1. PURPOSE

This procedure defines the control measures associated with the design, planning and execution of temporary works. It defines the assurance requirements necessary to comply with British and client standards and helps deliver safe construction projects.

This procedure supports VolkerRail individuals, operating on behalf of the organisation, to comply with their statutory and industry-related obligations with regard to managing health, safety and welfare in construction.

2. SCOPE

This procedure applies to all VolkerRail projects and VolkerRail businesses. It is principally associated with the civil and structural engineering disciplines and covers all types of temporary works which are deemed relevant to the railway industry and VolkerRail operations (see Appendix B).

This document covers the whole process for delivery of temporary works.

3. REFERENCES (INPUTS) / RELATED DOCUMENTS

- Health and Safety at Work Act 1974
- Construction (Design and Management) Regulations 2015
- HSE SIM 02/2010/04 The Management of Temporary Works in the Construction Industry
- BS 5975:2008 Code of practice for temporary works procedures and the permissible stress design of falsework
- Eurocode 0: Basis of Structural Design
- NR/L2/CIV/003 Engineering Assurance of Building and Civil Engineering Works
- NR/L2/INI/02009 Engineering Management for Projects
- Temporary Works on Network Rail Maintained Infrastructure (NRMI)
- ENG01M002 - Management of Sub-contracted Design.
- ENG01M004 - Undertaking Designs
- Bragg Report 1975

4. DEFINITION AND ROLES

Temporary works are generally associated with transient construction situations, where loadings that are much shorter than the design working life of the structure may result in risk of failure of the works.

Temporary works provide an ‘engineered solution’ that is used to support or protect an existing structure (or element of infrastructure) or the permanent works during construction, or to support an item of plant or equipment.

The circumstances where temporary works are required include:

- Enabling works which provide access to or facilitate the construction of the permanent works
- Staging and/or sequencing of works
- Asset management of existing structures subjected to a temporary or transient load or loading regime which differs to that normally experienced by the structure
- Partially complete permanent works
- Demolition works
- The use of plant or equipment

Title	Role
Designated Individual (DI)	Custodian accountable for the organisation's temporary works process. Assesses and documents the approval of the TWC and TWS.
Temporary Works Coordinator (TWC)	The first point of contact between the designer and the site team for all temporary works matters.
Temporary Works Designer (TWD)	Preparation of the temporary works design in accordance with industry practices.
Temporary Works Design Checker (TWDC)	Verification of the suitability of the temporary works design.
Permanent Works Designer (PWD)	Preparation of the permanent works design in accordance with industry practices.
Temporary Works Supervisor (TWS)	Accountable to and supports the TWC in the day-to-day management of the temporary works.

5. DISCIPLINE SPECIFICS

Civil & Structural Engineering: - this document, along with the British standard on which it is based, is largely based on civil engineering functions. Temporary works associated with site compounds, haulage roads, excavations, hoardings and unsupported structures are all deemed to fall into the civil engineering discipline.

Overhead Line – this discipline does have situations which can be described as a temporary works scenario. Examples of mid-point anchors, or incomplete portal frames (part missing boom) should be designed and executed as per this document.

Signalling & telecoms– signalling and telecoms schemes will often have staged outputs. However, as these are always formally planned, designed and executed under Network Rail standards, they do not fall under the requirements of this procedure.

Track – excavation works are commonplace when undertaking track and associated drainage works. These are similar in nature to civil engineering works and can therefore be aligned with this procedure. Additionally, temporary works may also cover protection from falls from bridges, crane pads and the creation of stillage areas.

E&P – this discipline will often have staged outputs but is unlikely to invoke the requirements of this standard. Temporary works involving power are to be consider as permanent works but are to have the processes of this standard applied to them. Temporary power supplies are one such example.

5.1 CDM Responsibilities

In the course of a project it is anticipated that VolkerRail may perform one or more of the following roles as identified below, all of which have defined statutory responsibilities in relation to temporary works in accordance with the CDM 2015 Regulations.

Role	Principal responsibilities
Principal Designer	As Principal Designer, the implementation of this procedure will be mandatory.

Role	Principal responsibilities
Designer	As a Designer operating on behalf of another party, that party must have a temporary works procedure which as a minimum meets the requirements of this procedure. Alternatively and subject to agreement from all parties, this procedure may be implemented.
Principal Contractor	As Principal Contractor, the implementation of this procedure will be mandatory. Where subcontracting elements of the work and delegating responsibility to external parties, the temporary works procedure of the supply organisations as a minimum must meet the requirements of this procedure. Where engaged in alliancing / joint venture arrangements, the temporary works procedure to be implemented must either as a minimum meet the requirements of this procedure, or subject to agreement from all parties, this procedure may be implemented.
Contractor	As a Contractor operation on behalf of another party, that party must have a temporary works procedure which as a minimum meets the requirements of this procedure. Alternatively and subject to agreement from all parties, this procedure may be implemented.

The Bragg report and BS 5975:2008 both recommend that the Temporary Works Coordinator (TWC) and the Temporary Works Supervisor (TWS) are employed by the Principal Contractor. Under most circumstances this will be implemented; however, subject to the written approval of the DI, there may be occasions where this is not viable.

5.2 Roles and Responsibilities of Individuals

Title	Core responsibilities
Temporary Works Designer (TWD)	• Preparation of designs for health and safety, with a particular emphasis on the fundament design principles for temporary works. • Management of foreseeable risks in line with the general principles of prevention: Eliminate, Reduce, Inform and Control. • Communicate, cooperate and coordinate with other project partners.
Temporary Works Design Checker (TWDC)	• TWDC has the same responsibilities under CDM 2015 as the TWD and PWD.
Temporary Works Coordinator (TWC)	• Ensuring that VolkerRail's procedure for the management of risks associated with temporary works is implemented. • Ensuring all relevant parties to the development and implementation of temporary works communicate, cooperation and coordinate. • Ensuring a suitable design is prepared, checked and implemented in accordance with the relevant drawings and specification.

Title	Core responsibilities
Designated Individual (DI)	• Establishing, implementing and maintaining the Temporary Works Procedure. • Validating the adequacy of external parties' temporary works procedures where VolkerRail are not operating as the Principal Contractor, or are subcontracting elements of the works. • Appointments associated with the temporary works, principally the Temporary Works Coordinator and the Temporary Works Supervisor. • Provides support to the Temporary Works Coordinator where required with respect to managing the pressures of the works. • Ensure that the various responsibilities have been allocated and accepted. • Ensuring those undertaking roles of responsibility are suitably competent in terms of knowledge, skill and experience; and have suitable resource capability to deliver the works.
Permanent Works Designer (PWD)	• PWD has the same responsibilities under CDM 2015 as the TWD and TWDC.
Temporary Works Supervisor (TWS)	• Supervision and checking of the temporary works notably during erection, use, maintenance and dismantling stages. • Authority to load and unload the temporary works.
CEM	• Ascertain the application of the CDM regulations to the project and the appropriate appointment of the TWC.

5.3 Appointment of Temporary Work Roles

5.3.1 Designated Individual Appointment

- The Engineering Director is responsible for the formal appointment of the Designated Individual.
- The letter of appointment will be managed through the training and competency department.

5.3.2 Temporary Works Coordinator Appointments

- The Project Manager shall propose the Temporary Works Coordinator, in conjunction with the CEM to the DI.
- The DI is responsible for appointing the Temporary Works Coordinator using the Form CIV510F01 to formally record the appointment which shall be on a project by project basis.
- The DI will interview all TWC candidates before endorsing their appointment.
- The DI will maintain a spreadsheet of VolkerRail appointments.
- The CEM will record the appointment in the project specific ENG01M011F001.
- The CEM will record the appointment in the Construction Phase Plan.
- The CEM will notify the client of the Temporary Works Supervisor appointment through use of the form NR/L2/INI/02009 F040

Delegation of TWC duties may be considered where there are concerns regarding the availability and/or capacity of a candidate to manage all aspects of the temporary works. The DI will undertake the assessment of the delegate in the same manner as the TWC appointment.

5.3.3 Temporary Works Supervisor Appointments

- The CRE shall propose all Temporary Works Supervisors to the DI.
- The DI is responsible for appointing the Temporary Works Supervisors.
- The DI will interview all candidates for medium and high risk works prior to endorsing their appointments.
- The DI will use the Form CIV510F002 to formally record the appointment which shall be on a project by

project basis.

- The DI will maintain a spreadsheet of appointments.
- The CRE will record the appointment in the project specific ENG01M011F001.

5.4 Competency of Temporary Works Role

5.4.1 Competency of the TWC

- The TWC should have a relevant academic qualification (e.g. civil engineering degree, HND or HNC).
- The TWC must have a least 5 years' experience of working on similar projects.
- The TWC must have attended a relevant temporary works coordinator course.
- The TWC must have a detailed knowledge and understanding of this procedure and its implementation.
- Familiarity with the health and safety aspects of design and construction, and a commitment to carry out the project safely.
- Projects involving complex and/or high risk temporary works the TWC should be a Chartered Engineer.

5.4.2 Competency of the TWS

- The TWS must have at least 3 years' experience of working on similar projects.
- The TWS must have attended a relevant temporary works supervisor course.
- The TWS must have a detailed knowledge and understanding of this procedure and its implementation.
- The TWS must have a relevant H&S qualification.

5.5 Mentoring Arrangements

A mentorship arrangement will become necessary if the proposed individual is lacking in experience or knowledge. Arrangements as follows;

5.5.1 Mentoring for TWC

- In all cases where mentorship is necessary, the mentor details will be recorded on the CIV510F01 form.
- The TWC under mentorship will have five different design briefs assessed and countersigned by their mentor.
- The DI will audit the TWC under mentorship during the course of their first project, and then as necessary until the DI is comfortable that the role is being carried out in a compliant manner.
- The DI will review a written statement against the following;
  a. Process
     i. Please identify the key roles associated with the temporary works process.
     ii. Please identify the key responsibilities associated with the role of TWC.
     iii. Please identify the main stages which lead up to a piece of work commencing on site and the associated timescales.
     iv. Please identify the roles you would engage with for a piece of temporary works with associated reasoning.
     v. Please provide examples of CAT 0 temporary works.
     vi. Please identify the standards associated with temporary works (National, client, VR)
  b. Excavations
     i. Please identify the typical risks and solutions to excavation support.
  c. Compounds
     i. Please identify which typical elements of a compound would be considered as temporary works and their associated design requirements.
  d. Others
     i. Please identify the nature of any temporary works associated with a crane lift and describe the design requirements.

- The DI will close out the mentorship arrangement when the evidence has been provided and when the mentor is comfortable with the experience and knowledge gained. This would typically be around 6 months subject to the nature and intensity of the project(s).

5.5.2 Mentoring for TWS

- In all cases where mentorship is necessary, the mentor details will be recorded on the CIV510-F002 form.
- The TWS will conduct their first shift as a shadowing shift with an experienced TWS. A report is to be written on this and the TWS mentee is to sign it.
- Shift reports for the TWS under mentorship. A minimum of 5 shift reports from 5 different pieces of work are to be undertaken.
- The DI will set a written tests against the following;
    a. Process
        i. Please identify the two key roles associated with the temporary works process.
        ii. Please identify the key responsibilities associated with the role of TWS.
        iii. Please identify the documentation you would expect to receive prior to undertaking a TWS shift.
        iv. Please identify the documentation you would expect to produce during the TWS shift.
    b. Excavations
        i. Please confirm the impact of water ingress on the excavation.
        ii. Please identify the maximum depth at which it is safe to enter an excavation.
        iii. Please identify when it is safe to allow persons into an excavation.
        iv. Please outline the activities you would undertake on site when carrying out this role.
        v. Please identify different types of shoring available.
        vi. Please identify areas of concern, other than water with regards to the stability of an excavation.
    c. Compounds
        i. Please identify which typical elements of a compound would be considered as temporary works.
        ii. Please detail the documentation you would complete, the nature of any concerns would you look for, and the frequency of completion.
    d. Others (such as crane pads)
        i. Please identify the nature of any temporary works associated with a crane lift.

- The DI will close out the mentorship arrangement when the evidence has been provided and when the mentor is comfortable with the experience and knowledge gained. This would typically be around 3 months subject to the nature and intensity of the project(s).

There are no specific criteria associated with the transition from a low level TWS to the upper levels. This is to be undertaken on an experience basis where the mentee would typically have gained 2 years' knowledge and experience in the relevant delivery.

5.6 Identification of Temporary Works Requirements

The TWC is responsible for the identification of all requirements for temporary works in conjunction with the discipline specific CRE. The details of each specific item of work shall be recorded by the TWS in the Temporary Works Register (CIV510-F003). The register will be established, populated and maintained by the TWC as a live document and held in a shared environment.

Through reference to the requirements of NR/L2/CIV/003, the TWC will categorise the nature of the temporary works in terms of risk and design check. These details will be recorded in the temporary works register.

The TWC is responsible for assessing whether a design is required to manage the risk, or whether other suitable control mechanisms are appropriate (i.e. work package plans, manufacturer's literature). It should be noted that CAT0 designs will often consist of manufacturers' literature appended to the design brief which will detail their application.

Each item of temporary works will have a unique identification reference number which will comprise the following:

- Client project number: e.g. 124119
- VolkerRail project number: e.g. EP0027
- Document Type: e.g. TMP
- Discipline: e.g. CV
- Unique number: e.g. 0000

A project specific numbering system may be used as an alternative.

5.7 The Design Brief

The design brief, written by the TWC, is a key stage of the design process and overall management of the temporary works. It sets the scope for any proposed design works and enables the design requirements, considerations and any supporting information to be clearly communicated to the designer. It should be written in conjunction with the construction CRE.

Template CIV510F04 is to be completed ensuring that site-specific and unusual risks and constraints are communicated to the temporary works designer.

5.8 The Design and Design Check

The design is to be undertaken in accordance with the requirements of NR/L2/CIV/003, utilising its competency requirements for designers and its check categories for the nature of each design.

A Design CRE is to be appointed by the CEM, in accordance with NR/L2/INI/02009. Other requirements associated with the client standard may be appropriate. These could include;

- Design Development Reviews
- Interdisciplinary Checks

The requirements of VolkerRail's internal standard ENG01 M004 Undertaking Designs is to be adhered to at all times.

It should be noted that CAT 0 designs may be undertaken by the TWC on the basis that the design utilises manufacturers' designs. Such items are defined in NR/L2/CIV/003 and include;

- Rhino barriers
- Herras Fencing
- 600mm deep excavations (no plant movements, no water etc.)
- Minor service trenches.

The proposed forms will normally be the F002 & F003 forms associated with NR/L2/CIV/003, however CIV510F05: Temporary Works Certificate of Design and Check is provided for instances where NR is not the client.

The construction CRE is to undertake check activities in preparation for completing the main installation works, as well as undertaking site inspections of the completed temporary works prior to the issue of the Permit to Load.

5.9 Design Approval

Design approvals are to be carried out in line with the requirements of the contract. Agreement is to be sought from the client in respect of delegated approvals. This is to be undertaken by the CEM in conjunction with the temporary works design CRE.

5.10 Construction

This stage ensures appropriate construction controls are implemented to ensure the risks of the construction activities are managed. These include:

- Provision of the temporary works design to all relevant parties
- The production of method statements which clearly define the sequencing of the operations
- Risk assessments
- Equipment and material checks
- The production and use of inspection and test plans and/or construction checklists (as required)

5.10.1 TWC Construction Responsibilities

The TWC is responsible for communicating the temporary works design and any subsequent alterations, to the construction team CRE who will communicated the design to the on-site personnel in the usual manner.

Communication to the TWS must be given specific attention.

5.10.2 CRE Construction Responsibilities

The arrangements for temporary works must be clearly described in the task briefing documentation, signed off by the CRE or the nominated deputy.

The CRE is responsible for ensuring that the arrangements for checking and inspections associated with the temporary works are carried out by the TWS.

The CRE may use the generic inspection sheets contained within this procedure, or may modify the sheet to suit a specific circumstance. The CRE is ultimately responsible for the TWS having appropriate documentation to record all inspections.

5.10.3 TWS Construction Responsibilities

The TWS is responsible for the supervision of the temporary works for the day-to-day operations of the construction phase which may involve full time presence, or regular inspection.

The TWS will use inspection checklists provided by the CRE to confirm the necessary control measures including inspection, witness, hold and test points. All paperwork is to be returned to the office.

5.10.4 Permit to Load

The Permit to Load (template CIV510F06) is a control mechanism used to ensure the risks associated with loading are managed appropriately. Once the TWS is satisfied the design of the temporary works has been implemented correctly, the Permit to Load can be issued.

5.10.5 Maintenance & Inspections

Maintenance of the temporary works during the period of loading are important to ensure any deterioration in performance is adequately managed and does not result in importing any additional risk to the works.

As a result, a formal inspection regime (as defined in the Design Brief) is to be implemented in accordance with the requirements of the design, as well as identifying changes in condition of the temporary works and the presence of any defects. Any defects identified are to be addressed and re-inspected.

Inspections may be recorded on the CIV510F05 following the initial permit to load sign-off. Alternative project specific forms may be required. All inspections are to be formally recorded.

5.10.6 Permit to Unload

The Permit to Unload may be issued once it has been confirmed that there is no longer a requirement for the temporary works. It should be used where the removal of temporary works will create a stress that may induce risk to the construction teams.

The design is to state where a permit to unload is required and provide the associated parameters.

6. ASSOCIATED GUIDANCE & INFORMATION

- Appendix A - Process flowchart for the management and delivery of temporary works
- Appendix B - Classification and categorisation of temporary works

7. DOCUMENTATION (OUTPUTS)

- CIV510F01 - Assessment and Appointment of the Temporary Works Coordinator
- CIV510F02 - Assessment and Appointment of the Temporary Works Supervisor
- CIV510F03 - Temporary Works Register
- CIV510F04 - Temporary Works Design Brief
- CIV510F05 - Temporary Works Certificate of Design and Check
- CIV510F06 - Temporary Works Permit to Load
- CIV510F07 - Temporary Works Permit to Unload

8. ISSUE RECORD

Issue	Date	Comments
1	08/08/2016	New Procedure
2	30/10/2018	Forms CIV510F03, CIV510F04 and CIV510F06 amended. Appendix B and D withdrawn (incorporated into procedure) Appendix C renamed as Appendix B.

9. WHAT HAS CHANGED IN THIS LATEST ISSUE AND WHY

The procedure reflects two years of use by the businesses and is a more streamlined version of the document.

A significant addition to the document is the instigation of mentoring plans for those not fulfilling the competency criteria.

Additionally a new infographic has been created for the benefit of project managers to enhance understanding of the procedure and its inputs (Appendix A).

Appendices B and D have been withdrawn and Appendix C has been re-named as Appendix B.

Forms CIV510F03, CIV510F04 and CIV510F06 have been amended.

10. 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
Project Management	Project Manager	Informed	Awareness

Discipline	Role	RACI	Type of briefing
Engineering	Project Engineers	Informed	Awareness
Engineering	Design Engineer	Responsible	Detailed
Engineering	Graduate – Civil Engineering	Responsible	Detailed

Competence	RACI	Type of briefing
Designated Individuals	Responsible	Detailed
Temporary Works Coordinators	Responsible	Detailed
Temporary Works Supervisors	Responsible	Detailed
CREs	Informed	Awareness
CEMs	Informed	Awareness

11. IMS AUTHORISATION

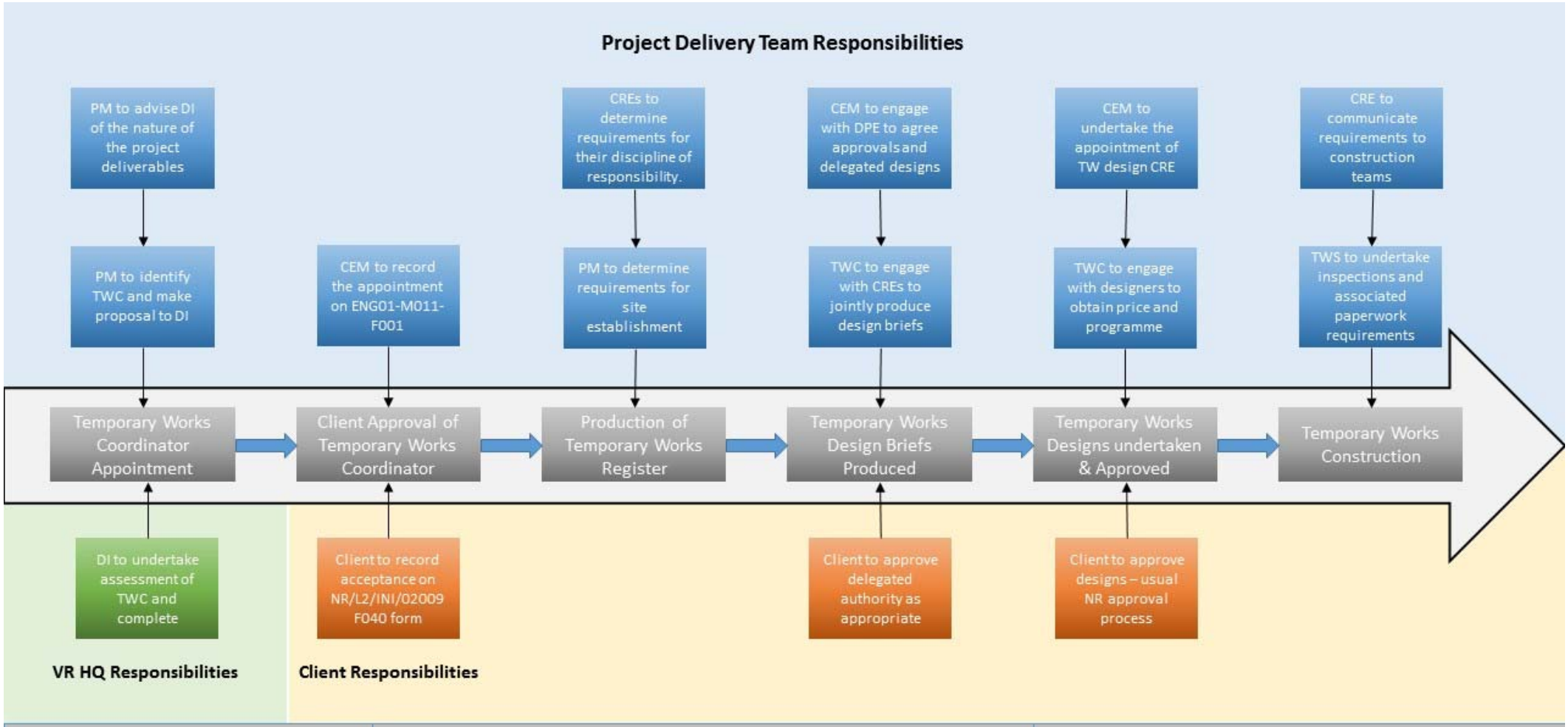
Document owner approval:

Ben Mather, Professional Head of Civil Engineering and Multidisciplinary Design, 30/10/2018

Approval for IMS:

Paula Roberts, IMS Coordinator, 30/10/2018

APPENDIX A: PROCESS FLOWCHART FOR THE MANAGEMENT OF TEMPORARY WORKS CIV510



DI – Designated Individual
PM – Project Manager
TWC – Temporary Works Coordinator
TWS – Temporary Works Supervisor
CRE – Contractors Responsible Engineer
DPE – Designated Project Engineer

CIV510F01 - Assessment and Appointment of the Temporary Works Coordinator
CIV510F02 - Assessment and Appointment of the Temporary Works Supervisor
CIV510F03 - Temporary Works Register
CIV510F04 - Temporary Works Design Brief

CIV510F05 - Temporary Works Certificate of Design and Check
CIV510F06 - Temporary Works Permit to Load
CIV510F07 - Temporary Works Permit to Unload

APPENDIX B: CLASSIFICATION AND CATEGORISATION OF TEMPORARY WORKS CIV510

Below are typical examples of types of temporary works sorted between the type of work, risk classification and category of design checked required.

Where the temporary works requirements deviate from the typical examples noted below, the assessment for the works will need to be re-evaluated which may lead to alternative design and check requirements. This is also a consideration where applying two or more proprietary systems in conjunction with one-another.

The below examples are not exhaustive.

Examples	Risk Classification	Category of Design Check
Temporary track alignments	HIGH	CAT 3
Temporary bridges carrying rail traffic	HIGH	CAT 3
Site signboards, hoardings and fencing over 2m in height	HIGH	CAT 3
Demolition	HIGH	CAT 3
Working platforms for cranes and piling rigs	HIGH	CAT 3
Open cut excavations greater than 6m deep (geotechnical advice should be sought over 3m deep)	HIGH	CAT 3
Ground support schemes greater than 3m deep, including sheet piling and proprietary support systems	HIGH	CAT 3
Trenchless construction including headings, thrust bores, mini tunnels etc. (including launch and reception pits)	HIGH	CAT 3
Permanent ground support systems (contiguous/secant/diaphragm walls) in temporary conditions	HIGH	CAT 3
De-watering and ground water control other than sump pumping	HIGH	CAT 3
Falsework and formwork over 3m high	HIGH	CAT 3
Trenchless construction, including headings, thrust bores, mini tunnels	HIGH	CAT 3
Working platforms for cranes and piling rigs	HIGH	CAT 3
Tower crane bases	HIGH	CAT 3
Façade retention schemes	HIGH	CAT 3
Flying and raking shores	HIGH	CAT 3
Complex propping schemes – multiple props and multiple levels	HIGH	CAT 3
Needling of structures greater than 2 story's high	HIGH	CAT 3
Ground support schemes greater than 3m deep	HIGH	CAT 3
Complex designed scaffold	HIGH	CAT 3
Cofferdams	HIGH	CAT 3
Bridge erection schemes	HIGH	CAT 3
Jacking schemes	HIGH	CAT 3
Complex structural steelwork and precast concrete erection schemes	HIGH	CAT 3
Hoarding and fencing over 3m high	HIGH	CAT 3
Fencing and hoardings up to 2m	MEDIUM	CAT 1 / CAT 2
Trench excavations up to 3m deep in good ground	MEDIUM	CAT 1 / CAT 2
Foundation underpinning not using piles	MEDIUM	CAT 2
Formwork for concrete walls, columns etc. up to 3m in height	MEDIUM	CAT 1 / CAT 2
Multi-level propped soil retaining structures	MEDIUM	CAT 2
Anchored soil-retaining structures up to 6m in height	MEDIUM	CAT 2
Cantilever soil-retaining structures with retained height not exceeding 6m	MEDIUM	CAT 2
Reinforced soil structures with a retained height not exceeding 6m	MEDIUM	CAT 2
Shield-driven tunnels up to 4.5m diameter	MEDIUM	CAT 2

APPENDIX B: CLASSIFICATION AND CATEGORISATION OF TEMPORARY WORKS CIV510

Examples	Risk Classification	Category of Design Check
Jacked undertrack structures up to 6m span	MEDIUM	CAT 2
Temporary station platforms	MEDIUM	CAT 2
Temporary road vehicle bridges and footbridges (other than proprietary superstructure systems)	MEDIUM	CAT 2
Tube-and-fitting scaffolding not supported on the ground (e.g. suspended from a structure), and/or more than 6m high and/or spanning more than 3m	MEDIUM	CAT 2
Demolition of multi-span arch bridges	MEDIUM	CAT 2
Falsework up to 3m high	MEDIUM	CAT 1 / CAT 2
Formwork for columns and walls up to 3m high	MEDIUM	CAT 1 / CAT 2
More complex propping schemes – multiple props at single level	MEDIUM	CAT 1 / CAT 2
Needling of structures up to 2 storeys high	MEDIUM	CAT 1 / CAT 2
Excavations up to 3m deep / high	MEDIUM	CAT 1 / CAT 2
Net systems not fixed to robust primary members	MEDIUM	CAT 1 / CAT 2
Hoarding and fencing up to 3m high	MEDIUM	CAT 1 / CAT 2
Simple designed scaffold	MEDIUM	CAT 1
Temporary roofs	MEDIUM	CAT 1 / CAT 2
Proprietary previously-designed road vehicle bridge or footbridge superstructure systems used at the rated loading, and used in accordance with the manufacturer's specification	LOW	CAT 1A
Single-level propped soil-retaining structures	LOW	CAT 1A
Cantilever soil-retaining structures with retained height not exceeding 3m	LOW	CAT 1A
Reinforced soil structures with a retained height now exceeding 3m	LOW	CAT 1A
Temporary level crossings	LOW	CAT 1A
Demolition of single-span arch bridges	LOW	CAT 1A
Temporary pedestrian edge protection to excavations etc. for public use	LOW	CAT 1A
Tube-and-fitting scaffolding supported on the ground, not more than 6m high and not spanning more than 3m	LOW	CAT 1A
Shallow trenches less than 1.2m in depth in good ground	LOW	CAT 0 / CAT 1A
Formwork less than 1.2m in height	LOW	CAT 0 / CAT 1A
Fences or hoardings up to 1.2m in height	LOW	CAT 0 / CAT 1A
Free standing aluminium access towers erected and used in accordance with the manufacturers recommendations.	LOW	CAT 0 / CAT 1A
Small MEWPs operating on a pavement designed for HGVs or on internal concrete bearing slabs and working within the tolerance set by the manufacturers	LOW	CAT 0 / CAT 1A
Internal hoarding systems and temporary partitions not subject to wind or differential air pressure or crowd loading	LOW	CAT 0 / CAT 1A
Proprietary falsework systems or access towers used in accordance with the manufacturers recommendations	LOW	CAT 0
Temporary pedestrian edge protection to excavations etc. for use only by persons under the control of the construction organisation (i.e. not for general public use)	LOW	CAT 0
Ground support for scaffolding, access towers, small crane lifts and the like where loading is modest and the substrate is competent	LOW	CAT 0
Formwork less than 1.2m high	LOW	CAT 0
Hoardings and fencing up to 1.2m high	LOW	CAT 0

APPENDIX B: CLASSIFICATION AND CATEGORISATION OF TEMPORARY WORKS CIV510

Examples	Risk Classification	Category of Design Check
Simple propping schemes – 1 or 2 props	LOW	CAT 0
Standard scaffold	LOW	CAT 0
Shallow excavations less than 0.6m deep/high	LOW	CAT 0
Minor unsupported (vertical-sided or battered) excavations, including: Normal service trenches Other excavations up to about $1m^2$ in plan (where subject to railway or road vehicular live loading no exceeding about 600mm in the direction of traffic)	LOW	CAT 0
Internal hoarding systems and temporary partitions not subject to wind loading	LOW	CAT 0