

1. PURPOSE

The purpose of this procedure is to:

- Detail the specific arrangements necessary to manage the safe and efficient organisation and control of vehicular plant & cranes used or hired by VolkerRail(VR) within a specific worksite;
- Mandate compliance with the requirements of the Provision and Use of Work Equipment Regulations (PUWER), Lifting Operations and Lifting Equipment Regulations (LOLER) and Network Rail Infrastructure Plant Manual NR/L2/RMVP/0200;
- Underpin the requirements of element 9.36 of the company’s integrated management system so as to maintain VR’s On-Track Plant Operating Scheme (POS) and assist in complying with NR/L2/INI/CP0070 Principal Contractor Licensing Scheme.

2. SCOPE

This procedure applies to all vehicular plant and cranes, including the organisation and control of vehicle travel movements and lifting operations whether internally or externally contracted, or supplied as part of a contract. Where VR is operating on sites under the control of third parties, or in joint venture with other companies then this procedure is the minimum standard which will apply.

Machines and equipment within the scope of this documentation include:

- On-Track Plant RRV’s and Demountable Machines (previously known as RMMM).
- Excavators, Trucks, Dumpers, Dozers, Tractors, Rollers;
- Those machine and lifting equipment configurations deemed to be a Crane, such as Excavator cranes, Tele-handlers, Lorry Loaders, MEWPS, Fork Lift Trucks, Telescopic Mobile & Crawler Cranes ;
- Any other machines defined as ‘self-propelled’ and/or machines, accessories or attachments included within the definitions of lifting equipment set out in the Lifting Operations and Lifting Equipment Regulations, (LOLER);

Compliance with the requirements of this procedure is mandatory for all personnel who manage, supervise and/or carry out work activities associated with vehicular plant & cranes.

3. REFERENCES (INPUTS) / RELATED DOCUMENTS
British Standards

- BS EN 1492 - 1 : 2000 + A1 : 2008 Flat Woven Webbing Slings
- BS EN 1492 - 2 : 2000 + A1 : 2008 Round slings
- BS 7121, Part 1, 2016 - Code of Practice for the safe use of cranes, General
- BS 7121, Part 3, 2017 +A1 2019 – Code of Practice for safe use of cranes, Mobile Cranes
- BS 7121, Part 4, 2010 - Code of Practice for the safe use of cranes, Lorry Loaders

Legislation

- LOLER 1998 – Lifting Operations & Lifting Equipment Regulations, (Including Code of Practice, and HSE Guidance)
- PUWER 1998 – The Provision and Use of Work Equipment Regulations 1998, (including Code of Practice and HSE Guidance)

Industry and Construction Standards

- NR/L2/RMVP/0200 Infrastructure Plant Manual (All modules)
- NR/L2/CTM/025 Competence & Training in On-Track Plant Operation & Activities
- GE/RT8000 Rule Book – Modules OTM and Handbook 15
- NR/L3/ELP/29987 Working On or About 25kV AC Electrified Lines
- NR/L3/CIV/0063 Piling, Drilling, Crane, MEWP SMPT and similar plant operations on or adjacent to the Railway
- RIS-1530-PLT – Rail Industry Standard for Engineering Acceptance of On-Track Plant & Associated Equipment
- RIS1710 Engineering Certification of Railbourne Plant and the Assessment of Non-Railbourne Plant

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A
					Page 1 of 24

VolkerRail Procedures

- PE321 – Operational & Engineering Arrangements for the use of the KIROW Cranes within Possessions
- PE323 – Avoidance of Danger From Overhead Power Lines
- CIV510 – Management of Temporary Works
- CMS19 – Competence & Training in On-Track Plant
- CMS25 – Competence Management Arrangements for OTP Lift Planners

4. DEFINITIONS

Abbreviation / Term	Definition
ALARP	A measure of risk, signifying “As Low As Reasonably Practical”
ALO (Any Line Open)	Any line that is open to traffic that could be foreseeably fouled by any plant, attachment or loads associated with them Covered in PE326M001
Appointed Person (Lifting Operations)	Initially named in British Standards, the ‘person appointed’ with sufficient training, practical and theoretical knowledge and experience required to manage the variety and complexity of planned lifting operations. See also ‘VolkerRail Lift Planners’
Banksman / Plant and Vehicle Marshall– (Non-rail mounted civil construction industry vehicles)	Traditionally the term Banksman / Plant and Vehicle Marshall has been applied to those persons signalling a driver to guide the manoeuvring of their vehicle. A Banksman / Plant and Vehicle Marshall is required to direct vehicle/machine movement where there are hazards outside of the driver/operator’s field of vision.
Engineering Acceptance Certificate (EAC)	The document granted to show that the item of Plant complies with the current Rail Industry Standards RIS 1530 PLT.
Engineering Conformance certificate (ECC)	The document granted to show that the item of Plant complies with the current Rail Industry Standards RIS 1530 PLT.
Crane Controller - Rail (Industry equivalent to ‘Crane Supervisor’)	The Crane Controller (CC) is a person who is trained and certificated as competent in the organisation & control of crane lifting operations on railway infrastructure sites. (Note: On non-Network Rail Infrastructure; this may be a ‘Construction Skills’ - CPCS or similar ‘Crane Supervisor’ with applicable VolkerRail OTP specific ‘Authority to Work’ documentation)
Demountable Machine formally known as Rail Mounted Maintenance Machine, (RMMM)	A machine brought to site and placed on the rails and can travel on rail under its own power system Such vehicles are not allowed to operate outside possessions.
Hirer/Customer (employing organisation)	Is a Company, firm, person, Corporation or public authority taking the Owner’s Vehicle or Crane on hire and includes their successors and personal representatives This is the person or organisation, (including their representatives or successors) that requires work to be carried out.
Lift Plan	Is a document that gathers all of the information regarding a particular lift into one place Covered in PE326M003
Machine Controller – (Rail Industry equivalent to Banksman / Plant and Vehicle Marshall)	The Machine Controller, (MC) is a person who has been trained, assessed competent and certificated with the principle duties of controlling On-Track Plant (OTP) operations in a railway infrastructure worksite. (Note: On non-Network Rail Infrastructure; may be a ‘Construction Skills’ - Construction Plant Competence Scheme (CPCS) or similar Banksman / Plant and Vehicle Marshall with applicable VolkerRail OTP specific Authority to Work documentation)
Machine or Crane Owner (plant contractor)	Is a Company, firm or person letting the Crane on hire and includes their successors, assignees or personal representatives.

Abbreviation / Term	Definition
Machine Operator	Is a competent person, responsible for the correct operation of the vehicle in accordance with the manufacturer's instructions and within the safe system of work; and who possesses current certification for the make and model of vehicle and lifting equipment; that they are operating.
Machine Planner	A competent person responsible for the production of planning documentation from including the most suitable on, off & cross tracking arrangements. This will be a representative of the Project Manager who is involved in the planning process and procurement of the type of required machine for the specific project. They in turn will liaise with any other Lift Planner / Appointed Person for any other lifting requirements.
Method Statement	Includes any version of such documentation as appropriate: Method Statement, Site Specific Addendum, Work Package Plan or Task Brief as appropriate.
On-Track Machines	Rail vehicles that can only travel on rail by virtue of a rail wheel guidance system and is allowed to travel in and outside of possessions on the open infrastructure.
On-Track Plant, (OTP)	Possession Only Rail Mounted Machines and Road Rail Vehicles Classified as MEWP, Demountable Machine (RMMM) or RRV
Plant Operations Scheme (POS)	The approved organisation responsible for the provision and operation of on-track plant on Network Rail managed infrastructure and Network Rail projects. Covered in PE326M002
Rated Capacity Indicator, (RCI)	A device that is set up to give visible and/or audible warning when a crane is nearing the limit of its design capacity. These devices commonly automatically monitor load, & backward stability of the machine as well as monitoring the gradient and cant; and also offer automatic movement limitation of rotating, swivelling and extending parts of the machine
Rail Mounted Crane (RMC)	A rail mounted crane for in possession work that is hauled to site by locomotive including General Purpose Cranes, Kirow Rail Cranes, Breakdown Cranes and Twin Jib Track Layer
Road-Rail Vehicle, (RRV)	A vehicle that can travel on the road under and also travel on rail by virtue of a rail wheel guidance system under its own power system. Such vehicles are not allowed to operate outside possessions.
Safe Working Load (SWL)	The maximum mass that a lifting device may raise, lower or suspend under particular service conditions.
Site Specific Machine Work Plan	The VolkerRail 'Site Specific Machine Work Plan' sets out identified requirements, procedures and process relevant to machine operations and machine lift activities; AND may include/duplicate relevant information, which is also set out in the Work Package Plan issued by the Principal Contractor. Designed as a documented management system for all machine processes; any necessary documentation of lifting activities identified as non-'routine' and/or of more complex nature will be found within Plan in the Parts 5-7
Slinger	Is the term used for the Network Rail competence for the Competent Person who attaches or removes accessories for lifting and relays the Crane Controllers commands when instructed to do so.
Slinger / Signaller	Is the term used for the Construction industry for the CPCS / NPORS certification in respect of slinging operations, for the Competent Person who attaches or removes accessories for lifting, working under supervision of a Crane Controller / Crane Supervisor(CS).

Abbreviation / Term	Definition
VolkerRail Lift Planners This is the VolkerRail, Rail Industry equivalent to an Appointed Person for Lifting Operations	<p>The VolkerRail Lift Planners will be given identified appropriate authorisation in writing to plan for machine-type operations as follows:</p> <p>Volker Rail OTP Lift Planners holding Sentinel OTP Single Lift Planner and are deemed competent to plan for the following types of machines:</p> <ul style="list-style-type: none"> • Road Rail Vehicles, (RRV) and Demountable Machines • Mobile Elevating Work Platforms (MEWPs) <p>Civils Construction Lifting machines such as excavators, forklift trucks, lorry loaders and simple telehandlers</p> <p>Sentinel OTP Tandem Lift Planner are competent to plan for the following types of machines:</p> <ul style="list-style-type: none"> • Tandem (Multiple) Lifting with approved RRV Machines <p>VolkerRail Lift Planners RMC, trained assessed and deemed competent to VolkerRail Training & Assessment Procedure (TAP701):</p> <ul style="list-style-type: none"> • On-Track Machines, (OTM) Twin Jib Track Layer • Rail Mounted Cranes (including General Purpose Cranes, • Kirow Rail Cranes, Breakdown Cranes) • Tandem Lifting of Rail Mounted Cranes (including General Purpose Cranes, Kirow Rail Cranes, Breakdown Cranes
VolkerRail Lift Planners This is the VolkerRail, Rail Industry equivalent to an Appointed Person for Lifting Operations – continued	<p>VolkerRail Lift planners who hold Construction Skills, CPCS Appointed Person – ‘Crane Lifting Operations’ can review contract and lift plans using PE326F15.</p> <p>If authorised by the Professional Head of Plant Engineering or POS Compliance Manager and have been issued with a Authority to work card will be allowed to plan for the following types of machines: Mobile Telescopic Crane, Tower Crane and Crawler Crane operations</p>
Working Load Limit (WLL)	The maximum load that an item of lifting equipment is designed to raise, lower or suspend under ideal conditions (by calculation)

4.1 Cross industry reference of definitions management of lifting operations

The table below identifies the competence required when working on Network Rail managed infrastructure and equivalent industry terms when involved with lifting operations.

Activity	Competence when working on NWR Managed Infrastructure	Equivalent competence of terminology used in the standards below:	
		LOLER	Constructions Industry standard BS7121
Produces and Authorises Lift Plans	Lift Planner	Competent Person	Appointed Person
Amends and Authorises Lift plans on site	Lift Planner	Competent Person	Appointed Person
Safe control of lifting operations	Crane Controller	Appropriately Supervised	Crane Supervisor
Attaches or removes an accessory for lifting	Crane Controller or Slinger	Load Handler	Slinger / Signaller
Relays Crane Controller Commands	Slinger	No equivalent term specified	Slinger / Signaller
Provides guidance for the movement of vehicles off track when manoeuvring	Banksman / Plant and Vehicle Marshall (Does not include lifting operations)	No equivalent term specified	Banksman (Does not include lifting operations)

5. PROCESS

5.1 Responsibilities

The Vehicular Plant Planning 'team' consists of:

Project Manager – The person whose holds responsibility for all the project matters inclusive of Plant requirements and logistics.

Appointed Person / Lift Planner - A person who holds an appointed person qualification such as "CPCS Appointed Person" for example and qualified to carry out and authorise Mobile Road Crane lifting operations

VR Lift Planner RMC - A person who holds an appointed person qualification such as "CPCS Appointed Person" for and has also been trained to carry out, plan and authorise Rail Mounted Crane lifting operations.

VR OTP Lift Planner, RRV, MEWP, Telehandler, Lorry Loader Crane - A person who holds the Network Rail competency OTP Lift Planning Single Lift for planning single lifts and would be required to hold the additional competency of OTP Lift Planning Tandem Lift if required to plan lifting with multiple machines, these are the competence identifiers for the person fulfilling the role of Appointed Person (Lifting Operations) on Network Rail managed infrastructure.

ALO - See **PE326M001 Any Line Open Module**

POS - See **PE326M002 Plant Operations Scheme Module**

Crane Controller - (for OTP and OTM) a person who holds the industry competence for controlling the movement of Mobile Cranes/Rail Mounted Cranes/RRV/MEWPS/Demountable Machines

Crane Supervisor - A Crane Supervisor is the person responsible for overseeing the movement of all lifting operations on a construction site to ensure the safety and effectiveness of the team.

Drivers / Machine Operators - A person who holds the industry competence for operating a specific type of Plant or Machinery

Machine Planner - The competent person responsible for the production of plant planning documentation following the guidelines detailed in the relevant sections of this procedure and Network Rail Plant Operations Manual NR/L2/RMVP/0200.

Machine Controller - a person who holds the rail industry competence for controlling the movement of RRV, Demountable Machines rail mounted or construction plant when it is working on or near the line

Slinger or Slinger / Signaller - Often the **Crane Controller/s** for OTP and OTM but must be a person who has been trained in the industry competency for slinger or Slinger / Signaller operation.

Banksman / Plant and Vehicle Marshall - must have been trained or assessed with regards to Banksman / Plant and Vehicle Marshall duties with regards to industry competency requirements.

5.1.1. Project Manager

The **Project Manager** shall:

- Be responsible for ensuring that this procedure is followed and identifying the On-Track Plant Operating Scheme and Safety Certification requirements for the relevant plant and equipment working on the project.
- Establish the roles and responsibilities within the project team for delivery of this procedure.
- Ensure that Machine Work Plans and Lift plans are considered at the start of the project and identify a suitable and competent Machine / Lift Planner to be appointed to the project. Document general site-specific vehicular plant operations using Form PE326F01 Site Specific Machine Work Plan, Parts 1-4 and associated Lift Plans Forms PE326F05, F06 or F07.
- Requests for lift plans should be documented and forwarded to the Lift Planner in sufficient time using the Lift Plan Request Form **PE326M003F01**. Further guidance on the use of this form is detailed in **Module PE326M003 section 5.3.2**.
- Ensure that any approved sub-contracted CPCS 'Appointed Person, Lifting Operations' responsible for the organisation and control of 'Contract Lifts' and supply copies of their planning documentation to a VR

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 5 of 24	

- CPCS Appointed Person in advance of lifts taking place. Carry out a review as detailed in section 5.3.6
- Agree the terms and conditions of sub-contracted vehicular plant and lifting activities under the Construction Plant Association (CPA) standard terms and conditions and supplementary conditions.
 - Ensure that every lifting operation has a safe system of work.
 - Monitor and review appointments regularly, particularly in the event of changing site conditions, complexity or workload.
 - The Project Manager shall ensure that the project has a lift planner available either on call or on site when OTP is working on the infrastructure.
 - The Project Manager shall ensure that only Sentinel registered Machine Operators, Machine Controllers, Crane Controllers and Operators are permitted to be employed for operating or controlling On-Track Plant, for information relating to the relevant qualifications for OTP Machine Operators and Controllers. For further guidance see **Module PE326M011**.
 - The Project Manager shall ensure that ALL sub-contractor Driver / Machine Operators, Banksman / Plant and Vehicle Marshall, Slinger-Signallers, and Crane Supervisors hold CPCS or verified equivalent to CPCS certification for all the related plant & equipment activities they are being contracted to operate or control.

NOTE: When allocating a VR Lift Planner to the project, the variety and complexity of the lifting operations to be undertaken should be considered, as well as all the problems that may arise from proximity hazards and the environment. The appointee must also be given the necessary time and resources to carry out the duties involved.

Where a more complex lifting operation is required then the **Project Manager** should seek advice from the **Professional Head of Plant Engineering** or **POS Compliance Manager** as to the level of competence required for the **Lift Planner**.

5.1.2. Machine Planner

The Machine **Planner** must visit and assess the entire site, considering all relevant factors and any additional considerations of a site-specific nature prior to preparing the plan, and follow the requirements of any relevant parts of legislation, network rail standards and this standard including appendix A and the relevant PE326 modules.

Note: The Machine Planner should also be the Site Lift Planner as they are the deemed as competent in planning OTP operations.

The Machine **Planner** will complete the VR Site Specific Machine Work plan **PE326F01** which shall identify the safe system of work required for the plant to carry the work and any the arrangements required so that work can be completed safely by identification of hazards, risks and restrictions associated with planned work requirements. This should also include consideration of the interfaces between equipment, infrastructure, people and process and how they may change within the geography of the work site and stages of work and external influences.

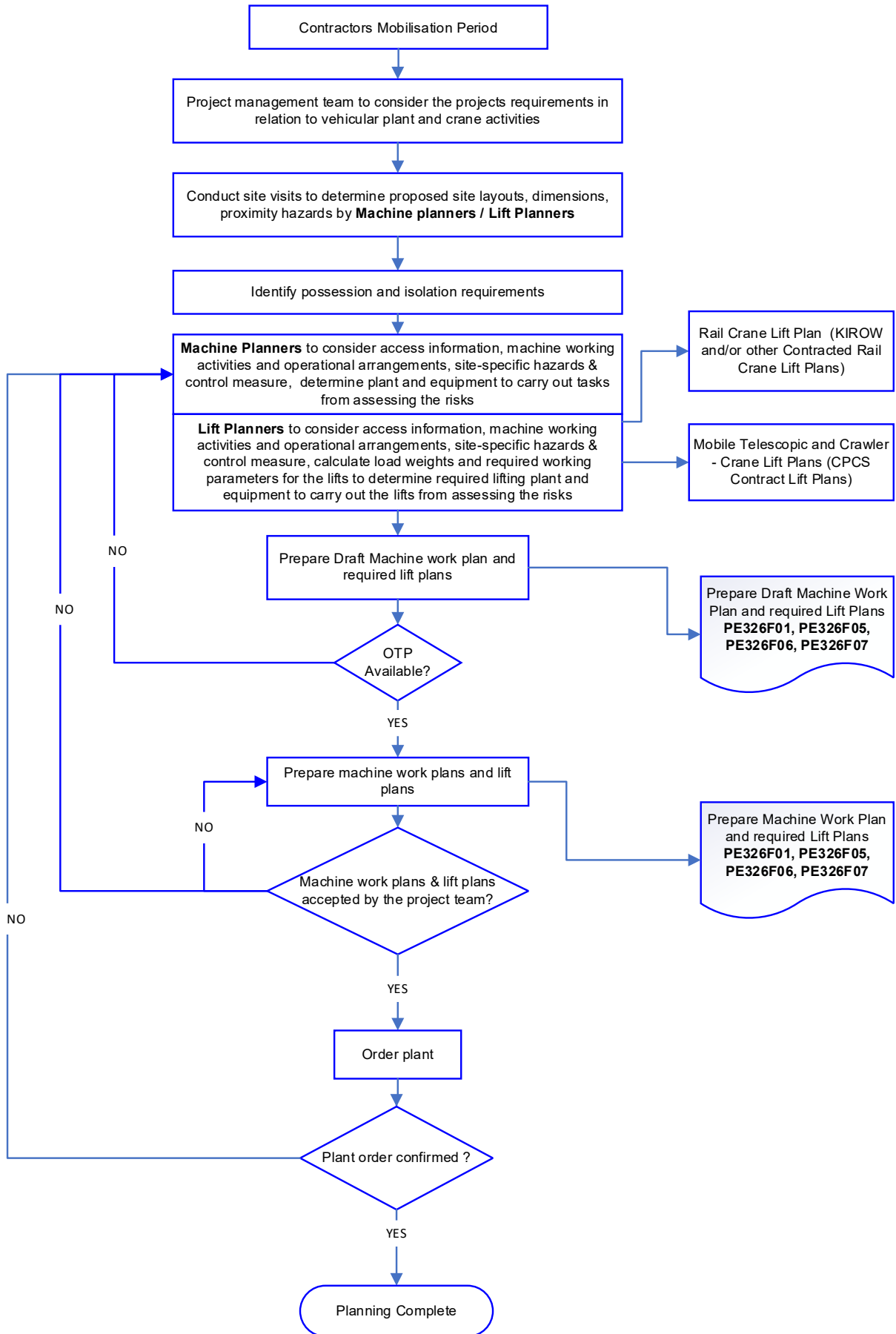
5.1.2.1 Planning for Piling, Drilling, Crane, MEWP, Self-propelled Modular Transport (SPMT) and similar temporary work operations on or adjacent to the railway.

For any crane operations piling, drilling, MEWP, SPMT and similar plant operations that are carried out 'On or adjacent to' Network Rail Managed Infrastructure but not 'On or near the line', the following document is to be consulted **NR/L3/CIV/0063 Piling, Drilling, Crane, MEWP, SMPT and similar plant operations on or adjacent to the Railway**.

This document gives Information, guidance, matters to be reviewed, levels of control when planning, this includes where similar temporary work operations are required for telehandlers, excavators undertaking lifting operations, lorry loaders and concrete pumps. This includes temporary works for working platforms and access / haul roads.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 6 of 24	

Site Specific Machine Work Planning System Process Flow-chart



Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A

5.1.3. VolkerRail Lift Planner

The VR **Lift Planner** has responsibility for the safe organisation and control of their planned lifting operations and to provide a safe system of working by properly planning the lifting operation, including preparation of a comprehensive Site Specific Machine Work Plan, Lifting Plans, Complying with Network Rail Plant manual NR/L2/RMVP/0200 and guidance in **Module PE326M003** and associated modules.

Liaise with sub-contractor’s crane teams, correlating Rail Crane Lift Plan (Kirow and / or other Contracted Rail Crane Lift Plans) and Mobile Telescopic and Crawler - Crane Lift Plans (CPA Contract Lift Plans) into the framework of the Site Specific Machine Work Plan.

5.1.4. Crane Supervisor / Crane Controller for OTP

The **Crane Supervisor / Crane Controller** for OTP and OTM directs and supervises the lifting operation in accordance with the site-specific lift/work plan.

They must:

- Be authorised, competent, suitably trained and have sufficient experience to carry out these duties particularly during tandem lift operations:
- Crane Supervisor = Crane Supervisor CPCS
- Crane Controller = Appropriate Sentinel MC/CC Scheme Competency
(Note: Tandem lift is an additional competence)

Guidance on when a Crane Controller is required is detailed in **Module PE326M003**.

5.1.5. Drivers / Machine Operators

Drivers / Machine Operators of all vehicular plant, machines and cranes in VR Project sites must:

- **For all On Track Plant (OTP)** be competent and hold the relevant Sentinel competency and Authority to Work Card for the relevant machine and attachments in accordance with NR/L2/CTM/025 and VR CMS19 - Competence and Training in On-Track Plant.

Further guidance on OTP competencies is detailed in **Module PE326M011**.

- **For Civils Construction Plant** be competent and hold a current Competence Card – Construction Plant Competence Scheme, (CPCS) Card or National Plant Operator Registration Scheme, (NPORS) Card for operating the appropriate category of vehicle, machine or crane.

Further guidance on CPCS competencies can be found on the scheme administrators’ website at www.nocnjobcards.org

Information regarding plant competencies for VR staff can be sourced from VR Training and Competence Team.

5.1.6. Slinger or Slinger / Signaller

The person holding either **Slinger or Slinger / Signaller** competence are deemed to be the competent person who attaches or removes any lifting accessory in accordance with the lift plan to the load.

All Network Rail Crane Controllers have to be qualified as a Slinger as a pre requisite.

Every Crane used on VR Sites must have at least one competent Slinger or Slinger / Signaller allocated to it whilst being set-up or working. When OTP Crane Controllers competence is not required they must hold appropriate Slinger Signaller ‘Construction Skills CPCS Cards’ or ‘NPORS Cards’

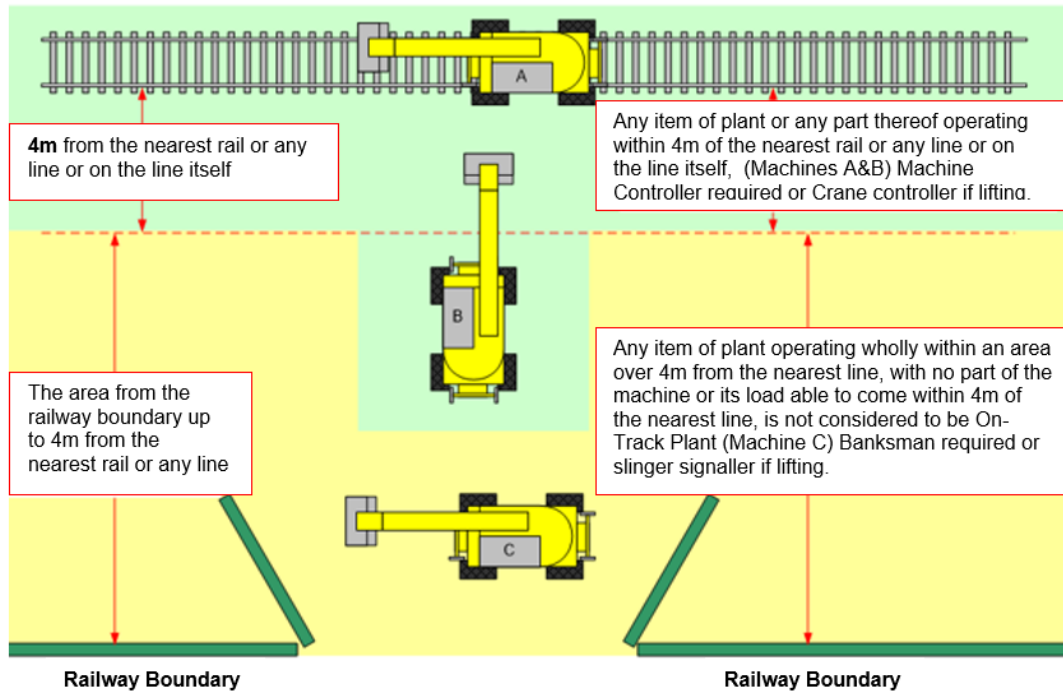
5.1.7. Machine Controllers, Banksman or Plant and Vehicle Marshall

The **Banksman** or Plant and Vehicle Marshall must hold a valid competence to be deemed qualified to direct plant and vehicle movements around a site, providing no part of the machine or its load can come within 4m of any line or lines.

For machines either Civils Construction Plant or OTP where the machine or its load is required to go within 4m of any line or lines then a qualified **Machine / Crane Controller** is required.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 8 of 24	

Illustration where On-Track Plant controls apply



5.1.8. Subcontractor Contract Lifting

Each subcontractor carrying out contract lifting operations will be required to provide their own **Appointed Person / Lift Planner** and where VR is the Principle Contractor; these **Appointed Persons** and their lifting plans are subordinate to the **VR Lift Planner**, who must be satisfied with Lifting Operations and Lifting Equipment Regulations compliance.

As set out in 5.1.3, the **VR Lift Planner**, as the **Project Manager's Lift Planner**, will liaise with sub-contractor's crane teams, correlating Rail Crane Lift Plans, (KIROW and / or other Contracted Rail Crane Lift Plans) and Mobile Telescopic and Crawler - Crane Lift Plans (CPA / Contract Lift Plans) into the framework of the Site Specific Machine Work Planning System.

NOTE: All subcontractor Appointed Persons must have a CPCS competence card and adequate experience to carry out their duties competently.

5.1.9. Subcontract POS Provision

Where a **Project Manager** has the need to subcontract out POS Provision this will only be when the relevant resources are not available through VR or it is part of a package of works, then they shall ensure that the proposed POS provider is on the approved supplier list for POS provision.

The **Project Manager** is to ensure that the POS supplier submits all POS paperwork and lift plans for checking by a **VR Lift Planner** who is part of their Project or Business stream, to ensure they cover all the relevant work and have the appropriate supervision and control measures in place, and follow the requirements of the NR/L2/RMVP/0200 Infrastructure Plant Manual, and all deliveries are incorporated to follow the VR procedure **SAF23**.

The subcontract POS providers must only utilise their own POS licence to deliver the works for VR as per the issued subcontract and cannot utilise other POS providers licence to deliver the works, but they may cross hire other providers OTP, plant and equipment in to work for them.

The **Project Manager** must arrange for relevant qualified staff to conduct relevant assurance and monitoring checks are carried out on the POS provider when they are delivering works.

5.2 Delivery and Collection

- For plant and material delivery the **Project Manager** shall ensure that all parties exchange information about the main risks involved and agree who will do what to control the risks.
- The sending out of the Site Specific Machine Work Plan **PE326F01** and other relevant documentation

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 9 of 24	

and information to other parties involved in the delivery chain, process for **PE326F01** detailed in **5.3.1**

- **Project Managers and VR Lift Planners** shall ensure that where lift plans are required for delivery and collections of plant and materials, these are produced as detailed in **5.3.3.**, or if a third party produces the lift plan then the lift plan is reviewed by the VR lift planner.
- **Project Managers** must assess delivery and collection risks in line with VR procedure **SAF23**.

5.3 Documented Planning

Movements of all vehicular plant and cranes on Network Rail or civil construction sites are only to be carried out as long as they are supported by a documented Plant SSOW, including suitable risk assessments and be authorised.

Copies of Form **PE326F01** Site Specific Machine Work Plan Part 1-4 are to be briefed out and held at a work-site by all **POS representatives, Banksman / Plant and Vehicle Marshall, Machine Controllers, Crane Supervisors and Crane Controllers**.

5.3.1. Site Specific Machine Work Plan Parts 1-4 (Form PE326F01)

Form **PE326F01** has been developed to characterise the main site specific elements of documented planning requirements to produce a Plant SSOW as follows:

- Part 1: Machine and Access Information
- Part 2: Site Description, layout & dimensions
- Part 3: Machine Working Activity and Operational Arrangements
- Part 4: Site-specific hazards & control measures
- Follow any planning guidance in Appendix A of this document.
- The Site Specific Machine Work plan **PE326F01** documents the safe, planned execution of all vehicular plant 'machine' and 'lifting' activities associated with multiple site specific planned methodologies and safe systems of work. The plan forms one of the documents for the **POS representative** to brief out and details the relevant information for MC / CC in the execution of their duties.
- The plan shall follow the requirements of the **Network Rail Plant manual NR/L2/RMVP/0200** to ensure compliance when working on NRMI, as well as the relevant VR procedures.
- The plan shall be comprehensive and document the safe, planned execution of all vehicular plant machine and lifting activities associated with multiple site specific planned methodologies and safe systems of work.
- The plan addresses the system by which all the planned operations can be documented and referenced to within Work Package Plans (WPP). The application of the WPP shall cover the range of accepted common activities 'On or near the line' so that sections within the template can easily relate to and encompass all machine operations within the boundary fence and also out into non-rail civil construction worksites not on or near the line and associated risks considered, as well as plant deliveries and collections.
- Information for crane operations piling, drilling, MEWP, (SPMT) and similar plant operations that are carried out 'On or adjacent to' Network Rail Managed Infrastructure but not 'On or near the line' is covered in **NR/L3/CIV/0063 Piling, Drilling, Crane, MEWP, SMPT and similar plant operations on or adjacent to the Railway**.

This includes where similar temporary work operations are required for telehandlers, excavators undertaking lifting operations, lorry loaders and concrete pumps. This includes temporary works for working platforms and access/haul roads.

5.4 Exclusion zones

All planning for OTP, Civil Construction plant and crane lifting operations shall take into account the required exclusion zones, the **Planner** is to document the required exclusion zones. The minimum exclusion zone shall be defined by the OTP's maximum working radius + length of any load (irrespective of orientation of the load) or 10m ,unless a specific activity or attachment stipulates a required exclusion zone, in line with the requirements of NR/L2/RMVP/0200 Network Rail Infrastructure Plant Manual as well as any industry standards and best practice guides.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 10 of 24	

5.4.1. Transit in a worksite

- When planning for OTP, consideration will be given to transit moves including the distances to be travelled and the actual time that would be required to complete the movements.
- The Site-Specific Machine Work plan **PE326F01** shall specifically document any limits of travel for the OTP.

Any areas that travel is **not** permitted in shall be clearly documented in the **Site-Specific Machine Work Plan PE326F01** with clear track location identified and shall have clear physical demarcation on site with relevant **“Stop No Rail Plant Past This Point”** boards placed to limit travel of the OTP, (see figure 1 below).

This could also be used at the start of possessions where OTP could be on tracked when the worksite is granted, but travel is limited whilst Points Stop Equipment has been placed then limit of travel demarcation is placed clear or any track circuits that may affect the operation of other infrastructure equipment If this is placed to avoid level crossings and track circuits that deadlock points, then the location is to be determined by consultation with the relevant signalling teams.

The **POS Representative** is to ensure that these are to be placed according to the location documented in **PE326F01** before any OTP is authorised to on track.

For areas where limit of travel is near Live Electrified Lines then follow instructions in section **5.6.1**

- Movement speeds will be agreed with all parties involved with the OTP and authorised by the **ES**.
- The location of the **Machine Controller** will be documented in the **PE326F01** at the planning stage.
- All movements will be planned for the OTP cab or in the case of a MEWP the basket to be at leading end when possible, to ensure the operator has a clear unrestricted view of the line ahead. If the OTP can be turned to ensure the operator has a clear unrestricted view of the movement, then it will be turned.
- Unless authorised under documented pre planned send and receive arrangements, the **Machine Controller** will walk ahead of all movements.
- A minimum distance of 100 meters is to be kept between items of plant travelling on the same line.
- All transit moves will be planned in line with the relevant requirements of GERT8000 Rule Book and NR/L2/RMVP/0200 Network Rail Infrastructure Plant Manual.
- Follow any planning guidance in Appendix A of this document.



Figure 1: Example **“Stop No Rail Plant Past This Point”** board.

5.4.2. On Site Communications

- On site communications shall include the provision of approved digital full duplex communications system when undertaking safety critical activities with plant either on or off the track.
- Contingency planning should consider to plan extra sets of duplex communications system in case this safety critical equipment fails.
- OTP operations **shall not** commence work if the full duplex communication system fails prior to the start of work.
- Use full duplex communication systems between travelling machines.
- The rules concerning on site communication has been set by Network Rail standard NR/L2/RMVP/0200 Infrastructure Plant Manual:

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 11 of 24	

5.4.3. Acceptance of Site Specific Machine Work Plan Parts 1-4 (Form PE326F01)

The **Project Manager** shall ensure that Site Specific Machine Work Plan Parts 1-4 (**Form PE326F01**) are 'accepted and signed off by the project management team' not later than 3 working days prior to the machine and crane working taking place, to ensure the plans cover the work required by the project team. Unauthorised plans printed directly without signature are not valid.

The Site Specific Work Plan must be briefed to the **POS Representatives** at least 24 hours in advance of the working shift.

5.4.4. Site Specific Machine Lift Plans Parts 5-7 (Forms PE326F05, 06 and 07)

All planning for OTP, Civil Construction plant and crane operations shall be in line with the requirements of NR/L2/RMVP/ 0200 Network Rail Infrastructure Plant Manual as well as industry standards and best practice, the regulations within the LOLER and the best practice within the British Standard 7121 Series, 'Code of Practice for the Safe Use of Cranes'.

VR **Lift Planners** shall complete Part 5, 6 and 7 Lift Plans which are the most frequently produced lift plans within VR, **Planners** need to consider plant delivery and collections especially where attachments need to be loaded and unloaded.

Guidance on Planning Lifting Operations is detailed in **Module PE326M003**.

5.4.5. Acceptance of Site Specific Machine Lift Plans Parts 5-7 (Forms PE326/F05, 06 and 07)

The **Project Manager** shall ensure that Site Specific Machine Work Lift Plan Parts 5-7 (Form PE326F05, 06 and 07) are 'accepted and signed off by the project management team' not later than 3 working days prior to the lifting operations taking place, to ensure the plans cover the work required by the project team. Unauthorised plans printed directly without signature are not valid.

The Lift plans must be briefed to the **POS representatives** at least 24 hours in advance of the working shift.

5.4.6. Kirow Crane sub-contracted Contract Lifts

For Kirow rail crane sub-contracted contract lifts, the planning shall be completed by the VR POM Kirow team in liaison with the Site **VR Lift Planner and Project Manager**. The VR POM Kirow team shall produce the lift plans for the Kirow crane under **PE321**.

5.4.7. Mobile cranes

Noting that VR does not own any Mobile, Telescopic or Crawler Cranes, when they are required to be used the **Project Manager** has two options available as follows:

5.4.7.1 Contract - Lift Employ a Contractor to carry out the lifting operation

Example Contract Lift:

If VR require any load or loads to be moved and enters into a contract lift directly, the approved contracted Crane Contractor shall undertake the work on VR's behalf. This contract will encompass all necessary planning, provision of personnel and equipment, and the actual execution of the lift.

VR must state within the contract that all work shall be carried out in accordance with BS 7121 Part 1, and that the 'contract lift party' will appoint an 'Appointed Person, Lifting Operations'.

The **Project Manager** should instruct the procurement team of any additional insurance requirements required by the contractor.

VR shall supply all necessary information to the subcontractor i.e. load(s) to be lifted, ground conditions, services etc.

The subcontractor is responsible for:

- Supplying the 'Appointed Person'
- Planning the lift and operating a safe system of work including provision of the lifting team in accordance with LOLER & BS 7121
- Providing equipment that is properly maintained, tested and certified
- Providing a competent operator
- Providing accurate support medium (e.g. ground) loading information to VR

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 12 of 24	

Under Contract Lift conditions, VR still retain certain duties and liabilities including the provision of correct and adequate information on the load(s) being lifted and providing adequate / stable ground conditions.

VR must also be satisfied that the contract lift party has the necessary competence to carry out the work required in accordance with BS 7121. This is determined by the submission of contractor lift plans for review by a fully competent **CPCS qualified Appointed Person** at least 3 working days prior to the lifts taking place and completion of the **PE326F15 Contract Lift Plan Evaluation Check Sheet**, ensuring LOLER & BS7121 compliance and compatibility with all site specific documentation.

5.4.7.2 Hired Crane – Hire a crane

Example Hired Crane:

If VR require a load or loads to be moved - proposes the use of a hired crane and the planning and execution of the lift.

The **Project Manager** will appoint an in-house CPCS card scheme ‘Appointed Person - Lifting Operations’. The Appointed Person may also be the **Project Manager’s VR Lift Planner** (if qualified as a CPCS Appointed Person – Lifting Operations) and be authorised by the **Professional Head of Plant Engineering or POS Compliance Manager**.

The owner of the hired crane has a duty to provide a competent operator and a crane that has been properly maintained and inspected, thoroughly examined, tested and certified. Evidence of this must accompany it.

However, notwithstanding any advice offered by the crane owner, the responsibility for ensuring that the crane is of a suitable type, size and capacity for the task to be undertaken, and for planning, executing the operation and ensuring periodic thorough examinations are undertaken, remains with VR.

5.4.8. Generic Lift Plans

In the case of construction lifting activities, low risk, repetitive and ‘routine’ operations, such as many of those commonly associated with Tele-Handlers, Fork Lift Trucks & Lorry Loaders, delivering, loading and unloading materials and plant to depots and compounds that are not ‘On or Near the Line’, the often sub-contracted ‘routine’ lifts must be planned in the first instance for a particular machine and equipment type. It is to be expected that ‘generic’ plans will be documented and held on the vehicle for the Operator / Banksman’s use. This shall be verified by the **Project Manager’s VR Lift Planner**.

The carrying out of ‘routine’ lifts, immediately organised and controlled by the Operator and Banksman, has not removed any legal responsibility from the **Project Manager**. In these instances, the **Operator** has merely been given authority to act as the **Project Manager’s VR Lift Planner** for that activity and is satisfying the Employing Organisation’s overall planning requirement.

5.5 The Immediate Organisation and Control of Lifts

The immediate operational Organisation and Control of lifting activities is the responsibility of the Crane Controller or Crane Supervisor in application of the appropriate lifting plans. The Crane Controller or Crane Supervisor will contact the VR Lift Planner in accordance with **Module PE326M003** when alterations are required or parameters have changed.

5.6 Working in Electrified Areas

5.6.1. General Requirements

Any work undertaken in AC electrified line areas shall have a detailed safe system of work identifying isolation requirements, as detailed in the Network Rail Plant manual NR/L2/RMVP/0200.

Where an isolation is required, it shall be implemented in accordance with NR/L3/ELP/29987. Limitations are shown on the Product Acceptance (PA) Certificate or Engineering Acceptance.

Certificate / Engineering Conformance Certificate (EAC/ECC) shall be adhered to.

Any areas within a worksite / Siding possession where there are sections of Live Electrified lines that OTP cannot approach which are not covered by a Overhead Line Permit shall be clearly documented in the Site-Specific Machine Work plan **PE326F01**, with clear track locations identified and shall have clear physical demarcation on site with relevant “**Stop No Rail Plant Past This Point**” boards placed to limit travel of the

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 13 of 24	

OTP towards the electrified line (**see figure 1 in section 5.4.1**). This shall be positioned at least 20m plus maximum jib length of the machine and any load from the nearest part of the Live Electrified Line when the machine is positioned on the same line.

Where there are electrified lines adjacent to the line that OTP is working on, machines shall have the relevant slew limiters set to ensure that any part of the machine and load cannot come within 2.75m of the Live electrified line, the distance the limiters are to be set at is to be clearly documented in the **Site-Specific Machine Work Plan PE326F01**.

The **POS Representative** is to ensure that any limit of travel boards are placed according to the location documented in **PE326F01** before any OTP is authorised to on track.

Work **Planners** shall firstly apply for an isolation.

5.6.2. Working under Live OLE

Any operations carried out by OTP and OTM under live OLE, must meet the requirements of the Network Rail Plant manual NR/L2/RMVP/0200 and section 5.5.3 below.

5.6.3. Application for Working Under Live

Where an isolation of OLE is not available, or the **Project Manager** requires, working, or transit moves to take place under live OLE, the planner in consultation with the Contractors Responsible Engineer - Overhead Line (**CRE, OLE**) shall check the requirements of the Network Rail Plant Manual NR/L2/RMVP/0200 and associated documents. A comprehensive risk assessment shall be undertaken following the requirements of standards, documenting the control measures to be put in place to mitigate the risks. The types of plant and confirmation that it is permitted to travel under energised OLE on the EAC/ECC and the limits of operation shall be identified.

This risk assessment and a completed NR/L2/RMVP/0200/F0462, Movement of OTP Under Energised OLE Planning and Approval form, shall in the first instance be sent by the **CRE, OLE** to the **Professional Head of Contact Systems or HSQE Director** for review. If the review concludes that the activity with the applied controls is acceptable the risk assessment shall be sent to the relevant Infrastructure owner for a peer review and authorisation. In the case of Network Rail this shall be the Designated Project Engineer (DPE).

5.6.4. External Overhead Lines

Safe systems of Work shall detail areas where third party cables cross the railway. Guidance on External power lines is detailed in **PE323**.

5.7 Transporting Loads on OTP trailers

When planning for the use of any OTP trailer and placing loads onto or from the trailers the planner must follow all the requirements detailed in the **Infrastructure Plant Manual NR/L2/RMVP/0200/P509** Trailers and Wheeled Attachments.

How loads will be secured to the trailers to prevent movement must be identified at the planning stage, the **project team** needs to make provision for the identified securing equipment to be available where the trailers will be loaded.

It is the responsibility of the project team to source the correct type of load restraints for the loads that will be carried on trailers, unless the load is a specific attachment for OTP trailers like ballast boxes, cable drum carriers and personnel carriers that have specific securing methods then these will be provided by the plant supplier.

If specific loading and securing arrangements are required, then this is to be clearly documented in the **Site-Specific Machine Work Plan PE326F01**

5.8 Ground Conditions

The **VR Lift Planner** must ensure that the loads imposed by mobile road cranes or major items of vehicular plant and equipment relying on outriggers for stability (e.g.: concrete pumps, aerial platforms, lorry loaders, Tele-handlers etc). can be safely transmitted into the ground by seeking the assistance of a competent **engineer / site Temporary Works Coordinator**.

Any temporary work requirements to enable Plant operations to take place when working with construction plant, or OTP working when not working rail mounted, or for utilising machines that would require stabilisers or outriggers, is to be deployed.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 14 of 24	

Any temporary works shall conform to VR procedure **CIV510** – Management of Temporary Works. Advice on the size of the imposed loads must be sought from the crane Owner, or VR’s **Professional Head of Civil Engineering and Multi-disciplinary Design**.

A CIRIA guide, “Crane Stability on Site C703” also deals with the subject of Ground Conditions.

Further Guidance on Crane outrigger loadings can be found in **Module PE326M012 - Ground Conditions**.

5.9 Plant and Equipment Maintenance and Inspection

5.9.1 Civils Construction Plant

The **Project Manager** shall ensure that all plant and equipment is maintained in accordance with the manufacturers’ recommendations and inspected on a regular basis so as to be in efficient working order and in a good state of repair.

The following records shall be supplied by the plant company where hired direct by VR. Where plant is brought in by a subcontractor they must also hold these records on site:

- Manufacturer’s maintenance instructions
- Manufacturer’s handbooks
- Test or calibration and Declaration of Conformity certificates (if applicable)
- Specific operating instructions
- Evidence of thorough examination certificates

A copy of this documentation shall be held in the site files while the equipment is under company control and be available for inspection in the event of audit or investigation.

If any plant or equipment is supplied in a poor state of repair and is not fit for use, or the machine is not accompanied by the relevant documentation, then the equipment must be quarantined, and the supplier contacted. The equipment must not be used until the issues have been rectified or the equipment is replaced.

All plant and equipment on site must be inspected at suitable intervals to ensure that it is safe to use and does not deteriorate or becomes liable to create a dangerous situation for the user or others. The machines shall be inspected daily by the **Operator**.

For non OTP Plant Hired / Owned directly by VR the following Hired Plant Inspection Sheets shall be utilised for daily operator inspections.

- Telescopic Handlers, **PE326F09**, Telehandler Operator Plant Check Sheet
- Excavators, **PE326F10**, Excavator Operator Plant Check Sheet
- Dumper, **PE326F11**, Dumper Operator Plant Check Sheet
- MEWP, **PE326F12**, MEWP Operator Plant Check Sheet
- Forklift, **PE326F13**, Forklift Operator Plant Check Sheet
- Any other operated Plant not listed, **PE326F14**, Operator Plant Check Sheet

For Plant brought in by a subcontractor they must have adequate plant inspection sheets or utilise the relevant VR Plant inspection Sheets.

5.9.2 OTP, OTM plant & equipment

The **Project Manager** shall ensure that all OTP, OTM Plant and equipment is maintained in accordance with the owners maintenance schedule so as to be in efficient working order and in a good state of repair.

The following records shall be supplied by the plant company where hired direct by VR. Where plant is brought in by a subcontractor, they must hold these records on site:

- Engineering Conformance Certificate (ECC) or Engineering Acceptance Certificate (EAC)
- Machine log book
- Maintenance instructions
- Brake test certificate
- Test or calibration and Declaration of Conformity certificates (if applicable)

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 15 of 24	

- Duty charts
- Manufacturer’s handbooks
- Specific operating instructions
- Evidence of thorough examination certificates

5.10 OTP Recovery Plan

There is a requirement when operating OTP on Network rail in relation to contingency planning when it has failed on the railway infrastructure and requires removal. It details the requirements to produce a Recovery Plan prior to OTP activities being undertaken, for the safety of both the OTP and the site in the event of a failure. It also includes the requirements to undertake assessments of both the OTP and the infrastructure and the recovery of the OTP in the event an on-site repair cannot be carried out.

This is documented in **Module PE326M010 OTP Recovery plan.**

5.11 Maintenance of Records

Record	Retained By	Retention Period
All associated with procedure	Project Team	Project completion + 3 years

6. MONITORING

The frequency of checks is to be undertaken in line with the project risk profile and in accordance with any requirements identified in the Quality Management Plan (QMP) and annual audit schedule.

In addition, monitoring of OTP lift planners and the completed OTP lift plans that are produced (listed below) will be undertaken as part of the Competence Management Arrangements for OTP Lift Planner (CMS25) during the Annual Capability Conversation.

- PE326F01 - Site Specific Machine Work plan,
- PE326F05 OTP Crane Lift Plans (Part 5),
- PE326F06 Tele-Handler, Forklift Truck and Lorry Loader Crane Lift Plans (Part 6),
- PE326F07 MEWP Operation (Part 7),

7. ASSOCIATED GUIDANCE & INFORMATION

- M&EE Codes of Practice
- SFPSG/CPA Guidance on Lifting Operations in Construction When Using Excavators
- SFPSG/CPA Guidance on the safe use of Dumpers
- CPA Guidance on the safe use of Lorry Loaders
- CPA Good Practice Guide Requirements for Mobile Cranes Alongside Railways Controlled by Network Rail
- SFPSG/CPA Guidance on the safe use of Telehandlers in construction
- SFPSG/CPA Guidance on Lifting and travelling with suspended loads using Telehandlers
- CIRIA - ‘C703’ – Construction Industry Research and Information Association- Crane Stability on Site
- Brief Guide to The Work at Height Regulations 2005
- HSG144, The Safe Use of Vehicles on Construction Sites
- HSG246 safety in the storage and handling of steel and other metal stock
- INDG290 Lifting equipment at work a brief guide
- INDG291 Providing and using work equipment safely a brief guide
- WTCHK1 Site inspection - workplace transport checklist
- GEIS6 The selection and management and use of mobile elevating work platforms
- INDG199 Workplace Transport Safety – An Overview

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A

8. DOCUMENTATION (OUTPUTS)

Modules

- PE326M001 - Any Line Open Working
- PE326M002 - Plant Operations Scheme
- PE326M003 - Lift Planning
- PE326M004 - Send and Receive
- PE326M005 - Handling Rail & Stacking Rail
- PE326M006 - Carrying Out Piling Operations
- PE326M007 - Road rail Access points
- PE326M008 - Telescopic Handlers
- PE326M009 - Lifting of Track Panels Using Four-Legged Chain Slings
- PE326M010 - OTP recovery Plan
- PE326M011 - OTP Controller & Operator Competency
- PE326M012 - Ground Conditions

Forms

- PE326F01 - Site Specific Machine Work Plan (Parts 1 – 4)
- PE326F05 - OTP Crane Lift Plans (Part 5)
- PE326F06 - Tele-Handler, Fork Lift Truck and Lorry Loader Crane Lift Plans (Part 6)
- PE326F07 - MEWP Operation (Part 7)
- PE326F08 - Machine and Crane Controllers Checklist (Part 8)
- PE326F09 - Telehandler Operator Plant Check Sheet
- PE326F10 - Excavator Operator Plant Check Sheet
- PE326F11 - Dumper Operator Plant Check Sheet
- PE326F12 - MEWP Operator Plant Check Sheet
- PE326F13 - Forklift Operator Plant Check Sheet
- PE326F14 - Operator Plant Check Sheet
- PE326F15 - Contract Lift Plan Evaluation Check Sheet

For the Southern Integrated Delivery (SID) VR team **Lift Planners** on the project will have the following document form variations, all approved PE326 documents on the IMS will be prefix of (SID).

These documents are part of assisting integration into the VR process and are for the SID team only to utilise these cannot be used on any other VR projects.

Wherever there is a reference to PE326F01 in the VR procedures this will be replaced with (SID) PE326F01.

Wherever there is a reference to PE326F05 in the VR procedures this will be replaced with (SID) PE326F05.

There are two new forms (SID) PE326F16 Rail Drag, (SID) PE326F17 Trailer plan these are specific to Southern Integrated Delivery.

- (SID) PE326F01 - will be used in lieu of PE326F01- Site Specific Machine Work Plan (Parts 1 – 4)
- (SID) PE326F05 - will be used in lieu of PE326F05- OTP Crane Lift Plans (Part 5)
- (SID) PE326F16 Rail Drag - will be utilised to produce plans for Dragging Rail by the SID team.
- (SID) PE326F17 Trailer plan – will be used for producing plans for utilising OTP trailers by the SID team.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 17 of 24	

9. ISSUE RECORD

Issue	Date	Comments
1 -6	March 2003 to April 2021	For issue record, please refer to Issue 6 of this procedure.
7	10/02/2023	Complete rewrite of PE326 with extensive additions and requirements necessary to avoid reoccurrence of incidents. This new procedure has been developed to detail the specific arrangements necessary to manage the safe and efficient organisation and control of Vehicular Plant and crane operations used or hired by VolkerRail (VR) within a specific worksite.
8	30/05/2024	Review of document only change made new section added, 5.7 Transporting Loads on OTP Trailers. Sections 5.8 onwards numbering has changed.
9	10/06/2024	Changes new section 5.1.9 on Subcontract POS provision Additions to section 5.4.1 Transit in a worksite. Additions to section 5.6.1 Electrified lines. Revised wording in section 5.7 Transporting Loads on OTP Trailers. Four new SID Specific forms.
10	18/10/2024	New section 5.1.2.1 added to reflect changes made to network rail standard NR/L3/CIV/0063, changes to wording in section 5.3.1 to reflect on same standard changes. Addition of appendix A OTP planning guidance.

10. WHAT HAS CHANGED IN THIS LATEST ISSUE AND WHY

New section 5.1.2.1 added following changes made to issue 2 of NR/L3/CIV/0063 Piling, Drilling, Crane, MEWP, SMPT and similar plant operations on or adjacent to the Railway.

For any crane operations piling, drilling, MEWP, Self-propelled Modular Transport (SPMT) and similar plant operations that are carried out 'On or adjacent to' Network Rail Managed Infrastructure but not 'On or near the line' the following document is to be consulted: NR/L3/CIV/0063 Piling, Drilling, Crane, MEWP, SMPT and similar plant operations on or adjacent to the Railway.

This document gives Information, guidance, matters to be reviewed, levels of control when planning, this includes where similar temporary work operations are required for telehandlers, excavators undertaking lifting operations, lorry loaders and concrete pumps. This includes temporary works for working platforms and access / haul roads.

New Appendix A section to give guidance when planning for areas of consideration that don't have a specific section within the procedure:

- The first addition is Identification of and issues around Track Circuit Interrupters (TCI), what diagrams have them shown as been present, how to identify them on site visits.
How to document their location and any mitigation required in the planning stage once they are identified as been present where OTP will be working.
- The second addition details the requirements to use Tractor and Trailers on VolkerRail sites as mandated by VolkerWessels UK.

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A

11. BRIEFING REQUIREMENTS

All new employees will receive an introduction to the Integrated Management System (IMS) at induction, according to the nature of the role.

All employees with an email address receive the 'Record of Revisions' each month, which details changes to the IMS. All Line Managers retain the responsibility to ensure their staff are briefed on changes as appropriate.

The following table defines how revised issues of this document are briefed to existing employees according to related specific responsibilities.

This is determined using the 'RACI' principle. Those roles identified as 'Responsible' and 'Accountable' should receive a formal awareness briefing facilitated by the Document Owner.

Discipline	Role	RACI	Type of briefing
Engineering	Chief Engineer	Informed	Awareness
Engineering	Professional Head of Plant Engineering	Consulted	Detailed
Engineering	Professional Head of Contact Systems	Consulted	Detailed
Engineering	Professional Head of Civil Engineering and Multi-disciplinary Design	Consulted	Detailed
Engineering	POS Compliance Manager	Consulted	Detailed
Project Management	Project Manager	Responsible	Detailed
Senior Management	General Manager	Responsible	Detailed
Senior Management	Business manager (POM)	Responsible	Detailed
Delivery	Senior Operations Manager (POM)	Responsible	Detailed
Delivery	Operations Manager	Responsible	Detailed
Delivery	Operations Manager (POM)	Responsible	Detailed
Delivery	OLE Plant Operations Manager	Responsible	Detailed
Delivery	Construction Manager	Responsible	Detailed
Delivery	Site Supervisors	Informed	Detailed
Delivery	Temporary Works Coordinator	Informed	Detailed
HSQES	HSQES Director	Consulted	Detailed
HSQES	H&S Manager	Consulted	Detailed
HSQES	Head of Quality Systems	Informed	Awareness
HSQES	Quality Systems Manager	Informed	Awareness

Competence	RACI	Type of briefing
Lift Planner	Responsible	Detailed
Machine Controller / Crane Controller	Responsible	Detailed
POS Representatives	Responsible	Detailed
OTP Operators	Responsible	Detailed

Document Control	Type of briefing
Lift Planner Pack	Electronic issue
VR/POS Rep Pack	Electronic / Hard copy issue

11. IMS AUTHORISATION**Document owner approval:**

Neil Hewitt, Professional Head of Plant Engineering, 18/10/2024

Document author:

Andrew Shipley, POS Compliance Manager, 18/10/2024

Approval for IMS:

Paula Roberts, IMS Coordinator, 18/10/2024

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26			
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 20 of 24		

a) Identification of Track Circuit Interrupters (TCI)

When planning for using OTP and the OTP will transit near trap / catch points or near to buffer stops, the planner is to check for the location of any TCI (see figure 3 below for photos of TCI) , these are not identified on five-mile diagrams or signallers diagrams.

The one way of identifying TCI is to use the signalling bonding diagram or signalling plan for the area concerned, the symbol shown for each interrupter see figure 2 below

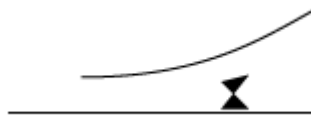


Figure 2. symbol for Track Circuit Interrupter

The diagrams can be obtained via the signalling design teams, who may be asked to check the diagram for you and confirm the location of any interrupters.

Signalling plans are slightly easier to read than the bonding diagrams, but when looking at a busy area, around a junction it can get a little complex.

The ideal way is to check around trap / catch points or near to buffer stops when undertaking the site visit

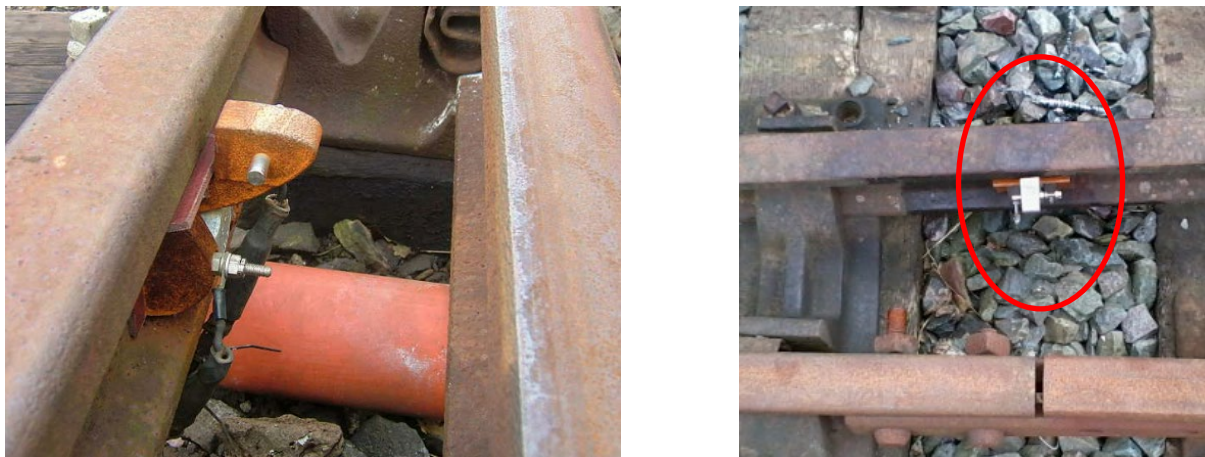


Figure 2. examples of Track Circuit Interrupters

When the location of TCI's are identified and there is no requirement for the OTP to transit near them, then their location is to be clearly documented in the PE326F01 parts 1 to 4 and if transit will be near to the location of the TCI then the use of "Stop No Rail Plant Past This Point" boards see (clause 5.4.1) should be planned to be used and clearly documented and briefed out.

If it is identified that the OTP is actually required to transit over the TCI then arrangements need to be made for them to be disconnected at the start of the possession and then reinstated before the possession is handed back.

b) Tractors and Trailers used in Construction (including rail sites)

For any projects requiring to utilise tractors and trailers to transport materials or equipment on the project then they must comply with all the requirements below mandated by VolkerWessels UK.

There are certain requirements surrounding the use of tractors for construction activities, including their use on the public highway, as certain exemptions relate only to tractors that only carry out agriculture, horticulture, or forestry works and do NOT include construction, for example:

- Driver licensing C1E and / or CE
- Use of white diesel
- The operator licensing regime
- Valid goods vehicle test certificate

Use of tractors on the public highway involves complex licensing and testing requirements. Advice should be sought from the VolkerWessels UK (VW UK) fleet team to assist in ensuring the requirements are met.

Care must be taken to avoid selecting a tractor to perform a non-specialist ‘haulage’ role on the highway, as this could be illegal. You must ensure the intended scope and use are clearly defined. There may be occasions where the selection of a tractor for ‘specialist’ tasks rather than ‘general haulage’ is a legal requirement. When it has been decided that a tractor is a legally viable option then the following requirements must be adopted:

MANDATORY
Tractors

- Pre-use inspection signed off.
- Protected cab or FOPS cab structure where there is a risk of falling objects.
- Seat belts (ideally) coloured (retractable) must be fitted and operational with static (non-flashing) green light to indicate when seat belt worn (when operating on construction sites).
- 360° visibility. This could be supported by cameras and or additional mirrors.
- Evidence of regular maintenance inspections, daily checks and weekly PUWER inspections to be carried out.
- If used on public highway it must comply with the Road Vehicles (Construction and Use) Regulations 1986. Specifically lighting, VED registration, indicators, registration plates, etc. Vehicle should comply with EC Machinery Directive 2006/42/EC and be supplied with a declaration of conformity.
- Demonstrate compliance with the correct category of DVSA vehicle testing according to the type and speed of tractor.
- Operators instructions (from the manufacturer) should be available on the machine.
- All safety labels (decals) in place.
- Isolation switch with key / locking doors with key.
- Cab steps and handles ideally painted high visibility yellow ensuring 3 points of contact is achievable.
- Front and rear work lights.
- In date fire extinguisher in cab.
- Audible reversing alarm audible outside of the cab.
- Checks on wheel nuts and wheel nut indicators and tyre wear and condition
- If used for towing must have hydraulic and / or air braking capability.
- If used for towing, a risk assessment must be undertaken, noting additional controls required to ensure the machine and trailer are operated in accordance with the operating limits of the combined vehicles.
- The maximum legal road speed for a tractor under 2.55m wide is 40 km/h (approx. 25 mph).
- The maximum legal road speed for a tractor 2.55m wide and over is 32km/h (approx. 20 mph).
- Only high specification tractors are legally able to travel over 40 km/h.
- The maximum weight of a laden tractor-trailer combination on the road is 31 tonnes and in that combination of 31 tonnes a laden trailer can be no more than 18.29t.
- All trailers over 750kg require brakes. If towed above 40 km/h they should have high speed (commercial)

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 22 of 24	

brakes with a mechanism to apply the trailer brakes in the event the trailer accidentally detaches.

- Tractors must comply with the NRMM emissions Regulations in Central London and Canary Wharf.

Trailers or Towed plant

- Ensure those carrying out daily checks and inspections have the correct information (i.e., user manual / checklist) and the right level of knowledge or understanding to undertake these tasks.
- That those carrying out towing and hitching operations are familiar with the specifics of the plant / equipment they using to tow.
- Daily checks and weekly PUWER inspections to be carried out.
- Frequency of inspections for each item (towable equipment) may vary depending upon on the intended use.
- All towable bowsers on highways must be road-legal and fitted with integral fuel bunding for environmental protection, correct labelling of contents
- Checks on wheel nuts and wheel nut indicators.
- Drawbar assembly / braking systems and towing eye.
- Breakaway cable / failsafe brake system if towing on Highway.
- Equipment securing devices.
- Jockey leg / wheel / skid, for smaller plant.
- Lights to be connected to tractor.
- Tyre wear and condition.
- If divisible loads are transported on trailers, a means of ensuring the load cannot enter the back of the tractor should be in place (back boards, chocking, chains, other barriers).

Operator

- Operators must hold the relevant competence, construction and DVLA licence dependent on use.
- They must also have familiarisation training on the tractor and trailer being operated, specifically the hitch and braking arrangements.
- CPCS card - A33 - Agricultural Tractor or NPORS - N601 agricultural tractor
- UK driving licence issued by the DVLA is required with the correct category.
- Category F licence only applies to tractors used primarily for agriculture or forestry. Therefore, if you wish to drive a tractor on the public highway in relation to construction projects, you need to hold a goods vehicle licence. That is category C1E for combinations with a maximum authorised mass (MAM) up to 12 tonnes (8.25 tonnes if the licence was obtained before 1997) and CE for combinations with MAM over 7.5 tonnes (8.25 tonnes for pre-1997 licences).
- Competency to be physically checked before being put to work - to be familiar with the machine / trailer. (Specific familiarisation training to be provided to operator on type of hitch arrangement attached to machine. Supplier to provide evidence.)
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls.
- Operator to be briefed on and to comply with completion of VolkerRail PE326F14 Operator Plant check Sheet, report defects and stop machine where defect is safety critical and report to site supervisor and log with VRCC
- Ensure the machine is operated in accordance with manufacturer's instructions and in accordance with their training.
- Operators must complete a full induction prior to starting work and have been briefed and signed appropriate RAMS / WPP / TBS for the task and briefed on the contents of the PE326F01 parts 1 to 4 Site Specific Machine Work Plan.
- Operator to be competency assessed in dealing with spills and environmental protection.
- Operator to comply with the VolkerRail drug and alcohol policy.

Links to HSE industry guidance: [Using tractors safely: A step-by-step guide \(hse.gov.uk\)](https://www.hse.gov.uk/usingtractors/)

Link to GOV.UK tractors and regulatory requirements: [Tractors and regulatory requirements: a brief guide September 2017 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/tractors-and-regulatory-requirements-a-brief-guide)

Issue no:	10	Date:	18/10/2024	Parent document:	IMS Section Number 9.26		
Approved for IMS:	IMS Coordinator	Document owner:	Professional Head of Plant Engineering	Workspace file:	N/A	Page 23 of 24	

RISKS	CONTROLS
<p>Significant hazards / risks identified when operating the machine.</p> <ul style="list-style-type: none"> • Safe and clean access into the cab before entering and dismounting as well as refuelling. • High risk of overturning at speed on inclines or when towing. • Only to be used on gradients that are within the machine's capabilities (please refer to the operator's manual). • Risk of trailer detachments if not coupled correctly or the hitch worn or defective. 	<ul style="list-style-type: none"> • Tractors to be parked on good level ground with even underfoot conditions for entering and exiting the cab. • Steps to be kept clear of mud and stone, to prevent slipping. • The tractor and trailer to be operated within the manufacturer's operating requirements, including speed, gradients etc. also, in accordance with the SSOW for the activity planned to be used for. • The trailer is to be coupled by a person who has been trained, ensuring that emergency braking / failsafe braking as required is in place and checked before moving off.

Note: Preparing a PE326F01 parts 1 to 4 Site Specific Machine Work Plan is required and consideration is required on how loads are to be secured to the trailer and what is required to secure the loads (including assessment of ground conditions and inclines on which they are to be used).