



U.S. Department
of Transportation
**Federal Transit
Administration**

Headquarters

1200 New Jersey Avenue, SE
Washington, DC 20590

SENT VIA EMAIL

June 9, 2023

Mr. Phillip Eng
General Manager
Massachusetts Bay Transportation Authority
10 Park Plaza
Boston, MA 02116

Subject: Conditional Approval of Revised Right of Way (ROW) Rules Compliance and Safety Work Plan

Dear Mr. Eng,

Thank you and your team at the Massachusetts Bay Transportation Authority (MBTA) for submitting a revised Right of Way (ROW) Rules Compliance and Safety Work Plan (Work Plan). The Work Plan was submitted on June 5, 2023, as required by the Federal Transit Administration (FTA) in our correspondence of May 19, 2023. The May 19 letter, and follow-on meetings with MBTA on Friday, May 26 and Friday, June 2, directed MBTA to focus the Work Plan on ROW processes and procedures that will be implemented to enhance safety within the next 60 days.

FTA approves the revised Work Plan sent to FTA by MBTA on June 5, 2023. However, until the Work Plan is fully implemented, FTA is concerned that there is potential for the continued risk of unsafe conditions and practices on the ROW and therefore will continue its monitoring until all action items are closed. If MBTA fails to appropriately implement the Work Plan within the next 60 days, ROW access will be restricted.

We appreciate MBTA's candid discussion of these issues and your agency's commitment to taking immediate action to improve the situation. FTA acknowledges the efforts made by MBTA in revising the Work Plan and recognizes the importance of its successful implementation.

Our collective goal is to continually improve safety and minimize risk associated with accessing and working on the ROW.

Thank you for your attention to this matter. If you have any questions or concerns, please contact our Safety Management Inspection Coordinator Erin Powell at (858) 335-6256 or by email at Erin.Powell@dot.gov.

Mr. Phillip Eng
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Sincerely,

A handwritten signature in black ink, appearing to read "Joe P. DeLorenzo". The signature is fluid and cursive, with the first name "Joe" and last name "DeLorenzo" clearly distinguishable.

Joe DeLorenzo
Associate Administrator and
Chief Safety Officer
Office of Transit Safety and Oversight

Enclosure: Evaluation Matrix_ROW Rules Compliance and Safety Work Plan

cc: Jeffrey Gonneville, Deputy General Manager, MBTA
Erik Stoothoff, Acting Chief Operating Officer, MBTA
Ron Ester, Chief Safety Officer, MBTA
Katie Choe, Chief of Quality, Compliance and Oversight
Steve Hicks, Chief Mechanical Officer, MBTA
Pat Richmond, Chief Transportation Officer, MBTA
Pat Lavin, Chief Safety Officer, Massachusetts Department of Transportation
Robert Hanson, Director, Rail Transportation Safety, DPU



Evaluation Matrix for Right of Way (ROW) Rules Compliance and Safety Work Plan, dated June 5, 2023

#	Actionable Item	Description	Responsible Party	Estimated Start Date	Estimated End Date	FTA Approval Status
Item 1.a Worker ahead flagging or notice provided to motorpersons in stations in advance of workers on the ROW						
1.a.1	Assess and implement light rail pilot	Determine and perform modifications (e.g., mobile a-frame signs, fixed platform signs, advanced mobile flagger, etc.) to current light rail operations & infrastructure in the Green Line central subway (Hynes to Park). Pilot location selected due to proximity to multiple near miss incidents.	QCO, Operations, E&M	6/5/2023	8/7/2023	Action Item Approved <u>Note:</u> MBTA opted to pilot the worker ahead warning system on the Green Line in the Central Subway based on the number of near misses at Copley Station. FTA will observe pilot implementation.
1.a.2	Develop procedure and train staff	Create standard procedures that address how notice is established, removed, communicated, and resulting actions of when notice is recognized. Develop and implement training materials for new procedures to pilot in the Green Line central subway. Pilot location selected due to proximity to multiple near miss locations.	QCO, Operations, E&M, Training	6/5/2023	8/7/2023	Action Item Approved <u>Note:</u> FTA will review procedures and training materials.
1.a.3	Procure consulting services	Issue an RFP for consulting services to assess technological capabilities for long- term implementation of measures intended to provide notice to motorpersons in advance of workers on the ROW.	QCO, Operations, IT, OCE	6/5/2023	8/7/2023	Action Item Approved
Item 1.b Re-configuration of available radio channels to provide additional capacity for heavy and light rail lines						
1.b.1	Administer spot audits of radio logs under IAL-AC-5 action	Establish recurring cadence of radio audits to develop data that is incorporated into analyses for root causes.	QCO, Safety, Operations	4/28/2023	8/7/2023	Action Item Approved <u>Note:</u> On 04/28/23, MBTA increased the number of audits of radio logs. FTA will review results during June OCC site visits.
1.b.2	Diversion Radio Communication Pilot	Implement a move of diversion related radio communications to dedicated channel(s), to be managed by the construction supervisor with OCC.	IT, QCO, Safety, Operations	6/5/2023	8/7/2023	Action Item Approved <u>Note:</u> MBTA will implement a pilot RIC/RWP program to hand over radio control for a diversion to the construction logistics



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						representative. This will require defined processes, policies, and training to be developed. FTA will observe implementation of this process.
1.b.3	Train on use of ICAO language	Develop a training for International Civil Aviation Organization (ICAO) language for radio communication to be deployed within OCC.	QCO, Safety, Operations	6/5/2023	8/7/2023	Action Item Approved <u>Note:</u> FTA will review training before it is delivered to MBTA employees.
Item 1.c Review and revision of required information to be exchanged between flaggers and dispatchers during radio call on/call off process to ensure unambiguous and explicit communication						
1.c.1	Review Call On/Call Off Script	Perform a detailed analysis of radio communication logs to determine if current script/process is not over or under detailed.	QCO, Operations, E&M	4/18/2023	7/14/2023	Action Item Approved
1.c.2	Revise Call On/Call Off Script	Based on analysis, revise script/process with sufficient detail and standardized checklists.	QCO, Operations, E&M	7/14/2023	8/7/2023	Action Item Approved <u>Note:</u> On 03/24/2023, MBTA Issued SO #23-058 emphasizing repeating back communications between the OCC and ROW personnel. FTA will verify radio communications as part of onsite observations on the ROW and in the OCC.
Item 1.d Review and revision of night and day orders to ensure safety critical information is communicated explicitly						
1.d.1	Revise Day/Night Order Draft Reviews	Increased structure and monitoring of day/night order draft reviews to ensure there are no single points of failure in creating and revising the orders for final distribution.	QCO, E&M, Operations	4/18/2023	5/19/2023	Action Item Approved
1.d.2	Revise day/night orders	Complete short-term actions outlined in April 24 th submission to incorporate additional key contacts, safety hotline details to improve communication.	QCO, E&M, Operations	4/18/2023	6/16/2023	Action Item Approved <u>Note:</u> On 04/20/23, MBTA began revision of Day and Night Orders draft review process and review of addendum process. MBTA also implemented an executive approval for addendums issued after 5PM. MBTA also reviewed immediate action letter with Network Rail (under 22-4 CAP 4) to accelerate reviewing and recommending revisions to Day and Night



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						orders format. FTA receives and reviews all Day and Night orders through daily submissions.
1.d.3	Implement addendum timeframe limitations for day/night orders	Standardize and enforce requirements for revisions to day/night orders.	QCO, E&M, Operations	4/18/2023	5/19/2023	Action Item Approved
1.d.4	Revise test train procedure and work crew limitations	Develop procedure to document test train routing on day and night orders and deconflict work to be occurring during test train operations.	QCO, E&M, Operations, Construction Logistics	4/18/2023	6/23/2023	Action Item Approved
1.d.5	Implement ROW Access Request Form Improvements	Analyze fields available in the ROW Access Request Form to understand if there are additional fields that would provide greater level of detail on work limits or scope to aid in clarifying the orders	QCO, E&M, Operations,	4/18/2023	8/1/2023	Action Item Approved
Item 1.e Adoption of line maps or other tools for OCC dispatchers to track the presence of workers on the ROW						
1.e.1	Observe visual aid Blue Line pilot at OCC	Develop feedback loop for technical & adaptive improvements to an already implemented pilot program to put power map on dispatcher's sheet to visually assess where workers are located.	QCO, E&M, OCC	5/1/2023	6/30/2023	Action Item Approved <u>Note:</u> On 05/01/23, MBTA introduced the pilot on the Blue Line, which provided power maps for OCC dispatchers to utilize as a tool to aid in tracking the locations of individuals on the ROW. FTA will observe during OCC onsite activity.
1.e.2	Update/streamline available dispatcher documentation	Assess effectiveness of OCC documentation for each transit line and implement technical improvements or revision to existing documentation for ease of use & awareness.	QCO, E&M, OCC	6/30/2023	7/14/2023	Action Item Approved
1.e.3	Develop additional visual aid pilots for other Light & Heavy rail lines	Utilize feedback loop from Blue Line Pilot to provide visual aid for light & heavy rail lines. Expanded pilot will include a documentation retention plan.	QCO, E&M, OCC	7/14/2023	8/7/2023	Action Item Approved



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Item 1.f Increased use of Level 3 protection for some MBTA work crews						
1.f.1	Level 3 Protection Analysis	Develop an assessment of what types of work activities currently utilize Level 3 protection (work that is <1 hour with live service) with pros & cons for other activities to be performed under Level 3 protection or the appropriate level of protection.	QCO, E&M, Operations	6/5/2023	8/7/2023	Action Item Approved
Item 1.g Additional training, qualification, and experience requirements for OCC dispatchers managing ROW access						
1.g.1	ROW Addendum Curriculum class size	Increased instructor to participant ratio to make training more effective. Ensure all of OCC attends and passes RAC training.	QCO, Training, Operations	5/15/2023	8/7/2023	Action Item Approved
1.g.2	Implement additional OCC supervisory presence & authority	Ensure that all shifts have senior supervisory presence to administer pre- shift briefings that educate high-risk operations requiring oversight, on-the-job coaching, and training. (In practice, at time of submission, Division Chief Deputy and Division Chief are scheduled on night shift to coach and train dispatchers as an interim measure while analyzing staffing needs).	QCO, OCC, E&M	4/24/23	8/7/2023	Action Item Approved <u>Note:</u> On 05/17/23, MBTA assigned the Division Chief of OCC to overnight shift at least 3 times per week. On 04/24/23, MBTA assigned the Deputy Division Chief of OCC to exclusive overnight shift to coach and train dispatchers, as well as to have leadership present to help oversee high risk activities such as adverse rail movement. MBTA also is working to ensure senior dispatchers are available to work on the overnight shifts. Additionally, on April 11, 2023, Operations implemented immediate actions within the OCC to put in place additional oversight into the night operations within OCC, conducted a safety briefing with all OCC dispatchers on recent near miss incidents, and instructed each dispatcher to log ROW access notes in their logs. FTA will observe during OCC onsite activities and ensure the OCC maintains compliance with hours-of-service requirements.
1.g.3	Existing training	Review existing training, qualifications and experience required for OCC dispatchers to manage ROW access and determine additional	QCO, Training, OCC,			Action Item Approved



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	evaluation and gap analysis	needs. Revise existing 22-6 & 7 consultant scope to prioritize training evaluation and gap analysis of ROW access management.	Operations	6/5/2023	8/7/2023	
Item 1.h Additional training and qualification for Operations and Engineering & Maintenance flaggers						
1.h.1	ROW Addendum Curriculum class size	Increase instructor to participant ratio to make training more focused and effective.	QCO, Training, Operations	5/15/2023	5/24/2023	Action Item Approved <i>Note:</i> On 04/20/23, MBTA implemented new process to submit Rosters for ROW Access 24 hours prior to accessing ROW. Engineering and Maintenance have held several safety stand downs to review the near miss incidents. All E&M forces have been required to receive ROW reinstruction in accordance with the March 24, 2023, DPU Directive and the vast majority have completed that reinstruction (all personnel are required to complete reinstruction before accessing the ROW). All personnel acting as flagpersons are also included in the ROW Addendum Compliance (RAC) training. FTA will observe training for E&M flaggers.
1.h.2	Utilize existing initiatives to increase staff capabilities	In addition to RAC training, action items associated with items 1.b, 1.c & 1.f, revise ROW checklist to include safety critical information with personnel signatory concurrence.	QCO, Operations, E&M, Training	6/5/2023	8/7/2023	Action Item Approved
Item 1.i Enhanced audits of ROW safety						
1.i.1	Work Site Hazard Analysis Documentation	Develop and implement procedures to document work site hazard analyses are completed to work commencing and the resulting requirements for protection measures.	QCO, E&M, Construction Logistics	4/20/2023	8/7/2023	Action Item Approved
1.i.2	ROW Access Verification Implementation	Develop and implement procedures to document ROW access after work is complete to document any deficiencies in ROW access protocols.	QCO, Operations, Safety	4/20/2023	8/7/2023	Action Item Approved



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1.i.3	Revise ROW Checklist	Revise ROW checklist to include safety critical information such as site/work specific hazards, sign-in record of all participating field personnel, and confirmation of ROW certification, and with personnel signatory concurrence of job and protection understanding.	QCO, Operations, E&M	6/5/2023	8/7/2023	<p>Action Item Approved</p> <p><u>Note:</u> MBTA is developing a new version of its ROW Checklist, which will more closely reflect a railroad worker safety briefing worksheet, that will prompt flaggers to check critical safety conditions with the work to be performed, work site characteristics, worker readiness with proper PPE and current ROW Certification, along with sign-off accountability by the flagger(s) and workforce accessing the ROW demonstrating their understanding of responsibility. FTA will review the ROW checklist before it is finalized.</p>
1.i.4	ROW Roster Implementation	Develop and implement procedures to document personnel planning to access the ROW 24 hours in advance.	QCO, Operations, E&M	4/20/2023	5/19/2023	<p>Action Item Approved</p> <p><u>Note:</u> FTA verifies these new procedures through review of ROW rosters submitted as part of the MBTA's daily submission and onsite checks to confirm accuracy of ROW rosters.</p>
<p>Item 1.j Changes to the Safety Rules Compliance Program to include requirements for providing feedback to workers (positive and constructive) at conclusion of each observation and collection of additional information to support understanding of the real-world conditions under which workers access the ROW</p>						
1.j.1	Revise SRCP Forms	Revise forms to include constructive feedback that supports understanding of the real-world conditions under which workers access the ROW.	QCO, E&M, Operations	4/20/2023	8/7/2023	<p>Action Item Approved</p> <p><u>Note:</u> FTA has already provided comments on these forms, which have been addressed by the MBTA. FTA will observe roll-out and implementation of this audit process. In addition, in response to FTA's IAL submission request, MBTA prepares a daily assessment of deficiency for ROW access report that is reviewed and signed by senior leadership. FTA reviews this daily submission, confirming any noted cancellations and/or deficiencies against the Night and Day Orders and event notifications.</p>