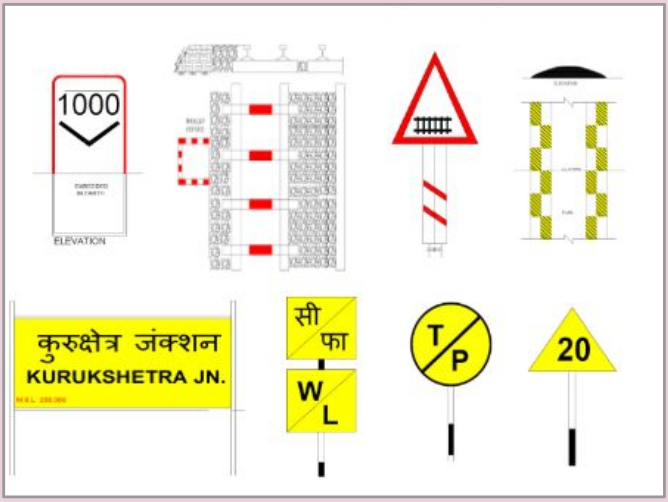
Trackside Indicator Boards & Signages



June 2020

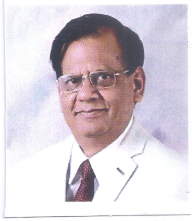
Northern Railway Construction Organisation
Kashmere Gate, Delhi-06



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

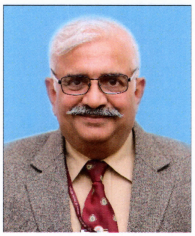
Dated : 26.06.2020

राजीव चौधरी
महाप्रबन्धक

Rajiv Chaudhry
General Manager

सत्यमेव जयते

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.

सत्यमेव जयते

उत्तर रेलवे
NORTHERN RAILWAY

मुख्य प्रशासनिक अधिकारी
(निर्माण)
कश्मीरी गेट, दिल्ली-6

अनिल कुमार लाहोटी
ANIL KUMAR LAHOTI

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 standardsof 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 filed 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.

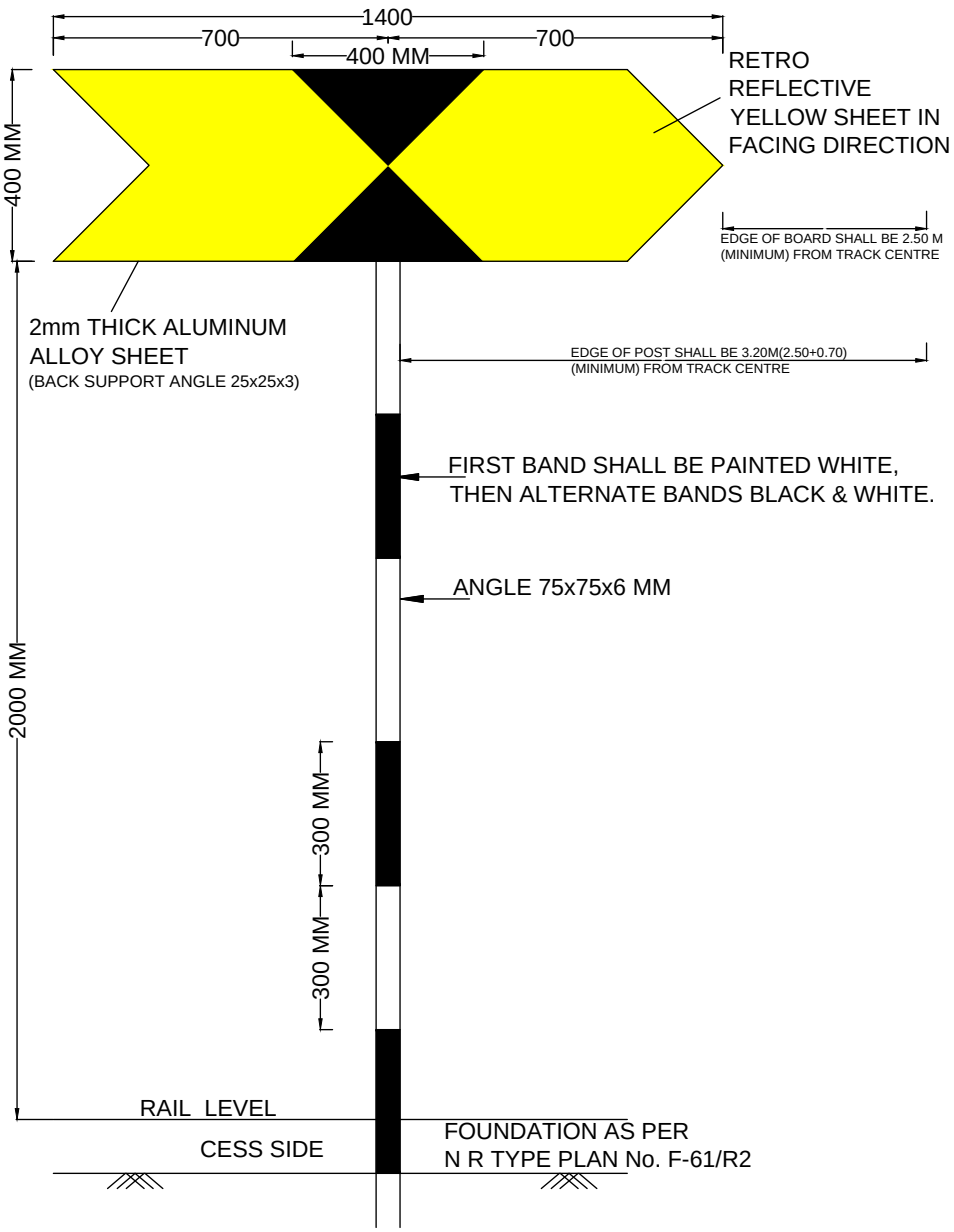
Anil Kumar Lahoti
Chief Administrative Officer/Con
Northern Railway

Kashmere Gate, Delhi
June'2020

CONTENTS

S. No.	ITEM	Page
1	Caution Indicator Board	1
2	Speed Indicator Board	2
3	Stop Indicator Board	3
4	Termination Indicator Board for Passengers Train	4
5	Termination Indicator Board for Goods Train	5
6	Stop Disc	6
7	Whistle Board for Curve/Cutting/Tunnel	7
8	Whistle Board for Level Crossing	8
9	Warning Board for Speed Breaker	9
10	Speed Breaker	10
11	Level Crossing Schematic Diagram	11
12	Warning Sign board for LC as Interim Safety	12
13	Warning Sign board for LC at 100M	13
14	Warning Sign board for LC at 200M	14
15	Turn Out Board	15
16	LWR Board	16
17	Curve Board	17
18	Catch Water Drain Board	18
19	Detail of Protection Post	19
20	Reference Post for Creep / LWR	20
21	Reference Post for Curve Tangent Point	21
22	Trolley Refuge on Cutting	22
23	Trolley Refuge on Bank	23
24	Station Name Board Principal	24
25	Station Name Board Secondary / Tertiary	25
26	Station Name Board for Halt Station	26
27	Important Bridge Name Board	27
28	Major Bridge Name Board	28
29	Bridge Number Tablet	29
30	Height Gauge For Level Crossing	30
31	Kilometer Post	31
32	Hectometer Post	32
33	Gradient Post	33
34	Land Boundary Post	34
35	Fouling Mark	35
36	Details of Foundations	36

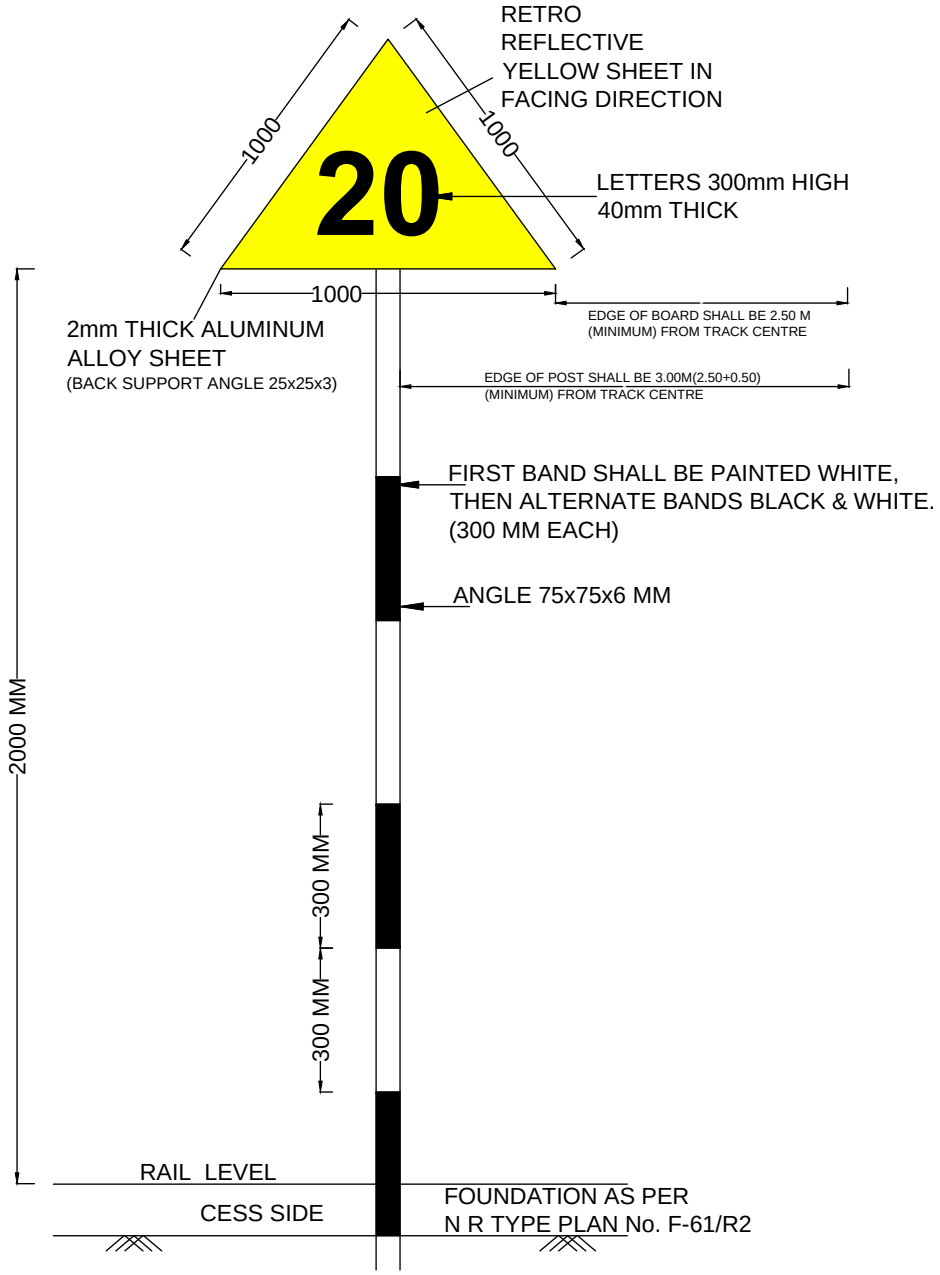
CAUTION INDICATOR



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

Back

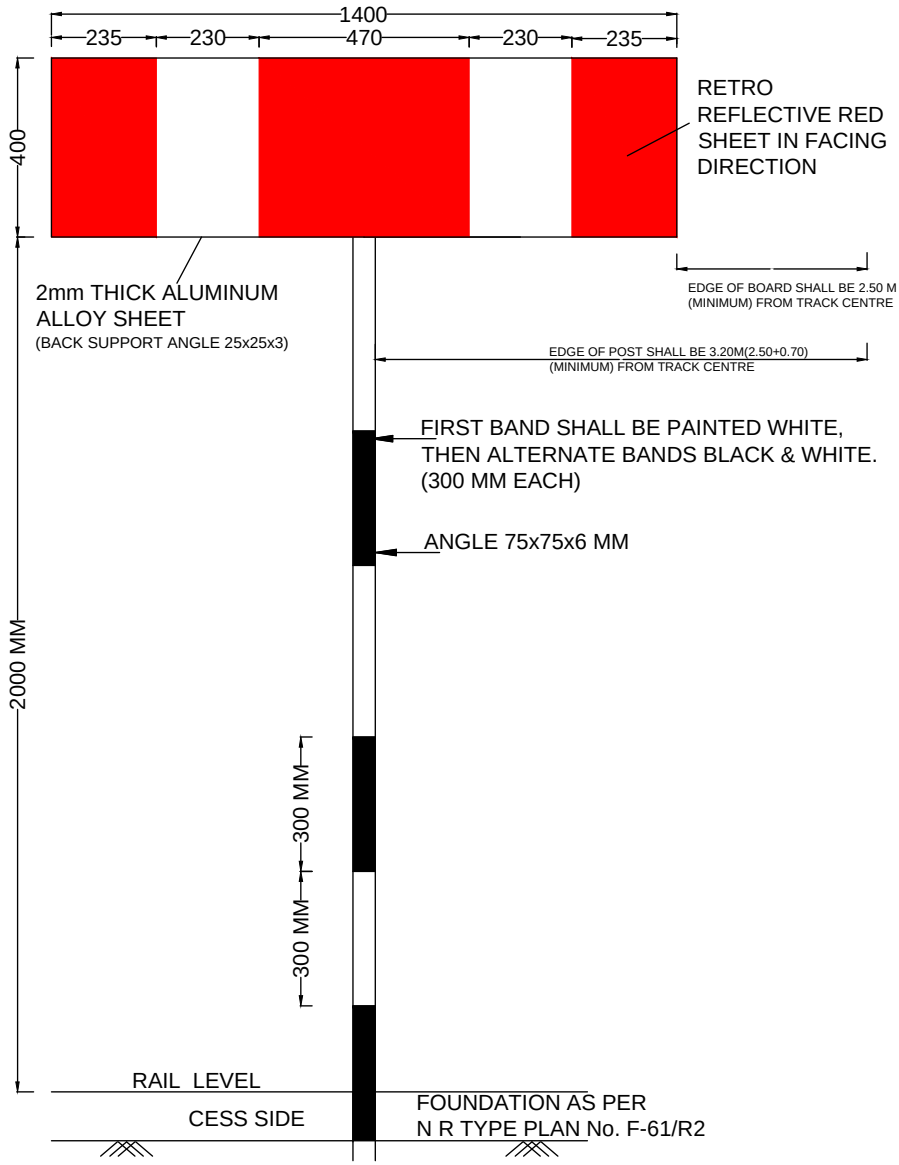
SPEED INDICATOR



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

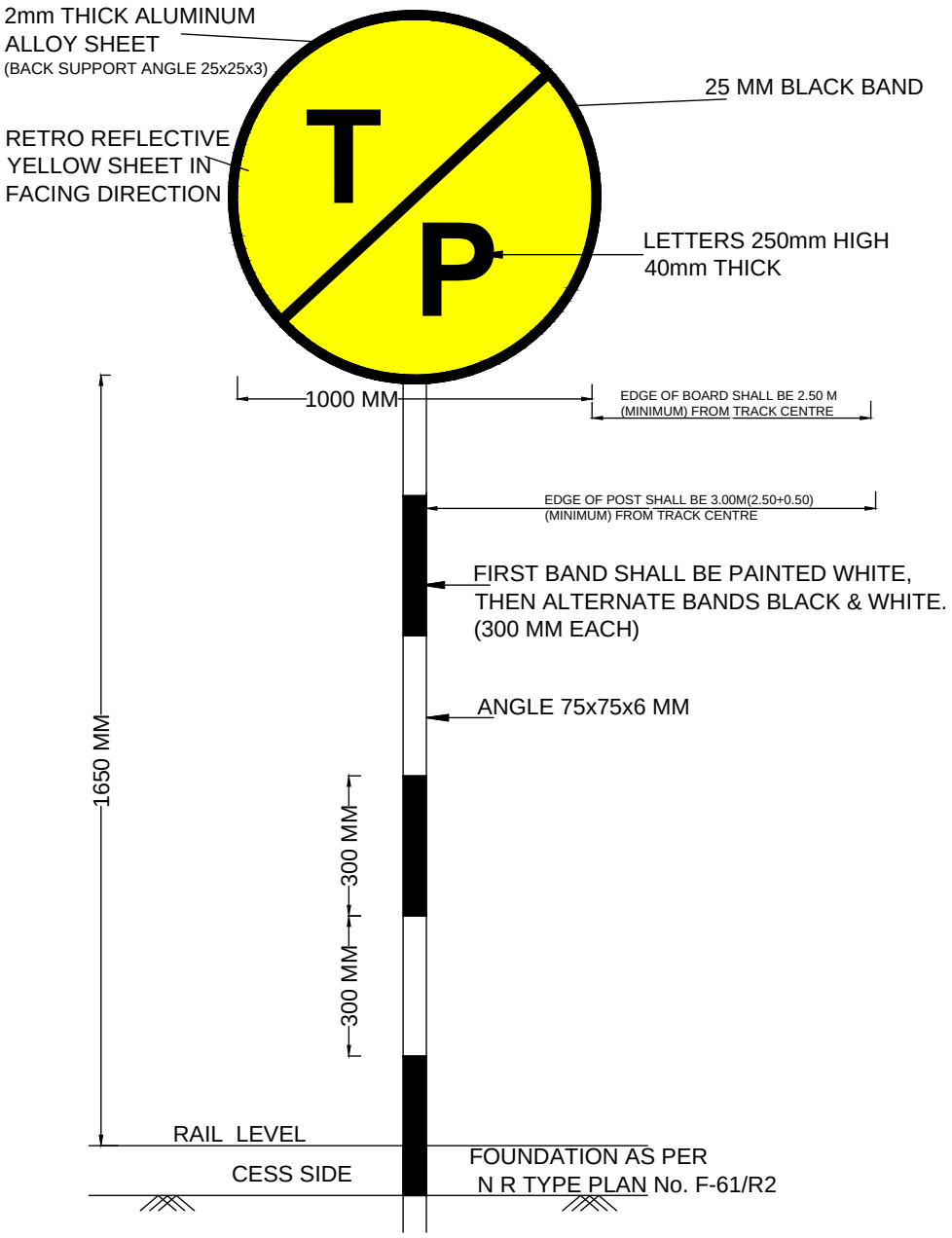
Back

STOP INDICATOR



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

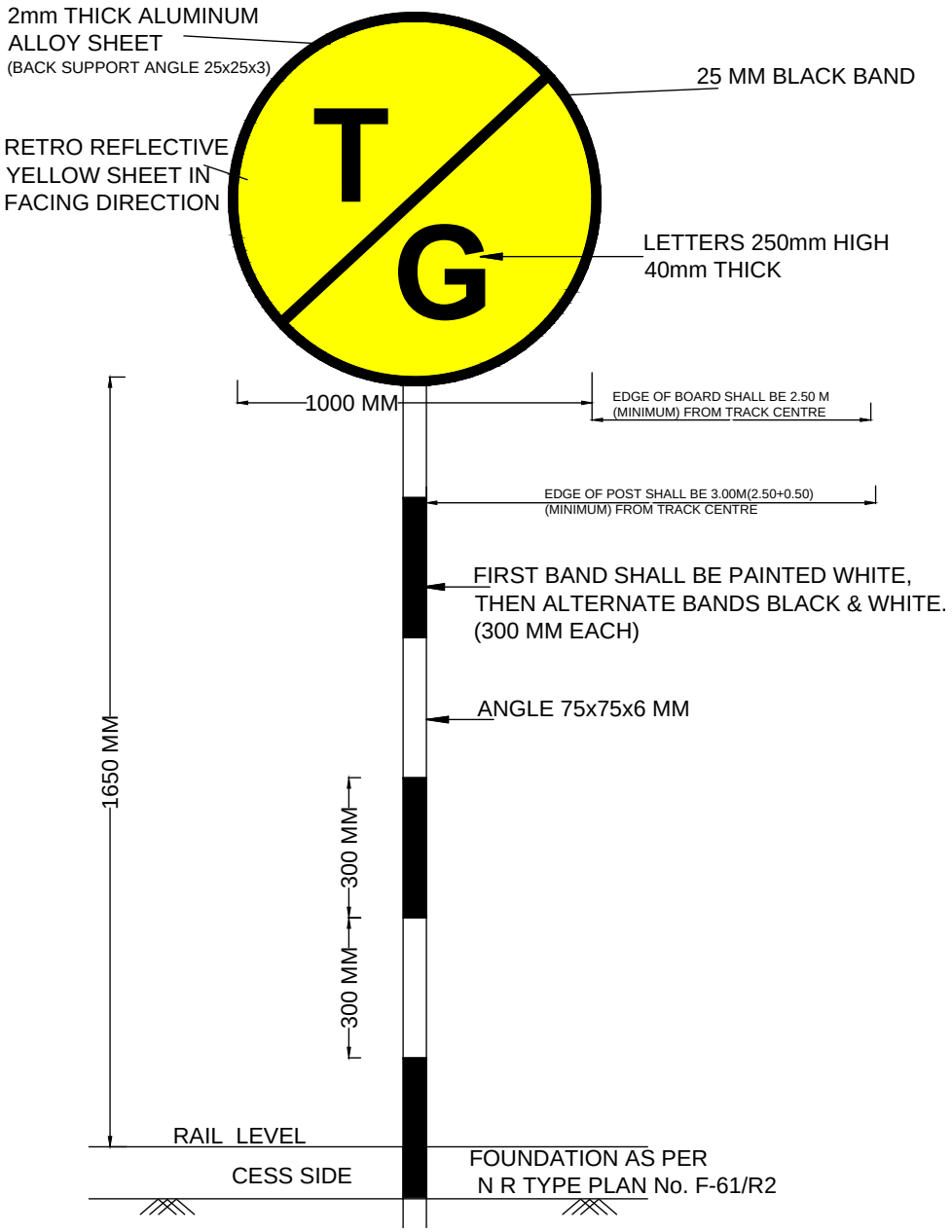
TERMINATION INDICATOR FOR PASSENGER TRAINS



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

Back

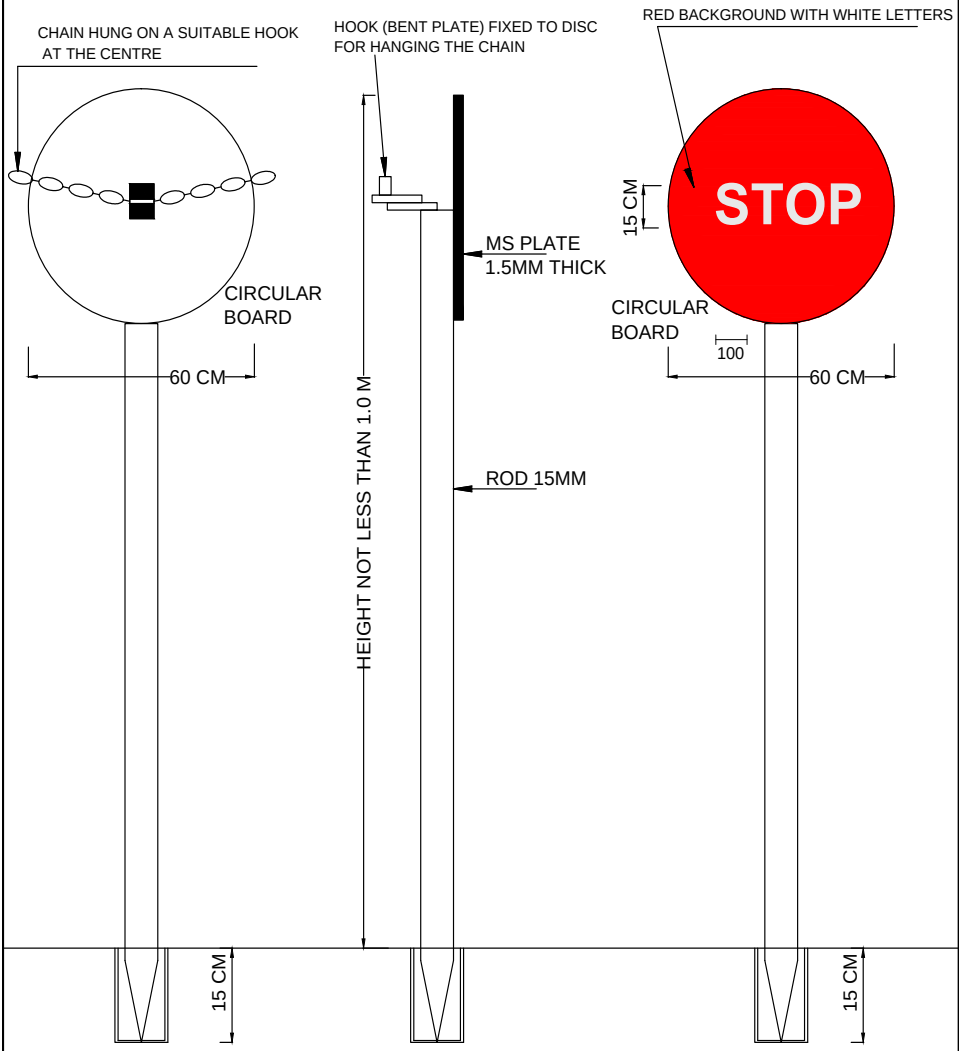
TERMINATION INDICATOR FOR GOODS TRAINS



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

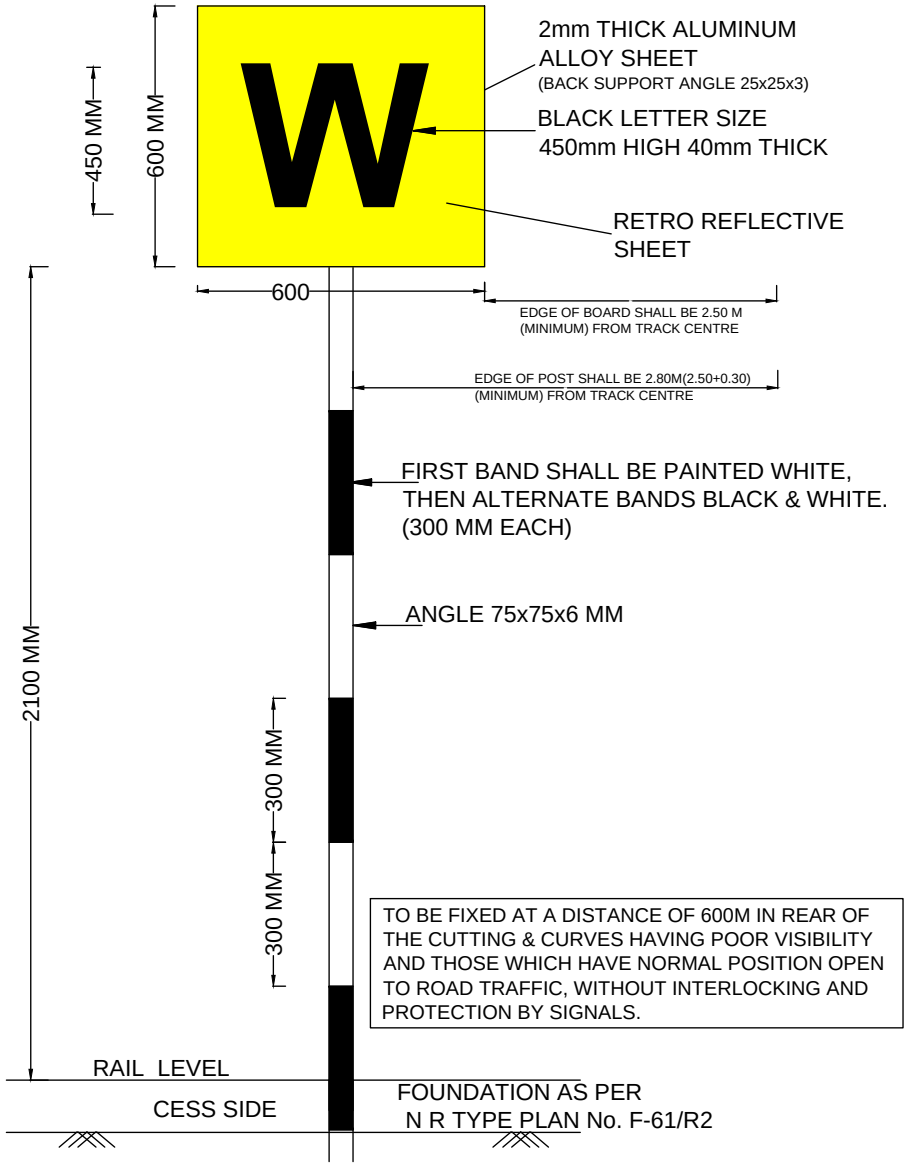
Back

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



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

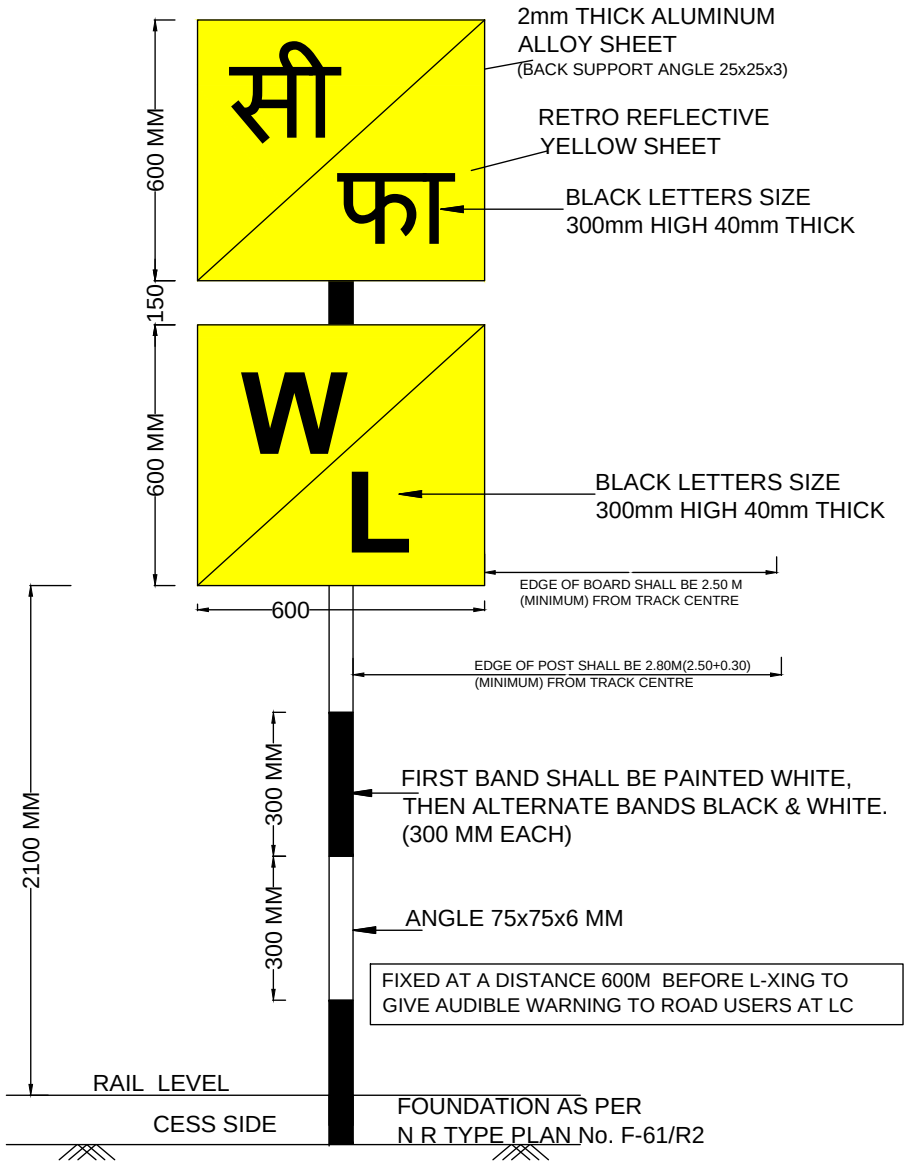
WHISTLE BOARD FOR CURVES/CUTTINGS/TUNNELS



REF.:- IRPWM PARA 916(1)

Back

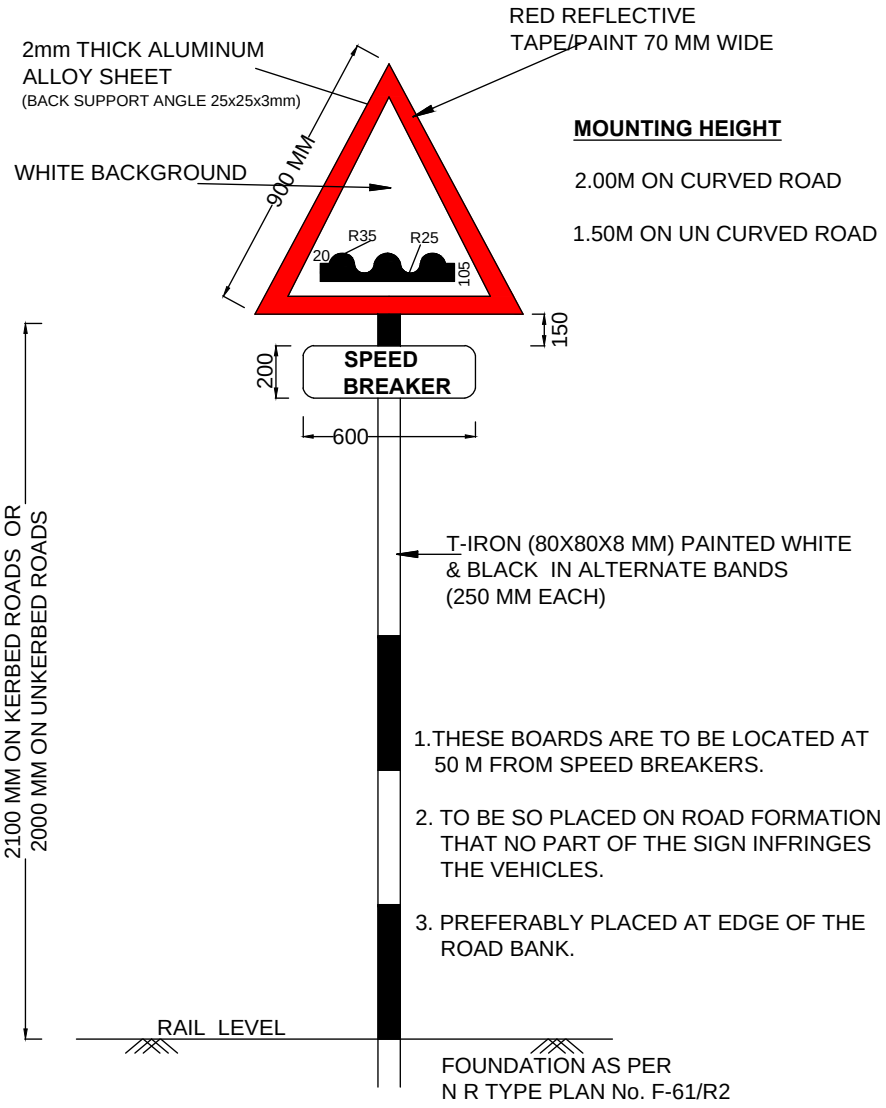
WHISTLE BOARD FOR LEVEL CROSSINGS



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

Back

WARNING SIGN BOARD FOR SPEED BREAKER



MOUNTING HEIGHT

2.00M ON CURVED ROAD

1.50M ON UN CURVED ROAD

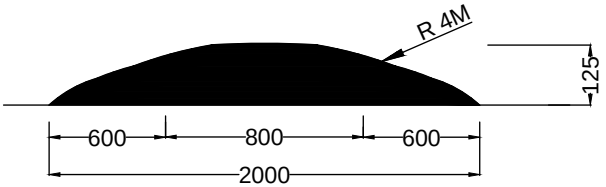
1. THESE BOARDS ARE TO BE LOCATED AT 50 M FROM SPEED BREAKERS.

2. TO BE SO PLACED ON ROAD FORMATION THAT NO PART OF THE SIGN INFRINGES THE VEHICLES.

3. PREFERABLY PLACED AT EDGE OF THE ROAD BANK.

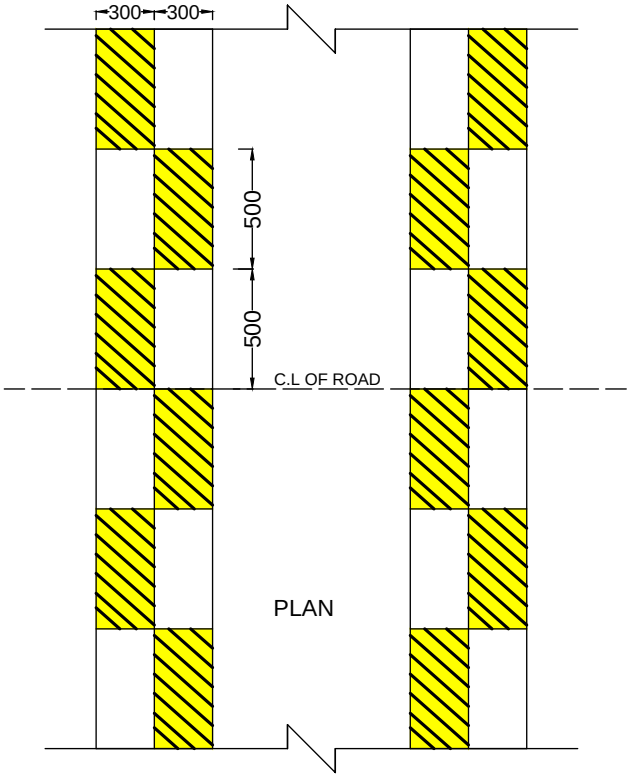
REF.:- IRPWM PARA 918/2 AND ANNEXURE 9/7

STANDARD SPEED BREAKER



ELEVATION

ALL DIMENSIONS ARE IN MM.

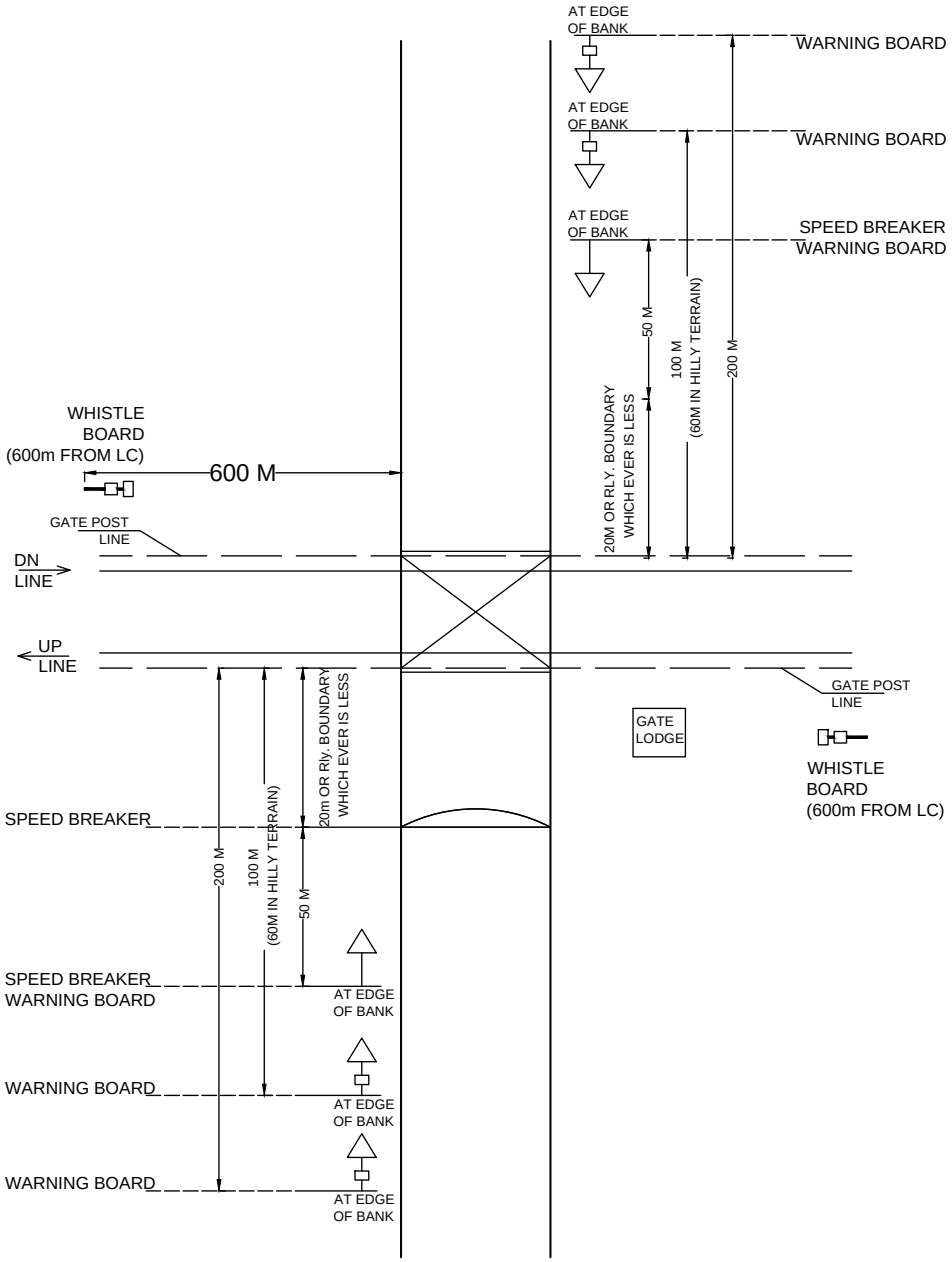


PLAN

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

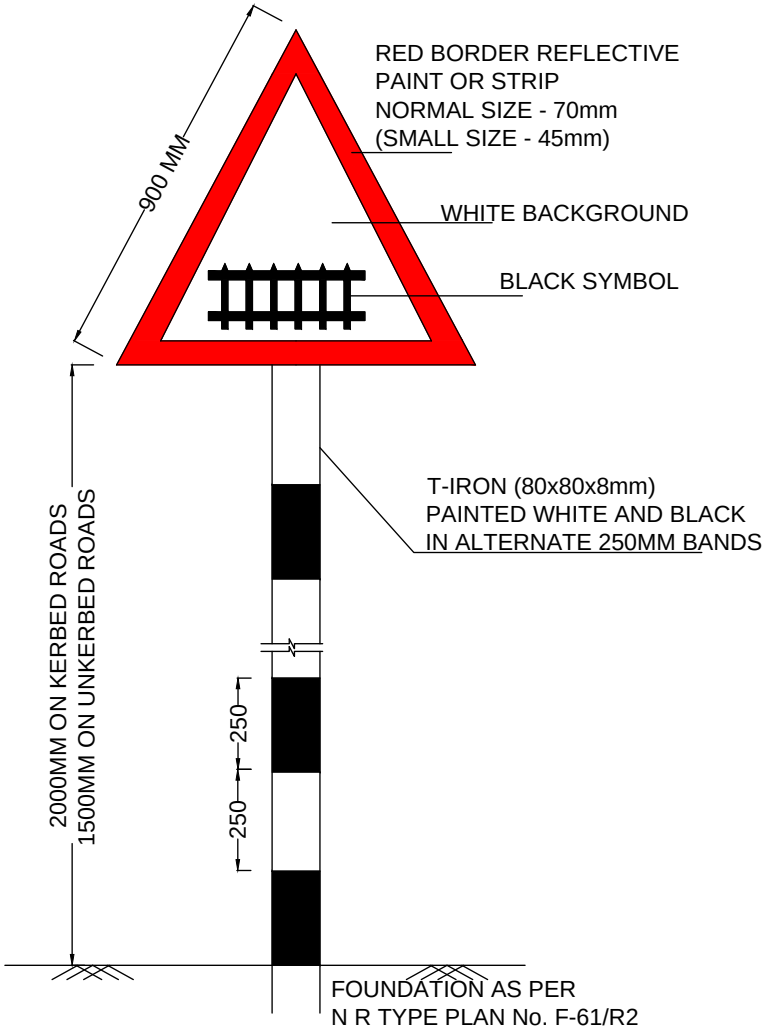
MANNED L-XING SCHEMATIC DIAGRAM



REF.:- N R CE CIRCULAR No. 266

Back

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

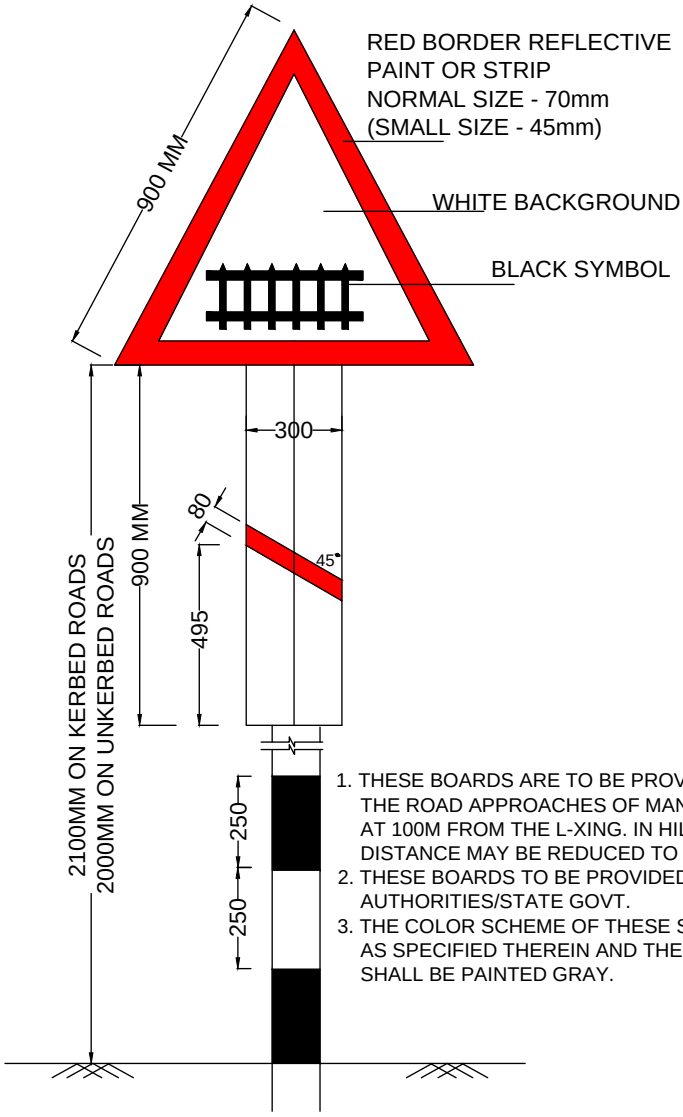


1. TO BE SO PLACED ON ROAD FORMATION THAT NO PART OF THE SIGN INFRINGES THE VEHICLES.
2. THESE BOARDS ARE TO BE LOCATED AT 100M FROM GATE POSTS.
3. THE BOARDS IS TO BE PROVIDED BY RAILWAYS AS INTERIM SAFETY MEASURE, ONLY TILL SUCH TIME THAT WARNING BOARDS ARE PROVIDED BY ROAD AUTHORITIES / STATE GOVT.
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

Back

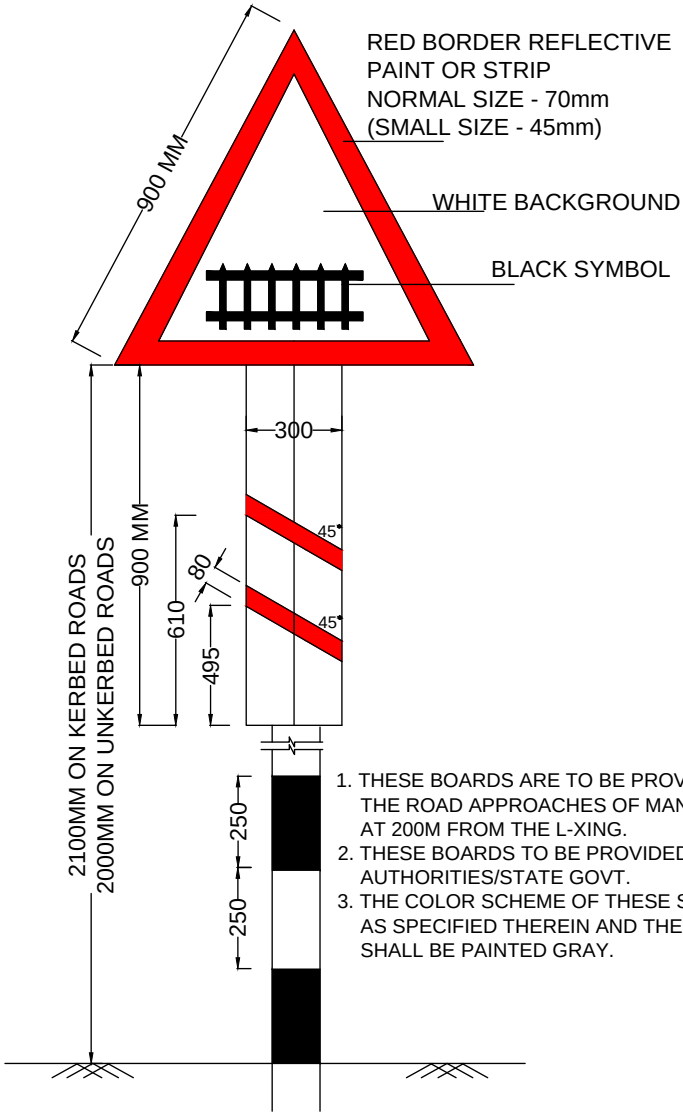
WARNING SIGN TO BE PROVIDED ON ROAD APPROACHES OF ALL MANNED L-XINGS



REF.:- N R CE CIRCULAR No. 266

Back

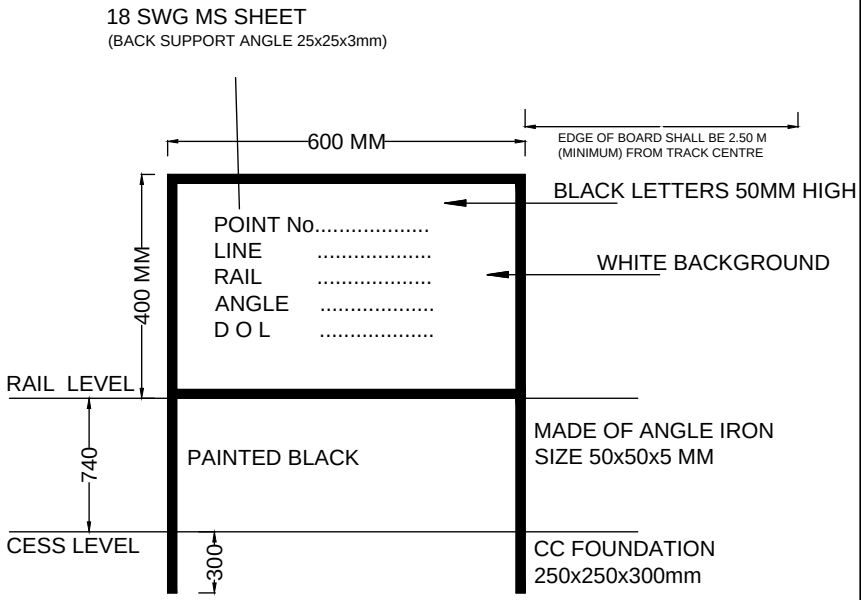
WARNING SIGN TO BE PROVIDED ON ROAD APPROACHES OF ALL MANNED L-XINGS



REF.:- N R CE CIRCULAR No. 266

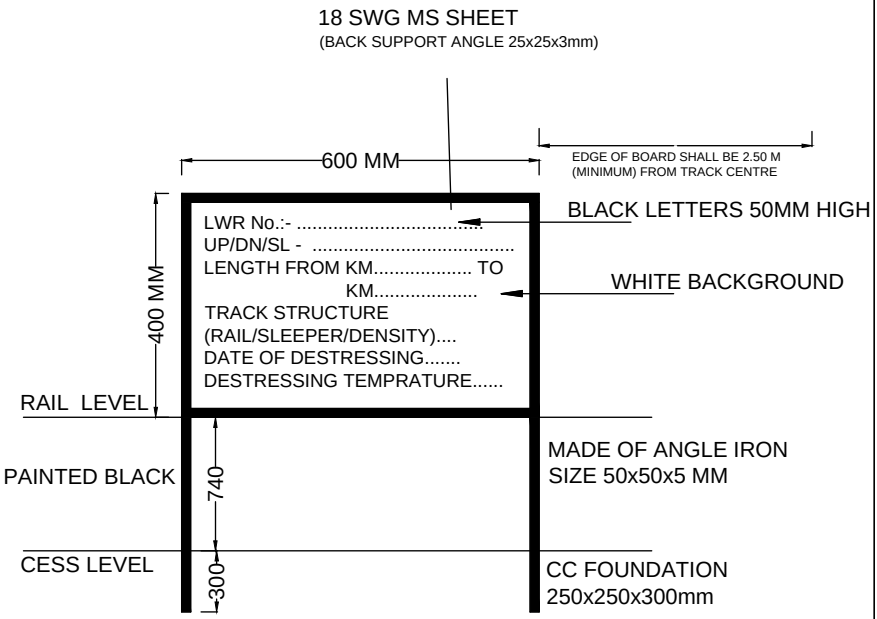
Back

TURN OUT BOARDS



BOARD TO BE PROVIDED PERPENDICULAR TO TRACK

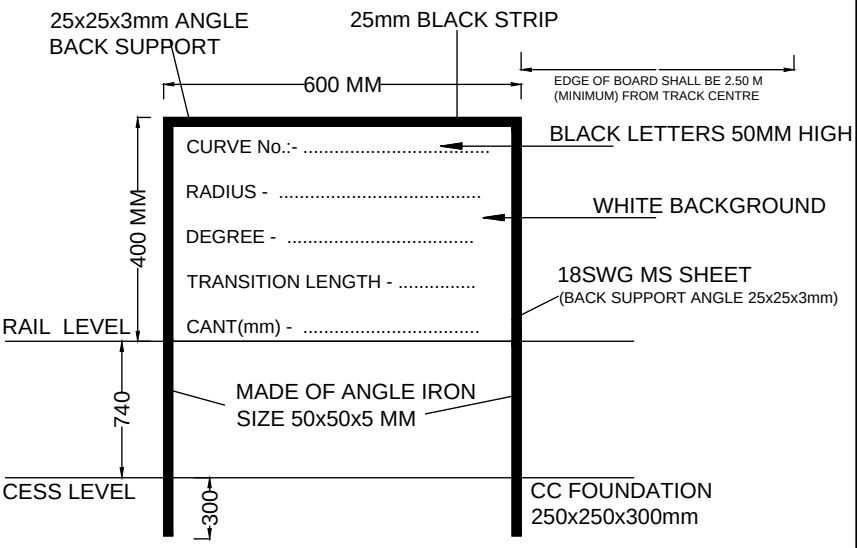
LWR BOARDS



BOARD TO BE PROVIDED PERPENDICULAR TO TRACK

REF.:- IRPWM PARA 212/4

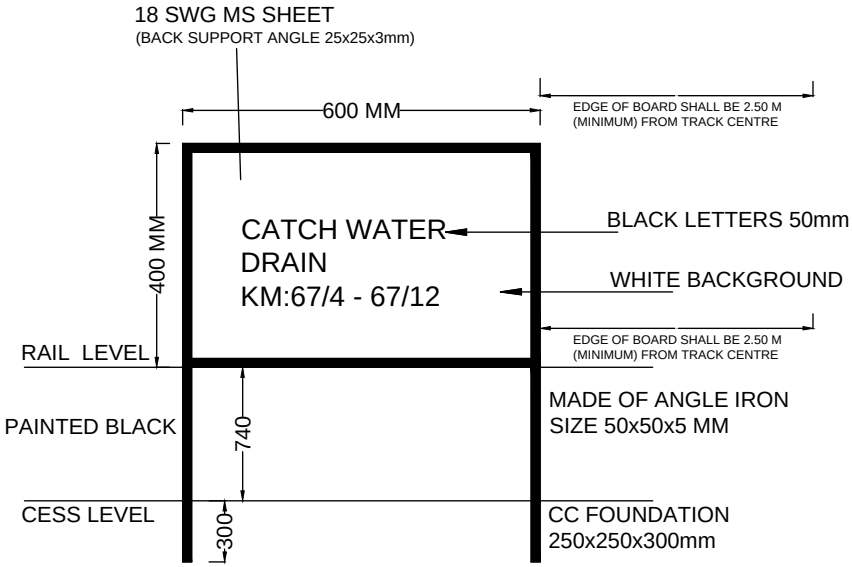
CURVE BOARD



BOARD TO BE PROVIDED PERPENDICULAR TO TRACK ON EACH APPROACH OF CURVE AT TANGENT POINT OUT SIDE OF CURVE.

REF.:- IRPWM PARA 409/1

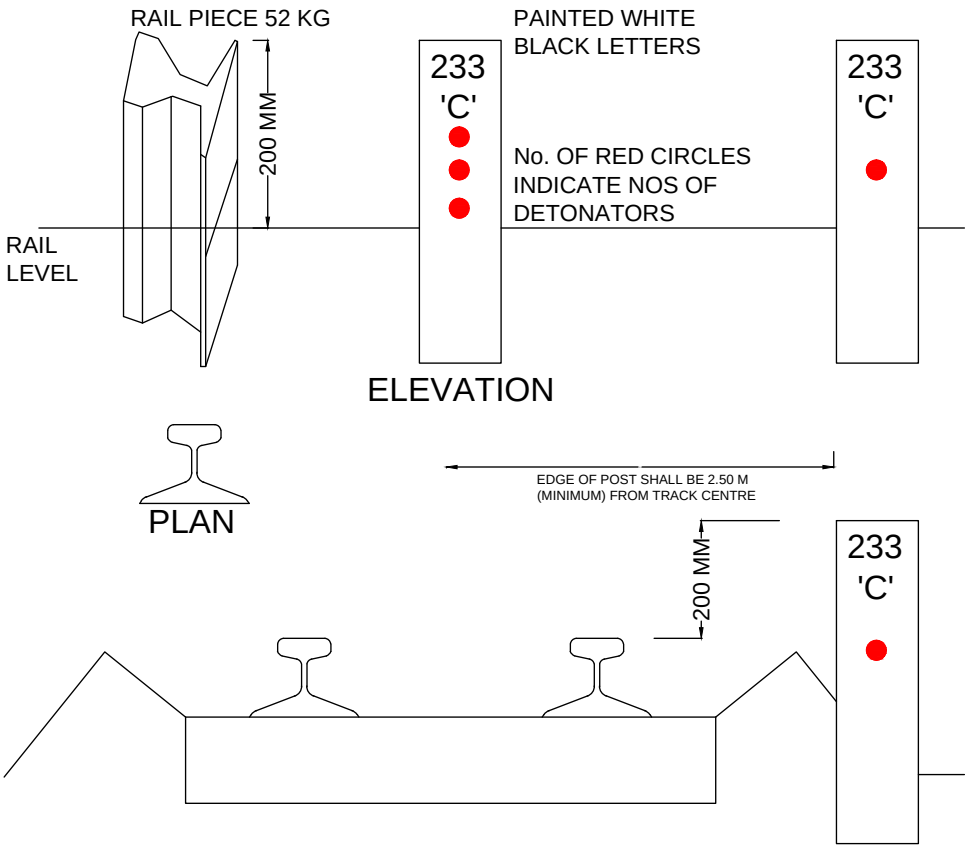
CATCH WATER DRAIN BOARDS



BOARD TO BE PROVIDED PERPENDICULAR TO TRACK AT EITHER ENDS OF CATCH WATER DRAIN

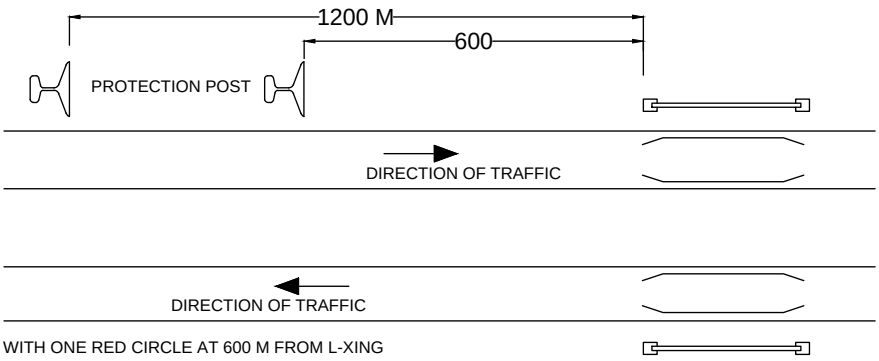
REF.:- IRPWM PARA 223

DETAIL OF PROTECTION POST



ELEVATION

PLAN



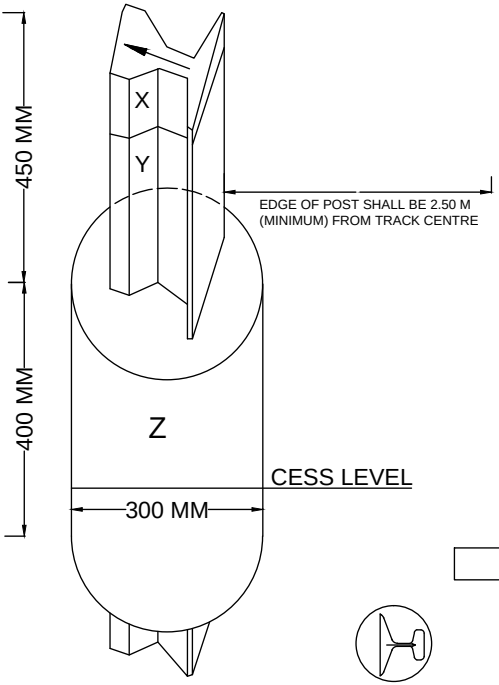
WITH ONE RED CIRCLE AT 600 M FROM L-XING

WITH THREE RED CIRCLE AT 1200 M FROM L-XING

REF.:- IRPWM PARA 806

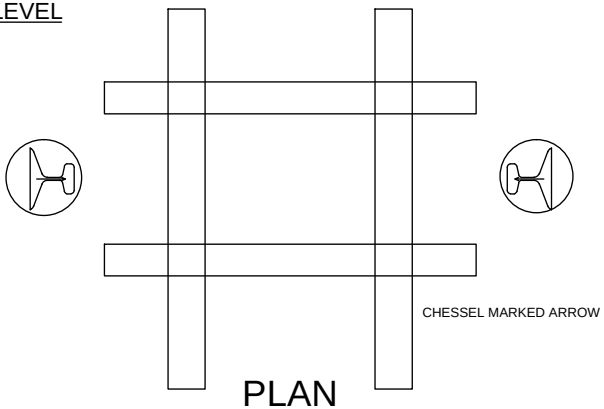
Back

DETAIL OF REFERENCE POST FOR LWR & CREEP

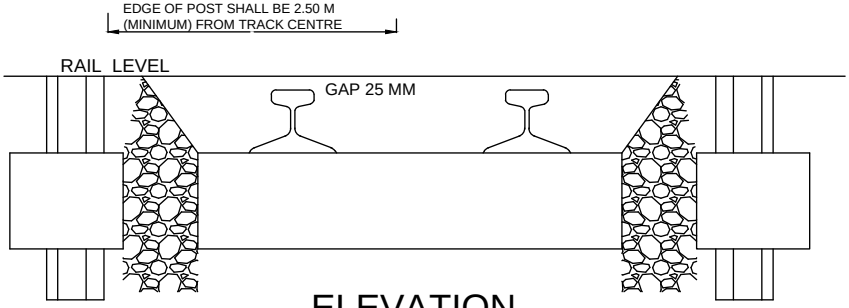


COLOUR REFERENCE

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



PLAN

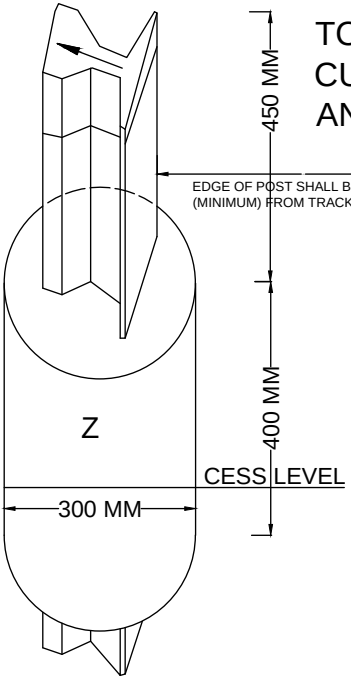


ELEVATION

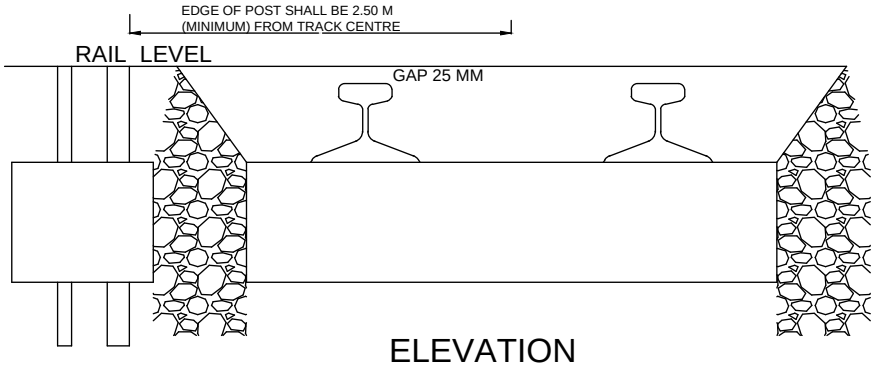
REF.:- IRPWM PARA 5.9

Back

DETAIL OF REFERENCE POST FOR TANGENT POINT



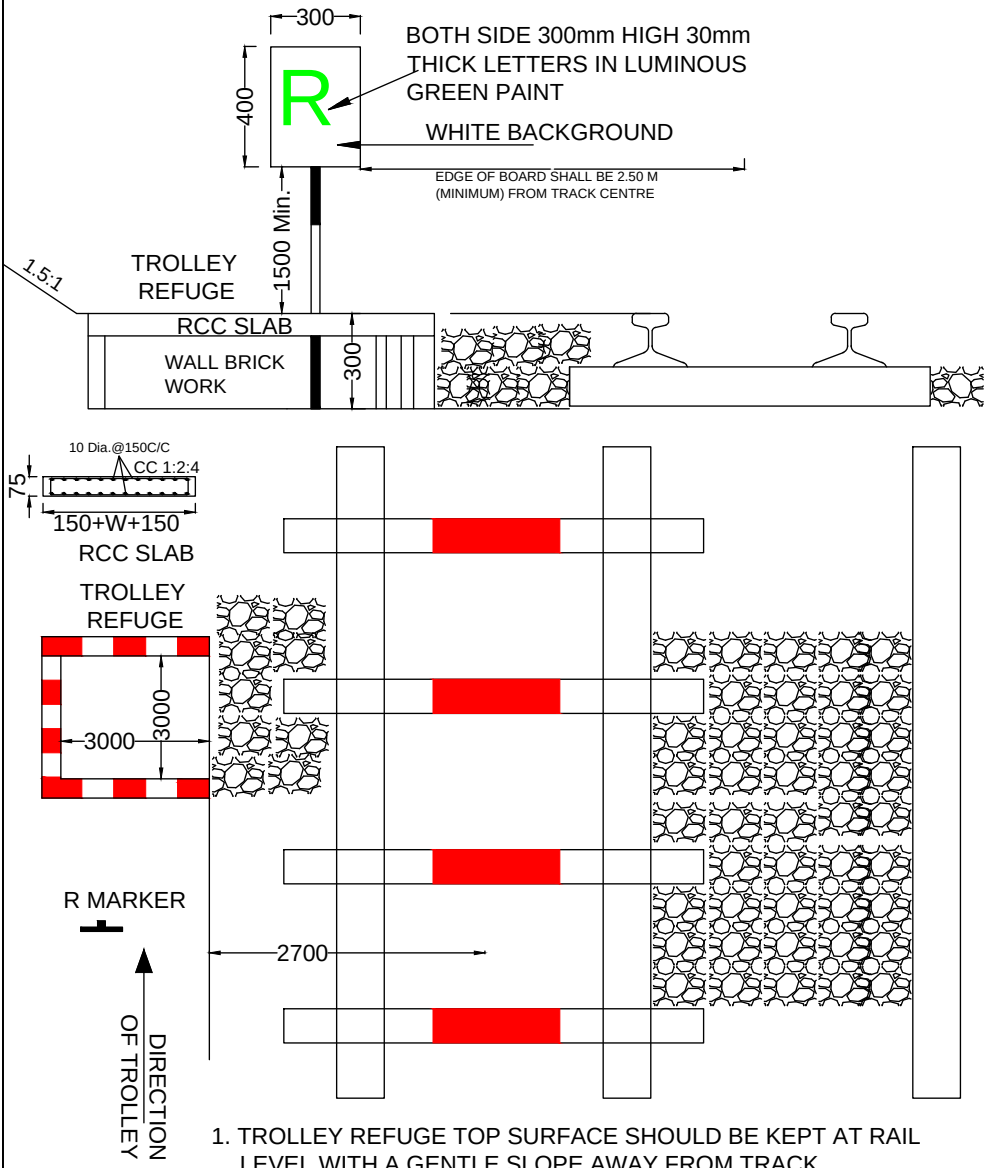
TO BE PROVIDED INSIDE OF CURVE, TTP TO BE PAINTED RED AND CTP WHITE AND SEJ BLACK



ELEVATION

REF.:- IRPWM PARA 409/2

TROLLEY REFUGE ON CUTTINGS



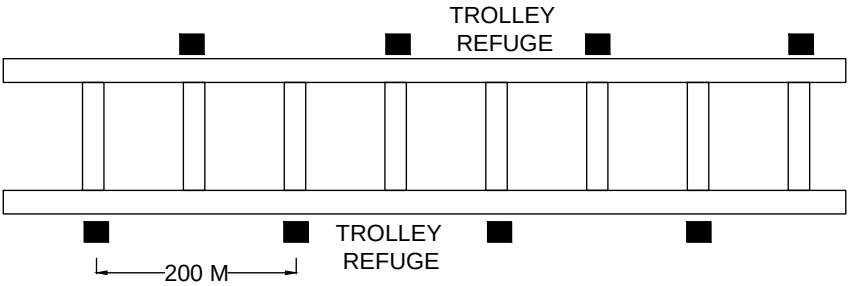
1. TROLLEY REFUGE TOP SURFACE SHOULD BE KEPT AT RAIL LEVEL WITH A GENTLE SLOPE AWAY FROM TRACK.

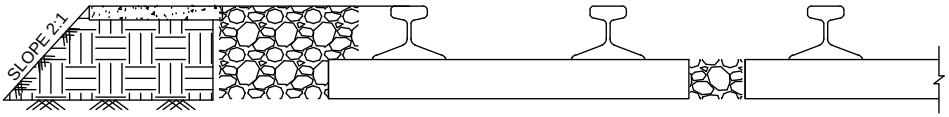
2. THE SPACE BETWEEN THE TRACK SHOULD BE FILLED WITH BALLAST AND LEVELED UP TO THE RAIL LEVEL FOR OFF-TRACKING OF THE TROLLEY OPPOSITE TO REFUGE.

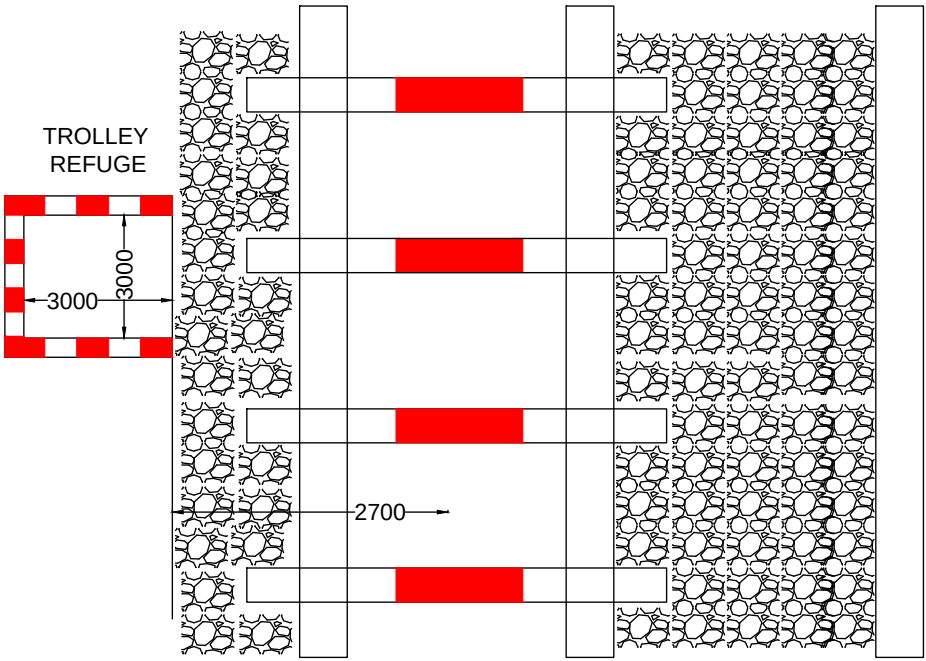
REF.:- IRPWM PARA 220

Back

TROLLEY REFUGE ON BANKS





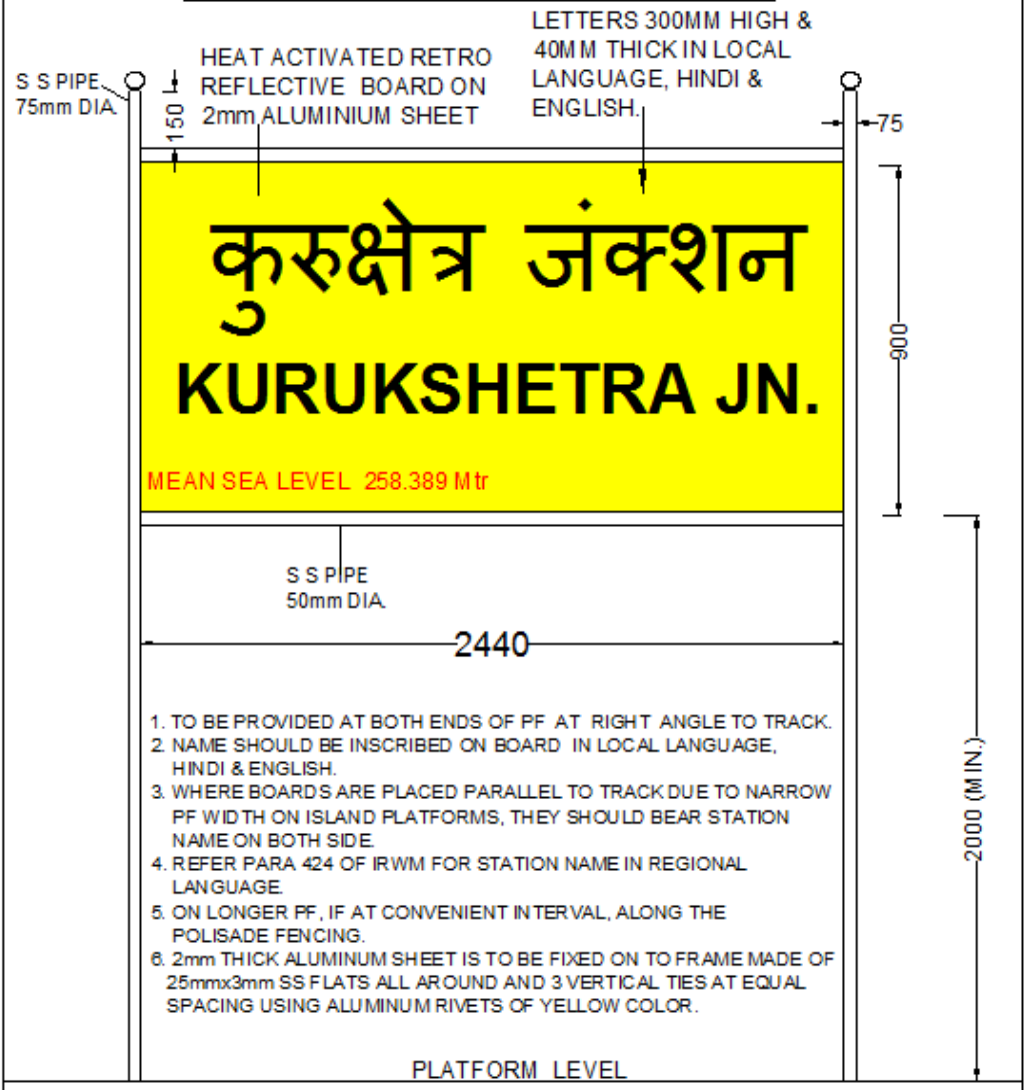


1. TROLLEY REFUGE TOP SURFACE SHOULD BE KEPT AT RAIL LEVEL WITH A GENTLE SLOPE AWAY FROM TRACK.

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

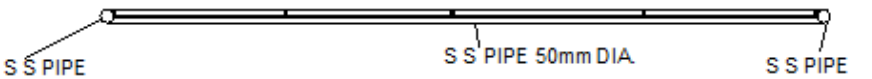
STATION NAME BOARD (PRINCIPAL)



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.

ELEVATION

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



PLAN

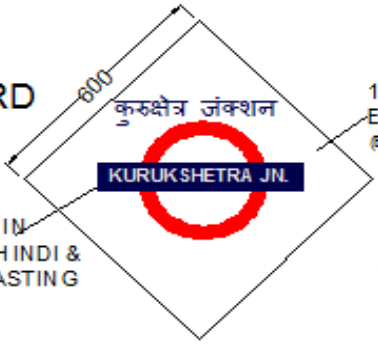
REF.:- IRWM PARA 424

Back

STATION NAME BOARD

(SECONDARY / TERTIARY)

TERTIARY NAME BOARD

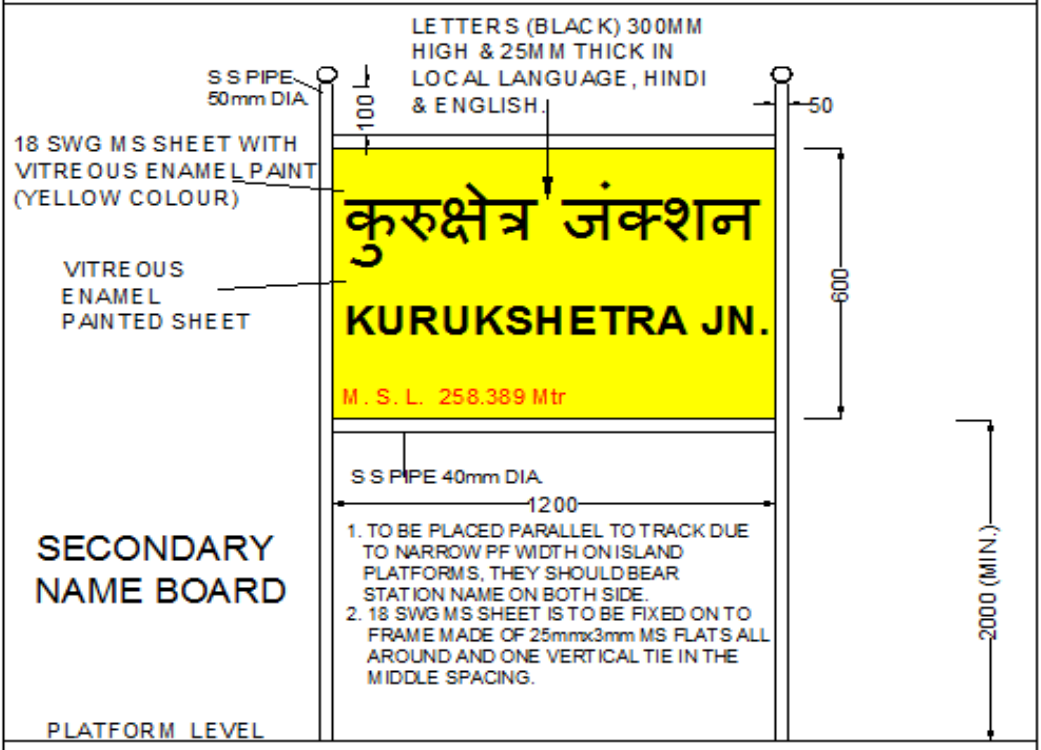


18 SWG MS SHEET WITH VITREOUS ENAMEL PAINT (YELLOW COLOUR)
(BACK SUPPORT FLAT 25x3)

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

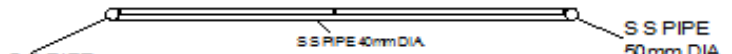
1. TO BE FIXED AT LAMP POST OR FIXED STRUCTURE.

SECONDARY NAME BOARD



ELEVATION

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

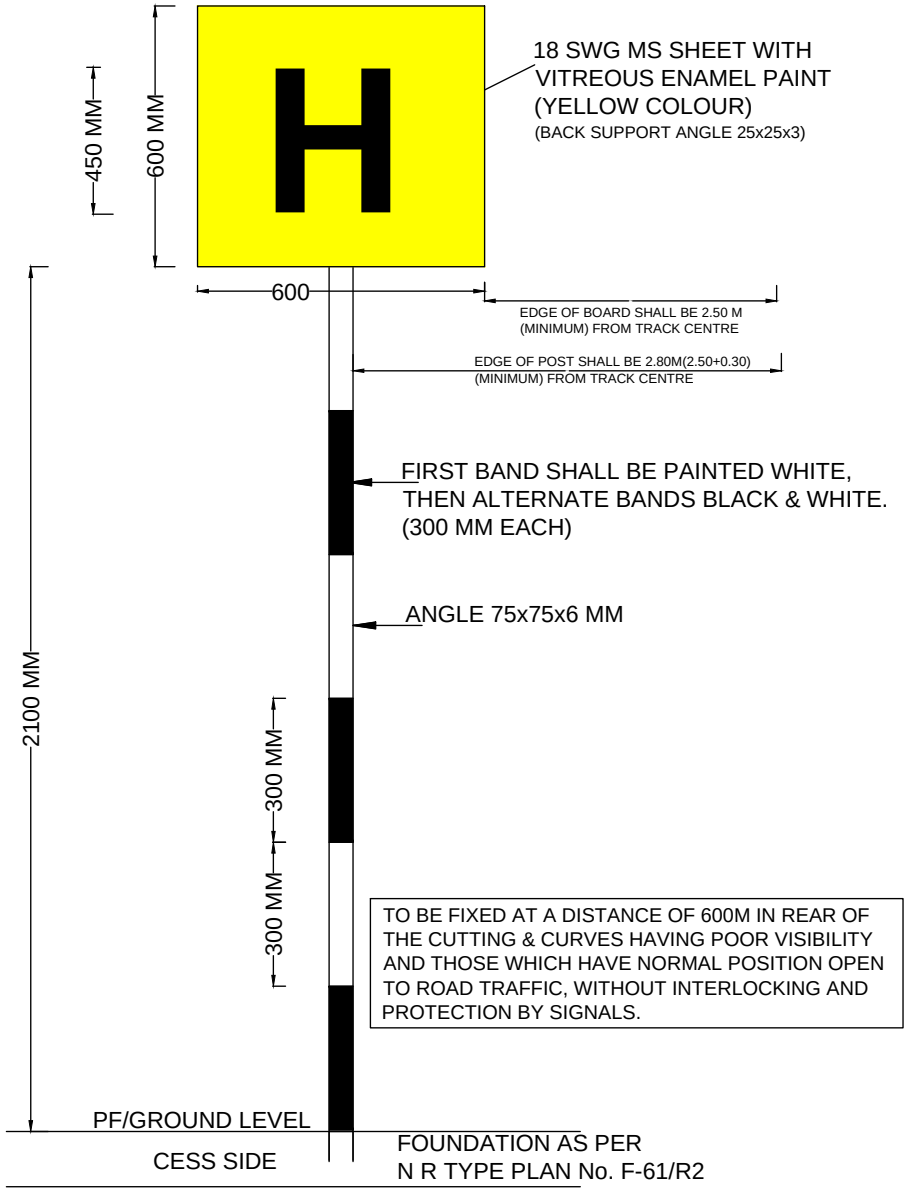


PLAN

REF.:- IRWM PARA 424

Back

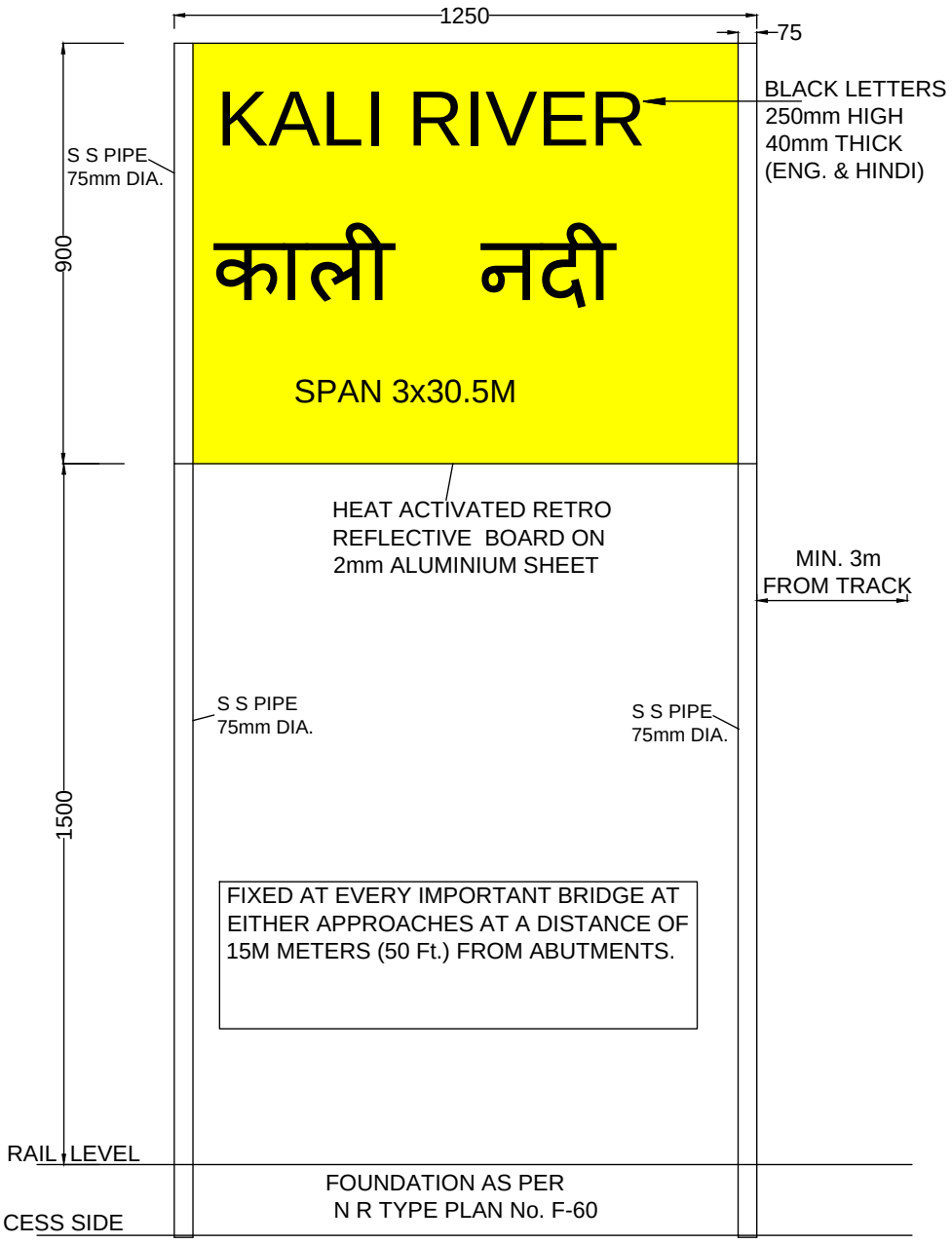
HALT STATION NAME BOARD



REF.:- IRPWM PARA 916(1)

Back

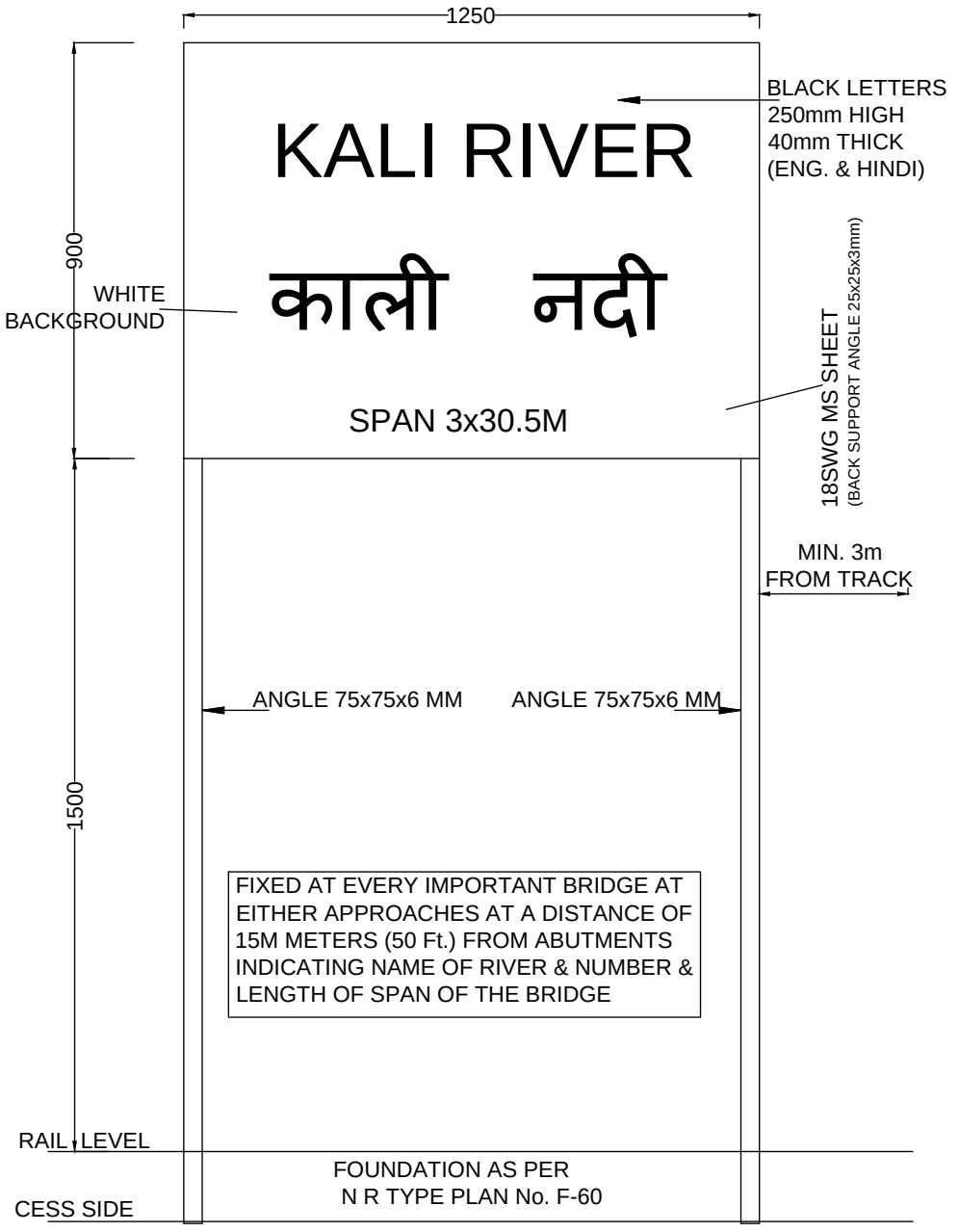
IMPORTANT BRIDGE BOARD



REF.:- IRBM PARA 203

Back

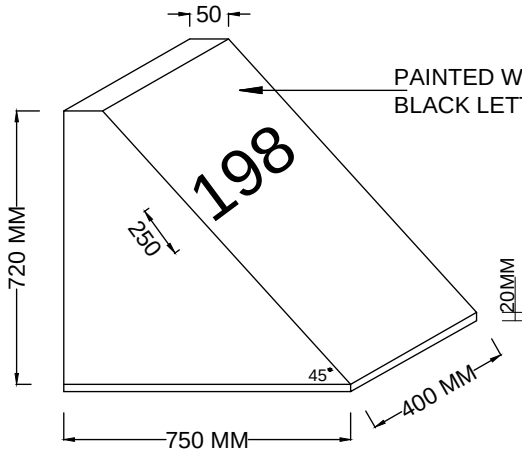
MAJOR BRIDGE BOARD

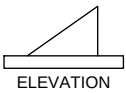


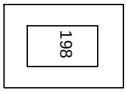
REF.:- IRBM PARA 203/6

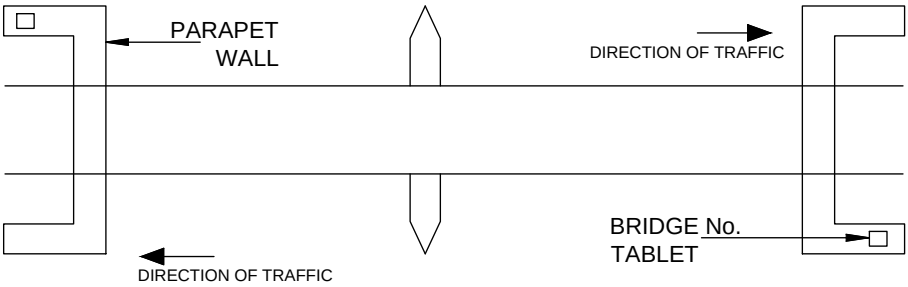
Back

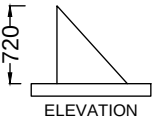
BRIDGE NUMBER TABLET DETAIL

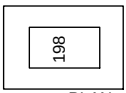






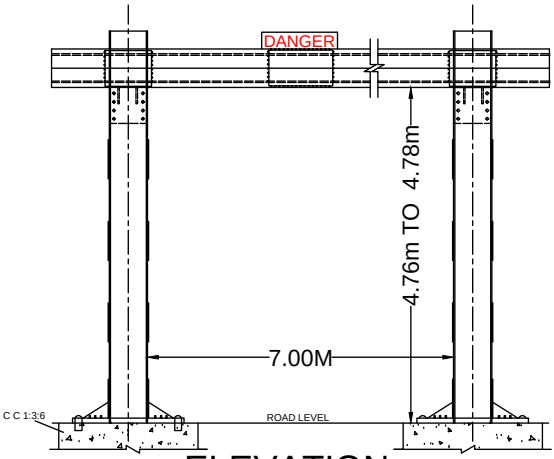




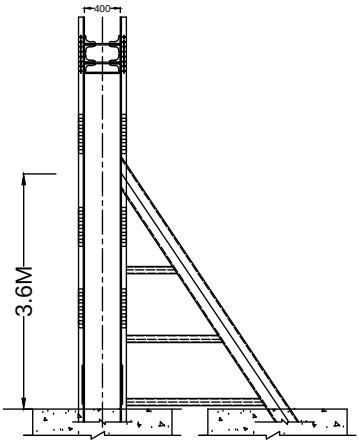


REF.:- IRBM PARA 203.7 ANNEXURE 2/1

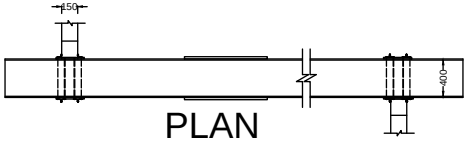
HEIGHT GAUGE FOR L-XING



ELEVATION

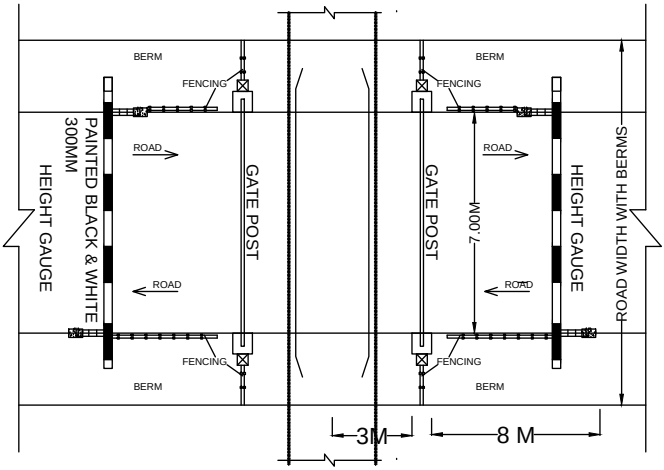


SIDE ELEVATION



PLAN

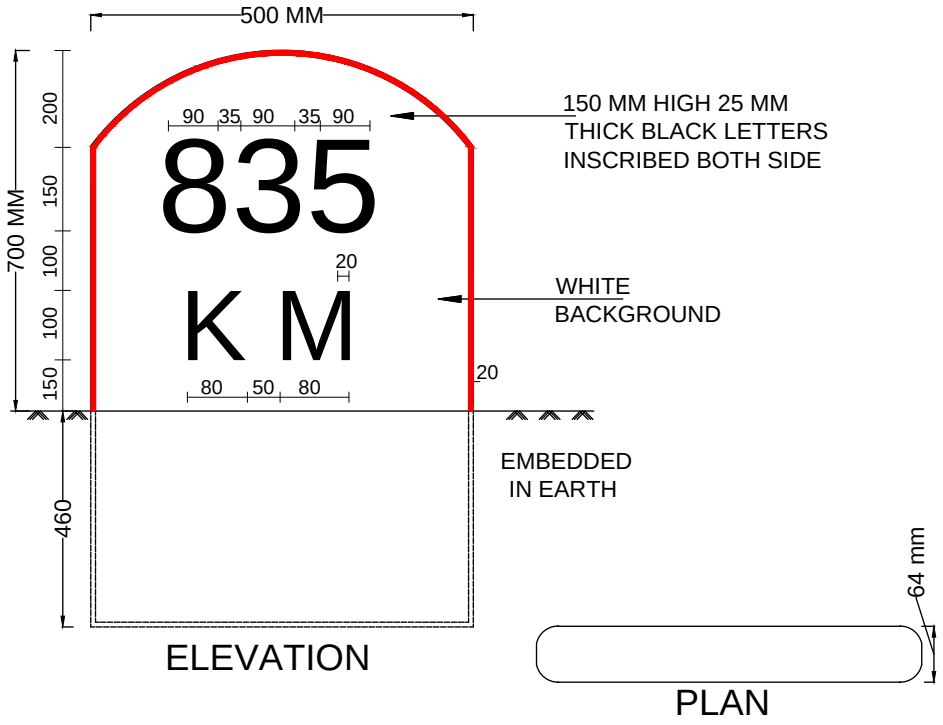
1. HEIGHT 4.76m TO 4.78m WILL BE AS PER ACTM CORRECTION SLIP No. 30 Dt. 22.10.2019 FOR LEVEL CROSSING.



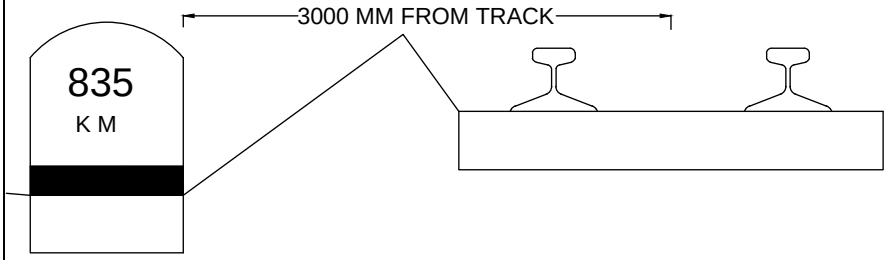
REF.:- TI/DRG/CIV/HGAUGE/RDSO/00001/5/0 Dt.08.03.2006

Back

DETAIL OF KM POST

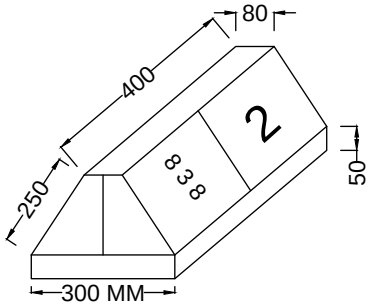


1. POST SHALL BE PROVIDED PREFERABLY OF PRECAST RCC, FIXED AT RIGHT ANGLE TO TRACK.
2. FIGURE, ARROWS LETTERS SHOULD BE PAINTED IN BLACK ON WHITE BACK GROUND
3. DIRECTION OF ARROWS & NUMBERS SHALL BE CHANGED ACCORDINGLY FOR OTHER KM
4. FOR OTHER DETAILS REFER NRHQE PLAN No.-4449

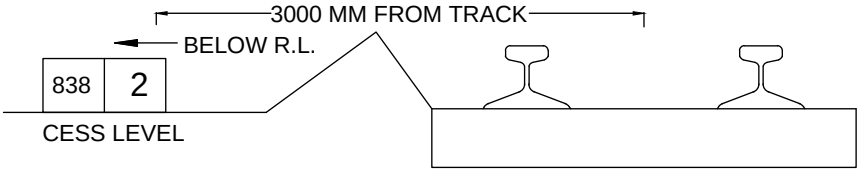


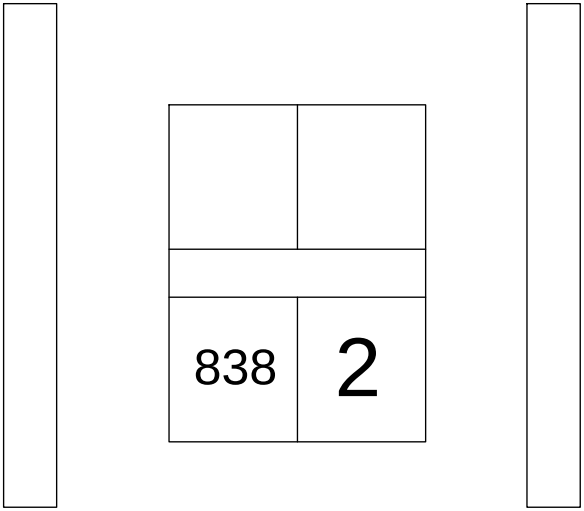
REF.:- IRPWM PARA 217 AND NR TYPE PLAN-F-46/R1/R2

HECTOMETER POST



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

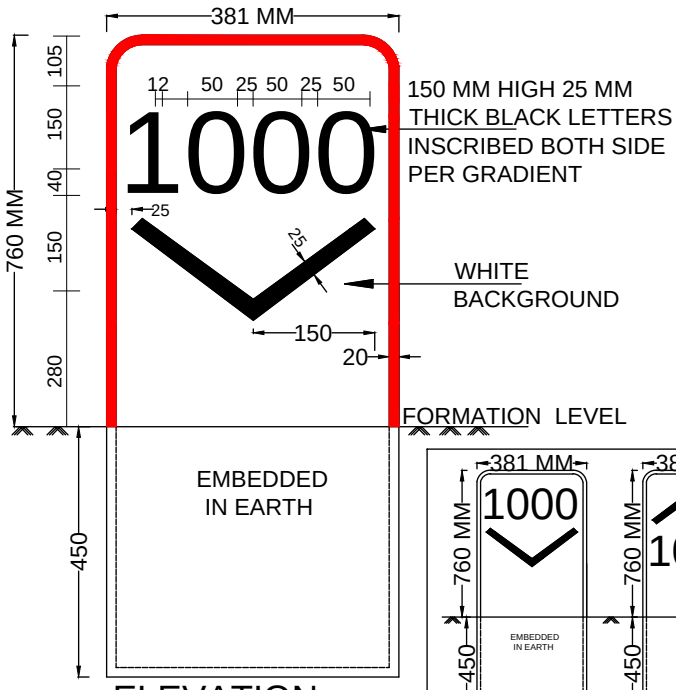


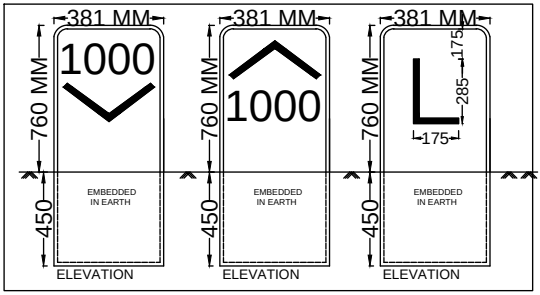


REF.:- IRPWM PARA 217

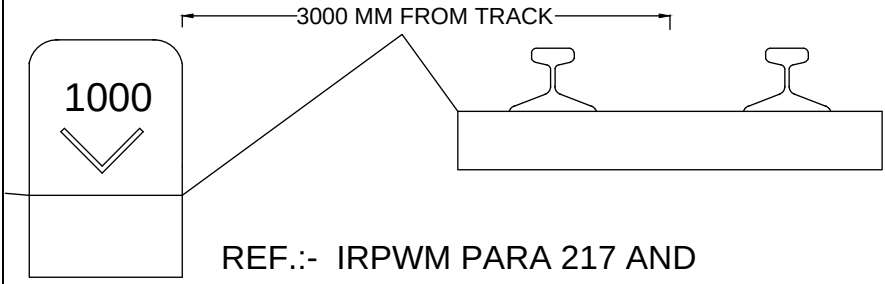
Back

GRADIENT POST



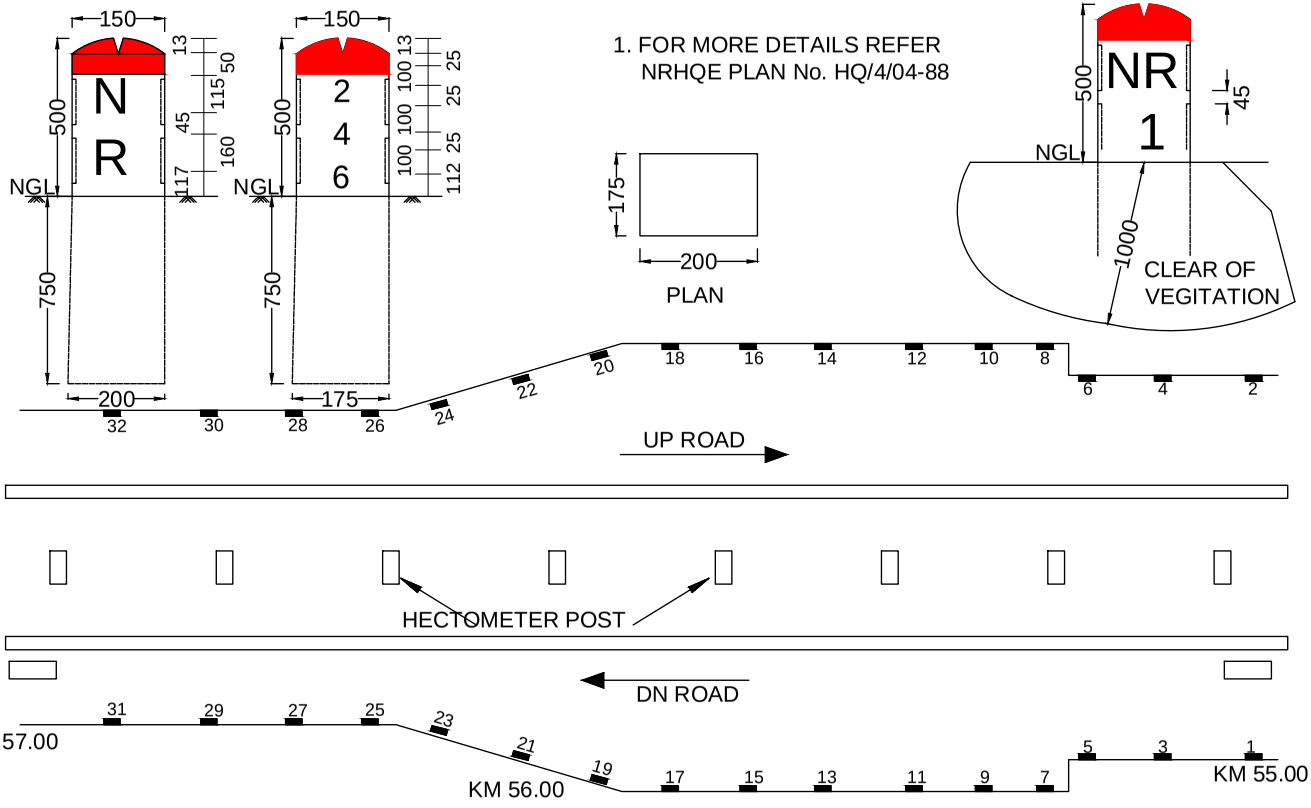


1. POST SHALL BE PROVIDED OF RCC, FIXED AT RIGHT ANGLE TO TRACK ON LESS DISTINCTLY VISIBLE
2. FIGURE, ARROWS LETTERS SHOULD BE PAINTED IN BLACK ON WHITE BACK GROUND
3. DIRECTION OF ARROWS & NUMBERS SHALL BE CHANGED ACCORDINGLY FOR OTHER GRADIENTS
4. FOR OTHER DETAILS REFER NRHQE PLAN No. 629



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

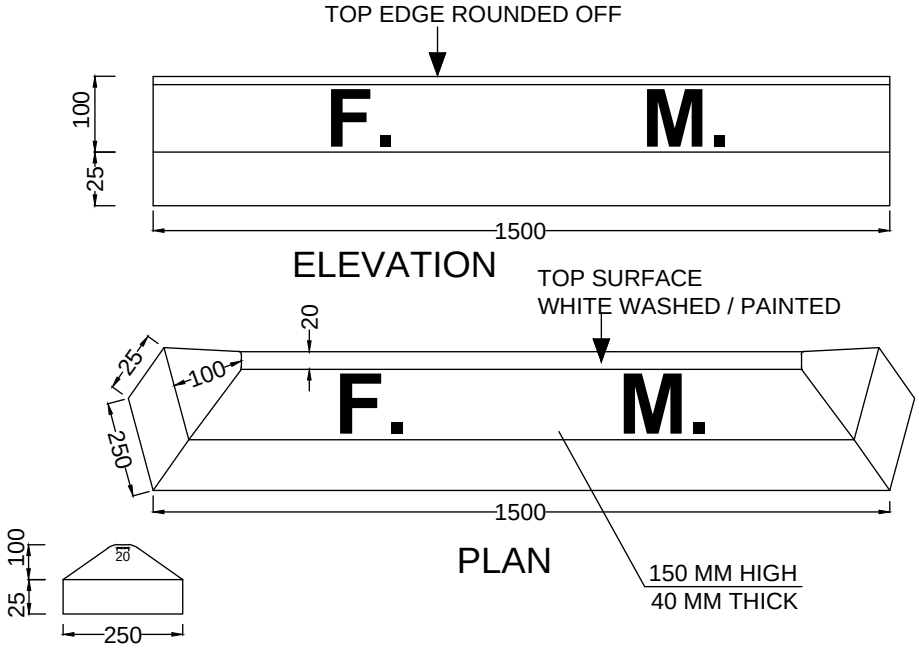
LAND BOUNDARY STONE



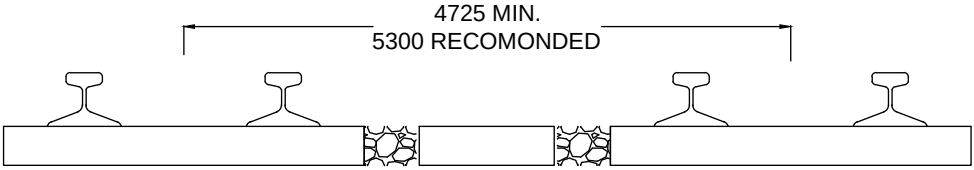
NOTE:- NO WHERE DISTANCE B/W THE TWO BOUNDARY STONES SHALL BE MORE THAN 200 M.

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

DETAILS OF FOULING MARK

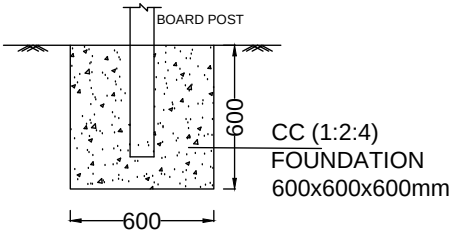


1. LETTERS SHALL BE INSCRIBED AND PAINTED BLACK 150 MM HIGH
2. THESE SHOULD BE LAID LEVEL WITH THE TOP LINE OF THE BALLAST SECTION
3. MADE OF STONE OR CONCRETE BLOCK.
4. THESE SHOULD BE FIXED AT THE POINT AT WHICH SPACING B/W THE TRACK BEGINS TO REDUCE TO LESS THAN MINIMUM AS LAID DOWN IN STANDARD SOD.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

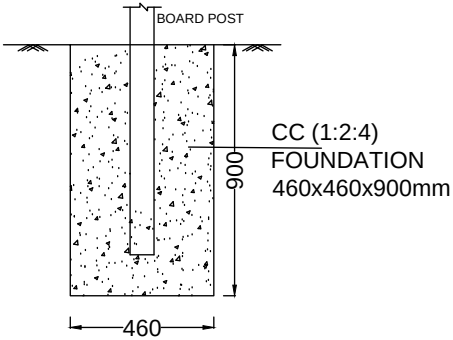


REF.:- IRPWM PARA 236

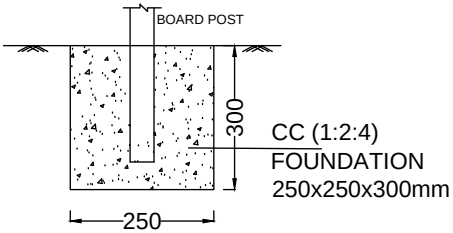
DETAILS OF FOUNDATIONS



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