

W-0377 – Improper Roadway Worker Protection – Southern Avenue Station – August 25, 2024

#### **Document Purpose:**

This WMSC written report on WMATA Metrorail's safety event investigations and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation reports that have undergone WMSC staff review and, if necessary, feedback and revision, describes the investigation activities, identifies factors causing or contributing to the safety events, 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 reports) as a unified item for adoption at the Washington Metrorail Safety Commission meeting on June 10, 2025.

WMSC staff recommend adoption of this investigation.

#### **Roadway Worker Protection**

The <u>WMSC's audit of Metrorail's Roadway Worker Protection Programs</u>, issued on July 31, 2024, demonstrates that although Metrorail has established policies and procedures, rules, training, and oversight of its RWP program, there are still deficiencies that put the safety of workers at risk. During this audit, WMSC personnel observed unsafe practices contrary to Metrorail policies and procedures at every observation activity conducted. As further explained in Finding 1 of the audit report, Metrorail is not effectively ensuring that its personnel on and around the roadway are consistently following the Roadway Worker Protection rules designed for their safety. This increases the risk that personnel may be injured or killed. Between 2005 and 2010, eight Metrorail employees were struck and killed by rail vehicles. In the years since, there have been several near-miss events with roadway workers, including an October 2016 safety event during which Federal Transit Administration (FTA) track inspectors were forced to jump out of the path of a train to avoid being hit by the train near Ronald Reagan Washington National Airport. In 2017, Metrorail instituted an additional form of safety protection for Metrorail mobile roadway workers called Advanced Mobile Flagger (AMF). There have been near misses that include workers narrowly escaping a fatal collision, including events that occurred in 2021, 2022, 2023 and as recently as last month.

On May 13, 2025, three trains in Automatic Train Operations (ATO) came across a mobile work crew without warning due to the absence of an Advanced Flagger. The preliminary investigation determined the train operators saw the crews and tried to slow down from high speeds (in an area where they could travel up to 75mph) to safely pass the crews, who were able to move to a place of safety. Multiple roadway workers and train operators did not immediately report



the incident. On Tuesday, May 20, 2025, a roadway worker entered the roadway without protection and was nearly struck by a train traveling at speed.

In response to these two near miss events Metrorail conducted safety standdowns focusing on reinforcing roadway worker protection rules and forms of RWP protection along with emphasizing the need to comply with these safety rules for individual and system safety. The WMSC conducted observations of several of these standdowns to gauge the effectiveness. Details of the WMSC observations are noted in this inspection report which is also found on the <u>WMSC's</u> <u>website</u>.

Metrorail developed and the WMSC approved corrective action plans created in accordance with the Program Standard to address the 13 findings of the RWP Audit issued in July 2024. These build on immediate mitigations and initial steps to correct outdated materials and communicate the importance of safety rules that Metrorail took based on the WMSC's communication of safety issues as those issues were observed and validated during the audit process. Corrective action plans associated with the RWP audit have scheduled dates of completion between December 2025 and October 2028.

On September 27, 2024, the WMSC issued an order requiring that Metrorail maintain its RWP program as it was written and implemented as of October 1, 2024. Thereafter, Metrorail may propose an annual schedule by which it intends to revise the RWP program and provide the WMSC with the package of revisions and accompanying training materials for WMSC approval. The intended goal here is to create an annual predictable revision cycle, with exceptions to address safety risks meeting certain conditions, and for any changes resulting from WMSC-required CAPs. Complying with the Order will allow Metrorail to focus on ensuring that employees are properly trained on rules that remain stable and for Metrorail to assess compliance for a reasonable duration of time before additional changes take effect.

In October 2024, the Federal Transit Administration issued 49 CFR Part 671 – Rail Transit Roadway Worker Protection regulation - establishing minimum safety standards for rail transit Roadway Worker Protection (RWP) to ensure the safe operation of rail transit systems and to prevent safety events, fatalities, and injuries to transit workers who may access the roadway in the performance of work. This regulation allows either rail transit agencies, such as Metrorail or state safety oversight agencies such as WMSC to prescribe additional or more stringent operating rules, safety rules, and other special instructions that are consistent based on risk profile of the rail operations. This regulation requires Metrorail to coordinate with the WMSC to establish a WMSC-approved RWP program that meets the requirements of the FTA regulation, by December 2025.

#### Safety event summary:

On Sunday, August 25, 2024, at approximately 2:03 a.m., an Office of Track and Structures Supervisor acting as the Roadway Worker in Charge (RWIC), entered the roadway and placed shunts at the incorrect location, resulting in the RWIC having no protection against possible train collision.

At 11:53 p.m. on August 24, 2024, the RWIC contacted the Radio Rail Traffic Controller and incorrectly informed the Controller that they were located at "F06", which is the alphanumerical code for Anacostia Station. However, the RWIC and their crew were actually located at F08, Southern Avenue Station. The RWIC requested a supervisory power outage from F1 177+34 to F1 253+84 and F2 177+34 to F2 253+84. The RWIC was instructed to standby until 2:03



a.m. on August 24, 2025, when the Rail Traffic Controller granted the RWIC permission to enter the roadway to place shunts under Exclusive Track Occupancy. Exclusive Track Occupancy is a form of protection that prohibits any vehicle from entering a defined location. The RWIC confirmed with the Rail Traffic Controller that they had been granted Exclusive Track Occupancy on tracks 1 and 2, and then stated they were confused, informing the Rail Traffic Controller that a train had just traveled through the station while the crew were still on the platform. The Controller asked the RWIC for their location and again the RWIC incorrectly stated "F06." At no time during this exchange or previous communication was an actual station name identified by the Rail Traffic Controller or the Roadway Worker in Charge.

At 2:13 a.m., the Radio Rail Traffic Controller identified on their Advanced Information Management System (AIMS) screen display that shunts had been placed at Southern Avenue Station on tracks 1 and 2, not at Anacostia Station, where permission had been granted and protection had been established. The Rail Traffic Controller instructed the RWIC to contact them via telephone and deenergized third rail power at Southern Avenue Station. At 2:16 a.m., when the RWIC contacted the Rail Traffic Controller, they were informed that "F06" was Anacostia Station, not Southern Avenue Station, and advised that they were not under any form of protection. The Rail Traffic Controller provided Foul time protection for the crew to immediately clear the work location. At 2:20 a.m., the Roadway Worker in Charge requested and was granted Foul Time protection to retrieve the shunts they previously placed at Southern Avenue Station, mistaking the location for Anacostia Station. The RWIC collected the shunts and relinquished Foul Time. The Roadway Worker in Charge was removed from service for post-event toxicology testing.

The causes and contributing factors include:

- Ineffective communication due to failure to use plain language
- Lack of rail system physical characteristic familiarization
- Lack of situational awareness, resulting in incorrect location identification
- Non-compliance with written operational rules and procedures, regarding verification of chain markers prior to entering the roadway

As a result of this investigation, the Roadway Worker in Charge was required to attend Roadway Worker Protection Level 4 Refresher Training.

Related corrective action:

- CAP C-0280 addresses the 2024 RWP audit finding that Metrorail is not effectively ensuring that its personnel on and around the roadway are consistently following the Roadway Worker Protection rules designed for their safety (Scheduled completion date October 2026).
- CAP C-0183 addressed the 2022 Rail Operations audit finding that Metrorail created safety risks by not requiring and conducting territory familiarization and physical characteristics training, and not assessing knowledge of physical characteristics prior to assigning operations personnel work on a line, in a terminal or in a yard (Scheduled completion date December 2026). Metrorail has indicated that following successful implementation to operations personnel that it envisions expanding this training to other categories of Metrorail personnel.

#### WMSC staff observations

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



Metrorail does not require and conduct territory familiarization and physical characteristics training and does not assess knowledge of physical characteristics prior to assigning roadway workers in charge (RWIC) work. The FTA regulation of Rail Transit Roadway Worker Protection requires that individuals such as RWICs, watchpersons, flaggers and other requiring specialized roadway worker training to be provided with training to cover the content and application of the additional RWP program requirements carried out by these positions and requires Metrorail to address the relevant physical characteristics of the rail system where on-track safety may be established.



# Washington Metropolitan Area Transit Authority Department of Safety (SAFE) Office of Safety Investigations (OSI)

# FINAL REPORT OF INVESTIGATION A&I E24676

Date of Event:	August 25, 2024
Type of Event:	O-23: Improper Roadway Worker Protection (RWP)
Incident Time:	02:03 hours
Location:	Southern Avenue Station (F08)
Time and How received by SAFE:	03:01 hours / MICC Notification
WMSC Notification Time:	03:38 hours
Responding Safety Officers:	None
Rail Vehicle:	N/A
Injuries:	None
Damage:	None
Emergency Responders:	None
SUDS I/A Incident Number:	20240827#119384

# August 25, 2024

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# **Abbreviations and Acronyms**

AIMS	Advanced Information Management System
ARS	Audio Recording System
ссти	Closed-Circuit Television
ETO	Exclusive Track Occupancy
GOTRS	General Orders and Track Rights System
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
RJSB	Roadway Job Safety Briefing
RTC	Rail Traffic Controller
RWIC	Roadway Worker In Charge
RWP	Roadway Worker Protection
SAFE	Department of Safety
SUDS	Safety Universal Data System
SPOTS	System Performance On-Time Summary
TRST	The Office of Track and Structures
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

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#### **Executive Summary**

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

On Sunday, August 25, 2024, at 02:03 hours, the Metro Integrated Command and Communications Center (MICC) OPS 3 Radio Rail Traffic Controller (RTC) granted an Office of Track and Structures (TRST) Supervisor serving as the Roadway Worker in Charge (RWIC) permission to enter the roadway to place shunts<sup>1</sup> at "Foxtrot<sup>2</sup> 06" (F06); which is the alphanumerical station name for the Anacostia Station. The RWIC was provided with Exclusive Track Occupancy<sup>3</sup> (ETO) as their form of Roadway Worker Protection (RWP).

At 02:13 hours, the Advanced Information Management System (AIMS) identified Track Circuit F08-F1-312, on Track 1 at the Southern Avenue Station (F08) was down. At 02:14 hours, AIMS identified Track Circuits F08-F2-312 and F2-306, on Track 2 at the Southern Avenue Station (F08) were also down, indicating shunts had been placed at these locations. The Radio RTC instructed the RWIC to contact the OPS 3 Button RTC via a landline telephone. The RWIC contacted the Button RTC and was asked for their precise location, and they stated they were at "F06, Southern Avenue Station." The Button RTC informed the RWIC that F06 was Anacostia Station, and they had no permission to enter the roadway at that location. The Button RTC instructed the RWIC to request foul time<sup>4</sup> to remove their shunts. After foul time was granted and the shunts were removed, the RWIC was instructed to clear the roadway and wait for supervision.

This incident did not result in any injuries or damage to infrastructure. TRST removed the RWIC from service per Standard Operating Procedure (SOP) 102-01, *Removing an Employee from Service*.

The probable cause of the Improper RWP event on August 25, 2024, at Southern Avenue Station, was the RWIC's oversight in identifying the station's location by the alphanumeric code and failing to verify their physical location.

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<sup>&</sup>lt;sup>1</sup> **Shunts** are a Safety-approved wire with clamping devices on both ends that when properly installed is designed to show a track occupancy light on the Advanced Information Management System (AIMS) display and to result in a zero-speed command for Class 1 rail vehicles.

<sup>&</sup>lt;sup>2</sup> **Foxtrot** is the alpha phonetic name for the letter "F" used at WMATA

<sup>&</sup>lt;sup>3</sup> **Exclusive Track Occupancy** is a method of establishing working limits on controlled track in which the movement authority of trains and other equipment is withheld by the train dispatcher or control operator or restricted by flagmen. The authority for the movement of rail vehicles within the working limits rests solely with the Roadway Worker In Charge (RWIC) of said limits.

<sup>&</sup>lt;sup>4</sup> **Foul Time** is a method of establishing working limits on controlled track when that work will not disturb the track or third rail structure in a manner that would prevent movements at normal speeds, in which a qualified roadway worker is notified by the rail traffic controller that no trains will operate within a specific segment of controlled track until the roadway worker reports clear of a hot spot or the track.

#### **Incident Site**

Southern Avenue Station, Tracks 1 and 2

### **Field Sketch/Schematics**

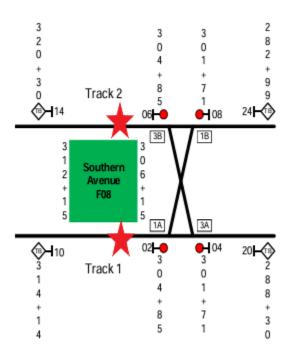


Figure 1 - depicts the locations where shunts were placed at Southern Avenue Station (F08). The above depiction is not to scale.

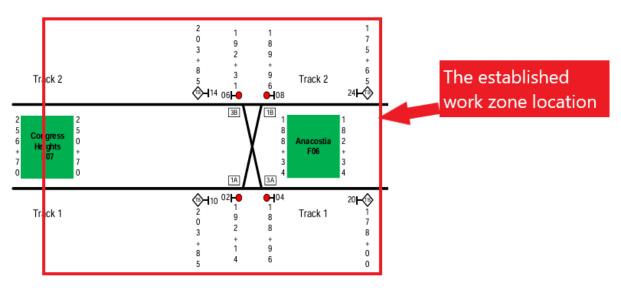


Figure 2 - depicts the work zone location under ETO protection. The above depiction is not to scale.

# **Purpose and Scope**

Incident Date: 08/25/2024 Time: 02:03 hours Final Report – Improper Roadway Worker Protection Rev.1 E24676

Drafted By: SAFE 708 – 9/20/2	
Reviewed By: SAFE 707 - 10/23/	
Approved By: SAFE 707 – 10/24/	2024

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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:

- Site Assessment through video and document review.
- Formal Interviews SAFE interviewed two (2) 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:
  - RWIC
  - Radio RTC
- Documentation Review Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
  - Metrorail Operating Rulebook (MOR)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Structures Supervisor's 30-Day work history
  - General Orders Track Rights System (GOTRS) Request
  - Roadway Job Safety Briefing (RJSB)
  - Maximo
- 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**

On Saturday, August 24, 2024, at 23:53 hours, a TRST Supervisor serving as the RWIC, contacted the MICC OPS 3 RTC to establish their General Orders Track Rights System (GOTRS) work zone. The RWIC stated they were at "F06" (Anacostia Station) and were requesting a Supervisory Power Outage under ETO protection, on Tracks 1 and 2, between Chain Markers (CM) F1/F2 177+34 to F1/F2 253+84. The Radio RTC acknowledged the request with 100% repeat back and instructed the RWIC to stand by, stand clear, and contact the Power Desk. It was later revealed that the RWIC was at Southern Avenue Station and provided the incorrect alpha numeric Station ID.



Figure 3 - depicts the Structures Supervisor at Southern Avenue Station.

On Sunday, August 25, 2024, at 02:03 hours, the Radio RTC granted the RWIC permission to enter the roadway at Anacostia Station (F06) to place their shunts under ETO protection. The RTC would verify the shunts were in place and inform the RWIC. The RWIC asked the RTC if they had ETO for both tracks because a train had just passed through the station. When the Radio RTC asked the RWIC for their location they replied that they were "on the platform at F06".

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Figure 4 - depicts Train ID 711 passing F08 - Southern Avenue Station at 02:03 hours with TRST crew standing by on the platform. The TRST crew was granted ETO protection for F06 – Anacostia Station.

At 02:13 hours, AIMS identified Track Circuit F08-F1-312, on Track 1 at the Southern Avenue Station (F08) was down. At 02:14 hours, AIMS identified Track Circuits F08-F2-312 and F2-306, on Track 2 at the Southern Avenue Station (F08) were also down, indicating shunts had been placed at these locations.



Figure 5 - depicts the RWIC placing a shunt on Track 1 at Southern Avenue Station at 02:12 hours.

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Figure 6 - depicts the RWIC placing a shunt on Track 2 at Southern Avenue Station at 02:13 hours.

The Radio RTC instructed the RWIC to contact the OPS 3 Button RTC via a landline telephone. The RWIC contacted the Button RTC and was asked for their precise location and they stated they were at "F06, Southern Avenue Station." The Button RTC informed the RWIC that F06 was Anacostia Station, not Southern Avenue Station, and they had no permission to enter the roadway at that location. The Button RTC instructed the RWIC to contact the OPS 3 Radio RTC and request foul time to remove their shunts. At 02:20 hours the RWIC contacted the OPS 3 Radio RTC to request foul time. At 02:24 hours the RWIC informed the Radio RTC that all personnel and equipment was clear of the roadway. The work crew made their way to Anacostia Station and the RWIC was notified to contact their office. At 03:17 hours, the RWIC was removed from service and sent for post-incident testing.

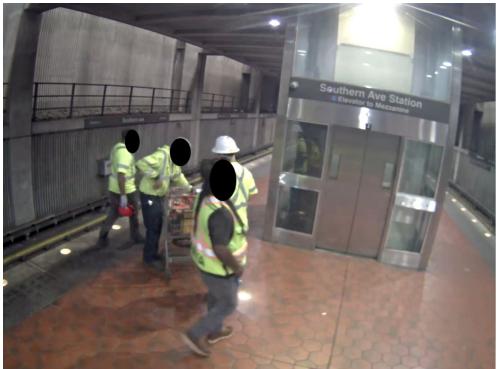


Figure 7 - depicts all personnel and equipment cleared from the Southern Avenue Station roadway at 02:24 hours.

Incident Date: 08/25/2024 Time: 02:03 hours Final Report – Improper Roadway Worker Protection Rev.1 E24676

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

Time	Description
	Saturday, August 24, 2025
23:53:00 hours	<u>RWIC</u> : Informed the Radio RTC that they were at F06, requesting a
20.00.00 110013	supervisory power outage from chain markers F1 177+34 to F1 253+84 and
	F2 177+34 to F2 253+84. No unit (rail vehicle) was being used.
	<u>Radio RTC</u> : Asked the RWIC what was their form of protection?
	<u>RWIC</u> : Responded ETO (protection)
	<u>Radio RTC</u> : Acknowledged the request for a supervisory power outage on
	tracks 1 and 2 from CM 177+34 to 252+84. The request time was 23:54
	(hours). The RWIC was instructed to stand by, stand clear and to contact the
	Power Desk.
	<u>RWIC</u> : Acknowledged the request time as 23:54 (hours), they would stand
	by, stand clear, and contact the Power Desk. [OPS 3 Radio]
	Sunday, August 25, 2024
02:03:05 hours	
02.03.05 10015	Radio RTC: Asked the RWIC to respond to the radio.
	<u>RWIC</u> : Acknowledged the message. <u>Radio RTC</u> : Informed the RWIC that they were now under ETO protection
	from F1 and F2 CM 177+34 to F1 and F2 CM 253+84. The Radio RTC
	granted the RWIC permission to enter the roadway to place their shunts according to SOP and Central will verify. The RWIC was reminded that third
	rail power was still hot and energized.
	Radio RTC: Radioed for the RWIC
	<u>RWIC</u> : Stated they had to wait until the train went by. The acknowledged that
	they were granted ETO protection. The RWIC asked if they had tracks 1 and 2?
	Radio RTC: Replied Affirmative. They had tracks 1 and 2 under ETO
	protection. CM 177+34 to F1 and F2 CM 253+84. They had permission to
	place their shunts according to SOP and Central will verify. The RWIC was
	reminded that third rail power was still hot and energized.
	RWIC: Acknowledged and stated that they were a little confused because a
	train just went through the station. They replied that they were granted ETO
	protection on tracks 1 and 2 from CM F1 and F2 177+34 to 252+84.
	Permission to install shunts and verify. Third rail power was still hot and
	energized.
	Radio RTC: Replied Affirmative and asked the RWIC for their current location.
	<u>RWIC</u> : Stated that they were at the platform at F06. [OPS 3 Radio]
02:13:06 hours	AIMS display showed a track circuit down at Southern Avenue Station on
02.13.00 10015	track 1. [AIMS]
02:14:18 hours	
02.14.16 Hours	AIMS display showed a track circuit down at Southern Avenue Station on
02:14:52 hours	track 2. [AIMS]
	Radio RTC: Radioed for the RWIC to answer their radio. [OPS 3 Radio]
02:15:28 hours	Radio RTC: Instructed the RWIC to contact them by landline telephone. [OPS
00.45.40.1	3 Radio]
02:15:48 hours	Third Rail Power was de-energized on Tracks 1 and 2 from Anacostia Station
	to Congress Heights Station [AIMS]
02:16:46 hours	Button RTC: Said, "Hello"
	RWIC: Stated their call number.
	Button RTC: Asked the RWIC for their location.
	<u>RWIC</u> : Stated they were at F06 Southern Avenue.

Time	Description
	Button RTC: Instructed the RWIC to clear the work location and informed
	them that F06 was the alphanumeric station code for Anacostia Station, not
	Southern Avenue Station.
	RWIC: Stated F06 is Anacostia Station?
	Button RTC: Replied, "Yes." The RTC informed the RWIC when they stated
	a train was passing, the reason the RTC asked was because there were no
	trains located at the work location (requested).
	<u>RWIC</u> : Replied, "I got you."
	<u>Button RTC</u> : Asked the RWIC if they realized that a serious incident almost occurred.
	<u>RWIC</u> : Stated that they weren't on the track yet.
	Button RTC: Instructed the RWIC to clear the work location immediately.
	RWIC: Stated that they looked right at the thing on the wall and
	Button RTC: Instructed the RWIC to stand by and stand clear. The Radio
	RTC would give them foul time to clear the track and report to the correct
	work location. The Button RTC informed them that they were under no
	roadway worker protection.
	<u>RWIC</u> : Replied, "Okay, I'll clear right now." [OPS 3 Phone]
02:18:30 hours	Blue Block and Human Form placed on Tracks 1 and 2 at Southern Avenue
	Station AIMS display. [AIMS]
02:20:39 hours	Radio RTC: Instructed the RWIC to proceed with their message.
	<u>RWIC</u> : Stated that they were requesting foul time for tracks 1 and 2 at
	Southern Avenue to retrieve their shunts located on one end of the platform.
	Radio RTC: Granted foul time for track 1 and 2 at Southern Avenue and
	informed the RWIC that the third rail power was still hot and energized. Let
	us know once you clear.
	<u>RWIC</u> : Acknowledged that they were granted foul time for tracks 1 and 2 at
	Southern Avenue Station. Third rail was still hot and energized and that they were sorry for the mix up. [OPS 3 Radio]
02:21:30 hours	AIMS display showed a track circuit restored at Southern Avenue Station on
02.21.30110015	track 2. [AIMS]
02:22:06 hours	AIMS display showed a track circuit restored at Southern Avenue Station on
02.22.00 110013	track 1. [AIMS]
02:23:54 hours	<u>RWIC</u> : Contacted the Radio RTC to relinquish their foul time and inform them
02.2010 1 110010	that they were enroute to Anacostia Station.
	Radio RTC: Acknowledged that all personnel and equipment were clear of
	the roadway at 02:24 hours and informed the RWIC to stand by/ stand clear
	once they arrived at Anacostia Station. [OPS 3 Radio]
02:25:00 hours	Blue Block and Human Form removed from Tracks 1 and 2 at Southern
	Avenue Station AIMS display. [AIMS]
03:01:09 hours	The Safety Information Officer (SIO) was contacted by Rail 1 and informed of
	the RWP infraction conducted by the RWIC at Southern Avenue Station [Rail
	1 Phone]
03:17:00 hours	RWIC removed from service [Rail 1 Phone]
Nota: Timog above	e may vary from other systems' timelines based on clock settings

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

### Advanced Information Management System (AIMS)

Time	Location	Alarm	Geographical partition	Functional partition	Priority level
Sun Aug 25 02:25:07 EDT 2024	Southern	Ave TRACK CIRCUITS F08-F1-316 THROUGH F08-F1-310 UNBLOCKED BY AT vawksyg-commpp	G	LAMR	I-EVENT
Sun Aug 25 02:24:58 EDT 2024	Southern	Ave TRACK CIRCUITS F08-F2-316 THROUGH F08-F2-305 UNBLOCKED BY AT vawksyg-commpp	G	LAMR	I-EVENT
Sun Aug 25 02:18:19 EDT 2024	Southern	Ave TRACK CIRCUITS F08-F2-316 THROUGH F08-F2-305 BLOCKED BY vawksyg-commpp	G	LAMR	I-EVENT
Sun Aug 25 02:18:13 EDT 2024	Southern	Ave TRACK CIRCUITS F08-F1-316 THROUGH F08-F1-310 BLOCKED BY vawksyg-commpp Shu	nt Indicatio	as on	I-EVENT
Sun Aug 25 02:15:47 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F2-312 FAILED OCCUPIED ALARM FINAL ACK. F SYSTEM AT vasc-hostapya	k 1 and 2 at		I-EVENT
Sun Aug 25 02:15:47 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F2-306 FAILED OCCUPIED ALARM FINAL ACK. SYSTEM AT vasc-hostapva	thern Avenu	e Station	I-EVENT
Sun Aug 25 02:15:16 EDT 2024	Southern	Ave Signal F08-6 COMMANDED Prohibit Exit BY AT vawksyg-commpp		LAMR	1-EVENT
Sun Aug 25 02:15:05 EDT 2024	Southern	Ave F08-8 Signal State COMMANDED CHANGE = Stop	Ğ	LAMR	<b>1-EVENT</b>
Sun Aug 25 02:15:03 EDT 2024	Southern	Ave F08-8 Signal Request Route COMMANDED Cancel Route BY AT v	G	LAMR	I-EVENT
Sun Aug 25 02:14:59 EDT 2024	Southern	Ave Signal F08-2 COMMANDED Prohibit Exit BY AT vawksyg-comm	G	LAMR	1-EVENT
Sun Aug 25 02:14:47 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F2-306 FAILED OCCUPIED	G	MR	4-MINOR
Sun Aug 25 02:14:47 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F2-312 FAILED OCCUPIED	G	MR.	4-MINOR
Sun Aug 25 02:14:30 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F1-312 FAILED OCCUPIED ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva	G	MR	I-EVENT
Sun Aug 25 02:13:30 EDT 2024	Southern	Ave TRACK CIRCUIT F08-F1-312 FAILED OCCUPIED	G	MR	4-MINOR
Sun Aug 25 02:08:23 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED ACKNOWLEDGED BY AT vawksmetrolpp	G	LAMR	I-EVENT
Sun Aug 25 02:04:50 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED ACKNOWLEDGED BY AT vawksmetro1pp	G	LAMR	I-EVENT
Sun Aug 25 02:03:22 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED ACKNOWLEDGED BY AT vawksmetro1pp	G	LAMR	I-EVENT
Sun Aug 25 02:03:20 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED ACKNOWLEDGED BY AT vawksmetro1pp	G	LAMR	1-EVENT
Sun Aug 25 02:00:52 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED ACKNOWLEDGED BY	G	LAMR	I-EVENT
Sun Aug 25 02:00:40 EDT 2024	Southern	Ave F08-2 Signal State COMMANDED CHANGE = Stop	G	LAMR	1-EVENT
Sun Aug 25 02:00:38 EDT 2024	Southern	Ave F08-2 Signal Request Route COMMANDED Cancel Route BY AT vawksyg- commpp	G	LAMR	I-EVENT
Sun Aug 25 02:00:29 EDT 2024	Southern	Ave Signal F08-8 COMMANDED Prohibit Exit BY AT vawksyg-commpp	G	LAMR	1-EVENT
Sun Aug 25 02:00:29 EDT 2024	Southern	Ave F08-2-4 IS ESTABLISHED WHILE EXIT F08-4 IS PROHIBITED	G	LAMR	5-MAJOR
Sun Aug 25 02:00:29 EDT 2024	Southern	Ave Signal F08-4 COMMANDED Prohibit Exit BY	G	LAMR	<b>1-EVENT</b>

# System Performance On-Time Summary (SPOTS)

#### ROCS SPOTS REPORT

	assed on up-to-the-second operational performance data from the Rail Operations Control System Current date/time: Thu Seo 5 16:33:24 2024												
	ne Galerenne.	The Sep	0 10.00.										
Seler	t Platform:		a	nd/or Selec	tip: 711		Leave bla	ink to rem	ove criteri				
	or Select 4-d	linitanırı				ink to rem							
	t Date: Au			24 20 0				_	1.00 -	то 03:	00 -		
Selec	t Date: Au	iy • [ 2	5 + 20	124 • 5	elect lime	25 (U-24	нкэј: н	rom	1.00 •	10 03.	•••		
Ge	nerate R	eport											
ID	Platform	length	dcode	Right door	Right door	dwell		Left door	dwell	Head	Tail cleared	cars	Travel Time door open to
				open	close		open	close					door open
711	<u>C15-1</u>	6	99	01:25:39	01:25:59	20				01:25:04	01:30:27	7676-7677.7666-7667.7583-7582	-
711	E10-2	6	96	01:27:38	01:28:02	24				01:27:03	01:32:47	6117-6116.6100-6101.6135-6134	1:59
711	E09-2	6	96							01:35:50	01:36:18	6134-6135.6101-6100.6116-6117	-
711	E08-2	6	96							01:38:40	01:39:11	6134-6135.6101-6100.6116-6117	-
711	E07-2	6	96							01:40:51	01:41:27	6134-6135.6101-6100.6116-6117	-
<u>711</u>	E06-2	6	96							01:43:50	01:44:22	6134-6135.6101-6100.6116-6117	-
711	E05-2	6	96							01:46:30	01:47:00	6134-6135.6101-6100.6116-6117	-
711	E04-2	6	96							01:48:10	01:48:43	6134-6135.6101-6100.6116-6117	-
<u>711</u>	E03-2	6	96									6134-6135.6101-6100.6116-6117	-
711	E02-2	6	96							01:50:53	01:51:29	6134-6135.6101-6100.6116-6117	-
		6	96									6134-6135.6101-6100.6116-6117	
		6	96									6134-6135.6101-6100.6116-6117	
		6	96									6134-6135.6101-6100.6116-6117	-
<u>711</u>	F03-2	6	96									6134-6135.6101-6100.6116-6117	-
	F04-2	6	96									6134-6135.6101-6100.6116-6117	
711	F05-2	6	96							01:57:55	01:58:28	6134-6135.6101-6100.6116-6117	-
			96									6134-6135.6101-6100.6116-6117	
			96									6134-6135.6101-6100.6116-6117	
		6	96								· · · · · ·	6134-6135.6101-6100.6116-6117	
		6	96									6134-6135.6101-6100.6116-6117	
<u>711</u>	F10-2	6	96							02:08:40	02:09:08	6134-6135.6101-6100.6116-6117	-

Figure 8 - the Orange box denotes Train ID 711 passed Anacostia Station (F06) at 02:00 hours. The Red box denotes Train ID 711 passed Southern Avenue Station (F08) at 02:03 hours.

### **Interview Findings and Written Statements**

As part of the investigation launched into the event, SAFE interviewed two (2) 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.

### RWIC's Written Statement

States that they were given their work location as alphanumeric station name F06. They looked at their Metro System Map and mistook F06 (Anacostia Station) as F08 (Southern Avenue Station). They went to Southern Avenue Station, instead of Anacostia Station and was granted ETO protection as a train was traveling through the station on track 2. The RWIC asked if they had ETO protection for both tracks. The RTC replied yes and asked the RWIC for their location. The RWIC replied "F06 Southern Avenue" Station. The RWIC stated that they were not corrected on their location by the RTC and began setting up their shunts at one (1) end of the work zone. The RWIC states that the RTC then called them on the telephone and asked once more for their location. The RWIC responded "F06 Southern Avenue" Station. The RTC then instructed the RWIC to clear the roadway immediately because they were in the wrong location.

### RWIC Interview Findings

- Stated they use glasses for reading purposes only.
- They were wearing them when they looked at the Metro System Map and incorrectly identified F06 as Southern Avenue Station.
- There was no Rail Maintenance Machine (RMM) utilized by the RWIC for their work zone.
- The RWIC's work crew consisted of four employees including themselves.
- Stated after reporting the train passing their location the RWIC informed the Radio RTC that they were at "F06 Southern Avenue" Station.
- Stated that they were not informed by the RTC that they were in the incorrect location. They then began to place their shunts at one end of the work zone.

# Radio RTC Interview Findings

- Stated during the incident they were working with a partner performing the Button RTC duties.
- Stated the RWIC called to establish their GOTRS track rights for Tracks 1 and 2 from F1/F2 177+34 to F1/F2 253+84. The RWIC stated they were at "F06."
- Stated they asked the RWIC for their location once they reported a train passing their location. The RWIC replied "F06."
- Granted the RWIC permission to enter the roadway under ETO protection to place their shunts. They stated they would verify that the shunts were visible.
- Stated they observed track circuits down on tracks 1 and 2 at Southern Avenue Station and believed the RWIC was at the incorrect location.
- They instructed the RWIC to contact them by telephone.
- The Radio RTC asked the RWIC for their location and they informed them that they were at "F06 Southern Avenue" Station.
- Once the RWIC was informed that they were at the incorrect station, they verified the information by looking at their RWP Quick Access Guide.
- The RWIC was instructed to clear the roadway immediately.
- After clearing the roadway, the RWIC requested and was granted Foul Time to remove their shunts from the roadway.

#### Weather

On August 25, 2024, at the time of the incident, NOAA recorded the temperature as 69.8°F, with clear skies, winds seven (7) mph, and 64.32% humidity. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Washington, DC].

#### **Related Rules and Procedures**

### Metro Rail Operating Rulebook, effective September 1, 2023

### 17.2 Roadway Worker Protection Cardinal Rules

**5.** There shall be no fouling of the WMATA's roadway unless it is necessary to perform your job.

#### **Human Factors**

#### <u>Fatigue</u>

### Signs and Symptoms of Fatigue

SAFE evaluated incident data for fatigue risk factors. No signs or symptoms of fatigue were detected from the available data. Video of the incident was reviewed for signs of the Structures Supervisor's fatigue. No signs or symptoms of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

### Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. Risk factors for fatigue were present. The incident occurred at a time of low circadian alertness. The employee reported keeping a regular sleep schedule in the days leading up to the incident. The employee worked the overnight shift in the days leading up to the incident. The employee was awake for 8.05 hours at the time of the incident The employee reported 10 hours of sleep in the 24 hours preceding the incident. The offduty period was 15 hours which provides an opportunity for 7-9 hours of sleep. This was more than the employee's usual workday sleep durations. The employee reported no issues with sleep. The employee worked the overnight shift in the days leading up to the incident.

#### Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Structures Supervisor complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

# **Findings**

- The RWIC called the OPS 3 RTC to request their GOTRS track rights on August 24, 2024, at 23:53 hours, for chain markers where they were not located.
- The RWIC was granted permission to enter the roadway at F06 under ETO protection on August 25, 2024, at 02:03 hours.
- The RWIC was physically located at F08 Southern Avenue Station, not F06 Anacostia Station.
- The RWIC stated that after reporting the train passing their location, the RWIC informed the Radio RTC that they were at "F06 Southern Avenue" Station. Upon listening to the ARS playback of this communication, the RWIC replied that they were at "F06" only.
- The RWIC failed to verify their work zone chain markers before entering the roadway to place their shunts.
- The OPS 3 RTCs observed downed track circuits at Southern Avenue Station, indicating shunts had been placed at that location.
- The RWIC had an RWP Quick Access Guide during the incident.
- As Train ID 711 traversed Southern Avenue Station on Track 2, all TRST personnel were on the platform at that time.

# Immediate Mitigation to Prevent Recurrence

- The RWIC was removed from service and sent for post-incident testing.
- The track work was canceled.

# Probable Cause Statement

The probable cause of the Improper RWP event on August 25, 2024, at Southern Avenue Station, was the RWIC's oversight in identifying the station's location by the alphanumeric code and failing to verify their physical location.

# Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
119384_SAFE CAPS_TRST_ 001	The RWIC to attend Roadway Worker Protection, level 4 Refresher Training (RC-1)	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.

### RWIC

The RWIC is a WMATA employee with nine (9) years of service and three (3) total years of experience as a Structures Supervisor. The RWIC holds a Roadway Worker Protection (RWP) Level 4 certification that expires in May 2027.

During the formal interview, the RWIC provided some background regarding their duties as a Structures Supervisor and answered questions regarding their alertness during the incident. On the date of the incident, the RWIC stated they were scheduled to perform drain cleaning at F06 on track 1 near the interlocking. The RWIC looked at a Metro System Map and misidentified F06 (Anacostia Station) and F08 (Southern Avenue Station). The RWIC stated that they wore glasses to read and had them on at the time they were looking at the map. They then went to Southern Avenue Station with their work crew and waited until the station closed. Once the Station closed, they went down to the platform and performed their RJSB.

The RWIC stated that as Central<sup>5</sup> granted them ETO protection a train began passing through the station on track 2. After the train passed the RWIC asked Central to verify that they were granted ETO protection for Tracks 1 and 2 and it was confirmed. The RWIC informed Central that a train had just passed their location. When asked for their location by Central, the RWIC replied F06 Southern Avenue Station. The RWIC stated that they were not informed that they were at the incorrect station and entered the roadway to begin setting up their work zone. Once they completed setting up one side of their work zone, they received a call from Central asking once more for their location. They replied that they were at F06 Southern Avenue Station and were instructed to clear the roadway immediately. Once the RWIC was informed that they were at the incorrect station, they verified the information by looking at their RWP Quick Access Guide. The RWIC then requested Foul Time to remove their shunts from the roadway. The TRST crew then went to Anacostia Station. Once at the station they contacted Central and were instructed to stand by and stand clear. The RWIC was then informed that they would be removed from service.

When asked the RWIC stated there were no issues with radio communication during this incident. When asked if the Chain Markers (CM) were identified during their RJSB the RWIC stated that they were not. They had the CMs written down from their GOTRS track rights request. They normally check the CMs once they enter the roadway to verify their work zone.

#### Radio RTC

The Radio RTC is a WMATA employee with two (2) years of service and 0.5 total years of experience as a Rail Traffic Controller. The Radio RTC holds a Roadway Worker Protection (RWP) Level 4 certification that expires in July 2025.

<sup>&</sup>lt;sup>5</sup> Central is a term used to describe the Rail Traffic Controllers or Metro Integrated Command and Communications personnel.

During the formal interview, the Radio RTC provided some background regarding their duties as an RTC and answered questions regarding their alertness during the incident. The Radio RTC stated during the incident they were working with a partner performing duties as the Buttons RTC. They stated that at the close of normal rail service, the Radio RTC communicates with Train Operators returning to rail yards, RWICs, and work crews. The Buttons RTC sets up work locations and provides RWP. The Radio RTC observed a work area set up between Anacostia Station and Southern Avenue Station with Blue Block areas, protected red aspects, and prohibited exits. The Radio RTC stated there was a train, enroute to Branch Avenue Yard that passed Anacostia Station. Once the train passed, a Human Form was placed on the AIMS screen at Anacostia Station allowing personnel to enter the protected area. The Radio RTC granted the RWIC permission the enter the roadway to place their shunts. Third rail power had remained energized.

The RWIC informed the Radio RTC that a Train had just passed their location and the Radio RTC was confused because there was no train showing at their location on the AIMS screen. They asked the RWIC for their location and the replied that they were at "F06" which was Anacostia Station. The Radio RTC verified via AIMS that the work zone was protected, and no trains were at the location. They then repeated the permission for the RWIC to enter the roadway at the prescribed CMs for the work zone (Tracks 1 and 2 from CM F1/F2 177+34 to CM F1/F2 253+84), and then moved on to the next work crew. Shortly thereafter the Radio RTC noticed downed track circuits at Southern Avenue Station. They verified that Automatic Train Control Maintenance (ATCM) personnel were not performing work at that location.

The Radio RTC then believed that the RWIC was placing shunts at the incorrect location and asked for them to call by telephone. The RWIC confirmed that they were at the incorrect location and were instructed to clear the roadway. Once clear of the roadway the RWIC was granted Foul Time to retrieve their shunts from the roadway. The Operations Manager (OM) informed the Radio RTC that the RWIC would be removed from service.

When asked do RWICs normally provide the station names or alphanumeric station code when requesting GOTRS track rights the Radio RTC stated that it varies. They stated normally RWICs would only provide the CMs that they have track rights for without providing the station name or alphanumeric station code. This occurs frequently when the requested track rights are outside of the station platform limits.

When asked how do RTCs verify shunts have been placed the Radio RTC stated that it appears as downed track circuits on their AIMS screen. If the shunts have been placed correctly on both tracks it would appear as if four (4) track circuits were down. Two on the high end and two on the low end. If it was for one (1) track only then there should be two (2) track circuits down.

# Appendix B – GOTRS Track Rights Request

Request Summary							
Request Number:	2024	23501000		Track	Access:	True	
Dates Requested:	08/2	5/2024 01:00	to: 08/25/2024 04:30	Clear	In Ten:	False	
Request Status:	Close	bd		Equip	ment on Track:	1	
Requestor:	_	_		Allow	Piggybacks:	True	
Requestor Organizati	on: TRST	/STRUC			ggyback:	No	
Tag #:	Close	d (20242387	12-S)		r Outage:	Supervisory	
Lock Out / Tag Out:					ional AC:		
Request Title:	STM	(South) Let	ak repair F06 Platform.				
Location, Work Typ	e and Desc	ription					
Location:			Mainline				
Non-Wayside Locatio	n Type:						
Request Type:			Expedited				
Charge Job Number:							
Contract Number:							
Maximo Work Order:							
Request Group:			No				
Location Description							
Request Description:			leak Repair (platform	1)			
Work Type:			Leak Repair				
Meeting Location:							
PB Meeting Location:							
Tools and Equipment			hand tools PPE and a	all safety equi	oment		
Equipment on Track:			RMM ? JR unit				
<b>T</b>	ick 1			Track 2			
Actual Work Area:	F182+34	F248+84	Actual Work Area:		F248+84		
Protected Work	F177+34	F253+84	Actual Work Area: Protected Work Area:	F182+34	F248+84		
Hot Stick Info. Third	Rail Gane						
From			То			Track ID	
F145+49			F191+57			1	
F192+23			F248+84			1	
F144+83			F189+00			2	
F189+32			F191+91			2	
F192+23			F248+84			2	

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Figure 9 - GOTRS Track Rights Request, page 1 of 5.

Request Summary	,		
Request Number:	202423501000	Track Access:	True
Dates Requested:	08/25/2024 01:00 to: 08/25/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	1
Requestor:		Allow Piggybacks:	True
Requestor Organiza	ation: TRST/STRUC	In Piggyback:	No
lag #:	Closed (2024238712-S)	Power Outage:	Supervisory
.ock Out / Tag Out:		Additional AC:	
Request Title:	STMN (South) Leak repair F06 Platform	. / Drain maintenance.	
Start: 08/25/2024	01:00	End: 08/25/2024 04:30	
Contacts			
Entered by		Requestor	
@wmata.con	Π	@wmata.com	
Work:		Work:	
Cell:	Home:	Cell:	Home:
WMATA Manager		Emergency Contact	
	-		
@wmata.co Work:	m	@wmata.com Work:	
Cell:	Home:	Cell:	Home:
	nome.	cun.	nome.
Support			
SUPPORT GROUP	Crew Size		
TRST/STRUC	4		
ESCORT GROUP	Crew Size		
POWER/LV			
Request Change H Date	Event		
08/22/2024 12:00	Request was cloned from Request 2024235009	nn	
08/22/2024 17:07	Request was edited.		
08/22/2024 17:38	Field(s) changed: Request Title, Equipment on Request status was changed to Approved	Track.	
08/23/2024 16:37	Request was edited.		
0.05.0004.00.00	Field(s) changed: Maximo Work Order. Work Prep was completed.		
08/25/2024 02:33			

Figure 10 - GOTRS Track Rights Request, page 2 of 5.

<b>GOTRS - GENERAL</b>	ORDERS	& TRACK	RIGHTS	SYSTEM
Track Rights Request				

Request Summary				
Request Number:	202423501000		Track Access:	True
Dates Requested:	08/25/2024 01:00 to: 08/25/2	024 04:30	Clear In Ten:	False
Request Status:	Closed		Equipment on Track:	1
Requestor:			Allow Piggybacks:	True
Requestor Organizatio	n: TRST/STRUC		In Piggyback:	No
Tag #:	Closed (2024238712-5)		Power Outage:	Supervisory
Lock Out / Tag Out:			Additional AC:	
Request Title:	STMN (South) Leak repair F08	5 Platform. / D	rain maintenance.	
Request Change His	tory			
	Event			
	Assistant Operations Manager Comm	ent was updat	ed.	
08/25/2024 08:24	Request status was changed to Close	ed		
Request Group				
Request Number	Description			
Piggyback				
Request Number Piggyback No active piggybacks fou				
Piggyback No active piggybacks fou Close-Out Summary				
Piggyback No active piggybacks fou Close-Out Summary Final Status:	nd	Closed		
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R	nd TC to establish working limits:	08/24/2	024 23:54	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa	nd ITC to establish working limits: ge Order:	08/24/2 08/25/2	024 02:12	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp	nd ITC to establish working limits: ge Order:	08/24/2 08/25/2 08/25/2	024 02:12 024 02:16	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking:	nd ITC to establish working limits: ge Order: leted/RWIC notified:	08/24/2 08/25/2 08/25/2 step not	024 02:12 024 02:16 : done	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking: Permission is given to	nd ITC to establish working limits: ge Order: lieted/RWIC notified: setup worksite:	08/24/2 08/25/2 08/25/2 step not	024 02:12 024 02:16 : done	
Piggyback No adive piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hes Sticking: Permission is given to RTC authorization to s	nd ITC to establish working limits: ge Order: Heted/RWIC notified: setup worksite: tart work is given to RWIC;	08/24/2 08/25/2 08/25/2 step not step not	024 02:12 024 02:16 : done : done : done	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking: Permission is given to RTC authorization to s PDC confirmed workin	nd TC to establish working limits: ge Order: ileted/RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear:	08/24/2 08/25/2 08/25/2 step not step not step not	024 02:12 024 02:16 : done : done : done : done 024 03:44	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Met Sticking: Permission is given to a TCC authorization to a PDC confirmed workin RTC confirmed workin	nd ITC to establish working limits: ge Order: Heted/RWIC natified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear:	08/24/2 08/25/2 08/25/2 step not step not step not 08/25/2 08/25/2	024 02:12 024 02:16 done done 024 03:44 024 03:44	
Piggyback No active piggybacks fou Final Status: RWJC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking: Permission is given to RTC authorization to s PDC confirmed workin Energization by PDC oc	nd TC to establish working limits: ge Order: leted /RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear: ompleted:	08/24/2 08/25/2 08/25/2 step not step not 08/25/2 08/25/2 08/25/2	024 02:12 : done : done : done 024 03:44 024 04:24 024 04:28	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking: Permission is given to RTC authorization to s PDC confirmed workin Energization by PDC o Work Stopped by Requ	nd TC to establish working limits: ge Order: leted /RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear: ompleted:	08/24/2 08/25/2 08/25/2 step not step not 08/25/2 08/25/2 08/25/2 08/25/2	024 02:12 done done done 224 03:44 024 03:44 024 04:24 024 04:28 04:24	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa Doe-Energization Comp Hot Sticking: Permission is given to RTC authorization to s PDC confirmed workin RTC confirmed workin RTC confirmed workin RTC confirmed workin RTC confirmed workin RTC confirmed workin	nd CTC to establish working limits: ge Order: leted/RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear: g limits are clear: setor:	08/24/2 08/25/2 08/25/2 step not step not 08/25/2 08/25/2 08/25/2	024 02:12 done done done 224 03:44 024 03:44 024 04:24 024 04:28 04:24	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Energization Comp Permission is given to RTC authorization to s PDC confirmed workin Energization by PDC ou Kork Stopped by Requ Reason: Rail Traffic Controller	nd TC to establish working limits: ge Order: Heted/RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear: g limits are clear: usetor: completed: comment:	08/24/2 08/25/2 step not step not step not 08/25/2 08/25/2 08/25/2 08/25/2024 Not enough	024 02:12 024 02:16 done done 024 03:44 024 04:24 024 04:24 04:24 04:24	
Piggyback No active piggybacks fou Close-Out Summary Final Status: RWIC has contacted R Authorize Power Outa De-Energization Comp Hot Sticking: Permission is given to RTC authorization to s PDC confirmed workin Energization by PDC o Work Stopped by Requ	nd TC to establish working limits: ge Order: Heted/RWIC notified: setup worksite: tart work is given to RWIC: g limits are clear: g limits are clear: g limits are clear: usetor: completed: comment:	08/24/2 08/25/2 step not step not step not 08/25/2 08/25/2 08/25/2 08/25/2024 Not enough	024 02:12 done done done 24 03:44 024 03:44 024 04:24 024 04:24 04:24 manpower 4 shubats at Southern Ave. T	he correct work locatian was blueeb Anaco

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Figure 11 - GOTRS Track Rights Request, page 3 of 5.

#### GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM Track Rights Request

Request Summary			
Request Number:	202423501000	Track Access:	True
Dates Requested:	08/25/2024 01:00 to: 08/25/2024 04:30	Clear In Ten:	False
Request Status:	Closed	Equipment on Track:	1
Requestor:		Allow Piggybacks:	True
Requestor Organization:	TRST/STRUC	In Piggyback:	No
Fag #:	Closed (2024238712-S)	Power Outage:	Supervisory
Lock Out / Tag Out:		Additional AC:	
Request Title:	STMN (South) Leak repair F06 Platform. / D	rain maintenance.	

As of 09J03/2024 10:49 4 of 5

Figure 12 - GOTRS Track Rights Request, page 4 of 5.

#### GOTRS - GENERAL ORDERS & TRACK RIGHTS SYSTEM Track Rights Request

Request Number:		202423501000		Track Access:	True
request number.		202423001000		Track Access.	1100
Dates Requested:		08/25/2024 01:00 to: 08/	25/2024 04:30	Clear In Ten:	False
Request Status:		Closed		Equipment on Track:	1
Requestor:	1			Allow Piggybacks:	True
Requestor Organiz	ation:	TRST/STRUC		In Piggyback:	No
fag #:		Closed (2024238712-S)		Power Outage:	Supervisory
ock Out / Tag Ou	t:			Additional AC:	
Request Title:	-	STMN (South) Leak repai	ir F06 Platform. / D	Drain maintenance.	
Close-Out Summ	ary				
Requestor Comm	ent:				
Delays					
Delay #	From	То	Reason		Re-Hot Stick Done
			24 04:24 RWIC WE		

As of 09/03/2024 10:49 5 of 5

Figure 13 - GOTRS Track Rights Request, page 5 of 5.

# Appendix C – Roadway Job Safety Briefing (RJSB)

i	This form must be completed legibly and accurately and be retained a normade available for inspection for a period of 50 days. Part 2: General Job Briefing Date: 8 .24.24.24 Time: 2:00 RWIC:
1	SMIC Call #
-	Safety Contact: Sec. 4.1.1
1 2	Safety Contact: Sur Something Say Something
Г	RWP Rule #6 Theme Shiell Bo NO Clumms of Any Track At Ang Time
3	Job Task(s):
L	DRAW Cloneng
4	Worksite, Electrical, Chemical, or Environmental Hazards:
-	TRopping Horeignos Poor Lighting
	Electronic Device Policy Reviewed
5	WP Stickers inspected: VI Tools and Equipment Inspect ad: VI Radio Certification Date Inspected: I Radio Checks Performed: VI
	FACO SHIND
	Emergency Response Plan:
6	PLAton To STRAN
	FLATE DAME TO STREAM
	Part 2: RWP Briefing: This section must be filled out before any Roadway Workers enter the Roadway.
	Railling Orac 1. 1. 1. 6.0
	Rail Line: GRN Track Number(s): 1+2 Track Access Guide (TAG) Speed: N/a
	Rail Line:       GRN       Track Number(s):       +2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       249494       TRk. 142
7	Rail Line:         GKN         Track Number(s):         +2         Track Access Guide (TAG) Speed:         N/4           Working Limits Chain Markers:         162434         24949494         TKL 1 +2           OPS Radio Channel:         0PS 3         OPS Phone Number:         202 - 962 - 1502
7	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/4         Working Limits Chain Markers:       1624.34       2473494       TRL / + 2         OPS Radio Channel:       0PS 3       0FS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warker       Time Needed to Reach Place of Safety: /0 set
7	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/4         Working Limits Chain Markers:       162434       2473494       TRL / + 2         OPS Radio Channel:       0PS 3       0PS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       WARK       Time Needed to Reach Place of Safety: /0 si         Are There Red Hot Spots Within Your Working Limits?       Yes X       to C         Red Hot Spot Chain Markers:       Pool       Time Safety:
7	Rail Line:       GRN       Track Number(s):       +2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2478494       TRAC / 42         OPS Radio Channel:       0PS 3       0PS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warker       Time Needed to Reach Place of Safety:       10 si         Are There Red Hot Spots Within Your Working Limits?       Yes X       to C         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:         PLATEGRAM       ND       Clamatics
7	Rail Line:       GRN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2473494       TRek / 42         OPS Radio Channel:       0PS 3       0PS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       UMArk       Time Needed to Reach Place of Safety:       10 set         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spot Sulthin Your Working Limits?       Red Hot Spot Hazard(s):       Red Hot Spot Chain Markers:         PLASSon       NO Clomenter         Construct       NO Clomenter
_	Rail Line:       GRN       Track Number(s):       +2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2478494       TRAC / 42         OPS Radio Channel:       0PS 3       0PS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warker       Time Needed to Reach Place of Safety:       10 si         Are There Red Hot Spots Within Your Working Limits?       Yes X       to C         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:         PLATEGRAM       ND       Clamatics
7	Rail Line:       GKN       Track Number(s):       1       :
_	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2434947       TKL / + 2         OPS Radio Channel:       0PS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warking Limits? Yes X       Toge Readed to Reach Place of Safety:       10 si         Are There Red Hot Spots WithIn Your Working Limits?       Yes X       Tog       Time Needed to Reach Place of Safety:       10 si         Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):       NO Clowerse         The for Lock       NO Clowerse       NO Clowerse       N/A       N/A         RWP Notes:       N/A       Local Signal Centrol AMF FT FT       FT       State Sta
_	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2473484       TRL / +2         OPS Radio Channel:       OPS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       LiAnk       Time Needed to Reach Place of Safety: /0 s.         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:         Place of Safety:       CAT       Limits?       Yes X         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):         Place Source       NO Clommand       NO Clommand         Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):
_	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2434947       TKL / + 2         OPS Radio Channel:       0PS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warking Limits? Yes X       Toge Readed to Reach Place of Safety:       10 si         Are There Red Hot Spots WithIn Your Working Limits?       Yes X       Tog       Time Needed to Reach Place of Safety:       10 si         Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):       NO Clowerse         The for Lock       NO Clowerse       NO Clowerse       N/A       N/A         RWP Notes:       N/A       Local Signal Centrol AMF FT FT       FT       State Sta
8	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         Working Limits Chain Markers:       162434       2473484       TRL / +2         OPS Radio Channel:       OPS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       LiAnk       Time Needed to Reach Place of Safety: /0 s.         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:         Place of Safety:       CAT       Limits?       Yes X         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):         Place Source       NO Clommand       NO Clommand         Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):
8	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         OPS Radio Channel:       OPS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warking Limits Chain Markers:       705 Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warke       Time Needed to Reach Place of Safety:       10 st         Are There Red Hot Spots Within Your Working Limits?       Yes X       Yos X       Time Needed to Reach Place of Safety:       10 st         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):       NO Clowmans         Ta ftwo loc k       NO Clowmans       N/A       No Clowmans         Rew Notes:       N/A       Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):         Advanced Mobile Flagger Placement:       Watchman/Lookout Placement:       Watchman/Lookout Placement:         Wetchman/Lookout Placement:       Watchman/Lookout Placement:       Watchman/Lookout Placement:
9 8	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         OPS Radio Channel:       OPS 3       OFS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warking Limits Chain Markers:       705 Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warke       Time Needed to Reach Place of Safety:       10 st         Are There Red Hot Spots Within Your Working Limits?       Yes X       Yos X       Time Needed to Reach Place of Safety:       10 st         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):       NO Clowmans         Ta ftwo loc k       NO Clowmans       N/A       No Clowmans         Rew Notes:       N/A       Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):         Advanced Mobile Flagger Placement:       Watchman/Lookout Placement:       Watchman/Lookout Placement:         Wetchman/Lookout Placement:       Watchman/Lookout Placement:       Watchman/Lookout Placement:
8	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/4         Working Limits Chain Markers:       162434       243494       TRACk Access Guide (TAG) Speed:       N/4         OPS Radio Channel:       OPS 3       OPS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Warking Limits?       Yes X       to D         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D       Red Hot Spot Chain Markers:         Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:         PLASSon       The Not Spot Chain Markers:       Red Hot Spot Chain Markers:       Red Hot Spot Hazard(s):         NO Clowmans       The Notes:       NO Clowmans       NO Clowmans         Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Placement:         Watchman/Lookout Placement:       Watchman/Lookout Rotation Schedule:       Watchman/Lookout Rotation Schedule:         Will There be a Speed Restriction on the Adjacent Track? Yes Not X       No X
9	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         OPS Radio Channel:       OPS       2473494       TRACk / 1 + 2       OPS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Limits       Time Needed to Reach Place of Safety:       10 set         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spot Chain Markers:       Red Hot Spot Spot Hazard(s):       NO Clomenes         J. How King IFIC       ETO Authority Local Signal Centrol AMF       AMF       FT D         Red Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):         Advanced Mobile Flagger Call #(s) or Last Name(s):       Matchman/Lookout Rotation Schedule:       Matchman/Lookout Rotation Schedule:         Will There be a Speed Restriction on the Adjacent Track? Yes No %       No %       Matchman/Lookout Rotation Schedule:         Will Gass 2 Vel:Iclas be Part of the Working Limite? Yes No %       No %       No %
9 8	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/A         OPS Radio Channel:       OPS       2473494       TRACk / 1 + 2       OPS Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Limits       Time Needed to Reach Place of Safety:       10 set         Are There Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spot Chain Markers:       Red Hot Spot Spot Hazard(s):       NO Clomenes         J. How King IFIC       ETO Authority Local Signal Centrol AMF       AMF       FT D         Red Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):       Advanced Mobile Flagger Call #(s) or Last Name(s):         Advanced Mobile Flagger Call #(s) or Last Name(s):       Matchman/Lookout Rotation Schedule:       Matchman/Lookout Rotation Schedule:         Will There be a Speed Restriction on the Adjacent Track? Yes No %       No %       Matchman/Lookout Rotation Schedule:         Will Gass 2 Vel:Iclas be Part of the Working Limite? Yes No %       No %       No %
8 9 0.0	Rail Line:       GKN       Track Number(s):       1 + 2       Track Access Guide (TAG) Speed:       N/4         Working Limits Chain Markers:       162434       2473494       TRL / + 2         OPS Radio Channel:       OPS       2075 Phone Number:       202 - 962 - 1502         Place of Safety:       CAT       Limits:       Yes X       to D         Red Hot Spots Within Your Working Limits?       Yes X       to D       Red Hot Spots Within Your Working Limits?       Yes X       to D         Red Hot Spots Within Your Working Limits?       Yes X       to D       Red Hot Spots Within Your Working Limits?       No D       Red Hot Spot Chain Markers:       Red Hot Spot Chain Markers:       No D       Red Hot Spot Mitchin Your Working Limits?       No D       Red Hot Spot Mitchin Your Working Limits?       No D       Red Hot Spot Mitchin Your Working Limits?       No D       Red Hot Spot Mitchin Schedule:       No D       Red

Figure 14 - RJSB, page 1 of 2.

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1	Red/Supervisory 7				Hot Sticking C	hain Marke	rs:		
2 /	and the second se		4238712	5	151				
	Red/Supervisory T			1	193	TRK	1		
12	nsulated Mat(s) C				151				
	WSAD Certific	Green L Or	ange 🖸 🔅 Yellow 🗂		140 Th	れて			
	N/I		WSAD-Serial #/As	iset-ID		ication Due	Ws	SAD Ser	ial #/Ass
		TH			<u>a - 17-</u>	1			
V	Vill a Piggyback Cr	Ewist he Working	g Within Your Work			/			
13 C	rew Leader/EIC Ca	all #(s):	g within Your Work	ing Limits	? Yes 🗆 No				
P	agyback Work As	signment(s);			Piggyback Wor	k Area, Chai	n Markers	: _	
			lowing must be read a			1. 1.			
	N	ONE			Worker Na				
				225	Was the G	FC Issue Res	solved? Ye	CC 13	WITH COMPANY
	t 4: Roadway Wo Iderstand and agree v roa <u>BOADWAY W</u> y Worker Signature	With all aspects of the	Readway Job Safety B Ierstand I have a respon RIGHT AND RESPONSIB	LITY'TO INF	received. I em ade induct myself in a : TIATE A GDOD FA	equately prote safé menoer at ITH CHALLENG	cted from a t all times." E WHEN NE	ny train r I <u>CESSAR</u> y	<u>.</u>
	IderStand and agree v roa <u>ROADWAY W</u>	with all aspects of the dway hazards, I und ORNERS HAVE THE	e Roadway Job Safety B	LITY'TO INF	received. I am ade	equately prote safé menoer at ITH CHALLENG	cted from a	ny train r I <u>CESSAR</u> y	novemen Crev Les
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	IderStand and agree v roa <u>ROADWAY W</u>	with all aspects of the dway hazards, I und ORNERS HAVE THE	Readway Job Safety B Ierstand I have a respon RIGHT AND RESPONSIB	LITY'TO INF	received. I am ad reduct myself in a s ILATE A GOOD FA Impioyae ID #	equately prote safé menoer at ITH CHALLENG	cted from a t all times." E WHEN NE	ny train r I <u>CESSAR</u> y	novemen Crev Les
Roadwa	IderStand and agree v roa <u>ROADWAY W</u>	Mth all appers of up downy heareds. I up downy heareds. I up I CRISENS HAVE THE Employee ID #	Readway Job Safety B Ierstand I have a respon RIGHT AND RESPONSIB	LITY'TO INF	received. I em adr reduct mysaff in a s TIATE A GOOD FA umpioyae ID #	equately prote safé menoer at ITH CHALLENG	cted from a t all times." E WHEN NE	ny train r I <u>CESSAR</u> y	novemen Crev Les
Roadwa	BOADWAY W ROADWAY W y Worker Signature 9 5: RW/IC Signature	Mth all appers of the down hazards. I wanted with a support of the	ie Roadway Job Safery B. Ierstand I have a cospon Riski TAND RESPONSIE Roadway Worker Sy	LITY'TO INF	received. I em adr reduct mysaff in a s TIATE A GOOD FA umpioyae ID #	equately prote safé menoer at ITH CHALLENG	cted from a t all times." E WHEN NE	ny train r I <u>CESSAR</u> y	novemen Crev. Le
Roadwa	BOADWAY W ROADWAY W y Worker Signature 9 5: RW/IC Signature	Mth all appers of it is down heards. I want want of the index of the i	ie Roadway Job Safery B. Ierstand I have a cospon Riski TAND RESPONSIE Roadway Worker Sy	LITY'TO INF	received. I em adr reduct mysaff in a s TIATE A GOOD FA umpioyae ID #	equately prote safé menoer at ITH CHALLENG	cted from a t all times." E WHEN NE	ny train r I <u>CESSAR</u> y	novemen Crev Les
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Part	Norstand and agree rea <u>BOADWAY W</u> y Worker Signature y S: RW/IC Signature al RW/IC Comment - CCTY	Mth all appers of the down hazards. I wanted the down hazards is t	ie Roadway Job Safery B. Ierstand I have a cospon Riski TAND RESPONSIE Roadway Worker Sy	Inature	received. I erm adr reduct mysaff in a : IIATE A GOOD FA Impioyee ID #	equately prote- safé menner at FIN CHALLENC Crew Lead	cted from a t all times." E WHEN NE	Ny train t	Crew Go
Part : Salution: Part : Salution:	Norstand and agree rea <u>ROADWAY W</u> y Worker Signature y S: RW/IC Signature al RW/IC Comment - CCTY	Mth all appers of the down hazards. I wanted the down hazards is t	ia Roadway Job Safery B. Jerstand I have a coponi Robit AND RESPONSIO Robdway Worke: Sa	Inature	received. I em ad reduct myself in a : IIATE A GOOD FA Impioyee ID #	equately prote- safé mencier at <u>ETH CHALLENC</u> Crew Lead	cted from a: Lali Simes." E WHEN NE er/EIC Signa	Ny train t	Crew Go
Part Part Salution WIC Signalering	S: RW/IC Signature	Mth all appers of the down hazards. I wanted the down hazards is t	ia Roadway Job Safery B. Jerstand I have a coponi Robit AND RESPONSIO Robdway Worke: Sa	Instore	# # # # # # # # # # # # # #	equately prote- safé menorer at <u>FTM CHALLENC</u> Crew Lead	cted from a: all times." E WHEN NE er/EIC Signa	Ny train t	Crew Go
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Part : Part : Sa Sa S	BOADWAY W ROADWAY W Worker Signature 9 1 5: RW/IC Signature al RW/IC Comment ACTY 1 nature: RW/IC Name: RW/IC Signature: RW/IC Signature:	Mth all appers of the down hazards. I wanted the down hazards is t	ia Roadway Job Safery B. Jerstand I have a coponi Robit AND RESPONSIO Robdway Worke: Sa	Instore	# # # # # # # # # # # # # #	aquately prote- safé mencier at <u>ETH CHALLENC</u> Crew Lead Crew Lead 	cted from a: Lali Simes." E WHEN NE er/EIC Signa	Ny train t	novemer C Crew to Ernplot
Part : Part : Sa Sa S	BOADWAY W ROADWAY W Worker Signature 9 1 5: RW/IC Signature al RW/IC Comment ACTY 1 nature: RW/IC Name: RW/IC Signature: RW/IC Signature:	Mth all appers of the down hazards. I wanted the down hazards is t	is Roadway Job Safery B. Jerstand Thave a copour Risk TAND RESPONSION Roadway Worke: Sy Codway Worke: Sy Codway Worke: Sy Codway Worke: Sy	Instore	High RWIC Cell	aquately prote- safé mencier at <u>ETH CHALLENC</u> Crew Lead Crew Lead 	cted from a: Lali Simes." E WHEN NE er/EIC Signa	Ny train t	Crew to Service

Figure 15 - RJSB, page 2 of 2.

# Appendix D – RWIC's Written Statement

	Washington	r Employee S	-	orm	TO BE COMP	LETED AND
1.		Metropolitan Are	ea Transit Aut	hority DIST	RIBUTED WI	THIN 24 HOURS
	Complete all Fields (Wri avolved Perconnol (Use	ite N/A if field does no	ot apply)			
N	nvolved Personnel (Use Jame (Last Name, First Na	THIS BIOCK TOP WIMATA	Employees and Co Witness?	D.O.B		Section of the section
			Ves X N		Employee I	D Union
P	hone Number	Job Title	Department/D)	vision (Company)		
La	ist Day Worked (Prior to)	STRUCTURE SUP	1.00			ofore the incident?
8	-23-24	Hours Worked (in last hours)	8-24-24		Was this the slo	sop schedule for the last luding days off?
	n Overtime? Yes No	Personal Protective Eq VEST HAND H FLASH LICH	Af Boots GL	was Safety	Now alert were the incident? F	you Immediately prior to ully Alert Moderately V Fighting Steep
Se	condary Employment ( me of Secondary Employe	write Nane if employe	e does not have se	GLASSING		n renong swep
Na	me of Secondary Employe	NONE			Full Time	Work Hours
Sec	condary Employer Full Add	dress			Part Time	WORK HOURS
Dat	te of Hire	Supervisor			Phone M	Number
Inji	ury Information (Compl e of Injury Time o	ete for all involved Pe	poie If there is no			
1 /	NONE	in a second my	or a methor ren	Body Part	one in Date o s) Injured:	f Injury)
Loc	ation (Address) where inju	iry occurred (check one:	MD DVA	DDC)		
With						
			Concerns and the second			
1	ness Information (Name, I	hone Number, Email, ac	láress)			
	Another Person Cause this		ldress) Name of Respons	ible Party		
Did		s Injury7_Yes _No		ible Party		
Did . Resp	Another Person Cause this consible Party Insurance C	s Injurya Yes No arrier/Agent	Name of Respons			
Did . Resp	Another Person Cause this	s Injurya Yes No arrier/Agent	Name of Respons		ou will seek tre	catment
Did , Resp Are y	Another Person Cause this consible Party Insurance C	s Injurya Yes No arrier/Agent	Name of Respons Phone Number Name/Address of	facility where yo	ou will seek tre	stment
Did , Resp Are y	Another Person Cause this consible Party Insurance C You able to Continue Work	s Injurya Yes No arrier/Agent	Name of Respons	facility where yo	ou will seek tre	tatment.
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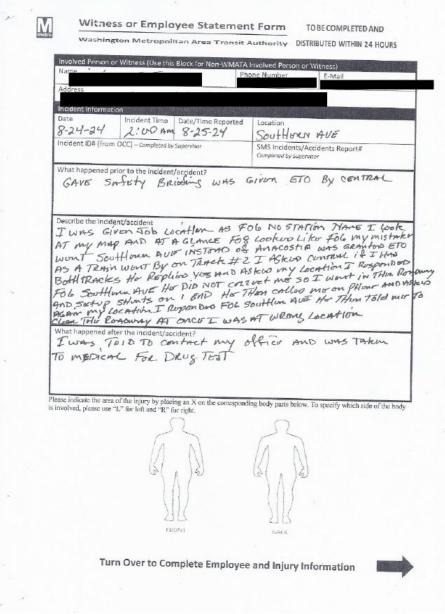


Figure 17 – The RWIC's Written Statement, page 2 of 2.

#### EXCLUSIVE TRACK OCCUPANCY

Exclusive Track Occupancy may be issued only by the Rail Traffic Controller to employees who hold a current Level 4 RWP qualification.

Exclusive Track Occupancy may be used as a method of establishing working limits on controlled track where the track within working limits shall be placed under the control of one RWIC by either:

- Authority issued to the RWIC by the Rail Traffic Controller who controls train movements on the track, or
- The RWIC causing fixed signals at each entrance to the working limits to display an aspect indication "Stop." (Local Signal Control)

#### Exclusive Track Occupancy Set-Up

Exclusive Track Occupancy working limits supplemental protection must be placed prior to beginning scheduled work. This supplemental protection includes the placement of shunts accompanied by two (2) red lanterns or e-flares placed a minimum of 500' beyond the outside of the work area to define the working limits, as well as "End Work Area" mats placed at both ends of the work area.



Figure 18 – Depicts Exclusive Track Occupancy (ETO) Standard Work Zone Procedures.

F-Line Track 1	Station	Station	Chain Marker	Chain Marker	Max Speed (MPH)	Notes
Gallery Place Station	F-01	F-01	E003+00	F003+00	50	
Clear View	F-01	F-02	003+00	016+00	50	
Archives Station	F-02	F-02	016+00	022+00	50	
Clear View	F-02	F-03	022+00	042+00	50	
Clear View: Interlocking	F-02	F-03	042+00	045+00	50	
L'Enfant Plaza Station	F-03	F-03	045+00	051+00	50	
Turnout Switch #5	F-03	F-04	051+00	056+00	50	Note 11
Curve	F-03	F-04	056+00	068+00	50	
Restricted View: Curve	F-03	F-04	068+00	087+00	55	
Waterfront Station	F-04	F-04	087+00	093+00	55	
Clear View	F-04	F-05	093+00	116+00	55	
Clear View: Interlocking	F-04	7-05	116+00	120+00	55	
Navy Yard- Ballpark Station	F-05	F-05	120+00	126+00	50	
Restricted View: Curve	F-05	F-06	126+00	143+00	65	
Clear View	F-05	F-06	143+00	166+00	65	
Restricted View: Curve	7-05	F-06	166+00	171+00	65	
Clear View	F-05	F-06	171+00	182+00	65	
Anacostia Station	F-06	F-06	182+00	155+00	55	
Restricted View: Inter- locking	F-06	F-07	188+00	192+00	65	
Restricted View: Carve	7-06	1-07	192+00	204+00	65	
Clear View	F-06	F-07	204+00	208+00	65	
Restricted View: Curve	F-06	F-07	208+00	214+00	65	
Clear View	F-06	F-07	214+00	220+00	65	
Restricted View: Curve	F-06	F-07	220+00	232+00	65	
Clear View	F-06	F-07	232+00	251+00	65	

Figure 19 - The green box depicts the CM included in the GOTRS track rights on Track, page 1 of 2, showing Anacostia Station.

F-Line 1	Frack 1	– Galle	ery Place	to Branc	h Aver	nue
F-Line Track 1	Station	Station	Chain Marker	Chain Marker	Max Speed (MPH)	Notes
Congress Heights Station	F-07	F-07	251+00	257+00	45	
Clear View: Curve	F-07	F-08	257+00	270+00	45	
Restricted View: Curve	F-07	F-08	270+00	280+00	45	
Restricted View: Curve	F-07	F-08	280+00	301+00	55	
Clear View: Interlocking	F-07	F-08	302+00	306+00	55	
Southern Avenue Station	F-08	F-08	306+00	312+00	65	
Clear View	F-08	F-09	312+00	320+00	65	
Restricted View: Curve	P-08	F-09	320+00	325+00	65	
Portal	F-08	F-09	325+00	325+00	65	
Restricted View: Curve	F-08	F-09	325+00	327+00	65	
Clear View	F-08	F-09	327+00	335+00	65	
Restricted View: Curve	F-08	F-09	335+00	344+00	65	
Portal	F-08	F-09	344+00	340+00	65	
Clear View	F-08	<b>F-09</b>	340+00	350+00	65	
Clear View: Curve	F-08	F-09	350+00	372+00	65	
Naylor Road Station	F-09	F-09	372+00	378+00	50	
Clear View: Interlocking	F-09	F-10	378+00	383+00	50	
Clear View	F-09	F-10	383+00	393+00	65	
Blind Spot: Curve	F-09	F-10	393+00	403+00	65	
Clear View	F-09	F-10	403+00	413+00	65	
Restricted View: Blind Spot	F-09	F-10	413+00	435+00	65	
Clear View: Curve	F-09	F-10	435+00	448+50	65	
Suitland Station	F-10	F-10	448+00	454+00	65	
Clear View	F-10	F-11	454+00	457+00	65	
Portal	F-10	F-11	457+00	457+00	65	

Figure 20 - The green box depicts the CM included in the GOTRS track rights on Track, page 2 of 2, showing Congress Heights Station.

				ie to Gal	<u> </u>	
F Line Track 2	Station	Station	Chain Marker	Chain Marker	Max Speed (MPH)	Notes
Restricted View: Curve	F-08	F-07	302+00	284+00	45	
Restricted View: Curve	F-08	F-07	284+00	257+00	45	
Congress Heights Station	F-07	F-07	257+00	251+00	65	
Clear View	F-07	F-06	251+00	235+00	65	
Restricted View: Curve	1-07	7-06	235+00	224+00	65	
Clear View	F-07	F-06	224+00	218+00	65	
Restricted View: Curve	F-07	F-06	218+00	213+00	65	
Clear View	F-07	F-06	213+00	208+00	55	
Restricted View: Curve	F-07	7-06	208+00	192+00	55	
Clear View: Interlocking	F-07	F-06	192+00	188+00	55	
Anacostia Station	F-06	F-06	188+00	182+00	55	
Clear View	F-06	F-05	182+00	172+00	55	
Curve	F-06	F-05	172+00	167+00	55	
Clear View	F-06	F-05	167+00	146+00	55	
Restricted View: Curve	F-06	F-05	146+00	126+00	55	
Navy Yard- Ballpark Station	F-05	F-05	126+00	120+00	55	
Clear View: Interlocking	F-05	F-04	120+00	116+00	55	
Clear View	F-05	F-04	116+00	093+00	55	
Waterfront Station	F-04	F-04	093+00	087+00	40	
Restricted View: Curve	F-04	F-03	087+00	070+00	40	
Clear View: Curve	F-04	P-03	070+00	055+00	45	
Clear View: Turnout Switch #7	F-04	F-03	055+00	051+00	45	
L'Enfant Plaza Station	F-03	F-03	051+00	045+00	45	
Clear View: Interlocking	F-03	F-02	045+00	042+00	50	

Figure 21 - The yellow box depicts the CM included in the GOTRS track rights on Track 2, showing Congress Heights Station to Anacostia Station.

### Appendix F – Why-Tree Analysis

