Level 2
Manual
Lineside vegetation management manual

Approvals

Content Approved by:

[Signature]

Graham Owen,
Technical Lead

Content approved by:

[Signature]

Mona Sihota,
Standard and Control Document Owner

Approved for publication by:

[Signature]

John Winnifrith,
Standards and Controls Management Team

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party without the written permission of Network Rail.

© Copyright 2020 Network Rail.

Uncontrolled copy once printed from its electronic source.

Published and Issued by Network Rail, 2nd Floor, One Eversholt Street, London, NW1 2DN.
User information

This Network Rail document contains colour-coding according to the following Red–Amber–Green classification.

**Red requirements – no variations permitted**
- Red requirements are to be complied with and achieved at all times.
- Red requirements are presented in a red box.
- Red requirements are monitored for compliance.
- Non-compliances will be investigated and corrective actions enforced.

**Amber requirements – variations permitted subject to approved risk analysis and mitigation**
- Amber requirements are to be complied with unless an approved variation is in place.
- Amber requirements are presented with an amber sidebar.
- Amber requirements are monitored for compliance.
- Variations can only be approved through the national variations process.
- Non-approved variations will be investigated and corrective actions enforced.

**Green guidance – to be used unless alternative solutions are followed**
- Guidance should be followed unless an alternative solution produces a better result.
- Guidance is presented with a dotted green sidebar.
- Guidance is not monitored for compliance.
- Alternative solutions should be documented to demonstrate effective control.
Compliance

This Network Rail standard/control document is mandatory and shall be complied with by Network Rail Infrastructure Limited and its contractors if applicable from June 2020.

Where it is considered not reasonably practicable\(^1\) to comply with the requirements in this standard/control document, permission to comply with a specified alternative should be sought in accordance with the Network Rail standards and controls process, or with the Railway Group Standards Code if applicable.

If this standard/control document contains requirements that are designed to demonstrate compliance with legislation they shall be complied with irrespective of a project’s Governance for Railway Investment Projects (GRIP) stage. In all other circumstances, projects that have formally completed GRIP Stage 3 (Option Selection) may continue to comply with any relevant Network Rail standards/control documents that were current when GRIP Stage 3 was completed.

**NOTE 1:** Legislation includes Technical Specifications for Interoperability (TSIs).

**NOTE 2:** The relationship of this standard/control document with legislation and/or external standards is described in the purpose of this standard.

Disclaimer

In issuing this standard/control document for its stated purpose, Network Rail Infrastructure Limited makes no warranties, expressed or implied, that compliance with all or any standards/control documents it issues is sufficient on its own to provide safety or compliance with legislation. Users are reminded of their own duties under legislation.

Compliance with a Network Rail standard/control document does not, of itself, confer immunity from legal obligations.

Where Network Rail Infrastructure Limited has granted permission to copy extracts from Network Rail standards or control documents, Network Rail Infrastructure Limited accepts no responsibility for, nor any liability in connection with, the use of such extracts, or any claims arising there from.

This disclaimer applies to all forms of media in which extracts from Network Rail standards and control documents might be reproduced.

Supply

Copies of standards/control documents are available electronically, within Network Rail’s organisation. Hard copies of this document might be available to Network Rail people on request to the relevant controlled publication distributor. Other organisations can obtain copies of this standard/control document from an approved distributor.

---

\(^1\) This can include gross proportionate project costs with the agreement of the Network Rail Assurance Panel (NRAP).
Issue record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>March 2018</td>
<td>New document. Replaces all draft versions of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NR/L2/TRK/5201 and NR/SP/TRK/05200</td>
</tr>
<tr>
<td>2</td>
<td>March 2019</td>
<td>Updated TEF forms to OTK forms</td>
</tr>
<tr>
<td>3</td>
<td>Sept 2019</td>
<td>Updated modules 1 &amp; 2</td>
</tr>
<tr>
<td>4</td>
<td>March 2020</td>
<td>Introduction for module 3</td>
</tr>
</tbody>
</table>

Reference documentation

NR/L2/OCS/095  
High risk sites for wrong side track circuit failures in leaf fall areas and for low rail adhesion

NR/L2/OPS/021  
Weather – managing the operational risks

NR/L3/CIV/152  
Vegetation management for earthworks

NR/GN/ENV/004  
Waste management manual

NR/L2/CTM/014  
Competence & Training in Overhead Line Engineering

NR/L3/MTC/MG0176  
Ellipse work management handbook

NR/L3/MTC/PL0175  
Maintenance planning handbook

NR/L3/MTC/PL0215  
Communicating with the public

NR/L3/MTC/EN0099  
Protected sites and species management

NR/L2/SIG/10157  
Signal sighting

NR/L2/SIG/19608  
Level crossing infrastructure inspection & maintenance

NR/L3/TRK/4041  
Maintaining track assets at level crossings

NR/GN/TRK/7001  
Track Work Information Index

NR/L3/TRK/003/TEF3064  
Hazard report for track assets

NR/L2/OTK/5201/F3076  
Leaf fall risk assessment

NR/L2/OTK/5201/F3077  
Tree hazard: risk evaluation and treatment system (threats and threats-nr)

NR/L2/OTK/5201/F3079  
Lineside vegetation inspection

NR/L2/OTK/5201/F3211  
Fallen tree incident form

NR/L2/OTK/5201/F3244A  
Third party tree notification letter (3PTL)

NR/L2/OTK/5201/F3244B  
Third party tree notification letter (3PTLII)

NR/L2/OTK/5201/F3245  
Tree risk evaluation & control by non-arboriculturist railway personnel (THREATS-NRP)

NR/L2/OTK/5201/F3269  
Supervisory inspection of lineside vegetation

NR/L2/OTK/5201/F3270  
Cab ride of lineside vegetation

NRL2/OTK/5201/F3069  
Pesticide application form

External References

BS3998  
Recommendations for Tree Work

BS5837  
Trees in relation to design, demolition and construction. Recommendations.
Contents

1 Purpose .................................................................................................................................................. 6
2 Scope.................................................................................................................................................... 6
3 Key principle for the management of risk ................................................................................................. 7
4 Asset Knowledge...................................................................................................................................... 7
5 Summary of modules ................................................................................................................................ 7
  5.1 Overview............................................................................................................................................ 7
  Table 1 – Module summary .................................................................................................................... 8
  5.2 Lineside vegetation inspection and risk assessment – Module 01 ..................................................... 8
  5.3 Lineside vegetation management requirements – Module 02 ......................................................... 8
    5.3.1 Principles of management ........................................................................................................... 8
    5.3.2 Immediate action ......................................................................................................................... 9
    5.3.3 Action .......................................................................................................................................... 9
    5.3.4 Alert .......................................................................................................................................... 9
  5.4 Route vegetation management plans - Module 03 .......................................................................... 10
6 Definitions ............................................................................................................................................... 10
  Table 2 – Terms and definitions ........................................................................................................... 14
7 Abbreviations ......................................................................................................................................... 14
  Table 3 - Abbreviations ......................................................................................................................... 16
1 Purpose

Lineside vegetation management is a process that uses risk assessment to contribute to the sustainable management of the lineside estate and the safe running of the railway infrastructure.

Risk from lineside vegetation is controlled by inspection, management and maintenance. These activities protect the Network Rail workforce and third parties against harm.

Responsible management of vegetation and respecting our neighbours improves the resilience of lineside environments and stakeholder relations.

Lineside vegetation includes areas on the operational railway, closed lines, non-operational or third party land.

Management of lineside vegetation is a control from the threats identified on bow tie ‘railway or third party vegetation affecting safety’ and controls or mitigates the following risks:

a) trees within falling distance of the track or third party land;

b) vegetation affecting:
   1. overhead line equipment;
   2. signal sighting;
   3. level crossing sighting;
   4. position of safety/refuge;
   5. railway vehicles by damage to rolling stock;
   6. railway access;
   7. inspection of assets;
   8. renewal of other assets; and
   9. enhancement projects;

c) leaf fall affecting the railway;

d) injurious and invasive weeds; and

e) damage to railway infrastructure or third parties.

Planned maintenance helps to deliver the most effective management regime once a compliant profile has been achieved.

2 Scope

This manual contains:

a) key principles for the management of risk;

b) asset knowledge; and

c) the impact of vegetation on other assets.

The document applies to inspecting, managing and maintaining lineside vegetation and all who are involved in those activities.
Out of scope for this process are:

a) management of vegetation necessary only for the stability and security of earthworks and structures;

b) management and inspection of vegetation in advance or in response to adverse/severe weather events which is included within NR/L2/OPS/021 ‘Weather – managing the operational risks’; and

d) environmental and community requirements for vegetation management.

### 3 Key principle for the management of risk

The key principle that underpins this standard is that risk from lineside vegetation must be understood so that appropriate controls can be selected and applied. Risk may be related to safety, performance, loss of habitat, cost or reputation.

Risks from lineside vegetation are identified, assessed and action is taken to control them. This is a continuous process, using the results of inspections and the full range of lineside vegetation information available.

### 4 Asset Knowledge

Ellipse contains the vegetation asset register and is used when creating the inspection and management plans. It stores the following asset information:

a) compliance with the requirements of this standard;

b) output from inspections;

c) work arising reports for lineside vegetation; and

d) any work carried out on lineside vegetation.

Accurate and current asset information is required to produce credible inspection and management plans.

### 5 Summary of modules

#### 5.1 Overview

Table 1 provides an overview of modules in this manual.

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Issue</th>
<th>Publication date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR/L2/OTK/5201/01</td>
<td>Lineside vegetation inspection and risk assessment</td>
<td>3</td>
<td>September 2019</td>
</tr>
<tr>
<td></td>
<td>Lineside vegetation management requirements.</td>
<td>3</td>
<td>September 2019</td>
</tr>
</tbody>
</table>
5.2 Lineside vegetation inspection and risk assessment – Module 01

This module prescribes requirements for inspection frequencies, minimum actions and maximum timescales.

This module prescribes the production and implementation of an inspection plan that covers all lineside vegetation.

The purposes of cyclical inspection are to:

a) assess where vegetation requires action or will require action before the next planned inspection;
b) assess the risk from trees that are within falling distance of the railway or a third party location;
c) assess the risk to the railway from Autumn leaf fall;
d) identify and assess the risk from injurious non-native plants; and
e) assess lineside vegetation that might be vulnerable during extreme weather events.

Investigations following incidents inform on the cause of failure and whether the asset poses a wider risk.

This module details:

a) types of inspection – vegetation, tree, leaf fall, cab ride, supervisory, post incident, and reactive;
b) vegetation inspections procedure;
c) corrective actions arising from inspection;
d) management requirements once the inspection has been completed;
e) updating records; and
f) hazardous tree remediation process.

5.3 Lineside vegetation management requirements – Module 02

5.3.1 Principles of management

Lineside vegetation is kept clear to a specified distance from the running line to allow for the safe operation of the railway. Planned maintenance avoids the need for the immediate response and reactive work.

Lineside vegetation is managed to allow other assets to be inspected and maintained. Management also allows certain assets, for example drainage, to function safely.
Output from inspections, asset information, analysis and local knowledge is used to carry out management work to meet safety, performance and cost targets.

Legislative and environmental restrictions are followed when managing lineside vegetation.

Vegetation management should encourage the establishment of desirable lineside conditions that add value not only to the lineside but also to the surrounding environment in terms of:

- connecting environments;
- promoting and providing biodiversity;
- protecting areas of ecological and historical importance; and
- improving the resilience of the vegetation.

Actions to manage vegetation will depend on the zone it grows within.

Zones for the management of vegetation are immediate action, action and alert as described in 5.3.2 – 5.3.4.

5.3.2 Immediate action

The Immediate Action Zone describes the area where vegetation is acted upon due to:

- contact with trains;
- affecting sighting of signalling;
- affecting sighting for users of level crossings;
- disrupting or damaging overhead line equipment;
- obstructing places of safety and safe walking routes; and
- trees that pose a risk to safety.

5.3.3 Action

The Action Zone profile describes the area where vegetation requires assessment and management for:

- tree failure affecting safety;
- leaf fall during Autumn; and
- encroachment towards the Immediate Action Zone.

5.3.4 Alert

The Alert Zone profile describes the area which requires maintenance to provide safe operating conditions for the railway and mitigates the risk posed by:

- trees growing to a height and diameter that pose a derailment risk;
- the density of leaf fall; and
- vegetation growing towards an area that requires an actionable response.
Continual cyclic vegetation tasks are required to restrict vegetation growth and to limit any negative impact it might have.

This module details:

a) the vegetation management procedure;
b) analysis of information;
c) requirements of intervention;
d) treatments – chemical, mechanical and motor/manual;
e) managing vegetation on rock faces and other earthworks;
f) disposing of cut material and managing tree stumps;
g) managing invasive non-native species;
h) updating records and asset information; and
i) environmental treatments – grazing, planting and re-seeding.

5.4 Route vegetation management plans - Module 03

This module provides the requirements for route asset managers to develop vegetation management plans and sectional asset plans to support the sustainable management of the lineside estates and its habitats.

This module details:

a) The requirements contained within a route vegetation management plan; and
b) the requirements contained within a sectional asset plan.

6 Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arisings</td>
<td>Material resulting from management and maintenance operations which requires control or removal.</td>
</tr>
<tr>
<td>Ballasted area</td>
<td>Between the outside edges of the ballast shoulders, including the four foot, six foot and ten foot.</td>
</tr>
<tr>
<td>Banded / banding</td>
<td>With respect to logs using, for example, steel fencing wire and staples to secure small dimension timbers to reduce the risk of logs moving to unwanted locations</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>The variability of plant and animal species within lineside habitats</td>
</tr>
<tr>
<td>Cambium</td>
<td>A layer that exists between the bark and the wood that assists in the growth of the tree.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cess</td>
<td>The ground from the outer edge of the ballasted area to 3 metres from the running rail.</td>
</tr>
<tr>
<td>Cess Strip</td>
<td>The ground area 3 to 5 metres from the running rail.</td>
</tr>
<tr>
<td>Closed line</td>
<td>A line that is legally closed but where land is still in ownership of Network Rail.</td>
</tr>
<tr>
<td>Conservation Areas</td>
<td>Designated areas within settlements where consent from the Local Planning Authority is required for a greater range of development activities than is the case elsewhere.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Local Authority websites can be consulted for the locations of conservation areas and the restrictions that apply.</td>
</tr>
<tr>
<td>Consents</td>
<td>Approval of conditions set out under licence application or written authorisations placed by an authority or landowner.</td>
</tr>
<tr>
<td>Coppice regrowth</td>
<td>The production of new growth from a cut tree stump.</td>
</tr>
<tr>
<td>Corrective action</td>
<td>An intervention designed to fully restore the asset to the desired operating condition.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Undertaken to complete work as a follow up to temporary measures undertaken during an immediate response.</td>
</tr>
<tr>
<td>Cutting slope angle</td>
<td>Steepness of the slope measured from the horizontal.</td>
</tr>
<tr>
<td>Disused / moth-balled line</td>
<td>A line that is not in use but is still legally available to train and freight operating companies.</td>
</tr>
<tr>
<td>Flail</td>
<td>Using a flail mower, a type of powered agricultural equipment, which is used to deal with heavier grass/scrub.</td>
</tr>
<tr>
<td>Forest Industry Safety Accord</td>
<td>Forest Industry accredited good practice for raising the standard of health, safety and welfare in the work place.</td>
</tr>
<tr>
<td>Habitats</td>
<td>The environment where plant and animal species normally live.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hazardous tree</td>
<td>A tree, which may have significant defects, that poses a risk to either the railway or a third party.</td>
</tr>
<tr>
<td>High risk leaf fall species</td>
<td>Sycamore (<em>Acer pseudoplatanus</em>), ash (<em>Fraxinus excelsior</em>), sweet chestnut (<em>Castanea sativa</em>), horse chestnut (<em>Aesculus hippocastanum</em>), lime (<em>Tilia species</em>), poplar (<em>Populus</em> species) – except aspen (<em>P. tremula</em>).</td>
</tr>
<tr>
<td>Immediate Response</td>
<td>An initial intervention undertaken to mitigate a safety or performance issue.</td>
</tr>
<tr>
<td></td>
<td><em>NOTE:</em> Undertaken within a specified timeframe to prevent the safety or performance issue getting worse.</td>
</tr>
<tr>
<td>Intervention</td>
<td>Action taken to make an improvement or prevent the condition of vegetation getting worse.</td>
</tr>
<tr>
<td></td>
<td><em>NOTE:</em> This includes other railway ‘problem plants’ not specifically listed in legislation, including horsetail and <em>buddleia</em>.</td>
</tr>
<tr>
<td>Lineside</td>
<td>The area between the ballasted area and the boundary measure.</td>
</tr>
<tr>
<td>Lineside estate</td>
<td>The extensive area of land that falls within the ownership boundary.</td>
</tr>
<tr>
<td>Lineside assets</td>
<td>Infrastructure assets on the lineside that require vegetation management.</td>
</tr>
<tr>
<td></td>
<td><em>NOTE:</em> These include but are not limited to the following: cess paths, walking routes, troughing/cable routes, access steps, access roadways, location cabinets/rooms, lineside buildings, equipment housing, signalling gantries, and overhead line equipment stanchions.</td>
</tr>
<tr>
<td>Lineside operational signs</td>
<td>Those that provide instruction or information to train drivers, train crew or those working on the railway.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Activities that keeps vegetation in a compliant state.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Management</td>
<td>Extensive work on vegetation to achieve a compliant profile.</td>
</tr>
<tr>
<td>Manual operations</td>
<td>The use of hand held tools for the management of vegetation and boundaries.</td>
</tr>
<tr>
<td>Mechanical operations</td>
<td>The use of plant and machinery for the management of vegetation.</td>
</tr>
<tr>
<td>Network Operations</td>
<td>This term refers to Route Operations Control for older locations, and Rail Operating Centre for newer</td>
</tr>
<tr>
<td>Operational Control measures</td>
<td>Actions separate to the removal of vegetation that lower the risk. <strong>NOTE:</strong> these may include speed restrictions or placing a watchman.</td>
</tr>
<tr>
<td>Rapid response</td>
<td>Where teams or individuals are required to react immediately when they discover the matter, or it is reported to them. <strong>NOTE:</strong> This will be in response to safety of the line incidents managed through Network Operations.</td>
</tr>
<tr>
<td>Reactive inspection</td>
<td>Inspection generated from reports by Network Operations or third parties.</td>
</tr>
<tr>
<td>Habitat resilience</td>
<td>The capability of vegetation to recover from an intervention positively.</td>
</tr>
<tr>
<td>Rock cutting</td>
<td>Steep sided excavation through rock, chalk or interbedded rock and soil.</td>
</tr>
<tr>
<td>Selective felling</td>
<td>Individual trees within a group of other trees that are identified and removed.</td>
</tr>
<tr>
<td>Species Control Agreement</td>
<td>An agreement made between an environmental authority and an owner of premises that sets out operations that are required to be taken against an invasive non-native species or formerly resident native species. <strong>NOTE:</strong> An owner could be the freeholder, leaseholder or a person who exercises powers of management or control over the land.</td>
</tr>
</tbody>
</table>
Term | Definition
--- | ---
Stump diameter | A measurement recording of the longest straight line across and passing through the centre of a tree stump. *NOTE:* For a coppice stool this includes the full extent of the stool.
Vegetation Inspection | Activity to visually assess the condition of vegetation.
Vegetation management plan | The activities required to achieve and maintain the desired vegetation profile over a given length of time.
Windrowing | Linear piles of branch and stem material, often used when access issues prevent use of a chipper; may be specified as part of environmental conditions creating biodiversity habitat.
Wind-throw | Uprooting or breakage of trees caused by strong winds, resulting in fallen trees with the root plate attached or broken parts of trees on the ground.
Woody vegetation | Trees and shrubs. *NOTE:* This includes Other weeds that can be harmful such as brambles or weeds of a size and density that could cause obstruction where they are found up to 3 metres from the running rail and 1 metre around lineside assets.

Table 2 – Terms and definitions

7 Abbreviations
For the purpose of this standard the abbreviations in Table 3 shall apply.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAG</td>
<td>Arboriculture and Forestry Advisory Group.</td>
</tr>
</tbody>
</table>
### Abbreviation Table

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAG</td>
<td><strong>NOTE</strong>: AFAG is an advisory group of the Health and Safety Executives (HSE’s) Agriculture Industry Advisory Committee (AIAC).</td>
</tr>
<tr>
<td>ALCRM</td>
<td>All Level Crossing Risk Assessment Model</td>
</tr>
<tr>
<td>AWR</td>
<td>Authorised Walking Route</td>
</tr>
<tr>
<td>BASIS</td>
<td>British Agrochemical Standards Inspection Scheme. <strong>NOTE</strong>: An independent organisation (BASIS Registration Ltd) set up to advise the UK Government and to specify and assess standards in the pesticide industry relating to storage, transport and competency.</td>
</tr>
<tr>
<td>DBH</td>
<td>Diameter of a tree trunk measured at breast height using a specialist tape that provides the diameter of the tree by taking a measure round its circumference. <strong>NOTE</strong>: Measured at 1.3 metres above ground level – when trees on slopes are measured, this shall be done from the ‘up-slope’ side of the tree</td>
</tr>
<tr>
<td>ENV</td>
<td>Environment and Sustainability</td>
</tr>
<tr>
<td>FISA</td>
<td>Forest Industry Safety Accord</td>
</tr>
<tr>
<td>FMS</td>
<td>Fault Management System, utilised by operations control</td>
</tr>
<tr>
<td>HSE</td>
<td>Health and Safety Executive</td>
</tr>
<tr>
<td>IC</td>
<td>Incident Controller</td>
</tr>
<tr>
<td>INNS</td>
<td>Invasive Non-Native Species</td>
</tr>
<tr>
<td>LiDAR</td>
<td>Light Detection and Ranging</td>
</tr>
<tr>
<td>IMPC</td>
<td>Infrastructure Maintenance Protection Coordinator</td>
</tr>
<tr>
<td>MST</td>
<td>Maintenance Scheduled Task</td>
</tr>
<tr>
<td>NR</td>
<td>Network Rail</td>
</tr>
<tr>
<td>OLE</td>
<td>Overhead Line Equipment</td>
</tr>
<tr>
<td>ORCC</td>
<td>Operations Risk Control Coordinator</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>OTK</td>
<td>Off-Track</td>
</tr>
<tr>
<td>PSR</td>
<td>Permanent Speed Restriction</td>
</tr>
<tr>
<td>RAM</td>
<td>Route Asset Manager</td>
</tr>
<tr>
<td>SM[OT]</td>
<td>Section Manager [Off Track]</td>
</tr>
<tr>
<td>SSSI</td>
<td>Site of Specific Scientific Interest</td>
</tr>
<tr>
<td>OTK/F</td>
<td>Off Track Form</td>
</tr>
<tr>
<td>THREATS</td>
<td>Tree Hazard: Risk Evaluation and Treatment System</td>
</tr>
<tr>
<td>TME</td>
<td>Track Maintenance Engineer</td>
</tr>
<tr>
<td>WAIF</td>
<td>Work Arising Information Form</td>
</tr>
<tr>
<td>WO</td>
<td>Work Order</td>
</tr>
</tbody>
</table>

**Table 3 - Abbreviations**
Standard and control document briefing note

Ref: NR/L2/OTK/5201 Issue: 4
Title: Lineside Vegetation Management Manual
Publication date: 7 March 2020 Compliance Date: 5 September 2020
Standard/Control Document Owner: Professional Head Drainage Off-track & Asset Protection
Non-compliance rep (Approver of TRACKER applications): Graham Owen, Senior Engineer
Technical lead/contact for briefings: Graham Owen Tel: 07515621583

Purpose:
Lineside vegetation management is a process that uses risk assessment to contribute to the sustainable management of the lineside estate and the safe running of the railway infrastructure.
Risk from lineside vegetation is controlled by inspection, management and maintenance. These activities protect the Network Rail workforce and third parties against harm.
Responsible management of vegetation and respecting our neighbours improves the resilience of lineside environments and stakeholder relations Lineside vegetation includes areas on the operational railway, closed lines, non-operational or third party land.
Management of lineside vegetation is a control from the threats identified on bow tie ‘railway or third party vegetation affecting safety’ and controls or mitigates the following risks:
a) trees within falling distance of the track or third party land;
b) vegetation affecting:
   1. overhead line equipment;
   2. signal sighting;
   3. level crossing sighting;
   4. position of safety/refuge;
   5. railway vehicles by damage to rolling stock;
   6. railway access;
   7. inspection of assets;
   8. renewal of other assets; and
   9. enhancement projects;
c) leaf fall affecting the railway;
d) injurious and invasive weeds; and
e) damage to railway infrastructure or third parties.
Planned maintenance helps to deliver the most effective management regime once a compliant profile has been achieved.

Scope:
This manual contains:
a) key principles for the management of risk;
b) asset knowledge; and
c) the impact of vegetation on other assets.
The manual applies to inspecting, managing and maintaining lineside vegetation and all who are involved in those activities.
Out of scope for this process are:
a) management of vegetation necessary only for the stability and security of earthworks and structures;
b) management and inspection of vegetation in advance or in response to adverse/severe weather events which is included within NR/L2/OPS/021 ‘Weather – managing the operational risks’; and
d) environmental and community requirements for vegetation management.

Overview of change
Introduction of module 03 to the Vegetation Management Manual
Module 3 ‘Route Vegetation Management Plans’:
   • aligns to requirements set out within sustainable land use programs;
   • formalises accountability for the asset;
   • Introduces vegetation and habitats as assets; and
   • promotes strategic planning that provides safety, performance and biodiversity benefits.

Reasons for change
To address inconsistencies applied to asset managemnt planning, to introduce best practice and to provide a process that can be adopted to allow vegetation to be managed as an asset.

This is an initial step to incorporate the key messages from the government’s vegetation management Varley review 2018.

Affected documents:

<table>
<thead>
<tr>
<th>Document</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR/L2/OTK/5201 ISSUE 3</td>
<td>Superseded</td>
</tr>
<tr>
<td>NR/L2/OTK/5201/03 ISSUE 1</td>
<td>New</td>
</tr>
</tbody>
</table>
**Briefing requirements:**

Will Briefing Management System be used to deliver the briefing to posts listed below? Yes

Technical briefings are given to those who have specific responsibilities within this standard/control document.

Awareness briefings are given to those who might be affected by the content but have no specific responsibilities within the standard/control document.

Details of the briefing arrangements are included in the associated briefing programme.

All posts identified for briefing must be as described in OrgPlus.

Roles are directly briefed and do not cascade briefings.

<table>
<thead>
<tr>
<th>Briefing (A-Awareness/ T-Technical)</th>
<th>Post</th>
<th>Function</th>
<th>Responsible for cascade briefing? Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Route Asset Manager [Track]</td>
<td>Eastern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Track]</td>
<td>Scotland Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Track]</td>
<td>Southern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Track]</td>
<td>North West &amp; Central Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Track]</td>
<td>Wales &amp; Western Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics, Drainage &amp; Off Track]</td>
<td>Eastern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics, Drainage &amp; Off Track]</td>
<td>Scotland Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics, Drainage &amp; Off Track]</td>
<td>Southern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics, Drainage &amp; Off Track]</td>
<td>Wales &amp; Western Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics]</td>
<td>Eastern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Geotechnics]</td>
<td>North West &amp; Central Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Drainage &amp; Off Track]</td>
<td>Eastern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Route Asset Manager [Drainage &amp; Off Track]</td>
<td>North West &amp; Central Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Senior Asset Engineer (Support) [Lineside]</td>
<td>Eastern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Senior Asset Engineer (Support) [Lineside]</td>
<td>Scotland Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Senior Asset Engineer (Support) [Lineside]</td>
<td>Southern Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Senior Asset Engineer (Support) [Lineside]</td>
<td>Wales &amp; Western Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Senior Asset Engineer (Support) [Lineside]</td>
<td>Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Asset Engineer [Drainage &amp; Off Track]</td>
<td>Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Project Manager (Works Delivery) [Off Track]</td>
<td>Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Track Maintenance Engineer [Off Track]</td>
<td>Region</td>
<td>Y</td>
</tr>
<tr>
<td>T</td>
<td>Section Manager [Off Track]</td>
<td>Region</td>
<td>N</td>
</tr>
<tr>
<td>T</td>
<td>Works Delivery Manager</td>
<td>Region</td>
<td>N</td>
</tr>
<tr>
<td>T</td>
<td>Programme Manager (Works Delivery) [Off Track]</td>
<td>North West &amp; Central Region</td>
<td>N</td>
</tr>
</tbody>
</table>

**NOTE:** Contractors are responsible for arranging and undertaking their own Technical and Awareness Briefings in accordance with their own processes and procedures.