

TOC Waiver

TW 203-722

Issued to	Sydney Rail Management Centre Downer EDI Rail / Sydney Trains
Issued by	Jakub Zawada Principal Engineer, Rolling Stock Access Integrity
Issued date	04 September 2018
Effective dates	04 September 2018 to 04 March 2019
Prevalence	This TOC Waiver supersedes TOC Waiver 203-720
Subject:	Revenue service of Sydney Growth Trains (SGT) B Set cars

This TOC Waiver supersedes TOC Waiver 203-720 and permits the revenue service of Sydney Growth Trains (SGT) B Set cars on the TfNSW Metropolitan Heavy Rail Network, specifically sets B02 and B03.

A waiver to the published conditions in the Train Operating Conditions (TOC) Manual is granted for the SGT B Set cars on the TfNSW Metropolitan Heavy Rail Network.

The following conditions shall be noted:

TS TOC 1 – Section 10. Locomotive and rolling stock data

Table 1 – Sydney Trains – SGT double deck suburban cars – medium width classification (group 3a)

Type of car	Sets	Car numbers	Code	Max speed (km/h)	Tare mass (t)	Length coupled (m)	Width (mm)	Seat capacity
Motor Car [D]	B	1602-1603 1702-1703 1802-1803 1902-1903	N	115 #	52.2	20.2	3035	118
Trailer Driver Car [D]	B	1102-1103 1202-1203	D	115#	52.1	20.7	3035	102

Type of car	Sets	Car numbers	Code	Max speed (km/h)	Tare mass (t)	Length coupled (m)	Width (mm)	Seat capacity
Trailer Car [D]	B	1302-1303 1402-1403	T	115#	48.1	20.3	3035	110

Maximum speed limited to 115 km/h (for further information refer to TS TOC 2, Division Pages, Section 17, Passenger Train Operating Conditions, Speed signs – maximum kilometres per hour)

[D] Downer EDI Rail

TS TOC 2 – Section 17. Passenger train operating conditions

Speed signs – maximum kilometres per hour

Speed signs – Millennium / Waratah / SGT

Millennium / Waratah / SGT trains are to run to normal or general speed signs (black numbers on a yellow background). Where Multiple Unit or Medium speed signs are provided (black MU numbers on a white background or white numbers on blue background) Millennium / Waratah / SGT trains will run to these speed signs up to a maximum speed of 115 km/h.

Maximum speed of Sydney Trains and NSW TrainLink rolling stock

Refer to the following tables 5 and 6 for updates. Note table speeds remains unchanged, however the restrictions for group 3a rolling stock for Erskineville Junction to Bondi Junction (ESR Line) and Carlingford Line have been updated to include SGT trains.

Table 5 - Maximum speed of Sydney Trains and NSW TrainLink rolling stock

AREA / SECTION	TRACK WIDTH CLASS	ELEC-TRIFIED	SPEED-SIGNS Y/N	INTER-CITY	SUBURBAN					DIESEL RAILCARS			NOTES Locality working	
					Double Deck	Double Deck	Double Deck	Double Deck	Double Deck	Single Deck	Endeavour / Xplorer	Hunter		XPT
Train Type ⇒					Double Deck	Double Deck	Double Deck	Double Deck	Double Deck	Single Deck	Endeavour / Xplorer	Hunter	XPT	
Train Width ⇒					Narrow	Medium	Medium	Medium	Extended + Medium	Wide	Narrow	Narrow	Narrow	
++Group					1	2	3	3a	4	5	6	6		
City Circle														
CENTRAL – CIRCULAR QUAY – CENTRAL – City Inner and Outer	Wide	Yes	Yes	40	40	40	40	40	40	40	40	N/A	N/A	1a
Sydney to Lithgow														
SYDNEY <> GRANVILLE – Main	Wide	Yes	Yes	100	100	100	100	100	80	100	100	100	100	
GRANVILLE <> ST MARYS – West Sub/Sub	Wide	Yes	Yes	115	115	115	115	115	80	115	115	115	115	
CENTRAL <> GRANVILLE – Suburban	Wide	Yes	Yes	80	80	80	80	80	80	80	80	80	80	
GRANVILLE <> ST MARYS – West Main/Main	Wide	Yes	Yes	115	115	115	115	115	80	115	115	115	115	
CENTRAL <> HOMEBUSH – Local	Wide	Yes	Yes	75	75	75	75	75	75	75	75	75	75	
ST MARYS <> EMU PLAINS	Wide	Yes	Yes	115	115	115	115	115	80	115	115	115	115	
EMU PLAINS <> SPRINGWOOD	Medium	Yes	Yes	85	85	85	85	N/A	N/A	85	85	85	85	
SPRINGWOOD <> LITHGOW	Narrow	Yes	Yes	100	N/A	N/A	N/A	N/A	N/A	115	115	115	115	
Power House Museum Siding	Narrow	No	No	N/A	N/A	N/A	N/A	N/A	N/A	10	10	N/A	N/A	
Regent Street- Mortuary Platform	Wide	No	No	10	10	10	10	10	10	10	10	10	N/A	
Eveleigh > Redfern – Up Engine Dive	Wide	Yes	Yes	15	15	15	15	15	15	15	15	15	15	
Redfern – Illawarra Dives	Wide	Yes	Yes	30	30	30	30	30	30	30	30	30	30	
Clyde to Carlingford/Sandown														
CLYDE <> CARLINGFORD	Wide	Yes	Yes	60	60	60 ^^	60 %	60	60	60	N/A	60	60	3a
ROSEHILL <> SANDOWN	Wide	^Yes	No	10	10	10	10	10	10	10	N/A	10	10	
Blacktown to Richmond														
BLACKTOWN <> RICHMOND	Wide	Yes	Yes	115	115	115	115	115	80	115	N/A	115	115	
SEVEN HILLS > BLACKTOWN >- Down Branch	Wide	Yes	Yes	70	70	70	70	70	70	70	N/A	70	70	
Lidcombe/Granville to Macarthur														
GRANVILLE <> CABRAMATTA	Wide	Yes	Yes	100	100	100	100	100	80	100	100	100	100	
LIDCOMBE <> MACARTHUR (Via Regents Prk)	Wide	Yes	Yes	115	115	115	115	115	80	115	115	115	115	
Lidcombe <> Loop Line	Wide	Yes	Yes	15	15	15	15	15	15	15	15	15	15	
Granville <> Y Link	Wide	Yes	Yes	70	70	70	70	70	70	70	70	70	70	
Central to Hornsby (Via North Shore)														
CENTRAL <> NORTH SYDNEY	Wide	Yes	Yes	60	60	60	60	60	60	60	N/A	60	60	1a
NORTH SYDNEY <> HORNSBY	Wide	Yes	Yes	80	80	80	80	80	80	80	80	80	80	
Waverton <> North Sydney Car Sidings	Wide	Yes	Yes	40	40	40	40	40	40	40	40	40	N/A	
Chatswood to Epping														
CHATSWOOD <> EPPING	Ext Med	Yes	Yes	80#	80#@\$	80*@	80*@	80#@	N/A	N/A	N/A	N/A	N/A	6b
Strathfield to Hamilton														
STRATHFIELD <> COWAN (Main)	Wide	Yes	Yes	115	115	115	115	115	80	115	115	115	115	
COWAN <> HAMILTON	Medium	Yes	Yes	115	115(7a)	130(7a)	115(7a)	115(7b)	N/A	145	145	160	160	7a, 7b
Strathfield <> Nth Strathfield – Flyover	Wide	Yes	No	40	40	40	40	40	40	40	40	40	40	
Rhodes>Nth Strathfield – Up Relief / NSRU	Ext Med	Yes	Yes	80	80	80	80	80	N/A	80	80	80	80	
North Strathfield <> Rhodes – Down Relief	Wide	Yes	Yes	85	85	90	85	85	80	90	90	90	90	
West Ryde > Epping – Down Suburban	Wide	Yes	Yes	90	90	95	90	90	80	95	95	95	95	
Epping > West Ryde – Up Suburban	Wide	Yes	Yes	90	90	90	90	90	80	90	90	90	90	
Epping>Thornleigh – Down Relief	Ext Med	Yes	Yes	75	75	90	75	75	N/A	90	90	90	90	
Thornleigh > Pennant Hills – Up Relief	Wide	Yes	No	50	50	50	50	50	50	50	50	50	50	
Berowra > Down Relief	Wide	Yes	Yes	50	50	50	50	50	50	50	50	50	50	

% Waratah (A) sets and SGT(B) sets not permitted between Clyde and Carlingford (Electrical restrictions). Refer to note 3a.

^^ OSC sets (H) restricted to a maximum of 4 cars (Electrical restrictions). Refer to note 3a.

+ See Sydney Metropolitan area – operation of wide gauge rolling stock (page 95) regarding operation of Wide Gauge rolling stock in the Metropolitan area.

++ Refer to Section General Instructions, Section 10 Locomotive and Rolling Stock Data for group categories.

^ Electrified between Rosehill and Electric Train Stop sign located at location CC22+736 (Overhead wiring structure).

#, @, \$, * See detail 6b in 6 – Chatswood to Epping (page 95) for further information.

For all operational requirements outside the TfNSW Metropolitan Heavy Rail network, refer to the CRN and ARTC Train Operating Conditions Manuals.

Table 6 - Maximum speed of Sydney Trains and NSW TrainLink rolling stock

AREA / SECTION	TRACK WIDTH CLASS	ELEC-TRIFIED	SPEED-SIGNS Y/N	INTER-CITY	SUBURBAN					DIESEL RAILCARS			NOTES Locality working	
					Double Deck	Double Deck	Double Deck	Double Deck	Double Deck	Single Deck	Endeavour / Xplorer	Hunter		XPT
Train Type ⇒					Double Deck	Double Deck	Double Deck	Double Deck	Double Deck	Single Deck	Endeavour / Xplorer	Hunter	XPT	
Train Width ⇒					Narrow	Medium	Medium	Medium	Extended + Medium	Wide	Narrow	Narrow	Narrow	
++Group					1	2	3	3a	4	5	6	6		
Sydney to Port Kembla/Bomaderry														
CENTRAL <> HURSTVILLE - Illawarra Line	Wide	Yes	Yes	100	100	100	100	100	100	80	100	100	100	
CENTRAL <> HURSTVILLE - Illawarra Local	Wide	Yes	Yes	80	80	85	80	80	80	80	85	85	85	
HURSTVILLE <> HELENSBURGH	Wide	Yes	Yes	115	115	115	115	115	115	80	115	115	115	
HELENSBURGH <> PORT KEMBLA	Medium	Yes	Yes	115	115	115	115	N/A	N/A	115	115	115	115	
CONISTON <> KIAMA	Medium	Yes	Yes	115	115	130	115	N/A	N/A	140	140%	140	140	
KIAMA <> BOMADERRY	Narrow	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	140	N/A	140	140	
Redfern <> Down and Up Illawarra Dive	Wide	Yes	Yes	30	30	30	30	30	30	30	30	30	30	
Meeks Road - XPT Depot	Narrow	No	No	N/A	N/A	N/A	N/A	N/A	N/A	15	15	15	15	
Allans Creek - Unanderra North Junction	Narrow	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	60	60	60	60	
Sutherland to Cronulla														
SUTHERLAND <> CRONULLA	Wide	Yes	Yes	100	100	100	100	100	100	80	100	N/A	100	
Erskineville Jct to Bondi Jct														
ERSKINEVILLE JUNCTION <> BONDI JUNCTION	Wide	Yes	Yes	60	60	60	60@	60	60	60	N/A	N/A	15	10a
Sydenham to Regents Park														
SYDENHAM <> REGENTS PARK	Wide	Yes	Yes	80	80	80	80	80	80	80	80	80	80	
Central to Wolli Creek (Airport Line)														
CENTRAL <> WOLLI CREEK	Wide	Yes	Yes	80	80	80	80	80	80	80	80	80	80	12a
Wolli Creek to Glenfield														
WOLLI CREEK JCT <> TURRELLA	Wide	Yes	Yes	80	80	85	80	80	80	80	85	85	85	
TURRELLA <> REVESBY - Main Line	Wide	Yes	Yes	115	115	125	115	115	115	80	125	125	125	
TURRELLA <> REVESBY - Local Line	Wide	Yes	Yes	110	110	115	110	110	110	80	115	115	115	
REVESBY <> GLENFIELD	Wide	Yes	Yes	115	115	115	115	115	115	80	115	115	115	
Glenfield to Leppington														
GLENFIELD <> LEPPINGTON - Main Line	Wide	Yes	Yes	115	115	115	115	115	115	N/A	115	115	115	
GLENFIELD <> LEPPINGTON - Loop Line	Wide	Yes	Yes	60	60	60	60	60	60	N/A	60	60	60	
Metropolitan Freight Lines														
NORTH STRATH JCT <> FLEM MARKETS JCT	Wide	Yes	Yes	50	50	50	50	50	50	50	50	50	50	
FLEMINGTON GOODS JCT <> FLEM STH JCT	Wide	Yes	Yes	40	40	40	40	40	40	40	40	40	40	
FLEMINGTON STH JCT <> LIDCOMBE GDS JCT	Wide	Yes	Yes	40	40	40	40	40	40	40	40	40	40	
FLEMINGTON MIDDLE JCT <> FLEM WEST JCT	Wide	Yes	Yes	50	50	50	50	50	50	50	50	50	50	
FLEM EAST JCT/ FLEM MIDDLE JCT <> HOMEBUSH BAY LOOP Olympic Park	Ext Med	Yes	Yes	50	50	50	50	50	50	N/A	50	50	50	
FLEMINGTON STH JCT <> ARTC BOUNDARY	Wide	* Yes	Yes	70	70	70	70	70	70	70	70	70	70	
ARTC BOUNDARY <> SEFTON PK EAST JCT	Wide	* Yes	Yes	80	80	80	80	80	80	80	80	80	80	
SEFTON PARK EST JCT <> SEFTON PK STH JCT	Wide	* Yes	Yes	35	35	35	35	35	35	35	35	35	35	
CHULLORA NTH JCT <> CHULLORA WEST JCT														Refer to ARTC for operating conditions
CHULLORA WEST JCT <> PAC. NAT. DEPOT														Refer to ARTC for operating conditions
CHULLORA TRACKFAST JCT <> INDUST SDGS														Refer to ARTC for operating conditions
CHULLORA SOUTH JCT <> ENFIELD STH MAIN														Refer to ARTC for operating conditions
ENFIELD SOUTH <> CAMPSIE														Refer to ARTC for operating conditions
CAMPSIE <> WARDELL ROAD WEST JCT														Refer to ARTC for operating conditions
ARTC BOUNDARY <> MEEKS RD WEST JCT	Narrow	No	Yes	40	N/A	N/A	N/A	N/A	N/A	N/A	40	40	40	
MEEKS RD WEST JCT > MEEKS RD/ SYDENHAM UP LINE Up North Fork	Narrow	* Yes	Yes	25	N/A	N/A	N/A	N/A	N/A	N/A	25	25	25	
SYDENHAM/MEEKS RD DOWN LINE Dwn North Fork <> MEEKS RD WEST JCT	Narrow	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	25	25	
MEEKS RD STH JN <> MEEKS RD NORTH JCT	Narrow	No	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	25	25	
MEEKS ROAD WEST JCT <> TEMPE JCT	Narrow	* Yes	Yes	25	N/A	N/A	N/A	N/A	N/A	N/A	25	25	25	14a
MARRICKVILLE JCT <> COOKS RIVER														Refer to ARTC for operating conditions
COOKS RIVER <> BOTANY (10.410km)														Refer to ARTC for operating conditions

+ See Sydney Metropolitan area – operation of wide gauge rolling stock (page 95) regarding operation of Wide Gauge rolling stock in the Metropolitan area.

++ Refer to General Instructions, Section General Instructions, Section 10 Locomotive and Rolling Stock Data for group categories.

% Hunter cars not permitted beyond Dunmore.

* This section of track may be 'Unavailable for electric traction'. Refer to the 1500-volt sectioning diagrams for the current status.

@ Waratah (A) sets and SGT (B) sets not permitted on Eastern Suburbs Rail line between Erskineville Junction and Bondi Junction (Electrical and Signalling restrictions). Refer note 10a.

For all operational requirements outside the TfNSW Metropolitan Heavy Rail network, refer to the CRN and ARTC Train Operating Conditions Manuals.

Local area working – special instructions

Specific localities

3 - Clyde to Carlingford

3a - Maximum length of stopping trains.

Due to short platforms between Clyde and Carlingford only four car or less suburban trains may operate on stopping services.

Rosehill Racecourse platform can accommodate eight car trains.

% Due to electrical restrictions, Waratah (A sets) **and SGT (B sets) are** not permitted between Clyde and Carlingford.

^ Due to electrical restrictions, Oscar (H sets) restricted to a maximum of 4 cars between Clyde and Carlingford.

10 - Erskineville to Bondi Junction

10a – Bondi Junction – Block working of trains less than 4 cars in length.

Whenever a train or vehicle has to traverse the diamond crossing at Bondi Junction through 908/912 or 911/907 points in the reverse position and if the train or vehicle is less than 4 cars in length, it shall be block worked in accordance with Sydney Trains Network Rule *NSY 512 Manual block working* between SY767 and SY783 signals or SY770 and ES6.48 signals respectively.

Trains or vehicles shorter than 4 cars in length may not reliably operate the track circuits.

@ Due to electrical and signalling restrictions, Waratah (A sets) and SGT (B sets) are not permitted on the Eastern Suburbs Rail Line between Erskineville Junction and Bondi Junction.

Jakub Zawada
Principal Engineer, Rolling Stock Access Integrity