



13.1

DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

927 10TH STREET
SACRAMENTO, CA
95814-2702

PROJECT DELIVERY
DIVISION

PH 916-808-8300
FAX 916-264-8281

January 12, 2004

City Council
Sacramento, California

Honorable Members in Session:

**SUBJECT: TOWER BRIDGE PEDESTRIAN/BICYCLE IMPROVEMENT PROJECT (PN:
HC06) – PROJECT UPDATE**

LOCATION AND COUNCIL DISTRICT:

Tower Bridge - Capital Mall (Route 275) at Sacramento River – City Council District 1 (see location map - Attachment A).

RECOMMENDATION:

This report is for information only.

CONTACT PERSONS: Mehrdad Nazeri, Senior Engineer, 808-7460
Tim Mar, Supervising Engineer, 808-7531

FOR COUNCIL MEETING OF: February 3, 2004

SUMMARY:

This report provides an update on the status of the Tower Bridge Pedestrian/Bicycle Improvement Project including project history, proposed improvements, cost, schedule, budget, and significant milestones achieved.

The design is scheduled to be complete in summer 2005 with construction completion in spring 2007, if construction funds are available.

COMMITTEE/COMMISSION ACTION: None.

BACKGROUND INFORMATION:

The widening of Tower Bridge for pedestrian/bicycle facilities is a top priority for the Cities of Sacramento and West Sacramento. Although the bridge is owned and operated by Caltrans, the two cities are jointly funding the Tower Bridge improvements.

Tower Bridge is the primary pedestrian/bikeway connection across the Sacramento River, between the cities of Sacramento and West Sacramento. The existing sidewalks on Tower Bridge are too narrow to accommodate existing and future pedestrian and bicycle traffic volumes. The purpose of the Tower Bridge Pedestrian/Bikeway Improvement Project (PN: HC06) is to widen the existing 3 to 4 foot wide sidewalks to 10 feet on both sides to improve daily and special event pedestrian and bicycle mobility and safety, while maintaining the current vehicular capacity over the bridge. This improvement is a key component of the Cities of Sacramento and West Sacramento Riverfront Master Plans.

The narrow width of the existing sidewalks constrains pedestrian and bicycle capacity. In February 2002, Caltrans videotaped Tower Bridge activity and it is evident that bicyclists are forced to dismount and walk when they encounter a pedestrian on the bridge sidewalk and/or the pedestrian is forced to step aside and wait between truss members while allowing the bicyclist to pass. The Cities of Sacramento and West Sacramento both envision the Riverfront area accommodating a variety of daily uses and special events as part of developing a vibrant, active recreational resource for the public. These activities will place additional bicycle and pedestrian demand on the Tower Bridge.

There is a high incidence of special event traffic, largely due to Raley Field events. The Traffic and Parking Analysis for Raley Field (December 1998) states that, "Pedestrian safety may be an issue on and near the Tower Bridge, [as] pedestrian capacity will be exceeded on the Tower Bridge, both before and after a sold-out event." The report details the anticipated pedestrian volumes for events at the stadium. During the pre-event hour for a sold-out baseball game, the report approximated that 6,000 stadium patrons will cross the Tower Bridge to reach the stadium, based on the distribution of parking spaces. Similarly, after a sold-out concert event, the report forecasted that 10,400 pedestrians would need to cross the Bridge to return to their vehicles. This report utilized the Highway Capacity Manual to analyze the forecasted pedestrian level of service. For both the pre-event hour and post-event hour, the pedestrian level of service was estimated at "F", the worst possible capacity level.

Bicycle commuters use the Tower Bridge to cross the Sacramento River into downtown Sacramento. The Caltrans Findings Report on 2001 Bike to Work Day found that bicyclists using Tower Bridge frequently expressed concerns about the speed of traffic and the need for better separation of bicycle and vehicular traffic. It is important that the selected improvement alternative be permanent (for daily and special event use) and located along the Capitol Mall Corridor, as this location is vital to the direct connection of both riverfronts, as well as vital to the direct commute of the bicyclists. In addition, comments received from recreational bicyclists at the December 2002 public open house expressed strong preference for wider sidewalks away from traffic rather than bike lanes on the pavement.

Several alternatives to the sidewalk widening have been considered, including reducing the number of vehicular lanes across the bridge to two lanes – one lane in each direction. The extra pavement width would be utilized for pedestrians and bicyclists. This configuration would allow a 5-foot wide bike lane and a 7-foot wide barrier-separated pedestrian area on each side of the bridge.

A traffic analysis was performed for this two-lane alternative, using traffic volumes from the Embassy Suites Project and the S.R. 275 Modification Project, as well as information from the regional traffic-forecasting model. Forecasted 2025 traffic demands would cause the service levels to degrade significantly to an unacceptable level (LOS F) for a two-lane alternative. Queues from the Capitol Mall/Front Street intersection are forecast to extend over 1000 feet to the east, backing through the adjacent intersection in Sacramento at 3rd Street under the 2025 conditions. For both eastbound and westbound traffic, the lane reduction from four to two lanes is forecast to more than double queue lengths.

City Traffic Engineers for both Sacramento and West Sacramento expressed strong concern with this 2-lane alternative and don't support this alternative. The amount of delay calculated for future conditions would result in diversion of traffic into the residential neighborhoods in West Sacramento. In addition, special events or pre-emption of the signal at Front Street/Capitol Mall due to raising of the Tower Bridge or railroad crossings would exacerbate delays and queues.

The Tower Bridge is a major route of ingress and egress from both cities. Delays and queues of this magnitude would not be acceptable due to the need to provide efficient commute and public transit access across the bridge, and for emergency vehicles and emergency evacuation requirements. For these reasons, the two-lane alternative was rejected.

Other alternatives considered include the following:

- Improve pedestrian/bicycle crossing on nearby structure (I street Bridge or Pioneer Bridge);
- Provide traffic control during special events;
- Reduce to one lane in each direction with reversible lane down the center;
- Reduce existing lane widths and stripe bike lanes on pavement;
- Separate bicycle and pedestrian traffic to opposite sides of the bridge;
- Enhance shuttle service and water taxi service between Sacramento and West Sacramento; and
- New pedestrian/bicycle bridge across the Sacramento River.

Each of these alternatives was considered and rejected by the Project Development Team because it was infeasible and/or did not address the project's purpose and need.

A goal of the Sacramento Riverfront Master Plan (July 2003) is to "provide for a balance of alternative modes of circulation to and within the riverfront, including West Sacramento and Downtown Sacramento, emphasizing non-automobile circulation." In order to do so, both Cities' Riverfront Master Plans propose a "River Loop" to connect the riverfronts for pedestrian and bicycle travel. These plans propose a widening of the Tower Bridge to accommodate sidewalks of appropriate widths.

As Tower Bridge is listed on the National Register of Historic Places, the Federal Highway Administration (FHWA) and Caltrans are required to ensure that the design of the project incorporates all reasonable alternatives to avoid an adverse effect on the historical significance of the structure and minimize harm to the structure. Furthermore, under state laws and regulations, Caltrans must consult with the State Historical Preservation Officer (SHPO) regarding effects on historic structures under its ownership. Both Cities have worked closely with Caltrans, FHWA and other agencies represented on the PDT since October 2001 to define a project that minimizes harm to the historic Tower Bridge. The result of this cooperative effort is consensus and support by the PDT for the currently proposed sidewalk-widening project. The environmental and historic resource issues have been documented in the Initial Study, Section 106 and Section 4(f) documents, administrative draft versions of which have been reviewed by Caltrans and FHWA.

Because of its anticipated future contribution to linkage with the Riverfront and enhanced pedestrian and bicycle access and safety, the project enjoys broad community support. Organizations in support of the project include, among others, Sacramento River Cats, the West Sacramento Chamber of Commerce, the Sacramento Chamber of Commerce, the Sacramento Planning Commission, the City of Sacramento Design Review and Preservation Board, the City/County Bicycle Advisory Committee, and the Sacramento Disabilities Advisory Commission.

Public outreach continues to be a high priority for this project. City staff has presented information to groups and organizations throughout the area, with special emphasis on those representing historical preservation and pedestrian and/or bicycle interest. Groups contacted included the State Historical Building Safety Board, the City of Sacramento Design Review and Preservation Board, the Sacramento City/County of History and Science, Midtown Architects, the Sacramento Area Bicycle Advocates, the Sacramento Old City Association, Walk Sacramento, and many others. Nearly 200 individuals are being sent informational mailings on the project, while more than 35,000 were invited to a public workshop that was held last spring.

The following is a milestone schedule for key tasks on the project:

Section 106 of the National Historic Preservation Act of 1966:

- | | |
|--------------------------------------|----------|
| •Draft Section 106 Package Submitted | 12/03/03 |
| •Caltrans/FHWA Comments Received | 01/20/04 |
| •Finalize Section 106 Document | 02/10/04 |
| •FHWA Approval/Forward to SHPO | 02/24/04 |

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966:

- | | |
|--|----------|
| •Admin Draft 4(f) Submitted to Caltrans and FHWA | 12/17/03 |
| •Caltrans/FHWA Comments Received | 01/21/04 |
| •Draft 4(f) to be Finalized | 02/11/04 |

Initial Study/ Notice of Preparation (IS/NOP):

•30-day Circulation Period 01/20/04-02/19/04

Project Report

•Admin Draft PR Submitted 12/22/03
 •Caltrans Comments to be Received 01/23/04
 •Draft Project Report to Caltrans 02/20/04

Environmental Assessment/ Environmental Impact Report (EA/EIR):

•Admin Draft EA/Draft EIR to Caltrans 03/04/04
 •45-day Circulation of the EA/EIR 04/29/04-06/10/04
 •Admin Final EIR/Final 4(f) to be Completed 07/08/04
 •Caltrans Certifies Final EIR 09/16/04
 •FHWA Issues FONSI w/ 4(f) Approval 09/30/04

Final Design: Fall 04-Summer 05

Construction: (assumes fund availability) Fall 05-Spring 07

FINANCIAL CONSIDERATIONS:

The total estimated project cost, including environmental clearance, design, construction, and construction inspection is \$9,400,000. The breakdown of total project cost, and comparison to previous estimates, is shown in the following table:

	August 2000	January 2004
Estimated Construction Cost	\$5.0M	\$5.7M
Preliminary Engineering, Environmental Documents and Final Design	\$0.8M	\$1.5M
Construction Management, Allowance for Change Orders, City Staff Time, Railroad Coordination and Other Pre-Construction Costs	\$1.3M	\$2.2M
TOTAL ESTIMATED COST	\$7.1M	\$9.4M

The cost increases are attributable to the complex specialized type of work associated with widening a historic bridge structure spanning across a major waterway and the lengthy environmental review process required by Caltrans and FHWA.

Both cities have been working together since 1995 to secure funds and implement this high priority project. The total budget programmed for this project is \$7,057,108. The potential funding sources for the \$2,342,892 shortfall are \$1,900,000 in Federal appropriation, \$1,050,000 from Sacramento Area Council of Government (Community Design Program), or local funds. The total Grant Funding for this project is \$6,300,495 and the total local match provided by both Cities of Sacramento and West Sacramento is \$756,613.

City Council
Tower Bridge Pedestrian/Bicycle Improvements Project (PN:HC06)
January 12, 2004

ENVIRONMENTAL CONSIDERATIONS:

This action is not considered a project as defined by Section 15378 of the California Environmental Quality Act (CEQA) guidelines because it is for information only.

POLICY CONSIDERATIONS:

This action is consistent with Title 3 of the Sacramento City Code, and this project is consistent with the City's Strategic Plan goal to improve the transportation system.

ESBD CONSIDERATIONS:

There are no ESBD considerations associated with this item.

Respectfully submitted,



Francesca Lee Halbakken
Project Delivery Manager

FOR CITY COUNCIL INFORMATION

Approved:



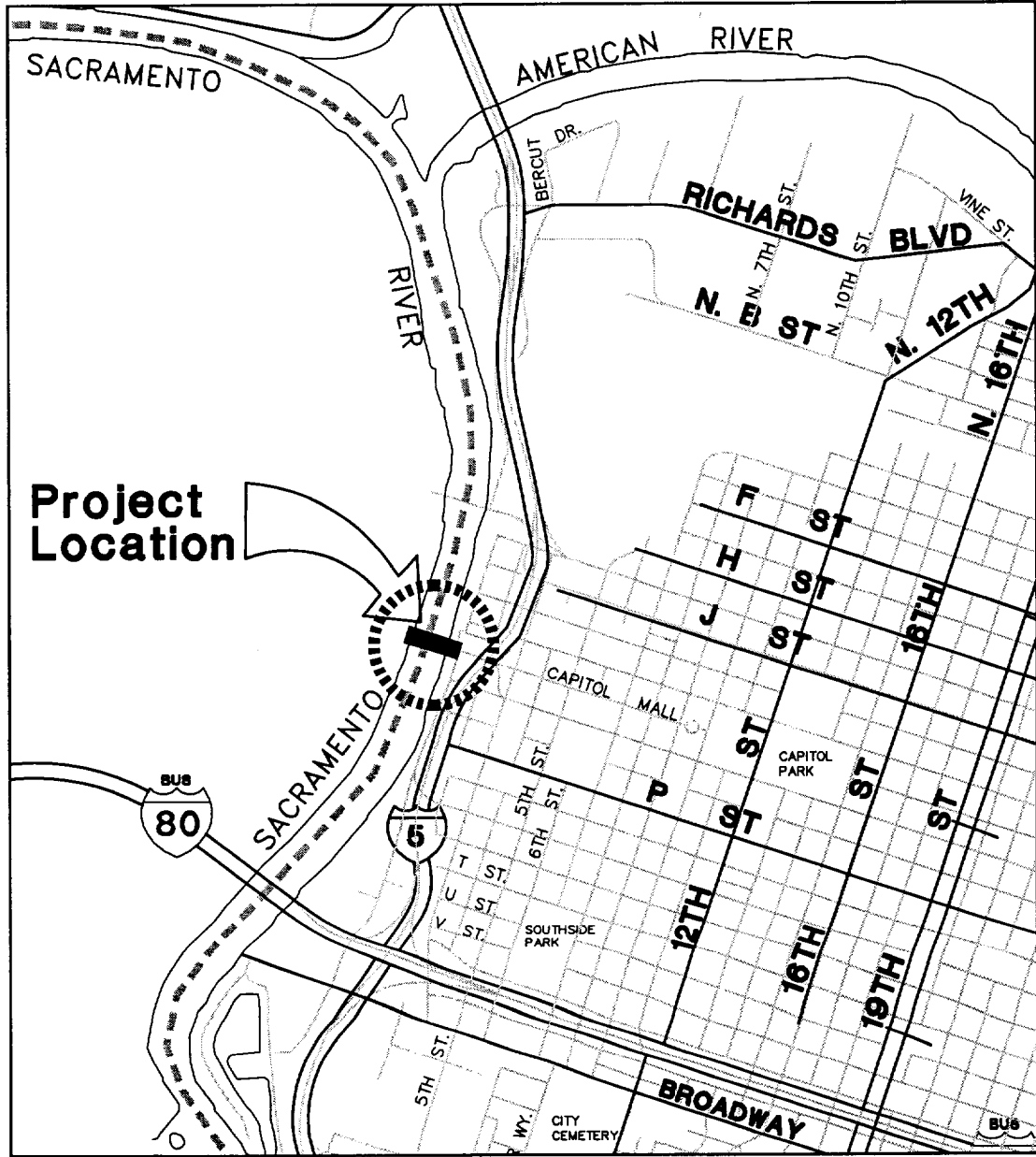
Thomas V. Lee
Deputy City Manager

Table of Contents

- 1) Attachment A, location map, page 7
- 2) Power point presentation material, pages 8-19

P/Active/HC06 Tower Bridge/Council/Tower Bridge Status 1-28-04

TOWER BRIDGE PEDESTRIAN/BICYCLE IMPROVEMENT PROJECT- PROJECT UPDATE



PN: HC06
LOCATION MAP

MAP CONTACT: B. CAMERON
DATE: 1/15/04

Department of
PUBLICWORKS
CITY OF SACRAMENTO



Tower Bridge Pedestrian/Bicycle Improvements Project



City Council Meeting

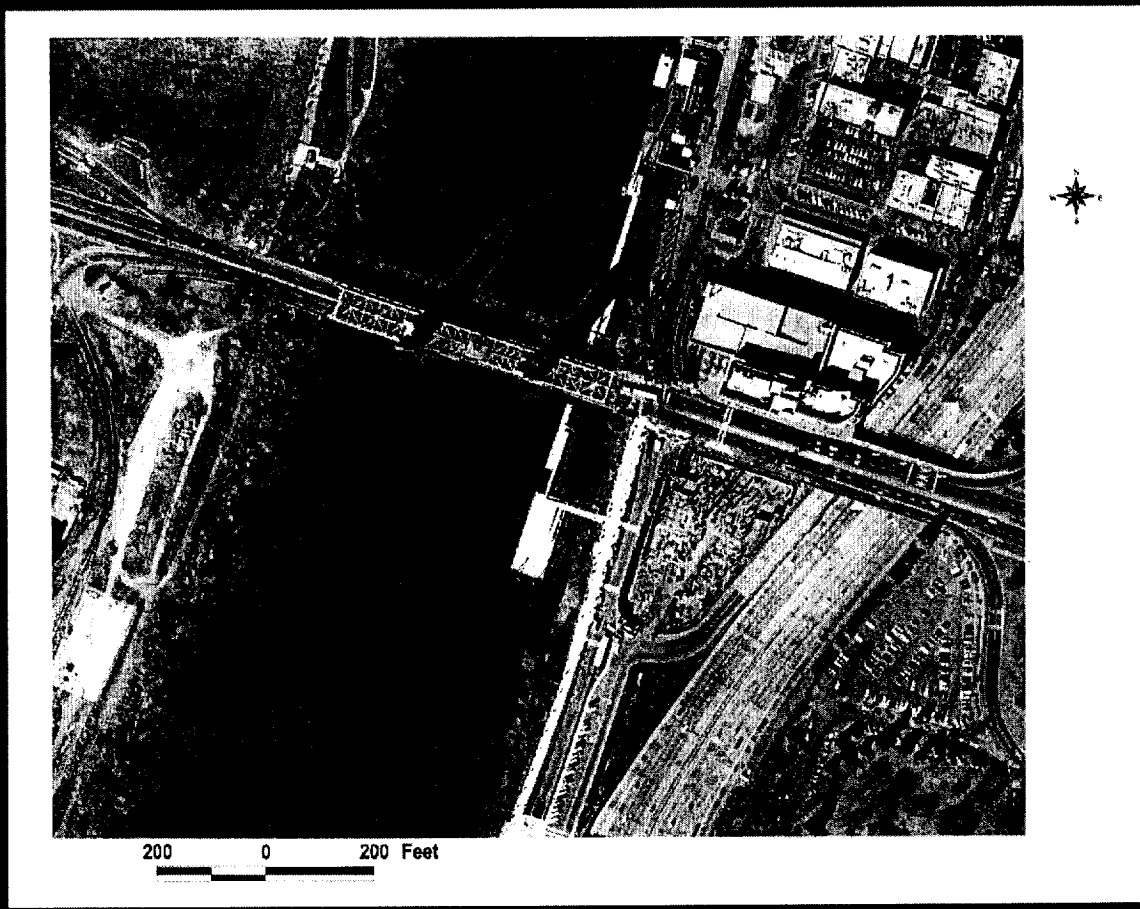
Sacramento, CA

February 3, 2004



Tower Bridge Pedestrian/Bicycle Improvements Project

- **Primary ped/bike linkage across Sacramento River**



On west:

- Raley Field
- River Walk
- Business Developments
- Ziggurat Building

On east:

- Old Sacramento
- Riverfront Promenade
- Capitol Mall



Tower Bridge Pedestrian/Bicycle Improvements Project

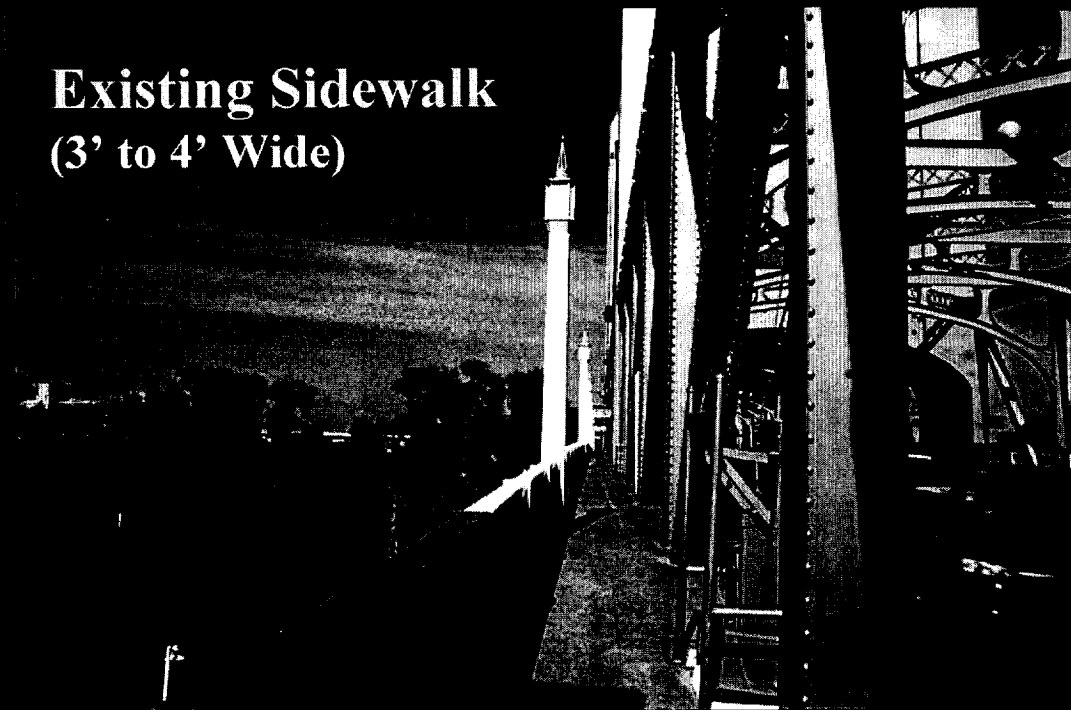
Project Purpose & Need

- **Increase pedestrian and bicycle access and capacity across Sacramento River**
 - for everyday and special event traffic
 - existing sidewalks narrow
- **Riverfront Linkage**
 - Needs identified in Riverfront Master Plans
- **Maintain historic integrity of Tower Bridge and Old Sacramento**



Tower Bridge Pedestrian/Bicycle Improvements Project

**Existing Sidewalk
(3' to 4' Wide)**



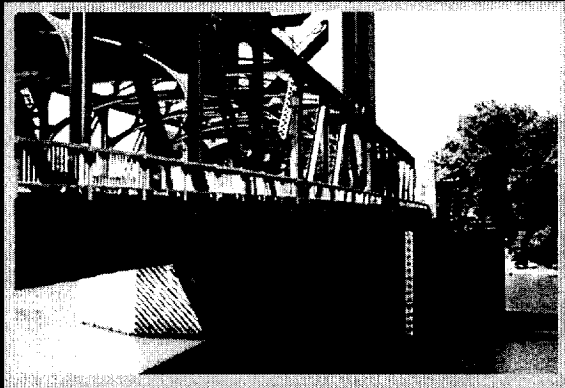
**Widen Sidewalk to 10'
(Proposed)**





Tower Bridge Pedestrian/Bicycle Improvements Project

Proposed Project



Steel Railing

- Relocate & reuse existing railing.
- Place relocated rail on curb, to increase height.
- Add horizontal cables (2) to bottom of railing.



Sidewalk (except lift span)

- Preserve in place; widen from outside edge.

Lift Span Sidewalk

- Remove existing sidewalk
- Replace and widen with lighter aluminum.



Sidewalk Supports

- Preserve in place.
- Add extra straight member.



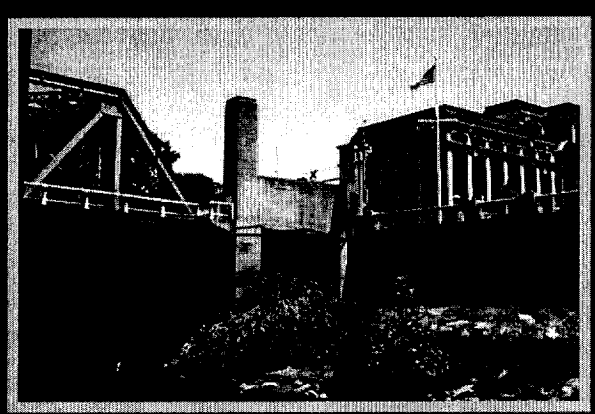
Tower Bridge Pedestrian/Bicycle Improvements Project

Proposed Project



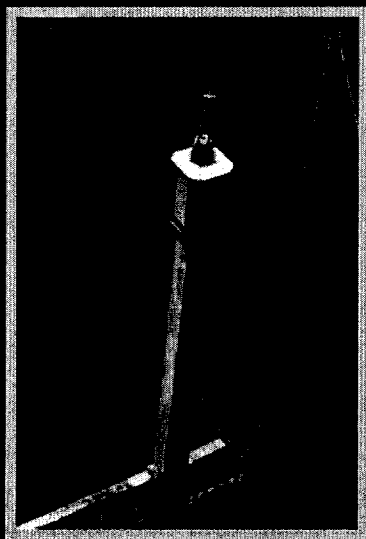
Concrete Barriers on West End

- Preserve barrier and add sidewalk on outside.
- Add new railing at outside of new walk.



Concrete Walls on East End

- Preserve in place.
- Widen to the outside of the walls.



Light Posts

- Relocate to the outside of the widened sidewalk.



Tower Bridge Pedestrian/Bicycle Improvements Project

Key Project Documents

Section 106 of the National Historic Preservation Act of 1966

- Federal requirement (FHWA).
- Is there an adverse effect to the Historic Property?
- Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the National Register of Historic Places.

Section 4(f) of the USDOT Act of 1966

- Federal requirement (FHWA).
- Are there any prudent and feasible alternatives?
- If yes, the project must consider them.
- If no, the project may be approved, if all measures to minimize harm are taken.

California PRC 5024.5

- Caltrans will review the Federal Section 106 and Section 4(f) processes.



Tower Bridge Pedestrian/Bicycle Improvements Project

Key Project Documents

Initial Study/ Notice of Preparation (IS/NOP)

- State CEQA requirement (Caltrans).
- Avenue by which to notify public of start of environmental documentation.
- Describes the proposed project and examines potential environmental impacts.

Environmental Assessment/Environmental Impact Report (EA/EIR)

- EA = Federal NEPA environmental document.
- EIR = State CEQA environmental document.

Project Report

- Caltrans document used to recommend approval of a project.
- Includes structural advanced planning study, with preliminary design.

Final Design

- Plans, specifications, & estimates.



Tower Bridge Pedestrian/Bicycle Improvements Project

Schedule

Section 106

- Draft Section 106 Package Submitted 12/3/03
- CT/FHWA Comments 1/20/04
- Final Section 106 2/10/04
- FHWA Approval/Forward to SHPO 2/24/04

Section 4(f)

- Admin Draft 4(f) Submitted 12/17/03
- CT/FHWA Comments 1/21/04
- Draft 4(f) 2/11/04

IS/NOP

- 30-day Circulation Period (via website) 1/20/04-2/19/04

Project Report

- Admin Draft PR Submitted 12/22/03
- CT Comments 1/23/04
- Draft Project Report 2/20/04

EA/EIR

- Admin Draft EA/Draft EIR 3/4/04
- 45-day Circulation 4/29/04-6/10/04
- Admin Final EIR/Final 4(f) 7/8/04
- Caltrans Certifies Final EIR 9/16/04
- FHWA Issues FONSI w/ 4(f) Approval 9/30/04

Final Design

Fall 04-Summer 05

Construction

Fall 05-Spring 07



Tower Bridge Pedestrian/Bicycle Improvements Project

Accomplishments To Date

- **Conducted team meetings with Caltrans & FHWA to streamline process**
- **Completed Preliminary Design**
 - Extensive Effort to Minimize Harm to Structure
 - Preserve as many elements as possible
- **Analyzed Numerous Alternatives & Designs**
 - No prudent and feasible alternatives
- **Conducted Public Outreach**
 - Public Workshop
 - Personalized presentations to several organizations
- **Conducted Early Consultation with SHPO**
- **Drafted Environmental Studies**
 - Section 106, Section 4(f), Natural Environment Study, Initial Study/Notice of Preparation
- **Environmental Document in Progress**
 - Currently in Initial Study/Notice of Preparation Public Circulation Period



Tower Bridge Pedestrian/Bicycle Improvements Project

Project Funding

Total Project Costs = \$ 9.4M

(Includes design, environmental documentation, construction, construction management, and City staff time)

Funds

Regional Federal Funds	\$ 1,134,495
State TEA	\$ 766,000
STIP	\$ 3,500,000
Federal Earmark	\$ 900,000
Local	\$ 756,613
<i>Total Programmed</i>	<i>\$ 7,057,108</i>

Total Shortfall **\$ 2,342,892**

Potential Additional Sources

- Request Federal Earmark \$1.9M
- Request Funds from SACOG \$1.05M
- Local Funding

Tower Bridge Pedestrian/Bicycle Improvements Project



Questions?