



Health & Safety Construction Management Plan

Aderrig Development, Adamstown SDZ.
Phase 3.

November 2023



Document Sign Off

Aderrig Phase 3,

Adamstown SDZ

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1. INTRODUCTION

This Construction Safety & Health Management Plan (HSCMP) has been prepared by B&C Contractors in conjunction with the preliminary Health & safety Plan developed by the PSDP. (Waterman-Moylan)

This Safety & Health Plan is considered a live document and will be regularly reviewed and updated as required as the project progresses.

2. PROJECT DIRECTORY

2.1 Client

Aderrig 1 Residential Limited Sixth Floor, Fitzwilliam Court, Leeson Close, Dublin 2, D02 YW24, Ireland			
Telephone:	(01) 6181800	Fax:	
Contact:	Denis Moloney	Email:	dmoloney@quintain.ie

2.2 Project Supervisor Design Process

Waterman Moylan Consulting Engineers, Block S, East Point Business Park, Alfie Byrne Road, Dublin 3, D03 H3F4			
Telephone:	01 6648900	Fax:	01 6613618
Contact:	Eva Aksu Kieran O'Neill	Email:	e.aksu@waterman-moylan.ie k.oneill@waterman-moylan.ie

2.3 Design Team - Architect

BKD Architects, 6/7 Harcourt Terrace Dublin 2, Ireland			
Telephone:	(01) 6182400	Fax:	(01) 1 6767385
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2.4 Design Team - Civil / Structural Designer

Waterman Moylan Consulting Engineers, Block S, EastPoint Business Park, Alfie Byrne Road, Dublin 3, D03 H3F4			
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Contact:	Jason Burger & Ian Worrell - Civil Bart Borowiak - Structural	Email:	j.burger@waterman-moylan.ie i.worrell@waterman-moylan.ie b.borowiak@waterman-moylan.ie

2.5 Design Team - Landscape Architect

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Contact:	Daithi O'Troithigh Linda Doyle	Email:	daithi@doyle-otroithigh.com linda@doyle-otroithigh.com



2.6 Design Team - Mechanical / Electrical Designer

Waterman Moylan Consulting Engineers, Block S, EastPoint Business Park, Alfie Byrne Road, Dublin 3, D03 H3F4			
Telephone:	01 6648900	Fax:	01 6613618
Contact:	Andrew Cruise	Email:	a.cruise@waterman-moylan.ie

2.7 Design Team - Public Lighting

Sabre Electrical Services Ltd., Unit 11 Bellevue Industrial Estate, Finglas, Dublin 11			
Telephone:	01 8110875	Fax:	01 8644720
Contact:	Graham Sheehan	Email:	graham@sabrelighting.ie

2.8 Project Supervisor Construction Stage Contractor

B&C Contractors Monaghan Ltd, Church Street, Carrickmacross, Co. Monaghan.			
Telephone:	042 9661124	Fax:	
Contact:	Colm Mc Bride	Email:	info@bandccontractors.ie

2.9 Project Build Team

B&C Contractors Monaghan Ltd, Church Street, Carrickmacross, Co. Monaghan.			
Contracts Manager:	Colm McBride	087 2644068	colm@bandccontractors.ie
Site Manager	Paul Babington	087 6599687	paul@bandccontractors.ie
Site Engineer	Paul Gribbin	0879416015	paulg@bandccontractors.ie
Site Safety Manager	Peter Sharpe	085 7340847	peter.sharpe@bandccontractors.ie
Quantity Surveyor:	Darren Jackson	087 9948564	darren@bandccontractors.ie
Accounts:	Shirley Marron	042 9661124	shirley@bandccontractors.ie
Administration:	Fiona Byrne	042 9661124	fiona@bandccontractors.ie

2.10 Health & Safety Authority

Health & Safety Authority, The Metropolitan Building, James Joyce Street, Dublin 1			
Telephone:	1890 289 389	Fax:	01 614 7020
Contact:		Email:	wcu@hsa.ie



3. DESCRIPTION OF THE PROJECT

3.1 Project Title:

This Preliminary Safety & Health Plan has been provided for Aderrig Phase 3 construction works in Adamstown SDZ.

3.2 Site Location:

The site is situated c.16 km east of Dublin City Centre and c.2 km east of Junction 4 of the M4, at Lucan. Refer to section 3.7 for an image showing the general location of the site within its wider environs.

3.3 Existing Environment:

The Client's lands are in Adamstown SDZ, South County Dublin. The proposed development is bounded generally:

East: Aderrig phase 2 & Boulevard Phase 1.

West and North: Undeveloped lands.

South: Undeveloped lands.

3.3.1 Existing Vegetation

Protection/Retention of Existing Trees.

Following on from an arborists report there have been a number of existing trees identified that shall be retained and protected from damage during building operations in accordance with a Tree Protection Plan prepared by qualified Arborist carrying professional indemnity insurance.

Only those trees detailed for removal in the Tree Survey and Planning Report submitted to the Planning Authority on 26 October 2022 shall be removed. All other trees on the site shall be retained and shall be protected from damage for the duration of the works on site,

All existing trees to be retained shall be enclosed by stout protective fencing, located at a suitable distance. (sample below)





The Planning Authority shall be notified in writing when protective measures are commencing and also in writing when they have been completed. The protective fencing shall at all times be maintained intact and in good order for the duration of the construction works. Any damage caused to the protective fence shall be repaired immediately. No materials shall be stored, no rubbish dumped, no fires lit, and no buildings erected inside the protective fence(s), nor shall any changes in ground level be made within the fence(s) unless previously agreed in writing by the Planning Authority. In the event that trees become damaged or otherwise defective during construction period, the County Council shall be notified as soon as reasonably practicable and remedial action agreed and implemented at the developer own expense. Any necessary tree felling and surgery works shall be first agreed on-site and subsequently in writing with the Planning Authority prior to the commencement of the development.

3.4 Scope of Works:

The work generally comprises of the construction of a new residential development of circa 207 dwellings ranging in height from 2 No. stories to 4 No. stories, comprising 75 No. houses and 132 No. duplex units. This project is the third phase of a four-phase development within the Aderrig Tile Development Area 8 of the ASDZ.

The development includes vehicular junctions to access the development from Celbridge Link Road (2 No.) and Adamstown Way (3 No.); internal road, cycle and footpath network. car parking spaces; cycle parking; bin storage areas; public, communal and private open space areas, with balconies and terraces facing all aspects; hard and soft landscaped areas; boundary treatments; public lighting; 2 No. sub-stations; and all associated site and development works above and below ground.

B&C Contractors will plan the work's in advance and put in place a safe system of works for all aspects of the project as appropriate in order to comply with requirements of the Construction Regulations. B&C Contractors will coordinate on site the location of all underground access chambers with the utility service providers and associated service routing.

3.5 Drawings:

Please refer to tender documents for all existing drawings.

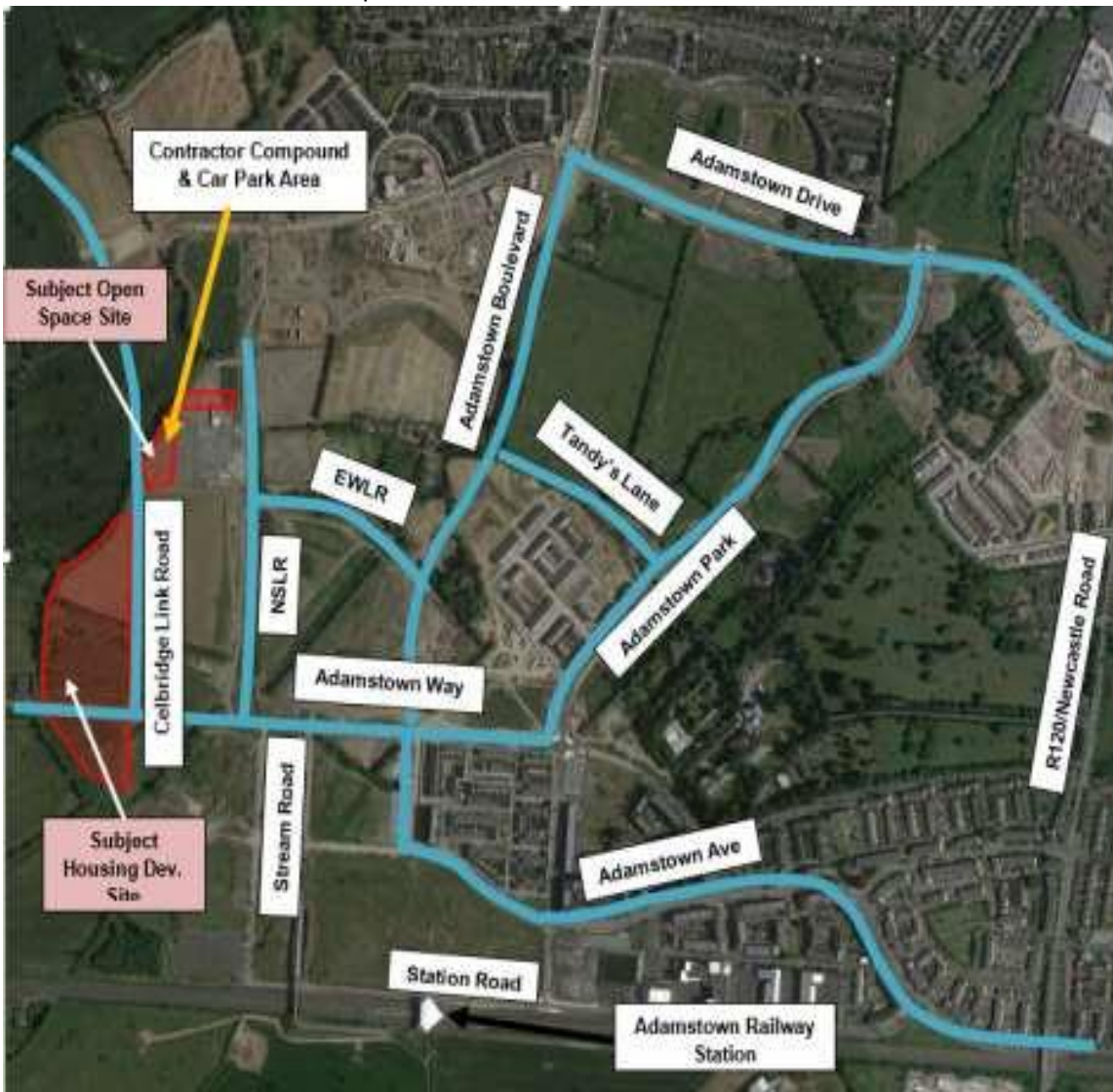
Final construction drawings will be issued prior to commencement of the works by design team. B&C Contractors will liaise with the Project design team Manager in order to obtain construction drawings prior to works as appropriate.

3.6 Adjacent Land Uses:

The subject site is situated in the central western area of Adamstown SDZ, within Development Area 8- 'Aderrig' under the Adamstown SDZ Planning Scheme Area. The Phase 3 site is bounded by agricultural lands to the north, west and south which are not included as part of the SDZ Planning Scheme. The site is bounded to the east by Aderrig Phase 2 development currently under construction. Also, the proposed construction of Adamstown Boulevard and Adamstown Station developments to the south-east may overlap with this project.

3.7 Boundaries and Access:

Site access routes for construction related traffic and deliveries can be via Adamstown Avenue / Adamstown Park / Adamstown Boulevard / Adamstown Way. The Celbridge Link Road will be utilized for site access later in the project when the road becomes live. Access is also possible via Station Road.





3.8 Location of Site Accommodation:

The layout of the site compound including site access and egress points, location of temporary site accommodation, location of unloading and storage areas, traffic and pedestrian routes etc. shall be determined by B&C Contractors and agreed prior to commencement of the works.



B&C Contractors will review and consult with the project drawings e.g. site utility drawings, existing site lay out, and other relevant information in order to facilitate connection of water and sewerage lines to the welfare facilities. Power shall be provided via temporary generators.

B&C Contractors will put in place measures to ensure the contractor's working areas / compound area secured against unauthorized access throughout the construction works. Construction parking will be managed/controlled by the B&C Contractors in consultation with the Client.

B&C Contractors will engage the services of a suitable qualified and licensed pest control company to supply, install and maintain bait stations at strategic locations throughout the site.

Timescale for the Works:



B&C Contractors Monaghan Ltd,
Church Street, Carrickmacross, Co.
Monaghan.
CEMP, Aderrig Phase 3, Adamstown SDZ.



The phase 3 intended date for commencement of construction work is January 2024. The project is expected to take up to 28 months.

A fully detailed project programme will be determined by B&C Contractors including the application of appropriate licenses and permits.

The PSDP will be kept informed of any significant changes to the programme for the construction works. If during the course of the works, it becomes necessary to develop detailed schedules for individual activities, this will be agreed with the Client prior to commencement of that activity.

3.9 Restriction on Working Hours:

The working hours on site are conditioned by the grant of permission.

Working hours are limited by grant of planning conditions as follows:

7.00am to 7.00pm Monday to Friday
9.00am to 1.00pm Saturday.
No Works on Sundays or Bank Holidays

Any construction work outside these hours shall only be permitted following a written request to the Planning Authority and the subsequent receipt of the written consent of the Planning Authority, having regard to the reasonable justification and circumstances and a commitment to minimise as far as practicable any unacceptable noise outside the hours stated above.

Should any changes to the above hours be required for carrying out the construction works, then such changes must be discussed with and approved in advance by the Client representative, Local Authority, and any other relevant parties. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

4. SAFETY PROVISIONS

4.1 Safety Objectives for the Project:

Implementation of the project works are in accordance with the Safety, Health and Welfare at Work Act 2005, and under the Safety, Health and Welfare at Work (Construction) Regulations 2013.

It is imperative that construction works to be carried out with due regard to the welfare of operatives and without putting at significant risk their Safety & Health and that of others who may be affected by the project, particularly the Public and other third parties.

Primary objectives:

- To ensure the general public is adequately protected from construction activities occurring within the site or in public spaces.
- To ensure zero health and safety incidents involving the public.
- To ensure that every person coming to site, goes home safely each day.
- To have safe working conditions for all on site and safe work methods.
- That hazards are identified and associated risks are reduced to a manageable level by applying the principals of prevention throughout the project.
- To have zero HSA reportable accidents or dangerous occurrences.
- To ensure that the HSA, do not raise any issues leading to enforcement or prohibition actions relating to the



project.

There is a statutory requirement to record and report incidents causing injury. In order to comply with this requirement, the project must include the provision of an incident management system to record all site incidents, including, and in particular, those that are related to traffic management. The incident management system adopted must identify and highlight unexpected levels or categories of incidents. This capability will facilitate early implementation of remedial measures to counter the impact of any unsafe features in the project.

The project and construction works are to be carried out in accordance with the design and specification outlined within the contract documents.

4.2 Duties of the Project Team:

4.2.1 Duties of the Client:

Duties of the Client are set out in Regulations 6-10 of the Safety, Health & Welfare at Work (Construction) Regulations 2013, S.I. No. 291 of 2013.

The Client must, for every project appoint a project supervisor for 2 stages of the project, firstly the Design stage and secondly the Construction stage. In practice the two stages may overlap.

- Appoint, in writing before design work starts, a project supervisor for the design process (PSDP) who has adequate training, knowledge, experience and resources
- Appoint, in writing before construction begins, a project supervisor for the construction stage (PSCS) who has adequate training, knowledge, experience and resources
- Be satisfied that each designer and contractor appointed has adequate training, knowledge, experience and resources for the work to be performed
- Co-operate with the project supervisor and supply necessary information
- Retain and make available the Safety File for the completed structure. The Safety File contains information on the completed structure that will be required for future maintenance or renovation
- Provide a copy of the safety and health plan prepared by the PSDP to every person tendering for the project. The Safety Plan documents how health and safety on the project will be managed up to project completion.
- Notify the Authority of the appointment of the PSDP where construction is likely to take more than 500 person days or 30 working days. The AF1 and AF2 forms are in the appendix.

4.2.2 Duties of the Project Supervisor Design Process:

Duties of the Project Supervisor (Design Process) are set out in Regulations 11-14 of the Safety, Health & Welfare at Work (Construction) Regulations 2013, S.I. No. 291 of 2013.

The primary function of the Project Supervisor for the Design Process (PSDP) is to coordinate the elimination, or if this not possible the reduction, of health and safety risks at the design stage. He must take account of a number of general principles of prevention, detailed in schedule 1 of the Safety Health & Welfare at Work Act 2005. In addition; he must co-ordinate the other designer's activities and consider the impact of programming on health and safety issues,

The Project Supervisor Design Process must:

- Identify hazards arising from the design or from the technical, organizational, planning, or time related aspects of the project;
- Where possible, eliminate the hazards or reduce the risk; in accordance with the general principles of prevention.



- Communicate necessary control measures, design assumptions, or remaining risks to B&C Contractors so they can be dealt with in the Safety and Health Plan;
- Ensure that the work of designers is coordinated to ensure safety;
- Organise co-operation between designers;
- Prepare a written safety and health plan for any project where construction will take more than 500 person days or 30 working days or there is a Particular Risk and deliver it to the client prior to tender.
- Prepare a safety file for the completed structure and give it to the client;
- Notify the Authority and client of non-compliance with any written directions issued;
- The PSDP may issue directions to designers or contractors or others.

4.2.3 Duties of the Designers:

Duties of the Designers are set out in Regulation 15 of the Safety, Health & Welfare at Work (Construction) Regulations 2013, S.I. No. 291 of 2013.

Principal duties are:

- Apply the principals of accident prevention and avoidance of occupational ill health to the design, taking account of the safety and health plan and safety file.
- Co-operate with the project supervisors for the design process and construction stage of the project.
- Co-operate with other designers.
- Provide the project supervisors, design and construction, with information regarding certain specific risks
- Provide the project supervisors, design and construction, with information about the nature and scope of the project so that the project supervisors can carry out their tasks.
- Take into account, directions from the project supervisors.
- Advise the client of his duties promptly if no PSDP is appointed.

4.2.4 Duties of the Project Supervisor Construction Stage:

Duties of the Project Supervisor (Construction Stage) are set out in Regulations 16-23 of the Safety, Health & Welfare at Work (Construction) Regulations 2013, S.I. No. 291 of 2013.

The Project Supervisor Construction Stage is responsible for managing and coordinating the construction phase safety and health issues on site. The Construction Regulations 2013 provide a framework for this process, with the requirement that the key risk management issues be set out in writing in the construction phase Safety and Health Plan. It is important to note that the presence of a Project Supervisor Construction Stage (PSCS) does not relieve other contractors/employers of their obligation to comply with their statutory safety and health obligations. The Project Supervisor Construction Stage must:

- Co-ordinate the implementation of the construction regulations by contractors;
- Organise co-operation between contractors and the provision of information;
- Co-ordinate the reporting of accidents to the Authority;
- Notify the Authority before construction commences where construction is likely to take more than 500 person days or 30 working days;
- Provide information to the site safety representative;



- Co-ordinate the checking of safe working procedures;
- Co-ordinate measures to restrict entry on to the site;
- Co-ordinate the provision and maintenance of welfare facilities;
- Co-ordinate arrangements to ensure that craft, general construction workers, and security workers have a Safety Awareness card, e.g. Safe Pass and a Construction Skills card where required;
- Co-ordinate the appointment of a site safety representative where there are more than 20 persons on site;
- Appoint a safety adviser where there are more than 100 on site;
- Provide all necessary safety file information to the PSDP;
- Monitor the compliance of contractors and others and take corrective action where necessary;
- Notify the Authority and the client of non-compliance with any written directions issued;
- B&C Contractors may issue directions to designers or contractors.

4.2.5 Duties of the Contractors:

Duties of the Contractors are set out in Regulations 24-28 of the Safety, Health & Welfare at Work (Construction) Regulations 2013, S.I. No. 291 of 2013.

4.2.6 Duties of the Employees:

Duties of the Employees are set out in Regulation 29 of S.I. No. 291 of 2013 of the Safety, Health & Welfare at Work (Construction) Regulations 2013.

4.3 Appointment of Project Supervisor Design Process:

The Client has appointed Waterman Moylan Consulting Engineers to act as the PSDP for the project.

4.4 Appointment of Project Supervisor Construction Stage:

The Client has appointed B&C Contractors to act as B&C Contractors & Main Contractor for the project.

4.5 Notifications:

The Client or Client Representative is required under Regulation 10 of the Safety, Health and Welfare at Work (Construction) Regulations 2013 to give advance notification to the Safety & Health Authority prior the Design Process beginning where construction is likely to take more than 500 person days or 30 working days. This is done through the submission of the AF1 form to the HSA.

B&C Contractors acting as B&C Contractors are required under Regulation 22 of the Safety, Health and Welfare at Work (Construction) Regulations 2013 to give advanced notification to the Safety & Health Authority prior to commencement of the construction works on site. This is done through the submission of the AF2 form to the HSA. B&C Contractors must make arrangement for displaying of the above notifications on the site at all times.

As the proposed construction works anticipated to take longer than 30 working days, the Client has informed the HSA via the AF1 form. B&C Contractors acting as PSCS will be required to notify the HSA and lodge an AF2 Form prior to commencement of the works as appropriate.

Note: Issuing of the above notifications to the Safety & Health Authority is a legal requirement. No works to be commenced on site unless the above notifications are submitted.



4.6 Safety & Health Plan for the Construction Stage:

B&C Contractors shall provide appropriate information to control all risks associated with the proposed construction works, taking into account the “Principles of Prevention” and put in place all safety measures for protection of all operatives on site and to all others who may visit the site, or be affected by the works outside the line of the site boundary.

4.7 Arrangements for communicating with Designers, PSCS and others:

4.7.1 Designer Safety Meetings:

The PSDP will arrange meetings or discussions with the designers throughout the project as necessary. At these meetings the Safety & Health aspects of the Design works will be discussed. A representative of the Client Management may attend these meetings as necessary.

Design activities that have yet to commence are the detailed design of utilities by the utility providers, temporary and permanent works designs by sub-contractors.

4.7.2 Pre-Start Site Safety Meeting:

Prior to commencement of construction works, a preliminary site safety meeting will be held by B&C Contractors. This is to discuss all safety aspects of the construction works with all relevant parties and agree the safe method of construction in principle.

4.7.3 Progress Site Safety Meeting:

During the course of the construction works, site safety meetings will be carried out by B&C Contractors on a regular basis in order to discuss safety aspects of the construction works. All meetings shall be recorded by the site manager and a copy of minutes distributed to all relevant parties. At these meetings, the implementation of the safety standards set out in the Safety & Health Plan shall be discussed.

4.7.4 Continuing Liaison:

In the event of design changes occurring during the course of construction works, then B&C Contractors will notify the PSDP of their occurrence, so that such changes and subsequent Safety and Health implications can be assessed in a timely manner.

The PSDP will then arrange meetings and discussions with the relevant Designers in order to discuss safety implications of the design changes. The relevant Safety and Health document will then be revised accordingly and submitted to the PSDP.

The PSDP will forward revised Safety & Health documents to B&C Contractors as appropriate for implementation. B&C Contractors will put in place procedures within his/her Safety and Health plan for dealing with unforeseen eventualities which may arise during the project execution which result in substantial design changes and which might have Safety and Health implications, affecting the contract period or any other resources.

4.8 Directions and Arrangements for Monitoring:

During the course of the project, the PSDP may arrange safety meetings in order to discuss the implementation of the safety standards set out in the Preliminary Safety & Health Plan.

4.8.1 Issuing Directions:

Under the Regulation 14 of the Safety, Health and Welfare at Work (Construction) Regulations 2013, “The project supervisor for the design process, so far as is necessary, may give directions to each person who is a designer, contractor or other relevant person, which directions, if carried out, will assist or enable compliance by the project supervisor with the duties imposed by these Regulations on the project supervisor”.



In order for the PSDP to comply with his duties under the above Regulation, and with a view to protecting persons at work, it may be necessary for the PSDP to issue directions to other duty-holders.

4.8.2 Monitoring Site Activities:

B&C Contractors will put in place specific procedures for dealing with unsafe practices or any other Safety and Health problems. B&C Contractors will put in place specific measures for reporting and resolution of any unsafe practices that may occur during the course of the construction works.

B&C Contractors will visit the site throughout the construction works on a regular basis in order to monitor/Inspect the site activities to ensure the safety & health of operatives on site.

B&C Contractors will maintain records of site inspections, for inclusion in the Safety File on completion of the works.

4.9 Special Requirements:

4.9.1 Contractors Safety Statement:

Under Section 20 of the Safety, Health and Welfare at Work Act 2005 B&C Contractors must produce his/her Company's Safety Statement to include:

- The safety and health of employees while they work
- The safety and health of other people who might be at the workplace, including operatives, visitors and members of the public

The safety statement represents a commitment to the safety, health and welfare at work. It should state the resources necessary to maintain and review safety and health laws and standards. The safety statement should influence all work activities, including:

- The selection of competent people, equipment and materials
- The way work is to be carried out
- How services are designed and provided

The safety statement must be made available to staff, and anyone else, showing that all hazards associated with the works have been identified and the risks have been assessed and eliminated or controlled.

4.9.2 Contractors Safety Method Statements:

Contractor's Method Statements are required, where a particular task would involve a risk to the people under his direct control, and to all other third parties, who may be affected by his actions.

Method Statements will identify the safe means to be employed by B&C Contractors to ensure that hazards and risks associated with his works have been identified and that the hazards or risks will be eliminated or reduced to an acceptable level, in which a competent person would be expected to manage on site, insofar as is reasonably practicable. The Method Statement shall also specify the plant or equipment to be used, and the safety procedures to be adopted when using such plant or equipment. B&C Contractors is obliged to ensure that all works shall be carried out in accordance with all related Safety & Health Acts, Regulations, safety codes and standards applicable to this type of works.

Method Statements should address the particular needs of the site and should detail the planned sequences and method of working. The proposed working method should be assessed to determine whether a number of method statements are required, particularly where the operations would be phased. Methods such as "Tool Box Talks" are recommended to help in disseminating the information, especially for those operatives who are carrying out the works.

Each Method Statement should be succinct and should form a single document, including site plans, annotated diagrams and a detailed programme of the works, to clarify and to communicate to those carrying out this work on site what is required. A logical order should be followed. It should be easy to understand, agreed and be known to all levels of management and



supervisors. Repetitive tasks may be covered by standard sheets, but critical activities should be specified in full. B&C Contractors shall ensure that the chosen method of work should not compromise the structural integrity of the works or adjacent structures/installations.

4.9.3 Operatives Health Safety Training Requirements:

B&C Contractors will ensure that all operatives have sufficient /appropriate health & safety training for the works to be undertaken. The requirement of current safety & health Legislation / Regulations in relation to training certificates must be complied with.

All construction workers undertaking the tasks listed in the Fourth Schedule of the Construction Regulations 2013, must have been issued with a QQI award under the Construction Skills Certification Scheme (CSCS) and be in possession of CSCS registration cards.

4.9.4 Plant & Equipment safety Requirements:

Each Contractor, when using his / her own, or hired plant and equipment, is required to ensure that all persons under his or her direct control on a construction site, have received the necessary training to operate, or to work with such equipment, and have been issued with the current Legislation/Regulations.

4.9.5 Safety & Health File for the Site:

B&C Contractors will maintain a Safety & Health File on site, Some of the information will be held in hard copy format on site whilst some information will be held on B&C Contractors Company Servers. The following is a non-exhaustive list of items that will be included:

Item	Site Safety & Health File Contents
1.0	File Index
2.0	Preliminary Safety & Health Plan-Design Process
3.0	Safety & Health Plan-Construction Stage
4.0	Company Safety Statement - Project Organization
5.0	Sub Contractor's Directory (Health and Safety Policies, SMS, Training Certificates etc.)
6.0	Detailed Safety Method Statement for all works to be carried out.
7.0	Hazard Identification
8.0	Risk Assessment
9.0	Health and Safety Authority / Statutory Requirements
10.0	Site Location-Site Map
11.0	Coordination with Design Team
12.0	Detailed Programme
13.0	Training Certificates
14.0	General Site Rules
15.0	Site Induction-Site Registration Procedure
16.0	Emergency Procedure and First Aid
17.0	Environment Issues-Waste Management System
18.0	Material Schedule - Material Safety Data Sheets
19.0	Plant and Equipment
20.0	Traffic Management
21.0	Site Safety Inspection / Site Audit
22.0	Toolbox Talks
23.0	Minutes of Site Safety Meetings
24.0	Monitoring of Compliances



- 25.0 Near Miss / Incident - Reports and Procedure
- 26.0 Site Compound Lay out - Storage Facility - Welfare Facilities.

4.10 Safety Documents:

Documents to be read and observed in conjunction with the Construction Management Plan are as follows:

- The Safety, Health and Welfare at Work Act 2005.
- Safety, Health and Welfare at Work (Construction) Regulations 2013 and Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2019 & 2020, (S.I. No. 291 of 2013 SI No: 129 of 2019, and S.I. No. 102 of 2020)
- Safety, Health and Welfare at Work (General Application) Regulations and amendments (S.I. No.299 of 2007, S.I. No.732 of 2007, S.I. No.176 of 2010, S.I. No.445 of 2012, S.I. Nos.36, 70 & 370 of 2016, S.I. No. 2 of 2020, SI No 619 of 2021 and S.I. No. 255 of 2023)
- Safety, Health and Welfare at Work (Confined Space) Regulations 2001 (S.I. No. 218 of 2001)
- Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations and amendments (S.I. No.386 of 2006 and S.I. No.589 of 2010)
- Shipments of Waste and the Waste Management (Shipment of Waste) Regulations, 2007 (S.I. No. 419 of 2007 (as amended by the Waste Management (Registration of Brokers and Dealers) Regulations 2008 (S.I. No. 113 of 2008)
- European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477) (invasive species)
- BS 5228 (Parts 1 & 2) :2009+A1:2014 code of practices for noise and vibration control on construction and open sites.
- Guidance for the Control and Management of Traffic at Road Works 2nd Edition 2010 published by Department of Transport.
- HSA- Code of Practice for Avoiding Danger from Underground Services.
- HSA– Guide to Safety in Excavation.
- HSA- Code of Practice for Working in Confined Spaces.
- NSAI - Code of Practice: Safe use of cranes in the construction industry; I.S. 360:2019.
- HSA Guidance - Safety with Lead at Work.
- HSA Guidance - Working with Materials Containing Asbestos Cement.
- HSA Guidance - Construction Site Traffic Management Plan.

5. Environmental Restrictions and Existing On-Site Risks

5.1 Safety Hazards:

5.1.1 Location of Existing Services.

Attention is drawn to the fact that live services including power, gas, water, telecommunications and foul/storm/combined sewers exist in the area. Adamstown Way Road passes through the site and contains existing gas, electrical, stormwater, foul water and watermain network infrastructure within the road corridor.

Telecommunications

The existing Eir and Virgin Media infrastructure distribution ducts runs serve the adjacent residential areas.

Gas distribution



The records indicate existing medium pressure natural gas distribution infrastructure under Adamstown Way. Here is no GNI connection in Aderrig Phase 3. However, work adjacent to live service is a **particular risk**.

Electrical power

Underground medium voltage (10/20 kV) and low voltage (230/400 V) run underneath the Adamstown Way. The cable at the south of the site in Adamstown way coming from ESB 38KV substitution. See tender drawings and record drawings.

Water supply

An existing water main runs underneath the Adamstown Way. See tender drawings and record drawings.

Drainage

An existing foul and storm mains run underneath the Adamstown Way. See tender drawings and record drawings. The Tobermaclugg stream runs to the west of the site with significant sections underground.

B&C Contractors will take all measures necessary to ensure the safety of all personnel in the vicinity while working on or adjacent to any live services.

Prior to commencement of the main works on site, B&C Contractors will ensure that all services on site including all underground / above ground, live / dead utility Services have been identified. The works shall include disconnection and diversion as required to maintain utility supply to residents and businesses on or supplied from the Adamstown infrastructure must remain live. Temporary supply will be required for all utilities (commissioned & tested) prior to any disconnection of utilities. Where tying into drains, "work around" temporary facilities shall be designed and agreed with the client's engineer and the utility provider.

B&C Contractors will comply with all guidance contained within HSA Publication Code of Practice for Avoiding Danger from Underground Services. B&C Contractors shall comply with the requirements of the relevant service provider, when working on or adjacent to an existing service.

5.1.2 Ground Conditions.

Site Investigation Reports by Ground Investigations Ireland Ltd. Subsoil Assessment Report, January 2021 and Ground Investigation Report dated, 8 December 2022 identify possibly made ground in the Aderrig Phase 3 site.

The client has engaged a third party to stabilize the ground within the phase 3 site. Soil stabilization works will be completed by others prior to the main construction activities commencing.

5.1.3 Safety Critical Anchors.

Where the works require designs which incorporate Safety Critical Anchors, the following will apply:

The Health and Safety Authority produced the Code of Practice for the Design and Installation of Anchors in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005, which came into operation on Monday 17th May 2010.

The designer's attention is also drawn to section 61 of the 2005 Act as follows regarding the use of codes of practice in criminal proceedings;

61.(1) Where in proceedings for an offence under this Act relating to an alleged contravention of any requirement or prohibition imposed by or under a relevant statutory provision being a provision for which a code of practice had been published or approved by the Authority under section 60 at the time of the alleged contravention, subsection (2) shall have effect with respect to that code of practice in relation to those proceedings.

(2)(a) Where a code of practice referred to in subsection (1) appears to the court to give practical guidance as to the observance of the requirement or prohibition alleged to have been contravened, the code of practice shall



be admissible in evidence.

(2)(b) *Where it is proved that any act or omission of the defendant alleged to constitute the contravention—*

- (i) is a failure to observe a code of practice referred to in subsection (1), or*
- (ii) is a compliance with that code of practice, then such failure or compliance is admissible in evidence.*
- (3) A document bearing the seal of the Authority and purporting to be a code of practice or part of a code of practice published or approved of by the Authority under this section shall be admissible as evidence in any proceedings under this Act.*

The design of anchors shall be by “a competent person engaged in work related to the design of a project.” The definition of competency “means a person who, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken”.

B&C Contractors will provide to Waterman Moylan as PSDP any of the following as requested,

- Ask any contractors, or sub-contracted designer, to demonstrate competency in the design of Anchors for use on this project.
- Ask for submittals of any FM-01, FM-02, and FM-03 forms as per their definition within the Code of Practice for the Design and Installation of Anchors.
 - **Anchor/FM-01** (information gathering) - This form used to gather the information together in order to carry out an anchor design.
 - **Anchor/FM-02** (anchor specification) - This form used to communicate the anchor design.
 - **Anchor/FM-03** (anchor installation) - This form used to check that the anchor has been installed correctly on site in conjunction with the FM-02

Supervision and Inspection of Anchors

The close supervision of the installation of anchors shall be provided by a supervisor who is trained in the installation of anchors and be competent to undertake this role.

B&C Contractors should ensure that the person installing the anchor is competent and has the following:

- **Training** - Training in the setting of the particular anchor may be provided on site by B&C Contractors or by the anchor supplier. Training from other sites may not be applicable as the installation requirements vary between different anchors.
- **Knowledge** - The anchor installer should have knowledge of the function of the anchor and the consequences if the installation procedures are not adhered. FM-02 will have details of the anchor specification to facilitate the completion of the FM-03.
- **Experience** - The anchor installer should have experience of installing the particular type of anchor. If the installer has limited experience, closer supervision should be provided by B&C Contractors to ensure that the installation is correct.

5.1.4 Slippery Surfaces Hazards.

B&C Contractors will ensure that works do not create a slippery surfaces hazard. Where slippery surfaces hazards are encountered in the course of the works, B&C Contractors will organize enabling works to clear the work area and access paths of slippery surfaces hazards and remove any biological waste.



5.2 Health Hazards:

5.2.1 Noise.

Planning conditions include the requirement to control, limit and prevent the generation of unacceptable levels of Environmental Noise Pollution from occurring during construction activity.

Noise emissions shall comply with the requirements of chapter 1 of part 5 - S.I. No. 299 Safety, Health and Welfare (General Applications) Regulations 2007 and Guidelines as set out in the BS 5228.

B&C Contractors will ensure all sub-contractors comply with B.S. 5228:2009 Noise and Vibration Control on Construction and Open Sites and have regard to the World Health Organisation (WHO) – Guidelines for Community Noise (1999).

B&C Contractors will agree with the Client & engage in local consultation in respect of any noise sensitive location within 100 meters of the development. Prior to construction activity commencing on site a notice containing contact details including out of hours details for the site team will be posted at site entrances.

Noise should be minimized as far as reasonably practicable, in particular by limiting the use of compressor and other plant to the stated working hours (see section 3.8) and by fitting and use of silencing devices wherever practicable and taking into account the measures proposed in the Construction Management Plan

- Best practice measures relating to the control and minimization of as set out in BS 5228 (2009) Parts 1 and 2 noise during all phases of the work.
- Selection of quiet plant including proprietary acoustic enclosures to compressors and generators.
- Control of noise sources including reduction of resonance effects by stiffening and / or the application of damping compounds to panels and / or cover plates.
- Control of rattling and grinding noises by fixing resilient materials between the contact surfaces.
- Screening by demountable enclosures.
- The siting of mechanical plant as far away from residential areas as possible.
- Regular maintenance of all plant.

B&C Contractors will ensure compliance with the duties under the Safety, Health and Welfare at Work (General Applications) Regulations 2007 (as amended) at the following daily noise exposure levels and peak sound pressure:

First Action Level (lower exposure action values where $L_{EX,8h} = 80$ dB(A) and $p_{peak} = 135$ dB(C) in relation to 20 μ Pa). The employer must (in addition to reducing noise levels by general action) inform each potentially affected worker and their representatives of the following:

- The results of the measurements taken of the noise and the possible risk to their hearing.
- What measures are being introduced to reduce the noise levels in the workplace.
- Advisability of wearing hearing protection that's individually fitted and where and how to obtain it

Second Action Level (upper exposure action values where $L_{EX,8h} = 85$ dB(A) and $p_{peak} = 137$ dB(C) in relation to 20 μ Pa). In addition to the previous requirements, when the level is above 85dB (A) the employer must:

- Identify the reasons for the excess noise and put in place a programme to reduce it.
- Provide the services of a registered medical practitioner to carry out hearing checks and preventive audiometric testing.
- Put up clearly visible and legible signs indicating that the noise level in the area is likely to exceed 85dB (A), in accordance with Chapter 1 of Part 7 of the Safety, Health and Welfare at Work General Application Regulations 2007 (amended in 2010).



Exposure limit values $L_{EX,8h} = 87 \text{ dB(A)}$ and $p_{\text{peak}} = 140\text{dB(C)}$ in relation to $20 \mu\text{Pa}$

- Work shall be stopped, measures shall be put in place to reduce the noise level to below thresholds as far as reasonably practicable.

For activities where the daily noise exposure varies markedly from one working day to the next, refer to section 123 (4) of the regulations.

B&C Contractors & Main Contractor has a duty to employees in adjacent businesses (including schools) under the Health & Safety at Work Act 2005. Where the noise level exceeds 80dB(A) the activity generating the noise shall be stopped and appropriate noise reduction / enclosure shall be provided to reduce exposure to employees in adjacent businesses or members of the public below 80dB(A).

B&C Contractors also has a duty to members of the public under the Environmental Protection Agency Act, 1992 and the Environmental Noise Regulations 2006. **Any member of the public can make a complaint to the District Court in relation to noise giving reasonable cause for annoyance.**

Environmental Noise Regulations 2006 shall be operated on the site outside the hours of work in section 3.10 (Restriction on Working Hours:) of this document. B&C Contractors is advised to measure noise levels to demonstrate compliance and retain a log of noise measurements on the project.

5.2.2 Dust.

Deliveries to site shall be strictly controlled to a point that minimizes disturbances to the adjoining properties and for the safety of those using the footpaths and roadways in the surrounding areas. Where possible trucks delivering or removing bulk materials will be fitted with easy over nets to prevent the accidental dislodgment of material. Trucks & other vehicles leaving site will be inspected by security at the security barrier to ensure that no excessive debris are attached to the vehicle, if debris are found, the vehicles wheels will be cleaned by way of Truck Wheel Wash. A portable Power Washer is available on site in the event the Wheel Wash is inoperable.

In the unlikely event that dirt and or debris is carried on to external roadways corrective action will be taken by way of mechanical road sweep. In the event that the use of the road sweep is delayed the road will be cleaned by hydraulically powered road brush fitted to teleporter until such time as the road sweep arrives. Any damage to the existing road or pathways will be repaired as soon as possible.

During extended periods of warm dry weather or as required, the internal site roads will be wet down by use of tractor and water bowser to minimise the potential of dust being generated. Ongoing reviews will be necessary and dust suppression proposals shall be documented in the Construction Environmental Management Plan. This plan will be furnished to and approved by South Dublin County Council prior to the commencement of any works.

B&C Contractors will keep a daily log. This will include weather conditions, construction activities, their location on site and visible dust-generated activities. If a complaint is made, B&C Contractors can refer back to the log.

5.2.3 Vibration.

B&C Contractors will comply with the requirements of chapter 2 of part 5 - S.I. No. 299 Safety, Health and Welfare at Work (General Applications) Regulation 2007 in order to control vibration issues arising as result of the construction works. Vibration should be minimized as far as reasonably practicable, taking into account the measures proposed in the Construction Management Plan

- Selection of quiet plant with low vibration emissions.
- Provision of anti-vibration mounts on reciprocating plant.
- Limitation of vibration from construction activities to the levels recommended in B.S. 5228:2009 Noise and Vibration Control on Construction and Open Sites.
- Materials to be lowered rather than dropped.



- Resilient materials to be provided on surfaces onto which materials are being lowered.

Vibration causing “White Finger Injury”, loss of sensitivity of the fingers / circulatory problems / numbness and finger pain, can also result in gangrene, reduced flexibility and strength of grip, permanent damage to the small veins in the hands etc.

All contractors are to provide a Risk Assessment within a method statement for the site personnel using any type of equipment making vibration, to ensure that working arrangements are maintained by providing a roster to ensure that no one is subjected to long durations of work using such equipment, and also ensuring that the equipment is relatively new and complying with the current Regulations, EN Codes and standards for the type of equipment. B&C Contractors will be required to produce a Method Statement showing procedures to reduce the exposure limits to the requirements of B.S. 6842.

5.2.4 Asbestos.

The works are on a greenfield portion of the site. There are no buildings to be demolished, as a result an Asbestos Survey is not available for the works.

There is the possibility of encountering asbestos containing materials illegally dumped on the site or as legacy services that pre-date 2000.

Asbestos containing materials constitute a particular risk according to the Safety Health and Welfare at Work (Construction) Regulations, 2006-2011.

If during the works on site, any suspected asbestos containing material is encountered, works must be suspended until such time as a competent asbestos contractor has visited the site, carried out a suitable survey, analyzed a sample as necessary, and if proved to be Asbestos a competent contractor removes it.

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations, 2006-2011 deals with the management and removal of asbestos from buildings. This legislation requires that the employer carrying

out the work on ACM's must first make a risk assessment regarding potential exposure to asbestos fibers. This assessment must estimate the type, level and duration of exposure, prior to work being undertaken. The risk assessment results will determine whether a written 14-day notification is required to the Health and Safety Authority.

B&C Contractors must be satisfied that the plan of work is adequate and that the chosen contractor is competent. Failure to do this may result in B&C Contractors being in breach of the Construction Regulations.

All contractors involved in the removal or working with asbestos must be able to provide evidence of their ability to perform Asbestos Work. B&C Contractors will put in place all control measures within Safety & Health plan for dealing with Asbestos containing material during the execution of the construction works.

5.2.5 Storage of Fuels & Hazardous Materials.

All plant Fuel will be stored at the plant and machinery yard located beside the main compound. All fuel must be stored in a bunded tank (double walled tank). The Bunded portion of the tank must have the capacity to contain 110% of the main tank and must be enclosed and protected from rainwater. All other fuels and lubricants must be kept in drip trays and within the storage container located outside the main compound.

5.2.6 Construction Dust - Respirable Crystalline Silica;

Respirable Crystalline Silica (RCS) dust is released in construction activities (drill, saw, cut or grind; stone, brick, tiles, concrete etc.). RCS is invisible under normal lighting conditions. A general rule is that if dust containing crystalline silica is visible in the air, it is almost always at a level more than the current limit value for RCS and is potentially harmful to health. It can take up to 24 hours for RCS dust created by very high energy tools (e.g. cut off saw) to settle, so it remains an invisible risk during that time.

Exposure to RCS over a long period can cause fibrosis (hardening or scarring) of the lung tissue with a consequent loss of lung function. Sufferers are likely to have severe shortness of breath and may find it difficult



or impossible to walk even short distances or upstairs. The effect continues to develop after exposure has stopped and is irreversible. Sufferers usually become house- or bedbound and often die prematurely due to heart failure:

- Chronic silicosis: >ten years' exposure at relatively low concentrations.
- Accelerated silicosis: 5-10 years' exposure to high concentrations.
- Acute silicosis: a rare complication of short-term exposure to very large amounts of silica. This condition is life-threatening and associated with very significant clinical consequences.

The respirable fraction (results in deposition in the lungs after inhalation) of the dust is invisibly fine and the Occupational Exposure Limit Value (8-hour reference period) is 0.5 mg/m³ as set down in the HSA Code of Practice for Chemical Agents Regulations 2016.

Different types of stone contain different amounts of silica. (<http://www.hse.gov.uk/lung-disease/silicosis.htm>)

sandstone, gritstone, quartzite	more than 70%
concrete, mortar	25% to 70%
shale	40% to 60%
china stone	up to 50%
slate	up to 40%
brick	up to 30%
granite	up to 30%
ironstone	up to 15%
basalt, dolerite	up to 5%
limestone, chalk, marble	up to 2% (but these can contain silica layers)

The Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016 S.I. No. 36 of 2016 contains a Prohibition on silica - Regulation 128 "An employer shall ensure that no sand or other substance containing free silica is introduced as an abrasive into any blasting apparatus".

All construction activities generating RCS dust shall be Risk Assessed, PSCS will ensure appropriate Controls are in place to manage the health hazard.

Suggested control measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- Building materials ordered in the correct size to reduce on site cutting.
- Controls such as correct water suppression and HEPA filtered on-tool extraction can reduce RCS exposures by over 90%.
- Poor design, application or maintenance of the on-tool extraction will affect control of the dust, risk assess and control filter changing.
- Workers should not clean up with compressed air.
- Avoid dry sweeping.
- Temporary screens or sheeting to protect bystanders or others who could be affected by the work activity.
- Ensure employees are informed of the health risks, inform employees to report symptoms if they develop.
- Ensure employees are consulted on controls and PPE.
- Training (use of controls. Health risks, PPE etc.) provided in a form, manner and language reasonably likely to be understood.
- Areas for eating and drinking uncontaminated, appropriate hygiene (i.e. hands washed before eating, drinking or smoking)

Note on Respiratory Protective Equipment.

- CE marked P3 filters - NOT nuisance dust masks.



- Particular attention where employees need to be clean-shaven to ensure PPE effectiveness (all tightfitting RPE). An alternative is a full-face mask.
- Wearers should be properly instructed, trained and supervised on the correct fitting, use and maintenance of RPE.
- Fit test, ensuring RPE is suitable for employee.
- Clean storage provided for reusable RPE.

5.2.7 Construction Dust - Wood Dust;

Workers may become exposed to timber dusts or chemicals through different routes, the most common being inhalation of a dust, aerosol, vapour or mist. Finer dust generally presents a greater risk since it can penetrate further into the lungs. Skin contact can occur through the eyes, nose or entry through skin absorption. Exposure to wood dusts may lead to irritation or inflammation of the respiratory tract (e.g. rhinitis or runny nose, sneezing), asthma or cancer (particularly sino-nasal).

An occupational exposure limit value (OELV) of 5mg/m³ (8 hour time weighted average), exists for both hardwood and softwood dusts, as set down in the HSA Code of Practice for Chemical Agents Regulations 2016.

All construction activities generating wood dust shall be Risk Assessed, PSCS to ensure appropriate Controls are in place to manage the health hazard.

Suggested control measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- The work environment should be well ventilated – dust control equipment should be used such as local exhaust ventilation (LEV) for effective control of dust at source.
- Temporary screens or sheeting to protect bystanders or others who could be affected by the work activity.
- Use a suitable vacuum system/cleaner to clear up dust regularly.
- Respiratory Protective Equipment (RPE) should have at least a P2 particulate filter fitted to a half or full face mask to provide effective protection and be CE marked; particulate respirators will give no protection against gases and vapours, a combination filter would be required to give adequate protection if such substances are involved.
- Any RPE worn should be properly fit tested.
- Good personal hygiene should be practiced and separate storage areas to prevent the contamination of work clothing to regular clothing.
- Appropriate laundering for protective clothing or PPE.
- No consumption of food or drink where timber dust generating work is being carried out. Areas for eating and drinking uncontaminated, appropriate hygiene (i.e. hands washed before eating, drinking or smoking).

5.2.8 Contaminated Land.

We are not aware of any contaminated land, however soil stabilization enabling works were required. The material (lime and cement stabilization) used is caustic. There is potential lung related medical issues associated with Construction Dust – see 5.2.6.

5.2.9 Existing Structures Hazardous Materials.

There are no existing structures associated with this scope of work.

5.2.10 Biological Hazards (Guano, Weill's disease, Sewar gases & Covid-19,)

Guano

Guano (bird droppings) are expected on exposed surfaces where birds congregate.



Breathing dust or water droplets containing contaminated bird droppings can lead to several diseases including:

- Psittacosis – this is a rare infectious disease caused by a bacterium called *Chlamydia psittaci*. It is mainly associated with parrots and other similar species but does affect other birds, including pigeons. Symptoms are commonly a flu-like illness and pneumonia usually appearing 5-19 days after exposure.
- Salmonella – this may also be present in some bird droppings. It is a bacterial infection that can cause significant diarrhoea.

Weil's disease (Leptospirosis)

Weil's Disease also known as Leptospirosis is an acute, infectious disease. It is caused by different types of one bacteria of which there are over 200 known strains. Weil's Disease is spread in the urine of infected animals and in water or soil contaminated with infected urine. The bacteria thrive in wet and moist conditions and can survive for months in stagnant water or wet soil.

- Early symptoms of Weil's Disease are non-specific (flu like) and may be misdiagnosed as a result.

Exposure to mouse or rat urine in sewers can occur via drains or contaminated river/sewer water. Workers working on or near drains could be exposed. Contractors should check for visible evidence of the presence of rodents i.e. droppings prior to carrying out the work.

All construction work involving contact with or removal of bio-hazards shall be risk assessed, PSCS to ensure appropriate Controls are in place to manage the health hazard.

Suggested control measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- Eliminate / limit contact with bird droppings where possible. Workers with a weakened immune system should not directly do tasks involving bird droppings.
- Clothing – use disposable coveralls, gloves etc. where appropriate. This clothing should be kept separate from personal clothing worn outside of work hours. Non-disposable overalls should be replaced when soiled and washed with detergent at a high temperature before being re-used.
- Wash hands and forearms before eating, drinking, smoking, using the telephone, taking medication, inserting contact lenses etc. Washing to include the provision and use of nailbrushes.
- Avoid hand-mouth or hand-eye contact when in contaminated areas.
- Dispose of all contaminated waste safely.
- Breaks – avoid contamination by taking rest and meal breaks away from the work area.
- First aid – make sure first aid equipment is fully stocked / maintained and readily available. Cover existing cuts and grazes. Wash any new cuts or grazes immediately with soap and running water and apply a waterproof dressing.
- Work method – prevent any dust getting into the air by wetting down the work area. Do not use high-pressure washers as this creates contaminated airborne droplets. Use plastic sheeting to prevent contamination spreading and to protect bystanders or others who could be affected by the work activity.
- Clothing – wear protective clothing. The type will depend on the work. It may include waterproof footwear and gloves.
- Respiratory Protective Equipment (RPE) – wear RPE if the work could generate dust or aerosols. Choose RPE with an assigned protection factor of 20 (eg FFP3 disposable mask or half mask with P3 filter). For longer duration work consider powered RPE with the same protection (eg TH2 powered hood / helmet). Make sure any RPE is compatible with other protective equipment. Anyone using tight fitting masks needs to be clean-shaven and face fit tested.



Sewar gases

Biological waste in sewage systems can decompose releasing toxic gases. Sewer gases may include hydrogen sulfide, ammonia, methane, esters, carbon monoxide, sulfur dioxide and nitrogen oxides.

Sewer gas with a distinct “rotten egg” smell, may be due to hydrogen sulfide content, which can be detected by human olfactory senses in concentrations as low as parts per billion.

- Exposure to low levels of this chemical can irritate the eyes, cause a cough or sore throat, shortness of breath, and fluid accumulation in the lungs.
- High concentrations of hydrogen sulfide (>150 ppm) can produce olfactory fatigue, whereby the scent becomes undetectable.
- At higher concentrations (>300 ppm), hydrogen sulfide can cause loss of consciousness and death.
- Very high concentrations (>1000 ppm) can result in immediate collapse, occurring after a single breath.

Work that exposes operatives to hazardous sewer gasses shall be risk assessed and the HSA Code of Practice for Working in Confined Spaces shall be implemented as appropriate.

Covid-19

The (COVID-19) coronavirus pandemic is caused by severe acute respiratory syndrome coronavirus. The virus is mainly spread during close contact and by small droplets produced when those infected coughs, sneeze or talk. These droplets rapidly fall to the ground or surfaces and are not generally spread through the air over large distances. People may also become infected by touching a contaminated surface and then their face. The virus can survive on surfaces for up to 72 hours. Effects of the virus can range from mild flu like symptoms to respiratory failure and death. Infected people may be asymptomatic and unknowingly infect others.

Irish government response is evolving and has resulted in the closure of construction sites and other workplaces to control this highly infectious disease. B&C Contractors shall monitor and appropriately respond to health advice from the Irish Government, HSE and HSA, including the COVID-19 Specific National Protocol for Employers and Workers published by Irish Government Department of Business, Enterprise and Innovation and the Department of Health, May 9, 2020 and any subsequent revisions.

Attention is drawn to the non-statutory Construction Sector C-19 Pandemic Standard Operating Procedure produced by the Construction Industry Federation. This document has been developed by the CIF Safety and Health Subcommittee mindful of the best available guidance, nationally and internationally, and serves as a guide for the management of COVID-19 on a construction site for the duration of the pandemic. This document will be periodically revised as health advice from the Irish Government, HSE and HSA evolves, B&C Contractors is advised to monitor and update the Health & Safety plan as appropriate.

5.2.11 Health Risks Arising from Client’s Activities.

Previous Works by others have stabilized the soil by the addition of caustic materials (cement or lime) which may result in an additional health hazard on this project.

5.3 Adjacent Activities:

5.3.1 Works Outside the Site Boundary;

Materials must only be brought on site as required. Under no circumstances will materials be allowed to be stored outside the site perimeter; all materials must be stored in the site material laydown areas.

Works anticipated to be carried out outside the site boundary are associated with:

- Tying into existing utilities installed as part of the road network.
- Access and deliveries to/from the site compound to the construction site.



5.3.2 Access to the Site by Members of the Public.

The site is a greenfield residential development constructed over several phases. At some stage the early residential units will be occupied with access to adjacent properties, roads close to the site, pedestrian areas or by members of the public. Appropriate segregation of members of the public from the active construction portion of the overall site will be required. B&C Contractors will plan for site co-occupancy from an early stage and sequence the works, so as to avoid access to the construction site by members of the public.

5.4 Planning Permission:

Application number: SDZ22A/0014 Application Type: Grant Permission Location:

Development Area 8, Aderrig, Adamstown, Lucan, Co. Dublin.

Planning Permission (SDZ22A/0014) was granted from South Dublin County Council Authority. The conditions particularly relevant to the Safety and Health Plan for Construction Stage shall be taken into consideration when developing this Construction Stage Health & Safety Plan.

Condition 13. Protection/Retention of Existing Trees.

Condition 20. Prevention of Spillage or Deposit of Debris on Adjoining Public Roads During Construction Works.

Condition 23. Environmental Health.

6. SIGNIFICANT DESIGN AND CONSTRUCTION HAZARDS

6.1 Designers Hazard Identification and Design Risk Assessment:

According to Regulation 15 of the Safety, Health and Welfare at Work (Construction) Regulations 2013, in carrying out work related to the design of a project each Designer shall identify the hazards associated with the works taking into account the General Principles of Prevention and the relevant existing Safety & Health Plan and Safety File. In this regard, each member of the Design team shall:

- Identify any hazards in the proposed design.
- Eliminate any hazards that can reasonably be eliminated (without introducing other higher risks) or reduce them to an acceptable level as far as reasonably practicable.
- Provide in writing to the project supervisor for the design process all information about the project that is known to the designer regarding particular risks to the safety, health and welfare of persons at work, regarding the nature and scope of the project.
- Provide in writing all information to the extent necessary to enable the project supervisor to comply with these Regulations, about the project that is known to that person and is necessary to ensure, so far as is reasonably practicable, the safe construction of the design for the project.

The Designer Risk Assessment schedule will not be an exhaustive list and B&C Contractors will exercise due care throughout the works together with continued liaison with the PSDP, as required, for design amendments which may affect Safety and Health Issues. It must be noted that reference should be made to the PSDP if further assessments are required.

B&C Contractors has design responsibility, (for example Temporary Work), Designers will be required to carry out Design Risk Assessments and submit to the PSDP prior to commencement of the works. Reference should be made to the PSDP



as design development or major changes to design occur.

6.2 Designers Particular Risks Assessments:

Under Regulation 15(b), the designers must provide, in writing, to the PSDP, all information known and available to the designer, which is necessary for the PSDP to carry out his or her duties. In order to comply with these duties and maintain a record of the various steps taken during the design process, Design Certificate forms have been or will be used on this project for both Permanent and Temporary Works.

The Design Certificates have been used in order to facilitate the checking of the design and the communication of the design assumptions to other designers.

The Temporary works Designer(s) shall complete temporary works design certificates to facilitate the provision of adequate information to all parties to allow the structure to be built in safety.

The Design Certificates will be used by various different designers, including specialist designers, to allow for unambiguous communication of their assumptions and assurances to the PSDP. The Design Certificates must be produced, updated during the course of the project and a copy of same to be maintained.

The Design Certificates must be submitted to the PSDP who will then verify the coordination of the various designers and issue them to B&C Contractors and others as appropriate.

6.3 Significant Construction Hazards and Proposed Control Measures:

6.3.1 Work at Risk of Drowning:

Identified Hazards:

- Excavation and seepage of ground/rainwater.
- Ground conditions vary from what is referenced in design or believed to be poorer than assumed. Associated

Risks:

- Drowning in shallow water.
- Falling into ditches (which have the potential to hold bodies of water) / existing stream running through the site.

Control measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- B&C Contractors will ensure that a Method Statement is prepared for these activities on site. The method statement should include proposals for temporary support structures.
- Any standing water in excavation areas to be extracted by pump, ensure edge protection to prevent falls into standing water.
- Risk Assessment to determine PPE requirements for workers at risk of drowning.

6.3.2 Work to Underground Services:

Identified **Hazards**:

- Contact live underground services.
- Contact with legacy undocumented services. Associated

Risks:

- ESB network and site record drawings show underground supply. Refer to section 5.1.1 Location of Existing Services; There may be other legacy services.
- Services within the Client's lands will be progressively made live, services once commissioned, will remain live throughout the construction period.



- Risk to site personnel relating to collapse of existing services, flying debris, work on live services, work in confined spaces, falling from height and disease.
- Biological hazards including Weil's disease.
- Heavy components including new manholes.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- B&C Contractors will take adequate safety measures to ensure all services above and below ground are located prior to any works commencing. Utility providers must be contacted to review proposed method statements and appropriate supervision of work to or adjacent existing services agreed.
 - Refer to section 5.1.1 for details of existing services.
- B&C Contractors will agree with the utility providers, the extent of site supervision (by the utility providers) required at various stages of construction and to make the necessary arrangements to coordinate and ensure site attendance and supervision is in place. PSCS shall organise field coordination of underground chambers and service routing. Works must avoid unplanned disruption to services.
- B&C Contractors will implement a safe system of works around all buried and above ground services.
 - The location of the existing services will be established on site by appropriate means including consulting latest *Dial Before You Dig* drawings from the utility companies, measurement including CAT scans and slit trenches. Ensure that all services are physically located and marked before work commences.
 - B&C Contractors always assume that there are live services present on site, even if existing drawings / information indicates that none are present.
 - B&C Contractors will ensure all site operatives adequately trained and qualified in relation to the type of working environments where such dangers arise using suitable PPE and equipment.
 - Method statement to identify safe systems for working with live services.
- Refer to section 5.2 Health Hazards: for suggested controls.
- Only fully trained and competent Electricians shall install the public lighting equipment. All tasks undertaken while installing the public lighting system shall be in accordance with the relevant method statement for the works. All works to be in accordance with ETCI, ESB Networks and Electrical Safety Supervisory Body (RECI) regulations for public lighting installation works. Contact the PL Section of the Council to arrange access. Ensure that the existing electrical supply is switched off prior to access.
- Only fully trained and competent ESB Network staff shall work on the ESB Network infrastructure in accordance with ESB Network's Construction Stage, Safety and Health Plan **Regular Routine Works**. B&C Contractors shall review the ESB Network crew's Job Site Safety Plan (JSSP) and communicate relevant elements of the JSSP to other construction workers.
 - Job Site Safety Plan is ESB Network's identification and recording of any work site hazards undertaken by the crew prior to commencement of work on site.
- All construction activity to be carried out in accordance with Gas Networks Ireland safety guide document "Safety Advice for Working in the Vicinity of Natural Gas Pipes" and also in accordance with the HSA publication "Code of Practice for Avoiding Danger from Underground Services".

6.3.3 Work Involving Heavy Plant & Equipment:

Identified **Hazards**:

- Working on high-risk plant & equipment on site together.
- Different soil levels on site.

Associated **Risks**:



- Risk to site personnel and persons around site of crushing, dangers associated with the mobile operation of lifting plant, vibration/noise in operation, structural failure of loading items onto existing surfaces.
- Overturning of plant and equipment.
- Risks to members of the public.
- Operatives not aware of hazards onsite or their specific duties.

Control measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- B&C Contractors will determine suitable lifting/craning equipment and locations for lifting/access.
- Attention is drawn to underground power lines, any existing street lighting and domestic power supply.
- Loading cranes onto existing ground finishes to be assessed by B&C Contractors prior to commencement of lifting operations.
- Banksmen for all lifts of heavy plant and equipment.
- B&C Contractors shall produce a method statement for the transportation of heavy items including the uncontrolled release of materials.
- Exclusion zones must be formed, and policed, during heavy lifting operations.
- Lifting appliances / gear used in these operations must be supplied with current test / thorough examination certificates. Persons involved shall be competent, certified and experienced.
- Suppliers of Heavy components (i.e. those heavier than 1 tone) must be asked to supply information on the weight of the components, and safe lifting points / procedures.
- All work must be carried out in accordance with IS 360:2004 Code of Practice for Safe Use of Cranes.

6.3.4 Work Involving Exposure to Chemical or Biological Substances:

Identified **Hazards**:

- Inhalation of Respirable Crystalline Silica (RCS) dust.
- Lime and cement dust.
- Exposure to material contaminated by animal urine or decaying organic matter.
- Exposure to chemicals, Cementous substances and other irritants.
- Exposure to chemicals, compost and insecticides used during work.
- Contact with soil containing localized contamination.
- Exposure to material containing Asbestos (ACM's) - legacy underground services or illegal dumping. Associated

Risks:

- Risks to health from noise, dust and vibrations, in particular silica dust generated from general construction works.
- Inhalation of caustic dust & chemicals used to stabilize the soil.
- Inhalation of wood dust when constructing temporary works.
- Inhalation, ingestion or absorption of chemical or biological substances.
- Excavation in ground with unknown fill to be safely removed and disposed of appropriately, where disturbed.
 - Any hazardous waste disposed of appropriately.
- Possibility of unknown subsoil Asbestos.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:



- Refer to section Health Hazards:5.2 for suggested controls.
- All site personnel are to report incidents of contact with rats to site foreman, specialist supplier to eliminate vermin from the works area before continuing with the required works.
- B&C Contractors will ensure method statement developed for handling chemicals when used during construction.
- All tree surgeons shall be mindful of using all other chemicals on site including the use of engine oil and fuel in chainsaws and all other machinery used on site.
- As part of the site investigation, environmental testing of soil samples was carried out and results considered against the limits set out in BS EN 12457-2. The results showed that the samples were non-hazardous and would generally be able to be treated as inert waste, however additional environmental testing shall be carried out on the stockpiles/rubble material evident on the site and not included in the site investigation. As the works will involve disturbance of a large volume of soil, contact with harmful substances e.g. localised contamination cannot be ruled out. The PSCS, when creating site rules, should consider use of gloves and other PPE for operations directly handling soil.

6.3.5 Traffic Movement:

Identified **Hazards**:

- Closing other construction sites and residential areas.
- Putting third parties at risk from construction activities / being struck by site vehicles.
- Operational bus cycle.
- Deliveries and storage of materials.
- Waste material excavation, storage / removal from site. Associated

Risks:

- Interface between construction sites and public vehicles.
- Person being struck by vehicles / reversing vehicle.
- Personnel not visible to drivers.
- Inadequate traffic control.
- Drivers / pedestrians unaware of work.
- Operatives, plant, transport outside working areas, safety zones or signed areas.
- Unsafe access for pedestrians.
- Debris on the roads / footpaths.
- Access from a secure compound to and from the works.
- Roads that members of the public have access to are safe for all users after work hours.
- Vandalism of any "after work hours" lighting or signage.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- The site is generally isolated from busy roads. The site is large enough for construction deliveries and site plant to operate only within the site boundaries and the likelihood of construction activities interfering with the public roads is low. As part of the site, access connections will be required onto the Adamstown Way to the North, Stream Road to the East, and Station Road to the South.
- A detailed Construction Traffic Management Plan shall be prepared for approval by the Local Authority.
- B&C Contractors will periodically review material routes and walkways as works progress. In particular, when the works progress to the stage where there is co-occupancy between residents and construction operatives B&C will ensure segregation between residential traffic and construction traffic.



- Coordinate and cooperate with others for any road surfacing works to Adamstown Way. Agree measures to protect construction personnel crossing from compound to project site.
- Where site works are to be carried out outside the designated site boundary, all necessary precautions must be taken to ensure the Health & Safety of the public / third parties, in addition disruption to existing circulation routes are to be kept to an absolute minimum.
- Attention is drawn to the Safety, Health and Welfare at Work (Construction) Regulations 2013 Regulation 97 *Works on roads, footpaths and cycle tracks* for any part of a road that is opened, excavated, broken up or obstructed by plant, machinery or equipment, with regard to responsibility to members of the public and persons at work.
- B&C will ensure road and footpath cleaning arrangements in place to prevent slips or skids due to debris on roads cycleways and footpaths.
- Refer to section 7.6 for general requirements.

6.3.6 Ambient and Artificial Lighting:

Identified **Hazards**:

- Working at times of low ambient lighting.
- Construction workers dazzled by vehicle lights.
- Temporary lighting dazzling Irish Rail services and road vehicles. Associated

Risks:

- Construction personnel injured by collision with traffic.
- Trip and fall injuries where lighting is inadequate.
- Disruption to public transport services.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- Temporary task lighting should be placed so as to avoid dazzling oncoming vehicles. Check temporary lighting periodically and after high wind conditions.
- A risk assessment shall identify activities where construction workers are at risk of being dazzled by vehicle lights. Suitable screening, of adequate strength to prevent windblown damage, shall be installed. Works sequenced and/or augmented with temporary lighting.

6.3.7 Manual Handling:

Identified **Hazards**:

- Lifting, pushing and pulling of tools, equipment and materials.
- Lifting of large pieces of any kind of materials.
- Site mobilization and demobilization.
- Excavation works. Associated

Risks:

- Personal injury.
- Back strain.
- Overexertion.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- B&C Contractors will identify all works involved manual handling and put in place a safe system of work to carry out



above works as appropriate.

- Manual handling should be avoided as far as possible and mechanical lift should be considered as appropriate. Where appropriate a temporary works designer shall be engaged.
- B&C Contractors will ensure that detailed method statements and risk assessments are prepared for all works involving Manual Handling.
- B&C Contractors will put in place measure to ensure only trained operatives are assigned to carry out manual handling works. Measures to include:
 - Wear gloves sufficient to the task.
 - Check weight & size of the load.
 - Ensure that no other viable method of lifting is available before attempting to lift manually.
 - Have sufficient personnel available to carry out lifting/ manual handling.
 - Provide for lifting method statements for all heavy items, addressing swing arcs and noting adjacent trees or other obstacles.
- B&C Contractors will make arrangements for regular tool box talks to be carried out for all operatives and Manual Handling rules as well as protective measure are discussed as part of the tool box talks.

6.3.8 Noise & Vibration:

Identified **Hazards**:

- Plant/equipment activities.
- Intrinsically noisy construction activities. Associated

Risks:

- Hearing loss.
- Exceeding permissible noise levels.
- White finger and carpal tunnel damage.

Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- Monitor noise levels where significant noise generating activities take place.
- Ensure PPE appropriate to the task and noise level is available and it is used.
- Refer to section 5.2.1 Noise for specific recommendations.
- Refer to section 5.2.3 Vibration for specific recommendations.

6.3.9 Security:

Identified **Hazards**:

- Unauthorized access.
- Theft of equipment including safety equipment.
- Aggressive trespassers confronts lone workers or small groups of workers. Associated

Risks:

- Unauthorized access to site during construction phase may expose a person to construction hazards that they are not familiar with.
- Assault by aggressive trespassers.
- Theft of safety equipment including signage may expose a person to construction hazards.



Control Measures to be put in place by B&C Contractors in order to eliminate / reduce / manage risks (as far as reasonably practicable) during this construction stage:

- B&C Contractors will ensure that there are adequate security precautions in place for the project to prevent the unauthorized entry of persons, with designated access points and appropriate signage put in place.
- B&C Contractors will ensure that all works, materials etc. forming part of this project must be confined to the designated areas on site.
- B&C Contractors will ensure adequate site security and develop an emergency response to incidents of harassment, intimidation or assault on construction workers. Lone working risk assessment to identify an appropriate response to aggressive trespassers.
- B&C Contractors will ensure that adequate measures are in place to prevent theft of safety equipment including signage and barriers with the immediate replacement of safety equipment including signage.



7. SITE WIDE ELEMENTS

7.1 General Site Rules:

Title: General site Rules

INTRODUCTION

The following information is for your benefit and guidance. Please read it carefully and comply with all requirements in the interest of everyone on site.

SITE SIGN IN

All Personnel entering the site must sign in at B & C CONTRACTORS site offices located in the site compound on arrival and sign out when leaving the site.

SMOKING

Smoking is not permitted within the Buildings, offices or items of plant and machinery. Smoking may be allowed in designated areas only. Any Person found smoking outside this area will be instantly dismissed from site.

PERMITS TO WORK

All Contractors must obtain a General Work Permit from the B & C CONTRACTORS site supervisor prior to commencing any work. Other permits to work may be required depending on task being conducted. (Hot works, Working at Height, Confined Spaces, Excavations, etc.)

FIRE EVACUATION

- Fire can cause significant damage to buildings and materials and can also prove fatal.
- Prevent fires from happening in the first instance.
- Ensure good housekeeping and keep Naked Lights away from Combustible Materials i.e. Paper, Wood and flammable Liquids.
- If you discover a Fire, Remember that immediate action is essential!
- Do Not Delay; Raise the Alarm Immediately by shouting FIRE! FIRE! FIRE! Or by activating the nearest Break Glass Unit.
- Notify the Site Foreman giving details of whereabouts of the fire.
- Know where Fire Extinguishers are situated and only use if trained to do so. They should never be obstructed or covered.
- Never obstruct Exits
- Never use Fire Hoses/ extinguishers for any other use than Fire Fighting
- If You Hear The Fire Alarm, Evacuate the building immediately and assemble at the B & C CONTRACTORS reception office for roll call.
- Do Not Re-enter the construction site unless specifically told to do so by site management.



ACCIDENT REPORTING

Accidents don't just happen, they are caused. All Accidents are preventable!

Remember your actions on site may cause or create an accident.

- If you have an accident/incident report it immediately to your supervisor or site Foreman no matter how slight.
- A First Aid Kit is available at B & C CONTRACTORS site office

The nominated First Aid Person on site will be through B & C CONTRACTORS. Occupational first Aiders will be displayed on the site notice board with contact phone numbers.

PERSONAL PROTECTIVE EQUIPMENT

Hard Hats, steel toe capped boots and High visibility vests are a mandatory Requirement on this site. They must be worn at all times.

Eye/ Face protection must be worn where there is a risk of injury to the eye or face i.e. Drilling / Chasing Concrete etc

Ear Protection must be worn where the noise level exceeds 85 DBA.

When using protective equipment or clothing, please observe the following basic rules;

Do not use Defective Equipment

If in doubt about the serviceability of an item, get advice

Report any damage or defects in equipment to your immediate supervisor.

Take good care of protective gear.

SCAFFOLDING; WORKING AT HEIGHTS

A risk assessment will be conducted for all working at height, this shall be communicated to all new starts through a specific risk assessment.

Always inspect scaffolding before use. Check for missing guardrails, toe boards, obstructed walkways and items removed and not replaced.

CSCS scaffolder to inspect and sign off scaffolding.

Never tamper with scaffolding

Ensure Access Ladder is tied at all times

Altering of any scaffolding MUST be completed by a competent person.

When working at heights ensure that one of the following are in place;

A Fixed guardrail for work platforms

Toe boards for work platforms

An Approved Safety Harness (All employees will have received work at height training prior to working at height)



MANUAL HANDLING

All employees will have received manual handling training.

Use mechanical means where possible to eliminate manual handling. (forklifts, teleporter, pallet truck, lifts, etc

Back injuries result from incorrect handling methods

Size up the job first

Do not carry a load you cannot see over

Watch out for pinch points

Stack goods carefully

Only lift what you are capable of lifting

Get Help

In the first instance try to obtain mechanical means of lifting and save your back

When lifting or lowering, always bend your knees first, keep your elbows tucked in at your side. Lift steady and firmly.

Stand up holding the load close to the body. Avoid Twisting.

Use gloves when handling goods

Manual lifting and carrying; using the correct methods for Lifting prevents Accidents and saves effort.

Back Straight

Chin In

Arms Close to the Body

Feet slightly apart

Bend Knees and lift by straightening the legs

Grip with palms of hands, not just the fingers

HOUSE KEEPING

A clean as you go policy will be in operation through B & C CONTRACTORS sites.

Clean and tidy sites reduce accident risks to all concerned. While working you must keep the surrounding areas tidy. Loose materials of any kind must not be left on scaffolding walkways in order to prevent slips, trips and falls. When you leave your work area, you must ensure that it is clean, tidy and safe.

Finally it is our intention at B & C CONTRACTORS as P.S.C.S. to have no accidents on this project and with your help and co-operation we can achieve this.

So Think Safe, Work Safe and Be Safe



SAFETY RULES FOR CONTRACTOR EMPLOYEES "DO ":

- Wear appropriate eye protection as determined by the task and RAMS.
- Specific tasks such as grinding or cutting will require the use of goggles or full-face visor.
- Wear a safety helmet at all times in construction areas. Lightweight bump caps are not acceptable.
- Wear safety footwear incorporating steel toecaps and reinforced mid soles.
- Wear gloves.
- Wash your hands frequently and thoroughly.
- Tie ladders securely when in use.
- Keep your work area tidy.
- Observe the site speed limit (15kph).
- Report all accidents, incidents, which could have had serious consequences (near misses), and unsafe work conditions to your immediate Supervisor or the Safety Officer.
- Evacuate to the contractors compound if the site alarm sounds.
- Use a full body safety harness, where there is a risk of falling and scaffolding is not provided. (Risk assessment to be completed for all work at heights)



SAFETY RULES FOR CONTRACTOR EMPLOYEES “DO NOT”:

- Smoke in any building, office or in/on any piece of plant or equipment.
- Use a naked flame or grinding/cutting tools anywhere onsite unless you are in possession of a current hot work permit.
- Use mobile phones or pagers on site unless authorized by site management.
- Enter any tank, manhole or other confined space unless you are in possession of a current confined spaces permit.
- Tamper or remove boards or handrails from any scaffolding erected on site.
- Drive any vehicle on site unless you hold a full driving license / CSCS card and are over 18 years of age.
- Reverse any vehicle on site unless you have a clear view to the rear or are being directed by a competent person.
- Leave tools or materials lying about at height.
- Locate or start up any item of engine driven plant anywhere on site unless you have received clearance that it is safe to do so.
- Work alone outside normal working hours.
- Create tripping hazards for yourself or others with electrical leads, hoses or discarded materials.
- Throw tools or materials down from a height.
- Open up any vessel, flanges or pipe work unless instructed to do so by the supervisor in charge.
- Attach lifting equipment to any part of the buildings or plant unless authorized to do so by site management.
- Use chemical storage drums for any other purpose then the manufactures intended use and instructions.
- Climb scaffolding.
- Eat or drink outside the contractors compound



7.2 Emergency Procedure:

B&C Contractors will draw up a full detail Emergency Procedure specifically for this project. This shall detail First Aid Equipment, First Aid points, First Aiders details, Emergency telephone numbers, fire evacuation process, assembly points, escape routes, firefighting equipment, temporary signage and all other relevant issue in his emergency procedure.

Procedures for the Emergency Evacuation of the site and for the call-out of emergency services must be established prior to commencement of the works and must be incorporated within the Safety & Health Plan for Construction phase.

Access routes to be designated as fire escape routes, and arrangements must be made to keep these routes clear of impediments at all times.

Emergency Exit Signage (i.e. Green Background, with directional arrows, and person running) to be erected along designated escape routes / stairwells (as required)

The Emergency Procedures must be amended from time to time as the works progress as necessary to ensure satisfactory standards are maintained during the works for the construction personnel.

7.3 Permit and Authorization Requirements:

B&C Contractors will draw up a Work Permit Procedure for all high risk i.e. work adjacent to live services, deep excavation, lifting of heavy objects, hot works, confined space, craneage and any other potential high risk works to be carried out on site. This should detail out who is authorized to issue work permit, when work permit to be issued, validity of the work permit, etc.

Authorization procedure and work permit issues must be established prior to commencement of the works and must be incorporated within the Safety & Health Plan for Construction Stage.

7.4 Security Arrangements:

The project is located on the periphery of suburban Dublin. There is a risk of anti-social activities outside normal working hours.

B&C Contractors will ensure that the site and working area is secured at all times. A security gate man will be employed during normal working hours with Remote monitoring outside of these times.

As the works progress, constructed dwellings will be occupied while subsequent phases are under construction. B&C Contractors will ensure that the site and working area is secured at all times and members of the public are prevented from accessing construction zones.

7.5 Waste Management:

All waste materials will be disposed of, under the appropriate Duty of Care and subject to approvals/consents from the relevant statutory bodies.

An inspection of the site shall be made by B&C Contractors for hazardous substances prior to commencement of the works. If such substances are encountered during the course of construction, then works will be halted (in that area) and a specialist consultant / contractor will be appointed to carry out assessment / removal as appropriate.

B&C Contractors will prepare a detailed inventory of dangerous substances encountered. Arrangements shall be made for such substances to be disposed of in a safe manner to an authorized disposal facility.

Should excavation material be suspected to be contaminated, then B&C Contractors shall make arrangements for carrying out appropriate environmental chemistry testing by a specialist consultant in order to determine the waste classification and Waste Acceptance Criteria.



Should excavated materials be assessed to be hazardous, B&C Contractors will carry out pretreatment of the waste soils to a methodology that is agreed with the receiving landfill operator and in accordance with Environmental Protection Agency guidance.

B&C Contractors will provide all appropriate measures to mitigate environmental pollution during the works, including, but not restricted to, wheel washing facilities, sheeting of Lorries, visual inspection, road sweeping as required and dust suppression.

B&C Contractors encouraged the reuse and recycling of any waste materials as far as is reasonably practicable.

Site shall be maintained to a level of cleanliness so as to prevent trips or falls. All material shall be stored safely. Walkways shall be designated and remain free from new / surplus materials. Offcuts at the workplace shall be disposed of on a daily basis or more frequently. Food waste, wrappers, drink containers etc. shall be managed and disposed of so as not to attract vermin.

B&C Contractors will ensure that his operations prevent any mud, dirt, debris or building material being carried onto or placed on the public road or adjoining property(s) as a result of the site construction works and repair any damage to the public road arising from carrying out the works. B&C Contractors shall ensure that any areas handed over for use by the general public are cleaned to a standard to prevent any mud, dirt, debris or building material being carried onto or placed on the public road

Any surface water collecting on the site may only be disposed of to the storm sewer system subject to it being free of silt, hydrocarbons or other contaminants, and should be in accordance with the requirement of the Local Authority. It must be noted that disposal of water may require Discharge license from the local authority.

In respect of any liquid disposal including underground water, B&C Contractors shall carry out appropriate environmental chemistry testing in order to determine whether the liquid is contaminated or not. The test regime shall be agreed with the receiving disposal facility and the testing shall be carried out by an accredited laboratory.

B&C Contractors will manage and carry out the works in accordance with best environmental practice and in accordance with the requirements specified in this document.

7.6 Traffic / Pedestrian Safety and Management:

7.6.1 Existing Environment

The project is located on a greenfield site in the Adamstown SDZ.

7.6.2 Proposed Traffic Safety Measure – General

The traffic management plan will include a control and management system for construction vehicles, to prevent the queuing of trucks, delivery vehicles, visitors etc. on public roads. B&C Contractors may be required to seek approval and license if it is envisaged that the traffic flow on public roads may be temporary disrupted by his works.

Approval must also be obtained from the Garda regarding any proposed disruption of normal traffic flow on public roads, or if it is anticipated that pedestrian “Right-of-Way” on footpaths may be affected.

Any works affecting features outside the cartilage of the site, e.g. footpaths, lights, service under the footpath will require approval from the Local Authority.

The access and egress for the portion of the road segregated from public use shall be controlled and managed by a “Banks man”. Banks men must be used to direct traffic on and off site. Vehicle routes on site should be clearly defined and isolated from pedestrian routes and appropriate safety signage displayed.

All construction vehicles or mobile machinery engaged in the construction work will be required to have working audible alarms and flashing lights when reversing and be controlled by a Banksman when the driver vision is restricted or when operating outside the site boundary.



B&C Contractors will not allow site operators or sub-contractors to occupy a car parking space in the adjoining / neighbourhood properties. B&C Contractors will put in place measures to restrict the parking of cars to the designated site.

B&C Contractors will determine the best and safest location for site accommodation, site car park, parking area for construction plant, mobile equipment, excavator, truck, tower crane etc. within the allocated compound. All vehicles must park as determined

B&C Contractors shall put in place measures to minimise the requirement for on-site storage areas and where this storage is absolutely necessary segregate these from public access and the works.

Haulage trucks, deliveries or storage material and facilities shall not impede public roads or access for emergency vehicles.

The access and egress from existing occupied buildings shall be maintained. Emergency routes required by the main Contractor's site Evacuations Safety Plan shall be maintained and by the need to ensure free passage for emergency vehicles to nearby and surrounding properties. Temporary works designs are anticipated where egress is impeded by the works.

B&C Contractors will put in place measures for the safe passage of the general public in the vicinity of the works.

B&C Contractors will ensure that existing roads, footpaths, rights of way, parking areas and access are not obstructed or damaged by construction traffic and that the general public is protected.

A Temporary Traffic Operations Supervisor will be required to:

- supervise traffic management road works and be available at short notice to deal with issues at particular site locations;
- be on site when temporary traffic management signs and devices are being installed, modified or removed; e.g., a SLG CSCS cardholder is required on site when:
 - switching between traffic lights and STOP/GO operations;
 - be on site to install traffic management arrangements diverting pedestrians or cyclists onto the roadway;
 - perform inspections of the traffic management and record same;
 - report issues or incidents relating to the temporary traffic management to the PSCS; and
 - liaise directly with the Designer (TTM) where required.

Health and Safety at Roadworks CSCS cardholder is required to be present on site if a SLG CSCS cardholder is not present and construction works are taking place on the road. The Health and Safety at Roadworks CSCS cardholder's duties do not extend to modifying the traffic management arrangements at a road works site.

8. SAFETY FILE

8.1 Existing Safety File:

The project is located on a greenfield site in the Adamstown SDZ, There is no existing safety file.

8.2 Project Safety File:

Under Regulation 13 of the Safety, Health and Welfare at Work (Construction) Regulations 2013, the PSDP is now responsible for preparation of a Safety File for the project and present it to the Client when the project is complete.

The Safety File is a record of information for the end user, which focuses on safety and health. The information it contains will alert those who are responsible for the structure and services in it of the significant safety and health risks that will need to be addressed during subsequent maintenance, repair or refurbishment, extension or other construction work or, indeed, its demolition.

In order to prepare the Safety File, the PSDP should receive appropriate information from designers, B&C Contractors and other duty-holders. This will require co-operation and co-ordination right from the start.



Information required for the Safety File includes the following:

- Construction drawings, specifications and information, used and produced throughout the construction process;
- The general design criteria adopted, and details of the equipment and maintenance facilities within the road and associated structures.
- Maintenance procedures;
- Manuals, and where appropriate certificates, produced by specialist contractors and suppliers which outline operating and maintenance procedures and schedules for plant and equipment installed as part of the structure (typically cleaning of drains);
- Details of the location and nature of utilities and services, including emergency systems; Information

supplied to the PSDP should include some, or all of the elements listed below:

- Detailed drawings and details of design criteria i.e. design loadings;
- Details of materials used;
- Details of maintenance i.e. painting of exposed steelwork, access to and cleaning of gutters or other features;
- Details of fragile materials.

The PSDP will coordinate preparation of the Safety File during the course of construction works. In this regard, the PSDP will prepare a list of documents / information to be prepared by the project team members for inclusion of the Safety File.

A procedure for issuing the Safety File documents will be circulated in due course.

B&C Contractors shall identify all relevant information relating to B&C Contractors and subcontractors working for the Safety File and shall submit the same to the PSDP in a timely manner.

It is the responsibility of B&C Contractors to continue to update the information supplied related to ongoing design during the construction phase of the project and to collect information for inclusion into the file from contractors working on project.

B&C Contractors shall discuss with all contractors the information required for the Safety File during the course of the project and as part of the site safety meetings on a regular basis.

The Safety File must be developed and information shall be submitted by various parties involved in the project to the PSDP in a timely manner throughout the project.