



NATIONAL TRANSPORTATION SAFETY BOARD
Investigative Hearing

Washington Metropolitan Area Transit Authority Metrorail train 302 that encountered heavy smoke in the tunnel between the L'Enfant Plaza Station and the Potomac River Bridge on January 12, 2015

GROUP	C
EXHIBIT	
14	

Agency / Organization

WMATA

Title

**Biennial Tunnel Structural Maintenance
Inspection Report 2014,
L'Enfant Plaza to L'Enfant Portal**



STRUCTURAL MAINTENANCE INSPECTION REPORT

L Line OB Track 2 (6,100 Ft)

F03 L'Enfant Plaza to L'Enfant Portal OB (3,800 Ft)

Inspected By: Donald Thomas*

Date Inspected: 10/22/2014 Report Generated:

Condition Rating		Inspection Frequency
N - Not Applicable	5 - Fair Condition	0 - Failed Condition
9 - Excellent Condition	4 - Poor Condition	Other
8 - Very Good Condition	3 - Serious Condition	
7 - Good Condition	2 - Critical Condition	
6 - Satisfactory Condition	1 - Imminent Failure Condition	

ITEM	NO.	REMARKS
<u>TUNNEL</u>		- Leak in the crown at joint is leaking on to the rail and hardware at CM L2 88+20
1) Tunnel Liner	6	
a. Concrete	5	- CM# 85+40 Overhead spall at joint (approx. 2-1/2"x 10"x 1"). There is also vertical cracking open to .030" on the East wall at the joint. See Photo(s): 4, 5, 6, 7, 8
b. Steel / Iron Plates and / or Bolts	6	
c. Grab Rails, Handrails and Fasteners	5	L2 70+00 grab bar covered by wires. Grab rail needs to be extended past wires.CM# 84+60 See Photo(s): 9, 10
3) Invert Slabs	6	
4) Drains / Troughs	4	- Main drain at the center of track bed is clogged at CM 90+60
5) Safety Walk	5	- L2 57+30, delam 12"x 12" on center of safety walk. - CM L2 56+15 nose plates missing on the top and center steps, nose plate raised 1 inch on the lower step and the top step is spalled (10"x8"x2") See Photo(s): 11, 12, 13, 14, 15
6) Lighting Equipment	6	
7) Communication Equipment	6	
8) Fire Line System	6	
9) Sign Age	6	Old CM signs at CM#56+00 to CM#100+00.
10) Debris	6	

THINK SAFETY FIRST



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ITEM	NO.	REMARKS
11) Floating Slab	6	
* List Unusual Conditions.	N	

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CHAIN MARKER	LOCATION	NO.	REMARKS
L2 88+20	CRWN	4	Leak at joint is dripping on to the rail and hardware See Photo(s): 2, 3
L2 90+60	Invert	4	Large drain at center of track is clogged See Photo(s): 1

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Inspection Frequency
Other

CHAIN MARKER	LOCATION	NO.	REMARKS

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CHAIN MARKER	LOCATION	NO.	REMARKS

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<u>TUNNEL</u>		- Leak in the crown at joint is leaking on to the rail and hardware at CM L2 88+20
1) Tunnel Liner	6	
a. Spalls		
b. Cracks		
c. Delaminating Concrete		
d. Deteriorated Steel/Iron Panels and/or Bolts		
e. Evidence of Squatting or Twisting		
f. Grab Rails, Handrails and Fasteners	5	L2 70+00 grab bar covered by wires. Grab rail needs to be extended past wires.CM# 84+60 See Photo(s): 9, 10
2) Invert		
a. Spalls		
b. Cracks		
c. Delaminating Concrete		
d. Invert Joints		
e. Accumulation of Debris		

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ITEM	NO.	REMARKS
f. Ports in Invert		
3) Drains		
4) Safety Walk	5	- L2 57+30, delam 12"x 12" on center of safety walk. - CM L2 56+15 nose plates missing on the top and center steps, nose plate raised 1 inch on the lower step and the top step is spalled (10"x8"x2") See Photo(s): 11, 12, 13, 14, 15
a. Spalls		
b. Cracks		
c. Delaminating Concrete		
d. Ports in Safety Walk		
5) Lighting System	6	
6) Communication System	6	
7) Fire System	6	
* List Unusual Conditions.	N	

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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
L Line OB Track 2 (6,100 Ft) - F03 L'Enfant Plaza to L'Enfant Portal OB
(3,800 Ft)



Photo 1

Large drain in center of track bed is clogged at CM L2 90+60



Photo 2

Leak in crown at construction joint, CM L2 88+20

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Photo 3

Crown leak at CM L2 88+20 is leaking onto the running rail.



Photo 4

Cracking in the East wall near the construction joint at CM L2 85+40

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Photo 5

Spalling in the East wall at the construction joint at CM L2 85+40



Photo 6

Cracking in the East wall near the construction joint at CM L2 85+40

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Photo 7

Spalling in the ceiling at the construction joint at CM L2 85+40



Photo 8

Overall of construction joint at CM L2
85+40

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Photo 9
Grab bar covered by wires at L2 70+00



Photo 10
Grab bar covered by wires at L2 70+00

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Photo 11

Spall/Delam on safety walk at CM L2 57+30



Photo 12

Spall/Delam on safety walk at CM L2 57+30

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Photo 13

Nose plate raised 1 inch on the bottom step CM L2 56+15



Photo 14

Top step spalled at CM L2 56+15

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Photo 15

Nose plates missing at the top and center step CM L2 56+15