but ends at the car dealership fence. This trail should be extended to connect with Encinitas Boulevard using the Caltrans right-of-way and adjacent property. Developing this trail would require the cooperation of

the adjacent commercial property owners. This project, along with projects 1 through 4 would work together to improve the pedestrian experience throughout Encinitas.

Concept Sketch:

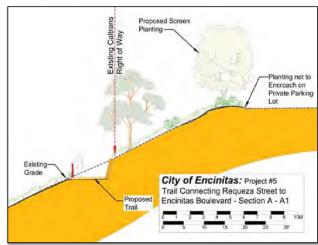


Figure i



Project #5: Trail Connecting Requeza Street to Encinitas Boulevard Context Map





The two images, above, show the existing conditions of the potential synergy project area on the east side of I-5 between Encinitas Boulevard and Santa Fe Drive. This area also shows potential for the development of pedestrian and bicycle trails along the edge of I-5. The trail system would stretch from Encinitas Boulevard to Santa Fe Drive if projects #3, 4 and 5 were to be developed into a pedestrian trail corridor.



Increased native planting as well as wetland improvements could be an important part of the implementation of the trail system through Encinitas proposed as part of projects #3-5.

Trail Project Examples:

The following design example illustrates the type of trail project that has been described in synergy projects #3-5 of this section of the report.

Mullan City to Plummer City, Idaho - Trail of the Coeur d'Alenes

The trail of the Coeur d'Alenes follows the Union Pacific Railroad right-of-way over 72 miles between the towns of Mullan and Plummer in northern Idaho. The trail runs adjacent to and crosses the I-90, allowing for a separated bicycle trail allowing greater access along the freeway for cyclists and hikers.

This project is further detailed on the Friends of the Coeur d'Alenes Trails web site:
www.friendsof.cdatrails.org



This rest area along the Trail of the Coeur d'Alenes provides benches and a picnic area in the shade. This type of facility could be incorporated into the trail system proposed for the City of Encinitas, where appropriate.



The Trail of the Coeur d'Alenes travels adjacent to and crosses I-90 as it passes from Mullan to Plummer. In many areas the trail is completely secluded from the freeway through the use of trees planted as a buffer. In other cases the trail passes over or under the freeway where appropriate, as depicted above in figure 78.



Project #6: Union Street Pedestrian Overpass, Trail Connection and Wetland Revegetation

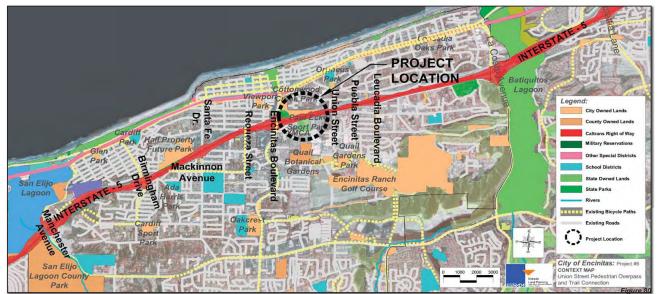
Project # 6: Union Street Pedestrian Overpass, Trail Connection and Wetland Revegetation

Description:

A new trail along the west side of I-5 is proposed to connect Cottonwood Creek Park to Union Street, and a bridge would be constructed providing pedestrian access across I-5. In addition, wetland restoration and/or enhancement, slope planting restoration, and enhanced landscaping would be constructed. A park would be built where the pedestrian bridge meets grade on the west side of the freeway on a vacant parcel owned by the City of Encinitas.

The proposed project includes:

- Construction of a 15' wide pedestrian bridge across I-5 connecting Union Street on both sides of the freeway.
- Construction of an 8' wide trail from Cottonwood Creek Park to Union Street on the west side of I-5.
- Construction of a variable height retaining wall to permit construction of the trail on the sloping terrain.
- Construction of a small parking area on Union Street for park and trail users.
- Construction of sidewalk and pedestrian ramps on Union Street to provide a connection to the trail.



Project #6: Union Street Pedestrian Overpass, Trail Connection and Wetland Revegetation Context Map

- Construction of a neighborhood park north of Union Street.
- Restoration and/or enhancement of existing wetlands south of Union Street and north of Cottonwood Creek.
- Revegetation of disturbed areas with vegetation native to the area
- Enhanced planting along the pedestrian bridge ramp to Union Street Park.

Rationale:

The area between Cottonwood Creek Park and Union Street is not served by existing trails. This trail is identified in the Encinitas General Plan and portions of the trail area are currently zoned as park land. A pedestrian bridge connecting the ends of Union Street would help to connect the neighborhoods, and allow people on the east side of the freeway to access the park facilities on the west side. The open land at the west side of I-5 provides an opportunity to connect Cottonwood Creek Park with the City-owned park parcels located on Union Street west of the freeway. There are opportunities for wetland restoration adjacent to the proposed trail. With the implementation of this project the City of Encinitas would have an improved pedestrian infrastructure, better access to parklands, and improved connections. This project is a perfect example of a "synergy" project that fulfills both City and Caltrans goals.



View looking southwest from Union Street east of I-5.

Concept Sketches:



Figure 82 depicts a cross section of the proposed pedestrian overpass connection over I-5 from Union Street to the proposed neighborhood park on the west side of the freeway. Figure 83 is a plan view of the proposed neighborhood park.





Synergy Project Selection Process

The following sections: 4.1.3, 4.1.4 and 4.1.5 describe the process used to define synergy projects in the City of Encinitas.

4.1.3 Preliminary Design Considerations

The development of synergy projects for the City of Encinitas has been achieved through the integration of the findings of the site analysis phase and the outcomes of the site synthesis phase into preliminary design concept plans. Examples of these preliminary design concept plans can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Preliminary design concepts were presented in meetings with City of Encinitas staff and elected officials to help finalize which synergy projects would be proposed. These comments have been summarized in the Preliminary Design Consideration Matrix.

Preliminary Design Consideration Matrix

Potential Synergy Project Area	Project Location and Existing Conditions	Relation to Caltrans R.O.W.	Land Use and Site Planning Issues	Land Use and Site Planning Recommendations
Manchester Avenue	Area along the northern border of San Elijo Lagoon. Manchester Avenue is the most southern major east-west road in Encinitas and passes under I-5. This area consists of the natural lagoon landscape and adjacent urban conditions.	Within Caltrans R.O.W	Existing trail systems are disconnected due to the freeway bridge over San Elijo Lagoon and the open water of the lagoon. Bicycle and pedestrian amenities are limited along Manchester Avenue.	Improve conditions for pedestrians and bicyclists along Manchester as it passes under the freeway. Complete the trail connections around San Elijo Lagoon, and improve the conditions of these trails.
Villa Cardiff Drive	Area along Villa Cardiff Drive on the east side of I-5 between Birmingham Drive and the MacKinnon Avenue Bridge. This road passes through a quiet residential neighborhood with a wide shoulder adjacent to the freeway. Connection across MacKinnon Bridge to future park at Hall Property.	Within and Adjacent to Caltrans R.O.W	MacKinnon Bridge possibly to be realigned across the freeway (by city). Freeway widening will affect the layout of the existing park and ride at Birmingham Drive.	Update conditions of the park and ride and improve the pedestrian connection along Villa Cardiff. Continue the park at Hall Property across the freeway and bring park amenities and improved landscape conditions to Villa Cardiff Drive.
Santa Fe Drive	Area south of Santa Fe Drive between future park at Hall property to the south and Santa Fe Drive to the north. Between commercial parking lot and I-5 on-ramps on the west side of the freeway. Will connect pedestrians and bicycles between Santa Fe Drive and the future park at Hall Property.	Within Caltrans R.O.W	Commercial parking lot is in close proximity.	Provide pedestrian trail connection from Santa Fe Drive, south to the proposed park at Hall Property.
Requeza Street	Area stretching between Requeza Street to the north and Santa Fe Drive to the south. Land is within Caltrans R.O.W on the east side of the freeway. Currently exists as an undulating open landscape free of buildings or other development.	Within and Adjacent to Caltrans R.O.W Some slight adjustment to the R.O.W. may be required.	Open area between residential and commercial lots to the east. The land is adjacent to the I-5, with the freeway on the east.	Provide pedestrian trail connection adjacent to the freeway from Santa Fe Drive, north to Encinitas Boulevard.
Union Street	Area north of Union Street on the east side of I-5 between the freeway and Ocean View Avenue. Cottonwood Creek trail system and wetland areas to the south.	Within and Adjacent to Caltrans R.O.W Trail easements would be required.	Environmental conditions through Cottonwood Creek should be respected. Community should be consulted in the development of this area.	Provide pedestrian overpass connection east-west across the freeway at Union Street. Construct neighborhood park at the west .
				Table 6

4.1.4 Soliciting Input From Stakeholders

Meetings were held with city staff during the development of synergy projects. These meetings have been invaluable to developing ideas for projects. The meetings are described below.

Feb. 2, 2005 - City of Encinitas staff, Caltrans, Dokken and Estrada Land Planning (at City of Encinitas)

June 22, 2005 - City of Encinitas staff and City Council members, Estrada Land Planning (at City of Encinitas)

July 10, 2006 - City of Encinitas staff, Caltrans and Estrada Land Planning (at City of Encinitas)

March 21, 2006 - City of Encinitas staff, Caltrans and Estrada Land Planning (at City of Encinitas)

Comments offered have been summarized into a stakeholder contribution matrix (see *table 7*). More information regarding the stakeholder meetings can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Preliminary design considerations have been presented to stakeholders and then, based on feedback, have been distilled into viable project concepts prior to being presented at the public meeting. Some of the preliminary concept ideas have not been pursued due to constraints and implementation barriers as discussed in the meetings.

Stakeholder Contribution Matrix

Potential Synergy	Preliminary Concept	Comments From	Ideas to be further
Project Area	Design Recommendations	Stakeholders	developed
Manchester Avenue	Pedestrian trails and connections across I-5, hanging trails under freeway bridges, connections to DAR at Manchester.	Travelers' views of the lagoons should be preserved; views from private properties should also be considered. Manchester has been identified as a significant E-W connection due to its potential for mass transit (proposed DAR). Trails are to be in high priority to the City, as long as they are appropriately placed.	Suspended pedestrian and bicycle trail connections under Manchester Bridge connecting existing trail systems around San Elijo Lagoon.
Villa Cardiff Drive	Reconnect the streetscape and connection to MacKinnon Bridge. Park and ride improvements at Birmingham, possible roundabout.	MacKinnon Bridge carries the SBC conduits and may be replaced to align perpendicular to the freeway. Development near the proposed park on Hall Property will need to provide relief for traffic noise from the freeway. Park and ride improvements are welcome.	Enhanced pedestrian and bicycle path amenities along Villa Cardif Drive; improvements to the existing park and ride.
Santa Fe Drive	Proposed trail connection to the park at Hall Property from Santa Fe Drive.	Plans exist for the city to widen Santa Fe Drive in order to reduce traffic congestion on local streets. This trail should be built within Caltrans R.O.W, and should not affect the shopping center parking lot.	Trail connection betweer southbound I-5 on-ramp and parking lot at shopping center towards Hall Property Park. Trail connection W of I-5 between Santa Fe Drive and Requeza Street.
Requeza Street	Trail connections parallel to the freeway that would allow pedestrians/bicycles to travel between Requeza and Santa Fe Drive.	Favorable response from City Council members.	Trail connection west of I-5 between Requeza Street and Encinitas Blvd.
Union Street	E-W Pedestrian/Bicycle trail connection across the freeway.	Preserving above ground natural corridors and wetlands is a priority for the community. This connection is seen in a favorable light by city council. Connecting communities across the freeway is of particular interest in the City of Encinitas.	Pedestrian overpass connection across I-5 at Union Street; connections and improvements to trails through Cottonwood Creek.



4.1.5 Public Input

Preliminary design options were presented to City of Encinitas staff and City Council members. Comments received from these meetings have been used to update and refine the synergy projects for the I-5 corridor through Encinitas. The revised project plans have been displayed at three community meetings in order to allow the public to discuss the development of design options for their community.

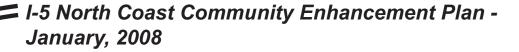
A description of the events of the overall community meeting for the City of Encinitas follows:

- Community meetings were held August 23rd, 24th and 25th, 2005 from 5-8 pm in the city of Encinitas.
- The meeting on the 23rd was held at the Paul Ecke Central Elementary School, and was attended by approximately 45 people.
- The meeting on the 24th was held at the Encinitas City Hall, and was attended by approximately 25 people.
- The final community meeting on the 25th was held at the Cardiff Elementary School Auditorium and was attended by approximately 50 people.
- Members of the community were able to see the enhancement projects, view the proposed footprint of the freeway, ask questions and voice their concerns.
- Comment sheets were provided for the public to submit their comments.
- The community was able to vote on their preferred synergy projects.
- Representatives from Estrada Land Planning were present at the project in order to answer questions and clarify the projects.
- Caltrans staff members were available to answer more specific questions concerning the widening.

More information regarding the community meetings held in the City of Encinitas can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Public Input Matrix

	Major Project Elements	Rationale	Major Community/Agency Comments
#1 Manchester Pedestrian Bridge and Trail	Suspended pedestrian and bicycle trail under freeway bridge connecting Manchester to the Lagoon trail system. Improved east/west trail connection at grade under 1-5 bridge. Trail connections to the existing San Elijo Lagoon trails.	To allow improved mobility for pedestrians and bicyclists along Manchester. To improve access to the trail systems at San Elijo Lagoon. To connect pedestrians more safely and effectively under the 1-5 at the southern edge of Encinitas. To increase the pedestrian connections from the proposed DAR along Manchester.	I like the suspended bridge under the freeway over the lagoon. It's ok. The trail for pedestrians is good. The suspended pedestrian walkway under the 1-5 bridge is a great idea. I like the idea of being able to get from east to west at the lagoon! All trails are extremely important especially around lagoon. This looks like a good solution. As long as it doesn't interfere with the environment and sensitive habitat and criters. There are no bicycles allowed on the lagoon system trails; a curb separated bike lane will also need to be constructed. Bridge will need to be phased in to accommodate our dredging plans for the SEL rejuvenation project. SEL supports this option. I like the bridge and new park and ride. Need bike lane, trail, etc. underneath 1-6 mlanchester, going both ways. 1-5 is barrier to any bikes or peds trying to use Manchester to cross. A lot of demand, but unsafe as is. The bike path under 1-5 is a safety hazard and surely must be redeveloped if bikes and pedestrians are to be accommodated - both westbound and especially eastbound. Escondido Creek must have adequate width under the 1-5 or, provision for runoff under 1-5 via culverts: big ones. This project would be great for access from Manchester to the paths around the lagoon BUT you need to ENHANCE SAFETY of pedestrians UNDER the UNDERPASS on either the south or north side. It is impossible to bike or walk safely under this bridge to go in either direction. There is a HEAVY flow of traffic, a lot of lane changing taking place, and it's dark under the underpass so non-autos are next to invisible.
#2 Villa Cardiff Improvements	Enhanced pedestrian connection across I- 5 between park at Hall Property and Villa Cardiff Drive. Pedestrian and bicycle trail amenities along Villa Cardiff Drive. Enhanced park and ride lot at Birmingham and Villa Cardiff. Possibility of roundabout for traffic calming on either side of I-5.	To improve pedestrian experience along Villa Cardiff Drive. To encourage the impact of the park on Hall Property to be felt on either side of the 1-5 and unite the communities. To improve the safety of the pedestrian connection across the 1-5.	I like this idea for walking and bicycling around the city. Please study car parking, it will be necessary: don't omit it. More parking and improvements to the park and ride are favorable. I like the walkway at MacKinnon over I-S. We need access to the Hall Property from the east for youth. The closure of the MacKinnon bridge will increase the traffic flow on Villa Cardiff Drive. Will Villa Cardiff be able to handle the overflow of traffic? Park or community plaza at park and ride, I like the roundabout. The existing park and ride is used extensively by communers and those willing to use public transportation to travel to both stadiums. Becade on tot kate this away. Keep the park and ride at Birmingham. Forget the park at Birmingham stop as there will already be a park on the WEST SIDE of the freeway. The trees you plant along the east side of freeway, just north of Birmingham, will be a welcome enhancement and should help reduce pollution and some sound (noise abatement).
#3 Hall Property Trail to Santa Fe Drive	Pedestrian trail connection between Santa Fe Drive and the park at Hall Property between southbound freeway ramps and the parking lot at the Vons' plaza.	To provide a direct pedestrian access from Santa Fe Drive to the park at Hall Property. To eliminate pedestrians crossing the parking lot in order to access the park by providing their own access from the street.	I'm in favor of a sloped boundary or berm on the west side where the Hall property abuts. This land is now vacant. Hall property park entrance trail along the freeway is not a good idea. It will encourage parking in the shopping center lot, which is now often very crowded. I do not like this trail. Intrusion by pedestrians into parking lot would lead to dangerous cross-walking from the parking lot to the trail.
#4 Trail Connecting Santa Fe Drive to Requeza Street	Pedestrian trail connection between Santa Fe Drive north to Requeza Street. Also, native planting enhancements will be included along with a graded DG trail.	To provide a more convenient pedestrian and bicycle connection between Requeza Street and Santa Fe Drive. This connection would encourage biking and hiking as viable options in this area, and would strengthen the connection to the proposed park at Hall Property.	This trail seems to make sense and looks good. Projects 4 and 5 only work as one package. Separating them doesn't create the needed link.
# 5 Trail Connecting Requeza Street to Encinitas Boulevard	Pedestrian trail connection between Requeza Street and Encinitas Boulevard. Native planting enhancements surrounding a graded DG trail.	To continue the trail between Santa Fe Drive and Requeza Street and to provide a more convenient pedestrian and bicycle connection between Requeza Street and Encinitas Boulevard.	All walking paths seem like a good, common sense idea. Trail canyon good but is too noisy and polluted, puts pedestrians at risk and is contingent upon getting sound wall/ barriers along the I-5.
# 6 Union Street Pedestrian Overpass and Trail Connection	Pedestrian overpass connection at Union Street. Community park on west side of I 5. Trail connections to Ocean View Avenue and south to Cottonwood Creek. Improved trail conditions and wetland restoration along Cottonwood Creek.	To provide pedestrian amenities across the freeway in order to connect the communities on either side of the I-S. To improve environmental conditions through native planting initiatives and improved trail conditions along Cottonwood Creek.	Union Street Bridge over I-5 very creative idea - what funding will accomplish this? Is it necessary to provide the walk path. The idea of the Union Street crossing is great with the exception of the dangerous traffic conditions on Saxony connecting the wonderful improvements to the YMCA. I like the park, but it needs to have restrooms and water. Table 8



4.1.6 Conclusions and Issues

Six synergy projects have been developed for the City of Encinitas. These projects are pedestrian and bicycle connections that would act to improve pedestrian circulation throughout the city. These trails would improve access across the I-5 east/west as well as provide north/south pedestrian corridors adjacent to the freeway.

More information about the methodology utilized during the synergy project development process can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Synergy Project Major Issues and Costs:

In order for these projects to be realized the following major issues need to be resolved.

Project #1 - Issues Affecting the Manchester Avenue Pedestrian Bridge and Trail:

· Coordination with resource agencies.

This project would have an approximate cost of \$2,200, 000.00

Project #2 - Issues Affecting the Villa Cardiff Drive Improvements:

- Future MacKinnon Street bridge realignment plans by the City of Encinitas need to be verified.
- Street width needs to be verified to allow for trail on west side. R.O.W. may need to be adjusted to allow for trail.

This project would have an approximate cost of \$440,000.00

Project #3 - Issues Affecting the Hall Property Trail Connecting to Santa Fe Drive:

• Sidewalk connection adjacent to the project needs to be verified with Santa Fe Drive alignment.

This project would have an approximate cost of \$350,000.00

Project #4 - Issues Affecting the Trail Connecting Santa Fe Drive to Requeza Street with Wetland Revegetation:

 Further hydologic analysis needs to be done to verify drainage cross section and materials.

This project would have an approximate cost of \$1,500,000.00

Project #5 - Issues Affecting the Trail Connecting Requeza Street to Encinitas Boulevard:

 R.O.W. acquisition may be necessary on adjacent parcels and easements. Project may be difficult to construct without R.O.W. acquisition on adjacent parcels.

This project would have an approximate cost of \$500,000.00

Project #6 - Issues Affecting the Union Street Pedestrian Overpass, Trail Connection and Wetland Revegetation:

- Utility relocation may be necesary and needs to be verified.
- Adjacent private development project will need to provide a trail easement.
- R.O.W. may need to be acquired.
- If adjacent private developers do not allow access, project may not be able to be constructed.

This project would have an approximate cost of \$5,400,000.00

4.1.7 Next Steps

The next steps in the development of the conceptual synergy projects for the City of Encinitas are:

- Obtain formal approval by City of Encinitas. would include obtaining approvals from affected Community Planning Groups, California Coastal Commission, City committees and boards, and approval by the City Council.
- City must obtain R.O.W. easements on 2 parcels on Union Street.
- Cooperative agreement will be required for R.O.W. adjustment.
- Utility relocations will need to be provided in Cottonwood
 Creek
- 5. Execute a maintenance agreement.
- Allocate Funding.
- 7. Develop detailed design plans.
- 8. Construct as part of phased I-5 improvements.

This Page Intentionally Left Blank

5.1 City of Carlsbad

5.1.1 Overview

The City of Carlsbad is a fast growing suburban area combining a quaint, village themed beachside downtown, with modern business enclaves surrounding Palomar Airport, and sprawling residential areas. Carlsbad has many character defining features that can be viewed from Interstate 5, including surf beaches, three natural lagoon systems, coastal bluffs, Legoland amusement park, the world famous La Costa Resort, several golf courses, remainders of agricultural land, and the brilliantly colored flower fields which are rapidly being replaced by planned suburban communities. The City encompasses over 42 square miles of land, with a population of approximately 95,000. Businesses include high tech, multimedia and bio-medical firms, 16 automobile dealerships, a regional shopping center, and a diverse range of light industrial and commercial enterprises. 6.87 miles of I-5 traverse the City, providing the primary vehicular route, and an opportunity for bicycle and pedestrian connection across the community.

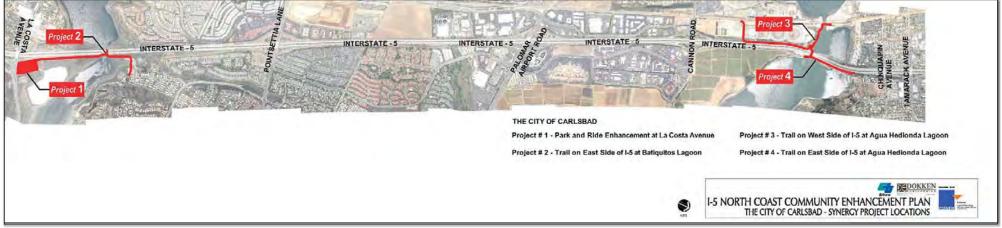
5.1.2 Recommended Synergy Projects for Carlsbad

Once comments and recommendations from the Carlsbad stakeholder groups and the City of Carlsbad had been compiled, five synergy projects were selected for development in the city. These projects are:

- #1 Park and Ride Enhancement/Nature Center at La Costa Avenue
- #2 Trail on East Side of I-5 at Batiquitos Lagoon
- #3 Trail on West Side of I-5 at Agua Hedionda Lagoon
- #4 Trail on East Side of I-5 at Agua Hedionda Lagoon



I-5 at Batiquitos Lagoon. Three lagoon systems lie within the city boundaries; their natural beauty is part of the character of the City of Carlsbad.





Project #1: Park and Ride Enhancement/Nature Center at La Costa Avenue

Project # 1: Park and Ride Enhancement/ Nature Center at La Costa Avenue

Description:

This project features a nature center, lagoon viewing overlooks, interpretive displays and additional parking to be added to the park and ride adjacent to La Costa Avenue on the east side of I-5. The nature center could include gathering spaces, exhibits, a meeting room and an informal dining area. The project is to be developed in cooperation with the Batiquitos Lagoon Foundation. The proposed project would include construction of the following:

 Nature Center with interpretive exhibits, a small amphitheater for nature talks, and a dining deck.

- Two shaded overlooks with benches and interpretive exhibits
- A boardwalk nature trail to allow protected access to the lagoon.
- Concrete trails connecting the nature center with La Costa Avenue.
- A decomposed granite trail connection to the existing Batiquitos lagoon trail. Trail improvements will be constructed on graded slopes within the Caltrans R.O.W.
- Enhanced park and ride facilities with upgraded landscaping and shade trees.
- · Landscaping compatible with the lagoon environment.

and the parking area.

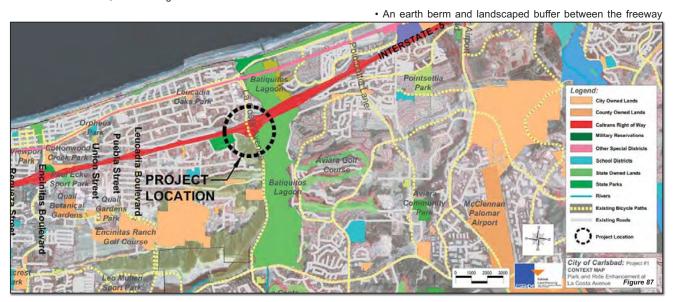
 Lighting for the park and ride, nature center, and trail connectors.

Rationale:

The concept for this project was developed in concert with the Batiquitos Lagoon Foundation, a volunteer organization dedicated to providing stewardship and educating the community about the unique ecosystem of the lagoon. During the development of synergy projects for the I-5 North Coast Corridor Project, a series of meetings with the Foundation led to the development of two projects that would advance the Foundation's goals of constructing a new nature center, trailhead, viewpoints, and improving trails around the lagoon in coordination with the freeway expansion. The nature center would share the parking in the existing park and ride allowing improved trail access and greater availability of environmental information for the public.



View of existing park and ride at La Costa Avenue facing west towards I-5. The proposed enhancements would provide additional pedestrian connections from La Costa around the park and ride and continue north to meet the trail system around Batiquitos Lagoon.



Project #1: Park and Ride Enhancement/Nature Center at La Costa Avenue Context Map



View of existing conditions to the north of the park and ride at La Costa Avenue.



View of existing conditions to the north of the park and ride at La Costa Avenue. This site would be the future location of the nature center for the Batiquitos Lagoon Foundation with the implementation of project #1.

Project Example:

Hartley Nature Center - Duluth, Minnesota

An interesting example of the type of nature center that could be incorporated into Project #1 is the Hartley Nature Center in Duluth, Minnesota. The main focus of the Hartley Nature Center includes: natural history, stewardship and sustainability.

The Hartley Nature Center includes sustainable building features such as:

- A ground source heat pump
- Roof mounted solar panels
- FSC certified wood
- · Clerestory automated windows
- Sensitive siting

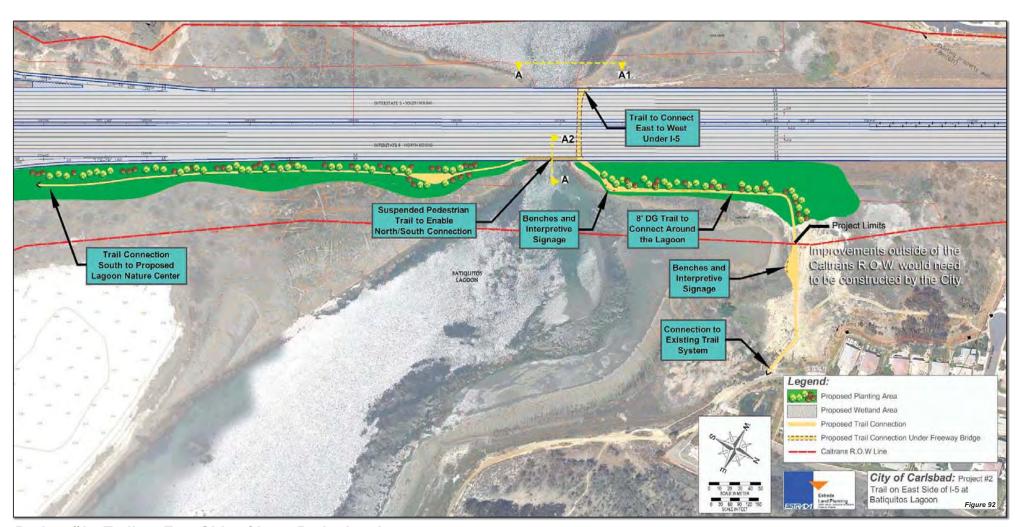
The facility provides many services for the community, including:

- Public education programs, lectures and events
- · Camps for children
- Field trips
- Fund-raising initiatives

This project is further detailed on the Hartley Nature Center web site: www.hartleynature.org



Hartley Nature Center, Duluth Minnesota.



Project #2: Trail on East Side of I-5 at Batiquitos Lagoon

Project # 2: Trail on East Side of I-5 at Batiquitos Lagoon

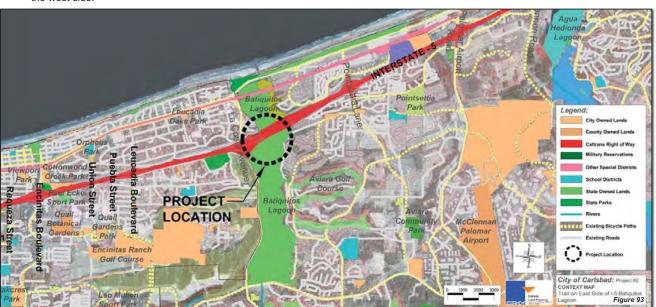
Description:

Located just north of the nature center on Batiquitos Lagoon, this project provides trail connections across Batiquitos Lagoon to the trails on the north side of the lagoon, and to the west side of Interstate 5. The trail improvements would allow hikers to complete the loop trail circuit around the lagoon.

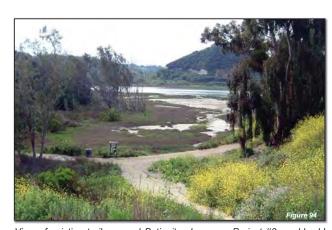
The project would include:

 A suspended trail that crosses under I-5 to the lagoon trails on the west side.

- A suspended trail connecting the north and south side of the lagoon trail system.
- 8' wide DG trail connecting the suspended bridge to the existing trails.
- · Observation areas with benches and interpretive signage.
- · Screen planting between the freeway and the trails.
- Revegetation of disturbed areas with planting compatible with the existing lagoon environment.
- · Restoration of the wetland area south of Piovana Court.



Project #2: Trail on East Side of I-5 at Batiquitos Lagoon Context Map



View of existing trails around Batiquitos Lagoon. Project #3 would add suspended trail connections under the freeway bridge in order to complete the trail circulation around the lagoon.

Rationale:

Currently, the Batiquitos Lagoon trails are bisected by I-5 and the water of the lagoon. The Batiquitos Lagoon Foundation and members of the public suggested pedestrian crossings to allow hikers and visitors to the Lagoon Nature Center to complete the circuit around the lagoon, and provide better public access from the visitor center. The Batiquitos Lagoon Foundation expressed interest in providing maintenance for the trail facilities.

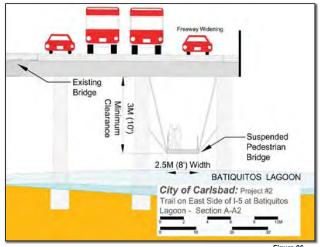
Concept Sketches:

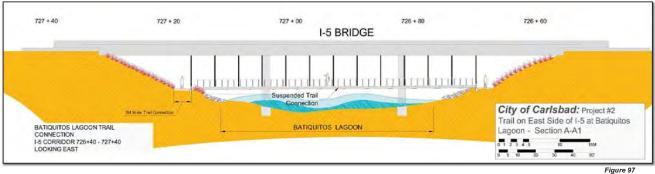
Figure 96 depicts the view of the suspended trail from the north. This trail connection would be suspended from the bridge structure with cables, allowing a continuation of the existing trail circuit around Batiquitos Lagoon.

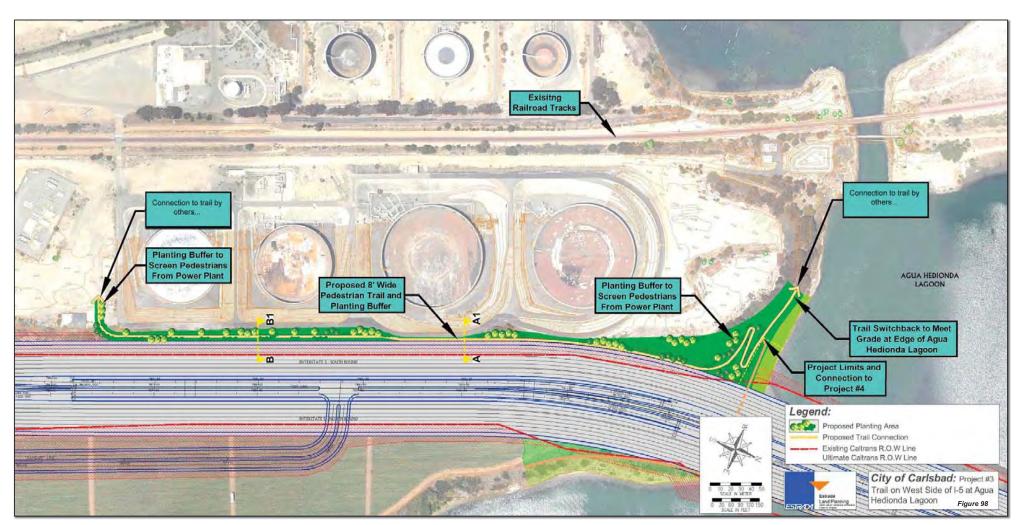
Figure 97 depicts an east facing cross section view of the suspended trail connection under the I-5 bridge spanning Batiquitos Lagoon.



View of Batiquitos Lagoon facing south, on the west side of I-5.







Project #3: Trail on West Side of I-5 at Agua Hedionda Lagoon

Project #3: Trail on West Side of I-5 at Agua Hedionda Lagoon

Description:

Project #3 is located on the west side of I-5 at Agua Hedionda Lagoon and consists of a new pedestrian bridge to be built beside the existing rail bridge spanning the mouth of the lagoon. This bridge would connect the Coastal Rail Trail system currently being developed by the City of Carlsbad. The project would also include a trail crossing from east to west following the southern shore of the lagoon. Switchbacks would ascend to meet the grades of a new trail between the freeway and the power plant. Walls and protective fencing would be required to enhance the safety of pedestrians or cyclists utilizing the trails in areas in close proximity with the rail lines and freeway.

The proposed project includes construction of the following:

- A new section of trail from the railroad tracks south of the power plant running east to I-5.
- A new section of trail along the west side of I-5 in the narrow space between the freeway and the power plant fence.
- A switchback trail section near the lagoon, to meet the grade of the trail at the lagoon and connect to the pedestrian trail constructed as part of project 4.
- Walls and protective fencing along the trail adjacent to the freeway.
- A separate pedestrian bridge parallel to the existing rail bridge at the west side of the lagoon.
- A trail extension to the existing trail on the north side of the railroad bridge.

- A planting buffer to provide screening along the power plant perimeter.
- Revegetation of disturbed areas with planting compatible with the lagoon environment.
- Lighting along the length of the trail, and on the pedestrian bridge.
- · Wayfinding signs to guide trail users.

Rationale:

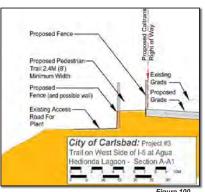
This project addresses the community's requests and the City's plans to extend Carlsbad's Rail Trail system, allowing pedestrians to connect across the freeway and lagoon and creating a loop trail around Agua Hedionda Lagoon.

Concept Sketches:

Figure 100 depicts a cross section of the narrowest point of the proposed trail connection between I-5 and the Power Plants at Agua Hedionda Lagoon. The trail would be protected by walls and security fencing through the area. Figure 101 shows how the trail would fit with room for planting to enhance the pedestrian experience.

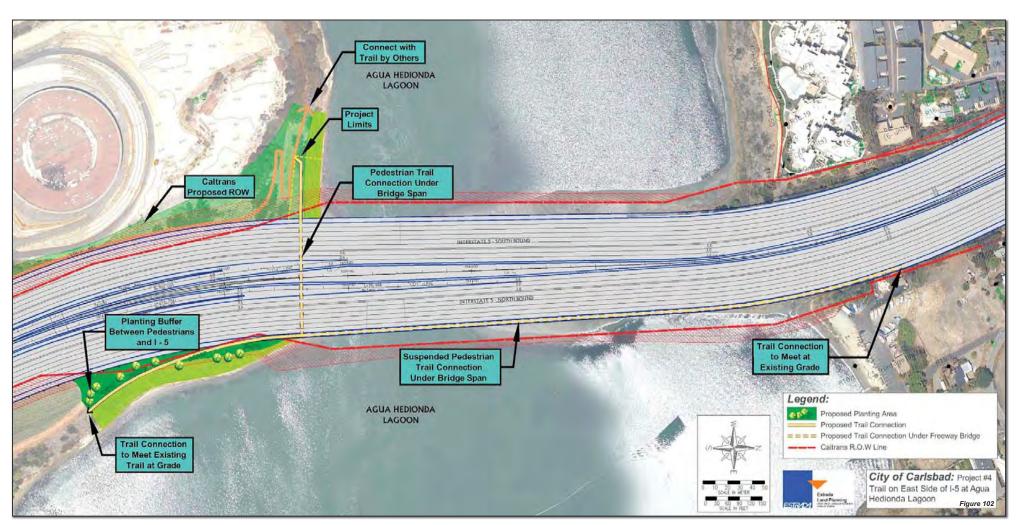


Project #3: Trail on West Side of I-5 at Agua Hedionda Lagoon Context Map



City of Carlsbad: Project #3
Trail on West Side of I-5 at Agua
Hedionda Lagoon - Section B - B1

Figure



Project #4: Trail on East Side of I-5 at Agua Hedionda Lagoon

Carlsbad - 60

Project # 4: Trail on East Side of I-5 at Agua Hedionda Lagoon

Description:

This project proposes to connect the existing trail on the southern shore of Agua Hedionda Lagoon, to the north side of the lagoon by means of a suspended trail located on the east side of I-5. A second suspended trail would cross under the freeway connecting the east side trail to the trail on the west side of the lagoon proposed in project #3

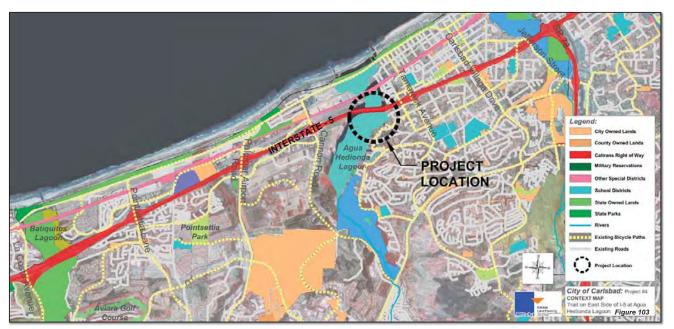
The project includes the following:

- An at-grade trail under I-5.
- A suspended trail structure along the east side of I-5 from the trail on the south side of lagoon to the north side under bridge widening.
- An 8' wide trail on grade to meet the existing trail south of the lagoon.
- · A planting buffer to screen the freeway from the trail.
- Revegetation of all disturbed areas with planting compatible with the lagoon environment.
- · Way finding signs, and trail markers.

· Lighting along the suspended trails, and connecting trails.

Rationale:

Currently, there is no trail connection across Aqua Hedionda Lagoon at I-5, and the existing trails on the east are separated from the trails on the west by I-5. Community members and City staff expressed the need to connect the existing trail systems, allowing pedestrians to safely traverse this area and improving public access to the lagoon.



Project #4: Trail on East Side of I-5 at Agua Hedionda Lagoon Context Map



View over Agua Hedionda Lagoon facing south towards I-5 and the existing power plant.



Synergy Project Selection Process

The following sections: 5.1.3, 5.1.4 and 5.1.5 describe the process used to define synergy projects in the City of Carlsbad.

5.1.3 Preliminary Design Considerations

The development of synergy projects for the City of Carlsbad has been achieved through the integration of the findings of the site analysis phase and the outcomes of the site synthesis phase into preliminary design concept plans. Examples of the design concepts developed for the City of Carlsbad can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Preliminary design concepts have been presented in meetings with City of Carlsbad staff in order to determine the final synergy projects for the City. Comments gathered in the City Staff review meetings and their effects on the development of synergy projects for Carlsbad have been summarized in the Preliminary Design Consideration Matrix.

Preliminary Design Consideration Matrix

Potential Synergy	Project Location and	Relation to	Land Use and Site	Land Use and Site Planning
Project Area	Existing Conditions	Caltrans R.O.W.	Planning Issues	Recommendations
Near La Costa Avenue	Area on the northeast side of I-5 at La Costa Avenue. A park and ride and Least Tern habitat currently are present in this area. A contrast of landscape conditions can be found in this area between the built conditions along La Costa Avenue and the natural landscape of Batiquitos Lagoon.	Within Caltrans R.O.W	Existing park and ride entrance is not lined up with Piraeus Street, resulting in an awkward entrance. The presence of the Least Tern habitat would result in a constraint on the north side of the proposed park and ride. Potential for staging area or other amenities for Batiquitos Lagoon trails.	Make improvements to the park and ride at La Costa Ave., realign entrance to correspond with Pireaus Street. Potential to move Batiquitos Lagoon Foundation interpretive center to this location, as a permanent home for the Batiquitos Lagoon Foundation, and their needs.
Near Batiquitos Lagoon	Area on the east side of I-5 at Batiquitos Lagoon. Natural landscape conditions with an existing trail system are present in the area.	Within and Adjacent to Caltrans R.O.W	Batiquitos Lagoon Foundation has a temporary interpretive center along the north shore of Batiquitos Lagoon. Trail connections are limited to the perimeter of the Lagoon, and currently do not form a complete circuit.	Extend the trail system to form a larger circuit surrounding the lagoon and along the freeway through the development of suspended trails north/south and east/west under the freeway.
Near Agua Hedionda Lagoon	Area on either side of I-5 near Agua Hedionda Lagoon. Currently, flower fields exist on the east side of the freeway although there is a possibility that these fields will be redeveloped in the future. A power plant and associated facilities are located on the west side of the freeway. Currently there is no pedestrian connection north/south across the lagoon at I-5.	Within Caltrans R.O.W	The City of Carlsbad is undergoing a long term plan to implement a rail trail through the city; there may be an opportunity to implement this trail through Caltrans right of way. Security regulations from the power plant restrict the location of a pedestrian trail along the rail tracks on the west side of the freeway in this area.	Extend the trail system to form a larger circuit surrounding the lagoon and along the freeway through the development of suspended trails north/south and east/west under the freeway.
Near Pio Pico Avenue	Area along Pio Pico at Holiday Park in Carlsbad. The area is characterized by residential communities on either side of the freeway, with community parkland and ball fields acting as local interest areas.	Within and Adjacent to Caltrans R.O.W	Widening of the freeway at this point will result in a more narrow road width along Pio Pico.	Enhance the streetscape conditions for pedestrians and for users of the local parks and ball fields through the provision of enhanced street trees, improved concrete sidewalks and enhancements to crosswalk facilities. Potential for changes to be made to Holiday Park to increase parking and provide space for planting buffer on the proposed retaining walls.
Near Carlsbad Village Drive	Area surrounding the existing intersection near Carlsbad Village Drive.	Within and Adjacent to Caltrans R.O.W	This intersection is the main driving route to the Carlsbad Village area. Currently this intersection does not express the image of Carlsbad Village.	This intersection does not express the image of Carlsbad Village.
				Table 9

5.1.4 Soliciting Input From Stakeholders

Meetings were held with interest groups and stakeholders from Carlsbad during synergy project development. The meeting dates and participating stakeholders are described below.

Jan. 21, 2005 -	City of Carlsbad staff, Caltrans, Dokken Eng. and Estrada Land Planning (at City of Carlsbad Faraday Center)
Nov. 22, 2005 -	City of Carlsbad Trails Managers and Park and Recreation Dept, Caltrans and Estrada Land Planning (at Estrada Land Planning)
Dec. 5, 2005 -	City of Carlsbad staff, Caltrans, SDGE, Lennar Corporation, Latitude 33, Wilson Corporation and Estrada Land Planning (at City of Carlsbad Faraday Center)
Dec 16 2005 -	Batiquitos Lagoon Foundation Caltrans and Estrada

Land Planning (at Batiquitos Lagoon Nature Center)

Jan. 31. 2006 -City of Carlsbad staff, Caltrans and Estrada Land Planning (at City of Carlsbad Faraday Center)

March 21, 2005 -City of Carlsbad Council Members, City of Carlsbad staff, Caltrans and Estrada Land Planning (at Carlsbad City

Hall. Council Chambers)

March 29, 2006 -Agua Hedionda Lagoon Foundation, Caltrans and Estrada Land Planning (at the Discovery Center of Agua

Hedionda)

July 6, 2006 -City of Carlsbad Staff, Caltrans and Estrada Land Planning

(at Carlsbad City Hall)

In addition, Caltrans staff made several presentations to resource agencies describing the trail concepts.

Preliminary design considerations were presented to stakeholders and then, based on feedback, have been distilled into viable project concepts prior to being presented at the public meeting. Some of the preliminary concept ideas have not been pursued due to constraints and perceived design barriers as discussed in the stakeholder meetings. Comments offered for the development of synergy projects for the City of Carlsbad have been summarized into a stakeholder contribution matrix (see table 10). More information regarding the stakeholder meetings can be found in the I-5 North Coast Community Enhancement Project Notebook.

Stakeholder Contribution Matrix

Potential Synergy Project Area	Preliminary Concept Design Recommendations	Comments From Stakeholders	Ideas to be further developed
Near La Costa Avenue	Enhancements to the park and ride. Permanent location of Batiquitos Lagoon Foundation Interpretive Center. Realign park and ride entrance with Pireaus Street.	Batiquitos Lagoon Foundation members are very positive about the idea of relocating their Nature Center at the La Costa park and ride. The Foundation members have agreed to take over maintenance of the nature center and parking lot should the project proceed.	La Costa park and ride enhancement Location of nature center for the Batiquitos Lagoon Foundatio Replanting of disturbed areas wi native plants.
Near Batiquitos Lagoon	Provide trail connections to complete the circuitious route around Batiquitos Lagoon. Implement suspended trail connections allowing pedestrian access under the new freeway bridges.	Trail on the west side of I-5 would need stairs, and/or ADA accessible ramps to traverse steep grades between freeway and residences. New trails may cause additional adverse environmental impacts through the lagoon. Trail impacts should be determined and designed in order to minimize these impacts; use of native planting is encouraged. Suspended trail connections under the freeway were received favorably.	North/south and east/west suspende trail connections under freeway bridge Connecting existing trail systen around the perimeter of the lagoon accordance with plans developed by the Batiquitos Lagoon Foundation.
Near Agua Hedionda Lagoon	Provide trail connections within Caltrans right-of-way to provide pedestrian access around Agua Hedionda Lagoon and link to the proposed rail trail connections recommended by the City, implement suspended trail connections allowing pedestrian access under the new freeway bridges.	Trail through Agua Hedionda Lagoon needs to be coordinated with the city. Trail connection to be class 1 trail with a wall. Sewer bridge at Agua Hedionda to be the connection for pedestrians crossing the lagoon. Part of the larger California-Mexico Coastal Trail. Would be safer for biking commuters to use a separate trail adjacent to the freeway rather than using Palomar Airport Road. Agua Hedionda Lagoon Foundation members believe that funding of rail trail connections and associated habitat mitgation along the power plant would be redundant if funded by opportunities and constraints monies. The City and Power Plant Authorities have their own funding for such projects.	North/south and east/west suspend trail connections under freeway bridg connecting proposed trails to existing trail systems and/or sidews connections to the north and south the bridge span. Work with City Carlsbad and Power Plant Authorities determine feasibility of the Rail Tr. connection between freeway and pow plant.
Near Pio Pico Avenue	Provide enhanced pedestrian connections between park facilities on either side of 1-5. Provide streetscape enhancements and planting buffers along Pio Pico.	City requested alternatives showing four design options at Holiday Park to allow them to decide on the options for mitigating for potential retaining walls along the park edge. Positive response to streetscape improvements along Chestnut in order to make a better pedestrian connection between Chase Field and Holiday Park.	Produce concept plans showir alternative design ideas to mitiga potential Pio Pico impacts near Holida Park. Enhance pedestrian experienc and amenities along Chestnut Avenu between Holiday Park and Chase ar Brierly Fields.
Near Carlsbad Village Drive	Enhance freeway intersection to depict a similar landscape expression as that of Carlsbad Village to the west. Enforce the intersection as a gateway to the Village, introduce a roundabout at the intersection and enhance the aesthetics of the connection.	City interested in the possibility of a roundabout at Carlsbad Village Drive. Traffic counts would be needed to determine feasibility of a roundabout here.	Determine feasibility of roundabout Carlsbad Village Drive

Several options were considered for Holiday Park adjacent to Pio Pico Ave. However, FHWA Section 4 (F) directs that the Federal Government should avoid impacts to public park lands. It was decided to eliminate any projects that would impact Holiday Park.

5.1.5 Public Input

Preliminary design options have been presented to City of Carlsbad Staff and Council Members. Comments received from these meetings have been used to update and refine the synergy projects for the I-5 corridor through Carlsbad. The revised project plans have been displayed at two community meetings in order to allow the public to discuss the development of design options for their community.

Description of the events of the overall community meetings for the City of Carlsbad:

- Community meetings were held May 2nd, 2006 from 1-3 PM and 5-8 PM in the city of Carlsbad. The meetings were held at the City of Carlsbad Faraday Center, and were attended by approximately 40 people.
- Members of the community were able to see the enhancement projects, view the proposed footprint of the freeway, ask questions and voice their concerns.
- Comment sheets were provided for the public to submit their comments.
- The community was able to vote on their preferred synergy projects.
- Representatives from Estrada Land Planning were present at the project stations to answer questions and clarify the projects.
- Caltrans staff members were available to answer more specific questions concerning the widening.

More information regarding the Community meetings held in the City of Carlsbad can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Public Input Matrix

	Major Project Elements	Rationale	Major Community/Agency Comments
# 1 Gateway for City of Carlsbad at La Costa Avenue	Entry Feature and/or sculptural element at La Costa Avenue	Provide visual marker and an appropriate sculptural element to denote the entrance to the City of Carlsbad; provide orientation marker and enhance sense of place for travelers on the freeway.	None noted:
# 2 Park and Ride Enhancements at La Costa Avenue	Enhanced park and ride lot for commuters in the City of Carlsbad; realign park and ride entrance to correspond with Piraeus Street intersection; relocate Batiquitos Lagoon Foundation Interpretive Center within Caltrans right-of-way. Use native planting to replant any disturbed surfaces.	Provide enhancements and additional facilities to facilitate commuter needs in the City of Carlsbad, to increase ease of accessibility to the park and ride facility, to encourage alternative uses of the parking lot on weekends and at night, to provide an opportunity for the Batiquitos Lagoon Foundation to acquire a permanent Interpretive Center location, to increase access to the lagoon trails from La Costa Avenue.	None noted.
#3 A Trail on East Side of I-5 at Batiquitos Lagoon	Connect existing lagoon trail north-south adjacent to I-5; provide suspended pedestrian trail facilities north-south and east-west under the freeway structure at the lagoon.	Help to achieve a complete circuitous trail connection around the lagoon in accordance with the Batiquitos Lagoon Foundation trail plans.	None noted.
# 3 B Trail on West Side of I-5 at Batiquitos Lagoon	Connect existing lagoon trails to the west side of I-5; provide stairs or switchbacks for ADA accessibility.	Help connect Batiquitos Lagoon trail system west towards the rail trail and allow for connections to the beach.	None noted.
# 4 A Trail on East Side of I-5 at Agua Hedionda Lagoon	Provide pedestrian and bicycle suspended trail connection and associated at grade trail connections north-south under freeway bridge between Cannon Road and Tamarack Avenue.	Improve pedestrian circulation opportunities through Carlsbad and provide a better connection between the neighborhoods on either side of the lagoon.	None noted.
#4B Trail on West Side of I-5 at Agua Hedionda Lagoon	Provide pedestrian trail connection along southwest edge of Agua Hedionda lagoon and connecting between the power plant adjacent to the freeway pedestrian and bicycle suspended trail connection and associated at grade trail connections east-west under freeway bridge.	Help to connect the rail trail through the City of Carlsbad in conjunction with the proposed freeway improvements.	None noted.
#5 Streetscape Enhancements on Chestnut Ave	Enhance the streetscape conditions through the provision of street trees, attractive buffer planting and decorative paving along Chestnut Avenue between Chase and Brierly Fields on the west under the freeway bridge	To enhance the pedestrian experience and to promote a safe sidewalk route between Holiday Park and Chase and Brierly Fields.	None noted.
	and to Holiday Park on the east.		Table 11

	Major Project Elements	Rationale	Major Community/Agency Comments
# 6 Pio Pico Streetscapte Enhancements at Holiday Park (6 alternatives shown at public meeting)	Streetscape concepts along Pio Pio including possible street resignment roundsbouts at intersection and planting buffer along freeway.	These concepts have been developed in order to mitigate the proposed retaining wall that would occur after freeway widening.	Eurela Pitace cannot be made a main street of any kind because of the children's facilities in the park. Head Start Program, Playgrand, Boy ScoulGirl Scouls and Knager House Preschool- with the increased traffic a child could get likeld. Add Indicatoges port palony self to break up mass-head with self-keep Pic Pico as 2 way traffic - lose parking on Pic Pico. Reep Eurela Place the way it is. Add green buffer between Pic Pico and sound wall (freeway). No roundabout all not head to the park of t
#7 Gateway at Carlsbad Village Drive	Roundabout and streetscape enhancements, creation of a gateway for Carlshad Village, improved visibility of character of Carlshad Village from the freeway.	Provide a point of reference for travelers on the freeway, to enhance the character of Carlsbad Village Drive all the way to the freeway.	Make Las Flores another gateway project - it is the northern gateway to Carlsbad.
#8 Streetscape Enhancements on Las Flores	Provide pedestrian amenities on the freeway bridge, provide a safer experience for bicyclists passing over the bridge on Las Flores.	There are limited amenities for access across the freeway at the northermostpart of Carlsbad, with the implementation of these enhancements there would be safer, more accessible connections across the freeway.	
			Table 11 - Continued

5.1.6 Conclusions and Issues

The first four Carlsbad synergy projects extend and connect existing trails to provide better continuity of the City trail network, and improved access to the natural areas of the lagoons. Together these projects strengthen the trail system, improving opportunities for recreation and alternative, self-propelled transportation.

Synergy Project Major Issues and Costs:

In order for these projects to be realized the following major issues need to be resolved.

Project #1 - Issues Affecting the Park and Ride Enhancement/ Nature Center at La Costa Avenue

- Funding for the proposed Nature Center needs to be acquired.
- Planting must be non-invasive, and compatible with the lagoon ecosystems.
- Design and construction must protect the sensitive environmental area.
- · Safety lighting must consider impacts on lagoon ecosystem.

This project would have an approximate cost of \$1,950,000.00

Project #2 - Issues Affecting the Trail on East Side of I-5 at Batiquitos Lagoon

- Design and construction must protect the sensitive environmental area.
- Design must be coordinated with the Batiquitos Lagoon Foundation.
- Lighting must consider impacts on lagoon ecosystem.

This project would have an approximate cost of \$4,200,000.00

Project #3 - Issues Affecting the Trail on West Side of I-5 at Agua Hedionda Lagoon

- Lighting for the trail must be compatible with lagoon ecosystem.
- Permission is required for installing trails and planting on power plant property outside the right of way.
- R.O.W. acquisition and relinquishments will be critical to develop this project.

This project would have an approximate cost of \$2,000,000.00

Project #4 - Issues Affecting the Trail on East Side of I-5 at Agua Hedionda Lagoon

- Trail users close to the driving lanes need to be protected by traffic barriers.
- Tidal, flood-water levels and storm debris need to be considered in establishing the elevation for the suspended trails.

This project would have an approximate cost of \$1,300,000.00

5.1.7 Next Steps

The next steps in the development of the conceptual synergy projects for the City of Carlsbad are:

- Obtain formal approval by City of Carlsbad. This would include obtaining approvals from affected Community Planning Groups, California Coastal Commission, City committees and boards, and approval by the City Council.
- 2. City obtains R.O.W. from SDG&E facility.

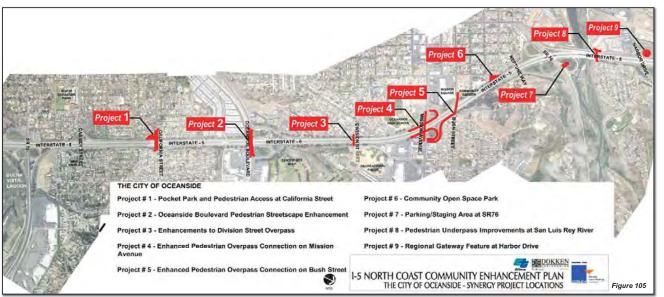
- 3. Cooperative agreement to relinquish Caltrans R.O.W. to City.
- 4. Execute maintenance agreements.
- 5. Allocate funding.
- 6. Develop detailed design plans.
- 7. Construct as part of phased I-5 improvements.

6.1 City of Oceanside

6.1.1 Overview

Oceanside is the northern coastal gateway to metropolitan San Diego and the site of the second California Mission along the historic El Camino Real. The city, established in 1888, encompasses approximately 42 square miles and is home to over 173,000 residents. The Oceanside yacht harbor, surf-fishing pier, splendid sandy beaches and Buena Vista Lagoon create a special seaside identity. Oceanside is a service center for Camp Pendleton and features shopping centers, commercial and light industrial areas, and many residential communities. I-5 traverses the coastal edge of the City for 3.85 miles crossing the San Luis Rey River, Buena Vista Lagoon, and State Route 78, which provides access to the interior.

Establishing better connections between the east and west side of the freeway is critical to the sense of community. East to west travel is frequent, thus it is important to improve the ability to cross the freeway. The northern boundary of the city along the I-5 corridor not only serves as the gateway to Oceanside, but also the gateway to San Diego County. There are many opportunities for trails and recreational facilities in the City of Oceanside.

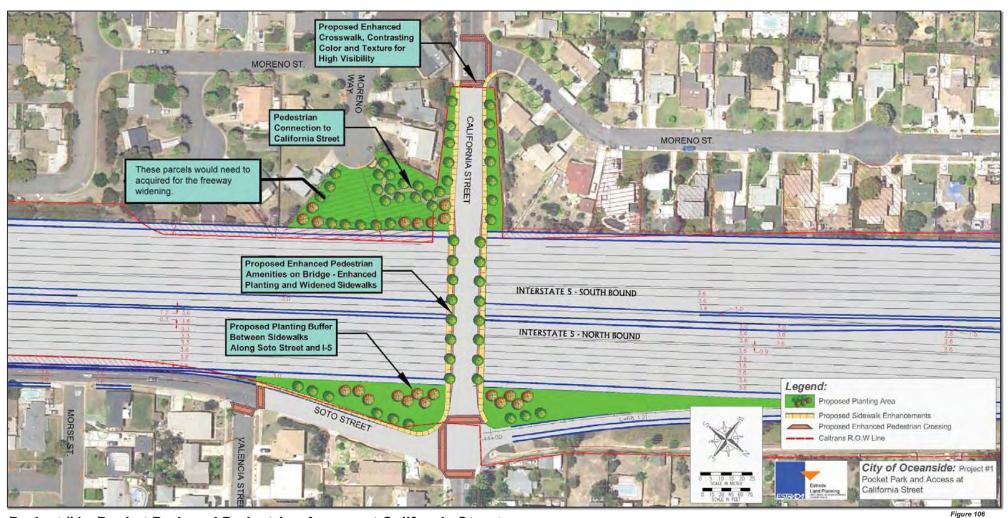


6.1.2 Recommended Synergy Projects for Oceanside

Nine synergy projects were selected as the most likely candidates for development in the city.

These projects are:

- #1 Pocket Park and Pedestrian Access at California Street
- # 2 Oceanside Boulevard Pedestrian Streetscape Enhancement
- #3 Enhancements to Division Street Overpass
- # 4 Enhanced Pedestrian Overpass Connection on Mission Avenue
- # 5 Enhanced Pedestrian Overpass Connection on Bush Street
- # 6 Community Open Space Park
- #7 Parking/Staging Area at SR76
- #8 Pedestrian Underpass Improvements at San Luis Rey River
- # 9 Regional Gateway Feature at Harbor Drive



Project #1: Pocket Park and Pedestrian Access at California Street

Project #1: Pocket Park and Pedestrian Access at California Street

Description:

Project #1 proposes the enhancement of the existing California Street Bridge to create a comfortable and convenient connection across I-5. The proposed landscape, pocket park, lighting and paving enhancements would implement "safe walk to school" principles and give residents from the Moreno Street neighborhood a much shorter pedestrian route eastward along California Street. A pocket park and other landscaped areas would be reclaimed from land vacated to make room for the I-5 widening.

The proposed project includes construction of the following:

- Widened and enhanced sidewalk paving across the California Street Bridge.
- Theme tree container planting across the bridge.
- A pocket park between Moreno Way and I-5.
- A walkway connecting Moreno Way with California Street.
- Enhanced theme planting to establish a visual link across the freeway.
- Pedestrian scale lighting across the bridge and through the pocket park.
- Enhanced paving street crossings on Soto Street intersections with California and Valencia Streets.

Rationale:

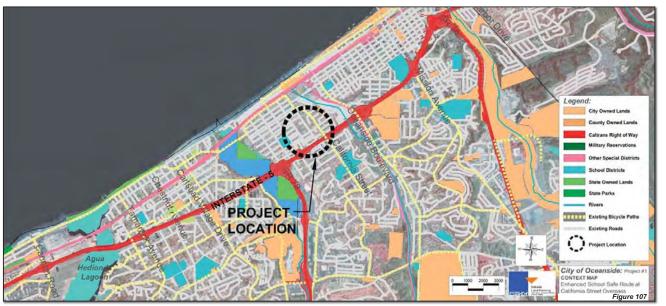
The existing California Street overpass bridges I-5 and links the residential communities on either side of the freeway. The bridge does not currently provide a pedestrian connection. An elementary and middle school are located on the east side of the interstate, with an elementary school and a church on the west side. Children walking to school and other residents create high pedestrian use on California Street. A more direct route is needed from the Moreno Street neighborhood to the overpass, and across to the east side. Since two parcels are being taken as a result of the widening, an opportunity exists to provide a small pocket park and pedestrian access directly to California Street.

Example Image and Concept Sketch:

Figure 108 is a example of pocket park.



Figure 10



Project #1: Pocket Park and Access at California Street Context Map



Figure 109

Figure 109 represents the proposed connector path and pocket park that would allow for a more direct route to school for the neighborhood children. The park would also serve as a community recreation area and gathering place for community events.

Project Example:

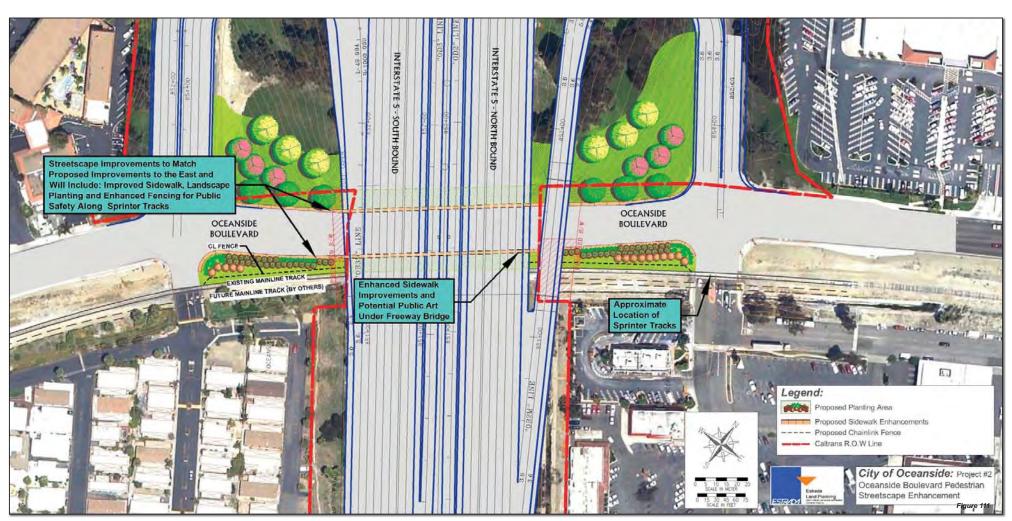
Chapel Hill, North Carolina - Mary Scroggs Elementary School

As part of a new subdivision in Chapel Hill, North Carolina, a path was built to connect Mary Scroggs Elementary School to a cul-desac of an adjacent residential street. Due to the direct route to school provided by the new path, sixty percent of students at Mary Scroggs Elementary School now walk or bicycle to school.

This project is further detailed on the Safe Route to School website: www.saferouteinfo.org



Connector path to connect the cul-de-sac to Mary Scroggs School, Chapel Hill, North Carolina.



Project #2: Oceanside Boulevard Pedestrian Streetscape Enhancement

Project #2: Oceanside Boulevard Pedestrian Streetscape Enhancement

Description:

New sidewalk and landscape improvements are proposed for Oceanside Boulevard under and adjacent to the I-5 overpass.

The project includes the construction of:

- Improvements to existing sidewalk on the southeast side of Oceanside Boulevard.
- · Improved and enhanced fences along the Sprinter tracks.
- Shrubs to help screen and enhance the Sprinter tracks to match proposed landscaping to the east (by City of Oceanside).



Project #2: Oceanside Boulevard Pedestrian Streetscape Enhancement Context Map Oceanside - 72

- New sidewalk under the I-5 overpass on the southeast side of Oceanside Boulevard.
- · Enhanced slope paving of the overpass.
- · Potential future art concepts by an artist under the bridge.
- · Provide lighting under the overpass.
- Enhanced planting on the northwest side of Oceanside Boulevard.

Rationale:

This project would enhance the character of Oceanside Boulevard by continuing the landscaping proposed to the east, and would also provide some pedestrian protection and separation from the Sprinter routes that currently run along Oceanside Boulevard.

Concept Sketch:

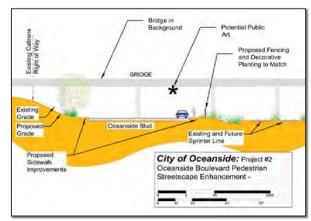


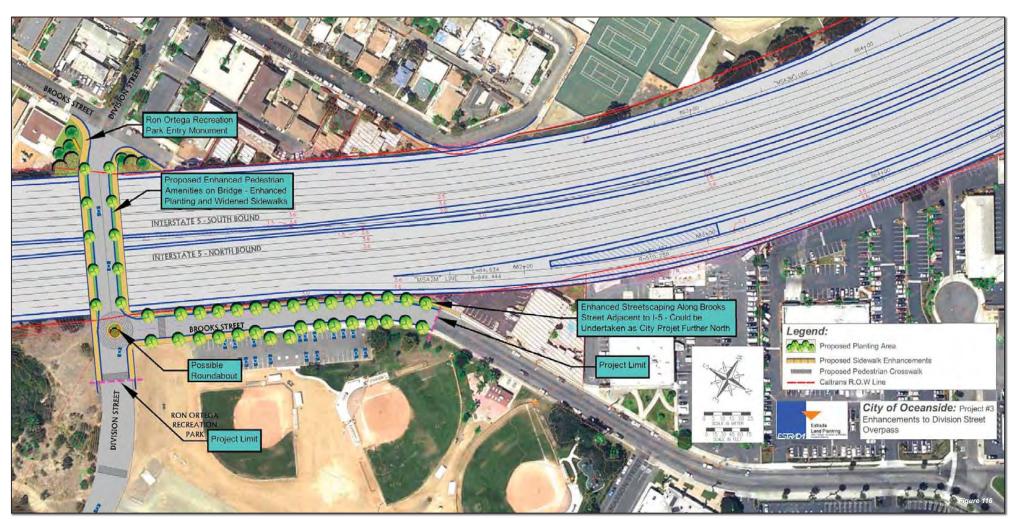
Figure 113



Existing conditions at Oceanside Boulevard facing north toward the existing I-5 access ramps. This image is just west of the I-5 freeway bridge.



View of the Sprinter tracks facing east toward the I-5 freeway bridge.



Project #3: Enhancements to Division Street Overpass

Project #3: Enhancements to Division Street Overpass

Description:

The Division Street pedestrian overpass would be widened and enhanced with special paving, container planting and street trees. A roundabout could be implemented as a traffic-calming device on the east side of the overpass and would also highlight the entrance to Ron Ortega Recreation Park. Streetscape improvements would be extended north along Brooks Street, where new sidewalks and street trees would enhance the image of the street-side businesses, as well as provide mitigation for the narrowing of the southern portion of Brooks Street to allow freeway widening.

The project includes the construction of:

- · Widening of the Division Street bridge.
- · Container tree and shrub planting on the bridge.
- Enhanced pedestrian paving on the bridge and along Division
- Park entry monument on the west side of I-5 at Division Street.
- A landscaped pocket park west of I-5 on Division Street.
- · A new roundabout at the intersection of Division Street and Brooks Street.
- · Street trees and enhanced planting along Brooks Street.
- Enhanced paving bands across Division Street.

• Pedestrian scale lighting along the bridge and the new sidewalk

along Division Street.



View from the existing Division Street overpass facing northeast towards Recreation Park.



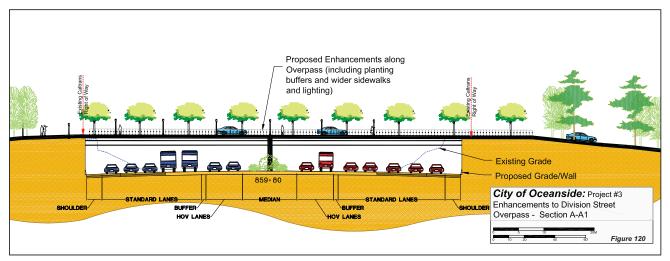
Project #3: Enhancements to Division Street Overpass



View from the existing Division Street overpass facing southwest towards the residential neighborhood along Brooks Street on the west side of I-5.

Rationale:

Located south of Mission Avenue in Oceanside, the existing Division Street overpass provides a freeway crossing near Ron Ortega Recreation Park. While this overpass enables residents of the community south of Oceanside High School and west of I-5 to access the park amenities and shopping centers on the east side of the interstate, the route is narrow and presents a harsh environment to pedestrians. This project would allow a more comfortable and attractive pedestrian crossing and an enhanced gateway to the park.



Concept Sketches:

Figure 120 is a sectional view of the proposed enhancements to the Division Street overpass. This project would strengthen the linkage between the community on the west side of the freeway, with the existing recreational facilities and shopping amenities on the east side of I-5.



Project #4: Enhanced Pedestrian Overpass Connection on Mission Avenue

Project #4: Enhanced Pedestrian Overpass Connection on Mission Avenue

Description:

The south side of Mission Avenue over I-5 currently presents an unsafe pedestrian conection. This is a popular connection for high school students. Wider and more direct pedestrian sidewalk amenities would allow for a safer connection, and would reduce the immediate concerns facing the students of Oceanside High School. The freeway ramp alignment at Mission Avenue would be modified to eliminate the conflict between students crossing the ramps and vehicles accelerating towards the freeway. The new ramp alignment would meet Mission Avenue on the north side rather than connecting

on both the north and south sides of Mission Avenue, as in the current configuration.

The project includes construction of:

- 15.5' wide sidewalks on the south side of the Mission Avenue overpass.
- Trees in planters located on the south side of the overpass.
- Realignment of the on and off ramps to allow signalized pedestrian crossings
- · Pedestrian lighting on the south side of Mission Avenue.
- · Enhanced planting.

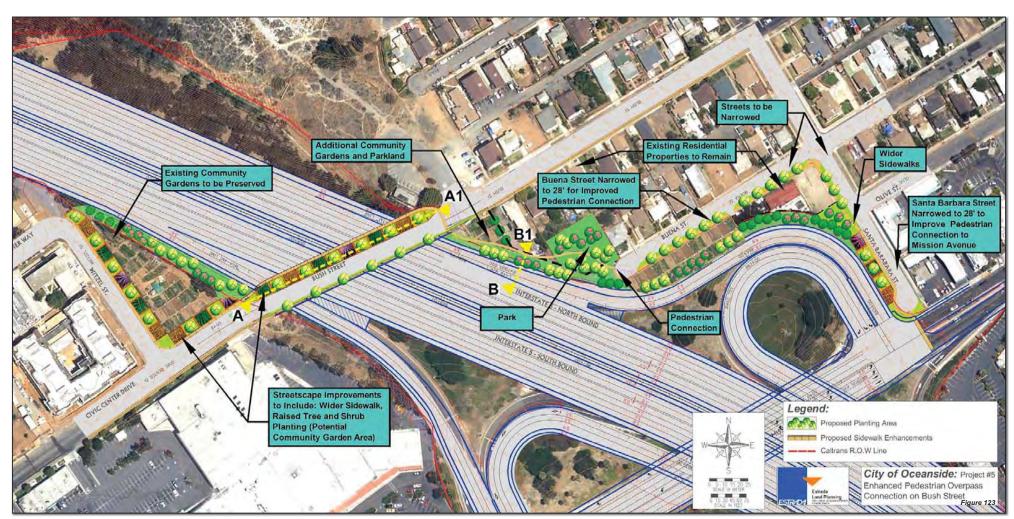
 A potential pedestrian connection on vacated City street south of Mission Avenue to connect with the public park.

Rationale:

With Oceanside High School in close proximity to freeway ramps and the busy overpass on Mission Avenue, safety is of grave concern as students cross the busy ramps on their way to school. Students and community members should be able to traverse the intersection without having to dart across traffic. The proposed ramp realignment associated with this project also allows for increased freeway planting.



Project #4: Enhanced Pedestrian Overpass Connection on Mission Avenue Context Map



Project #5: Enhanced Pedestrian Overpass Connection on Bush Street

Project #5: Enhanced Pedestrian Overpass Connection on Bush Street

Description:

Project #5 is primarily a linkage project, connecting the existing community gardens at Civic Center Drive and Witzel Street across an enhanced overpass and following the freeway alignment as a linear park to Mission Ave.

The project includes construction of:

- Sidewalk and raised planter areas on the south side of the Bush Street bridge.
- Raised community garden plots on the north side of the Bush Street bridge.

- · Enhanced pedestrian lighting across the bridge.
- New sidewalk along Witzel Street and Civic Center Drive/Bush Street.
- Additional garden plots on the east and west side of I-5.
- A planting buffer to separate the community gardens from the freeway.
- A paved trail from the east side of the bridge along the onramp to Buena Street.
- Reduction of the Buena Street width and construction of wider sidewalks.
- Reduction of Santa Barbara Street width and construction of wider sidewalks.

· Street trees and enhanced planted parkways along Buena



Project #5: Enhanced Pedestrian Overpass Connection on Bush Street Context Map

Street and Santa Barbara Street

- Garden plots along Santa Barbara Street adjacent to the northbound on-ramp.
- Screen planting between the northbound on-ramp and the proposed trail and community garden plots.
- Enhanced pedestrian lighting on Civic Center Drive, Witzel Street, Buena Street and Santa Barbara Street and the connector trail.

Rationale:

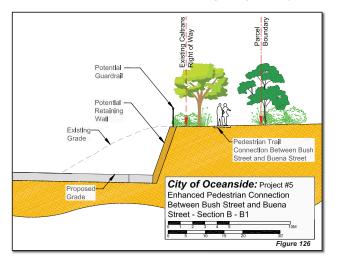
The existing community gardens at the corner of Civic Center Drive and Witzel Street provide a community focus as well as gardening opportunities to apartment and condominium dwellers. Through the hard work and dedication of a group of Oceanside residents, these garden plots are thriving. Project #5 would extend these gardens, across the overpass to the east, providing additional gardening area on both sides of I-5. The provision of an enhanced overpass with a community garden theme, coupled with the enhanced pedestrian connection to Mission Ave. would allow for greater pedestrian access over the freeway and joining the communities separated by I-5.



View of the existing overpass facing east with the existing public gardens to the left of the view. With the implementation of project #5, planting facilities would be expanded along the overpass.

Concept Sketches:

Figure 126 is a cross section showing how the pedestrian connection between Bush Street and Buena Street along the right-of-way would



look. Figure 127 is a section of the proposed overpass enhancements along Bush Street.

Project Example:

Upland, California - Euclid Avenue Overpass

Along Euclid Avenue, in Upland California there exists a seamless landscape across the I-210 freeway bridge. Street trees, pedestrian facilities and a unique curb and gutter have been built into the freeway bridge, in keeping with the historic character of Euclid Avenue.

More information about this overpass can be found on the Roads and Bridges Website:

www.roadsbridges.com/Freeway-To-Go-article3770

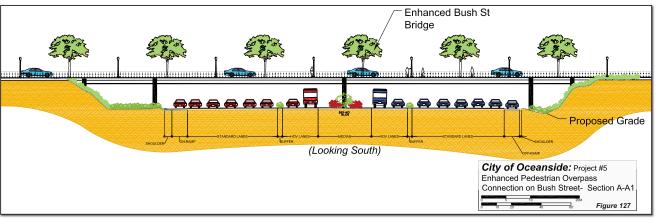
Projects #1, 3, 4 and 5 are similar to the Euclid Avenue Overpass, with street trees and planting being included on the new overpass structures.



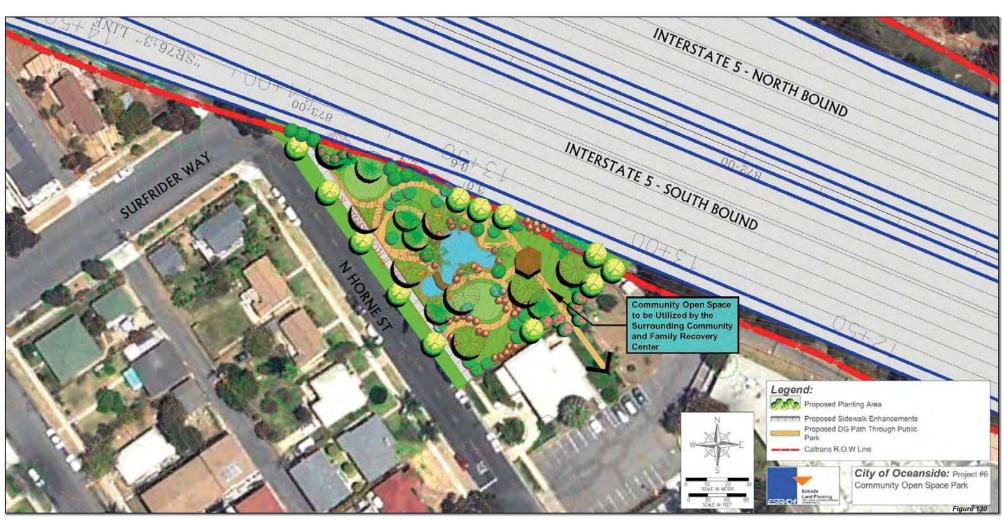
View of the Landscaped Euclid Avenue overpass from I-210 in Upland, California.



Street trees, shrubs, lawn and sidewalks extend over the overpass, creating a seamless corridor along Euclid Avenue.



Oceanside - 80



Project #6: Community Open Space Park

Project #6: Community Open Space Park

Description:

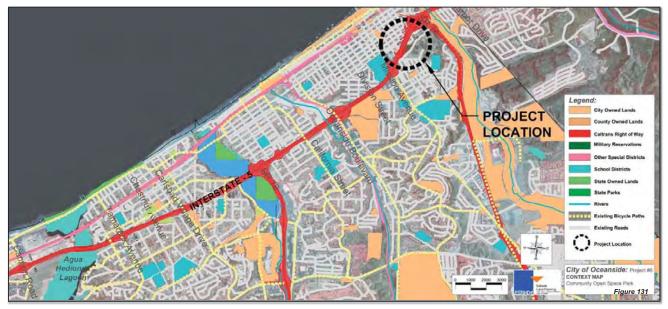
Two parcels would be acquired for the freeway widening and would allow for construction of a joint use City park to be used by the Family Recovery Center and the adjacent community. Features of the proposed park could include undulating paths through lush garden plots, the soothing sound of running water, a shade structure and a selection of native plants. This project would provide the neighborhood with a place of beauty and provide for visual contrast with the surrounding urban development. In addition it could provide the Family Recovery Center with external spaces that could help heal. The specific design of this park would be provided at a later date after community input.

The project could include the construction of:

- A recovery garden with shade structure and meandering paths.
- Detailed planting including color, scents, textures and sounds to appeal to all senses.
- An enhanced noise wall with artwork facing the garden.
- · Site integrated art.
- · Pedestrian scale lighting.

Rationale:

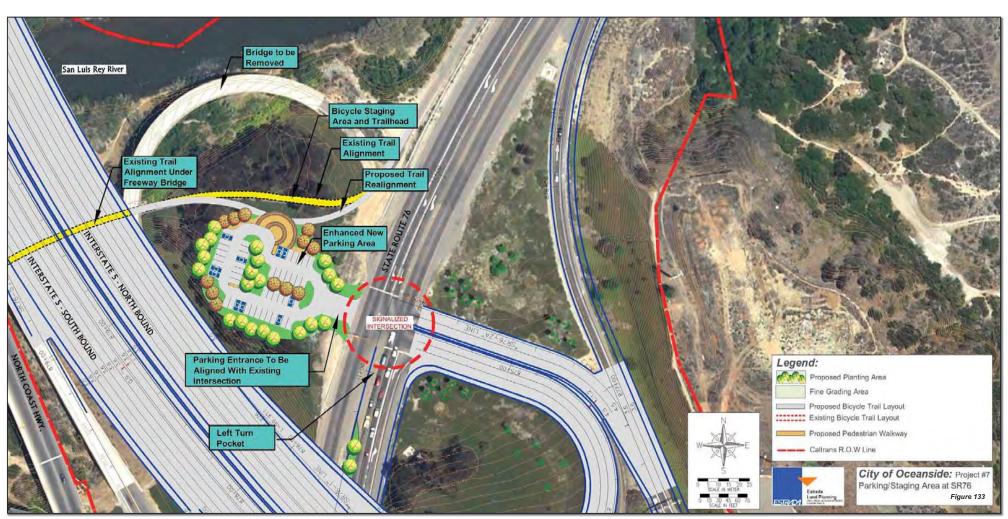
Public parks are important features of healthy urban communities. With the widening of I-5 and its effects on the surrounding community, the provision of additional parkland would benefit the public. Project #6 is a proposed park on the west side of I-5 located at the corner of Surfrider Way and North Horne St. Two parcels would be acquired in this area due to the freeway widening. The residual property would be transformed into a public park. The park would be located next to an existing medical and rehabilitation facility and could act as an area of respite and sanctuary for patients of the facility.



Project #6: Community Open Space Park



Located next to the Family Recovery Center, this community open space park could act as an area of respite and sanctuary for those recovering.



Project #7: Parking/Staging Area at SR76

Project #7: Parking/Staging Area at SR76

Description:

Located east of the intersection of I-5 and State Route 76, project #7 combines a new parking area, trailhead staging area and other support amenities for the existing San Luis Rey bike path. Sensitive design would preserve the existing eucalyptus trees on the site. The incomplete freeway bridge would be removed and the disturbed grade revegetated. Wetland mitigation could be provided in the area where the bridge currently stands.



Project #7: Parking/Staging Area at SR76 Context Map

The project would include the construction of:

- An enhanced parking area with approximately 50 parking spaces.
- · A plaza area with enhanced paving.
- · Lighting for the plaza and parking area.
- Enhanced planting in the park and ride.
- Revegetation of disturbed areas with plants compatible with the natural vegetation.
- · Bicycle staging area and trailhead.
- · Interpretive exhibits.
- · Observation area and lookouts.
- · Drinking fountain.
- · Realignment and widening of the existing trail.
- Construction of a trail under I-5 above the riverbank.
- Security lighting for the trail under the freeway.

Rationale:

The existing bike trail along the San Luis Rey River currently does not provide a defined trailhead or parking area. The community meetings identified this as an important opportunity to serve commuters with a park and ride lot, and provide parking and trailhead facilities for trail users. Since peak use for commuter parking and biking occur at different times of the week, the parking can serve both uses.

Design Examples:

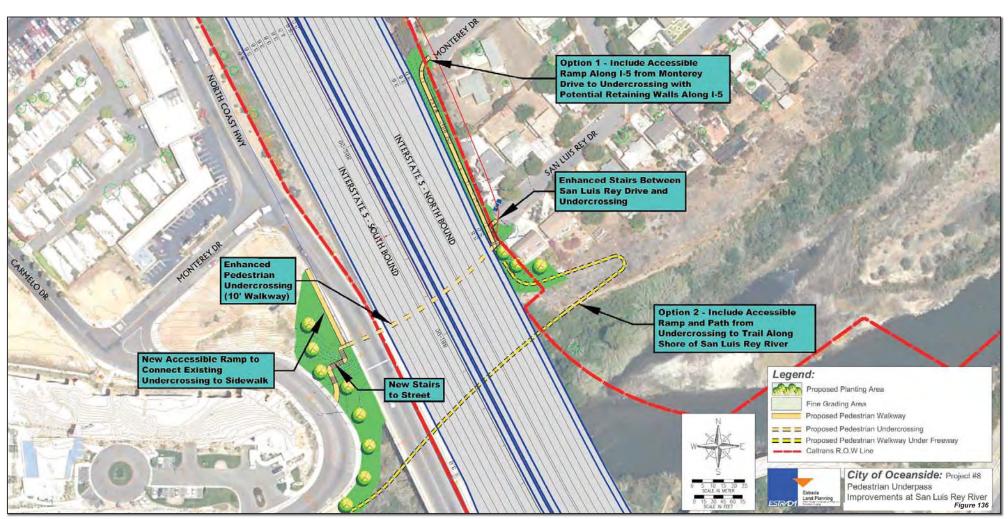
5th/3rd Gateway Park and Ride - City of Beavercreek, Ohio

The Creekside Recreation Trail is a heavily utilized paved bicycle and walking trail that connects Greene and Montgomery Counties in Ohio. Along the route of this trail lie several park and ride and rest facilities. One example is the 5th/3rd Gateway Park and Ride in the City of Beavercreek. This facility provides a restroom, water, soft drinks, a place to picnic and ample parking. This example is similar to the proposed park and ride enhancements along the San Luis Rey River in Oceanside.

This project is further detailed on the Miami Valley Trails website: www.miamivalleytrails.org



The 5th/3rd Gateway Park and Ride in the City of Beavercreek, Ohio.



Project #8: Pedestrian Underpass Improvements at San Luis Rey River

Project #8: Pedestrian Underpass Improvements at San Luis Rey River

Description:

Project #8 proposes to enhance the existing underpass at San Luis Rey Drive to allow an improved pedestrian and bicycle connection from east to west under I-5. Improvements to the existing underpass would include a widened sidewalk, ramp connections to meet ADA requirements, improved lighting and planting and public art features.

The proposed project includes the construction of:

 An enhanced pedestrian undercrossing possibly including art.

- · Security lighting for the pedestrian undercrossing.
- Accessible sidewalks to the undercrossing from the adjacent sidewalks.
- Stairs to provide a shortcut to Riverside Drive.
- Stairs from San Luis Rey Drive to the pedestrian undercrossing.
- Planting to enhance the appearance of the undercrossing entries.

Option A would include the proposed project, with the addition of:

- A sidewalk along I-5 northbound between San Luis Rey Drive and Monterey Drive.
- · Retaining walls to create space for the sidewalk.

Planting and lighting along the proposed sidewalk.

Option B would include the proposed project, with the addition of:

- An accessible trail connection from the undercrossing stairs on the east of I-5 to connect to a trail along San Luis Rey River, under the freeway.
- · Planting and lighting along the proposed accessible trail.

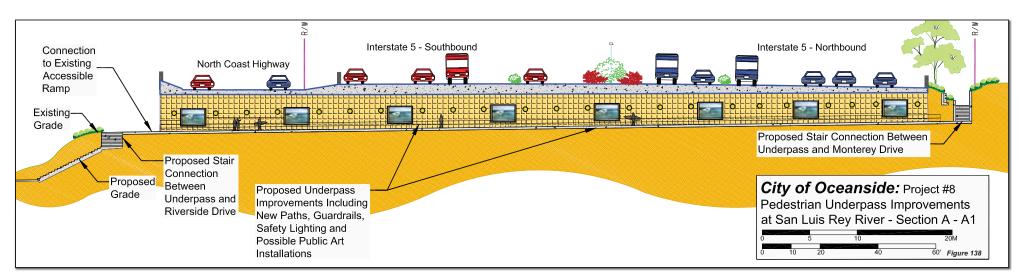
Rationale:

The existing pedestrian underpass at the I-5 bridge on the northern shore of the San Luis Rey River is used regularly by surfers and beach-goers to cross the freeway. Many residents in the area have expressed that they are uncomfortable in this isolated and derelict facility, and therefore do not use the crossing. The enhancements proposed for the underpass connection are intended to provide a more enjoyable and convenient underpass.



Project #8: Pedestrian Underpass Improvements at San Luis Rey River Context Map

Oceanside - 86



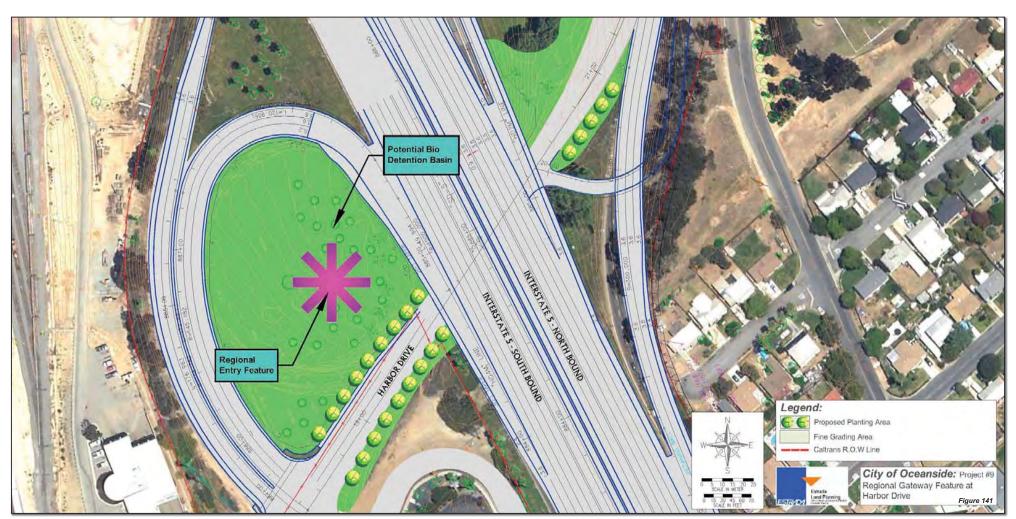
Concept Sketch:



View from the entrance to the underpass on the east side of I-5. The lack of entrances to this neighborhood from I-5 make this connection valuable for pedestrian traffic.



View from existing underpass facing west. The underpass is currently described as 'creepy' and 'unsafe' by local residents. The existing chain link fencing has been 'modified' by an anonymous underpass user, to allow for a more direct route to the Ocean. Stairs and ramp improvements are recommended to make this connection more accessible.



Project #9: Regional Gateway Feature at Harbor Drive

Project #9: Regional Gateway Feature at Harbor Drive

Description:

This project proposes a regional gateway feature. It would include creative paving patterns, evocative landscape elements, and structures to reflect the regional identity and provide an entry for the County as well as Oceanside. Colors, textures and materials could combine to create a striking image in the open area bordered by Harbor Drive and the southbound ramps. The final design would be determined after soliciting input from the community.

The proposed project could include the construction of:

- · A sculptural feature.
- Focal lighting to illuminate the monument.

- · Street trees along Harbor Drive.
- · Seating elements.
- Enhanced planting to provide a distinctive appearance.

Rationale:

Located at the northern edge of the City, Harbor Drive is the first major interchange that drivers encounter when entering the City of Oceanside from Orange County. After passing through the open landscapes of Camp Pendleton, Harbor Drive is the transition point and introduction to the urban environment of San Diego County. A regional gateway at this point would signal the entry to the San Diego region and provide a focal point for regional identification.

Project Example:

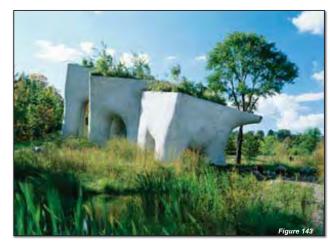
Elevated Wetlands - Don Valley Parkway, Toronto, Ontario

Rising out of the landscape in the City of Toronto, "The Elevated Wetlands" is a functioning sculpture that acts as a visual gateway along the Don Valley Parkway. The sculpture acts to sustain nature in an urban setting, and serves as a distinct monument for passing motorists. Aunique sculptural element, one that would express the San Diego region, is proposed at I-5 and Harbor Drive in Oceanside.

This project is further detailed on the Elevated Wetlands website: www.elevatedwetlands.com



Project #9: Regional Gateway Feature at Harbor Drive Context Map



The Elevated Wetlands near the Don Valley Parkway in Toronto, Ontario provide a unique, extremely recognizable sculptural element along the freeway.



Synergy Project Selection Process

The following sections: 6.1.3, 6.1.4 and 6.1.5 describe the process used to define synergy projects in the City of Oceanside.

6.1.3 Preliminary Design Considerations

The development of synergy projects for the City of Oceanside has been achieved through the integration of the findings of the site analysis phase and the outcomes of the site synthesis phase into preliminary design concept plans. Examples of the design concepts developed for the City of Oceanside can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Preliminary design concepts have been presented in meetings with City of Oceanside staff in order to determine the final synergy projects for the City. Comments gathered in the City Staff review meetings and their effects on the development of synergy projects for Oceanside have been summarized in the Preliminary Design Consideration Matrix.

Preliminary Design Consideration Matrix

Near Oceanside Boulevard Near Division Street Near Mission Avenue	Area at Division Street overpass between Brooks Street at 15. Division Street acts as an important pedestrial concentration over the tracks are to state at 15. Division Street acts as an important pedestrial communities are connected by this overpass.	Within and Adjacent to Caltrans right-of-way Within and Adjacent to Caltrans right-of-way Within Caltrans right-of-way	Community facilities, such as schools and a church are located on either side of the freeway and are connected by the overpass on California Street. It is desirable that the connection be made more accessible for the community. Providing a safe and consistent pedestrian sidewalk connection along Oceanside Boulevard, and keeping pedestrians away from the Sprinter tracks are important goals. The Oceanside Boulevard underpass is currently unpleasant and improvements to the condition of the underpass are also desirable.	Recommendations The connection should be made more pedestrian friendly under the direction of 'safe walk to school' recommendations. Wider sidewalks and the addition of street trees and additional buffer zones on the overpass are desirable features. Also the addition of a park linkage between the cul-de-sac at Moreno Way and the overpass at Californial Street would allow a more direct linkage between the residents and local community facilities. The provision of, or improvements to, sidewalks on either side of Oceanside Boulevard, including planting buffers between the Sprinter tracks and pedestrian amenities. Improvements to the condition of the underpass, with the possibility of public art being introduced to improve the pedestrian experience crossing under the freeway.
Near Division Street Near Mission Avenue	ramps to I-S. Currently the underpass is unsightly and the surrounding landscape along Oceanside Boulevard is uninspired. Sprinter tracks are located along Oceanside Boulevard at this location, with the possibility of double tracking in the future. Area at Division Street overpass between Brooks Street at I-S. Division Street acts as an important pedestrian connection; unfortunately the overpass is currently not		connection along Oceanside Boulevard, and keeping pedestrians away from the Sprinter tracks are important goals. The Oceanside Boulevard underpass is currently unpleasant and improvements to the condition of the	either side of Oceanside Boulevard, including planting buffers between the Sprinter tracks and pedestrian amenities. Improvements to the condition of the underpass, with the possibility of public art being introduced to improve the pedestrian experience
Near Mission Avenue	at I-5. Division Street acts as an important pedestrian connection; unfortunately the overpass is currently not	Within Caltrans right-of-way		
Near Mission Avenue	designed with amenities for pedestrian safety.		Brooks Street has been severed by I-5. The resulting conditions see the residential neighborhood on the west cut off from amentiles on the east. It is important to provide residents with a safe direct route to amenities on the east in order to improve walkability conditions across I-5.	Improvements to the pedestrian experience across the Division Street overpass are desirable. These improvements could include, wider sidewals, planting buffers between pedestrians and traffic, road striping or textured paving on the roads to enforce the pedestrian focus of the overpass.
	Area at Mission Avenue overpass between the on ramps to 1-5. Oceanside High School lies on the west side of the freeway with shopping centers on the east. Considerable pedestrian traffic crosses the on-ramps to access this overpass.	Within Caltrans right-of-way	Many pedestrians and high school students cross the on- ramps and local streets at this busy overpass. With the current ramp configuration, pedestrian safety is not emphasized. Vehicles in transition to and from the freeway travel the ramps and are often in conflict with pedestrians crossing the ramps to continue traveling along Mission Avenue.	By reconfiguring the on-ramps to the north side of Mission Avenue, pedestrians are free to access Mission Avenue without the pressure of traversing the freeway ramps. These changes would make the pedestrian connection at the Mission Avenue overpass a much more safe and walkable experience.
Near Bush Street	Area at Bush Street overpass between the existing community garden on the west side of I-5 following the Caltrans right-of-way line and the edge of the freeway on-ramps to Mission Avenue. The area is characterized by residential development on both sides of I-5 with shopping and other amenities being located at Mission Avenue.	Within and Adjacent to Caltrans right-of-way	There are few amenities for pedestrian safety on the overpass connection at Bush Street. The overpass is an important linkage between the residential communities on either side of the freeway, connecting to the community gardens as well as to shopping and amenities on Mission Avenue. It is desirable to improve the pedestrian experience across this overpass. Public park land is limited in the area as well. Increasing park land and the community gardens is also desirable.	Further north, at Horne Street there is potential for the development of a public park on a plot of land that will remain after the proposed freeway widening.
Neal Sall Luis Ney Nivel	Area near San Luis Rey River at I-5. Two areas of possible synergy project development have been identified, on the south side of the river and at the north side of the river. On the south side at I-5 and SR76 there is a significant amount of open space within Caltrans right-loway where a synergy project could be located. On the north side, pedestrian linkages are limited between the residential community on the east side of I-5 and the rest of the community, including the beach to the west. The existing pedestrian underpass is utilized by the neighborhood, but is seen as unsafe and unpalatable by many locals.	Within Calfrans right-of-way	With the proximity of major transportation routes (ie 1.5 and SR76), the area on the south side of the river would be an ideal location for a park and ride. This area is also on the route of the existing San Luis Rey bloycle path. The park and ride could tie into the path and provide amenities for the trail users. On the north side of the river the underpass connection is in need of provisions for pedestrian safety.	The development of a park and ride on the south side of San Luis Rey Niver and the addition of trail amention to service the existing bicycle path are desirable as enhancements to the local community. Pedestrain safely enhancements to the underpass connection on the north side of the river would help to unlie the community on either side of the free way. Table 12

6.1.4 Soliciting Input From Stakeholders

Meetings were held with interest groups and stakeholders from Oceanside during synergy project development. The meeting dates and participating stakeholders are described below.

March 02, 2005 -	City of Oceanside staff, Caltrans, Dokken Engineering and
	Estrada Land Planning (at Caltrans Juan Street, Design
	Balcony)

Dec. 19, 2006 -	City of Oceanside staff, City Council Members, Caltrans
	and Estrada Land Planning (at Oceanside City Hall)

May. 15, 2006 - City of Oceanside staff, City Council Members, Caltrans and Estrada Land Planning (at Oceanside City Hall)

June 07, 2006 - City of Oceanside staff, Oceanside High School staff, Oceanside Superintendant of Schools, Caltrans and Estrada Land Planning (at Oceanside High School)

July 06, 2006 - City of Oceanside Staff, City Council Members, Caltrans and Estrada Land Planning (at Oceanside City Hall)

Preliminary design considerations were presented to stakeholders and then, based on feedback, have been distilled into viable project concepts prior to being presented at the public meeting. Some of the preliminary concept ideas have not been pursued due to constraints and perceived design barriers as discussed in the Stakeholder meetings. Comments offered for the development of synergy projects for the City of Oceanside have been summarized into a stakeholder contribution matrix (see table 13). More information regarding the stakeholder meetings can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Stakeholder Contribution Matrix

Potential Synergy Project Area	Preliminary Concept Design Recommendations	Comments From Stakeholders	Ideas to be further developed
Near California Street	Streetscape enhancements along California Street voerpass including widened sidenwisks and street trees. Use of acquired land parcels for public parkland and pedestrian connections. Potential for safer pedestrian connection along Soto St.	Calfornia Street connects the middle and elementary school. Because there had been one fatality there, the sidewalk needs to be enhanced; incorporate into the Safe Routes Program that the city is trying to establish.	Enhance pedestrian experience on overpass with wider sidewalks and street tree buffers. Creation of new neighborhood park and pedestrian connection from cul de-sac to California Street.
Near Oceanside Boulevard	Stretscape enhancements along Occanados Blvd. underpass including planting buffer between Sprinter tracks and proposed sidewalk improvements. Trail from Occanados Blvd. behind shopping center to neighborhoods to the west.	City did not like the idea of crossing under the freeway in a tunnel under the existing creek bridge at Loma Alta for security reasons. But there is a need for the pediestrian connection to and from the shopping center.	Stretscape enhancements between freeway en-residence of control of the control of
Near Division Street	Overpass and streetscape enhancements along Division Street including widered sidewalks and street possible of the street of the street of the street Potential for brownfield development in Recreation Park could include passive Recreation: dog walks, skate park, BMX track or playing fields.	Division Street needs lighting. Estrada explained that the current covered landfill site near Recreation Park is under-utilized by the commonly. Estrada continued to explain that there are, in fact, recreational uses that suggested that this piece of land should not be developed as a "hang out", that the local police would be concerned with this happening along with any proposed recreational uses.	New overpass at Division Street to include wider pedestrian sidewalks and street tree planting to provide greater safety measures for pedestrian crossing.
Near Mission Avenue	Overpass and streetscape enhancements along Mission Ave, freeway ramp re-alignment to north side of Mission Ave.	There is a real danger at Mission Avenue at the NB offramp because the students of the high school head loward the diring and field foot binstesses across the 1-5 and cars coming off of the northbound ramp don't see the pedestrians. School officials like the proposed Mission enhancements and are happy that the proposals will not negatively affect their enrovations from the past few years. Concern expressed from the school representatives in regards to any proposals that would open the school with a public path; there should be no outside public access to the school for safely reasons. The school is interested in increasing its open space from a current 32 acres to their desired 50 acres.	Re-configure the Mission Avenue freeway on-ramps to the north side of Mission to separate pedestrian and merging freeway striffe. Provide a wide sidewalk with street trees on the south side of the street.
Near Bush Street	Overpass and linear park development along Bush Street, provision of additional lands for public gardens and a linear park connection to Mission Ave. Potential rail connecting open space for all cast side of Bush Street Prough carryon to connect with existing trails. The provision of the provis	The Community Cardens are very significant to the community, Many users live east of the 1-5 and wish across basin St to access the grader. Councilvonema Macini suggested providing presetescape and lighting on Bush Street from the garden to San Diago Street. Near Bush Street, the proposed trail link to SR 78 brought up questions over who would use the strail and would the a security issue and a slot graniterance issue; need to operate the street of the strain	Bush Street improvements to include; widened pedestrian overpass with improved sidewalks and unique planting features, including street trees. Firther north, the remaining land parcel at Surfice Way. Which is the remaining land parcel at Surfice Way. The street was the street of the second street with the second street
Near San Luis Ray River	Park and rids development on the acush aids of San- Luis Rey River including amentiles and realignment of the existing blockpd path along the river. Improve pedestrian connection across I-5 on the north side of the river, between San Luis Rey Drive and Monterey Drive.	Fraix suggested that there should be a bite and ride at the loop ramp not in use. Pater Weiss suggested that the path under the Interested bridge be made wider if that option is to be selected. Estrade explains the bite and ride project to all attendates. Weiss saked if these could be even more parting added to this project in order to make it an official park and ride (three times the parking that is shown currently.) Jacobo mentioned that adding more parking at the location would be difficult due to the environmental needs of the area. He continued to mention that if the City wants more parking, then it can be added. Jan Desrosiens asked if the money for the park and ride would come from the Ops and Cons funds. Estrads and Jacobo suggested that the funding would come from a combination of sources including the Ops and Cons funds, and oly revenue as Macion brought up the subject of her concerns with the Monterey Access range connections. She mentioned that the ramps of Monterey would set on hading the same more creegy by underpass rather than fixing the current problems here. The connection at the Harbor Blied underpass should accessive more lightling and better security and allow for bikes to use the underpass. Will the connection be ADA accessible?	Improvements to the easilvest trail connections under the freeway bridge on either shore of the river. To the south, near 1-6 and SYR5 a pask and ride is proposed with native planting and amenities for the existing bicycle path along San Luis Rey River. To the north, improvements to the existing underpass between Montreey Driver and San Luis Rey River Drive could include new staff and ramp connections at the access points, more lighting and improvements to the underpass.
Near Harbor Drive	Regional gateway for San Diego County. Possible enhancements to intersection at SR76 and North Coast Highway.	At the Harbor Blvd intersection near tourist info center, Estrada Land Planning suggested enhancing that area since it is within the California ROW, Frank stated that the intersection had been enhanced and to get the plans from the Oceansice Planning Dept.	Regional gateway feature and park are proposed near 5 and Harbor Drive. Improvements to include; urbar street trees, decorative planting and a public art feature to represent the County of San Diego.
			Table 13

6.1.5 Public Input

Preliminary design options have been presented to City of Oceanside Staff and Council Members. Comments received from these meetings have been used to update and refine the synergy projects for the I-5 corridor through Oceanside. The revised project plans have been displayed at two community meetings in order to allow the public to discuss the development of design options for their community.

Description of the events of the overall community meetings for the City of Oceanside:

- The Community Meeting was held June 20th, 2006 from 5-8 PM in the city of Oceanside. The meeting was held at Oceanside High School, and was attended by approximately 80 people.
- Members of the community were able to see the enhancement projects, view the proposed footprint of the freeway, ask questions and voice their concerns.
- Comment sheets were provided for the public to submit their comments.
- The community was able to vote on their preferred synergy projects.
- Representatives from Estrada Land Planning were present at the project stations to answer questions and clarify the projects.
- Caltrans staff members were available to answer more specific questions concerning the widening.

More information regarding the Community meetings held in the City of Oceanside can be found in the I-5 North Coast Community Enhancement Plan Project Notebook.

Public Input Matrix

	Major Project Elements	Rationale	Major Community/Agency Comments
#1 Pocket Park and Access at California Street	Improvements to the podestrian facilities on the California St. overpass under aste walk to school design principles. Development of a pocket park linking the Morena Way cul-de-sac to California St. directly.	There are schools and other community facilities located on either side of I.6 in the neighborhoods segmented by the freeway. By improving pedestrian safety along California Street, the communities would become much safer and more accessible by pedestrian traffic.	
# 2 Oceanside Boulevard Pedestrian Streetscape Enhancement	Streetscape enhancements along Oceanside Blvd. between the freeway on-ramps, including improvements to the freeway underpass. Sidewalk improvements, planting buffer and fencing along Sprinter tracks potential for public art to improve the underpass.	The existing underpass at Oceanside Blvd is unsightly and uninspiring. The streetscape enhancements presented here would help to provide the community with a more pleasant street. Also the streetscape enhancements and planting buffers would provide a measure of separation and increased pedestrian safety measure along the street.	Please landscape the west side of Oceanside Bivd from I-S to Crouch St. The only thing that could hurt this improvement project is the sprinter. But it would definitely improve the safety of padestrians. This area needs much, much more in improvements – Oceanside Bivd USLY AND IS A MAJOR GATEWAY for heavens sake. Put money here! And to the east of this project. Project 9 is way too small an needs to be extended east past I-S
#3 Enhancements to Division Street Overpass	Replacing existing overpass at Division Street with widened enhanced pedestrian amenities.	There are few amenities for pedestrians to cross on the overpass at Division St. As a desirable connection between the residential neighborhood on the west side of the freeway and the park and commercial facilities on the east side of the freeway, improvements to the freeway overpass would allow for widened pedestrian sidewalk connections and tree planting.	
#4 Enhanced Pedestrian Overpass Connection on Mission Avenue	Re-configuring existing overpass at Mission Avenue to have the on-ramps connect on the north side of the street. Widened sidewalks along the south side of the street to increase safety for pedestrians walking along Mission.	The current ramp configuration leaves pedestrians crossing through the acceleration ramps for the freeway. This is not a safe condition. These improvements would allow for a safer pedestrian crossing along the south side of Mission, and would eliminate the need for pedestrians to cross through the on-ramps.	Enough has been spent on Mission – spread the money around.
#5 Enhanced Pedestrian Overpass Connection on Bush Street	Replacing existing overgass at Buth Street with widened enhanced prodestrial mentilise. Extending a linear park from the existing community gardens over the freeway following the ramp edge to Mission Avenue.	This proposed project has been proposed in order to encourage the development of the community gardens in the neighborhood and to strengthen the pedestrian experience on the overpass and the connection to Mission Ave.	Great idea but again a waste of large amounts of funds – get some money to the Oceanside Blvd gateway! We have nothing!
#6 Community Open Space Park	Community park with winding paths, benches and a variety of planting areas to be built on a parcel of land that would be acquired as part of the freeway widening project.	There would be an empty parcel of land at Surfrider Way and N. Horne St. after the freeway widening, This empty land would be ideal for the provision of neighborhood parkland that would enhance the community.	Many homeowners in the area bounded by Mission, 15, Neptune and Coast Hwy were unable to make it. This is a high-density area apartments. We have no parks or open space in this area. We desperately need a park. Please consider #4, which is the park next to it family recovery center. This park will do much lowards appeasing homeowners who will have to cope with freeway lense that a encroaching on their land with noise, smog etc. Thank you. This should be funded with private funds or outside parkland grants!
#7 Parking/Staging Area at SR76	Provision of a park and ride lot with park amenities that would be in with the existing bicycle path along the south side of San Luis Rey River.	This project would allow for commuters to utilize the parking during work hours, and would provide improved access to the San Luis Rey bicycle path for all otizens of Oceanside.	Will the existing circular off-ramp, now abandoned, be removed or left? Park and ride is waste of \$ - there is plenty of parking at harbor ar at the start of the bike trait. Why not put \$ so that Francine Villas has access to Bike Trail? How about wheelchair accessible bridge for Capistano Park over the river to the beach bike trail? We need a trail form Capistano Park to the Harbor on the north side of the We Don't spend money on park and ride there is one on the other side (south). Adding a park and ride and spending more money on an existir trail is unnecessary. Love bike path from Capistrano to beach please light up well. Possible alternative: have bike trail go to ocean and but through the underpass.
#8 Pedestrian Underpass Improvements at San Luis Rey River	Enhancements to the existing underpass on the north side of San Lius Rey Rever connecting the Capistrano neighborhood with Monterey Driver and the North Coast Highway. This project would include enhanced lighting and conditions under the freeway bridge, as well as and conditions under the freeway bridge, as well as and connections on the east and west sides of the underpass.	As one of the few pedestrian entrances to the Capistrano community in the northeast region of Coeanside, the existing underpreass is an important laintage for the community. The underpose is currently underpreased to the underpose is currently underpreased to the underpose in the proposed selection of the proposed selection of the underpose outliness and the provision of improvements to the underpose conditions as well as the provision of improved stairs and accessible ramps.	Capistrano community needs access to be improved along river underpass. We desperately need a "real" trail along the river because the is no way to take a baby stroller or gear to harbor. Should be if, too, as we have heard of 3 muggings there necenty. Please please, need some kind of bike access we are dealing with hord traffic at San Rapheal and Pendelout. What about an aspiral path to improve to path that is already running along the north side of the river. Would allow whole community more access out into the rest of Occarria. Also would allow policing of the riverbuck, much more safer. Trains. Probastian and handicap improvements to underpass blogde in extension from north side San Luis Rivy River at 16- east to better Riv. Existing Utility trail not maintained – lilegal encampments, dumping one extension from north side San Luis Rivy River at 16- east to feeter Riv. Existing Utility trail not maintained – lilegal encampments, dumping one extension from north side San Luis Rivy River at 16- east of decent Riv. Existing Utility trail not maintained – lilegal encampments, dumping one extension from north side San Luis Rivy River at 16- east of decent River. Existing Utility trail not maintained – lilegal encampments, dumping one extension from north side San Luis Rivy River at 16- east of Cocarria. In the substitute of

	Major Project Elements	Rationale	Major Community/Agency Comments
Pedestrian Underpass Improvements at San Luis Rey River (Continued)	Major Project Elements	Rationale	What about Loretta Street? Completed project should have good lighting and be protected from area below where homeless come from Currently turned does not feet safe. I non early in the morning and cannot cross the street from Harbor Drive to San Rafael because of too green belt and Morteney. Drive and experience of the street from Harbor Drive to San Rafael because of too green belt and Morteney. Drive all the more into one and encourage area for crimes, homeless, mapping set. Project \$2 is very important but needs to be significantly revised. The existing crossway needs to be significantly improved. There is no rationale in opening another access through Morteney. Put all the money into one improved access. Trail on north side of San Luis Rey River connecting with the Oceanside harbor parking but, you could make a nice park and parking place in the Harbor area with access to Capistrano Park. No greenbelt at Morteney — improve turner long. The proposed walking path from San Luis Rey has major concerns. It will serve as the only vable pedestrian access out of the neighborhood and should accommodate bixes and wheelchairs. Enhancing the existing path preserves many problems and only partially mitigates the main problem of handicapped access. We appreciate the improvements as they are shown, but feel it would be far better and cheaper if the path started at Capistrano Park and followed the river. This solution would allow the trail to be level and truly handicapped accessible. A path along the river would also make it useable for bixes — the currently presented solution would not allow for bicycles as the path does not have enough headroom. East also of Harbor Drive pedestrian walkway ramped down on east safe to make trail at river instead of directly under the concrete of the freeway. Pedestrian and harbicap improvements to undepens a bejord the advention from north side of San Luis Rey River at 15 — east to Benett Rd. Esting utility Irall. No green belt on Montevey. Improve existing turnel only. Do not double o
			rape-murder-burglary please make it open and bright if always smalls like urine. Please consider an "overpass" not a lighted tunnel where the homeless can sleep-out of the rain; criminals and gangs can do a lot to someone in a tunnel – I want to be "seen and heard". Thank you. Needs to be well lik. Wide to accommodate bicycles and surf boards. Crime prevention design. Improve tunnel no greenfeld on bike path. More lighting for underpass San Luis Rey.
# 9 Regional Gateway Feature at Harbor Drive	Landscape gateway at Harbor Drive to indicate the entrance to the Region of San Diego. This project could include; public art, streetscape planting, benches, feature lighting and passive recreation space.	As the first intersection with a decidedly urban character in contrast to the more natural feel of Camp Pendleton to the north, Harbor Drive would be an ideal location for an entry feature that would introduce San Diego County.	Regional signage must be concerned with views from the east of 1-5 houses. This project I am curious to why we can't have an overpass, it looks the same except for plants. Lot of raffic in this area. Great idea to improve. I like Harbor Drive ramp enhancements, will make Oosanside inviting to new business/vacationers - \$\$\$ to the community.
			Table 14 - Continued

6.1.6 Conclusions and Issues

A diverse array of projects have been developed for the City of Oceanside. The majority of projects proposed for Oceanside would strengthen pedestrian safety and access across I-5 through improvements to overpasses and underpasses along major east/ west connectors. Other projects would provide additional public park land. Together the projects recommended for the City of Oceanside would act to strengthen pedestrian access across I-5, improving safety as well as providing more opportunities for recreation and improved walkability.

Synergy Project Major Issues and Costs:

In order for these projects to be realized the following major issues need to be resolved:

Project #1 - Issues affecting the Pocket Park and Pedestrian Access at California Street

- The improvements must take into consideration the bridge structural capacity.
- Maintenance agreements for the park and adjacent Caltrans right of way must be determined.

This project would have an approximate cost of \$935,000.00

Project #2 - Oceanside Boulevard Pedestrian Streetscape Enhancement

- Sprinter regulations limit the adjacent planting of trees.
- Maintenance agreements are needed for this property combining City, Sprinter and Caltrans Property.

This project would have an approximate cost of \$1,480,000.00

Project #3 - Enhancements to Division Street Overpass

- · Existing bridge load capacity must be considered.
- Fire access must be provided on narrowed bridge roadway.
- Traffic studies are needed to validate the roundabout.

This project would have an approximate cost of \$1,930,000.00

Project #4 - Enhanced Pedestrian Overpass Connection on Mission Avenue

- Limits of maintenance responsibility must be established for each different land ownership.
- Feasibility of changes to vehicular circulation must be validated by traffic studies.
- The plans for the cul-de-sac south of Mission must be coordinated with the property owner.

This project would have an approximate cost of \$2,000,000.00

Project #5 - Enhanced Pedestrian Overpass Connection on Bush Street

- Existing bridge structural capacity must be considered in design of bridge improvements.
- Limits of Caltrans maintenance responsibility, civic responsibility, and garden responsibility need to be determined.

This project would have an approximate cost of \$2,375,000.00

Project #6 - Community Open Space Park

- · Land parcels need to be assembled by the City.
- Walls should include sound baffling acoustic design to maximize sound reduction for optimal enjoyment of the park.

 Extensive dense planting buffers should be designed for dust and pollution reduction.

This project would have an approximate cost of \$675,000.00

Project #7 - Parking/Staging Area at SR76

- · Lighting must be sensitive to the river habitats.
- Trail under freeway must be designed to accommodate flood waters.

This project would have an approximate cost of \$910,000.00

Project #8 - Pedestrian Underpass Improvements at San Luis Rey River

- Due diligence is required for constructing stairs without providing equal alternative access.
- · Providing a real sense of safety is critical.
- Ease of surveillance is critical to the feeling of safety for the underpass.
- Maintenance agreements for combining city property with Caltrans right-of-way improvements are needed.

This project would have an approximate cost of \$450,000.00

Project #9 - Regional Gateway Feature at Harbor Drive

- The selection of a regional identity symbol needs to be supported by representatives of the entire region.
- The overlapping relationship of the gateway to the City of Oceanside and the relationship to the larger regional image must be resolved.
- Required sight distance from ramp must not be obstructed.
- A cooperative agreement between the City and Caltrans for maintenance would be required.

This project would have an approximate cost of \$690,000.00

6.1.7 Next Steps

The next steps in the development of the conceptual synergy projects for the City of Oceanside are:

- Obtain formal approval by City of Oceanside. This would include obtaining approvals from affected Community Planning Groups, City committees and boards, and approval by the City Council.
- 2. Execute a maintenance agreement.
- Allocate funding.
- 4. Develop detailed design plans.
- 5. Construct as part of phased I-5 improvements.