भारतसरकार (GOVERNMENT OF INDIA) रेल मंत्रालय (MINISTRY OF RAILWAYS) रेलवे बोर्ड (RAILWAY BOARD)

No. 2015/CE-II/TK/14

New Delhi, dated 11.12.2024

Principal Chief Engineer, All Zonal Railways.

Sub: Yard Drainage Plan

Ref: (i) This office's L.No. 2015/CE-II/TK/14 dated 06.06.2024

- (ii) This office's L.No.2024/CE-II/TK/Track Tolerance dated 28.10.2024
- (iii) This office's L.No.2024/CE-II/TK/Track Tolerance dated 30.10.2024
- 1. Having proper & designed yard drainage covering complete yard is one of the most important factors for longevity of track renewal and maintenance works. Instructions are issued regularly by various levels, recent one issued vide para 13 of letter under reference (i) above.
- 2. ACS-12 to IRWM-2000 has also been issued in Aug-2024, adding detailed stipulations regarding Yard Drainage System and its design.
- 3. Instructions for track maintenance upgradation of passengers and goods loop lines have been issued vide letters under reference (ii) & (iii). An Umbrella work named "Yard Improvement & Upgradation over IR" has also been sanctioned in 2024-25 to achieve prescribed track maintenance standards. But to retain such track parameters, it is required to drain out complete water from yard through properly designed, constructed and maintained drainage network. Plan of such drainage network may be called as 'Yard Drainage Plan'.
- 4. Yard Drainage Plan for each yard may be developed after carrying out detailed survey using state-of-the-art survey equipments including LiDAR. The following should be kept in mind while developing Yard Drainage Plans:
 - i. Complete yard will be covered in planning. In big yards, plan for passenger running lines may be separated from goods running lines if drainage system of both parts can work independently.
 - ii. Thorough and detailed orthographic 3D mapping of yards through drone/total station/ LiDAR or any other suitable means is to be done for planning.
 - iii. Yard Drainage Plan will have the complete Ground Level and Invert Level of each drain. It will have complete details of each drain like size, flow of direction, Q_{max}, covered/open etc.
 - iv. Yard drainage should be connected to city drainage network and it should be shown in Plan.
 - v. Plan should show all type of drains whether open (kuchcha/pucca), covered, underground etc. for existing as well as planned/ proposed ones.
 - vi. Plan should cover the maintenance practices to be followed for cleaning of drains.
 - vii. Plan should be examined and approved by CTE.

5. Necessary facility will be made available in TMS to upload the latest 'Yard Drainage Plan' on the similar lines of ESP.

This is issued with the approval of Add. Member/Civil Engg.

Director, Civil Engg. (Plg.), Railway Board

Copy: CPD/TMS/NR for kind information and necessary action please.