



Bridge Report Transmittal Sheet

	Bridge #	Admin	Structure Name	Location	Inspection Date	Type	Work	Work Recom Cost Total
1	55C0283	25	SUNSET CHANNEL	100' NE/O PACIFIC CST HWY	03/21/2011	UNDERWATER	Y	\$



DEPARTMENT OF TRANSPORTATION  
Structure Maintenance & Investigations

Bridge Number : 55C0283  
Facility Carried: BROADWAY  
Location : 100' NE/O PACIFIC CST HW  
City :  
Inspection Date : 03/21/2011

## Bridge Inspection Report

### Inspection Type

Routine	FC	Underwater	Special	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**STRUCTURE NAME:** SUNSET CHANNEL

### CONSTRUCTION INFORMATION

Year Built : 1959  
Year Widened: N/A  
Length (m) : 29.3

Skew (degrees): 0  
No. of Joints : 3  
No. of Hinges : 0

Structure Description: Simply supported 4-span CIP/RC deck slab with RC 5-column pile bents and with column pile bent abutments.

Span Configuration : (S) 4 @ 7.0 m (N) c/c

### LOAD CAPACITY AND RATINGS

Design Live Load: M-13.5 OR H-15

Inventory Rating: 24.3 metric tonnes

Operating Rating: 40.5 metric tonnes

Permit Rating : PPPPP

Posting Load : Type 3: Legal

Calculation Method: NO RATING ANALYSIS

Calculation Method: NO RATING ANALYSIS

Type 3S2: Legal

Type 3-3: Legal

### DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.3 m br, 0.9 m sw, 8.6 m, 0.9 m sw, 0.3 m br (E)

Total Width: 11.0 m

Net Width: 8.5 m

No. of Lanes: 2

Rail Description: Metal Railing

Rail Code : 1000

Min. Vertical Clearance: Unimpaired

### DESCRIPTION UNDER STRUCTURE

Channel Description: Tidal basin.

### CONDITION TEXT

#### UNDERWATER INVESTIGATION

A routine underwater inspection was conducted following the guidelines of the Federal Highway Publication, FHWA-NHI-10-027, Underwater Inspection of Bridges. Methods of inspection for piles, piers, abutments, footings, cells, cofferdams and scour follow the recommendations detailed in the aforementioned publication. All elements inspected, are listed in the "Substructure Investigation" table, at the end of this report. Elements not listed on the table or not discussed in the text of this report, were not inspected during this investigation. Elements that were not inspected or required further inspection, will be discussed in the text of this report and scheduled for a near future investigation. Above water features were inspected only if noted.

A Level I visual inspection was performed on 100% of the submerged elements covered under this report and supplemented by a tactile examination using large sweeping motions of the diver's hands where visibility was impaired. The inspection shall be detailed enough to detect "obvious" damage and deterioration. It shall also confirm the continuity of members and detect undermining or exposure of piles and footings.

A Level II inspection was conducted on 10% of the submerged elements. Any marine growth present was removed using hand tools which allowed for a detailed inspection of the substructure.

A Level III inspection is conducted only when a Level II inspection has revealed the need

**CONDITION TEXT**

for in-depth evaluation. This type of inspection may include extensive cleaning, detailed measurements, and in some cases, selected nondestructive and partially destructive testing techniques. Level III inspections will be fully detailed in the text of the report.

Due to the depth of water, this bridge is to remain on the underwater inspection list. The maximum depth of the channel was found to be 2.5m (8.3') at Bent 3.

Due to recent severe storm activity, this waterway was considered polluted and the inspection was conducted using contaminated water procedures.

All substructure elements from Bent 2 to Bent 4 were inspected. The bottom was comprised primarily of shells and silt.

Moderate marine growth was noted on all inspected elements

No defects were noted on all inspected substructure elements, however spalling with exposed rebar was noted on the pile cap of Pier 2.


**UNDERWATER INVESTIGATION**

Next Inspection :	21-MAR-2016	Water Type :	Other
Inspection Freq.:	60 months	Max. Water Velocity:	0 mps
Dive Type :	B - Routine UW	Max. Water Depth :	3 m
Dive Mode :	D - Surface supplied	Max. Visibility :	1.0 m
Contractor :	N/A	Water Surface Elev.:	m
Contract No. :	N/A		
Supervisor :	Richard Hunt/Dave Kendal	Diver :	Dave Glasgow
Tender :	Dale Floyd	Backup Diver :	Shane Stirling

**SUBSTRUCTURE INVESTIGATED**

Location	Depth (m)	Vel (mps)	Channel	Substructure Description
Pier 2	2.0	0.0	Shells/Silt	RC Piles
Pier 3	2.5	0.0	Shells/Silt	RC Piles
Pier 4	2.0	0.0	Shells/Silt	RC Piles

Inspected By : D.Glasgow/RM.Hunt

  
Richard M. Hunt (Registered Civil Engineer)

