

New Science & Technical Graphics Rooms,
Toilet Facilities and all associated works at
Halla Lydia, St Dominic's College, Cabra
Ratoath Road, Ashdown,
Dublin 7, D07 NX47.

Board Of Management
St Dominic's College, Cabra.

Preliminary Health
& Safety Plan

REV	DESCRIPTION	DATE	BY	APPROVED	DOCUMENT
0	Initial Issue	20/06/26	SK	JOD	

NJOG Job Ref.No.: 26/009

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PRELIMINARY HEALTH & SAFETY PLAN

New Science & Technical Graphics Rooms, Toilet Facilities & associated works

Halla Lydia, St Dominics College, Ratoath Road, Ashdown, Dublin 7, D07 NX47.

ON BEHALF OF

Board of Management of St Dominics College, Cabra.

This Preliminary Safety and Health Plan has been prepared as required under the Safety, Health and Welfare at Work (Construction) Regulations, 2013 (as amended) in accordance with our appointment as Project Supervisor Design Process. It has been prepared following a review of information provided by the Designers, Client and by reference to the available contract documentation.

It is noted that the Safety Health and Welfare at Work (Construction) Regulations) 2013, (*hereinafter the Regulations*) came into force on the 2nd August 2013. Appointments are made under these new Regulations. Design team inspections have been undertaken at the site. A limited inspection of the site by the Project Supervisor (Design Process) has also occurred.

The Contractor and Project Supervisor (Construction Stage) are advised that opening-up works may reveal changes requiring a reassessment of the design/ construction risks for the Project.

Risk control measures applied by Designers and by the Project Supervisor (Construction Stage) should take into account the General Principles of Prevention. In descending order of effectiveness, the "hierarchy of risk control" involves:

- Change to eliminate a hazard
- Substitution of a less hazardous design feature
- Enclosure - Separation of people from the hazard
- Reduced Exposure - Changes that reduce the time individuals are exposed to a risk, or the number of people exposed
- Safe systems of work, together with suitable training and supervision written procedures, and the provision of information, instruction, warnings, signs and/or labels
- Use of personal protective equipment (PPE).

The designer's contribution to risk control lies in the ability to affect the environment within which the Contractor must operate and the nature and extent of the operations which need to be carried out.

This document shall be read in conjunction with the issued Site Limitations Document, elements of which are reiterated here where appropriate.

The PSCS shall take particular account of the guidance in Section 1.3.3 when allowing for resource inputs required to satisfactorily carry out the collation and presentation of information to the PSDP.

1.0 DESCRIPTION OF PROJECT

1.1 PROJECT DESCRIPTION AND PROGRAMME DETAILS

1.1.1 General Description of Site

The site is situated at St Dominics College, Ratoath Road, Ashdown, Dublin 7, D07 NX47.

1.1.2 General Description of the Works

The works GENERALLY consist of the FOLLOWING:

- Under the Climate Action Summer Works Scheme 2026 , the project includes including the provision of New Science Rooms , Technical Graphics Area , Multi-purpose Room and Toilet Facilities and associated works within the existing Halla Lydia Building.
- Demolish, strip-out, removal and disposal of elements as identified on the drawings, including equipment, services and finishes.
- Identify and seal all potential points of entry for rodents.
- Construct new Science & Technical Graphics Rooms, Toilet Areas, Plant Room etc as per the drawings and specifications
- Re-decorate throughout.
- Commission all Building Services and handover to client in accordance with Department of Education requirements
- Provide new hot, cold and mains water installation including new hot water heater.
- Install new waste pipework
- Install new extract ventilation system
- Review (and upgrade where necessary) the existing electrical installation
- Provide new fitted furniture, presses and appliances
- Install mechanical ventilation

1.1.3 Location and Layout of the Project

The site is situated at St Dominics College, Ratoath Road, Ashdown, Dublin 7, D07 NX47.. Both pedestrians and vehicles use the Dominican Cabra Campus and surrounding areas.

1.1.4 Concurrent work

The existing campus which comprises a several Schools, Convent, Church and Nursing Homes will remain operational during the Project. Campus deliveries, planned and reactive maintenance and works by statutory undertakers may all occur during the course of the Project. Formal structured liaison proposals must ensure full awareness of any overlaps or conflicts which may occur as a result of this fact. The PSCS (Project Supervisor Construction Stage) is to take account of the Site Limitations Document in preparing his Health & Safety Plan.

1.1.5 Time Scales for Completion of the Project

Commencement date: 10th August 2026

Completion date: 16th October 2026

The Design Team and the Project Supervisor for the Design Process have considered the time scale and are of the view that it is reasonable for the phased works involved

given allocation of appropriate resources and a proactive safety management system. If the scope of the works is changed then the adequacy or otherwise of the time for completing the works should be reviewed by the Client, Architect and Project Supervisor Design Process in consultation with the Project Supervisor Construction Stage and the Contractor (See Section 2.7, Continuing Liaison)

1.1.6 The Project Supervisor Construction Stage (PSCS)

The Project Supervisor (Construction) is required to confirm that the intended programme and initial dates stated in the Contract documentation are achievable in view of the broad principles to be adhered to in relation to Safety and Health and the context of the scale and nature of the development. The Main Contractor for the Project shall be required to prepare a Construction Programme for inclusion with their Health & Safety Plan. This Programme shall be updated on an ongoing basis to account of the changing conditions on-site.

1.2 DETAILS OF DESIGN TEAM

1.2.1 Client

Board of Management of St Dominics College Cabra,
Ratoath Road, Ashdown, Dublin 7, D07 NX47.

1.2.2 Contract Administrator

N.J. O'Gorman & Associates Ltd.
16 Gilford Road,
Sandymount. Dublin 4,
D04 EC80
Tel: +353 (01) 4755244
Email; contactus@njog.ie

1.2.3 Mechanical & Electrical Engineer

N.J. O'Gorman & Associates Ltd.
16 Gilford Road,
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1.2.4 Civil & Structural Engineer

N.J. O'Gorman & Associates Ltd.
16 Gilford Road,
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Tel: +353 (01) 4755244
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1.2.5 Project Supervisor Design Process (PSDP)

N.J. O'Gorman & Associates Ltd.
16 Gilford Road,
Sandymount. Dublin 4,
D04 EC80
Tel: +353 (01) 4755244
Email; contactus@njog.ie

1.3 EXTENT AND LOCATION OF EXISTING RECORDS AND PLANS

1.3.1 Safety Statements and AF2 Notice

The Main Contractor will be appointed to act as Project Supervisor (Construction Stage).

The Safety Statement of the Main Contractor shall be appended to the developed Safety and Health Plan for the Construction Stage.

The AF2 notice is to be submitted by the Project Supervisor Construction Stage.

1.3.2 Existing Safety File

The Client has not made available any Mechanical and Electrical Operating and Maintenance Manuals / Safety File Information.

1.3.3 Proposed Safety File

The Project Supervisor Design Process is responsible for handover of the Safety File to the Client. The Project Supervisor Construction Stage under Regulation 21 shall co-ordinate arrangements among contractors to ensure provision of all relevant information and forward this to the Project Supervisor Design Process in a timely fashion and orderly manner. The Safety File is to have two components, a hard copy record with information and a software interface allowing access to soft copies, pdf, .dwg, etc.

The Project Supervisor Construction Stage shall obtain or prepare the following and submit to the Project Supervisor Design Process:

- Details of key structural principles, including safe working loads.
- Details of construction methods and materials, including COSHH data sheets, which may present residual hazards.
- General maintenance instructions including access provision and information about equipment provided for cleaning and maintaining the building fabric.
- As-built drawings.
- Nature, location and markings of utilities and services, including emergency and fire fighting.
- Instructions for operation, maintenance, dismantling and removal of equipment and systems.
- Details of hazards associated with the materials used in the construction.
- Access requirements/ restrictions.

In addition:

SAFETY FILE INFORMATION TO BE PROVIDED:

Safety File

"Regulation 24" - The Safety, Health and Welfare at Work (General Application) Regulations

The Safety File is a record of information for the end user, which focuses on safety and health. The information it contains will alert those who are responsible for the structure and services in it of the significant safety and health risks that will need to be addressed during subsequent maintenance, repair or refurbishment, extension, or other construction work or, indeed, its demolition. Contractors who have information relevant to the Safety File must promptly pass it on to the Project Supervisor Construction Stage who in turn passes it on to the PSDS to include in the Safety File.

The Contractor shall include all information required by the Construction Regulations 2013, The Contract Documents, Guidelines on the Procurement, Design and Site Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations, 2013 and all other statutory requirements, not limited to the following:

1. Construction drawings, specifications and bills of quantities, used and produced throughout the construction process
2. All design criteria
3. Details of the equipment and maintenance facilities within the structure
4. Maintenance procedures and requirements for the structure
5. Manuals, certificates, produced by specialist contractors/designers and suppliers which outline operating and maintenance procedures and schedules for plant and equipment installed as part of the structure, typically lifts, electrical and Mechanical installations and window cleaning
6. Details of the location and nature of utilities and services, including emergency and fire-fighting systems
7. Certificates of compliance for all subcontractors
8. Certificates of compliance for all Contractor's design consultants
9. Warranties – Material and Workmanship
10. Collateral Warranties
11. All other documentation required by the Contract Documents.

The hard copy Safety File format should be A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled. Selected drawings needed to illustrate or locate items should be included, where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.

The software interface must allow intuitive browsing and click access to the relevant data.

1.3.4 Tender Information and Documentation

The tender information and documentation comprises the specification of the works and the drawings which the Contractors have received under separate cover.

1.4 ARRANGEMENTS FOR PROJECT COMMUNICATIONS

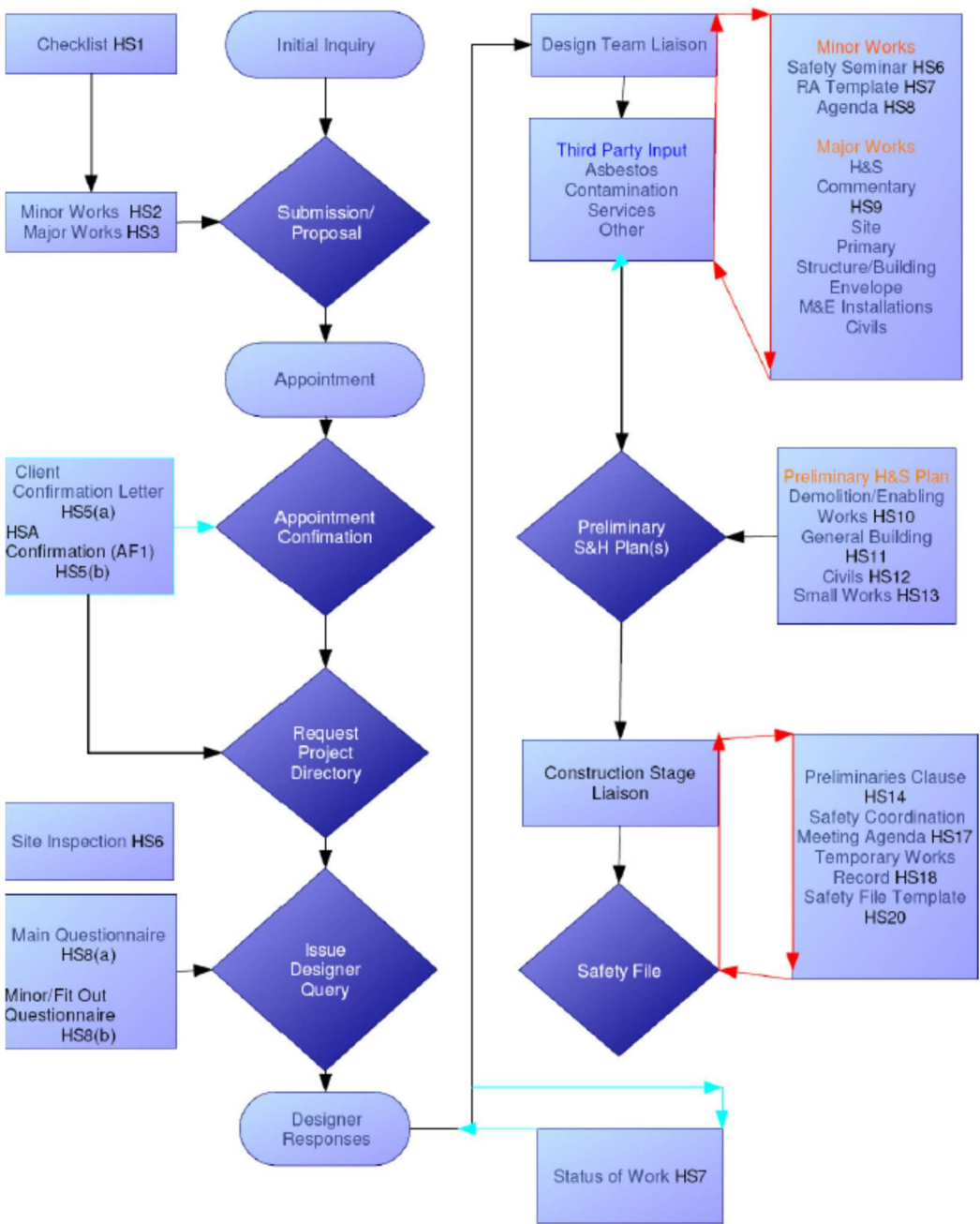


Figure 4 Project Life Cycle

2.0 CLIENT'S CONSIDERATIONS AND MANAGEMENT REQUIREMENTS

2.1 STRUCTURE AND ORGANISATION

2.2.1 Client

Board of Management of St Dominics College Cabra,
Ratoath Road, Ashdown, Dublin 7, D07 NX47.

2.2.2 Contract Administrator

N.J. O'Gorman & Associates Ltd.
16 Gilford Road,
Sandymount. Dublin 4,
D04 EC80
Tel: +353 (01) 4755244
Email; contactus@njog.ie

2.2 RECORD KEEPING, MONITORING AND REVIEW

Prior to the commencement of the construction works, the Main Contractor shall submit for approval a Construction Management Plan and Method Statements for the Works which shall form the basis of the record keeping, monitoring and review procedures recommended in the HSA Guidelines.

The Construction Management Plan shall include but is not limited to the following:

- A Full Construction Programme
- A Fire Safety Plan
- An Hours of Operation Schedule
- Temporary Car Parking Details
- A Co-ordinated Site Compound Drawing
- Details of crash decks to be Provided
- A Traffic Management Plan
- Details of Noise, Dust and Vibration Control Measures to be taken
- Flood & Water Ingress Mitigation Measures to be taken
- Waste Disposal Management Plan
- Demolition Control Document

Record keeping is required for proof of compliance as well as for monitoring the effectiveness of the health and safety management system. Records should include:

- The risk assessments, hazards and precautions
- Written work instructions, including those related to safety
- Training records and list of authorised persons
- Inspection and maintenance records, including those for PPE, and especially those relating to the statutory examinations of plant and machinery
- Any permits to work Equipment specification, CE compliance and any noise level figures provided by the manufacturer.
- Safe Pass and CSC records
- Site Induction Records
- Records of any reported defects, incidents or accidents and actions taken (this will also include accident investigation reports).

Hot works rules will apply as necessary. An appropriate hot works approval forms policy is to be operated. Ref. Appendix E, Site Limitations Document. This hot works policy shall include for a minimum 1hr live watch after completion of all Hot Work.

2.3 PERMITS AND AUTHORISATION REQUIREMENTS

Client check lists and authorisation sheets which relate to any approvals to be granted shall be prepared by the Main Contractor in co-operation with all of his nominated and domestic sub-contractors. In this regard the Main Contractor shall follow the permit forms setdown in Appendix E of the Site Limitations Document. The Main Contractor is at liberty to provide his own standard health and safety forms for such procedures provided that they match the information requirements set down on the forms appended to this document.

In addition the following operations will need to be undertaken by means of a permit to work system.

- All metal grinding or other abrasive wheel work, or sand blasting.
- Hot works
- Services Connections

2.4 EMERGENCY PROCEDURES

The Main Contractor shall be responsible for maintaining in operation the existing fire detection and alarm system at all times during the Construction Works. An evacuation protocol shall be developed with the Client and the Design Team in order to deal with fire alarm activations. This protocol shall be in keeping with the Policies for the existing facility.

The Contracting Team shall make provision for the full testing and witnessing of the Cause and Effect Strategy.

The Main Contractor shall put in place a 'Permit to Disable or Isolate Fire Detection & Alarm System' (Ref. Appendix E, Site Limitations Document) prior to (Pre-removal of Service) and upon completion (Post-removal of Service) of any works which may affect the operation of the existing Fire Detection and Alarm System.

The Main Contractor shall note that the use of gloves or other protective covers over smoke or heat detectors is not permitted at any time.

The Main Contractor shall be required to maintain the Fire Alarm system within the construction site areas of the existing facility at all times. The Main Contractor shall obtain a 'Permit to Disable or Isolate Fire Detection & Alarm System' (Ref. Appendix E, Site Limitations Document) prior to (Pre-removal of Service) and upon completion (Post-removal of Service) of any works which may affect the operation of the existing Fire Detection and Alarm System.

The Main Contractor shall prepare an overall evacuation strategy for the Campus which shall be implemented in the event of the fire alarm sounding. This evacuation strategy shall be prepared in conjunction with the fire safety plan for the Campus.

It is suggested that the Main Contractor shall liaise with the local fire services authority and notify them of the project prior to the commencement of the construction works.

The Main Contractor shall be responsible for ensuring that access is available for the Fire Service to the perimeter of the buildings at all times. It is suggested that a designated Fire Service Access Route is maintained around the perimeter of the Main Contractors Compound Area during the proposed works.

The Main Contractor shall be responsible for ensuring that access is available to all existing fire hydrants and hose reels which are situated within his Construction Sites. It is suggested that any additional hydrants which have been called-up as part of the brief for the works are installed at the earliest available opportunity.

The Main Contractor shall ensure that in the event of a fire all site personnel know and clearly understand the standard routines and procedures to be adopted to minimise danger to life.

The Main Contractor shall be responsible for ensuring that there is adequate fire protection equipment on site during the construction works in accordance with I.S.EN 3 & I.S. 291.

The Main Contractor is to carry out fire drills and document them.

Hot works rules will apply as necessary. An appropriate hot works approval form policy is to be operated. Ref. Appendix E3. The Main Contractors own hot works policy must be checked and counter signed prior to works commencing. This hot works policy shall include for a minimum 1hr live watch after completion of all Hot Work.

The Main Contractor shall co-operate with the requirements of the Clients Fire Safety Consultant/Officer arising from any site inspections which he carries-out on the Campus. Failure to do so could result in the serving of a closure order on the site.

All existing fire-exit routes within and from the existing building are to be maintained at all times, except where it may become necessary to temporarily take particular escape-routes out of operation to facilitate the construction of the extension. In such cases, fire-escape routes may only be temporarily taken out of use for pre-specified periods in agreement with the Fire Safety Engineer, the Client and Architect and with written agreement for same having been obtained in advance of taking the fire-escape routes out of use. Apart from the above noted exception, all Fire exit routes must be kept clear at all times. The Main Construction shall be responsible for forming suitable temporary escape routes (internal and external) from the Building. This shall include the lighting of all escape routes and the provision of emergency escape lighting. This design requirement must be maintained at all times during the works.

The Contractor may not burn any rubbish or debris on the Construction site or on the Campus.

The Main Contractor shall note that smoking is prohibited at all times on the Campus.

All existing soil vent pipes (SVP's), drainage pipework and other penetrations through the existing external walls and floor slabs must be checked to ensure that they are adequately fire stopped in accordance with the design intent to achieve a 60mins fire rating prior to the commencement of any hot works within the Building. It may be necessary to upgrade the fire-proofing of some of the existing service penetrations and openings due to the nature of the extension building.

The Main Contractor is to ensure that the fire integrity of all holes or openings in the existing walls and floor slabs are maintained at all times throughout the construction works. Fire seal and compound (or similar to be agreed with the design team shall) is to be installed to all new

holes or openings in the existing walls and floor slabs when the work areas are left unoccupied and in particular at the close of each days works. Fire Dampers and/or duct wrap and fire collars are to be installed as required where mechanical and electrical services pass through the existing walls and floor slabs. A contingency plan is to be put in place and agreed with the Fire Engineer prior to the commencement of the works in case of an emergency where the contractor needs to vacate a works area quickly.

The Main Contractor shall maintain the required fire integrity of all floors and walls where services penetrate them during and on completion of the construction works. The Main Contractor is to liaise with the Engineer to discuss and agree any measures that need to be taken to comply with this requirement.

The Main Contractor shall ensure that 60mins fire compartmentation lines are maintained between the existing 'live' facility and the proposed Construction Site/s prior to and at all times during the construction works.

A Fire sealing handbook has been put forward to guide the contractor on fire sealing and fire stopping details (Reference Appendix F, Site Limitations Document). The Contractor is to liaise with his Plasterboard Material Supplier and Fire-Proofing Specialist and prepare and issue to the Design Team his set of site specific Fire-proofing (and Acoustic) Construction Details for use on the Project. The Contractor is to consult with the Design Team on any fire stopping details that present a concern.

The Main Contractor is to notify the Design team of his preferred fire sealing contractors. The Fire consultant is at liberty to interview the proposed contractor prior to his appointment.

Gas must be stored and locked in open cages at night time. The maximum amount of cylinders to be situated within the construction site at any one time is 4no. 21kg cylinders. All torches must have braided hoses, anti flash back valves and all connections are to be the crimped type. The maximum length of hose is 15m and the minimum length of hose is 6m. At the start of each day equipment must be checked with leak detection spray before a torch is lit. This is to be signed off and records kept by the contractor. The service cylinders in use must be on a suitable trolley with pneumatic tyres and must not be man handled. At all times works using torches must be supervised by a Fire watchman. One Fire watchman is required per torch. This person is to have no other role at the time of torching. Each fire watcher must have the following equipment to hand: 8kg minimum dry chemical extinguisher and 1no. 9litre AFF foam spray. The vessels must meet IS-EN 3 and comply with IS 291. Each fire watcher must also have a 1.8sq.m high specification fire blanket to IS-EN1869.

The Main Contractor shall note that LPC (Loss Prevention Council) Approved flame retardant membranes should be used in all dust screens that separate working areas from school areas and other buildings.

The Contractor is to refer to the following guideline documents (and newer versions of same) before the Construction Works commence and as they proceed:

Fire Prevention on Construction Sites – The Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation published by Construction Confederation and The Fire Protection Association (Sixth Edition, January 2006)

Code of Practice for the Construction of Building – Insurers' Rules for the Fire Protection of Industrial and Commercial Building published by The Loss Prevention Council (LPC)

Fire Safety in Construction Work – Guidance for Client, Designer's and those managing and carrying out construction work involving significant fire risks published by the Health and Safety Executive (HSE) UK

The Main Contractor shall note that fire safety and general health and safety audits may be carried out by the client's independent auditors. It is recommended that the PSCS (Project Supervisor Construction Stage) accompanies the auditors during their inspections. All observations made and advice offered by the auditors are to be given careful consideration by the PSCS who is to immediately advise the Main Contractor of any actions necessary to bring the construction project into accordance with all current fire and health and safety legislation. Where the Main Contractor is found to be in breach of any current fire and health and safety legislation he will be expected to rectify same within a timely fashion and shall be obliged to issue an immediate written response confirming that he has rectified the breach highlighted by the client's independent auditors.

2.5 SITE RULES

A number of site specific rules are brought to the attention of the contractor. Variations or amendments to these must be agreed by the Client and the Project Supervisor for the Construction Stage, otherwise they are to be applied to site operations in full.

The contractor shall draw up an appropriate list of rules covering site safety and site personnel and submit it to the Project Supervisor Construction Stage for discussion.

2.5.1 Site Specific Rules

Detailed Rules on deliveries within the Site are set down in the Site Limitations Document. The Main Contractor shall be allowed access to the site at the times set down in the site limitations document. These working hours may be superseded by the conditions set down in the Planning Approval for the Project, reference Site Limitations Document.

2.5.2 Training

General Requirement

Suitable training and instruction, as well as being required by law, can help minimise risk of injury to employees and other persons using the workplace. Three types of training should be considered.

Induction - ensuring that new recruits are clear about the key rules, and the need to follow them and accept supervisory scrutiny and guidance from experienced colleagues.

Basic Training - usually provided as a formal training programme either provided in a block or in short modules during the first days / weeks of working.

Reminder / skill development - best provided topic by topic in 10 minute "toolbox talks" with an opportunity for staff to comment and ask questions, thereby forming part of the organisation's employee staff consultation process.

2.5.3 Training for Persons Directly Involved

All those workers who operate and maintain plant and machinery, or work in the field of operatives, and their direct supervisory staff should receive training and instruction.

2.5.4 Instruction for Other Persons on Site.

Other contractors and visitors, who enter the area where operations take place, should be aware of the hazards likely to be present and the safety rules and procedures they must observe. These will include the emergency procedures for First Aid etc., and the prohibition on anyone operating or working on cutting machinery unless trained and authorised. The degree of detail needed for these other staff and visitors who are not directly involved in the operations may not be as great as for the workers who operate, maintain and clean the machine. Written details should be given to contractors together with other site rules before they are allowed on site.

The Project Supervisor for the Construction Stage should coordinate arrangements among contractors to ensure the provision of relevant information, in writing, necessary for the project supervisor for the design process to complete the Safety File referred to in Regulation 13, monitor the implementation of the arrangements and take any necessary corrective action, as set out in Regulation 20, and provide in writing to the project supervisor for the design process all relevant information necessary for that project supervisor to complete the Safety File referred to in Regulation 13.

2.6 ACTIVITIES ON OR ADJACENT TO THE SITE DURING THE WORKS

2.6.1 Surrounding Land Use

The works area is situated on a 'live' Campus comprising several Schools, Convent, Church, and Nursing Homes.

The Campus will remain operational during the construction works.

2.6.2 Planning Conditions & Requirements for Preservation

Refer to the Site Limitations Document for details of other associated Conditions imposed upon the Project.

2.6.3 Existing Services

The Main Contractor is to make every effort to identify and record any and all services that exist on this site and which may be encountered as the works proceed or which may be affected by the works. This is to ensure that no building services are affected by the works being carried out by the contractor or by subsequent works. All scans and investigations necessary to confirm the locations and definition of services are to be undertaken by the contractor, in agreement with the client and the Project Management team, to facilitate the provision of this information.

The contractor shall review the available services drawings and shall carry out any site surveys and investigations deemed necessary to verify what services are in existence. The contractor shall be required to carry out enabling works to divert services prior to the commencement of the works proper. The contractor shall maintain all services in operation during the course of the contract unless otherwise agreed with the design team. A comprehensive and coordinated Mechanical and Electrical /Civil Engineering/ Builders Works method statement shall be submitted and agreed with the design team and client prior to any service disconnections occurring. The contractor shall note that

certain enabling works are to be undertaken in advance or at the outset of the commencement of the Main Contract.

The Main Contractor may need to temporarily and/or permanently relocate or extend some services within the existing building as part of the construction works.

The works shown on the Mechanical and Electrical Engineering Consultants drawings and are to be carried out in conjunction with the Mechanical and Electrical Subcontractors for the Project. These works are to be programmed and carried out in strict agreement with the Project team and in accordance with the requirements of the Mechanical and Electrical designers. "Checks lists" and authorisation sheets which relate to any approvals to be granted shall be prepared by the Main Contractor and confirmed with the Project team throughout the construction works. In this regard the Main Contractor shall follow the permit forms set down in the Appendix E, Site Limitations Document. The Main Contractor is at liberty to provide his own standard health and safety forms for such procedures provided that they match the information requirements set down on the forms appended to this document. A Service Disconnection Checklist/Method Statement will need to be provided by the Main Contractor prior to the disconnection of any services.

Any temporary disconnection of services and reconnection of same is to be programmed in consultation with the Facilities Management and Project team. Prior to disconnection of a service, a minimum of two weeks advance notice must be given in writing to the Facilities Management and Project team for approval. The Contractor shall be aware of the extreme importance of this procedure given the risk to tenants in the event of a sudden withdrawal of the fire alarm system or electricity, for example.

The Main Contractor shall be aware of the existence of a range of fresh air ventilation intake ducts which are situated around the perimeter of the existing building. In addition the Main Contractor shall be aware of the existence of a range of foul extract ducts (SVP's) which are situated at roof level of the existing building. All of these ducts shall be diverted as necessary in order to ventilate away from the area of work. These works are to be carried out in conjunction with the Mechanical and Electrical Subcontractors for the Project. All proposed works are to be agreed with the client prior to commencement of the works.

The Main Contractor shall be responsible for protecting and maintaining in operation the existing Mechanical and Electrical Systems and their associated Plant and Equipment situated on the Campus. All Mechanical and Electrical plant should be fenced off or protected in a suitable manner prior to the commencement of the works. The fencing or protection should not restrict the flow of air to the equipment. The Main Contractor shall in conjunction with the Mechanical and Electrical Subcontractor follow a maintenance regime for all existing Mechanical and Electrical equipment to be maintained during the works. This maintenance regime associated with the Remedial Works shall be agreed in advance with the Facilities Management Team and the Project Team.

2.6.4 Existing Traffic System

Access to the site is from Ratoath Road, Dublin 7.

Access Storage and Contractors Vehicles

The road and existing site lines must be kept clear at all times. The parking of Contractor's vehicles should be set out on site and agreed.

The Contractor shall submit proposals for on-site storage areas for approval by the Project Supervisor Construction Stage and segregate these from the works.

The Contractor shall submit and agree with any other Contractors a programme of deliveries and access requirements.

All deliveries to the site shall be made via the approved access roads. The Contractor shall submit proposals for on-site storage areas for approval by the Project Supervisor Construction Stage and segregate these from the works. The Construction Phase Safety and Health Plan shall incorporate a drawing which shall clearly define the areas of the contractors operations. Areas on site for use by vehicles should be clearly identified and separated from pedestrian routes.

2.6.5 Contractor's Personnel and Site Visitors

The Contractor shall implement an appropriate booking in and out system for all site operatives and visitors. Contractor's personnel shall carry appropriate identification at all times on site.

The contractor shall institute a formal site induction procedure including issue of P.P.E. as for all personnel. Particular reference to site specific aspects of this project to be allowed for eg access / egress, restrictions, welfare facilities etc.

Safe Pass

All construction workers on this site must have received FAS Safe Pass safety awareness training and be in possession of registration cards

Construction skills Certificate scheme

Valid Construction Skills Safety Certificate are to be in place where appropriate.

The Project Supervisor Construction Stage is required to co-ordinate provisions to ensure that appropriate certificates are in place.

2.6.7 Vehicular Transitional Hazards

A full-time member of the Main Contractors staff shall have overall responsibility for the management of Construction traffic to/from the site at all times. This person shall be responsible for controlling the entry and exit of construction traffic from the site. The Main Contractor/PSCS shall carry-out a Health and Safety Risk Assessment for any deliveries to the site and determine if banksmen/spotters are required in order to assist delivery trucks and other construction vehicles enroute to the Construction Site (Site Compound/ Offloading areas) and vice-versa.

All construction vehicles entering the site are to be restricted to a speed limit of 8km/hr (5miles per hour) when travelling Kingram Place, Leeson Close and the construction site.

2.6.8 Pedestrian Transitional Hazards

Warning signs sealed off access signs/barriers and "out of bounds" notices must be provided where relevant as the works proceed. The contractor is advised of the

requirements for safe pedestrian access to be maintained on, to and from the campus at all times.

Temporary signs, sealed off access signs, barriers and "out of bounds" notices will be provided where relevant as the works proceed.

Hoarding and site security generally must be of a high standard.
Site access points must be manned and monitored at all times when work is in progress, and secured when work is not in progress.

The Contractors shall install pedestrian and vehicular signage on Kingram Place and Leeson Close in advance of the commencement of the works to warn users.

2.6.9 Contractor's Deliveries

The Main Contractor shall include in his Construction Traffic Management Plan a detailed master programme showing all deliveries and removals. This programme of deliveries and removals shall be issued to both the client and the Project Manager for co-ordination purposes and shall be updated in advance on a weekly basis.

The Main Contractor shall be responsible for collating the delivery and removal requirements from all of the nominated and domestic subcontractors for input into the aforementioned master programme showing all deliveries and removals.

The Main Contractor shall liaise with the Facilities Management team and the Project Management team on a weekly basis in relation to the management and coordination of deliveries to the Construction Site.

The Main Contractor shall review the access and egress route from the site and shall mark possible pinch points or tight corner locations where bollards may be required to ensure that no public parking takes place which could impact on the delivery process. The Main Contractor shall fix removable bollards in these locations and shall liaise with the client in this regard in order to ensure that a clear access and egress route is maintained at all times.

Access to the site shall be controlled by the Main Contractor, as part of his Construction Management Plan.

2.6.10 On-Site Conditions

Appropriate signage to be provided at the entrance/s to the site.

Fire doors are to be kept shut. The Contractor shall maintain in operation emergency exit doors and emergency exit routes at all times.

All existing fire-exit routes within and from the existing building are to be maintained at all times, except where it may become necessary to temporarily take particular escape-routes out of operation to facilitate the construction of the extension. In such cases, fire-escape routes may only be temporarily taken out of use for pre-specified periods in agreement with the Fire Safety Engineer, the Client and Architect and with written agreement for same having been obtained in advance of taking the fire-escape routes out of use. Apart from the above noted exception, all Fire exit routes must be kept clear at all times. The Main Construction shall be responsible for forming suitable temporary escape routes (internal and external) from the Building. This shall include the lighting of all escape routes and the provision of emergency escape lighting. design requirement must be maintained at all times during the works.

2.7 CONTINUING LIAISON

The following procedures shall be in place with respect to considering the Health and Safety implications of design decisions, which remain to be made or where design changes occur or where time required for the completion of the project or phases of the project occurs:

The relevant design decisions, design changes or time changes should only be those which materially affect the information provided with respect to particular risks as defined under the Regulations or to the nature and scope of the project as to the extent necessary to enable the Project Supervisors to comply with the Safety Health and Welfare at Work (Construction) Regulations, 2013.

The Project Supervisor Construction Stage will promptly bring to the attention of the Project Supervisor Design Process any such design decisions that he is aware of.

Designers are to notify promptly both the Project Supervisor Design Process and Project Supervisor (Construction Stage) of design decisions and provide them with sufficient information, i.e. copies of documentation etc., in order for them to carry out the necessary assessments before the revised work is carried out and to give directions regarding same when the assessment has been completed.

The Project Supervisor Design Process will be copied with the minutes of all on site meetings where design decisions are involved and all written instructions or confirmation of verbal instructions issued by the Design Team which are relevant decisions or changes as defined above.

The Project Supervisor Design Process and the Project Supervisor Construction Stage shall meet as necessary to co-ordinate information received from all designers. The frequencies of such meetings are matters to be addressed by the Project Supervisor Construction Stage in the developed Health and Safety Plan. Health and Safety must be headed up as an item to be addressed at all Project Site meetings, including the contractors meetings with designer's subcontractors, suppliers, employees etc.

Where unforeseen eventualities arise during project execution resulting in substantial design changes or affecting the time period for the project, the Designers shall promptly notify the Project Supervisors (Design Process) and (Construction Stage) and provide these with relevant information together with the Designer's Risk Assessment. Directions shall be issued as necessary by the Project Supervisor Construction Stage acting on

2.8 TEMPORARY WORKS MANAGEMENT COORDINATION
Any Temporary Works will be managed as outlined in the flowchart below:

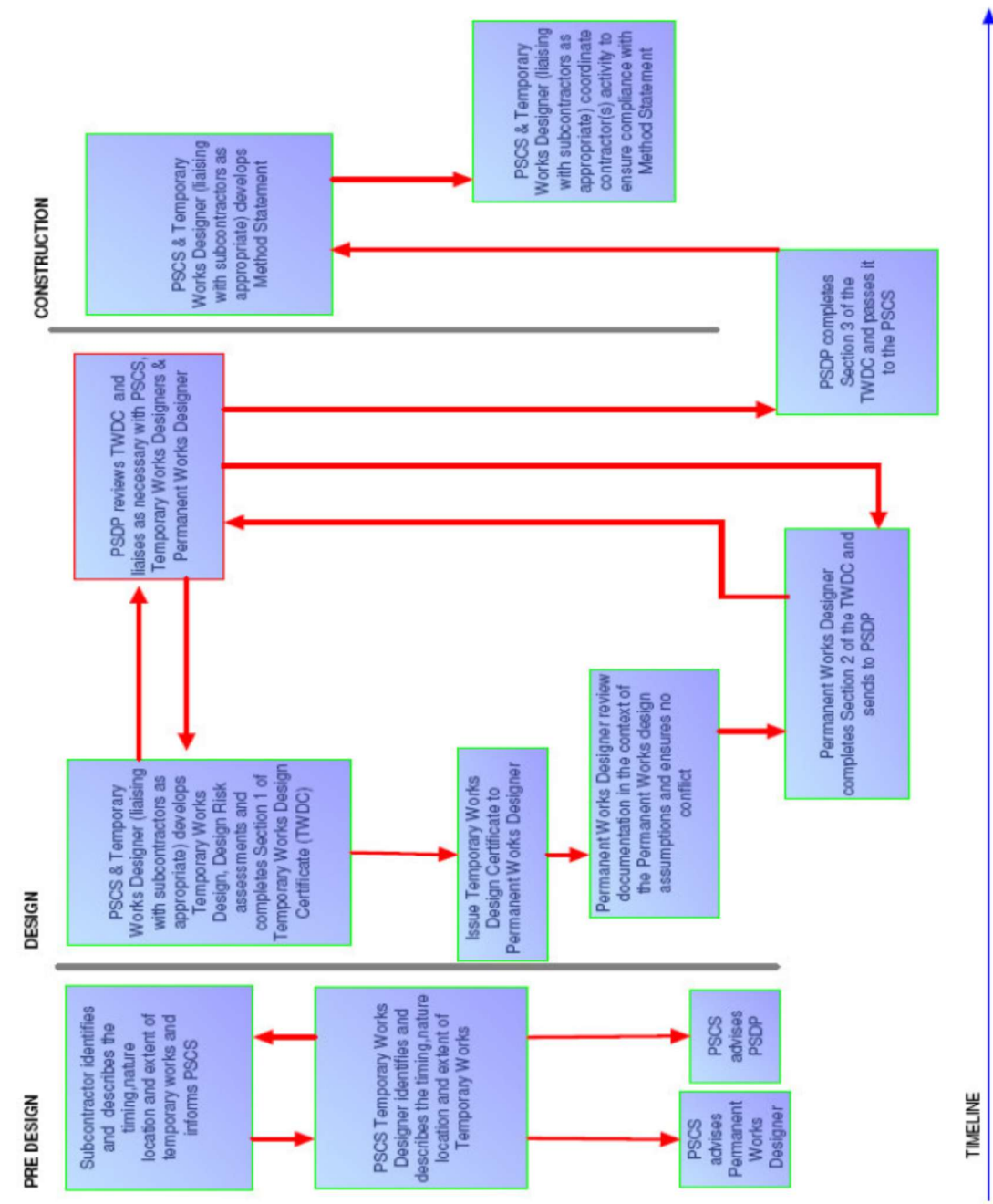


Figure 7 Management of Temporary Works

3.0 ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS

3.1 THE DESIGN AND PARTICULAR RISKS

3.1.1 Risk Assessments

Appendices A and B contain Particular and generic Risk Assessments as assessed by liaison with members of the Design Team as of the date of issue of this document. Reference should be made to the Project Supervisor Design Process if particular assessments are required.

It should be noted that many of the risks on the Project might arise out of working methods, which are at the discretion of the Contractor and as such cannot be determined by the Project Supervisor for the Design Process (PSDP). The Contractor shall also pay particular attention to the attached risk assessment.

The Contractor's Designer, (including those of subcontractors) in respect of Contractor design items particularly his temporary works engineers, will be required to make the necessary Risk Assessments and forward these to the Project Supervisor Design Process prior to works commencing. A temporary works design certificate will also be required to be issued and signed by the permanent works Engineer and the Project Supervisor Design Process prior to works commencing on site.

Reference should be made back to the Project Supervisor Design Process as design development or major changes to design occur.

The Contractor is to consider and make provision to minimise the identified risks during the construction phase.

Risk Assessments prepared by the Project Supervisor Design Process are included in Appendix B. These add to those prepared by the Project Designers and reference should be made to both in the preparation of the Construction Phase Safety and Health Plan.

3.1.2 Contractor's Method Statement

The Contractor is informed that the following Method Statements should be provided prior to commencement of the works. This is not intended to be an exhaustive list and the Contractors should develop this list as circumstances may require:-

- Traffic Management
- Interface Management at Points 1-8 identified in Figure 1
- Fire Safety Management
- Access Control
- Liaison with other Contractor on-site
- Services Connections/Diversions

The Contractor is to further note the following:

- Site Setup & Establishment
- General Items
- Demolition Works

- Temporary Works
- Building Works
- Commissioning and Handover

3.1.3 Contractor's Design

There may be the elements of contractors design involved in completing the construction works e.g. temporary works, mechanical and electrical design. In cases where contractors design is anticipated, information should be passed to the Project Supervisor Construction Stage to allow assessment of any health and safety implications.

Note: Designers as defined under the Regulations has a broader definition than just activities by the Design team (see Regulation 15) of Safety, Health & Welfare at Work (Construction) Regulations, 2013.

3.2 SAFETY OF PERSONNEL ON SITE

Plant and Equipment

Care should be taken to ensure that plant equipment is:-

- (a) of an appropriate type and standard having regard to the location and type of work involved,
- (b) in the charge of a competent operator, and
- (c) maintained in good working condition at all times.

The equipment should be fitted to machines of adequate power and stability for the use intended.

The operator should be experienced in the use of equipment and there should be a high standard of inspection and maintenance.

Where appropriate, plant and equipment should comply with the requirements of the relevant British Standards.

3.2.1 Protection of Site Personnel

During work all operators should wear adequate protective clothing and, where appropriate, protective equipment such as safety goggles, ear defenders and respirators, complying with the requirements of the appropriate British Standard. Relevant standards include the following:-

BS 679 Filters for use during welding and similar industrial operations.

BS 1397 Specification for industrial safety belts, harnesses and safety lanyards.

BS 1870 Safety footwear

BS 2091 Respirators for protection against harmful dust and gases

BS 2092 Industrial eye-protectors

BS 4555 High efficiency dust respirators

BS 4558 Positive pressure, powered dust respirators

BS 5240 General purpose industrial safety helmets

High levels of noise can cause permanent hearing damage to workers. Attention is drawn to the Health and Safety Executive publication *Code of practice for reducing the exposure of employed persons to noise*, which contains advice on the levels of noise that are a serious hazard and the precautions that can be taken. When noisy machinery is used, ear defenders may be necessary.

For specific operations where intervention or action levels have been or will be identified, which may prejudice the health of persons using the site, special precautions should be taken regarding protective clothing, goggles and the use of respirators.

3.3 GENERAL PROTECTIVE PRECAUTIONS

Every working place and approach and all openings dangerous to persons employed and others should be properly illuminated and protected.

Precautions can be split into three areas, each of which will require addressing:

- (a) those precautions that are specially aimed at safeguarding those engaged on the site of the works;
- (b) those precautions that are necessary for the safety and convenience of persons not connected with the works, including members of the public;
- (c) those precautions that are necessary for the protection of property likely to be affected by the works..

Areas are to be properly secured or closed against entry at all times when operations are not in progress, and left in a safe condition at the close of each day's work.

All reasonably practicable steps should also be taken to prevent the exposure of third parties to substances hazardous to health that are or could be present during works.

Temporary works design

Use of temporary works certificates as outlined in 'Guidelines on the Procurement, Design and Management Requirements of the Safety, Health and Welfare at Work (Construction) Regulations 2006' will be the control mechanism for temporary works design where applicable – the Contractor is to comply with the requirements of any updated guidelines to take account of the Safety, Health and Welfare at Work Construction (Regulations) 2013.

The Contractor / Project Supervisor Construction Stage is to issue a programme and schedule of temporary works design elements that will require co-ordination and co-operation with permanent works designers. This should be issued at the commencement of the Project and developed and updated as the Project progresses.

At the time of this document, permanent work designers were not aware of any temporary works design requirements other than the temporary fire alarm system.

3.3.1 Confined Spaces

The works may give rise to confined spaces as defined by the Safety, Health & Welfare at Work (Confined Spaces) Regulations 2001. Such areas as any vessel, tank, container, vault, silo, hopper pit, bund, pipe, sewer, flue, well, chamber, compartment, cellar or similar space (e.g. lift well, excavations, basement areas, roof space or sealed

room etc) by virtue of its enclosed nature creates conditions which give rise to a likelihood of accident, harm or injury of such nature as to require emergency action due to:-

(a) the presence or reasonable foreseeable presence of:

- (i) Flammable or explosive atmospheres (e.g. flour dust)
- (ii) Harmful gas, fumes or vapours
- (iii) Free flowing solid or an increase level of liquid (consider basin location)
- (iv) Excess of oxygen
- (v) Excessively high temperature

(b) the lack or reasonably foreseeable lack of oxygen

The design team has not identified any confined spaces.

It should also be noted that the fluid nature of construction and the process of construction could lead to the creation of confined spaces even though the completed building may not have readily identified confined spaces as per the code of practice for working in confined spaces.

The Project Supervisor Construction Stage must keep under review the construction process, identifying confined spaces as they occur and carrying out risk assessment and implementing control measures in accordance with the Code of practice for working in Confined Spaces.

Permits to work should be used.

3.3.2 Electrical Hazards

The main hazards arising from electricity on this project include electric shock, burns, fires and explosions. A planned schedule shall be used for the testing and inspection of portable electrical equipment. This shall include the strength and capability of electrical equipment, protection against adverse/hazardous conditions. Persons working on electrical equipment shall have the necessary competence requirements to carry out their work safely and not endangering themselves or others.

3.3.3 Safety and Convenience of Third Parties

A person carrying an operations should make sure that any works partially complete are, so far as is reasonably practicable, properly secured or closed against entry at all times when operations are not in progress, and that the building or structure is left in a safe condition at the close of each day's work.

All reasonably practicable steps should also be taken to prevent the exposure of third parties to substances /items hazardous to health that are or could be present during works. Every effort should be made to minimise any nuisance to the public.

Adequate signage, lighting, physical measures and other security measures to be developed. Areas of work must be left in a safe condition at the end of each shift.

3.3.4 Dust

The Main Contractor shall maintain all footpaths and roads affected by the works to be carried out by him so that they remain in a safe and tidy condition. This shall include the use of a road cleaning vehicle (or wheel wash) as required to maintain all areas in a clean and presentable state. The grounds of the Campus shall be maintained in a tidy and orderly manner at all times during the construction works. The roads are to be

kept clean and free of dirt and dust at all times. The contractor shall road sweep as necessary to ensure this for the duration of the contract.

The creation of dust by the construction works is to be controlled by the Contractor with an ongoing review. Dust is to be prevented from affecting any common areas. Prior to the commencement of the works, the contractor shall submit, for approval, a Construction Management Plan which is to include details of the contractor's proposals to mitigate dust generation on the Construction Site.

The Main Contractor shall monitor dust levels with particulate meters (3no.) throughout the construction works and provide test information to the Project Team on a weekly basis. The location of the particulate meters shall be agreed in advance of the commencement of the works with representatives of the Project team.

The dust criterion proposed is the EU stage 1 limit value of 50 micrograms per metre cubed for particulate matter of size less than 10 microns (PM₁₀).

Limits: 50µg/m³, not to be exceeded more than 35 days per year, as per EU stage 1 limit

3.3.5 Noise

Noise should be minimised as far as possible, in particular by limited the use of compressors and other plant to stated hours and by the fitting and use of silencing devises wherever practicable. Attention should be paid to the recommendations given in BS 5228:1997 – *Noise and Vibration Control on Construction and Open Sites*. The Contractor shall comply with the requirements of the site limitations document. The Contractor is to limit the spread of noise, plant or processes should be replaced by less noisy alternatives (if reasonably practicable). Sources of particular noise shall be enclosed and/or increased their distance from occupied buildings. Every effort should be made to minimise any nuisance to the adjoining areas and occupiers.

Construction plant used on site should comply with the relevant Irish regulations in relation to noise and vibration requirements.

High levels of noise can cause permanent hearing damage to workers. Attention is drawn to the Health and Safety Executive publication *Code of practice for reducing the exposure of employed persons to noise*, which contains advice on the levels of noise that are a serious hazard and the precautions that can be taken. When noisy machinery is used, ear defenders may be necessary.

3.3.6 Fire

If the work of the Contractor introduces fire hazards into an area, the Contractor is responsible for providing the appropriate type of fire fighting equipment and of informing the Tenants, Facilities Management and Project team of the unusual hazard.

The Contractor must inform the Facilities Management and Project team well in advance of any temporary safety measures that the Campus may have to undertake with regards to the nature of the proposed works, and the affect on the following: - Fire Exits, Fire Fighting Equipment, Fire Detection & Alarm Systems, Utilities, Adjacent Areas etc.

Contractors or their employees/sub-contractors are, on arriving at the work site must check: -

- (a) The nearest means of escape in case of fire.
- (b) The location, type and method of operating fire-fighting equipment.

- (c) The location of the nearest fire alarm.
- (d) The procedure to be taken in case of fire or on the sounding of the fire alarm.

Precautions should be taken to prevent the risk of fire or explosion caused by gas or vapour. Containers of oxygen, acetylene or liquefied petroleum gas should be handled with care and stored and used in accordance with good practice. When the thermal reaction or thermal lancing methods are used, consideration should be given to the prevention of oxygen enrichment and the attendant risk of explosion or ignition of flammable vapour. Containers of oxygen, acetylene or liquefied petroleum gas should be handled with care and stored and used in accordance with good practice.

Extra care should be taken to ensure that no incipient fires are left when burning equipment. (E.g. oxy-propane torches). Hot works are not envisaged. However, in the case where they occur use of hot works permits will be mandatory. These will include a provision for work to stop one hour before the end of the shift and the area to be checked formally at the expiration of this period.

Attention is drawn to fire prevention on construction sites – joint code of practice on the protection of fire on construction sites and buildings undergoing renovations published by the fire prevention association will be reviewed.

It is noted that the fire alarm and detection system is to remain active during the course of the works and the provision of 'shower caps' to detectors during works may be required. These are to be removed at the end of the shift.
It is imperative that the fire escape route from the existing facilities is not obstructed at any stage.

Gas cylinder and similar containers, whether empty, in use or spare, should be stored in a safe place, in accordance with good practice, since if they become involved in a fire any resulting explosion may cause injury to persons and damage to property.

3.3.7 Vibration

Exposure to whole body and/or hand-arm vibration shall be reduced as far as reasonably practicable. (Exposure is via driving/using heavy equipment vehicles etc and hand tools such as pneumatic tools and jackhammers etc). The PSCS shall seek technical advice such as ensure that exposure is not above the daily exposure action level.

Risk assessments shall be conducted to highlight the key risk areas. Control measures like the following will be implemented: Information on hazards/risks, employee health records, alternative work methods (if applicable), work schedules arrangements to reduce exposure time, adequate clothing etc.

The vibration criterion proposed is a limit of 0.14 mm peak particle velocity (ppv) in sensitive areas. This is the perception threshold from BS 6842, and is a very strict criterion for a construction project.

Vibration limit: 0.14 mm/s peak particle velocity (as per BS 6842)

Elsewhere the vibration criterion are set down on the structural engineers drawings.

3.3.8 Working at Height

Work at height is work in any place, including a place at, above or below ground level, where a person could be injured if they fell from that place. Taking this into account, work at height activities shall be identified as the works progresses. The regulations shall be applied continuously throughout the project, most notably during work in/near excavations in addition to the extension and even the refurbishment works.

The main onus in relation to these regulations include: to carry out a risk assessment, to follow the General Principles of Prevention (taking steps to prevent, avoid or reduce risks) and finally to choose the correct equipment and select collective measures to prevent falls (i.e. guard rails, working platforms etc.). These should be selected before other measures which may only reduce the distance and the consequence of the fall.

A safe system of work is required when planning to do work at a height. This system should include; appropriate supervision where necessary, weather conditions workers may be exposed to and emergency/rescue procedures that may be required.

3.3.9 Housekeeping

This is a significant issue during the internal works due to the tight nature of the site. It's also important within the designated site compound.

The main onus on all contractors is related to their organisation/co-operation with a view to protecting workers & preventing accidents on site. The main issues that need to be addressed continually include general material storage, access & egress within the site and ensuring that traffic routes (horizontal & vertical) are kept clear. Housekeeping is vital to prevent slips, trips and falls and falling materials. It should cover the storage, use, cleanup and adequate disposal of materials.

3.3.10 Demolition

Demolition is a hazardous operation and the methods, material and equipment used should be accord with the need to safeguard life and property. It is essential that precautions be taken both before and during actual construction. Such precautions may be categorized under the following three headings:

Precautions aimed at safeguarding those engaged on the site of the works;

- Precautions that are necessary for the safety and convenience of persons not connected with the works, including members of the public;
- Precautions necessary for the protection of property likely to be affected by the construction works;

During the demolition process, consideration should include the following:

- the sequence & method of proposed demolition
- details of the plant required, including the capacities and location of the cranes and the methods of placing and recovering plant to be used enclosed within the structure
- site traffic plan, detailing arrangements for, and the control of site traffic
- contingency arrangements, for e.g. partial collapse
- detailed programme and timetable of event
- arrangements for protecting the public (site security, containment of demolition materials etc
- arrangements for structural stability (avoidance of unplanned, including premature

- collapses, details of any temporary works to provide support, designed by a competent engineer)
- safety of the workforce (details of personnel access and working platforms, including the procedure for their maintenance and removal as the structure is reduced, adequate working
- space and exclusion zones, arrangements for the protections of persons including permit to work procedures
- Protective precautions, as referred to in Clause 5 of BS 6187, are to be taken. This will include some minor works to provide service routes for mechanical and electrical services. All practical precautions shall be taken where necessary to prevent any person being exposed to danger at work through the collapse of any part of a building before the new structure is completed. The Main Contractor shall liaise with the Structural Engineer prior to forming any new openings in the existing Building Structure.

3.3.11 Material Disposal

Contractor's should assess and take such measures as and when necessary to remove debris and other materials arising from the site regularly during the works.

Pro-active measures given the restricted nature of the site are required.

Prior to the commencement of works the Main Contractor shall submit for approval, a plan containing details of his proposals for the management of waste (and, in particular, contaminated and recyclable materials) within the development, including the provision of facilities for the storage, separation and collection of the waste. Any waste company used in the grounds of the Campus must be licensed by the EPA. The method of disposal of all site waste is to be detailed for client approval. The method of disposal of all site waste is to be provided to the client.

1.1 3.3.12 Avoidance of Danger from Collapse of Structure

Protective precautions, as referred to in Clause 5 of BS 6187, are to be taken. Ensure that there are no risks of uncontrolled collapse. All practical precautions shall be taken where necessary to prevent any person being exposed to danger at work through the collapse of any part of a building before the new structure is completed.

1.2 3.3.13 Temporary Supports

All temporary supports and temporary works deemed necessary are to be designed and signed by a Chartered Structural Engineer along with a Temporary Works Design Certificate and submitted for record to the Project Supervisor Design Process and the Permanent Works Designers prior to the commencement of any erection of structural elements.

1.3 3.3.14 Nuisance

Particular care is to be taken to minimise nuisance caused by dust, smoke and noise (ref. Clause 5.3.5., BS 6187). Note the adjacent buildings will be occupied at all times during the construction works.

1.4 3.3.15 Making Good and Protection

Make good only to the extent required to ensure safety of all personnel on site. Ensure that all hazardous areas are stable, illuminated, secure and that safety signage is in place.

Provide general protection as per Clause 5.4. of BS 6187 and as outlined in the Safety Health and Welfare at Work (Construction) Regulations, S.I. No 291 of 2013.

It is critical that adequate protection of the building fabric and structure is provided at all times. Existing Fire Exits are to be hoarded off with overhead protection and suitable temporary signage and lighting to be installed within the hoarding clearly marking exit routes. While works to the existing and new M&E services are being carried out, ensure adequate protection is installed over the existing services, fixtures and fittings below. Fire stopping of existing joints will also require protection hoarding over the areas below. Design of all such protection is the contractor's responsibility.

1.5 3.3.16 Asbestos Survey

1.6 The Contractor shall arrange for the carrying-out of a Demolition/Refurbishment Asbestos Survey Report by an Asbestos Specialist. The Contractor shall carry-out his own health and safety checks and risk assessments in relation to the presence of asbestos prior to the commencement of the works. The Contractor shall arrange for the safe removal and disposal of all asbestos and asbestos containing products in advance of the commencement of any demolition works.

4.0 SIGNIFICANT DESIGN AND CONSTRUCTION HAZARDS

4.1 DESIGN ASSUMPTIONS & CONTROL MEASURES

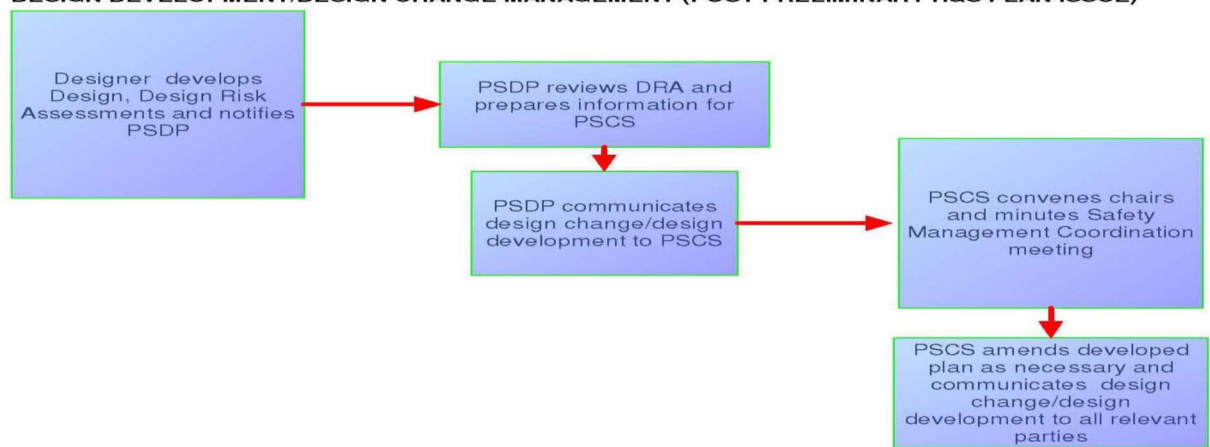
Design assumptions and controls are outlined in Appendix B risk assessments in accordance with HSA **Guidelines on the Procurement, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2013** and apply the General Principles of Prevention outlined in the Safety Health & Welfare at Work (General Application) Regulations. The purpose of the General Principles of Prevention is to provide a framework within which design and detailing issues can be assessed.

For reference purposes these principles are outlined below.

- i) The avoidance of risks
- ii) The evaluation of unavoidable risks
- iii) The combating of risks at source
- iv) The adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and systems of work, with a view to alleviating monotonous work and work at a predetermined rate and to reduce their effect on health
- v) The adaptation of the workplace to technical progress
- vi) The replacement of dangerous articles, substances or systems of work by non dangerous articles, substances or systems of work.
- vii) The development of an adequate prevention policy in relation to safety, health and welfare at work, which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment.
- viii) The giving to collective protective measures of priority over individual protective measures.
- ix) The giving of appropriate training and instruction to employees.

4.2 ARRANGEMENTS FOR COORDINATION OF ONGOING DESIGN WORK & HANDLING DESIGN CHANGES

DESIGN DEVELOPMENT/DESIGN CHANGE MANAGEMENT (POST PRELIMINARY H&S PLAN ISSUE)



4.3 MATERIALS RISK ASSESSMENTS

The Contractor is to provide Risk Assessments for all materials subject to control under the following statutory instruments applicable to construction sites.

- Safety, Health & Welfare at Work (Carcinogen) Regulations 2001 (S.I. No. 078 of 2001)
- Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 (S.I. No. 386 of 2006)
- Safety, Health & Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)
- Safety, Health & Welfare at Work (Control of Noise at Work) Regulations 2006 (S.I. No. 371 of 2006)
- European Communities (Classification, Packaging and Labelling of Dangerous Preparations) (Amendment) Regulations 2007 (S.I. No. 76 of 2007)
- European Communities (Classification, Packaging and Labelling and Notification of Dangerous Substances) (Amendment) Regulations 2006 (S.I. No. 25 of 2006)

The materials specified for use on this project are identified within the Tender documentation. There is not an exhaustive list of general or particular material risks. The contractor should make his own assessment from the tender documentation or any future changes to the Specification.

APPENDIX A
PROJECT SUPERVISOR DESIGN PROCESS
RISK ASSESSMENTS
FIRST SCHEDULE PARTICULAR RISKS

**Assessment of Particular Risks Undertaken in accordance with Schedule One of the
 Safety Health a& Welfare at Works (Construction) Regulations, 2013**

**NON-EXHAUSTIVE LIST OF WORK INVOLVING
 PARTICULAR RISK TO THE SAFETY AND HEALTH
 OF PERSONS AT WORK**

YES	NO
√ (Reference Designers Risk Assessment)	
√ (Reference Designers Risk Assessment)	
	√
	√
	√
	√
	√
	√
	√
√ (Reference Designers Risk Assessment)	

**Please tick the appropriate box to identify whether the particular risk has been
 identified as present:**

1. Work which puts persons at work at risk of burial under earthfalls, engulfment in swampland or falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work on site.
2. Work which puts persons at work at risk from chemical or biological substances constituting a particular danger to the safety and health of such persons or involving a legal requirement for health monitoring.
3. Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Article 20 of Directive 80/836/Euratom
4. Work near high voltage power lines
5. Work exposing persons at work to the risk of drowning
6. Work on wells, underground earthworks and tunnels.
7. Work carried out by drivers at work having a system of air supply.
8. Work carried out in a caisson with a compressed-air atmosphere.
9. Work involving the use of explosives.
10. Work involving the assembly or disassembly of heavy prefabricated components

APPENDIX B
DESIGNERS RISK ASSESSMENTS

APPENDIX C

**SUGGESTED HEADINGS FOR DEVELOPED
HEALTH & SAFETY PLAN**

**SUGGESTED HEADINGS FOR INCLUSION IN DEVELOPED
SAFETY AND HEALTH PLAN**

Note: The format is only given as a general guideline and may be adjusted or revised as the Project Supervisor Construction Stage sees fit, but nevertheless, the Safety and Health Plan must address the issues outlined.

1.0 GENERAL

1.1 Description of Project

Including name of person responsible for carrying out duties of Project Supervisor Construction Stage.

1.2 General Statement of Health and Safety Principles and Objectives for the Project

Including a copy of the Contractor's Health and Safety Policy Document and Health and Safety Statement.

1.3 Information on restrictions which affect the Work

2.0 ORGANISATION AND MANAGEMENT

The number and type of staff responsible for Health & Safety on this Project with details of their qualifications, a schedule of their duties and contact numbers (emergency and normal). Specific and suitably qualified individual(s) must be identified as Site Safety Officer to take overall responsibility for site safety issues including the approval of method statements, permits to work and liaison with the Project Supervisor(s).

3.0 HEALTH AND SAFETY STANDARDS TO WHICH PROJECT WILL BE CARRIED OUT

4.0 MEANS FOR INFORMING ALL CONTRACTORS ON SITE *

* Please note the definition of contractor under the Regulations is extremely broad.

5.0 SELECTION PROCEDURES

Contractors, self employed and designers employed by the contractors will comply with Health and Safety requirements and make adequate provision for Health and Safety. Suppliers of materials to provide adequate Health and Safety information to support their products. Machinery and plant to be properly selected, used and maintained and operation training provided.

6.0 COMMUNICATION AND CO-OPERATION

6.0 ACTIVITIES WITH RISKS TO HEALTH AND SAFETY

Risk Assessments include those to be incorporated by other contractors. Control measures including arrangements for issuing directives.

7.0 ACTIVITIES WITH PARTICULAR RISK TO HEALTH AND SAFETY

Control measures including method statements to be clearly set out.

**PROCEDURES AND A PROGRAMME FOR THE DEVELOPMENT OF
CONTRACTOR DESIGN ITEMS AND CONTINUED LIAISON WITH THE PROJECT
SUPERVISOR (DESIGN PROCESS) AND THE CLIENT'S SAFETY OFFICER**

10.0 EMERGENCY PROCEDURE

For dealing with and minimising effects of injuries, fire and other dangerous occurrences.

Reporting of notified accidents or incidents to Health and Safety Authority under the Safety, Health and Welfare at Work (General Application) Regulations.
Arrangements for ensuring that proper site safety records are maintained.

11.0 WELFARE PROVISION

12.0 INFORMATION AND TRAINING FOR PEOPLE ON SITE

13.0 CONSULTATION WITH PEOPLE ON SITE

14.0 SITE RULES

15.0 SAFETY FILE

Arrangements for passing on information for preparation of the Safety file and ensuring said document is ready to hand over to the Client fully developed on project completion.

16.0 ARRANGEMENTS FOR MONITORING COMPLIANCE

16.0 PROJECT REVIEW

Reviews of different trades as the work is completed.

APPENDIX D

**NON-EXHAUSTIVE LIST OF
LEGISLATION APPLICABLE
TO
CONSTRUCTION SITES**

Acts:

No.10 of 2005 Safety, Health & Welfare at Work Act, 2005
No. 6 of 2004 Public Health (Tobacco) (Amendment) Act 2004
No. 28 of 2004 Maternity Protection (Amendment) Act 2004
No. 6 of 2002 Public Health (Tobacco) Act 2002
No. 12 of 1998 Civil liability (Assessment of Hearing Injury) Act 1998
No. 46 of 2003 Personal Injuries Assessment Board Act 2003
No. 20 of 1997 Organisation of Working Time Act 1997
No. 10 of 1996 Waste Management Act 1996
No.16 of 1996 Protection of Young Persons (Employment) Act 1996
No. 10 of 1995 Occupier's liability 1995
No. 34 of 1994 Maternity Protection Act 1994
No. 7 of 1992 Environmental Protection Agency Act 1992
No. 3 of 1990 Building Control Act 1990
No. 7 of 1989 Safety, Health and Welfare at Work Act 1989.
No. 6 of 1987 Pollution Act 1987
No. 30 of 1981 Fire Services Act 1981
No. 9 of 1980 Safety in Industry Act 1980
No. 10 of 1972 Dangerous Substances Act 1972
No. 10 of 1955 Factories Act 1955.

Regulations:

S.I. No. 291 of 2013 Safety, Health and Welfare at Work (Construction) Regulations, 2013
(Revoked and replaced S.I. No. 504 of 2006, S.I. No. 130 of 2008, S.I. No. 423 of 2008, S.I. No. 523 of 2010, S.I. No. 461 of 2012, S.I. No. 481 of 2012, S.I. No. 182 of 2013)
S.I. No. 299 of 2007 Safety, Health and Welfare at Work (General Application) Regulations 2007
S.I. No. 232 of 2006 Safety, Health and Welfare (Working at Height) Regulations 2006
S.I. No. 504 of 2006 Safety, Health and Welfare (Construction) Regulations, 2006 (Revoked and replaced S.I. No. 481 of 2001)
S.I. No. 392 of 2005 Safety, Health and Welfare at Work (General Application) (Amendment) (Revocation) Regulations 2005
S.I. No. 277 of 2003 Safety, Health and Welfare (Construction) (amendment) Regulations, 2003 (Amends S.I. 481 of 2001)
S.I. No. 258 of 2003 Safety, Health and Welfare at Work (Explosive Atmospheres) Regulations 2003.
S.I. No. 218 of 2001 The Safety, Health and Welfare at Work (Confined Spaces) Regulations 2001
S.I. No. 11 of 2000 Safety, Health and Welfare at Work (Night work and shift work) Regulations 2000
S.I. No. 218 of 2000 Safety, Health & Welfare at Work (Pregnant Employees) Regulations 2000
S.I. No. 386 of 2006 European Communities (Protection of Workers) (Exposure to Asbestos) Regulations 2006
S.I. No. 54 of 1998 Safety, Health and Welfare at Work (Children's and Young Persons) Regulations 1998
S.I. No.248 of 1998 (S.I. No. 146 of 1994) Biological Agents Regulations 1998 and 1994
S.I. No. 467 of 1997 Safety, Health & Welfare at Work (Extractive Industries) Regulations 1997
S.I. No.125 of 2000 Radiological Protection Act 1991 (Ionising Radiation) Order, 2000

S.I. No. 132 of 1995 Safety, Health & Welfare at Work (Signs) Regulations 1995.
S.I. No. 393 of 2000 European Communities (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations, 2000
S.I. No. 116 of 2003 European Communities (Classification, Packaging and Labelling and Notification of Dangerous substances) (Amendment) Regulations 2003
S.I. No. 357 of 1995 Safety, Health & Welfare at Work (Repeals and Revocations) Order 1995.
S.I. No. 358 of 1995 Safety, Health & Welfare at Work (Miscellaneous Welfare Provisions) Regulations 1995
S.I. No. 107 of 2000 European Communities (Dangerous Substances and Preparations) (Marketing and Use) Regulations 2000
S.I. No. 503 of 2003 European Communities (Dangerous Substances and Preparations) (Marketing and Use) (Amendment) Regulations 2003
S.I. No. 619 of 2001 Safety, Health & Welfare at Work (Chemical Agents) Regulations 2001
S.I. No. 78 of 2001 Safety, Health & Welfare at Work (Carcinogens) Regulations 2001
S.I. No. 285 of 1991 Safety, Health and Welfare at Work Act 1989 (Control of Specific Substances/ Activities) Regulations 1991
S.I. No. 157 of 1990 European Communities (Protection of Workers) (Exposure to Noise) Regulations 1990.
S.I. No. 201 of 1990 Dangerous Substances (Storage of Liquefied Petroleum Gas) Regulations 1990
S.I. No. 251 of 1989 EC (Protection of Workers) (Exposure to Chemical, Physical and Biological Agents) Regulations 1989
S.I. No. 219 of 1988 EC (Protection of Workers) (Exposure to Lead) Regulations 1988
S.I. No. 30 of 1982 Safety in Industry (Abrasive Wheels) Regulations 1982
S.I. No. 241 of 2001 European Communities (Noise Emission by Equipment for use Outdoors) (Amendment) Regulations 2006
S.I. No. 518 of 2001 European Communities (Machinery) Regulations 2001