

Strathfield–Hornsby

Network Control

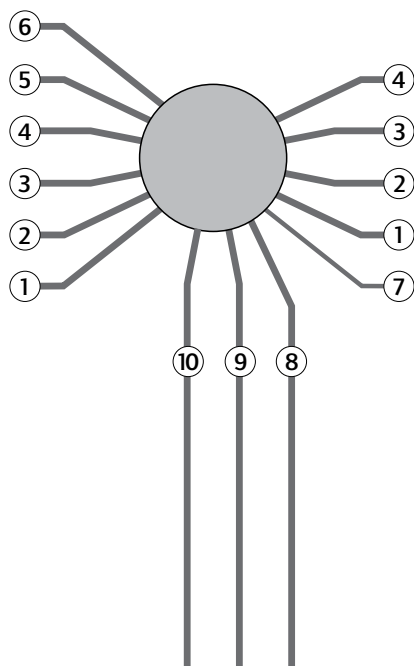
Signaller at Homebush Control Centre

Systems of Safeworking

The line between Strathfield and Hornsby is Rail Vehicle Detection (RVD) territory. It includes the sections:

- Strathfield–Rhodes
- Rhodes–West Ryde
- West Ryde–Epping
- Epping–Thornleigh
- Thornleigh–Hornsby.

Diagram



Location details

Strathfield 11.713km (NLA 114)

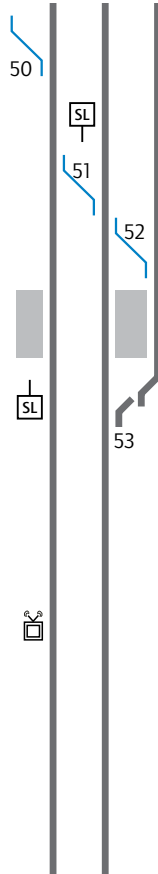


- ① Up Main line (Central–Lidcombe)
- ② Down Main line (Central–Lidcombe)
- ③ Up Suburban line (Central–Lidcombe)
- ④ Down Suburban line (Central–Lidcombe)
- ⑤ Up Local line (Central–Lidcombe)
- ⑥ Down Local line (Central–Lidcombe)
- ⑦ Goods Loop line
- ⑧ Down Relief line
- ⑨ Down Main North line
- ⑩ Up Main North line

Strathfield–Hornsby

Diagram

Location details



Rhodes 16.494km

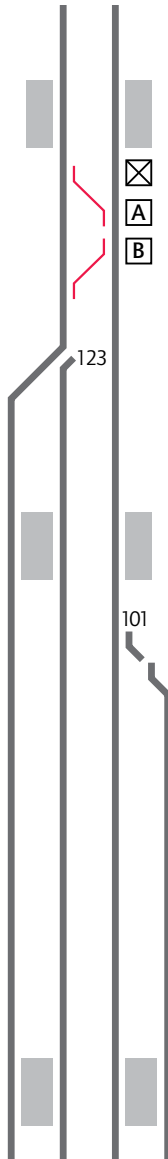


- ! Controlled from Homebush
- ! Rhodes abuts Strathfield
- [YL] 15.263km Down Relief line: Down signal RS5R
- [YL] 15.263km Down Main North line: Down signal RS7N
- ^50- Up Main North line to the Up Relief line
- [EYL] 15.112km Up Main North line: Strathfield Up signal ST194N
- [SL] 16.082km Up SHUNT LIMIT sign on Down Main North line
- ^51- Down Main North line to Up Main North line
- ^52- Down Main North line to Down Relief line
- 16.494km Rhodes. Platforms 1, 2 and 3
- [SL] 16.667km Down SHUNT LIMIT sign on Up Main North line
- ^53- Down Relief line to Down Main North line. Down Relief line ends
- [WID] 16.980km Wheel impact load detector on Up Main North line: reports to RMC (Sydney). Network Controller tells relevant Signaller to warn Train Crew
- [EYL] 17.348km Down Main North line: Down signal RS23N
- [YL] 17.712km Up Main North line: Up signal RS22N

Strathfield–Hornsby

Diagram

Location details



West Ryde 19.126km

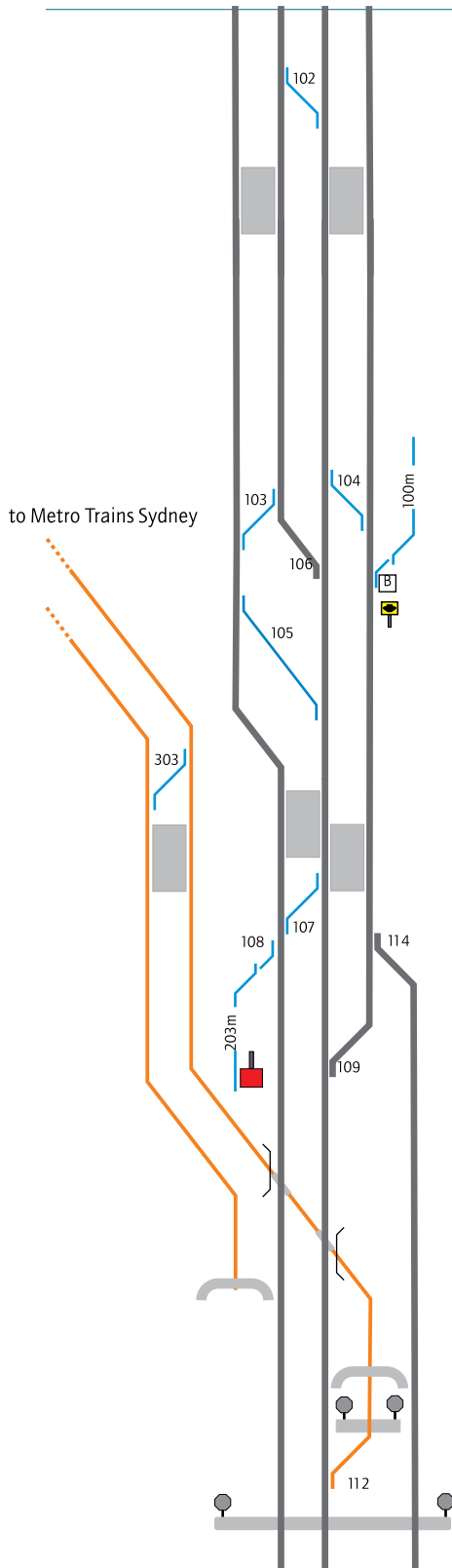


- ! Controlled from Homebush
 - [YL] 17.873km Down Main North line: Down signal WR1
 - 18.103km Meadowbank. Platforms 1, 2
 - [EYL] 18.566km Up Main North line: Up signal N11.46
 - [X] 18.659km Traffic hut: Annett lock AB
 - [A] 18.672km Emergency crossover Down Main North line to Up Main North line: key from Annett lock AB, released by release 121 and from special hasp with XL key
 - ! Signals that must be set at STOP before frame A or B is released: Down accept WR1, home WR3; Up home/starters WR8N and WR10NS, accepts WR12N and WR14NS
 - [B] 18.675km Emergency crossover Up Main North line to Down Main North line: key from Annett lock AB, released by release 121 and from special hasp with XL key
 - [123] Up Main North line to Up Main North line. Up Suburban line ends
 - 19.126km West Ryde. Platforms 1 and 2, 3
 - [101] Down Main North line to Down Suburban line
 - [YL] 19.120km Up Main North line: Up signal WR12N
 - [YL] 19.120km Up Suburban line: Up signal WR14NS
 - [EYL] 19.601km Down Main North line: Down signal N12.19
 - [EYL] 19.601km Down Suburban line: Down signal NS12.19
-
- 20.075km Denistone. Platforms 1 and 2, 3 and 4

Strathfield–Hornsby

Diagram

Location details



Epping 23.263km

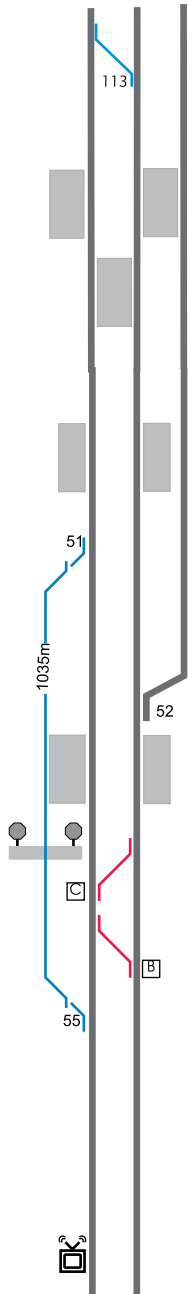


- ! Controlled from Homebush
- [YL] 20.547km Down Main North line: Down signal EW15
- [EYL] 20.596km Up Main North line: Up signal N12.78
- 102- Down Main North line to Up Main North line
- █ 21.330km Eastwood. Platforms 1 and 2, 3 and 4
- [YL] 22.308km Down Suburban line: Down signal EG21
- [EYL] 22.862km Up Suburban line: Up signal NS14.20
- [YL] 23.458km Up Chatswood–Epping line: Down signal EG199
- [EYL] 23.470km Up Chatswood–Epping line: Up signal CE23.4
- [YL] 23.645km Down Chatswood–Epping line: Down signal EG201
- [EYL] 23.657km Down Chatswood–Epping line: Up signal CE23.6
- 104- Down Main North line to Down Suburban line
- 103- Up Suburban line to Up Main North line
- 106- Down Main North line to Up Main North line
- ! [B] Down Suburban line to Epping Down refuge: key from releasing switch B, released by release 110
- ! See Special instructions
- 105- Down Main North line to Up Suburban line
- ! WARNING: Freight trains must not use crossover 105
- 303- Down Chatswood–Epping line to Up Chatswood–Epping line
- █ 23.263km Epping. Platforms 1 and 2, 3. (24.745km. Platform 5 and 6 on Chatswood–Epping line)
- 107- Down Main North line to Up Main North line
- 108- Up Main North line to Turnback siding
- 114- Down Suburban line to Down Relief line
- █ 23.855km Down STOP sign on Turnback siding
- 109- Down Suburban line to Down Main North line. Down Suburban line ends
- ⤴ 25.192km Up Chatswood–Epping line portal
- ⤵ 25.293km Down Chatswood–Epping line portal
- ⦿ 25.497km Network access
- 112- Down Metro Trains Sydney line to Down Main North line (booked out of use, clipped, spiked and XL locked in the Normal position. ECRL CLOSED)
- ⦿ 24.091km Network access

Strathfield–Hornsby

Diagram

Location details



- 113– Down Main North line to Up Main North line
- 25.286km Cheltenham. Platforms 1, 2
- EYL 25.481km Down Main North line: Down signal N15.83
- YL 26.114km Up Main North line: Up signal EG62
- 26.815km Beecroft. Platform 1 and 2

Thornleigh 29.350km

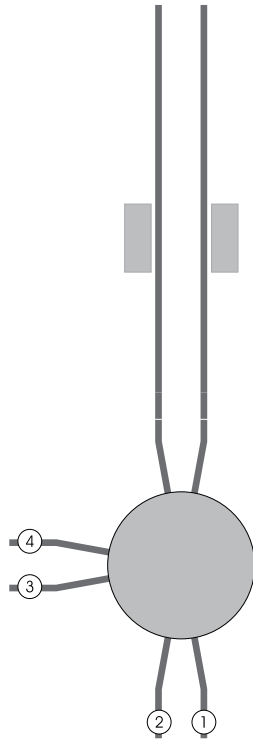


- ! Controlled from Homebush
- YL 27.866km Down signal TH1
- 28.505km Pennant Hills. Platforms 1, 2
- EYL 28.507km Up signal N17.68
- 51– Up Relief line to Up Main North line
- 52– Down Relief line to Down Main North line
- 29.350km Thornleigh. Platforms 1 and 2, 3
- 29.500km Network access
- C 29.657km Emergency crossover Down Main North line to Up Main North line: key from Annett lock C, released by release 53. Taking the release sets points 55 to NORMAL
- ! Signals that must be set at STOP before frame C is released: Down homes TH7 and TH9 and home/starter TH11
- B 29.750km Emergency crossover Up Main North line to Down Main North line: key from releasing switch B, released by release 54. Taking the release sets points 55 to REVERSE
- ! Signals that must be set at STOP before frame B is released: Down homes TH7 and TH9 and home/starter TH11
- ⚠ WARNING: If release 54 is returned to NORMAL, points 55 remain in REVERSE. Unless a route for the Up Relief line is being set, the points must be set to NORMAL
- 55– Up Main North line to Up Relief line
- 📡 29.992km Pantograph Condition Monitoring System reports to Mechanical Controller at RMC
- ! See Special Instructions
- EYL 30.512km Down signal N18.97
- YL 30.650km Up signal TH20

Strathfield–Hornsby

Diagram

Location details



■ 31.634km Normanhurst. Platforms 1, 2

Hornsby 33.704km (NLA 302)



- ① Down Main North line (Hornsby–Gosford)
- ② Up Main North line (Hornsby–Gosford)
- ③ Up Shore line (Central–Hornsby)
- ④ Down Shore line (Central–Hornsby)

Strathfield–Hornsby

Special instructions

Work on track North Strathfield Rail Underpass (NSRU)

Before any work on track method or authority can be authorised for work on the Up Relief line at North Strathfield, the Signaller must ensure that:

- the entire portion of the Up Relief line is unoccupied, and
- all signals giving entry to the Up Relief line in both directions have been set at STOP with blocking facilities applied.

⚠ WARNING: Other than during a Local Possession Authority, the use of Lookout Working is not permitted from Signal No. ST 174R at North Strathfield to 557 points at North Strathfield on the Up Relief line.

Motive power restrictions

Other than during a Local Possession Authority, the Chatswood–Epping line is usually restricted to use by electric-powered vehicles. Only the Network Controller may authorise use of other types of motive power.

Prior to authorising a non-electric-powered vehicle to operate on the Chatswood–Epping line, the Network Controller must:

- arrange for the Emergency Response Unit to isolate all fire alarms, and
- confirm with the Central Control System (CCS) Operator that the ventilation system on the Chatswood–Epping line has been switched to congested mode.

Following the non-electric-powered vehicle's departure from the Chatswood–Epping line, the Network Controller must tell the Emergency Response Unit and the CCS Operator of its departure.

Misroute of non-electric-powered vehicles

Should a non-electric-powered vehicle be misrouted to the Chatswood–Epping line, the Signaller at Homebush must immediately tell the Network Controller.

On being told of a non-electric-powered vehicle being misrouted to the Chatswood–Epping line, the Network Controller must:

- arrange for the Emergency Response Unit to isolate all fire alarms, and
- confirm with the CCS Operator that the ventilation system on the Chatswood–Epping line has been switched to congested mode.

Following the non-electric-powered vehicle's departure from the Chatswood–Epping line, the Network Controller must tell the Emergency Response Unit and the CCS Operator of its departure.

Epping Down Refuge siding

Work on track

When work on track is to be carried out in Epping Down Refuge siding, the procedures below must be followed.

Authorisation

Only the Network Controller may authorise work on track in Epping Down Refuge siding.

Protection Officer

Make sure that rail traffic within the siding will not move without authorisation.

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Tell the Network Control Officer:

- your name and contact details, and
- give the name of the siding and ground frame designation, and
- the type of work to be done, and
- the intention to clip the relevant points, and
- the intended start and finish times
- when applicable, that rail traffic within the siding will not move without authority.

Network Control Officer

Make sure that rail traffic not associated with the work is not scheduled to enter the siding during the work on track times.

Signaller

Ask the Network Controller for permission to allow work on track to commence.

Network Controller

When the above conditions have been met, authorise the work on track to commence.

Signaller


When authorised, advise the Protection Officer to commence work.

Network Controller and Signaller

Record, in permanent form, all information about the authorisation of work on track in the siding.

Protection Officer

When permission is received to allow work on track to commence:

- clip and lock the points to prevent unauthorised rail traffic access to the siding.
-  **WARNING:** Work within the sidings must not commence until the points have been clipped and locked.

Returning the siding to service

Protection Officer

Make sure that:

- all equipment is clear of the line
- all workers have cleared the worksite
- the line is certified fit for service
- the point clip and SL lock has been removed, then
- tell the Network Control Officer that the work is completed, and about any restrictions on track use.

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Pantograph Condition Monitoring System (PCMS)

The PCMS installed on structure H29 + 992 MUST be isolated as per Safe Work Instruction DSYD2016/34982 prior to any work under possessions and OHW infrastructure work between H29 + 950 and H30 + 050 on the South line. Contact Electrical Operating Centre (ICON Electrical) on 02 9379 4911 for advice.

Maintenance Window Local Possession Authority (LPA)

During Maintenance Window LPA's (MW70, MW71 and MW72), a worksite may be established within 500 metres of the LPA limit for maintenance activities, inspections and testing if:

- a set of points can be secured to prevent access to the portion of track, or
- a Work On Track Authority adjoining the LPA limit is authorised, or
- Lookout Working is established in accordance with NWT 310 *Lookout Working*.

 **WARNING:** Worksites with associated rail traffic must not be established within 500 metres of an LPA limit unless a TOA adjoining the LPA limit has been authorised.

Points that are clipped and locked to protect a Maintenance Window LPA may be unclipped in accordance with NSG 616 *Precautions during signalling equipment testing*.

Related documents

NLA 110 *Central–Lidcombe*

NLA 114 *Strathfield*

NLA 302 *Hornsby*

NLA 304 *Central–Hornsby*

NLA 308 *Chatswood–Epping*

NLA 310 *Hornsby–Gosford*

Effective date

4 March 2019