

Signs, Notice Boards and Instruction Plates

ESA-07-01

Applicability

NSW / QLD

Publication Requirement

Internal / External

Primary Source

SPS 03 – Issue 1, Revision 2 – May 2005

Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
1.1	04 Feb 19	Standards	Standards	Manager Standards	General Manager Technical Standards 26/02/2019

Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	31 Jan 19		First issue of standard to supersede SPS 03 (v1.2).
1.1	04 Feb 19	5.1	Editorial amendments to sample prohibitive boards.

Disclaimer

This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

Authorised users of this document should visit ARTC's intranet or extranet (www.artc.com.au) to access the latest version of this document.

Table of Contents

Table of Contents2

1 Introduction.....4

1.1 Purpose4

1.2 Scope4

1.3 Standard Owner4

1.4 Responsibilities4

1.5 Reference Documents4

1.6 Form of Lettering5

2 Materials5

2.1 Dimensional Tolerances.....5

2.2 Reflectivity5

2.3 Mounting Holes6

2.4 Height and Location of Signs in the Corridor6

3 List of Current Signs and Plates7

4 Mandatory or Hazard Signs and Notice Plates.....9

4.1 “STOP” Signs9

4.2 Electric Trains Stop Board10

4.3 Derailer Signs.....10

4.4 Catch-Point Sign11

4.5 Block Joint Sign.....12

4.6 Limit of Shunt Sign13

4.7 End of Staff Section Sign14

5 Safeworking Instruction Boards15

5.1 Prohibitive Boards15

5.2 Semi-Automatic Signal Board16

5.3 Automatic Signal Board.....17

5.4 Intermediate Siding Board.....17

5.5 Slip Boards18

5.6 Distant Signal Boards.....19

5.7 Begin and End Single Light Indication Boards19

5.8 Tonnage Instruction Boards20

6 Train Order Working Signs.....21

6.1	Location Sign.....	21
6.2	Yard Limit Sign.....	21
6.3	Shunt Limit Sign	22
6.4	Begin / End Train Order Working.....	22
6.5	Clearance Post.....	23
6.6	Network Control Boundary	23
6.7	Begin / End Advanced Train Management System (ATMS) Working	24
7	Miscellaneous Notice Boards	25
7.1	Advisory Speed Boards.....	25
7.2	Special Speed Board – Sydney Metropolitan Area.....	26
7.3	Accept Signal Board.....	26
7.4	Yard Limit and End Yard Limit Signs	27
7.5	Repeat Signal Board	27
7.6	Distant Signal Plate	28
7.7	Co-Acting Signal Board.....	28
7.8	Indicator Signal Board.....	29
7.9	Outer Home Boards	29
7.10	Automatic Signal Board.....	30
7.11	Signal Identification Plates by Line and Distance	30
7.12	Signal Identification Plates by Controlling Lever Number	31
7.13	Shunt Signal Identification Plates Identified by Line and Distance	31
7.14	Signal Building, Cabinet and Location ID Plate	32
7.15	Gantry Signal Identification Plate	32
7.16	Warning Light Nameplate.....	33
7.17	Landmark Sign	33
7.18	Trackside: Track Circuit Equipment Label	34
7.19	Guard’s Indicator Plate.....	35
8	Level Crossing Signs	36
8.1	Road User Signs	36
8.2	Train Driver Signs	38
8.3	Road Sign Combinations	39
8.4	Pedestrian Level Crossings	41

1 Introduction

1.1 Purpose

The purpose of this standard is to detail the requirements for the manufacture and erection of signalling safeworking signage in the rail corridor.

1.2 Scope

This standard contains the requirements for the wording, size, colour, and materials for notice boards, instruction plates and signs used with the railway safeworking systems and at level crossings in New South Wales.

Railway notice boards are divided into three categories:

- Signs or notice boards with an unconditional mandatory message, e.g., 'STOP' or signs which denote a hazard, e.g., 'CATCHPOINT'. These signs are normally white lettering on a red background.
- Signs or notice boards with an instruction to the driver which supplements the Safeworking Rules, e.g. 'Drivers must not pass this signal etc'. These signs are normally white lettering on a black background.
- Signs or notice boards of a specialised nature, e.g., advisory speed boards, pilot staff box labels. These signs may be in a variety of colours depending on application

Level Crossing signs comply with the materials, colours and sizes specified in Australian Standard 1742 Part 7 - 'Manual of Uniform Traffic Control Devices - Railway Crossings' and Australian Standard 1743 "Road Signs Specifications". Methods of mounting may, however, differ.

1.3 Standard Owner

The Manager Standards is the standard owner and is the initial point of contact for all queries relating to this standard.

1.4 Responsibilities

Project Engineers, Project Managers, Signal Maintenance Engineers and Signalling Commissioning Engineers are responsible for the implementation of this standard.

The Signal Standards Engineer is responsible for managing the process.

1.5 Reference Documents

The following documents support this procedure:

- AS 1734 Aluminium Flat Sheet
- AS 1742 Part 7 Manual of Uniform Traffic Control Devices - Railway Crossings
- AS 1743 Road Signs Specifications
- AS 1744 Forms of Letters and Numerals for Road Signs
- AS 1906 Retro-reflective Materials

1.6 Form of Lettering

Except where otherwise shown, lettering and numerals and letter and numeral spacing shall be in accordance with AS 1744.

Letter or numeral sizes are quoted as, for example, “80DM” or “100CN” where;

- “80” and “100” are the letter heights in mm
- “D” and “C” (series) are letter and numeral forms and “M” (medium) and “N” (narrow) are letter and numeral spacings specified in AS 1744.

Where letter or numerals which are not included in AS 1744 are specified, the form and proportion shall be similar to that shown in AS 1744.

2 Materials

Signs and notice plates shall be made from aluminium alloy sheet or extrusion, Alloy shall be 5052 H38:-

For 2 mm thick sheet	5052 H36 or H38
	5086 H34
	5251 H36 or H38
For extrusions	6063 T5 or T6
	6061 T6

All sign and notice plate dimensions in the following sections are quoted in millimetres.

Where reflective lettering, numerals or backgrounds are specified, the reflective material as well as any process inks or pastes shall be to AS 1906 Part 1, with the class of material as specified for each sign.

Non-reflective finishes such as paints, films or other coating materials shall be compatible with the reflective materials, adhere securely to the aluminium plate or extrusion and have an equivalent or better service life than the reflective materials.

Square corners shall be rounded to 5mm minimum radius.

Signs shall be securely fixed to aluminium channels by broad head aluminium rivets. The heads to be coloured to match the colour of the sign.

2.1 Dimensional Tolerances

Overall dimensions of sign or plate	± 5 mm
Vertical spacing between lines of letters or numerals	± 5 mm
Mounting hole centres	± 2mm

2.2 Reflectivity

Where reflective letters on a reflective background are specified, the same class of reflective material shall not be used for both letters and background.

Class 1 and Class 2 materials to AS 1906.1 shall be used as specified herein, eg, class 1 letters on a Class 2 background.

2.3 Mounting Holes

Where mounting holes positions and sizes are quoted, these are for direct mounting the plate to a signal post or rail post with U-bolts. If the signs are to be mounted using “Bandit” clamps or similar with proprietary brackets, hole centres should be varied to suit the bracket used.

2.4 Height and Location of Signs in the Corridor

Signs and notice boards in the corridor should be located such that they are easily identifiable by operators or drivers of rail mounted vehicles. They should be typically planned for installation in accordance with ESC-04-01 – Signal Sighting and Position, with final confirmation of position by way of a signal sighting committee.

3 List of Current Signs and Plates



Description	Drawing No.	Style
Signal Identification Plates	M01-143	Sign
Enginemen must ensure points are set and	M05-002	Notice Board
Begin Single Light Indication	M05-003	Notice Board
Post Mtg. Detail for Signs & Plates etc	M05-004	Old details
Post Mtg. Detail for Signs & Plates etc to fence	M05-005	Old details
Advisory Speed Signs	M05-006	Assembly
Derail Sign	M05-007	Vertical
Automatic Signalling Instruction	M05-008	Notice Board
Stowing Limit	M05-009	Notice Board
Catch Points	M05-011	Notice Board
Train crew Instruction for Level crossing	M05-013	Instruction Plate
Stop train not to pass until warning lights	M05-014	Instruction Plate
Stop	M05-017	Notice Board
Outer Home (OH)	M05-018	Distinguishing Board
Outer Home (OH)	M05-019	Vertical Board
Don't Move when crossing barriers lowered	M05-020	Warning Sign
Block Joint	M05-021	Vertical Notice Board
Identification Plates for huts	M05-022	Identification Plate
ID Plate mounting bracket	M05-024	-
ID Plate siding number	M05-025	Plate
Trains Must Not Increase Speed Before	M05-026	Notice Board
Timing Track Marker	M05-027	Plate
Distinguishing plate accept signal	M05-028	Plate
Distinguishing plate accept signal, remote controlled	M05-029	Plate
Non Interlocked Area	M05-030	Plate
This Signal is to be passed at Stop	M05-035	Drivers Instruction Plate
Limit of Shunt Board	M05-039/ 1 & 2	Notice Board
Tonnage Signal	M05-045	Instruction Board
Important Wind Both Ends	M05-048	Warning Notice
Begin and End, Yard Limit	M05-052	Notice Board
Begin and End, Yard Limit	M05-053	Vertical Notice Board

Description	Drawing No.	Style
Begin and End, Yard Limit with location names	M05-054	Vertical Notice Board
Begin and End, Yard Limit with location names	M05-055	Notice Board
Worksite protection location Sign	M05-056	Sign, post Mtg.
Points requiring clipping sign	M05-059	Sign
When Authorised to Pass Signal	M05-064/ 1 & 2	Notice Board
This Signal Must Not Be Passed at Stop	M05-064/3	Notice Board
Sign post mounting hardware assembly detail	M05-066	-
Location Sign – Train Order Working	M05-070	Sign
Yard Limit sign	M05-071	Sign
Clearance Post	M05-072	Post
Begin / End Train Order Working	M05-073	Sign
Train Order Working with location track names	M05-074/1	Sign
Train Order Working Kilometrage marker	M05-074/2	Sign
Slip Site	M05-076	Slip Board
Worksite, Do Not pass at Stop	M05-142/7	Sign
Railway Level Crossing – Open Crossbuck	M06-204	Sign
Level Crossing signs - various	M06-212	Sign
Level Crossing - Train drivers Approach	M06-213	Sign
Pedestrian Level Crossing - Do Not cross	M06-215	Sign
Pedestrian Level Crossing – General signage layout	M06-244	Sign
Pedestrian Level Crossing – Emergency Exit	M06-247	Sign
Level Crossing - Train drivers Approach, Predictor	M06-250	Sign
Pedestrian Level Crossing – Cyclists Dismount	M06-262	Sign
Railway Level Crossing	M06-263	Sign
Level Crossing – Report all faults	M06-265	Sign
Axle Counter Sign	Not Available	Sign


4 Mandatory or Hazard Signs and Notice Plates

Where horizontal and vertical signs are shown, the horizontal sign shall be used except where there is insufficient space available to locate the sign.



4.1 “STOP” Signs

	Horizontal Sign	Vertical Sign
		
Drawing No.	M05-017	M05-007
Sign Identification No.	002400.2.1H	002400.2.1V
Width	600mm	200mm
Height	400mm	800mm
Plate thickness	2mm	2mm
Letter size, type and spacing	140EM	140EM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting	To drawing M05-017	To drawing M05-017
Mounting Holes Centres and Diameter	160mm h x 260mm v, 14mm dia	160mm h x 710mm v, 14mm dia



4.2 Electric Trains Stop Board

Text Sign	
	
Drawing No.	002400.2.2
Width	450mm
Height	350mm
Plate thickness	2mm
Letter size, type and spacing	60DM 100DM
Letter material	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2
Mounting Holes Centres and Diameter	160mm h x 310mm v, 11mm dia


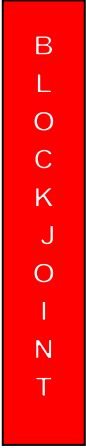
4.3 Derailer Signs

	Horizontal Sign	Vertical Sign
		
Drawing No.	M05-017	M05-007
Sign Identification No.	002400.2.3H	002400.2.3V
Width	600mm	200mm
Height	400mm	800mm
Plate thickness	2	2
Letter size, type and spacing	120DM	100DM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting	To drawing M05-017	To drawing M05-007
Mounting Holes Centres and Diameter	160mm h x 250mm v, 14mm dia	110mm h x 760mm v, 14mm dia

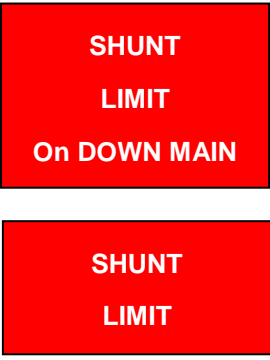

4.4 Catch-Point Sign

	Horizontal Sign	Vertical Sign
		
Drawing No.	M05-011	-
Sign Identification No.	002400.2.4H	002400.2.4V
Width	600mm	200mm
Height	400mm	800mm
Plate thickness	2mm	2mm
Letter size, type and spacing	120EM	60EM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting	To drawing M05-011	-
Mounting Hole Centres and Diameter	160mm h x 410mm v, 14mm dia	160mm h x 860mm v, 14mm dia

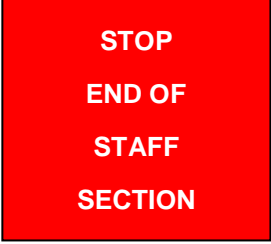
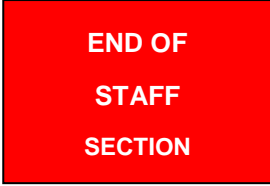
4.5 Block Joint Sign

	Horizontal Sign	Vertical Sign
		
Drawing No.	-	M05-021
Sign Identification No.	002400.2.5H	002400.2.5V
Width	600mm	200mm
Height	400mm	800mm
Plate thickness	2mm	2mm
Letter size, type and spacing	120EM	60EM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting	-	To drawing M05-021
Mounting Hole Centres and Diameter	160mm h x 410mm v, 14mm dia	160mm h x 760mm v, 14mm dia

4.6 Limit of Shunt Sign



	Horizontal Sign	Vertical Sign
		
Drawing No.	-	M05-007
Sign Identification No.	002400.2.6H	002400.2.6V
Width	600mm	200mm
Height	450mm	800mm
Plate thickness	2mm	2mm
Letter size, type and spacing	80DN 40DN	40DN
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting	-	To drawing M05-007
Mounting Hole Centres and Diameter	160mm h x 410mm v, 14mm dia	160mm h x 760mm v, 14mm dia


4.7 End of Staff Section Sign

	Stop Sign	End Sign
		
Drawing No.	002400.2.7A	002400.2.7B
Width	600mm	600mm
Height	600mm	450mm
Plate thickness	2mm	2mm
Letter size, type and spacing	100DM 80EM	100DM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Retro-reflective Red Class 2	Retro-reflective Red Class 2
Mounting Holes Centres and Diameter	160mm h x 560mm v, 14mm dia	160mm h x 410mm v, 14mm dia


5 Safeworking Instruction Boards

5.1 Prohibitive Boards


	This Signal must not be etc	When 'A' Light is out etc
		
Board Identification No.	002400.3.1A	002400.3.1B
Width	250mm	250mm
Height	400mm	600mm
Plate thickness	2mm	2mm
Letter size, type and spacing	30CN	'A' 40CN 30CN
Letter Material	Retroreflective White Class 2	Retroreflective White Class 2
Background Material	Black non reflective	Black non reflective
Mounting Holes Centres and Diameters	160mm h x 410mm v, 11mm dia	160mm h x 560mm v, 11mm dia

	
	End of Signalling Authority
Drawing No.	-
Width	600mm
Height	600mm
Plate thickness	2mm
Letter size, type and spacing	80DM
Letter material	Retro-reflective White Class 1
Background materials	Top, Retro-reflective Red Class 2 Bottom, Black non reflective
Mounting	160mm h x 560mm v, 14mm dia

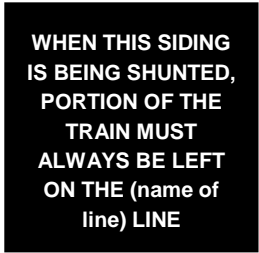
5.2 Semi-Automatic Signal Board

	
Board Identification No.	002400.3.2A and B
Width	600mm
Height	600mm
Plate thickness	2mm
Letter size, type and spacing	30CN
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting Holes Centers and Diameters	160mm h x 560mm v, 11mm dia


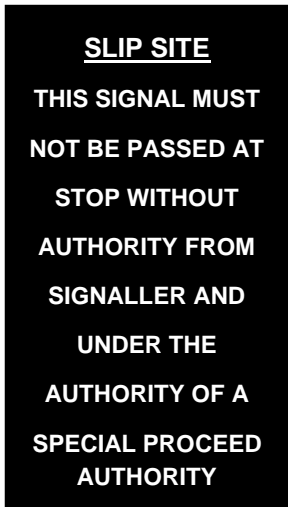
5.3 Automatic Signal Board

	
Board Identification No.	002400.3.3
Width	600mm
Height	450mm
Plate thickness	2mm
Letter size, type and spacing	30CN
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting Hole Centres and Diameter	160mm h x 410mm v, 11mm dia



5.4 Intermediate Siding Board

	
Board Identification No.	002400.3.4
Width	450mm
Height	450mm
Plate thickness	2mm
Letter size, type and spacing	30CN
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting Hole Centres and Diameter	160mm h x 360mm v, 11mm dia

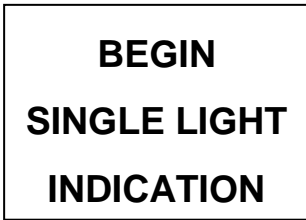
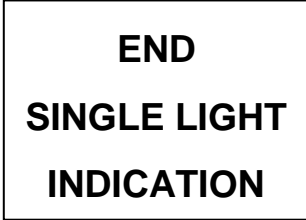
5.5 Slip Boards

		
Drawing No.	M05-076	M05-076
Board Identification No.	002400.3.5A	002400.3.5B
Width	600mm	600mm
Height	400mm	750mm
Plate thickness	2mm	2mm
Letter size, type and spacing	50DN 40DN	50DN 30DN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non-reflective	Black non-reflective
Mounting Holes Centres and Diameter	160mm h x 360mm v, 11mm dia	160mm h x 710mm v. 11mm dia

5.6 Distant Signal Boards

	Horizontal board	Vertical Board
		
Board Identification No.	002400.3.6A	002400.3.6B
Width	600mm	400mm
Height	400mm	650mm
Plate thickness	2mm	2mm
Letter size, type and spacing	40DN	40DN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non-reflective	Black non-reflective
Mounting Holes Centres and Diameter	160mm h x 360mm v, 11mm dia	160mm h x 610mm v, 11mm dia

5.7 Begin and End Single Light Indication Boards

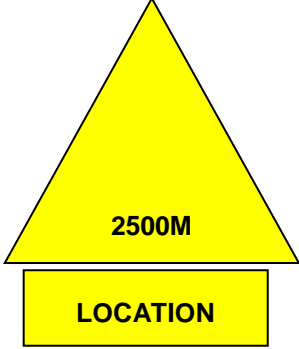
		
	"BEGIN" board	"END" board
Drawing No.	M05-003	-
Board Identification No.	002400.3.7A	002400.3.7B
Width	900mm	900mm
Height	450mm	450mm
Plate thickness	2mm	2mm
Letter size, type and spacing	80DM	80DM
Letter material	Black non reflective	Black non reflective
Background material	Retro-reflective White Class 2	Retro-reflective White Class 2
Mounting	To drawing M05-003	To drawing M05-003

5.8 Tonnage Instruction Boards

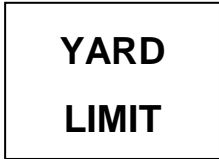
	<u>TONNAGE SIGNAL</u> TRAINS OF OVER PRESCRIBED LOAD TO WAIT UNTIL SIGNAL IS AT FULL CLEAR	<u>TONNAGE SIGNAL</u> TRAINS OF OVER PRESCRIBED LOAD TO WAIT UNTIL SIGNAL IS AT MEDIUM
Drawing No.	M05-045	M05-045
Board Identification No.	002400.3.8A	002400.3.8B
Width	450mm	450mm
Height	400mm	400mm
Plate thickness	2mm	2mm
Letter size, type and spacing	30CN	30CN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non reflective	Black non reflective
Mounting Holes Centres and Diameter	160mm h x 360mm v, 11mm dia	160mm h x 360mm v, 11mm dia

6 Train Order Working Signs


6.1 Location Sign

	
Drawing No.	M05-070 and STD-R0003
Plate thickness	2mm
Triangle Background material	Retro-reflective Yellow Class 1A
Location Sign	Retro-reflective Yellow Class 1A
Letter size, type and spacing	125mm CN or DN – Medium & narrow width letters if required to fit. Black
Rear of Sign	Gloss White
Mounting	As per M05-070
Note: Can be used to replace Landmarks, without the name sign.	

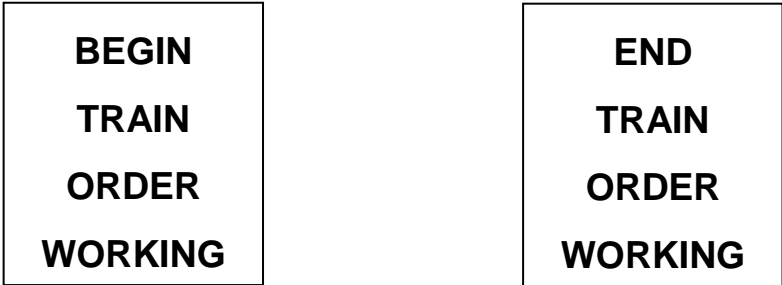
6.2 Yard Limit Sign

	
Drawing No.	M05-071 and STD-R0005
Plate thickness	2mm
Background material	Retro-reflective White Class 1A
Lettering material	Non reflective Black
Letter size, type and spacing	200mm EM – Black
Rear of Sign	Gloss White with black cross 75mm wide
Mounting	As per M05-071

6.3 Shunt Limit Sign

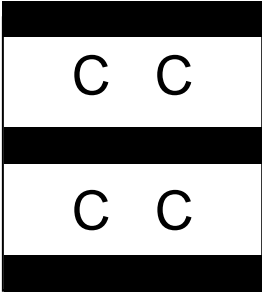
	
Drawing No.	Same sign dimensions as M05-071 and STD-R0004
Plate thickness	2mm
Background material	Retro-reflective Yellow Red 1A
Lettering material	Non reflective Black
Letter size, type and spacing	200mm EM – White
Rear of Sign	Grey
Mounting	As per M05-071

6.4 Begin / End Train Order Working

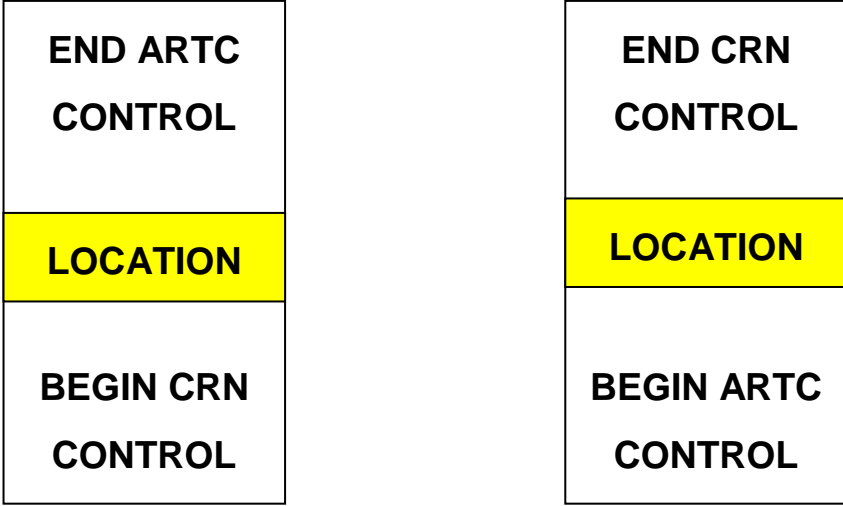
	
Drawing No.	M05-073 and STD-R0001
Plate thickness	2mm
Background material	Retro-reflective White Class 1A
Lettering material	Non reflective - Black
Letter size, type and spacing	120mm EM – Black
Rear of Sign	Gloss White
Mounting	As per M05-073

6.5 Clearance Post

This is a self-adhesive sticker or decal to be affixed to a capped, painted white length of medium galvanised pipe.


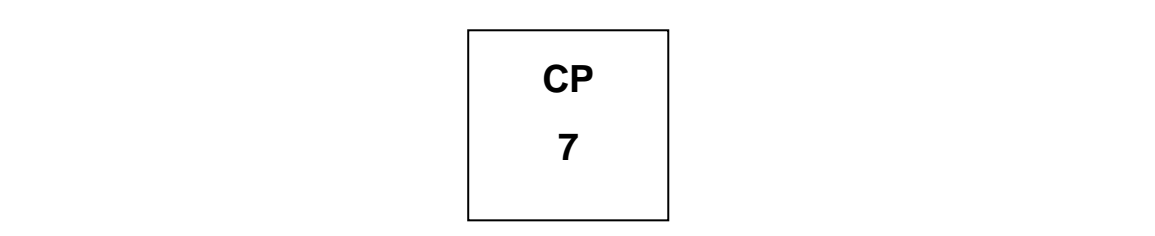
	
Drawing No.	STD-R0002
Background	Retro-reflective White Class 1A
Lettering and bands	Non reflective - Black
Letter size, type and spacing	120mm D – Black

6.6 Network Control Boundary

	
Drawing No.	
Width	850mm
Height	1200mm
Plate thickness	2mm
Background – top and bottom	Retro-reflective White Class 1A
Background - centre	Retro-reflective Yellow Class 1A
Lettering material	Non reflective - Black
Letter size, type and spacing	120mm D – Black





6.7 Begin / End Advanced Train Management System (ATMS) Working

The yellow "Location" board uses the same drawing as the Location sign in Section 6.1

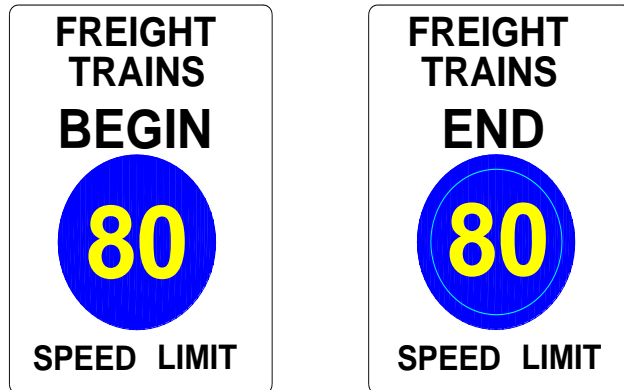
	
Drawing No.	
Width	900mm
Height	850mm
Plate thickness	2mm
Background material	Retro-reflective White Class 1A
Lettering material	Non reflective - Black
Letter size, type and spacing	120mm EM – Black
Rear of Sign	Gloss White
Mounting	As per M05-073
	
Drawing No.	
Width	450mm
Height	400mm
Plate thickness	2mm
Background material	Retro-reflective White Class 1A
Lettering material	Non reflective - Black
Letter size, type and spacing	120mm EM – Black
Rear of Sign	Gloss White
Mounting	

7 Miscellaneous Notice Boards

7.1 Advisory Speed Boards

				
	A	B	C	D
	For locomotive hauled passenger and freight Maintenance use only.	For XPT, Xplorer and Endeavour trains Maintenance use only.	For Freight over 1150 long Maintenance use only.	Intermediate train stop advisory Speed Board. Note: Number as per design, Typically 8, 10, 12, 15, 20.
Drawing No.	M05-006	M05-006	M05-006	M05-006
Board Identification No.	002400.4.1A	002400.4.1B	002400.4.1C	-
Diameter	600mm	600mm	600mm	300mm
Plate thickness	2mm	2mm	2mm	2mm
Letter size, type and spacing	300DN	300DN	300DN	150DN
Letter material	Red class 1 retro reflective	Red class 1 retro reflective	Yellow class 1 retro reflective	White class 1 retro reflective
Background material	Yellow Class 2 retro reflective	Silver Class 2 retro reflective	Blue Class 2 retro reflective	Black non reflective
Mounting holes centres and diameter	Specified by client	Specified by client	Specified by client	Specified by client
Mounting	To drawing M05-006	To drawing M05-006	To drawing M05-006	To drawing M05-006

7.2 Special Speed Board – Sydney Metropolitan Area

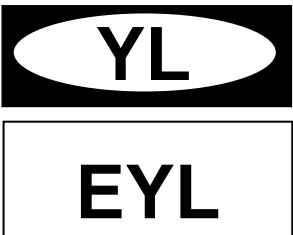
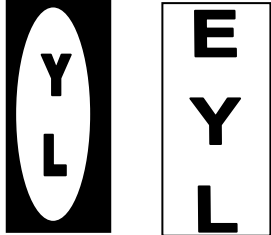


	BEGIN Board	END Board
Board Identification No.	002400.4.2A	002400.4.2B
Width	800mm	800mm
Height	1200mm	1200mm
Plate thickness	2mm	2mm
Letter size, type and spacing “Freight Trains” “Begin” “End” “Speed Limit”	100EM 140EM 80DM	100EM 140EM 80DM
Letter material	Black non reflective	Black non reflective
Numeral 300 DM	Yellow class 1 retro-reflective	Yellow class 1 retro-reflective
Disk 560mm dia	Blue non-reflective	Blue non-reflective
Background material	Retro-reflective White class 2	Retro-reflective White class 2


7.3 Accept Signal Board

Board Identification No.	002400.4.3
Width	600mm
Height	150mm
Plate thickness	2mm
Letter size, type and spacing	100DM
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting Hole Centres and Diameter	160mm h x 110mm v, 11mm dia


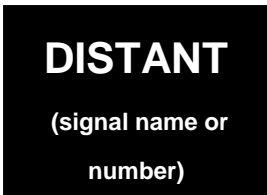
7.4 Yard Limit and End Yard Limit Signs

	Horizontal Sign	Vertical Sign
		
Drawing No.	M05-052/055	M05-053/054
Width	As per M05-052/055	As per M05-053/054
Height	As per M05-052/055	As per M05-053/054
Plate thickness	2mm	2mm
Letter size, type and spacing	As per M05-052/055	As per M05-053/054
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non reflective	Black non reflective
Mounting	To drawing M05-052/055	To drawing M05-053/054




7.5 Repeat Signal Board

	
Board Identification No.	002400.4.4
Width	600mm
Height	300mm
Plate thickness	2mm
Letter size, type and spacing	80DM
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	160mm h x 260mm v, 11mm dia



7.6 Distant Signal Plate

		
Board Identification No.	002400.4.5A	002400.4.5B
Width	600mm	600mm
Height	150mm	300mm
Plate thickness	2mm	2mm
Letter size, type and spacing	100DM	100DM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Black non reflective	Black non reflective
Mounting	160mm h x 100mm v, 11mm dia	160mm h x 260mm v, 11mm dia



7.7 Co-Acting Signal Board

			
Application	Outdoor	Outdoor	Tunnel
Width	600mm	200mm	160mm
Height	300mm	160mm	200mm
Plate thickness	2mm	2mm	2mm
Letter size, type and spacing	80DM	50CN	50CN
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Black non reflective	Black non reflective	Black non reflective
Mounting	As per site conditions	As per site conditions	As per site conditions

7.8 Indicator Signal Board

		
Board Identification No.	002400.4.6A	002400.4.6B
Width	200mm	600mm
Height	160mm	300mm
Plate thickness	2mm	2mm
Letter size, type and spacing	50CN	80DM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Black non reflective	Black non reflective
Mounting Centre Holes and Diameter	160mm h x 110mm v, 11mm dia	160mm h x 210mm v, 11mm dia
Note: Use co-acting plate for new work.		



7.9 Outer Home Boards

		
Board Identification No.	002400.4.7A	002400.4.7B
Width	600mm	150mm
Height	150mm	450mm
Plate thickness	2mm	2mm
Letter size, type and spacing	120DM	120DM
Letter material	Retro-reflective White Class 1	Retro-reflective White Class 1
Background material	Black non reflective	Black non reflective
Mounting Centre Holes and Diameter	160mm h x 110mm v, 11mm dia	100mm h x 410mm v, 11mm dia


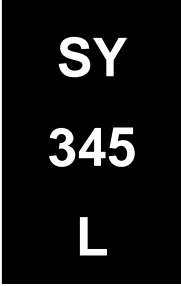
7.10 Automatic Signal Board

	
Board Identification No.	002400.4.8
Width	200mm
Height	250mm
Plate thickness	2mm
Letter size, type and spacing	180DM
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	160mm h x 160mm v, 11mm dia



7.11 Signal Identification Plates by Line and Distance

	Horizontal Sign	Alternative Version
		
Drawing No.	M01-143	M01-143
Width - Signal Post	600mm	-
Width - Gantry mount	760mm	N/A
Height	150mm	-
Plate thickness	2mm	2mm
Letter size, type and spacing	100DN	100DN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non reflective	Black non reflective
Mounting	To drawing M06-264	To drawing M06-264

7.12 Signal Identification Plates by Controlling Lever Number

	Horizontal Sign	Alternate Sign
		
Drawing No.	M01-143	Refer to M01-143 for general guidance
Width	600mm	-
Height	150mm	-
Plate thickness	2mm	2mm
Letter size, type and spacing	100DN	100DN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non reflective	Black non reflective
Mounting	To drawing M06-264	To drawing M06-264

7.13 Shunt Signal Identification Plates Identified by Line and Distance

	Horizontal Shunt Sign	Vertical Shunt Sign
		
Drawing No.	M01-143	M01-143
Width	400mm	200mm
Height	90mm	165mm
Plate thickness	2mm	2mm
Letter size, type and spacing	50DN	50DN
Letter material	Retro-reflective White class 1	Retro-reflective White class 1
Background material	Black non reflective	Black non reflective
Mounting	As required	As required

7.14 Signal Building, Cabinet and Location ID Plate

	N14.6 LOCATION
Drawing No.	Refer M05-022
Width	Refer M05-022
Height	Refer M05-022
Plate thickness	Refer M05-022
Letter size, type and spacing	Refer M05-022
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	To suit

7.15 Gantry Signal Identification Plate

	N 21.7
Drawing No.	M01-143
Width	760mm
Height	150mm
Plate thickness	2mm
Letter size, type and spacing	100DN
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	To suit

7.16 Warning Light Nameplate

Drawing No.	-
Width	300mm
Height	200mm
Plate thickness	2mm
Plate Material	Aluminium – Marine grade 5005 if in corrosive environment
Letter size, type and spacing	25D – Medium & narrow width letters if required to fit
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	-
Note: Line text will vary with location.	


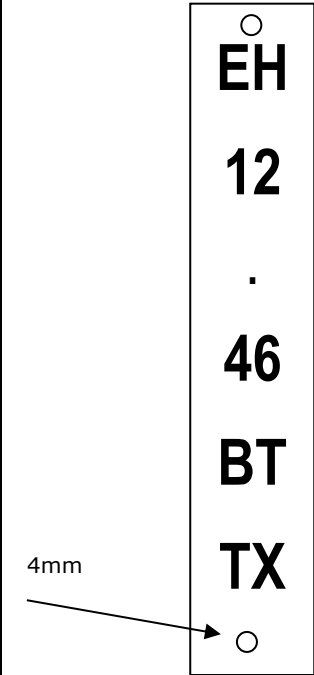
7.17 Landmark Sign

The drawing listed for this sign shows imperial dimensions which should be converted to their nearest metric equivalent during manufacture.

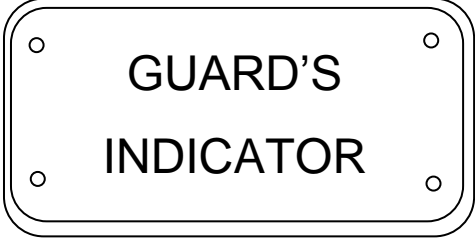
The drawing listed for this sign shows “yellow class 2 retro reflective material...”.It shall be as per the table below so that it is consistent with other yellow background signage within the CRN.

Drawing No.	D06032
Plate thickness	2mm
Triangle Background material	Retro-reflective Yellow Class 1A
Rear of Sign	Glass White
Mounting	As per M05-070

7.18 Trackside: Track Circuit Equipment Label

	Horizontal Sign	Vertical Sign
		
Style	Case mount version	Support post mount
Width	90mm	30mm
Height	45mm	125mm
Plate thickness	2mm	2mm
Letter size, type and spacing	12DN, 5mm spacing	12DN, 5mm spacing
Letter material	Engraved black paint filled	Engraved black paint filled
Background material	Natural anodised aluminium	Natural anodised aluminium
Mounting	Screw, rivet and/or glue	Screw, rivet and/or glue

7.19 Guard's Indicator Plate

	
Drawing No.	-
Width	250mm
Height	140mm
Plate thickness	2mm
Letter size, type and spacing	25D – Medium or narrow width letters if required to fit
Letter material	Retro-reflective White Class 1
Background material	Black non reflective
Mounting	To suit.

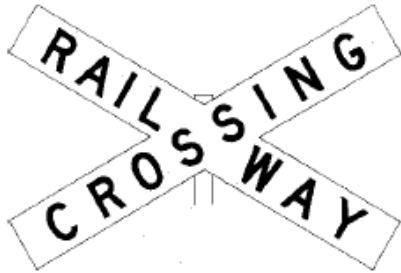
8 Level Crossing Signs

8.1 Road User Signs

8.1.1 Railway Crossings



Normative R6-25B sign to AS1742.7. Used with RX-1, RX-2 & RX-5 assembly. Refer to drawing M06-263 for details and stock code.



Old assembly R6-24A sign to AS1742.7 – NOT TO BE USED for new installations. Previously used with RX-1, RX-2 & RX-5 assembly. Refer to drawing M06-204 for details.

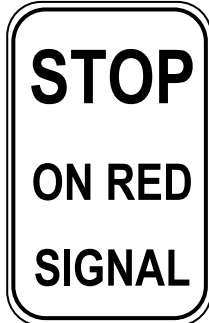
8.1.2 X Tracks



W7-2-2A sign to AS1742.7 for use with R6-25B sign. Used with RX-1, RX-2 & RX-5 assembly. Refer to drawing M06-212 for details.



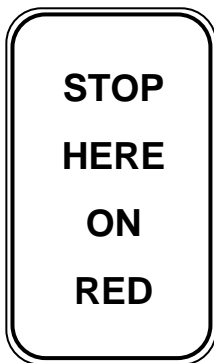
W7-2-1A sign to AS1742.7. Used with RX-1, RX-2 & RX-5 assembly. Refer to drawing M06-212 for details.

8.1.3 Stop on Red Signal

Preferred style R6-9 sign to AS1742.7. Used with RX-5 assembly. Refer to drawing M06-212 for details.



Legacy style - sizes and colours as specified for R6-9 sign AS1743 when used with RX-5 assembly.

8.1.4 Stop Here on Red Signal

R6-6A sign to AS1742.7. Refer to drawing M06-212 for details.

8.2 Train Driver Signs

8.2.1 Approach Warning Sign



Sizes and colours as for W7-4B sign to AS1743. Refer to drawing M06-213 for details.

Note: Provision of the advance warning sign (for road users) is normally the responsibility of the road authority. W7-4C sign size may be more appropriate in some country situations.

8.2.2 Approach Warning Sign for Crossings fitted with Predictors

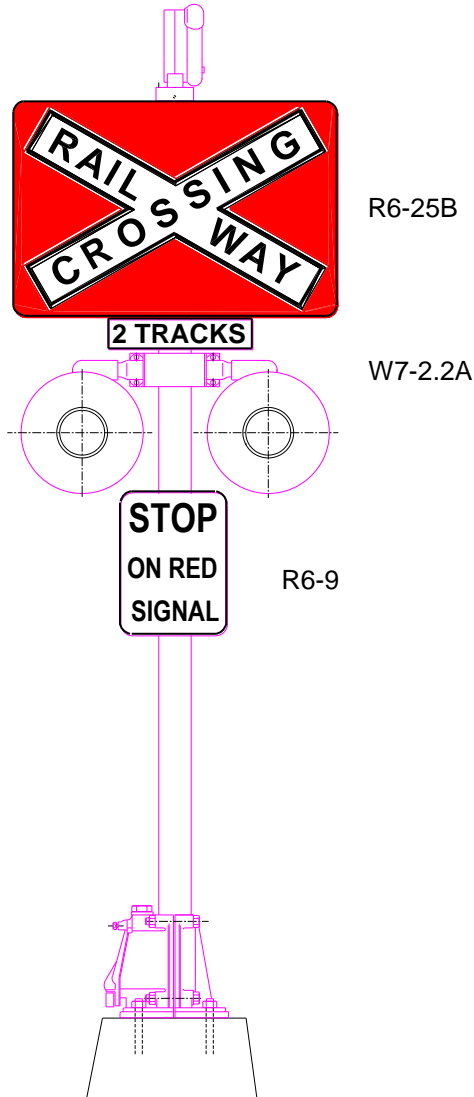


Refer to drawing M06-250 for details.

Note: Predictor warning signs are similar to W7-4B sign except banded in blue.

8.3 Road Sign Combinations

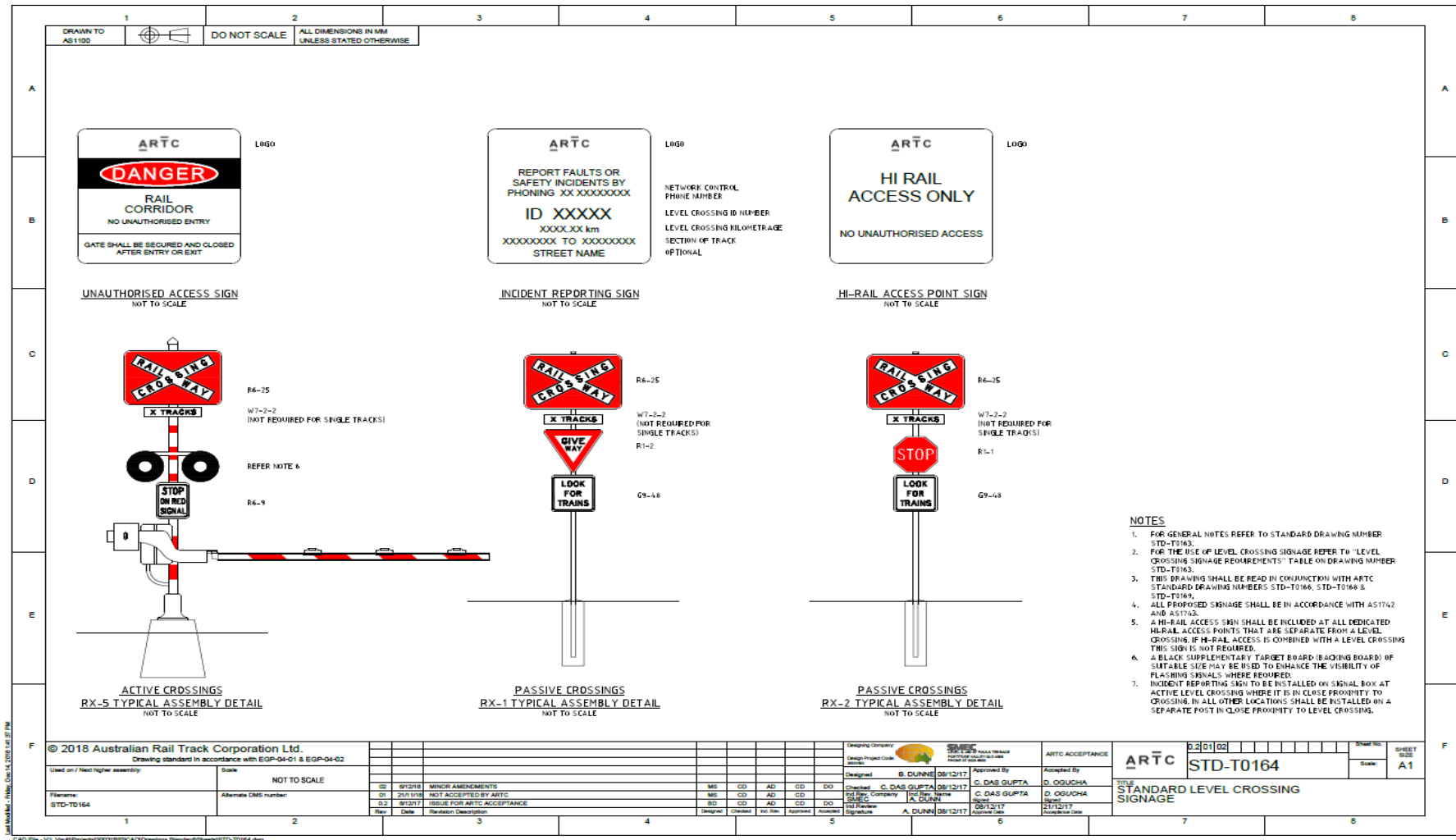
8.3.1 Actively Protected Crossings (RX-5 Signal Assembly Incorporating Sign R6-25)



Normative RX-5 assembly to AS1742.7.

8.3.2 Other Arrangements

Other active and passive level crossing arrangements are shown on ARTC drawing STD-T0164 along with other ARTC level crossing signage.



8.4 Pedestrian Level Crossings

8.4.1 Active Protection (Lights and Siren etc.)



W7-14-3 sign to AS1747.7. Refer to drawing M06-215 for details.

8.4.2 Remotely Monitored Sites



Refer to drawing M06-265 for details.

8.4.3 Cyclists Dismount



G9-58A sign to AS1747.7. Refer to drawing M06-262 for details.

8.4.4 Emergency Exit with Gate Release



Refer to drawing M06-247 for details.

8.4.5 Emergency Exit Arrow



Refer to drawing M06-247 for details.

Note: RH arrow version shown.

8.4.6 No Thoroughfare



Refer to drawing M06-244 for details.