

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
(RAILWAY BOARD)**

2020/Proj./MPMRCL/DBR/30/4

New Delhi, dated 22.04.2024

**Managing Director,**  
Madhya Pradesh Metro Rail Corporation Limited (MPMRCL),  
2nd Floor, Zone-14, Bhopal Municipal Corporation,  
Smart City Building, BHEL, Govindpura,  
Near Natraj Petrol Pump, Bhopal-462023,  
Madhya Pradesh

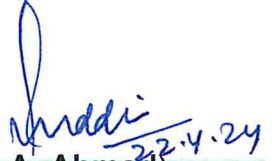
**Sub: Amendments/correction in Design Basis Report (DBR) for Bored Tunnel Section (May 2020) for Bhopal and Indore Metro Rail Projects of Madhya Pradesh Metro Rail Corporation Limited (MPMRCL).**

Ref: - (i) RDSO's letter no. UTHS/MPMRCL/BMRC/P01/112020 dated 15.03.2024  
(ii) Revised DBR uploaded on RDSO's online portal on 20.02.2024  
(iii) MPMRCL's letter no. 295/P&D/RDSO//2023 dated 07.02.2024  
(iv) Board's letter of even no. dated 29.09.2020

Ministry of Railways (Railway Board) has decided that amendment/corrections as indicated in the Advance Correction Slip No. 01 dated 22.04.2024 in Clause 8 [Point 2, Point 2(a), Point 2(b) & Point 5] of Design Basis Report (DBR) for Bored Tunnel Section (May 2020) for Bhopal and Indore Metro Rail Projects of Madhya Pradesh Metro Rail Corporation Limited (MPMRCL) be made.

It has the approval of the Competent Authority.

Encl: ACS No. 01 (As Annexure)



(F. A. Ahmad)

Director/Gati Shakti (Civil)-IV  
Railway Board

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Copy to:

- (i) **Executive Director/UTHS**, RDSO, Manak Nagar, Lucknow w.r.t letter No. UTHS/MPMRCL/BMRC/P01/112020 dated 15.03.2024
- (ii) **OSD/UT & Ex-Officio Joint Secretary**, Ministry of Housing & Urban Affairs (MoHUA), Nirman Bhavan, New Delhi-110001

**ADVANCE CORRECTION SLIP TO DESIGN BASIS REPORT (DBR) FOR BORED TUNNEL SECTION (MAY 2020) FOR BHOPAL AND INDORE METRO RAIL PROJECTS OF MADHYA PRADESH METRO RAIL CORPORATION LIMITED (MPMRCL)**

ADVANCE CORRECTION SLIP NO. 01 DATED 22.04.2024

Clause No.	Existing Para	Proposed Para
Clause 8: Point 2 (Page no. 14)	Passenger emergency evacuation design for cross-passages between running tunnels, which are constructed by either cut-and-cover or bored tunnel, shall comply with NFPA -130 — 2010 for fixing guide-way transit and passenger Rail system as follows;	Passenger emergency evacuation design for cross-passages between running tunnels, which are constructed by either cut-and-cover or bored tunnel, shall comply with NBC (Latest Revision & Amendments) as follows:
Clause 8: Point 2 (a) (Page no. 14)	In single-track tunnels, the distance from the end of a station to a tunnel shaft to the surface shall not exceed 762 meters. Cross-passages shall be permitted to be used in lieu of emergency exit stairways to the surface where train ways are located within separate structures.	Within enclosed trainways, the maximum distance between emergency exits/exit stairways shall not exceed 750m in compliance with NBC 2016 Cl. K-4.1.3 (Latest Revision & Amendments). Cross-passages shall be permitted to be used in lieu of emergency exit stairways to the surface where train ways are located within separate structures.
Clause 8: Point 2(b) (Page no. 14)	The distance between cross-passages in the tunnel shall comply with NFPA 130 - 2010 clause 6.2.2.3.2.	The distance between cross-passages in the tunnel shall comply with NBC 2016 (Latest Revision and Amendments). First cross-passageway shall be provided not farther than 500m from the end of platform of an enclosed station or from the tunnel portal or from a mid-tunnel exit-way in compliance with NBC 2016 Cl. K-4.1.5(a). Distance between any two cross-passageways shall not be more than 250m in compliance with NBC 2016 Cl. K-4.1.5 (b)
Clause 8: Point 5 (Page no. 14)	A concrete bulkhead fitted with a steel door and frame shall be constructed to isolate the cross-passage from each running tunnel. This door shall be self-latching, have a fire resistance of 2 hours minimum and shall be capable of withstanding the maximum differential pressures on either side created by the passage of trains. The maximum force to open the door shall comply with NFPA 130 -2010 clause 6.2.2.4.2.	A concrete bulkhead fitted with a steel door and frame shall be constructed to isolate the cross-passage from each running tunnel. Cross - passageways shall be separated from each trainway with separate self-closing door assemblies having a fire protection rating of minimum 120 minutes, and shall be adequate to withstand positive and negative pressures caused by passing trains and the emergency ventilation system. The maximum force to open the door shall comply with NBC 2016 Cl. K-4.3.1 (e). (Latest Revision & Amendments).

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