



Collisions

At or Near Minnesota Ave Station,

March 19, 2024, and March 22, 2024

Document Purpose

This WMSC written report on WMATA Metrorail's safety event investigation and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation report that has undergone WMSC staff review, feedback, and Metrorail revision, describes the investigation activities, identifies factors causing or contributing to the accident, and sets forth ongoing, additional, or upcoming corrective actions and further oversight work (such as inspections and audits) as necessary or appropriate. The WMSC's ongoing oversight during the investigative process, including safety event reporting and verification, participation in investigative interviews, data review, consistent communication with the Metrorail investigations team, and feedback on Metrorail's reports leads to further improvements prior to consideration of the reports by WMSC Commissioners for adoption. The WMSC's safety event investigation oversight assures the sufficiency and thoroughness of Metrorail's investigations. The WMSC Commissioners are considering these documents (the WMSC review and Metrorail's investigation report) as a unified item for adoption at the Washington Metrorail Safety Commission meeting on September 16, 2025

WMSC staff recommend adoption of this investigation.

The three collisions described in detail below occurred at Minnesota Avenue Station and were caused by assets and structures fouling the dynamic envelope and thus impeding rail vehicle traffic. The dynamic envelope is an outline of the cross-sectional area, above and beside the tracks, which will be occupied by a train. A passing train will collide with any object or person within this outline. All vehicles operated within the Metrorail system, whether they be Metrorail-owned or contractor-owned vehicles, must undergo a Dynamic Envelope Test to ensure they meet Metrorail specifications. The vehicles involved in the collisions had been tested and the investigations determined all of the vehicles' appendages were stowed properly.

The causes of and contributing factors to the events described in more detail below include:

- Previously damaged assets (ETS Box and post) encroaching on the roadway
- Failure to mitigate a known hazard by completing an assigned work order promptly
- Lack of policy, procedure and supervisory oversight to ensure the proper measuring and installation of wooden railing, resulting in its installation despite it not being the correct dimensions

Investigations W-397 and W-0398 being considered at the September 16, 2025, led to specific corrective actions including:

- Metrorail conducted Toolbox Talks with personnel and developed a lessons learned detailing the event and modified their protocol when there are any modifications that may impact the dynamic envelope. The protocol now requires engineer drawings showing the maximum and minimum clearance requirements specific to the area, that the installation be performed in accordance with those engineering specifications and that post-installation verification be conducted by engineering to confirm compliance.



Metrorail is in the process of implementing related corrective action plans (CAPs) including:

- C-0294 addresses the finding that Metrorail Emergency Trip Stations (ETS) located throughout the system are not treated as fire-life safety assets. Actions Metrorail must take to address this finding include reviewing all departmental procedures related to emergency trip stations and ensure proper alignment on the responsibilities for the inspection, preventive and corrective maintenance, and prioritization of all emergency trip stations. Emergency trip stations must be identified and repaired on a timeline commensurate with the function they are intended for, that is fire life safety and emergency functions. There must be clear responsibility for identification of emergency trip stations that are in need of repair and notification to proper departments for resolution (Scheduled completion date April 2027).

Safety event summaries:

W-0397 – Minnesota Avenue Station – March 19, 2024 (E24214)

Two roadway maintenance machines, Ballast Regulator (BR-04) and Prime Mover (PM-50), which had a flatcar (B406) attached, struck an Emergency Trip Station (D92) at Minnesota Avenue Station within minutes of each other while traveling in a convoy of four vehicles from Shady Grove Rail Yard to New Carrollton Rail Yard.

The first collision occurred at 1:31 a.m., when BR-04 struck an Emergency Trip Station (ETS) box and post on track 2 while traveling in the convoy of vehicles. BR-04's Equipment Operator was unaware of the collision and continued on without reporting the event. The collision was discovered during an investigative review of closed-circuit television footage regarding the second collision detailed below. During an investigative interview, the Equipment Operator stated that they did not hear or feel anything while traveling through Minnesota Avenue Station. The Equipment Operator also stated they performed a pre-trip inspection, ensured attachments were secure and there were no mechanical issues before leaving the rail yard.

As a result of the collision, a pole that is a part of the ETS structure was left leaning forward, encroaching onto the roadway.

At 1:36 a.m., PM-50, with Flatcar B406 attached, which was a part of the same convoy, struck the same ETS structure. This collision caused more extensive damage, including the dislodgement of the ETS, and damage to a fence and staircase handrail at the end of the station's platform. An investigative review of documents showed a work order created October 3, 2023, to replace a damaged handrail at that location. The repair had not been made at the time of this event.

At 1:37 a.m., the Buttons Rail Traffic Controller in the Control Center reported that power was down at Minnesota Avenue Station to the Power Desk Assistant Superintendent. One minute later, after being notified of the collision by the Flagman on attached Flatcar B406, the Equipment Operator of PM-50 reported the unit may have struck something to the Control Center. The Equipment Operator requested an absolute block to go back to the Minnesota Avenue Station platform and perform a track inspection. The Rail Traffic Controller granted the absolute block, notified the Assistant Operations Manager of the collision and Metrorail personnel were dispatched to respond to the scene.

After identifying damage caused by the collision, the Equipment Operator requested and was granted Foul Time Protection to perform a walking track inspection.

Additional damage was identified to posts and cables, and scratches found on the flatcar. There was no damage to the track.



750 First St. NE • Ste. 900 • Washington, D.C. 20002

Office: 202-384-1520 • Website: www.wmsc.gov

Incident Command was established, Power Department personnel made repairs, Office of Track and Structure personnel performed gauge measurements and removed debris, and a wooden handrail was installed to replace the damaged metal handrail. Communications and Signaling IT replaced and repaired the ETS Box and post on April 4, 2024.

BR-04, PM-50 with B406 were removed from service for post-incident inspection. The investigation determined that all appendages were properly stowed on the vehicles, and all vehicles had cleared the dynamic envelop template. However, the damaged handrail encroached into the dynamic envelop, causing the collision. It was also determined that both vehicles were being operated at speeds greater than the required restricted speed of 15 miles per hour (mph) at the time of the collisions.

The Equipment Operators for BR-04 and PM-50 were removed from service for post-incident toxicology testing.

W-0398 – Minnesota Avenue Station – March 22, 2024 (E24223)

Flatcar F617, which is part of a series of flatcars that make up Locomotive Prime Mover (LPM-51) struck the temporary wooden handrail that replaced the metal handrail previously damaged during a collision that occurred on March 19, 2024 (Investigation W-0397). LPM-51 was traveling from New Carrollton Rail Yard to Greenbelt Rail Yard on March 22, 2024 when the collision occurred.

During an investigative interview, the Flagman, stated that LPM-51 made contact with the wooden staircase handrail twice, causing the step bracket on the unit to detach. The Flagman notified LPM-51's Equipment Operator of the collision. The Equipment Operator did not report the collision to the Control Center until approximately 18 minutes after it occurred. The Equipment Operator requested permission to conduct a ground walkaround.

The Buttons Rail Traffic Controller notified the Assistant Operations Manager and personnel from multiple departments were dispatched to respond to the scene. There was no damage to the track. The damaged wooden railing was replaced with temporary fence netting and later replaced with permanent metal railing.

Emergency Response Team personnel conducted track gauge measurements, and a track inspection was conducted, and the track was deemed safe. The investigation determined that the temporary wooden stairs and handrail installed following the March 19, 2024, event were too wide and encroached onto the roadway.

The Equipment Operator and Flagman were removed from service for post-incident toxicology testing.



Washington Metropolitan Area Transit Authority
Department of Safety (SAFE)
Office of Safety Investigations (OSI)
FINAL REPORT OF INVESTIGATION A&I E24214 and E24223

	E24214	E24223
Date of Event:	March 19, 2024	March 22, 2024
Type of Event:	A-3 - Collision	
Incident Time:	01:36 hours	00:48 hours
Location:	Minnesota Avenue Station, track 1	
Time and How received by SAFE:	01:40 hours – SAFE/MAC	01:10 hours – SAFE/MAC
WMSC Notification Time:	03:37 Hours	02:46 Hours
Responding Safety Officers:	WMATA: Office of Safety Investigations (OSI), Office of Emergency Preparedness (OEP) WMSC: None Other: None	
Rail Vehicle:	Ballast Regulator (BR-04), Prime Mover (PM-50) with Flatcar (B406)	Locomotive Prime Mover 51 (LPM51), and Flat Car 617
Injuries:	None	
Damage:	Emergency Trip Station (ETS) Box D-92 and post, Cables, and Staircase Railing, and Fence	Temporary Wooden and handrail stairs
Emergency Responders:	Metro Transit Police Department (MTPD)	
SMS I/A Incident Number:	20240319#115557	20240322#115629

Minnesota Avenue Station – Collision

March 19, 2024, and March 22, 2024

Table of Contents

Abbreviations and Acronyms-----	3
Executive Summary-----	5
First Occurrence (E24214) -----	5
Incident Site-----	6
Field Sketch/Schematics-----	6
Second Occurrence (24223)-----	6
Purpose and Scope -----	7
Investigative Methods-----	8
Investigation-----	9
First Occurrence (E24214) -----	9
Second Occurrence (E24223) -----	13
Chronological Event Timeline-----	16
Interview Findings -----	20
Weather -----	21
Related Rules and Procedures -----	21
Human Factors -----	22
Fatigue -----	22
Post-Incident Toxicology Testing-----	23
Findings -----	23
Immediate Mitigation to Prevent Recurrence -----	23
Probable Cause Statement-----	24
Recommended Corrective Actions -----	24
Appendices-----	25
Appendix A – Interview Summaries -----	25
Appendix B – Photographs and Images-----	26
Appendix C – Work Orders-----	30
Appendix D – General Orders & Track Rights System (GOTRS)-----	31
Appendix E – Operational Technology -----	49
Appendix F – Office of Vehicle Program Services (CENV) -----	50
Appendix F – Facilities Lessons Learned -----	57
Appendix G - Root Cause Analysis-----	59

Abbreviations and Acronyms

ASD	Area of Safety Dispersal
BR	Ballast Regulator
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
CENV	Vehicle Program Services
CM	Chain Marker
CTEM	Car Track Equipment Maintenance
ETS	Emergency Trip Station
GOTRS	General Orders & Track Rights System
LPM	Locomotive Prime Mover
MAC	Mission Assurance Coordinator
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
MTPD	Metropolitan Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
OEP	Office of Emergency Preparedness
OSI	Office of Safety Investigations
PDAS	Power Desk Assistant Superintendent
PM	Prime Mover
SAFE	Department of Safety
SMS	Safety Measurement System
T	Tamper
WMATA	Washington Metropolitan Area Transit Authority

Washington Metropolitan Area Transit Authority
Department of Safety – Office of Safety Investigations

Executive Summary

**Note that all times listed are approximate and may contain minor variations due to differences between systems of record. **

First Occurrence (E24214)

On Tuesday, March 19, 2024, at 23:51 hours, Tamper (T-005), Ballast Regulator (BR-04), and Prime Mover (PM-50) with Flatcar (B406) attached was dispatched from Shady Grove Station traveling as a convoy originating at Shady Grove Yard (A99) traveling to New Carrollton Yard (D99) when a collision occurred at Minnesota Avenue Station.

At 01:31 hours, the convoy was traveling outbound on track 2, when BR-04 struck a ETS Box structure at Minnesota Avenue Station causing the pole to lean towards the roadway. The Equipment Operator of BR-04 was unaware of the collision and did not report it to the MICC.

At 01:36 hours, PM-50 with B406 attached traversed the same area and caused additional damage when it collided with the ETS Box, dislodging the equipment, and damaging the fence and handrail attached to the staircase at the end of the platform.

At 01:37 hours, the Button Rail Traffic Controller (RTC) notified the Power Desk Assistant Superintendent (PDAS) that the power was de-energized at Minnesota Avenue Station.

At 01:38 hours, the Equipment Operator of PM-50 reported to the Metro Integration Command and Communications (MICC) Center they were not sure if the Roadway Maintenance Machine (RMM) collided with the ETS Box near Chain Marker (CM) D2 330+00 and requested an absolute block back to Minnesota Avenue Station to perform a track inspection.

At 01:39 hours, the Button RTC notified the Assistant Operations Manager (AOM) of the event.

The Radio RTC granted the Equipment Operator an absolute block to Minnesota Avenue Station platform on track 2 to perform the track inspection. Upon observing the damage on the roadway the Equipment Operator stopped and requested foul time to perform a walking inspection from the incident to Minnesota Avenue Station platform.

The Equipment Operator contacted the AOM and reported that the RMM collided with ETS Box #D92, causing damage to the ETS Box and fencing. The Equipment Operator reported that B406 sustained scratches.

The Offices of Track and Structures (TRST) Emergency Response Team (ERT), Car Track Equipment Maintenance (CTEM), Automatic Train Control (ATC), Communications and Signaling (COMM IT), Power, Metro Transit Police Department (MTPD), Emergency Preparedness (OEP), and Safety Investigations (OSI) were dispatched to Minnesota Avenue Station.

Damage to ETS Box D-92 and Post, Cables, Staircase Railing, and Fence were identified. TRST determined that there was no damage to the track.

At 04:05 hours, PM-50 with B406 were dispatched and continued to New Carrollton Yard.

At 04:49 hours, all personnel were verified clear from the roadway.

In adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the Radio RTC dispatched a Track Supervisor to relieve the Equipment Operator from duty for post-incident testing.

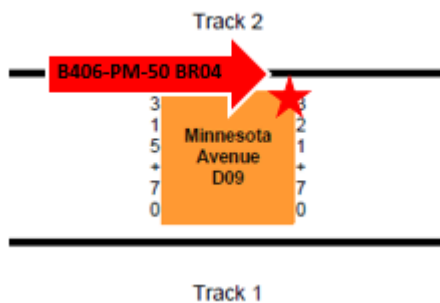
BR-04, and PM-50 with B406 were removed from service for post-incident inspection.

The probable cause of the Collision event that occurred on March 19, 2024, at Minnesota Avenue Station was due to the ETS Box and Post which was previously damaged and encroaching on the roadway.

Incident Site

Minnesota Avenue Station, track 2.

Field Sketch/Schematics



The above depiction is not to scale.

Second Occurrence (24223)

On Friday, March 22, 2024, at 00:36 hours, Locomotive Prime Mover 51 (LPM-51), with nine flatcars attached, including Flatcar (F617) was dispatched from New Carrollton Station originating from New Carrollton Yard (D99) traveling to Greenbelt Yard (E99) when a collision occurred at Minnesota Avenue Station on track 2.

At 00:48 hours, the Roadway Maintenance Machine (RMM) was traveling inbound on track 2, when F617 struck the wooden handrail attached to the staircase on the north end of Minnesota Avenue Station causing the step bracket on F617 to become detached.

At 01:05 hours, the Equipment Operator of LPM-51 reported to the Metro Integration Command and Communications (MICC) Center that F617 collided with the wooden staircase railing and there was no damage. The wooden staircase was installed due to the incident on March 19, 2024, using the incorrect measurements.

The Button RTC notified the Assistant Operations Manager (AOM) of the event.

The Offices of Track and Structures (TRST) Emergency Response Team (ERT), Car Track Equipment Maintenance (CTEM), Facilities Maintenance, Metro Transit Police Department (MTPD), Emergency Preparedness (OEP), and Safety Investigations (OSI) were dispatched to Minnesota Avenue Station.

Damage to the staircase railing and the step bracket on F617 were identified. TRST determined that there was no damage to the track.

Facilities Maintenance personnel removed the wooden staircase railing and replaced it with a temporary fence netting.

At 04:08 hours, the RMM was dispatched to New Carrollton Yard.

In adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the Radio RTC dispatched a Track Supervisor to relieve the Equipment Operator and Flagman from duty for post-incident testing.

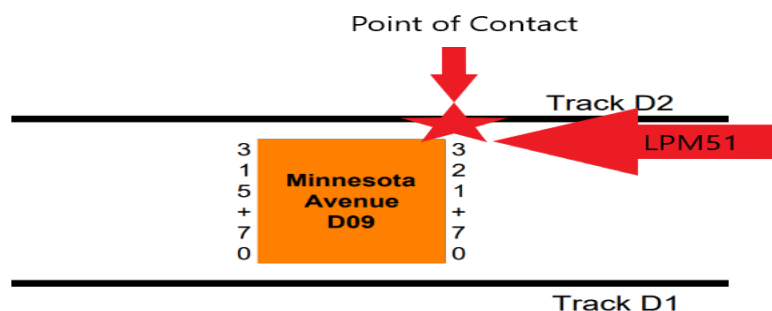
F617 was removed from service for post-incident inspection.

The probable cause of the Collision event that occurred on March 22, 2024, at Minnesota Avenue Station was due to the improper measurement of the replacement wooden staircase railing which was too wide and encroached on the roadway.

Incident Site

Minnesota Avenue Station, track 2.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is to collect and analyze available facts, determine the probable cause(s) of the incident, identify contributing factors, and make recommendations to prevent a recurrence.

Investigative Methods

The investigative methodologies included the following:

- Physical Site Assessment
- Formal Interviews – SAFE interviewed three (3) individuals as part of this investigation. The interviews included persons present at, during, and after the incident, those directly involved in the response process, and representatives from the Washington Metrorail Safety Commission (WMSC). SAFE interviewed the following individuals:

First Occurrence (E24214)

- Equipment Operator (BR-04)
- Equipment Operator (PM-50)

Second Occurrence (24223)

- Flagman (LPM-51)
- Documentation Review – Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
 - Employees 30-day work history review
 - Employees Written Statements
 - Department Investigation Report
 - Metrorail Operating Rulebook (MOR)
 - National Oceanic and Atmospheric Administration (NOAA)
 - Metro Integrated Command and Communications (MICC) Incident Report
 - Maximo Data
 - The Office of Vehicle Program Services (CENV)
 - Operational Technology – Speed Analysis
 - General Orders & Track Rights System (GOTRS)
- System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback
 - Closed-Circuit Television (CCTV)
 - Advanced Information Management System (AIMS)

Investigation

First Occurrence (E24214)

On Tuesday, March 19, 2024, T-005, BR-04, and PM-50 with B406 attached were a convoy originating at Shady Grove Yard (A99) traveling to New Carrollton Rail Yard (D99) when a collision occurred at Minnesota Avenue Station.

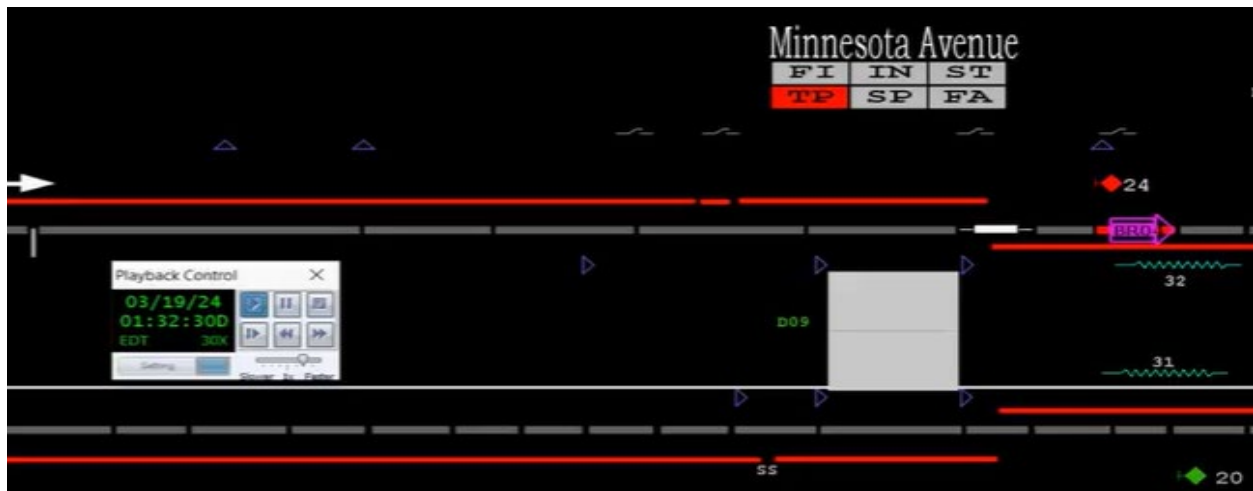


Figure 1 – AIMS Playback of BR-04 when the collision occurred.

The Audio Recording System (ARS) revealed that at 00:16 hours, the convoy was granted permission to enter the mainline from Shady Grove Yard to New Carrollton Yard.

At 01:31 hours, the convoy was traveling outbound on track 2, when BR-04 struck a ETS Box structure at Minnesota Avenue Station causing the pole to lean towards the roadway. The Equipment Operator of BR-04 was unaware of the collision and did not report it to the MICC.



Image 1 – Image of BR-04 colliding with the ETS Box and Post at Minnesota Avenue Station.

At 01:36 hours, PM-50 with B406 attached traversed the same area and caused additional damage when B406 collided with the ETS Box and pole, dislodging the equipment and causing damage to the fence and handrail at the end of the platform.



Image 2 – Image of B406 colliding with the ETS Box at Minnesota Avenue Station.

At 01:37 hours, the Button RTC notified the PDAS that the power was de-energized at Minnesota Avenue Station.

At 01:38 hours, the Equipment Operator of PM-50 reported to the MICC that the RMM collided with the ETS Box near CM D2 330+00 and requested an absolute block to Minnesota Avenue Station to perform a track inspection.

At 01:39 hours, the Button RTC notified the Assistant Operations Manager (AOM) of the event.

The Radio RTC granted the Equipment Operator an absolute block to Minnesota Avenue Station platform on track 2 to perform the track inspection. Upon observing the damage on the roadway the Equipment Operator stopped and requested foul time to perform a walking inspection from the incident to Minnesota Avenue Station platform.

At 01:41 hours, the Equipment Operator of PM-50 requested foul time to walk to the platform. The Radio RTC granted foul time to Minnesota Avenue Station on track 2, and to conduct a ground walk-around of the RMM, take photographs, and report the findings.

At 01:47 hours, the Equipment Operator of T-005, reported clear of the mainline, and located at New Carrollton Rail Yard.

At 01:48 hours, the Equipment Operator of BR-04, reported clear of the mainline, and located at New Carrollton Rail Yard.

At 01:49 hours, the Equipment Operator of PM-50 advised the AOM that the B406 made contact with ETS Box #D92, and that there was damage to the ETS Box and fencing. The Equipment Operator reported that B406 sustained scratches.

ERT, CTEM, ATC, COMM IT, Power, PLNT, MTPD, OEP, and OSI were dispatched to Minnesota Avenue Station.

At 02:14 hours, CTEM personnel arrived on the scene and performed an inspection.

At 02:34 hours, the OEP Primary Responder arrived at Minnesota Avenue Station.

At 02:55 hours, the TRST Supervisor established Incident Command on the platform and advised that a test train would be needed to perform a track inspection.

The TRST Supervisor and Incident Commander requested and was granted foul time to allow OEP personnel to enter the roadway to investigate.

Power personnel performed an assessment and assisted with making repairs. TRST personnel performed a track gauge measurement and removed debris from the wayside. Facilities Maintenance personnel replaced the staircase railing with a wooden handrail. COMM IT began to repair and replace the ETS Box and Post.



Image 3 – Image 1 of the new ETS Box and temporary wooden railing.



Image 4 - Image 2 of the new ETS Box and temporary wooden railing.

The Incident Commander advised that CTEM personnel advised that PM-50 was safe to move.

At 04:04 hours, the Radio RTC dispatched PM-50 with B406 to New Carrollton Yard.

At 04:05 hours, the Incident Commander relinquished foul time and verified that all personnel and equipment were clear of the roadway.

At 04:28 hours, Train ID 800 (L6133/32x6152/53x6031/30x6120/21T) was dispatched from New Carrollton Station to perform a track inspection.

At 05:03 hours, the Train Operator of Train ID 800 reported a good track inspection at Minnesota Avenue Station on track 2.

CCTV of the convoy was reviewed and there was no observation of any other collisions as the convoy traveled from Shady Grove Yard.

A review of the Estimated Speed Data Chart revealed that T-005, BR-04, and PM-50 exceeded the restricted speed of 15 MPH for Class 2 Rail Vehicles.

On April 4, 2024, the ETS Box was completely repaired.

Maximo Work Order #18475642 outlines that repairs to ETS Box D92 were completed on April 4, 2024, while the replacement of the ETS light and labels remains pending.

CENV determined that BR-04 and 8406 collided with the wayside equipment. Both cleared the Rail Vehicle Dynamic envelope template with appendages properly stowed. While BR-04 passed the clearance test with the wings stowed, the operator is responsible to properly stow the wings for system travel.

The Ballast Regulators do not have electronic travel lookouts if the wings are not properly stowed. A visual inspection at New Carrollton Yard found both wings properly stowed. There was no historical incidence with BR-04's ballast wing contacting other wayside equipment within the metro system.

Second Occurrence (E24223)

On Friday, March 22, 2024, LPM-51 with nine flatcars attached, including F617 departed New Carrollton Yard (D99) traveling to Greenbelt Yard (E99) when a collision occurred at Minnesota Avenue Station on track 2.

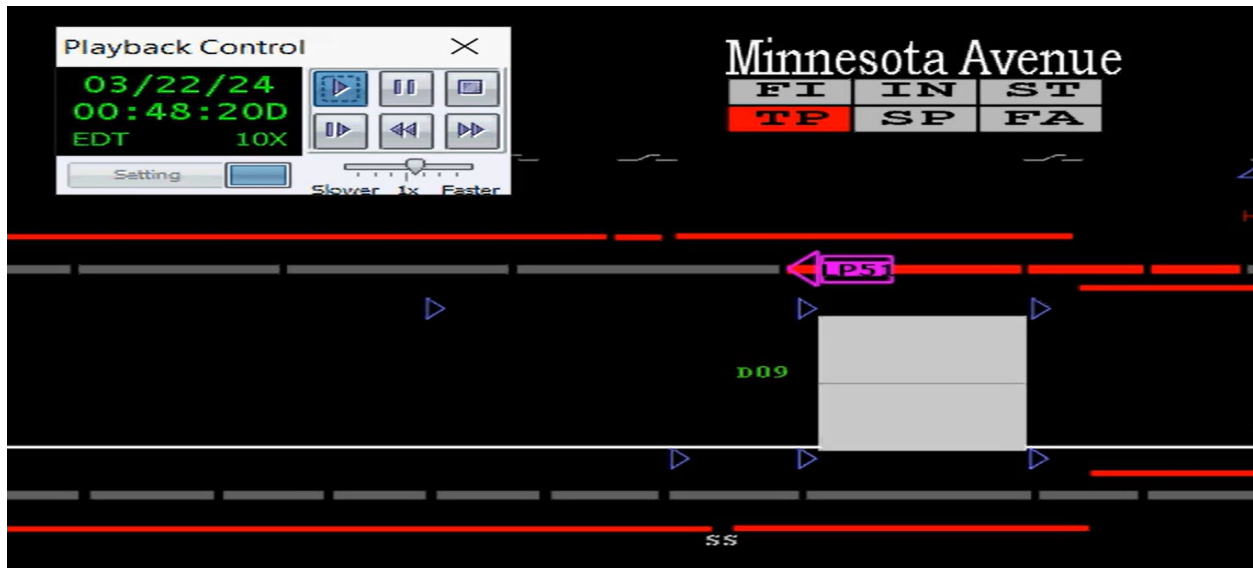


Figure 2 - AIMS Playback of LPM-51 and F617 when the collision occurred

Three days before this collision, on March 19, 2024, there was a collision at the same location¹. Facilities Maintenance personnel replaced the staircase railing with a temporary wooden handrail.

The Audio Recording System (ARS) revealed that at 00:36 hours, the RMM was granted permission to enter the mainline from New Carrollton Yard to Greenbelt Yard.

At 00:48 hours, the Roadway Maintenance Machine (RMM) was traveling inbound on track 2, when F617 struck the wooden handrail attached to the staircase on the north end of Minnesota Avenue Station causing the step bracket on F617 to become detached.

¹ At 01: 31 hours, the Roadway Maintenance Machines (RMM) were traveling outbound on track 2, when BR-04 struck the ETS Box at Minnesota Avenue Station causing the pole to lean towards the roadway.

At 01:36 hours, PM-50 with B406 attached traversed the same area and caused additional damage when it collided with the ETS Box, dislodging the equipment, and damaging the fence and handrail attached to the staircase at the end of the platform.

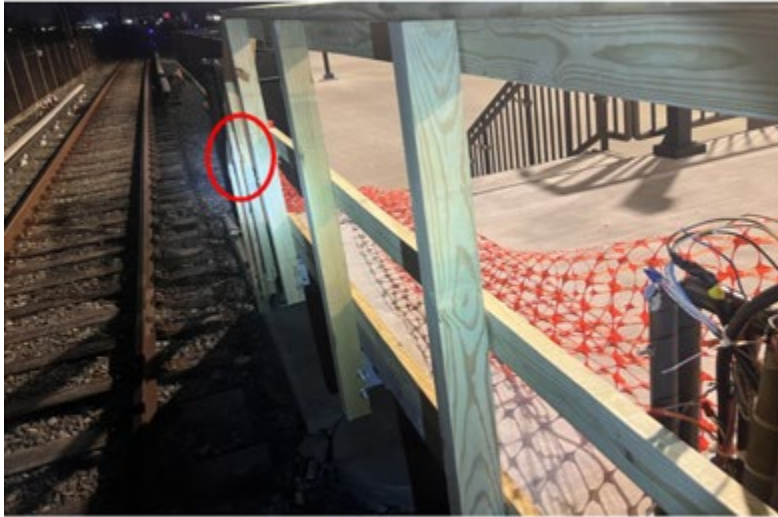


Image 5 – Images of damage to the wooden staircase railing and step bracket on F617.

At 01:05 hours, the Equipment Operator of LPM-51 reported to the MICC that F617 collided with the wooden staircase railing and there was no damage.

The Button RTC notified the AOM of the event.

The Offices of Track and Structures (TRST) Emergency Response Team (ERT), Car Track Equipment Maintenance (CTEM), Facilities Maintenance, Metro Transit Police Department (MTPD), Emergency Preparedness (OEP), and Safety Investigations (OSI) were dispatched to Minnesota Avenue Station.

At 01:41 hours, ERT personnel arrived on the scene and performed an inspection.

At 01:48 hours, OSI personnel arrived on the scene.

At 01:55 hours, MTPD personnel arrived on the scene.

At 02:09 hours, Facilities Maintenance personnel arrived on the scene and performed an inspection.

At 02:22 hours, ERT requested and was granted foul time to perform a track gauge measurement test.

Damage to the staircase railing and the step bracket on F617 were identified. ERT determined that there was no damage to the track.

Facilities Maintenance personnel removed the wooden staircase and replaced it with a temporary fence netting.

At 03:57 hours, the repairs were complete and all personnel cleared from the roadway.

At 04:08 hours, the RMM was dispatched to New Carrollton Yard.

Chronological Event Timeline

First Occurrence (E24214)

A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Time	Description
March 18, 2024	
23:51:31 hours	<u>Equipment Operator of BR-04</u> : Advised they were departing Shady Grove Yard and traveling to New Carrollton Yard. <u>Radio RTC</u> : Acknowledged. [Radio OPS1]
23:51:41 hours	<u>Equipment Operator of T005</u> : Advised they were departing Shady Grove Yard in front of BR-04. <u>Radio RTC</u> : Acknowledged. [Radio OPS1]
March 19, 2024	
00:16:16 hours	<u>Equipment Operator of PM-50</u> : Advised they were departing Shady Grove Yard with B406 attached. <u>Radio RTC</u> : Acknowledged. [OPS1]
01:31:04 hours	BR-04 collided with the ETS Box and Post. [CCTV]
01:36:45 hours	PM-50 with B406 collided with the ETS Box and Post. [CCTV]
01:37:42 hours	<u>Button RTC</u> : Notified the PDAS that the power was de-energized at Minnesota Avenue Station. <u>Power Desk Assistant Superintendent</u> : Acknowledged. [Phone OPS2]
01:38:20 hours	<u>Equipment Operator of PM-50</u> : Reported that the vehicle came into contact with an ETS Box and requested to perform a track inspection. <u>Radio RTC</u> : Acknowledged. Granted an absolute block to the platform. <u>Equipment Operator of PM-50</u> : Acknowledged. [Radio OPS2]
01:39:01 hours	<u>Button RTC</u> : Advised AOM of the incident. <u>AOM</u> : Acknowledged. [Phone OPS2]
01:41:37 hours	<u>Equipment Operator of PM-50</u> : Requested foul time. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
01:42:10 hours	<u>Radio RTC</u> : Granted foul time. <u>Equipment Operator of PM-50</u> : Acknowledged. [Radio OPS2]
01:47:53 hours	<u>Equipment Operator of T005</u> : Advised that they cleared from the mainline and located at New Carrollton Rail Yard. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
01:48:12 hours	<u>Equipment Operator of BR-04</u> : Advised that they cleared from the mainline and located at New Carrollton Rail Yard. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]

Time	Description
01:49:55 hours	<u>Equipment Operator of PM-50</u> : Advised AOM that they were in a convoy when they struck an ETS Box and fencing. <u>AOM</u> : Acknowledged. [Phone OPS2]
02:19:24 hours	<u>CTEM</u> : Arrived on scene. [CCTV]
02:33:00 hours	OSI personnel arrived at Minnesota Avenue Station. [CCTV]
02:34:25 hours	OEP arrived on the scene. [CCTV]
02:53:28 hours	<u>TRST</u> : Advised the Radio RTC that all personnel were clear of the roadway. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
02:55:23 hours	<u>TRST</u> : Advised that they will assume command at Minnesota Avenue Station, track 2 side, and requested a test train. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
02:58:32 hours	<u>Incident Commander</u> : Requested foul time for Safety to enter the roadway. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
03:14:05 hours	<u>Radio RTC</u> : Granted Command foul time. <u>Incident Commander</u> : Acknowledged. [Radio OPS]
03:43:09 hours	<u>New Carrollton Terminal</u> : Advised that a test train would be dispatched from to Minnesota Avenue Station. <u>Button RTC</u> : Acknowledged. [Phone OPS2]
04:04:00 hours	<u>Incident Commander</u> : Advised PM-50 was safe to move to New Carrollton Yard. Personnel were clear for equipment movement. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
04:04:49 hours	<u>Radio RTC</u> : Granted PM-50 an absolute block to Landover, track 1 and cross over to Cheverly. <u>Equipment Operator of PM-50</u> : Acknowledged that all personnel and equipment were clear of the roadway. [Radio OPS2]
04:22:39 hours	<u>Equipment Operator of PM-50</u> : Reported located at New Carrollton Yard. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
04:28:00 hours	Train ID 800 was dispatched from New Carrollton Station to perform a track inspection. [SPOTS]
04:49:42 hours	<u>Incident Commander</u> : Advised that they were relinquishing foul time and all personnel and equipment were clear of the roadway. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]
05:03:00 hours	<u>Train Operator of Train ID 800</u> : Reported a good track inspection at Minnesota Avenue Station on track 2. [Radio Ops 2]
05:03:14 hours	<u>TRST Supervisor</u> : Advised a good track inspection at Minnesota Avenue track 2. <u>Radio RTC</u> : Acknowledged. [Radio OPS2]

Note: Times above may vary from other systems' timelines based on clock settings.

Second Occurrence (E24223)

A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Time	Description
00:36:36 hours	<u>Equipment Operator of LPM51</u> : Reported located at New Carrollton Station. <u>Radio RTC</u> : Instructed to verify a lunar signal at D13-08, and granted an absolute block to Cheverly Station on track 2. <u>Equipment Operator of LPM51</u> : Acknowledged. [Radio, Ops2]
00:47:06 hours	<u>Equipment Operator of LPM51</u> : Reported approaching Minnesota Avenue Station. <u>Radio RTC</u> : Instructed to hold at Minnesota Avenue Station due to single tracking. <u>Equipment Operator of LPM51</u> : Acknowledged. [Radio, Ops2]
00:48:02 hours	Flat Car F617 collided with the wooden handrail of the staircase at Minnesota Avenue Station on track 2. [CCTV]
00:48:25 hours	<u>Equipment Operator of LPM51</u> : Reported holding at Minnesota Avenue Station. <u>Radio RTC</u> : Acknowledged. [Radio, Ops2]
01:02:17 hours	<u>Radio RTC</u> : Granted an absolute block to Potomac Avenue Station on track 2. <u>Equipment Operator of LPM51</u> : Acknowledged. [Radio, Ops2]
01:05:07 hours	<u>Equipment Operator of LPM51</u> : Requested to have someone inspect the temporary steps at Minnesota Avenue Station. Reported the wood from the staircase knicked the flatcar and there was no damage. <u>Button RTC</u> : Inquired if the RMM was able to continue, and that they would inform their management. <u>Equipment Operator of LPM51</u> : Responded that the RMM was able to move. <u>Button RTC</u> : Acknowledged. [Phone, Ops2]
01:07:19 hours	<u>Equipment Operator of LPM51</u> : Advised moving again. Reported that a visual inspection of the flat car was good, and to have someone check out the wooden steps. <u>Radio RTC</u> : Instructed the Equipment Operator to hold their location and requested a landline. <u>Equipment Operator of LPM51</u> : Acknowledged transmission. [Radio, Ops2]
01:08:16 hours	<u>AOM</u> : Inquired if the RMM hit anything. <u>Equipment Operator of LPM51</u> : Advised that the flatcar knicked the wood staircase located on the north end of the platform on track 2. <u>AOM</u> : Instructed to hold. Advised the Safety would respond to perform an investigation. <u>Equipment Operator of LPM51</u> : Acknowledged. [Phone, Ops2]
01:10:15 hours	AOM notified the MAC. [Phone, Rail1]
01:15:10 hours	MAC notified the Safety Director on Call (SDOC). [Phone, MAC Desk]
01:22:18 hours	MAC notified and dispatched OSI to the scene. [Phone, MAC Desk]
01:27:51 hours	<u>MOC</u> : Advised that Facilities and Track were en route to Minnesota Avenue Station. <u>AOM</u> : Acknowledged. [Phone Rail 1]
01:41:00 hours	ERT reported being located at Minnesota Avenue Station. [Radio, Ops 2]

Time	Description
01:48:16 hours	OSI reported located at Minnesota Avenue Station. [Radio, Ops 2]
01:55:34 hours	MTPD Officer arrived at Minnesota Avenue Station. [CCTV]
02:05:31 hours	<u>Radio RTC</u> : Advised ERT that they were the on-scene commander. <u>ERT</u> : Acknowledged. [Radio Ops 2]
02:09:00 hours	Facilities Maintenance reported being located at Minnesota Avenue Station. [Radio, Ops 2]
02:22:00 hours	<u>ERT</u> : Requested foul time to enter the roadway. <u>Radio RTC</u> : Granted foul time. [Radio Ops 2]
02:34:25 hours	<u>OEP</u> : Arrived at Minnesota Avenue Station. [CCTV]
02:56:00 hours	TRST established IC. [Radio Ops 2]
03:20:17 hours	TRST personnel measured the distance between the gauge, platform, and temporary wooden staircase. [CCTV]
03:27:06 hours	Facilities Maintenance personnel removed the wooden staircase. [CCTV]
03:40:28 hours	Facilities Maintenance personnel placed temporary orange fencing. [CCTV]
03:57:00 hours	IC reported repairs were complete. [Radio Ops 2]
04:08:28 hours	A track inspection was conducted by LMP51. [Radio, Ops 2]

Office of Track and Structures (TRST)

Interview Findings

As part of the investigation launched into the event, SAFE interviewed two people. The interviews identified the following key findings associated with this event. The findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

First Occurrence (E24214)

Equipment Operator of Ballast Regulator BR-04

- The operator reported no mechanical issues.
- The operator stated they performed a pre-trip inspection.
- The operator stated that they ensured that all attachments were adjusted before going to the mainline.
- The operator stated the task was to transport BR-04 from Shady Grove Yard to New Carrollton Yard.
- The operator stated they were not sure if a safety briefing was conducted before departing Shady Grove Yard.
- The operator stated they met the convoy at the C&A.
- The operator stated the ballast wings were in the locked position before departing Shady Grove Yard.
- The operator stated the hydraulic button was in the off position during travel.
- The operator stated that BR-04 does not warn the operator if the ballast wings are not properly locked.
- The operator stated that they did not feel or hear anything when they passed through Minnesota Avenue Station.
- The operator stated that while traveling from Metro Center Station (C01) to Stadium-Armory (D08) BR-04 did not strike any objects.

Equipment Operator of Prime Mover (PM-50)

- The operator stated the task on the day of the incident was to transport a flatcar from Shady Grove Rail Yard (A99) to New Carrollton Rail Yard (D99) accompanied by a convoy.
- The operator reported no mechanical issues with PM-50.
- The operator stated a safety briefing was conducted before departing Shady Grove Yard.
- The operator stated they were traveling at a restricted speed of 15 MPH.
- The operator stated that PM-50 met the convoy at McPherson Square Station.
- The operator stated that they were notified by the flagman of the incident.
- The operator requested to conduct a track inspection.
- The operator stated Ballast Car hit the ETS Box.

Second Occurrence (E24223)

As part of the investigation launched into the event, SAFE interviewed one person. The interview identified the following key findings associated with this event. The findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Flagman - Locomotive Prime Mover

- The flagman stated that the LPM-51 is used to bring out strings of rail to different areas in the system.
- The flagman stated they originated from New Carrollton Rail Yard towards Greenbelt Rail Yard.
- The flagman stated the steps of LPM-51 made contact with the handrail.
- The flagman stated when LPM-51 made contact with the handrail they notified the operator via intercom.
- The flagman stated they were unsure if the handrail fouled the roadway.
- The flagman stated they were made aware of the collision due to the sound of the impact.
- The flagman stated that LPM-51 made contact with the handrail twice. The front and rear of the unit.
- The flagman stated they notified the operator of the incident and advised they need to investigate.

Weather

First Occurrence (E24214)

On March 19, 2024, at the time of the incident, NOAA recorded the temperature as 37°F, with clear skies, winds 12 MPH, and 48% humidity at Minnesota Avenue Station. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.

Second Occurrence (E24223)

On March 22, 2024, at the time of the incident, NOAA recorded the temperature as 41°F, with clear skies, winds 14 MPH, and 41% humidity at Minnesota Avenue Station. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.

Related Rules and Procedures

Metrorail Operating Rulebook

- 8.2 Movement at Restricted Speed.
- 8.11.1.1 Positive communications shall be established between the operator and the vehicle flag person.
- 11.5 Protection on Controlled Track.
- 11.7 Speed. (Metrorail Operating Rulebook)
- 11.14 Operations at Night.
- 11.21 Absolute Blocks.

Safety Bulletin

- SB #20-11 Be on the Lookout for Potential Roadway Obstructions

Human Factors

Fatigue

Signs and Symptoms of Fatigue

First Occurrence (E24214)

The Equipment Operator of BR-04

We evaluated conditions at the time of the incident to distinguish whether evidence of fatigue was present. No sign of fatigue was indicated by the available data. The Equipment Operator reported experiencing no symptoms of fatigue in the time leading up to the incident.

The Equipment Operator of PM-50

We evaluated conditions at the time of the incident to distinguish whether evidence of fatigue was present. No sign of fatigue was indicated by the available data. The Equipment Operator reported experiencing no symptoms of fatigue in the time leading up to the incident.

Second Occurrence (E24223)

The Flagman of LPM-51

We evaluated conditions at the time of the incident to distinguish whether evidence of fatigue was present. No sign of fatigue was indicated by the available data. The Equipment Operator reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

First Occurrence (E24214)

The Equipment Operator of BR-04

The incident data was evaluated for fatigue risk factors. Risk factors for fatigue were not present. Since fatigue evidence and risk factors were not present, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

The Equipment Operator of PM-50

The incident data was evaluated for fatigue risk factors. Risk factors for fatigue were not present. Since fatigue evidence and risk factors were not present, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

Second Occurrence (E24223)

The Flagman of LPM-51

The incident data was evaluated for fatigue risk factors. Risk factors for fatigue were not present. Since fatigue evidence and risk factors were not present, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

Post-Incident Toxicology Testing

First Occurrence (E24214)

WMATA's Drug and Alcohol Program determined that the Equipment Operator of BR-04 complied with and was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

WMATA's Drug and Alcohol Program determined that the Equipment Operator of PM-50 complied with and was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Second Occurrence (E24223)

WMATA's Drug and Alcohol Program determined that the Equipment Operator of LPM-51 complied with and was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

WMATA's Drug and Alcohol Program determined that the Track Repairer AA complied with and was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

First Occurrence (E24214)

- Maximo Data revealed that on October 21, 2023, damage to ETS Box #92 was reported and the repairs had not been finished.
- The convoy traveled from Shady Grove Yard without incident until the collision at Minnesota Avenue Station.
- BR-04 was first to collide with the ETS Box on March 19, 2024.
- The Equipment Operator of BR-04 was unaware that the collision had occurred.
- Flatcar B406 attached to PM-50 collided with the ETS Box after BR-04.
- Damage to ETS Box D-92 and Post, Cables, Staircase Railing, and Fence were identified.

Second Occurrence (E24223)

- There was a collision in the same area three days prior.
- Improper measurement of the wooden staircase railing encroached on the roadway.
- The wooden handrail attached to the staircase on the north end of Minnesota Avenue Station and the step bracket on F617 were damaged.

Immediate Mitigation to Prevent Recurrence

First Occurrence (E24214)

- The Equipment Operator of BR-04 was removed from service for post-incident testing.
- The Equipment Operator of PM-50 was removed from service for post-incident testing.
- The BR-04, PM-50 and B406 were removed from service for post-incident inspection.
- Debris was removed from the roadway.
- Track gauge measurement was conducted.
- Track inspection was conducted.

Second Occurrence (E24223)

- Track gauge measurement was conducted.
- An orange netting was installed to replace the wooden railing.
- A survey was conducted and identified encroachment.

Probable Cause Statement

First Occurrence (E24214)

The probable cause of the Collision event that occurred on March 19, 2024, at Minnesota Avenue Station was due to the ETS Box and Post which was previously damaged and encroaching on the roadway.

Second Occurrence (E24223)

The probable cause of the Collision event that occurred on March 22, 2024, at Minnesota Avenue Station was due to the improper measurement of the wooden staircase railing which was too wide and encroached on the roadway.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
<u>First Occurrence (E24214)</u>			
115557_SAF ECAPS_TRS T_001	TRST conducted a ToolBox Talk with the personnel involved.	TRST SRC	Completed
115557_SAFE CAPS_PLNT_ 001	Facilities Maintenance developed a lessons learned detailing the event and modified their protocol when there are any modifications that may impact the dynamic envelop.	PLNT	Completed
<u>Second Occurrence (E24223)</u>			
115629_SAF ECAPS_TRS T_001	TRST conducted a ToolBox Talk with the personnel involved.	TRST SRC	Completed

Appendices

Appendix A – Interview Summaries

The below narratives summarize the incident and represent the statements made by the involved individual. As such, times and details may present a conflict with the data contained in systems of record.

First Occurrence (E24214)

Equipment Operator (BR-04)

The Ballast Regulator Operator is a WMATA employee with twenty-two years of service and over thirteen years as a Class 2 Operator. The Operator holds a Roadway Worker Protection (RWP) Level 2 certification that expires in December 2024.

During the interview, the Operator stated that on the day of the incident, the task was to transport BR-04 from Shady Grove Rail Yard to New Carrollton Rail Yard. The operator performed a pre-trip inspection before departing Grove. The operator stated the wings on BR-04 were in the locked position before departing Shady Grove.

The operator was adamant that the wings did not make contact with any objects before entering Minnesota Avenue Station and did not hear or feel anything when BR-04 made contact with the ETS Box.

Equipment Operator (PM-50)

The Prime Mover Operator is a WMATA employee with over thirteen years of service and over eleven years as a Class 2 Operator. The Operator holds a Roadway Worker Protection (RWP) Level 4 certification that expires in November 2024.

During the interview, The Operator stated their duty was to transport PM-50 and several flatcars from Shady Grove Rail Yard to New Carrollton Rail Yard. The Operator stated they met BR-04 and T-005 at McPherson Station as part of a convoy. The Operator stated there was a safety briefing was performed and no mechanical issues were reported.

The Operator stated while entering Minnesota Avenue Station at the regulated speed of 15 MPH PM-50 made contact with the ETS Box. The Operator was made aware by the flagman. The Operator reported the incident to the MICC and requested a block from the Radio RTC to perform a track inspection.

Second Occurrence (E24223)

During the interview, The Flagman stated that steps made contact with the front and rear of LPM-51. The Flagman stated they were notified by a loud noise. The Flagman advised the operator via unit intercom phone. The operator of LPM-51 contacted the Radio RTC and requested a permissive block to conduct a ground walkaround.

Appendix B – Photographs and Images

First Occurrence (E24214)



Image 6: Shows damage to the ETS Box and handrail.

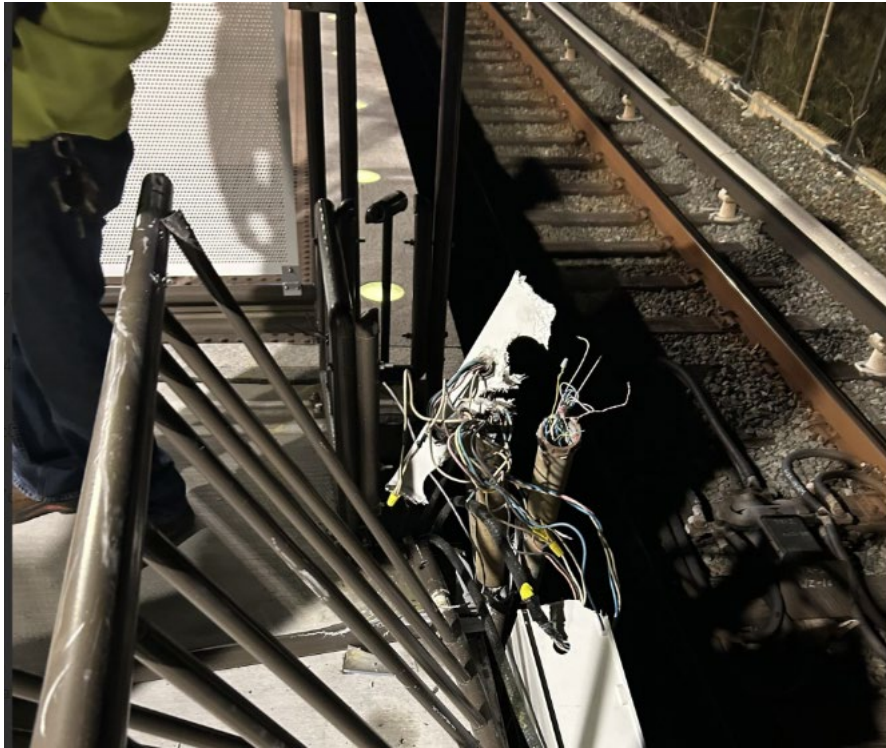


Image 7: Depicts the location of the ETS Box and shows damage to the handrail.

Second Occurrence (E24223)

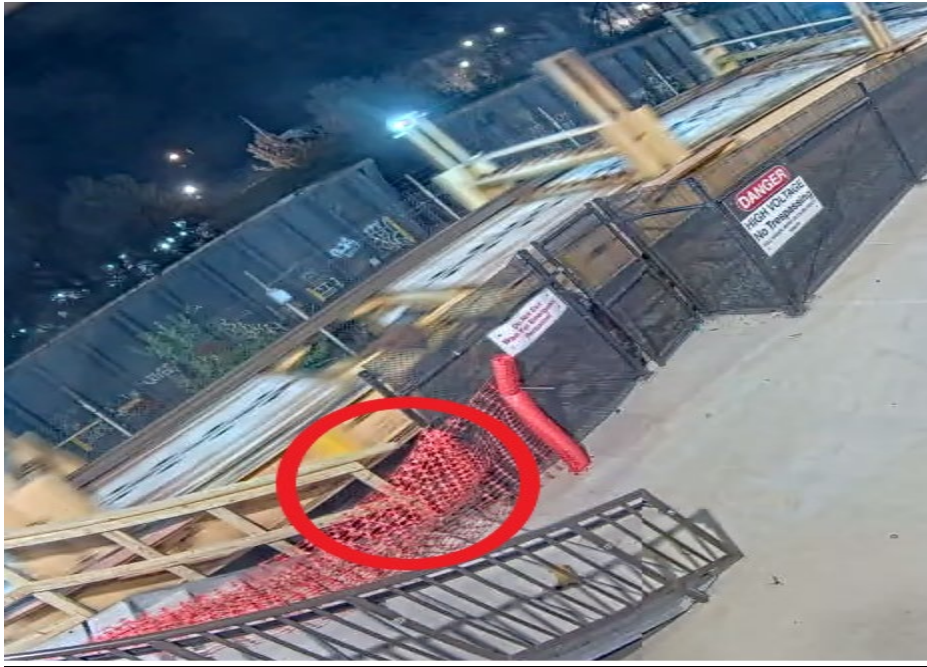


Image 8: Shows the point of impact.



Image 9: Depicts the point of contact.



Image 10: Shows the orange temporary fencing.

Appendix C – Work Orders

First Occurrence (E24214)

- Maximo 18194079 – Damage reported to the ETS Box support.
- Maximo 18194194 – Damage was reported to the ETS Box support pole at CM D2 368+00.
- Maximo 18470764 – ETS Phone inspection was conducted at Minnesota Avenue, track 2.
- Maximo 18475630 – Damage reported to the ETS Box.
- 18475642 – Class 2 vehicle reported making contact with ETS Box #D92 at Minnesota Avenue, track 2.
- Maximo 18491989 – ETS Box reported not working at Minnesota Avenue, track 2.
- Maximo 18170817 – Ticket submitted on 10/8/2023 to replace the damaged handrail.

Appendix D – General Orders & Track Rights System (GOTRS)

First Occurrence (E24214)

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18194079	D09 ETS BOX D92 SUPPORT DAMAGED		CH	TRPM005-TRPM, ETS	D09-TB-ETS D09, TB, ETS	TRPH308197	TRPH	TRPME99		CLOSE	11/05/2023 22:42
		0.0		0.0 3792-VANDALIZED / DAMAGED EQUIPMENT			TRPH			03/19/2024 06:59	03/19/2024 06:59
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 1: Maximo ticket #18194079.

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18470764	ITNC, D09-D10 TRACK 2 ETS PHONE INSPECTION		PH		D09-ITNC-TEL-ETS D09, MINNESOTA AVENUE, WAYSIDE, ETS SYSTEM	788282	ITNC	ITNCS-MAINT	05/15/2024 24:00	CLOSE	04/11/2024 03:21
8141	ITNC, WAYSIDE PHONE CHECK 182 DAYS			0.0			ITNC	ITNCSMAINT1	05/15/2024 02:05	04/23/2024 13:10	04/11/2024 03:21
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 2: Maximo ticket #18470764.

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18475630	D09, ETS BOX D92 is damaged (struck by maintenance vehicle)		CH		ITNCD09 ITNC, D09 SYSTEM	ITNCD09	ITNC	ITNCS-MAINT		CLOSE	03/19/2024 14:37
		0.0		0.0			ITNC			04/23/2024 13:12	04/17/2024 14:46
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 3: Maximo ticket #18475630.

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18475642	D09 ETS box D92 struck by PH 50 completely removed		CH	TRPH005-TRPH, ETS	D09-TR-ETS D09, TR, ETS	TRPH308142	TRPH	TRPME99		CLOSE	03/19/2024 07:16
		0.0		0.0 3792-VANDALIZED / DAMAGED EQUIPMENT			TRPH			04/04/2024 07:30	04/04/2024 07:27
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 4: Maximo ticket #18475642.

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18491989	D09 PLATFORM TRK #2 SIDE ETS BOX NOT WORKING		CH		D09-ITNC-TEL D09, ITNC, TELEPHONE ITNCD09T SYSTEM		ITNC	ITNCS-MAINT		CLOSE	03/26/2024 15:04
		0.0		0.0			ITNC			04/03/2024 11:15	03/30/2024 02:26
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 5: Maximo ticket #18491989.

Washington Metropolitan Area Transit Authority Maintenance and Material Management System Work Order List											
WO #	Description	Parent Wo	Type	Failure	Location	Asset	Maint Office	Labor	Targ. Start	Status	Actual Start
JP #	Create Mile	Comp Mile	Problem	Work Location			Owning	Crew	Targ. Comp	Date	Actual Finish
18170817	D09 TRK #2 MEZZ AREA HANDRAIL BROKEN THAT SUPPORTS THE ETS BOX		PCM	TRSTSTRC-TRST, STRUCTURES	D ORIM, D Line, New Carrollton	TD09	TRST-STRC	TRST-STRC-NOR		CLOSE	05/22/2024 07:06
		0.0		0.0 D60-HAND RAIL DEFECTIVE						05/22/2024 07:06	05/22/2024 07:06
Number of Records: 1											
WT_plus_wotrack.rptdesign											

Document 6: Maximo ticket #18170817.

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202328600100	Track Access:	True
Dates Requested:	11/06/2023 00:30 to: 11/06/2023 04:00	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	IT/NCS	In Piggyback:	No
Tag #:		Power Outage:	None
Lock Out / Tag Out:		Additional AC:	
Request Title:	D08 - D09 ETS INSPECTION		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Regular
Charge Job Number:	
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	D08 - D09
Request Description:	ETS PHONES INSPECTION
Work Type:	Phones
Meeting Location:	D08 PLATFORM
PB Meeting Location:	
Tools and Equipment:	HAND TOOLS AND PPE
Equipment on Track:	

	Track 1			Track 2	
Actual Work Area:	D215+00	D313+00	Actual Work Area:	D215+00	D313+00
Protected Work Area:	D210+00	D318+00	Protected Work Area:	D210+00	D318+00

Date & Time

Start:	11/06/2023 00:30	End:	11/06/2023 04:00
--------	------------------	------	------------------

Contacts

Entered by	Requestor
------------	-----------

Work:

Work:

As of 03/20/2024 12:48
1 of 4

Document 7: General Orders & Track Rights - ETS Box Inspection on 11/06/2023.

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202328600100	Track Access:	True
Dates Requested:	11/06/2023 00:30 to: 11/06/2023 04:00	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	IT/NCS	In Piggyback:	No
Tag #:		Power Outage:	None
Lock Out / Tag Out:		Additional AC:	
Request Title:	D08 - D09 ETS INSPECTION		

Cell:	[REDACTED]	Home:		Cell:	[REDACTED]	Home:	[REDACTED]
-------	------------	-------	--	-------	------------	-------	------------

WMATA Manager

[REDACTED]

Emergency Contact

[REDACTED]

Work: [REDACTED]

Work: [REDACTED]

Cell: [REDACTED] Home:

Cell: [REDACTED] Home:

Support

SUPPORT GROUP	Crew Size
---------------	-----------

IT/NCS	4
--------	---

Request Change History

Date	Event
10/13/2023 04:08	Request was cloned from Request 202314901100.
10/24/2023 16:42	Request status was changed to Approved
11/06/2023 03:43	Work Prep was completed.
11/06/2023 04:03	Work Prep was edited. Field(s) changed: Radio ID, Radio ID: 5137 to 5131.
11/06/2023 05:51	Request status was changed to Opened
11/06/2023 07:01	Request status was changed to Closed

Request Group

Request Number	Description
----------------	-------------

Piggyback

No active piggybacks found

Document 8: General Orders & Track Rights - ETS Box Inspection on 11/06/2023 - Page 2

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202328600100	Track Access:	True
Dates Requested:	11/06/2023 00:30 to: 11/06/2023 04:00	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	IT/NCS	In Piggyback:	No
Tag #:		Power Outage:	None
Lock Out / Tag Out:		Additional AC:	
Request Title:	D08 - D09 ETS INSPECTION		

Close-Out Summary

Final Status:	Closed
RWIC has contacted RTC to establish working limits:	11/06/2023 00:51
Permission is given to setup worksite:	11/06/2023 01:18
RTC authorization to start work is given to RWIC:	11/06/2023 01:32
RTC confirmed working limits are clear:	11/06/2023 02:01
Rail Traffic Controller Comment:	
Assistant Operations Manager Comment:	
RWIC Comment:	
Requestor Comment:	
Delays	

Document 9: General Orders & Track Rights - ETS Box Inspection on 11/06/2023 - Page 3

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202328600100	Track Access:	True
Dates Requested:	11/06/2023 00:30 to: 11/06/2023 04:00	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	IT/NCS	In Piggyback:	No
Tag #:		Power Outage:	None
Lock Out / Tag Out:		Additional AC:	
Request Title:	D08 - D09 ETS INSPECTION		

Document 10: General Orders & Track Rights - ETS Box Inspection on 11/06/2023 - Page 4

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202407204200	Track Access:	True
Dates Requested:	03/16/2024 01:00 to: 03/16/2024 06:00	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	False
Requestor Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Expedited
Charge Job Number:	
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	ETS REPAIR
Request Description:	ETS REPAIR
Work Type:	ETS
Meeting Location:	D11 FIELD OFFICE
PB Meeting Location:	
Tools and Equipment:	HAND TOOLS PPE
Equipment on Track:	
Piggyback Comments:	NO

Track 2

Actual Work Area:	D271+48	D368+32
Protected Work Area:	D266+48	D373+32

Date & Time

Start:	03/16/2024 01:00	End:	03/16/2024 06:00
--------	------------------	------	------------------

Contacts

Entered by	Requestor
------------	-----------

As of 03/20/2024 12:33
1 of 4

Document 11: General Orders & Track Rights - ETS Box Repair on 3/16/2024

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Page 35

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202407204200	Track Access:	True
Dates Requested:	03/16/2024 01:00 to: 03/16/2024 06:00	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requestor:	Phillip Osborn	Allow Piggybacks:	False
Requestor Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Work: [REDACTED]

Cell: [REDACTED] Home: [REDACTED]

Work: [REDACTED]

Cell: [REDACTED] Home: [REDACTED]

WMATA Manager

Work: [REDACTED]

Cell: [REDACTED] Home: [REDACTED]

Emergency Contact

Work: [REDACTED]

Cell: [REDACTED] Home: [REDACTED]

Support

SUPPORT GROUP	Crew Size
---------------	-----------

POWER/REGION	2
--------------	---

ESCORT GROUP	Crew Size
--------------	-----------

POWER/REGION	2
--------------	---

Request Change History

Date	Event
03/12/2024 15:55	Request was cloned from Request 202407000300.
03/12/2024 17:09	Request status was changed to Approved
03/16/2024 02:10	Work Prep was completed.
03/16/2024 04:06	Request status was changed to Opened
03/16/2024 10:04	Request status was changed to Closed

Request Group

Request Number	Description
----------------	-------------

Piggyback

No active piggybacks found

Document 12: General Orders & Track Rights - ETS Box Repair on 3/16/2024 - Page 2

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM
Track Rights Request

Request Summary

Request Number:	202407204200	Track Access:	True
Dates Requested:	03/16/2024 01:00 to: 03/16/2024 06:00	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requester:	[REDACTED]	Allow Piggybacks:	False
Requester Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Close-Out Summary

Final Status:	Closed
RWIC has contacted RTC to establish working limits:	03/16/2024 00:06
Permission is given to setup work site:	03/16/2024 02:01
RTC authorization to start work is given to RWIC:	03/16/2024 02:17
RTC confirmed working limits are clear:	03/16/2024 06:04
Rail Traffic Controller Comment:	
Assistant Operations Manager Comment:	
RWIC Comment:	
Requester Comment:	
Delays	

Document 13: General Orders & Track Rights - ETS Box Repair on 3/16/2024 - Page 3

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM
Track Rights Request

Request Summary

Request Number:	202407204200	Track Access:	True
Dates Requested:	03/16/2024 01:00 to: 03/16/2024 06:00	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requester:	Philip Osborn	Allow Piggybacks:	False
Requester Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Document 14: General Orders & Track Rights - ETS Box Repair on 3/16/2024 - Page 4

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Page 37

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408006700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-S)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Emergency
Charge Job Number:	809634
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	D09 Minnesota Platform
Request Description:	Clearance Verification Survey of ETS Box
Work Type:	Other
Meeting Location:	D09 Minnesota Station
PB Meeting Location:	
Tools and Equipment:	
Equipment on Track:	

Track 1		Track 2	
Actual Work Area:	D315+00 D325+00	Actual Work Area:	D315+00 D325+00
Protected Work Area:	D310+00 D330+00	Protected Work Area:	D310+00 D330+00

Hot Stick Info. Third Rail Gaps:

From	To	Track ID
D315+20	D339+77	1
D315+20	D339+77	2

Date & Time

Start:	[REDACTED]	End:	[REDACTED]
--------	------------	------	------------

Contacts

Entered by	Requestor
------------	-----------

As of 03/30/2024 23:34
1 of 4

Document 15: General Orders & Track Rights - Emergency Clearance Verification Survey – 3/21/2024.

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408005700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-5)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Work:	[REDACTED]	Work:	[REDACTED]
Cell:	[REDACTED]	Cell:	[REDACTED]
Home:	[REDACTED]	Home:	[REDACTED]

WMATA Manager

Work:	[REDACTED]	Work:	[REDACTED]
Cell:	[REDACTED]	Cell:	[REDACTED]
Home:	[REDACTED]	Home:	[REDACTED]

Emergency Contact

Support

SUPPORT GROUP	Crew Size
---------------	-----------

WPMI/TASC	4
-----------	---

Request Change History

Date	Event
03/20/2024 22:14	Request was created.
03/20/2024 22:59	Request status was changed to Approved Comment: Please remember to keep safety first!
03/21/2024 00:01	Work Prep was completed.
03/21/2024 03:06	Request status was changed to Opened
03/21/2024 07:18	Request status was changed to Closed

Request Group

Request Number	Description
----------------	-------------

Piggyback

No active piggybacks found

Document 16: General Orders & Track Rights - Emergency Clearance Verification Survey - 3/21/2024. Page 2

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408006700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-S)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Close-Out Summary

Final Status:	Closed
RWIC has contacted RTC to establish working limits:	03/20/2024 23:06
Authorize Power Outage Order:	03/21/2024 01:37
De-Energization Completed/RWIC notified:	03/21/2024 01:51
Hot Sticking:	03/21/2024 02:15

From	To	Track ID	Waive(?)	Radio ID	Chain Marker	Entered By	Date
D315+20	D339+77	1		6096	D315+20	Marquette T Malloy	03/21/2024 02:15
D315+20	D339+77	2		6096	D315+20	Marquette T Malloy	03/21/2024 02:15

Permission is given to setup worksite:	03/21/2024 02:15
RTC authorization to start work is given to RWIC:	03/21/2024 02:15
PDC confirmed working limits are clear:	03/21/2024 03:17
RTC confirmed working limits are clear:	03/21/2024 03:18
Energization by PDC completed:	03/21/2024 03:36
Rail Traffic Controller Comment:	
Assistant Operations Manager Comment:	
RWIC Comment:	
Requestor Comment:	SAFETY EQUIPMENT and HAND TOOLS

Delays

Document 17: General Orders & Track Rights - Emergency Clearance Verification Survey — 3/21/2024. Page 3

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408006700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-S)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Document 18: General Orders & Track Rights - Emergency Clearance Verification Survey – 3/21/2024 - Page 4

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Page 40

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408201900	Track Access:	True
Dates Requested:	03/26/2024 00:00 to: 03/26/2024 04:30	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	False
Requestor Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Expedited
Charge Job Number:	
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	ETS REPAIR
Request Description:	ETS REPAIR
Work Type:	ETS
Meeting Location:	D11 FIELD OFFICE
PB Meeting Location:	
Tools and Equipment:	HAND TOOLS PPE
Equipment on Track:	
Piggyback Comments:	NO

Track 2

Actual Work Area:	D271+48	D368+32
Protected Work Area:	D266+48	D373+32

Date & Time

Start:	03/26/2024 00:00	End:	03/26/2024 04:30
--------	------------------	------	------------------

Contacts

Entered by	Requestor
------------	-----------

As of 03/30/2024 23:33
1 of 4

Document 19: General Orders & Track Rights - ETS Box Repair on 10/26/2024

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Page 41

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM
Track Rights Request

Request Summary			
Request Number:	202408201900	Track Access:	True
Dates Requested:	03/26/2024 00:00 to: 03/26/2024 04:30	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	False
Requestor Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		
Work:	[REDACTED]	Work:	[REDACTED]
Cell:	[REDACTED] Home:	Cell:	[REDACTED] Home:
WHATA Manager		Emergency Contact	
[REDACTED]		[REDACTED]	
Work:	[REDACTED]	Work:	[REDACTED]
Cell:	[REDACTED] Home:	Cell:	[REDACTED] Home: [REDACTED]
Support			
SUPPORT GROUP	Crew Size		
POWER/REGION	2		
ESCORT GROUP	Crew Size		
POWER/REGION	2		
Request Change History			
Date	Event		
03/22/2024 15:37	Request was cloned from Request 202407204200.		
03/25/2024 17:49	Request status was changed to Approved		
03/26/2024 02:04	Work Prep was completed.		
03/26/2024 03:53	Request status was changed to Opened		
03/26/2024 08:29	Request status was changed to Closed		
Request Group			
Request Number	Description		
Piggyback			
No active piggybacks found			

As of 03/30/2024 23:33
2 of 4

Document 20: General Orders & Track Rights - ETS Box Repair on 10/26/2024 - Page 2

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408201900	Track Access:	True
Dates Requested:	03/26/2024 00:00 to: 03/26/2024 04:30	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requester:	[REDACTED]	Allow Piggybacks:	False
Requester Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Close-Out Summary

Final Status:	Closed
RWIC has contacted RTC to establish working limits:	03/25/2024 23:53
Permission is given to setup worksite:	03/26/2024 01:18
RTC authorization to start work is given to RWIC:	03/26/2024 01:18
RTC confirmed working limits are clear:	03/26/2024 04:29
Rail Traffic Controller Comment:	
Assistant Operations Manager Comment:	
RWIC Comment:	
Requestor Comment:	

Delays

Document 21: General Orders & Track Rights - ETS Box Repair on 10/26/2024 - Page 3

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408201900	Track Access:	True
Dates Requested:	03/26/2024 00:00 to: 03/26/2024 04:30	Clear In Ten:	True
Request Status:	Closed	Equipment on Track:	0
Requester:	[REDACTED]	Allow Piggybacks:	False
Requester Organization:	POWER/REGION	In Piggyback:	No
Tag #:		Power Outage:	None ETS REPAIR AT D09
Lock Out / Tag Out:		Additional AC:	
Request Title:	ETS REPAIR AT D09		

Document 22: General Orders & Track Rights - ETS Box Repair on 10/26/2024 - Page 4

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM
Track Rights Request

Request Summary

Request Number:	20240806700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-5)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Emergency
Charge Job Number:	809634
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	D09 Minnesota Platform
Request Description:	Clearance Verification Survey of ETS Box
Work Type:	Other
Meeting Location:	D09 Minnesota Station
PB Meeting Location:	
Tools and Equipment:	
Equipment on Track:	

	Track 1			Track 2	
Actual Work Area:	D315+00	D325+00	Actual Work Area:	D315+00	D325+00
Protected Work Area:	D310+00	D330+00	Protected Work Area:	D310+00	D330+00

Hot Stick Info. Third Rail Gaps:

From	To	Track ID
D315+20	D339+77	1
D315+20	D339+77	2

Date & Time

Start:	03/21/2024 00:30	End:	03/21/2024 04:30
--------	------------------	------	------------------

Contacts

Entered by	Requestor
------------	-----------

As of 03/30/2024 23:34
1 of 4

Document 23: General Orders & Track Rights - Emergency Clearance Verification Survey

Incident Dat3/19/2024 and 3/22/2024
Time: 01:36 hours and 00:48 Hours
Final Report Rev 2 – Collision
E24214 and E24223

Drafted By: SAFE 706 – 05/03/2024
Reviewed By: SAFE 702 – 06/05/2024
Approved By: SAFE 707 – 06/20/2024

Page 45

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	202408006700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Yea:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TKST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-5)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Location, Work Type and Description

Location:	Mainline
Non-Wayside Location Type:	
Request Type:	Emergency
Charge Job Number:	B59634
Contract Number:	
Maximo Work Order:	
Request Group:	No
Location Description:	D09 Minnesota Platform
Request Description:	Clearance Verification Survey of ETS Box
Work Type:	Other
Meeting Location:	D09 Minnesota Station
PB Meeting Location:	
Tools and Equipment:	
Equipment on Track:	

Track 1		Track 2	
Actual Work Area:	D315+00 D325+00	Actual Work Area:	D315+00 D325+00
Protected Work Area:	D310+00 D330+00	Protected Work Area:	D310+00 D330+00

Hot Stick Info, Third Rail Gaps:

From	To	Track ID
D315+20	D339+77	1
D315+20	D339+77	2

Date & Time

Start:	03/21/2024 00:30	End:	03/21/2024 04:30
--------	------------------	------	------------------

Contacts

Entered by	Requestor
------------	-----------

As of 03/30/2024 23:34
1 of 4

Document 24: General Orders & Track Rights - Emergency Clearance Verification Survey - Page 2

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	20240806700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-5)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Close-Out Summary

Final Status:	Closed
RWIC has contacted RTC to establish working limits:	03/20/2024 23:06
Authorize Power Outage Order:	03/21/2024 01:37
De-Energization Completed/RWIC notified:	03/21/2024 01:51
Hot Sticking:	03/21/2024 02:15

From	To	Track ID	Waive(?)	Radio ID	Chain Marker	Entered By	Date
D315+20	D319+77	1		6096	D315+20	Marquette T Malloy	03/21/2024 02:15
D315+20	D319+77	2		6096	D315+20	Marquette T Malloy	03/21/2024 02:15

Permission is given to setup worksite:	03/21/2024 02:15
RTC authorization to start work is given to RWIC:	03/21/2024 02:15
PDC confirmed working limits are clear:	03/21/2024 03:17
RTC confirmed working limits are clear:	03/21/2024 03:18
Energization by PDC completed:	03/21/2024 03:36
Rail Traffic Controller Comment:	
Assistant Operations Manager Comment:	
RWIC Comment:	
Requestor Comment:	SAFETY EQUIPMENT and HAND TOOLS
Delays	

Document 25: General Orders & Track Rights - Emergency Clearance Verification Survey - Page 3

GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM

Track Rights Request

Request Summary

Request Number:	20240806700	Track Access:	True
Dates Requested:	03/21/2024 00:30 to: 03/21/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	0
Requestor:	[REDACTED]	Allow Piggybacks:	True
Requestor Organization:	TRST/CEE	In Piggyback:	No
Tag #:	Closed (2024081740-5)	Power Outage:	Supervisory Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	Emergency Clearance Verification Survey D09 Platform		

Document 26: General Orders & Track Rights - Emergency Clearance Verification Survey - Page 4

Second Occurrence (E24223)

None

Appendix E – Operational Technology

First Occurrence (E24214)

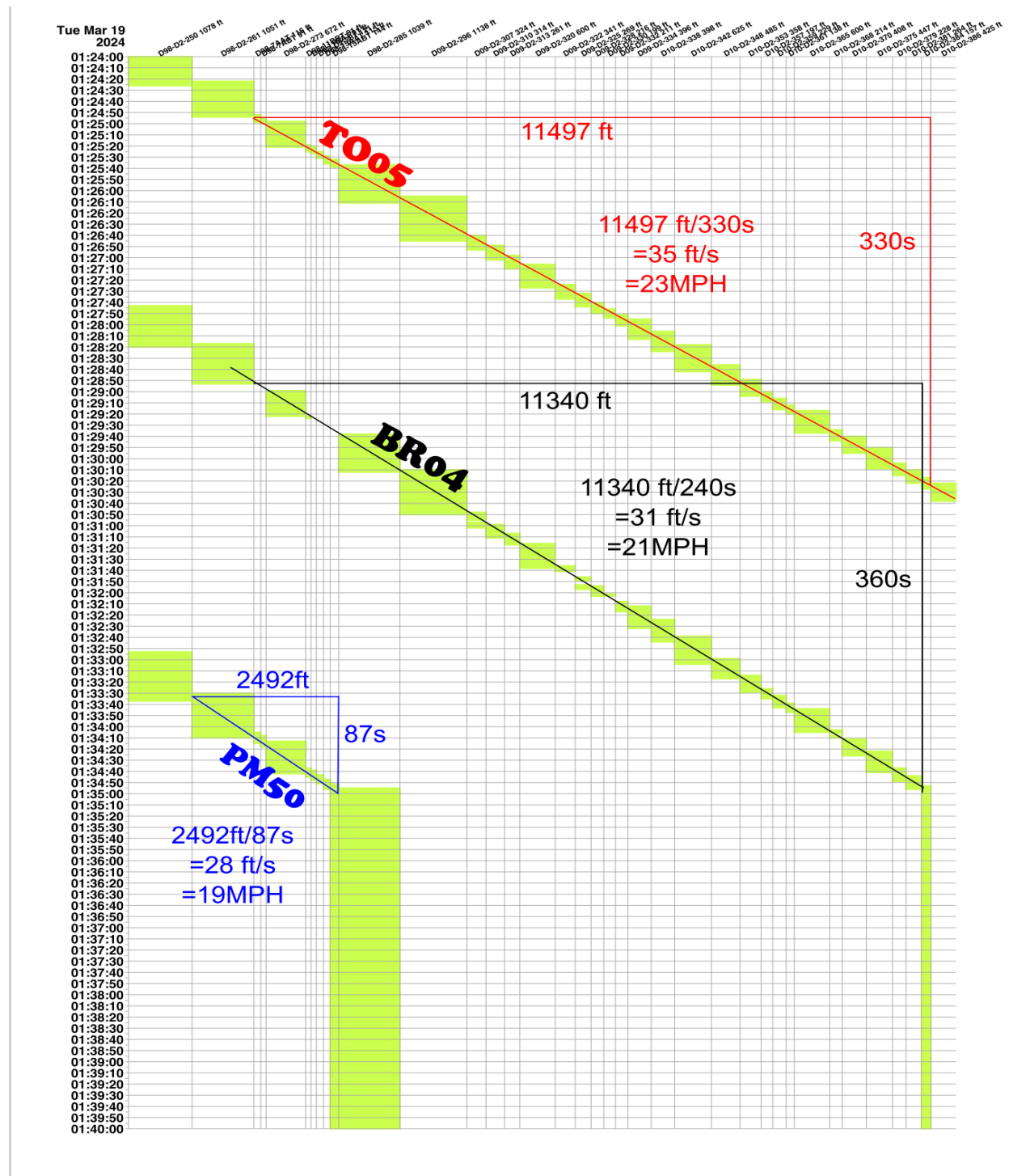


Chart 1: Shows the speeds of T-005, BR-04, and PM-50, traveling through Minnesota Avenue Station, Track 2.



Washington Metropolitan Area Transit Authority

CENV

Incident Report

RMM Contact with Minnesota Avenue Station ETS Box and Handrail

March 19, 2024

Document 27: CENV Report.



Washington Area Metropolitan Transit Authority
Incident Summary Report

Table of Contents

Investigation Team Members.....	3
List of Attachments	3
Executive Summary.....	4
Findings of Investigation	4
Conclusion	7
Recommendations.....	7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior consent.*

Document 28: CENV Report. Page 2.

LOCATION: Minnesota Avenue Station (D09)
INCIDENT #: 1518392809335261
DATE: 3/19/2024
TIME: 01:30 AM

Investigation Team Members

[REDACTED]

Report Prepared By: [REDACTED]

Report Approved By: [REDACTED]

List of Attachments

Attachment A – Work Order 18236177

Page 3 of 7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior written consent.*

Document 29: CENV Report. Page 3 (Redacted)

Executive Summary

At approximately 0130 hours on the morning of March 19, 2024, ballast regulator, BR04 contacted the pole supporting the ETS box at the east end of the Minnesota Avenue Station (D09) Track 2 platform while traveling outbound to New Carrollton Rail Yard (D99). The contact caused the box to lean into the dynamic envelope. Five minutes later, ballast car, B406, being pulled by PM50 struck the ETS box causing additional damage to the hand railing and protective fencing in the Area of Safe Dispersal (ASD) (Figure 1). No injury to personnel was reported. Superficial damage was noted to both BR04 and B409.

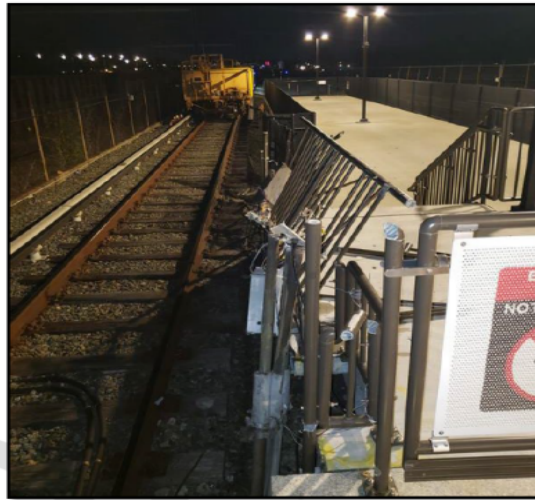


Figure 1. Station Damage

Inspection of BR04 and B406 showed no identified issues that would have contributed to this incident. BR04 and B406 have successfully passed RMM clearance testing within the designated dynamic envelope. The cause of this incident is most likely the ETS box and support encroaching into the railcar dynamic envelope.

Findings of Investigation

At approximately 0130 hours on the morning of March 19, 2024, ballast regulator, BR04 contacted the pole supporting the ETS box at CM D2 321+70 while traveling outbound in reverse direction to New Carrollton Rail Yard (D99), at the East end of the platform of Minnesota Avenue Station (D09), causing it to lean into the dynamic envelope. Five minutes later, ballast car, B406 being pulled by PM50 struck the ETS box causing additional damage to the hand railing and protective fencing in the ASD. During the inspection, resent damage was discovered consistent with wayside contact. Figure 2 shows contact evidence on the right-side of the Ballast Regulator wing structure.

Page 4 of 7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior written consent.*

Document 30: CENV Report. Page 4.

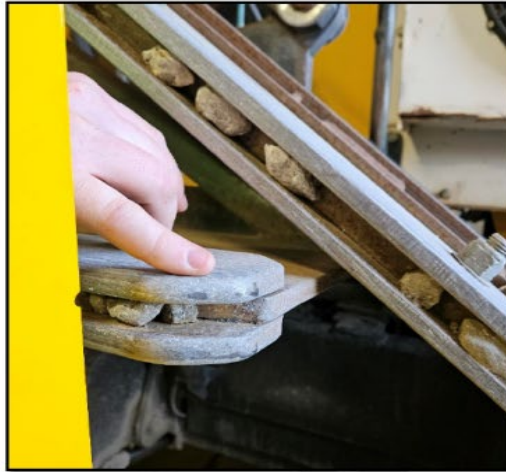


Figure 2. BR04 Contact area

B406 was inspected and found to have recent strike marks consistent with contacting wayside equipment (Figure 3).



Figure 3. B406 Contact area

After visual inspection, BR04 successfully cleared the dynamic envelope template at the New Carrollton Yard with right and left wing stowed and locked (Figure 4). B406 passed a clearance test December 15, 2021.

Page 5 of 7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior written consent.*

Document 31: CENV Report. Page 5.

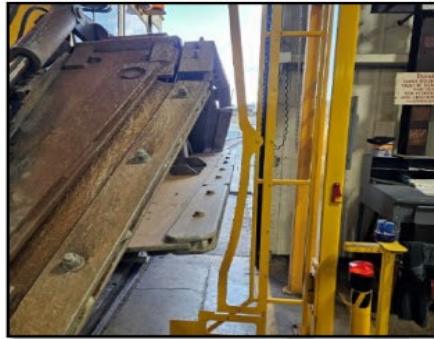


Figure 4. Left Side Clearance

Review of video recording from the Minnesota Avenue platform (MINA 03-19-2024 0131-0137 hrs_C-D09-PN-062_Tuesday March 19 202465351 9aa1a51) shows BR04 contacting the ETS support. After coming to rest, the ETS box is leaning further into the revenue envelope (Figure 5 and Figure 6).



Figure 5. Pre-contact



Figure 6. Post-contact

Page 6 of 7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior written consent.*

Document 32: CENV Report. Page 6.

Conclusion

Investigation revealed that both vehicles BR04 and B409 contacted wayside equipment. Both cleared the Rail Vehicle Dynamic envelope template with appendages properly stowed.

While BR04 passed the clear test with the wings stowed, the operator is solely responsible to properly stow the wings for system travel. The Ballast Regulators do not have electronics travel lockouts if the wings are not properly stowed. Visual inspection at New Carrollton Yard found both wings properly stowed. There is no historical incidence with BR04's ballast wing contacting other wayside equipment within the metro system.

Recommendations

Survey ASDs and affected ETS boxes to identify encroachment into the Rail Vehicle dynamic envelope.

DRAFT

Page 7 of 7

*This information is proprietary to the Washington Metropolitan Area Transit Authority (WMATA).
No reproduction is allowed without prior written consent.*

Document 33: CENV Report. Page 7.

Appendix F – Facilities Lessons Learned

Incident Summary – Roadway Maintenance Machine Contact with Handrail

Date of Initial Incident: March 19, 2024

Follow-up Incident: March 22, 2024

Overview:

On March 19, 2024, we received a report that a Roadway Maintenance Machine made contact with a handrail located near the area of rescue. The initial request was to restore accessibility and perform a temporary repair of the damaged handrail.

Due to the urgency of the situation, a supervisor from the Carpenters Office was dispatched to the site to assess the damage and provide a temporary mitigation plan. The supervisor recommended reinstalling the handrail using the existing mounting brackets. To ensure it remained outside the dynamic envelope, the platform's granite edge was used as a visual reference point. As shown in Picture 1, the repaired handrail was installed approximately three inches inside the granite edge to allow clearance for the top rail. The supervisor who overseen the initial repair is no longer with the authority.



Picture 1: Picture taken on 3/20/2024

However, on March 22, 2024, another Roadway Maintenance Machine made contact with the replaced handrail. A superintendent was then sent to reassess the site. This time, the handrail was relocated further back—from outside the step tread to inside the step tread—to ensure sufficient clearance from the dynamic envelope (Picture 2).



Picture 2: Picture taken on 3/22/2024

Lesson Learned:

While we had consulted with Engineering regarding the appropriate materials for the handrail, no formal measurement or clearance verification was requested as part of the temporary mitigation. This oversight highlights the need for a more rigorous process when working near the dynamic envelope.

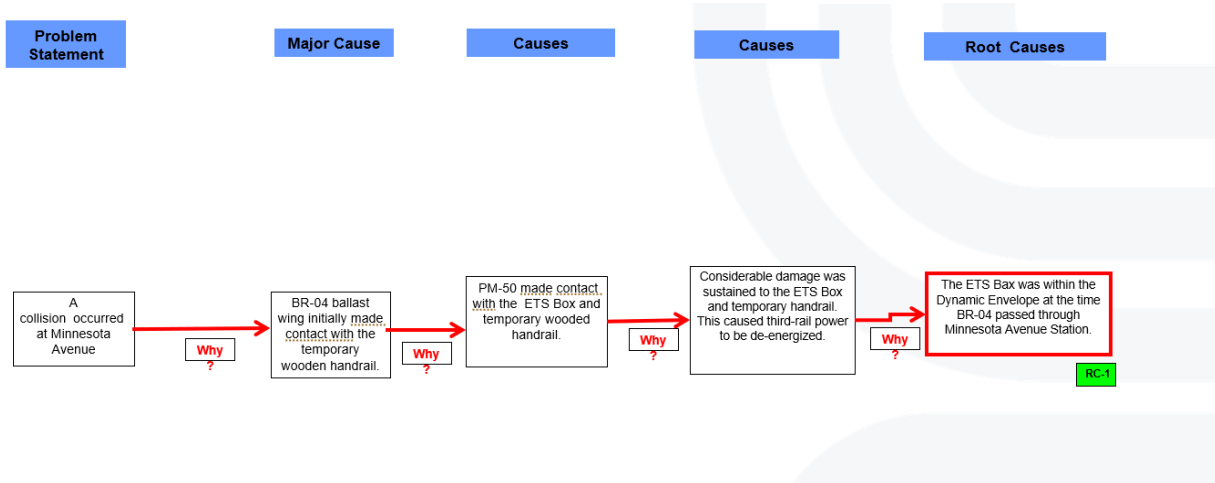
Going forward, any modification—temporary or permanent—that may impact the dynamic envelope will follow this protocol:

1. Request Engineering Drawings showing the maximum and minimum clearance requirements for the specific area.
2. Perform Installation in accordance with these engineering specifications.
3. Schedule Post-Installation Verification by Engineering to confirm compliance and prevent any future conflicts with the dynamic envelope. This experience emphasizes the importance

of including Engineering validation as part of the clearance assessment process, especially when working near active right-of-way or critical infrastructure.

Appendix G - Root Cause Analysis

First Occurrence (E24214)



Root Cause Analysis

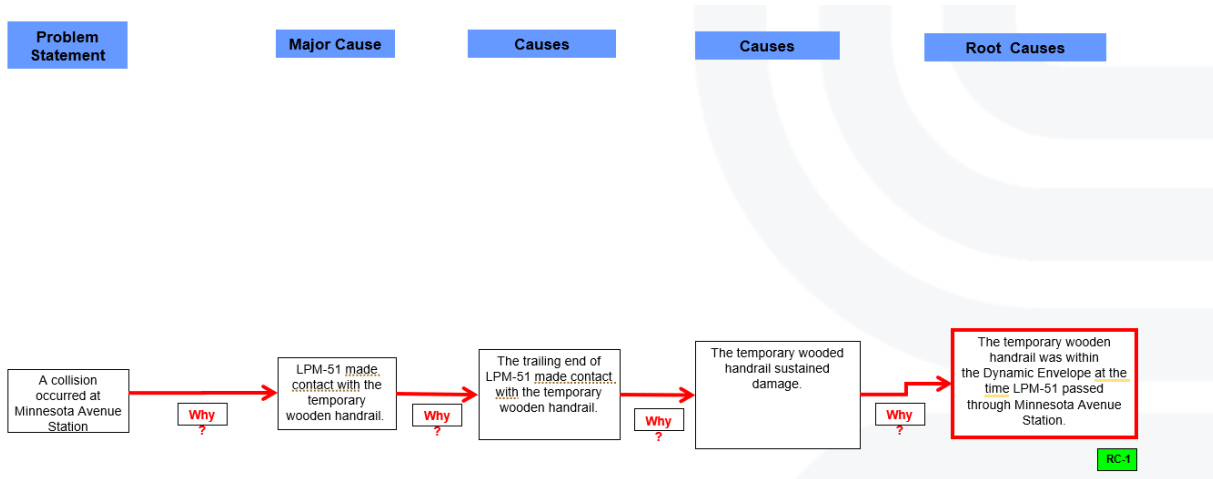
Chart: First Occurrence Root Cause Analysis.

E24214 – Collision – Minnesota Avenue

First Occurrence (E24214)



Second Occurrence (E24223)



Root Cause Analysis

Chart 2: Second Occurrence Root Cause Analysis

E24223 – Collision – Minnesota Avenue

Second Occurrence (E24223)

