

Infrastructure Plant Manual

Module P301 – Road rail access points

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0.1 Job roles

This module is applicable to the following job roles, you must familiarise yourself with all of the clauses contained within it to understand your personal responsibilities. If you intend to carry out any of these roles you must hold the relevant Sentinel competency:

- Principal Contractors
- Plant Operator License Holders
- Machine Controller
- Crane Controller
- Planner
- Engineering Supervisor
- Machine Operator

0.2 Risk Mitigation

This module helps mitigate the following high level risks:

- a) compliance with legislation (LOLER, PUWER, HASAW);
- b) damage to assets, e.g. RRV or its load hitting a passing train during ALO operation;
- c) derailment, e.g. trailer being loaded incorrectly;
- d) staff injuries, e.g. Operator being trapped between machine and infrastructure or machine and machine.

1 Application of this module

This module details requirements for:

- a) the type and selection of road rail access point (RRAP);
- b) access point and access route construction;
- c) the registration of RRAP in Ellipse;
- d) the requirements for involving Commercial Property where land access rights, lease or purchase is necessary.

It applies to:

- a) all RRAP on Network Rail managed infrastructure;
- b) access points specifically used by emergency services OTP.

It does **not** apply to:

- a) the management of public accommodation, highway or occupation level crossings used as on/off tracking point;
- b) the selection or management of pedestrian only access points.

2 Placing of RRAP

Wherever possible, locate RRAP on straight and level track.

Places where RRAP should not be located are broadly categorised as:

- a) where they should not be located at any time;
- b) where they should not be located unless a risk assessment demonstrates that it is safe to do so;
- c) where they should not be located unless an assessment into their affect on lineside neighbours has been undertaken.

Table 1 provides some examples of these types of locations.

At the feasibility and design stages consider:

- a) where on-track plant will be stabled;
 - NOTE This should be inside the boundary fence which may require additional standing area.*
- b) if stabling areas are located close to RRAP, hazards such as OLE equipment and other third party electricity cables;
- c) traffic management and signage on the public highway;
- d) the effects that putting in a new or upgraded RRAP may have on the public highway.

NOTE A record should be made (e.g. photographs or video) of the before and after condition of the road surface and verges in the vicinity of the access point in case damage is caused and the Highway Authority seeks reparations.

Locations where access points should not be fitted;

- a) On curves of 200m radius or less where continuous check rails are installed;
- b) Where guard rails or lateral resistance end plates are present;
- c) On high ballast shoulder areas;
- d) Over rail joints^(see Note) or rail welds;
- e) Over rail adjustment switches, treadles, axle counters, or hot axle bearing detectors;
- f) Within 20m of a platform ramp;
- g) Where cross track cables are present;
- h) Where red or third rail impedance bonding is present.
- i) Where overhead line equipment (OLE) is less than 4165mm above rail level (ARL);
- j) Where a non level road could place any part of the OTP within 600mm of the OLE;
- k) As shown in NR/L2/TRK/2102.

NOTE Access points located within sidings may be located over rail joints subject to risk assessment and approval.

Locations where access points should not be fitted unless a risk assessment demonstrates that it is safe to do so;

- a) Less than a minimum of 20m from any switch and crossing unit;
- b) Less than 20m from an underbridge or tunnel where there are vertical or lateral restrictions that could restrict vehicle manoeuvrability;
- c) Where infrastructure assets such as signalling equipment and lineside structures are located which could restrict vehicle manoeuvrability;
- d) Next to, or over, under track crossings;
- e) Where there is an excessive height difference between adjacent running lines^(see Note);
- f) Within trespass and vandalism hotspots;
- g) Where road access is hazardous (e.g. access is directly from a dual-carriageway, busy roads or areas of limited visibility).

NOTE See NR/L2/TRK/2102 for requirements.

Locations where access points should not be fitted unless an assessment into their affect on lineside neighbours has been undertaken;

- a) Sites of special scientific interest (SSSI's);
- b) Conservation areas;
- c) Adjacent to hospitals;
- d) Residential areas;
- e) Schools.

Table 1 – Locations where RRAP should not be fitted

Take into account delivery logistics such as:

- a) access through the boundary gate from public highways;
- b) access routes through minor roads;
- c) height, width and weight restrictions on public highways;
- d) third party overhead services (e.g. power lines, pipes and telephone wires).
Mark overhead services with 'goal posts' to warn of height restrictions;
- e) seasonal or periodic road availability;
- f) access rights and suitability of private roads;

- g) delivery vehicle size and manoeuvrability;
- h) condition of existing highway surface and verges.

Appropriate functions within Network Rail (e.g. Commercial Property, Community Relations Manager) and the OTP haulier where necessary, shall be consulted when determining the type and location of RRAP.

3 Classification and construction of RRAP

The appropriate classification and type of RRAP to be installed, shall be selected using Table 2 and Table 3.

RRAP shall:

- a) conform to NR/L2/TRK/2049 and NR/L2/TRK/4040;
- b) be constructed so that the flangeway gap is as specified in NR/L2/TRK/2049;
- c) be constructed so that lineside drainage is suitably protected and not compromised;
- d) be constructed, and where necessary protected, such that vehicles using them as a turning point cannot foul the line.

NOTE Protection could include the placing of removable/lockable bollards, lockable barriers and Armco type railings such that any vehicle and its load cannot foul the line.

Ballast shoulders abutting up to a RRAP shall be in accordance with NR/L2/TRK/2102.

Exposed timber surfaces shall have an approved anti-slip coating applied.

Proprietary access equipment shall be approved for use in accordance with the appropriate process detailed in NR/L2/RSE/100.

Key		Classification			Track Category Suitability (NR/L2/TRK/ 2102)	Type of Construction	Activity Suitability
1 st Preference		Permanent	Semi Permanent	Temporary			
2 nd Preference							
Minimum requirement							
Public highway level crossing		Yes	N/A	N/A	Any	Out of scope of this module	Any
Properly constructed semi permanent installation (See Table 3)	Type A	N/A	Yes	N/A	Any	Installed to the same standard as public highway level crossing (See Figure 1)	Any
	Type B	N/A	Yes	N/A	4, 5 & 6	Fixed timber infill (See Figures 2, 4 and 6)	Any
	Type C	N/A	Yes	N/A	4, 5 & 6	Fixed timber infill in 4ft with braced stone in 6ft (See Figures 3 and 5)	Any
Yard area with the surface level with head of the rail		Yes	Yes	No	N/A	Concrete, tarmac etc, dogged timbers or consolidated stone	Any – siding must be under possession
NR approved unsecured semi-permanent crossing panels		No	No	Yes	1A, 1-6 In fill must be removed at end of possession	Bomac, Strail, Holdfast etc	Possession only
Restrained and supported timber decking		No	No	Yes	All - must be removed at end of possession	Approved system restrained to prevent movement	Possession only
Approved proprietary access equipment		No	No	Yes	All - must be removed at end of possession	N/A	Possession only
Farmers/occupation crossing		N/A	N/A	N/A	N/A	N/A	Not suitable for large RRV's

Table 2 – Classification and suitability of RRAP