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WMSC Inspection Report 20250716

ISSUED 7/18/2025

Inspection Details

Title: Negative Return Cable Structure Configuration and Integrity

Location: Braddock Road (C12)

Date of Inspection: July 16, 2025

Time of Inspection: 10:00am to 12:00pm

Unannounced

Risk-Based (Inspection, Inspection Report 20250602)

Functional Area: Power

Hazard Rating: 3C

Overview

On July 16, 2025, the WMSC conducted an inspection as a follow-up to a possible hazard identified during a July 2, 2025, train control room inspection (Inspection Report 20250602). During the July 2, 2025, TCR inspection it was noticed that the negative return cable structure situated on the safety walk at Braddock Road track 1 appeared to be used as a section of handrail for accessing the ancillary rooms past the end gate of the platform.

Upon discovery of this configuration, WMSC inspectors contacted WMATA's Department of Safety to better understand the structure's intended purpose—whether it was intended to be handrail in addition to supporting the negative return cables—as it is located between two handrail segments. Additionally, the WMSC Inspectors wanted to better understand the cable support structure and the cable configuration. The cable structure also moves with slight application of force, suggesting insufficient structural integrity.

The negative return cable is a component of the electrical circuit, serving as the return path for current from the train's traction motors back to the substation. Ordinarily, these cables exist along the right-of-way: within ducts or trays or below ground. According to Metrorail personnel, the position of the cable structure is within WMATA Manual of Design Criteria, Release 11.0 (ENG-MAN-1000-R11.0, June 2024) Chapter 20 Traction Power specification; however, the unintended defect is that the structure does not function as a handrail for the purposes of the safety walk.

Following the inspection, on July 16, 2025, WMSC inspectors held a debrief with the safety officer, in accordance with Program Standard Section 6.F.1.

Defects and Corrective Actions

WMSC Inspections identify safety issues that may be classified as defects, findings, or recommendations. Findings and recommendations are defined by Program Standard Section 5.E.2 and 5.E.3, respectively. Ordinarily, issues identified in a WMSC inspection report are classified as defects. Defects are specific safety issues of non-conformance/non-compliance that are identified and that require remedial action.

This inspection did not identify any findings or recommendations and therefore does not require a WMSC Corrective Action Plan in accordance with Program Standard Section 5.E.4.

Defect Observations and Determinations

Metrorail Operating Rulebook (MOR) section 17.3 defines the roadway. This includes section 17.3.9:

> "Station platforms are not considered part of the roadway, nor are the walkways beyond the station platform end-gates protected by handrails. Walkways with gaps in the handrail of six (6) feet or less are not part of the roadway. However, any maintenance or construction, the use of tools, ladders, scaffolds, or lifts that have the potential for fouling the track requires a RWIC to use RWP in accordance with these rules and instructions, even if performed behind the handrails."

The cable structure at Braddock Road Station creates a handrail gap that exceeds six feet. Metrorail personnel advised the WMSC that the cable structure is not a handrail.

The cable structure was observed as missing cross braces that assist in providing structural support and rigidity to the vertical cable tray framing. The structure also presents as temporary in that the brace is not attached to the cable structure, and the horizontal member of this detached structure is held together with discarded polyester webbed pull tape providing insufficient stability support.

Defect 1

There is a handrail gap that exceeds six feet. Through a combination of on-site inspection and communication with Metrorail, WMSC Inspectors learned that the cable structure is ineligible as a safety handrail. And considering the potential for electrical current passing through the cables, the cables and the cable structure should likewise not serve as an intended handrail.

Hazard Rating: 3B

Photos:

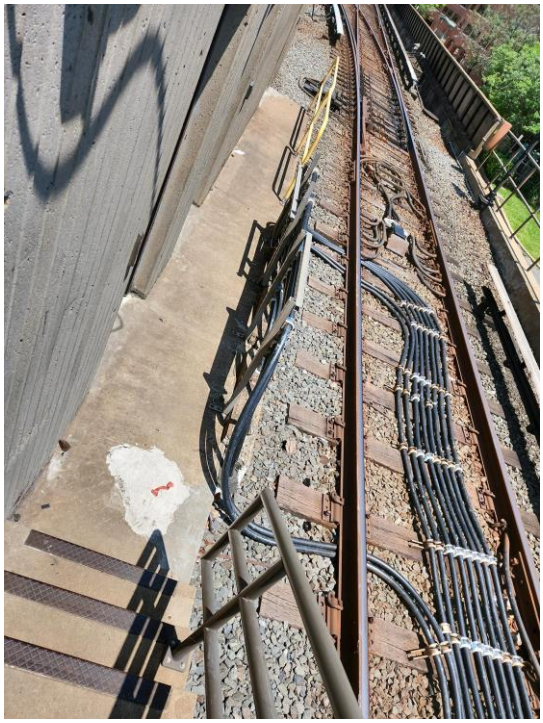

Photo 1. The gap between the handrails exceeds six feet.

Defect 2

WMSC inspectors identified that the support structure was unstable, shaking, and detached from the cable tray frame. The cross brace is attached by pieces of cloth and is not uniform across the vertical post, causing the entire structure to sway.

Hazard Rating: 3B

Photos:

Photo 2 (Left). Structure being held together with discarded polyester webbed pull tape.

Photo 3 (Right). Structure missing braces for rigidity.

Next Steps

Please respond **by Monday, July 21, 2025,** to acknowledge receipt and to convey responses to the WMSC regarding what, if any, actions will be or have been taken in response.