

Lake Hodges Bicycle and Pedestrian Bridge Status Report

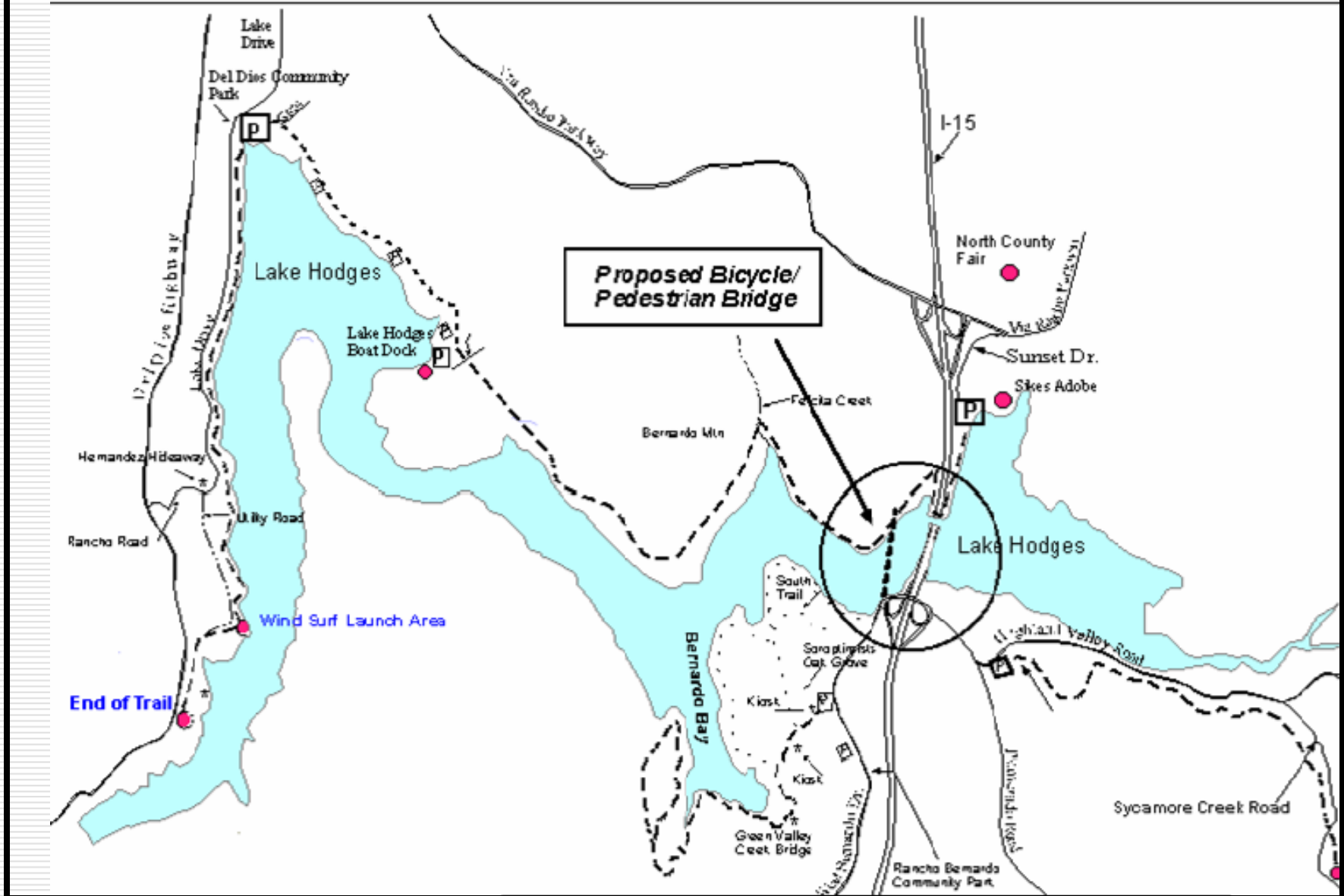
Susan Carter, Deputy Director
San Dieguito River Park Joint Powers Authority

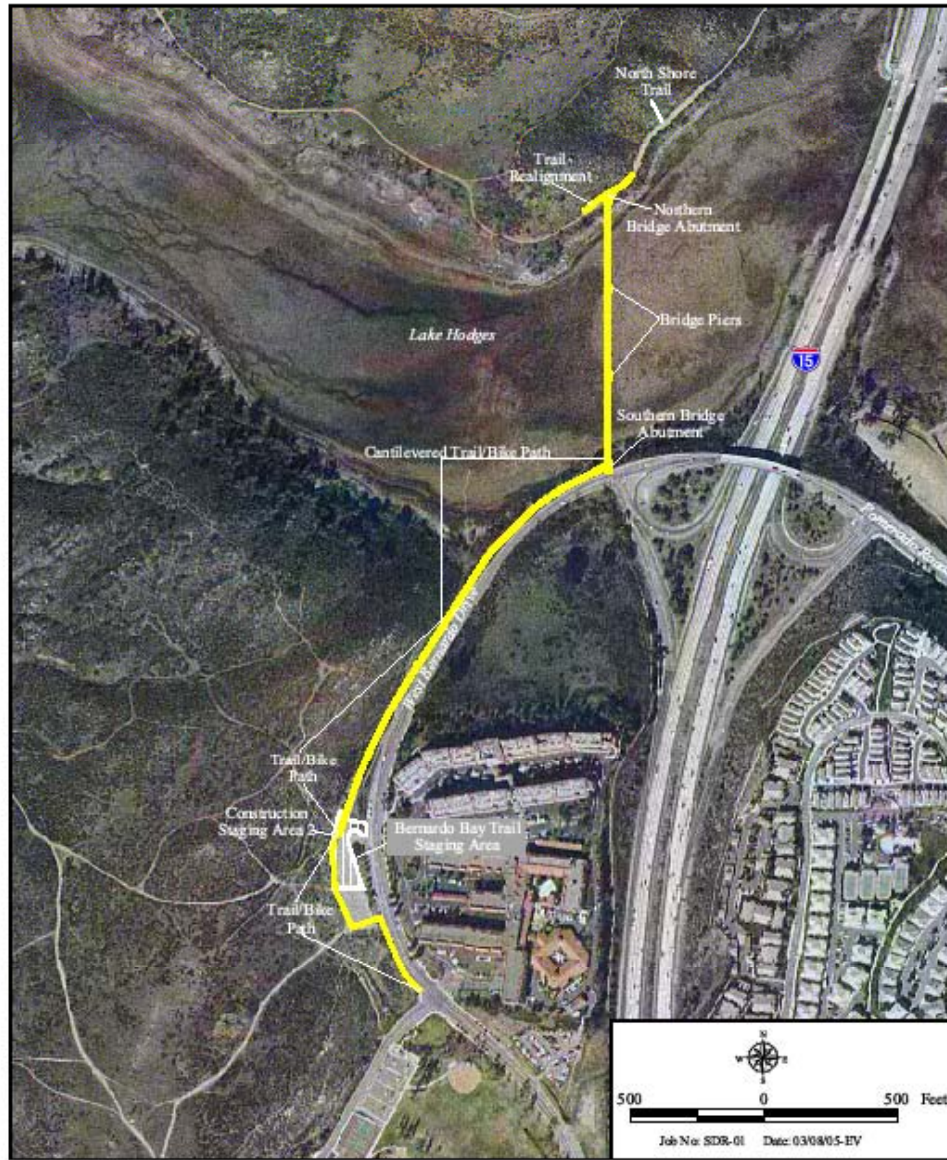
Bill Prey, Construction Engineer
SANDAG

February 13, 2008



San Dieguito River Park Trails Lake Hodges Area





013 of 001200-01 Lake At Emerald 01.apr74-jul17.mxd (Map)

Project Location Map

LAKE HODGES PEDESTRIAN/BICYCLE BRIDGE

Figure 2

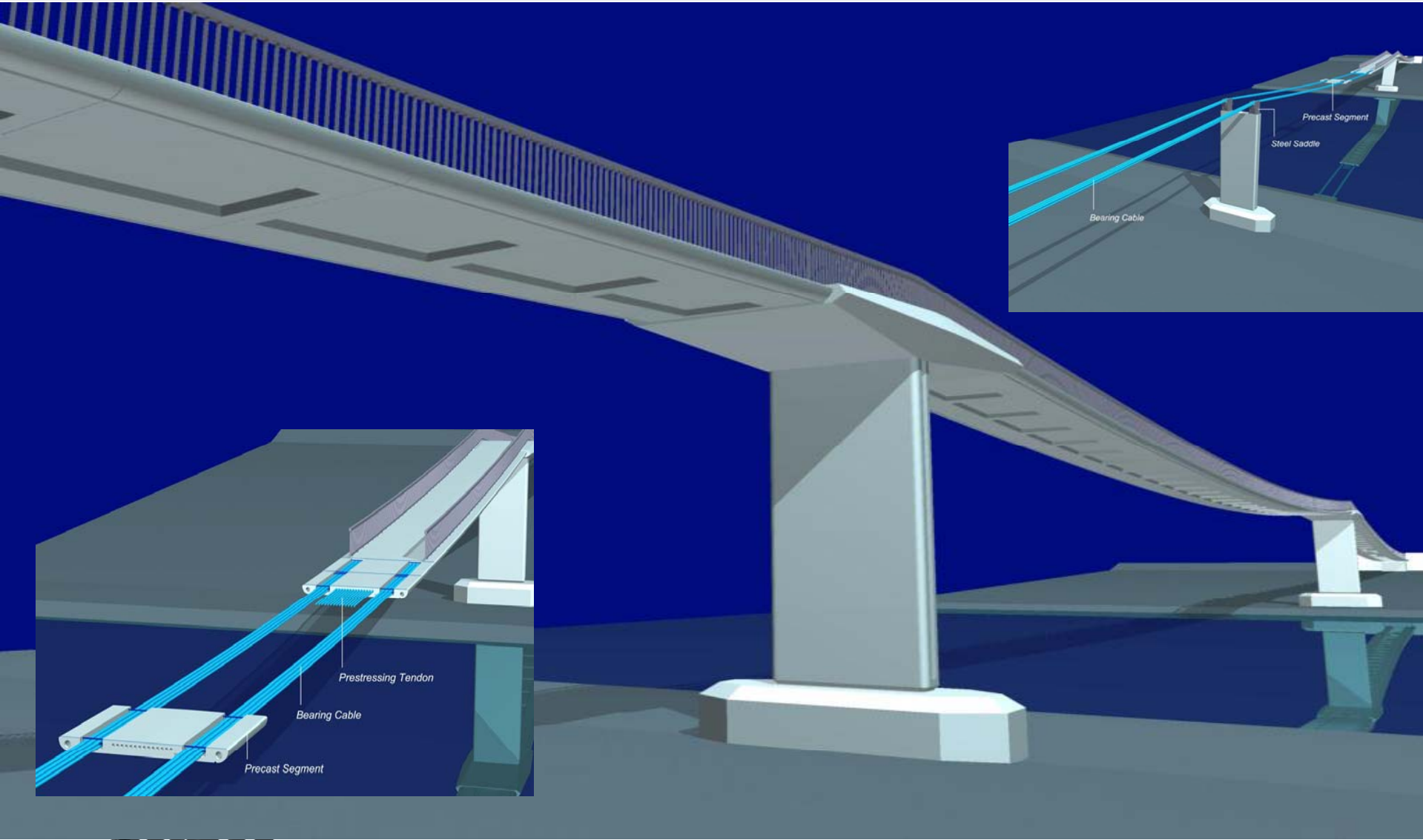


HELIX

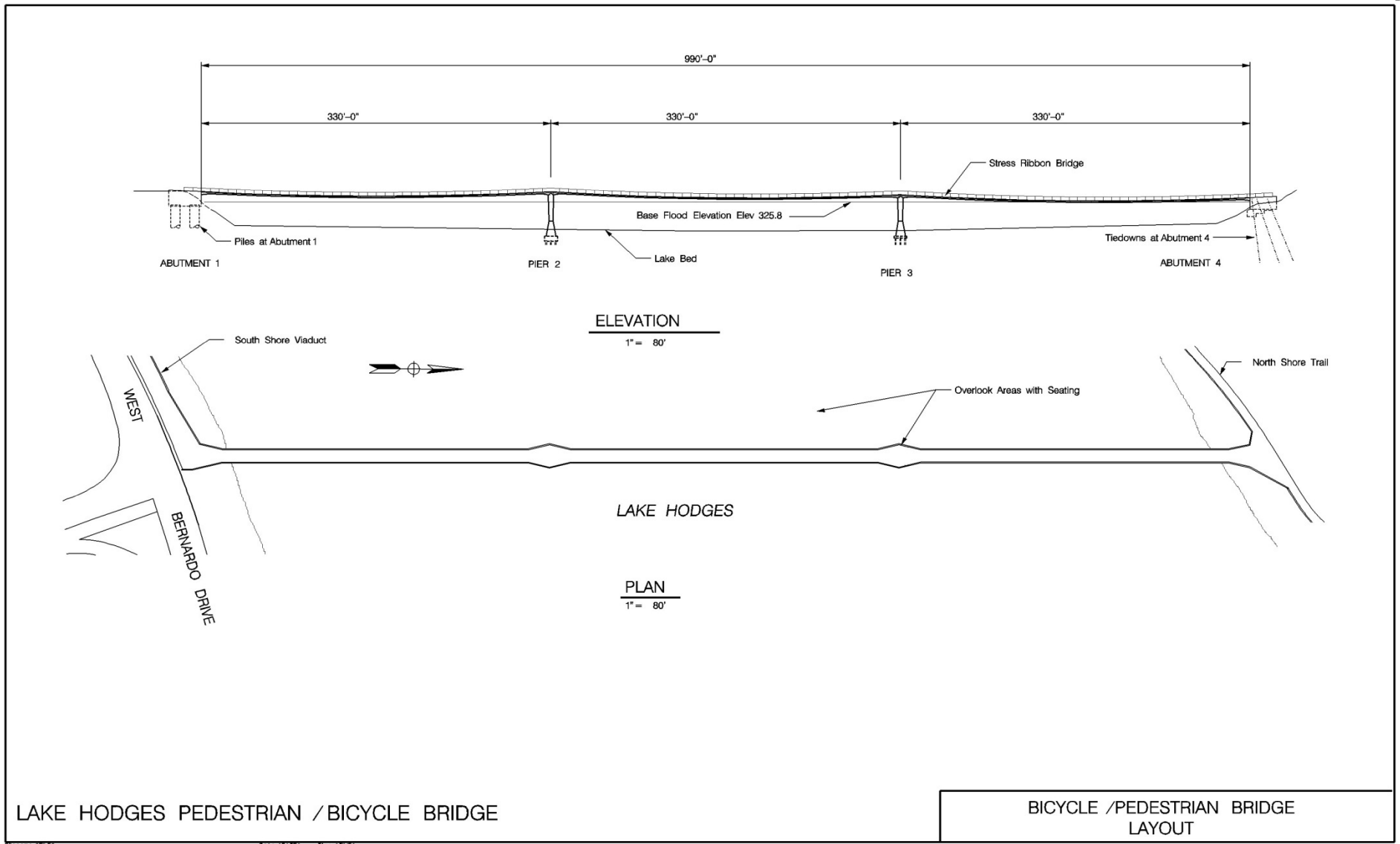
Stress Ribbon Bridge



Stress-Ribbon Bridge Construction



Bridge Layout

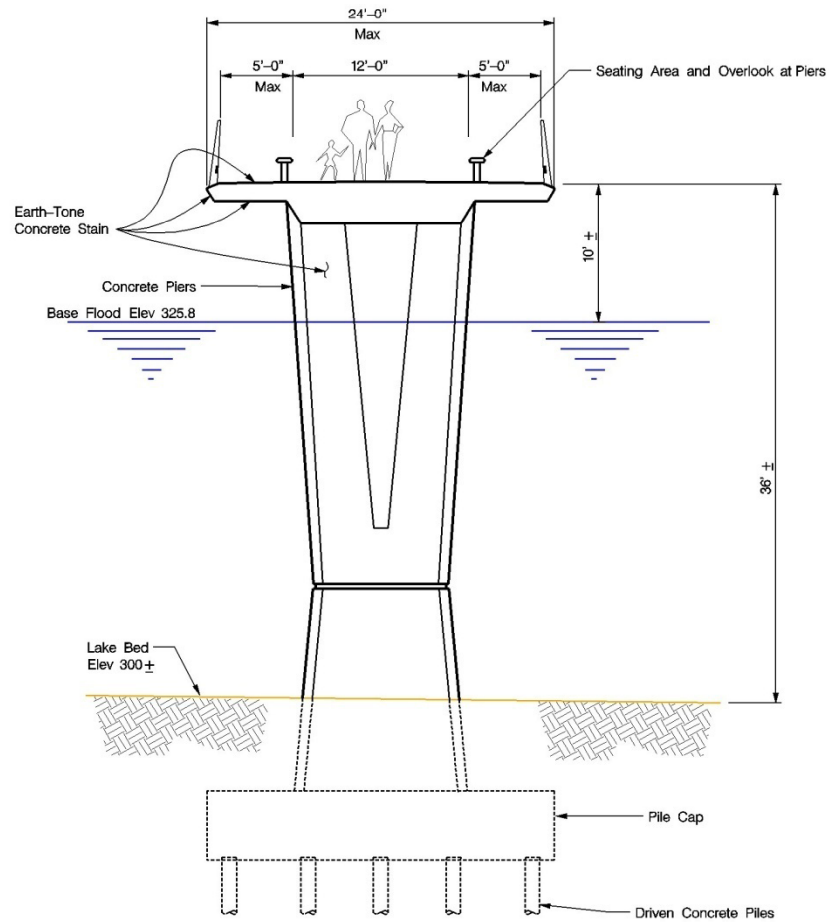


LAKE HODGES PEDESTRIAN / BICYCLE BRIDGE

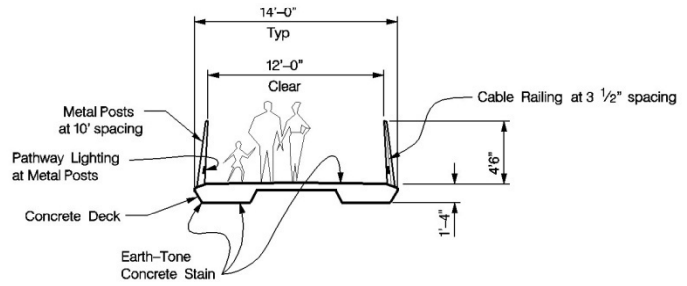
BICYCLE / PEDESTRIAN BRIDGE LAYOUT



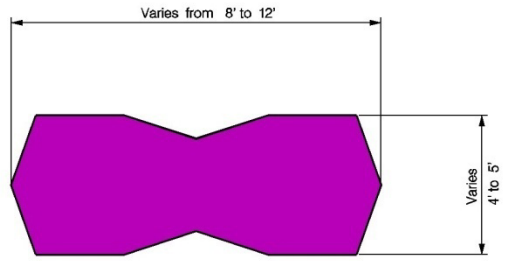
Bridge Typical Sections



SECTION AT PIER
1/8" = 1'-0"



SECTION BETWEEN PIERS
1/8" = 1'-0"



PIER CROSS SECTION
3/8" = 1'-0"

LAKE HODGES PEDESTRIAN / BICYCLE BRIDGE

BICYCLE / PEDESTRIAN BRIDGE
TYPICAL SECTIONS



Project Purpose

- ❑ Provide bicyclists and pedestrians a commuting and recreational route for crossing Lake Hodges and the San Dieguito River Valley
- ❑ Provide recreational users access to the network of trails on both sides of the lake without using an automobile

Design

- ❑ Design by T Y Lin International
- ❑ “Stress ribbon” bridge
- ❑ 1,000 ft long
- ❑ Three spans
- ❑ Precast concrete deck
- ❑ Panels 14 ft wide x 10 ft long x 16 in thick

Design

- ❑ Panels strung on cables anchored using rock anchors
- ❑ Panels "stressed" to create a rigid deck
- ❑ Concrete panels produce a thin bridge profile from the side

LAKE HODGES BICYCLE AND PEDESTRIAN BRIDGE FUNDING
(Phase 1 and Phase 2)

1.	\$3,061,000	Federal Transportation Enhancement (TE) funds (w/ Caltrans District 11)
2.	\$1,500,000	State River Parkway Bond Act funds (Prop 13)
3.	\$625,000	State River Parkway Bond Act funds (Prop 40)
4.	\$500,000	SANDAG FY 2004 and 2005 <i>TransNet</i> Bicycle Program funds
5.	\$2,000,000	Federal TE funds (SANDAG regional, March 2006)
6.	\$1,875,000	SANDAG FY 2009 <i>TransNet</i> Bicycle, Pedestrian and Neighborhood Safety funds (March 2007)
7.	\$347,000	State River Parkway Bond Act funds (Prop 40, July 2007)
8.	\$9,908,000	Total Available Funding Phase 1 and Phase 2



LAKE HODGES BICYCLE AND PEDESTRIAN BRIDGE BUDGET (Phase 1 and Phase 2)

	Expenditures	Forecast	Line Item
	To Date	To Complete	
1.	\$70,000	\$70,000	Project Administration
2.	\$401,913	\$401,913	Environmental
3.	\$798,187	\$816,599	Design
4.	\$249,800	\$438,995	Construction Management
5.	\$2,107,978	\$2,107,978	Construction Phase 1
6.	\$3,397,059	\$6,710,205	Construction Phase 2
7.	-	(\$229,171)	Change Orders Phase 2
8.	-	-	Remaining Project Contingency
9.	\$7,024,937	\$10,316,519	Total Budget Phase 1 and Phase 2



Lake Hodges Bicycle and Pedestrian Bridge Status Report

- ❑ Forecast to Complete: \$10,316,519
- ❑ Available Funding: \$9,908,000
- ❑ Current Shortfall: \$408,519
- ❑ Options:
 - Additional cost saving changes
 - Grants and donations
 - Assess membership
 - Mortgage reconstructed facility



Lake Hodges Bicycle and Pedestrian Bridge Status Report

□ Phase 1

- Constructed South Abutment
- Contractor – FCI Constructors, Inc.
- Amount - \$2,107,978
- Completed - May 15, 2007



Lake Hodges Bicycle and Pedestrian Bridge Status Report

□ Phase 2

- Constructing Bridge, Piers and North Abutment
- Contractor – FCI Constructors, Inc.
- Amount - \$6,679,275
- Began - September 16, 2007
- Scheduled Completion – March 16, 2009

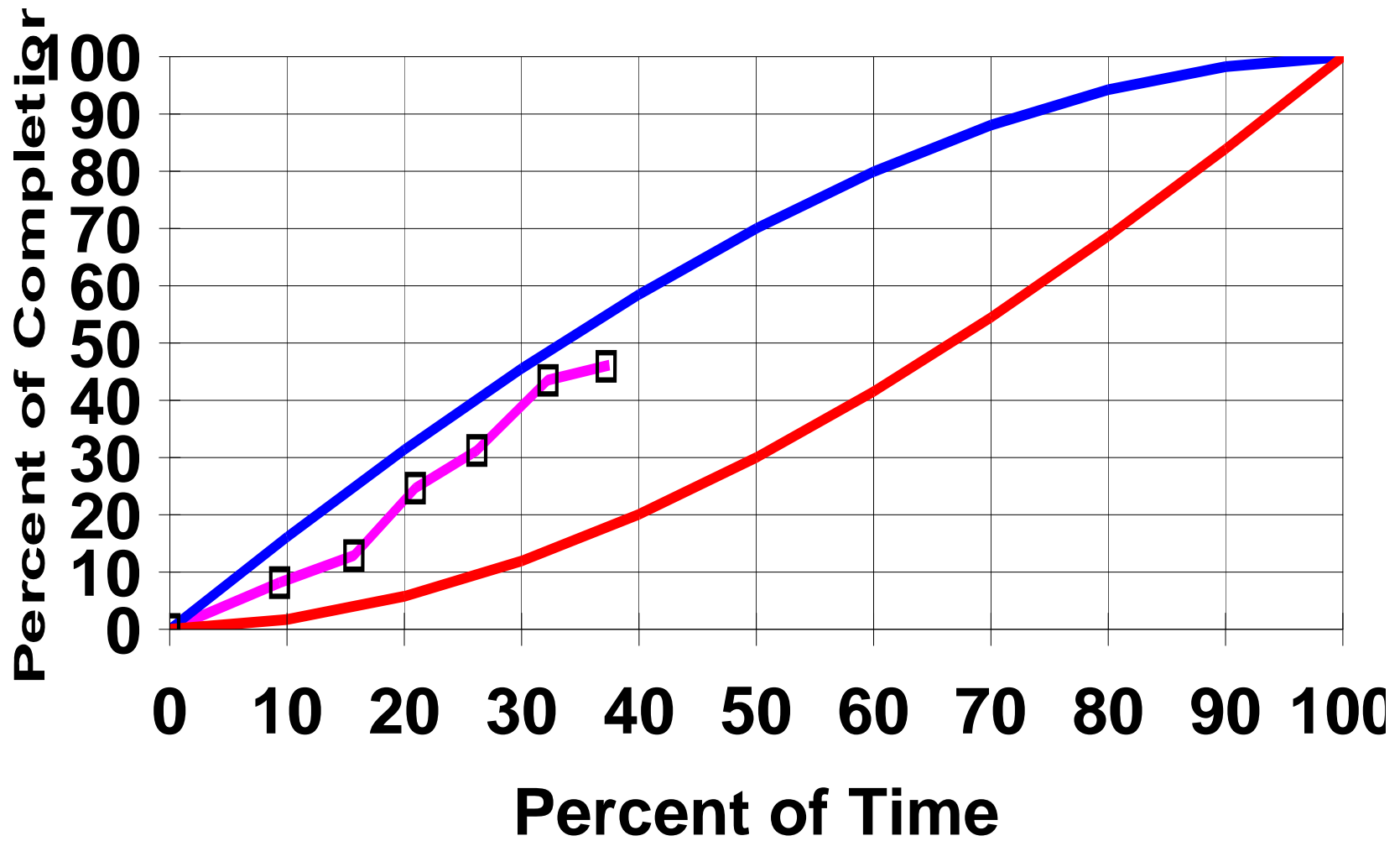


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□ Phase 2

- 51% complete
- \$3.4 million of \$6.7 million earned
- 37.5% of working days expended
- 4.5 months of 12 month working time expended

"EXAMPLE" CONSTRUCTION PROGRESS CURVE



Lake Hodges Bicycle and Pedestrian Bridge Status Report

□ Phase 2

- Constructed temporary trestle
- Completed driving piling for bridge piers
- Completed driving sheet piling
- Installed internal bracing for cofferdams
- Began pumping water from cofferdams



Lake Hodges Bicycle and Pedestrian Bridge Status Report

□ Phase 2

- Constructed north abutment retaining wall and abutment
- Shop drawings for precast concrete deck approved, except for minor details
- Rock anchor fabrication underway
- No construction mid March to mid September



Lake Hodges Bicycle and Pedestrian Bridge Status Report

- Phase 2 remaining work
 - Construct bridge piers
 - Drill and place rock anchors
 - Cast and place bridge deck panels
 - Stress bridge deck elements
 - Install handrail and lighting
 - Remove temporary trestle
 - Cleanup and demobilize



Lake Hodges Bicycle and Pedestrian Bridge Status Report

- Phase 2 Construction Change Orders
 - transfer phase 1 work into phase 2 contract \$21,420
 - Reduction in quantity of driven piling \$5,925
 - Potential redesign bridge rail
 - Potential redesign lighting system
 - Potential to allow work in nesting season





CONSTRUCTION TRESTLE



COFFER DAM FOR PIER CONSTRUCTION



SANDAG 



DRIVING PILES FOR PIERS



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NORTH ABUTMENT CONSTRUCTION



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