Division / Business Unit:	Safety & Systems
Function:	Operations
Document Type:	Guideline

Network Information Book

Sydney 2

Enfield (inc) to Flemington Junction (exc) & Chullora Junction to Leightonfield (inc) excluding Sefton Park Junction

OGW-30-26

Applicability

Interstate Network

Publication Requirement

Internal / External

Primary Source

Local Appendix Units Metropolitan 010, 040, 045, 050 & 055
Route Access Standard - Defined Interstate Rail Network Section Pages D45

Document Status

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Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	31 Aug 2016		Initial issue

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1.4	15 Apr 2020	1.3, 1.16	Shared Corridor procedures updated in section 1.3. Drawing legend updated. All diagrams updated for eTap introduction.
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2.1	11 Apr 2025	1.3, 1.12, 2.3, 2.5	Applicable Rules and Communications sections updated. Flemington and Sefton Junction Interface Requirements added

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1 General Information

1.1 Board Extent

Enfield South including ED101 (12.737km) & G12.8 (12.793km) to Leightonfield including LF12 (24.482km) & Sefton SP3 (21.287km)

Chullora ED288 (17.710km) ED286 (17.725km) EW405 (19.711km) & EW407 (19.712km)

Flemington Junction inclusive Down Main signal ED18.7 (18.648km) and up Main signal ED18.8 (18.895km)

This area is controlled by the Sydney 2 Network Controller, Network Control Centre South (NCCS).

Contact Numbers:

Phone:	(02) 6924 9804
Train Transit Manager:	(02) 6930 5311
Emergency:	(02) 6924 9864

1.2 Safeworking System

Rail Vehicle Detection

1.3 Applicable Rules

1.3.1 Safeworking - Network Rules and Procedures

ARTC Network Rules and Procedures will apply to the Metropolitan Freight Network and the Southern Sydney Freight Line.

To ensure consistent application of Network Rules and Procedures in the Sydney Trains and ARTC shared rail corridor areas where the Southern Sydney Freight Line and Metropolitan Freight Network operates, ARTC and Sydney Trains have agreed to variations to their respective Network Rules and Procedures which will apply as detailed.

ANWT 304 Track Occupancy Authority and ANPR 701 Using a Track Occupancy Authority

In exception to the requirement in ARTC Rule ANWT 304 page 4, Authorisation, Attended locations and ANPR 701 page 3, Obtaining a Track Occupancy Authority, Network Controllers, Network Control Officers and Protection Officers must compile a Track Occupancy Authority form (ANRF 002B) when a Track Occupancy Authority is wholly within the yard limits of an ARTC attended location.

ANWT 308 Absolute Signal Blocking

In exception to the requirement in ARTC Rule ANWT 308 page 4, Protection Methods, Protection Officers when requesting Absolute Signal Blocking (ASB) on the ARTC Network must make sure that:

- two consecutive controlled signals can be set at STOP with blocking facilities applied, or
- an ESML handle can be removed to exclude rail traffic, or
- one controlled signal can be set at STOP with blocking facilities applied, and
    - a set of points can be secured to prevent access

or

- an easily-reached safe place is available and a Lookout is provided.

Network Controllers and Network Control Officers must make sure that when Protection Officers request an ASB on the ARTC / Sydney Trains shared rail corridor that the above requirements are observed.

NWT 310 Lookout Working

In addition to the requirements of Sydney Trains Rule NWT 310, Sydney Trains will ensure that persons working under NWT 310 Lookout Working, Protection Officers when requesting Lookout Working must make sure that:

- Work in the Danger Zone using the Lookout Working method must be done in daylight hours only, for a maximum of two (2) hours, and
- If the work is to continue beyond this time, it is to be treated as a new application.

Network Controllers and Network Control Officers must make sure that when Protection Officers request Lookout Working on the ARTC / Sydney Trains shared rail corridor that the above requirement is observed.

The above exceptions are summarized in the following table:

ADDITIONAL REQUIREMENTS

SYDNEY TRAINS	ARTC
NWT 304 NIL	**ANWT 304** A Track Occupancy Authority form (ANRF 002B) must be compiled when a Track Occupancy Authority is wholly within the yard limits of an ARTC attended location.
NWT 308 (Absolute Block) NIL	**ANWT 308** • two consecutive controlled signals can be set at STOP with blocking facilities applied, or • an ESML handle can be removed to exclude rail traffic, or • one controlled signal can be set at STOP with blocking facilities applied, and ☐ a set of points can be secured to prevent access or ☐ an easily-reached safe place is available and a Lookout is provided.

NWT 310	ANWT 310
• Work in the Danger Zone using the Lookout Working method must be done in daylight hours only, for a maximum of two (2) hours, and • if the work is to continue beyond this time, it is to be treated as a new application.	NIL

1.3.2 Issuing a Track Occupancy Authority at Flemington Junction

Down Goods

The ARTC Network Controller at Junee is responsible for implementing a TOA on the Down Goods line between ED265 D or ED267 NF signal and ST 369.

If the TOA will extend beyond ST 369 Signal a separate TOA must be issued by Signaller ROC (Lidcombe panel) for the portion of track beyond ST 369 Signal.

Up Goods

The Signaller ROC (Lidcombe panel) is responsible for implementing TOA on the Up Goods between ST 372, ST 370 or ST378 signal and ED 272 Signal.

If the TOA limits extend beyond ED 18.8 signal, the Signaller ROC (Lidcombe panel) and ARTC Network Controller Junee must confer. A copy of the NRF 002 TOA form must be transmitted to the ARTC Network Controller at Junee.

If the TOA will extend beyond ED 272 Signal, a separate TOA must be issued by the ARTC Network Controller at Junee for the portion of track beyond ED 272 Signal.

1.4 Adjacent Train Control Boards / Centres

ARTC Sydney 1	(02) 6924 9806	Emergency	(02) 6924 9866
ARTC Sydney 3	(02) 6924 9803	Emergency	(02) 6924 9863
Sydney Trains			(02) 9379 4733
Flemington South Up Goods interface Lidcombe Panel			(02) 9752 8450
Sefton Junction Up Goods interface			(02) 9563 7973

1.5 Section Operating Equipment

1.5.1 Interlockings and Sidings

Km	Interlocking, Station, Platform or Siding	Length of Passenger Platform in Metres
13.731km	Enfield South	
13.956km	Enfield Through Road No 1	
14.575km	Sadlier's Siding	
15.554km	Down Storage Siding	
16.666km	Enfield North	
16.764km	Enfield Through Road No 1	
16.829km	Staging Roads	
16.908km	Intermodal Logistics Siding	
17.005km	Delec Siding	
17.083km	Chullora Junction South	
17.467km	Chullora Junction West	
17.597km	Chullora Junction North	
17.467km	Chullora Industrial Sidings (Down Goods)	
17.475km	Chullora Industrial Sidings (Up Goods)	
19.828km	Enfield West	
22.450km	Leightonfield	

1.6 Train Braking Requirements

Brake Holding Tests for the Rearmost Vehicles (retention tests)

The following apply:

1. The operator **shall** put into place systems for conducting brake holding tests.
2. The number of vehicles (or for articulated or permanently coupled vehicles the number of triple valve control units) required to conform to the requirements of this sub-section shall be:

   a. Three (3) for freight trains operated in New South Wales;

   b. Two (2) for freight trains not entering New South Wales; and

   c. One (1) for all passenger trains where a guard is provided or three (3) for passenger trains without guards.
3. The vehicle operator shall ensure that air and hand brakes operate correctly.
4. The air brakes on the vehicles **shall** remain effectively applied for a period of time, based on train length, considered sufficient for a member of the train (locomotive) crew to reach the vehicles and secure handbrakes in the event of a breakaway en route.
5. This time **shall** be ten (10) minutes plus three (3) minutes for each 100 metres or part thereof of train length. For example, a train 1240 metres long will require a holding (retention) time of 13 x 3 + 10 = 49 minutes.
6. If any of the required number of vehicles (as specified in item (2) above) fail the above test (as specified in item (5) above), generally known as a holding or retention test, the faulty vehicle(s) **shall** be repaired or the train remarshalled to ensure compliance with the requirements of items (3) and (4) above.
7. Brake holding tests successfully completed will remain valid for the departure within a period of 24 hours from completion of the test. After that period, the vehicles **shall** be re-tested.

Freight Trains

On freight trains, the maximum number of inoperative or isolated brakes permitted on a train **shall** be either of the following:

1. One conventional two-bogie vehicle for every ten (10) vehicles in the train where the vehicle is isolated as a unit.
2. One bogie for every ten (10) bogies in the train where individual bogies can be isolated or the isolation of triple valve control units affects more than two (2) bogies. This applies, only on the proviso that the total un-braked mass of the train **shall not** exceed 10% of the total train mass (excluding the mass of the hauling locomotives).

Item (1) above applies where the only vehicles isolated are conventional two-bogie vehicles. In all other cases, the requirements of item (2) **shall** be followed.

For the purposes of this clause, a four-wheel (two-axle) vehicle **shall** be counted as one bogie, and locomotives under power **shall not** be counted as train vehicles.

1.7 Level Crossings

ALCAM ID is the number allocated from the Australian Level Crossing Assessment Model used by rail and road managers across Australia. It's a national database for assessing risk which is overseen by a National Committee and supported by the Rail Industry Safety Standards Board (RISSB).

ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
4342	Wentworth Road Enfield	MFN	14.933	Road	Private	Half Boom Flashing Lights
	Chullora Service Lxing	MFN	17.370			
4347	Chullora Junction Takeoff	MFN	18.744	Road	Private	
4345	Enfield West Takeoff	MFN	18.237	Road	Private	
4379	Leightonfield Service Lxing	SSFL	23.530	Road	Private	Stop Signs
4380	Leightonfield Service Lxing	SSFL	23.640	Road	Private	Gate
	Flemington South Take Off	SSFL	18.900			

1.8 Emergency Local Releases

Nil

1.9 Maximum Permanent Speeds and Permanent Speed Restrictions

Refer the Route Access Standard - Defined Interstate Rail Network Section Pages D45 for all speed information.

1.10 Maximum Train Length

Maximum train length is 1800 metres

1.11 Structure Clearances

Refer Route Access Standards for Rolling Stock Outlines.

1.12 Communications

Refer to the Route Access Standard general information section 4.10 for National Train Communications System (NTCS) details.

The UHF radio is used for the Local train Radio - Train to Train and train to track Side communications.

UHF Local Train Radio (LTR) frequency details

Frequency: 418.425 MHz (UHF),

Bandwidth: 12.5 KHz,

EIRP: 41W (remote/low density areas), 8.3W (medium & high density areas)

Tx CTCSS: 162.2 Hz

Rx CTCSS: 162.2 Hz

Selcall: disabled

1.13 Wayside Monitoring Systems

Water level sensors Sefton Dive 21.625km.

1.14 Ruling Gradients

Enfield to Leightonfield	1 in 100
Leightonfield to Enfield	1 in 100

1.15 Curve and Gradient Data

For all Curve and Gradient data, refer to the ARTC Internet.

https://extranet.artc.com.au/eng_network-config_cd.html

1.16 Drawing Legend

	Standard gauge track		Dual gauge track
	Broad gauge track		Crossover
	Advisory Sign or Location Sign		Speed sign
	Pedestrian Crossing		Passive Protection Level Crossing
	Active Protection Level Crossing – Flashing Lights		Active Protection Level Crossing – Lights and Boom
	Bridge or Overpass		Underpass
	River/Creek or Significant river bridge or Viaduct	Station Passenger Platform	Station or Platform
	Derail		Points
	Automatic Signals		Controlled Signals
	Dwarf Signals	6 6D 74.592 km 4 109.128 km	Signal number reference
	Repeater Signal		Mechanical Frame
	Point Indicator		Tunnel
	Overheight Detectors	>> <<	Wayside Equipment

2 Locations and Sections Information

2.1 Enfield Yard (EFY)

General Arrangements

Operations along the double bi-directional (RVD) Metropolitan Freight Network (MFN) Line are remotely controlled by the ARTC Network Control Centre South (NCCS).

ARTC/Sydney Trains Interface boundary is at 18.909km on the Up and Down Flemington Line

Refer safety interface agreements IA1615, IA1903, IA1916, IA1917, IA1918 & IA1919 for private sidings information.

Operating Guidelines

- All trains must be individually crewed when in Enfield staging roads.
- Crew changes may be conducted in Enfield staging roads.
- If train crew are required to walk through Enfield Yard to access a train on the Staging Roads for a crew change, the Enfield Yard Train Management Centre must be contacted on 02 8745 4331 before entering Enfield Yard.

NOTE: Main line points 341 and 345 at the western end of Enfield Yard are not available for electric locomotive operation.

Enfield Yard Staging Roads

The movement of trains into Enfield Yard Staging Roads on the Up Main is via 340 points and is controlled and signalled by the NCCS.

The movement of trains into Enfield Yard Staging Roads on the Down Main is via 301, 302, 304, and 306 points and is controlled and signalled by the NCCS.

Enfield Yard Staging Roads No: 1 and No: 2 are capable of holding 1670 metre trains.

Points and signals on Staging Roads No.1 & No. 2 are controlled and signalled by the NCCS.

Emergency Operating Locks are provided for the emergency operation of the following points:

Points No.	Description	Point Type	EOL Location
380	Turnout Staging Road 1 to Staging Road 2	D84M + Claw Lock	Up side of Staging Road 2 adjacent to ED504 signal hut
383	Crossover Staging Road 2 to Staging Road 1	D84M + Claw Lock	Up side of Staging Road 2 adjacent to ED516 signal hut
384	Crossover Staging Road 1 to Staging Road 2		Up side of Staging Road 2 adjacent to ED516 signal hut
387	Turnout Staging Road 1 to Staging Road 2		Up side of Staging Road 2 adjacent to ED201 signal hut

Enfield Private Sidings

Access into the Sydney Trains Enfield Yard and connecting roads is managed by Pacific National Enfield Shift Manager. Approval to enter the Sydney Yards is by Pacific National and signalled by ARTC NCCS.

Exiting from the Sydney Trains Enfield Yard and is managed and signalled by ARTC.

There are six private sidings. Movements into and exiting the Private Sidings are managed by NCCS.

Catch points are located at the connection points to the ARTC Network.

Operation of Power-operated Points in an Emergency

All main line and staging roads points are electrically controlled from the NCCS.

If these points fail to operate correctly, a transit alarm will sound on the Network Controller workstation.

If it is necessary to alter the route, Emergency Switch Machine Locks (ESMLs) / Emergency Operation Locks (EOLs) are provided so points may be manually operated.

Emergency Switch Machine Locks (ESMLs) / Emergency Operation Locks (EOLs) are provided for the Emergency manual operation of points and catch points.

The Network Controller must promptly advise the Signals Maintenance Representative of failures.

Enfield Yard – Level Crossing (14.928)

A level crossing is provided across the Metropolitan Freight Network at 14.928kms to provide access to the Enfield Yard area.

The Enfield Yard level crossing is equipped with flashing lights and boom barriers.

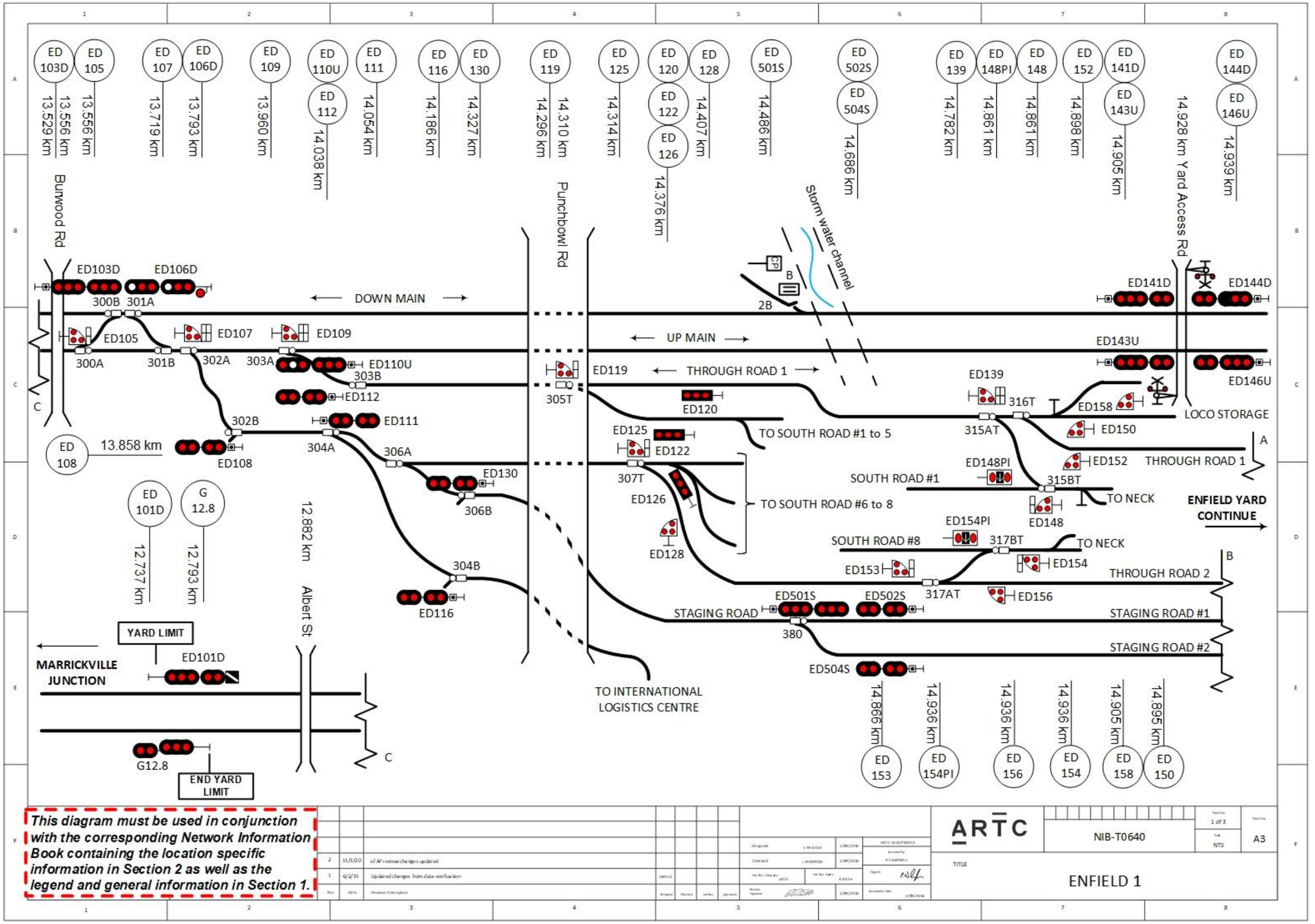
A train approaching a red signal will operate the crossing and the crossing operation will be normalised after the train comes to a stand at the red signal.

A Test switch, Manual Operations switch and Emergency switch is provided and mounted on the wall of the Level Crossing equipment cabinet.

Freight Paths from Enfield Yard

Freight services departing Enfield to travel via the Lidcombe Loop will operate on the bi-directional Up Goods Fork and Up East Fork lines and then cross to the Up Main South via the 206 Crossover at Regents Park.

Freight services departing Enfield to travel towards Sefton will operate on the bi-directional Up Goods Fork and Up West Fork and then cross to the Down West Fork via the 205 Crossover.


ED 103D
ED 105
ED 107
ED 106D
ED 109
ED 110U
ED 112
ED 111
ED 116
ED 130
ED 119
ED 125
ED 120
ED 122
ED 126
ED 128
ED 501S
ED 502S
ED 504S
ED 139
ED 148PI
ED 148
ED 152
ED 141D
ED 143U
ED 144D
ED 146U
13.529 km
13.556 km
13.719 km
13.793 km
13.960 km
14.038 km
14.054 km
14.186 km
14.327 km
14.296 km
14.310 km
14.314 km
14.376 km
14.407 km
14.486 km
14.686 km
14.782 km
14.861 km
14.861 km
14.898 km
14.905 km
14.928 km Yard Access Rd
14.939 km
Bunwood Rd
Punchbowl Rd
Storm water channel
DOWN MAIN
UP MAIN
THROUGH ROAD 1
THROUGH ROAD 2
TO SOUTH ROAD #1 to 5
TO SOUTH ROAD #6 to 8
SOUTH ROAD #1
SOUTH ROAD #8
STAGING ROAD
STAGING ROAD #1
STAGING ROAD #2
LOCO STORAGE
ENFIELD YARD CONTINUE
TO NECK
TO INTERNATIONAL LOGISTICS CENTRE
MARRICKVILLE JUNCTION
YARD LIMIT
END YARD LIMIT
Albert St
12.882 km
13.858 km
12.737 km
12.793 km
14.866 km
14.936 km
14.936 km
14.936 km
14.905 km
14.895 km
ED 108
ED 101D
G 12.8
ED 153
ED 154PI
ED 156
ED 154
ED 158
ED 150
300A
300B
301A
301B
302A
302B
303A
303B
304A
304B
305T
306A
306B
307T
315AT
315BT
316T
317AT
317BT
380
2B
This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.
ARTC
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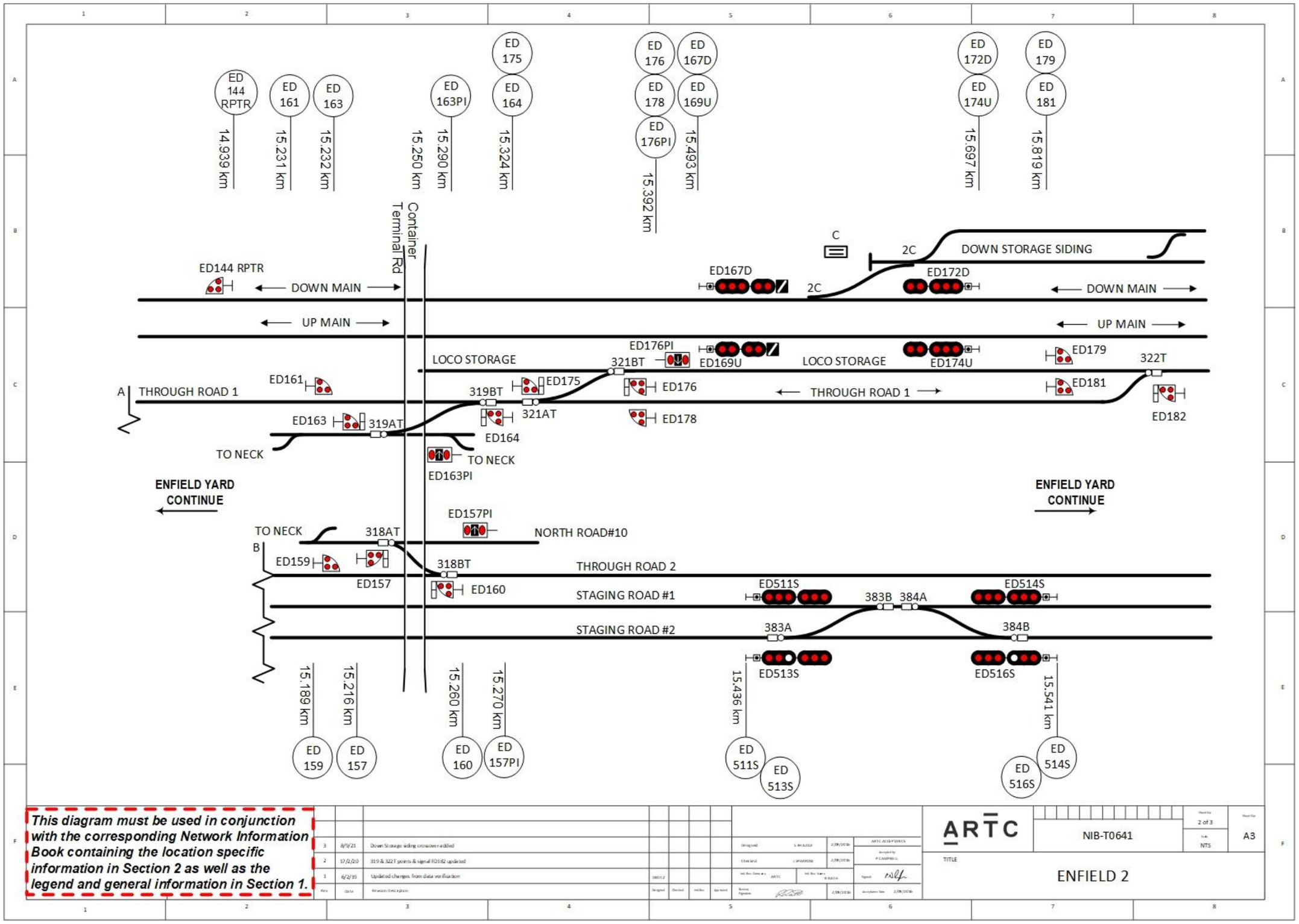
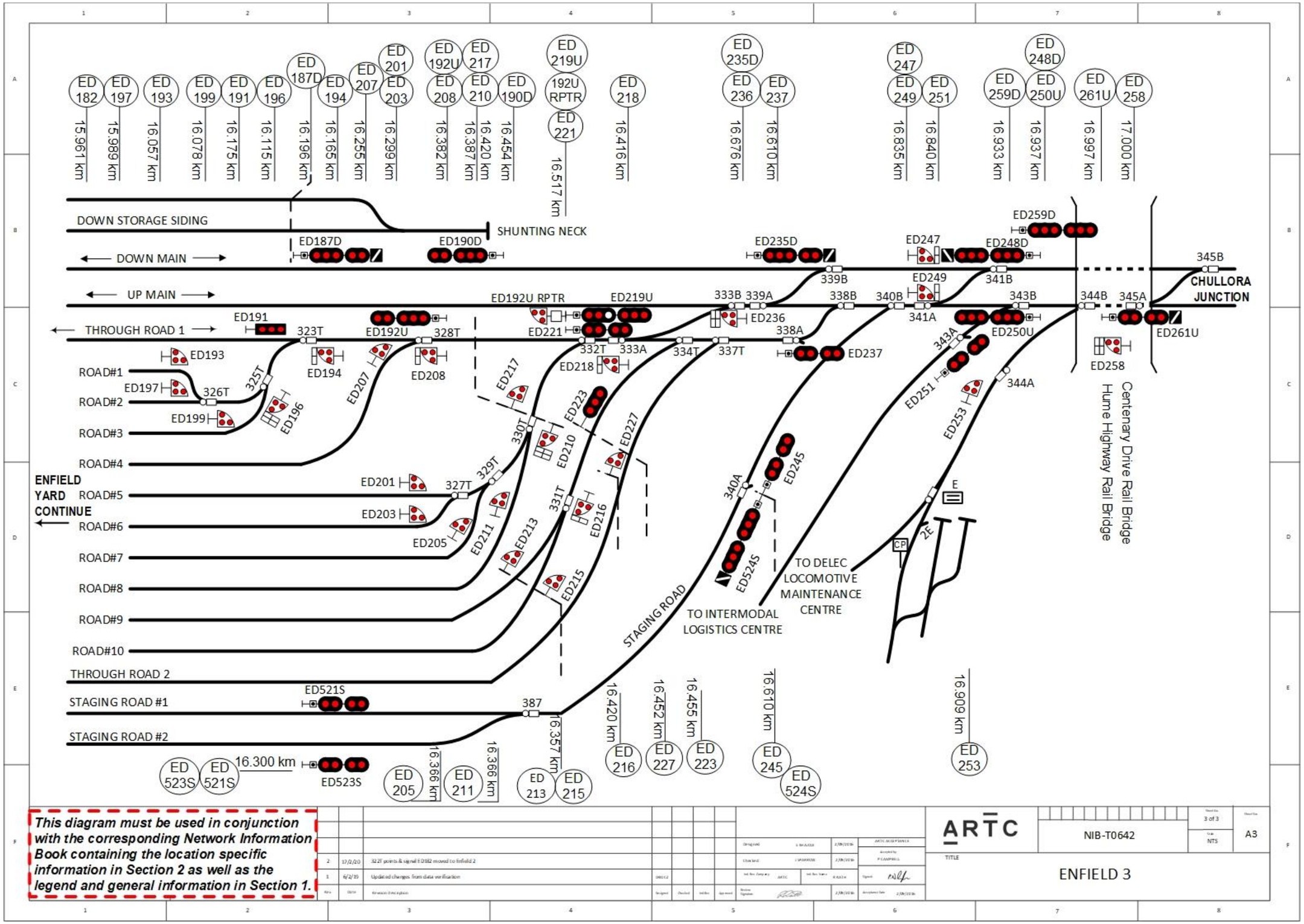
1 of 3
NTS
A3
ENFIELD 1



This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.

Rev	Date	Revision Description
3	8/9/21	Down Storage siding crossover added
2	17/2/20	319 & 322T points & signal ED182 updated
1	6/2/19	Updated changes from data verification

ARTC
NIB-T0641
2 of 3
A3
NTS
TITLE
ENFIELD 2


ED 182
ED 197
ED 193
ED 199
ED 191
ED 196
ED 187D
ED 194
ED 207
ED 201
ED 203
ED 192U
ED 208
ED 217
ED 210
ED 190D
ED 219U
192U RPTR
ED 221
ED 218
ED 235D
ED 236
ED 237
ED 247
ED 249
ED 251
ED 248D
ED 259D
ED 250U
ED 261U
ED 258
15.961 km
15.989 km
16.057 km
16.078 km
16.175 km
16.115 km
16.196 km
16.165 km
16.255 km
16.299 km
16.382 km
16.387 km
16.420 km
16.454 km
16.517 km
16.416 km
16.676 km
16.610 km
16.835 km
16.840 km
16.933 km
16.937 km
16.997 km
17.000 km
DOWN STORAGE SIDING
SHUNTING NECK
DOWN MAIN
UP MAIN
THROUGH ROAD 1
ROAD#1
ROAD#2
ROAD#3
ROAD#4
ENFIELD YARD CONTINUE
ROAD#5
ROAD#6
ROAD#7
ROAD#8
ROAD#9
ROAD#10
THROUGH ROAD 2
STAGING ROAD #1
STAGING ROAD #2
ED191
323T
ED193
325T
326T
ED197
ED199
ED196
ED194
ED207
ED192U
328T
ED208
ED192U RPTR
ED219U
ED221
332T
333A
ED218
334T
337T
333B
339A
ED236
339B
338B
338A
ED237
340B
341A
ED247
ED249
341B
ED248D
ED259D
343B
ED250U
343A
ED251
ED253
344A
344B
345A
345B
CHULLORA JUNCTION
ED261U
ED258
Centenary Drive Rail Bridge
Hume Highway Rail Bridge
ED217
ED223
330T
ED210
ED227
329T
ED201
327T
ED203
ED205
ED211
ED213
331T
ED216
ED215
340A
ED245
ED524S
TO INTERMODAL LOGISTICS CENTRE
TO DELEC LOCOMOTIVE MAINTENANCE CENTRE
CP
E
2E
ED521S
387
16.357 km
16.300 km
ED523S
ED 523S
ED 521S
ED 205
16.366 km
ED 211
16.366 km
ED 213
ED 215
16.420 km
ED 216
16.452 km
ED 227
16.455 km
ED 223
16.610 km
ED 245
ED 524S
16.909 km
ED 253
This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.
32.2T points & signal ED182 moved to Enfield 2
Updated changes from data verification
ARTC
NIB-T0642
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NTS
A3
TITLE
ENFIELD 3

2.2 Chullora (CGJ)

General Arrangements

Operations along (RVD) Metropolitan Freight Network (MFN) Line are remotely controlled by the ARTC Network Control Centre South (NCCS)

Chullora Private Sidings

Chullora comprises of four private sidings. There are 5 interfaces shown on the diagram: Chullora Master siding, No 7 MTS, Industrial siding and SOY east and west.

Movements into and exiting the Private Sidings are managed by NCCS.

Catch points are located at the connection points to the ARTC Network. G, F and Y frames are manually operated and release is given by NCCS.

Refer safety interface agreement IA1903 for further information.

Operation of Power-operated Points in an Emergency

All main line points are electrically controlled from NCCS.

If these points fail to operate correctly, a transit alarm will sound on the Network Controller workstation.

Emergency Switch Machine Locks (ESMLs) / Emergency Operation Locks (EOLs) are provided for the manual operation of points and catch points.

The Network Controller must promptly advise the Signals Maintenance Representative of failures.

Points Auto Normalisation

Number 352, 353 and 361 points will auto normalise to the normal position if they are in the reverse position and have been in the reverse position and free and available for 45 continuous seconds.

Emergency Level Crossing

Located on the Up and Down Goods lines at 17.370km

Sydney Trains Access site.

Locked boundary gates and signs to contact NCCS for access.

Crew Change Location

A crew change area of 80m length is located on the Up Goods line between signal ED282 and the shunting limit sign.

2.3 Flemington Sydney Trains Interface Requirements

Local Possession Authorities (LPA)

The limits of an LPA must not extend beyond the Operational Interface. This is the ST369SJD signal in the Down Direction (19.233 km) and ED18.8 Signal in the Up Direction (18.895 km)

Back-to-Back LPAs

Where back-to-back LPAs are implemented, the following instructions will apply:

- Worksites and rail traffic that need to move from ARTC territory to Sydney Trains territory are authorised and supervised by the Sydney Trains Possession Protection Officer (PPO).
- Worksites and rail traffic that need to move from Sydney Trains territory to ARTC territory are authorised and supervised by the ARTC PPO.

Where work is being undertaken at or over the interface boundary the following will apply:

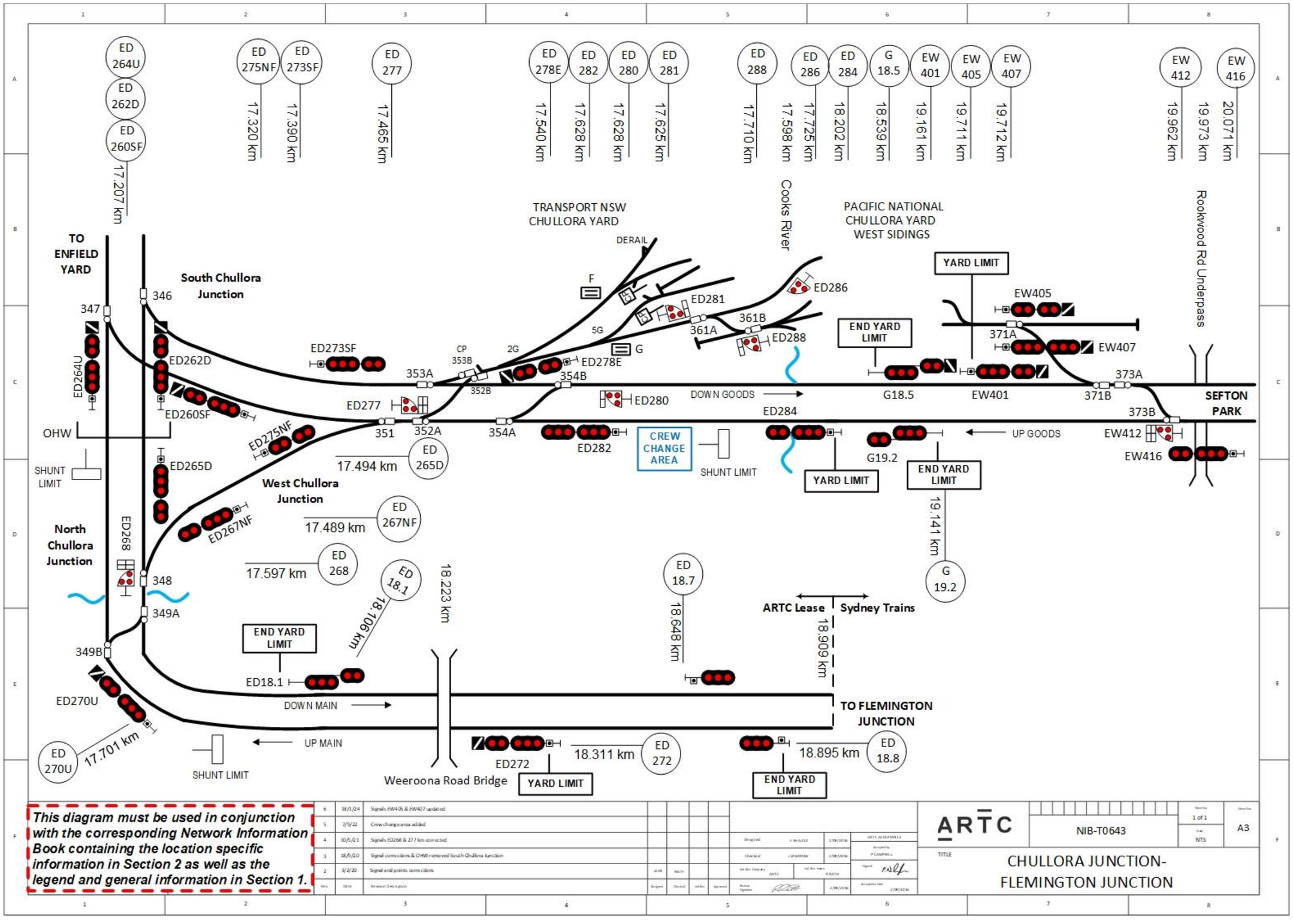
- The ARTC PPO and the Sydney Trains PPO must confer and come to a clear understanding of the worksite protection to be established over the ARTC and Sydney Trains interface boundary.
- When the work at or over the interface boundary is completed, the ARTC PPO and Sydney Trains PPO must ensure that possession protection is established as prescribed in the relevant network rules.

ARTC only LPA

Where a ARTC only LPA is to be obtained, the ARTC Possession Protection Officer must:

Ensure that possession protection is established as prescribed in ANWT302 and ANPR 700.

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.


ED 264U
ED 262D
ED 260SF
17.207 km
ED 275NF
ED 273SF
17.320 km
17.390 km
ED 277
17.465 km
ED 278E
ED 282
ED 280
ED 281
17.540 km
17.628 km
17.628 km
17.625 km
ED 288
17.710 km
ED 286
17.598 km
ED 284
17.725 km
G 18.5
18.202 km
18.539 km
EW 401
EW 405
EW 407
19.161 km
19.711 km
19.712 km
EW 412
EW 416
19.962 km
19.973 km
20.071 km
Cooks River
Rookwood Rd Underpass
TRANSPORT NSW CHULLORA YARD
PACIFIC NATIONAL CHULLORA YARD WEST SIDINGS
TO ENFIELD YARD
South Chullora Junction
346
347
ED264U
ED262D
ED260SF
ED273SF
353A
CP 353B
352B
2G
F
DERAIL
5G
G
ED278E
ED281
361A
361B
ED288
ED286
END YARD LIMIT
YARD LIMIT
EW405
371A
EW407
373A
371B
373B
SEFTON PARK
354B
ED277
ED280
DOWN GOODS
G18.5
EW401
ED284
OHW
351
352A
354A
ED282
CREW CHANGE AREA
SHUNT LIMIT
YARD LIMIT
G19.2
END YARD LIMIT
UP GOODS
EW412
EW416
ED275NF
17.494 km
ED 265D
ED265D
West Chullora Junction
North Chullora Junction
ED268
ED267NF
17.489 km
ED 267NF
17.597 km
ED 268
348
349A
ED 18.1
18.106 km
18.223 km
19.141 km
G 19.2
ED 18.7
18.648 km
ARTC Lease
Sydney Trains
18.909 km
END YARD LIMIT
ED18.1
349B
ED270U
DOWN MAIN
TO FLEMINGTON JUNCTION
UP MAIN
ED 270U
17.701 km
SHUNT LIMIT
Weeroona Road Bridge
ED272
YARD LIMIT
18.311 km
ED 272
18.895 km
ED 18.8
END YARD LIMIT
This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.
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CHULLORA JUNCTION-
FLEMINGTON JUNCTION

2.4 Sefton Dive and Pump Station (SFT)

General Arrangements

Operations along the single line (RVD) Southern Sydney Freight Line are remotely controlled by the ARTC Network Control Centre South (NCCS)

The Southern Sydney Freight Line passes under the Sydney Trains Bankstown line via the Sefton Dive.

A pump station is located within the Sefton Dive to control any storm water that might enter the dive.

Sefton Dive Pumps

The Dive is fitted with water level sensors at 21.625km which will activate the pumps according to water levels within the Sefton Dive.

Pump activation alarms are monitored by the NCCS.

2.5 Sefton Junction Sydney Trains Interface Requirements

Local Possession Authorities (LPA)

The limits of an LPA must not extend beyond the Operational Interface. This is the SP3 Signal in the Down Direction (21.443 km)

Back-to-Back LPAs

Where back-to-back LPAs are implemented, the following instructions will apply:

- Worksites and rail traffic that need to move from ARTC territory to Sydney Trains territory are authorised and supervised by the Sydney Trains Possession Protection Officer (PPO).
- Worksites and rail traffic that need to move from Sydney Trains territory to ARTC territory are authorised and supervised by the ARTC PPO.

Where work is being undertaken at or over the interface boundary the following will apply:

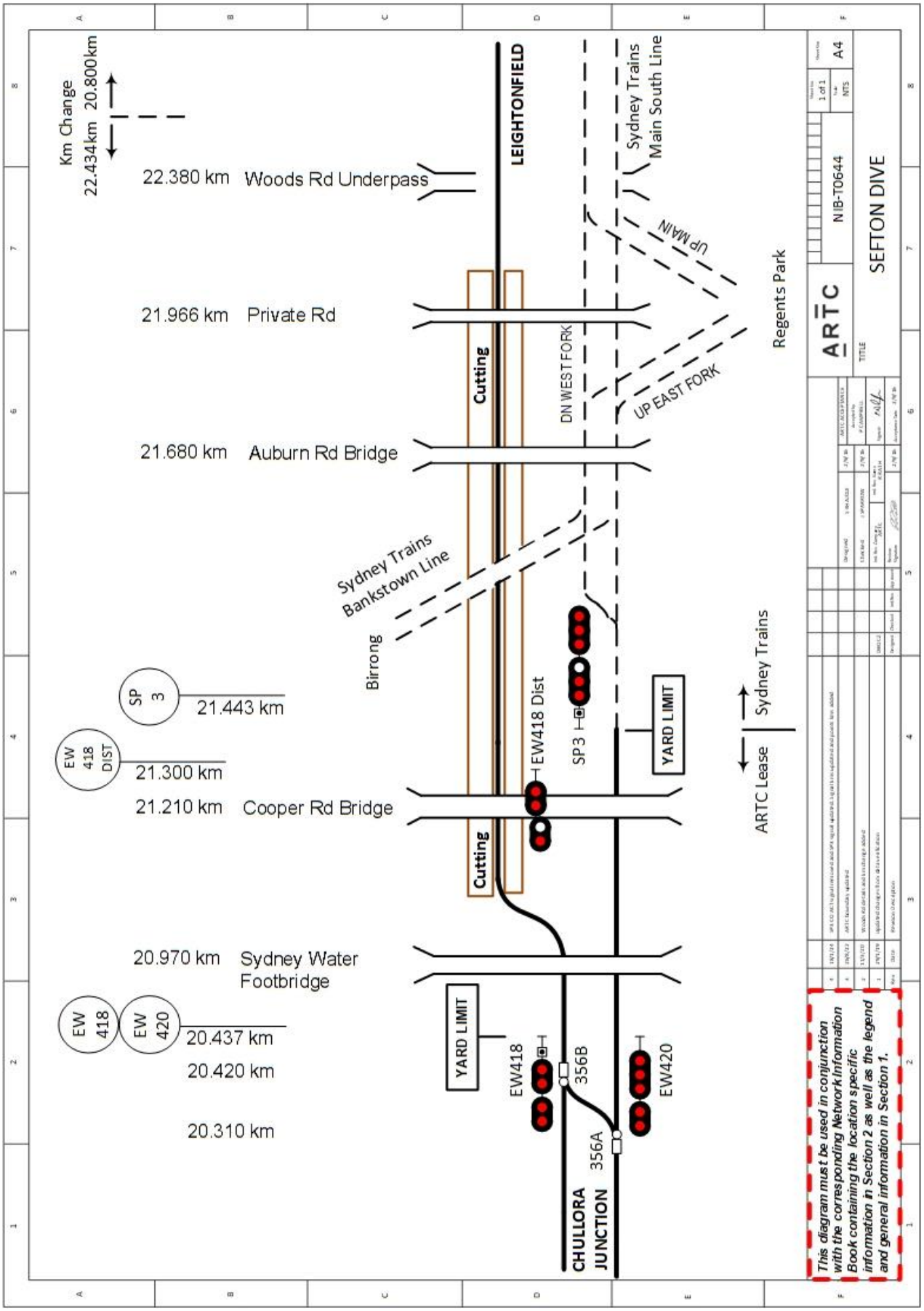
- The ARTC PPO and the Sydney Trains PPO must confer and come to a clear understanding of the worksite protection to be established over the ARTC and Sydney Trains interface boundary.
- When the work at or over the interface boundary is completed, the ARTC PPO and Sydney Trains PPO must ensure that possession protection is established as prescribed in the relevant network rules.

ARTC only LPA

Where a ARTC only LPA is to be obtained, the ARTC Possession Protection Officer must:

Ensure that possession protection is established as prescribed in ANWT302 and ANPR 700.

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.


Km Change
22.434km 20.800km
22.380 km Woods Rd Underpass
21.966 km Private Rd
21.680 km Auburn Rd Bridge
21.443 km
21.300 km
21.210 km Cooper Rd Bridge
20.970 km Sydney Water Footbridge
20.437 km
20.420 km
20.310 km
LEIGHTONFIELD
Sydney Trains Main South Line
UP MAIN
Regents Park
Cutting
DN WEST FORK
UP EAST FORK
Sydney Trains Bankstown Line
Birrong
SP 3
EW 418 DIST
EW 418
EW 420
EW418 Dist
SP3
YARD LIMIT
Cutting
ARTC Lease
Sydney Trains
YARD LIMIT
EW418
356B
356A
EW420
CHULLORA JUNCTION
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SEFTON DIVE
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This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.

2.6 Leightonfield (LTA)

General Arrangements

Operations along the single line (RVD) Southern Sydney Freight Line are remotely controlled by the ARTC Network Control Centre South (NCCS).

A crossing loop and sidings are provided at Leightonfield.

The movement of trains into Leightonfield Yard No1 siding is via the Loop Line and is signalled by the NCCS.

Access to the Leightonfield Yard No 2 siding is managed by manual point switches.

All points and signals controlled from the NCCS are controlled by axle counters.

Leightonfield Loop

Leightonfield Loop is capable of holding 1370 metre trains.

Up and Down trains may travel through the Leightonfield Loop line on the authority of the fixed signals.

Catch points are located at both ends of Leightonfield Loop.

Leightonfield Yard

Leightonfield Yard comprises of No 1 & No 2 sidings.

Movements within Leightonfield Yard are managed by NCCS.

“End of Signalled Authority” boards are provided and operators must contact NCCS to request permission to proceed.

Operation of Power-operated Points in an Emergency

All main line and loop line points are electrically controlled from NCCS.

If these points fail to operate correctly, a transit alarm will sound on the Network Controller workstation.

If it is necessary to alter the route, Emergency Switch Machine Locks (ESMLs) / Emergency Operating Locks (EOLs) are provided for the manual operation of points and catchpoints.

Emergency Operating locks are provided for the Emergency manual operation of points 217, 218, 220 & 221 points and catch points.

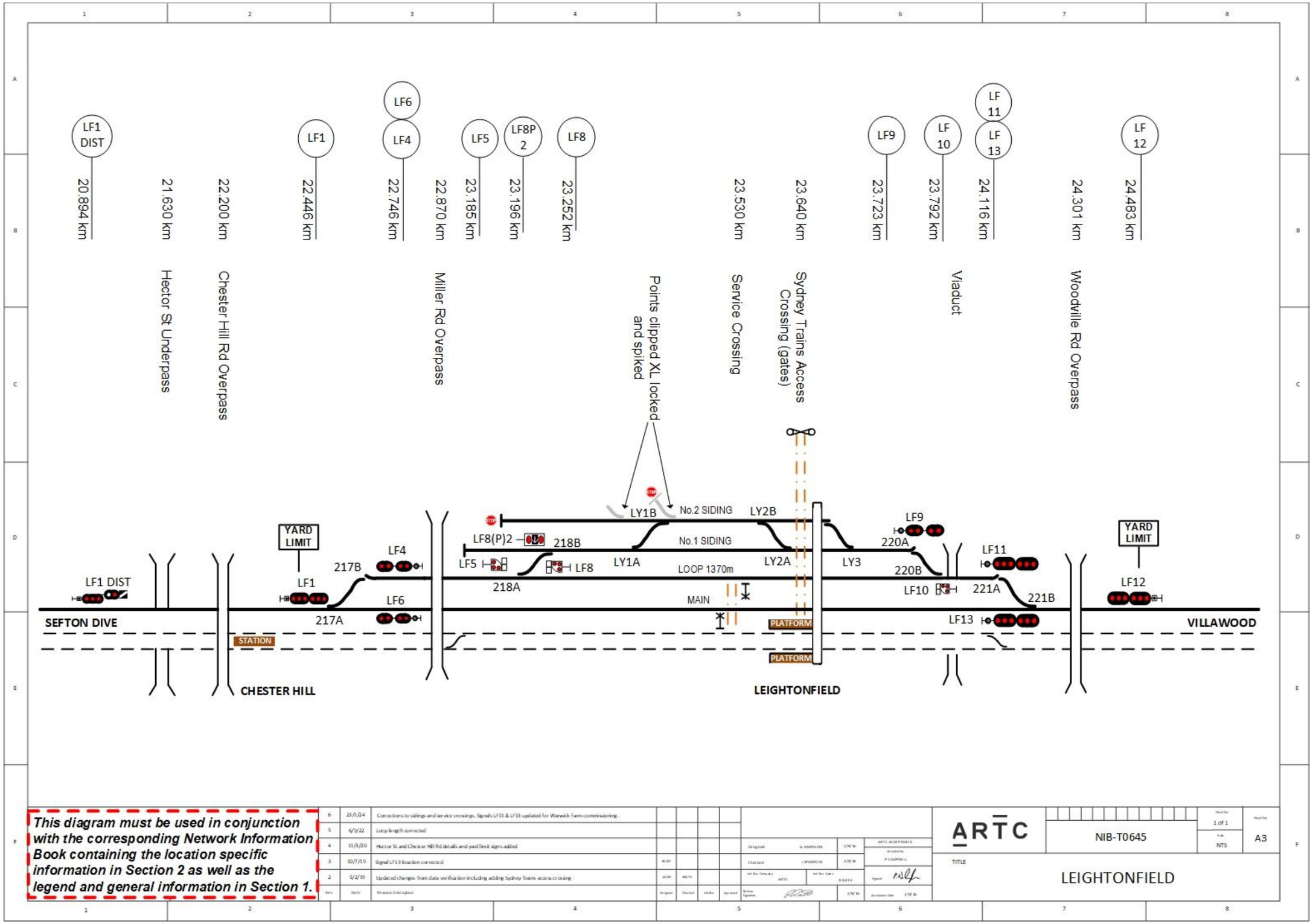
The Signals maintenance representative must be promptly advised of failure circumstances.

Emergency Level Crossing

Located on the main Southern Sydney Freight Line at 23.530km

Sydney Trains Access site.

Locked boundary gates and signs to contact NCCS for access.



This diagram must be used in conjunction with the corresponding Network Information Book containing the location specific information in Section 2 as well as the legend and general information in Section 1.

Rev	Date	Revision Description
6	23/1/24	Corrections to sidings and service crossings. Signals LF11 & LF13 updated for Warwick Farm commissioning.
5	6/9/22	Loop length corrected
4	11/5/20	Hector St and Chester Hill Rd details and yard limit signs added
3	10/7/19	Signal LF13 location corrected
2	5/2/19	Updated changes from data verification including adding Sydney Trains access crossing

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LEIGHTONFIELD