PART I:
General Project Information

1. **Project Title:** Twin Lakes Beachfront

2. **Total Funding Requested:** $_200,000_____

   Total Project Cost: $_____**5,900,000.00**_____

3. **Implementing Agency:** County of Santa Cruz

4. **Sponsoring Public Agency that has Master Agreement with Caltrans:** *(if different from implementing agency)* (Same)

5. **This is priority number _1_ of __8__ projects submitted.** (*If requesting funds for more than one project)*

6. **Project summary:** *(Briefly describe the project in 1 to 2 sentences)*

   Grant application is for the partial reconstruction of East Cliff Drive from 5th Avenue to the intersection of 7th Avenue. This work is a component of a much larger coastal access project known as the Twin Lakes Beachfront Phase 3 which was modified to delete the portion from 7th Ave to 9th Ave. The former Phase 3 project is described on the now dissolved Redevelopment Agency website http://sccounty01.co.santa-cruz.ca.us/red/currproject_TwinLakesBeachfrontProjects.html. Also, please see the attached print-out of the PowerPoint presentation prepared for the Santa Cruz County Planning Commission in October 2012 (see Exhibit B).

7. **Project Description/Scope:** *(Describe the scope of work for the project, including all capital improvements or program characteristics. Please describe the improvements associated with each mode of transportation as applicable. Attach additional information if needed.)*

   The project shifts the existing roadway north onto existing paved and un-paved conditions and reclaims the existing right-of-way for public purposes (two 12' wide travel lanes, two 5' wide bike-lanes, drought tolerant landscaping, year round UNIVERSAL pedestrian walkways along East Cliff Drive and down to the beach sand, seating walls, and other park like improvements). Neither bike-lanes or sidewalks currently exist in the project area. The component of this project specific to this grant application will assist in the reconstruction of the roadway, including the circular stop sign controlled three way intersection of East Cliff Drive, 5th Avenue and the lower harbor entrance; road reconstruction will raise the elevation of the roadway by removing the existing pavement, preparing the sub-grade, adding additional compacted base rock and placing 3" AC over a 9" AB slurry seal.

8. **Regional Transportation Plan (RTP) Project Number:** *(from draft 2014 RTP Project List, approved by the RTC August 15, 2013)* _____N/A_____

   a. Project costs are identified as ☐ "Constrained" or ☐ "Unconstrained" in the RTP list *(8/2013)*

9. **Project Cost by Mode:** *(List the approximate percentage of total project costs related to different transportation modes in the chart below. Project description (above) must include explanation of what will be done related to each applicable mode. For bicycle, pedestrian and transit components, indicate how much of the cost is associated with a new facility versus replacement of existing facility. For instance if a new sidewalk is added as part of a larger road where no sidewalk previously existed, that cost would be shown as "new". If an existing sidewalk is taken out to widen the road, then a replacement sidewalk built, show cost under "replacement".)*

	% of Total Cost by Mode	New facility cost (not replacement)	Replacement
Road Rehab	100%		
Road –Auto Serving	%		
Bicycle	0%	$	$
Pedestrian	0%	$	$
Transit	0%	$	$
TSM*	0%	$	$
TDM*	0%		
Planning	0%		
TOTAL	100%		

**TSM=Transportation System Management (ex. ITS, signal synchronization); TDM=Transportation Demand Management (ex. rideshare programs)*

10. **Project Location** and Limits or Service Area: East Cliff Drive from 5th Avenue to intersection of 7th Avenue, including the intersections of the lower Harbor entrance, 5th Avenue and East Cliff Drive.

    a. **Project Length:** 900 feet

    b. **Circle the Complete Street Design Type:** *(See Table 2 of the Complete Streets Guidebook online at http://sccrtc.org/projects/multi-modal/monterey-bay-area-complete-streets-guidebook/ for description)*

    c. **Provide information on existing and projected conditions/context for projects on roadways** *(if applicable)*:

	Existing	**With project** *(write "N/C" if no change)*
Functional classification of this road, as defined by FHWA?*	Minor Arterial, Functional Classification 4.	N/C
Right-of-way width	Varies 80' Avg	Negligible Change
Roadway pavement width	Varies 40' Avg	N/C
# of automobile lanes	EB-1, WB-1	N/C
2-Way Center Turn Lane (Yes/No)	No	N/C

Sidewalks (none, one side or both?)	None	Both Sides
Sidewalk width	N/A	4' N side & 6-16' S side
Landscaping (Yes/No)	No	Yes
On-Street Parking (Yes/No)	No- On shoulder	Yes
Shoulder width	Varies 0-5'	0'
Bike lane width	None	5'
Intersections (Signalized/unsignalized)	Unsignalized	N/C
Pavement condition (poor, fair, good)	Good	Good
Posted speed limit	25 mph	N/C
Traffic Volumes	7,672	N/C
Transit Route/Stops (Yes/No)	Yes	N/C
Truck Route (Yes/No)	No	N/C
Are accommodations for seniors, disabled, and youth/students sufficient? (Yes/No)	No	Yes

**Note: STP funds cannot be used on roads functionally classified as "local" or "rural minor collectors" except for bridges not on federal-aid highways and as shown under STP Eligible Activities*

11. **Project Schedule** *(Enter the proposed schedule or actual completion of various project milestones. Complete either section A. Capital Projects or B. Non-Capital Projects, as appropriate):*

A. Capital Projects:

Project Milestone			**Month/Year**
Begin Environmental (PA&ED) Phase			Completed 2012
Circulate Draft Environmental Document	**Document Type** *(ex. EIR)*		N/A
End Environmental Phase (PA&ED Milestone)			2012
Begin Design (PS&E) Phase			11/2013
End Design Phase (complete PS&E)			6/2014
Begin Right of Way Phase			10/2013
End Right of Way Phase (Right of Way Certification Milestone)			6/2014
Request Authorization to Proceed with Construction (completion of all prior tasks)			6/2014
Award Contract			8/2014
End Construction Phase (Construction Contract Acceptance Milestone)			10/2015
End Closeout Phase (Closeout Report)			12/2015

B. Non- Capital Projects:

Activity* *(add additional lines if needed to reflect all tasks)*	**Start Activities (month/year)**	**End Activities (month/year)**
N/A	N/A	N/A

*Please state the activity to be completed (ex. preliminary planning, project implementation, project completion).

12. **Contact** Person/Project Manager Name:_____Sheryl Bailey_____

Telephone Number :____(831) 454-7963__ E-mail:__PRC027@CO.SANTA-CRUZ.CA.US

PART II
Project Benefits

Given the large backlog of transportation needs in the region and the extremely limited amount of funding available, it is important to ensure that funds are used cost effectively to maximize benefits to the transportation system. Additionally state and federal rules, as well as RTC policies, require consideration of how projects will contribute towards implementation of the long-range transportation plan, the achievement of one or more transportation goals, and implementation of state and federal policies including the California Complete Streets Act of 2008, SB375, and MAP-21. Project benefits will be taken into consideration when evaluating projects. ***Projects are not expected to address all of the following. Please write N/A where something is not applicable to your project.***

1. **Generally, what are the benefits of this project?** *(ex. goal/purpose/benefit of project; problem to be addressed; importance to the community)*

This segment of East Cliff Drive serves as the primary route conveying bicycles, pedestrians and vehicular access including cars, RVs, commercial delivery trucks, trailer drawn boats and emergency access to the Twin Lakes and Harbor Beaches, the lower Harbor boat launches, the Harbor businesses, and residences on East Cliff Drive and 5th, 6th and Assembly Avenues. State Parks estimates that over one-half million visitors visit Twin Lakes and Harbor Beaches annually. This project will provide much safer access to all of the users of the planned roadway and roadside improvements and will greatly benefit the community.

2. **How many travelers will be directly served by this project per day? ___(See AADT Below)___**
   a. ADT volumes *(if applicable)*__7,672___ _____
   b. Other *(e.g. avg. number of people directly served/day; number of users of facility/day; TDM-direct participants)* _____N/A_____
   c. For projects with bike, ped, transit, or TDM elements – Number of people expected to shift from automobile to alternative mode _____N/A _____ *(average per day)*
   d. Source(s) used to develop estimates shown above:
   RTC Traffic Counts: http://sccrtc.org/wp-content/uploads/2011/07/2011-06-adt-counts.pdf

3. **Who are the primary travelers served/targeted by project?**

☐ Commuters	☒ Recreational users	☒ Visitors
☐ Youth	☒ K-12 Students	☐ College Students
☐ Low income	☐ Seniors	☒ Disabled
☒ Other-__Bicyclists & Residents__		

   a. Briefly describe indirect beneficiaries of the project, if any:
   N/A

4. **What are the key destinations served by this project and distance** *(in approximate feet)* **from project/facility?**

☒ Employment centers__50___feet	☐ Senior centers _____feet
☐ Senior housing _____feet	☒ K-12 Schools ___50___feet
☒ Groceries/Services ___50___feet	☒ Retail/Commercial center _____feet
☐ Transit centers _____feet	☒ Visitor destination __0____feet

☒ Parks/recreational area ___0___ feet ☒ Civic/public facilities __50___feet
☐ Other_____

a. Are there other planned transportation and/or land use projects that could affect circulation in the project area in the future? *If yes, list projects.*
No

b. Are planned (future) land use projects anticipated to increase travel demand through project area? *(Mark yes or no for each mode)*
Car: ☐ Yes ☒ No **Transit:** ☐ Yes ☒ No **Truck/Goods:** ☐ Yes ☒ No
Bike: ☐ Yes ☒ No **Pedestrian:** ☐ Yes ☒ No

5. What travel condition(s) are improved or impacted as a result of the proposed project design? *Check all that apply.*

☒ Safety: Improves transportation safety
- ☒ There are currently perceived safety/speeding issues in the project area
- ☐ Project will reduce fatal and/or injury collisions
  - ☐ There is a history of collisions in the project area
    - Number of severe injury or fatal incidents in project area in past 10 years___ (Source? e.g. http://tims.berkeley.edu _____)
- ☒ Improves safety for which modes: Auto, Truck, Emergency Access Vehicles, bicycles & pedestrians._____
- ☒ Reduces potential for conflict between cyclists and/or pedestrians and vehicles
- ☒ Safety improved for youth, vulnerable users (pedestrians/bicyclist), and transportation disadvantaged (low income, seniors, disabled, minority status)
- ☒ Provides access to emergency services

☒ System Preservation: Preserves existing transportation infrastructure/facilities or services
- Pavement: Current PCI of road _76__. Projected PCI with project _100.
- Why is this location/facility a priority for preservation, especially over other facilities? This road is part of a larger coastal public access project and it was chosen as a candidate for funding due to its function as a principal access to over one half million visitors annually to Twin Lakes and Harbor Beaches, the lower Harbor businesses and boat launches, and the residents, as well as emergency access vehicles.

☒ Reduces Vehicle Miles Traveled (VMT)
- ☒ Reduces vehicle miles traveled per capita
- ☒ Shifts automobile travel to alternative modes
- ☒ Decreases the number of people traveling in single occupancy vehicles
- ☒ Improves access to alternative modes (walk, bike, bus, carpool, etc)
- ☒ Increases the percentage of people that could walk, bike, or take transit to key destinations within 30-minutes or less
- ☐ Increases ridesharing
- ☐ Increases telework options
- ☐ Expands Transportation Demand Management (TDM) Programs
- ☐ Reduces the need for travel
- ☒ Improves multimodal Level of Service

- ☒ New multiuse path
- ☒ Reduces automobile speeds, describe (e.g. traffic calming, speed limit, etc) _More visual cues including pathways, crosswalks, landscaping and signage

☒ Increases walking

- ☒ There are currently lacking/insufficient pedestrian facilities
- ☒ Improves connectivity, fills gap in sidewalk/pedestrian path network
  - ☒ Reduces distance to walk trip between neighborhood and key destination
- ☒ Adds new sidewalks or paths on: ☐ one or ☒ both sides of the street
- ☐ Widens sidewalk path of travel for current and projected pedestrian volumes
- ☐ Adds missing curb ramps
- ☒ Upgrades facility to meet ADA accessibility requirements, implement ADA Implementation Plan
- ☐ Reduces pedestrian crossing distance
- ☐ Adds pedestrian signal heads
- ☐ Adds pedestrian-actuated traffic signals or automatic pedestrian cycles
- ☐ Adds audible countdown at intersection
- ☐ Adds pedestrian-level lighting
- ☒ Adds high visibility crosswalks
- ☐ Adds illumination at crosswalks
- ☐ Other crosswalk enhancements
- ☐ Adds median safety islands
- ☐ Minimizes driveways
- ☒ Adds wayfinding signage
- ☒ Adds shade trees (Street trees)
- ☒ Adds planter or buffer strips
- ☒ Adds benches or other types of seating

☒ Increases bicycling

- ☒ There are currently lacking/insufficient bicycle facilities
- ☒ Improves connectivity, fills gap in bicycle network
  - ☐ Reduces distance to bike trip between neighborhood and key destination
- ☐ New Class I bicycle path
- ☒ New Class II bicycle path
- ☐ Shared-Lane Marking (Sharrow)
- ☐ New Bicycle boulevard
- ☐ Widens bicycle lanes from ____ feet to _____feet wide
- ☐ Widens outside lanes or improve shoulders
- ☐ Adds bicycle actuation at signals (i.e., loop detectors and stencil or other means to make signals responsive to bicycles)
- ☐ Adds bicycle box at intersection
- ☐ Adds color-treated bicycle lane
- ☐ Adds floating bicycle lane
- ☒ Adds signs, signals and pavement markings specifically related to bicycle operation on roadways or shared-use facilities
- ☒ Adds route/wayfinding signage
- ☐ Adds long-term bicycle parking (e.g., for commuters and residents)

- ☒ Adds short-term bicycle parking

☒ Increases public transit usage
- ☒ There are currently lacking/insufficient transit facilities
- ☐ There are currently lacking/insufficient transit service
- ☐ Improves connectivity of transit, fills gap in transit network
- ☐ Improves transit service ☐reliability, ☐frequency and/or ☐efficiency
  - ☐ ITS/signal priority
  - ☐ Priority bus lane
  - ☐ Bus bulbs/pull outs
  - ☐ Increases transit service, reduces headways
- ☒ Increases access to transit
  - ☒ Adds sidewalks to bus stops
  - ☐ Adds bicycle racks on buses
  - ☒ Improves access for people with disabilities
- ☐ Adds bus stop(s)
- ☐ Improves bus stop/station (adds/upgrades seating, lighting, shade/shelter, trash can, route information/maps, etc)
- ☐ Provides real time bus arrival information
- ☐ Adds Wi-Fi on bus

[x] Reduces air pollution
- ☒ Reduces greenhouse gas emissions (GHG)
- [x] Reduces fuel consumption

The smoother road surface should serve to improve speed consistency and fuel efficiency in motor vehicles, as well as reduce travel time.

[x] Improves travel time reliability of the transportation system. Which modes? Auto and bike

☒ Improves efficiency of the transportation system. Which modes? Auto, bike and pedestrian.
- ☐ Implements Transportation System Management (TSM) programs/projects
- ☐ Increases miles facility/service can carry ☐passengers and/or ☐freight/goods

☐ Reduces total traffic congestion
- ☐ Reduces peak period traffic congestion ___AM peak ____PM peak
- ☐ Shifts peak travel to off-peak periods
- ☒ Reduces freight traffic congestion Trucks are known to leave the roadway at the circle getting stuck in the beach sand and blocking the road under current conditions

[x] Reduces disparities in safety and access for people who are transportation disadvantaged due to age, income, disability or limited English proficiency Project adds ADA parking

[x] Improves the convenience and quality of trips

The smoother road surface should serve to improve speed consistency and fuel efficiency in motor vehicles, as well as reduce travel time. The landscaping, crosswalks, sidewalks and bike lanes should add to a better quality trip

☒ Increases ecological function (such as: ☒ increases tree canopy; ☐ improves habitat; ☒ improves water quality; ☒ reduces storm water runoff; ☐ enhances sensitive areas)

☐ Other improvement(s). Please explain, if not addressed in prior questions:

6. Will project result in the elimination or reduction of an existing bike path or sidewalk? Will

the proposed project sever or remove all or part of an existing pedestrian or bicycle facility or block or hinder pedestrian or bicycle movement? ☐ Yes ☒ No. *If yes, please explain why this condition is unavoidable and if bicycle and pedestrian accommodations are provided on an adjacent/parallel street.*

a. Was the facility being removed, modified, or replaced previously funded through the RTC?
☐ Yes ☐ No N/A

7. Complete Streets Implementation/Design. Given the street design and existing and future conditions, please complete the following *(for projects on roadways). (See the Monterey Bay Area Complete Street Guidebook for more information, definitions.)*

a. Describe how this project is consistent with the guidebook:

The goal of the complete streets guidebook is to plan transportation projects such that the project meets the needs of all users, including non-drivers of all ages and abilities, and helps reduce greenhouse gas emissions by encouraging bicycle, pedestrian and transit usage. Lack of sufficient or perceived safe bicycle and pedestrian facilities are reasons many streets are "incomplete" in the Monterey Bay Area. This project is designed to provide safe access to all the users of the roadway and roadside improvements and incorporates the following best practices or components of a "Complete Street": designed for all users and including their zones (pedestrians, bicyclists, transit, motorists, commercial trucks, boats on trailers, commuters, tourists, active recreational users, and emergency responders), well designed connections to adjoining streets and from adjacent driveways, a green zone (street trees, other landscaping), street furniture zone (parkway amenities), parking zone (23 dedicated parking spaces) appropriate way finding and instructional signage, and the project was designed with safety in mind with the following improvements, the posted speed limit is safe for all of the users, crosswalks, deeper parking stalls to allow for safer vehicle access for beach loading and un-loading, a designated beach drop-off spot, an improved three way intersection at the west end of East Cliff Drive, two 12' wide travel lanes, dedicated and shared bike lanes, year round universal/ADA coastal and street side access via walkways and ramps, and multi-modal 4-16' wide pathway.

b. Is the project area a candidate for the following?
- Road Diet (3 or more lanes, but ADT <20,000, bicycle collisions) ☐ Yes ☒ No
- Traffic Calming: ☒ Yes ☐ No
- Roundabout: ☐ Yes ☒ No
- Transit/Bike/Ped Prioritization at Intersection: ☒ Yes ☐ No
- Transit-Oriented Development/Transit Corridor (15 min. headways: ☐ Yes ☒ No
- Neighborhood Shared Street: ☒ Yes ☐ No
- Pedestrian Place: ☒ Yes ☐ No

c. Is the complete streets cross section/design for this type of street (as recommended in the Guidebook) supportable for this project? ☐ Yes ☒ No
If not, explain why:
☒ Lack of ROW width
☒ Insufficient Funding
☒ Trees/environmental constraints
☒ Existing Structures
☒ Other

East Cliff Drive – Complete Streets Category: "Avenue" (Arterial based on volume)
Pedestrian –The north side of East Cliff Drive will have a 4' wide pathway based on community input. Portions of this area are constrained by steep natural slopes, existing structures, driveways and mature trees. The south side (beach side) will have a 6-16' wide multi-modal pathway and year round universal access ramp to the beach during winter months.
Street Furniture – Pedestrian seating, public art, bicycle racks, and way finding and/or interpretational signage for the Monterey Bay Sanctuary Scenic Trail, the CA Coastal Trail and the historic horse drawn trolley will be provided.
Green–drought tolerant Street Trees and other landscaping will be provided alongside the north side pathway and intermingled within the south side pathway. The proposed green zones vary in width from 4 to 15 feet.
Motor Vehicle – Travel lanes are 12' wide and wider at the circular three way intersection to accommodate the larger vehicles (boats on trailers, commercial trucks and emergency access vehicles).
Bicycle – 5' wide dedicated bicycle Lane widths are sufficient with the 25 miles per hour posted speed limit.
Parking – On street angled and parallel parking is provided on both sides of East Cliff (6 on the north side and 17 (3 of which are parallel) on the south side). The south side parking acts as a buffer between pedestrians and motor vehicles.

d. Have alternative designs been considered? ☒ Yes ☐ No

At least three different alternatives were considered to maximize the benefit provided to each type of user.

e. What refinements of the cross section/design were needed?
- Removed/partial zones (Guidebook Ch. 5) for:
  ☒ Pedestrians ☒Bicyclists ☐Landscaping ☒Vehicles ☒Parking
  Pedestrian walkways are 4' wide on the north side and 6'-15' wide on the south side, the dedicated bike lanes are 5' wide and the travel lanes are 12' wide with a 25 mph posted speed-limit.

- Considered alternative routes/locations for:
  ☐ Pedestrians ☒Bicyclists ☐Landscaping ☐Vehicles ☒Parking

f. Exemptions to Complete Streets (refer to Ch. 6 of the Guidebook)
- Is the project exempt from accommodating certain users? ☐ Yes ☒ No
- Is the cost excessively disproportionate to the need or probable use? ☐ Yes ☒ No
- There is a documented absence of current and future need? ☐ Yes ☒ No
- Other

8. Describe the public input plan for this project.

This most recent iteration of the project involved the community at three public meetings. Stakeholders and participants were identified and these and other community interested persons worked with the former Redevelopment Agency staff from the beginning conceptual design identifying goals, objectives and priority land users. At the third meeting a conceptual design plan was presented. Comments received from the participants at this meeting overwhelmingly approved the proposed plan. The Concept Plan was then submitted to the Board of Supervisors and approved at its August 12, 2008, meeting. The Planning Commission approved the project at a public hearing in October 2012 and the Coastal Commission approved the project at a public hearing in August 2013. At both public hearings supporters of the project either came to the hearing to speak their support of the project or wrote letters of support for the project and not one person spoke in opposition to the project.

9. Stakeholder Outreach: Which stakeholder groups have already provided input, or will be

asked to provide input in future, on project scope and design?

Group	Provided input	Will seek input
Neighborhood Group	Yes	N/A
Business Association	Yes	N/A
School	No	N/A
Property Owners	Yes	N/A
Bicycle Committees	Yes	N/A
Pedestrian Committee	No	N/A

Group	Provided input	Will seek input
Transit Agency	Yes	N/A
Adjacent jurisdictions	Yes	N/A
Environmental Groups	Yes	N/A
Transportation Disadvantaged	Yes	N/A
Senior Group	No	N/A

Have specific changes been requested by stakeholders? ☒ Yes ☐ No

10. Describe project readiness/deliverability:

Preparation of the construction plans and documents is scheduled to begin November 2013. The Santa Cruz County Planning Commission issued a Coastal Development Permit in October of 2012. The Coastal Commission issued the project a Notice of Intent to Issue Coastal Development Permit the last week in August of 2013. Preparation of the legal descriptions is underway to begin the right-of-way acquisitions process and preliminary conversations regarding acquisitions have begun with the Santa Cruz Port District and the State Park (both strong supporters of the project) have occurred. Construction is estimated to begin in the fall of September 2014.

EXHIBIT A

Project Budget & Funding Plan

Project Cost by Phase

Twin Lakes Beachfront Improvements - 5th Ave to 7th Ave

Round figures to the nearest thousand dollars

					Phase of Work			
Sources (Specify fund source type - ex. RSTP,STIP, AB2766, Local, TDA, etc)	**FY 12/13**	**FY 13/14**	**FY 14/15**	**Source Total**	**Env'l (PA/ED)**	**Design (PS&E)**	**Right-of-Way (ROW)**	**Construction**
2013 RSTP Funds	$0	$200,000	$0	**$200,000**	$0	$30,000	$0	$170,000
Local Plant Funds	$0	$0	$25,912	**$25,912**	$0	$4,000	$0	$21,912
Total				**$225,912**	**$0**	**$34,000**	**$0**	**$191,912**

Fiscal Year each component to begin					Winter 2013	Winter 2013	Spring 2014	Summer 2014
					Env'l (PA/ED)	**Design (PS&E)**	**Right-of-Way (ROW)**	**Construction**

LELAND SAYLOR ASSOCIATES

PROJECT: **EAST CLIFF DRIVE AT TWIN LAKES BEACHFRONT**
LOCATION: **SANTA CRUZ, CALIFORNIA**
CLIENT: **RRM DESIGN**
DESCRIPTION: **PUBLIC RIGHT-OF-WAY AND ROADWAY IMPROVEMENTS**

LSA JOB NO: **09-129C R3**
PREPARED BY: **WM**
CHECKED BY: **JS**
ESTIMATE DATE: **4/27/2011**
PROJECT AREA (SQFT): **137,214**

DESIGN DEVELOPMENT OPINION OF COST

ITEM #	DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
1.1	DEMOLITION				NONE
1.2	SITEWORK				~~3,145,203~~
	TOTAL SITE & BUILDING				~~3,145,203~~
					₱ 2,980,170
	PRORATES				
	General Conditions	8.00%		238,414	~~251,616~~
	Design Contingency	5.00%		149,008	~~157,260~~
	Escalation	0.00%			-
	Geographic and Environmental Factor	0.00%			-
	Market Factor	0.00%			-
	Small Job Factor	0.00%			-
	Phasing Allowance	0.00%			-
	SUBTOTAL				3,554,080
	Bonds	2.00%		59,600	~~71,082~~
	Overhead and Profit	6.00%		178,810	~~213,245~~
	TOTAL PROJECT COSTS				~~3,838,406~~
					₱ 3,606,002

REVISED TOTAL

REVISED TOTAL

Competitive Bidding

The prices in this Estimate are based on Competitive Bidding. Competitive Bidding is receiving responsive bids from at least five (5) or more General Contractors and three (3) or more responsive bids from Major Subcontractors or Trades. Major Subcontractors are Structural Steel, Plaster / EIFS Contractors, Mechanical, Plumbing and Electrical Subcontractors.

Without Competitive Bidding, Contractor bids can and have ranged from 25%-to 100% over the prices in this Estimate, depending on the size of the job.

LELAND SAYLOR ASSOCIATES

PROJECT: **EAST CLIFF DRIVE AT TWIN LAKES BEACHFRONT**
LOCATION: **SANTA CRUZ, CALIFORNIA**
CLIENT: **RRM DESIGN**
DESCRIPTION: **PUBLIC RIGHT-OF-WAY AND ROADWAY IMPROVEMENTS**

LSA JOB NO: **09-129C R3**
PREPARED BY: **WM**
CHECKED BY: **JS**
ESTIMATE DATE: **4/27/2011**
PROJECT AREA (SQFT): **137,214**

DESIGN DEVELOPMENT OPINION OF COST

ITEM #	DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
1.0	**GENERAL CONDITIONS (SEE PRORATES ABOVE)**				
1.1	**DEMOLITION**				
	COSTS FOR DEMOLITION ARE INCLUDED WITH SECTION 1.2 SITEWORK				-
					-
					-
	SUBTOTAL 1.1				**NONE**
1.2	**SITEWORK**				
					-
	EROSION CONTROL				-
	SILT FENCE	988	LF	1.75	**1,729**
	PROTECT STORM DRAIN INLET DURING CONSTRUCTION	7	EA	125.00	**875**
	STORM DRAIN INFILTRATION GALLERIES POST CONSTRUCTION	7	EA	150.00	**1,050**
	GRAVEL BAGS IN FLOW LINES AFTER PAVING	50	EA	10.00	**500**
	FIBER ROLLS	130	LF	8.00	**1,040**
					-
	SIMULATED PURISIMA FORMATION EMBANKMENT				-
	STEEL SHEET PILING, EXTRACTED	2,000	SF	30.00	**60,000**
	MASS EXCAVATION FOR EMBANKMENT	25,680	CY	5.00	**128,400**
	PREMIUM FOR ROCK EXCAVATION	938	CY	35.00	**32,830**
	HAND GRADE BANKS	19,067	SF	0.30	**5,720**
	GEOTEXTILE FABRIC	21,928	SF	0.45	**9,868**
	ALTERNATING LAYERS OF SAND AND ANCHORED GEOTECH FABRIC IN PLACE OF CONCRETE CAISSONS	5,071	CY	60.00	**304,260**
					-
					-
	KEYWAY FOOTING IN BED ROCK, INCLUDING BAR REINFORCING	148	CY	500.00	**73,926**
	SHOTCRETE BASE SLAB, 14" THICK, INCLUDING #4 BAR REINFORCING @ 12" O.C.E.W.	890	CY	700.00	**623,117**
	ANCHORAGE FOR SURFACE FORMATION	9,534	SF	0.50	**4,767**
	SHOTCRETE SURFACE - SIMULATED PURISIMA FORMATION	456	CY	700.00	**319,200**
	BACKFILL	2,412	CY	35.00	**84,407**
					-

LELAND SAYLOR ASSOCIATES

PROJECT:	**EAST CLIFF DRIVE AT TWIN LAKES BEACHFRONT**	LSA JOB NO:	**09-129C R3**
LOCATION:	**SANTA CRUZ, CALIFORNIA**	PREPARED BY:	**WM**
CLIENT:	**RRM DESIGN**	CHECKED BY:	**JS**
DESCRIPTION:	**PUBLIC RIGHT-OF-WAY AND ROADWAY IMPROVEMENTS**	ESTIMATE DATE:	**4/27/2011**
		PROJECT AREA (SQFT):	**137,214**

DESIGN DEVELOPMENT OPINION OF COST

ITEM #	DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
	RIP-RAP				-
	PROTECT (E) HEAD-WALL & BEACH OUTFLOW - ALLOWANCE	1	LS	10,000.00	**10,000**
	REMOVE (E) RIP-RAP - ALLOWANCE	1	LS	7,500.00	**7,500**
	HAND GRADE BANKS	13,400	SF	0.30	**4,020**
	GEOTEXTILE FABRIC	15,409	SF	0.45	**6,934**
	GRADED ROCK UNDERLAYER, 12" DEEP	536	CY	40.00	**21,439**
	RIP-RAP, 2.4 FT. DIAMETER, SELECT FROM COUNTY STOCKPILE, LOAD, TRUCK TO SITE AND PLACE (NO MATERIAL COST)	645	TON	45.00	**29,029**
					-
	STREET SUBGRADE PREPARATION				-
	TRAFFIC CONTROL ALLOWANCE	1	LS	60,000.00	**60,000**
	SAW-CUT (E) ROADWAY	728	LF	4.00	**2,912**
	ROCK EXCAVATION @ ROADWAY SUBGRADE	254	CY	50.00	**12,700**
	IMPORT & COMPACT FILL TO SUBGRADE	5,911	CY	15.00	**88,665**
	PULVERIZE, GRADE & COMPACT (E) PAVING FOR (N) BASE @ ROAD BED & SIDEWALK	65,526	SF	2.00	**131,052**
					-
	STREET IMPROVEMENT				-
	REF: CONSTRUCTION NOTES ON SHEETS 5.1 THRU 5.3				-
1	SAW CUT (E) PAVING (COST IS WITH SUBGRADE PREPARATION ABOVE)				-
2	AC PAVEMENT, 3"AC OVER 9"AB	65,526	SF	2.80	**183,474**
	SLURRY SEAL	65,526	SF	0.30	**19,658**
3	ROLLED C&G	193	LF	10.00	**1,930**
3.5	STANDARD VERTICAL CURB	1,275	LF	12.00	**15,300**
4&19	TYPE 'A' CURB & GUTTER	1,456	LF	24.00	**34,942**
5	TYPE 'B' CURB RAMP	7	EA	1,800.00	**12,600**
6	TYPE 'C' CURB RAMP	1	EA	1,600.00	**1,600**
7	TYPE 'D' CURB RAMP	6	EA	2,000.00	**12,000**
8	CONSTRUCT DRIVEWAY	90	LF	35.00	**3,150**
9	DEPRESSED DRIVEWAY	132	SF	12.00	**1,584**
10	CROSSWALK PAINT BANDS	1,232	SF	1.20	**1,478**
11	INSTALL GO INLETS	8	EA	950.00	**7,600**
12	ADJUST MANHOLE LID	5	EA	1,200.00	**6,000**
13	ADJUST WATER METER BOX	3	EA	600.00	**1,800**
14	CROSS GUTTER	210	LF	20.00	**4,200**
15	WATER QUALITY TREATMENT UNITS	4	EA	8,000.00	**32,000**
16	INSTALL (N) FIRE HYDRANT	1	EA	2,400.00	**2,400**
17	ORANGE PLASTIC TREE PROTECTION	220	LF	12.00	**2,640**
18	CONCRETE SIDEWALKS, DG SEEDED, INTEGRAL COLOR. BAR REINFORCING	20,894	SF	8.00	**167,153**
20	CONCRETE RETAINING WALLS, 5 FT. MAX., COST INCLUDES BAR REINFORCING & INTEGRAL COLOR	236	CY	800.00	**188,672**
	ROCK ANCHOR ALLOWANCE	1	LS	50,000.00	**50,000**
					-

LELAND SAYLOR ASSOCIATES

PROJECT: **EAST CLIFF DRIVE AT TWIN LAKES BEACHFRONT**
LOCATION: **SANTA CRUZ, CALIFORNIA**
CLIENT: **RRM DESIGN**
DESCRIPTION: **PUBLIC RIGHT-OF-WAY AND ROADWAY IMPROVEMENTS**

LSA JOB NO: **09-129C R3**
PREPARED BY: **WM**
CHECKED BY: **JS**
ESTIMATE DATE: **4/27/2011**
PROJECT AREA (SQFT): **137,214**

DESIGN DEVELOPMENT OPINION OF COST

ITEM #	DESCRIPTION	QUANTITY	UNIT	COST	TOTAL	
	TRAFFIC, PARKING & PAVEMENT MARKING				-	
	STOP	4	EA	90.00	**360**	
	WHEELCHAIR	2	EA	90.00	**180**	
	BICYCLE	10	EA	120.00	**1,200**	
	CENTER LINE	1,183	LF	1.00	**1,183**	
	BIKE LANE LINE	1,440	LF	1.00	**1,440**	
	PARKING STALLS	850	LF	1.00	**850**	
	CROSS HATCH	416	LF	1.00	**416**	
					-	
	LANDSCAPE				-	
	TREE PROTECTION FENCE (COST IS INCLUDE AS ITEM 17 WITH STREET IMPROVEMENTS)				-	
	SEAT WALLS	84	LF	190.00	**15,960**	
	TRASH RECEPTACLES	8	EA	750.00	**6,000**	
	SHRUBS, PERENNIALS, GRASSES	7,174	SF	1.00	**7,174**	
	VEGETATION ON SLOPE TO REMAIN. REPLANT DISTURBED AREAS AS NEEDED	1,976	SF	0.60	**1,186**	
	IRRIGATION SYSTEM WITH WEATHER SENSOR	7,174	SF	2.50	**17,934**	
	DECOMPOSED GRANITE WALKWAYS	3,411	SF	4.00	**13,645**	
	BIKE RACKS, STAINLESS STEEL.	8	EA	750.00	**6,000**	
	CONCRETE UNIT PAVERS	945	SF	12.00	**11,340**	
	BOULDERS	111	EA	240.00	**26,640**	
	CONCRETE STAIRS WITH INTEGRAL COLOR	15	CY	1,450.00	**21,750**	
	STAIR GUARDRAIL, STAINLESS STEEL	116	LF	140.00	**16,240**	
	WOOD & STEEL RAILING, 42"	337	LF	110.00	**37,070**	
	REMOVE (E) PALM	1	EA	1,200.00	**1,200**	
	REMOVE (E) MONTEREY CYPRESS	3	EA	1,200.00	**3,600**	
	(N) MONTEREY CYPRESS, 15 GAL	3	EA	2,500.00	**7,500**	
	SANCTUARY SCENIC TRAIL SIGN NO. OR 5.12 & DIR 2.4	1	EA	1,000.00	**1,000**	
	VEHICLE GATE, 12 FT.	1	EA	8,000.00	**8,000**	
					-	
	STORM DRAINAGE				-	
	DRAIN INLET	9	EA	1,350.00	**12,150**	
	STORM DRAIN, 24 IN. HDPE	90	LF	54.00	**4,860**	
	STORM DRAIN, 18 IN. HDPE	230	LF	48.00	**11,040**	
	STORM DRAIN, 15 IN. HDPE	80	LF	43.00	**3,440**	
	STORM DRAN, 12 IN. HDPE	30	LF	38.00	**1,140**	
	WATER QUALITY TREATMENT UNITS (SEE STREET IMPROVEMENTS ITEM NO. 15)					
		-			-	
	UTILITIES, ELECTRIC	-			-	
1	EXISTING UTILITY POLE/STREET LIGHT HEAD TO REMAIN. PROTECT	4	EA	250.00	**1,000**	↓ NOT IN SCOPE
2	EXISTING UTILITY POLE/STREET LIGHT HEAD TO BE RELOCATED.	2	EA	2,400.00	**4,800**	
3	EXISTING OVERHEAD SERVICE TO REMAIN. PROTECT	1	LS	500.00	**500**	
4	EXISTING OVERHEAD SERVICE TO BE REMOVED. 15 TERMINATIONS	1,573	LF	3.00	**4,719**	

LELAND SAYLOR ASSOCIATES

PROJECT: **EAST CLIFF DRIVE AT TWIN LAKES BEACHFRONT**
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CLIENT: **RRM DESIGN**
DESCRIPTION: **PUBLIC RIGHT-OF-WAY AND ROADWAY IMPROVEMENTS**

LSA JOB NO: **09-129C R3**
PREPARED BY: **WM**
CHECKED BY: **JS**
ESTIMATE DATE: **4/27/2011**
PROJECT AREA (SQFT): **137,214**

DESIGN DEVELOPMENT OPINION OF COST

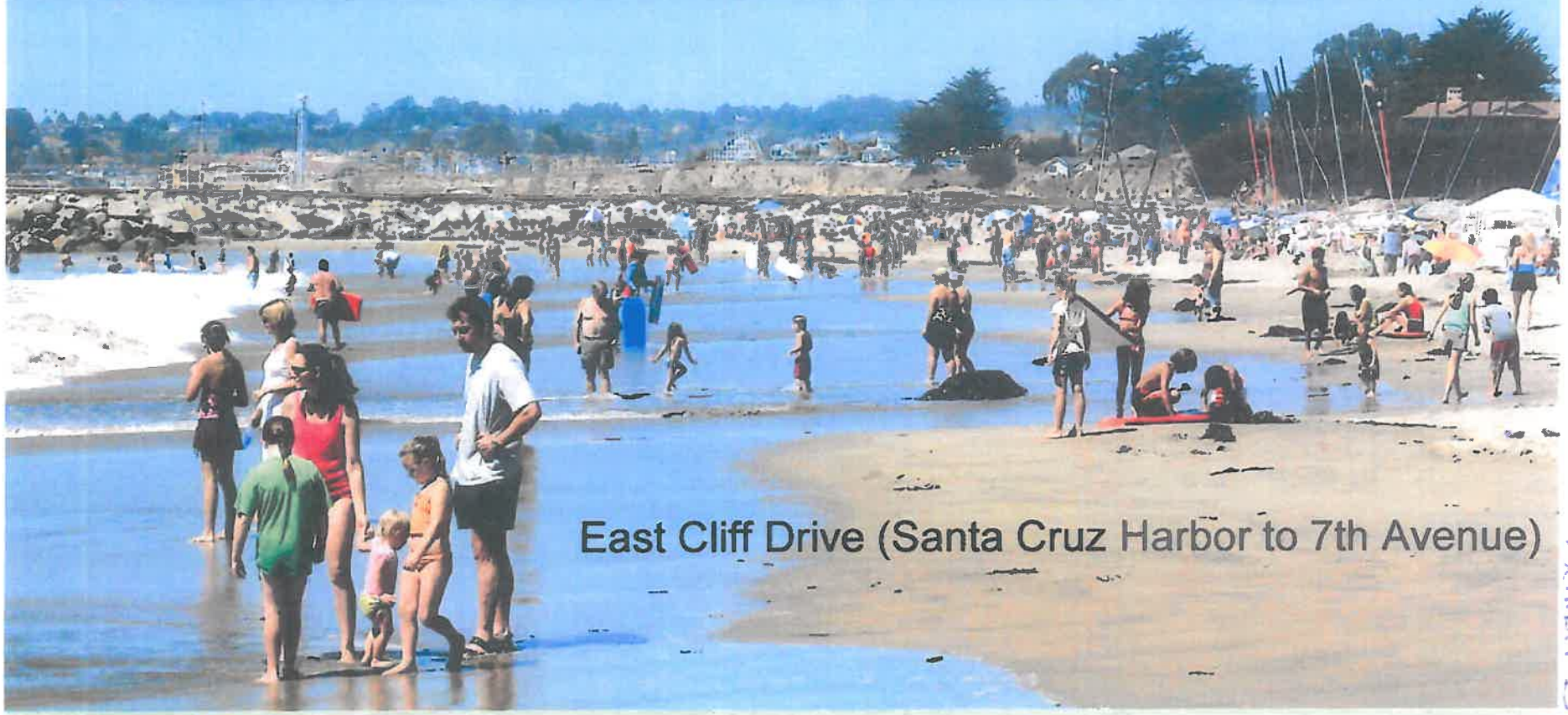
ITEM #	DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
5	EXISTING TELEPHONE POLE/OVERHEAD SERVICE TO BE REMOVED.	145	LF	7.00	1,015
6	EXISTING GUY ANCHOR POLE TO BE RELOCATED. COORDINATE EXACT LOCATION AND GUY WIRE ATTACHMENTS WITH CIVIL ENGINEER.	1	EA	2,500.00	2,500
7	EXISTING UTILITY POLE TO BE RELOCATED.	1	EA	2,000.00	2,000
8	NEW LOCATION FOR EXISTING UTILITY POLE. (COST IS INCLUDED WITH RELOCATONS)				-
9	COORDINATE EXACT LOCATION OF GUY WIRE ATTACHMENTS WITH CIVIL ENGINEER.	1	EA	500.00	500
10	EXISTING PG&E PRIMARY BOX. ADJUST TO NEW GRADE, PROVIDE FULL TRAFFIC RATED COVER.	1	EA	1,800.00	1,800
11	EXISTING TELEPHONE AND CATV PULL BOXES. ADJUST TO NEW GRADE AND PROVIDE INCIDENTAL TRAFFIC RATED COVERS.	1	LS	1,600.00	1,600
12	EXISTING UNDERGROUND ELECTRIC/TELEPHONE/CATV UTILITY SERVICES. PROTECT.	1	LS	15,000.00	15,000
13	INTERCEPT EXISTING UNDERGROUND UTILITY SERVICE CONDUITS AND EXTEND WIRE ROUTE TO RELOCATED UTILITY POLE AS DIRECTED BY THE SERVICING UTILITY COMPANIES.	1	EA	3,000.00	3,000
14	NEW UNDERGROUND UTILITY SERVICE CONDUITS (ELECTRIC/TEL/CATV) AS DIRECTED BY THE SERVICE UTILITY COMPANIES.	1,410	LF	50.00	70,500
15	NEW PG&E SECONDARY DROP TO EXISTING METER.	1	EA	1,200.00	1,200
16	EXISTING MID SPAN TAPS/SERVICE DROPS (TEL./CATV) TO BE REMOVED.	3	EA	1,350.00	4,050
17	EXISTING UTILITY POLE TO BE REMOVED.	1	EA	1,000.00	1,000
18	EXISTING METER AT LIFT STATION TO REMAIN. SERVICE TO BE RE-FED UNDERGROUND. (PAD MOUNTED TRANSFORMER WILL BE REQUIRED).	1	EA	4,500.00	4,500
19	EXISTING METER PEDESTAL AND UNDERGROUND FEEDER TO RESTROOM BUILDING TO REMAIN. METER PEDESTAL TO BE RE-FED UNDERGROUND.	1	EA	3,500.00	3,500
20	EXISTING OVERHEAD TEL. SERVICE DROPS TO BE REMOVED. BUILDINGS TO BE RE-FED UNDERGROUND.	1	EA	3,900.00	3,900
21	PROPOSED LOCATIONS FOR METER PEDESTALS.	2	EA	750.00	1,500
					-
	SUBTOTAL 1.2				**3,145,203**

NOT IN SCOPE

REVISED TOTAL $ 2,980,17[illegible]

TWIN LAKES BEACHFRONT PROJECT

A Coastal Public Access Enhancement Project



East Cliff Drive (Santa Cruz Harbor to 7th Avenue)

Exhibit B

Santa Cruz County Parks

Santa Cruz County Department of Public Works

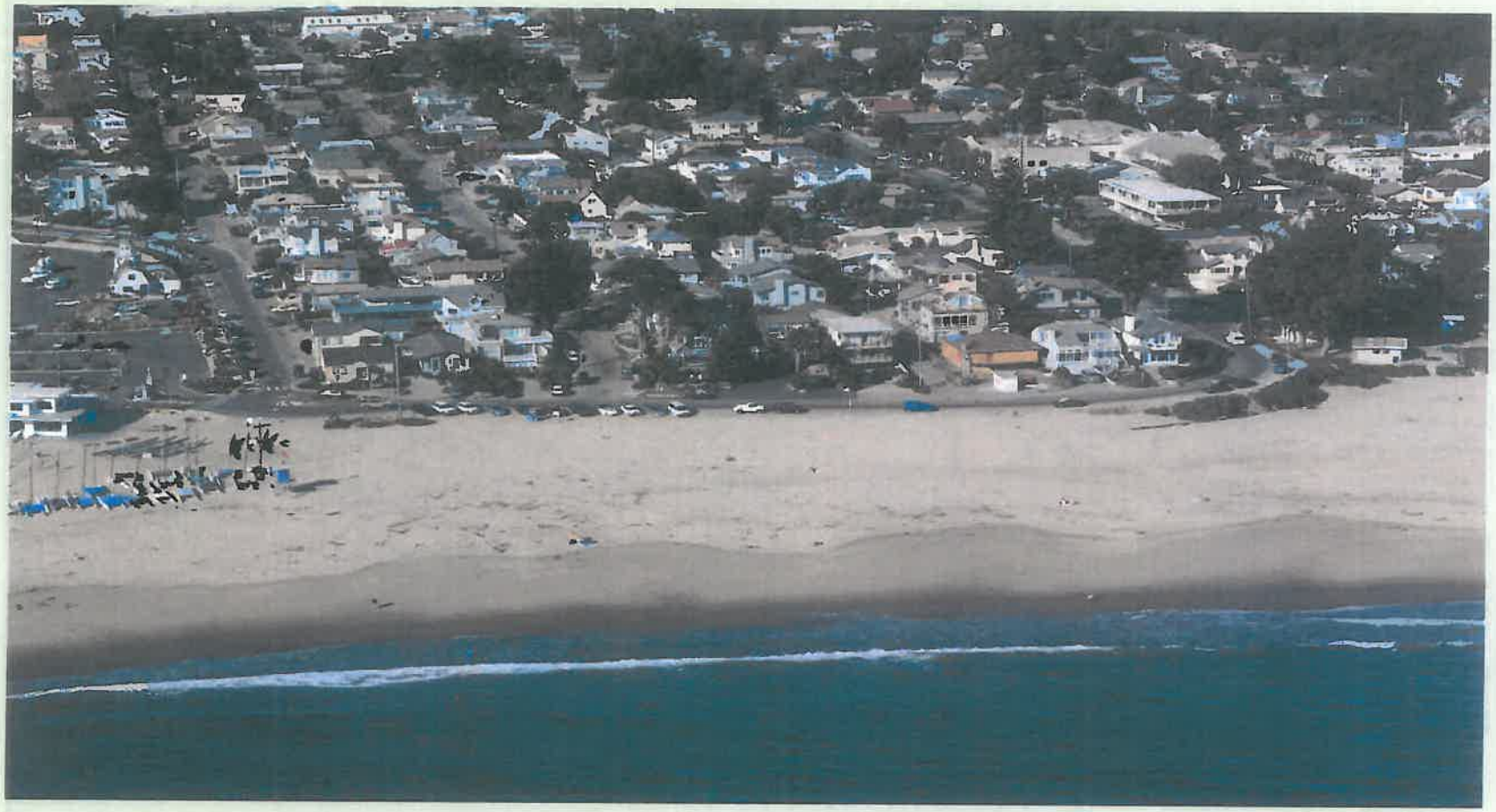
Twin Lakes Beachfront

Why Do We Need This Project?

State Parks estimates that one half million people visit Twin Lakes Beach annually.

Twin Lakes Beachfront

Harbor to 7th Ave.



Twin Lakes Beachfront

Existing Conditions

Existing Conditions:

Twin Lakes Beachfront- A Coastal Public Access Enhancement Project

Existing Winter Scour Conditions:

1998 Storm Damage

1998 Storm Damage

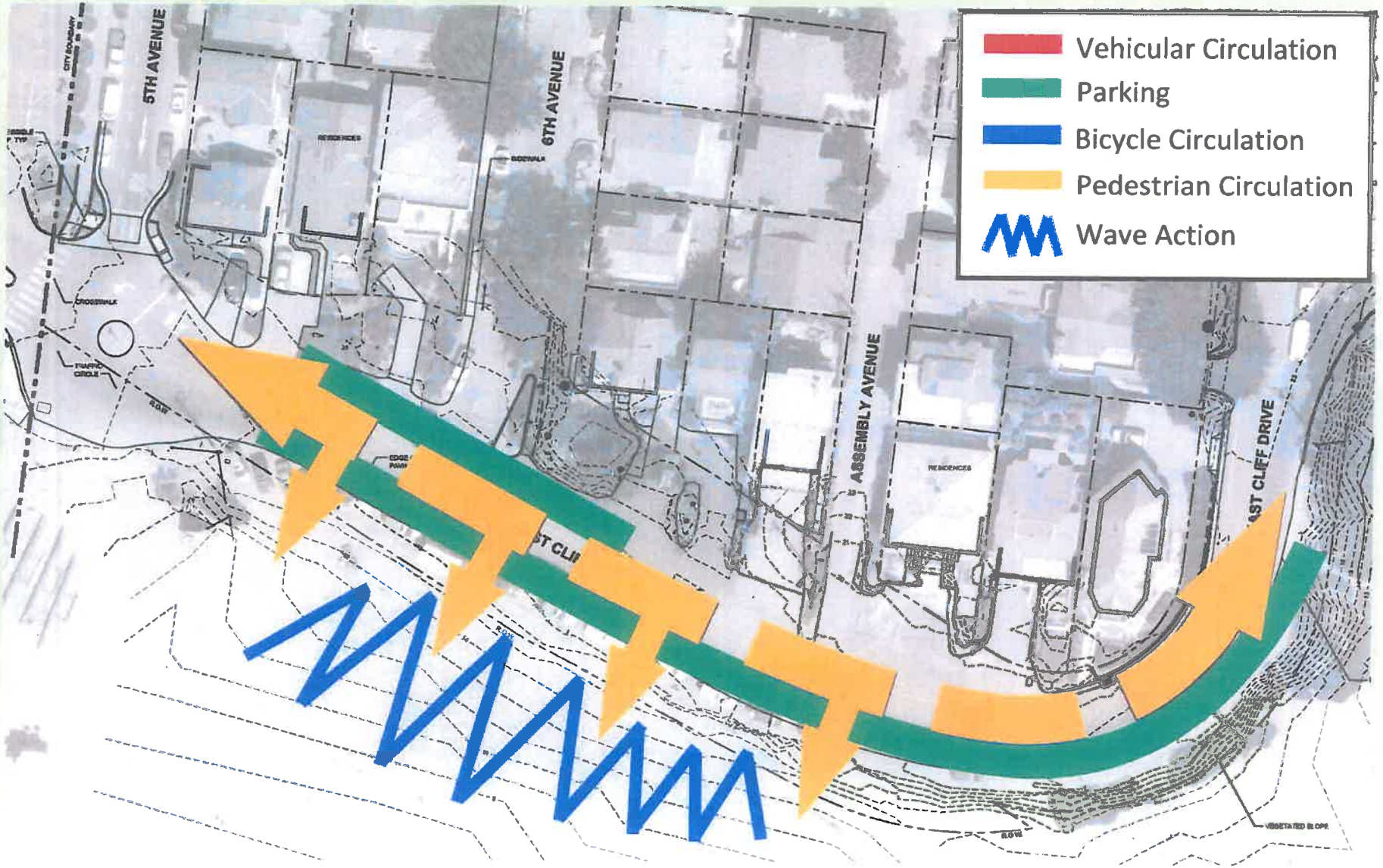
1998 Storm Damage

1982 Storm Damage

Twin Lakes Beachfront- A Coastal Public Access Enhancement Project

Twin Lakes Beachfront

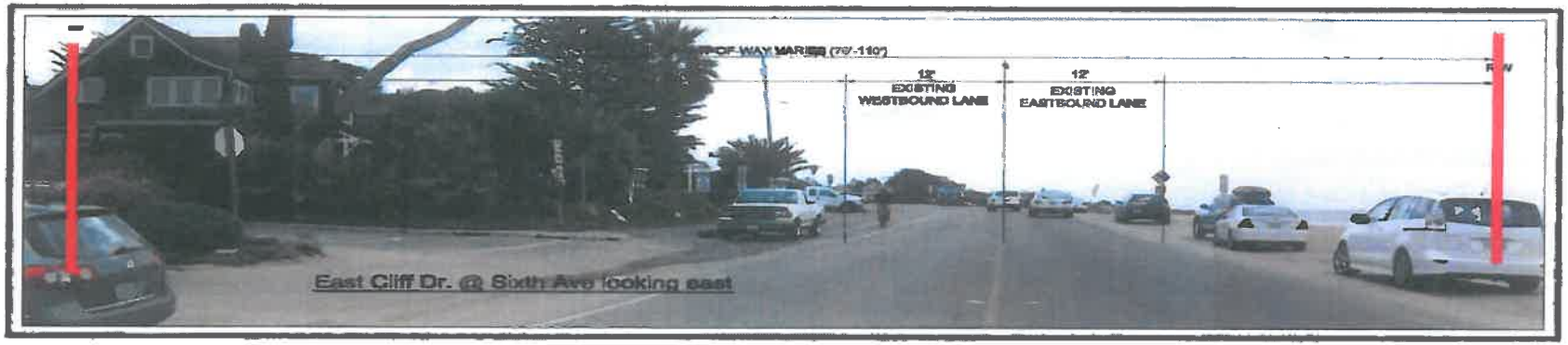
Existing Conditions



Twin Lakes Beachfront

Existing Conditions

Width of County Right-of-Way -Approx. 60 to 110 feet

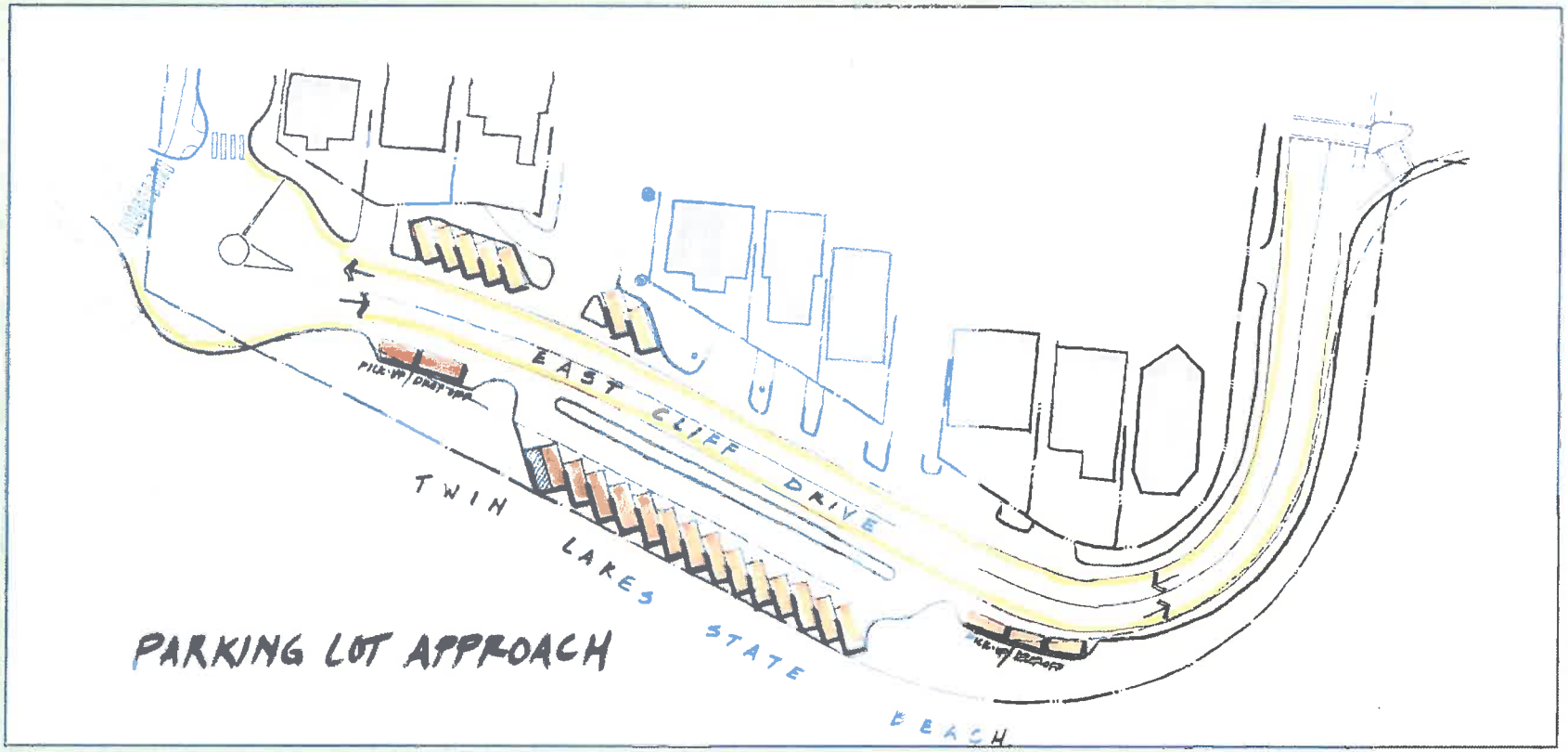


Twin Lakes Beachfront
Goals and Objectives

- Maximize Pedestrian Access and Safety
- Provide for Safe Bicycle Access
- Improve Parking and Vehicular Circulation
- Maintain Scenic Quality
- Plan for Storm Water Quality and Undergrounding of Overhead Utilities

Preferred Alternative

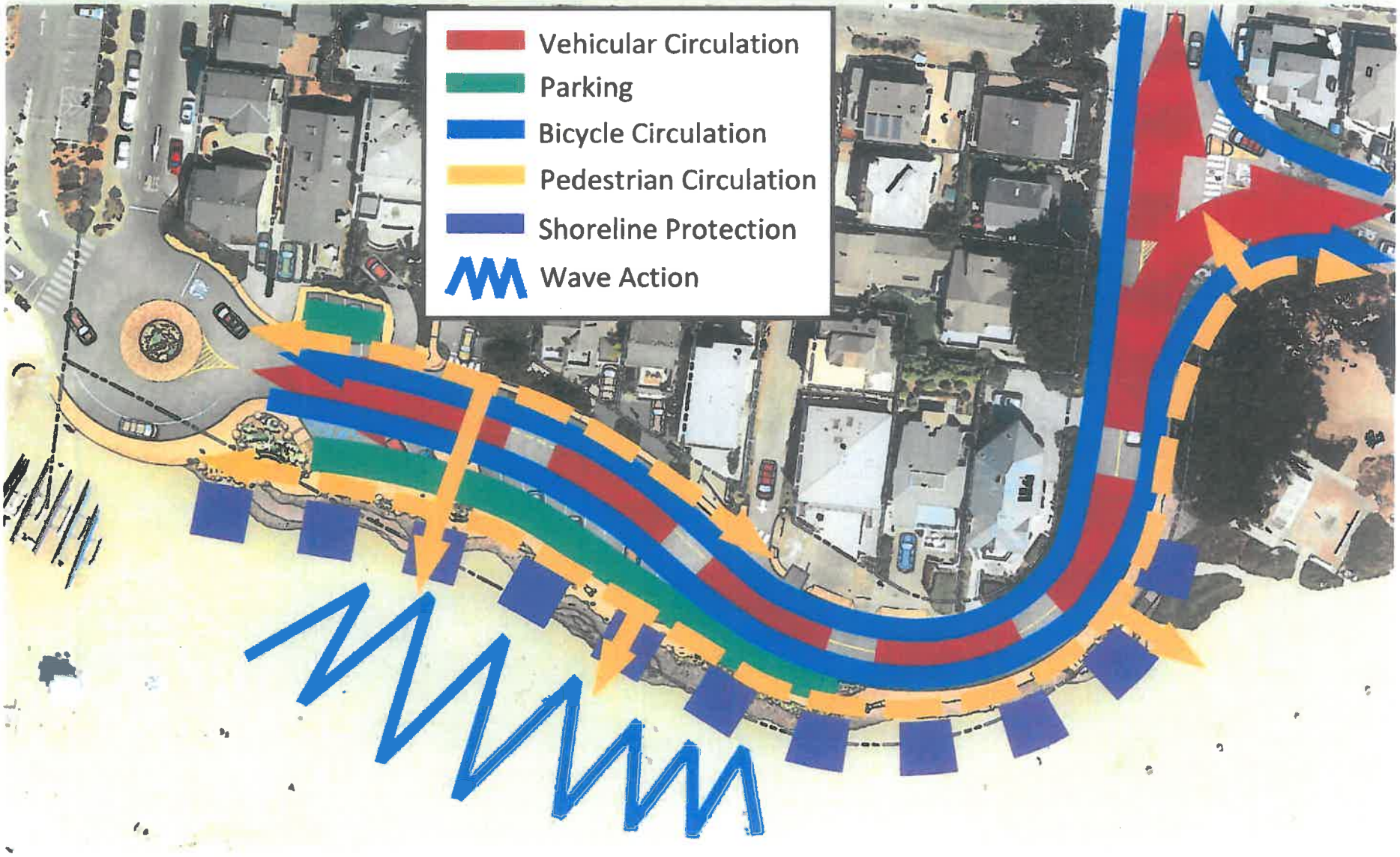
Alternative Parking Approaches: Parking Lots, Parallel & Diagonal



- Same spaces as diagonal
- Limits Conflicts
- More pavement
- Requires more space

Twin Lakes Beachfront

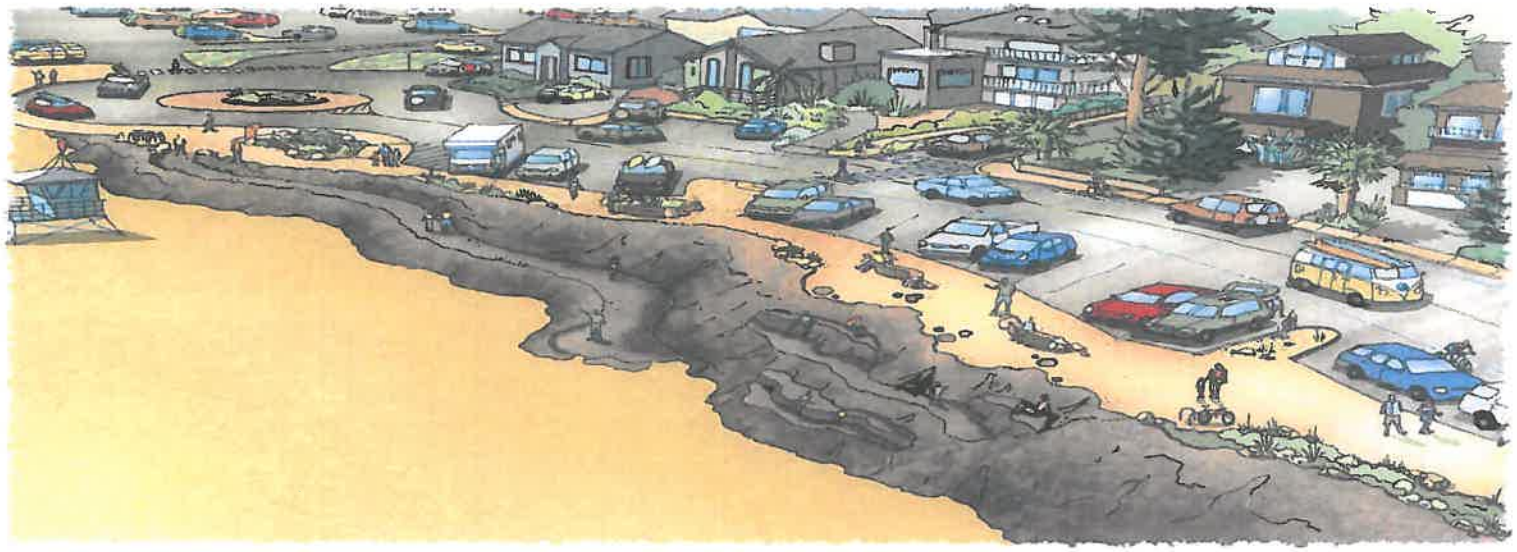
Concept Plan

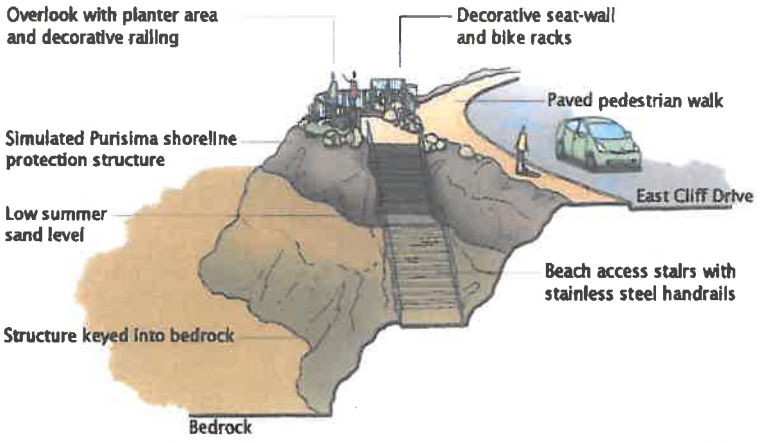


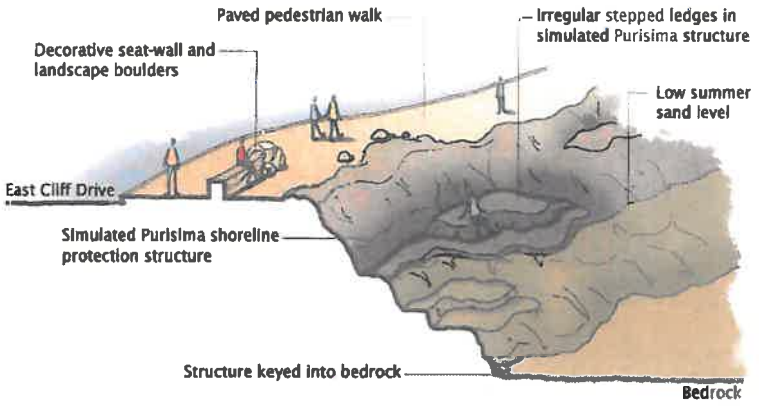
Proposed Plan:

Twin Lakes Beachfront- A Coastal Public Access Enhancement Project

Bluff Protection Provides Coastal Access





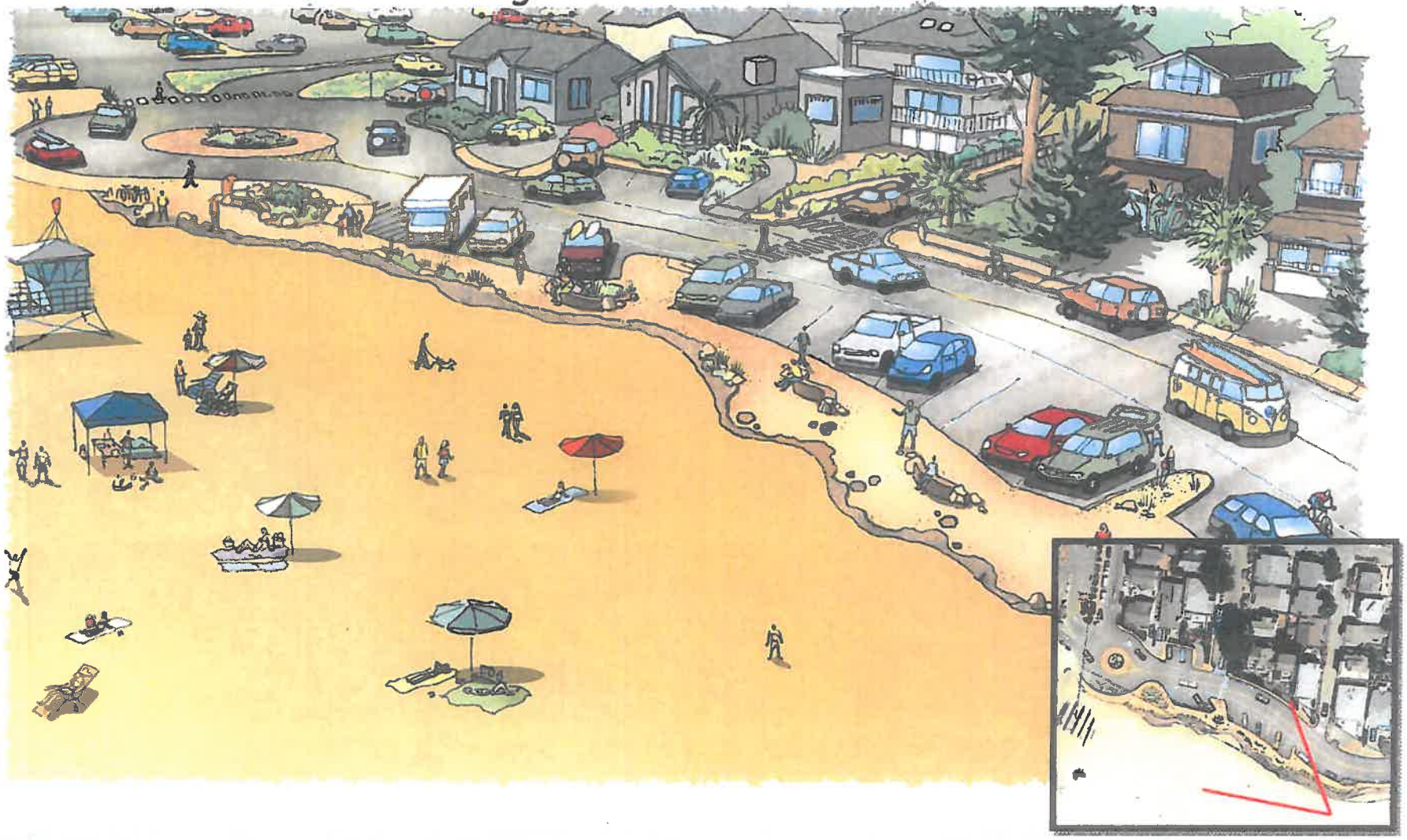


Twin Lakes Beachfront- A Coastal Public Access Enhancement Project

Twin Lakes Beachfront

Bird's Eye View Looking West Down East Cliff Dr.

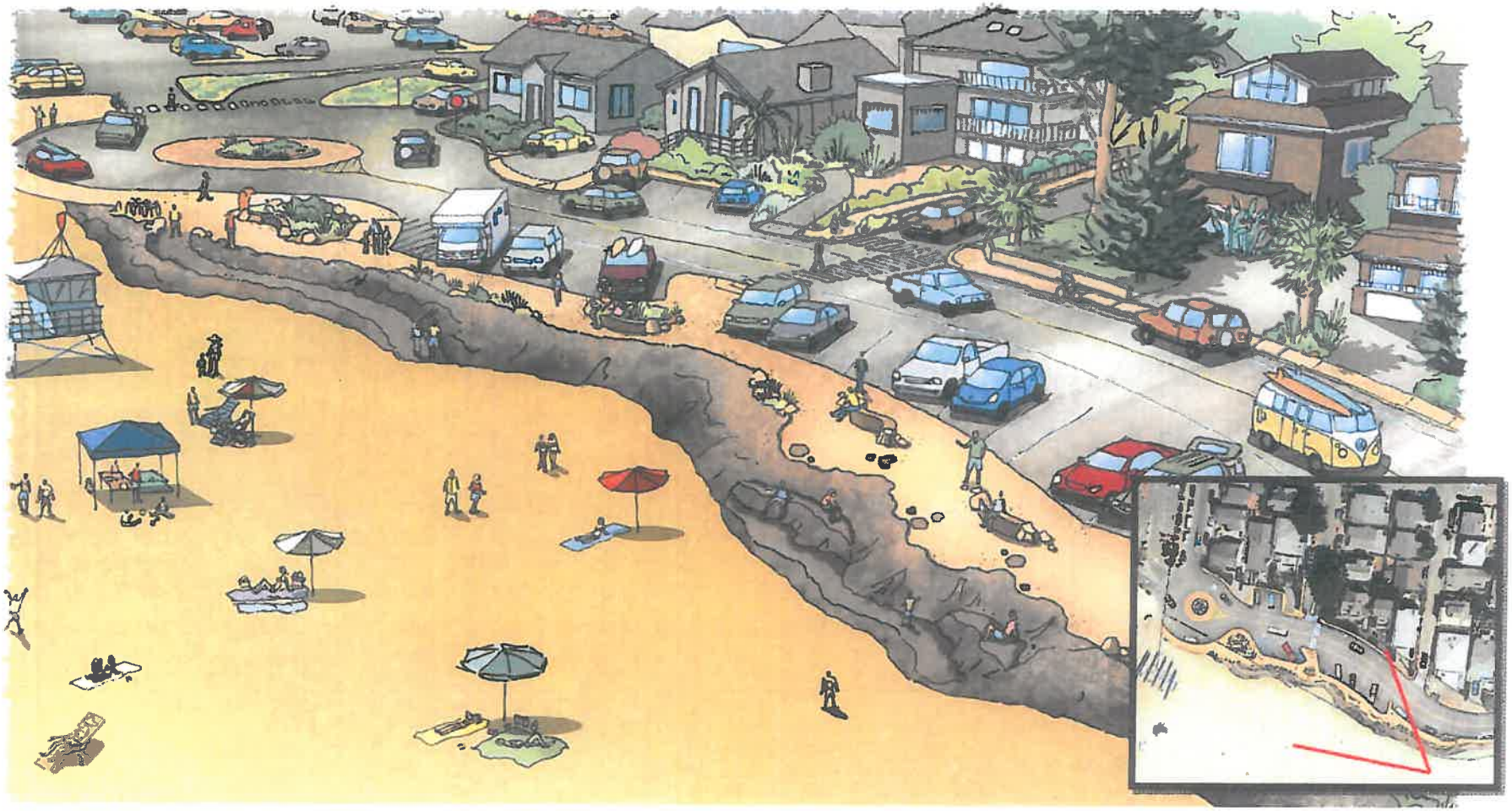
High Summer Sand Condition



Twin Lakes Beachfront

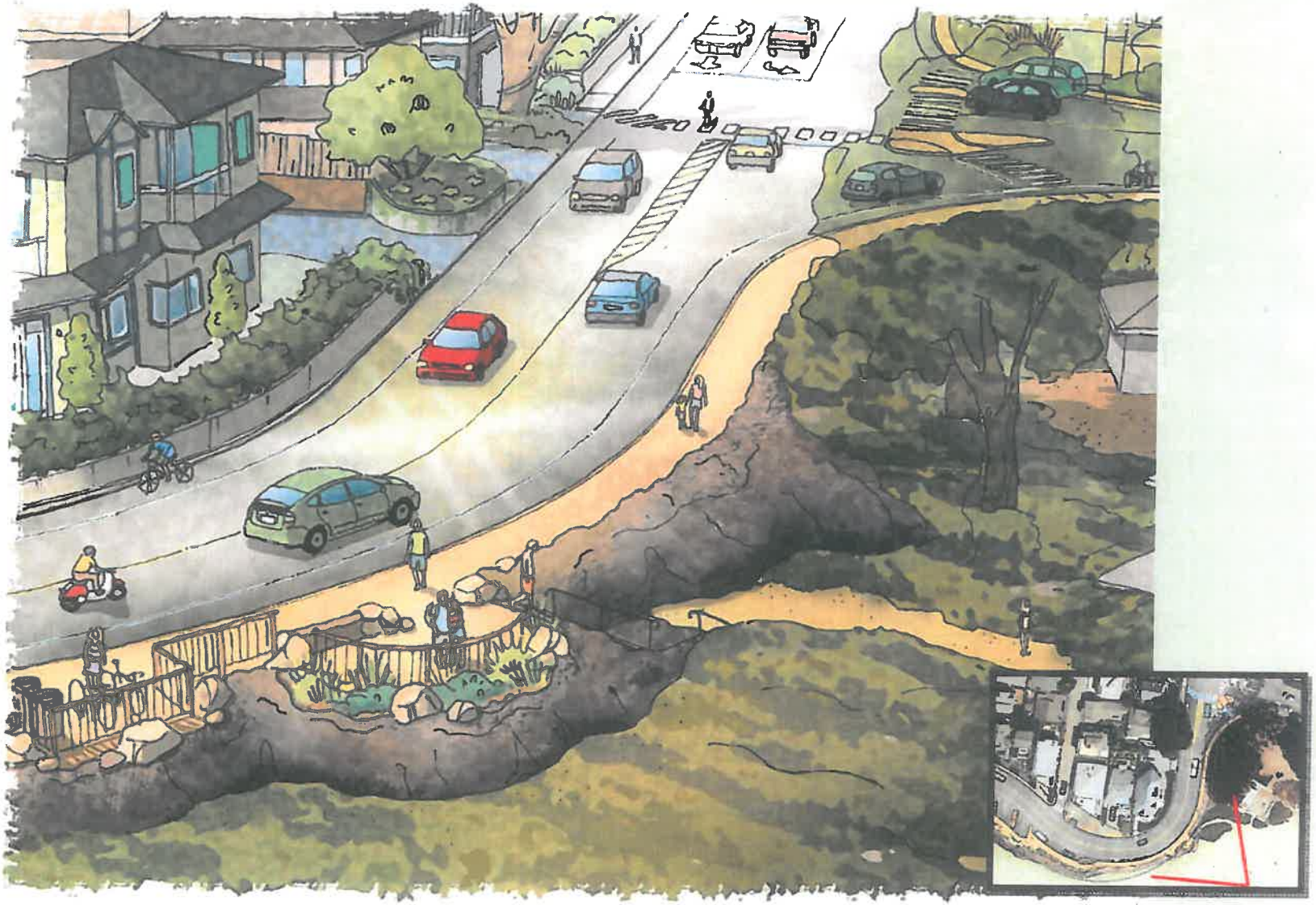
Bird's Eye View Looking West Down East Cliff Dr.

Low Summer Sand Condition



Twin Lakes Beachfront

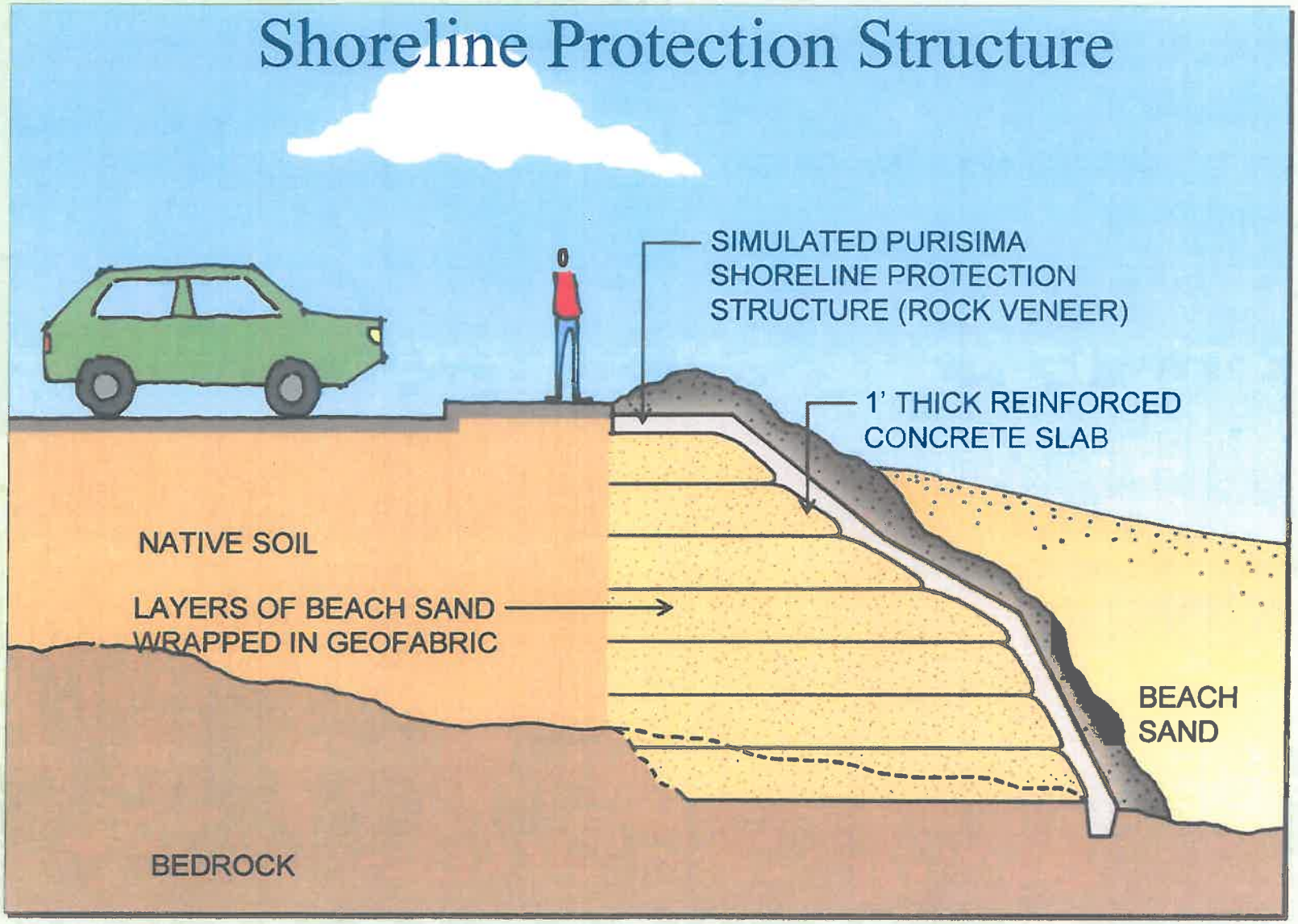
Bird's Eye View of East Cliff Dr. at 7th Avenue



Twin Lakes Beachfront

Typical Potential Improvements

Twin Lakes Beachfront



Strong Community Support

Supporters:

- State Parks
- County Parks Commission
- Santa Cruz Port District
- Santa Cruz County Sheriff's Office
- Disability Community
- Bike Advocates
- Live Oak Community

Twin Lakes Beachfront- A Coastal Public Access Enhancement Project

TWIN LAKES BEACHFRONT PROJECT

Santa Cruz County Parks

A Coastal Public Access Enhancement Project