

March 2020

Report

Draft Construction Management Plan

Cúirt na Coiribe Refurbishment & Extension Development Project, Galway

Exeter Ireland Property III Limited

securing right **outcomes**

LOCATION	BLOCKS	LEVELS	DISP.	REPORT NO. REV
DnC & GnC SITE	ALL	ALL	PSDP	DCMP-DCON-RPT-001-03

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1 Executive summary

This Draft Construction Management Plan (DCMP) document has been prepared to seek to demonstrate how proposed Cúirt na Coiribe Development works could be planned to be delivered in a logistical, sensible and safe sequence. The indicative methodology referenced within is required to be interrogated and developed upon by the contractor prior to commencing works on site.

The development team's indicative construction programme summarises the scale of construction activities that are necessary to undertake a development of this size coupled with the logistical implications of the works and their effect on the adjacent residential communities. In line with the overall development strategic programme, and prior to any enabling or main build works, the contractor will be required to develop a detailed programme for each special work element | works package. Chief among the challenges of the development is the introduction of construction activities significant in scale and volume that are or will be bordered by residential properties and public roadway interface.

A construction development of this scale has been planned to be as least disruptive as possible. The project team are seeking to endeavour to protect the right of all affected stakeholders in continuing their daily lives with limited or undue interruption (as far as reasonably practicable) that maybe caused by noise or dust or to be inconvenienced by the construction operations and traffic movements. The project team's similar like previous project experience offers a high degree of confidence in prioritising disruption minimisation.

The DCMP outlines an envisaged strategy for servicing the construction works with personnel and materials, accommodation and welfare facilities, removal of waste, vertical transportation of materials and personnel, security considerations and programme and logistics challenges for the proposed Cúirt na Coiribe Extension Development whilst being mindful of the constraints within and around the site's environs. This document presents:

- a construction programme sequence supported by projected construction methodologies | techniques that will be adopted by the contractor during the works;
- a summary of foreseeable potential impacts by construction works and mitigating factors; and
- a structured proforma template for the contractor's Construction Management Plan (CMP) that will be conditioned for approval by the Planning Authority pre-commencing on site.

As the ultimate controlling mind for the works, Exeter Ireland Property III Limited through their Project Manager (NMG Project Services Limited) will take the lead in ensuring that there are suitable and sufficient systems in place that promote good health and safety coordination and communication between all project stakeholders and the appointed contractors.

1.1 Development planning permission amendment description (March 2020)

Exeter Ireland Property III Limited intend to apply for a strategic housing development at the Cúirt na Coiribe complex, Dún Na Coiribe Road, off Headford Road, Galway on a site measuring 1.414 Ha. The proposed development will consist of:

- the demolition of the two storey building (582 sq m) at the entrance to the scheme towards the eastern boundary of the site and the removal of the fifth storey (attic) level (1,123 sq m) of the main building;
- the provision of horizontal and vertical additions to and extensions of the main existing building providing 920 No. bedspaces (an additional 515 No. student accommodation

bedspaces) in 868 No. bedrooms; ancillary student accommodation spaces at basement and ground floor level measuring 1,688 sq m and including gym/fitness studio, games room, library/study spaces, multi-functional spaces, café/restaurant, and student lounge spaces; all provided in a single building in 9 No. linked blocks ranging in height from 2 No. to 6 No. storeys (gross floor space of 24,521 sq m plus basement car-parking and plant (2,615 sq m)). The scheme comprises a total floor area above ground of 22,180 sq m over a basement of 4,956 sq m; and

- The scheme also proposes 59 No. car-parking spaces (43 No. basement and 16 No. surface spaces); 656 No. cycle parking spaces; 5 No. motorcycle parking spaces; external student amenity spaces; hard and soft landscaping; boundary treatments; plant; diversion of services and all associated works above and below ground.

1.2 Project setting

The design considers the existing Cúirt na Coiribe site together with the challenges of the site, working within typical planning constraints and developing a strong vision for the development of Cúirt na Coiribe. The following strategic setting issues have been recognised within the design solution:

- **Location** - The project is to be located within the existing defined boundaries;
- **Adjoining owners** – the site contains several adjoining uses i.e. residential properties, commercial units and public roadway. The proximity of these areas | services presents a physical and consideration constraint, which will require attention and management at all times;
- **Site specific constraints** – the development site has specific constraints relating to existing services, ground conditions, construction methods, interface with adjoining neighbours etc. Key development constraints include the adjacency of works to residential properties and the continual operation of the Dun na Coiribe (DnC & GnC) roadway; and
- **Headford Road and DnC & GnC infrastructure** – local infrastructure surrounds will be fully operational during the construction period with an absolute priority to maintain safe pedestrian and vehicular movements.

2 Introduction

2.1 Glossary of terms

Term	Definition
DCMP	Draft Construction Management Plan
CMP	Construction Management Plan (prepared by contractor)
CEMP	Construction Environmental Management Plan (prepared by contractor)
C&DWMP	Construction Demolition & Waste Management Plan (prepared by contractor)
CnCD	Cúirt na Coiribe Development
GCC	Galway County Council
DnC & GnC	Dun na Coiribe and Gort na Coiribe estates

Term	Definition
TII	Transport Infrastructure Ireland
PSDP	Project Supervisor for the Design Process
PSCS	Project Supervisor for the Construction Stage
CLO	Community Liaison Officer (Contractor Appointee)
CLP	Community Liaison Plan

2.2 Definitions

- *"Draft Construction Management Plan"* is the overall planning, coordination, and control document for the CnCD from construction commencement to completion. The DCMP is designed to meet the requirements placed upon Exeter Ireland Property III Limited to seek to produce a safe, functionally, and financially viable project. This DCMP is the overarching governance and template document for the contractor in preparing their CMP.
- *"Project"* refers to the design and construction of the CnCD. The CnCD is a critically important commercial undertaking, involving considerable expense and significant socio-economic impact;
- *"Site"* means the lands and other places works are to be executed or places provided by Exeter Ireland Property III Limited for the purposes of the contract; and
- *"Works area"* relates to specific pieces of ground planned for a specific construction activity. The CnCD works area is defined by a red boundary line. Within the boundary the contractor is responsible for the safe delivery of works and site security.

2.3 Waiver

Whilst DCON Safety Consultants took care in verifying the content of this document, it does not assume any legal liability for its accuracy or completeness. The information is supplied for information only and under no circumstance can DCON Safety Consultants Limited or Exeter Ireland Property III Limited be held liable for any cost arising from inaccuracies or omissions about the content of this document.

3 Aim and objective of DCMP

3.1 Aim

- The DCMP has been prepared to impart the over-arching vision of Exeter Ireland Property III Limited that CnCD works can be delivered safely and without risk. As client, Exeter Ireland Property III Limited seek to ensure that all works are planned & managed in a safe organised manner, undertaken, and coordinated by competent contractors while obtaining the necessary confidences of all project stakeholders;
- Exeter Ireland Property III Limited are wholly committed to establishing and supporting all necessary aims and objectives to meet this vision; and
- Exeter Ireland Property III Limited are dedicated to observing the a high level of health, safety, & environmental standard and good practice compliance throughout the construction stage of the development. This dedication is shared amongst all project partners and is a prerequisite outcome for all contractors on the CnCD.

3.2 Objective

- The DCMP will be provided to each tendering contractor detailing the specific requirements of their CMP. The DCMP sets out the quantum of minimum information needed for the CMP;
- The underlying objective of the DCMP is to inform the contractor of obligatory minimum standards of behaviours demanded to ensure that compliance with planning conditions can be met. Supplementary subobjectives include but not limited to:
 - A safe workplace is established, regularly assessed for adequacy, and maintained for all persons directed associated with or affected by works. Instilling positive & proactive attitudes, managing risk, and requiring courteous and respectful behaviour of every organisation working on the CnCD is a required norm;
 - Limit where possible disruption to adjacent residential, surrounding roadway infrastructure, utility provider services, members of the public etc.;
 - Limit where possible disruption to property owners and users with mitigations required to secure constant access to occupied residential and commercial properties in the DnC & GnC area;
 - Work practices are tailored to suit necessary arrangements to safe guard any in place access means to occupied residential | commercial properties, utility services and roadway users;
 - Construction activities are planned and executed to maximise the effectiveness, efficiency, sustainability & value-for-money of such works as they progress without impeding where possible existing residential property enjoyment, utility services, roadway use etc.; and
 - Exeter Ireland Property III Limited baseline health and safety requirements are clearly defined and shared with the contractor when preparing their CMP.

4 Project particulars

4.1 PSCS appointment

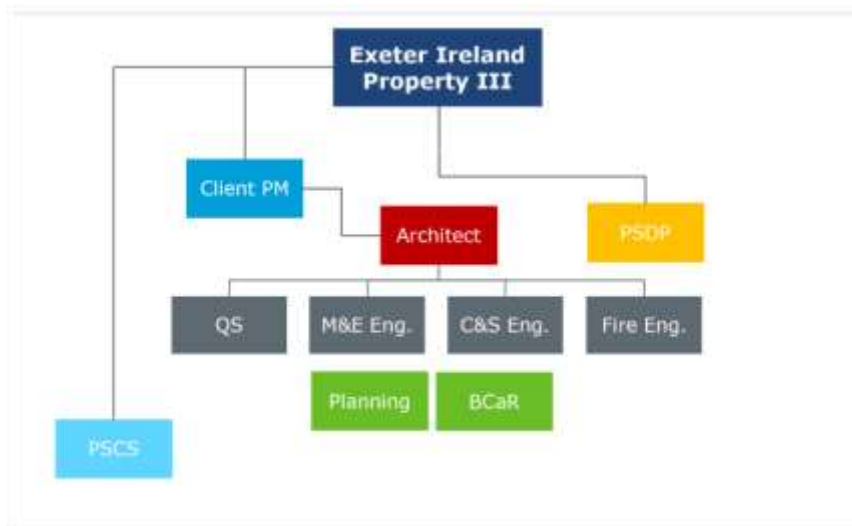
The client is required under Section 17(1) of the Safety, Health and Welfare at Work Act 2005 to appoint competent person or persons for the purpose of ensuring so far as is reasonably practicable, that the project –

- is designed and is capable of being constructed to be safe and without risk to health;
- is constructed to be safe and without risk to health;
- can be maintained safely and without risk to health during subsequent use; and
- complies in all respects, as appropriate, with the relevant statutory provisions. The appointments under section 17 of the 2005 Act will generally mirror the requirement to appoint a competent PSCS and the duties in section 17(1) are in addition to the duties in the Construction Regulations, 2013.

Post competency assessment, the contractor will be appointed as PSCS and will be given possession of the CnCD site area which will form their respective site boundary. Exeter Ireland Property III Limited will remain tasked for assessing, challenging, interrogating and monitoring the contractor's compliance with current health & safety legislation and planning commitments.

5 Project parties

The organogram below sets out the respective parties' roles on the CnCD:



6 Development health & safety requirements

6.1 Client strategic health & safety drivers

Exeter Ireland Property III Limited have a controlling influence on how the overall programme of CnCD works will be managed which brings with it certain responsibilities with respect to health and safety. When the contractor is given possession of a works or block area, this area will form their respective site. Exeter Ireland Property III Limited will seek assurance and evidence to ensure each parties' compliance with regard to planning conditions | current good practice standards | statutory instruments will be in place for the works.

Exeter Ireland Property III Limited will seek to ensure that there is good communication and coordination between those operating alongside, adjacent or in other areas of the works through a developed Community Liaison Plan (CLP) and oversight | management by the contractor's designated Community Liaison Officer (CLO). Exeter Ireland Property III Limited in planning, procuring and implementing the safe delivery of the CnCD recognise the complexity, scale of the development and the inputs necessary to deliver it. Equally it understands the necessity of:

- Continued support from project stakeholders including but not limited to local residents, neighbouring commercial property owners, GCC, TII, etc.;
- Committed support from the contractor and their supply chain to comply with their commitments within this DCMP and the site specific CMP to seek to achieve a 0.00 Accident Frequency Rate on the project;
- Clear definition and allocation | delegation of roles and responsibilities to the parties best able to manage the task;
- Effective explanation of CnCD strategies for the safe planning and execution of works through this DCMP. Regular coordination meetings with but not limited to local residents, business owners and GCC may be carried out in compliance with the CLP;

- Procurement and management of a contractor competent to progress & complete the works on behalf of Exeter Ireland Property III Limited willing to proactively engage in a collaborative manner to advance the CnCD to the benefit of every stakeholder.

6.2 Contractor Requirement: Considerate contractor behaviours

It is a condition of working on the CnCD that the contractor develops their delivery methodology around the following headings | principles:

6.2.1 Care about appearance

- Constructors must ensure sites appear professional and well managed;
- Ensuring that the external appearance of sites enhances the image of the industry;
- Being organised, clean and tidy;
- Enhancing the appearance of facilities, stored materials, vehicles and plant; and
- Raising the image of the workforce by their appearance.

6.2.2 Respect the community

- Constructors must have regard to the principles and requirements set out in the CLP (Section 9.8) for ensuring the timely and effective communications with all affected parties, with provision of accurate, relevant and regular information of works proposed and being undertaken;
- Informing, respecting and showing courtesy to those affected by the work;
- Minimising the impact of deliveries, parking and work on the public highway;
- Contributing to and supporting the local community and economy; and
- Working to create a positive and enduring impression, and promoting the Considerate Contractors Scheme Code.

6.2.3 Protect the environment

- Constructors must protect and enhance the environment;
- Identifying, managing and promoting environmental issues;
- Seeking sustainable solutions, and minimising waste, the carbon footprint and resources;
- Minimising the impact of vibration, and air, light and noise pollution; and
- Protecting the ecology, the landscape, wildlife, vegetation and water courses.

6.2.4 Secure everyone's safety

- Constructors must attain the highest levels of safety performance to ensure a 0.00 Accident and Incident Frequency Rates;
- Having systems that care for the safety of the public, visitors and the workforce;
- Minimising security risks to neighbours;
- Having initiatives for continuous safety improvement; and
- Embedding attitudes and behaviours that enhance safety performance.

6.2.5 Value their workforce

- Constructors must provide a supportive and caring working environment;
- Providing a workplace where everyone is respected, treated fairly, encouraged and supported;

- Identifying personal development needs and promoting training;
- Caring for the health and wellbeing of the workforce; and
- Providing and maintaining high standards of welfare

6.3 Contractor Requirement: Safe work cycle

The concept of a safe working cycle is a type of management tool that can be used to solve difficulties in different aspects of the management systems.

6.3.1 Safe working cycle

A safe working cycle is the combination of construction quality and construction safety. It stresses that through the safety policy and objectives, as well as the formulation of a safety management system, the company management can change the traditional enforcement on safety measures into a cooperative and coordinated method of dealing with safety issues. This cycle clearly indicates the responsibilities of different workers. It places particular emphasis on the leadership of the frontline management at construction sites, e.g. project leaders and foremen.

The cycle encourages mutual trust between supervisors and workers at the construction sites and facilitates direct communication. The aim of the safe working cycle is to integrate quality and safety aspects of construction so that adequate considerations have been taken for each aspect to achieve a cost effective construction project.

The safe working cycles are classified into daily, weekly and monthly basis. The period is determined by the importance, and urgency of the construction activities. Daily cycle is comparatively thorough and detailed. The coverage of weekly and monthly procedures is more broadly.

Each item of the safe working cycle is shown in the following diagrams:

6.3.2 Daily safe working cycle

The daily safe working cycle basically includes eight items. These items are arranged according to the daily schedule of the project, and can be shown on a time chart. This means that each person can carry out their responsibilities according to the schedule. The contractor must set the working hours of each item according to its own conditions and the characteristics of the project.

6.3.2.1 Morning safety meeting (delivered by all subcontractors to their employees)

The morning safety meeting is the first step of the daily safe working cycle. It includes:

- The announcement of important matters (such as project development/special activities, special safety information, etc.); and
- Inspection on personal protective equipment and dressing.

Benefits

- Gives workers time to prepare themselves psychologically for work and pay special attention to the safety rules and the working environment of the work sites; and reminds them that they must check on their outfits and personal protective equipment;
- Promotes team spirit and cooperation; and
- Provides an opportunity to convey safety message, and raises workers' vigilance.

Contractor points to note

- The person-in-charge of the morning safety meeting must have a thorough understanding of conditions at the site, be well informed of the safety inspection results and the content of the process safety discussions for the previous day;
- The meeting must not exceed the time limit of 15 to 20 minutes;
- Ensure that the morning safety meetings do not fall into a tedious routine;
- Morning safety meeting on Monday may focus on major safety issues for that specific week. It can be implemented together with the monthly safety meeting;
- Considering the differences in the nature of different projects or corporate cultures, morning safety meeting can be divided into several stages and implemented at various time periods, or changed into afternoon meeting in case not all workers can attend. The meeting can be postponed with a 24hrs notice, in order to fit into the working schedule for specific activities; and
- Records of attendance of the subcontractor workers are required to be kept to encourage more workers to participate through process safety discussions and safety committee meetings.

6.3.2.2 Hazard Identification Activity

Hazard Identification Activity is the second step in the Daily Safe Working Cycle. Team leaders or Foremen lead team members to identify the hazards in the day's work, and make the workers aware of the degree of risks and measures for precaution. Records of these awareness sessions are to be kept.

Benefits

- The participation of front-line workers reduces resistance to the implementation through recognition and acceptance of the safety measures by front-line workers themselves;
- Team spirit can be enhanced (though the discussion at the working place) as part of practical safety training;
- The safe working circle can be reinforced, and the safety consciousness increased;
- It encourages the participation of individuals so as to make each one singularly and individually responsible;
- It deepens the understanding of the working process;
- It facilitates the contact between the contractor and other subcontractors in order to reduce possible adverse impact on efficiency and prevent accidents that may be induced by lack of communication and misunderstanding;
- To manage the project properly so as to prevent accidents; and
- To enhance discipline (to wear safety equipment and proper clothing).

Contractor points to note

- The content of the Process Safety Discussion for the previous day and the information announced at the morning safety meeting will be helpful in initiating follow-up actions for the Hazard Identification Activity;
- Foremen must be familiar with the procedures for the project, pre-arrange the work, set up guidelines for workers to follow, and try to understand the personalities for each worker;

- Foremen must encourage workers to participate in the Hazard Identification Activity and make them aware of the importance of safe working;
- Frequency of such activities – depending on the complexity of work, one additional Hazard Identification Activity can be held before the start of work in the afternoon. Depending on the arrangement of the work, it can be carried out on the previous day. – In case of any change in the working procedure, one special meeting may become necessary;
- In the Morning Safety Meeting, the safety requirements are only mentioned in broad lines; relevant safety instructions must be explained in detail during the Hazard Identification Activity;
- Foremen must be well prepared on the previous day in order to fulfil their responsibilities for supervision. They must, based on the working guidance of the recorded | minuted Process Safety Discussion from the previous day, lay out the process of the work, provide guidance, make work arrangements, and carry out other duties such as training, inspections, reports as well as discussions;
- Work guidance includes:
 - Objectives of the work, implementation methods, procedures, goals, necessity and importance thereof;
 - Construction area, passage layout, methods and the routes for transporting construction materials;
 - Working hours and sequence;
 - Allocation of responsibilities for workers and personnel arrangements (appropriate assignment);
 - Coordination with other trade people on site;
 - The use of construction materials;
 - Machinery, transporting equipment, tools, protective devices;
 - Highly hazardous situations at work;
 - Reporting channels; and
 - General summary on working process upon completion of the project;
- Making a summary after collecting workers' comments on the following:
 - Safety critical area; and
 - Examples of the previous accidents in the same line of work.
- Workers (including plant operators) must participate in the Hazard Identification Activity; and
- Personnel from the contractor must participate as much as possible.

6.3.2.3 Prior-to-work Inspection

A Prior-to-work Inspection is essential and must take place immediately after the Hazard Identification Activity. Before the start of work and the usage of equipment, all the tools, equipment, machineries and materials must be in safe and proper condition.

Benefits

- Tools and equipment must be in good working condition bring about better efficiency and help reduce accidents;

- To identify problems before the start of work and rectify them and have prevent the problems from getting worse and thereby reduce losses; and
- Compliance with laws and regulations to avoid lawsuits.

Contractor points to note

- Record of the inspection results of materials, equipment and machineries to be kept;
- Carry out all the mandatory and other planned inspections;
- Inspect the conditions of construction sites and the environment daily;
- Make safety inspections on selected key areas, rectify problems discovered and stop work wherever appropriate;
- Report results to the responsible persons after safety inspection. If necessary, the project manager of the contractor and the safety officer must also sign on the inspection reports and monitor the programme of connective actions;
- Regardless of the ownership of materials, equipment and machineries, the principal contractors must ensure that they are used only after proper inspection;
- Inspections must be performed before the tools and equipment are moved to the sites; and
- If the inspection is done in places of high risk, the person must follow the Safety Procedures defined.

6.3.2.4 Guidance & Supervision at Work

Guidance and Supervision at Work is another aspect of safety monitoring. It mainly falls within the responsibilities of contractor project leaders. This includes keeping track of implementation of the safety measures from the Hazard Identification Activity, checking the compliance and addressing problems that may occur during its implementation.

Benefits

- Understanding the project progress and its characteristics facilitates communication with and acceptance by the workers;
- Project leaders can solve problems directly;
- Timely check on the compliance with safety instructions and procedures; and
- Coordinating all kinds of activities.

6.3.2.5 Safety Inspection

The safety inspection carried out by senior management at construction sites serves both as supervision, and assurance for the safe operator of daily work. Senior management can quickly solve any safety problems that may affect the progress of work.

Benefits

- It demonstrates the company's commitments to safety;
- It enables senior management to understand site safety problem and solve them;
- It promotes cooperation among subcontractors to solve problems; and
- It can be used to assess the performance of subcontractors.

Contractor points to note

- Special attention must be paid to these high risk activities mentioned in previous day's Process Safety Discussion;
- The project manager/general foreman must set an example, communicate with the workers and listen to their opinions while doing the Safety Inspection; and
- The Safety Inspection must not be cancelled without a solid reason. The job can be assigned to some representatives instead when necessary.

6.3.2.6 Process Safety Discussion

Process Safety Discussion provides an opportunity for communication and cooperation in solving problems. Solutions are sought for problems identified during the day before these problems worsen or persist.

Benefits

- Confirm the progress of the day's work and decide on the procedures of next process, including coordination of different activities, with an aim to solving problems quickly and enhancing efficiency; and
- Assign next day's work, with safety directions and measures to subcontractor.

Contractor points to note

- The Discussion must focus on site safety. Time must not be wasted on unrelated issues;
- Subcontractors can put forward topics for review during the meeting;
- The summaries of the Process Safety Discussion must be announced at the Morning Safety Meeting the next morning; and
- Project managers, general foremen and safety officers must make a full preparation of the safety materials for the Discussion.

6.3.2.7 Clean as you Go

This step is designed to ensure that all the equipment, tools, instruments and environment of the workplace are tidied up after a day's work, in preparation for the next day's work. This process consists of more than a general cleaning. All required materials and tools are classified and stowed accordingly before the end of a day's work.



Benefits

- Tidying up materials, equipment and tools help reduce accidents;
- Efficiency is enhanced; and
- After-work tidying up assists to maintain a safe environment when workers return to work the next day.

Contractor points to note

- Workers must understand the benefits of good housekeeping practices. It is more than just discarding trash;
- Person-in-charge of the site must allocate sufficient space for stowing materials/ wastes;

- Since the workplace may pose a threat to safety & Health before tidying up, the tidying up crew must collect, store/discard wastes, especially hazardous materials and those with toxic property according to the safety instructions;
- Proper labels must be affixed on containers for dangerous substance.

6.3.2.8 Final Check after Work

Daily Safe Working Cycle ends with Final Check after Work. The final check is to ensure that no accident will occur at construction sites after work, be it fire, flooding, scaffoldings collapse, theft, or trespassing, in order to prevent loss and affect members of the public.

Benefits

- Prevention of accidents and energy conservation;
- Assessment on workers' performances in housekeeping; and
- Compliance with laws and regulations.

Contractor points to note

- Special check on workplaces and their vicinity to high risk works is a priority;
- Watch out for people who may enter the construction sites through unlocked gates or external hoarding boards;
- Under harsh weather, double-check the drainage systems to see if they are blocked, if the scaffoldings are stable, and if the materials are stored in the right place. Make sure safeguards are in place against storm and rain; and
- Maintain supervision over those who are working overtime and ensure that they are aware of emergency procedures. Supervisors must be aware of:
 - agreed finishing times and emergency procedures as per the approved notification for emergency works; and or
 - an extension of work times if needed and permitted (refer to the CLP in Section 9.8).

6.3.3 Weekly safe working cycle

Weekly Safe Working Cycle aims at making an interim review of the performance in the past week and making arrangements for the future.

It consists of 3 steps as follows:

1. Inspection & Check;
2. Process Safety Discussion; and
3. Weekly Tidying Up

6.3.3.1 Weekly Safety Inspections and Weekly Check Up

The contractor and sub-contractors must jointly carry out a weekly inspection. They can therefore strengthen their cooperation and work on eliminating the safety problems found during inspection and define their respective responsibilities on-the-spot.

This will provide information for the management in their self-appraisal and underline the commitment of the management. The contractor and sub-contractors (competent persons) also need to inspect their own machines, electrical installation and scaffolding on site on a weekly basis to ensure the sound operation of such equipment and facilities.

Benefits

Weekly inspection must:

- Promote communication between the contractor and sub-contractors and clarify each party's responsibilities; and
- Underline the commitment of senior management.

Weekly check-up must:

- Spot problems as early as possible before they get worse; and
- Conform to relevant laws and regulations.

Contractor points to note

- The contractor must ensure all sub-contractors participate; and
- If the project manager is unable to attend, a representative can be appointed. The manager must nevertheless be kept up to date with the inspection results to demonstrate his | her interest.

6.3.3.2 Weekly Process Safety Discussion

The weekly Process Safety Discussion must promote the communication between people at various levels and sub-contractors, summarising the safety performances in the last week and planning for construction work for following week.

Benefits

- To promote communication and help sub-contractors improve their work; and
- To create opportunities for bringing problems to attention and for an early remedy.

Contractor points to note

- The contractor project manager or his | her representative must chair the meeting and all participants are encouraged to express their views at the meeting; and
- The minutes on the Weekly Process Safety Discussions must be distributed as soon as possible so as to take follow-up actions.

6.3.3.3 Daily Tidying Up / Weekly Superclean

This step is to thoroughly tidy up the site to prepare for work the following week.

Benefits

- To create a safe working environment;
- To reduce accidents caused by at risk conditions;
- To ensure required materials are ready for use;
- To keep the site in good working order and discipline; and
- To improve efficiency.

Contractor points to note

- Avoid over or under work in the tidying up. The objective is to meet the standard set by the client;
- Machinery must be cleaned according to relevant safety instructions;
- The tidying up results must be evaluated as a measure of motivation;
- Ensure no place is left out; and
- Senior management's involvement ensures a more persuasive outcome.

6.3.4 Monthly safe working cycle

Monthly Safe Working Cycle is to review the site performance and progress, to improve the workers' safety awareness through training and reward schemes, and to recognize their commitment and cooperation.

Monthly Safe Working Cycle must include the following:

6.3.4.1 Monthly Inspection

Monthly Inspection aims at improving the management of machines, equipment, tools and materials. It must be carried out in line with relevant rules and regulations.

Benefits

- Regular in-depth inspections on machines and equipment serve to identify problems at the early stage; and
- Keeping the machines and equipment in constant serviceable condition will also improve the productivity and quality.

Contractor points to note

- The checking schedule and procedure is worked out in advance;
- Assistance from services companies (as required); and
- Plant | equipment to be checked include pile drivers, cranes, earth-moving equipment, heavy-duty transportation plants, pressure vessels, welding/cutting kits, portable and fixed electrical installations, etc.

6.3.4.2 Monthly Safety Training

Through Monthly Safety Training, workers can reinforce the concept and awareness of safety, sharpen necessary skills, gain relevant knowledge and foster a correct attitude. Examining the causal root of accidents | incidents | near misses, the same or similar events can be avoided.

Benefits

- Through safety training, workers will continue to master the safety skills and knowledge required on the development and foster positive attitude on safety.
- Safety training underlines the importance senior management attaches to workers' safety and health.
- Safety training is a legislative requirement.

Contractor points to note

- The training courses must meet the workers' needs;
- The objective and methods of training must be determined;
- Training programmes must be implemented according to plan;
- The effectiveness of training must be evaluated.
- The improvement actions required must be done after evaluation.
- The training must be of appropriate duration and must not be too long.

6.3.4.3 Monthly Safety Meeting

Monthly Safety Meeting must be held together with the Daily Morning Safety Meetings and include, in addition to the routine issues of morning meetings, the safety promotion activities to improve the workers' sense of safety awareness and to present awards.

Benefits

- Other than benefits of Daily Morning Safety Meeting, the Monthly Safety Meeting can also boost the morale workers.

Contractor points to note

- Safety promotion must be designed to foster the safety culture of the client;
- Safety awards must be fair in commending those individuals, groups with good safety performance;
- Safety promotion must have well-defined topics and objectives; and
- Senior management must enthusiastically support the safety promotional activities.

6.3.4.4 Safety Committee Meeting

Monthly Safety Committee Meetings aim at strengthening communication among concerned persons on site, eliminating any misunderstandings or lack of coordination at work, reviewing the past safety records and planning for the coming month. As a result, the workers' safety awareness can be improved and accident reduction can be achieved.

Benefits

- The communication among workers of different trades is strengthened, their work better coordinated and accidents avoided; and
- As members of the Safety Committee come from various trades, safety measures formulated at the meeting must be more practical and acceptable to them.

Contractor points to note

- The contractor project manager must chair the Safety Committee with the site safety officer acting as secretary of the Committee;
- The following issues will be discussed at the meeting:
 - weekly and monthly construction progress;
 - safety measures on special tasks;
 - coordination on different types of work; and

- client instructions.
- Discussion on the progress, special tasks and work cooperation could ensure safety at work;
- Sub-contractors must raise any problems concerning their work and the coordination with other parties before and after work commencement. RAMS must be in place after this discussion;
- Before the meeting, the agenda must be studied and any other relevant issues must be added;
- Each Safety Committee member must fully understand all the issues discussed during the meeting;
- The meeting minutes must be distributed within 48hrs of meeting or as soon as possible, so that every worker will be informed of the meeting and their comments on the meeting can be collected; and
- The meeting must progress with the right pace & must not drag on too long.

7 Design (preconstruction and construction) stages

7.1 Preconstruction stage

7.1.1 Survey needs

Several surveys were undertaken which has supported CnCD design development. Prior to works commencing on any site, further surveys will be carried out as deemed necessary:

7.2 Construction stage

7.2.1 Temporary work designs

The contractor and their supply chain will be obliged to manage, plan and carry out elements of temporary works design. The contractor must consider all works which may affect the interface with adjoining property owners and members of the public. All temporary works design and management shall be carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations, 2013 and relevant Approved Codes of Practice. The contractor must adopt the process and forms as found in Appendix 2 of the HSA Publication '*Approved Code of Practice - The Safety, Health and Welfare at Work (Construction) Regulations, 2013*'. No temporary work works are permitted to commence without a Temporary Works Design Certificate being signed off by the Temporary Works Designer, Permanent Works Designer and PSDP.

Envisaged temporary work items include:

- Site hoarding and associated footings;
- Site compound establishment including site signage;
- Provision of a designed wheel wash at the site exit point;
- Temporary service diversions (as required);
- Overhead lifting near to residential properties;
- Temporary traffic management;
- Excavation propping;
- Piling mats;
- Falsework | formwork;

- Crane bases (tower | mobile | self-erecting equipment);
- Working access (vertical movements);
- Excavation material removal and stock piling;
- Temporary welfare services (water, foul and power);
- Construction waste disposal;
- Contaminated | hazardous material removal;
- Gantries;
- Temporary stability of permanent works; and
- Restrictions on construction traffic movements, noise, dust, vibration and working hours.

8 Draft construction methodology

There is a need to ensure that DnC & GnC residents and nearby businesses are protected from undue disturbance during the construction of the CnCD. This DCMP seeks to ensure that contractors are informed of and that they undertake their contract works using good | best practice and thereby reducing their impact on local communities. It is estimated that construction will take approximately 15 months to complete.

The detailed construction programme is dependent on contractor appointment, market and other considerations. The overall delivery programme has been estimated on the basis that the construction of the CnCD will be completed by a single contractor. The CnCD site will be set up with access and egress points from the DnC & GnC roadway and various internal CnC roads. Construction traffic will be generated for the duration of these works on site, with levels of vehicles movements varying throughout the construction period depending on the construction activities on-going.

The first construction activity on the development will be an enabling works package. These works are intended to provide a robust and appropriately high site perimeter hoarding around the site area. The project team are seeking to endeavour to protect the right of all affected stakeholders in continuing their daily lives with limited or undue interruption as far as reasonable practicable that may be caused by the construction operations.

There are several constraints and requirements which have been carefully considered by the project team throughout the design process. It is envisaged that the entire CnCD construction phase would take place over an assessed timeline to ensure safe construction. Associated infrastructure and roads works will be completed (i.e. final service connections, paving, drainage etc.) in coordination with the contractor's construction programme.

8.1 Indicative construction methodology

The following indicative methodology has been drafted on the basis of initial scheme design inputs. Specific methodologies of work will be defined pre-commencement of works developed by the contractor in their CMP.

8.1.1 Refurbishment works (to existing accommodation blocks)

8.1.1.1 Mechanical upgrade work

- Fit-out of all floor levels involving the modifications and additions to the installed heating, ventilation, protective services automatic controls systems;

- A full strip out of the existing Air Conditioning system all floors followed by the installation of a new Air Conditioning system, plus modifications to the existing ventilation, water services, fire protective systems and automatic controls; and
- The installation of new heating and air conditioning within the main reception / atrium area

8.1.1.2 *Electrical upgrade work*

- Fit-out of the ground and 1st floor levels involving the modifications and additions to the installed lighting, general services systems, fire protective systems plus the installation of a new IT system throughout; and
- A full strip out of the existing lighting and IT installation on 2nd and 3rd floors followed by the installation of a new LED lighting installation and IT system, modifications and extension to the general services system, new fire protective systems.

8.1.1.3 *Architectural and builders work*

- Remodelling of internal floor plates (floor | wall | ceilings etc.) and toilet areas; and
- All associated builders works including temporary and permanent fire stopping measures ensuring the compartmentalisation of works and operational office and common areas.

8.1.2 Substructure construction

Substructure works i.e. groundworks | formwork | rising concrete elements | attenuation and drainage etc. will be completed in a sequential series. Where possible, an overlap of substructure works between new blocks will be sought to achieve so and maximise supply chain efficiencies for the contractor.

8.1.3 Residential block construction (new build works)

- Cores are central to each block footprint. For the upper level slabs to be completed, the core must be cast to that level. To minimise program impact, zones will be created to each basement slab level to allow it to be cast without the core being complete to that level. The use of a e.g. propriety vertical wall formwork system that is self-climbing to cast the core may be used;
- The core system will be supported by a tower crane for lifting of materials, an Alimak or alternative means to get men and tools to the system, and its own satellite concrete placing boom to place concrete;
- Lobby slabs, header beams and stairs will follow the core walls and will be cast as soon as practical to maintain structural stability of the core walls and provide access to cast the core slabs. When the last vertical wall elements are cast, the jump form will be removed in a strategic sequence and manner for safety reasons and to allow the lift motor rooms to be cast as early as possible to get builders lifts operating;
- The superstructure will be steel frame with permanent steel decking on a power-floated concrete infill. Structure trades and works will be supported by tower cranes for lifting of materials, formwork hoists to lift recycled formwork, Alimaks or alternative means to transport operatives and materials to the decks, satellite placing booms to place concrete, propriety perimeter edge screens to provide fall protection to operatives;
- The facade will be double glazed and curtain walled in certain elements with an insulated lightweight steel frame facade with Tegral or similar prefabricated sections. The facade will be erected as soon as practical to commence waterproofing floors so that finishes and fit out can commence;
- The roof material will be a single ply membrane composite to new roof areas with renewable energy PV panel systems on same. The roof embellishments will commence when the

structure is complete. These works will not be able to be completed until all plant has been lifted into the plant rooms and the façade has been installed to this level to complete the water tightness of the fabric;

- When slabs are cast and the formwork props removed, the services will commence to be installed. These works will commence within the building but will not be completed till the façade to that level is complete. The façade provides edge protection for the men working near the edge and provides weatherproofing for equipment that is water sensitive. The works will be organised in several passes, with what we term “rough in of services” being the first pass which is all services that can be installed before the façade is installed to that level;
- Finishes are normally commenced in earnest when the façade is installed to that floor. The services will be scheduled to be completed enough to allow finishes to commence in our programming. Plant, equipment and materials will be lifted to the floors via several means depending on what stage the building is at. The means will be tower cranes, Alimaks or builders lift. The builders lifts will be used for “clean trades” such as services fit off, carpets, ceiling tiles and fit out, to minimise damage to the lifts. Materials that will be hoisted via the Alimaks or Builders lifts will be unloaded in the loading dock to save congestion to the material handling areas; and
- When the fabric of the tower is complete, and the tower cranes have been removed, the gantries will also be removed. This will allow the external works to be commenced and completed in a timely manner. The works will also include making good any areas that have been affected by the construction of the project. As some of the external works will be to footpaths and roads to mesh them in with the new building, some footpath and lane closures will be required. These will be coordinated with GCC.

9 Construction access

9.1.1 Site access

Aware of the complexity of logistical challenges faced by such large-scale construction work, Exeter Ireland Property III Limited want to prevent traffic congestion due to construction works and negative impacts on the DnC & GnC neighbourhood environment in the surroundings of the construction area. It is a condition of works that:

- Maintenance of access to local roadways, footways public transport is secured. ~~It is not envisaged with the exception of hoarding construction works (where working space is required to erect hoarding safely) that CnCD works will impact on the use of roadways by residents and members of the public;~~ and
- Should a need arise to provide temporary pedestrian | vehicle access outside the hoarding line, a detailed temporary Traffic Management Plan will be developed in compliance with the requirements of the Department of Transport Chapter 8 Temporary Traffic Measures and Signs for Roadworks manual. This plan will be required to be approved by GCC prior to implementation with appropriate forward notice (in compliance with the CLP) shared with all DnC & GnC stakeholders.

All necessary controls will be agreed with GCC Traffic Section pre commencement of project works.

9.1.2 Construction access principles (generally)

- Protection members of the public from site activities;
- Public roadways are kept clear always;

- Construction traffic will be limited to certain routes and times of day, with the aim of keeping disruption to existing traffic and residents to a minimum. To minimise disruption to the local areas, construction traffic volumes will be managed through the following measures:
 - During peak morning and evening hours, ancillary, maintenance and other site vehicular movements will be discouraged;
 - Daily construction programmes will be planned to minimise the number of disruptions to surrounding streets by staggering HGV movements to avoid site queues;
 - Access through DnC & GnC will be maintained through all stages of construction;
 - Only minimum essential site staff parking will be provided. In parallel with this, parking restrictions and management measures on adjacent streets | residential areas will be reviewed and implemented as necessary in agreement with the local residents and GCC to avoid any site parking overspill issues; and
 - The contractor will be required to promote travel by sustainable modes of transport.
- Delivery of materials shall under supervision to avoid contact with persons. Deliveries shall be programmed to avoid high trafficked times minimising congestion and conflict with other deliveries;
- The site construction access strategy must prioritise the:
 - Increase the efficiency of construction works;
 - Decrease the disruption of the local transport system from construction works traffic;
 - Multiple construction access point routes ensure the ability of a contractor to coordinate, schedule and plan works effectively & efficiently so as to control foreseeable key construction logistics impacts;
 - Appropriate hoarding | screening | crash barriers of areas where public and vehicle travel interface will be provided and managed; and
 - All the above will be required as part of the contractor's CMP which needs to be agreed with GCC before commencement of construction.

9.2 Logistics | construction site access strategy

The contractor compound for the site will be included within the site and may move as construction progresses within the site area. The contractor, when appointed, may identify other (or additional) locations within the site area. It is anticipated that the majority of construction vehicles accessing the sites will come from the Headford Road via the N6.

Vehicle movements will be managed through the construction stage by the contractor competent dedicated logistic team on the ground. Regardless of location, the contractor is obliged to ensure that their site can run with maximum safety, efficiency while causing the least disruption to the adjoining residents, commercial property stakeholders etc.

9.2.1 Abnormal load deliveries

Public safety, driver health & welfare, and delivering on good risk management practices are the cornerstones of transport safety. All identified abnormal loads require public agency engagement e.g. An Garda Síochána, GCC Roads etc. The safety of other road users is paramount, and much thought and effort goes into logistics planning and permitting for the movement of these large loads.

All necessary controls will be agreed with GCC Traffic Section pre commencement of project works.

9.2.1.1 *Movement of abnormal loads*

- Road Traffic (Permits for Specialised Vehicles) Regulations 2009, S.I. No. 147 of 2009, and Road Traffic (Specialised Vehicle Permits) (Amendment) Regulations 2010, S.I. 461 of 2010, introduce a streamline permit system and list of Designated Routes to be administered by An Garda Síochána for the movement of loads not exceeding 27.40m in length and 4.30 metres in width on the major inter-urban routes;
- Vehicles and loads exceeding the 4.65m national height limit are not covered under this scheme and require a Local Authority Permit instead;
- Abnormal loads must adhere to the maximum weight limits set down by Road Traffic (Construction and Use of Vehicles) Regulations 2003, S.I. 5 of 2003 and the maximum height limit set down in Road Traffic (Construction and Use of Vehicles) (Amendment) Regulations 2008, S.I.366 of 2008;
- A "Permit for Specialised Vehicles" form when signed by the Garda Síochána grants permission to move abnormal loads as defined under the above Regulations, on inter-urban routes specified in the Schedule of Designated Roads. Any deviations from the Schedule of Designated Roads in above Regulations require independent authorisation from the Local Authority concerned and/or the Minister for Transport.

9.2.2 **Traffic management coordinator**

The contractor is required to appoint a competent Traffic Management Coordinator (TMC) who will be responsible for the design coordination of these access points and all other temporary traffic safety and management matters for the construction stage. The TMC is required to ensure that all traffic management requirements set out in the Traffic Impact Assessment are adhered to. Specific site contractor traffic management plans must at a minimum include:

- No temporary | drop off parking on approach access public routes. No unloading or blockages of access routes. Such vehicles will be immediately directed to move;
- The contractor must carry out an auto-track analysis to ensure that adequate turning space is available on their site. The auto-track must demonstrate how construction vehicles will go in and out of the site; and
- The contractor must seek to eliminate where possible the necessity for reversing of any construction or supply chain vehicle onsite.

9.3 **Site set up and management**

The site must have a well-planned construction compound layout. All temporary facilities and utilities must be designed to:

- increase productivity and safety;
- reduce area(s) needed for temporary construction; and
- maximise utilisation.

9.3.1 **Compound notes**

- The contractor will ensure that their compound set up accounts for appropriate spatial provision for waste management segregation, logistical deliveries and day to day contractor car parking; and

- The contractor will be required to propose and confirm their compound layout in their CMP.

9.3.2 Contractor overflow car park area location (indicative)

Appropriate overflow contractor carparking can be made available in areas of client landholding. This area may change subject to works phasing and ongoing construction activities.

9.3.3 Site set up

When beginning works, the contractor's construction activity experts will use their expertise to think through the issues associated with the running of the project, the staged activities that will occur during the project life cycle are assessed and they use their understanding to establish the compound, walkways, roadways, facilities and welfare items and ensure they are clearly established and marked at the earliest stage to clarify to all visitors that this is an organised, efficient, tidy and safe site.

Key hazards must be identified and where possible "designed" out of the site, for example keeping pedestrians away from site traffic. The site must be easily understood using clear site maps depicting a layout that delivers the safest workplace possible. The site set up has the compound at its heart, pedestrian and vehicle routes as the arteries and while set up cannot deal with exclusion zones as they will vary on a day to day basis, the set up can deliver a safe "skeleton" site and pop-up work zones and exclusion zones are introduced as appropriate to isolate hazardous activity.

9.3.4 Way finding & orientation

On arrival on site a first time visitor, operative or delivery driver must know where they are, where they are going, where they cannot go and where other items are located. The site must be visibly well ordered and well-drawn site plans used to convey the order on site to all visitors in a clear and simple way. It's about quickly understanding the site and clarifying basic behaviour. Where are the safe routes? Where are the key hazards? Where are the welfare items?



sample directional gateway signage

9.3.5 Vehicle and pedestrian segregation

Pedestrians and vehicles must be able to circulate safely in the workplace; the construction activity must plan segregation and routes well. The temporary nature of a construction site, its changing layouts and the frequency with which operatives change and are therefore unfamiliar with their workplace are 3 important factors that add to the risk.

The contractor must focus their efforts in planning and delivering a site where drivers and pedestrians are segregated and provided with safe routes to work zones. The objective is that personnel can see at a glance where they can or cannot go.



9.4 Hoarding

The overarching consideration in all elements of the site set-up will be to reasonably endeavour to ensure the works can be undertaken in a safe manner for members of the public and the contractor and their staff. The contractor will construct a robust hoarding that considers wind and people loads in such an open site plane, around the proposed site perimeter. Hoarding will either be timber or palisade panels ranging in height from 2.40m.

Hoarding may be embellished with artwork and or graphics which would be appropriate for the development. Hoarding will be supplemented in sensitive areas during certain construction activities to mitigate against noise impacts as required. The alignment of the hoarding will remain constant in the round for site works. The hoarding line may be dynamic and subject to amendment to meet the requirements and constraints of the site.

9.4.1 Notes on hoarding

- Hoarding lines must be inspected daily by the contractor;
- Inspection records must be retained on site for regular GCC review;
- Hoarding limits site access to controlled access points;
- Hoarding must protect those outside the site from hazards within;
- Hoarding must protect those inside the site from outside activity;
- Branded hoarding must identify ownership of the site area;
- Hoarding locates must identify the site/work-zone for visitors;
- Hoarding must be used to direct behaviour before arrival on site.

9.5 Site security

The contractor will be responsible for the security of their site for the duration of their works. The contractor will be required to at a minimum:

- Maintain site hoarding to the each boundary with adequate controlled access and egress points;
- Maintain site security staff always;
- Install access security in the form of turnstiles and gates fitted with anti-swing fixtures;
- Reasonably endeavour to ensure restricted access is maintained to the works;



- Operate a site induction process for all site staff;
- CCTV arrangements or alternative to be provided as required;
- An appropriate controlled access control system to be installed at security access for site personnel;
- Provision of adequate warning signs to site perimeter and along the streets approaching the site to inform the public of danger & no trespassing onto site;
- Anti-climb measures | protection to be erected around tower cranes etc.;
- Ensure all staff have current Safe Pass and Construction Skills Cards;
- Monitor and record all deliveries to site and all materials | waste taken off site for disposal to appropriate licensed facility; and
- A fire watch system regime will be implemented with appointed competent fire watch supervisors tasked to inspect the site prior to the end of each working day | shift. All staff will be made fully aware of their individual responsibilities about security and will undertake their work in line with current service guidelines. All staff and operatives will be fully inducted into the security, health and safety and logistic requirements on site.

9.5.1 Site security systems

Suitable security measures will be put into place by the contractor to cover all elements of the site internally and externally. 24hour security measures will also be put in place when required, particularly at the latter stages of the construction programme where the building equipment and finishing cycles are in place. On possession of the site, the contractor will proceed to ensure the security of the site is achieved by direction of all personnel and deliveries to the site compound. Once established, access into and out of the site compound will be through a e.g. turnstile system and or other controlled system.

9.5.2 Craneage

It is envisaged that the site will require the use of a number of tower cranes, with a mixture of e.g. 30.00m, 55.00m jibs being employed to provide the necessary site lifting coverage. Cranes will be required for the moving of building materials around the site. The use of cranes will also be required for the erection of the facade and installation of plant on each block | building. The layout of cranes to achieve maximum coverage for the site will be determined by the contractor in consultation and agreement with Exeter Ireland Property III Limited.

9.5.3 Storage of materials on site

Any materials stored on site must be done so in a safe manner. Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater.

All necessary controls will be agreed with GCC Pollution Section pre commencement of project works.

9.5.3.1 Bund tank needs

Oil is the commonest water pollutant. These guidelines are intended to help reduce pollution caused by inadequate storage of oil in fixed tank installations.

- Location - Safety, security, access and maintenance needs must be considered when storing oil. Tanks must be positioned, or other steps taken, to minimise the risk of damage by

impact. Oil must not be stored in significant risk locations (i.e. within 10m metres of a watercourse or 50m of a borehole);

- General requirements - Oil must be stored in a tank of sufficient strength and structural integrity to ensure that it is unlikely to burst or leak in ordinary use. It is recommended that tanks with a design life (with proper maintenance) of 20 years are used;
- Tank specification - Storage tanks must be type tested to a recognised standard and produced to that standard under a quality assurance system complying with BS EN ISO 9001:2000 or BS EN 9002:1994. Steel tanks must comply with BS 799: Part 5 and must be protected against corrosion. Steel tank drain valves must be used to prevent frost damage. There is no British Standard for prefabricated steel tank systems. However, the Oil Firing Technical Association for the Petroleum Industry (OFTEC) have developed a standard for steel tanks, OFS T200 which does include these;
- Polyethylene tanks and tank systems must comply with OFS T100. Compliance with standards for construction and manufacture does not guarantee compliance with storage regulations;
- Tank installation and marking - It is recommended that tanks are installed by technicians registered with a professional scheme, such as that operated by OFTEC. The tank must be marked with the product type and tank capacity; and
- Tank decommissioning - Before a tank is taken out of use or removed, it must be fully drained. This work must be undertaken by suitably qualified technicians and hot work must never be carried out until the tank has been degassed and the appropriate certificate issued.

9.5.3.2 Secondary containment

Secondary containment must prevent oil escaping to the environment in the event of leakage from the tank or ancillary equipment. All tanks and their ancillary equipment must be situated within an oil-tight secondary containment system such as a bund. The potential escape of oil beyond the bund area by jetting must be considered. The risk of this can be minimised by:

- keeping the primary container as low as possible;
- increasing the height of the bund wall; and
- building the bund as far away from the tank as possible

For steel tanks in open bunds, a minimum distance of 750mm between the tank and the bund wall and 600mm between the tank and the base is recommended to allow access for external inspection.

9.5.4 Removal of materials from site

The removal of materials from the site will primarily be undertaken during enabling works and basement construction stages of the site. The removal or addition of materials to facilitate e.g. basement construction are typically the most intensive periods for material movement off site. Each of these elements of work will need to be managed effectively to reasonably endeavour to ensure that there is no queuing of trucks on the public roadway. All trucks will be expected to have a built on tarpaulin that will cover the transported material as it is being brought to or hauled off site.

9.5.5 Water supply

The contractor will require a water source for the duration of the works. Water will be required for:

- Contractor welfare facilities;
- Vehicle wheel wash | automated spray booths (use of recycled water);
- Dust suppression;
- Curing of concrete in warm weather; and
- Cleaning of formwork etc.

The contractor must apply to Irish Water for a temporary connection for water supply and/or waste water.

9.5.6 Timing of construction travel movements to obviate queuing on public roadways

- Working hours are determined and conditioned by the Grant of Permission. Working hours are expected to be 08:00 – 19:00 Monday to Friday and 08:00 – 14:00 on Saturday. Works that may be excessive in noise sensitive locations will be risk assessed and scheduled to take place between defined times in consultation with residents where at all possible;
- It is recognised that there may be circumstances where the restriction on hours of work cannot be adhered to e.g. concrete pours, power floating works, works on or adjoining residential properties etc. In these circumstances the contractor will be required to provide written agreement with GCC before any works start outside normal hours;
 - Where out of hours works are noise sensitive, such exceptional events will only be permitted to be undertaken when all other alternatives have been considered and exhausted. Any night time operations in particular will comply with good mitigation practices as specified by British Standards or similar; and
 - All such works above will be preceded by written approval from GCC, showing evidence of consultative communications with local residents and businesses.
- Deliveries will be sequenced '*just in time*' to ensure that their arrival and departures time are outside peak interface periods with residents and businesses;
- Deliveries are not permitted to queue on public roadways. They may hold | temporarily wait in designated non-public areas before 08:00 with their engines turned off;
- Operatives may access their site prior to 8:00 but are not permitted to operate construction machinery before 08:00; and
- No significant work will commence onsite before 08:00. On site | holding vehicles must ensure that their engines are turned off before 08:00.

All necessary controls will be agreed with GCC Traffic Section pre commencement of project works.

9.5.7 Dust | Dirt

Dust prevention measures shall be included for control of any site airborne particulate pollution. As a minimum, a dust | dirt management plan must be incorporated in relation to the construction phase of implementing the works (i.e. from site mobilisation/enabling to site demobilisation). The plan should address BS5228: Noise and Vibration Control on Construction and Open Sites and Best Practical Means | Best Available Technology to minimise air blown dust and particles from being emitted from the site:

- Air tight dust sheeting to all access points in to each work area;
- Covering skips;

- The washing down of site entrance adjacent pavements, haul roads and onsite traffic routes;
- The use of a water spray at the site entrance and near sensitive receptors to suppress dust; and
- Wheel washes or equivalent provision near to site entrances mitigating dust nuisances.

A site specific Construction Environmental Management Plan will be prepared by the contractor and submitted to GCC demonstrating specific controls that will be employed to adhere to the requirements of this condition.

9.5.8 Construction noise

Noise monitoring sensors will be fitted within and outside the site boundary . Sensors outside the site will measure ambient non-construction background dB levels. These baseline readings will be recorded to assess whether supplementary construction noise emissions contribute to any breaches of permitted limits. Construction site sensors will be fitted on the internal face of the boundary hoarding at sensitive locations to measure compliance with limits set out in *BS 5228 – 1: 2009: Code of Practice for Noise and Vibration Control on Construction and Open Sites: Noise*.

9.5.9 Vibration

A specialist contractor shall be engaged by the contractor to monitor, collate and report on vibration results for the duration of the works.

9.5.10 Harmful materials

Harmful materials shall be stored on site for use in connection with the construction works only. These materials shall be stored in a controlled manner. Where on site fuelling facilities are used there shall be a bunded filling area using a double bunded steel tank at a minimum. Removal of any discovered | known hazardous material from a site and its transportation to the appropriate licenced facility shall be carried out in accordance with current legislation, best practice and guidelines.

9.6 Construction and demolition waste management

Exeter Ireland Property III Limited is committed to ensuring the highest standard of recycling on site in terms of materials arising from the CnCD. The contractor will be required to comply with the principles of the Draft Construction and Demolition Waste Management Plan having regard to Circular WPR 07/06 - Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, published by the DECLG, July 2006 submitted to the Planning Authority for written agreement.

A site specific Construction and Demolition Waste Management Plan will be prepared by the contractor and submitted to GCC demonstrating specific controls that will be employed to adhere to the requirements of this condition.

9.6.1 Excavations

Excavations will be required throughout the site to facilitate the formation to basement levels, car park ramp access, modifications to existing services and to facilitate construction of new services. In total, an estimated 2,738m³ of ground material will be required to be excavated on the CnCD and will be either removed to another infrastructure construction site or landfill. Stock piling with agreement post future planning permission will only occur within the site (red line) in agreement with GCC. It is noted that the contractor will ultimately be responsible for

securing agreements for acceptance of surplus materials that are required to be sent to licensed facilities in compliance with the requirements of the DCEMP and their site specific Construction and Demolition Waste Management Plan.

9.6.2 Waste management structure organogram



9.6.3 Construction & Demolition Waste Management Plan requirements

The contractor's C&DWMP must detail the intended practice for the management of waste arising from the construction and demolition processes and in particular the management of hazardous waste and recyclable materials.

In particular the Plan shall specifically address but not limited to the following points:

- **Overall waste management**
 - Analysis of waste arising | material surpluses'
 - Specific Waste Management objectives of the Project including waste minimisation and the potential to reuse and process materials generated on site in the construction phase;
 - Methods proposed for Prevention, Reuse and Recycling;
 - Waste Handling Procedures;
 - Waste Disposal Procedures, including tracking of waste to final destination;
 - Waste auditing; and
 - Record keeping of receiving site | other gate receipts may be inspected by GCC.
- **Waste compound**
 - Details of the provision of a dedicated and secure compound, containing bins and skips into which all waste generated by construction site activities will be placed;
 - Responsibility for provision of signage and verbal instruction to ensure proper housekeeping and segregation of construction waste materials; and
 - Responsibility for identification of Permitted Waste Contractors who shall be employed to collect and dispose of waste arising from the construction works.
- **Waste reuse and recycling management**
 - Identification of potential for Reuse of Inert Wastes; and
 - Proposed management measures.

▪ **Hazardous waste**

- Identification and management of any Hazardous Wastes likely to arise during the construction process; and
- In the event that hazardous soil, or historically deposited hazardous waste is encountered during the work, the contractor must notify GCC Environmental Enforcement Section and provide a Hazardous/Contaminated Soil Management Plan. Immediate segregation of suspected hazardous | contaminated material is required for necessary inspection | testing. The contractor will be required to provide the following information to GCC:
 - estimated tonnages of waste;
 - description of location where waste was found;
 - proposed destination for authorised disposal/treatment; and
 - information on the authorised waste collector(s).

9.6.4 Predicted impacts of the proposed development (construction phase)

Volumes of waste materials will be generated during the construction of the proposed development. However careful management of these, including segregation at source, will help to ensure maximum recycling, reuse and recovery is achieved, in accordance with current local national waste targets. It is expected however that a certain amount of waste will still need to be disposed of to landfill. Assuming appropriate facilities are provided, environmental impacts (e.g. litter, contamination of soil or water etc.) arising from waste storage are expected to be minimal. Particular attention must be given to the appropriate management of excavation waste containing contaminated or hazardous materials by the contractor. The use of suitably licenced waste contractors will seek to ensure compliance with relevant legal requirements and appropriate off site management of waste.

9.6.5 Consultation with relevant bodies

~~GCC will be consulted throughout the construction phase to ensure that all available waste reduction, reuse and recycling options are being explored and utilised and that compliant Waste Management is being carried out at the site.~~ Specialist companies, wherever required, will be contacted to determine their suitability and each company's record reviewed to ensure relevant current collection permits | licenses are held. Companies will also be contacted to gather information regarding treatment of hazardous materials, if required (although not anticipated for this site), costs of handling and the best methods of transportation for recycling or reuse when hauling off site.

9.6.6 Pest control

The contractor will be required to adopt an Integrated Pest Management Plan as part of the works. This plan will establish a sustainable approach to managing pests in order to minimise health and environmental risks throughout the construction works and is to be prepared in accordance with the guidelines set out in the '*Rodent Control for Construction Industry*' information leaflet as issued by the Health Service Executive, Environmental Health Service, 2009. The contractor will be responsible for ascertaining if the proposed lands are currently infested rodents and other pests. If so, any lands will be required to be disinfested by a pest control specialist, as is reasonably possible given the nature of the site. Throughout the works, the contractor will be responsible for ensuring that a good standard of hygiene is maintained to limit the attraction of rodents and other pests to the site. Measures are to include, but are not limited to the following:

- Waste food, empty food tins, and other waste to be stored in bins with sealed lids;
- Accumulations of construction debris which may provide harbourage for rodents are to be cleared away regularly and in a timely manner; and
- Stocks of building material are to be neatly stored.

The contractor shall implement measures to prevent infestations during the proposed works. This will include infestation of existing and proposed drains, sewers, ducts and nearby properties. Measures are to include, but are not limited to the following:

- Removal of all existing refuse from site;
- During the laying of new drains the sewers, open pipe ends and manholes are to be protected against entry by rodents when work is not in progress – particularly at night time; and
- Surface water pipes discharging into watercourses to be fitted with an antiflood flap valves at outlet points.

A finalised Pest Control Management Plan is required to be submitted by the contractor to Exeter Ireland Property III Limited prior to commencement of works.

9.7 Plant and equipment use

Consideration has been given to the types of plant and equipment that are likely to be used during construction works. Typical types of plant and equipment associated with each key construction activity are set out in the table below:

9.7.1 Indicative plant used during construction

Plant and Equipment	Enabling Works	Site Clearance	Earth-works and Sub-structure	Super-structure	Roofing and Cladding	Services and Finishes
Tower cranes		✓	✓	✓	✓	✓
Passenger /goods hoists					✓	✓
Excavator/ Breaker						
Cutters, drills and small tools		✓	✓	✓	✓	✓
Floodlights		✓	✓	✓		

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Plant and Equipment	Enabling Works	Site Clearance	Earth-works and Sub-structure	Super-structure	Roofing and Cladding	Services and Finishes
Fork lift truck/ Pallet truck		✓	✓	✓	✓	✓
Hydraulic benders & cutters		✓		✓		✓
Lorries and vans		✓	✓	✓	✓	✓
Mobile crane		✓		✓	✓	
Mobile lorry mounted concrete pump			✓	✓		
Poker vibrator			✓	✓		
Ready mixed concrete lorry			✓	✓		
Concrete splitters/ saws		✓		✓		
Scaffolding and hydraulic access platforms		✓	✓	✓	✓	
Tipper lorries		✓	✓			
Flatbed articulated vehicle		✓	✓	✓	✓	✓

Plant and Equipment	Enabling Works	Site Clearance	Earth-works and Sub-structure	Super-structure	Roofing and Cladding	Services and Finishes
Large rigid lorries		✓	✓	✓	✓	✓
Track mounted piling rigs			✓			
Water pumps		✓	✓			
Raking props		✓				

9.8 Community liaison plan & public relations

Exeter Ireland Property III Limited will require the contractor to appoint a Community Liaison Officer (CLO) so that particular issues | complaints raised by local residents may be quickly identified and responded to. CLO details will be shared with local residents.

9.8.1 Community liaison plan

Given the nature of the proposed CnCD and that there may be at any given stage, multiple subcontractors on site, there will be a need to have an effective management of public relations and complaint handling to ensure good relations and a mutual trust between all key stakeholders during construction. These key stakeholders will be mainly but not be limited to the residents and GCC, but will most likely extend to the wider community as development progresses including but not limited to An Garda Síochána, NTA, TII etc.

The dissemination of accurate and timely information in relation to on-going and proposed works, changes to traffic layouts and other activities, in advance to the key stakeholders will lend itself to a potential to reduce queries, complaints and nuisance during construction. It will be essential to operate a Good Neighbour Policy covering the following areas:

- Designated CLO (contractor appointment);
- Early implementation;
- Good client, staff and neighbourhood liaison;
- Reduction of nuisance factors;
- Clear access for neighbouring premises; and
- Clear and concise and accurate information.

The contractor and his CLO is accountable for the development of the CLP. Accountability includes authorising the document, monitoring its effectiveness and performing a formal document review. Members of the project team, including employees, contractors,

subcontractors and consultants, will be accountable for ensuring the requirements of the CLP are implemented within their area of responsibility.

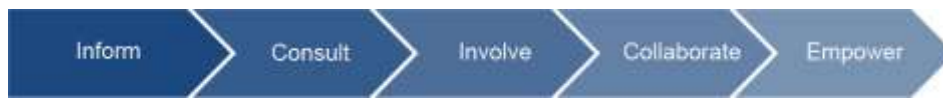
The CLP will be updated every three months and shared with GCC at each update milestone. Updates must take into account:

- changes in the design and construction programme;
- changes in stakeholder and community needs; and
- changes in contractor activities and stakeholder and community information requirements.

The CLP will include, as sub-plans, separate “Stakeholder and Community Involvement Plans” that are specific to separate projects and contractor activities.

9.8.2 Guiding community liaison principles

The management of community liaison issues for the CnCD positions the community at the centre of the community liaison effort. The approach taken is based on extensive mapping of stakeholder impacts and interests in the works and broader CnCD project. Community liaison activities outlined in this plan sit in the ‘inform’ and ‘consult’ part of this spectrum. A critical success factor for the effective management of community liaison issues during the project will be the alignment of the community liaison approach and responses. From the stakeholders’ perspective this will create a seamless response to all contacts. It also ensures a coordinated risk management approach.



9.8.3 Stakeholder mapping and analysis

Stakeholder mapping and analysis will be undertaken to identify those who may potentially experience the greatest impacts (both positive and negative) and those with an interest in the CnCD works. Stakeholders will continue to be identified and categorised according to their levels of impact and interest, using an industry standard stakeholder analysis tool below:



The stakeholder analysis tool categorises stakeholders in the following way:

- Category A – Stakeholders with a high level of impact (positive and negative) and interest in the development – local residents | households and businesses (within a 200m radius of the construction zones), GCC, other agencies including utility providers, transport agencies and An Garda Síochána;
- Category B – Stakeholders with a high level of impact (positive and negative) but a lower level of interest in the CnCD – including nearby residents and businesses beyond a 200m radius and within a 500m radius
- Category C – Stakeholders who have considerable interest in the CnCD but a relatively low level of impact; and
- Category D – Stakeholders with comparatively little impact and little interest in the CnCD.

For the purposes of the CnCD CLP, key stakeholders to be addressed are Category A and B stakeholders. This strategy subject to re-evaluation through periodic review of the CLP or in response to potential response from a wider area by the contractor.

9.8.4 Community Liaison Officer

The CLO functions will include but not be limited to the following:

- Main point of contact for the client in respect of their site, works on-going and upcoming;
- Main point of contact for public and key stakeholders in relation to site specific issues – their contact details will be noted at the entrance to the site and provided to GCC;
- Updating the client in relation to any interface with key stakeholders on any site specific issues/queries; and
- Manage a log of complaints/issues (if any) that arise on their site including actions to resolve and inform the client as part of an agreed Complaints Procedure.

9.8.5 Issues related to the project works , temporary work s and construction activities

The CLO will monitor key issues while working closely with the construction and environment teams to understand and assess issues as they arise throughout the project.

Project works	Temporary works	Construction activities
<ul style="list-style-type: none"> ▪ Traffic changes ▪ Air quality ▪ Waste ▪ Noise and vibration ▪ Soils and groundwater ▪ Car parking, transport and access ▪ Local business impacts ▪ Local resident impact ▪ Human health ▪ Hazards and risks 	<ul style="list-style-type: none"> ▪ Traffic changes ▪ Air quality ▪ Waste ▪ Noise and vibration ▪ Soils and groundwater ▪ Car parking, transport and access ▪ Local business impacts ▪ Local resident impact ▪ Human health ▪ Hazards and risks 	<ul style="list-style-type: none"> ▪ Team members and subconsultants to flag issues with the CLO ▪ Contractor personnel and subcontractors to behave appropriately at all times ▪ Maintain terms of agreement and protocol

9.8.6 Communication procedure

The objective of communication procedures will be to:

- Maintain effective working relationships and mutual trust between key stakeholders during construction;
- Promote the free flow of timely and appropriate information in all directions between key stakeholders in order to try to anticipate and resolve any potential issues before they arise;
- Evaluate the results of monitoring activities on a periodic basis;
- Oversee a Community Complaints Procedure, ensuring appropriate responses from the contractor are forthcoming;
- Identify and respond to matters raised by local residents or which may arise as a result of the monitoring;
- Construction staff will be encouraged to remove all Personal Protective Equipment (PPE) and use wash down facilities before leaving the site;
- Exeter Ireland Property III Limited recognise the importance of the community liaison role in ensuring the smooth running of activities and in relation to residents and public services. Important key issues in ensuring good relations are:
 - Correct points of contact, information and liaison;
 - Responsiveness to contacts and information;
 - Good housekeeping in all aspects of the operations; and
 - Keeping people informed of site operations, through regular meetings, mail drops & newsletters will help create good relationships and co-operative atmosphere.
- The contractor is required to ensure that all agents, supply chain contractors, suppliers under their control etc. act in a manner to minimise disruption to the surrounding locality;
- The contractor will be responsible for establishing relationships with relevant parties, and communicating with each as appropriate throughout the pre-construction, construction and hand over phase of the CnCD. The CLO will:
 - Ensure all communications are relayed back to GCC for insertion in their webpage as part of the Communications Strategy to ensure GCC are aware ahead of any potential communications from local residents and property owners.
 - Populate and distribute a local development newsletter;
 - Point of immediate contact for neighbours and stakeholders;
 - Monthly briefing with neighbours on progress, monitoring reports (noise | vibration) and any corrective issues;
 - Liaison with GCC and emergency services as appropriate;
 - Liaison with An Garda Síochána, particularly in relation to traffic movements and permits; and
 - Preparation of reports for the site progress meeting on neighbourhood issues.
- Efficient signage, maintenance and cleanliness of services and temporary facilities will be given high priorities within the overall scheme of the liaison strategies for the project.
- Due to the nature of construction works it is essential to operate Good Neighbour Policies. Key aspects of a Good Neighbour Policy include:

- Early implementation;
- Good client, staff and neighbourhood liaison;
- Reduction of nuisance factors;
- Clear access for neighbouring premises;
- Clear and concise information; and
- Designated liaison officer.

9.8.7 Monitoring and evaluation construction activities

In keeping with the requirements of the CLP, the CLO will establish continuous evaluation, monitoring and reporting systems. The purpose of monitoring and evaluation is to verify and validate the successful delivery of stakeholder and community liaison activities.

The figure below provides an overview of the approach to the monitoring and evaluation process. It seeks to demonstrate that evaluation is a process, not a product, and is integrated into all stages of programming the community liaison activities (designing, monitoring, and reflecting on success).



The monitoring and evaluation process established will capture and report on qualitative and quantitative evaluation measures, for example:

- Frequency and types of consultation and profile of those involved;
- Positive and negative feedback (logged by the CLO and reported to the client);
- Take-up of consultation and engagement process, to assess suitability of the activities; and
- Quality, accuracy and legibility of communications material presented.

9.8.7.1 Sample indicators for monitoring and evaluation activities

Objective	Target	Strategy	Indicator	Target
Timely response to all stakeholder enquiries and complaints	As per the requirements of planning	Adhere to the requirements of planning	Number (and percentage) of responses provided within time limit	100%
Documentation of responses and actions	As per the requirements of consultation	Adhere to the requirements planning	All responses and actions documented	100%
Quality – information and experience and satisfaction	<ul style="list-style-type: none"> All interested stakeholders have opportunities to participate in consultation All interested stakeholders have opportunities to lodge feedback and complaints Stakeholders advised how their feedback would be used 	<ul style="list-style-type: none"> Adherence to CLP Provision of feedback to stakeholders during liaison activities 	<ul style="list-style-type: none"> High levels of participation across identified stakeholder groups High levels of stakeholder satisfaction 	90%
Appropriateness – for stakeholder, needs, level of interest impact and expectations	<ul style="list-style-type: none"> Feedback and complaints were adequately considered and informed construction activities Responses addressed issues and concerns raised Liaison activities met stakeholder requirements and expectations 	<ul style="list-style-type: none"> Adherence to CLP Monitoring and analysis of issues and responses in line planning Provision of feedback to stakeholders during consultation activities 	<ul style="list-style-type: none"> Alignment of issues and responses High levels of stakeholder satisfaction with response mechanisms 	90%

10 Contractor compliance requirements

10.1 Planning compliances*

(*Applicable to those design elements where a contractor bear design responsibility i.e. specialist contractors | suppliers) - The contractor must in their planning and execution of the works take ownership for the requirements set out in the Grant of Planning Permission so conditions are complied with completely.

10.2 Statutory compliances

As a minimum, all aspects of works and project facilities must comply with good industry practice, statutory instruments and all necessary consents including but not limited to the following:

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- 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, 2007-2020;
- The Safety, Health and Welfare of Work (Construction) Regulations, 2013 to 2019;
- The Construction Products Regulation (CPR), 2013;
- The Building Control (Amendment) Regulations, 2014-2017;
- Any recommendation | Code of Practice etc. made by the Health and Safety Authority (HSA) or equivalent HSE publication;
- BS 5228: Noise and Vibration Control on Construction and Open Sites : 2009 + A1 2014 (BS 5228-1);
- 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, and the HSA;
- Relevant Irish Standards ("Irish Standards"), British Standards ("British Standards"), Codes of Practice ("Codes of Practice"), EU Directives ("Directives") or equivalent European Standards ("European Standards");
- Building Research Establishment Digest Recommendations;
- 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 equipment for use in a potentially explosive atmosphere must be appropriate for the environment and must comply with the EU 'Atex' Directive;
- All BSRIA Publications;
- All HVCA Publications;
- ETCI - National Rules for Electrical installations;
- CIBSE Publications- Guides, Codes, Technical Memoranda, Application Guides, Lighting Guides, etc.;
- ASHRAE guidance for specific Mechanical Systems and Components (where more comprehensive than CIBSE); and
- Working Time Directive, 2003.

Exeter Ireland Property III Limited will only appoint a competent contractor to complete works. Contractors are responsible to positive monitor works ensuring consistently high standards of safe planning, temporary works design as necessary, works management and workmanship. The level of interaction and frequency of inspection is based on assessed levels of risk arising

from the works. All contractors are reminded of the need to progress all works in accordance with health & safety regulatory requirements.

10.3 Construction stage requirements

10.3.1 Construction stage document requirements

The contractor must provide prior to commencement of any works on the CnCD the following information to Exeter Ireland Property III Limited for written acknowledgment:

- ~~A CMP Plan that conforms with this requirements of this DCMP;~~
- The CMP must be submitted for the site to the Planning Authority and GCC for agreement in writing, prior to commencement. In this regard the CMP shall include a site specific site Construction Traffic Management and Community Liaison Plan. Plans shall provide details of intended construction practice for the development are per the Notification to Grant Permission Conditions as required. Specific information requirements include:
 - location of the site and materials compound(s) including area(s) identified for the storage of construction refuse;
 - location of areas for construction site offices and staff facilities;
 - location of any settlement tank with associated discharge licence;
 - details of site security fencing and hoardings;
 - details of appropriate numbered on-site car parking facilities for site workers during the course of construction;
 - details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;
 - measures to obviate queuing of construction traffic on the adjoining road network;
 - measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network, will be managed through a combination of a full time road sweeper, wheel wash, automated spray booth provision at the site entrance and good waste management practice employment by the contractor;
 - alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works;
 - provision of parking for existing properties during the construction period;
 - details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
 - containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater;
 - off-site disposal of construction | demolition waste and details of how it is proposed to manage excavated soil; and
 - means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains. A record of daily checks that the works are being undertaken in accordance with the CMP shall be kept for inspection by the Planning Authority.
- Copy of AF2 notification to the Health and Safety Authority for the site;

- Site specific Construction Stage Health and Safety Plan for the site – the contractor as PSCS | Main Contractor must produce and submit in soft copy in advance of the works commencing a construction-stage health and safety plan for acknowledgement by Exeter Ireland Property III Limited. Each plan will be assessed on an ongoing basis during construction to account for the dynamic evolution of the project and adherence to agreed temporary work measures (demolition, groundworks, service diversions, traffic management etc.) and site rules;
- Site specific contaminated material | hazardous material strategies (as required);
- Approved commencement documentation as required by the Building Control (Amendment) Regulations, 2014 and | or similar statutory or regulatory documentation;
- Site specific Safety Statement;
- Names of personnel including shadow and support staff responsible for discharging the role of PSCS, site safety, health, welfare and first aid personnel;
- Written confirmation from Exeter Ireland Property III Limited that the contractor proposed site establishment complies with project requirements. If non-compliances are subsequently identified corrective actions must be remedied at the cost of the contractor;
- Evidence of the required insurances being in place;
- Confirmation (in advance of commencement) to confirm that previous works on site have been assessed to ensure compliance with as-built information;
- Details of the contractor contact details for subsequent payments;
- Proposed samples for approval of the design team and Exeter Ireland Property III Limited;
- Permit to work submittals such as method statements, risk assessments and applications for works outside the CnCD site redline boundary; and
- Complete Client Safety File.

10.3.2 Construction stage health and safety plan

The plan document must be project-specific and must incorporate the requirements of the strategies within this DCMP. The contractor must ensure their plan enables the location of its entire compound within its site as per the demised area and other areas outside the red line boundary where e.g. MEP, ICT etc. will be required to operate at defined interface points. Each plan, at a minimum must include at least the following sections:

- **Project directory and communications protocols** proposed to be used with Exeter Ireland Property III Limited in response to the necessary Communication Strategy;
- **Site establishment plan** including any proposed phasing / staging of site compound areas – identifying the location of, inter alia, the building footprint, site offices, welfare facilities for operatives and staff, materials storage, component assembly area, waste skips or similar, craneage / hoists / scaffolding, generator / pumps etc. The layout of same must be agreed in advance with Exeter Ireland Property III Limited with focus on the proposed location of potential noisy / dust creating equipment such as pumps & generators, and potential impacts on the progress or uses of nearby residential properties;
- **Contract programme** as previously agreed with Exeter Ireland Property III Limited;
- **Risk Management Strategy** – listing of specific site risks, the contractor must present a weighted risk matrix based on their evaluation of risks particularised to its specific works and the site;

- **Deliveries Strategy** - including swept path analysis (projection of HGV vehicle movements linked to the contract programme for the duration of the works), proposals for just-in-time deliveries, and its proposals to avoid impacts on traffic passing around the perimeter and through the site;
- **Storage Strategy** – developing the deliveries strategy to minimise storage requirements, but also addressing protecting and securing the components;
- **Waste Management Strategy** – addressing the requirements to implement, reduce, re-use recycle strategy and identifying the proposed location of skips etc. The strategy must address proposed mechanisms to avoid rodents inhabiting the site;
- **Fire & Emergency Plan** – planning and execution of the works in a manner which avoids impact on operational continuity of CnCD must particularise these proposals to the works in question and any risks identified in identifying and managing the respective project’s risks;
- **Storm-water Management Plan** – designing and implementing agreed construction site storm-water runoff control, post construction site storm-water management, pollution prevention | good housekeeping etc.;
- **Temporary Works Register** - this register must be submitted at pre-start by the contractor to the Project Manager and PSDP. The register is to be updated during the construction period in coordination with the Project Manager and PSDP;
- **Temporary Connections Plan** – for the avoidance of doubt, the contractor shall not be permitted to source temporary connections for utilities or draw power or water from the permanent infrastructure supplies unless otherwise agreed. Arrangements must instead be made for generators and similar temporary installations;
- **Temporary Traffic Management Plan** and swept path analysis – the contractor must carry out a swept path analysis for the CnCD site using design plans, and take account of the expected vehicles that will enter and exit the site during the construction project. The contractor must demonstrate how vehicles can operate safely within the traffic management proposal of the CnCD site and wider permanent roadways;
- **Overhead Lifting Plan** – the contractor is obliged to obtain approval from TII regarding their use of cranes (mobile, self-erecting, tower etc.) if the slewing capacity of these lifting appliances breach or travel near to neighbouring properties;
- **Community Liaison Plan** - responding to the Exeter Ireland Property III Limited Good Neighbour Charter;
- **Noise, Dust & Vibration Mitigation Plan** - attention is to be given to the impact on neighbours, immunosuppressed neighbours & members of the public; and
- **Phased Handover Plan.**

10.3.3 Client Safety File

The Client Safety File is information collated by the PSDP under Regulation 13(a) & (b) of the Safety, Health and Welfare at Work (Construction) Regulations, 2013. The Safety File is a record of information for the end user of the development which focuses on safety and health in relation to the day-to-day usage, maintenance, alteration and demolition of each structure within the CNCD. The information contained within the file shall alert those responsible for the design of new structures and services of any significant risks to safety and health that shall be addressed during detailed design development.

The Safety File document must be held in PDF format while also being capable of handling Revit, AutoCAD, MS Word, Excel files etc. To make this task achievable co-operation between

and co-ordination of all the relevant parties is of essential, right from the outset of the project. The design & build contractor is responsible under Regulation 21 for the co-ordination of arrangements among contractors to ensure the provision of relevant information, in writing, thus enabling the completion of the safety file. The BCaR information needs list is separate to the Client Safety File. The format and quantum for each Block |Structure will be agreed | provided during pre-contract stage with the preferred contractor. Refer to Appendix A for a typical Client Safety contents list.

10.3.4 Site utilities

Existing services will be identified from the utility bodies, current service drawing records and by use of a full-service sweep of the buildings and surrounds. These will be retained on site for reference. As appropriate, applications will be submitted for power, drainage and water connections through the relevant GCC departments. The contractor will be required to review and advise on:

- **Electricity:** - completed application form for temporary supplies and informing the Power Supply Company of the required power on dates and the dates at which the new supply connection is required. An application will be made to the ESB and relevant power networks for the temporary supplies required for the construction works;
- **Water:** - applications for final water connection and | or metering. An application will be made to Irish Water for a new water supply required for a temporary construction supply. An application will be submitted for the final connection. This will be a water supply up to the site boundary and terminate with an isolator. From the isolator, the mechanical contractor will run a new pipe and enter the plant room where a double valve and mains isolator will be installed. All underground pipework is to be disinfected in accordance with Water Supply (water fittings) Regulations 199 (SI 1999, 1148);
- **Waste Water:** - reviewing means for disposal of waste water. Connection to the Local Authority sewer for both temporary supply and for permanent supply will be lodged with GCC ;
- **Telecommunications:** - advising the contractor's head office on the number of telephone lines required for broadband, phones, faxes and computers. The contractor will then apply for the lines and advise on the installation date; and
- **Gas Supply:** - completing the various form for the new Gas Supply main for the development from the existing site boundary location and connection to the mechanical systems in a timely manner to allow for testing, commissioning and to aid drying out of the building.

The contractor will work together with their temporary electrics sub-contractor to establish the total power requirements for the site.

11 Construction and environmental management

The DCEMP provides the detailed environmental controls and monitoring activities to ensure that potential negative effects are minimised during the construction phase.

11.1 Minimum mitigation measures for the construction stage (as per Natura Impact Assessment Report)

The activities of the project for the construction phase shall remain within the boundary of the proposed site. Within this area, the mitigation measures outlined below shall be implemented :

- Construction and Environment Management Plan (CEMP) will be submitted to Galway County Council for agreement prior to site works commencing. This CEMP will incorporate the mitigation measures listed within the Natura Impact Assessment Report dated March 2020. The CEMP will also strictly adhere to best practice environmental guidance including but not limited to the following:
 - CIRIA Guidance C532 Control of water pollution from construction sites. Guidance for consultants and contractors. (CIRIA, 2019 - www.ciria.org);
 - CIRIA Guidance C741: Environmental good practice on site guide (Charles & Edwards, 2015; CIRIA, 2019 - www.ciria.org);
 - CIRIA Guidance C750D: Groundwater control: design and practice (Preene et al., 2016; CIRIA, 2019 - www.ciria.org);
 - Inland Fisheries Ireland 2016 Guidance on Protection of Fisheries During Construction Works In and Adjacent to Waters; and
 - Construction method statements will be submitted to Galway County Council for agreement prior to site works commencing.

11.1.1 Site compound

- The site compound shall be located within the site boundary;
- The compound will be located north of the exist local road and its respective drainage system, whilst remaining within the area of the proposed site. This will safeguard the surface water and groundwater pathways from potential pollution events within the compound;
- Only plant and materials necessary for the construction of the works will be permitted to be stored at the compound location;
- Site establishment by the contractor will include the following:
 - Site offices;
 - Site facilities (canteen, toilets, drying rooms, etc.);
 - Office for construction management team;
 - Secure compound for the storage of all on-site machinery and materials;
 - Temporary car parking facilities;
 - Temporary fencing;
 - Site Security to restrict unauthorized entry;
 - Bunded storage of fuels and refuelling area. Bunds shall be 110% capacity of the largest vessel contained within the bunded area;
 - A separate container will be located in the Contractors compound to store absorbents used to contain spillages of hazardous materials. The container will be clearly labelled, and the contents of the container will be disposed of by a licenced waste contractor at a licenced site. Records will be maintained of material taken off site for disposal;
 - A maintenance programme for the bunded areas will be managed by the site environmental manager. The removal of rainwater from the bunded areas will be their responsibility. Records will be maintained of materials taken off site for disposal;
 - The site environmental manger will be responsible for maintaining all training records;

- The contents of any tank will be clearly marked on the tank, and a notice displayed requiring that valves and trigger guns be locked when not in use;
- Drainage collection system for washing area to prevent run-off into surface water system; and
- All refuelling of vehicles will be carried out at the fuel stores within the main site compound and only ADR trained personnel will be permitted to operate fuel bowsers.

11.1.2 Water quality

Relevant legislation and best practice guidance that have been considered includes but not limited to the following:

- CIRIA C532 Control of water pollution from construction sites. Guidance for consultants and contractors (CIRIA, 2019 - www.ciria.org);
- CIRIA C515 Groundwater control – design and practice, 2nd ed. (CIRIA, 2019 - www.ciria.org);
- CIRIA Guidance C741: *Environmental good practice on site guide* (Charles & Edwards, 2015; CIRIA, 2019 - www.ciria.org);
- Inland Fisheries Ireland 2016 *Guidance on Protection of Fisheries During Construction Works In and Adjacent to Waters*;
- Adoption of a surface water / groundwater plan including appropriate barrier controls to prevent any seepage of potentially polluted surface water from the site into the groundwater table below (e.g. geotextile barriers);
- At no point should there be storage of any materials or vehicles/machinery within 50m of the Terryland River;
- Oil booms and oil soakage pads should be maintained on-site to enable a rapid and effective response to any accidental spillage or discharge. These shall be disposed of correctly and records will be maintained by the environmental manager of the used booms and pads taken off site for disposal;
- Fail-safe site drainage and bunding through drip trays on plant and machinery will be provided to prevent discharge of chemical spillage from the sites to surface water;
- Adoption of a surface water plan including appropriate erosion and silt controls, including step-wise removal of sediment when digging trenches for attenuation wetland outlet pipe, to prevent any uncontrolled flow of surface water (with high sediment loading) from the site into the Terryland River (e.g. trenches, silt fence).

11.1.3 Pollution control and spill prevention

Spill kits containing absorbent pads, granules and booms will be stored in the site compound with easy access for delivery to site in the case of an emergency. A minimum stock of spill kits will be maintained at all times and site foremen's vehicles will carry large spill kits at all times. Absorbent material will be used with pumps and generators at all times and used material disposed of in accordance with the Waste Management Plan.

All used spill materials e.g. Absorbent pads will be placed in a bunded container in the contractor's compound. The material will be disposed of by a licenced waste contractor at a licenced facility. Records will be maintained by the environmental site manager. Regular inspections and maintenance of plant and machinery checking for leaks, damage or vandalism will be made on all plant and equipment. In the event of a spill the contractor will ensure that the following procedure are in place:

- Emergency response awareness training for all Project personnel on-site works.
- Appropriate and sufficient spill control materials will be installed at strategic locations within the site. Spills kits for immediate use will be kept in the cab of mobile equipment.
- Spill kits will be stored in the site compound with easy access for delivery to site in the case of an emergency. A minimum stock of spill kits will be maintained at all times and site vehicles will carry spill kits at all times. Spill kits must include suitable spill control materials to deal with the type of spillage that may occur and where it may occur. Typical contents of an on-site spill kit will include the following as a minimum:
 - Absorbent granules;
 - Absorbent mats | cushions;
 - Absorbent booms;
 - Spill kits will contain gloves to handle contaminated materials and sealable disposal sacks;
 - Track-mats, geotextile material and drain covers;
 - All potentially polluting substances such as oils and chemicals used during construction will be stored in containers clearly labelled and stored with suitable precautionary measures such as bunding within the site compound;
 - All tank and drum storage areas on the site will, as a minimum, be bunded to a volume not less than the following;
 - 110% of the capacity of the largest tank or drum within the bunded area, or 25% of the total volume of substances which could be stored within the bunded area;
 - The site compound fuel storage areas and cleaning areas will be rendered impervious and will be constructed to ensure no discharges will cause pollution to surface or ground waters;
 - Designated locations for refuelling are within site compound;
 - Potentially contaminated run off from plant and machinery maintenance areas will be managed within the site compound surface water collection system; and
 - Damaged or leaking containers will be removed from use and replaced immediately.

11.1.4 Mitigations for disturbance | removal of immature riparian woodland | scrub habitat

Any clearance vegetation required to permit works and access should be carried out outside of the bird breeding season (i.e. avoiding March to September inclusive), as QI and non-QI (though protected) bird species may nest within this vegetation. If works are proposed for the bird breeding season, or if following initial clearance, it becomes apparent that some further de-vegetation is necessary during the bird breeding season, an experienced ecologist should first check all areas for the presence of nesting birds.

Should any nests be found they would have an exclusion zone put in place to safeguard the nests until the chicks have fledged. The vegetation to be cleared should also be checked for Otter or Otter couching sites immediately prior to the commencement of works by a qualified ecologist. Once the outfall pipe is installed, natural recolonization of riparian vegetation will be allowed to occur unhindered.

11.1.5 Means to ensure surface water runoff is controlled so no slit enters public drains | ponds | water sewers

- The construction contractor will implement the following mitigation measures, for release of hydrocarbons, polluting chemicals and sediment control:
 - Provision of measures to prevent the release of sediment during the construction work. In respect to works near to any attenuation pond, drain or sewer, the following measures (individual or combined) will be used:
 - Designed siltation tanks within the boundary of the site;
 - Straw rolls (also called fibre rolls, coir rolls, or wattles);
 - Silt fences; and
 - Gravel bags.

A site specific Stormwater Runoff Management Plan will be prepared by the contractor and submitted to GCC demonstrating specific controls that will be employed to adhere to the requirements of this condition.

12 Traffic management

The level of construction traffic directly associated with the CnCD will vary over the course of the construction programme and the following section presents the projected volume of traffic generated during the peak construction activity only.

12.1 Peak construction period

Excavation and earthworks activities represent the most onerous construction stages in terms of construction traffic for the site. The traffic impact of the likely increase in traffic associated with the construction of the proposed development will be assessed in the construction traffic management plan prepared by the contractor. The reduced dig excavation (3,550m³) and construction of the podium area will require a large quantity of excavation haulage movements with podium slab concrete and steel deliveries replacing excavation vehicle numbers thereafter.

12.2 Construction traffic generation

As noted above, the peak construction period will occur during the reduced dig excavation and construction of the podium structures. These construction works will generate traffic from the following activities:

- Reduced dig excavation;
- Delivery of concrete;
- Delivery of steel;
- Miscellaneous deliveries;
- Staff; and
- Site visitors | unscheduled visitors.

12.2.1 Delivery of concrete

There will be a significant number of concrete movements associated with staff and raw material deliveries to the site.

12.2.2 Delivery of steel

Steel reinforcement is required for the construction of the podium structures. It is anticipated that steel will be delivered directly to the site. For the purposes of this assessment it is assumed that multiple deliveries would occur per day.

12.2.3 Contractor staff

All contractors' vehicles will park within the development site area in a designated parking area. There will be no contractor parking permitted on any public roads.

12.2.3.1 Hours of operation

Site development and building works shall be carried out between the hours of operation recommended by GCC to safeguard the residential amenities of properties in the vicinity. The typical hours of operation are as follows:

- Monday to Friday, 7:30am – 19:00pm;
- Saturdays 08:00am – 14:00pm; and
- No works on Sundays or Public holidays.

The typical hours of operation will ensure that contractor staff travelling to/from the site do not coincide with the network peak hours along the adjacent local road network.

12.3 Total construction traffic generation

The total traffic generation for construction activities based on the assumptions will be presented in the TTA.

12.3.1 Construction traffic impacts

12.3.1.1 Impact of works on DnC & GnC access

Access to the Headford Road, DnC & GnC estates will be maintained through all stages of construction. Temporary traffic management will be required along Headford Road to facilitate the works. It will be the responsibility of the contractor to phase the works such that access to residential properties is maintained from all directions. Details of the traffic management arrangements will be contained within the site specific Construction Traffic Management Plan to be submitted to GCC by the contractor.

12.4 Construction traffic mitigations

12.4.1 Construction traffic strategy

Construction traffic will be limited to certain routes and times of day, with the aim of keeping disruption to existing traffic and residents to a minimum. To minimise disruption to the local areas, construction traffic volumes will be managed through the following measures:

- During peak hours, ancillary, maintenance and other site vehicular movements will be discouraged.
- Daily construction programmes will be planned to minimise the number of disruptions to surrounding streets by staggering HGV movements to avoid queuing;
- Access to residential estates will be maintained through all stages of construction;
- Abnormal site deliveries will be coordinated with GCC in consultation with local residents as per CLO requirements;

- Site staff parking will be provided with the potential for an overflow contractor carpark onsite; and
- The contractor is expected to promote travel by sustainable modes of transport (where possible).

12.5 Construction traffic management plan

A site specific construction phase Traffic Management Plan will be prepared by the contractor. Discussed below are a number of issues, information on which are to be included in each Traffic Management Plan as set out and guided by the Dublin City Council document '*Directions for the Control & Management of Roadworks in Dublin City*'.

12.5.1 Movement of machinery and plant

The contractor shall determine safe internal haul routes within their site area, including the locations for crossing any public roadways as part of their agreement with GCC prior to construction. The contractor must provide an appropriate number of competent Banksmen to specifically manage (as necessary) vehicle movements at these locations as they have been found to pose risks arising from proximity of works to DnC & GnC roadway users, pedestrian movements (construction personnel and members of the public). Contractors must not move machinery and plant across public roads in areas other than designated agreed crossing locations.

12.5.2 Loading | unloading locations

Vehicles must be loaded and unloaded within the demised site area (i.e. within the site boundary red line). All deliveries and collections must be overseen and managed for the contractor by a nominated competent person. The contractor must consider and explain how to manage the impacts on vulnerable persons, cyclists, pedestrians, other road users, and any affected roadway infrastructure.

Appendix A – Indicative Client Safety File Contents List

Client Safety File Information Needs List

DCON Safety Consultants Project: 151

Project Name: Cuir na Coirbe Development Project

Ref	Folders and Subfolders	Folder Ref Nrs	Documents included	Subcontractor	PI Insurance	Specialist Insurance	Uploaded	Comments	BCaR Checked	Complete and on file
Ref	Folders & Sub-folders	Folder and Subfolder Ref Nrs	Documents included	Subcontractor	PI Insurance	Specialist Insurance	Uploaded Y N	Comments Y N N/A	BCaR Checked Y N	Complete and on file Y N
0.0	Contents & Health & Safety	0.1	Contents							
		0.2	Project Directory (Design Team)							
		0.3	Project Directory (Subcontractors)							
		0.4	Architect Practical Completion Certificate							
		0.5	Safety File Handover Letter							
		0.6	Certificate of Compliance on Completion (PSCS Main Contractor)							
		0.7	Certificate of Compliance on Completion Architect (Executive Architect and Interior Architect)							
		0.8	Certificate of Compliance on Completion Assigned Certifier							
		0.9	Certificate of Compliance on Completion Structural Engineer							
		0.10	Certificate of Compliance on Completion M&E Consultant							
		0.11	Ancillary certificates (subcontractors supply chain contractors)							
1.0	Excavation	1.1	Site inspection documents							
		1.2	Waste Permits							
2.0	Foundations	2.1	Site foundation inspection report							
		2.2	Reinforcement rebar certificates							
		2.3	Concrete mix details							
		2.4	Ancillary certificate (PSCS Main Contractor)							
		2.5	Cube test results							
		2.6	Reinforcement mesh Declaration of Performances (DOP's)							
		2.7	Certificate for crushed stone							
3.0	Substructure including floor screeds	3.1	Inspection reports from design team							
		3.2	Test certificates for stone & sand							
		3.3	Hollocore slabs including ancillary cert							
		3.4	Block certificates							
		3.5	Mortar mix details							
		3.6	Concrete lintels							
		3.7	Radon barrier DOP							
		3.8	Radon sump DOP							
		3.9	Radon barrier ancillary certificate							
		3.10	Underfloor insulation information							
		3.11	Concrete mix details							
		3.12	Pressure test of drainage pipes reports							
		3.13	Drainage DOP's							
		3.14	Watermain DOP's							
		3.15	Cube test results							
		3.16	Watermain test results (CCTV pressure jointing information etc)							
4.0	Rising walls to roof	4.1	Inspection sheets from design team							
		4.2	Block & brick certificates							
		4.3	Cavity insulation information							
		4.4	Precast concrete design and product information (walls slabs) and selected perimeter walls							
		4.5	Concrete & steel lintels (DOP's & certificates)							
		4.6	Cavity barriers information							
		4.7	Cavity closers information							
		4.8	Mortar mix details							
		4.9	Wall ties & DPC details							
		4.10	Airtightness membrane & tape information							
		4.11	Window cills details and information							
		4.12	Structural steel & beam information (including coating details and certificate)							
		4.13	Masonry and render finish information							
		4.14	Coating reports							
5.0	Roof structure	5.1	Inspection reports from design team							
		5.2	Roof material system specification & guarantee (e.g. Sika)							
		5.3	Material DOP's							
		5.4	Ancillary certificate (roof structure)							
		5.5	Aluminium flashing informatio							
		5.6	Cavity Barrier (ceiling roof void areas etc.)							
		5.7	Roof maintenance strategy							
6.0	External windows & doors	6.1	Inspection reports from design team							
		6.2	O&M manuals including certificates, DOP's, drawings, warranties etc							
		6.3	Ancillary certificate							
		6.4	Roof light information							
		6.5	Steel door information							
		6.6	Electrical window information							
		6.7	External windows & doors ironmongery information (specific product manual pages only)							
		6.8	Fire cert windows?							
7.0	Drainage	7.1	Inspection report from design team							
		7.2	Test certificates for stone & sand							
		7.3	Pressure test of drainage pipes report							
		7.4	Drainage DOP's							
		7.5	Ancillary certificate (PSCS Main Contractor)							
		7.6	Drainage CCTV survey report							
8.0	Service ducting	8.1	Inspection report from design team							
		8.2	ESB duct information (as installed residual (in place) etc)							
		8.3	Eircom duct information (as installed residual (in place) etc)							

Client Safety File Information List

		8.4	Gas ducts (as installed residual (in place) etc)							
		8.5	Generator to switch room duct(s) (as installed residual (in place) etc)							
		8.6	Ducting across service yard gate (as installed)							
		8.7	Ducting to gate (as installed)							
		8.8	Ancillary certificate (PSCS Contractor)							
9.0	Internal Floor screed	9.1	Inspection reports from design team							
		9.2	All floors DOP's							
		9.3	Screed certificate (PSCS Contractor)							
		9.4	Ancillary certificate							
		9.5	Cube test results							
10.0	Internal partition walls	10.1	Inspection reports from design team							
		10.2	Stud partition DOP's specification, BBA certificate (if applicable) & associated fire rating information certificates							
		10.3	Ancillary certificate							
		10.4	Fire rated partitions opinion of compliance (Fire Consultant)							
		10.5	Fire rated partitions opinion of compliance (PSCS Main Contractor)							
11.0	Internal wall finishes	11.1	Inspection reports from design team							
		11.2	Vinyl for wet rooms & bedrooms							
		11.3	Finish to block walls, DOP's & product and safety data sheets							
		11.4	Wet coat finish to block walls, DOP's& product and safety data sheets etc							
		11.5	Ancillary certificates							
		11.6	Decorations DOP's (paint, tile, wallpaper, vinyl, any feature walls etc.)							
12.0	Mechanical	12.1	Inspection reports from design team							
		12.2	O&M Manuals including commissioning reports, ancillary certificates, as built drawings (in PDF and DWG) (specific product manual pages only)							
		12.3	M&E Consultant opinion of compliance							
		12.4	Gas certification (PSCS Main Contractor)							
13.0	Electrical	13.1	Inspection reports from design team							
		13.2	O&M Manuals including commissioning reports, ancillary certificates, as built drawings (in PDF and DWG) (specific product manual pages only)							
		13.3	M&E Consultants opinion of compliance							
		13.4	Emergency lighting and fire detection and alarm systems (#3217 and #3218 4-part certificates)							
		13.5	RECI/ECTI certification							
14.0	Ceiling finishes	14.1	Inspection reports from design team							
		14.2	Fire Ceiling - Material DOP's							
		14.3	MF Ceiling - Material DOP's							
		14.4	Grid ceiling - Material DOP's							
		14.5	Gypsum report							
		14.6	Access hatch details and product information							
		14.7	Ancillary certificates							
		14.8	Fire rated ceilings opinion of compliance							
		14.9	Rooflight information							
		14.10	Access ladder information							
15.0	Internal Doors & Screens	15.1	Inspection reports from design team							
		15.2	O&M Manuals, DOP's, fire certificates							
		15.3	Ancillary certificates							
		15.4	Ironmongery product information (specific product manual pages only)							
		15.5	Commissioning							
		15.6	Signage (ironmongery and wayfinding)							
16.0	Internal floor finishes	16.1	Inspection reports from design team							
		16.2	Ancillary certificates							
		16.3	Screeds & fillers							
		16.4	Underlays							
		16.5	Floor finishes							
17.0	Sanitary ware	17.1	Inspection reports from design team							
		17.2	DOP's and specification and product information (specific product manual pages only)							
18.0	Fire stopping	18.1	Inspection reports from design team							
		18.2	Fire consultant inspection report							
		18.3	Fire damper inspection report							
		18.4	Material DOP's							
		18.5	Fire certificate							
		18.6	Ancillary certificate							
		18.7	Opinion of compliance (Supply chain contractor)							
19.0	Air tightness	19.1	Air tightness test report							
		19.2	Inspection report from Design Team							
20.0	Paths, Paving & Grounds	20.1	Inspection sheets from design team							
		20.2	Concrete test results							
		20.3	Paving DOP's & data sheets							
		20.4	Tarmacadam DOP & data sheet							
		20.5	Ancillary certificates							
21.0	External railing, gates & Landscaping	21.1	Inspection sheets from design team							
		21.2	CE Certs, Mill certs, drawings & letter of compliance & commissioning							
		21.3	Steel certs							
		21.4	Fixings							
		21.5	Ancillary certs							
		21.6	Signage							
		21.7	External Lighting							
		21.8	Bike Racks							
		21.9	Landscaping							
		21.10	Aco drains							
		21.11	Fire Hydrants							
22.0	Fall arrest	22.1	Inspection sheet from design team							
		22.2	O&M Manuals, certs, warranties							
		22.3	Ancillary certificate							
23.0	As Built Drawings (validated by Design Team)	23.1	Underground services (PSCS - Main Contractor) (PDF and DWG)							
		23.2	Architect (Executive and Interior Architects) As Built drawings (Revit, PDF and DWG)							
		23.3	Structural As Built drawings (Revit, PDF and DWG)							
		23.4	M&E As Built (PDF and DWG)							
		23.5	Fire Consultant As Built drawings (Revit, PDF and DWG)							

Client Safety File Information List

24.0	IPS Panels & Toilet Cubicles	24.1	Design team inspection reports						
		24.2	O&M Manuals & drawings (specific product manual pages only)						
		24.3	Ancillary certificates						
25.0	Fire Dampers	25.1	Inspection reports from design team						
		25.2	DOP's						
		25.3	Fire stopping DOP's						
		25.4	Electrical elements, details, schematics etc.						
26.0	Fitted Furniture	26.1	Inspection reports from design team						
		26.2	DOP's						
		26.3	Ancillary certificate						