



WMSC Inspection Report 20260723B

ISSUED 7/27/2026

Inspection Details

Title: Track Inspection, East Falls Church interlocking

Location: East Falls Church (K05) Interlocking

Date of Inspection: 7/23/26

Time of Inspection: 8:00am to 1:00pm

Announced (via email Director, Track and Structures)

Risk-Based (Investigation)

Functional Area: Track, Roadway Worker Protection

Hazard Rating: 1C

Overview

On July 23, 2026, a WMSC Inspector conducted a track walk inspection of the East Falls Church (K05) interlocking.¹ The goal of the inspection was to assess the overall track conditions and to observe roadway worker protection rules compliance.

This is a risk-based inspection based on the July 4, 2026, derailment (Safety Event Code A-5)² that occurred near College Park-U of Md Station (E09). During interviews for that investigation, Metrorail personnel expressed concern about the condition of K05 interlocking at East Falls Church. The WMSC determined a risk-based inspection was necessary to assess conditions at the interlocking first hand.

¹ An arrangement of signals and track elements (switches, derails, movable-point frogs) that are interlocked so movements can be made only on routes proven safe and locked. Metrorail Operating Rulebook, Glossary of Terms, page 17-9.

² In accordance with WMSC Program Standard (Rev. 8) Metrorail must "...report all safety events outlined in the Safety Event Notification Matrix in the timeframe and manner specified for each safety event type." Safety event code A-5 (FTA) is triggered when one or more wheels of a rail transit vehicle unintentionally leaves the rails. Source: WMSC Program Standard (Rev. 8).



This inspection focused on identifying any defects, wear, or maintenance concerns that could affect the safe operation of train movements throughout the area. Track conditions were assessed against Metrorail's track maintenance standards.

After concluding the inspection, WMSC Inspectors conducted a debrief with the Track Inspection Supervisor 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.

Observations and Defect Determinations

Metrorail Track and Structures Department relies on the TRST-1000, Track Inspection and Safety Standards, that rates various track defects by severity using a color-coded system (section 102.2):

102.2. Level of Serviceability (Condition Rating)

(A) **Green** (Minimal wear): This condition of serviceability exists when the track structure is

maintained well within the limits of track tolerances. This will be denoted on subsequent charts and reports as "G" for "satisfactory" and indicated, if necessary, by the color Green.

(B) **Yellow** (Damage and/or Wear): This condition of serviceability exists when damage or wear exists such that one or more of the components of a section of track have broken down or worn to the point of rapidly approaching tolerance or is at tolerance but does not exceed tolerance. This will be denoted on subsequent charts and reports as "Y" for "needs attention" and indicated, if necessary, by the color Yellow.

(C) **Red** (Severe Damage/Wear, Exceeds Tolerances): This condition of serviceability exists when a given component is severely worn or a given condition has exceeded tolerances to an extent that serviceability is possible with failure expected in the near future. Restricted Speeds may need to be implemented based on the nature of the defect or at the discretion of the qualified person inspecting the track. This will be denoted on subsequent charts and reports as "R" for "immediate remedial action" and indicated, if necessary, by the color Red.



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(D) Black (Failing/Failed): This condition exists when something in the track structure could lead to instantaneous service interruptions, derailment, loss of life, injury, or property damage. When such a condition is discovered, the qualified person inspecting must make every effort to correct the condition immediately and must decide whether to allow operations to continue under supervision or to remove the track from service. If operations are allowed to continue, the qualified person must remain at the location of the defect until relieved or until the condition is corrected. This will be denoted on subsequent charts and reports as “B” for “immediate remedial action” and indicated, if necessary, by the color Black.

Defect 1

WMSC Inspectors observed severe chipping on the left-hand switch point at 1B switch.

Hazard Rating: 3C

Photos



Photo 1: Severe chipping on the switch point at 1b switch.



Defect 2

WMSC Inspectors observed loose screw spikes and two consecutive frog³ plates missing clips at 1A switch. Per the TRST-1000, table 108.6A, this is considered a **Green** condition.

Table 108.6A: Frog Plate Hold-Down

Level	Operating Speed	Missing e-clip % of Total	Consecutive Missing Clips	Missing Plate Anchorage % of Total	Consecutive Missing Spikes (Ballasted)	Consecutive Missing Studs (DF)
Green	Normal	0-25	2	0-25	4	2
Yellow	Medium	26-36	3	26-36	6	3
Red	Slow	37-50	4	37-50	8	4
Black	OOS	More than 50	More than 4	More than 50	More than 8	More than 4

Hazard Rating: 3C

Photos



Photo 2: Missing clips on frog plate at 1A switch.

Defect 3

WMSC Inspectors observed a broken/missing joint bar bolt on a rail joint bar close to 3A switch. The Emergency Response Team (ERT) was in the process of installing a new bolt when the initial WMSC inspection concluded.

³ Frog plates are a specialized crossing component in a track switch (turnout) or track interlockings that allow trains to cross from one rail line over another. Source: American Railway Engineering and Maintenance-of-Way Association



Hazard Rating: 3C

Photos



Photo 3: Broken joint bar bolt not secured.

Defect 4

WMSC inspectors observed low ballast⁴ on the shoulders of the wooden ties at 1B switch as evidenced by the ends and shoulders of the ties being exposed. Refer to TRST-1000, Table 107.2A.

Table 107.2A: Ballast Guidelines for Wood Ties

Wood Ties-Crib Ballast (Below the Top of the Tie)	Level	Operating Speed
Up to 2 inches	Green	Normal
More than 2 up to 5 inches	Yellow	Medium
More than 5 inches	Red	Slow
Wood Ties-Ballast Shoulder Width	Level	Operating Speed
Over 10 inches	Green	Normal
More than 6 up to 10 inches	Yellow	Medium
Less than 6 inches	Red	Slow
Wood Ties-Number of Tie Ends Exposed in 20 ft.	Level	Operating Speed
Less than 3 inches	Green	Normal
More than 3 up to 5 inches	Yellow	Medium
More than 5 inches	Red	Slow

Note: Defects for crib ballast and shoulder width apply when it involves a minimum of 6 consecutive ties or 5 consecutive cribs.

Hazard Rating: 3B

⁴ Ballast forms the critical foundation layer beneath and around the wooden, concrete, or steel ties (sleepers) supporting the steel rails.



Photos



Photo 4: Shows low ballast on the shoulders of the ties.

Defect 5 - (mitigated)

WMSC Inspectors observed that the heel block⁵ bolt at 3B switch was not secured. A heel block is the support component at the pivot end of a switch, keeping the switch rails properly aligned and supported while trains pass over the turnout. A temporary restriction was called in until an Emergency Response Team (ERT) could make repairs. ERT personnel arrived while the inspection was still ongoing and made repairs. However, the wrong-size heel block bolt was temporarily installed, and it was communicated to the WMSC that the correct bolt would be installed that night. WMSC confirmed that the proper bolt was installed per Maximo Work Order #20597963.

Hazard Rating: 1C

⁵ A heel block is a heavy-duty structural spacer and joint mechanism located at the heel of a switch point. The heel sits at the fixed end of the switch where it acts as a pivot point, helps maintain gauge, and absorbs lateral load.



Photos



Photo 5 (left): Missing nut and washers on heel block bolt at 3B switch. Photo 6 (right): Shows that temporary repairs were made to secure the bolt.

Observation 1

The watchperson was using the current Roadway Worker Protection (RWP) hand signals and was equipped with the proper Personal Protective Equipment (PPE), including use of the Whiskey Disk.

Photos



Photo 7: Watchperson using proper hand signals as the train approached and passed the inspection crew.



Next Steps

Please respond **by Thursday, July 30, 2026**, to acknowledge receipt and to convey responses to the WMSC regarding what, if any, actions will be or have been taken in response.