



City of Santa Barbara Transportation & Circulation Committee *Staff Report*

DATE: September 27, 2012

TO: Transportation & Circulation Committee (TCC) Members

FROM: Browning Allen, Transportation Manager

SUBJECT: **Cabrillo Boulevard Bridge Beachway Relocation Project**

RECOMMENDATION

That the Transportation & Circulation Committee (TCC) find the Beachway Bridge relocation consistent with the Circulation Element of the General Plan.

EXECUTIVE SUMMARY

The Cabrillo Boulevard Bridge Reconstruction Project (Project) at Mission Creek was approved by the California Coastal Commission (CCC) on April 9, 2008, to replace the existing, structurally deficient bridge with a new bridge (Attachment 1 – Approved Plan). Since the CCC approval, the Project has been in the Caltrans right of way phase. The Project is anticipated to begin construction in the summer of 2013. The original project proposal included placing a temporary Beachway bridge 70 feet of the south to get people and area utilities away from the construction zone. As a result of the Project's Value Engineering Analysis, significant cost and schedule savings were discovered if the temporary Beachway location could be made permanent (Attachment 2 – Proposed Plan). This location is preferred from a circulation safety perspective. Approximately one month of schedule savings, and \$500,000 of cost savings can be achieved during construction if the Beachway portion of the proposed bridge is relocated. Relocating the Beachway would also minimize a current safety issue of separating the Beachway from the bridge's sidewalk. The sidewalk and Beachway currently mix fast moving pedestrians/joggers/bicyclists with slow moving pedestrians. This conflict in use can be addressed as part of the Project and triggers by amending the Project's permits.

REQUEST

The City is requesting the following agency approvals to relocate the Beachway approximately 59 feet to the south from its current location:

1. City of Santa Barbara Historic Landmarks Commission and Caltrans review and acceptance of the supplemental Historic Properties Survey Report (HPSR) and Memorandum of Agreement (MOA) MST2004-00878/CDP2007-2001. Historic Landmarks Commission review and approval of the revised bridge railing.
2. City of Santa Barbara Planning Commission recommendation of the California Coastal Commission for the amendment of MST2004-00878/CDP2007-2001/CDP 4-07-134. The

Beachway is located in the CCC's original jurisdiction, the Planning Commission requirement is to only make a recommendation to the CCC for the Beachway relocation.

3. CCC Approval of an immaterial amendment to the existing approval Coastal Development Permit, CDP 4-07-134, for the Cabrillo Blvd. Bridge Replacement Project.
4. California Department of Fish and Game approval to amend the approved Streambed Alteration Agreement (1-8-07-F-63).
5. Army Corps of Engineers approval to amend the approved Nationwide 404 Permit, SP-2006-00379-CLM.
6. Regional Water Quality Control Board approval to amend the approved 401 Certification, 34208WQ08)

NEED AND PURPOSE

SAFETY ENHANCEMENTS

In the current configuration, the Beachway merges with the pedestrian walkway adjacent to the street, as it crosses Mission Creek. This is a very busy area because the sidewalk carries pedestrian traffic from a large parking facility at Garden Street to the popular Stearns Wharf. The sidewalk at the bridge also serves as a loading area for tourist vehicles and buses. This pedestrian traffic naturally uses the Beachway because it provides the most direct route to Stern's Wharf and the Sunday Santa Barbara Arts and Craft Show.

To add to the problem, the Beachway is the first close encounter visitors have with the coastline. Pedestrians frequently walk to the railing to peer at the ocean view and into the water, unaware of the high speed traffic, then sharply turn away from the railing and into the path of cyclists. The typical collision conflict between pedestrians and bicyclists is compounded on Sundays during the Cabrillo Art Show, when pedestrians view art from the Beachway. The stop-start and erratic movements of the pedestrians cannot be anticipated by the cyclists and injuries occur between the two user types or when the cyclist tries to avoid the last second conflict.

The proposed Beachway location, which moves the facility to the south, would significantly reduce the number of pedestrians using the Beachway and will especially discourage casual pedestrian use by visitors unfamiliar with the area and risks. The City anticipates that proposed changes will also significantly reduce bike-pedestrian conflicts and improve the safety of the Beachway facility.

CONSISTENCY WITH THE CIRCULATION ELEMENT

The Project is consistent with the Circulation Element's Goal No. 10, which requires the City's mobility system to incorporate all users: drivers, pedestrians and bicyclists. The minor project modification of the Beachway Bridge relocation allows for a safer experience by separating fast moving pedestrians-/joggers/bicyclists with slow moving pedestrians.

COST AND SCHEDULE SAVINGS

Since the Project's value engineering analysis, staff realized it does not make sense to construct a temporary Beachway for bike and foot traffic during construction if the location of the permanent Beachway is relocated to also serve this purpose. If the Beachway is permanently relocated, the one-time construction can also serve to support both a permanent relocation of Santa Barbara's

utilities and the temporary utilities during construction. This concept has many other positive project ramifications on the cost and schedule, resulting in additional saving of project overhead costs.

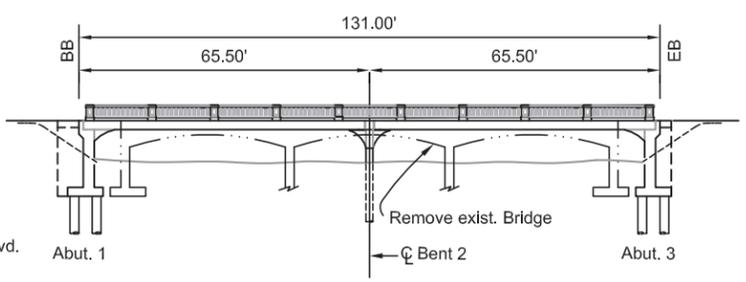
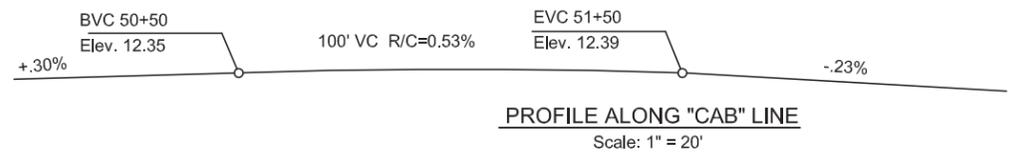
PERMITS/ENVIRONMENTAL REVIEW

The impacts of the Beachway are similar to those studied in the current permits, as the Beachway is already permitted at the current location. It is the same bridge design but moved 59 feet to the south. It will still have the same substructure and a center piling. The Beachway abutments and center piling would be in the dewatered areas per the previously approved Creek Bypass System. The Beachway deck is anticipated to be precast concrete so falsework and superstructure work in the lagoon will be minimal. The only difference is the bridge has a slightly longer span and a lighter bridge railing. In addition a temporary Beachway, also included in the current permits, would no longer be needed.

Attachments

1. Approved Plan
2. Proposed Plan

JWG/ks

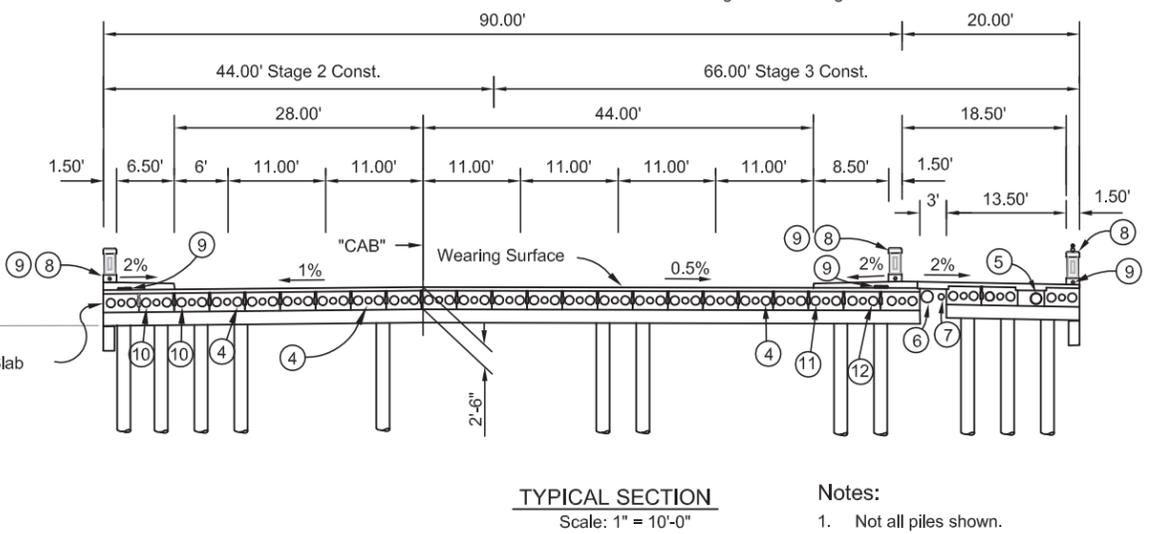
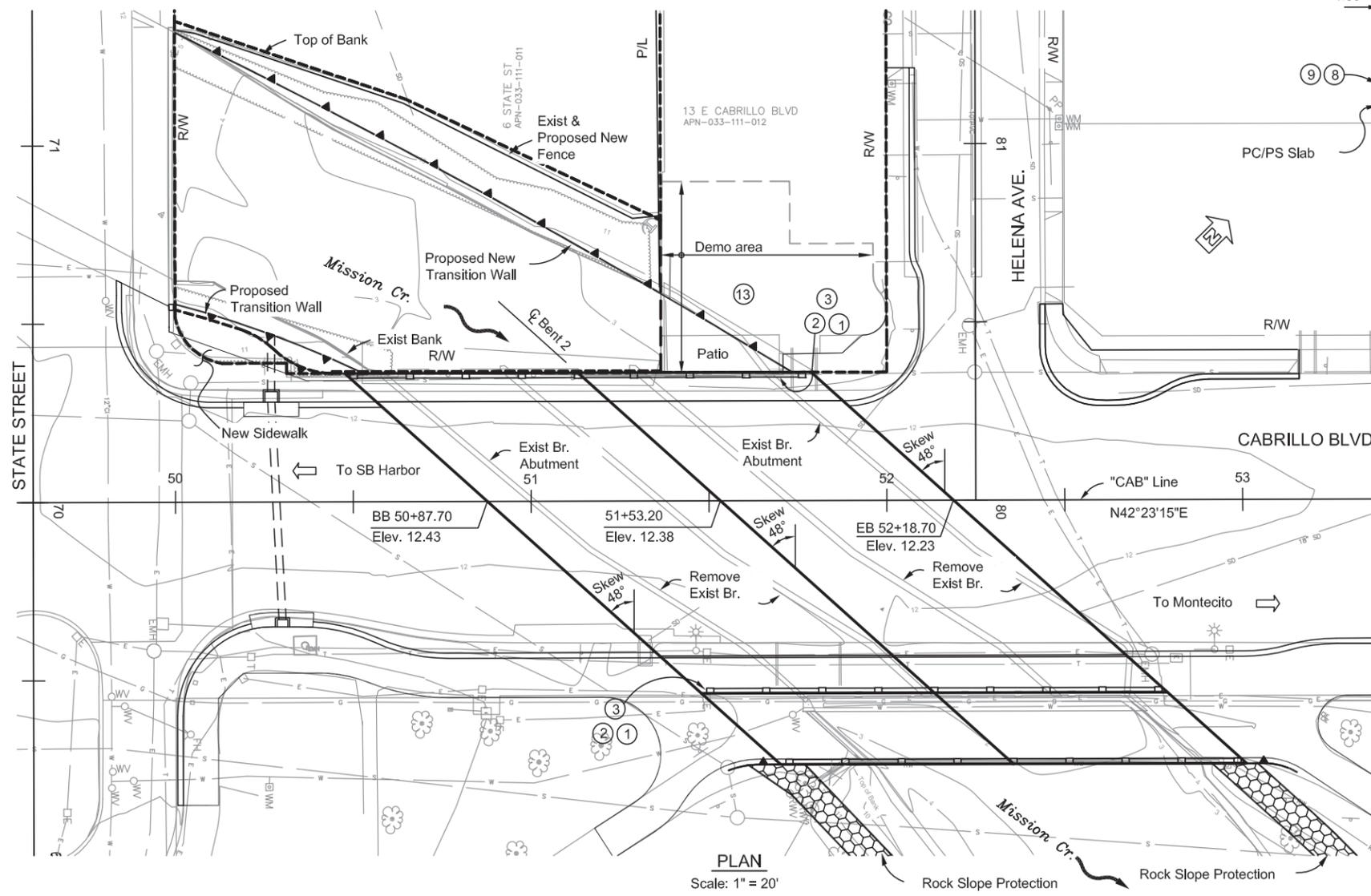
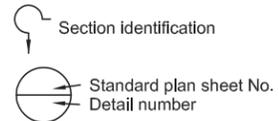


- Notes:**
1. Bridge skew not shown.
 2. Upstream barrier rail shown.
 3. See barrier rail aesthetic details for railing architecture.
 4. See special provisions regarding building at 13 East Cabrillo Blvd.

- Notes:**
1. For design notes see "Deck Contours" sheet.
 2. The contractor shall verify all controlling field dimensions before ordering or fabricating any materials.
 3. For Pile Data Table, see "Deck Contour" sheet.
 4. Not all utilities shown. See roadway plans for utility locations.
 5. See road plans for lane and sidewalk layout.

INDEX TO PLANS

Sheet No.	Title
71	General Plan
72	Deck Contours
73	Foundation Plan
74	Abutment 1 Layout
75	Abutment 3 Layout
76	Bent Details No. 1
77	Bent Details No. 2
78	Prestressed Concrete Slabs
79	Top Slab Reinforcement
80	Barrier Rail Architectural Details
81	Misc. Barrier Rail Details
82	Tubular Pipe Railing Details
83	CISS Pile Details
84-85	Log of Test Borings



- Notes:**
1. Not all piles shown.
 2. Upstream Transition Walls and Bridge Pile Installation constitutes Stage 1 Construction.
 3. Existing Structure and Utilities not shown.

STANDARD PLANS, DATED MAY, 2006

A10-A,B	ACRONYMS AND ABBREVIATIONS
A62-A	EXCAVATION AND BACKFILL MISCELLANEOUS DETAILS
A62-C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B2-8	PILE DETAILS-CLASS 200
B6-10	UTILITY OPENINGS, T-BEAM
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING =2")
B7-10	UTILITY OPENING - BOX GIRDER
B11-51	TUBULAR HAND RAILING
B11-54	CONCRETE BARRIER TYPE 26

- | | |
|---|---|
| ① Cast "Br. No. 51C-350" and year completed | ⑨ Future Utility Opening through sidewalk & barrier rail (Typ.) |
| ② Cast "Cabrillo Blvd. Bridge" | ⑩ 4" SCE Conduit |
| ③ Barrier Rail Aesthetics and Layout, See Civil Plans | ⑪ 1-4" Ø Verizon |
| ④ 4" Ø Future utility opening through PC/PS Slab (Typ.) | ⑫ 1-3" Ø Cox Cable |
| ⑤ 14" Ø Recycled Water | ⑬ Demolition, see building demolition plans |
| ⑥ 16" Ø High Pressure Gas (by others) | |
| ⑦ 8" Ø Water | |
| ⑧ Concrete Barrier | |

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

DESIGN MW
DRAWN RT
CHECKED SI
FLD.BK.NO. _____

BENGAL ENGINEERING
250 BIG SUR DRIVE, GOLETA, CA 93117
(805) 563-0788

Reg. Civil Eng. _____ Approval Date: _____

Cabrillo Boulevard Bridge (Replacement)
at Mission Creek

Original Scale 0 1 2 3
Is In Inches

GENERAL PLAN
Approved

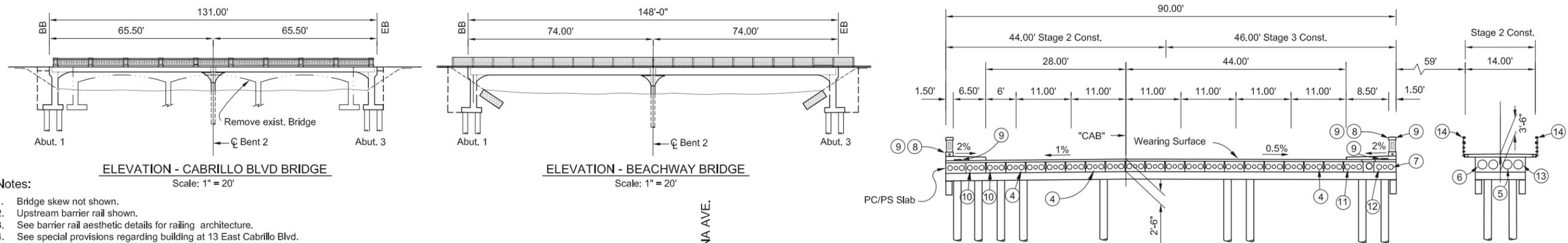
CITY OF SANTA BARBARA
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

Approved: _____ Date _____
City Engineer

CITY PROJ. No. 7661
FA No. BRLS-5007(034)

SHT. **71** OF **84** SHTS.

DWG. NO. C-1-4200



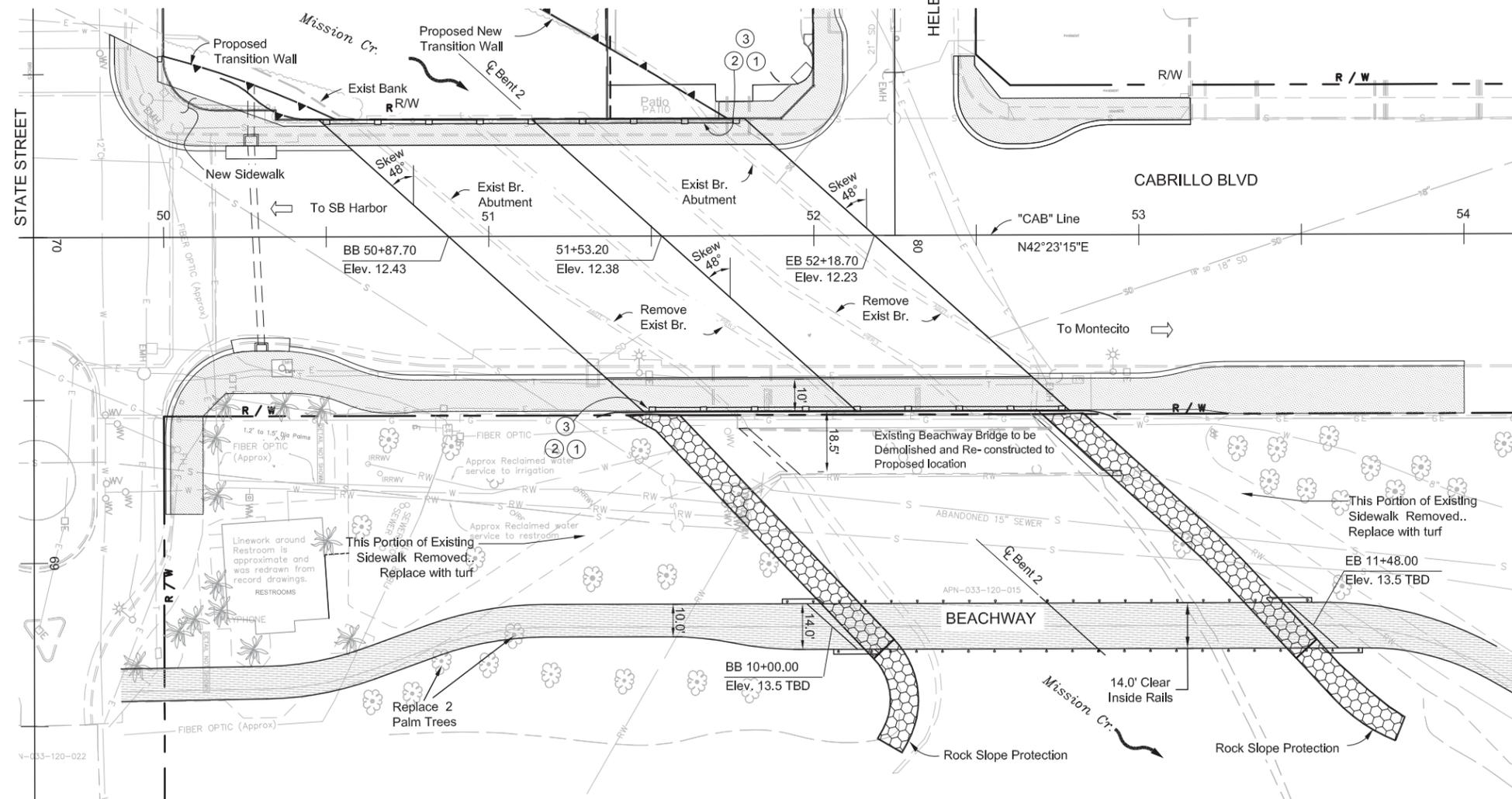
- Notes:**
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 4. See special provisions regarding building at 13 East Cabrillo Blvd.

TYPICAL SECTION
Scale: 1" = 10'-0"

- Notes:**
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- 1 Cast "Br. No. 51C-350" and year completed
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 - 4 4" Ø Future utility opening through PC/PS Slab (Typ.)
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 - 8 Concrete Barrier
 - 9 Future Utility Opening through sidewalk & barrier rail (Typ.)
 - 10 4" SCE Conduit
 - 11 1-4" Ø Verizon
 - 12 1-3" Ø Cox Cable
 - 13 Future Dredge Line
 - 14 Beachway Bridge Rail, Aesthetic Features to be Determined

Legend

	Sidewalk
	Beachway



PLAN
Scale: 1" = 20'

<table border="1"> <tr> <td>NO.</td> <td>DESCRIPTION</td> <td>DATE</td> <td>APPROVED</td> </tr> <tr> <td colspan="4">REVISIONS</td> </tr> </table>				NO.	DESCRIPTION	DATE	APPROVED	REVISIONS				5/29 DESIGN MW DRAWN RT CHECKED SI FLD.BK.NO. PAGE _____ ATLAS _____	BENGAL ENGINEERING 250 BIG SUR DRIVE, GOLETA, CA 93117 (805) 563-0788 Reg. Civil Eng. _____ Approval Date: _____	Cabrillo Boulevard Bridge (Replacement) at Mission Creek Original Scale 0 1 2 3 Is In Inches	PROPOSED GENERAL PLAN	CITY OF SANTA BARBARA PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION Approved: _____ Date _____ City Engineer	CITY PROJ. No. 7661 FA No. BRLS-5007(034) SHT. ___ OF ___ SHTS. DWG. NO. C-1-4200
NO.	DESCRIPTION	DATE	APPROVED														
REVISIONS																	