

TOBIN

Refurbishments & Extension at Cape
Clear Heritage Centre at Oileán Chléire,
Co. Corcaigh

Volume A – Works Requirements

Volume A1.1: Specification – Description of
Works & Contract Requirements



Údarás na
Gaeltachta

BUILT ON KNOWLEDGE

Document Control Sheet

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Standards - Post Brexit Requirements

Where reference is made to British Standards within this document, it should be understood that the reference in question should be substituted by the relevant European standard after the 31st of December 2020.

Please note that after the 31st of December 2020, the following principles apply:

1. Manufacturers, distributors, importers and authorised representatives must comply with their obligations and responsibilities under Regulation (EU) 305/2011 - Construction Products ('CPR') when placing a construction product on the EU market.
2. Both authorised representatives and importers must be established in the EU-27.
3. UK Notified Bodies will lose their status as EU Notified bodies the end of the transition period. Manufacturers, distributors, importers and authorised representatives of construction products will need to take the necessary steps to ensure that they hold certificates under the responsibility of an EU27 Notified Body to demonstrate compliance for products placed on the EU market post-Brexit. In practice, this means either:
 - a. arrange for a transfer of their files and the corresponding certificates from the UK 'notified body' (a 'notified body' registered in the UK) to an EU-27 'notified body', or
 - b. apply for a new certificate with an EU-27 'notified body'

The Contractor should ensure that that the CE Marking / Declaration of Performance and relevant product-related documentation is appropriate to demonstrate and ensure compliance with the current Irish Building Regulations. Products Regulation is available at the following link:

<https://www.gov.ie/en/publication/9a771-brexit-construction-products-regulation/>

Further information on the implications of Brexit is available here:

<https://www.housing.gov.ie/corporate/brexit/brexit-construction-products-regulation>

1. PROJECT PARTICULARS

This document and other Works Requirements documents are intended to outline the design proposed and design intent to the extent that a competent Contractor, along with its sub-Contractors, can construct and form its tender sum for this project. Please note that it will be assumed that all items that can be reasonably inferred from this have been included for in the tender sum.

Where reference to the Architect is made on the Contract Documents and Works Requirements, this shall also be inferred as the Employers Representative and / or Engineer and vice versa. This role shall be undertaken by **TOBIN**.

As outlined in the ITT for this project, the Contractor was required to have fully considered the design and construction of the works (and any other information that could reasonably be inferred there from) based on the Works Requirements and relevant background information provided. Therefore, any clarification which they require shall have been queried during the tender process. Any clarification post tender which should have been obvious to a competent contractor shall not be entertained as a variation to the Works Requirements.

Údarás na Gaeltachta intends to refurbish & Extend the Cape Clear Heritage Centre at Oileán Chléire, Co. Corcaigh.

The Conditions of Contract applicable to this Contract are those contained in the “GCCC Conditions of Short Public Works Contract, PW-CF6”.

The Contractor should ensure that he has examined all drawings and specifications to satisfy themselves of the extent and nature of the works. The quantities outlined in the Pricing Document do not form part of the Contract and are superseded by the information contained in the drawings and specifications.

1.1 SUMMARY OF SCOPE OF WORKS

The proposed works consist of the refurbishment and extensions at Cape Clear Heritage Centre at Oileán Chléire, Co. Corcaigh as identified on Drawing 12085-6101 & 12085-6102 Site Layout Plan.

The works will involve the following:

- Internal building modifications.
- Construction of a building extension.
- Installation of a packaged Wastewater Treatment System and all Associated works.
- Upgrade of surface water system.
- Upgrade existing access with new surfacing.
- Construction of a foul sewer.
- Installation of fencing.
- Upgrading of percolation area.
- All associated landscaping including top soiling and seeding.

1.1.1 Access Constraints

The works are located at the heritage centre on Cape Clear Island. Access to Cape Clear is limited by fixed ferry schedules that restrict delivery windows and require coordination with local operators. Tidal conditions affect docking, so heavy loads must align with suitable tide levels to avoid delays. Strong winds and rough seas can suspend crossings, which means weather

forecasts are reviewed daily and delivery plans include buffer days and contingency routes. Onshore, narrow roads and limited laydown space further slow movement, so materials are sequenced to arrive only when they can be handled immediately.

1.2 DETAILED DESCRIPTION OF WORKS

The works comprise internal alterations to the existing building, construction of a 10 m² extension, a glazed entrance lobby, and a covered external area, along with the replacement of the current wastewater treatment system and percolation area with a packaged system and its associated infrastructure. The existing access will be retained and resurfaced, and a new ramped approach will be constructed. A review confirmed that the existing septic tank and percolation area are undersized, so these will be upgraded as part of the project. Surface water will continue to drain to the existing soak pit, which has adequate capacity for the increased impermeable area. The existing water supply will remain unchanged. The scope of works also includes construction of a foul sewer, installation of fencing, upgrading of the surface water system, and completion of all related landscaping, including topsoiling and seeding as detailed on Drawings 12085-6100 – 12085-6112. Contractor shall allow for the site visit prior to tender submission.

The complete set of tender drawings include the following:

Drawing Number	Drawing Title
12085-6100	Site Location Map
12085-6101	Site Layout Plan
12085-6102	Site Layout Plan
12085-6104	Drainage Site Layout Plan
12085-6108	Polishing Filter Details
12085-6109	Pumping Station Section
12085-6110	Rising Main Details
12085-6111	Signage Details Map
12085-6112	Proposed Demolition Plan

1.2.1 Site Set Up and Mobilisation

The Contractor shall erect temporary fencing along the boundary to secure the site. The Contractor shall be responsible for the temporary works design, security, maintenance, and removal upon completion of the temporary fencing.

1.2.2 Site Clearance

The Contractor shall clear the site of all obstructions and prepare the site for the works. Existing obstructions on the site which are to be removed and disposed offsite at a licensed tip facility.

The Contractor shall have been deemed to have visited the site to ascertain the extent of obstructions on site to be removed.

The following works are to be executed and completed by the Contractor. The scope shall include for the supply, delivery, construction, testing and commissioning of the works.

Site clearance works will include the removal and disposal of all excess material offsite to a suitably licenced waste facility.

Demolition Works

The demolition works include the following:

- Existing pumping station to be demolished and replaced
- Existing rising main to be removed and upgraded
- Existing wastewater treatment plant (WWTP) to be decommissioned and disposed of off-site to a suitably licenced facility.

Any material being removed from site shall be disposed of at a suitably licensed facility. Certificates shall be made available upon request.

Demolition work shall be carried out in accordance with British Standard Codes of Practice; BS6187: 1982 (Code of Practice for Demolition and BS 5228 Pt 1, 2 & 4 (Noise and Vibration Control), or any other relevant code of practice.

The order and method of each operation is to be submitted to the Engineer for review prior to commencement. This to include proposed methods of propping, shoring, protection of adjoining areas, property, retained structures et cetera.

Notwithstanding any information given in the Contract documents, the onus shall be on the Contractor to visit the site of the works and satisfy himself as to the nature and extent of the work and all other matters that might influence his price or time for completion of the works. Arrangements to visit the site should be made with the Client/Engineer

The demolitions shall be carried out without damage to retained property or adjoining areas. If such damage should occur, through negligence in the carrying out of this demolition, the contractor shall reinstate and make good at his own expense. Any such reinstatement shall be executed with materials and workmanship to match the existing work.

The Contractor shall perform the demolition works in accordance with Safety, Health and Welfare at Work (Construction) Regulations 2013.

Ensure the safety of the works and public during demolition work. Carry out demolition work in such a manner as to cause the minimum inconvenience to the staff, public and to adjoining owners.

Materials arising from the demolitions are to become the property of the Contractor and are to be removed from site as the work proceeds.

The site is to be left neat and tidy to the satisfaction of the Main Client and Engineer.

1.3 REINSTATEMENT

Reinstatement of the areas outside the site should be as follows:

- Grassed areas should be reinstated with a minimum of 200mm topsoil, graded, stone picked and seeded

- Road reinstatement in accordance with the relevant detail contained in the DTTAS 'Guidelines for Managing Openings in Public Roads (2017)'.

1.3.1 Generally

An allowance is to be made by the contractor for the certification of each work element. The works description and specification outline the design intent of all works areas. It is the responsibility of the contractor to achieve the requirements of the design intent for each works element. For e.g. construction of 1-hour fire rated wall or air tightness, weathertight building etc.

The Works Requirements and relevant background information endeavour to highlight all existing services and utilities. However, the Contractor, by way of a site inspection will be deemed to have included for all costs associated with the protection, diversion, or removal (where required) of any services encountered during the works.

Neither the Employer nor its officers, employees, or advisers, will have any liability in connection with these documents. Tenderers must make their own assessment of the adequacy, accuracy, and completeness of these documents.

1.4 EMPLOYERS PROJECT TEAM

The following is the Employers Project Team:

Employers Representative:

Name: TOBIN

Address: Fairgreen House, Fairgreen Road, Galway

Contact Name: Micheál Geraghty

Tel: 091-565211

E-mail: micheal.geraghty@tobin.ie

Civil Engineer:

Name: TOBIN

Address: Fairgreen House, Fairgreen Road, Galway

Contact Name: Nathaniel Chidavaenzi

Tel: 091-565211

E-mail: nathaniel.chidavaenzi@tobin.ie

Quantity Surveyor:

Name: TOBIN

Address: Fairgreen House, Fairgreen Road, Galway

Tel: 091-565211

E-mail: galway@tobin.ie

PSDP:

Name: TOBIN

Address: Fairgreen House, Fairgreen Road, Galway

Contact Name: Shane Byrne

Tel: 091-565211

E-mail: shane.byrne@tobin.ie

Any reference to Employers Representative / Engineer throughout the Works Requirements Documentation shall be deemed to be an appropriate member of the Design Team named above as advised by the Employers Representative from time to time during the course of the contract.

From a Contract Administration perspective, where reference to the Architect is made on the Works Requirements and Contract Documents, this shall also be inferred as the Employers Representative and / or Engineer. This shall be taken as **TOBIN**.

1.5 DOCUMENTS

The Conditions of Contract applicable to this Contract are those contained in the “Short Public Works Contract- PW-CF 6” current at the tender date.

Documents included in the Contract are as follows:

Volume A: Works Requirements

- Volume A1.1 – Specification – Description Project Works & Contract Requirements.
- Volume A1.2 – Civil Particular Specifications.
- Volume A2 – Specification - Materials, Workmanship and Methods of Construction.
- Volume A3 – Drawings.

Volume B: Form of Tender, Agreement, Conditions of Contract and Schedules

- Form of Tender and schedule.

Volume C: Pricing Document

The following documents are provided to the Contractor but do not form part of the Contract:

- Pricing Document Instruction to Tender.
- Bills of Estimate Quantities (BoQ).

Also included is a **Background Information Pack** which are not contractual documents consisting of.

1. Model Forms.
2. Preliminary Health and Safety Plan.
3. Site Characterisation Assessment Report.
4. Natura Impact Statement (NIS).
5. Preliminary Construction Environmental Management Plan.
6. Appropriate Assessment Screening Report.

If contradictions or anomalies are found between the documents, the order of precedence as set out above shall be used to clarify same. Where contradictions occur, the document with the higher order of precedence as listed above shall be taken as the correct version.

This information is provided to the Tenderer for reference and information purposes to allow the Tenderer to consider the implications of same on the tender sum. It is assumed that the information provided will be fully considered and the implications of such information shall be deemed to be included for in the tender sum.

The Works Proposals submitted by the Contractor with his Tender also form part of the documents included in the Contract.

1.6 ENGINEERING BRIEF AND DESIGN DEVELOPMENT

It will be the Contractor's responsibility to meet the requirements for the construction and installation of the Works as set out in the Works Requirements or as subsequently amended on the instruction of the Employer's Representative.

The Engineering and Performance Briefs for the proposed works will include the following, not as an exhaustive list but for use as a guide:

- Comply with all relevant H&S acts, regulations and codes of practice etc. also refer to section 3.17 of this document.
- The specific design guides and codes of practice listed elsewhere in contract documents
- The Building Regulations and relevant TGD, s.
- CIBSE Guides, Technical Memorandum and Guides to current practice.
- HVCA specification documents
- B&ES specification documents
- Statutory Regulations, Services Technical Publications, Irish, British and European Standards.
- Electro Technical Council of Ireland Regulations
- Requirements of the relevant Local Authorities
- The Engineering Drawings and Specifications describing the buildings and the site layout.
- The specification requirements as detailed elsewhere in this Specification and services information on drawings.
- The information shown on the engineering services drawings defining the location of specific elements of the services installation except where revisions may be made with the prior agreement of the Employer's Representative for co-ordination purposes or were considered necessary by the Contractor to achieve the performance standards.
- The general arrangement of services in selected areas for which typical details, sections or plant layouts may have been included in the Specification.
- A requirement to observe recognised standards of good practice throughout the installation of the services.
- A requirement to ensure that the completed installations and the associated building works make full provision throughout for safe future operation, isolation, regulation repair, maintenance and where appropriate, adaptation and extension.
- A requirement to ensure that the completed installations and the associated building works are fully to adoptable standards and suitable for sale on the private market.
- All trade association standards whether advisory or compulsory.

Notwithstanding the contents of the Works Requirements and associated drawings, the Contractor shall be fully responsible for the complete installation of the works to ensure that

they can be tested and handed over in fully operational mode. The Contractor shall include in the tender for all necessary items not specifically mentioned or indicated, to achieve this objective.

All materials shall be new (unless expressly stated otherwise) and are to be installed in accordance with manufactures specification and instructions and allowance is to be made by the Contractor to do so.

The Contractor shall not deviate from the Works Requirements in any shape or form without prior written approval from the Employer or Employers Representative.

1.7 FORM OF CONTRACT

The form of Conditions set out in the “**Short Public Works Contract- PW-CF 6**” current at the tender date.

1.8 INSTRUCTIONS FOR TENDERING

The Contractor shall have taken cognisance and adhered to the requirements of the Instructions for Tendering Document prior to submitting its tender.

1.9 INSPECTION OF SITE & DOCUMENTS

The Contractor must accept the site as he finds it although for his assistance and guidance, tender documents and drawings have been provided to aid the Contractor with setting out the works.

If the intending Tenderers desire to fully satisfy themselves as to the information set out in the sections in regard to the materials which are likely to be encountered, they shall before tendering, by separate arrangement with the Clients Management Staff concerned, and at their own expense, to carry out site measurements as may be necessary to satisfy themselves fully as to the nature of the works which are likely to be encountered. Despite the availability of the above-mentioned documents and drawings, the Contractor shall nevertheless be deemed to have visited the site and to have obtained all necessary information additional on that provided as to risks, contingencies and any other circumstances likely to affect his tender.

It will be the Tenderers/Contractor’s responsibility to appropriately survey and analyse each of the work’s areas on site to ensure that all works are covered within their tenders. The drawings and specification outline the proposed design, and the Contractor should satisfy himself that all works associated with the intended design and related construction are accounted for in the tender sum. Each Tenderer will be allowed ample time on site to consider the works at each works area.

The Contractor shall be deemed to have examined the Tender Documents and drawings and to have satisfied himself as to the full extent and nature of the work, the manner in which it must be carried out, the means of access, the space available for storage, the building structure, the conditions affecting labour and the execution of the Contract generally.

Should the Contractor have any queries regarding the intent and meaning of the Contract, the Tender Documents or the drawings, he shall, before submission of his Tender obtain clarification in writing from the Employers Representative as per the ITT.

In the case of any conflict or discrepancy between the various contract documents (i.e. Specification, Drawings, etc.), or ambiguity therein, the Contractor shall so advise the Employers

Representative and shall prior to submitting his Tender obtain clarification in writing as to the exact intent of the item concerned.

In the event of the Contractor's failure to do so, the cost of any resultant change or addition shall be borne by the Contractor.

No allowance will be made for failure on the part of the Contractor to fully acquaint himself of the nature of the site and to inform himself on all environmental matters subject always to the natural rights of any Contractor to make a valid claim in the event of unforeseen physical obstacles being encountered of such a nature as to interfere with the expeditious progress of the work.

The Contractor shall retain the risk of encounters on the Site of any unforeseeable ground conditions (not resulting from weather) or unforeseeable human-made obstructions or Utilities in the ground. No variations or compensation events shall be entertained by the Employers Representative in these instances.

For clarification, utilities mean conducting media and apparatus for water, sewage, electricity, gas, oil, telecommunications, data, steam, air, or other services, and associated apparatus and structures.

A condition, circumstance or occurrence is unforeseeable if an experienced Contractor tendering for the Works could not have reasonably foreseen it on the Designated Date, having inspected the Site and its surroundings and having satisfied itself, insofar as practicable and considering any information in connection with the Site provided by the Employer, as to all matters concerning the Site, including its form and nature and its geotechnical, hydrological and climatic conditions.

The Tenderer is afforded the option of carrying out additional Site Investigations during the Tender Period.

Heavy rain flooding or strong winds are specifically outside the category of a physical obstruction and no claims in any way related to any such flooding or winds at any time of the year will be entertained on the assumption that the Contractor will have provided against such a contingency in his Tender.

Any issue the Contractor needs clarification on should be issued through the appropriate channels as set out in the Instructions to Tender. The Contractor shall also include for having pre and post construction photographs taken to ensure that all areas are left in a condition satisfactory to the Employers Representative at the end of the works.

The Contractor shall make good any damage caused to buildings and materials to a condition at least equal to that in which they were before any constructional was permitted to pass over them.

1.10 RELATED CONTRACTS

The Contractor shall be aware that it is envisaged that a number of construction contracts may be ongoing during course of this contract.

The Main Contractor is required to facilitate, coordinate, and programme these works within its own programme. All costs associated with coordination and liaising with other Contractors shall be included within the tender sum.

The Main Contractor shall be PSCS for the site while these other contracts are ongoing and shall always be responsible for the health and safety on site.

1.11 PRICING THE WORKS

Tenderers are required to tender for the complete scope of works being carried out within the allocated programme set out in the Tender Documents.

If the intending Contractors desire to fully satisfy themselves as to the information set out in the sections in regard to the materials which are likely to be encountered, they shall before tendering, by separate arrangement with the Clients Management Staff concerned, and at their own expense, to carry out site measurements as may be necessary to satisfy themselves fully as to the nature of the works which are likely to be encountered. Despite the availability of the above-mentioned documents and drawings, the Contractor shall nevertheless be deemed to have visited the site and to have obtained all necessary information additional on that provided as to risks, contingencies and any other circumstances likely to affect his tender.

It will be the Tenderers/Contractor's responsibility to appropriately survey and analyse each of the works' areas on site to ensure that all works are covered within their tenders. The drawings and specification offer an outline of the proposed design only and the Contractor should satisfy himself that all works are accounted for. Each Tenderer will be allowed ample time on site to consider the works at each works area.

No allowance will be made for failure on the part of the Contractor to fully acquaint himself of the nature of the site and to inform himself on all environmental matters subject always to the natural rights of any Contractor to make a valid claim in the event of unforeseen physical obstacles being encountered of such a nature as to interfere with the expeditious progress of the work.

1.12 TEMPORARY WORKS

Allowance shall be made in tender sum for all necessary temporary works that are required to facilitate the works such as (but not limited to) pumping, river/stream water management, cofferdams, trench control, dewatering methods, temporary roads, piling mats, crane tracks, access platforms, hoists, scaffold, temporary structures etc.

Unless noted otherwise in this Specification or in other Contract Documents, the Contractor shall be responsible for the design of any temporary works required to construct the permanent works on the project. The Contractor shall be responsible for the design of all temporary works such as cofferdams, river/stream diversion, working platforms, formwork, trench control, excavation, pumping and water management.

The Contractor shall appoint a competent Temporary Works Designer who shall take overall design responsibility for the stability of the structures during the envisaged construction process. This designer must be competent in temporary works design, to safely provide for the complex forces involved in temporary works/permanent works interaction at the various stages of construction. The Contractor shall also employ a suitably qualified site engineer for this purpose. It will be required that both the Temporary Works Designer and qualified engineer liaise with each other and the Project Supervisors at all stages.

The Contractor is required to arrange and ensure the attendance of all specialist designers and temporary works designers at site meetings.

All temporary works design proposals shall be submitted to the Employers Representatives for review no earlier than 10 days prior to any temporary works commencing. If the Employers Representative has any comments to make in terms of the temporary works design, it shall do so within 5 days of receipt of Temporary Works Design. The Temporary Works Designer shall provide the Employers Representative with a Temporary Works Design Certificate in the form of the HSA sample certificate.

The Contractor is required to arrange and ensure the attendance of all specialist designers and temporary works designers at site meetings.

1.13 MOVEMENT OF MACHINERY AND PLANT ACROSS PUBLIC ROADS

The Contractor shall, where he proposes to move machinery and plant across public roads, seek the approval of the Roads Authority and the Employer's Representative. In seeking approval, the Contractor shall submit details of the layout of the crossing, and all proposed signing, safety equipment and controls proposed.

At any site haul route crossing of public or private right of way, a speed limit of 15kph shall be enforced on the haul route within 50 metres of the crossing.

The Contractor shall take every precaution to prevent dirt, mud or other material being dropped or spread by traffic associated with the works on roads being part of the works, which are made available for public use by the Contractor, whether such traffic is the Contractor's own vehicles, the sub-Contractors or his supplies of vehicles hired by any of the above.

All vehicles leaving a work area and entering a traffic lane shall have its wheels and underbody cleaned when necessary so as to avoid mud and dirt being deposited on the public road. The Contractor shall clean roadways of any such dirt, mud or other materials that may be spilt or spread by traffic travelling to or from the site in connection with the works, whether such traffic belongs to the Contractor, his sub-Contractors or his suppliers. On each working day the Contractor shall employ a Road Suction Sweeper to clean all Public Roads within 500m of his operations as well as on haul routes. Such cleaning operations shall be carried out notwithstanding road cleaning work being carried out by the Employer or other Contractors to the Employer.

The Contractor shall comply with the maximum permissible loads for public roads in Ireland and where requested by the Employer's Representative shall provide evidence of compliance with regard to delivery of material to site. Pumping of water onto a public road or private property shall not be permitted. Heavy discharges to gullies and storm drains shall have silt traps incorporated in the temporary discharge arrangement. Any damage shall be made good by the Contractor at his own expense.

1.14 CONTROL OF NOISE AND VIBRATION

The Contracting Authority has informally agreed that the following measures would be appropriate, and these are given as a guide; however, it is for the Contractor to decide whether to seek the Contracting Authority's formal consent to his proposed methods of work and to the steps he proposes in order to minimise noise.

The normal working hours within the site shall be as specified in section 3.37.

The Contractor shall employ the best practical means to minimise noise produced by his operations including plant maintenance and shall comply with the recommendations in BS5228

2009 (Noise Control on Construction and Open Sites). Plant and machinery used on site shall comply with the EC (Construction Plant and Equipment) (permissible Noise Levels) Regulations, 1988 (SI No. 320 of 1988)

All vehicles and mechanical plant used on the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order for the duration of the works in compliance with BS 5228. Machines in intermittent use shall be shut down in the periods between work or throttled down to a minimum.

The Contractor shall remove from the works any item of plant which in the opinion of the Employer's Representative is ineffectively silenced. All compressors shall be "sound reduced" models fitted with properly lined and sealed acoustic covers and shall be kept closed whenever the machines are in use. All ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Pumps and mechanical static plant shall be enclosed by acoustic sheds or screens were directed by the Employer's Representative.

Any plant such as generators and pumps which is required to work outside the hours of 0700 hours to 1800 hours, shall be surrounded by an acoustic enclosure to the approval of the Employer's Representative which shall restrict the noise level to not less than 5dB(A) below levels quoted in the following table:

Schedule of Total Noise Levels at Control Stations

Period	Hours	Ambient Noise Level Leq Measured at Control Station: dB(A)	Period of Hours over which Leq is applicable	Maximum Sound Level (see Note (iv) below) measured at Control Station
Monday – Friday	0700 – 1800	70	15 mins	88
Saturday	0800 – 1500	65	15 mins	80
All unattended plant outside normal working hours		60		55

The Contractor shall organise his operations with regard to the positioning of plant and the location of haul routes etc., so it minimises construction noise to adjacent properties.

The Period referred to as "night" shall be from 2000 hrs to 0800 hrs.

Unless otherwise permitted by the Employer's Representative any work on Sundays shall or official public holidays shall not be executed.

The Contractor shall select and utilise methods of working and items of plant so that the maximum measured ground vibrations do not exceed a peak particle velocity of 8.5mm per second at any occupied property, and 10mm per second at any other residential property.

Furthermore, the Contractor shall select and utilise methods of working and items of plant so that the maximum measured ground vibrations do not exceed the following peak particle velocities: -

- 5mm per second at a location 270m from freshly poured concrete, i.e. concrete placed less than two days.
- 20mm per second at completed structures.
- 5mm per second at location of existing A.C. watermains.

The Contractor shall monitor ground vibrations at selected locations to the approval of the Employer's Representative during the progress of the works. Each vibrograph shall be certified as being in proper working order and shall unless otherwise approved, record vibrations in three directions simultaneously with print-out showing the amplitude and frequency of the vibrations.

Vibration measurements shall be taken at the base of buildings, on the side facing the source of vibration. Where feasible, the measurement should be taken on a hard surface on the ground outside the building.

In exceptional circumstances the Contractor may apply to the Employer's Representative for consent to carry out works which the Contractor considers will exceed the specified limit of ground vibration. The procedure for submitting and processing the application will be as specified for obtaining consent to exceed the specified noise levels.

The Contractor shall provide instrumentation suitable for monitoring vibration when required by the Employer's Representative. Such monitoring shall include locations outside the limits of the site. The Employer's Representative is to be provided with copies of all vibration recordings.

2. THE PROGRAMME

2.1 PROGRAMME

The works are expected to commence in Q2 2026 and be completed within **66 calendar working days / 3 months** from the Contract Date as outlined in the Volume B Tender and Schedule.

This duration shall include **20 site working days programme contingency** as outlined in Section the Volume B - Tender and Schedule.

The programme includes for commissioning, testing, snag clear out and handover to Client.

Date of contract commencement to be agreed prior to Contract Award.

The successful contractor shall prepare a programme, for agreement with the employer's representative, prior to commencement on site. This program shall include for all constraints identified in the contract documents. The contractor shall track this program and provide updated revisions at progress meetings.

At the time of tendering the Contractor shall submit a proposed programme (Microsoft Project or similar) showing how he intends carrying out the works, other specialist Contractors he intends using, and the staff he proposes allocating to the works on a monthly basis.

3. STATUTORY CONSTRAINTS

3.1 CONSENTS

The Contractor shall give and comply with all notices and pay all taxes, fees and charges required under Legal Requirements to be paid in connection with performing the Contract, as per the Conditions of Contract.

Where changes in statutory or other legal requirements occur after the designated date which results in changes or additions to the work, the resultant increase or decrease in cost shall be borne by the Contractor.

3.2 HEALTH AND SAFETY

The successful Tenderer shall be appointed as Project Supervisor Construction Stage (PSCS) in accordance with the provision of Safety, Health and Welfare at Work (Construction) Regulations, 2013.

The Contractor shall enter into the appointment in the form of Model Form 1.22 “Form of Appointment of Project Supervisor” included in Background Information. The Contractor shall prepare and lodge the relevant notices for the Works with the various statutory authorities including but not limited to the AF2 notifications to the Health & Safety Authority.

3.2.1 General

The Employer reserves the right to terminate the role of the PSCS at any time and appoint a new PSCS. The Employer will not be liable for any costs or losses arising from this termination. The PSCS shall comply with the 2013 Regulations and should particularly note the following:

- Following appointment as PSCS, develop the Safety & Health Plan, including updating it with new/revised design information passed on by the PSDP. Following this the Contractor’s designers’ information will be coordinated with all of the other designers’ information and any new information will be passed onto the PSCS for inclusion in the Safety and Health Plan. This coordination will be carried out by the PSDP but will require the full cooperation of the Contractor and his designers.
- The PSCS shall be obliged to advise the PSDP, as soon as is practical, of any changes arising from unforeseen conditions or eventualities which may affect design. This must be done in order to permit the PSDP to pass this information to all designers so that they can coordinate their designs and include the changes in their designs.
- The PSCS shall ensure that all personnel on site have appropriate training, Safe Pass and CSCS where necessary, and those records of same, including copies of certificates/cards, shall be kept on a readily accessible file for inspection. Copies of the same shall be provided to the Resident Engineering Staff or other designated Representatives of the Local Authority.
- The PSCS and the Contractor shall assist the PSDP where required, to allow the PSDP comply with the Regulations. This extends to ensuring that all of the Contractor’s designers and any specialist/ proprietary designers cooperate with the PSDP.
- The Contractor shall appoint a competent Temporary Works Designer and a suitably qualified engineer to coordinate the design of the temporary works. This is outlined in more detail under the “Temporary Works” heading below.

- The PSCS shall coordinate the Contractors who will be providing information for the Safety File. This should be demonstrated on a monthly basis and presented to the PSDP for review. Failure to do so will result in an additional 1% of monthly claim for payment being withheld on top of that scheduled in the conditions of contract.
- The PSCS shall gather all relevant information, from all designers, specialist designers, and Contractors, including relevant information from the final version of the Safety & Health Plan, and delivery to the PSDP for inclusion in the Safety File.

The following is a non-exhaustive list of the information, which the PSCS must provide to TOBIN, in their role as PSDP, for inclusion in the safety file:

- Construction Programme
- All As Constructed Drawings both in hard copy and in Auto Cad format
- Works Requirements
- Bills of Quantities and Schedules of Prices
- All design information and general design criteria
- Documentation on maintenance procedures and requirements
- Details of equipment and maintenance facilities
- All manuals, certificates
- All procedures, requirements and schedules
- Details of location and nature of all utilities and services
- Fire Fighting and emergency systems (including security systems)
- Site records – example logs of difficulties encountered on site
- Copies of relevant photographic and video material of construction
- Other relevant information, which in the opinion of the PSCS should be included in the safety file.

Any further information, requested by the PSDP, which is deemed necessary by the PSDP to allow him to complete his role and to prepare the Safety File.

The PSCS shall coordinate all Contractors' arrangements for constructing the works so as to protect the Safety Health and Welfare of all persons (including employees, visitors and the general public) affected by the construction of the works.

It shall be the duty of all Contractors to implement these arrangements to protect, as far as reasonably practicable, the Safety Health and Welfare of all persons affected by the construction of the works.

The PSCS shall monitor all of these arrangements and shall take appropriate steps, where necessary, to ensure that they are implemented and effective in accordance with S.I. 504 of 2006.

The Main Contractor shall, in respect of all persons' and sites' activities, provide for, and ensure compliance with, all Health, Welfare and Safety Standards and Regulations whatsoever arising in connection with the works.

As between the Client and the Main Contractor, the Main Contractor shall be responsible for the health and safety of all persons employed on the site, whether under his direct control or not.

The Main Contractor shall ensure that safe practices and methods of work are adopted at all times.

The Main Contractor in that capacity, or in his capacity as Project Supervisor Construction Stage, shall notify the Engineer in writing, at or prior to the submission of his tender, if he considers that any contractual requirement relating to the time for carrying out the works, or any part of the works, or the design of the works, or specification of materials, renders work methods or procedures hazardous, or in any way prevents the work from being safely carried out. Upon receipt of such notice, the Engineer shall issue such necessary instructions as he shall see fit to the Main Contractor.

The Contractor shall grant the client unrestricted licence to use and reproduce all documentation in the Safety File to facilitate the future maintenance, alteration or demolition of the property to which it relates.

The Contractor shall grant the client the right to assign with the property the client's rights to use and reproduce all documentation in the Safety File in the event of the property being transferred to another party at any time in the future.

The Contractor shall ensure that all safety, health and welfare measures required under or by virtue of the provisions of any enactment or regulations or working rules of any industry are strictly complied with.

The Contractor shall comply with the Safety Health and Welfare at Work Act, 2005. All work shall be subject to S.I. No. 44 of 1993 Safety Health and Welfare at Work (General Application) Regulations as amended from time to time. The Contractor shall comply with the current metric edition of the IEE Regulations and the requirements of the Electricity Supply Board. Works on roads, footpaths and cycle tracks shall be carried out in compliance with Part 13 of the Safety, Health and Welfare at Work (Construction) Regulations, 2006. All works shall be subject to the requirements of the following General Application Regulations:

- S.I. 371 of 2006 – SHWW Control of Noise at Work Regulations 2006
- S.I. 370 of 2006 – SHWW Control of Vibration at Work Regulations 2006
- S.I. 318 of 2006 – SHWW Work at Height Regulations 2006
- S.I. 386 of 2006 – SHWW Exposure to Asbestos Regulations 2006-2010

All works shall comply with Local Authority bylaws and with all current legislation and Building Regulations.

The Contractor shall ensure that all vehicles delivering or transporting materials in connection with the Works shall be adequate sheeted to ensure that as far as practicable no materials can fall and no dust can be blown from the vehicle.

A Preliminary Safety and Health Plan has been prepared for this Contract. The Contractor shall be required to familiarise itself with each item detailed in the Plan and to make any necessary amendment to their proposed Programmes of Work to reflect such.

3.2.2 Project Supervisor Design Process

TOBIN Representatives have been appointed as Project Supervisor for the Design Process (PSDP) in accordance with the provision of Safety, Health and Welfare at Work (Construction) Regulations, 2013.

3.2.3 Certificates

The Contractor will provide, when requested, certificates in the form approved by the HSA and as set out in the HSA guidance document “Guidelines on the Procurement, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2013” including the temporary works design certificate.

3.3 DUTIES AND WARRANTIES OF THE CONTRACTOR

The Contractor warrants that it has examined the site and the Contract Documents and has satisfied itself that same are suitable to enable the Contractor to proceed with the construction of the Works.

The Contractor warrants that it has, or has procured, the necessary skill and experience to perform its obligations under this Contract and that it has satisfied itself in all respects as to the form and nature of the sites, the ground and sub-soil therein and the means of access to and through the sites, availability and location of utility services on, under, over or adjacent to the sites. Further the Contractor shall satisfy itself in relation to the precautions and the times and methods of working necessary to prevent any nuisance, whether public or private, to any third parties.

The Contractor shall, in accordance with and subject to the terms of this Contract execute and complete Works in accordance with the Programme and before the expiry of the relevant Period for Completion stated in these documents.

The Contractor shall execute and complete the Works:

- in compliance with the Work’s Requirements.
- with proper skill and care.
- in a good and workmanlike manner in accordance with good building and engineering practice and all relevant building codes and standards.
- utilising good quality new materials and equipment fit for their respective purposes.
- without infringing any patent, copyright or other rights invested in any third parties (and shall fully indemnify the Employer in respect of all costs, liability and expenses arising in the event of any such breach occurring).
- in compliance with the Statutory Requirements; and
- in compliance with the Building Control Act 1990 (and any amendment or re-enactment of such Act) and all Regulations made there under.

The Contractor shall not undertake any modifications in the design, quality or quantity of the Works or the addition, omission or substitution of any work (other than minor modifications, additions, omissions or substitutions which do not adversely affect the standard or quality of the Works) without having notified the Engineer and obtained his prior written approval.

The Contractor shall comply with or ensure compliance with such reasonable directions as may be given by the Engineer from time to time with regard to:

- ensuring that the Works are carried out and completed in accordance with the Works Requirements.

- any discrepancy in or between any of the Works Requirements.
- the removal from the site of any materials or goods brought thereon by the Contractor and the substitution of any other materials or goods, therefore.
- the opening up for inspection of any work covered up.
- the removal and/or re-execution of any works which in his reasonable opinion are not in accordance with the Works Requirements.
- the dismissal from the Works of any person employed thereon who may, in the reasonable opinion of the Engineer be incompetent or guilty of misconduct.
- the amending or making good of any defects.

The Contractor shall ensure that the Works are completed to a standard set out in the Works Requirements.

3.4 BUILDING CONTROL

N/A

3.5 STATUTORY APPROVALS

N/A

4. CONSTRAINTS & REQUIREMENTS

4.1 CONDITIONS OF CONTRACT

The form of Conditions set out in the “Short Public Works Contract- PW-CF 6”.

4.2 PERFORMANCE BOND

Not Used.

4.3 PARENT COMPANY GUARANTEE

NA

4.4 FOREIGN COMPANIES

If the Contractor and/or Guarantor is incorporated outside of jurisdiction of Ireland, the Contractor/ Guarantor will be obliged to provide a legal opinion from a lawyer based in the jurisdiction where the company was incorporated to confirm:

- That the company was properly incorporated, is still in existence and has the necessary power to enter into the transaction in question,
- That the agreement/ deed/guarantee, as executed by the company, has been correctly executed by it and that the document binds the company and is enforceable against,
- That any corporate or statutory procedures required in the jurisdiction in which the company was incorporated (required in relation to the execution of the deed/agreement/guarantee) have been attended to, and
- It is not necessary under the laws of the jurisdiction in order to ensure the validity, enforceability and priority of the obligations and rights of the Client under the agreement that it be filed, registered, or notarised in any public office or elsewhere or that any other instrument relating thereto be signed, delivered, filed, registered or recorded.

This shall be requested from the Contractor prior to award of Contract. Award of Contract shall be dependent on the satisfactory compliance with this requirement.

4.5 TIME FOR COMPLETION

Subject to and in accordance with the Conditions of Contract, the Contractor will be required to complete the Works within the time stated in the Volume B - Tender and Schedule and this document.

4.6 DAMAGES

Liquidated Damages under the Conditions of Contract are as identified in the Volume B - Tender and Schedule.

4.7 COLLATERAL WARRANTIES

Collateral Agreements between the Specialists listed at Section 1F of the Tender and Schedule and the Employer shall be required in accordance with the Conditions of Contract. These agreements shall be in the Model Form included in the Background Information Pack.

Refer to the Tender and Schedule regarding levels of insurance required of the Specialists.

4.8 GENERAL REQUIREMENTS CONCERNING INSURANCE

The Contractor shall include for all insurances required to comply with the Conditions of Contract and Schedule, and such other current relevant insurances, Acts or Statutory Instruments of the Oireachtas.

The Contractor shall provide documentary evidence that all necessary insurances have been taken out and are being properly maintained. The Contractor shall, if requested by the Engineer at Tender stage, provide documentary proof that he has the following insurances: -

1. All Risks Insurance
2. Public Liability Insurance – minimum level of Public Liability for works up to €6.5m limit. Maximum excess €6,500.
3. Employers Liability Insurance – Minimum level of €13m. Maximum excess €10,000.
4. Professional Indemnity Insurance as per the Volume B - Tender and Schedule – The professional indemnity insurance is to be kept in place for 6 years after Practical Completion of the Works is certified by the Employer's Representative. The minimum indemnity limit for professional indemnity insurance shall be €1,500,000 for each and every claim or series of claims arising from the same originating cause annual aggregate limit. The maximum excess shall be €100,000 or 1.5% of turnover (Whichever is less).

These levels shall also apply to Subcontractors requiring Professional Indemnity Insurance.

Please refer to Schedule 1D of the Form of Tender for the minimum indemnity limits (& maximum excesses) required for each of the above.

He shall provide the following details for each of the above policies: -

1. Insurer, Policy Number and Renewal Date.
2. Extent of cover of each policy.
3. Details of any restrictive endorsements and/or warranties on each policy.
4. Limits of indemnity where appropriate for each policy.

All Risks Insurance shall provide cover for 100% of the Contract sum plus additional site clearance and professional fees associated.

The Contractor should note the following requirements should be met at a minimum:

- Their Employers and Public Liability insurance and all policy endorsements to include a notation under their Public Liability insurance that the Council are an Additional Insured, and that those insurances contain a Non-Vitiation clause
- Complete Contract Works All Risks policy schedule covering material damage to the Works and all policy endorsements to include the notation that the Council are a Joint Insured and that the policy contains a Non-Vitiation clause

Insurance costs shall be expressly priced separately in the Pricing Document.

4.9 UNFIXED WORKS ITEMS

NA

4.10 PRICE FLUCTUATIONS

Price fluctuations shall be dealt with in accordance with the Conditions of Contract Clause 4 and the Schedule in Volume B.

The successful tenderer shall when requested by the Engineer submit a detailed list of all materials and equipment for the works along with their basic price at the designated date. The prices quoted shall include for delivery to site and shall exclude all trade or cash discounts.

4.11 PAYMENT TERMS

Payment shall in accordance with the Conditions of Contract Clause 4.

Claims for materials or equipment on site which have not been fitted shall be detailed separately. Unless otherwise agreed by the Employer no payment shall be made for materials or equipment purchased but not delivered to site. Where payment is required and agreed to by the Employer, for equipment or materials stored elsewhere than on the site the Contractor shall be responsible for bonding and insuring such goods and vesting them in the Employers name. The Contractor shall not be reimbursed for any expenses incurred in carrying out the above.

4.12 FINAL ACCOUNT

Final Account payment shall in accordance with the Conditions of Contract Clause 4.

The final account shall not be cleared for payment until the following have been carried out to the satisfaction of the Engineer.

1. Final testing and commissioning.
2. Clearance of all snags or faults as identified by the Engineer.
3. Submission of final approved Record Documentation to the Employer and the Engineer.
4. Mounting of instruction charts, etc., in the appropriate locations.
5. Provision of all tools and accessories necessary for the operation and maintenance of the works.
6. Provision of completed Safety File in accordance with Section 3.2
- 7.

4.13 RETENTION

Retention on all payments shall in accordance with the Conditions of Contract Clause 11.3 and the Schedule at Volume B.

4.14 VALUE ADDED TAX

Value Added Tax shall be as per Clause 4 of the Conditions of Contract.

4.15 SCHEDULES AND FORM OF TENDER

The Schedules and Form of Tender shall be completed and shall be returned to the Client as per the Instructions for Tendering Particulars, via the E-Tenders Portal. Hard copy returns will not be accepted, and tender submissions must be through e-tenders at the dates and times outlined in the ITT document.

4.16 DATE FOR POSSESSION

The Date for Substantial Completion of the Works shall be included on the programme and shall be as specified in the Schedule at Volume B and shall be deemed to be the last day of that period, starting on the Contract Date.

4.17 DATE FOR COMPLETION

The Date for Practical Completion of the Works shall be included on the programme and shall be as specified in the Volume B - Tender and Schedule and if the Volume B - Tender and Schedule states a period, the last day of that period, starting on the Contract Date.

4.18 PROGRAMME CONTINGENCY

The Programme Contingency shall be as outlined in the Schedule at Volume B and Clause 9.4 of the Conditions of Contract. This shall be presented on the Contractor's programme.

4.19 DISPUTE RESOLUTION

Disputes resolution procedure shall be as set out in Clause 15 of the Conditions of Contract.

4.20 PAY AND CONDITIONS OF EMPLOYMENT OF WORK PERSONS

The Contractor shall prominently exhibit copies of this Clause for the information of persons at the Site. In this clause, "worker" means an individual employed by, or otherwise working for, the Contractor or the Contractor's Personnel on or adjacent to the Site.

Pay and Conditions of Employment Certificate shall be in the Model Form included in the Background Information Pack.

The Contractor shall ensure that the rates of pay and the conditions of employment, including pension contributions, comply with Clause 7 of the Conditions of Contract and all applicable laws and that those rates and conditions are at least as favourable as those for the relevant category of worker in any employment agreements registered under the Industrial Relations Acts 1946 to 2015. This applies to workers who are posted workers (within the meaning of Directive 96/71/EC of the European Parliament and the Council of the 16 December 1996 concerning the posting of workers in the framework provision of services), except that the Contractor's obligation to make pension contributions under registered employment agreements does not apply to posted workers who already contribute, or whose contributions are paid, to a supplementary pension scheme established in another member state of the European Union. The obligations in this clause apply regardless of what rates the Contractor has tendered for adjustments to the Contract Sum.

The Contractor shall in respect of:

- (i) workers employed by, or otherwise working for, the Contractor and

- (ii) all other workers, ensure that their employers, or the persons for whom they are working,

Do all of the following:

- (1) Pay all wages and other money due to each worker
- (2) Ensure that workers' wages are paid in accordance with the Payment of Wages Act 1991 and are never more than 1 month in arrears or unpaid
- (3) Pay all pension contributions and other amounts due to be paid on behalf of each worker
- (4) Make all deductions from payments to workers required by Law, and pay them on as required by Law
- (5) Keep proper records [including time sheets, wage books and copies of pay slips] showing the wages and other sums paid to and the time worked by each worker, deductions from each worker's pay and their disposition, and pension and other contributions made in respect of each worker, and produce these records for inspection and copying by any persons authorised by the Employer, whenever required by the Employer
- (6) Produce any other records relating to the rates of pay, pension and other contributions, deductions from pay and their disposition, conditions of employment of, rest periods, and annual leave for inspection and copying by any persons authorised by the Employer, whenever required by the Employer
- (7) Respect the right under law of workers to be members of trade unions
- (8) Observe, in relation to the employment of workers on the Site, the Safety, Health and Welfare at Work Act, 2005 and all employment law including the Employment Equality Act 1998, the Industrial Relations Acts 1946 to 2004, the National Minimum Wage Act 2000, and regulations, codes of practice, legally binding determinations of the Labour Court and registered employment agreements under those Laws.

The Employer shall be entitled to make random checks requiring production of records

If the Employer so requests, the Contractor shall, within 5 working days after the receipt of the request, give to the Employer a statement showing the amount of wages and other payments due at the date of the request to and in respect of each worker, or, in respect of workers not employed by or otherwise working for the Contractor, ensure that their employer or the person for whom they are working does the same.

The Employer may seek information under this Clause only for the purpose of ensuring the obligations referred to in this Clause to workers have been properly discharged. All documents and records received shall be returned to the person providing them or destroyed if the Employer is satisfied that the relevant employer has complied with legal obligations to workers.

If the Contractor has not complied with this Clause, the Employer shall [without limiting its other rights or remedies] be entitled to estimate the amount that should have been paid to workers and contributions that should have been made on their behalf, and the Employer may deduct the estimated amount from any payment due to the Contractor, until the Employer is satisfied that all proper amounts have been paid.

The Contractor shall give the Employer's Representative with each interim payment claim, a certificate in the form in the Relevant Background Information, that, in respect of the work to which the interim payment claim relates, the Contractor has complied in full with this Clause. If the Contractor does not comply with this Clause, it shall pay to the Employer any costs the Employer incurs in investigating and dealing with the non-compliance.

The Contractor shall ensure that in the event of an official of a trade union which is Party to a registered employment agreement affecting workers having concerns in relation to the Contractors or Contractor's Personnel's compliance with the agreement, that official will have access to a designated member of the Contractor's management who shall engage constructively to resolve all matters at this point.

4.21 CONFIDENTIALITY AND SECRECY

All documents issued and information given to the Tenderer shall be treated by him as confidential.

The Employer and the Employers Representative shall keep confidential the Contractors rates and prices in the Pricing document.

4.22 VARIATIONS AND DELAYS

The Volume B - Tender and Schedule and Amendments to the Conditions of Contract list the events which may be classed as a Variation or Delay.

4.23 REQUIRED CONTRACTOR SUBMISSIONS

The procedure for Contractor Submissions shall be as set out in the Conditions of Contract and Instructions for Tenderers Documents.

Without prejudice to the conditions of contract whenever the contract requires that a document or a proposed course of action be submitted to the Employers Representative, the following shall apply:

1. The Contractor shall give the document or a statement of the proposed action and all necessary supporting information to the Employer's Representative.
2. The Employer's Representative may [but is not bound to] make a written objection to a Contractor's submission, giving reasons.
3. The Employer's Representative may request additional information.
4. The Employer's Representative's period for objection is 10 working days from when the Employer's Representative has received from the Contractor enough information to make a purposeful review of the matter submitted should it wish to make one.
5. The Contractor shall apply in writing for any reduction of the period that it considers desirable in the interests of the Works, which the Employer's Representative may agree if it thinks fit.
6. The Employer's Representative may alter or withdraw an objection.
7. The Contractor shall not implement any submission before the period has ended, or contrary to any outstanding objection given within the period.
8. The Contractor shall make a new submission to meet any objection given within the period.

9. The Contractor shall also make new submissions as necessary to perform its duties under the Contract [whether or not it has received any objection], and in particular so that its submitted programme shows actual and current planned progress.
10. The Employer's Representative may object on the grounds that to proceed according to the submission:
 - a) would not comply with the Contract or
 - b) would have an adverse effect on the Employer or the public interest or
 - c) would impose an obligation on the Employer that the Contract does not require the Employer to bear or
 - d) would be contrary to a Legal Requirement or
 - e) would have an adverse effect on the Contractor's ability to comply with the Contract

or any other ground stated in the Contract.

Neither the Employer's Representative's rights to object, nor objections or their absence, reduce any of the Employer's Representative's other powers, or reduce any of the Contractor's responsibilities.

4.24 PROGRAMME

Before the Date for Commencement, the Contractor shall submit to the Employer's Representative a detailed programme having regard to the requirements of the Inspection Plan and Inspection Notification Framework.

If there is a programme in the Works Proposals that complies with the Contract, the Contractor shall submit that programme, with any required additional information [such as the actual programmed dates and any Inspection Plan requirements]. Sub-contractor or detailed programmes may also be requested for critical items/elements of the works.

The programme shall be of a quality that will permit effective monitoring of the Works and shall, unless agreed with the Employer's Representative include details of all of the following:

1. When the Contractor will require any instructions, Works Items or other things to be given by the Employer, or anything else the Contract requires the Employer, the Employer's Representative or others to give the Contractor.
2. The order in which and times at which the Contractor proposes to execute the Works, including details of procurement, manufacture, delivery, installation, construction, testing, commissioning and trial operation of Works Items and the sequencing and timing of inspections and of tests
3. When Contractor's Documents will be submitted to the Employer's Representative
4. Work to be carried out at the Site by Employer's Personnel and others as provided in the Works Requirements
5. Current critical path, critical resources, floats and other flexibility
6. when the Contractor will require any instructions, Works Items or other things to be given by the Employer, or anything else the Contract requires the Employer, the Employer's Representative or others to give the Contractor
7. the Contractor's estimate of each category of Contractor's Personnel and Contractor's Things expected to be on Site for each period

8. details of last review made of programme logic and durations, and of the purposes of any changes
9. anything else required by the Works Requirements.

The Contractor's programme shall allow the required periods of time for the Employer and the Employer's Personnel to comply with their obligations under the Contract.

The program shall include for all constraints identified in the contract documents. The contractor shall track this program and provide updated revisions at progress meetings.

The program of works will be set out in as timely and efficient manner as possible however the contractor shall understand there may be certain areas and/or time periods that will be out of bounds and may require reallocation of resources to accommodate this.

An electronic version of the programme shall also be supplied at the same time which shall be an intelligible digital source format for input into programming software such as MS Project or equivalent approved. The Gantt chart shall show all items in the programme, without hidden or rolled-up sections. The critical path shall be clearly shown on the programme. The programme shall be supported by bar charts for particular activities or time scales at the request of the Employer's Representative.

All revisions and / or updates to the programme and data relating to the programme shall be provided to the Employer's Representative in both hard copy (A1) and approved electronic format.

If the Contractor's programme most recently submitted to the Employer's Representative does not correspond with actual or reasonably projected progress or the Contractor's obligations, the Contractor shall, if so directed by the Employer's Representative, submit to the Employer's Representative a revised programme that complies with this sub-clause and the other provisions of the Contract, showing actual progress and progress projected by the Contractor. If the Contractor asserts that it is not possible to reach Practical Completion of the Works or a Section by its Date for Practical Completion, the revised programme shall show Practical Completion by the earliest possible date. [Neither the programme nor its review will limit the Contractor's responsibility or liability for the delay.] If the Contractor fails to submit the revised programme within 10 working days of a request from the Employer's Representative, the Employer shall be entitled to withhold from the Contractor 15% of any payment to be made to the Contractor until the revised programme is submitted.

4.25 PRE-APPOINTMENT INFORMATION

Prior to the award of a contract the Contractor shall submit to the Employer Representatives for his approval:

- a method statement and detailed network diagram showing the proposed phasing and logic linking the various construction activities and allow for any necessary revisions following discussions with the Employer and the ER
- an overall works programme and detailed works programme based on the network diagram and allow for any necessary alterations based on comments by the Employer and the ER. These programmes shall be updated by the Contractor regularly and accurately, particularly as reasonably requested by the ER

- provide detailed resource statement (on a similar time based to programmes) for the key trades and sub-contractors based on foregoing developed programmes
- update tender method statements in light of development of the network analysis and programmes and allow for any proposed alterations to information supplied pre-contract
- schedules of approvals, information/drawings required all in accordance with the Programme. Include for agreeing times to allow for submissions and approval before the related work commences

Detailed designs calculations as required for comment by ER - connection details to steel, precast bridge etc.

The Contractors management proposals for the project shall be agreed with the Employer prior to the placing of the Contract, and the agreed arrangements shall be recorded in Minutes of Understanding which shall form part of the Contract Documentation

4.26 PRICING DOCUMENT

The Employer has provided a Pricing Document for completion by the Tenderer and returned as the pricing document (Volume C).

The Contractor shall, as part of this tender submission, submit a fully priced and completed Volume C – Pricing Document.

The measurement of quantities shall be based on the Agreed Rules of Measurement (ARM 4) as agreed between the Construction Industry Federation and the Society of Chartered Surveyors or other standard method of measurement agreed with the Employers Representative.

The rates in the Pricing Document shall be used for assessing interim payment valuations, as well as determining adjustments to the Contract Sum in accordance with Clause 4.

If the Contractor believes there to be an error in the calculation of quantities in the Volume C Pricing Document, this should have been notified through a tender clarification of the error.

Amounts must be included wherever required in the Schedule and the Pricing Document. All items in the Pricing Document must be priced. The Pricing Document must not contain negative rates or prices, or omit rates, or use zero rates. Blank spaces, the terms 'nil', 'included', dashes or the like must not be used, and Contractor will be required to break out costs as per the Pricing Document line items. Where zero is a permitted entry, it must be stated as '0.00'. Each amount must properly cover the full inclusive value of the work to which the amount relates.

4.27 SITE MEETINGS

When so requested by the Employers Representative, the Contractor shall attend site meetings which shall be held at regular intervals. He shall also attend the Employers Representative on site when so requested.

The Contractor shall submit, at each site meeting a report detailing progress of the works (% complete of each element of the work), current and projected labour force, delays and reasons for same and concerns, if any, relating to future progress of the works, all in a format acceptable to the Employers Representative.

4.28 PROGRESS REPORTS

The Contractor shall submit progress reports at progress meetings to the agreement of the Employer's Representative in accordance with the following:

1. The Contractor shall give the Employer's Representative, monthly progress reports from the Date for Possession until the Contractor has completed all work outstanding on Practical Completion of the Works. The first report shall cover the period from the Date for Possession up to the end of the month in which it occurs, and each subsequent report shall cover one month. The Contractor shall give each progress report within 7 days after the end of the month it relates to. Each progress report shall be in a form agreed by the Employer's Representative.
2. Each progress report shall include all of the following, except to the extent that the Works Requirements say, or the Employer's Representative agrees that any of the following may be omitted:
 - (1) a detailed description of progress of each stage of the Works against the Contractor's current programme
 - (2) the names of Specialists and the off-site suppliers of the main Works Items, and progress and location of the design, manufacture, fabrication, delivery, installation, testing and commissioning of Works Items
 - (3) details of the Contractor's Personnel and Contractor's Things on the Site
 - (4) Status of preparation and review of Contractor's Documents
 - (5) copies of quality assurance documents and test results and certificates
 - (6) details of when any instructions to be given by the Employer's Representative will be required, and any that are outstanding
 - (7) details of when any Works Items or other things to be given by the Employer will be required, and any that are outstanding
 - (8) details of any Delay Events and Variations that have occurred during the period, or are unresolved, including any disputes referred to dispute
 - (9) Details of forecast final account and updated cash flow forecasts
 - (10) details of any accidents, injuries, hazardous incidents, environmental incidents, labour relations problems and public relations problems concerning or affecting the Works
 - (11) details of anything that might have an adverse effect on the execution of the Works, the steps the Contractor is taking or proposes to take to reduce those risks, and any steps that the Contractor proposes that the Employer or the Employer's Personnel take to reduce those risks
 - (12) anything else that the Contractor considers relevant to a progress report
 - (13) A copy of the Contract Programme with all tasks marked-up with progress as at the meeting date.
 - (14) A look-ahead detailing the main activities to be undertaken or milestones to be reached during the forthcoming 4-week period.

(15) Photographs of construction works.

(16) anything else relevant to a progress report that the Employer's Representative directs.

The first report will be from date of commencement to the end of that month. The final report will be issued upon completion of the works.

The precise content and format of the Contractors Project Progress Report, and the project progress meeting agenda and schedule shall be subject to change by agreement between the Contractor and the Employers Representative.

4.29 METHOD STATEMENTS

The contractor is required to promptly supply method statements to TOBIN as required setting out detailed methods of construction for works including, but not limited to, those specific elements covered by the particular and residual risks outlined in the preliminary health and safety plan. A copy of these method statements shall also be forwarded for review to the PSDP.

The Contractor shall provide Method Statements specifically for Engineering Services installations as follows in addition to those called for elsewhere in this documentation.

- Any Temporary works.
- Phasing of the Works
- Waste disposal and Specialist waste disposal.
- Mobilisation to site, generally and day to day
- Public Protection, Signage and Pedestrian / Traffic Management.
- Making Safe Existing Services.
- Proposed excavations and ground works
- Proposed sequence of operations.
- Proposed erection of structural steel
- External Works including cladding
- Permit to Work proposals in respect of HV and other critical areas.
- Protection of equipment throughout installation and handling.
- Testing and commissioning to be provided 1 month before the start of any commissioning period.
- Additional Method Statements shall be provided as directed by the Employers Representative during the course of the works.

Testing and commissioning (including pipework cleaning, flushing and treatment) – to be provided 1 month before the start of any commissioning period.

Additional Method Statements shall be provided as directed by the Engineer during the course of the works.

4.30 CASH FLOW

Prior to commencing work on site, the Contractor shall submit an indicative cumulative cashflow forecast to indicate the anticipated valuation figures on a month-by-month basis, based on the programme. This shall be updated monthly and shall accompany all interim payment claims.

4.31 NOTICE AND TIME FOR EMPLOYER'S OBLIGATIONS

The Contractor shall give the Employer's Representative at least 10 working days advance notice of the date by which the Contractor requires any instructions that the Employer's Representative is to give, or Works Items or other things that the Employer is to give, including any requirements arising from the Inspection Plan and Inspection Notification Framework.

The latest date for the Employer's Representative to give required instructions, or the Employer to give the Contractor any required Works Item or other thing, shall be the latest of the following:

1. The date stated in the Contract, if any
2. The date shown in the Contractor's current programme
3. The date for which the Contractor first notifies the Employer's Representative under this sub-clause that it is required
4. The date the Contractor requires the instruction, Works Item or other thing in accordance with its actual progress.

4.32 CHANGE CONTROL PROCEDURES

The Contractor shall implement a change control system to actively manage the process of change control.

Changes proposed to Contract requirements must be agreed in writing between the Employers Representative and the Contractor and in accordance with the clauses set out in the contract.

4.33 CONTRACTOR'S DOCUMENTS

All Contractor's Documents shall be in English.

4.34 SUBCONTRACTORS AND SPECIALISTS

The Contractor shall appoint the following Specialists:

- Geotechnical Engineer
- Hydrologist / Water Management Specialist
- Environmental Specialist / Ecologist

4.35 SERVICES FOR EMPLOYER'S FACILITIES

The Contractor is not required to operate or maintain any parts of the site and facilities of the Employer other than for maintenance contracts expressly stated in the Works Requirements.

4.36 SETTING OUT THE WORKS

The Contractor shall set out the works and keep them correct at all times. Errors in his setting out shall be put right by the Contractor at his own expense. The checking of any setting out by the Engineer shall not relieve the Contractor of his responsibility for the correctness thereof.

4.37 ADDITIONAL INFORMATION

Written addenda or additional drawings may be issued by the Engineer up to seven (7) days prior to the date set for submission of tenders, to clarify, modify or otherwise alter the Tender Documents, Conditions of Contract and/or design of the works. Each addendum or

additional or modified drawing so issued shall be taken as forming part of the Tender Documents and any associated cost implications shall be included in the Tender price.

Receipt of each addendum or modified or additional drawing shall be acknowledged immediately in writing. Failure to carry out this instruction may result in non-consideration of the Tender.

4.38 COPYRIGHT

The Tender Documents and drawings are the property of the Employers Representative and any information contained therein is confidential and not for publication and is issued on the understanding that no part thereof shall be copied or communicated to a third party without the permission in writing of the Employers Representative.

4.39 CUSTOMS DUTIES

The Contractor shall be deemed to have included in his Tender for all customs and other duties legally payable at the designated date.

4.40 PATENT RIGHTS AND ROYALTIES

The Contractor shall save harmless and indemnify the Employer, the Architect, and the Engineer from and against infringement of any patent rights, design, trademark or name or other protected rights of any constructional plant, equipment or material used for, or in connection with the works.

4.41 ORDER AND METHODS OF IMPLEMENTATION

Contractor shall have regard to the fact that:

- a) There can be no interference with existing water supplies, drainage systems and other Utilities and supplies must be maintained at all times with the exception of those to be made redundant by the installation of new services. The Contractor must arrange for location of the cables with the assistance of the relevant authority, and he must comply in all respects with the requirements of each authority with regard to the crossing of the services.
- b) The necessity to obtain the necessary Licences or Permits under Planning and other Statutory Regulations and the current Waste Management Acts and Regulations related to the offsite disposal (temporary and permanent) of excavated materials.

Where the contractor proposes to carry out work at night (outside normal 8am to 6pm) this shall first be agreed with the Employers Representative, and the Contractors Rates shall be deemed to include for any night work associated with his proposed method of construction.

The contractor shall include for these constraints in pricing and programming the works.

4.42 REQUIREMENTS FOR NOISE CONTROL AND CLEANLINESS OF SITE

The Employers Representative will not permit the use of jack hammers, compressors or drills at peak times. The Contractor shall take all necessary precautions to ensure the enjoyment of privacy by third parties and shall at all times comply with the requirements of BS 5228, Noise Control on Construction and Open Sites, Part 1 1997 Code of Practice for Basic Information and Procedures for Noise and Vibration Control.

During works in public areas, the Contractor must provide suitable measures to avoid transfer and movement of dust and debris from the works.

Any occurrence of dust, debris or noise must be removed from public spaces immediately by the Contractor and/or upon the request from the Employers Representative.

The Contractor shall employ the best practical means to minimise noise produced by his operations including plant maintenance and shall comply with the recommendations in BS5228 2009 (Noise Control on Construction and Open Sites). Plant and machinery used on site shall comply with the EC (Construction Plant and Equipment) (permissible Noise Levels) Regulations, 1988 (SI No. 320 of 1988)

All vehicles and plant used on the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order for the duration of the works in compliance with BS 5228. Machines in intermittent use shall be shut down in the periods between works or throttled down to a minimum. The Contractor shall remove from the works any item of plant which in the opinion of the Employer's Representative is ineffectively silenced. All compressors shall be "sound reduced" models fitted with properly lined and sealed acoustic covers and shall be kept closed whenever the machines are in use. All ancillary percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Pumps and mechanical static plant shall be enclosed by acoustic sheds or screens were directed by the Employer's Representative.

Any plant such as generators and pumps required to work outside the hours of 0800 hours to 2000 hours shall be surrounded by an acoustic enclosure to the approval of the Employer's Representative.

The Contractor shall organise his operations with regard to the positioning of plant and the location of access routes etc., so it minimises construction noise to residential areas.

The Contractor shall be required to monitor adjacent areas for noise pollution and shall minimise noise levels to the satisfaction of the Employers Representative.

The Period referred to as "night" shall be from 2000 hrs to 0800 hrs for all works.

4.43 BUILDERS WORK

Unless indicated otherwise the Contractor shall provide for the marking out, construction and supervision of all builder's work in connection with the Contract and were deemed necessary by the Engineer shall provide Builder's Work Drawings, in accordance with Section 3.50 "Working Drawings".

The Contractor shall provide for all construction requirements with regard to structural supports, chases, recesses, holes, trenches and pipe ducts to ensure that the work may be correctly executed, and subsequent alterations avoided.

The Contractor shall provide all structural support requirements for all main items of plant including plinths, equipment supports, pipework, switchgear, control panels, fittings and fixtures etc and shall provide for major cores and opes (including fire stopping) in floor slabs, roofs and walls for M&E installations.

The Contractor shall be responsible for forming and making good (including making good of any acoustic and fire rated measures) of all opes required.

4.44 WORKING DRAWINGS

The term "Working Drawings" shall be deemed to include drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data and material of a similar nature required to explain in detail the works covered under this Contract.

The Contractor will be required to provide necessary Working Drawings in connection with the works. These shall include drawings prepared by the Contractor and those provided by suppliers and sub-contractors. The Engineer's decision in regard to the requirement for working drawings will be final. The Contractor shall be responsible for obtaining the requisite drawings from suppliers and sub-contractors to facilitate the works and to adequate level of detail to allow the ER and design team make appropriate decisions.

The Contractor shall include for updating/amending the tender drawings as required due to building changes and/or layout changes requested by the Employers Representative.

Working Drawings shall be prepared to an approved scale. In general, the following scales are considered acceptable although specific instances may require different scales: -

- Key Plans/Site Plans	1:100/1:200
- General Arrangement/Layout	1:50
- General Cross Section/Elevations	1:50
- Roof Plans	1:100
- Switch and Plant Room Plans/Sections	1:20
- Details	1:20/1:10

Within one (1) week of receipt of notice to proceed (Letter of Intent or Order, as the case may be) the Contractor shall produce a Schedule of Working Drawings, indicating Drawing No; Title and Scale of each drawing proposed and detailing scheduled dates for issue of each drawing. The schedule/programme for issue of drawings shall take cognisance of the construction programme and the needs of interfacing trades and make do allowance for the review process.

The Contractor shall consult the current relevant drawings of other trades and services during the preparation of the Working Drawings and shall co-ordinate with the Engineer for interfacing trades to the extent necessary to ensure that his works are fully co-ordinated into the works. The Contractor should note that the responsibility for the production of co-ordinated services drawings/details rests with the Contractor.

Drawings shall be prepared on standard "A" size sheets. Drawings must be prepared using an approved Computer Aided Drafting (CAD) system compatible with the current release of AutoCAD.

The Contractor shall submit to the Engineer two (2) copies of each drawing for each review submitted. One (1) disc and six (6) prints shall be issued of each "Approved for Construction" drawing.

Drawings will be returned to the Contractor after review marked as follows: -

Status A:	Approved for Construction
Status B:	Modify/Revise as indicated. Work may proceed provided comments are incorporated.
Status C:	Not Approved: Revise and resubmit incorporating comments as indicated.

Status B and C drawings shall be resubmitted with comments incorporated.

Delays resulting from drawings being rejected (Status C) because same were incorrect, incomplete or otherwise inadequate, shall not be considered as justification for an extension of time.

The Engineer's approval shall be only for conformance with the design concept of the works and for compliance with the information given in the Contract Documents and shall not extend to means, methods or construction procedures.

4.45 INSTRUCTION OF STAFF

Upon completion of the installation the Contractor shall provide competent personnel to instruct the Employer's staff in the proper use and maintenance of all apparatus and equipment supplied under his Contract.

The Contractor shall be responsible for ensuring that any specialist system suppliers provide the necessary instruction of the Employer's staff in the use of their equipment.

The Contractor shall include in his tender for 2 No. separate post completion visits to site for tenant staff instruction.

4.46 EXISTING SERVICES

The Contractor's attention is drawn to the fact that there may be existing services in the vicinity of the proposed works. These services may include ESB cable, Eircom cable, Gas Mains, Watermains, Surface Water and Foul Sewers and other Ducts and Pipelines, Cables, Culverts, Land Drains etc. No claims shall be entertained from the Contractor on the failure of the Engineer to properly and accurately indicate the positions of services.

4.47 HAZARDOUS CONSTRUCTION WASTE

The Waste Management (Hazardous Waste) Regulations (1998) implement provisions relating to hazardous waste. The collection and transfer of Hazardous Wastes are governed

by separate legislation this being the Movement of Hazardous Waste Regulations, 1998. These Regulations set down procedures to track and monitor the movement of hazardous waste and make the local authority in whose functional area the waste originates responsible for the supervision and control of the waste.

Disposal of hazardous waste can only be undertaken at a licensed hazardous waste facility. Transfer of the hazardous material off-site requires the Contractor to obtain a waste collection permit and a consignment note (C1 Form) from the local authority. Refer also to the health & safety plan.

4.48 FALL PROTECTION

The Contractor shall provide for all necessary fall protection devices and equipment to enable the Contracting staff to carry out their work in a safe and orderly manner. The Contractor shall also take cognisance to provide for all necessary protection devices and equipment to ensure that the staff and general public are protected from falling debris, slips or falls during construction. The Contractor shall also provide for removing all such equipment and reinstatement of building surfaces where damage has been caused to the building fabric. Refer also to the health & safety plan.

4.49 HAND OVER AND PRACTICAL COMPLETION

The Contractor shall include a specific time period in the construction programme for the commissioning of the Works including all building services and energy systems. This period shall precede the issuance of the Sectional Completion Certificates for the various elements of the Works.

The Contractor shall not be permitted or allowed a separate snagging period or Defects Liability Period for completed Works.

The Date for Sectional Completions will be as stated in the Contract Documents or as mutually agreed between the Employer's Representative and the Contractor. In order to avoid the Project being offered prematurely, the Contractor shall firstly snag the works and send one set of the snagging list to the Employer's Representative for information. The Contractor shall confirm to the Employer's Representative in writing that all snags have been satisfactorily completed. The Contractor shall with the Employer's Representative inspect the Works for Defects not less than two weeks prior to the programmed or anticipated dates for Sectional Completion.

The Contractor shall, if required by the Employer's Representative, at times of the year subject to frost, drain down all water storage and heating installations as may be necessary to protect the same from frost damage; the Contractor must also allow for re-filling and testing prior to the dates for Completion.

Prior to the date for Sectional Completion the Contractor shall ensure that the Works are thoroughly clean, inside and outside, with all splashes, deposits, rubbish and surplus materials removed and all this cleaning must be completed prior to the Works being offered for snagging review.

The Contractor shall ensure the following is undertaken prior to the date for Practical Completion and shall ensure that written confirmation of these activities is provided to the Employer's Representative prior to the Date for Completion:

- All painted surfaces: minor faults to be touched up, carefully matching colour and brushing out edges. Badly marked areas to be repainted back to suitable breaks or junctions.
- All moving parts: to be adjusted, eased and lubricated on all doors, windows, drawers, ironmongery, controls and other moving parts as necessary to ensure easy and efficient operation.
- All services must be complete, operational and, where metered, the Contractor shall ensure that a final reading shall be taken by the relevant statutory undertaker at the Date for Completion and the Contractor shall be responsible for the payment of all charges up to this time.
- All signs, nameplates and numbers shall be fixed in place.
- All drainage completed and connected to the sewer.
- Any roads, footpaths and sewers to be adopted, shall be completed to the local authority's adoption requirements and the completion requirements shall not be deemed to have taken place until either the local authority adopt the Works or indicate that they will be adopted at the end of the Defects Liability Period. All roads and footpaths shall be completed, including the final surfacing wherever possible and practicable. All fencing, walls, lighting and external works shall also be completed. All turfing and landscaping shall also be completed as far as the season will permit and where and only with the Contracting Authority's agreement the final turfing or planting cannot be completed, the topsoil shall be spread ready for completion.
- A complete Safety File in accordance with the Regulations shall be issued at Practical Completion with a draft Safety File being offered to the Employers Representative at least three weeks before Practical Completion for comment. Retention in the sum of an additional 15% of monthly claim for payment will be withheld from the Contractor until safety file is received in full and to the satisfaction of the Employers Representative and PSDP.

The installation shall not be deemed complete until the following have been carried out to the satisfaction of the Employers Representative.

1. The satisfactory completion of all testing and commissioning as specified elsewhere in this document.
2. The provision of all spare parts and tools necessary for the satisfactory operation of the works.
3. Provision of instruction charts and diagrams affixed to the wall as specified.
4. Provision of complete Record Documentation which has been approved by the Employers Representative.
5. The instruction of the Employer's staff in the operation of the plant.

4.50 ACCESS ROUTES

All existing access routes to and within the sites will be maintained and used by the contractor for the duration of the works.

4.51 RECORD DOCUMENTATION / AS CONSTRUCTED DRAWINGS

The Contractor shall provide two (2) weeks prior to Practical Completion of the Works, a complete draft of the Record Documents finished in all details to the Employers Representative's satisfaction, except final test certificates, commissioning results etc. which may not yet be available. The Contractor is advised that great importance will be placed upon quality, accuracy, clarity and completeness of the Record Documents and upon their being made available promptly. The half release of retention monies will not occur until the as constructed drawings and safety file are submitted and approved by the ER.

In the event that the Contractor does not satisfactorily provide the draft and/or completed manuals in a timely manner he shall be responsible for the day-to-day operation of the plant, at his cost until such time as the manuals are approved and issued.

The Contractor shall demonstrate from time to time, as required by the Employers Representative throughout the execution of the Works, that an adequate and accurate record of the work as it proceeds is being maintained and that the Record Documents are themselves being progressively compiled as the work on site proceeds.

Record Documents shall comprise the following: -

1. Record drawings and schedules.
2. Testing, commissioning and performance proving reports.
3. Operating and maintenance instruction (manuals).

The Record Documents shall be adequate for the following purposes: -

- To record clearly the arrangements of the various sections of the works as actually installed and to identify and locate all component parts thereof.
- To make it possible to comprehend the extent and purpose of the works and method of operation thereof.
- To set out clearly the extent to which maintenance and servicing is required and how, in detail, it should be executed.
- To set out clearly trouble shooting and fault identification/rectification procedures.
- To provide sufficient and readily accessible information to facilitate the proper ordering of spares and replacements.

The Record Documents shall be correlated so that the terminology and the numerical and/or other references used therein are consistent with and similar to those used in the physical identification of component parts of the Works.

Operating and Maintenance Instructions/Data shall be provided by the Contractor and shall comprise the following, as applicable, written to be read in conjunction with the Record Drawings.

- A general description of the scope, purpose and manner of working of the works as a whole.
- A detailed description of the scope, purpose and manner of working of each system or apparatus forming part of the works.
- Data on general design parameters and associated normal operating conditions, based on commissioning tests.
- Clear and comprehensive instruction for the starting up, running and shut-down of each system or apparatus.
- Clear and comprehensive instructions for dealing with emergency conditions for each system or apparatus.
- Instructions in respect of any precautionary measure from time to time necessary.
- Instructions in respect of the care of all apparatus.
- Instructions as to the nature, extent and frequency of servicing necessary to properly maintain the works in good condition and as to the materials to be used for that purpose. This information may be supported in detail but not replaced by the supplier's data for particular component apparatus.
- The names and addresses of suppliers and local agents of all major components of the Works as may potentially be required for servicing or to obtain spare parts or replacements.
- List of spare parts along with associated catalogue numbers.
- Circuit identification charts for all valves, equipment, switchgear, distribution boards, etc.
- Colour coded wiring diagrams for all equipment and specialist systems provided.
- Copies of all warranties and service contracts.
- Copies of test certificates and/or reports on specialist systems or equipment carried out at the manufacturer's works and/or on site.
- Copies of all type test certificates for equipment installed under the Contract.
- Copy of the final completion certificates duly completed.
- Manufacturers data; including their manuals, catalogues, together with parts identification and recommended spare parts' lists. Only data relevant to the works shall be included. Where non-relevant data appears on the same sheet it shall be clearly marked to indicate that it is not applicable.
- Names and addresses of manufacturers and their agents.

The Operating and Maintenance Manual shall be divided into sections as required by the extent of the works. A detailed index of contents shall be provided.

For each section a detailed description of each system shall be provided sub-divided to contain:

- System description.
- Equipment schedules.
- System schematics/flow diagrams.
- System operating procedures.
- System and system component maintenance and troubleshooting data.
- System commissioning test results/data.

Copies of manufacturer's data shall be included, indicating the method of operation and individual maintenance instructions. Such data shall be indexed and cross-referenced to the Operating and Maintenance Manual and presented in dedicated folders.

The Record Drawings shall show the layout of the works as installed and the drawings shall be generally similar to the Contract Drawings. All equipment thereon shall be clearly identified.

Pipework, Cable runs, sprinkler, conduit and trunking routes, etc., shall be clearly shown.

Schematic diagrams for pipework systems and circuit diagrams, for all equipment supplied under the Contract, including any amendments that may have been made shall be included.

Copies of relevant electrical wiring diagrams shall be included in the Electrical Manuals.

Unless otherwise permitted by the Employers Representative separate drawings shall be provided for each system/installation.

Record Drawings of the installed works shall be prepared on AO or A1 size metric sheets and shall be original drawings prepared by the Contractor. Drawings shall be prepared using an approved CAD system compatible with AutoCAD (current release). The use of the Employers Representative's base drawings is permitted provided same are available, but the Contractor shall incorporate all building changes which may have occurred.

Lettering of drawings shall be minimum 2.5 mm high, and each drawing shall be provided with a title block approved by the Employers Representative.

A copy of each vendor (supplier, manufacturer or specialist sub-contract) drawing shall be provided. Where these drawings are prepared using CAD an AutoCAD (current release) compatible disc shall be provided also.

An outline of the Record Documents detailing proposed contents (list of sections) and list of proposed Record Drawings shall be submitted for review and approval at least eight (8) weeks prior to the scheduled date for Practical Completion.

Draft copies of all Record Drawings and Operating and Maintenance Manuals shall be made available in advance of the Completion Date in order that the Employers Representative has the opportunity to comment and that the Contractor shall have time to make corrections and amendments and still make available at the time of the signing of the Certificate of Practical Completion a complete and final package of Record Documents.

One copy of the outline and draft Record Documents shall be submitted for the Employers Representative's review. Further draft copies may be requested and shall be provided at no extra cost should the Employers Representative feel that the initial draft is inadequate. The final issue of the Record Documents shall comprise: -

1. Record Drawings and Schedules
 - a. 2 No - Original of each drawing including vendor drawings.
 - b. 3 No - CD-R disc(s) in respect of the above drawings which shall include a detailed drawing schedule.
 - c. 2 No - Half Scale copies of each of the above drawings with Title/Index Sheet, bound into sets with acetate front and back covers.
 - d. 1 No - Copy of system schematics, wiring diagrams, etc., mounted on board and heat sealed. These shall be mounted in agreed position in plant rooms, switch rooms etc.
 - e. 3 No - Copies of equipment schedules.
 - f. 3 No - Copies of Test Certificates, Commissioning and Proving Test results and reports.

(The latter two items to be on CD ROMs in PDF format and/or Microsoft Office suite (non-writable) format and/or AutoCAD format. They shall be identified with the project title, the Contractor's name and contents title).

2. Operating and Maintenance Instructions (Manuals)
 - a. 3 No - Copies, each on CD ROM readable using PDF files, Microsoft Office suite and/or AutoCAD. They shall be identified with project title, the Contractor's name and contents title.

The Contractor is referred to "The Building Services Research and Information Association (B.S.R.I.A.) Application Guide" Operating and Maintenance Manuals for Building Services Installations" by J.H. Armstrong as a guide to the organisation and preparation of the Record Documents.

A copy of the record documentation shall also be forwarded for review to the PSDP. The cost of such construction records shall be deemed to be included in the Contractor's rates generally.

4.52 EMPLOYERS REPRESENTATIVE INSPECTION

Before proceeding with work that will cover and conceal previous work, or allowing other trades to do so, the Contractor shall give early notice in writing to the Employers Representative and shall afford him the opportunity of inspecting the previous work. Approvals given at such inspections will not relieve the Contractor from full responsibility for the quality of the work throughout. Works covered in without notice shall be exposed as directed by the Employers Representative at the expense of the Contractor.

The Employers Representative and any person authorised by him shall, at all times, have access to the works and the site and to all workshops and places where work is being prepared or where materials, manufactured articles and machinery are being obtained for the works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access

4.53 TESTS ON COMPLETION

The Contractor shall propose a detailed programme and schedule for testing and commissioning for mutual agreement with the Employers Representative. The detailed proposal shall individually identify each element of the Works, the associated testing criteria, testing standard to be achieved, testing standard achieved, comment and any other relevant information. The information included within the testing schedule should include all elements of the Works to prove compliance with the Works Requirements.

The Employers Representative will be afforded the opportunity to witness all testing and commissioning accordingly. In addition, the Employers Representative shall be afforded the opportunity to request, and witness, up to 10% of the mechanical and electrical testing to be repeated.

As part of the testing and commissioning process, selected tests will be carried out to prove that the engineering services are capable of achieving the specified performance criteria set out in the Works Requirements.

If, in the opinion of the Employers Representative, the tests are being unduly delayed, he may by notice in writing call upon the Contractor to make such tests within ten days from the date of the said notice and the Contractor shall make the said tests on such day within the said ten days as the Contractor may fix and of which he shall give notice to the Employers Representative. If the Contractor fails to make such tests within the time aforesaid the Employers Representative may proceed to make arrangements to have the tests carried out by a specialist company selected by the Employers Representative. All tests so made by this specialist shall be at the risk and expense of the Contractor.

If any portion of the works fails to pass the test, tests of the said portion shall, if required by the Employers Representative or by the Client, be repeated within a reasonable time upon the same terms and conditions, save that all reasonable expense to which the Employer or the Main Contractor may be put by the repetition of the tests shall be deducted from the Contract Price.

An allowance is to be made by the contractor for the certification of each work element. The works description and specification outline the design intent of all works areas. It is the responsibility of the contractor to achieve the requirements of the design intent.

4.54 DEFECTS PERIOD

All items of work, plant, equipment, apparatus or materials supplied under this Contract, whether of the Contractor's own make or supplied by a Sub-Contractor or nominated supplier, shall be guaranteed against faulty workmanship or materials for a period of at least twelve (12) months from the date of the Certificate of Substantial Completion of the Contract.

If any equipment or part thereof shows signs of weakness owing to faulty design, materials or workmanship, or to neglect on the part of the Contractor, or which, in the opinion of the Engineer is unsatisfactory, the Contractor shall repair or remove such equipment or articles and substitute others for them if the Engineer thinks fit. The Contractor shall bear all the costs thereof.

The cost of making good any defects which may arise from fair wear and tear or from want of proper care or management by the Employer in the running of the plant shall be excluded from this guarantee.

The Contractor shall include in his tender price for the following attendances during the Defects Liability Period:

1. Immediate attention to emergency calls (Within 4 Hours) by a competent Engineer.
2. Carry out 3 No. comprehensive examinations of the installation including checks on operation of all safety devices in conjunction with the Clients Representative or Facility Manager.

One examination at 3 months operations and 6 months operations and at the end of the Defects Liability Period.

All defects shall be rectified so that an inspection may be carried out prior to the issue of a Final Certificate.

An allowance is to be made by the Contractor for the certification of each work element.

4.55 ASSESSMENT / AWARD OF TENDERS

The assessment / award of tenders shall be carried out in accordance with the appropriate Clauses of the Instructions to Tender.

5. QUALITY ASSURANCE AND TESTING

5.1 QUALITY ASSURANCE

The Contractor shall establish and implement quality assurance procedures including procedures for establishing quality assurance systems for itself and Subcontractors. The quality assurance procedures shall be reflected in appropriate quality plans submitted to the Employer's Representative. The Contractor shall give the Employer's Representative copies of all reports prepared in accordance with the Contractor's quality assurance procedures. The Employer's Representative may monitor, spot check and audit the Contractor's quality assurance procedures.

The Contractor shall establish and implement quality assurance procedures for the following:

- a) Storage and handling of material specified for the Contract.
- b) Taking of samples for testing.
- c) The level of compliance with Regulations and Manufactures Instructions.

5.2 SAMPLES AND APPROVALS SCHEDULE

The successful Contractor will be required to prepare a detailed sample submittal and approval schedule for issue to the Employers Representative for consideration within two weeks of the date of execution of the Contract.

The Contractor shall provide all samples of work as may be reasonably required by the Employers Representative together with any cost of supplying equipment for site testing and sampling to establish a standard approved by the Employers Representative. The cost of all reasonable tests is deemed to be included in the rates tendered in this document.

The Contractor shall agree and maintain complete and current inspection and test procedures with the Employers Representative prior to commencement of the works.

The Contractor shall supply, at this own expense, samples of all materials manufactured articles and executed work which the Employers Representative may request for approval before adoption. Such approval shall not relieve the Contractor from responsibility for any defects.

The Contractor shall supply materials at his own expense, for all tests required by the Specification and such tests as the Employers Representative may direct under the Conditions of Contract and execute all necessary arrangements, notices, removals and reinstatement in connection with such tests. Copies of the test results shall be issued directly to the Employers Representative.

Samples which have been installed in position may be retained as part of the works provided they have been approved by the Employers Representative.

The Contractor shall submit one submission or sample of each proposed product for consideration by the Employers Representative. Only this shall be reviewed by the Employers Representative. If additional submittals are presented for review, the Employers Representative shall be compensated for reviewing additional submittals.

Where in the opinion of the Employers Representative the samples submitted are not of an acceptable standard or are unsuitable for use in the proposed circumstances, he shall have the right to instruct the Contractor to obtain an alternative material or equipment from such source

as the Employers Representative shall decide. All expenditure in connection with samples submitted for approval shall be borne by the Contractor.

Where special plant or equipment is required for which samples cannot be obtained, the Contractor shall submit prototype drawings in duplicate to the Employers Representative for approval. The Employers Representative shall indicate on the drawings submitted such modifications as he may consider necessary, and the Contractor shall modify the said drawings accordingly and shall resubmit them for final approval. No manufacture of special plant or equipment shall proceed until the drawings have been approved in writing by the Employers Representative.

The Contractor shall provide, as necessary, sample boards identifying a range of indicative samples for evaluation, which must be submitted without cost to the Employer's Representative, and 2 weeks after Letter of Intent issued prior to the items being ordered or fabricated.

For the avoidance of doubt, it will be the Contractors responsibility to ensure that the materials are consistent and true to the original sample throughout the entire duration of the Works and that the Contractor complies with the relevant material specifications. The Contractor shall be aware that the Employers Representative may from time to time make requests to the Contractor to provide to the Employers Representative delivery notes for materials as evidence of materials incorporated into the Works. The Contractor shall provide such delivery notes to the Employers Representative within 5 working days of the receipt of any such request.

5.3 QUALITY CONTROL PROCEDURES

The successful Contractor will provide the Employers Representative with a copy of their Quality Plan for the project prior to the issue of the Letter of Acceptance.

5.4 MATERIALS AND WORKMANSHIP

Materials, goods and workmanship are to be of the best quality of their respective kinds and those for which there is a Eurocode, Irish or British Standard or Code of Practice are to comply therewith unless otherwise stated.

The Employers Representative shall have power to direct the removal of all defective materials from the works by the Contractor.

If required by the Employers Representative, the Contractor shall provide a copy of any Code of Practice for use by the foreman on site.

Where components or materials are specified to comply with a National Standard, the relevant standard number shall be marked on the commodity or on the delivery docket. Generally, reference to Irish, British or other Standard or Code of Practice do not give the year of issue or dates of amendments and the latest relevant published version including any relevant amendments published at the date of tender shall apply.

Where a Standard or Code of Practice has been superseded, the edition current at the date of invitation to tender shall apply. The Contractor shall provide a copy of the Irish Standards Handbook or other relevant codes of practice for use by this supervisory staff.

Where appropriate all materials delivered to the site shall bare the manufacturers name, brand or any other data that may be required to verify the exact nature of the material and relate it to

the requirements of the specification. Where applicable materials shall bare the British Standards Certification mark and or the British Board of Agreement Certificate mark.

Work test certificates shall include whenever applicable, the location of the work or the delivery or batch which the sample represents.

Assessment of the quality of materials and workmanship shall be made in the presence of the Employers Representative or his representative, unless otherwise instructed.

The Contractor shall make available to the Employers Representative any instruments or other equipment and provide every assistance that may be required for checking the accuracy and quality of the works.

Unless otherwise specified the accuracy of the work shall comply with B.S.5606.

The Contractor shall be deemed to have included in his rates for all items to comply with the specified tolerance as well as completing the works to tolerance of existing structures, finishes and services which currently pertain on site.

5.5 APPROVED MANUFACTURERS

The Employers Representative's approval shall be obtained by the Contractor for all items of plant and equipment to be incorporated in the works unless they have been specified or nominated by the Employers Representative in the Specification.

Any requirement to use a material or article which is defined by reference to a named supplier or manufacturer or a specified quality assurance scheme or Agreement Certificate, or which is registered with or has otherwise received the approval of the Employer shall be satisfied using a material or article which has received equivalent approval in another member state of the European Communities, provided that the material or article in question shall be as safe, suitable and fit for the relevant purpose as the material or article complying with the requirement specified in the Contract.

5.6 TRADE NAMES:

In every case where on the Drawings, in the Specifications, materials appliances or fittings of special design, manufacture or description, patented or otherwise, are described or the names of the manufacturers or agents are given, any departure from the specified articles or material will only be permitted on the written authorisation of the Architect and if no such authorisation is obtained, the Contractor must supply the articles or materials originally specified.

When the words "or equivalent or approved" are included after the use of a trade name the Architect may accept the alternative product (at the Architect/ER's discretion) provided that the contractor shall demonstrate to the full satisfaction of the Architect that it is in appearance, workmanship, quality, performance durability and warranty at least equivalent to the product originally specified and approved by the Architect. If requested the Contractor shall provide test certificates and any other necessary information to enable full comparison with the product originally specified to be made.

In the case of insulation and demonstrating compliance with TGD-L the Builder shall provide full calculations, giving elemental U-Value tables and calculations, demonstrating that his/her proposed insulating materials in conjunction with the general construction conform to the regulations. The builder shall be responsible for their removal and replacement (and all associated works) entirely at his/her own expense, with materials if they do not comply.

5.7 LIMITATIONS ON THE AUTHORITY OF THE EMPLOYER'S REPRESENTATIVE

There are no limitations on the authority of the Employer's Representative to perform its functions or powers under the Contract.

5.8 CONCILIATION

The Conciliator's terms of appointment shall be as set out in the relevant conditions of the contract.

5.9 STATUTORY REQUIREMENTS

The Contractor shall include in his Tender for all costs arising in connection with statutory and other legal requirements in force at the designated date.

Where changes in statutory or other legal requirements occur after the designated date which result in changes or additions to the work, the resultant increase or decrease in cost shall be borne by the Contractor as per Clause 4 of the Conditions of Contract.

6. SITE REQUIREMENTS

6.1 WORKING TIMES

Working times shall be agreed with the Client prior to commencement of works.

No works are permitted on Sundays or Bank Holidays.

Any requests for deviations to these times must be requested from and approved by the Client.

6.2 EMPLOYERS REPRESENTATIVE ON-SITE STAFF

Not used

6.3 SANITARY & OFFICE ACCOMMODATION FOR EMPLOYERS REPRESENTATIVE

Not used

6.4 ATTENDANCE ON EMPLOYER'S REPRESENTATIVE SITE STAFF

Not used

6.5 EXISTING FACILITIES AND USE OR OCCUPATION BY EMPLOYER

Not used

6.6 SANITARY & OFFICE ACCOMMODATION FOR WORKPEOPLE

The Contractor is required to provide for the welfare of employees and visitors as per part 14 of the 2006 Regulations. He shall coordinate arrangements, which facilitate the provision and maintenance, in an appropriate condition, of site welfare facilities for all persons at work on the construction site, in accordance with Part 14, and shall monitor the implementation of the arrangements.

The Contractor is advised to visit the site and ascertain the access facilities thereto, the supply of labour and material the district will afford and the general convenience of working. He shall be taken to have made himself familiar with all aspects of the site that may have connection with or affect the works. He must take all the above into account when tendering and no charge for any extra labour and materials will be allowed in consequence of the Contractor's failure to do so.

The Contractor shall provide an adequately sized and properly furnished office complete with telephone for his Site Agent or Foreman in charge of the works. He shall also provide all necessary messing accommodation for his workmen. Sanitary conveniences will be provided by the Main Contractor.

The Contractor shall also supply office accommodation for all nominated sub-contractors on the project.

6.7 TEMPORARY STORAGE SHEDS

The Contractor shall provide for his own use and requirements, such temporary offices, sheds, hard standings and other holding areas for items for incorporation in the permanent work for which he has responsibility while such goods are on the site awaiting incorporation. The cost of such accommodation as he deems necessary for his own use must be provided by him and shall be deemed to have been included in his general overheads.

The Contractor shall provide waterproof storage for all plant and materials required on site for the execution of the works which shall be placed on a firm level site provided by the Main Contractor. The Contractor shall also supply storage and assembly areas for all nominated sub-contractors on the project.

The Contractor shall include for removing the above office and storage facilities from site and making good where necessary upon completion of the Contract.

The contractor must note the environmentally sensitive nature of the works area, as such the area must be fully weather tight and leak proof.

Where extra-large plant items, which cannot be conveniently accommodated in the stores, are delivered to the site, the Contractor shall include for tarpaulins or other approved covering or protection, adequately fastened and secured so as to prevent damage to equipment from dust, rain, etc. Where necessary or directed by the Employers Representative the Contractor shall provide adequate heating to prevent rust or corrosion of equipment.

Machined and bright surfaces shall be protected by paint, tallow or grease where this has not been carried out by others or has been removed in transit. On completion, surfaces so treated shall be cleaned and where appropriate, shall be polished.

Conduits, pipes and similar materials shall be adequately supported and properly stored to prevent bending and distortion, and the ends shall be closed and threads protected by means of purpose made end caps. The storage of conduits, pipes or other such materials by laying them direct on the ground will not be permitted.

Where building or climatic conditions are such that equipment installed is likely to be damaged by dirt, dust, water or moisture the Contractor shall provide adequately secured protection by means of heavy polythene wrappings. The Employers Representative's decision as to the need for such protection shall be binding.

Materials or equipment that are damaged or become defective due to failure to comply with the above shall be replaced at the expense of the Contractor.

There shall be areas designated within the site and near to working areas for the Contractors use for storage of plant, equipment and materials. Materials, equipment and plant must be stored within the Contractors compound or in the designated storage areas. Where the Contractor is utilising the designated storage areas, the Contractor is responsible for securing the areas and the items held within are held at the Contractor's risk.

Space for office and messing accommodation and storage of plant and materials. Actual offices, stores, and messing accommodation shall be provided by the Contractor.

6.8 TEMPORARY POWER & LIGHTING

The Contractor shall provide for his own use and requirements, temporary power and lighting, either by portable generators or temporary supply for areas such as the Contractors Compound and Construction area. The cost of such as is deemed necessary must be provided by the Contractor and shall be deemed to have been included in his general overheads.

The Contractor will not be at liberty in any way to restrict the Engineering Site Staff in the use of electric light or in the use of the night storage heaters in cold weather.

The Contractor shall include in his Tender for the cost of electricity consumed in the Accommodations for the period up to the date for Practical Completion.

6.9 ATTENDANCE ON EMPLOYER'S REPRESENTATIVE SITE STAFF

The Contractor shall provide for attendance to Employer's Representative Staff during the course of the constructional programme. Such attendance may include:

- Assistance in measuring the amount of work done from week to week.
- Assistance in the general supervising, testing, checking and examining the Contractors work.

6.10 SERVICES TO SITE

The Contractor shall make arrangements for services that shall be required for the construction of the Works.

6.11 CARPARK AREAS MADE AVAILABLE FOR THE WORKS

Contractor shall agree with the Client regarding the location of the main Contractor compound, material storage and parking.

6.12 ACCESS

Access to the site is limited. Details of all heavy plant to be used during the works shall be provided in the method statements. The Contractor shall include for these constraints in pricing and programming the works.

It will be contractor's responsibility to identify constraints on access to the various areas of the site during the tender stage.

The Contractor shall include for these constraints in pricing and programming the works.

6.13 SITE FENCING

The Contractor shall ensure that unauthorised persons and livestock are effectively excluded from the Works. As soon as the Contractor starts construction, he shall establish a secure, with fencing as necessary as required to prevent unauthorised entrance or trespass into the works or compound. The Contractor shall regularly inspect and maintain all such fencing; any defects being made good without delay. The fencing shall be removed on completion of works.

6.14 CONTRACTORS' PLANT

The Contractor shall provide all materials, tools, tackle, slings, haulage and labour necessary to carry out the works.

The Contractor shall provide all scaffolding and/or mobile hoists necessary to carry out the works.

The Contractor shall include for all costs involved with bringing to and removing from site all necessary plant and for maintaining the same on site for the duration of the works.

6.15 TEMPORARY WORKS/ACCESS PLATFORMS

All temporary works/Access Platforms necessary for the works shall be designed by the contractor and subject to agreement with the Employers Representative. A hoarding

protection shall also be provided as required around the construction area for public protection.

All temporary works shall be dismantled and removed from the site by the contractor upon completion of the works.

6.16 CONSTRUCTION WASTE AND SPOIL.

All excess construction materials, and spoil associated with the works shall be removed from the site by the contractor and disposed of in accordance with relevant statutory regulations.

6.17 ENVIRONMENTAL MANAGEMENT

All construction shall be carried out in line with the Inland Fisheries Ireland 2016 guidelines.

To avoid/reduce the release of suspended solids/pollutants into the surface water environment via surface water run-off, the following measures must be implemented by the contractor:

- Excavation works must not be carried out during or following heavy rainfall. Excavations will be covered during heavy rainfall to avoid the creation of surface water with high concentrations of suspended solids that would require dewatering. During lighter rain periods, the time period over which excavations are left open will be reduced insofar as is reasonably practicable.
- The stockpiling of materials will be minimised on-site and will be situated where surface water percolates freely into groundwater and >50m from any watercourse/drainage ditch.
- Silt fences will be constructed using a permeable filter fabric and not a mesh. Silt fencing will be installed as per the manufacturer's guidelines and shall be maintained until vegetation on the disturbed ground has been re-established. The fencing will be installed between the proposed development area and any watercourse/drainage ditch. Once installed, the silt fence will be inspected regularly during construction and on an increased basis during heavy rainfall. The contractor must install silt fencing prior to completing excavations for footbridges.
- Dewatering of excavations will be minimal and should be avoided, where possible. If required, dewatering will be carried out by pumping excess water to temporary settlement tanks or filtration systems located within the construction works area. These will be monitored at least twice daily and discharged to existing drains when water is within the prescribed water quality limits. Environmental Quality Standards (EQS) as set out in the *European Communities Environmental Objectives (Surface Waters) Regulations 2009*, as amended, will be applied for reference unless otherwise directed by the Local Authority or Statutory Bodies. Silt de-watering bags or temporary settlement tanks will be used when water is being discharged and discharge pumping rates will be controlled to a maximum of 2 litres/second (l/s);
- Fuel and oil handling as well as refuelling of plant shall be completed within the main compound. No refuelling will be permitted in the works areas.
- Wastewater generation from the welfare facilities will be discharged to an enclosed tank and removed off-site for treatment as required
- On completion of the works, all apparatus, plant, tools, offices, sheds, surplus materials, waste and temporary erections or works of any kind will be removed from the site.

6.18 CONTRACTORS' STAFF

When requested, the tendering Contractor shall furnish details of all staff employed by him and available for work on this project. They shall be divided into the following categories: -

1. Contract Administration Staff
2. Drawing Office Staff
3. Site Labour Staff

Further to above, the Contractor must provide for a full time Tenant Liaison Officer for the duration of all construction works. This person will be responsible for dealing, on a day-to-day basis, with tenants and any complaints or queries that they may have. This person will be responsible for all notices issued in relation to upcoming works, how long works will last in each unit etc

None but fully qualified and competent workmen shall be employed on the works, and the Contractor shall furnish such information as the Employers Representative may require as to the qualifications and competency of any workman.

Access to the Works area shall be restricted to the Contractor and their Operatives. All site staff, suppliers and operatives. If personnel are not sure of the restricted areas, they shall immediately ask The Contractors management staff of the Employer's Representative.

6.19 FOREMAN AND SITE AGENT

The Contractor shall keep a competent foreman on site, or where the scope of the works so necessitates, or the Employers Representative decides a competent site agent.

The site agent or foreman shall be authorised on the Contractor's behalf to receive instructions from the Employers Representative and shall give his whole time to the superintendence of the work. He shall keep accurate records and details of all work carried out by his staff.

The site agent or foreman shall not be changed during the progress of the works without the permission of the Employers Representative.

6.20 SITE OPERATION

The Contractor shall confine his operations to the immediate vicinity of the site permitted to be used and shall take all precautions to prevent any of his staff from entering restricted areas.

Any nuisance or disturbance caused by the Contractor or those employed by him to the residents, the public or the Employer and premises including premises handed over to the Employer prior to final completion shall be stopped immediately any complaint is made. The Contractor shall be responsible for making good, at his own cost, for any loss or damage arising from such nuisance or disturbance.

If such nuisance or disturbance arises through neglect of proper precautions the Contractor shall, indemnify the Employer against all claims which may be made in this respect.

6.21 SITE CLEARANCE

The Contractor shall not allow his rubbish to accumulate on site and shall keep the site clean and tidy at all times. On completion of the Contract, he shall remove from site all his materials, plant, etc.

6.22 FIRE PRECAUTIONS

The Contractor shall take all reasonable precautions to prevent the outbreak of fire, particularly in work involving the use of naked flame.

He shall impress on his staff the dangers involved in the careless disposal of matches, cigarette ends, and in the accumulation of rubbish on site. Fire extinguishers shall be kept on site, and all staff shall be instructed as to their whereabouts and use.

The Contractor shall ensure that safe methods of working are followed when using any equipment, liquids or gases or other articles which may involve a danger to persons or property and shall take all reasonable and necessary precautions against danger or damage by fire or explosion where the execution of his work may involve the presence of flames or sparks.

All flammable or vaporising liquids shall be used and stored in accordance with the appropriate regulations. When equipment or vessels which may contain flammable materials, liquids, etc., are not in use they shall be removed to a place of safe storage.

Where welding is carried out in proximity to flammable building materials, the Contractor shall take all necessary precautions to protect the building fabric from risk of fire.

6.23 HEALTH AND SAFETY

The Contractor shall comply with all the legal acts and regulations which apply to this construction site. Particular attention is drawn to the requirements of:

- The Safety, Health and Welfare at Work Act 2005.
- The Safety, Health and Welfare at Work (Commencement) Order 2012.
- The Factories Act 1955.
- The Safety in Industry Act 1980.
- The Safety, Health and Welfare at Work (General Applications) Regulations 2007 to 2012.
- The Safety, Health and Welfare of Work (Construction) Regulations, 2013.
- The Construction Products Regulation (CPR) 2013.
- "Specification and related Documents for Ground Investigation in Ireland".
- IS EN 1997-1 Eurocode 7 Part 1: General Rules.
- IS EN 1997-2 Eurocode 7 Part 1: Ground Investigation and Testing.
- IS EN ISO 22475-1 Geotechnical Investigation and Testing – Sampling Methods and Groundwater Measurements.
- BS1377 1990; EN-Methods of Test for Soils for Civil Engineering Purposes.
- BS 5930 1999 and A2: 2010; Code of Practice for site investigations.

- BS5228: 2009 and A1:2014 Code of Practice for Noise Control on Construction Sites.
- ‘Code of Safe Drilling Practice’ – British Drilling Association.
- Guidance Notes for the Safe Drilling of Landfills and Contaminated Land – SISG.
- Avoidance of Electrical Hazards when Digging – ESB.
- Code of Practice for Avoiding Danger from Underground Services – ESB/HSA.
- Code of Practice for Avoiding Danger from Overhead Electricity Lines–ESB/HSA.
- Any other recommendation made by the Health and Safety Authority.
- Law and Good Industry Practice on Disability including those of the National Disability Authority.
- Fire Services Act 1981.
- Good Industry Practice in respect of Fire.
- Requirements of Utility Providers.
- Relevant Irish Standards (“Irish Standards”), British Standards (“British Standards”), Codes of Practice (“Codes of Practice”), EU Directives (“Directives”) or equivalent European Standards (“European Standards”).
- Local Bye-Laws and Regulations.
- The Building Control Acts 1990 and 2007 including all relevant subordinate legislation made under these Acts (and any amendment or re-enactment of such Acts (the “Building Regulations”)
- Regulations and requirements of all relevant authorities.
- All BSRIA Publications.
- All HVCA Publications.
- ETCI - National Rules for Electrical installations.
- All CIBSE Publications- Guides, Codes, Technical Memoranda, Application Guides, Lighting Guides, etc.; and
- All ASHRAE guidance for specific Mechanical Systems and Components (where more comprehensive than CIBSE).

The Contractor shall provide for complying with these Acts, and relevant Regulations including Notifications and placards for display. The Contractor shall provide for complying with the requirements of the Project Supervisor Construction Stage and shall include for all co-operation, the supply of additional information and resources, and all other matters to ensure that the Project Supervisor (Construction) Stage can fulfil his function as defined in Clause 6 of the Safety, Health and Welfare at Work (Construction) Regulations 2013 and subsequent legislation.

6.24 PROTECTIVE CLOTHING AND SAFETY EQUIPMENT

The Contractor should note that personal protective equipment (PPE) must be worn at all times on the construction site; the minimum requirements for PPE on this project are:

- safety helmet
- safety type footwear (waterproof if appropriate)
- high visibility vest or jacket (must only bear the relevant contractor's name)
- eye protection where necessary
- dust protection masks

Additional PPE must be worn whilst carrying out activities such as grinding, welding, and such like.

10 clean sets of PPE must be provided and available for the sole use of the Employer and Engineer Team and approved visitors.

Hearing protection must be worn when using any machinery, tools or equipment which emits sound pressure levels in excess of 85 decibels and also when working in any area sign posted to the effect that hearing protection is a requirement in that area.

6.25 SAFETY SIGNAGE

All safety signs used on site during the project, as well as any safety signs designed for use in or around the site must comply with the requirements of the Safety, Health and Welfare at Work (General Application) Regulations 2007 Part 7 Chapter 1 (Safety Signs at Places of Work) and Schedule 9.

Where signboards are used they should have the shape and colour set out in Part B of Schedule 9 of the Regulations. The pictograms used should be as simple as possible, and while they may be slightly different to those shown, any difference should not alter or obscure the meaning.

Signboards should be made of suitably robust materials, and their dimensions and features should make them easy to see and understand. Signboards should be installed in the line of sight, should not be obscured and should be installed in a well-lit, easily accessible and visible location. Where light levels are poor, the signs should incorporate artificial lighting or reflective or phosphorescent material as appropriate.

Signboards should be removed as soon as the situation to which they refer ceases to exist. Otherwise, signs left in place undermine the effectiveness of other signage.

The signboards should not include text. Text may be included on a supplementary signboard provided that it does not adversely affect the effectiveness of the signboard.

6.26 ASBESTOS PRODUCTS

Where the Contractor encounters any material suspected of containing asbestos, work shall be immediately suspended in its vicinity and no other work shall be carried out which might expose either the Contractors personnel or third parties to contact with the suspect material, or of releasing it into the environment.

If any of the material has been disturbed, the area shall be sealed off and the advice of the Health and Safety Authority obtained on the treatment required for personnel who may have been in contact with it.

Work on asbestos containing materials shall be carried out in accordance with the appropriate legislation and regulations and with the instructions of the Health and Safety Authority.

All works are to be conducted under the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2010, and all works to remove asbestos from site are to be conducted by competent and approved asbestos removal specialists.

6.27 SAFEPASS ACCREDITATION

The Contractor shall provide for the operation of the requirements of the construction industry's safety accreditation scheme, known as the 'Safe pass' scheme. Employees engaged on the site must be provided with the opportunity, to undertake an appropriate SOLAS/FAS approved training course and to achieve accreditation. No person shall be allowed on site without an up-to-date Safe pass card.

6.28 UNLOADING

Unloading, handling, transporting on site and hoisting of the Contractor's Materials and plant shall be the responsibility of the Contractor and shall be deemed to be included in his Tender.

7. TRAFFIC MANAGEMENT

7.1 TRAFFIC SAFETY AND MANAGEMENT REQUIREMENTS (ROLES, RESPONSIBILITIES AND DEFINITIONS)

The roles, responsibilities and definitions of the various duty holders on this project in relation to Traffic Management are outlined in this section of the Specification.

The Contractor shall comply with the relevant sections and requirements of:

- Department of Transport Temporary Traffic Management Suite:
 - “Traffic Signs Manual – Chapter 8 – Temporary Traffic Measures and Signs for Roadworks” Department of Transport, August 2019
 - “Temporary Traffic Management Design Guidance” Department of Transport, August 2019
 - “Temporary Traffic Management Operations Guidance” Department of Transport, August 2019
- Guidance for the Control and Management of Traffic at Roadworks (2nd Edition) – Department of Transport, NRA and Local Government Management Services Board, October 2010.

7.2 TRAFFIC SAFETY & MANAGEMENT REQUIREMENTS

The Contractor shall submit his proposed Operational Traffic Management Plan for approval by the Engineer before commencing any works on site. The Contractors programme of work shall allow two weeks for approval by the Engineer of the Operational Traffic Management Plan and shall allow in his programme for other time limits specified in this Specification.

7.3 SIGNAGE AND LAYOUT OF ROADWORKS GUIDELINES

The Guidelines as specified in the current Department of Transport Traffic Signs Manual, Chapter 8 shall be used in conjunction with the Design Process Traffic Management Plan for signage, layout of roadworks and traffic management. This Section sets out the additional requirements over those stated in the Department of Transport Traffic Signs Manual, Chapter 8.

Where the Works are on or adjacent to Public Roads or Streets, the Contractor shall first view the Works from as many directions as traffic shall approach, plan his work sequence and his proposed traffic layout and then select the type of control devices. A full list of sign and device requirements shall be established before any site works commence.

7.4 PHASING OF WORKS

Before any works are to take place on site, the Contractor shall advise road users of the commencement date for construction and the period of time the road works will be in place and shall erect temporary advisory signs on all approaches, where appropriate.

The erection and removal of any traffic management or temporary diversion shall not be carried out during the following hours:

Monday to Saturday 07:30 to 09:30 hours and 16:00 (15:30 on Fridays) to 18:30 hours and on any local or national public holiday.

The permitted working hours are as outlined in Section 6.1 of this Document.

7.5 DESIGN OF OPERATIONAL TRAFFIC MANAGEMENT PLAN LAYOUT

The operational traffic management plan should include the following information as a minimum. Drawings/schedules indicating traffic management layout including the following as appropriate:

1. Phasing of works at each location,
2. Geometric design,
3. Extent of existing trafficked road being interfered with,
4. Position of traffic signals/signalmen,
5. Working areas,
6. Width of Lanes,
7. Barriers,
8. Safety zones,
9. Provision for pedestrians,
10. Access and exit locations for construction,
11. Provision for emergency services,
12. Timing of Operations,
13. Road Lighting/ Temporary Lighting,
14. Routes of proposed diversions,
15. Road Signage, Cones, Temporary Marking, etc.

The Contractor may prepare and submit to the Employers Representative for his approval revisions to the Operational Traffic Management Plan during the course of the Works. The Operational Traffic Management Plan and revisions to that plan shall be submitted at least 7 days prior to the date on which the Contractor proposes to implement any element of the plan. The Contractor shall not commence any work, which affects vehicular, pedestrian or cycle movements without the prior written approval of the Employers Representative to the proposed Operational Traffic Management Plan. The Contractor shall regularly review the Operational Traffic Management Plan measures and prepare alternative plans where he considers it necessary or desirable to alter those measures. The Contractor shall not implement any alterations or revisions to the Operational Traffic Management Plan measures without the prior written consent of the Employers Representative.

The plan shall indicate traffic lane closures where required for the safe construction of the works or for the safety of personnel involved in construction activities and alternative arrangements for routing traffic. The plan shall be presented with a written description setting out the proposed sequence of traffic management measures and associated construction activities. The plan shall have regard to any concurrent Traffic Safety and Control measures in use adjoining or in close proximity to the proposed Works.

7.6 ACCESS TO THE SITE

Road access to the Site shall be gained solely via those roads that are referenced and permitted in this document.

Access to the Site from public roads shall be subject to the written approval of the relevant persons including the relevant roads authority. The Contractor shall:

- (1) be responsible for and bear the costs relating to any such accesses and any related matters arising with persons who consider themselves to be affected by such accesses
- (2) allow in their tender for the cost of the erection of a security access gate which is controlled by a fingerprint acknowledgement device for all approved personnel. The Contractor shall be responsible for ensuring that the gate is locked outside of the stated opening hours. No claims shall be accepted relating to maintaining this access point or for facilitating access to the site by other contractors.
- (2) assess the environmental impacts of such accesses and
- (3) ensure significant adverse impacts shall be avoided in or around the execution and completion of the Works.

Notwithstanding any other provisions of the Contract, the Contractor may also gain entry to the Site via private land, but only with the prior express agreement in writing of the landowner and /or where appropriate the occupier. The Contractor shall:

- (1) be required to have such agreement in writing prior to executing any such access route across private land and
- (2) submit a copy of any agreement together with supporting drawings to the Employer's Representative prior to commencing execution of any affected Works Items.

Access to private land from the public road shall be subject to the written approval of the relevant road's authority.

The Contractor shall bear all costs and shall:

- (1) be fully responsible for negotiating and making payments relating to these accesses and for any matters arising with parties who consider themselves to be affected by these accesses and
- (2) assess the potential environmental impacts of any such access and shall ensure that significant adverse impacts shall be avoided in and or by the execution and completion of the Works. These impacts shall be assessed in accordance with other provisions of the Contract and Laws.

Subject to the other provisions of the Contract, the Contractor shall:

- (1) not trespass on lands outside the Lands Made Available by the Employer for the Works or
- (2) enter the Site by the existing public roads.

The Contractor shall execute appropriate signs to identify designated accesses and restricted routes Temporary roadworks signage shall comply with the TSM.

Prior to accessing the Site, the Contractor shall consult with the relevant roads authority and shall comply with the requirements with regard to the pre-construction condition of the existing road network in order to identify the extent of a dilapidation survey to be carried out by the Contractor. Such dilapidation survey shall be witnessed by a representative of the relevant roads' authority and the Employer's Representative.

7.7 GENERAL REQUIREMENTS

Prior to commencement of any Works, the Contractor shall consult with the Employer, the appropriate relevant Authorities, Utilities and Service Providers and Private Utility Service Providers, relevant persons and interested parties to determine the permitted access / egress routes and crossings for construction related vehicles and plant and any requirement for pre-condition surveys in the vicinity of the Works.

The Contractor shall consult and comply with the requirements of the relevant Authorities, Utilities and Service Providers and Private Utility Service Providers in respect of all heavy commercial vehicles (HCVs) associated with the Works using public roads, including, but not limited to, dump trucks and haulage trucks.

The Contractor shall liaise with the relevant persons and interested parties to ensure that, as far as practicable, construction related traffic shall not interfere with any farm operations.

The Contractor shall provide, erect and maintain such traffic signs, lamps, barriers, and the like, complying with clause 117 of the NRA Specification as may be required to ensure compliance with the requirements and restrictions detailed in this Section.

The Contractor shall restrict the passage of construction related plant, equipment and materials to and from the Site and off-site areas to the permitted access / egress routes as described in this Section.

The Design, execution and completion of access / egress points to the Site and off-site areas shall consider the type and volume of existing traffic volumes and anticipated type and volume of the construction related traffic. Such Design, execution and completion of the Works shall also comply with the requirements of Section 4 of this document.

Wheel wash facilities shall be provided at each access / egress point to the Site and off-site areas to ensure that construction related plant, vehicles and debris shall not have an impact on the quality of the roads in the surrounding area. Wheel wash facilities shall be provided with rumble grids to remove excess mud from wheels and shall not have an overflow. Such wheel wash facilities shall be located, as far as practicable, away from watercourses and other bodies of water and effluents disposed of in appropriate facilities. All construction related plant and vehicles shall use the wheel wash facility when exiting the Site and off-site areas. All construction related plant and vehicles shall also use the weighbridge facility when accessing or exiting the Site and off-site areas. The Contractor shall maintain a record of all weights of construction related plant and vehicles in a log that shall be readily available for inspection by the Employer's Representative at all times.

In locations where a proposed haul route for the transportation of earthworks materials is to cross a National, Regional or Local Road, the Design, execution and completion shall provide adequate traffic control and protective measures such as concrete aprons or the like, as

appropriate, prior to the moving of construction related plant and vehicles across such public roads.

1.8.1 Permitted Access / Egress Routes to and From Site and Off-Site Areas

The Contractor, its principle sub-contractors and suppliers, shall use only the permitted access routes, as described in the Works Requirements, for all purposes in connection with the Works, including, but not limited to, import of acceptable, and disposal of unacceptable, materials, unless otherwise approved by the Employer's Representative and agreed with the relevant road authority. It is the Contractor's responsibility to ensure that all routes meet the relevant safety requirements and code of practice, in particular but not exclusively those relating to overhead power lines.

A pre-construction condition survey shall be undertaken by the Contractor on all permitted access / egress routes prior to trafficking with construction related plant or vehicles. As a minimum, a pre-construction condition survey shall be carried out along the entire extents of the access routes.

A condition survey shall be carried out on all permitted access / egress routes upon completion of the trafficking of the road by construction related plant and vehicles. The Contractor shall allow for any necessary repairs to the access / egress routes to restore the routes to their condition prior to the commencement of haulage operations.

The Design, execution and completion of all Works to restore the permitted access routes to pre-construction condition, that may be required by the condition survey, shall be carried out by the Contractor as soon as practicable following completion of the trafficking of the road by construction related plant and vehicles.

The Contractor shall comply with the other provisions of the Works Requirements regarding restrictions on the routing of vehicles under the control of the Contractor, its principle sub-contractors and suppliers when planning and programming the Works.

The consent of the Authorities and Utilities to proposals to use public roads for construction related traffic shall not relieve the Contractor of its other responsibilities under the Contract.

The contractor shall ensure that regular and inter-visible passing bays be provided along the site access routes and haul roads to allow for the safe two-way movement of vehicles.

It should be noted that the site access route is IDA Belview Business & Technology site and national road.

1.8.2 Prohibited Access Routes

Access to or from the Site or off-site areas shall only be permitted via Local Roads or roads other than the permitted access / egress routes with the prior written approval of the Employer's Representative and the prior written consent of the relevant road authority. Such approval and consents shall be subject to all conditions that may be required by the Employer's Representative or relevant road authority. Such conditions shall be at the Contractor's expense and may include, without limitation, requirements to carry out prior road improvement Works to any proposed access / egress route, requirements to maintain road standards and safety during use of the route by the Contractor, its principle sub-contractors and suppliers, and requirements for the Contractor to carry out measures, following such use, to restore the route to the same condition as before any haulage operations, as a minimum.

Applications for the use of a prohibited access route shall be submitted to the Employer's Representative for its approval for their consent, at least 2 weeks in advance of any proposed haulage along such route. The Contractor shall note that there is no guarantee that the application shall be approved by the Employer's Representative.

Proposals as outlined in this document shall include, but shall not be limited to, the following:

- Pre - condition surveys of any proposed access / egress routes.
- Details of construction related traffic volumes and loadings.
- Risk assessment of the haul route.
- Autotrack analysis to determine suitability for use by heavy commercial vehicles.
- Assessment of drainage on the route.
- Proposed protective measures.
- Proposed maintenance regime which shall be undertaken, and paid for, by the Contractor during the trafficking of the road by construction related plant and vehicles.
- Proposed rehabilitation Works which shall be paid for and undertaken by the Contractor on cessation of the haulage activities; and
- Any other information that may be required to fully assess the Contractor's proposal.

7.8 THE USE OF PERMANENT WORKS BY CONSTRUCTION TRAFFIC

The structures and finished pavement forming part of the Works may be used to carry construction related traffic only when measures, as approved by the Employer's Representative, shall have been taken to protect such Works from damage.

The Contractor shall submit its proposals at least four weeks before it is proposed to use any of the structures or finished pavement forming part of the Works to carry construction related plant and vehicles. Such proposals shall include, without limitation, supporting calculations, details of any loadings, proposed protective measures, and any other information required by the Employer's Representative in order to fully assess the proposal. The proposals shall not be implemented by the Contractor without the prior written approval of the Employer's Representative.

The approval of the Employer's Representative to proposals to use structures or finished pavement forming part of the Works for construction related plant and vehicles shall not relieve the Contractor of its other responsibilities under the Contract.

1.9.1 General Principles

Prevailing traffic speed and roadway type are the principal factors which dictate distance of the first sign and spacing of subsequent signs in advance of the Works.

Any work staff including flagmen performing any hazardous task outside the marked off work area should wear a safety waistcoat of orange-fluorescent material and with reflective strips.

Signs, lamps and equipment must be kept clean and batteries replaced before they lose effectiveness.

Parking of vehicles must not obscure any sign or danger area.

Signs must be covered whenever they are not meant to apply and should be removed immediately they are no longer required.

7.9 LIGHTING

Where floodlighting of the works area is required in poor daylight conditions, the positioning of the lighting units must not be such as to cause glare to drivers. Workmen should be protected from stepping inadvertently from the illuminated area into an unilluminated traffic lane.

In addition to lighting, signs, chevrons, barriers and other devices should be reflectorised. Reflectors should be used to ensure that the work area is adequately marked if the lighting is vandalised or otherwise fails.

1.10.1 Hazard Warning Lights

All vehicles and self-propelled plant used in the construction works shall be fitted with roof-mounted amber flashing lights whilst in the working areas.

7.10 TRAFFIC SIGNAGE

All traffic signage for use at roadwork's (warning, regulatory and information) must comply with Clause 8.2.1 of the Department of Transport Traffic Signs Manual, Chapter 8.

7.11 ONE WAY OPERATIONS

Where it becomes necessary to restrict two-way traffic to the shuttle use of one lane flagmen shall be used. Traffic signals shall only be used where the interruption is of long duration and includes hours of darkness.

Flagmen may be used where the ends of the one-way section are clearly intervisible during working operations, where duration of control is confined to daylight periods, for unscheduled interruptions such as culvert repairs, watermain bursts etc.

If one-way operation ceases at the end of the working day all related signposting should be covered so that drivers are not misled.

7.12 ROAD DETOURS

The Guidelines as specified in the Department of Transport Traffic Signs Manual, Chapter 8, Clause 8.3.6 should be used for road detours.

Traffic must be provided with a large sign at the point of commencement of the detour and a sign must be provided at every point of possible confusion along the detour route. Signs shall meet the colour, lettering and dimension requirements of Chapter 8 of the Traffic Signs Manual.

Traffic should be informed by a large sign at the end point of the Detour.

Where traffic on a Detour is directed onto an existing road already carrying significant independent traffic, signs similar to those shown in the Guideline Documents already referred to should be used to direct only the diverted traffic.

7.13 MAINTENANCE REQUIREMENTS

The Contractor shall keep all routes used by site traffic free of mud and debris deposited by site traffic.

All drains, ditches, grips and outfalls shall be kept clear of any spoil mud, slurry, pollution, etc, arising directly or indirectly from the Works.

The Contractor shall take all necessary steps to avoid creating a dust nuisance.

The Contractor shall ensure that all vehicles delivering or transporting materials in connection with the Works shall be adequate sheeted to ensure that as far as practicable no materials can fall and no dust can be blown from the vehicle.

The only permitted exceptions to this requirement are Vehicles being used in surface dressing operations

