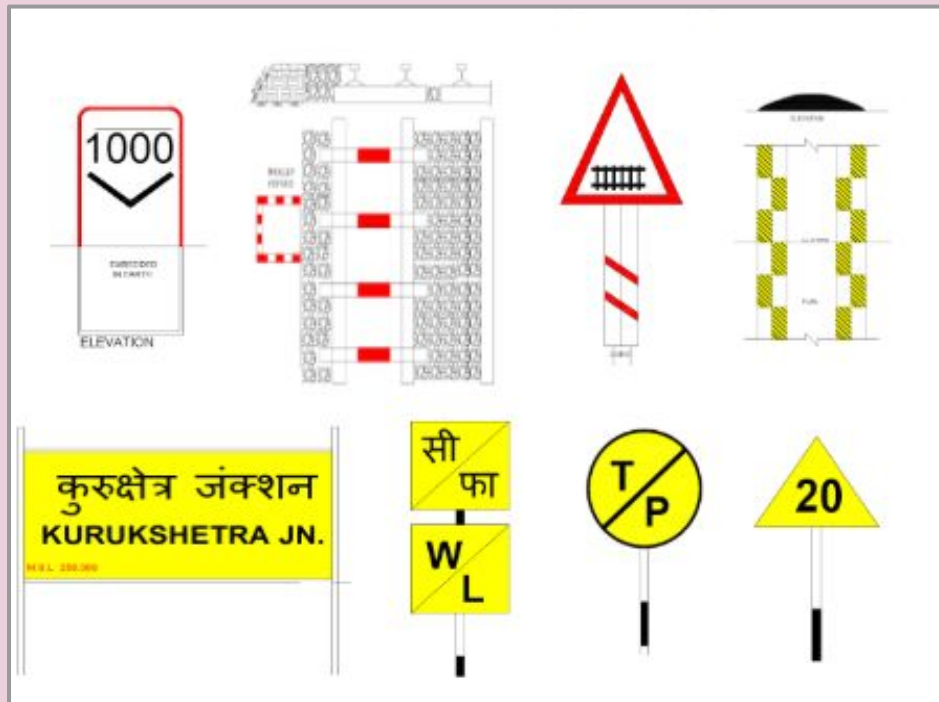


Trackside Indicator Boards & Signages



June 2020

Northern Railway Construction Organisation
Kashmere Gate, Delhi-06



विश्वेश चौबे
Vishwesh Chaube



सदस्य इंजीनियरिंग, रेलवे बोर्ड
और पदेन सचिव,
भारत सरकार
रेल मंत्रालय
रेल भवन, नई दिल्ली-110001

MEMBER ENGINEERING, RAILWAY BOARD
&
EX-OFFICIO SECRETARY,
GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAIL BHAVAN, NEW DELHI-110001



MESSAGE

Signage, boards and marker posts along track play a very important role in operation and maintenance. They also serve as important guide to the field officials in their working. It is important that signage and boards are fixed in a standard manner so that the crew, maintenance staff, etc. notice them in a predictable manner.

I am happy to note that Northern Railway Construction is bringing out a handbook on "Trackside Indicator Boards & Signages" where all the track side indicators boards, posts, tablets, name boards etc. have been put in one place as a ready reference to railway engineers in the field. I am sure this book will prove a handy and useful tool for the field engineers for maintaining standards in this regard.

I congratulate Sri A. K. Lahoti, CAO/C, Northern Railway and his team of officers for this effort and wish them all success in their endeavors of maintaining high standards while building infrastructure.

(Vishwesh Chaube)
MEMBER ENGINEERING

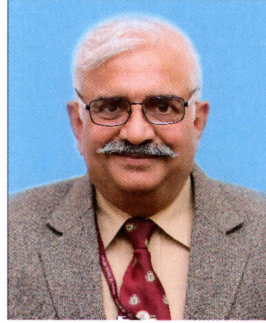
Dated : 26.06.2020



राजीव चौधरी
महाप्रबन्धक
Rajiv Chaudhry
General Manager



उत्तर रेलवे
बड़ौदा हाऊस, नई दिल्ली-110001
NORTHERN RAILWAY
BARODA HOUSE, NEW DELHI-110001
☎ : 011-23387227 & 23384548 (Off.)
011-23384503 (Fax)



MESSAGE

Robust infrastructure is the backbone of a safe, reliable and efficient transportation network. Maintaining requisite standards while building and maintaining the infrastructure is vital to meet this goal. Signage, information boards and marker posts along track play an important role in safe operation and providing necessary information to the staff working in field. Such signage, boards, etc. must be provided to standards for the convenience of the operation and maintenance staff. Maintaining the standards also adds to aesthetics in infrastructure.

I am happy to note that Northern Railway Construction is bringing out a handbook "Trackside Indicator Boards & Signages" which is a compilation of up to date instructions in this regard from various manuals, circulars and drawings. The information on the subject in pictorial form has been put in one place as a ready reference to field engineers. I am sure this book will be a useful tool for the field engineers in maintaining the standards.

I congratulate the team of officers of Northern Railway Construction Organization for bringing out this handbook and convey my best wishes for their endeavour.

(Rajiv Chaudhry)

NEW DELHI.
29.06.2020.



उत्तर रेलवे
NORTHERN RAILWAY

अनिल कुमार लाहोटी
ANIL KUMAR LAHOTI

मुख्य प्रशासनिक अधिकारी
(निर्माण)
कश्मीरी गेट, दिल्ली-6
CHIEF ADMINISTRATIVE OFFICER
(CONSTRUCTION)
KASHMERE GATE, DELHI - 6



FOREWORD

Various types of indicator boards/signage and marker posts are required to be fixed along the track to inform/warn train drivers, road users and Railway's infrastructure maintenance staff of the track features, proximity to works sites, level crossings, bridges, etc.

Indian Railway Permanent Way Manual, Works Manual, Bridge Manual, various drawings of RDSO and Zonal Railway provide details and standards of these signage, boards, posts, etc. However, these are not readily available at one place. Absence of such ready reference often leads to non-standard practices in field.

A need was therefore being felt to provide a ready reference booklet to field officials containing the standards of all indicator boards/signage with dimensional sketches in one place. This would make available the required technical information of standards in this regard in one booklet for Engineers in field.

I compliment Sri P. K. Sharma, CE/C/Spl, Sri Shiv Om Dwivedi, DyCE/C-II/CSB, Sri Harpal Singh, XEN/C-II/CSB and Sri Vikas Meena, SSE/Drg/CSB for the effort made to compile all indicator boards/signage and posts in one booklet with sufficient details so that uniformity is maintained in construction projects of Northern Railway.

I am sure that the booklet will be very useful for the field engineers for maintaining standards. The suggestions for improvement may be sent to CEC/Spl, Northern Railway.

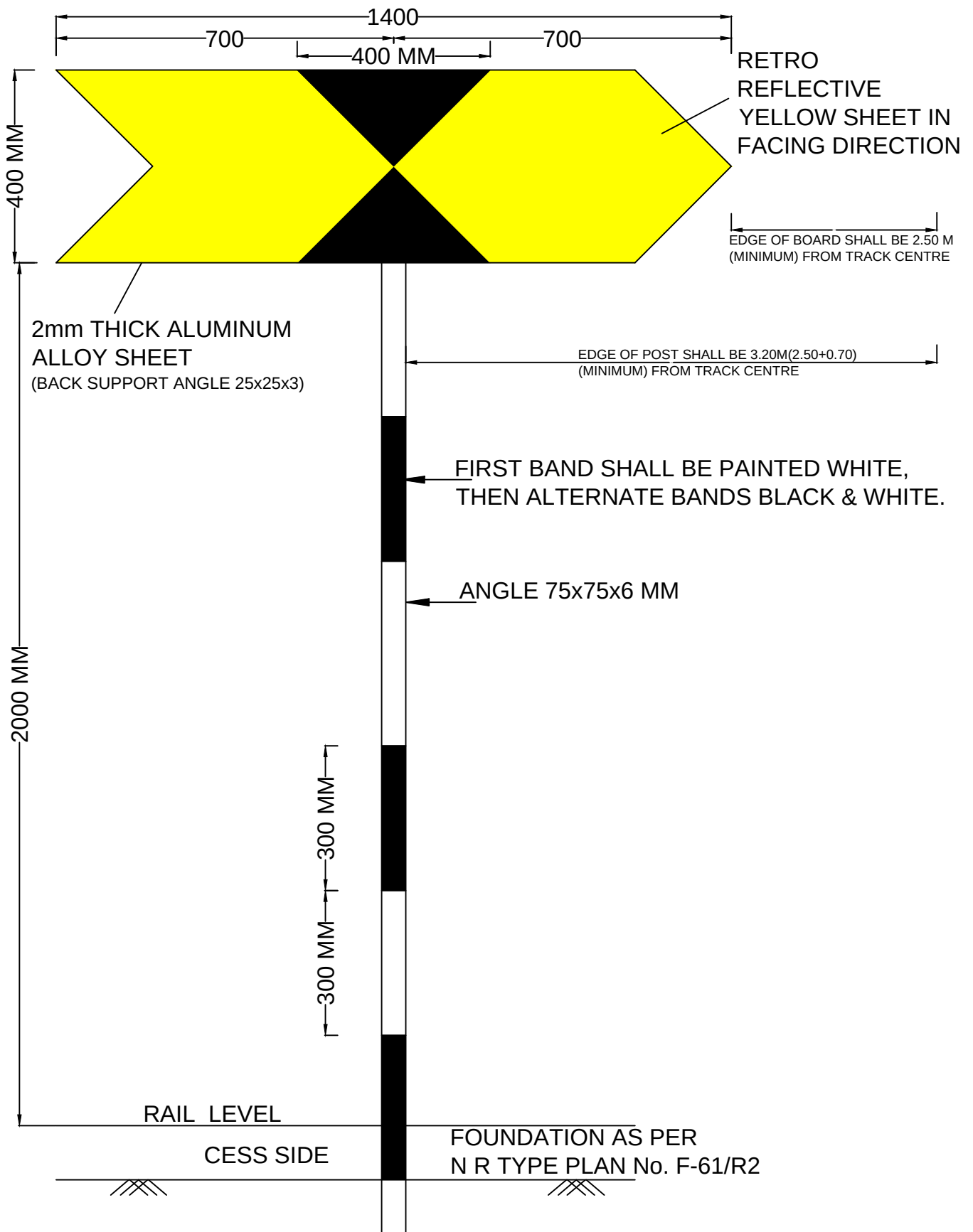
Anil Kumar Lahoti
Chief Administrative Officer/Con
Northern Railway

Kashmere Gate, Delhi
June'2020

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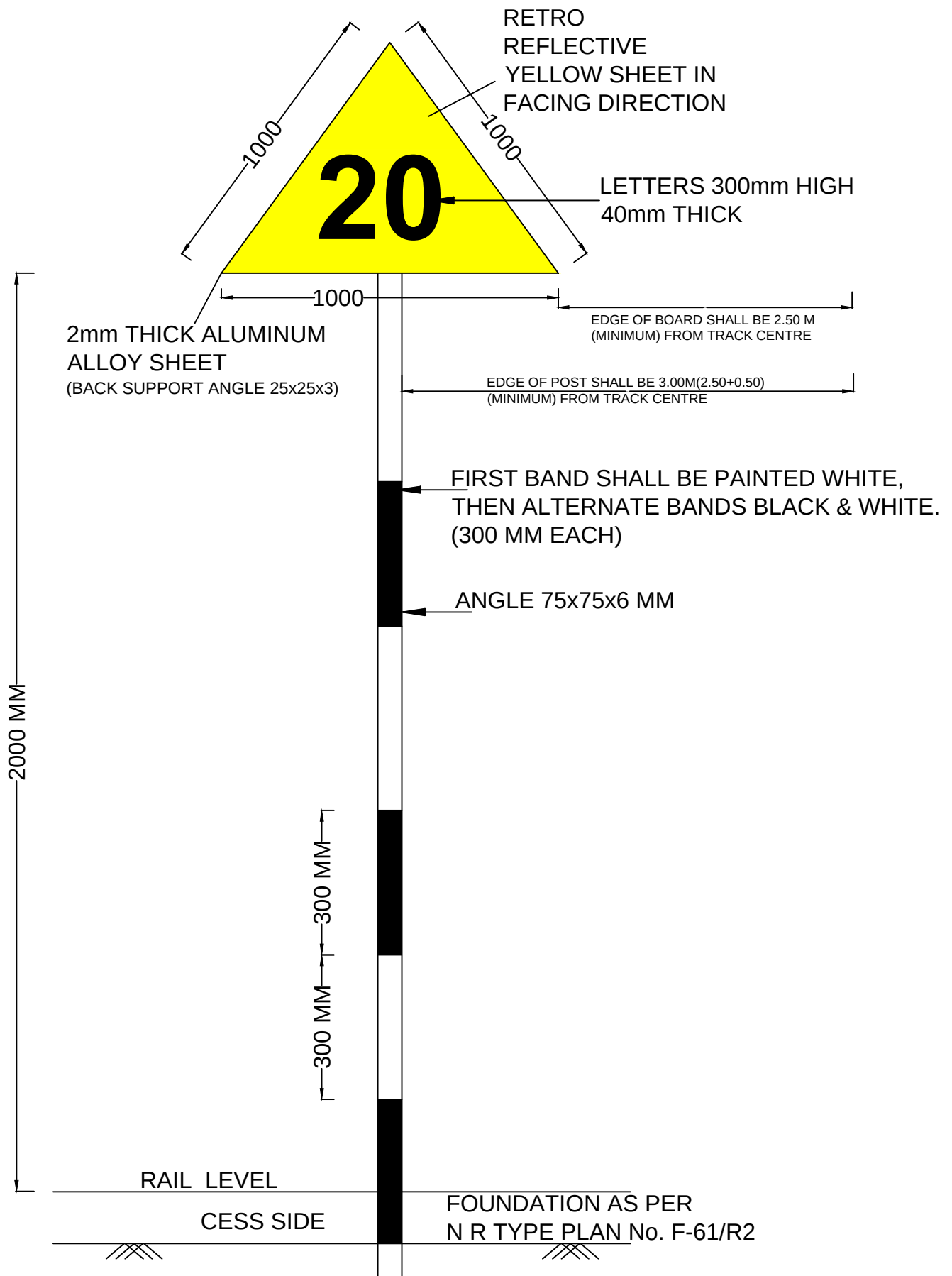
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2	Speed Indicator Board	<u>2</u>
3	Stop Indicator Board	<u>3</u>
4	Termination Indicator Board for Passengers Train	<u>4</u>
5	Termination Indicator Board for Goods Train	<u>5</u>
6	Stop Disc	<u>6</u>
7	Whistle Board for Curve/Cutting/Tunnel	<u>7</u>
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CAUTION INDICATOR



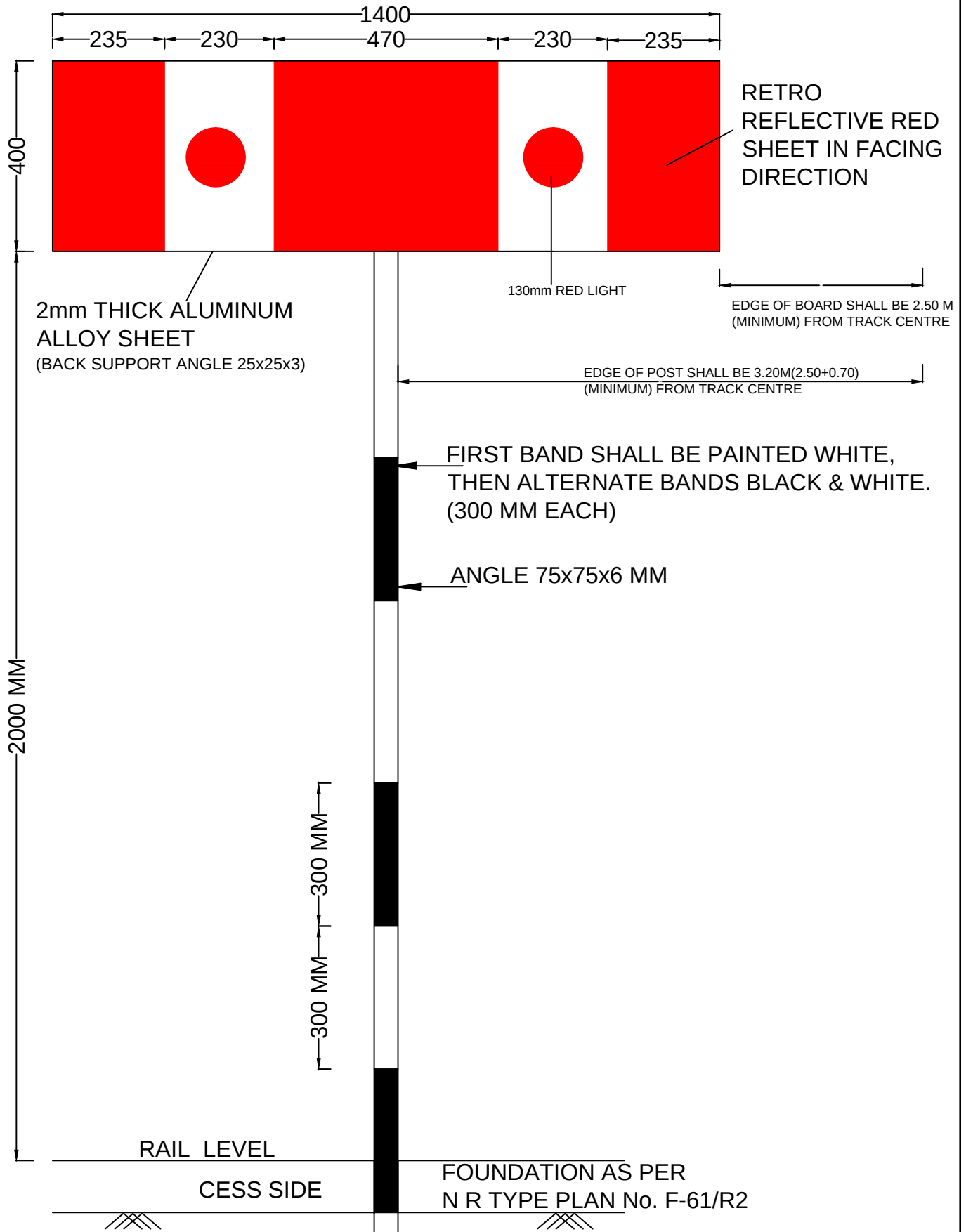
REF.: IRPWM PARA 807 & 808 ANNEXURE 8/4

SPEED INDICATOR



REF.: IRPWM PARA 807 & 808 ANNEXURE 8/4

STOP INDICATOR



REF.: IRPWM PARA 807 & 808 ANNEXURE 8/4

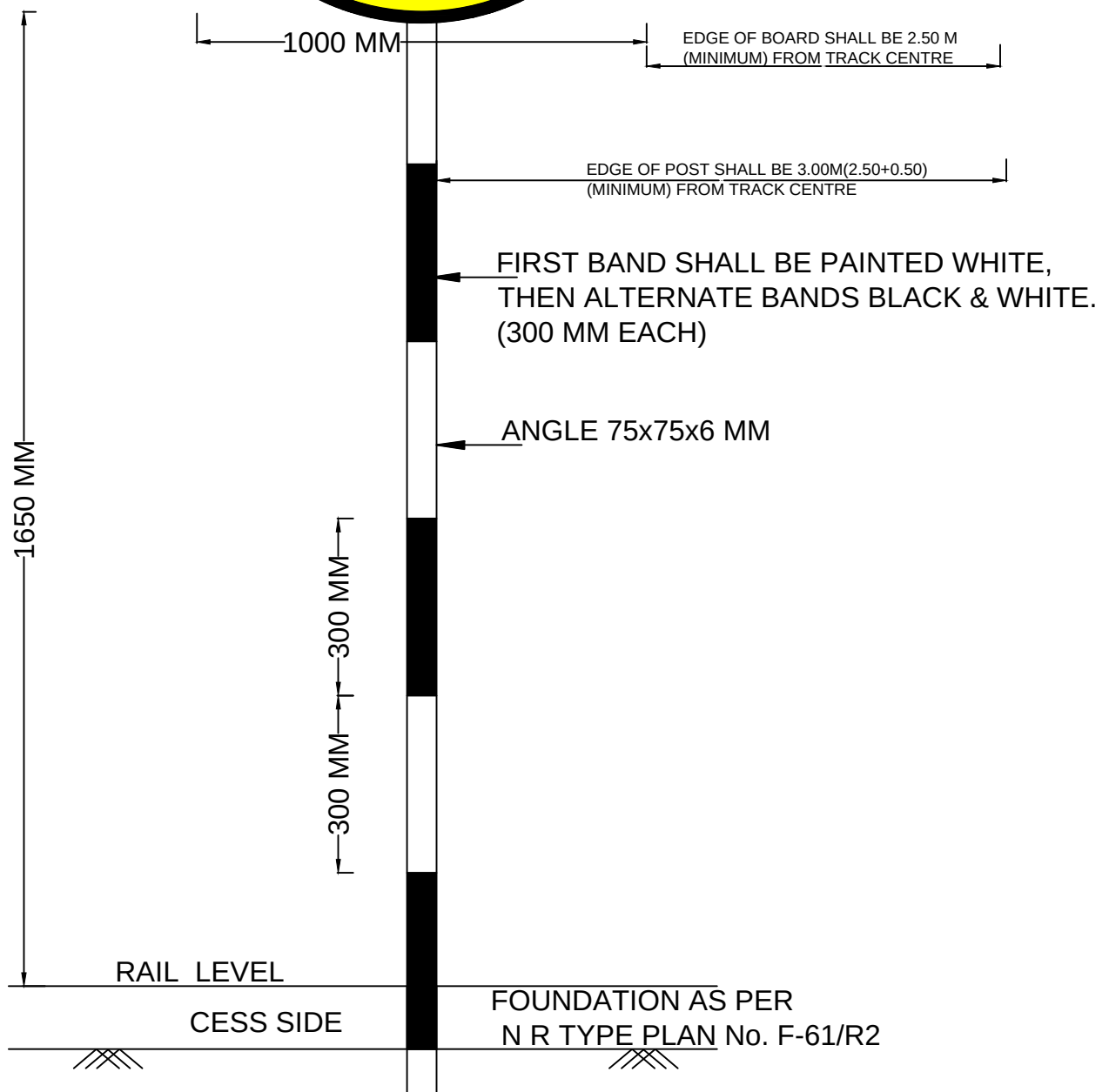
TERMINATION INDICATOR FOR PASSENGER TRAINS

2mm THICK ALUMINUM
ALLOY SHEET
(BACK SUPPORT ANGLE 25x25x3)

RETRO REFLECTIVE
YELLOW SHEET IN
FACING DIRECTION

25 MM BLACK BAND

LETTERS 250mm HIGH
40mm THICK



REF.: IRPWM PARA 807 & 808 ANNEXURE 8/4

TERMINATION INDICATOR FOR GOODS TRAINS

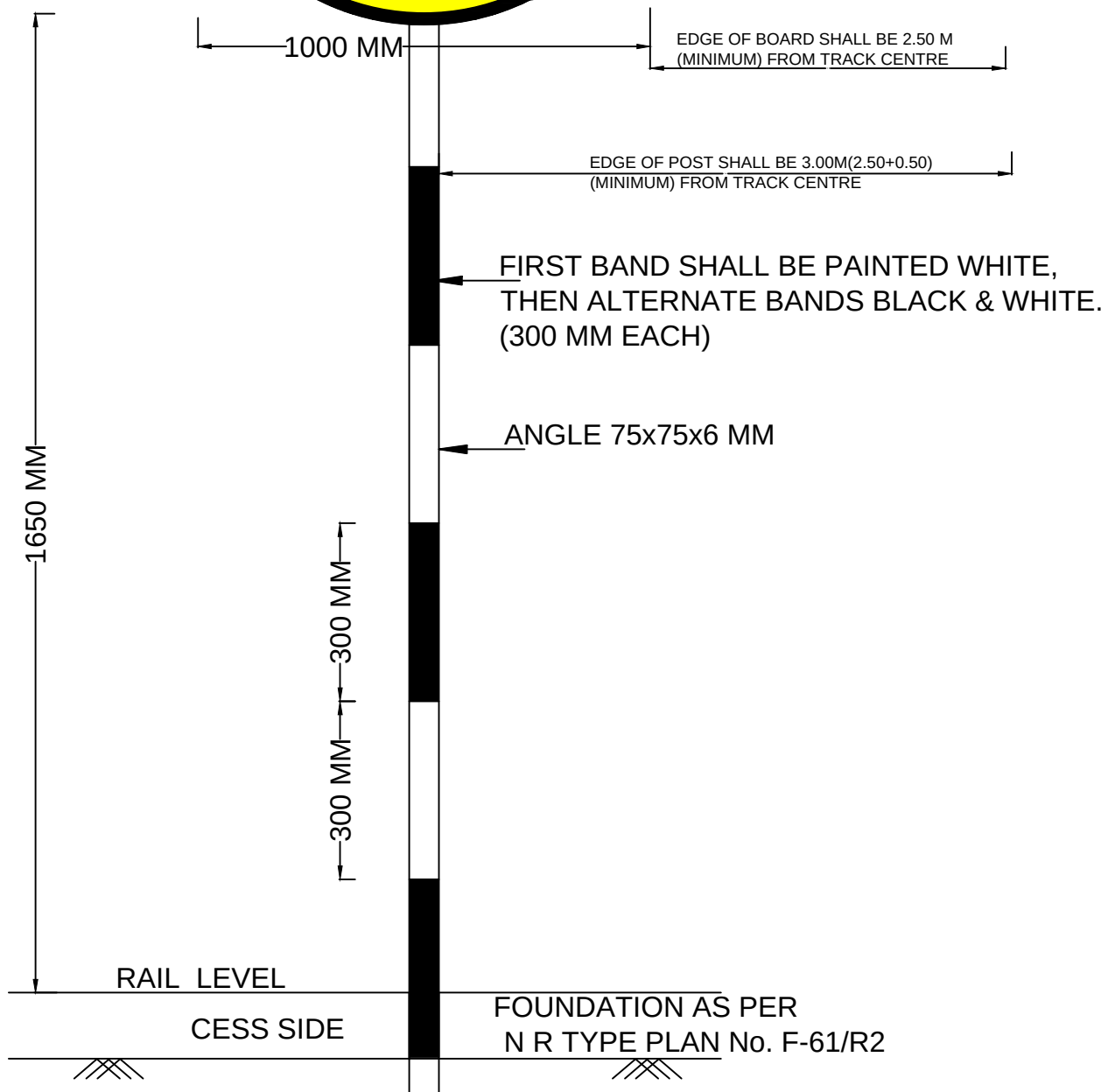
2mm THICK ALUMINUM
ALLOY SHEET

(BACK SUPPORT ANGLE 25x25x3)

RETRO REFLECTIVE
YELLOW SHEET IN
FACING DIRECTION

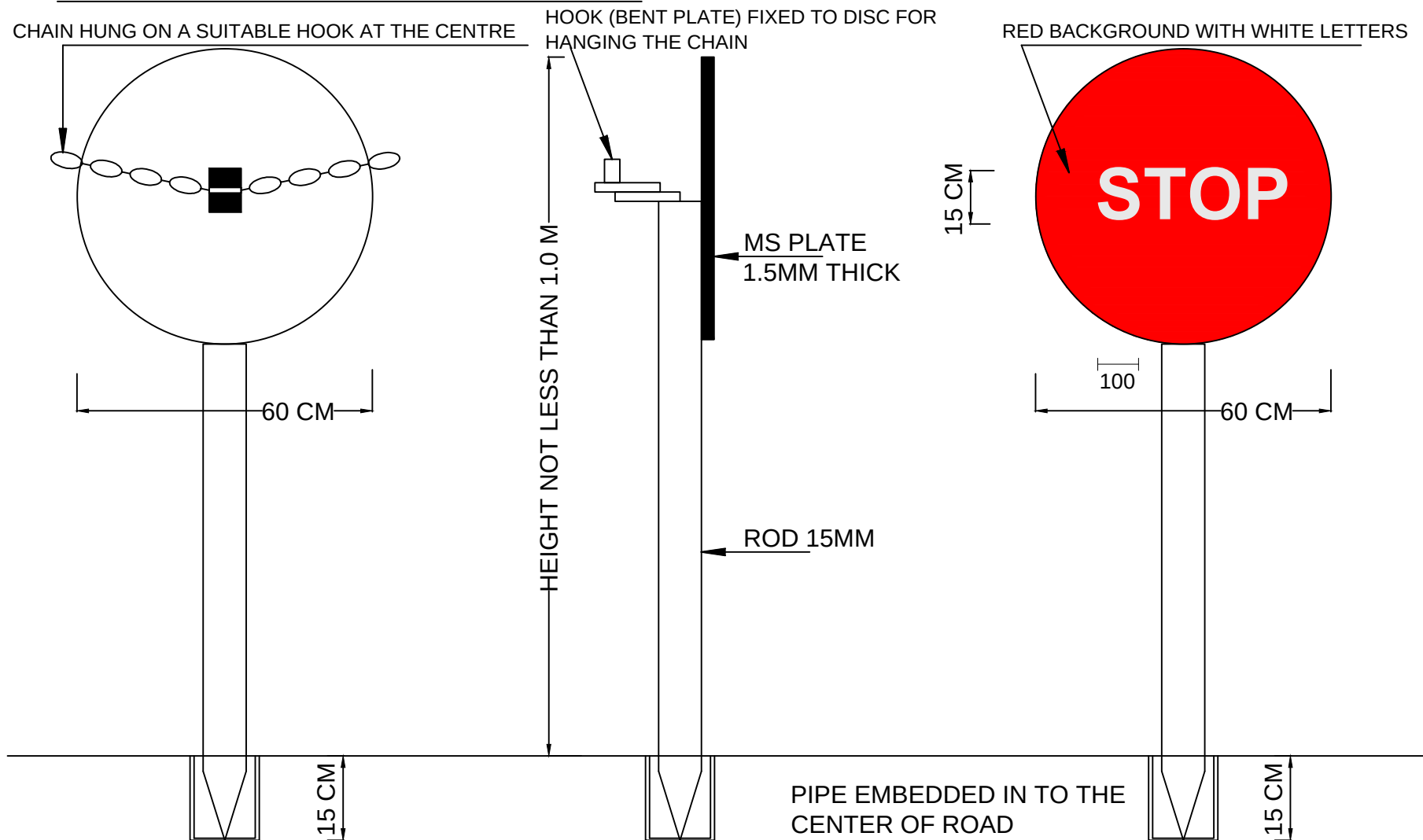
25 MM BLACK BAND

LETTERS 250mm HIGH
40mm THICK



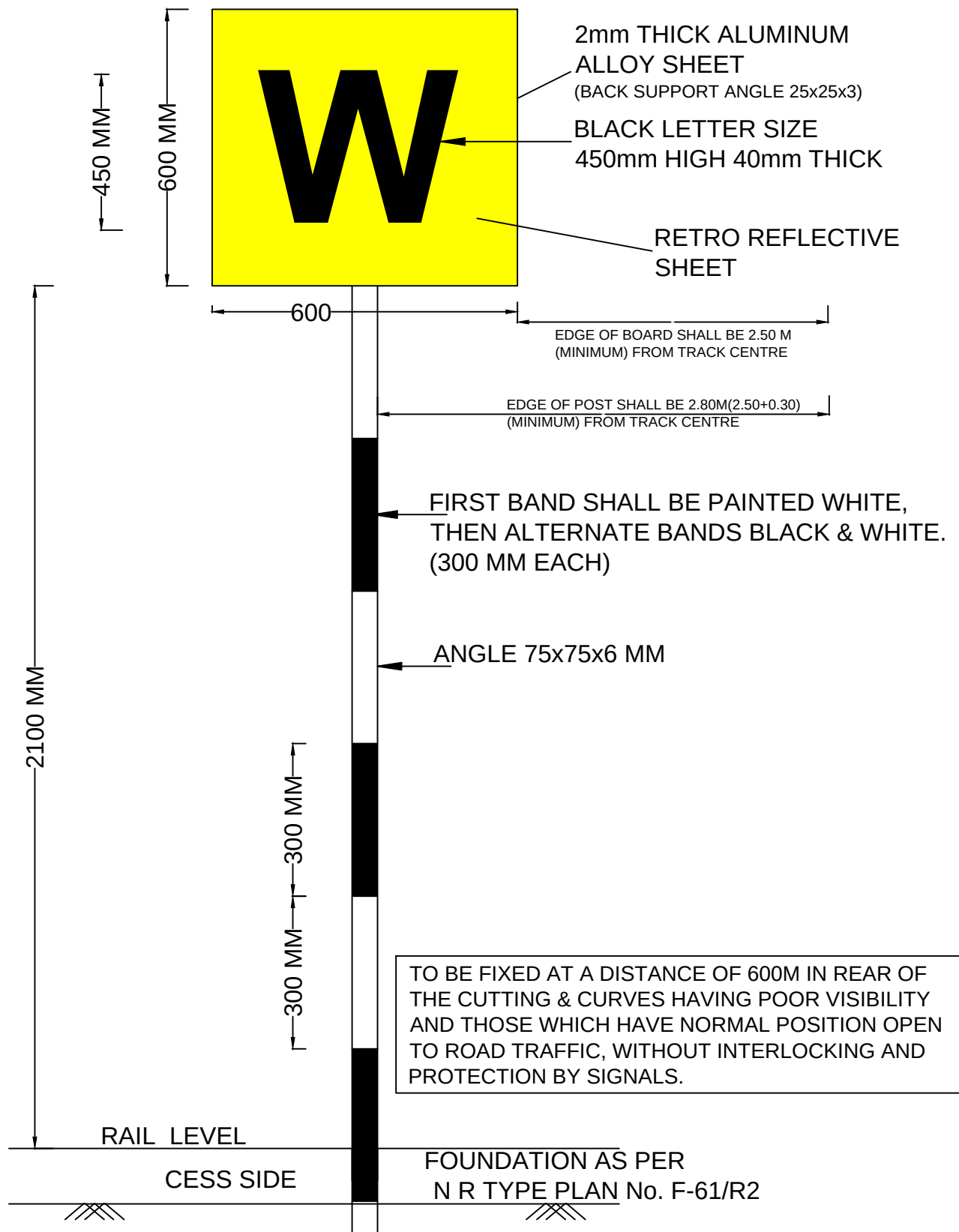
REF.: IRPWM PARA 807 & 808 ANNEXURE 8/4

DETAILS OF STOP DISC TO BE PROVIDED ALONG WITH SAFETY CHAIN AT MANNED L-XINGS



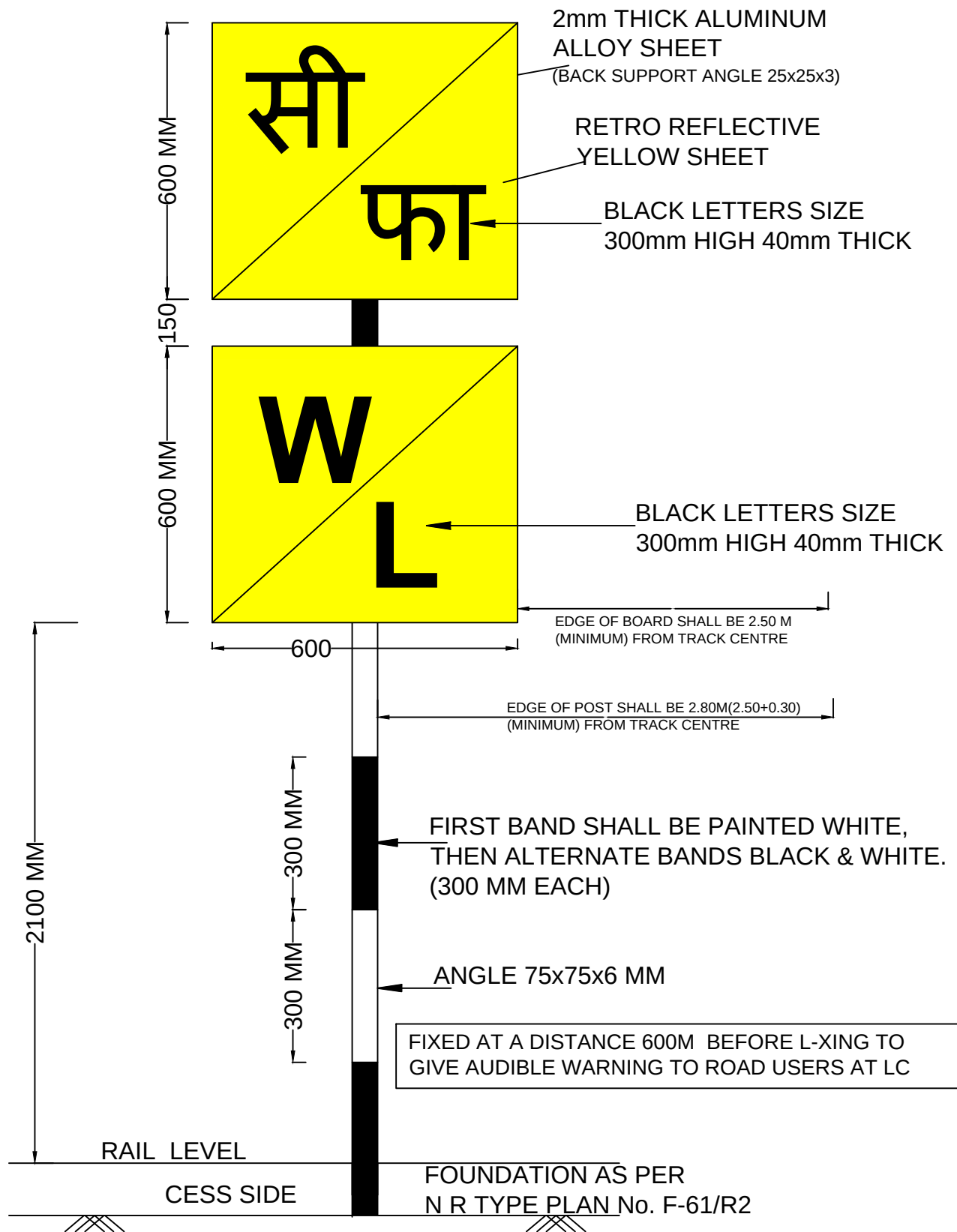
REF.:- IRPWM PARA 905 AND ANNEXURE 9/2

WHISTLE BOARD FOR CURVES/CUTTINGS/TUNNELS



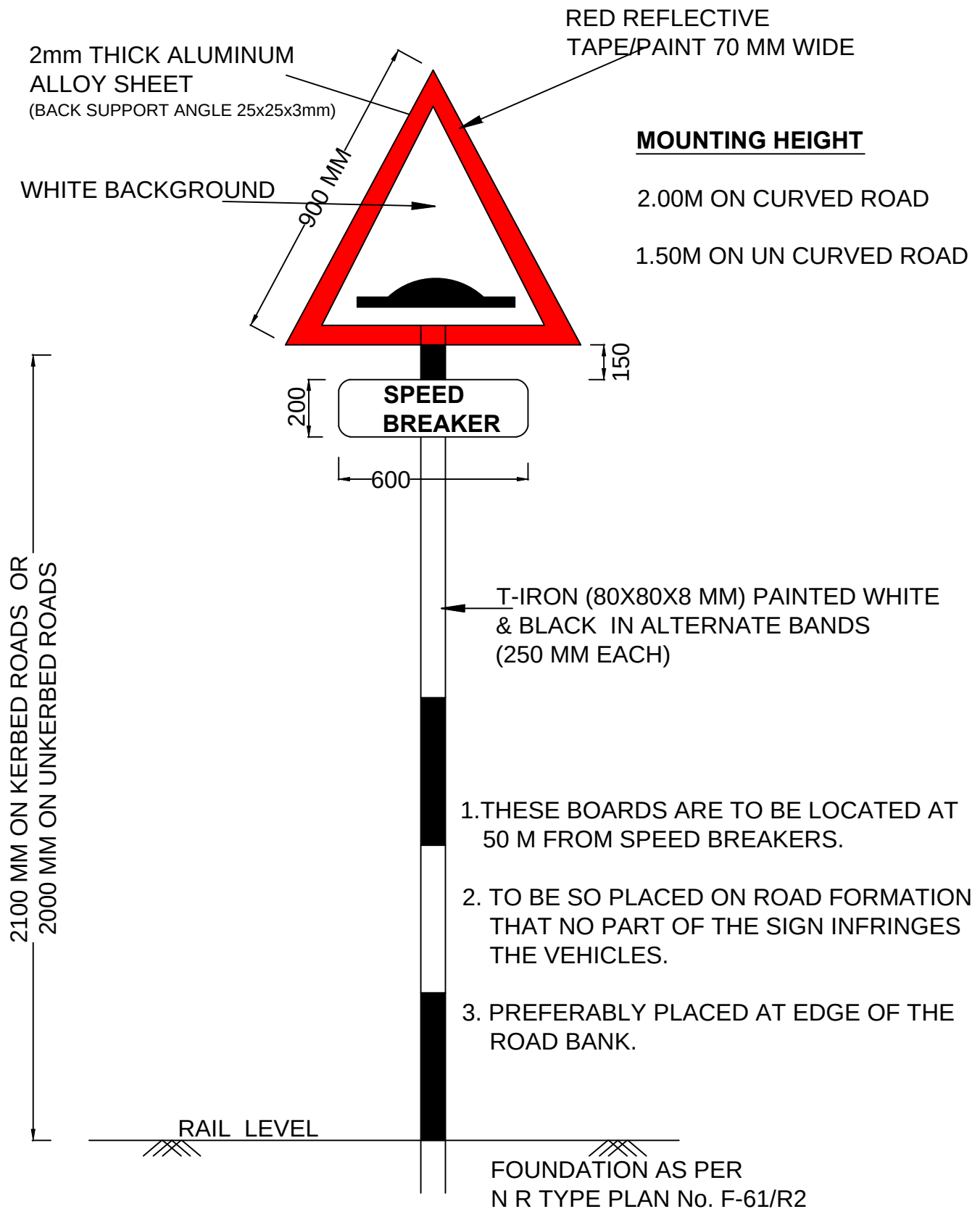
REF.:- IRPWM PARA 916(1)

WHISTLE BOARD FOR LEVEL CROSSINGS



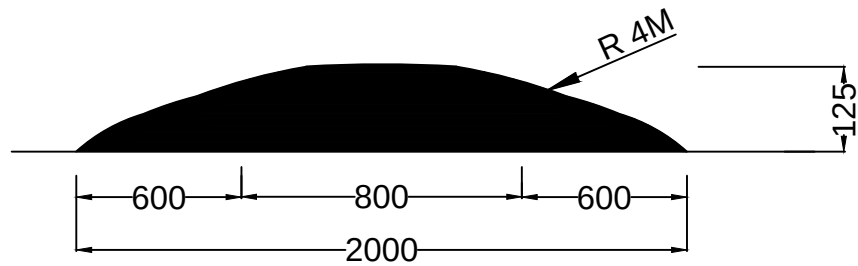
REF.: IRPWM PARA 916/1 ANNEXURE 9/5

WARNING SIGN BOARD FOR SPEED BREAKER



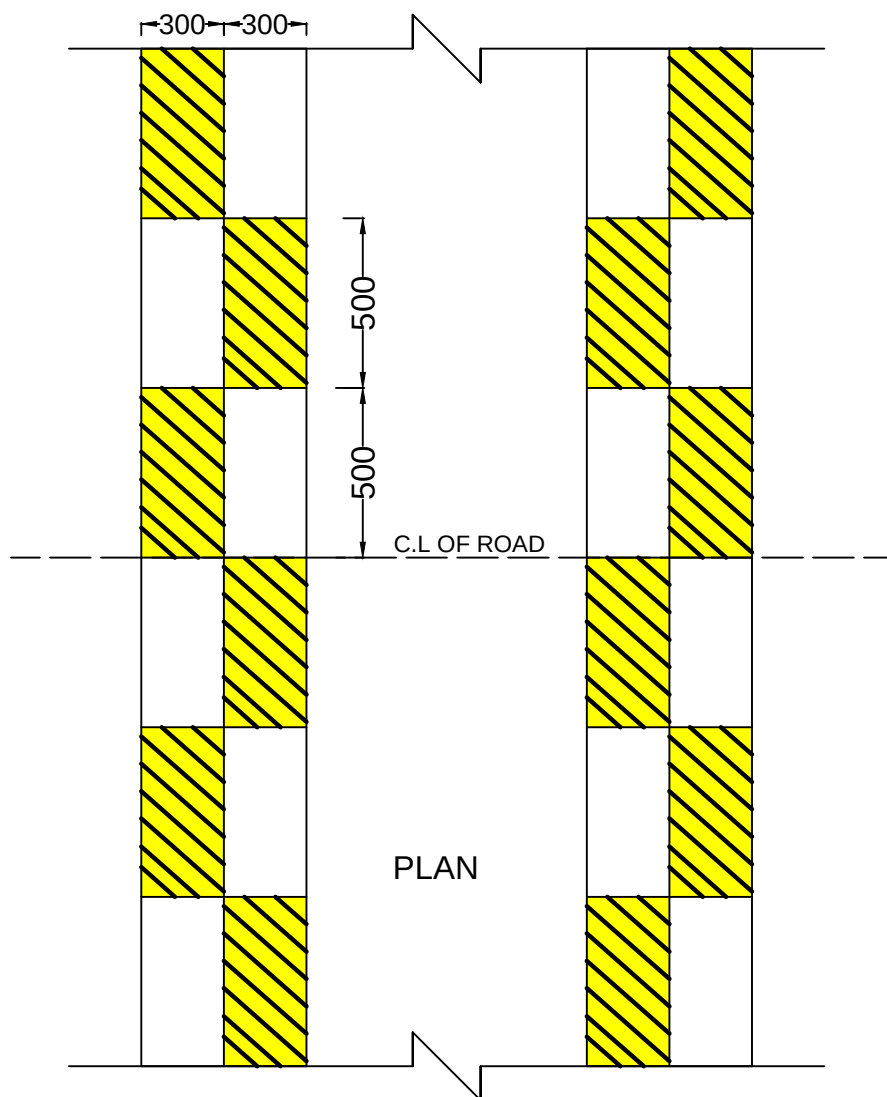
REF.: IRPWM PARA 918/2 AND ANNEXURE 9/7

STANDARD SPEED BREAKER



ELEVATION

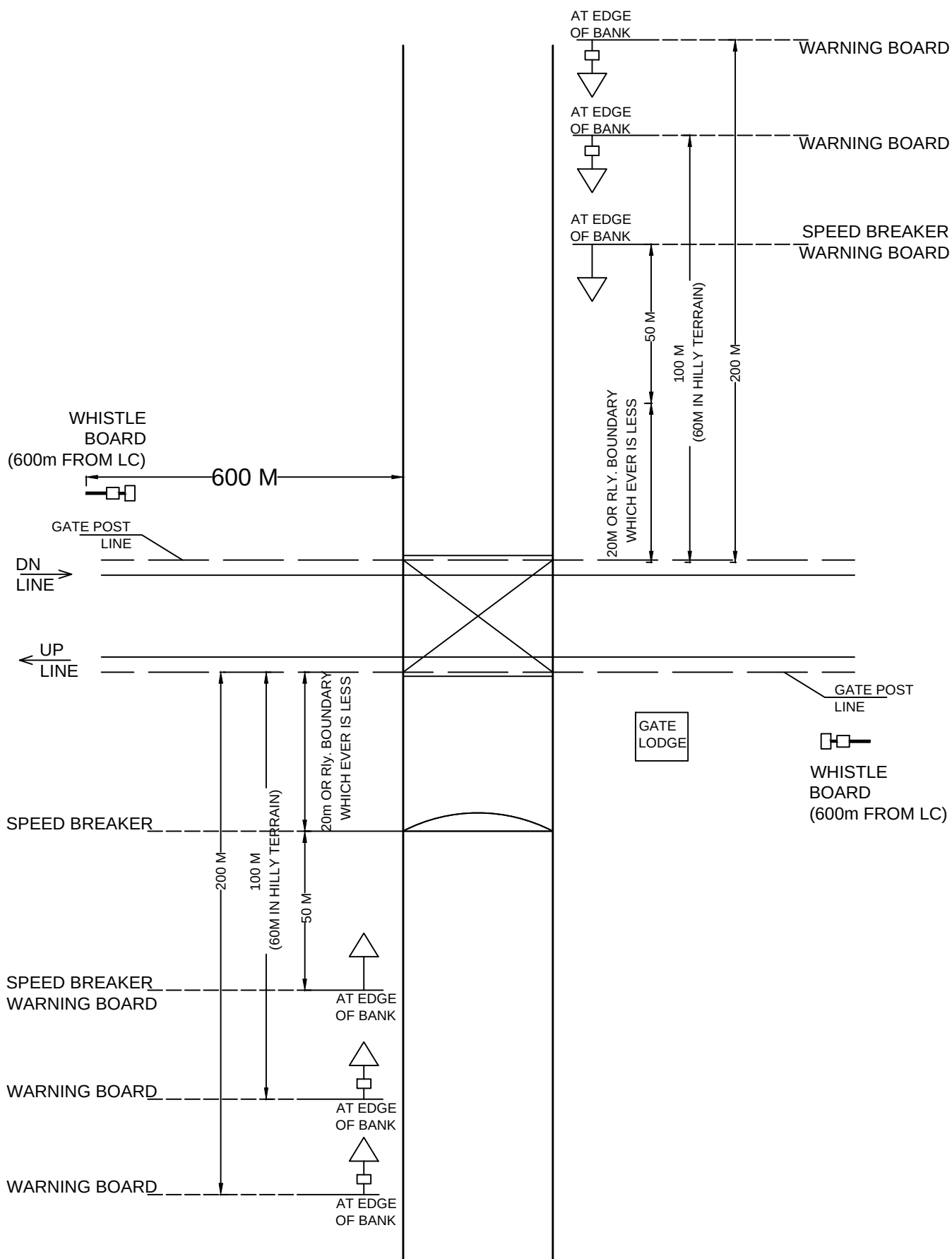
ALL DIMENSIONS ARE IN MM.



HUMP SHOULD EXTEND TO THE FULL ROADWAY WIDTH APPROPRIATE BASE COARSE MATERIAL SHOULD BE EXTENDED OVER THE SHOULDERS FOR PLACING THE HUMPS OVER THESE.

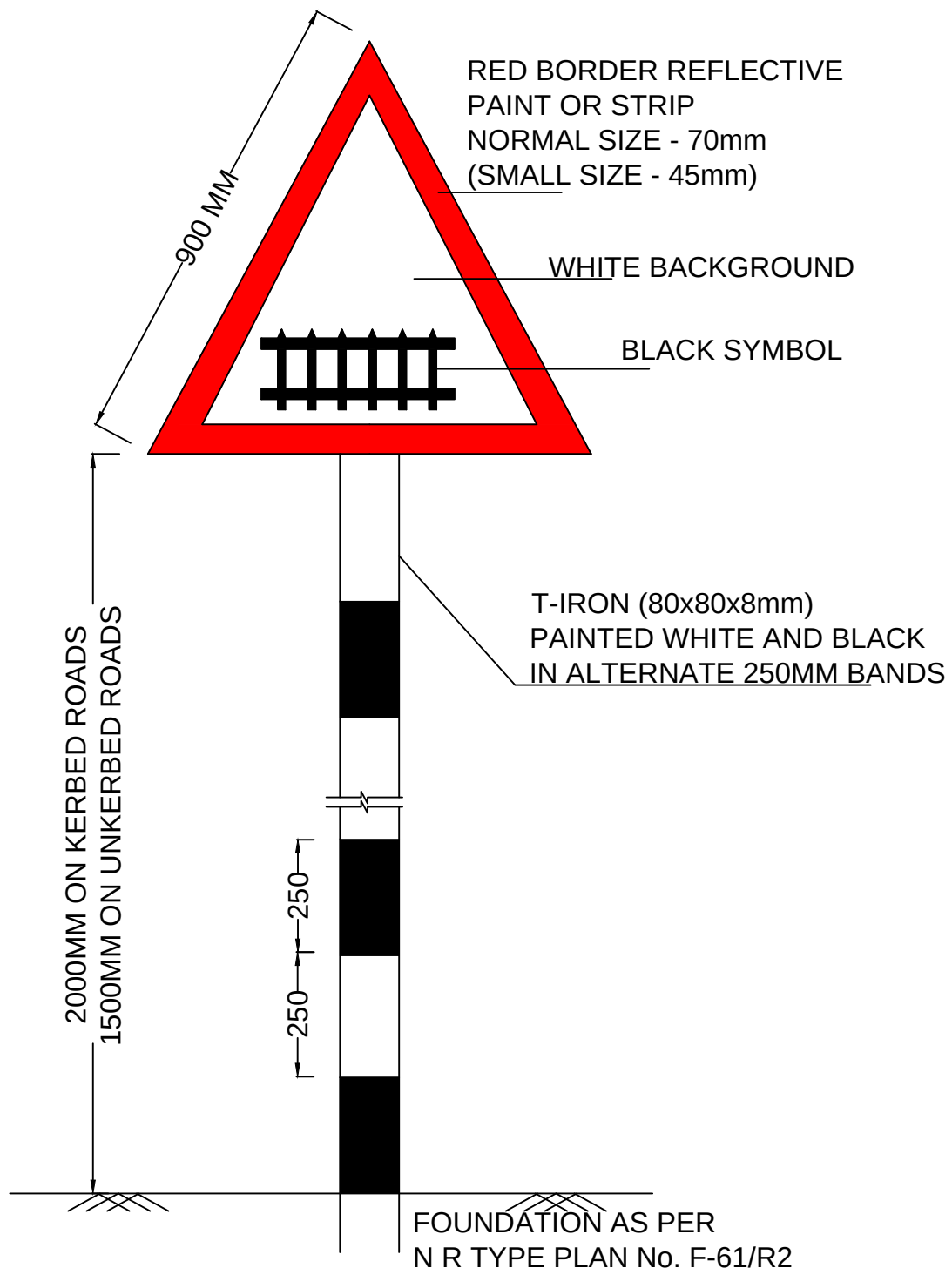
REF.: IRPWM PARA 918/1 AND ANNEXURE 9/6

MANNED L-XING SCHEMATIC DIAGRAM



REF.: N R CE CIRCULAR No. 266

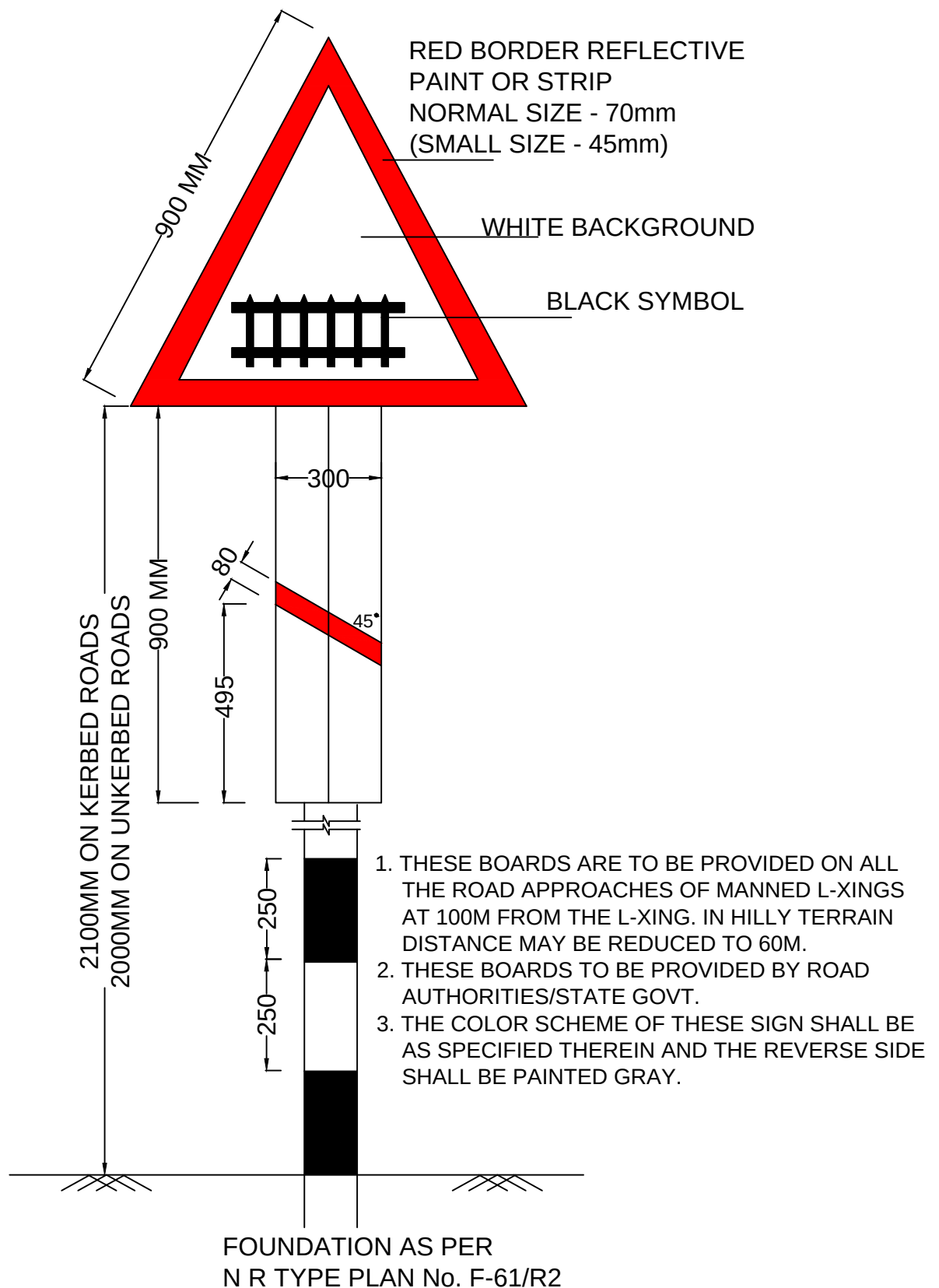
WARNING SIGN TO BE PROVIDED ON ROAD APPROACHES OF ALL MANNED L-XINGS



1. TO BE SO PLACED ON ROAD FORMATION THAT NO PART OF THE SIGN INFRINGES THE VEHICLES.
2. THESE BOARDS ARE TO BE LOCATED AT 100M FROM GATE POSTS.
3. THE BOARDS IS TO BE PROVIDED BY RAILWAYS AS INTERIM SAFETY MEASURE, ONLY TILL SUCH TIME THAT WARNING BOARDS ARE PROVIDED BY ROAD AUTHORITIES / STATE GOVT.
4. THE COLOR SCHEME OF THESE SIGNS SHALL BE AS SPECIFIED THEREIN AND THE REVERSE SIDE SHALL BE PAINTED GRAY.
5. THE POSTS OF ALL THESE SIGNS SHALL BE PAINTED IN 250MM WIDE BANDS, ALTERNATIVELY BLACK AND WHITE AND THE LOWEST BAND TO THE GROUND SHALL BE BLACK.

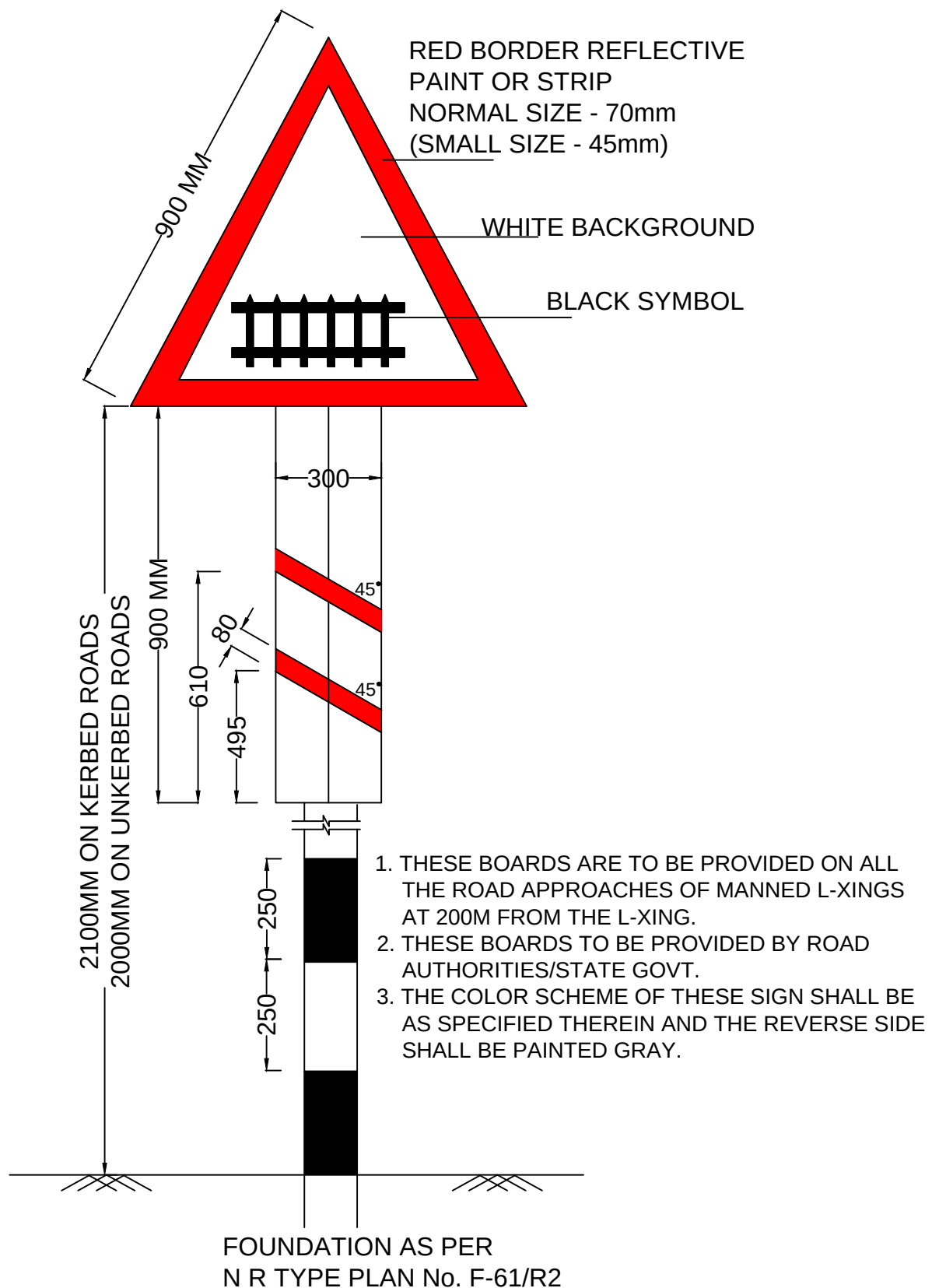
REF.:- N R CE CIRCULAR No. 266

WARNING SIGN TO BE PROVIDED ON ROAD APPROACHES OF ALL MANNED L-XINGS



REF.:- N R CE CIRCULAR No. 266

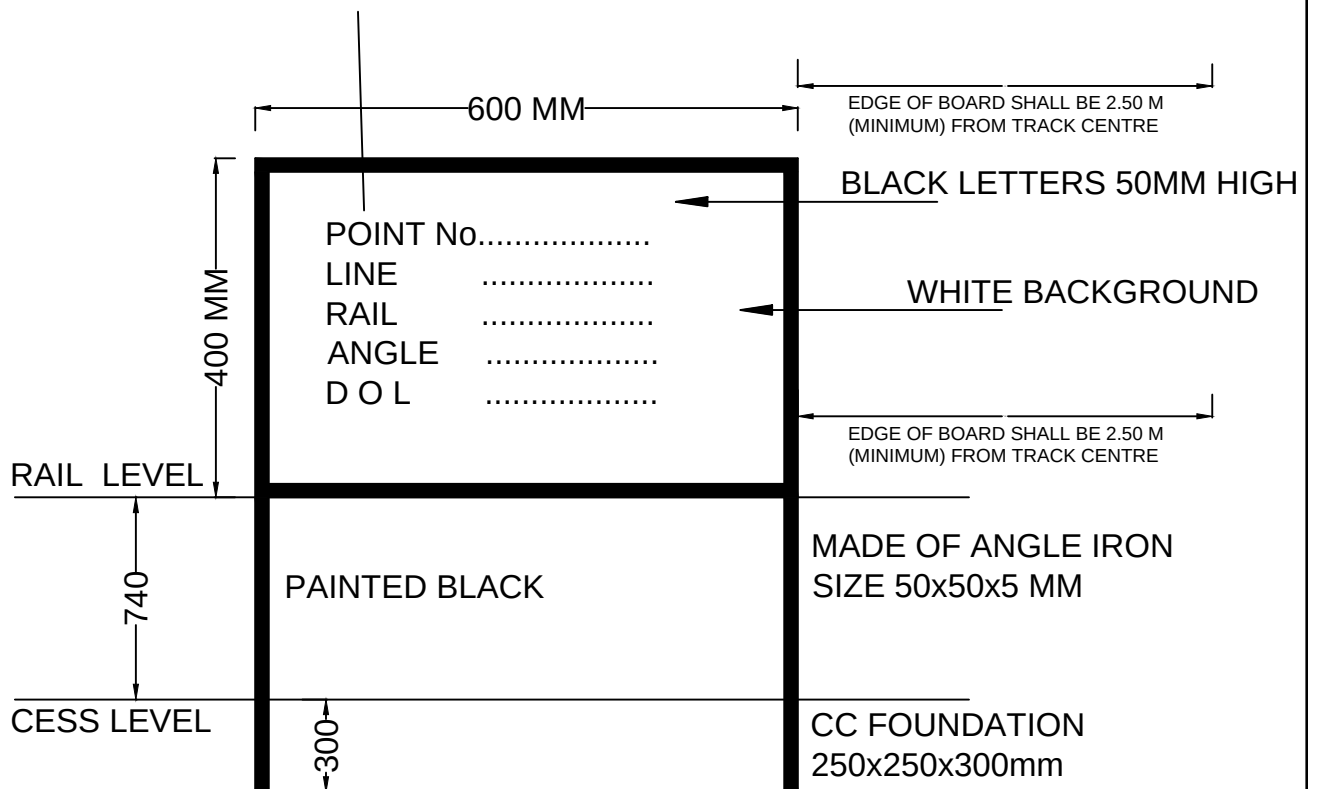
WARNING SIGN TO BE PROVIDED ON ROAD APPROACHES OF ALL MANNED L-XINGS



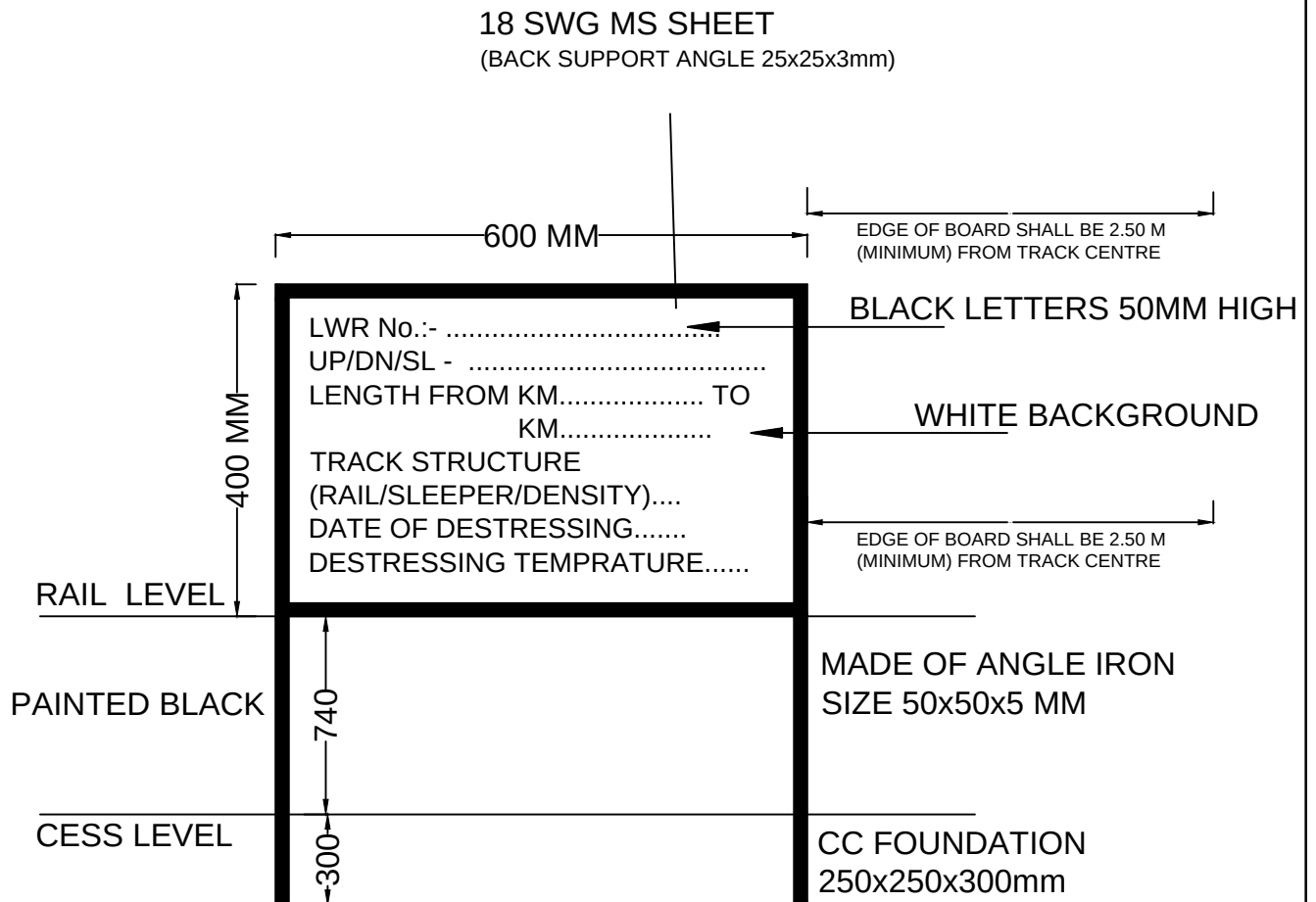
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TURN OUT BOARDS

18 SWG MS SHEET
(BACK SUPPORT ANGLE 25x25x3mm)

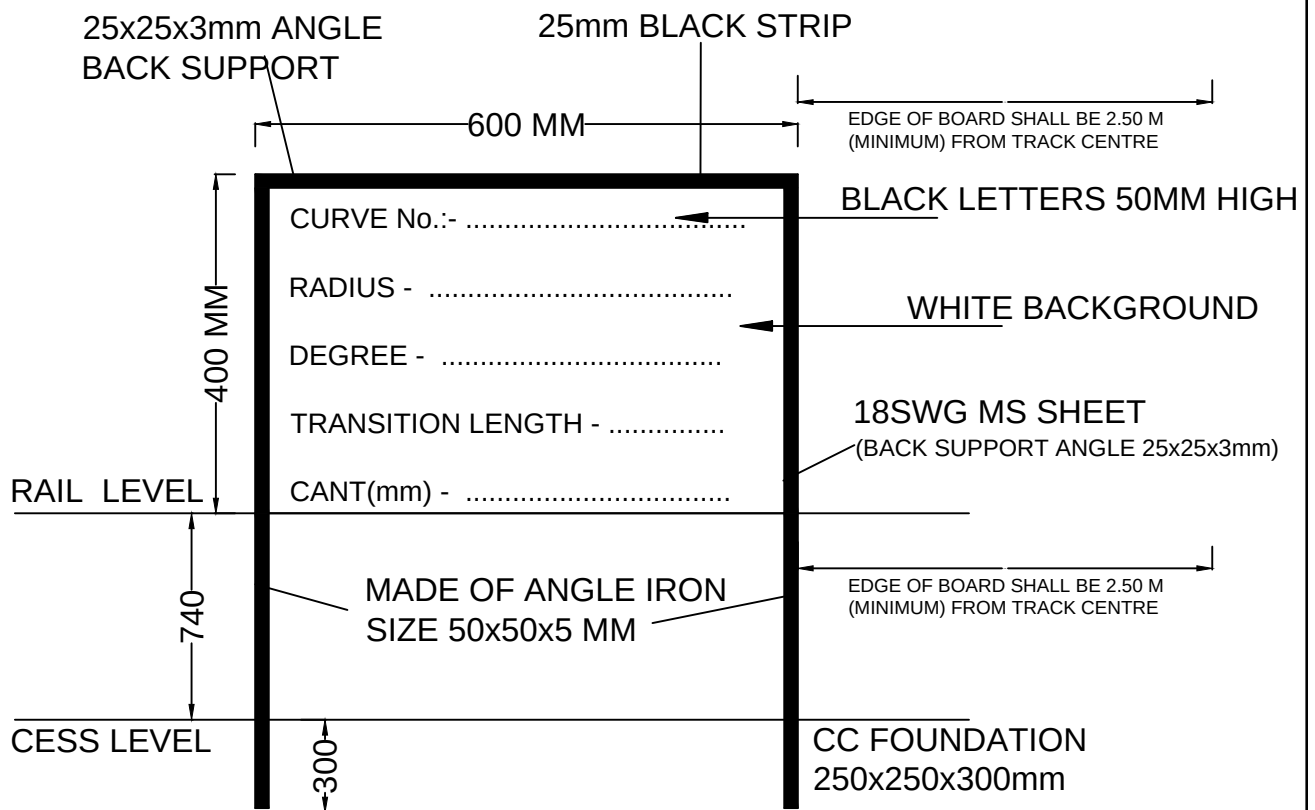


LWR BOARDS



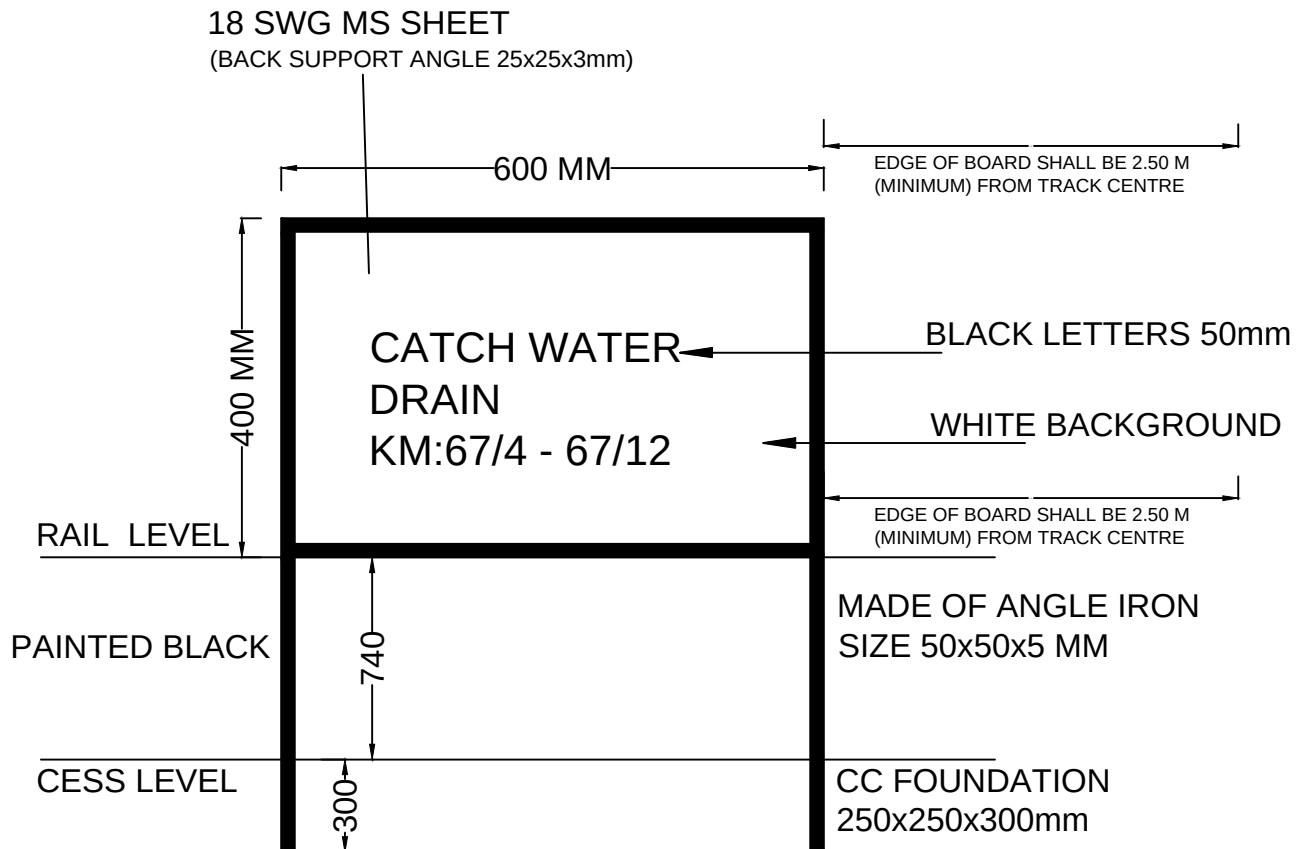
REF.:- IRPWM PARA 212/4

CURVE BOARD



THIS BOARD IS TO BE PROVIDED ON EACH APPROACH OF CURVE AT TANGENT POINT OUT SIDE OF CURVE.

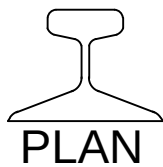
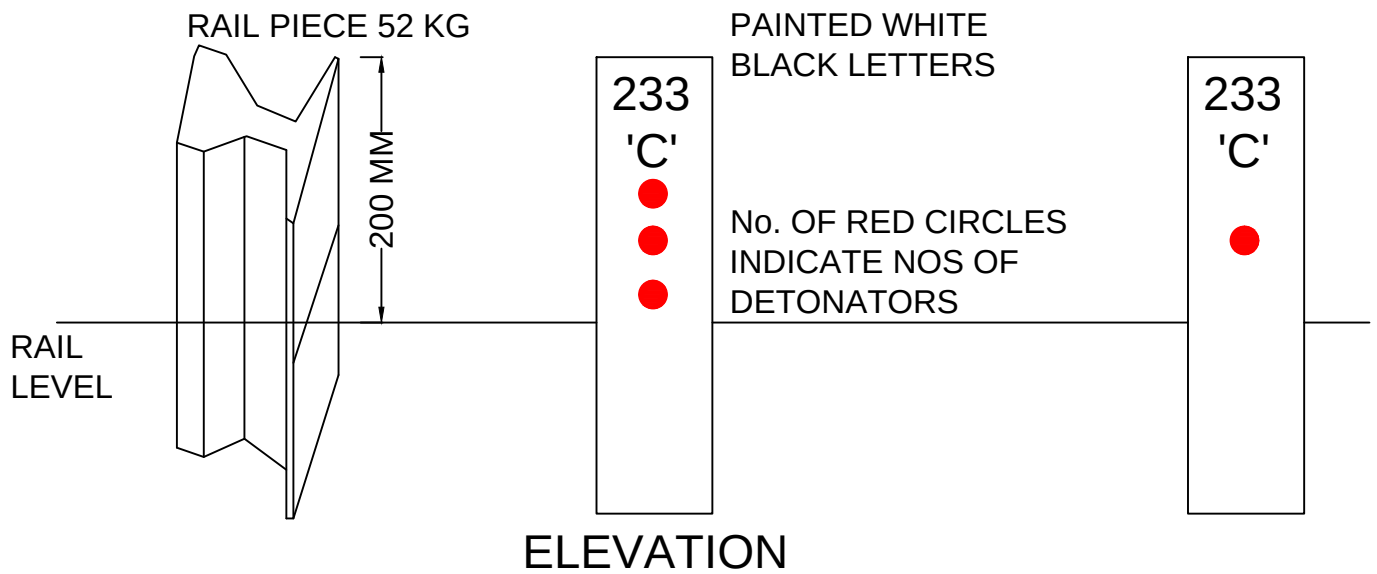
CATCH WATER DRAIN BOARDS



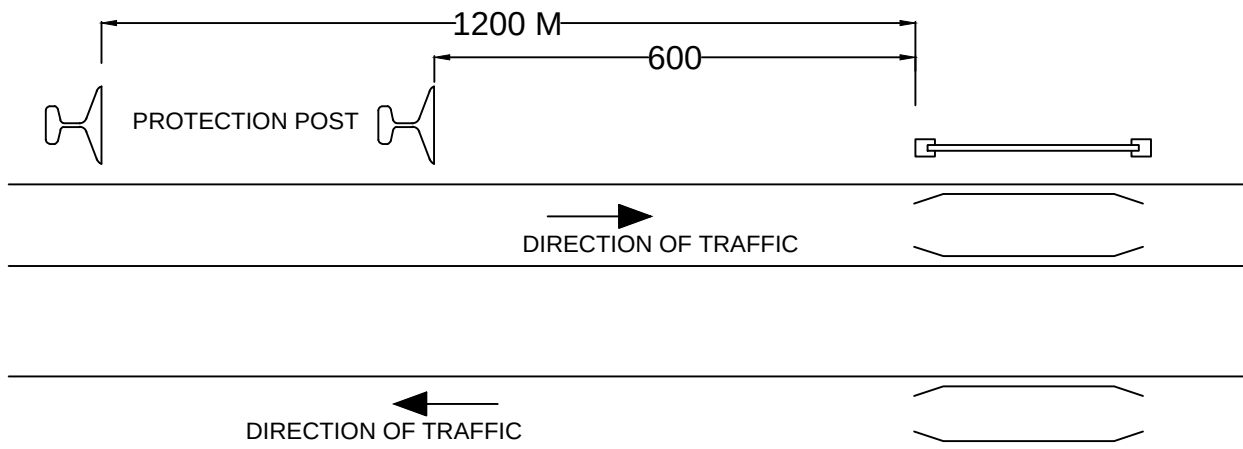
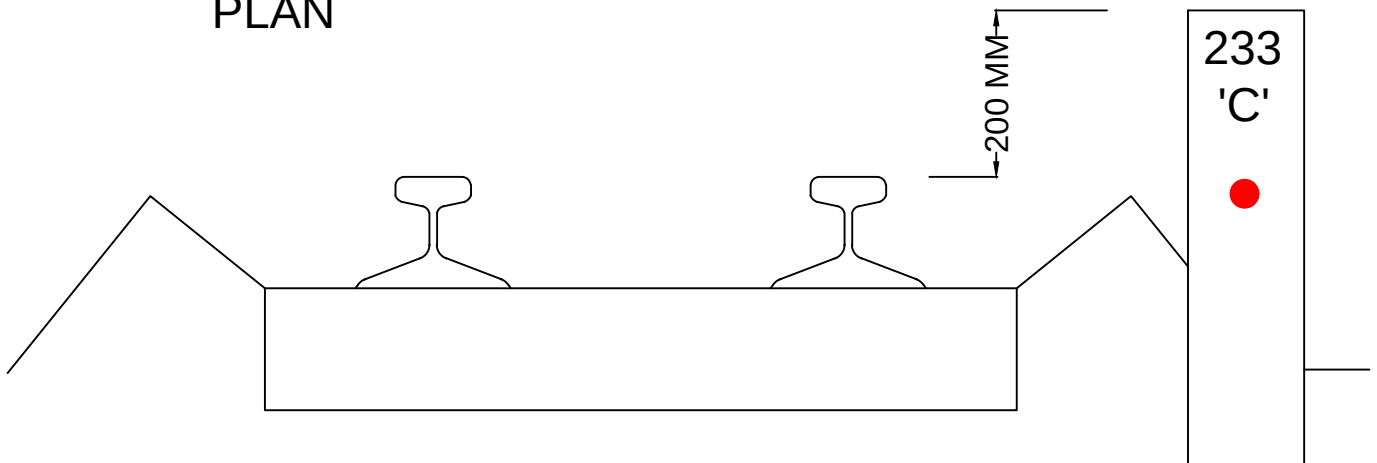
TO BE PROVIDED AT EITHER ENDS
OF CATCH WATER DRAIN

REF.:- IRPWM PARA 223

DETAIL OF PROTECTION POST



EDGE OF POST SHALL BE 2.50 M
(MINIMUM) FROM TRACK CENTRE

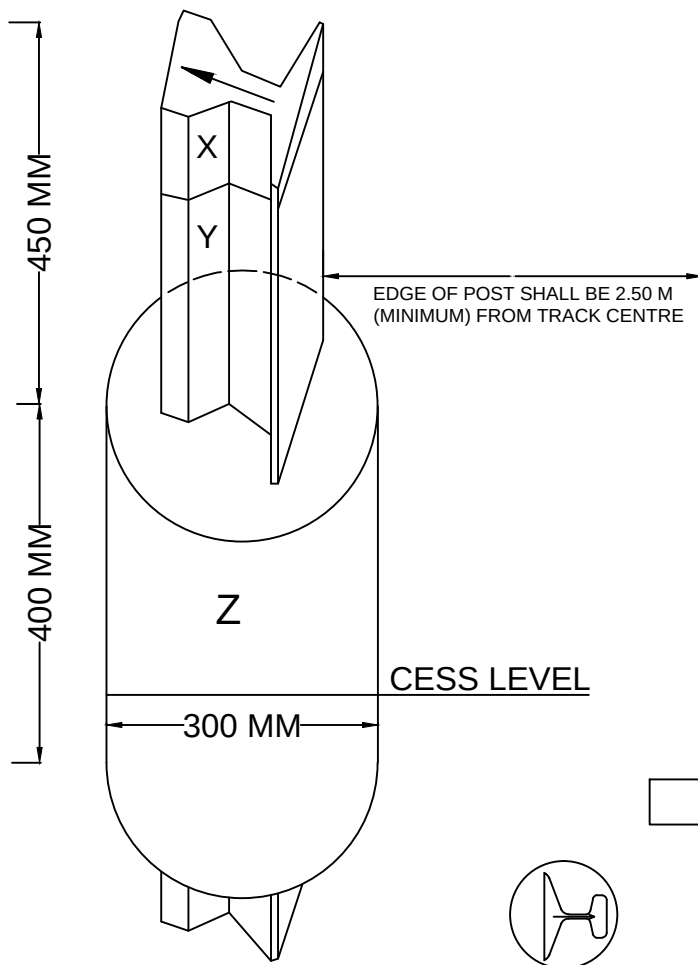


WITH ONE RED CIRCLE AT 600 M FROM L-XING

WITH THREE RED CIRCLE AT 1200 M FROM L-XING

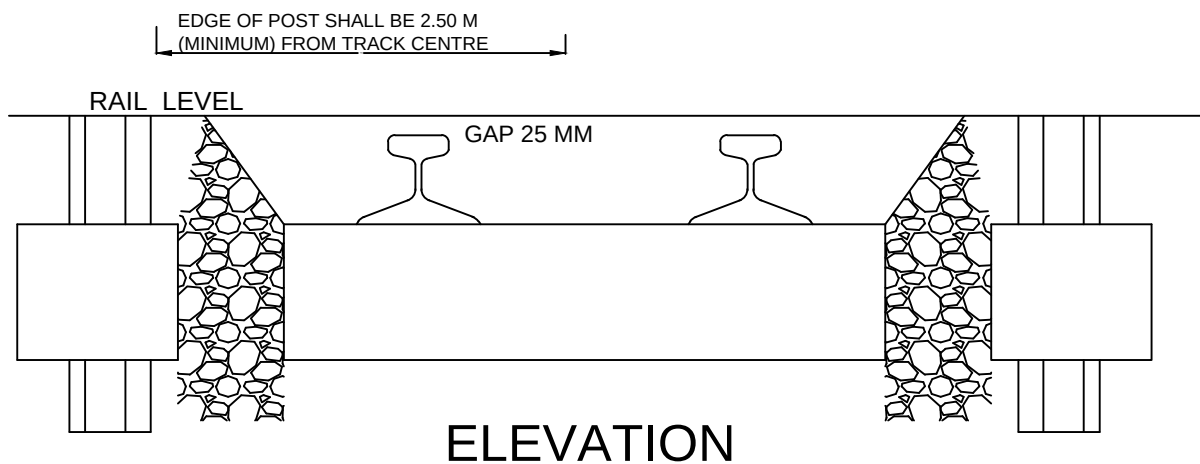
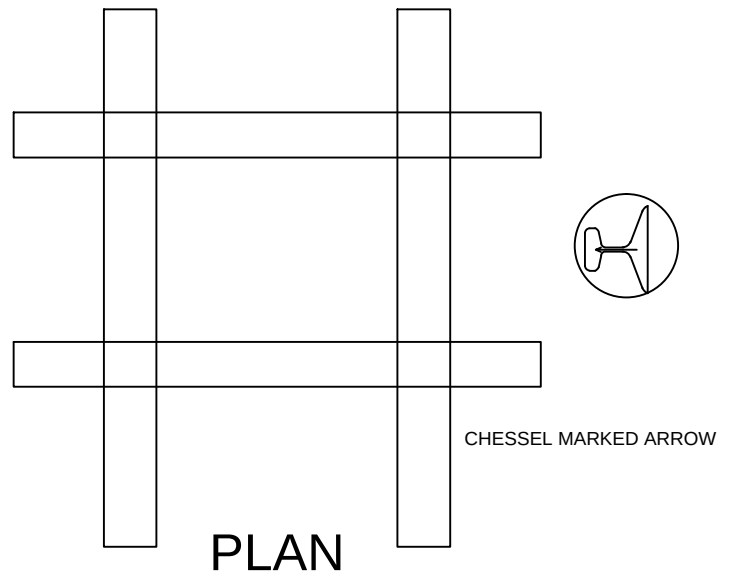
REF.: IRPWM PARA 806

DETAIL OF REFERENCE POST FOR LWR & CREEP



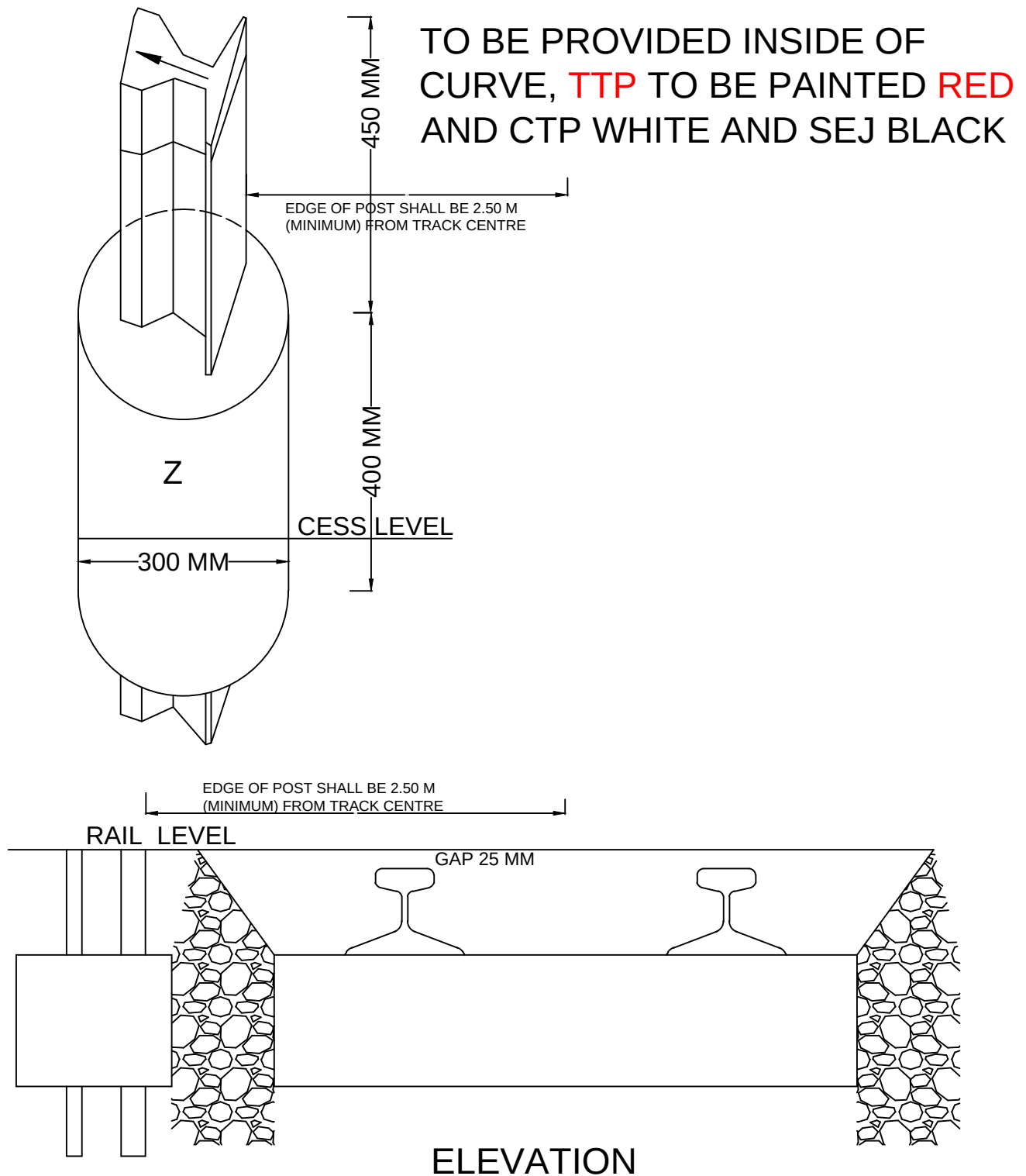
COLOUR REFERENCE

LOCATION	X	Y	Z
SEJ	WHITE	RED	WHITE
MID OF BREATHING LENGTH	BLACK	YELLOW	WHITE
BREATHING LENGTH	BLACK	YELLOW	WHITE
CREEP POST IN LWR / SWR / CWR	RED	YELLOW	WHITE



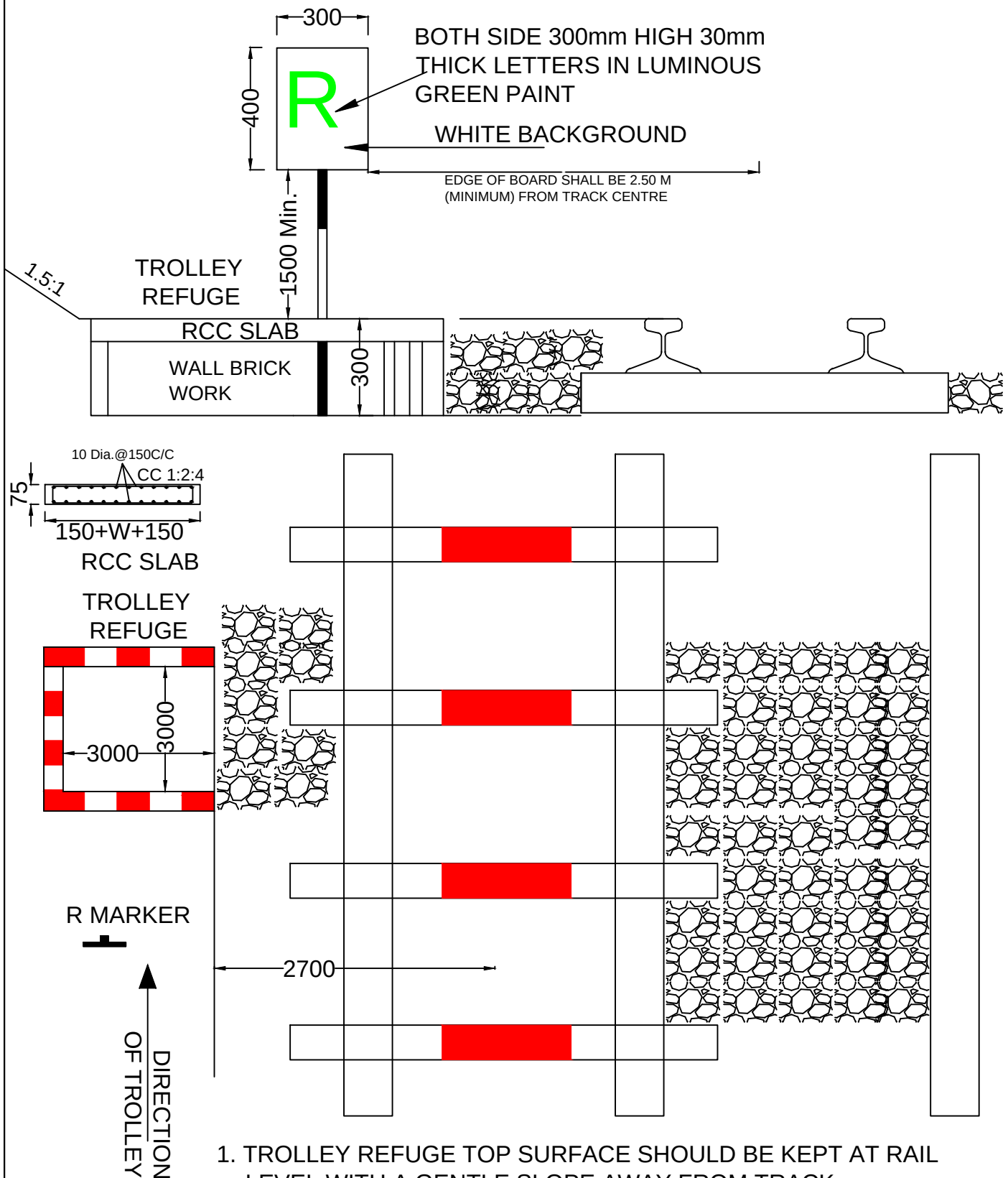
REF.:- IRPWM PARA 5.9

DETAIL OF REFERENCE POST FOR TANGENT POINT



REF.:- IRPWM PARA 409/2

TROLLEY REFUGE ON CUTTINGS

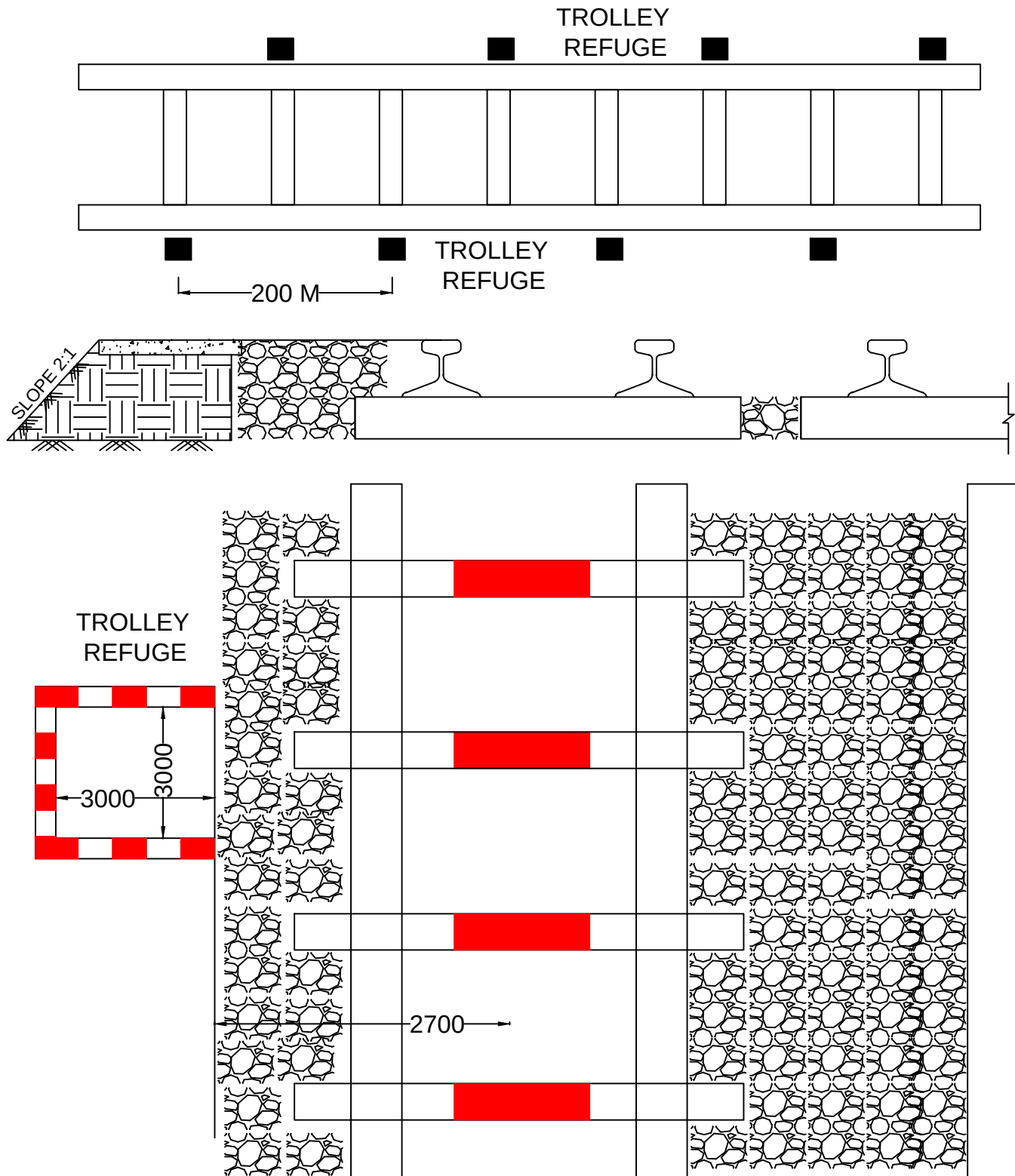


1. TROLLEY REFUGE TOP SURFACE SHOULD BE KEPT AT RAIL LEVEL WITH A GENTLE SLOPE AWAY FROM TRACK.

2. THE SPACE BETWEEN THE TRACK SHOULD BE FILLED WITH BALLAST AND LEVELED UP TO THE RAIL LEVEL FOR OFF-TRACKING OF THE TROLLEY OPPOSITE TO REFUGE.

REF.:- IRPWM PARA 220

TROLLEY REFUGE ON BANKS



1. TROLLEY REFUGE TOP SURFACE SHOULD BE KEPT AT RAIL LEVEL WITH A GENTLE SLOPE AWAY FROM TRACK.
2. THE SPACE BETWEEN THE TRACK SHOULD BE FILLED WITH BALLAST AND LEVELED UP TO THE RAIL LEVEL FOR OFF-TRACKING OF THE TROLLEY OPPOSITE TO REFUGE.

REF.:- IRPWM PARA 220/2

STATION NAME BOARD (PRINCIPAL)

LETTERS 300MM HIGH &
40MM THICK IN LOCAL
LANGUAGE, HINDI &
ENGLISH.

S S PIPE
75mm DIA.

HEAT ACTIVATED RETRO
REFLECTIVE BOARD ON
2mm ALUMINIUM SHEET

कुरुक्षेत्र जंक्शन
KURUKSHETRA JN.

MEAN SEA LEVEL 258.389 Mtr

S S PIPE
50mm DIA.

2440

1. TO BE PROVIDED AT BOTH ENDS OF PF AT RIGHT ANGLE TO TRACK.
2. NAME SHOULD BE INSCRIBED ON BOARD IN LOCAL LANGUAGE, HINDI & ENGLISH.
3. WHERE BOARDS ARE PLACED PARALLEL TO TRACK DUE TO NARROW PF WIDTH ON ISLAND PLATFORMS, THEY SHOULD BEAR STATION NAME ON BOTH SIDE.
4. REFER PARA 424 OF IRWM FOR STATION NAME IN REGIONAL LANGUAGE.
5. ON LONGER PF, IF AT CONVENIENT INTERVAL, ALONG THE POLISADE FENCING.
6. 2mm THICK ALUMINUM SHEET IS TO BE FIXED ON TO FRAME MADE OF 25mmx3mm SS FLATS ALL AROUND AND 3 VERTICAL TIES AT EQUAL SPACING USING ALUMINUM RIVETS OF YELLOW COLOR.

PLATFORM LEVEL

ELEVATION

FOUNDATION AS PER
N R TYPE PLAN No. F-60

S S PIPE
75mm DIA.

S S PIPE 50mm DIA.

S S PIPE
75mm DIA.

PLAN

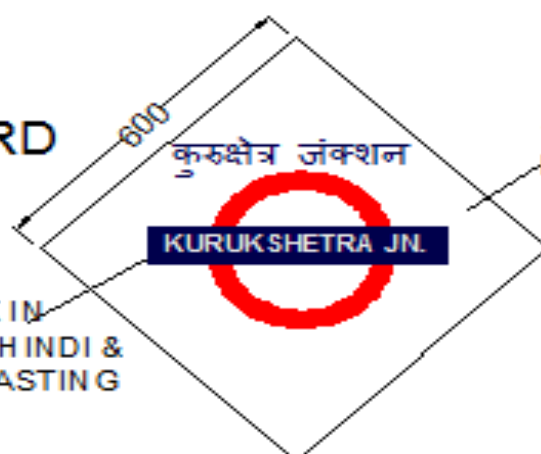
REF.:- IRWM PARA 424

STATION NAME BOARD

(SECONDARY / TERTIARY)

TERTIARY NAME BOARD

LETTERS 100MM
HIGH & 15MM THICK IN
LOCAL LANGUAGE, HINDI &
ENGLISH IN CONTRASTING
COLOUR



18 SWG MS SHEET WITH VITREOUS
ENAMEL PAINT (YELLOW COLOUR)
(BACK SUPPORT FLAT 25x3)

1. TO BE FIXED AT LAMP POST
OR FIXED STRUCTURE.

18 SWG MS SHEET WITH
VITREOUS ENAMEL PAINT
(YELLOW COLOUR)

VITREOUS
ENAMEL
PAINTED SHEET

LETTERS (BLACK) 300MM
HIGH & 25MM THICK IN
LOCAL LANGUAGE, HINDI
& ENGLISH.

कुरुक्षेत्र जंक्शन
KURUKSHETRA JN.

M. S. L. 258.389 Mtr

S S PIPE 40mm DIA.

1200

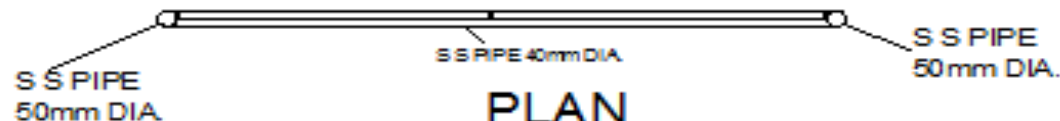
1. TO BE PLACED PARALLEL TO TRACK DUE TO NARROW PF WIDTH ON ISLAND PLATFORMS, THEY SHOULD BEAR STATION NAME ON BOTH SIDE.
2. 18 SWG MS SHEET IS TO BE FIXED ON TO FRAME MADE OF 25mmx3mm MS FLATS ALL AROUND AND ONE VERTICAL TIE IN THE MIDDLE SPACING.

SECONDARY NAME BOARD

PLATFORM LEVEL

ELEVATION

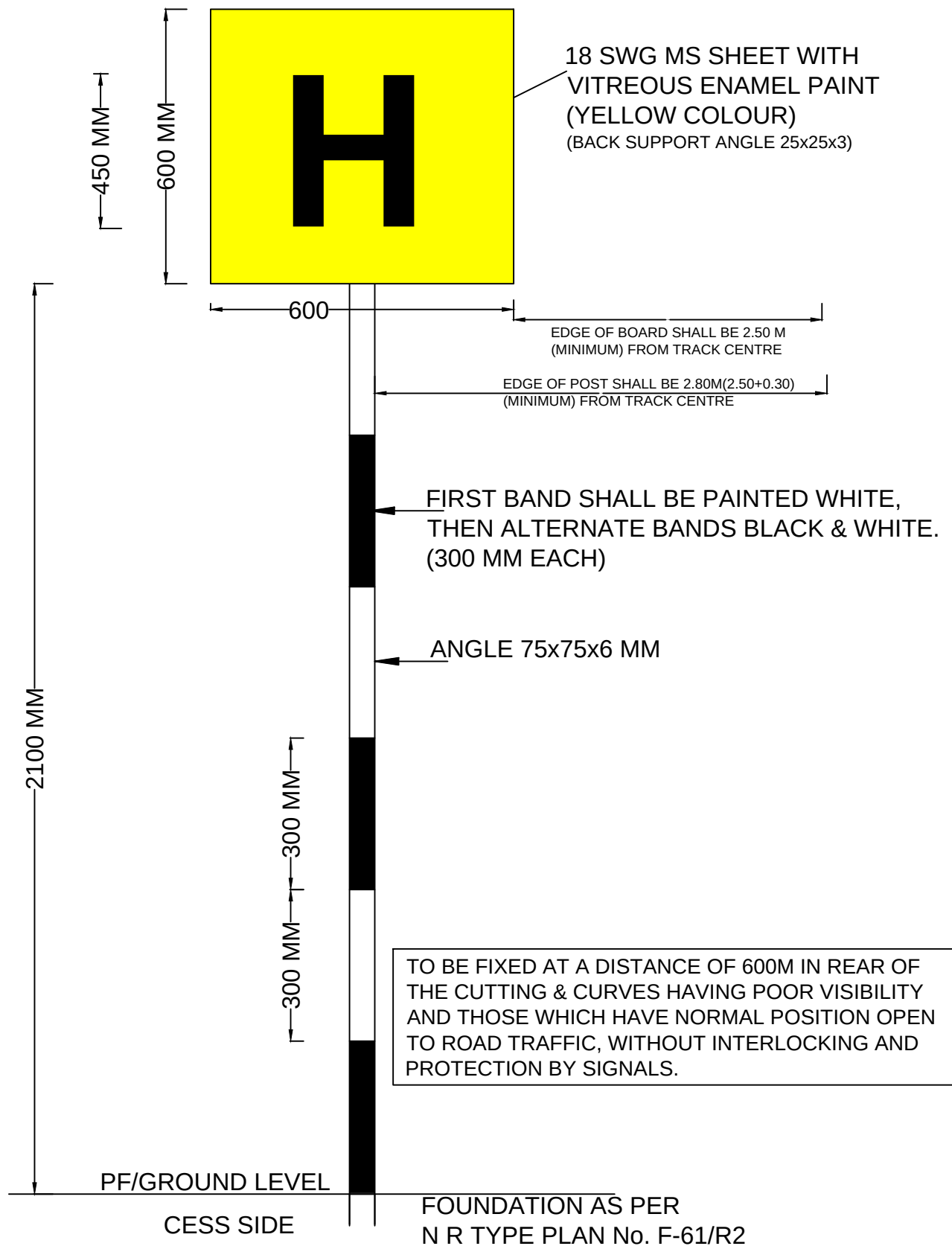
FOUNDATION AS PER
N R TYPE PLAN No. F-60



PLAN

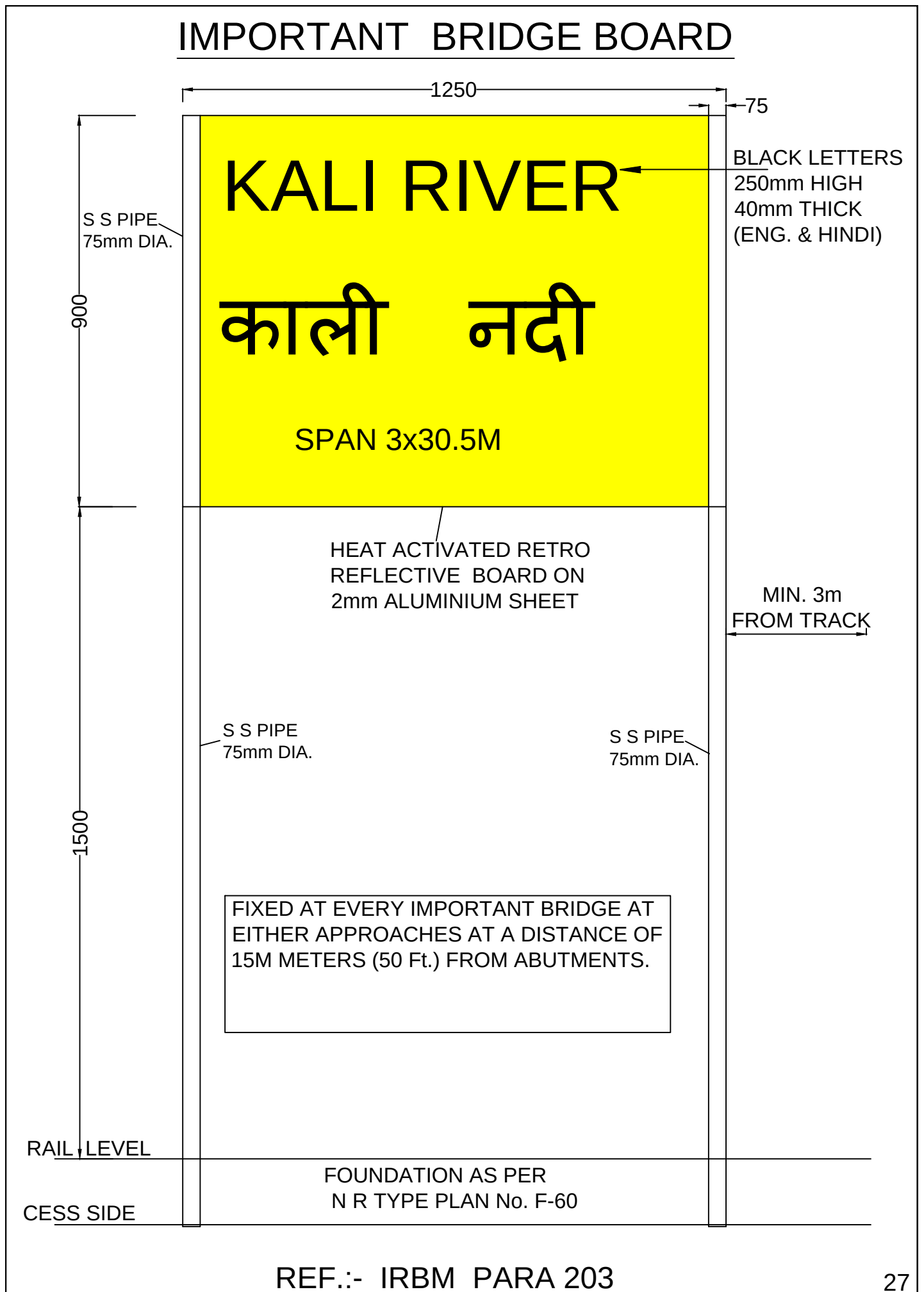
REF.:- IRWM PARA 424

HALT STATION NAME BOARD



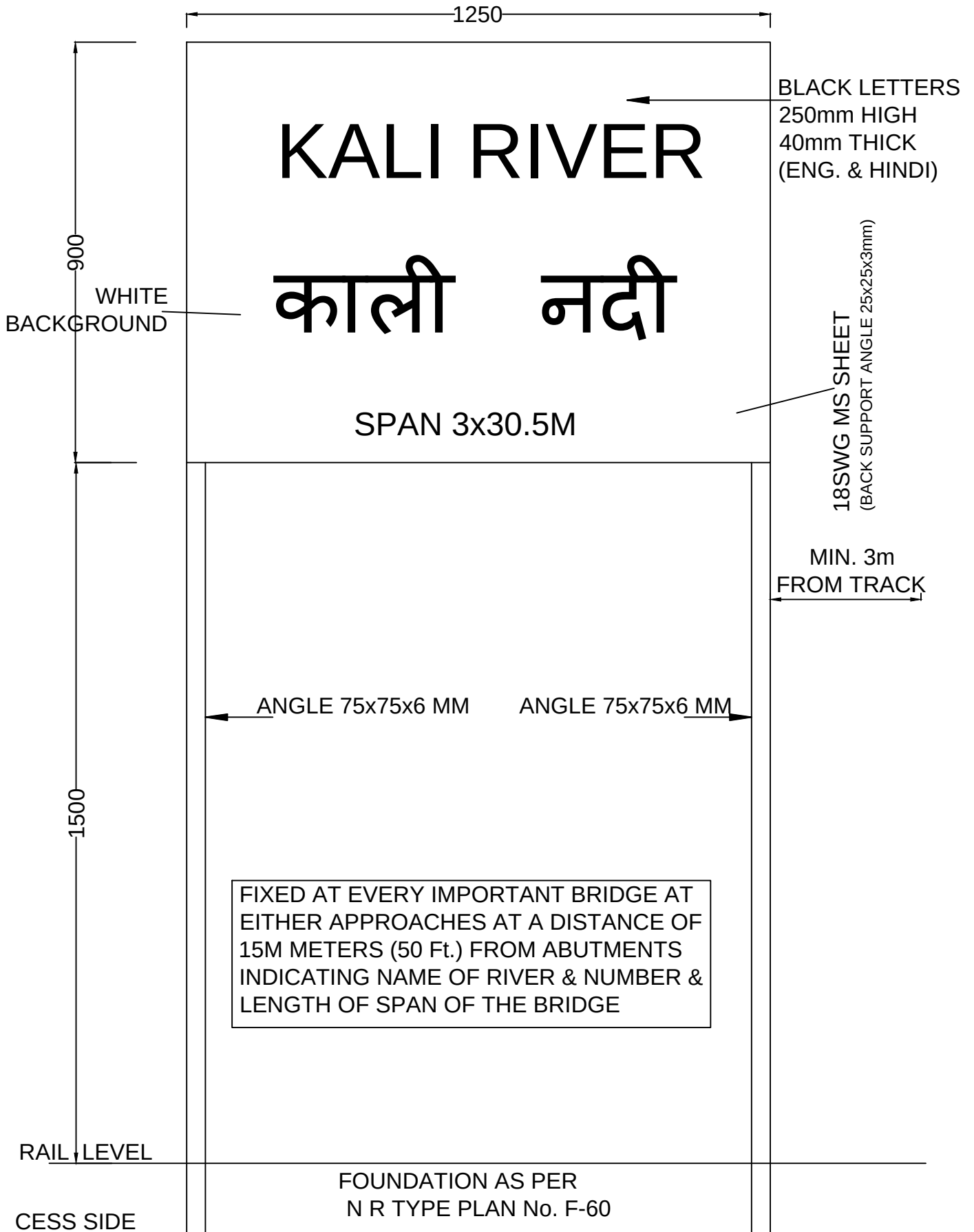
REF.:- IRPWM PARA 916(1)

IMPORTANT BRIDGE BOARD



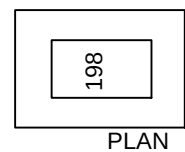
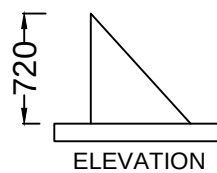
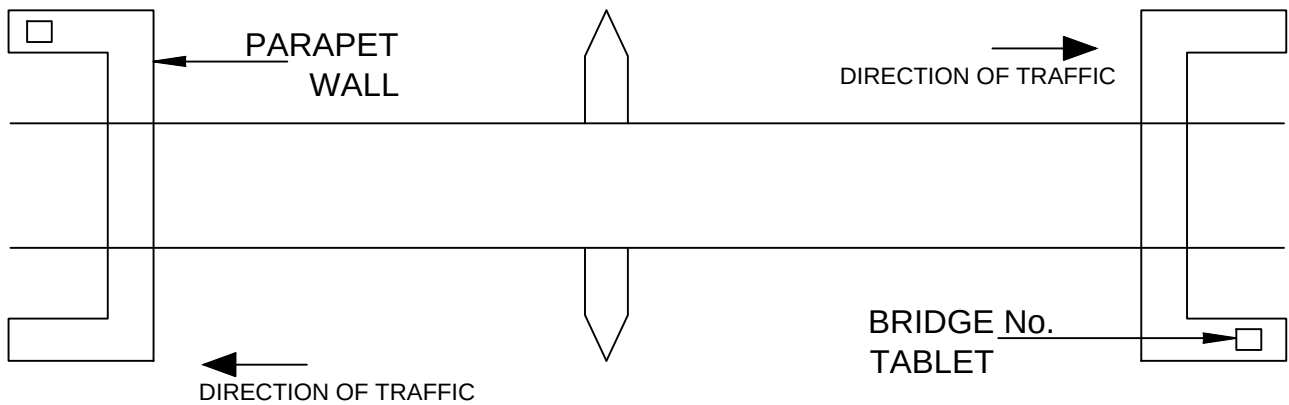
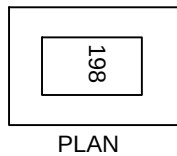
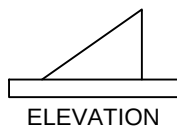
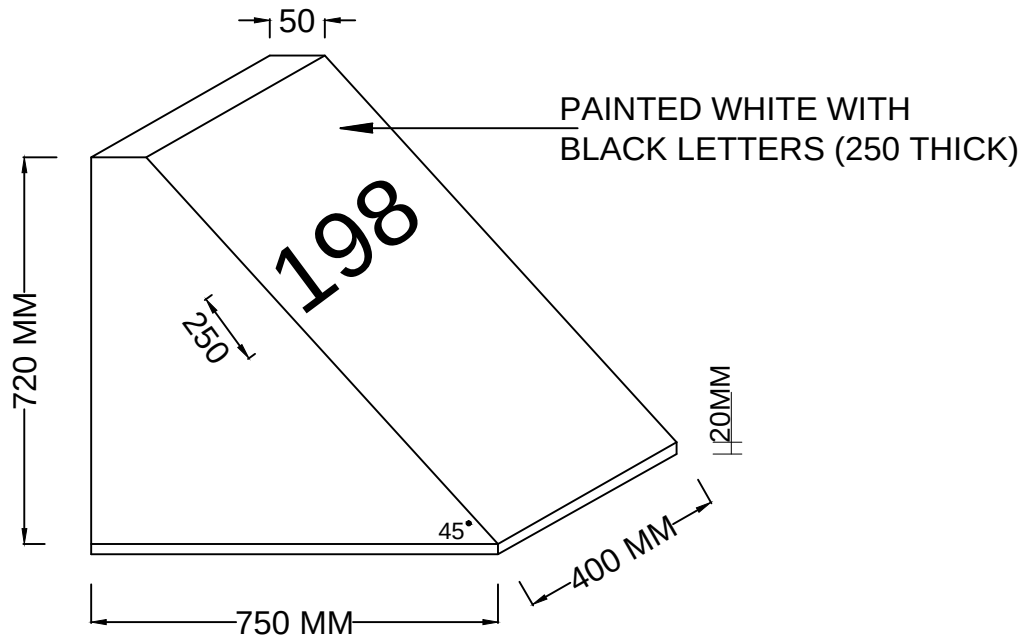
REF.:- IRBM PARA 203

MAJOR BRIDGE BOARD



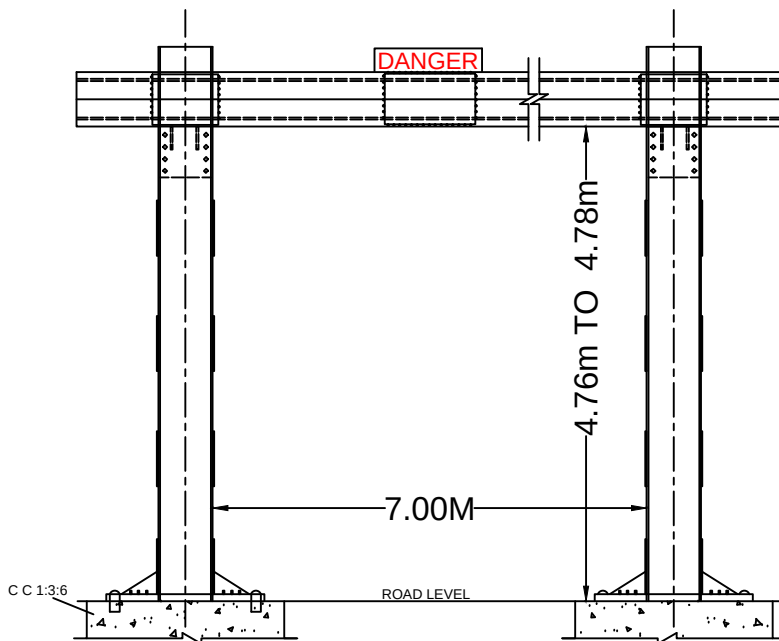
REF.:- IRBM PARA 203/6

BRIDGE NUMBER TABLET DETAIL

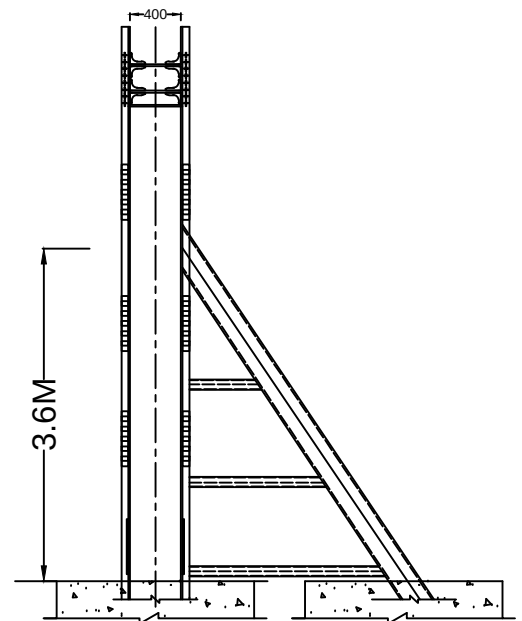


REF.:- IRBM PARA 203.7 ANNEXURE 2/1

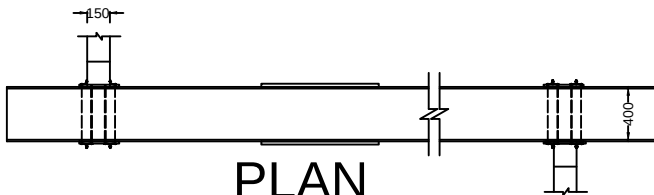
HEIGHT GAUGE FOR L-XING



ELEVATION

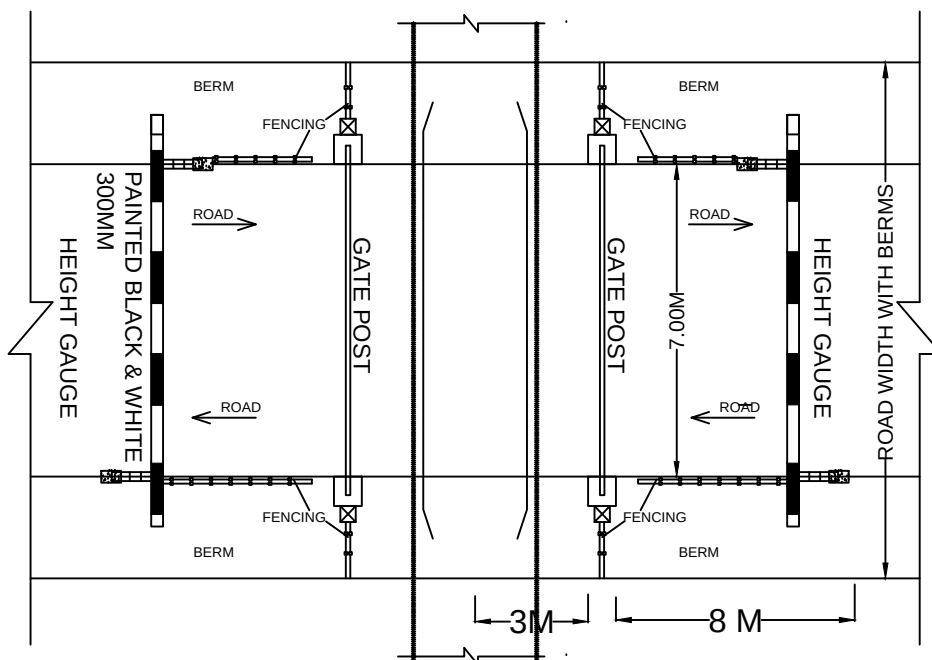


SIDE ELEVATION

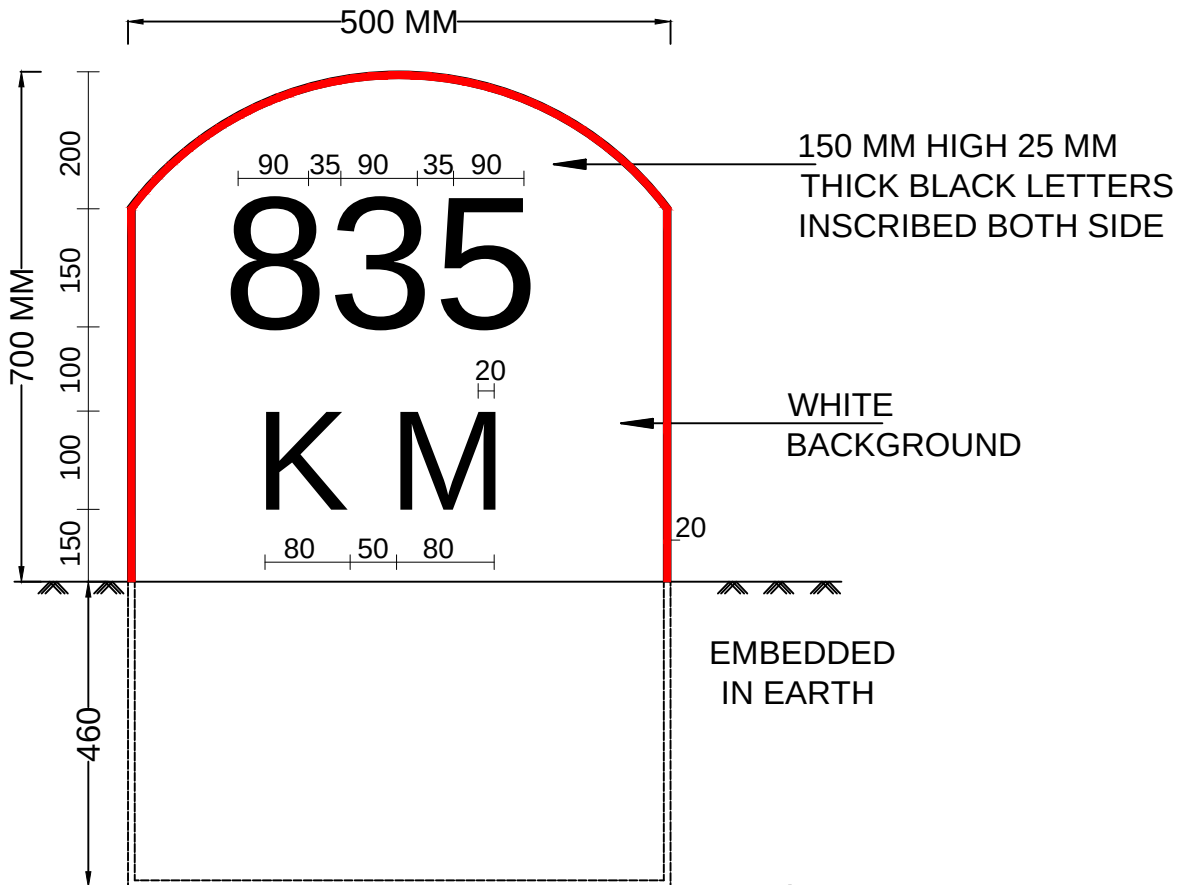


PLAN

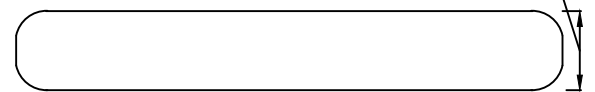
1. HEIGHT 4.76m TO 4.78m WILL BE AS PER ACTM CORRECTION SLIP No. 30 Dt. 22.10.2019 FOR LEVEL CROSSING.



DETAIL OF KM POST

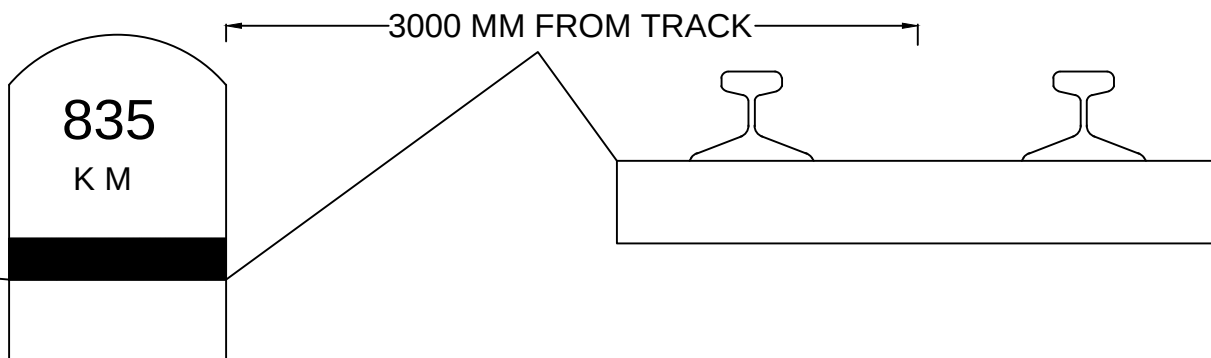


ELEVATION



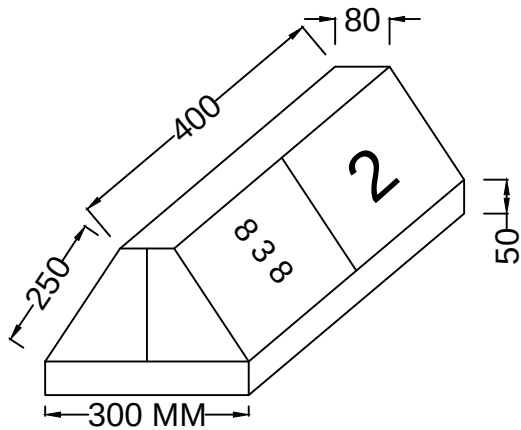
PLAN

1. POST SHALL BE PROVIDED PREFERABLY OF PRECAST RCC, FIXED AT RIGHT ANGLE TO TRACK.
2. FIGURE, ARROWS LETTERS SHOULD BE PAINTED IN BLACK ON WHITE BACK GROUND
3. DIRECTION OF ARROWS & NUMBERS SHALL BE CHANGED ACCORDINGLY FOR OTHER KM
4. FOR OTHER DETAILS REFER NRHQE PLAN No.-4449

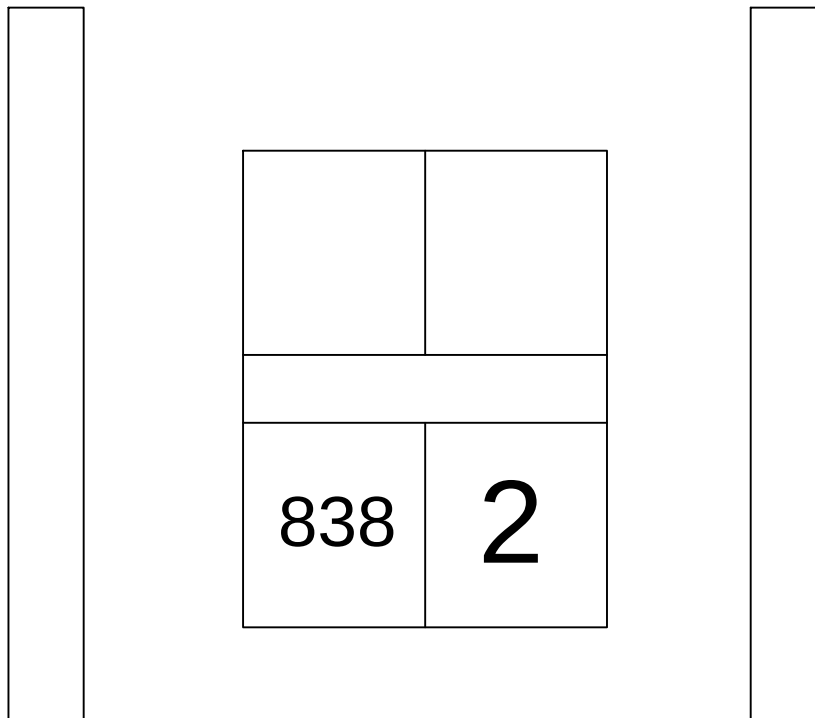
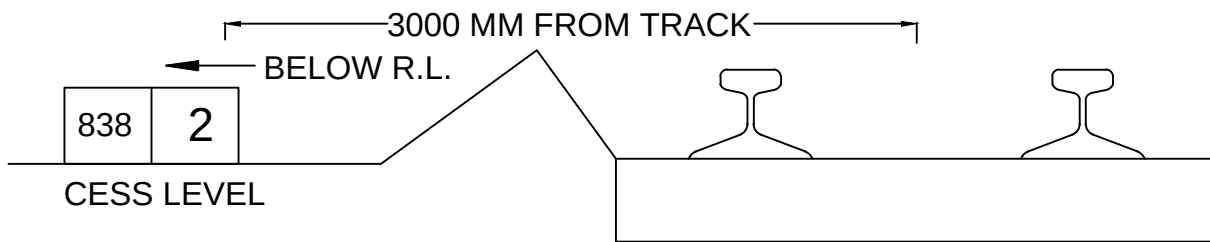


REF.: IRPWM PARA 217 AND NR TYPE PLAN-F-46/R1/R2

HECTOMETER POST

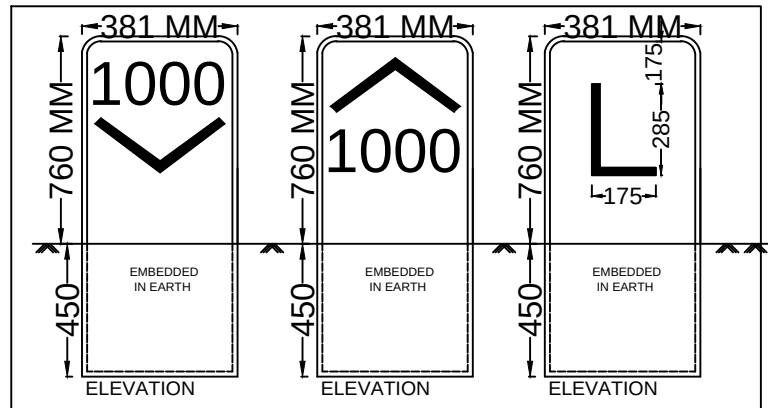
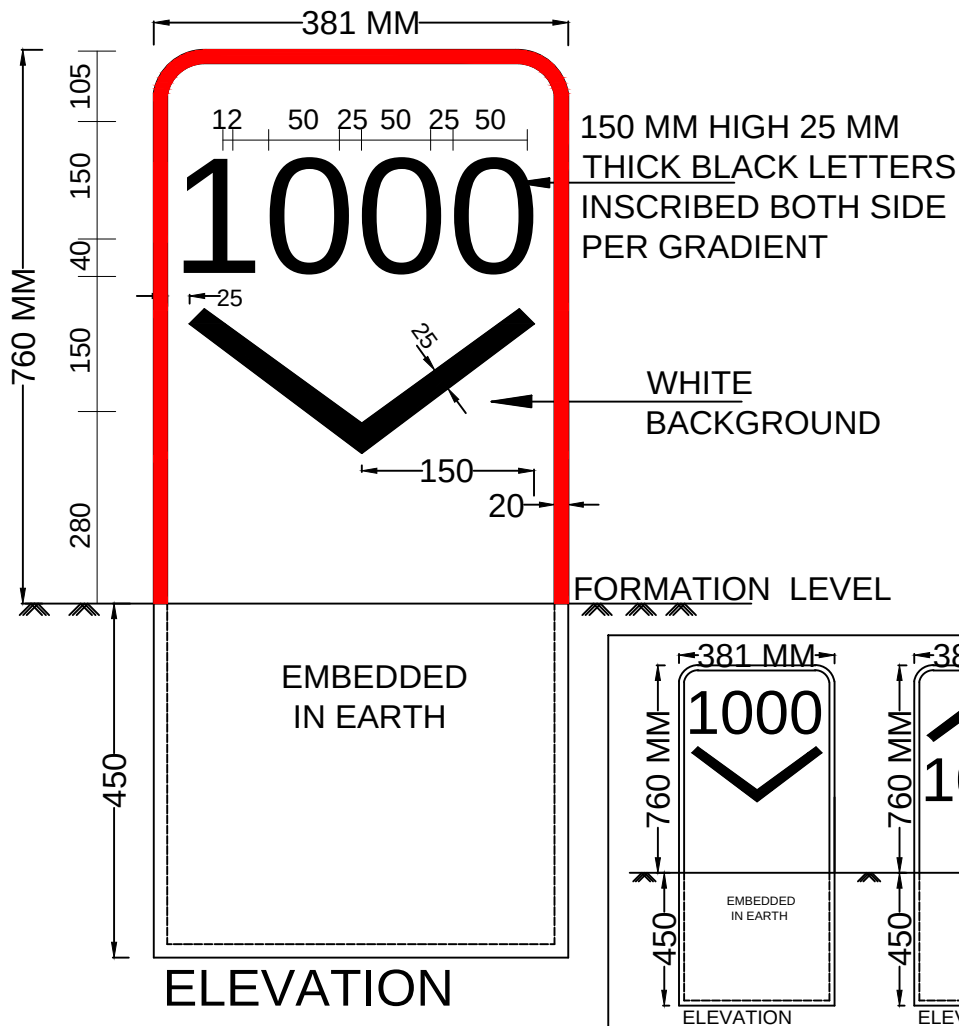


1. KEPT BELOW RAIL LEVEL IN CENTER OF DOUBLE TRACK RUNNING PARALLEL.
2. ON SINGLE LINE IF BOTH SIDES OF THE TRACKS ON CESS ALTERNATELY.
3. TO BE PROVIDED IN NON-ELECTRIFIED SECTION.

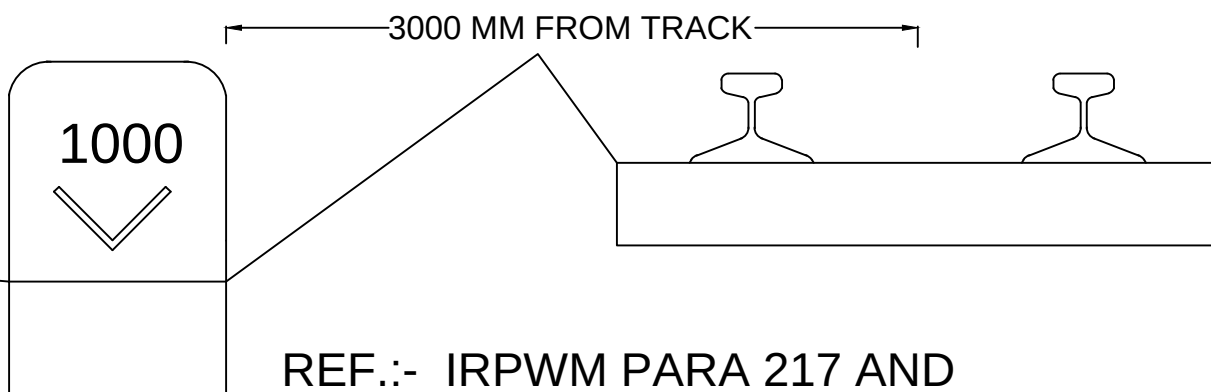


REF.:- IRPWM PARA 217

GRADIENT POST

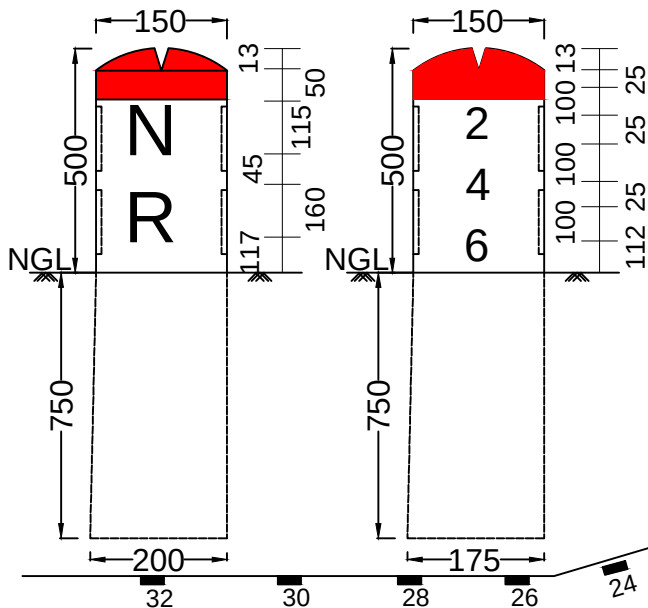


1. POST SHALL BE PROVIDED OF RCC, FIXED AT RIGHT ANGLE TO TRACK ON LESS DISTINCTLY VISIBLE
2. FIGURE, ARROWS LETTERS SHOULD BE PAINTED IN BLACK ON WHITE BACK GROUND
3. DIRECTION OF ARROWS & NUMBERS SHALL BE CHANGED ACCORDINGLY FOR OTHER GRADIENTS
4. FOR OTHER DETAILS REFER NRHQE PLAN No. 629

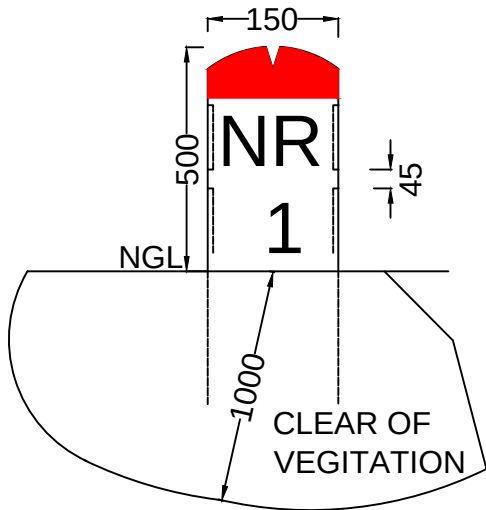
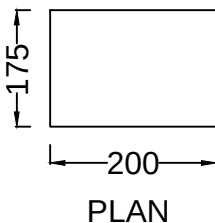


REF.:- IRPWM PARA 217 AND
NR TYPE PLAN F-35/R2/R3

LAND BOUNDARY STONE



1. FOR MORE DETAILS REFER
NRHQE PLAN No. HQ/4/04-88



UP ROAD

HECTOMETER POST

DN ROAD

KM 57.00

KM 56.00

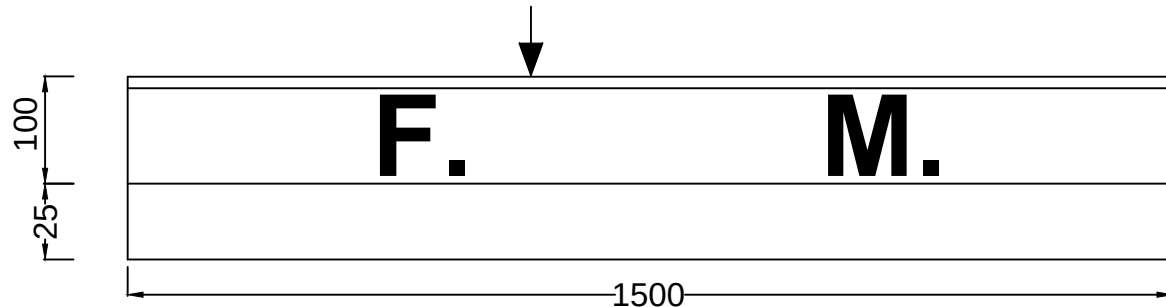
KM 55.00

NOTE:- NO WHERE DISTANCE B/W THE TWO BOUNDARY STONES SHALL BE MORE THAN 200 M.

REF.:- IRPWM PARA 219 AND NR TYPE PLAN F-65

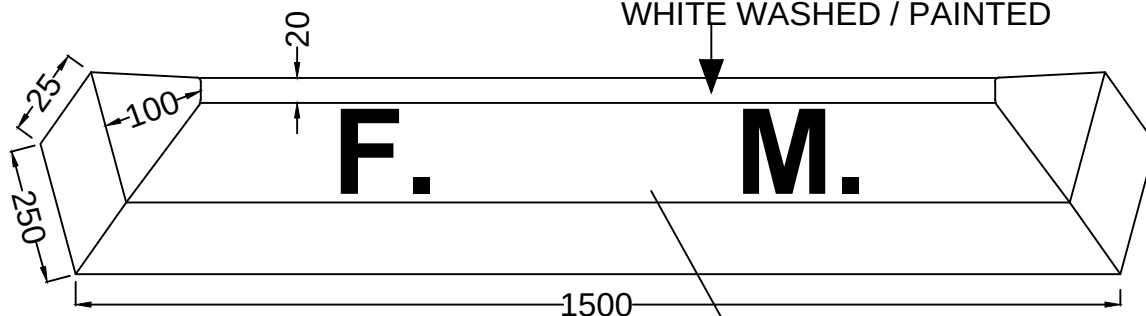
DETAILS OF FOULING MARK

TOP EDGE ROUNDED OFF



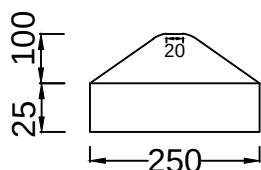
ELEVATION

TOP SURFACE
WHITE WASHED / PAINTED



PLAN

150 MM HIGH
40 MM THICK



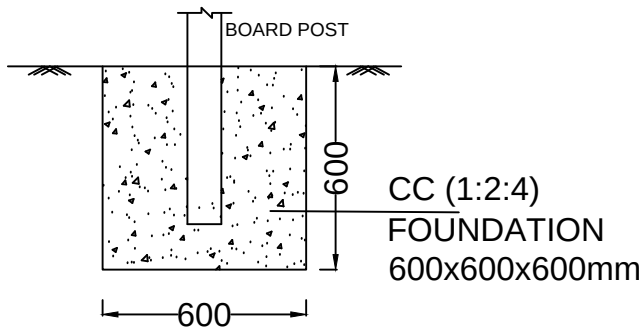
X-SECTION

1. LETTERS SHALL BE INSCRIBED AND PAINTED BLACK 150 MM HIGH
2. THESE SHOULD BE LAID LEVEL WITH THE TOP LINE OF THE BALLAST SECTION
3. MADE OF STONE OR CONCRETE BLOCK.
4. THESE SHOULD BE FIXED AT THE POINT AT WHICH SPACING B/W THE TRACK BEGINS TO REDUCE TO LESS THAN MINIMUM AS LAID DOWN IN STANDARD SOD.
5. THESE SHOULD BE DISTINCTLY VISIBLE & DIFFICULT TO REMOVE.
6. CEMENT CONCRETE 1:2:4.

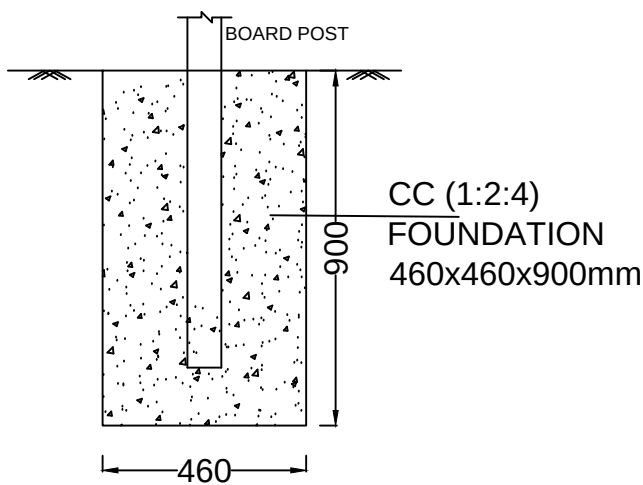


REF.: IRPWM PARA 236

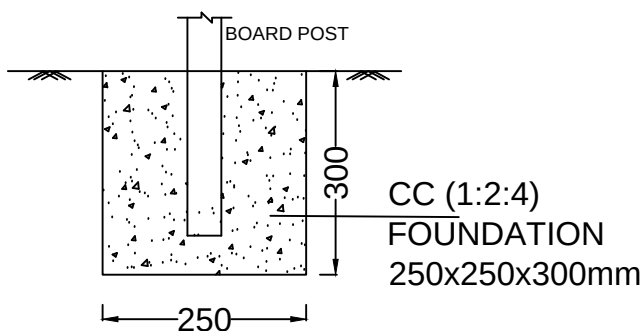
DETAILS OF FOUNDATIONS



FOUNDATION AS PER
N R TYPE PLAN No.
F-61/R2



FOUNDATION AS PER
N R TYPE PLAN No.
F-60



FOUNDATION FOR
RUNNING TRACK SIDE
BOARDS