ATTACHMENT 1

DRAFT

Preliminary Project Report

Passenger Platforms and Related Improvements to the Santa Cruz Branch Line for Recreational Rail Service

("Village Cruzer")

Prepared by:

The Santa Cruz County Regional Transportation Commission

September 2003

Registered Civil Engineer's Certification

This project study report has been prepared for the Santa Cruz County Regional Transportation Commission under the direction of Robert W. Scott, Registered Civil Engineer. Mr. Scott attests to the technical information contained herein and has judged the qualifications of any technical specialists providing engineering data upon which recommendation, conclusions and decisions are based.

Robert W. Scott

Registered Civil Engineer 13179

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Introduction and General Project Description

The project consists of capital improvements needed to provide for Recreational Rail Service – "Village Cruzer"[1] – within Santa Cruz County between the City of Capitola (Jade Street Park) and the Aptos-Seascape area, a distance of approximately six miles. The service is proposed to operate a maximum of 120 days during the peak tourist months in the spring, summer and fall seasons, with an option of additional special service to accommodate special events.

The project will include stop facilities at key tourist recreational locations along the route. It will also include sidings near each terminus. Each stop will include the construction of passenger waiting platforms, shelters, lighting, bike racks and related amenities to allow passengers safe, convenient and accessible boarding and deboarding. The project also includes the purchase of a three car rail vehicle set and a "Next Train" automated announcement system.

The proposed recreational rail service will be operated under contract by a private operator without a public operating subsidy. The contract operator will provide all staff, servicing, maintenance and marketing to meet the needs of the proposed service. Vehicles will be required to provide space for bicycles, strollers and wheelchairs.

A detailed operating plan for the Village Cruzer will be determined in a subsequent request for proposals (RFP) process; however, for this PSR, it is determined that at a maximum, the service would make hourly roundtrips between 11:00 a.m. and 8:00 p.m. during specific months and days of the year (120 days maximum).

The full route offers unique and popular coastal scenery and serves locations of demonstrated tourist appeal. Stops are located to provide access to Jade Street Park, Capitola Village, New Brighton Beach State Park, Seacliff Village and Seacliff Beach State Park, Aptos Village, and the Seascape Village and Resort. The start up phase may be limited to the Capitola-Aptos Village segment.

Background and System Planning Efforts

A number of studies (see Appendix 3) and rail demonstrations have investigated the viability of service along the Santa Cruz Branch Line within Santa Cruz County. These studies and equipment demonstrations have included examinations of recreational rail service between the San Francisco Bay Area and Santa Cruz, generally known as the *Suntan Special*.

In August 1996, Parsons Brinckerhoff completed the *Intercity Recreational Rail Study for the San Francisco Bay Area to Santa Cruz Corridor*. The study concluded that intercity weekend rail service was feasible even with conservative ridership estimates. In 1998, LS Transit Systems completed the *Around the Bay Rail Study*, which analyzed the integration of recreational rail service from San Francisco to Santa Cruz and to Monterey and adding service between Santa Cruz and Monterey. In 1998 the *Major Transportation Investment Study* (MTIS) for the Watsonville to Santa Cruz corridor was completed. Based on the MTIS, the Santa Cruz County

[1] This name is used only for convenience in this report. A future naming contest is suggested as a way to name the proposed recreational rail service.

Regional Transportation Commission selected a program of projects for the corridor. The program of projects includes acquisition of the Santa Cruz Branch Rail Line for future transportation purposes and construction of a bicycle and pedestrian path (Coastal Rail Trail) along the rail line.

Demonstration trains were brought to Santa Cruz County in 1996 to test the *Suntan Special* service concept as proposed in the *Intercity Recreational Rail Study for the San Francisco Bay Area to Santa Cruz Corridor.* On one weekend in May 1996, over 1,250 fare-paying passengers rode two trains from San Jose to the Santa Cruz Boardwalk and back during the *Return of the Suntan Special* event. At two other train demonstration events in 1996, over 1,000 fare-paying passengers rode either the Siemens RegioSprinter or the IC3 Flexliner along the Santa Cruz and the Santa Cruz Big Trees and Pacific branch lines.

With the assistance of Miller, Owen & Trost (MOT), the Regional Transportation Commission has been in negotiations with Union Pacific to purchase the Santa Cruz Branch Rail Line. As part of the negotiations process, a study was completed by MOT and Alta Transportation Consulting, Inc. examining several alternative scenarios for recreational rail service along the Santa Cruz and Davenport Branch Rail Lines[2]. With estimates of 10,000 to 25,000 annual riders, the study concluded that visitor-oriented passenger rail service offered between Capitola and Aptos could prove profitable and therefore attractive to private entrepreneurs experienced in visitor oriented railroad operations. The Alta study anticipated the use of two-car, self-propelled train units operating at relatively slow speeds during the primary tourist season.

Successful recreational rail service already exists in Santa Cruz County. Santa Cruz Big Trees and Pacific Railway Company, also known as Roaring Camp Railroads, operates a steam train at its site near Felton; it also operates a passenger train between its Felton site and the Beach/Boardwalk area in the City of Santa Cruz through the San Lorenzo River Gorge along right-of-way (the Felton Branch) it purchased from the Southern Pacific Company in 1985. Service to the Beach/Boardwalk is seasonal (May to December) operating about 105 days per year. In 2002, this latter service carried approximately 30,000 passengers at a cost of $16/round trip.

Need, Purpose & Benefits

Purpose

The Highway 1 corridor experiences a level of service "F" all year around including during the peak tourist season. As a result, local streets and roads providing access to visitor attractions along the corridor also experience heavy congestion, impacting both visitor and local resident travel. Nearly all visitors to Santa Cruz County arrive by automobile. Many visitors are attracted to more than one destination but their mobility is limited by congestion on the highways, congestion on local roads and parking limitations at individual attractions. These circumstances meet established criteria for potentially successful recreational rail service.[3]The purpose of the Village Cruzer project is to provide an attractive alternative means of travel for weekend and

[2] Santa Cruz Branch Line Intra-County Recreational Rail Options Preliminary Analysis, March 2003
[3] Santa Cruz Branch Line Intra-County Recreational Rail Options Preliminary Analysis, March 2003

summer non-commute trips between Capitola, Aptos, and Seascape Villages within Santa Cruz County, at a very low startup cost.

This project is consistent with the *2001 Santa Cruz County Regional Transportation Plan* (RTP), which includes a policy supporting in-county passenger rail service, acquisition of the Santa Cruz Branch Rail line for future transportation purposes and two passenger rail projects[4]. One of the passenger rail projects is for a tourist trolley in Capitola and the other is for rail transit in Santa Cruz.

Transportation Benefits

The Village Cruzer would use an existing underutilized transportation right-of-way along this corridor, and provide a new travel alternative, primarily for visitors and recreating local residents without travel time constraints. Recreational rail service will improve visitors' and residents' mobility and access to attractions, help reduce congestion for those who must use their cars, and help maximize the efficiency of parking facilities by allowing visitors to park at destinations with available parking and take the Village Cruzer to destinations with insufficient parking. Used in conjunction with bicycles, the non-driving range for both visitors and residents will be significantly enhanced by the service.

The Village Cruzer can also help to more effectively manage the high number of visitors to special events such as Capitola's Begonia Festival and the Monte Foundation's fireworks. By adding rail cars, the Village Cruzer can transport visitors to the special event from dispersed parking areas thereby minimizing the congestion impacts near the event sites. Also associated with the purchase of the Santa Cruz Branch Rail Line, the planned Coastal Rail/Trail will also provide improved mobility, congestion reduction and economic benefits.

The capital improvements for this project would support other passenger uses of the railroad that may develop. Platforms and related improvements are needed for passenger safety and convenience, as well as to provide Americans with Disabilities Act access to disabled passengers. Furthermore, the proposed project would provide opportunities to enhance the local economy without adverse traffic impacts.

Benefits to the Local Economy

The proposed Village Cruzer would foster tourism in Santa Cruz County, one of the key economic sectors in the region, and one which has suffered due to world events and economic conditions beyond local control. The various visitor attractions and special events along the corridor that would be served by the Village Cruzer already attract tens of thousands of tourists each year. The Village Cruzer would allow existing visitors to more easily visit more than one attraction, attract new visitors to the Santa Cruz area, encourage visitors to stay in the Santa Cruz area longer, and encourage residents to visit attractions due to the improved access and a positive travel experience. The expected result would be enhanced economic activity associated with the local tourism industry, including sales tax revenues and transient occupancy tax revenues.

[4] 2001 Regional Transportation Plan Constrained Action Element

Project Description

The Village Cruzer project consists of the installation of boarding and alighting facilities at six locations and two minor track modifications following acquisition of the Santa Cruz Branch Rail Line[5]. The proposed project will support the introduction of weekend and summer visitor oriented passenger rail services along the Highway 1 corridor in Santa Cruz County. The proposed service would serve two historic train stations (Capitola and Aptos Village), two popular state beaches (New Brighton State Beach and Seacliff State Beach), two community parks (Jade Street Park and Aptos County Park), and a major resort complex.

The proposed locations of six platforms and boarding areas are: Jade Street Park and Capitola Community Center in the City of Capitola; the site of the former train station in Capitola Village; the site of the former train station in Aptos Village; New Brighton State Beach; Seacliff Village; and Seascape Village and Resort. An alternate location at Cliff Drive in Capitola is included. These are shown in the map on page 5.

Track extensions are required at either termini of the service to allow trains to standby for schedule recovery and for overnight storage off the main track. These storage tracks will also provide a location off of the main track for the trains to wait while the freight train uses the track.

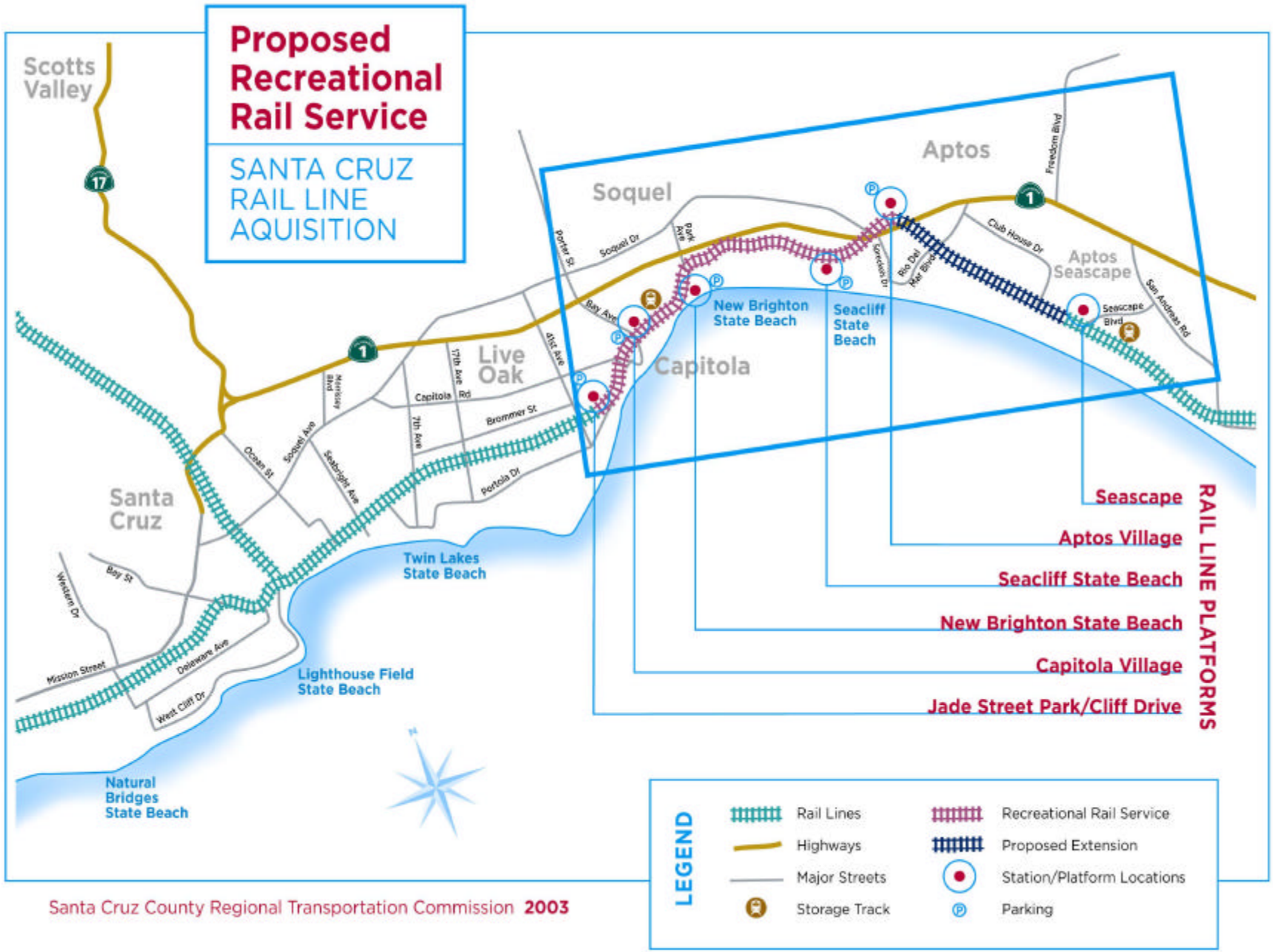
Standard Station Design (Detail on Page 16)

The basic station design includes a 10-foot wide platform, which will be 8 feet at station locations where the right of way is narrower. Each station will have a passenger shelter, benches and a tactile strip. Each station will have bicycle parking and the necessary ramps to ensure access. Each station will also have message boards to inform travelers of the expected arrival of the next train. It is expected that local communities will participate in the specific design of each station with input and funding contributions to incorporate enhancements which express the communities' character.

Maintenance and Storage Facilities

The construction of maintenance facilities is not part of this project because maintenance facilities will be available near the project area. With the planned improvements at the train station at Watsonville Junction in Pajaro, Union Pacific will be relocating its Salinas maintenance facilities to Pajaro. Santa Cruz Big Trees and Pacific Railroad has maintenance facilities in Felton. Both the Union Pacific and Big Trees maintenance facilities are about 10 miles from the project limits in opposite directions. A train operator interested in providing recreational rail service may contract with Union Pacific or Big Trees to use their maintenance facilities. The area in the Santa Cruz wye may be available for storage of rail vehicles.

[5] Santa Cruz Branch Rail Line Acquisition Project Study Report, September 7, 2000



Santa Cruz County Regional Transportation Commission **2003**

Detailed Platform Descriptions

Individual location maps and typical platform layout are listed in Appendix 1, in the order presented below.

Jade Street Park Platform (detailed location on page 17)

A passenger platform is proposed to be located west of 47th Avenue along the north side of the track, between the track and Jade Street Park. This site is the westerly end of the service.

The platform will be placed between the track and the park, beginning approximately 15 feet west of 47th Avenue so the train may make its stop without blocking the intersection or pedestrian traffic. A walkway and ramp are required to extend from the street to the platform, and some additional sidewalk improvements along 47th Avenue are required. The platform will be 8 inches above the top of the track, with dimensions approximately 8' x 150' in order to accommodate a two-car train. The platform and walkway/ramp will be asphalt concrete. Some wooden headers and/or retaining walls are required around the platform. A portable passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit and fencing or railing will be provided at the back edge for security. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single ten-unit bicycle rack will be installed. Provision for drainage along the railroad right-of-way will be made by installation of a drainage pipe beneath the platform.

According to railroad records, the right-of-way is 30 feet wide at this location, with 16 feet between the track centerline and northerly edge of the right-of-way. The back of the basic platform is 15 feet from the track centerline. All construction will be within the railroad right-of-way.

This site provides a convenient terminus for the service and allows access to Capitola's Jade Street Park facilities and community center.

Cliff Drive Platform as an Alternative to Jade Street Park Platform (detailed location on page 17)

As an alternative to the platform at Jade Street Park a passenger platform is proposed to be located adjacent to Cliff Drive, west of Capitola Village.

The platform will be placed on the tangent section of train track adjacent to Cliff Drive approximately 650 feet east of 47th Avenue. A walkway and ramp are required to extend from the existing parking area to the platform. The platform will be eight inches above the top of the track, and approximately 10' x 150' in dimensions in order to accommodate a two-car train. The platform and walkway/ramp will be asphalt concrete. Some wooden headers and/or retaining walls are required around the platform. A passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform and walkway will be lit. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed.

There is metered parking along Cliff Drive at this location. Some parking will have to be relocated to provide access to the platform. Access to Capitola Village and the beach is along Cliff Drive; the center of town is less than one-quarter of a mile away.

Capitola Station/Platform (detailed location on page 18)

A passenger platform is proposed to be located east of Monterey Avenue, between the track and the south side of Park Avenue. This is the site of the historic train station in Capitola, which is now operating as a bed and breakfast inn.

The platform will be placed across the tracks from the inn, approximately 15 feet east of Monterey Avenue so the train may make its stop without blocking the intersection. A walkway and ramp are required to extend from the street to the platform. The platform will be eight inches above the top of the track, and approximately 10' x 150' in dimensions in order to accommodate a two-car train. The platform and walkway/ramp will be asphalt concrete. Some wooden headers and/or retaining walls are required around the platform. A passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit, and railing will be provided at the back edge for passenger security. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed.

As there is a large parking lot operated by the City of Capitola immediately to the west, across Monterey Avenue, additional parking is not needed. Access to Capitola Village and the beach is along Monterey Avenue; the center of town is approximately one-quarter of a mile away.

This is the location of a storage track that will be close to the position of a historic siding. It is also proposed that there be a future separate project to improve pedestrian facilities on Park Avenue at the existing Metro bus stop adjacent to this site, thus creating an improved multi-modal transfer site.

New Brighton State Beach Platform (detailed location and photo on page 19)

A passenger platform is proposed by the track adjacent to Park Avenue, opposite Coronado Street. Walkways will provide access both to Park Avenue and New Brighton State Beach. The platform will be placed easterly of the track. The platform will be approximately 8 x 150', which will accommodate a two-car train. The platform will be eight inches above the top of track. The platform is located on a substantial cross-slope. A column and beam structure is required to support the platform. The platform will be a concrete deck over framed structure. (Detailed design may find alternate structural systems to be more economical and effective.)

The platform is located approximately 34 feet in elevation above the State Beach parking lot. This will require an accessible walkway, including switchbacks and landings, of approximately 500 feet down the side of the bank to provide access. The track and platform are 7' below the level of Park Avenue. Approximately 100' of accessible walkway will be required to connect with the adjacent street. Additional pedestrian facilities will be required at the street as well. A

passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit and fencing or railing will be provided around the platform for security. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed.

This site provides access to a popular state beach and to the residential area across Park Avenue. The track's proximity to the state beach day-use parking lot makes it convenient for beach visitors and campers to use the train for access to other tourist sites along the route.

Seacliff State Beach Platform (detailed location on page 20)

A passenger platform is proposed to be located west of State Park Drive on the south side of the track. The platform will be placed approximately fifteen feet west of the road so the train may stop clear of State Park Drive. A walkway and ramp are required to extend from the street to the platform. The platform is to be approximately 10' x 150', which will accommodate a two-car train. The platform will be eight inches above the top of track. The platform and walkway/ramp will be asphalt concrete. Some wooden headers and/or retaining walls are required around the platform. Because of grade differences an approximately four-foot high retaining wall is required at the southerly portion of the platform. A passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit, and fencing or railing will be provided at the back edge for security. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed. The access walks will connect and coordinate with improvements planned as part of the County's Seacliff Area Improvement Project.

The entrance to Seacliff State Beach is one short block from this stop, and the beach is less than one-quarter mile to the south. Three-tenths of mile to the north is a regional shopping center and Seacliff Inn. Again, similar to New Brighton State Beach, the stop's proximity to state beach parking provides visitors access to other tourist destinations without driving.

Aptos Village Station/Platform (detailed location on page 21)

A passenger platform is proposed to be located at the site of the historic train station, adjacent to the "Aptos Station" shopping complex, between the track and the north side of Soquel Drive. A short walkway and ramp are required to extend between the street, the platform and the adjacent parking lot. The platform is to be approximately 10' x 150', which will accommodate a two-car train. The platform will have to be curved to accommodate the track's curvature, and it will be eight inches above the top of track. The platform and walkway/ramp will be asphalt concrete. Some wooden headers and/or retaining walls are required around the platform. A passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit, and fencing or railing will be provided at the back edge for security. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for information signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed.

Aptos Village shops and services and ample parking are adjacent to the platform. The Aptos Village Plan, which is currently being updated, will include additional parking. Aptos County Park and the roadway entrance to Nisene Marks State Park are one-tenth of a mile to the west. A bus connection to Cabrillo Community College is next to the proposed platform.

Seascape Station/Platform (detailed location on page 22)

The proposed location of a passenger platform is northwest of the entrance to the Seascape Conference Center and Resort, between the track and Sumner Avenue. It is at the intersection of Seascape Boulevard and Sumner Avenue. The platform will be placed approximately 15-feet northwesterly of the intersection so that the train may stop without blocking the entrance road.

A walkway and ramp are required from the end of the access road sidewalk to the platform. The platform is to be approximately 10' x 150', which will accommodate a two-car train. The platform will be eight inches above the top of the track. The platform and walkway/ramp will be asphalt concrete. Wooden headers are required around the platform.

A passenger lift and enclosure as well as a passenger shelter and benches will be provided. The platform will be lit, and fencing or railing will be provided where needed to avoid falls. A two-foot wide tactile strip will run the length of the platform. Provisions will be made for informational signage, trash receptacles and a public telephone. A single bicycle rack accommodating ten bicycles will be installed.

Seascape Village shops and services are immediately across Sumner Avenue to the east. The station is adjacent to the Seascape Conference Center and Resort and just west of the entrance to the Seascape County Park and cliffside walkway.

Capitola Storage Track (detailed location on page 18)

There is a need for trains to be able to standby at, or near, the ends of the rail line to wait until the scheduled time of departure (schedule recovery). The train also needs a location to be stored for short periods such as overnight without having to return to a permanent storage facility. Trains also need to be able to wait off the main track to avoid potential conflicts with the freight service.

There are no useable sidings in the vicinity of the Capitola end of the service. Restricted right-of-way width west of Capitola Village prevents construction of a new siding at the Jade Street Park Stop. A siding existed at the site of the Capitola stop (the former Capitola Depot site.) A turnout and 250 feet of tangent track are proposed to be constructed at this location.

Seascape Storage Track (detailed location on page 22)

A storage capacity similar to that proposed at Capitola is needed at the Seascape end. A turnout and *250* feet of tangent track are to be constructed. This can be located roughly two-tenths of a mile easterly of the passenger stop on the northerly (street) side of the main track. Excavation and a six-foot retaining wall will be required. The train will be partially screened from adjacent residents by the wall; and landscaping between the top of the wall and along the street will

complete the screening. There is sufficient space within the existing railroad right-of-way for this construction.

"Next Train" Announcement System

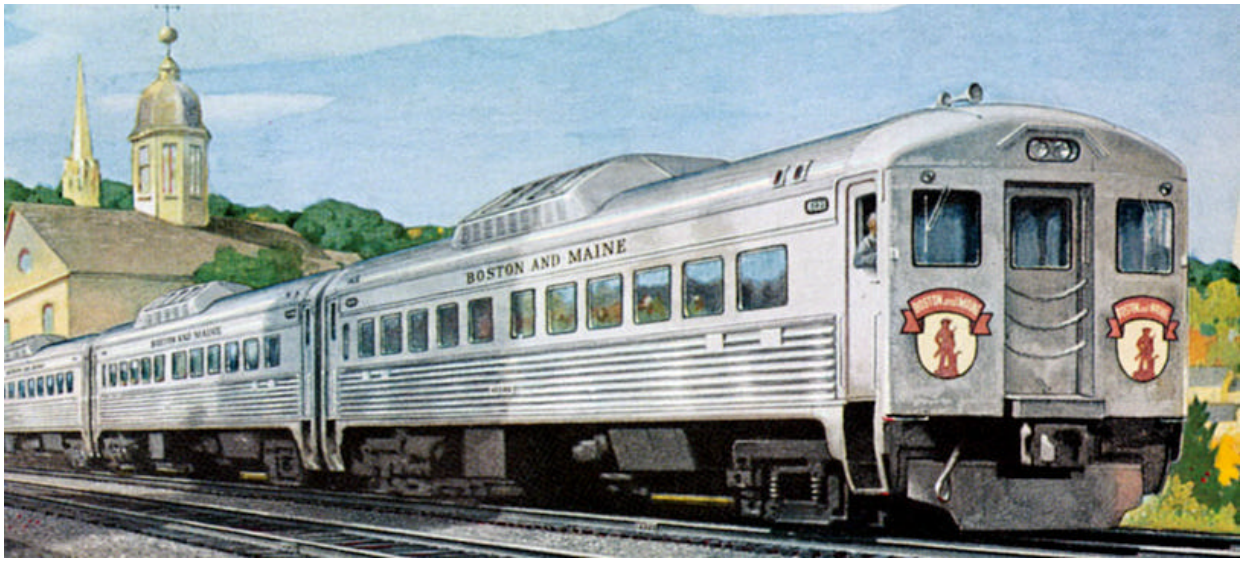
Due to the need to accommodate continued daytime freight service, it is proposed that each platform be equipped with electronic signs that accurately report the anticipated arrival time of the next train. The system requires a receiving unit at each platform and a transmitting unit on each train. Using GPS technology combined with predetermined running times, passengers will be informed of the anticipated arrival time of the vehicle for which they are waiting.

Train Set

The Alta study suggested the use of a two-car, self-propelled train. The Preliminary Project Report assumes that the rail vehicles used for this service will be Rail Diesel Cars (see photo below), or a similar self-propelled rail car. Rail Diesel Cars meet all of the federal requirements for operating passenger train service and freight rail service on the same railroad track. It is proposed that a three-car train set be purchased with 2 engine cars which can operate individually or in conjunction with other cars and one car that must be operated with other cars. Having 2 engine cars provides for a back up car in case one needs to be out of service for repair or maintenance. Having a three car set gives a train operator the flexibility to run one two or three cars depending on the demand for ridership or to accommodate special events.

The contract operator may use its own rail vehicles or use the proposed Commission owned vehicles. If the contract operator uses Commission owned vehicles, the operator will be required to maintain them accordingly. Any operator owned vehicles used will meet the standards and equipment specifications of the Commission owned vehicles.

Rail Diesel Car



Crossings

This project does not propose to change any grade crossings. There are existing crossings to accommodate the railroad right-of-way's intersections with various streets and roads and Highway 1. There are eight grade-separated crossings and eight at-grade crossings. The grade crossings are the follows:

Grade Separated Crossings	At-Grade Crossings
Wharf Road in Capitola	47th Avenue in Capitola
Riverview Avenue in Capitola	Monterey Avenue in Capitola
Capitola Avenue in Capitola	New Brighton Road at New Brighton State Beach
Highway 1 (twice) in Aptos	Estates Drive in Seacliff
Soquel Drive (twice) in Aptos	Mar Vista Avenue in Seacliff
Rio Del Mar Boulevard in Aptos	State Park Drive in Seacliff
	Aptos Creek Road in Aptos
	Trout Gulch Road in Aptos

There are additional grade-separated crossings where the railroad right-of-way traverses creeks and other minor waterways.

Train Operations

Proposals to operate the rail service will be sought from private rail operators. The firm chosen to operate the service will provide all necessary staff, maintenance, servicing, marketing, promotions and all other related services for full operations. Proposition 116 funds are included in the financial plan to purchase one three-car rail diesel train set.

The existing successful tourist rail operation of the Santa Cruz Big Trees and Pacific Railway Company operates 105 days a year. It operates its service to the Boardwalk weekends from mid-May to mid-June, then daily through August, and weekends to the end of October.

The length of the route is six miles. It is anticipated that the Village Cruzer would operate at approximately 15 mph average speed over the course of the route. The train speed will not exceed 25 mph between stations; this is the standard residential street speed limit. At a maximum, the train will operate on a one-hour round trip headway, including stops and schedule recovery time.

The train will operate under central dispatch control, which will control all operations on the track between Watsonville and Davenport when the passenger train is in service. Switch operation, when needed, will be manual.

Project Cost Estimates and Funding Sources

The total estimated project capital cost is $1,596,780 for all portions of the project. Details for each project component are listed in Appendix 2.

Capital Cost Estimates*
Passenger Platforms and Related Improvements (Revised 9/03)

Item	Construction Cost	Engineering (10%)	Construction Mgmt. (5%)	Contingency (25% of total)	Project Total
Platforms					
Jade Street Park	$101,110	$10,110	$5,060	$29,070	$145,350
Capitola Village	$82,660	$8,270	$4,130	$23,770	$118,830
New Brighton State Beach	$162,970	$16,300	$8,150	$46,860	$234,280
Seacliff State Beach	$100,400	$10,040	$5,020	$28,870	$144,330
Aptos Village	$82,520	$8,250	$4,130	$23,730	$118,630
Seascape Village	$82,520	$8,250	$4,130	$23,730	$118,630
Platform Subtotal	$612,180	$61,220	$30,620	$176,030	$880,050
Trackwork					
Capitola Storage Track	$85,250	$8,530	$4,260	$24,510	$122,550
Seascape Storage Track	$89,500	$8,950	$4,480	$25,730	$128,660
Trackwork Subtotal	$174,750	$17,480	$8,740	$50,240	$251,210
Equipment					
"Next Train" System**	$118,000	$11,800	$5,900	$13,570	$149,270
3-Car Train Set**	$250,000	$25,000	$12,500	$28,750	$316,250
Total Project Cost	$1,154,930	$115,500	$57,760	$268,590	$1,596,780
Platforms with Cliff Dr. Alt.					
Cliff Drive Platform	$93,840	$9,380	$4,690	$26,980	$134,890
Less Jade St. Platform	($101,110)	($10,110)	($5,060)	($29,070)	($145,350)
Adj. to Platform Subtotal					($10,460)

* Does not include acquisition of the Santa Cruz Branch Rail Line or oversight costs associated with the acquisition
** 10% equipment contingency

Funding sources for the project are listed below. All matching funds are secured.

Project Phases	Estimated Cost	Funding Source
Environmental Review	$85,000	Regional Share STIP (state funds)
Design and Construction	$1,596,780	Proposition 116
Operations	n.a.	Private Operator
Total	$1,681,780	

Hazardous Materials/Waste

A Phase I environmental site assessment was conducted for the entire project right-of-way and completed in April, 1997. The purpose of the Phase I environmental site assessment was to identify features or historical uses or activities that could be associated with environmental impairment of soil and/or groundwater along the right-of-way. The Phase I environmental site assessment included an above ground look at the right-of-way and facilities within and adjacent to the right-of-way. The assessment also included review of records and historical information on the railroad operations, derailments, nearby environmental investigations, chemical usage on the right-of-way or on sites adjacent to the right-of-way. Although the Phase I environmental assessment did not conclude that there is likely to be environmental contamination on the right-of-way, the Regional Transportation Commission will conduct a Phase II site assessment.

The SCCRTC has the funds and has issued a contract to conduct the Phase II environmental site assessment. The assessment work will begin as soon as a right of entry agreement is secured from Union Pacific. The Phase II assessment will include taking soil samples and analyzing them for contamination. The assessment is expected to be completed by March 2004.

Environmental Review

The *Major Transportation Investment Study* (MTIS) completed in 1998 conducted an environmental screening of transportation alternatives for the corridor including several alternatives on the Santa Cruz Branch Rail Line ROW. In 2002, the Regional Transportation Commission completed environmental review for acquisition of the Santa Cruz Branch Rail Line by issuing a Negative Declaration to satisfy the California Environmental Quality Act (CEQA) and obtaining a Categorical Exclusion to satisfy the National Environmental Policy Act (NEPA).

This project is statutorily exempt from the California Environmental Quality Act as a project that provides for "the institution or increase of passenger or commuter services on rail lines or highway rights-of-way already in use, including the modernization of existing stations and parking facilities" (Public Resources Code, Section 21080(b)(10)). However, the *2001 Santa Cruz County Regional Transportation Plan* (RTP) requires that an environmental impact report (EIR) be completed for this project:

> "Retain the option of future in-county passenger rail service for when it is financially feasible, acceptable to the community, and only after the completion of an environmental impact report that concludes that all the significant impacts can be satisfactorily mitigated."(2001 RTP, Policy 2.4.6)

Therefore, the Regional Transportation Commission has initiated an EIR process under the California Environmental Quality Act (CEQA). It may be determined that the project does not require environmental review under the National Environmental Policy Act (NEPA) because federal funds will not be used for the project, it will not involve federal lands, and it is not expected to have impacts on federally protected waterways or wetlands.

A contract to complete the necessary environmental work is expected to be in place by August 2003 and the work is expected to be completed by March of 2004. Some of the possible impacts which have been proposed for study are noise, safety and traffic circulation.

Project Schedule

The expected schedule for the project is as follows:

Project Phase	Start Date
Design engineering	2005
Construction	2005-2006
Operating Proposals Solicited	2005
Service	2006

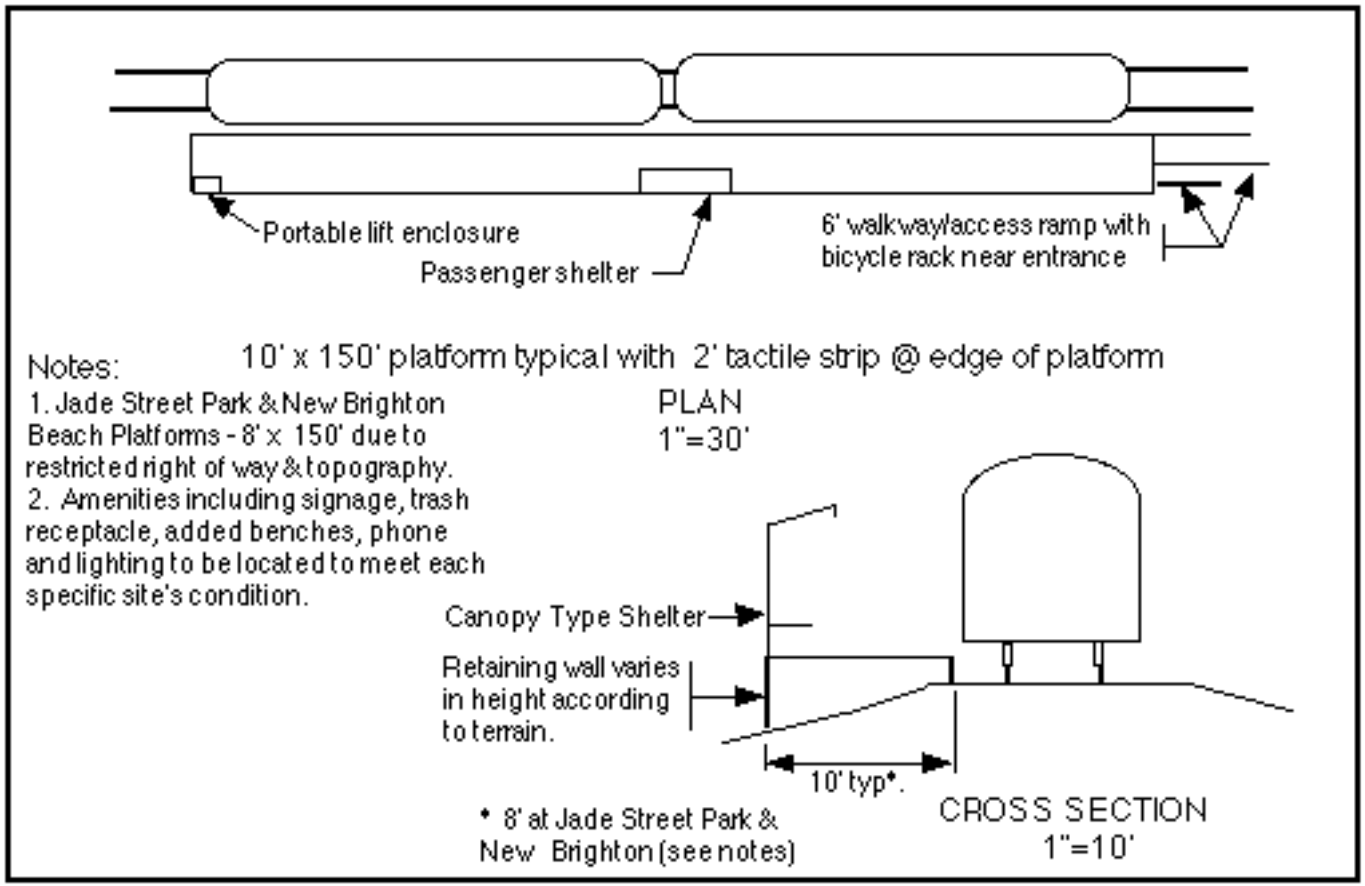
Various factors will affect the timing of this project, including the timing of allocation of state funds.

Project Contacts

Linda Wilshusen, Executive Director for the Santa Cruz County Regional Transportation Commission, is the contact person for this project, (831) 460-3213 or linda.wilshuse@co.santa-cruz.ca.us. Additional information on this Project Study Report may be obtained from Project Engineer, Robert W. Scott, (861) 438-0135 or bob@scottbiz.com or Senior Transportation Planner, Luis Mendez, (831) 460-3212 or luis.mendez@co.santa-cruz.ca.us. Additional information may also be obtained from the Regional Transportation Commission website at http://www.sccrtc.org, by e-mail at info@sccrtc.org or by regular mail at Santa Cruz County Regional Transportation Commission, 1523 Pacific Avenue, Santa Cruz, CA 95060.

Appendix 1

Individual Maps Layout and Photos

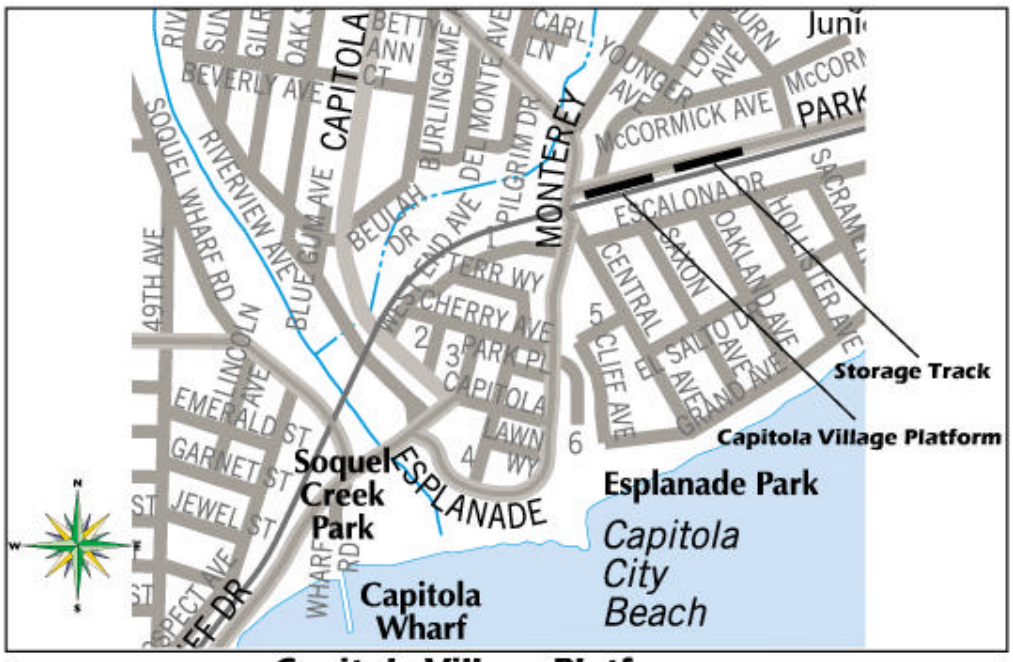


TYPICAL PASSENGER PLATFORM

Jade Street Park Platform

Jade Street Park Platform Site – looking east to 47th Avenue

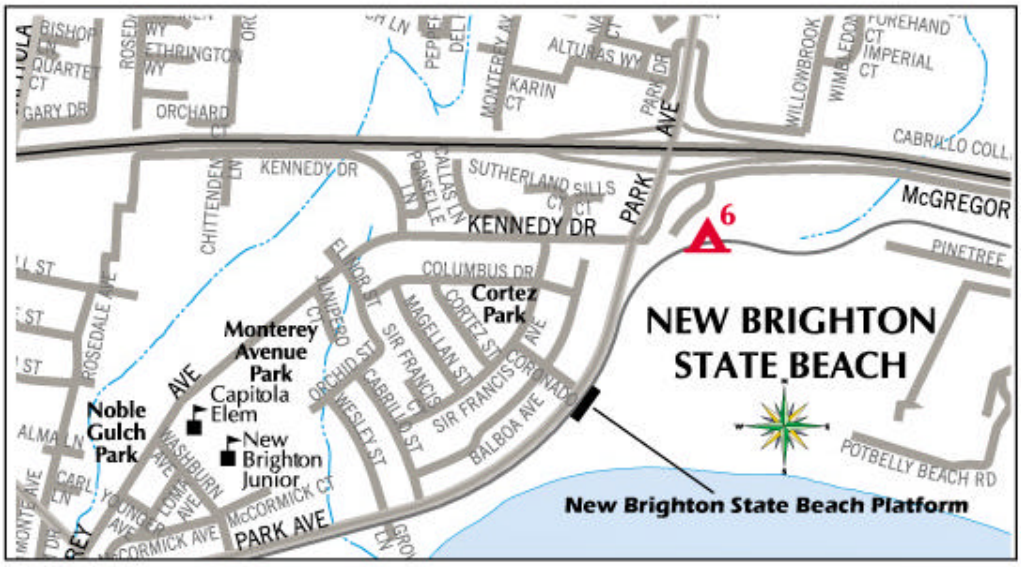
Cliff Drive Platform (Alternate Site) – looking east



Capitola Village Platform

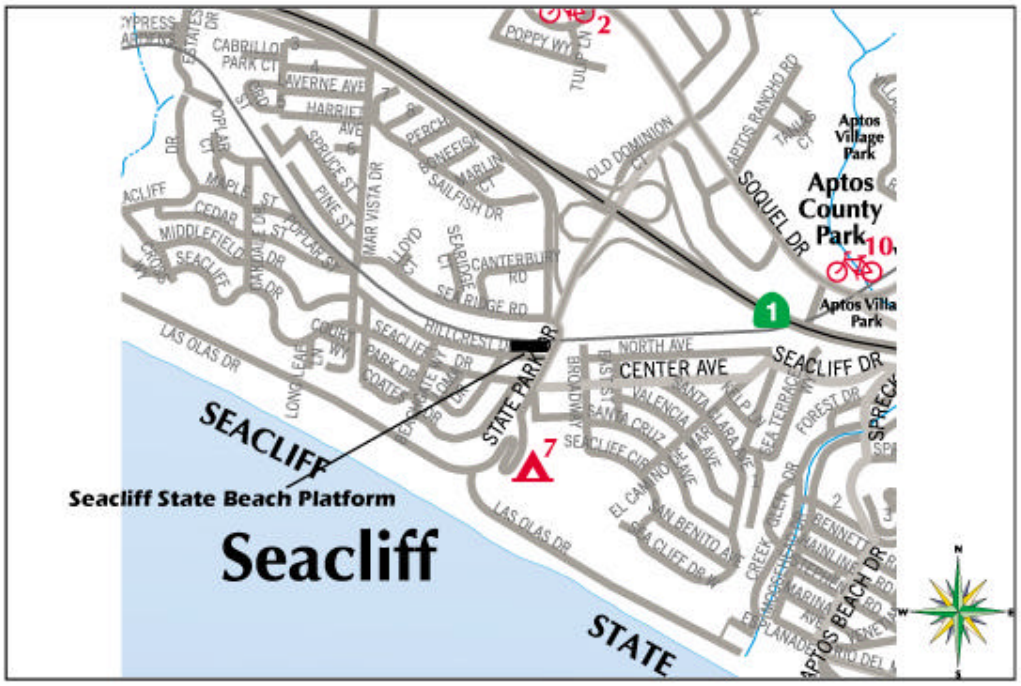
Capitola Village Platform Site – looking west

Capitola Storage Track Location – looking east from the proposed platform site



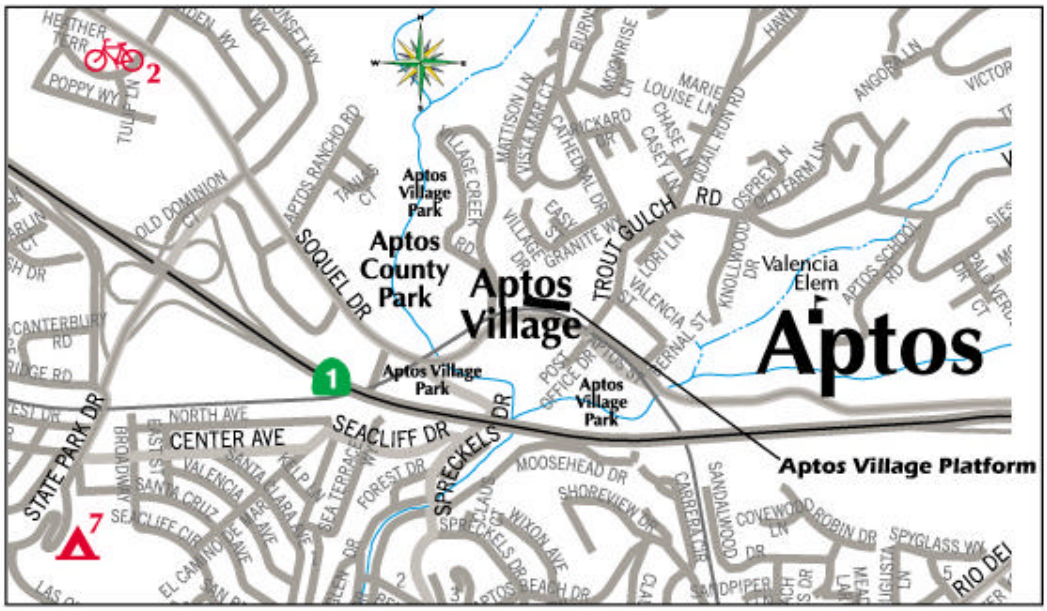
New Brighton State Beach Platform

New Brighton Park Platform Site – looking east



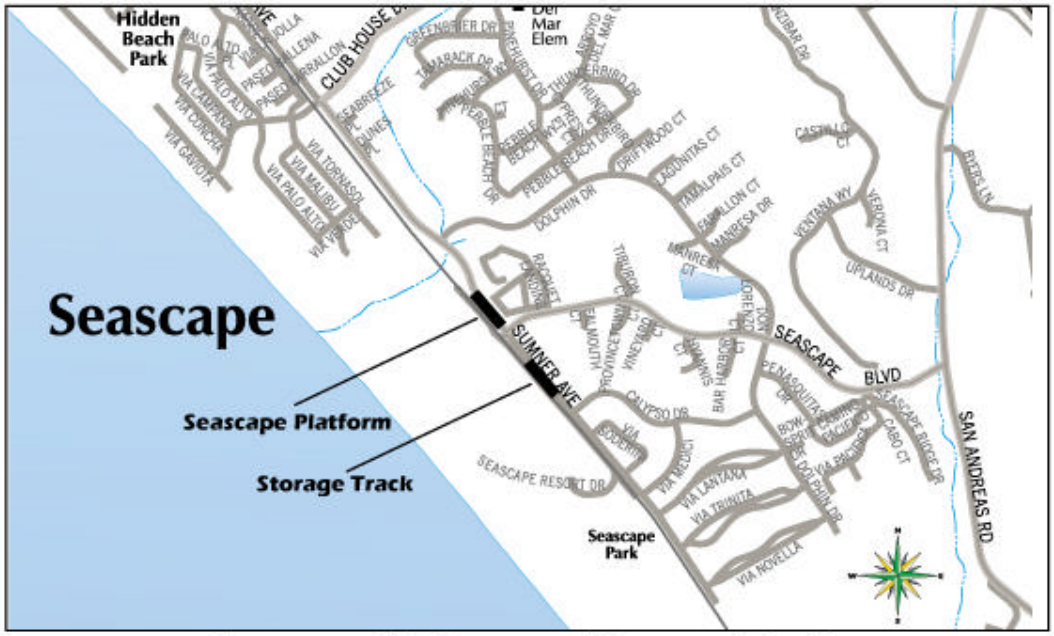
Seacliff State Beach Platform Not to scale, for illustrative purposes only

Seacliff Platform Site – looking east toward State Park Drive



Aptos Village Platform

Aptos Station Platform Location – looking west



Seascape Platform and Storage Track

Not to scale, for illustrative purposes only

Seascape Platform Site – looking west

Seascape Storage Track Location – looking east

Appendix 2

Detailed Construction Cost Estimates

Detailed Estimate - Jade Street Park Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$8,000	$8,000
Grading & subbase preparation	L. S.	n/a	$5,000	$5,000
Walkway & ramp	S. F.	90	$8.00	$720
Earthfill	C. Y.	48	$11.50	$554
Aggregate base	C. Y.	15	$45	$682
Platform paving	S. F.	1200	$5.00	$6,000
Retaining wall	S. F.	323	$30	$9,690
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1200	$7.50	$9,000
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Hand railing	L. F.	164	$36	$5,904
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Drainage installation	L. S.	n/a	$8,400	$8,400
Street Sidewalk prep. (allow.)	L. S.	n/a	$1,600	$1,600
Construction Total				$101,113

Detailed Estimate - Cliff Drive Platform (Alternate)				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$7,500	$7,500
Grading & subbase preparation	L. S.	n/a	$4,500	$4,500
Walkway & ramp	S. F.	100	$8.00	$800
Earthfill	C. Y.	32.5	$11.50	$374
Aggregate base	C. Y.	18.5	$45	$833
Platform paving	S. F.	1500	$5.00	$7,500
Retaining wall	S. F.	184	$30	$5,520
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1500	$7.50	$11,250
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Parking facilities relocation (allow.)	L. S.	n/a	$10,000	$10,000
Construction Total				$93,839

Detailed Estimate - Capitola Village Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$7,000	$7,000
Grading & subbase preparation	L. S.	n/a	$4,000	$4,000
Walkway & ramp	S. F.	78	$8.00	$624
Earthfill	C. Y.	32.5	$11.50	$374
Aggregate base	C. Y.	18.5	$45	$833
Platform paving	S. F.	1500	$5.00	$7,500
Retaining wall	S. F.	184	$30	$5,520
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1500	$7.50	$11,250
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Construction Total				$82,663

Detailed Estimate - New Brighton Beach State Park Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$13,000	$13,000
4-foot pathway - park access	L. F.	500	$32.00	$16,000
4-foot pathway - street access	L. F.	100	$32.00	$3,200
Platform support structure	S. F.	1200	$30.00	$36,000
Plarform decking	S. F.	1200	$10.00	$12,000
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting (including pathway)	S. F.	3640	$7.50	$27,300
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Hand railing	L. F.	164	$36	$5,904
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Sidewalk improv. on Bay St.	L. S.	n/a	$4,000	$4,000
Construction Total				$162,967

Detailed Estimate - Seacliff Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$7,500	$7,500
Grading & subbase preparation	L. S.	n/a	$4,500	$4,500
Walkway & ramp	S. F.	126	$8.00	$1,008
Earthfill	C. Y.	89	$11.50	$1,024
Aggregate base	C. Y.	19	$45	$833
Platform paving	S. F.	1500	$5.00	$7,500
Retaining wall	S. F.	566	$30	$16,980
Timber header	S. F.	150	$12	$1,725
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1500	$7.50	$11,250
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Hand railing	L. F.	146	$30	$4,380
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Construction Total				$100,399

Detailed Estimate - Aptos Village Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$7,000	$7,000
Grading & subbase preparation	L. S.	n/a	$4,000	$4,000
Walkway & ramp	S. F.	60	$8.00	$480
Earthfill	C. Y.	32.5	$11.50	$374
Aggregate base	C. Y.	18.5	$45	$833
Platform paving	S. F.	1500	$5.00	$7,500
Retaining wall	S. F.	184	$30	$5,520
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1500	$7.50	$11,250
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Construction Total				$82,519

Detailed Estimate - Seascape Platform				
Item	Unit	Quantity	Unit Cost	Total
Clear & prepare site	L. S.	n/a	$7,000	$7,000
Grading & subbase preparation	L. S.	n/a	$4,000	$4,000
Walkway & ramp	S. F.	60	$8.00	$480
Earthfill	C. Y.	32.5	$11.50	$374
Aggregate base	C. Y.	18.5	$45	$833
Platform paving	S. F.	1500	$5.00	$7,500
Retaining wall	S. F.	184	$30	$5,520
Timber header	S. F.	162	$12	$1,863
Tactile strip	S. F.	300	$30	$9,000
Lighting	S. F.	1500	$7.50	$11,250
Passenger shelter installed	L. S.	n/a	$4,000	$4,000
Passenger lift enclosure	L. S.	n/a	$7,500	$7,500
Bicycle rack installed	L. S.	n/a	$1,200	$1,200
Striping & signage (allow.)	L. S.	n/a	$2,500	$2,500
Landscape & fencing (allow.)	L. S.	n/a	$7,000	$7,000
Benches, trash receptacles (allow.)	L. S.	n/a	$2,500	$2,500
Utility connection fees (allow.)	L. S.	n/a	$10,000	$10,000
Construction Total				$82,519

Capitola Storage Track			
Item	Unit Cost	Quantity	Total
Turnout	$68,000/L.S.	lum sum	$68,000
Track	$115/L.F.	150 L.F.	$17,250
Construction Total			$85,250
Seascape Storage Track			
Item	Unit Cost	Quantity	Total
Excavation and Offhaul	$17/C. Y.	250 C. Y.	$4,250
Turnout	$68,000/L.S.	lump sum	$68,000
Track	$115/L.F.	150 L.F.	$17,250
Construction Total			$89,500
"Next Train" Announcement System			
Item	Unit Cost	Quantity	Total
Platform Installation	$18,000	6 platforms	$108,000
Train Installation	$5,000	2 trains	$10,000
Equipment Total			$118,000
Train Set			
Item	Unit Cost	Quantity	Total
3-Car Set	$200,000	1 set	$200,000
Transport and refurbish	$50,000	1 set	$50,000
Equipment Total			$250,000

Appendix 3

Chronology of Rail Related Studies
Santa Cruz County
1977 – 2003

1977 Feasibility of Railway Service, San Jose – Santa Cruz (Caltrans)

1978 Countywide Local ½ Cent - Transit Sales Tax Approved

1980 Intracounty Rail Study (SCCRTC, Englund & Sons – consultant)

1983 Feasibility of Passenger Rail Service Study (SCCRTC)

1984 Countywide Measure A Election – 83% of voters support allowing article XIX gas tax funds to be spent on rail development

1989 Urban Corridor System Planning Study (SCMTD, McGean et al – consultants)

1989 Suburban Corridor System Planning Study (SCMTD, McGean & Douglas – consultants)

1991 Fixed Guideway Planning Charrette – Summary Report (SCCRTC, Deleuw, Cather & Company – consultants)

1993 Corridor Refinement Study (SCCRTC, Parsons Brinkerhoff – consultants)

1995 Santa Cruz – Los Gatos Rail Corridor Feasibility Study (SCCRTC, Deleuw, Cather & Company – consultants)

1996 Intercity Recreational Rail Study (SCCRTC, Parsons Brinckerhoff Quade & Douglas – consultants)

1998 Around the Bay Rail Study (SCCRTC, LS Transit Systems – consultants)

1998 Major Transportation Investment Study (SCCRTC, Parsons Brinckerhoff Quade & Douglas – consultants

2000 Santa Cruz Branch Line Acquisition Project Study Report (SCCRTC)

2002 Final Initial Study and Negative Declaration for the Santa Cruz Branch Rail Line Acquisition (SCCRTC, Denise Duffy & Associates – consultants)

2003 Santa Cruz Branch Line Intra-County Recreational Rail Options Preliminary Analysis (SCCRTC, Hyde, Miller, Owen & Trost – consultants)

SCCRTC = Santa Cruz County Regional Transportation Commission
SCMTD = Santa Cruz Metropolitan Transit District
Caltrans = California Department of Transportation