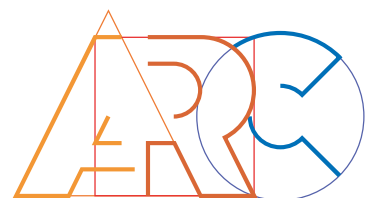


## **Description & Schedule of Salvaged Cast Iron Elements at 42A Parkgate Street, Dublin 8**

Compliance with Condition 4 (v) of An Bord Pleanála Order ABP-306569-20

October 2020



This short illustrated report is being prepared by ARC Consultants as part of a compliance submission in relation to Condition 4 (v) of the An Bord Pleanála Order in regard to a Strategic Housing Development at No 42A Parkgate Street, Dublin 8 - ABP-306569-20. The text of Condition 4 (v) is as follows:

4. *The following details shall be submitted to, and agreed in writing with, the planning authority within six months:*
  - (v) *Detailed drawings and schedule of salvaged cast iron elements from the large warehouse and how these will be incorporated into the proposed scheme;*

There are three main types of cast iron element in the warehouse at Parkgate Street. These are:

- Cast iron columns
- Cast iron main beams
- Cast iron gutter-beams

This report describes these elements and discusses their likely condition and the potential for salvage and reuse.

### **Columns**

The cast iron columns are some 16 feet high (4875 mm) down to their base below the floor, and are 6 inches in diameter (153 mm). The columns are, for the most part, placed at 24 foot centres (7,315 mm) both in the north-south direction and the east-west direction. At the east end of the building, near where the building comes to a point, the east-west separation of the columns reduces to 18 feet (5,487 mm).

### **Main Beams**

The columns support 24 foot long cast iron main beams running in the north-south direction. These beams are complex in shape. The bottom flange of the beams is flat and level, but the upper flange sweeps down in a curve from a high point at each end of the beam, and then slowly sweeps up again to a high point in the centre of the beam. These beams are roughly 'I' shaped in section with a broad lower flange and a narrower upper flange. The flanges do not maintain a constant width along the length of the beam and both the upper and lower flanges widen towards the ends of the beam and again towards the centre. At the ends of the beams there is a flat vertical plate at right angles to the beam. This plate has a half cylindrical vertical alcove in the centre, some 150 mm to 170 mm across. The beams are butt jointed at the tops of the columns supporting them and are bolted together with four bolts passing through the end plates of the beams. The beams being butt jointed, the two alcoves at the ends create a hollow cylinder in the centre of the joint. It is suspected that a cylindrical projection at the top of the columns fits into this alcove and locks the beams in position. Since it has not been possible to look inside the joint between the beams and columns, how precisely the joint is made will only become clear when the cast iron structure in the warehouse are dismantled.

### **Gutter Beams**

The 24 foot beams running north-south in turn support cast iron gutter-beams running east west at 12 foot centres, one above the ends of the main beams and one above the centre of each main beam. These cast iron gutter beams are roughly 'U' shaped in section, though their precise shape is uncertain since so far it has not been possible to examine the inside of the gutter-beams. The gutter beams are not symmetrical in section. On the south side of the beams there are sockets near the top of the beam at 4.8 foot centres (4,463 mm). The purpose of these sockets is to accept the sloping timber frames of the north-light glazing of the roof. On the north side of the gutter beams there is a shallow projection that makes a shelf that runs along the full length of the beam. The purpose of this shelf is to support the wall plate and rafters of the solid south facing part of the north-light roof.

### **Condition of the Cast Iron**

The condition of the cast iron element is somewhat uncertain, and will only be possible to determine properly when the structure has been taken down

There is some evidence of rusting at the top of the columns, where the ends of the beams join above the head of the column. The bases of the columns have been buried beneath the floor of the warehouse since the cast iron structure was erected in the 1880s. Opening up has been carried out to reveal the base of one column. This shows that the bottom of the column fans out to form a circular cast iron base integral with the column. This base then stands on a granite slab some 750 mm square and some 100 to 150 mm thick, all of this buried some 350 mm below the warehouse floor. The bases of the columns have, therefore, been buried in damp conditions for more than 100 years. There is clear evidence of rust on the base of the column that was opened up. The condition of the bases of the rest of the columns will not be known until they are taken down.

The 24 foot north-south beams appear in quite good condition. They are indoors under the roof and are well away from any ground damp. The gutter-beams are butt jointed above the north south main beams and there is minor evidence of water penetration from the gutter-beams and of associated rust at the joint of the main beams.

The gutter-beams have been carrying water for more than 100 years and the extent of consequent wear and degradation of the gutter-beams is unknown. A short length of the north side of a gutter-beam was opened up and this showed clear evidence of rust.

### **Source of the Cast Iron**

The 24 north-south beams are marked with the name 'Courtney Stephens and Bailey', a foundry located in Blackhall Place. The detail of the north-south beams and the gutter-beams is quite a heavy and robust character, but the columns are more delicate in their style and detail. This might suggest that the columns came from a different foundry. In addition, there are slots on each of the four sides of the head of the columns a little below the top moulding. These slots might suggest that the columns were designed to connect to beams different those they now support. On the other hand, the building was built in the 1880s as a woollen mills, and the slots may be there in connection with machinery associated with the running of a woollen mills.

### **Availability of Cast Iron Elements for Reuse**

The extent to which the cast iron in the warehouse is available for salvage and reuse is somewhat uncertain because some of the cast iron elements are built into the walls or floor of the warehouse and cannot be fully inspected, and because it is only when the structure is dismantled that the joints between different cast iron elements can be inspected. However, even making a conservative estimate of the amount of the cast iron that will be suitable for reuse, there is reasonable confidence that it will be sufficient for the construction of the pergola indicated on the planning drawings.

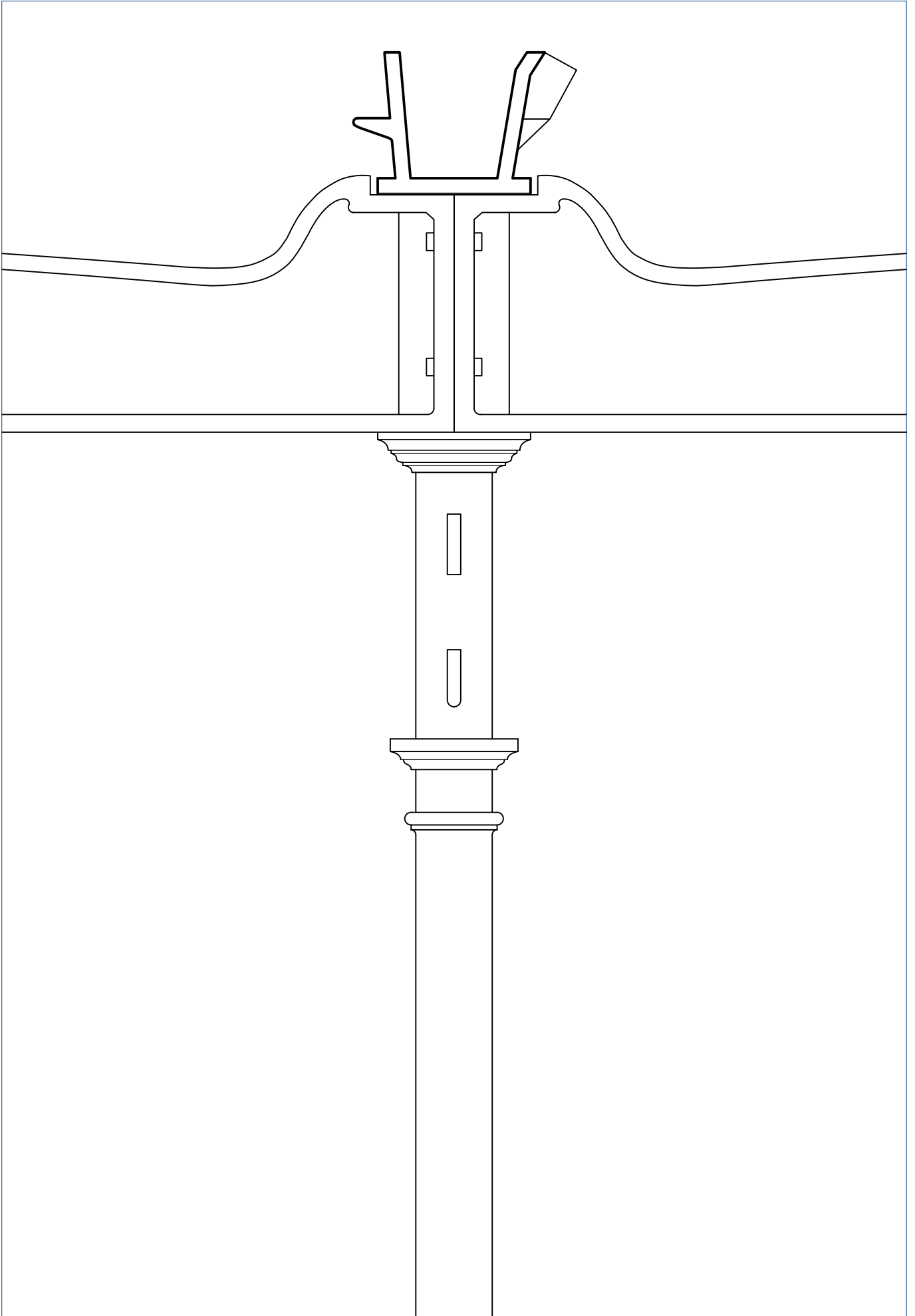
There are in excess of 50 columns, the exact number is not clear because some of the columns are embedded in walls, and there appear to be some others hidden behind modern partitions within the building. There are also in excess of 50 apparently intact 24 foot north-south main beams, some of which are embedded in walls. In addition there are some partial north-south beams that have been cut back where they meet the curving wall along Parkgate Street at the north east end of the building. There are a large number of 24 foot and 18 foot lengths of gutter-beam and some short offcuts where the gutter-beams meet the curved Parkgate Street wall. Because of their exposure to the elements, the extent to which gutter beams can be salvaged and reused is uncertain.

As is noted on the drawings produced by Mitchell and Associates it is proposed to reuse 14 cast iron columns, 12 of the main cast iron beams and 7 short length of cast iron gutter-beam in the construction of the pergola. It is also proposed to use 4 short sections of main beam to deal with end conditions. These 4 short sections will be cut from existing shortened main beams that were cut back at the time of the construction of the warehouse where they meet the curve of the warehouse wall along Parkgate Street. The pergola will echo the arrangement of the cast iron elements as they are at present in the warehouse, save that the east-west separation of the columns and main beams will be reduced to half a bay. It is proposed to strip back the cast iron of the pergola and provide a new exterior grade protective coating to the cast iron elements.

**W. H. Hastings FRIAI • October 2020**

*RIAI accredited Grade I Conservation Architect*





*Detail of the joint between the top of one of the cast iron columns and a pair of the main north-south cast iron beams above. At the top of the drawing is a section through one of the gutter-beams that run east-west and rest on the main beams. Scale 1:10*





General view of the warehouse looking east, showing the columns the main beams supported by the columns and running north-south and the gutter-beams supported on the ends and centre of the main beams and running east-west



View of part of the west wall of the warehouse, showing both columns and beams embedded in the wall.



*View looking at the inside of the curving wall to Parkgate Street at the north east of the warehouse. This view shows several main beams cut short as they enter the wall.*





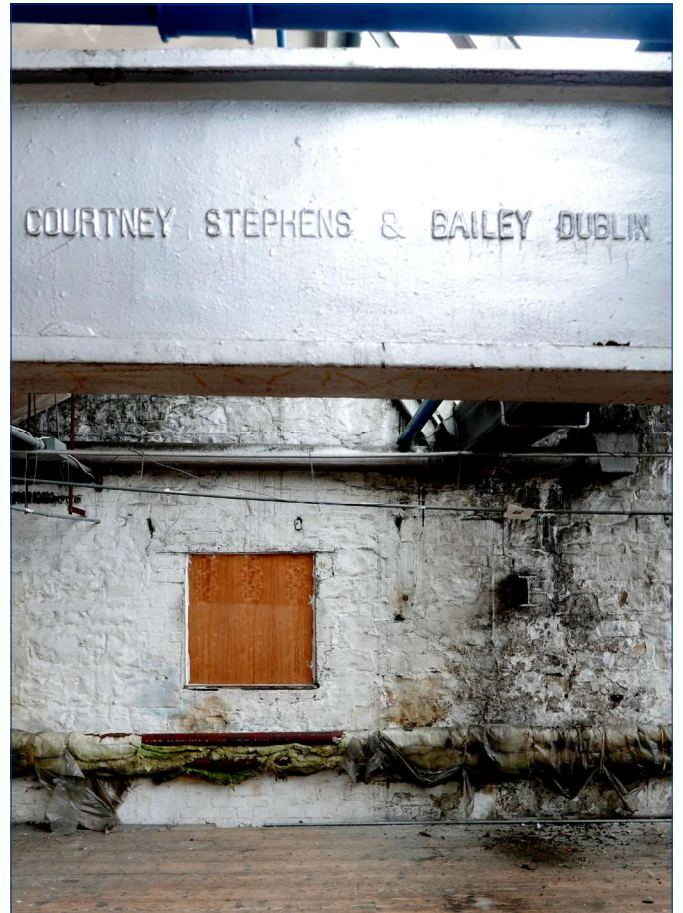
Detail of the top of a column and the joint between two main beams above, showing how the ends of the beams are bolted together.



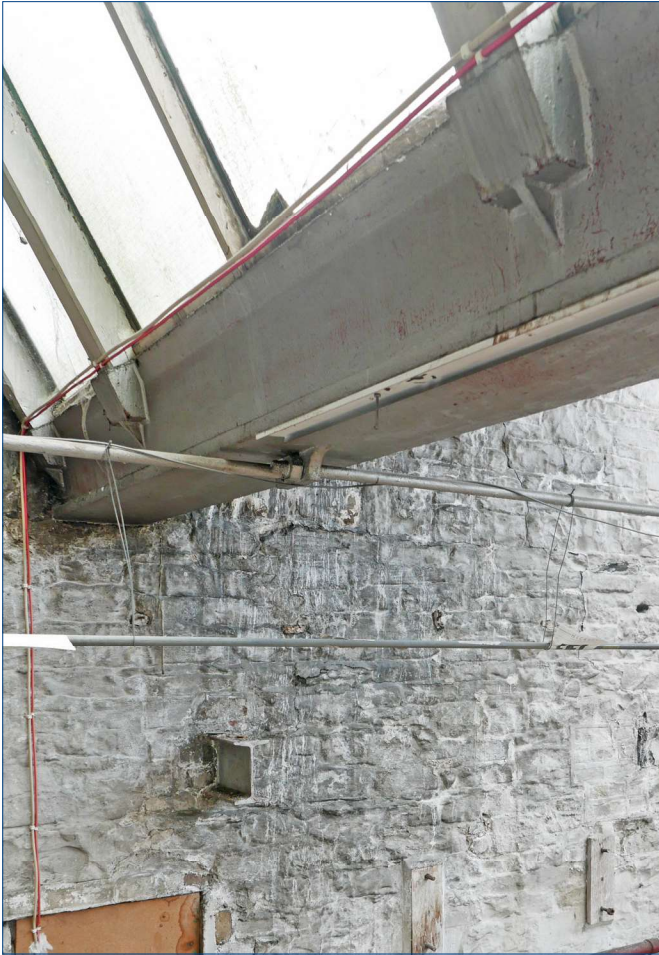
Detail of the top of a column and the joint between two main beams above, showing a gutter beam resting into a recess in the top of the beams



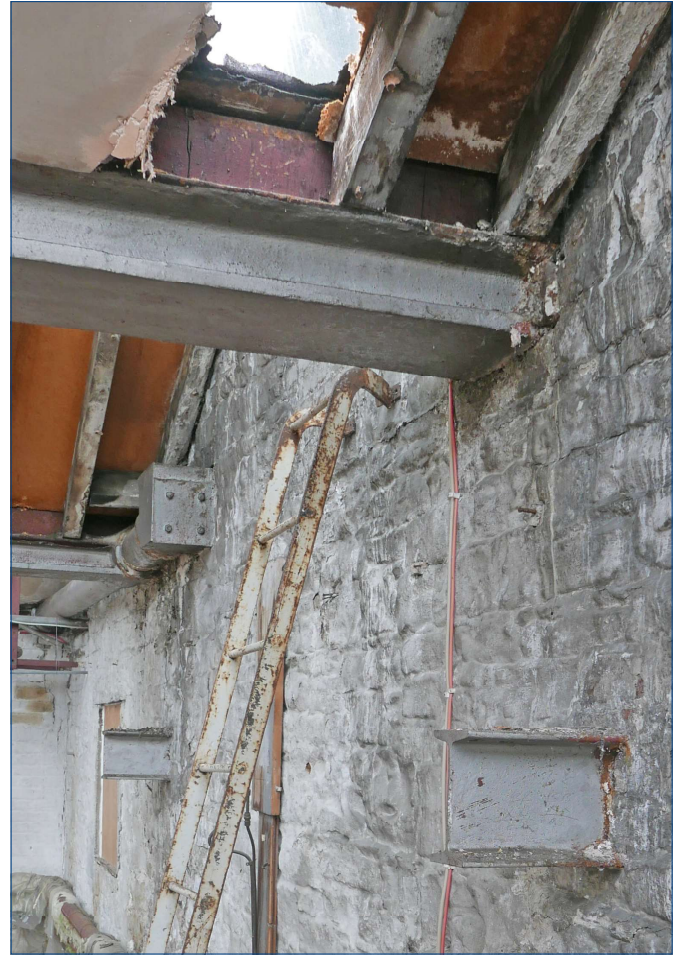
Detail of the centre of one of the main beams showing the recess to take the gutter beam above. The gutter beams join over the main beams and there is some evidence of rust from water penetration seen at the top of the main beam.



The name of the iron foundry marked on the side of one of the main beams. The foundry was nearby in Blackhall Place.



*Detail of the south side of one of the gutter beams, showing the sockets on the beam to take the frames of north light glazing*



*Exposed detail of the north side of the same gutter beam showing the shelf on the beam designed to take the ends of rafters*



*View of a trial pit excavated to show the detail of the base of a column. The base of the column flares out to produce a broad flange to spread the load. Under the column is what appears to be a granite slab some 750 mm square.*



Planning ref: SHD0001/20, AN BORD PLEANÁLA REG. REF 306569

Address: 42A, Parkgate Street, Dublin 8

---

**Re: Compliance with Condition No. 4 of SHD0001/20, AN BORD PLEANÁLA REG. REF 306569**

The Planning Authority received a submission regarding Condition No. 4 of planning reference SHD0001/20, on the 24<sup>th</sup> and 30<sup>th</sup> October 2020. Condition No. 4 requires that:

*4. The following details shall be submitted to, and agreed in writing with, the planning authority within six months:*

*(i) Details of all signage and shopfronts associated with the development;*

**Submission:** There are 3 individual shop fronts proposed within the scheme, all of which front on to Parkgate Street. Details have been submitted showing the locations and also the materials to be used in each shop front including stone and brick cladding, spandrel panes, glazing, signage and ventilation grills.

The submission is considered to comply with Condition 4(i).

*(ii) Details of a maintenance strategy for materials within the proposed development;*

**Submission:** A Maintenance Strategy report has been provided in response to planning condition 4(ii). The report provides an initial assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered to effectively manage and reduce costs for the benefit of the residents.

The submission is considered to comply with Condition 4(ii).

*(iii) Details of changing/toilet facilities to be provided in close proximity to the ancillary residential facilities/services;*

**Submission:** Details have been submitted indicating that changing/toilet facilities will be provided at both undercroft and ground floor levels.

At undercroft level it is proposed to provide 2 Changing rooms female/ male – including showers including shower rooms, WC, lockers, and seating. At ground floor level it is proposed to provide 5 x Universally Accessible WC located close to each core and an additional Accessible WC at the River Building.

*The submission is considered to comply with Condition 4(iii).*

*(iv) Detailed drawings of the formation of the proposed wall openings in the River Liffey quay wall, including new beam and columns; (v) Detailed drawings and schedule*

*of salvaged cast iron elements from the large warehouse and how these will be incorporated into the proposed scheme;*

**Submission:** The submission details have been submitted to the City Conservation Officer.

(v) *Detailed drawings and schedule of salvaged cast iron elements from the large warehouse and how these will be incorporated into the proposed scheme;*

**Submission:** The submission notes that there are three main types of cast iron element in the warehouse at Parkgate Street. These are:

- Cast iron columns
- Cast iron main beams
- Cast iron gutter-beams

There are in excess of 50 columns, the exact number is not clear because some of the columns are embedded in walls, and there appear to be some others hidden behind modern partitions within the building. There are also in excess of 50 apparently intact 24 foot north-south main beams, some of which are embedded in walls. In addition there are some partial north-south beams that have been cut back where they meet the curving wall along Parkgate Street at the north east end of the building. There are a large number of 24 foot and 18 foot lengths of gutter-beam and some short offcuts where the gutter-beams meet the curved Parkgate Street wall.

The submission notes that some of the salvaged cast iron columns and beams are to be used in the construction of a Pergola structure in the proposed landscaping scheme.

Drawing have been submitted by Mitchell and Associates outlining how it is proposed to reuse 14 cast iron columns, 12 of the main cast iron beams and 7 short length of cast iron gutter-beam in the construction of the pergola. It is also proposed to use 4 short sections of main beam to deal with end conditions. These 4 short sections will be cut from existing shortened main beams that were cut back at the time of the construction of the warehouse where they meet the curve of the warehouse wall along Parkgate Street. The pergola will echo the arrangement of the cast iron elements as they are at present in the warehouse, save that the east-west separation of the columns and main beams will be reduced to half a bay. It is proposed to strip back the cast iron of the pergola and provide a new exterior grade protective coating to the cast iron elements.

*The submission is considered to comply with Condition 4(v).*

(vi) *Details of a piece of public art, of suitable quality, that shall be incorporated into the proposed public open space;*

**Submission:** The submission in relation to 4(v) notes that the applicant has begun initial engagement with Ruairí Ó Cuív, City Council Arts Officer.

The submission notes that they two options are being discussed in relation to delivering a suitable piece of public art work. Firstly they are investigating the possibility of hosting a suitable piece(s) of sculpture from IMMA in Kilmainham. This may offer the possibility of rotating/ periodically changing the sculpture which would create an exciting way for IMMA to engage with the public.

Alternatively, they are considering commissioning a new bespoke piece of art. In this regard we have a list of artists with proven reputations for producing high quality commissions of public art around the country. We are also open to working with emerging artists or further suggestions from the DCC Arts Officer. This selection process would include, but not be limited to, the following points:

- Confirming a suitable location for the piece of art considering views as well as the uses of space within the site.
- We propose the piece of art should contribute to place making and the identity of the Parkgate Street open space. We propose the piece of art should act as a strong presence in the public open space, while considering robustness to prevent vandalism and risks to safety.
- Commissioning initial outline design proposals through a suitable artist or artists including details on type and scale of the artwork, considering the size and use of the open space and adjacent buildings. We would ensure the artist/ each artist is briefed on the project background, previous design stages and next steps for the procurement of the sculpture, the aspirations for the sculpture, and the programme and budget.
- Review outline design proposals received, with shortlisting as appropriate, in consultation with DCC Arts Officer.
- Agree the successful artist and piece of art allowing it to then be commissioned in agreement with yourselves.

We trust the above is acceptable to agree this planning condition and we request written confirmation that this condition has now been complied with.

The Planning Authority Notes the details of the submission in relation to Condition 4(iii) and accepts that the submission is acceptable subject to further discussions with the Dublin City Council Arts Officer to deliver a suitable piece of public art work at this site.

*(vii) Details of greening of flat or gently sloping roofs.*

**Submission:** Details of the proposed material to be used in the flat or gently sloping roofs, prepared by Mitchell + Associates has been submitted. The submission notes that the green roofs will comprise the following;

- Sedum vegetation blanket on
- Drainage mat
- Polyester reinforced app modified bitumen elasto polymer fully torch bonded high performance cap sheet
- 3mm polyester reinforced app modified bitumen bas sheet
- Precast Concrete Slabs to Structural Engineers details.

The submission is considered to comply with Condition 4(vii).

#### Recommendation

The submission is considered to **comply** with Condition No. 4i,ii,iii,v,vi,vii of Planning Reference SHD0001/20, AN BORD PLEANÁLA REG. REF 306569

*Note to Applicants: For the avoidance of doubt, any modifications to the permitted development, contained on any drawings and documentation lodged as 'compliance', which*

*are not required pursuant to conditions of a planning permission, should not be construed as being assessed and/or authorised by way of showing any such modifications, etc., on drawings and documentation lodged as 'compliance'.*

I recommend that the Applicant be informed of this decision.

---

Kiaran Sweeney  
Senior Executive Planner

Planning Registry & Decisions, Planning Department  
Civic Offices, Wood Quay, Dublin 8

Clárlann / Cinntí Pleanála  
An Roinn Pleanála agus Forbartha, Clárlann / Cinntí  
Oifigí na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8  
T: (01) 222 2149

Niall Connolly,  
Stephen Little & Associates  
26/27, Upper Pembroke Street  
Dublin 2  
D02 X361

27-Nov-2020

**Application No:** SHD0001/20Sub01  
**Application Date:** 20-Oct-2020  
**Proposal:** Condition 4 (i), (ii), (iii), (v), (vi), (vii)  
**Location:** 42A, Parkgate Street, Dublin 8  
**Final Grant Date:** 28-May-2020

**IMPORTANT NOTE:**

Please be advised that from Monday 15/06/20 a compliance submission can only be submitted in pdf format and by e- mail to [compliances@dublincity.ie](mailto:compliances@dublincity.ie)

To Whom It May Concern,

The Planning Authority hereby informs you that the details submitted by you on the 20-Oct-2020 are satisfactory and in compliance with Condition 4 (i), (ii), (iii), (v), (vi), (vii) and are acceptable to the Planning Authority as per the terms of the attached Planner's report dated 24-Nov-2020..

**Note to Applicant: For the avoidance of doubt, any modifications to the permitted development, contained on any drawings and documentation lodged as 'compliance', which are not required pursuant to conditions of a planning permission, should not be construed as being assessed and/or authorised by way of showing any such modifications, etc., on drawings and documentation lodged as 'compliance'.**

Yours faithfully

Jane Burke

---

For Administrative Officer

**DEMOLITION WASTE  
MANAGEMENT PLAN FOR A  
MIXED-USE DEVELOPMENT**

**AT**

**42A PARKGATE STREET,  
DUBLIN 8**

The Tecpro Building,  
Clonshaugh Business & Technology Park,  
Dublin 17, Ireland.

T: + 353 1 847 4220  
F: + 353 1 847 4257  
E: [info@awnconsulting.com](mailto:info@awnconsulting.com)  
W: [www.awnconsulting.com](http://www.awnconsulting.com)

---

Report Prepared For

**Ruirside Development Limited**

---

Report Prepared By

**Chonaiil Bradley**, Senior Environmental  
Consultant

---

Our Reference

CB/19/10606WMMR03

---

Date of Issue

16 December 2020

---


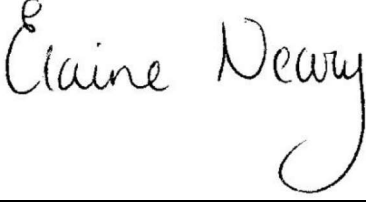
**Cork Office**  
Unit 5, ATS Building,  
Carrigaline Industrial Estate,  
Carrigaline, Co. Cork.  
T: + 353 21 438 7400  
F: + 353 21 483 4606

AWN Consulting Limited  
Registered in Ireland No. 319812  
Directors: F Callaghan, C Dilworth,  
T Donnelly, T Hayes, D Kelly, E Porter

**Document History**

Document Reference		Original Issue Date	
CB/19/10606WMR03		16 December 2020	
Revision Level	Revision Date	Description	Sections Affected

**Record of Approval**

Details	Written by	Approved by
Signature		
Name	Chonaiil Bradley	Elaine Neary
Title	Senior Environmental Consultant	Associate
Date	16 December 2020	11 December 2019

<b>CONTENTS</b>		<b>Page</b>
1.0	INTRODUCTION	4
2.0	CONSTRUCTION & DEMOLITION WASTE MANAGEMENT IN IRELAND	4
2.1	National Level	4
2.2	Regional Level	5
2.3	Legislative Requirements	6
3.0	DESCRIPTION OF THE PROJECT	7
3.1	Location, Size and Scale of the Development	7
3.2	Details of the Non-Hazardous Wastes to be produced	8
3.3	Potential Hazardous Wastes to be produced	8
3.4	Main Demolition Waste Categories	9
4.0	WASTE MANAGEMENT	10
4.1	Demolition Waste Generation	10
4.2	Construction Waste Generation	11
4.3	Proposed Waste Management Options	11
4.4	Tracking and Documentation Procedures for Off-Site Waste	13
5.0	ESTIMATED COST OF WASTE MANAGEMENT	13
5.1	Reuse	13
5.2	Recycling	13
5.3	Disposal	14
6.0	DEMOLITION PROCEDURES	14
6.1	Check for Hazards	14
6.2	Removal of Components	14
6.3	Removal of Roofing	14
6.4	Excavation of Services, Demolition of Walls and Concrete	14
7.0	TRAINING PROVISIONS	14
7.1	Waste Manager Training and Responsibilities	15
7.2	Site Crew Training	15
8.0	RECORD KEEPING	15
9.0	OUTLINE WASTE AUDIT PROCEDURE	16
9.1	Responsibility for Waste Audit	16
9.2	Review of Records and Identification of Corrective Actions	16
10.0	CONSULTATION WITH RELEVANT BODIES	16
10.1	Local Authority	16
10.2	Recycling/Salvage Companies	17
11.0	REFERENCES	18



## 1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Demolition Waste Management Plan (DWMP) on behalf of Ruirside Development Ltd, for a residential development in response to the An Bord Pleanála (ABP) Grant of Permission (GOP) (Ref ABP 306569) condition No. 30 This plan only relates to the demolition of some of the existing structures on site and not the excavation and construction phases of the development. A separate Construction and Demolition Waste Management Plan (C&D WMP) will be prepared to cover these phases of the development.

The DWMP has been prepared in advance of a full C&D WMP to progress the demolition of buildings prior to the bird nesting season (March 1<sup>st</sup> to August 31<sup>st</sup>), mitigating or reducing the impact the development would have on nesting birds.

Condition No. 30 requests:

*Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of the development. This plan shall be prepared in accordance with the “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects”, published by the department of the Environment, Heritage and Local Government in July 2006.*

The purpose of this plan is to provide information necessary to ensure that the management of demolition waste at the site is undertaken in accordance with current legal and industry standards including the *Waste Management Acts 1996 - 2011* and associated Regulations <sup>1</sup>, *Protection of the Environment Act 2003* as amended <sup>2</sup>, *Litter Pollution Act 1997* as amended <sup>3</sup> and the *Eastern-Midlands Region Waste Management Plan 2015 – 2021* <sup>4</sup>. In particular, this Plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also seeks to provide guidance on the appropriate collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and/or water).

This DWMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of demolition waste to be generated by the development and makes recommendations for management of different waste streams.

## 2.0 CONSTRUCTION & DEMOLITION WASTE MANAGEMENT IN IRELAND

### 2.1 National Level

The Irish Government issued a policy statement in September 1998 known as ‘*Changing Our Ways*’ <sup>5</sup>, which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2013).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled ‘*Recycling of Construction and Demolition Waste*’ <sup>6</sup> concerning the development and implementation of a voluntary construction industry programme to meet the Government’s objectives for the recovery of C&D waste.

The most recent national policy document was published in July 2012, entitled ‘*A Resource Opportunity - Waste Management Policy in Ireland*’ <sup>7</sup>. This document

stresses the environmental and economic benefits of better waste management, particularly in relation to waste prevention. The document sets out a number of actions in relation to C&D waste and commits to undertake a review of specific producer responsibility requirements for C&D projects over a certain threshold.

The National Construction and Demolition Waste Council (NCDWC) was launched in June 2002, as one of the recommendations of the Forum for the Construction Industry, in the Task Force B4 final report. The NCDWC subsequently produced '*Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects*'<sup>8</sup> in July 2006 in conjunction with the then Department of the Environment, Heritage and Local Government (DoEHLG). The guidelines outline the issues that need to be addressed at the pre-planning stage of a development all the way through to its completion. These guidelines have been followed in the preparation of this document and include the following elements:

- Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- Waste disposal/recycling of C&D wastes at the site;
- Provision of training for waste manager and site crew;
- Details of proposed record keeping system;
- Details of waste audit procedures and plan; and
- Details of consultation with relevant bodies i.e. waste recycling companies, Dublin County Council etc.

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a C&D Waste Management Plan for developments. This development requires a C&D WMP under the following criterion:

- New residential development of 10 houses or more;
- New developments other than (1) above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,250m<sup>2</sup>; and
- Demolition/renovation/refurbishment projects generating in excess of 100m<sup>3</sup> in volume, of waste.

Other guidelines followed in the preparation of this report include '*Construction and Demolition Waste Management – a handbook for Contractors and Site Managers*'<sup>9</sup> published by FÁS and the Construction Industry Federation in 2002.

These guidance documents are considered to define best practice for C&D projects in Ireland and describe how C&D projects are to be undertaken such that environmental impacts and risks are minimised and maximum levels of waste recycling are achieved.

## 2.2 Regional Level

The development is located in the Local Authority area of Dublin City Council (DCC).

The *EMR Waste Management Plan 2015 – 2021* is the regional waste management plan for the DCC area published in May 2015.

The regional plan sets out the following strategic targets for waste management in the region:

- A 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan;
- Achieve a recycling rate of 50% of managed municipal waste by 2020; and
- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices.

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €130 - €150 per tonne (2019) of waste which includes a €75 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015*.

The *Dublin City Council Development Plan 2016 – 2022*<sup>10</sup> sets out a number of objectives and actions for the Dublin City area in line with the objectives of the regional waste management plan.

Waste Policies and Objectives with a particular relevance to the development are as follows:

Policies:

- *SI19: To support the principles of good waste management and the implementation of best international practice in relation to waste management in order for Dublin City and the region to become self-reliant in terms of waste management.*
- *SI20: To prevent and minimise waste and to encourage and support material sorting and recycling.*
- *SI21: To minimise the amount of waste which cannot be prevented and ensure it is managed and treated without causing environmental pollution.*

Objectives:

- *SIO17: To promote the re-use of building materials, recycling of demolition material and the use of materials from renewable sources. In all developments in excess of 10 housing units and commercial developments in excess of 1000 sqm, a materials source and management plan showing type of materials/proportion of re-use/recycled materials to be used shall be implemented by the developer.*
- *SIO18: To implement the current Litter Management Plan through enforcement of the litter laws, street cleaning and education and awareness campaigns.*
- *SIO19: To implement the Eastern-Midlands Waste Management Plan 2015-2021 and achieve the plan targets and objectives.*

## 2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the development are:

- Waste Management Act 1996 (No. 10 of 1996) as amended. Sub-ordinate legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (SI 126 of 2011) as amended
  - Waste Management (Collection Permit) Regulations (S.I. No. 820 of 2007) as amended
  - Waste Management (Facility Permit and Registration) Regulations 2007, (S.I. No. 821 of 2007) as amended
  - Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) as amended
  - Waste Management (Packaging) Regulations 2014 (S.I. 282 of 2014) as amended
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997)
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
  - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)

- European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
- Waste Management (Food Waste) Regulations 2009 (S.I. 508 of 2009), as amended
- European Union (Household Food Waste and Bio-waste) Regulation 2015 (S.I. No. 191 of 2015)
- Waste Management (Hazardous Waste) Regulations, 1998 (S.I. No. 163 of 1998) as amended
- Waste Management (Shipments of Waste) Regulations, 2007 (S.I. No. 419 of 2007) as amended
- Waste Management (Movement of Hazardous Waste) Regulations, 1998 (S.I. No. 147 of 1998)
- European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)
- European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
- Environmental Protection Act 1992 (No. 7 of 1992) as amended.
- Litter Pollution Act 1997 (No. 12 of 1997) as amended.
- Planning and Development Act 2000 (No. 30 of 2000) as amended <sup>11</sup>.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996 - 2001* and subsequent Irish legislation, is the principle of “*Duty of Care*”. This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of “*Polluter Pays*” whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the client ensures that the waste contractors engaged by demolition contractor are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007 and Amendments* or a waste or IE licence granted by the EPA. The COR/permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

### **3.0 DESCRIPTION OF THE PROJECT**

#### **3.1 Location, Size and Scale of the Development**

Planning permission was granted on this site, subject to 33 Nr. Conditions which amended the development. The development as permitted is a mixed use residential and commercial scheme comprising build to rent residential units with associated residential amenities and facilities, commercial office and café/ restaurant floor space.

To facilitate the development, a number of structures on site will be demolished, including Parkgate House. All structures contained within the Record of Protected structures will be retained, restored and adapted. This includes the riverside stone wall, the turret at the eastern end of the site, the square tower on the riverfront and the entrance stone arch on the Parkgate Street frontage.

In addition to retaining the Protected Structures, it is also proposed to retain the larger of the two gabled industrial buildings on the river front for use as the residents gym and part of the smaller gabled building. All other structures are proposed for demolition, it is proposed to retain some of the large cast iron structural elements from the warehouse for use in the new development.

### **3.2 Details of the Non-Hazardous Wastes to be produced**

There will be waste materials generated from the demolition of some of the existing buildings and hardstanding areas onsite. The volume of waste generated from demolition will be more difficult to segregate than waste generated from the construction phase, as many of the building materials will be bonded together or integrated i.e. plasterboard on timber ceiling joists, steel embedded in concrete etc.

There will be no excavation and removal of material as part of this phase of the development.

Waste will also be generated from demolition workers e.g. organic/food waste, dry mixed recyclables (wastepaper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided onsite during the construction phase. Waste printer/toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

### **3.3 Potential Hazardous Wastes to be produced**

#### **3.3.1 Fuel/Oils**

As fuels and oils are classed as hazardous materials, any on-site storage of fuel/oil, all storage tanks and all draw-off points will be bunded (or stored in double-skinned tanks) and located in a dedicated, secure area of the site. Provided that these requirements are adhered to and site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel/oil wastage at the site.

#### **3.3.2 Asbestos**

A Refurbishment/Demolition Asbestos Survey was carried out at this site in March 2019 by Phoenix Environmental Safety Ltd. The buildings were surveyed for the purpose of detecting and recording incidences of asbestos containing materials (ACMs). A report was issued which contains a register showing the location and type of asbestos and the risks and recommendations in relation to the material found. The scope of the asbestos survey was confined to all accessible areas of the existing factory building and an outbuilding at the rear of the site. No. 43 Parkgate Street was not surveyed as the building was unsafe to enter.

During the course of the survey, ACMs were identified in a number of locations including but not limited to cement roof slates, roof matts, pipe work, electronic equipment and floor tiles. All areas surveyed containing asbestos were included on the Asbestos Register.

The ACMs and suspected ACMs identified by the Asbestos survey will be required to be removed by a suitably trained and competent person prior to commencement of

demolition works. ACMs will only be removed from site by a suitably permitted waste haulier and will be brought to a suitably licenced facility. Where required, the HSA should be contacted in relation to the handling of asbestos and material should be dealt with in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006*, as amended and associated approved Codes of Practice. The contractor will also be required to refer to the *Construction & Demolition Management Plan* in relation to asbestos identification and removal.

### **3.3.3 Japanese Knot Weed and Other Invasive Plant Species**

Ecological Site surveys have been undertaken at this site and in the surrounding area as part of the site ecological assessment. As part of this, a site walkover was undertaken for the purpose of identifying and managing any schedule 3 (*Regulations SI No. 355/2015*) invasive species such as Japanese Knotweed (*Fallopia japonica*). This included a walkover survey of the entire site and around part of the outside perimeter. Details can be found in the information submitted with the planning application.

No Japanese Knotweed plant species or third schedule invasive species were recorded within the property boundary.

### **3.3.4 Other known Hazardous Substances**

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer toner/cartridges, batteries (Lead, Ni-Cd or Mercury) and/or fluorescent tubes and other mercury containing waste may be generated from during demolition activities or temporary site offices. These wastes (if encountered) will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

## **3.4 Main Demolition Waste Categories**

The main non-hazardous and hazardous waste streams that could be generated by the construction and demolition activities at a typical site are shown in Table 3.1. The List of Waste (LoW) code (as effected from 1 June 2015) (also referred to as the European Waste Code or EWC) for each waste stream is also shown.

Waste Material	LoW/EWC Code
Concrete, bricks, tiles, ceramics	17 01 01-03 & 07
Wood, glass and plastic	17 02 01-03
Treated wood, glass, plastic, containing hazardous substances	17-02-04*
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*
Metals (including their alloys) and cable	17 04 01-11
Soil and stones	17 05 03* & 04
Gypsum-based construction material	17 08 01* & 02
Paper and cardboard	20 01 01
Mixed C&D waste	17 09 04
Green waste	20 02 01
Electrical and electronic components	20 01 35 & 36
Batteries and accumulators	20 01 33 & 34
Liquid fuels	13 07 01-10
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30
Insulation materials	17 06 04
Insulation containing asbestos and asbestos-containing construction materials and other insulation containing hazardous substances	17-06-01*, 03* & 05*
Organic (food) waste	20 01 08
Mixed Municipal Waste	20 03 01

**Table 3.1** Typical waste types generated and EWCs (individual waste types may contain hazardous substances)

## 4.0 WASTE MANAGEMENT

### 4.1 Demolition Waste Generation

Demolition works at the site will involve the demolition of the existing structures and hard standing areas on site. Demolition figures published by the EPA in the 'National Waste Reports' <sup>14</sup> and data from previous projects have been used to estimate the approximate break-down for indicative reuse (offsite), recycling and disposal targets of demolition waste. Estimates have been based on the building areas supplied by the project quantity surveyors This breakdown is shown in Table 4.1.

Waste Type	Tonnes	Reuse/Recovery		Recycle		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Glass	25.4	0	0.0	85	21.6	15	3.8
Concrete, Bricks, Tiles, Ceramics	1449.5	30	434.9	65	942.2	5	72.5
Plasterboard	101.7	0	0.0	80	81.4	20	20.3
Asphalts	228.8	0	0.0	25	57.2	75	171.6
Metal	381.3	5	19.1	80	305.1	15	57.2
Slate	203.4	0	0.0	85	172.9	15	30.5
Timber	305.1	10	30.5	60	183.0	30	91.5
<b>Total</b>	<b>2695.2</b>		<b>484.4</b>		<b>1763.3</b>		<b>447.5</b>

**Table 4.1** Estimated off-site reuse, recycle and disposal rates for demolition waste

The appointed demolition contractor will be required to prepare a detailed demolition management plan prior to work commencing which should refine the above estimated worst case waste figures.

#### **4.2 Construction Waste Generation**

There will be no construction associated with this phase of the development. A separate Construction and Demolition Waste Management Plan (C&D WMP) will be prepared to cover the construction and excavation phases of the development.

#### **4.3 Proposed Waste Management Options**

Waste materials generated will be segregated on site, where it is practical. Where the on-site segregation of certain waste types is not practical, off-site segregation will be carried out. Due to space restrictions onsite, it is expected that most segregation will occur offsite at the waste contractors licensed waste facilities. There will be skips and receptacles provided to facilitate segregation at source where feasible. All waste receptacles leaving site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. There are numerous waste contractors in the Dublin Region that provide this service.

All waste arising's will be handled by an approved waste contractor holding a current waste collection permit. All waste arising's requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

Some of the sub-contractors on site will generate waste in relatively low quantities. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (Ref. Article 30 (1) (b) of the Waste Collection Permit Regulations 2007 as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste offsite in their work vehicles (which are not designed for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s) detailing the waste arising throughout the demolition phase, the classification of each waste type, waste collection permits for all waste contractors who collect waste from the site and COR/permit or licence for the receiving waste facility for all waste removed off site for appropriate reuse, recycling, recovery and/or disposal.

Dedicated banded storage containers will be provided for hazardous wastes which may arise such as batteries, paints, oils, chemicals etc, if required.

The management of the main waste streams is outlined as follows:

##### Soil, Stone, Gravel and Clay

There will be no excavated material moved offsite as part of this phase of the development

##### Bedrock

It is not anticipated that bedrock will be encountered during this phase of this development.

##### Silt & Sludge

During the demoltion phase, silt and petrochemical interception should be carried out on runoff and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed offsite.



### Concrete Blocks, Bricks, Tiles & Ceramics

The majority of concrete blocks, bricks, tiles and ceramics generated as part of the demolition works are expected to be clean, inert material and should will be recycled, where possible.

### Hard Plastic

As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

### Timber

Timber that is uncontaminated, i.e. free from paints, preservatives, glues etc., will be disposed of in a separate skip and recycled off-site.

### Metal

Metal will be segregated and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

### Plasterboard

There are currently a number of recycling services for plasterboard in Ireland. Plasterboard from the demolition and construction phases will be stored in a separate skip, pending collection for recycling.

### Glass

Glass materials will be segregated for recycling, where possible.

### Waste Electrical and Electronic Equipment (WEEE)

Any WEEE will be stored in dedicated covered cages/receptacles/pallets pending collection for recycling.

### Other Recyclables

Where any other recyclable wastes such as cardboard and soft plastic are generated, these will be segregated at source into dedicated skips and removed off-site.

### Non-Recyclable Waste

Demolition waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip/receptacle will be examined by a member of the waste team (see Section 7.0) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

### Asbestos Containing Materials

A Refurbishment and Demolition Asbestos Survey was be undertaken by Phoenix Environmental Safety Ltd. in March 2019. The survey was carried out for the purpose of identifying and managing any ACMs on the premises. ACMs were identified in multiple locations including in roofing slate, floor tiles and pipe work. A full list of ACMs identified by Phoenix Environmental Safety LTD. can found within their report submitted with the planning application.

The ACMs and suspected ACMs identified by the Asbestos survey will be required to be removed by a suitably trained and competent person prior to commencement of demolition works. ACMs will only be removed from site by a suitably permitted waste haulier and will be brought to a suitably licenced facility. Where required, the HSA should be contacted in relation to the handling of asbestos and material should be dealt

with in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006*, as amended and associated approved Codes of Practice. The contractor will also be required to refer to the *Construction & Demolition Management Plan* in relation to asbestos identification and removal.

#### Other Hazardous Wastes

If any other hazardous wastes are found efforts on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise potential for environmental impacts. Hazardous wastes will be recovered, wherever possible, and failing this, disposed of appropriately.

#### **4.4 Tracking and Documentation Procedures for Off-Site Waste**

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project Waste Manager (see Section 7.0).

All movement of waste and the use of waste contractors will be undertaken in accordance with the *Waste Management Acts 1996 - 2011*, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project Waste Manager (see Section 7.0) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR/permit or EPA Waste/IE Licence for that site will be provided to the nominated project Waste Manager (see Section 7.0). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the relevant authority on behalf of all local authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on site.

#### **5.0 ESTIMATED COST OF WASTE MANAGEMENT**

An outline of the relative costs associated with different aspects of waste management is provided below.

The total cost of demolition waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

##### **5.1 Reuse**

By reusing materials on site, there will be a reduction in the transport and recycle/recovery/disposal costs associated with the requirement for a waste contractor to take the material off-site.

##### **5.2 Recycling**

Salvageable metals will earn a rebate which can be offset against the costs of collection and transportation of the skips.

Clean uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated wastes, such as recyclable waste, from a site than to take mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated wastes such as timber from a site than to take mixed waste.

### **5.3 Disposal**

Landfill charges in the Leinster region are currently at around €130 - €150 per tonne (2020) which includes a €75 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015*. In addition to disposal costs, waste contractors will also charge a collection fee for skips.

Collection of segregated demolition waste usually costs less than municipal waste. Specific demolition waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill.

## **6.0 DEMOLITION PROCEDURES**

The demolition stage will involve the removal of some of the existing structures and hard standing areas. A formal demolition plan should be prepared for the site; however, in general, the following sequence of works should be followed during the demolition stage.

### **6.1 Check for Hazards**

Prior to commencing works, buildings and structures to be demolished will be checked for any likely hazards including asbestos, ACMs, electric power lines or cables, gas reticulation systems, telecommunications, unsafe structures and fire and explosion hazards, e.g. combustible dust, chemical hazards, oil, fuels and contamination.

### **6.2 Removal of Components**

All hazardous materials will be removed first. All components from within the buildings that can be salvaged will be removed next. This will primarily include metal however may also include timbers, doors, windows, wiring and metal ducting, etc.

### **6.3 Removal of Roofing**

Steel roof supports, beams etc. will be dismantled and taken away for recycling/salvage.

### **6.4 Excavation of Services, Demolition of Walls and Concrete**

Services will be removed from the ground and the breakdown of walls will be carried out once all salvageable or reusable materials have been taken from the buildings. Finally, any existing foundations and hard standing areas will be excavated.

## **7.0 TRAINING PROVISIONS**

A member of the construction team will be appointed as the project Waste Manager to ensure commitment, operational efficiency and accountability during the demolition phase of the project.

## 7.1 Waste Manager Training and Responsibilities

The nominated Waste Manager will be given responsibility and authority to select a waste team if required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site. The waste manager will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the waste manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The waste manager will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The waste manager will also be trained in the best methods for segregation and storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this DWMP.

## 7.2 Site Crew Training

Training of site crew is the responsibility of the Waste Manager and, as such, a waste training program should be organised. A basic awareness course will be held for all site crew to outline the DWMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Areas (WSAs). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

## 8.0 RECORD KEEPING

Records should be kept for all waste material which leaves the site, either for reuse on another site, recycling or disposal. A recording system will be put in place to record the waste arising's on site.

A waste tracking log should be used to track each waste movement from the site. On exit from the site the waste collection vehicle driver should stop at the site office and sign out as a visitor and provide the security personnel or waste manager with a waste docket (or WTF for hazardous waste) for the waste load collected. At this time, the security personnel should complete and sign the Waste Tracking Register with the following information:

- Date
- Time
- Waste Contractor
- Company waste contractor appointed by e.g. Contractor or subcontractor name
- Collection Permit No.
- Vehicle Reg.
- Driver Name
- Docket No.
- Waste Type
- EWC/LoW

The waste transfer dockets will be transferred to the site waste manager on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the DCC Waste Regulation Unit as requested.

Alternatively, each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste docket/WTF maintained on file and available for inspection on site by the main contractor as required.

A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licences will be maintained on site at all times. Subcontractors who have engaged their own waste contractors, should provide the main contractor with a copy of the waste collection permits and COR/permit/licence for the receiving waste facilities and maintain a copy on file available for inspection on site as required.

## **9.0 OUTLINE WASTE AUDIT PROCEDURE**

### **9.1 Responsibility for Waste Audit**

The appointed waste manager will be responsible for conducting a waste audit at the site during the Demolition phase of the development.

The nominated Waste Manager is:

Name: Fergal Duffy

Company: Chartered Land.

Contact Number: +353 (0) 86 8166419

Email: [fduffy@charteredland.ie](mailto:fduffy@charteredland.ie)

### **9.2 Review of Records and Identification of Corrective Actions**

A review of all the records for the waste generated and transported off-site should be undertaken mid-way through the project. If waste movements are not accounted for, the reasons for this should be established in order to see if and why the record keeping system has not been maintained. The waste records will be compared with the established recovery/reuse/recycling targets for the site.

Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved.

Waste management costs will also be reviewed.

Upon completion of the Demolition phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling/reuse/recovery figures for the development.

## **10.0 CONSULTATION WITH RELEVANT BODIES**

### **10.1 Local Authority**

Details of the proposed destination of each waste stream are provided in Tables 10.1. Confirmation Letters from waste contractors can be found in appendix A of this document.

DCC will also be consulted, as required, throughout the demolition phase in order to ensure that all available waste reduction, reuse and recycling opportunities are identified and utilised and that compliant waste management practices are carried out.

European Waste Code	Waste Material Description	Waste Collection Company & Waste Collection Permit Reference	Waste Destination Company Name	Waste Destination Company Address & Waste Facility License Reference
17 04 01-07	Metals	Thorntons Recycling <b>NWCPO-09-01190-05</b>	Padraig Thornton Waste Disposal Limited	Thorntons Recycling Centre, Killeen Road, Ballyfermot, Dublin 10. <b>W0044-02</b>
17 09 04	Mixed C&D Waste	Thorntons Recycling <b>NWCPO-09-01190-05</b>	Padraig Thornton Waste Disposal Limited	Thorntons Recycling Centre, Killeen Road, Ballyfermot, Dublin 10. <b>W0044-02</b>
17 01 01-03 & 07	Concrete, bricks, tiles, ceramics	Thorntons Recycling <b>NWCPO-09-01190-05</b>	Padraig Thornton Waste Disposal Limited	Thorntons Recycling Centre, Killeen Road, Ballyfermot, Dublin 10. <b>W0044-02</b>
17 08 02	Plasterboard	Thorntons Recycling <b>NWCPO-09-01190-05</b>	G&J O'Neill Enterprises Ltd	Unit 74A Naas Industrial Estate, CO Kildare <b>WFP-KE-15-0080-01</b>
17 06 01* & 05	Asbestos	TBC	TBC	TBC

**Table 10.1** Predicted waste types, quantities and destinations (Demolition)

## 10.2 Recycling/Salvage Companies

The appointed waste contractor for the main waste streams managed by the demolition contractors will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations/permits/licences are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling/reclamation, the means by which the wastes will be collected and transported off-site and the recycling/reclamation process each material will undergo off site.

## 11.0 REFERENCES

1. Waste Management Act 1996 (No. 10 of 1996) as amended. Sub-ordinate and associated legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended.
  - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended.
  - Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. No. 821 of 2007) as amended.
  - Waste Management (Licensing) Regulations 2000 (S.I. No. 185 of 2000) as amended.
  - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended.
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended.
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
  - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
  - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended.
  - Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended.
  - European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 191 of 2015)
  - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended.
  - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended.
  - The European Communities (Transfrontier Shipment of Hazardous Waste) Regulations 1988 (S.I. No. 248 of 1988)
  - European Communities (Shipments of Hazardous Waste exclusively within Ireland) Regulations 2011 (S.I. No. 324 of 2011)
  - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
2. Protection of the Environment Act 2003, (No. 27 of 2003) as amended.
3. Litter Pollution Act 1997 (S.I. No. 12 of 1997) as amended
4. Eastern-Midlands Region Waste Management Plan 2015 – 2021 (2015).
5. Department of Environment and Local Government (DoELG) *Waste Management – Changing Our Ways, A Policy Statement* (1998).
6. Forum for the Construction Industry – *Recycling of Construction and Demolition Waste*.
7. Department of Environment, Communities and Local Government (DoECLG), *A Resource Opportunity - Waste Management Policy in Ireland* (2012).
8. Department of Environment, Heritage and Local Government, *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects* (2006).
9. FÁS and the Construction Industry Federation (CIF), *Construction and Demolition Waste Management – a handbook for Contractors and Site Managers* (2002).
10. Dublin City Council (DCC), *Dublin City Development plan 2016-2022* (2015)
11. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended
12. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2015)

13. Council Decision 2003/33/EC, establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC.
14. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2012*.
15. EPA and Galway-Mayo Institute of Technology (GMIT), *EPA Research Report 146 – A Review of Design and Construction Waste Management Practices in Selected Case Studies – Lessons Learned (2015)*.



**APPENDIX A**

**Waste Facility Conformation Letters**

10<sup>th</sup> December 2020

To Whom it May concern

Padraig Thornton Waste Disposal Ltd t/a Thorntons Recycling can confirm that we will accept all non hazardous waste from Parkgate Street into our licenced facility at Killeen Road Ballyfermot, waste licence no. W0044-02

Estimate Figures are as follows;

MMW: 548.1 tonne

C&D 170.2 tonne

Wood: 85.3 tonne



Regards

Niamh Clonan

Planning Registry & Decisions, Planning Department  
Civic Offices, Wood Quay, Dublin 8

Clárlann / Cinntí Pleanála  
An Roinn Pleanála agus Forbartha, Clárlann / Cinntí  
Oifigí na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8  
T: (01) 222 2149

Niamh Robinson / Niall Connolly  
Stephen Little & Associates  
26/27 Upper Pembroke Street  
Dublin 2  
D02 X361

24-Mar-2021

**Application No:** SHD0001/20Sub08  
**Application Date:** 18-Dec-2020 & 15-Feb-2021  
**Proposal:** Condition 30  
**Location:** 42A, Parkgate Street, Dublin 8  
**Final Grant Date:** 28-May-2020

**IMPORTANT NOTE:**

Please be advised that from Monday 15/06/20 a compliance submission can only be submitted in pdf format and by e- mail to [compliances@dublincity.ie](mailto:compliances@dublincity.ie)

To Whom It May Concern,

The Planning Authority hereby informs you that the details submitted by you are satisfactory and in compliance with Condition 30 and are acceptable to the Planning Authority.

Copies of the relevant report(s) are attached for your information.

**Note to Applicant: For the avoidance of doubt, any modifications to the permitted development, contained on any drawings and documentation lodged as 'compliance', which are not required pursuant to conditions of a planning permission, should not be construed as being assessed and/or authorised by way of showing any such modifications, etc., on drawings and documentation lodged as 'compliance'.**

Yours faithfully

Jane Burke

---

For Administrative Officer