

## Transport Infrastructure Ireland

# ITS - Equipment Supply & Installation Framework - Lot 4

## Preliminary Safety and Health Plan

Reference:

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 300794-00

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# 1. Introduction

Arup has been appointed by Transport Infrastructure Ireland (TII) as Project Supervisor Design Process (PSDP) in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (hereunder referred to as the “Construction Regulations”) for the Intelligent Transport Systems (ITS) **Equipment Supply & Installation Framework Lot 4.**

Construction Regulation 9 states that

- 9. (1) A client shall provide or arrange to have provided a copy of the safety and health plan prepared under Regulation 12 to every person—*
- (a) being considered for the role of project supervisor for the construction stage, or*
  - (b) tendering for that role.*

As required by Regulation 12(1) (a) this Plan has been prepared on a preliminary basis for the purpose of providing information for the Project Supervisor Construction Stage (PSCS).

As required by Regulation 12(1) (b), this plan has been prepared by the PSDP in time to enable it to be provided in compliance with Regulation 9 to every person being considered or tendering for the role of PSCS.

Regulation 16 sets out the duty of the PSCS to further develop this plan for the construction site, as necessary, before the commencement of the construction work, and all the other duties of the PSCS in relation to the plan.

## 2. General Description of the Works and the Time within which it is intended that the Project will be Completed

### 2.1 Type of Project

The descriptions provided in this document regarding the nature of the project are brief summaries only. Please refer to the full Contract Documents for a complete detailed description of the project.

This scope element involves the supply and/or installation of intelligent transport system and associated equipment at various locations on Ireland's national road network.

The scope of work is summarised below in Section 2.4.

### 2.2 Parties Involved

	Company	Address	Contact Person	Contact Details
<b>Client</b>	TII	Parkgate Business Centre Parkgate Street, Dublin 8 D08 DK10	David Laoide-Kemp	T: 01 646 3600 E: David.Laoide-Kemp@tii.ie
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<b>Main Contractor / PSCS</b>				T: E:

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### 2.3 Project Location and Description

The project involves the supply, installation and testing of Intelligent Transport Systems (ITS) and associated equipment at various locations on Ireland's national road network. The project spans a mix of urban and interurban environments, including national primary roads, motorway sections, and adjacent areas. The contractor as part of the contract shall supply and install a number of devices to test, integrate, commission and handover.

### 2.4 Scope of Works

The full scope of works should be determined from the contract documents. The information presented below is a brief summary only and the full extent and details of the proposed works are as per the Contract Requirements.

The scope of this Contract is for the Provision of Supply and installation of electronic equipment on designated national and non-national roads such as:

The following is a list of items which the contractor will be supplying, installing and testing:

### **School Warning Signs (SWS)**

- The Contractor shall supply and install all School Warning Signs equipment including all necessary mounting bracketry, power connections and communications interfaces.
- The Contractor shall support the integration of the School Warning Signs equipment with the associated Services.
- The Contractor shall undertake all testing and commissioning of all SWS equipment.

### **Network Communication Equipment**

- The Contractor shall supply, deliver, store and install all materials, communications cables and associated fittings, cabinets and ancillary items.
- The Contractor shall perform all works, cable terminations and engineering services as necessary to install, test, commission and render operational the complete fibre optic cabling and network equipment.
- Delivery, receiving, offloading, handling, storing, installation and completion of all equipment shall form part of this Works include in the Framework Agreement

### **Periodic Speed limit Sign (PSLS)**

- The Contractor shall design, supply, and install PSLS units and all associated ancillary equipment.

### **Equipment Cabinets**

- The contractor shall supply of the Equipment Cabinet and its internal components.
- The Contractor shall supply the Equipment Cabinet with power cable termination and distribution, communication cable termination and interconnection, and racking to provide the installed roadside communications equipment with the required level of physical, electrical, Electro Magnetic Compatibility (EMC), and environmental protection to ensure its proper operation in a temperature-controlled environment

### **Driver Feedback Signs (DFS)**

- The Contractor shall design, supply and install Driver Feedback Sign.
- The Contractor shall undertake all testing and commissioning of all Driver Feedback Sign equipment
- The Contractor shall supply and install all Driver Feedback Sign equipment including all necessary mounting bracketry, power connections and communications interfaces.
- The Contractor shall support the integration of Driver Feedback Sign equipment with the associated Services.

### **Wrong Way Driver Warning Signs (WDS)**

- The Contractor shall design all Wrong Way Driver Warning Signs equipment.
- The Contractor shall undertake all testing and commissioning of all Wrong Way Driver Warning Sign equipment.
- The Contractor shall supply and install all Wrong Way Driver Warning Sign equipment including all necessary mounting bracketry, power connections and communications interfaces.
- The Contractor shall support the integration of the Wrong Way Driver Warning Sign equipment with the associated Services.

The Contractor will be required to interface with, and operate, systems provided by third parties which may include the following:

- TII's Asset and Fault Management System (AFMS)
- Advanced Traffic Management System (ATMS)
- National Incident Management System (NIMS)
- Zephyr Systems
- Drakewell C2 Cloud Service

**In addition to the above the contractor shall**

- Carry out the construction work in accordance with all statutory requirements including (but not limited to):
  - Safety, Health and Welfare at Work Act, 2005.
  - Safety, Health and Welfare at Work (Construction) Regulations 2013 (as amended).
  - Safety, Health and Welfare at Work (General Application) Regulations 2007 (as amended).
- Act as Project Supervisor for Construction Stage (PSCS) for the project.
- Provide all necessary security on the construction site including any necessary temporary security fencing/demarcation of the work areas.
- Provide all necessary temporary edge protection required for the duration of the works.
- Set-up the site, including laydown areas.
- Identify and protect all existing services.
- Keep the site secure at all times from unauthorised entry.
- Reinstate all areas affected by the works.
- Keep the site clean and tidy at all times.
- Clean-up the site and demobilise.
- Carry out all of the works in accordance with the requirements of TII.
- Establish all temporary plant and equipment on site, including all necessary safety equipment.
- Design and implement all temporary works associated with the project such as:
  - Temporary traffic management measures e.g. Pedestrians and vehicular movements.
  - Temporary lighting, electrical supply or other temporary services.
  - Temporary weathering, noise and dust protection measures.
  - Temporary measures associated with the phasing or sequencing of the works.
  - Temporary access e.g. Scaffolding, ladders, MEWPs
  - Any other necessary temporary works.

## **2.5 Other Related Works on National Roads**

Throughout the country the maintenance of Motorways and some National Roads has been tendered to various concessionaires, each of which will have ongoing maintenance and road improvements ongoing throughout the works. The Contractor will be required to liaise with these Concessionaires throughout the contract to ensure that:

- The Concessionaires are aware of the activities of the contractor in advance.

- Temporary traffic management plans (if required) have been agreed with the Concessionaires and all other permitting and permissions from the Concessionaires, required by the ITS Contractor, have been received; and
- If the Concessionaire is planning any construction works in the area, there must be co-ordination between the Concessionaire and the Contractor.

Method Statements should be produced and transmitted by the Contractor to the concessionaires in advance of any works, for their approval.

A provisional list of individual motorway operators is given below (note, this list should be subject to regular updating and confirmation by the Contractor). Non-related ITS related equipment and infrastructure is normally maintained by these motorway operators.

- M1 Northlink.
- M3 Eurolink Limited.
- M4 Eurolink Limited.
- M7/M8 Midlink.
- M50 Concession Limited.
- MMarC Area A - Globalvia Sacyr Jons [GSJ].
- MMarC Area B - Colas Roadbridge JV [CR JV]; and
- MMarC Area C - Egis Lagan Services [ELS].

The Contractor will be required to liaise with and establish working relationships with the following third parties (and any other relevant parties) in order to safely perform the works.

- Motorway Operation Control Centre (MOCC)
- Motorway Maintenance Contractors (MMaRC)
- TII ITS EMC Contractor
- Local Authorities
- National Transport Authority (NTA)
- PPP Operators
- Utility providers (Gais Networks Ireland, ESB, Eir, Uisce Éireann Etc)
- Other State Bodies as appropriate
- Other Contractors such as MTFO DC contractors

For all Works, the contractor will provide general method statements and traffic management plans for approval to TII.

To complete any work, the PSCS will request permission from the relevant road operator prior to carrying out any work.

No works should be undertaken until proposed Method Statement for works has been approved by MMarC, PPP, or local authority.

## **2.6 Time Schedule**

The timescale for completion of the project will be determined once the scope of the call off from the framework is specified.

## **3. Information on any other Work Activities taking place on the Site, and other Site Information**

### **3.1 Other Work Activities on the Site**

Due to the nature of the works, all sites will be in close proximity to roads of various types including motorways, national roads, minor roads and local roads.

The sites will be in a variety of locations nationally including urban, rural, agricultural and sometimes adjacent to schools, houses or businesses. The Contractor will be required to take this into account when planning and executing works.

Motorways in Ireland are operated by individual operators and the system has been split up and is operated by several different consortiums, for the duration of this Contract general motorway maintenance works will be in operation from the Concessionaires listed in section 2.5.

Careful coordination will be needed between the Contractor and the Equipment Maintenance Contractor to ensure that the installation works do not impinge on the scheduled or reactive maintenance visits and nor will either impinge upon or interfere with the operations of the Motorway operator.

The ITS Equipment Supply Contract may also extend into some areas undergoing construction works by others, such as the ongoing upgrade works to various national routes. When this arises, there will be a site-specific consideration of how best to arrange the necessary co-ordination between the ITS Contractor and the other works contractor.

### **3.2 Existing Safety Files**

The Employer will make available all equipment information available on the existing ITS infrastructure.

The Contractor/PSCS will be required to provide all the relevant information on any newly installed equipment to update the Safety File records.

### **3.3 Existing Safety and Health Plans**

There is an existing PSHP for the ITS Equipment Maintenance Contract, which can be made available to the contractor, if required.

### **3.4 Existing Drawings and Information**

Any existing drawings and information will be made available to the Contractor.

### **3.5 Site Constraints**

Any particular constraints in relation to the works being carried out are included in the project contract.

As mentioned in Section 2.5 above, the Contractor/PSCS will be required to liaise with the various Concessionaires or road controllers in advance of all works and comply with their particular requirements.

Details of this coordination should be laid out in the Contractor's Construction Stage Safety and Health Plan.

#### **3.5.1 Site Access and Site Security during the Project**

As sites are located on both major and high-speed roads as well as in city centre and urban areas, safe site access will be of paramount importance for site operatives and the safety of other road users, pedestrians, and the public at large.

The PSCS will provide suitable site access method statements for all off-road activity, Method statements will provide for suitable means of parking, further access to site, and generic method statements to cover all site works.

### 3.5.2 Existing Services

Significant diversions of privately and publicly owned services and supplies are not envisaged as part of this project.

All existing services shall be identified prior to the commencement of works. Any works carried out in the vicinity of the existing services and supplies shall be agreed in advance with the relevant Authorities, Utilities, and Service Providers.

The Contractor is responsible for confirming the existence, nature and location of all existing services and upholding same. The location of services is subject to confirmation on the site by safe methods, such as the use of cable avoidance tools, hand digging to 1.2 m, awareness of manholes and other elements on the surface that could suggest the location of underground services, as well as consulting with the service providers.

All excavation works shall be carried out in accordance with the requirements of the HSA Code of Practice for Avoiding Danger from Underground Services, May 2016.

All works in the vicinity of overhead powerlines shall be carried out in accordance with the HSA Code of Practice for Avoiding Danger from Overhead Electricity Lines, May 2019.

### 3.5.3 Traffic Management

The Contractor shall prepare a Temporary Traffic Management Plan, which will incorporate the following:

- Mobilisation and demobilisation of personnel, plant, and equipment.
- Delivery and removal of plant to the site for the project.
- Delivery of backfill material.
- Removal of waste material from the site.
- Pedestrian management.
- Warning sign layout details.

The Contractor shall provide all necessary traffic management provisions for both vehicles and pedestrians to facilitate the installation works and protect the safety of the public.

All traffic management measures will be in accordance with Chapter 8 of the Traffic Signals Manual, where appropriate, and in accordance with TII requirements.

Movements of plant, equipment and personnel at the site shall be executed so as to avoid risks to the public or project personnel. The roads and footpaths must be left in normal working condition at the end of each day.

The designers have noted that it will be necessary for the contractor to design and implement temporary traffic management plans where the works are located. This will be necessary to control any construction traffic movements in the area adjacent to the works to avoid risks of collisions or other accidents.

A Preliminary Temporary Traffic Management Plan has been prepared and included in **Appendix C**.

Detailed Temporary Traffic and Pedestrian Management plans are to be designed and implemented by the Contractor and submitted for review prior to any works commencing on site. TTMP are to be in accordance with traffic signs manual and the requirements of the specification.

The designers of the TTMP will co-ordinate with the PSDP as set out in Section 8.1 below.

The work areas are constrained by the requirement to maintain traffic flows. The access points to the sites are from public roads, and the sites themselves are located on roads.

## 4. Work related to the Project, which will involve Particular Risks to the Safety, Health and Welfare of Persons at work including but not limited to those referred to in Schedule 1 of the Construction Regulations

### 4.1 Principal Hazards identified by the Design Team and PSDP

The works which will involve risks to the safety, health and welfare at work are described below only to the extent necessary to enable a competent Contractor to identify and assess the risks and to put in place methods to manage them.

Many other risks on the project may arise out of working methods adopted by the Contractor and as such, these cannot be determined by the PSDP. These risks should be identified by the PSCS and addressed in the construction stage safety and health plan.

Materials and substances used during the construction stage could also present health and safety hazards. The Contractor will be required to carry out risk assessments as required by the Regulations, and to introduce appropriate control measures. The materials specified by the Design team are deemed to be within the normal experience of a competent Contractor and have therefore not been specifically identified.

### 4.2 General Works involving Particular Risks

This section of the Preliminary Health & Safety Plan is prepared to highlight work involving particular risks to the health and safety of persons at work. This list has been prepared in accordance with but not limited to Schedule 1 of the Health, Safety and Welfare at Work (Construction) Regulations, 2013 and represents a non-exhaustive list of particular risks.

It should be noted that this plan was developed during the construction stage but the PSCS will still need to revise and update it further for the construction stage. Many of the risks on the project may arise out of working methods which are at the discretion of the Contractor and as such cannot be determined by the PSDP.

The summary of particular risks identified to date and presented below includes items of work involving particular risk to the health and safety of persons at work or other persons affected by construction activity.

The summary has been prepared by the PSDP following co-ordination with the designers and using information provided by designers.

Further information is available in the Design Risk Assessments contained in **Appendix B** below.

The Risks highlighted below may not include standard construction-related risks that a competent Contractor working on the project should already be aware of (e.g. slips, trips and falls, accidents when using hand-tools etc.).

### 4.3 Summary of Particular Risks Identified

Schedule 1 of the Safety Health and Welfare (Construction) Regulations 2013 lists work that presents particular risks to the safety and health of persons at work.

The following list reviews the site and works proposed in relation to these particular risks and the current information available.

#### **4.3.1 Work which puts persons at work at risk of falling from a height where the risk is particularly aggravated by the nature of the work or processes used or by the place of work or construction site.**

- Risk of falling from height during installation of equipment at heights, e.g. PSLs, DFS, WDS, SWS signs, etc.
- Risk of falling from height into deep excavations or from high embankments.
- Risk of working from height while working on a MEWP or scaffolding.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.3.2 Work which puts persons at work at risk of burial under earthfalls where the risk is particularly aggravated by the nature of the work or processes used or by the place of work or construction site.**

- No particular risk identified.

#### **4.3.3 Work which puts persons at work at risk of engulfment in swampland where the risk is particularly aggravated by the nature of the work or processes used or by the place of work or construction site**

- No particular risk identified.

#### **4.3.4 Work which puts persons at work at risk from Chemical or Biological Substances constituting a particular danger to the safety and health of such persons or involving a statutory requirement for health monitoring**

- Risk of encountering contaminated soil/water during the works.
- Risk of exposure to chemical substances while carrying out the works e.g., Diesel when fuelling machinery.
- Risk of exposure to dust, vapours or fumes.
- Risk of contact with poisonous or invasive plants

Exposure to biological substances, other than those that may normally be expected to be encountered during excavation work on public land, are not anticipated. Such agents typically include:

- Vermin and associated faeces and urine (Weil's Disease).

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.3.5 Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Directive 96/29/Euratom2.**

- No particular risk identified.

#### **4.3.6 Work near High Voltage Power Lines**

- Risk of contact with overhead or buried HV power lines in the vicinity of the works.
- Risk of contact with overhead HV lines in the installation of any new ITS equipment.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.3.7 Work exposing the persons at work to the risk of drowning.**

- No particular risk identified.

#### **4.3.8 Work on wells, underground earthworks and tunnels**

- No particular risk identified.

#### **4.3.9 Work carried out by divers at work having a system of air supply.**

- No particular risk identified.

#### **4.3.10 Work carried out in a caisson with a compressed air atmosphere.**

- No particular risk identified.

#### **4.3.11 Work involving the use of explosives.**

- No particular risk identified.

#### **4.3.12 Work involving the assembly or dismantling heavy prefabricated components.**

- Risk of injury during the installation of heavy prefabricated components such as PSLs, DFS, overhead signs.
- Risk of falling loads due to overloading or misuse of lifting equipment.
- Risks in handling signage in high winds.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

### **4.4 Other Significant Risks Identified**

The risks below are additional to those identified above in accordance with Schedule 1 of the Safety Health and Welfare (Construction) Regulations 2013.

#### **4.4.1 Buried Services**

- Risk of contact with unknown underground or overhead services on the site.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.2 Lone Working**

- Risk associated with lone working.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.3 Risks from objects falling from height**

- Risk of objects falling from height on contractor staff when raising or lowering equipment.
- Risk of objects falling from height onto members of public while working above live traffic.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.4 Traffic Management**

- Risk of collision between work vehicles and adjacent high speed motorway traffic.
- Risk of collision between live traffic and work site
- Risk of unsafe parking indirectly causing traffic incident
- Risk of pedestrians or cyclists being involved in accidents near the work zone.
- Risk of traffic accident when the temporary traffic management measures are being installed or removed.

- Risk of obstruction and accidents due to poor planning and coordination of site deliveries.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.5 Working adjacent to and within Existing Lands/Businesses**

- Risk of striking buried service on the site of a private nature (not covered by the information provided by the standard utility providers in the city/suburbs).
- Risk of interference with the workings of the privately owned facility, e.g. if the property is an industrial facility.
- Risk of accident involving the property owners, their staff, visitors or other occupants of the property.
- Risk of member of public aggressively approaching workers carrying out work on open land.

It is considered that these risks should be capable of safe management and control by a competent contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.6 Access and Security**

- Risk of unauthorised access onto the site.
- Risk of unauthorised access by construction workers onto surrounding property.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.7 Electrocutation**

- Risk of electrocution from contact with buried electrical services
- Risk of electrocution while commissioning ITS system.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.8 Weather**

- Risks associated with bad weather such as frost, ice, gales, heavy rain, snow, fog, etc.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.9 Use of Machinery and Equipment**

- Risk of accidents involving the movement and operation of heavy machinery at the site.
- Risk of accidents involving the use of site vehicles.
- Risks associated with loading and unloading of plant/equipment/materials.
- Risk of injury to project personnel due to the improper use of machinery and equipment at the sites.

This type of project will require that the Contractor uses a range of plant and equipment. All machinery and equipment to be used on site shall be in good working order, be maintained in good working order and suitable for the work to be undertaken.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

#### **4.4.10 Noise & Dust**

- Risk of noise impacting the public in the vicinity of the site.

- Risk of dust impacting the public in the vicinity of the site.

It is considered that these risks should be capable of safe management and control by a competent Contractor using safe systems of work and the appropriate levels of resources and equipment.

## 5. Conclusions drawn by the Designers and PSDP

Many conclusions by the designers and PSDP have already been set out and included in the main body of the plan above, under the relevant headings, and in the relevant Appendices attached.

Below is a summary of the main overall conclusions drawn as regard the general principles of prevention and any relevant safety and health plan or safety file:

- The works have been designed taking into account the general principles of prevention.
- Where it has not been possible to eliminate a hazard, it has been either mitigated in design or is considered capable of mitigation in execution so as to render the works capable of safe management and control by a competent contractor using safe systems of work and the appropriate levels of resources and equipment.
- The designers have taken account of any existing information during the design stage of the project.
- There will be an ongoing requirement for co-ordination between the designers, the PSDP, the PSCS and the Contractor (as appropriate) to deal with issues such as design changes, temporary works design, and so on, all as discussed in more detail in the main body of the plan above.
- The actual construction sequencing, which is in the primary control of the Contractor/PSCS, will also have to take into account the general principle of prevention.
- Similarly, the entire construction process including methodologies, sequencing, site co-ordination, use of sub-contractors, temporary works design and the construction stage health and safety plan will all have to take into account the general principle of prevention.

## 6. The location of Electricity, Water and Sewage Connections, where appropriate, to facilitate adequate Welfare Facilities

Tie-ins for services for welfare facilities are not available alongside the motorways where the ITS system are installed. The Contractor will be required to provide temporary welfare facilities at suitable locations depending on the various working locations for the project duration. The facilities provided must be in accordance with the construction regulations.

## 7. PSCS and Contractor Activities

### 7.1 PSCS and Contractor Roles - General

It is a legal requirement that the PSCS and Contractor will carry out their roles in accordance with the requirements of the Safety, Health and Welfare at Work (Construction) Regulations 2013 and amendments.

### 7.2 Construction Stage Health and Safety Plan

During the construction stage, the Safety and Health Plan is the responsibility of the PSCS.

### 7.3 Contractor's Construction Activity

In general terms the Contractor's construction activity will be supervised and co-ordinated by the PSCS, in accordance with the Construction Regulations.

### 7.4 Contractor's Proposals to Eliminate or Control Risks

The Contractor is required to take appropriate measures to eliminate or control the risks created by the above hazards. Explanation of the proposed measures is to be included in the form of detailed method statements which will provide the basis for the management of the risk to health and safety not only of the workers undertaking the work, but also of those affected by the work.

The Contractor and PSCS shall note the hazards and risks identified by the Designers and the PSDP in this document and ensure that all of these are adequately addressed.

A clear explanation is required for the proposed methods and sequences of work, having regard to the available access and egress into the isolated work sites, other Contractor's site operations (if applicable) and working in proximity with other adjacent hazards.

Any other hazards in addition to those shown in **Appendix B** are to be identified by the Contractor, who is to include in his Method Statements proposals as to how their associated risks may be controlled.

All Method Statements will include site specific Risk Assessments.

The detailed protocols and procedures in relation to Contractor Method Statements and Risk Assessments will be as per the PSCS requirements for the project.

A risk assessment shall be carried out to the appropriate level before any work is carried out.

### 7.5 Competence of Contractor's Designers

During the course of the works the Contractor may be required to appoint designers such as (but not limited to) the following:

- Temporary Works Designers (e.g., Scaffolding, etc.).
- Temporary traffic management designers.
- Other designers.

It is a legal requirement that these designers are competent to carry out their design work.

## 8. Continuing Liaison during the Construction Stage

### 8.1 The requirements for continuing liaison between Designers and the PSDP/PSCS

In the course of the works, there may be additional Design work carried out by any of the Designers in the project.

Regulation 15 states the following duties for all Designers:

- (3) *In carrying out work related to the design of a particular project, a designer shall promptly provide in writing to the project supervisor for the design process or for the construction stage, whichever is appropriate, all information—*
- (a) *about the project that is known to the designer regarding particular risks to the safety, health and welfare of persons at work, including but not limited to the risks referred to in Schedule 1,*
  - (b) *regarding the nature and scope of the project to the extent necessary to enable the project supervisor to comply with these Regulations,*
  - (c) *about the project that is necessary for that project supervisor to prepare the safety file, and*
  - (d) *that is known to that person and is necessary to ensure, so far as is reasonably practicable, the safe construction of the design for the project.*

Therefore, it is a standing duty of all designers to provide the PSDP and/or the PSCS (whichever is appropriate) with the information necessary to enable them to comply with the Construction Regulations.

Particular attention is hereby drawn to the requirement of the **Designers of Temporary Works** to co-operate with the PSDP and provide them with all of the information required to allow them to carry out their duties under the Regulations.

The PSDP may require that Temporary Works Design Certificate contained in **Appendix A** will be filled out by temporary works designers and submitted for review and acceptance by the PSDP before commencement of the associated temporary works.

### 8.2 Procedures for continuing liaison between Designers and the PSDP

If new designers are appointed, the PSDP/PSCS will be informed by the party appointing the designers.

The designer will carry out their duties in accordance with Regulation 15 and pass on all the necessary information to the PSDP/PSCS in a timely manner, to allow them to carry out their duties in accordance with the Construction Regulations.

### 8.3 Procedures for dealing with Significant Design Changes

If the necessity for a significant design change arises during the construction phase, the respective designer will carry out their duties in accordance with Regulation 15 and pass on all the necessary information to the PSDP/PSCS in a timely manner, to allow them to carry out their duties in accordance with the Construction Regulations.

## 9. Safety File

It is the responsibility of the PSDP to assemble the completed Safety File. The Regulations require the Designers, Contractors and the Project Supervisor for the Construction Stage to co-operate with and provide information to the PSDP to enable the Safety File to be prepared.

The file must be reviewed and adjusted during the progress of the works to take account of any changes that have occurred. The Guidelines to the Safety, Health and Welfare at Work (Construction) Regulations 2013 provide general details of the information that may be included in the Safety File.

The following information (as a minimum) will be included in the Safety File by the PSDP:

- As-built drawings
- Design Criteria
- Specifications, BOQ and all other Contract Documents.
- O & M Manuals for all installed Intelligent Transport systems, Cameras and any electrical equipment/products.
- Any other relevant as-built information or technical information relevant to the future maintenance or alteration to the Intelligent Transport Systems.
- Useful Construction photos showing hidden or buried information.
- Any residual hazards (maintenance or future alteration) which may remain on site after completion of works.
- Any further reasonable information requested by the PSDP during the project.

The relevant parties (Contractor/ PSCS/ Designers, etc.) should note that they will be required to provide all of the above information in a timely and professional manner.

The PSCS will note his duties as listed in the Regulations as follows:

***Duties of the project supervisor for the construction stage, safety file.***

*21. (1) The project supervisor for the construction stage of a project shall –*

*(a) coordinate arrangements among contractors to ensure the provision of relevant information, in writing, necessary for the project supervisor for the design process to complete the safety file referred to in Regulation 13, monitor the implementation of the arrangements and take any necessary corrective action, as set out in Regulation 20, and*

*(b) provide in writing to the project supervisor for the design process all relevant information necessary for that project supervisor to complete the safety file referred to in Regulation 13.*

The PSCS will comply with the requirements as noted above.

# Appendix A

## Temporary Works Design Certificate



### Temporary Works Designer's Certificate

(For use in connection with the Safety Health and Welfare at Work (Construction) Regulations 2013. Nothing in this certificate shall be construed as imposing on the designer any liability whether in negligence, for breach of duty or otherwise that would not otherwise attach and the certificate is provided on this basis)

PSDP's Certificate Ref. No: \_\_\_\_\_

1.	Project:	
2.	Designer:	
3.	Designer's client:	
4.	Elements/features of the temporary works for which we were/are appointed.	
5.	Main design codes adopted: <i>(if applicable)</i>	
6.	Drawings: <i>(schedule may be appended)</i>	
7.	The intended construction sequence is detailed in:	
8.	Requirements for temporary stability, propping, bearing, bracing, loading restrictions etc are detailed in:	
9.	Certificate(s) by permanent works designer(s) which we have taken particular account of in respect of its/their Item 9: <i>(if applicable; quote the PSDP's Certificate Ref. No.)</i>	

**We hereby confirm** that we have to date carried out, and will continue to carry out as necessary, the design of those parts of the works which we are appointed to design exercising reasonable professional skill, care and diligence and with due regard to our duties under the Safety Health and Welfare at Work Act 2005 and under the Safety Health and Welfare at Work (Construction) Regulations, 2013 (the 'Regulations') in that we:

1. have taken account of the General Principles of Prevention and any existing Safety File,
2. have provided the PSDP & PSCS as appropriate with relevant information as required by the Regulations, and
3. have cooperated with the PSDP & PSCS and with other designers as necessary.

We confirm we have received all information and cooperation which we required from the designer(s) noted in Item 9.

Signed:  for and on behalf of (temporary works designer) Date:

**We hereby confirm** that we have coordinated the activities of the designer named above and the other designers on the project in respect of the taking account of the General Principles of Prevention during the design of the element(s) of the works described above with due regard to our duties as PSDP under the Safety Health and Welfare at Work (Construction) Regulations, 2013.

**Erection of the Temporary Works may proceed, subject to the provision of a Temporary Works Method Statement agreed by the Contractor, Temporary Works Erector and PSCS as being adequate.**

Signed:  for and on behalf of (PSDP) Date:

# Appendix B

## Design Risk Assessment

Please see Design Risk Assessments included overleaf.

# Appendix C

## Preliminary Temporary Traffic Management Plan

