



**Highway Attachment 9 – Caltrans District 4 Attenuator Repair Records
for All HOV Left Exits**

HWY18FH011

(11 pages)

Rayburn David S.

From: Au-Yeung, Roland [REDACTED]
Sent: Tuesday, August 23, 2016 12:21 PM
To: Rayburn David S.; [REDACTED]
Cc: [REDACTED] Becic Ensar; Morrison Jennifer
Subject: RE: Repair records for other attenuators at HOV left Exits in Oakland District
Attachments: Repair Record for Attenuator Hit at HOV Left Exit.pdf

David,

The following is the list of HOV left exit locations within District 4:

1. Westbound Route 80 at Emeryville in Alameda County – Ala-80 PM 3.064
2. Eastbound Route 237 to northbound Route 880 in Milpitas in Santa Clara County – SCI-237 PM R 9.295
3. Southbound Route 880 to westbound Route 237 in Milpitas in Santa Clara County – SCI-880 PM 8.784
4. Northbound Route 85 to northbound Route 101 in Mountain View in Santa Clara County – SCI-85 PM R23.867
5. Southbound Route 101 to southbound Route 85 in Mountain View in Santa Clara County – SCI-101 PM 48.385
6. Westbound Route 80 left off ramp to Cutting Boulevard in Richmond in Contra Costa County – CC-80 PM 2.191
7. Eastbound Route 80 left off ramp to Richmond Parkway in Pinole in Contra Costa County – CC-80 PM 6.68
8. Northbound Route 880 to westbound Route 80 on the approach to San Francisco Oakland Bay Bridge toll plaza left side in Oakland in Alameda County – Ala-880S PM 0.926R

District 4 Maintenance searched the Integrated Maintenance Management System, a computerized database for maintenance activities, for work related to repair or replace attenuator. The search covers a 10-year period from June 28, 2006 thru June 28, 2016.

I reviewed the repair records and determined the number of times for attenuators repair at the above listed locations. The number of repairs is shown in the list below:

1. 0
2. 0
3. 1
4. 0
5. 9
6. 1
7. 2
8. 0

Attached is the repair records for the locations with repairs. The handwritten number in the circle on the attachment corresponds with the number of the list.

If you have any questions, please call me at 510-286-4560 or email me.

Roland

From: Rayburn David S. [REDACTED]
Sent: Wednesday, June 22, 2016 9:01 AM
To: Au-Yeung, [REDACTED] Leu, Bill@CHP [REDACTED]
Cc: Bronson, Jason@CHP [REDACTED] Becic Ensar [REDACTED] Morrison Jennifer

[REDACTED]
Subject: RE: Repair records for other attenuators at HOV left Exits in Oakland District

Thank you Roland

David

From: Au-Yeung, [REDACTED]
Sent: Wednesday, June 22, 2016 10:57 AM
To: Rayburn David S.; [REDACTED]
Cc: Bronson, Jason@CHP; Becic Ensar; Morrison Jennifer
Subject: RE: Repair records for other attenuators at HOV left Exits in Oakland District

I can count 8 HOV left exit locations within District 4. Our electronic accident database only include the reported accidents. There may be collisions with the attenuator that were not reported to a police agency. To get the number of collisions with the attenuator, I will request our Maintenance to search their maintenance log for repairing of the attenuator.

From: Rayburn David S. [REDACTED]
Sent: Wednesday, June 22, 2016 7:19 AM
To: Leu, [REDACTED]; Au-Yeung, [REDACTED]
Cc: Bronson, [REDACTED]; Becic Ensar <[REDACTED]>; Morrison Jennifer
[REDACTED]
Subject: Repair records for other attenuators at HOV left Exits in Oakland District

Billy,

Our project Manager for this case has indicated he needs to make a comparison in this case to other impacts into attenuators at HOV Left Exits in the Oakland District for the same time frame. Roland told me once that he has other interchanges where they are hit much more frequently. We do not need the actual accident reports for the other attenuator locations; just the number of repairs from accident damage. That should be available in Rolands' electronic files. I'm sure you could use this information as well. Let me know if this can be done.

Thanks

David

CONFIDENTIALITY NOTICE - THIS E-MAIL TRANSMISSION MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, PROPRIETARY, SUBJECT TO COPYRIGHT, AND/OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IT IS FOR THE USE OF INTENDED RECIPIENTS ONLY. If you are not an intended recipient of this message, please notify the original sender immediately by forwarding what you received and then delete all copies of the correspondence and attachments from your computer system. Any use, distribution, or disclosure of this message by unintended recipients is not authorized and may be unlawful.

CONFIDENTIALITY NOTICE - THIS E-MAIL TRANSMISSION MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, PROPRIETARY, SUBJECT TO COPYRIGHT, AND/OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IT IS FOR THE USE OF INTENDED RECIPIENTS ONLY. If you are not an intended recipient of this message, please notify the original sender immediately by forwarding what you received and then delete all copies of the correspondence and attachments from your

computer system. Any use, distribution, or disclosure of this message by unintended recipients is not authorized and may be unlawful.

3

E/B 880 to w/B 237

SCL-880 PA 8.784

Daily Work Date

Unit ID : '04-SCL-880', From Mile : '8.5', To Mile : '8.8', Activity = : 'M80010', Report Start Date : '01-JUL-2010', Report End Date : '28-JUN-2016'

Wono	Crew	Activity	Activity Description	IMMS Unit ID	From	To	PM	Comments	Work Date
2536877	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-880	PM 8.614	PM 8.614	PM	SB IS/880 CONN/R TO WB SR1237 HOV FLYOVER LANE - ATTENUATOR REPLACEMENT	04-AUG-2011
2968326	041015	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-880	PM 8.6	PM 8.6	PM	Repair damaged attenuator Compressor with Vendor	20-FEB-2013
3832732	041015	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-880	PM 8.614	PM 8.614	PM		15-JAN-2016

5

S/B 101 to S/B 85

SCL-101 PM 48.201

IMMS Work Order Report v3

Daily Work Date

Unit ID : '04-SCL-101', From Mile : '48', To Mile : '49', Activity = 'M80010', Report Start Date : '01-JUL-2010', Report End Date : '28-JUN-2016'

Wono	Crew	Activity	Activity Description	IMMS Unit ID	From	To PM	Comments	Work Date
2381897	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	attenuator hit sb 101 @ sb 85 hov lane cat system attenuator damaged	14-JAN-2011
2616562	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	SCL SB 101 PM 48.201 AT TRANS TO SB 85 HOV LANE ATTENUATOR DAMAGE	26-NOV-2011
2728675	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	SCL SB 101 PM 48.201 AT SB 85 HOV LANE ATTENUATOR HIT	07-APR-2012
2772131	041024	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.1	PM 48.1	06/04/2012:Repair & replace attenuator (sand barrel array) S/B 101 @ S/B 085. emergency closure. Close HOV Ramp, remove & replace barrels, sweep...	04-JUN-2012
2775876	041024	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.621	PM 48.621	06/10/2012: Called out by area superintendent E.Ramirez for attenuator replacement.S/B 101 Shoreline onramp at the 101/085 split. Replaced with sand barrel array T14...	10-JUN-2012
2804964	041015	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 47.655	PM 47.655	Call Out Bairs # 193932 S/B 101 @ San Antonio San Barrels Damage Protecting Tempory K-Rail In Construction Zone. Swept Area For Excessive Sand In Roadway. Contractor O C Jones To Make Permant Repairs To Barrels.	21-JUL-2012
2960854	041021	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 47.855	PM 47.855	Call out by Oakland to Inspect a Sand Barrel hit S/B 101 JNO of 85	20-JAN-2013
2964555	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	repair attenuator hit sb hwy 101 to sb hwy 85 hov lane	12-FEB-2013
3186307	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.621	PM 48.621	attenuator hit shoreline on ramp to sb hwy 101	25-NOV-2013
3186363	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	reset smart attenuator sb hwy 101 @ sb hwy 85 hov fly off	26-NOV-2013
3397690	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	RPM .548	PM 51.655	Replace 06 sand barriers , damaged by traffic. Call by OAK SR # 846045	07-AUG-2014
3490438	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 47.856	PM 47.856	Atenuator set was pushed in by traffis sb 101 to SB 085	28-NOV-2014
3573019	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.201	PM 48.201	emergency attenuator repair s/b 101 at the 85 flyover. replaced three side panels and bolts	13-MAR-2015
3638142	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.5	PM 48.5	Callout by Oakland DCC guardrail damage nb 101 Shoreline off.	30-MAY-2015

⑤ 5/B 101 to 5/B 85 SCL-101 PM 48.201

IMMS Work Order Report v3

Wono	Crew	Activity	Activity Description	IMMS Unit ID	From	To	PM	PM	Comments	Work Date
3703208	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.2	PM 48.2			Needed to reset SMART Crash Cushion. Needed to get this fixed ASAP. Currently provides no protection. created an emergency closure number: T1011A from 2000 hours on 08/18/2015 to 0001 hours on 08/19/2015 - #1 of 1 of the HOV to Connector ramp to SB sr/85 - created bairs and service request number for Ernesto Ramirez III/4-5-60 at D041027.10-39 dcc Imartin AUG/18/15 19:45 Area Supervisor Ernesto Ramirez III/4-5-60 - Acting on Area Superintendent Terry Gutierrez' instructions: Requesting an Emergency Closure for the Resetting of the Attenuator/Smart Cushions. #1 of 1 lane from 2000 hours on 08/18/2015 to 0001 hours on 08/19/2015. Closing the HOV Lane SB/85 to the Connector Ramp only from SB US/101. Ernesto/4-5-60, will also need a BAIRS AND SERVICE REQUEST CREATED and sent to him. He is setting up with his crew. 10-4 408-590-7553 Imartin AUG/18/15 18:58	18-AUG-2015
3752157	041015	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 37.745	PM 47.695			SRT's inspection and repair North and South 101	13-OCT-2015
3807796	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 47.755	PM 47.755			Replaced damaged SMART Crash Cushion with new one S101 Carpool Connector to S85 251641 COMMENTS CALL SIGN SUBMITTER RECEIVED DISPATCHED Also, collapsable attenuator SB 85 at the split of 101 needs to be repaired. Adv Jose. 10-39 TMC asmith NOV/14/15 23:56 10-21 Supv Jose on hm phone. Jose adv he'll go check out location. 10-39 dcc asmith NOV/14/15 23:49 Updating Outlook Notifications. 10-5 dcc asmith NOV/14/15 23:43 Update: Sac HQ (Tony)verbally 10-39 dcc asmith NOV/14/15 23:43 All lns open. 10-44 TMC asmith NOV/14/15 23:42 10-21 Supv Jose Rosas 4-5-40 on cell. Left detail msg. 10-5 dcc asmith NOV/14/15 22:49 Sending Outlook Notifications. 10-5 dcc asmith NOV/14/15 22:39 10-21 P.I.O Robert Haus on call. Left detail msg. 10-5 dcc asmith NOV/14/15 22:36 10-21 Regional Manager Earl Sherman on cell. Left detail msg. 10-5 dcc asmith NOV/14/15 22:36	23-DEC-2015
3847208	041027	M80010	REPAIR/REPLACE ATTENUATOR	04-SCL-101	PM 48.384	PM 48.384			Reset Smart Cushion Attenuator at SB 101 and SB 85 HOV connector.	31-JAN-2016
										01-FEB-2016

6

W/B 80 to CUTTING BOULEVARD CC-80 PM 2.191

IMMS Work Order Report v3

Daily Work Date
Unit ID : '04-CC-080' , From Mile : '2' , To Mile : '2.5' , Activity = : 'M80010' , Report Start Date : '01-JUL-2010' , Report End Date : '28-JUN-2016'

Wono	Crew	Activity	Activity Description	IMMS Unit ID	From	To PM	Comments	Work Date
2676518	041053	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 0	PM 13.76	REPAIR ATTENUATOR E/B 80 AT POMONA OFF RAMP	07-FEB-2012
3473170	041056	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 2.15	PM 2.15	REPAIR DAMAGED ATTENUATOR WESTBOUND HWY 80 AT THE CUTTINGS AVENUE OFF RAMP IN THE CENTER DIVIDE. NOVEMBER 8, 2014	08-NOV-2014
3906665	041056	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 2.1	PM 2.2	W/B 80 AT CUTTING BLVD. OFF RAMP IN THE CID NO PRIOR NOTICE. ATTENUATOR SYSTEM SUPPOSE TO BE UPGRADED BUT SYSTEM IS SEVERLY HIT AND WILL NOT TAKE ANOTHER HIT. NEED TO MAKE TEMPORARY REPAIRS. CALLED IN AN EMERGENCY CLOSURE. LOOKED FOR MATERIAL NEEDED IN THE WEST YARD. FOUND ALL BUT THE NOSE. WENT TO SAN LEANDRO TO GET THE NOSE. NEEDED TO LIFT THE DAMAGED ATTENUATOR UP ONE BY ONE DUE TO IT BEING KNOCKED OFF ITS TRACKS. REALIGNED TO BEST OF ABILITY AND PULLED OUT AS MUCH AS POSSIBLE. RAILS BENT BAD IN MIDDLE. HAD TO USE SLEDGE HAMMER TO GET STRAIGHT AND ROCK BAR TO PIC UP AND PUSH IN. REATTACHED WITH A SPLICE BOLT BECAUSE SYSTEM NOT LINING UP. NOTE: WHILE AT SAN LEANDRO, LEADWORKER ESTHER GARCIA RECEIVED A CALL FROM DELTA FOR FENCE DAMAGE AND CATTLE GOING ON ROADWAY. AFTER INVESTIGATION IT WAS DETERMINED FENCE LINE WAS NOT OURS. APRIL 7, 2016	07-APR-2016

7

E/B 80 to RICHMOND PARKWAY

CC-80 PM 6.68

Unit ID : '04-CC-080', From Mile : '6.2', To Mile : '6.8', Activity = : 'M80010', Report Start Date : '01-JUL-2010', Report End Date : '28-JUN-2016'

Daily Work Date

Wono	Crew	Activity	Activity Description	IMMS Unit ID	From	To	PM	Comments	Work Date
2676518	041053	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 0	PM 13:76		REPAIR ATTENUATOR E/B 80 AT POMONA OFF RAMP	07-FEB-2012
3751014	041053	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 6.4	PM 6.5		Repaired 2 barrels e/b 80 at HOV Richmond Parkway off ramp	14-OCT-2015

⑦ E/B 80 to RICHMOND PARKWAY CC-80 PM 6.68

Unit ID : '04-CC-080', From Mile : '6.2', To Mile : '6.8', Activity : 'M80010', Report Start Date : '28-JUN-2006', Report End Date : '01-JUL-2010'

Daily Work Date

WONO	Crew	Activity	Activity Description	IMMS Unit ID	From PM	To PM	Comments	Work Date
1231683	04695	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 0	PM 13	Work on Bids for attenuator Parts & Paperwork	06-DEC-2006
2069407	04692	M80010	REPAIR/REPLACE ATTENUATOR	04-CC-080	PM 6.56	PM 6.56	Sand barrel hit E/B Hwy 80 HOV Lane to Richmond Pkwy off. SR# 561047 12/04/09 Made Repairs	27-NOV-2009

04-DEC-2009