



**Ann Street, St Helier, Jersey**

**Site Waste Management Plan  
(SWMP)**

**(Rev 1)**

## **Table of Contents**

<b>1. Introduction</b> .....	<b>3</b>
1.1 Objectives .....	4
1.2 Terminology .....	5
<b>2.0 Site Description</b> .....	<b>7</b>
2.1 Location .....	7
2.2 Previous Uses .....	7
2.3 Existing Buildings and Structures .....	7
2.4 Overview of Ground Conditions .....	7
2.5 Overview of Development Proposals .....	7
<b>3.0 Demolition</b> .....	<b>8</b>
3.1 Uses of Recycled Demolition Material .....	8
<b>4.0 Excavations</b> .....	<b>10</b>
4.1 Introduction .....	10
4.2 Survey Information .....	10
4.3 Groundwater .....	11
<b>5.0 Importation of fill material</b> .....	<b>11</b>
5.1 Contamination Prevention .....	11
5.2 Recycled Aggregate .....	11
<b>6.0 Quantitative Evaluation</b> .....	<b>12</b>
<b>7.0 Minimising waste production</b> .....	<b>15</b>
7.1 Introduction .....	15
7.2 Potential options for minimising waste production .....	15
7.3 Recycled materials and sustainability .....	17
7.4 Contamination Prevention .....	17
<b>8.0 Disposal Options: Local Waste Management Facilities</b> .....	<b>17</b>
<b>9.0 Waste Management Implementation</b> .....	<b>18</b>
9.1 Introduction .....	18
9.2 Roles and Responsibilities .....	18
<b>10.0 Type and Suggested Provisions for Operational Waste</b> .....	<b>22</b>
10.1 General .....	22
10.2 Existing Municipal Waste Services .....	22
10.3 Domestic Provisions .....	23
10.4 Refuse Strategy .....	23
10.5 Off-site destinations of Domestic Waste .....	23
<b>11.0 Conclusions</b> .....	<b>24</b>

## **1. Introduction**

The Client and Principle Contractor will take all reasonable steps to ensure that:

- All waste from the site is dealt with in accordance with the 'Waste Management (Jersey) Law', 2005;
- Materials will be handled efficiently and waste managed appropriately in accordance with this and any subsequently approved Site Waste Management Plan (SWMP); and
- No demolition or construction works are commenced on-site until planning permission has been granted to develop the land and a fully detailed SWMP has been submitted and approved, in accordance with Island Plan Policy WM1 and the associated planning guidance.
- Following completion of the demolition works, a 'Post Completion Statement', giving details of the actual waste generation and its final destinations, whether recycled, re-used or disposed of, will be provided.

This document provides the working plan of the waste management to be employed at this development and where necessary will be updated as new techniques, technologies or opportunities become available as the development evolves through the planning and/or construction phases to provide for any new or unforeseen circumstances.

Effective waste management is now a crucial element of the planning process.

The Bridging Island Plan (March 2022) address the issue of site waste and in doing so, reflects the general aims of the States' approved 'Solid Waste Strategy' and the internationally accepted 'Waste Hierarchy'. It also seeks to achieve a reduction in construction and demolition waste from that presently produced, an increase in reuse and recycling of waste, the increasing diversion of waste from landfill and a reduction in the requirements for non-renewable resources during a construction build. The formulation and implementation of SWMPs are regarded as an essential and practical tool in addressing these objectives.

In accordance with policies of the Bridging Island Plan (March 2022), a Site Waste Management Plan will therefore be required as an integral part of any planning application for sizeable developments.

This SWMP has been prepared in accordance with Supplementary Planning Guidance advice note "Site waste management plans", September 2013.

## 1.1 Objectives

This waste management plan is intended to outline how the Client and Principle Contractor will take positive action in reducing the amount of waste produced from demolition, excavation and construction works during the development process. As part of this, the presence, removal, handling and safe disposal of any contaminants or hazardous waste as outlined in 'Waste Management (Jersey) Law 2005' that may be created or exposed in the development process will be outlined.

The overall objective of this SWMP is to:-

- Identify, as far as possible, the volume and nature of material that will arise from the clearing and preparing of a site ready for development (including any imported material).
- Detail how this material is to be re-used or disposed of.
- Give input into the design process to suggest ways of reducing the dependence on imported materials and minimising waste production through 'green specification' and detailing.
- Review the potential to organise the site set up in such a way as to facilitate waste minimisation.
- Identify the various elements and sources of waste from the construction process.
- Detail how this material is to be re-used or disposed of.
- Identify possible sources of hazardous waste, contaminated elements and potential pollution sources.
- Detail how these materials and potential pollution sources will be disposed of, remediated or eliminated.
- Identify the operational waste output from the completed development.
- Detail how this will be handled and disposed of and outline any onsite or local collection and recycling facilities.
- Provide a base from which post demolition and post construction feedback may be given.

## 1.2 Terminology

The following definitions have been taken for consistency throughout this report; they are generally accepted throughout the industry, and referenced in the SWMP SPG but are occasionally misquoted hence they are detailed here for clarification:

**Aggregates** – Sand, gravel and crushed rock and other bulk materials which are suitable for use in the construction industry as concrete, mortar, finishes, or roadstone, or for use as a construction fill.

**Controlled Waste** – as defined in the Waste Management (Jersey) Law 2005, means hazardous waste, health care waste and municipal waste.

**Disposal** – The eventual disposal of all waste that cannot be reused or recycled.

**Energy from Waste** – the combustion of waste under controlled conditions in which the heat released is recovered usually in the form of electricity generation.

**Hazardous Waste** – Waste that is harmful to human health or the environment if improperly contained, handled, treated, or disposed of. This includes wastes which are corrosive, explosive, flammable, infectious, carcinogenic, teratogenic, mutagenic, ecotoxic and prone to releasing toxic gases or producing leachate after disposal. Examples include asbestos, bulk chemicals, contaminated soil and paint tins.

**Incineration** – the controlled burning of waste to reduce volume.

**Inert Waste** – Waste which is stable in the presence of normal biological and chemical agents. As such, it will not undergo any significant physical, chemical or biological transformation, nor will it harm or cause adverse effects to the environment. Examples include sub-soils, concrete, brick and stone.

**Landfill** – The deposit of waste material onto or into land in order to dispose of it.

**Leachate** – Contaminated liquid which can seep from a landfill site.

**Licensed Site** – A waste disposal or treatment facility which is licensed under the Waste Management (Jersey) Law 2005.

**Non-Hazardous Waste** – Waste which will break down / decompose when buried, resulting in the production of landfill gases such as methane and carbon dioxide. Examples include timber, paper and cardboard.

**Non-inert waste** – Waste which is not considered inert, consisting of bio-degradable and combustible waste and other waste material such as plastic, grit and dust.

**Re-Use** - When reclaimed materials can be used again in the same form with minimal reprocessing (e.g. de-nailing timber joists for re-use as timber joists).

**Recycling** – Recovering re-usable materials from waste or using waste material for a positive purpose.

**Recovery** – When reclaimed waste materials are processed or disposed of in a way that creates reusable by-products that replace other materials which would have to be used for that purpose, thereby conserving natural resources (e.g. composting green waste, or incinerating waste to extract usable energy).

**Registered Waste Carrier** – A person who has a valid letter of registration issued under Article 43 of the Waste Management (Jersey) Law 2005, which permits him or her to move hazardous or health care waste within Jersey.

**Residual Waste** – In common usage it means the fraction of collected waste remaining after a treatment step, which generally requires further treatment or disposal. In the context of this guidance it can also mean the leftover waste which cannot be prevented, reused, reclaimed or recovered and should be disposed of into the environment by controlled landfilling.

**Spoil** – Soil, rock or other ground materials excavated.

**Statutory Nuisance** – a nuisance is a state of affairs written in statute that seriously affects the enjoyment of someone's home or land (e.g. noise, dust, odour, smoke etc). The Statutory Nuisances (Jersey) Law 1999 is enforced by Environmental Health.

**Waste** – A wide-ranging term encompassing most material which is no longer wanted and requires to be disposed of (e.g. because it is broken, worn out, contaminated, or otherwise spoiled). It is defined in the Waste Management (Jersey) Law 2005 as: "any substance or object that is discarded; any substance or object in a person's possession or control that the person intends to discard; or any substance or object in a person's possession or control that the person is required by national law to discard."

**Waste hierarchy** – The waste hierarchy ranks the main waste management options in order of “environmental friendliness” as follows: Minimise waste; Re-use; Recycle; Recover; and Disposal to landfill as a last resort.  
Waste minimisation – measures and/or techniques that reduce the amount of wastes generated.

## **2.0 Site Description**

### **2.1 Location**

The proposed redevelopment of Anne Street Brewery and other associated properties is located within the parish of St Helier to the north east part of town.

The site is bounded to the north by Simon Place road and other existing properties, access is currently afforded from St Saviours road on the east of the site and to the west lies Ann Street road. There are multiple properties located immediately to the south and south-east, some of which include the Mayfair Hotel and De Quetteville Court apartments which are due to be demolished.

### **2.2 Previous Uses**

It is understood that brewery activities commenced at the Site in 1871 and ceased operation in 2004. 4/4a Simon Place and Sans Souci have also been unoccupied since 2004

A large portion of the Site was demolished in 2008 and converted into the car park that is currently present.

It is understood that the surrounding area has generally consistently been residential in nature, with some commercial premises.

### **2.3 Existing Buildings and Structures**

Sans Souci, Brew House, Brew House Office and stores, Belmont House and 12 Simon Place will be retained and refurbished as part of the scheme and following demolition of the remaining buildings.

### **2.4 Overview of Ground Conditions**

The Geotechnical Investigation showed soil samples in general, having a mild presence of anthropogenic material. A hydrocarbon odour was also reported within a sample which is not a surprise given the historic uses of the area on this brown field site.

Any contamination that is found during the course of the works however, would be remediated as detailed in the Demolition and Construction Environmental Management Plan that has been produced for this development.

### **2.5 Overview of Development Proposals**

The site currently comprises of a large hardstanding area which is used as a private car park. Multiple buildings that form the site have fallen into disrepair over the years and will require demolishing.

Sans Souci, Brew House, Brew House Office and stores, Belmont House and 12 Simon Place will be retained and refurbished as part of the scheme and following demolition of the remaining buildings, the proposed development will provide 262 residential dwellings in four apartment blocks that will range from four to seven stories in height. The scheme will include new plant rooms, cycling parking and refuse stores within the basement car park.

The proposal seeks to significantly improve upon not only the existing residential properties, but also the local amenity and communal spaces throughout with enhancements and creation of landscaped areas.

### **3.0 Demolition**

The proposals for the development of the site require the demolition of some existing building.

The largest element of the demolition waste will be the hardcore from the demolition of the various concrete, brick and block super-structures. Any suitable hardcore waste will be crushed within confines of the proposed site and used where possible within the development, forming temporary hardstanding's and a level foundation platform. Any surplus can be used for various site fill to mitigate the need for importing materials. Any further surplus can be used on other Dandara developments or utilised by the demolition contractor for fill elsewhere in the Island.

Before any demolition works begin an intrusive pre-demolition asbestos survey will be carried out in order to establish the presence of any asbestos containing materials in the existing buildings. Should any asbestos be identified, then the correct removal and disposal procedures will be implemented by an approved contractor removing the materials to the asbestos facility at La Collette for disposal.

#### **3.1 Uses of Recycled Demolition Material**

The following is an assessment of options which will be considered for the opportunity to recycle or re-use materials during the process of reclamation of the demolished materials from the existing buildings in order to minimise waste and landfill being removed from the site:-

##### **Drainage/Underground Utilities**

All new services trenches should be of a width suited to the depth and size of the buried services, thus avoiding the need to over-dig and backfill. Where suitable for use, the granular backfill around the buried services shall be provided from recycled demolition arising's.

##### **Primary Structure**

The predominant material arising from the demolition of the existing building's main structure is envisaged to be block, stone and concrete. The bricks, blocks and concrete can be crushed on site and used as fill and engineering materials whether temporary or permanent.

Any steelwork found can be transferred by the demolition contractor to France where it will be recycled.

Timber from the structures will be segregated where possible. Structural timbers can be segregated for re-use off site in alternative uses as the grading could not be used on new structures given building byelaw regulation requirements, or recovered as energy at the Energy from Waste plant.

##### **Glass**

Glass can be recycled and used in many forms examples are given below:

Recycled aggregate in concrete

Granular backfill or bedding material for pipes and paving stones

Granular sub-base material in road construction

Further information on the above and other recyclable materials can be found at the following website:

[www.wrap.org.uk](http://www.wrap.org.uk)



Unfortunately, such recycling facilities are unavailable in the island and therefore the glass will be separated and removed from site to be deposited at the aggregate recycling centre at La Collette reclamation site where it is used as an aggregate or as an engineered lining for the outer sea wall.

## **Windows**

The windows from some of the buildings are the original timber frames and will have the glass removed, leaving the frames to be disposed of offsite. Their condition and thermal inefficiency does not allow their re-use.

## **Roofing materials**

The roof of most of the properties to be demolished have a slate or tile finish which can be removed and re-used where they are of good condition.

## **Plumbing and cabling**

Copper and lead are to be routinely stripped out of the buildings prior to demolition for off-site recycling. The metal ductwork for the air-conditioning system shall be separated for recycling.

## **Fixtures and fittings**

Any existing freestanding furniture such as beds and wardrobes will be recycled where possible, however the buildings marked for demolition have been empty and free from furniture for some time.

## **External Works**

There are no specific external works, other than potentially some sheds and overgrown gardens.

## **4.0 Excavations**

### **4.1 Introduction**

The surplus material gained from the excavation of the basement and foundation works will be removed to the recycling facility at La Collette.

There will be minimum spoil produced from any service trenches required within the development area to form connections with public services outside the site boundary as well as spoil produced from external landscaping works. Where it is not possible to reuse this material within the site it will be removed to the recycling facility at La Collette.

### **4.2 Survey Information**

Given the sites previous uses and understanding the findings of the Geotechnical Investigation carried out, it is anticipated that there is a potential to uncover some contaminants within the soil arisings when excavating.

Any contamination found during the excavation will be remediated in accordance with our contamination discovery strategy detailed within the Demolition Construction Environmental Management Plan.

### **4.3 Groundwater**

Findings from the Geotechnical investigation identify the groundwater to be approximately 1.4m above basement level and notes any dewatering would have to be carried out cautiously to avoid the risk of settlement arising from groundwater lowering.

The report further details considerations for groundwater and discusses systems to control ground water both during construction and for the completed project as well as site drainage, soakaways and contamination.

### **5.0 Importation of fill material**

Any fill material brought into the site shall be clean and free from contaminants and deemed suitable for engineering purposes by the development engineer. A key source of fill may include concrete, brick and block crushed arising's from the demolition process. This process will create a significant reduction in waste produced by the development and thus ease the pressure on the Island's waste disposal centres.

### **5.1 Contamination Prevention**

As a requirement of all SWMPs undertaken, certain materials are to be screened at the source and disposed of safely by the contractor responsible. Waste materials are to be segregated as well as secured or banded as appropriate and the suitability of the material for its destination site is to be assessed before it is transported for appropriate onward disposal.

### **5.2 Recycled Aggregate**

The use of recycled materials for coarse aggregate in structural concrete is now permitted under the criteria set out in BS8500 parts 1 and 2. There are two classifications for recycled aggregate, RA and RCA. The former stands for Recycled Aggregate and is the use of crushed 'inorganic material previously used in construction' and can be relatively impure (i.e. including brickwork, blockwork, render, glass etc). The latter stands for Recycled Concrete Aggregate and has tighter tolerances on the percentage fines and brick dust content. In Jersey there is the unusual situation where granite blocks are commonly recovered from demolition arising's. Under the requirements of BS8500, these would need to be classed as RA (i.e. lower quality) as they are not the arising's of crushed concrete. In reality they will produce a coarse aggregate of higher quality than either RA or RCA as they are akin to virgin aggregate.

Until such time as the Island's manufacturers of concrete begin to utilise re-cycled aggregates in new concrete production, excavation and demolition arising's cannot be used in this process.

Ronez can produce a form of recycled block from any concrete left over from ready mix deliveries or returned blocks; demolition waste and recycled aggregates from other sources still cannot be used. Unfortunately, the process to produce the block is limited to small quantity runs. As a result, its use on a large scale is commercially unviable.

However, the use of recycled crushed aggregates for engineering fill materials is now commonplace throughout the island and it will be unusual for any fill required to be imported to not be a derivative of a recycled aggregate.

## 6.0 Quantitative Evaluation

Estimates on the quantity of materials are to be confirmed following full site investigation.

Waste Materials	Estimated Quantity	Onsite re-use / recycling	Offsite re-use / recycling	Incineration and energy recovery	Disposal
(from demolition) Concrete blocks Plain concrete Reinforced concrete	(Estimated) 1000 m2 1000 m2 800 m3	<b>Crush and reuse on site as hardcore, fill and engineered piling mat – 100%</b>	<ul style="list-style-type: none"> <li>- Segregate and reuse as hardcore or fill</li> <li>- Segregate and sell to building or waste management contractor for recycling and onward sale to the construction industry</li> </ul>		Final option
<b>Excavated material from basement</b>	<b>(Estimated) 9050m3</b>	<b>Retain and reuse on site where possible as backfill/ site levelling.</b>			<b>To go to La Collette 98%</b>
Glass	(Estimated) 500 m2		<ul style="list-style-type: none"> <li>- <b>Segregate and send to waste management contractor at La Collette for crushing and recycling as aggregate. – 100%</b></li> <li>- Possible future option of segregating and selling to concrete and road surface asphalt providers for crushing to use as aggregate replacement</li> </ul>		Final option
Sand	N/A	Reuse as fill	<ul style="list-style-type: none"> <li>- Segregate and reuse as fill</li> <li>- Send to building or waste management contractor for recycling and onward sale to the construction industry</li> </ul>		Final option
Soil – (uncontaminated)	(Estimated) TBC following site investigation	<b>Set aside for reuse in gardens and landscaped areas, or as backfill. – 0%</b>	<ul style="list-style-type: none"> <li>- <b>Segregate and reuse for landscaping and as backfill – 100%</b></li> <li>- Sell to waste management contractor for recycling.</li> <li>- Sell to landscape gardener, or quarry operator for reuse in landscaping and land restoration</li> </ul>		Final option
Stone – Granite	Minimal	<ul style="list-style-type: none"> <li>- Reuse in walls and other built features</li> <li>- Crush and reuse as hardcore</li> </ul>	<ul style="list-style-type: none"> <li>- Segregate and reuse in walls and built features.</li> <li>- Sell to building or waste management contractor for recycling and reuse in construction industry, or land restoration.</li> </ul>		Final option

Tarmac	2000 M2	Use planings in new tarmac	<ul style="list-style-type: none"> <li>- Sell to building or waste management contractor for recycling.</li> <li>- Sell to a road surface asphalt provider for reuse in tarmac manufacture.</li> </ul>		Final option
<b>Waste materials</b>	<b>Estimated Quantity</b>	<b>Onsite re-use / recycling</b>	<b>Offsite re-use / recycling</b>	<b>Incineration and energy recovery</b>	<b>Disposal</b>
Cable wiring	(Estimated) 500 m		Segregate and send for recycling to recover high value metals – 100%		
Metals – Steel frame External cladding	(Estimated) 15 m3 N/A m2	Reuse in temporary works on site	Segregate ferrous and non-ferrous metals and send to scrap merchants for recycling. – 100%		
Pallets	(Estimated) N/A	Reuse for storage and movement of materials on site – 100%	<ul style="list-style-type: none"> <li>- Reuse pallets elsewhere</li> <li>- Sell to a pallet recovery operator to separate out reusable pallets and breakdown others into kindling wood</li> <li>- Send for shredding and recycling.</li> </ul>		
Paper	(Estimated) N/A	Use for scrap notepaper – 10%	Segregate and send to waste recycling contractor. – 90%	Final option	
Plasterboard	(Estimated) 5 tonne	Provide dedicated space for off-cuts and reuse	<ul style="list-style-type: none"> <li>- Return waste to supplier</li> <li>- Send to approved site for recycling (i.e. by removing nails, screws and paper from the gypsum core, crushing the gypsum to a fine powder and using it as a substitute for virgin gypsum). – 100%</li> </ul>		Final option
Timber	(Estimated) 600 m	<ul style="list-style-type: none"> <li>- Salvage more valuable timber for reuse (e.g. roof and floor joists, floorboards).</li> <li>- Reuse onsite for shuttering, shoring, framing, temporary hoardings etc.</li> </ul>	<ul style="list-style-type: none"> <li>- De-nail more valuable timber and sell to builders for reuse.</li> <li>- Sell to waste management contractor for recycling or onward sale of reclaimed timber. – 100%</li> </ul>	Final option	
Roof tiles	(Estimated) 800 m2		Sell to building or waste management contractor for recycling.		Final option
Trees and vegetation	N/A	<ul style="list-style-type: none"> <li>- Shred / chip onsite for landscaping (e.g. mulch for planting areas)</li> <li>- Compost on site for landscaping</li> </ul>	Send to La Collette for shredding and composting (for soil improver).		
<b>Waste materials</b>	<b>Estimated Quantity</b>	<b>Onsite re-use / recycling</b>	<b>Offsite re-use / recycling</b>	<b>Incineration and energy recovery</b>	<b>Disposal</b>

Re-useable items and furnishings (e.g. soft furnishings radiators, sanitary ware)	(Estimated) 10 m3		<ul style="list-style-type: none"> <li>- <b>Sell to second-hand dealers – 80%</b></li> <li>- Organise “giveaway” event before any buildings are demolished.</li> </ul>	<b>Final option, depending on item – 20%</b>	
Carpets	(Estimated) 800 m2		<ul style="list-style-type: none"> <li>- <b>Sell to second-hand dealers – 50%</b></li> </ul>	<b>Final option, depending on item – 50%</b>	
Flat roof coverings (Ruberoid)	(Estimated) 800 m2			<b>Final option, depending on item – 100%</b>	
Asbestos	(Estimated) Unknow until asbestos survey undertaken				<b>Special Waste to La Collette – 100%</b>
Contaminated soil	(Estimated) N/A	Remediate onsite and reuse material	<ul style="list-style-type: none"> <li>- Possible future option to segregate and send to a licensed contractor in Jersey to remediate or dispose of.</li> <li>- For some very specific heavy industry sites (e.g. gasworks), segregate and send off-Island to a licensed waste management contractor to remediate.</li> </ul>		Controlled landfill, off island

## **7.0 Minimising waste production**

### **7.1 Introduction**

The environmental impact of construction is considerable. Over 5% of the UK CO<sub>2</sub> emissions arise from the production of building materials. The manufacture and transport of materials accounts for approximately 10% of all UK energy production. This is likely to be a greater percentage for Jersey since transportation requirements are more onerous. It is the awareness of these statistics that have encouraged designers and other construction professionals to take a more environmentally responsible approach to the selection and specification of materials. The key factors considered when selecting imported materials are: Climate change e.g. CO<sub>2</sub> emissions, Fossil fuel depletion, ozone depletion e.g. careful selection of insulation, human toxicity to air and water, ecotoxicity, waste disposal, water extraction, acid deposition and eutrophication.

### **7.2 Potential options for minimising waste production**

There are opportunities to minimise waste at various stages during the development process. Examples of options which will be available are included in the Table below. As a design and build developer, Dandara are able to control all aspects of the following consideration. This is not intended to be exhaustive: -

<b>Element</b>	<b>Actions</b>	<b>Intended implementation</b>
<b>Design</b>	Making use of off-site prefabrication / pre-assembly as part of the overall design	N/A – not viable on small scale developments such as this due to transportation costs to the Island
	Designing to sizes that correspond to standard dimensions for sheet materials (e.g. plasterboard) and modules of components.	Using Dandara’s in-house design teams, this is implemented for every element of the construction, to the extent that bathrooms are designed/wall tiling sizes specified to suit to reduce the cutting of the tiles. Wall studwork is set out to allow for standard width insulation to be placed within it without cutting and ceiling heights are set to allow for full sheets of plasterboard to remove a requirement to cut to size.
	Allowing for specification of recycled materials in the design.	Aggregates such as piling matt and concrete are manufactured from recycled product along with some paving products. There are now also a variety of products and materials used in new construction which are part produced and manufactured using recycled materials.
	Designing for future recycling and ease of disassembly.	This also forms part of the Management in Construction (Jersey) Regulations 2016 and is therefore considered when undertaking the design.
	Reducing volumes of spoil by balancing the volume of any cut material (from foundations, service trenches, re-contouring) against the volume of reusable fill material (e.g. for land re-profiling, visual / noise bunds etc).	The existing site levels shall be taken into account at the design stage so to reduce the amount of spoil generated wherever possible.
	Incorporate existing trees and vegetation and features into the landscape and external works design.	Following an ecological report, various measures to improve the surrounding landscaped area will be incorporated into the development to improve the local ecology.

	Containing and managing contaminated land in situ, where practicable.	Follow the contamination discovery strategy outlined in the DCEMP.
<b>Procurement</b>	Reduce surplus / waste materials by correct ordering (i.e. specifying correct volume, amount, size etc).	Dandara's internal Quantity Surveying teams measure required material quantities for procurement to ensure the ordered quantities are accurate and waste is minimised. This of course is cost efficient for the business and is therefore company policy for all materials.
	Reduce packaging waste by asking suppliers to send product with minimal packaging.	Minimal packing is requested from suppliers, however due to transportation generally being from the UK this is often unavoidable to allow for adequate protection. Recyclable packaging is however provided.
	Reduce packaging waste by buying in bulk, rather than individually wrapped products.	Due to the scale of the development, this is always undertaken.
	Procure sheet materials pre-cut to design specifications.	Ceiling plasterboard is purchased in half board sizes to reduce wastage and risk of damage when cutting full board to size.
	Secure agreement to return damaged products to suppliers.	Dandara's company policy requires that materials are inspected and checked prior to delivery to ensure that there is no damage. In the event a damaged product is received, these are returned to the supplier as a credit is obtained.
	Set up just-in-time delivery of materials arriving to site, to help prevent damage through inadequate storage and weather conditions.	Due to the lack of storage space on most development sites, deliveries are timed to suit the construction programme to negate on site storage requirements and weather damage.
<b>Contracts</b>	Using contract specifications for subcontractors that require implementation of waste minimisation practices.	Dandara employ the majority of tradesmen for their developments and are therefore able to directly control waste minimisation. Relevant waste minimisation provisions are included within the contract documentation of any subcontractors that are utilised.
<b>On-site</b>	Segregate excavated contaminated soils to avoid cross contamination.	The separation of all waste materials is employed on all sites to ensure the most cost-efficient waste disposal methods are employed.
	Using staff induction to promote waste minimisation.	The site supervision team, based full time on each development site actively control and direct appropriate waste management practices on all developments.
	Storing pallets which arrive with imported materials until there are sufficient numbers to make collection or return to supplier economical.	All blue coloured 'European' pallets are returned back to the haulage company at Jersey's dockside. Any other pallets are collated and a specific contractor paid to collect these for onward recycling.
	Minimising timber waste by using re-useable steel shuttering for concrete work (or re-using timber for shuttering).	Any timber offcut of use is retained for secondary use on site where possible prior to final disposal if required.
	Planning base excavations and concrete pours so that any surplus concrete can be used as blinding.	All concrete pours are calculated for specific delivery sizes to ensure that wastage is negligible, if any. Concrete is an expensive commodity.



### **7.3 Recycled materials and sustainability**

The sustainability of the project is detailed within the Environmental Impact Statement and further through the Sustainability Report by Whitecode, outlining key sustainability features and requirements on delivering Ann Street as a sustainable scheme. Energy reduction through passive improvements, fabric energy efficiency, life cycle carbon assessments and renewable technologies has been identified.

As summarised in the above table, recycled material and products now form part of construction process. Blinding for hardscaping is derived from recycled aggregate and the envisaged piling matt will be won from the demolition of the existing buildings and crushed to size.

During our procurement phase for residential developments, we are now seeing more and more companies utilising recycled materials within their finished products. We will actively continue to, where possible, utilise these companies and finished products on the Ann Street Scheme to best offset our waste production.

### **7.4 Contamination Prevention**

As a requirement of all SWMPs undertaken, certain materials are to be screened at the source and disposed of safely by the contractor responsible. A typical procedure matrix is shown in Section 9, showing the roles and responsibilities of each participant in the demolition/construction process. All waste materials are segregated as well as secured or banded as appropriate and the suitability of the material for its destination site is assessed before it is transported.

### **8.0 Disposal Options: Local Waste Management Facilities**

The following is a list of ways in which waste materials that may be produced during the construction process may be managed using the existing facilities in Jersey. This information has been derived from discussions between several consultants, the States of Jersey Recycling Officer, the Department for Infrastructure and local demolition and recycling contractors.

- Masonry, Concrete, Tarmac, Clean sand, Glass etc. – In the event that any of these items may not be reused in the fill operations on site. The Aggregate Recycling Centre at La Collette Reclamation Site operated by A.A.L Recycling deals with the above materials and processes them for use as aggregate or used as fill in land reclamation schemes.
- Steelwork is fragmented and exported for recycling at the Metal Waste Facility, Hunt Bros.
- Non-Ferrous materials e.g. copper and lead and cables are readily purchased by private companies, e.g. Hunt Bros., for exporting to the UK market.
- Any Special Waste is taken to the Special Waste Disposal Facility at La Collette, where it is collected and transported to the UK.
- All other waste for disposal which cannot be recycled or used for landfill is taken to the Energy for Waste site at La Collette.
- Plasterboard is segregated from other site waste and recycled at the La Collette facility.
- Pallet boards are collected by Farm Fuels Ltd.

## **9.0 Waste Management Implementation**

### **9.1 Introduction**

This section sets out the site waste management procedures to be implemented during construction works.

The aim of these procedures is to;

- Ensure that the work is carried out in such a way that disposal of materials is limited and dealt with by best practice.
- Reduce the amount of waste going to landfill in Jersey.
- Ensure that re-use and recycling is maximised as outlined in this report.
- Avoid environmental damage caused by the mishandling of waste.
- Promote the specification of products and materials that do not contribute to ongoing or future environmental impacts.

This waste management procedure should be used by the contractors in their preparation of strategies and Method Statements for the works on site.

### **9.2 Roles and Responsibilities**

It is imperative that one individual from each of the groups below is designated as being responsible for the implementation of this plan. They will need to accept the roles and responsibilities outlined below and liaise with other members of the team. Waste Management should appear as an item on the agenda in all meetings.

#### **Developer**

Dandara, in the role as Developer, shall continually monitor the production of waste throughout the demolition and construction process. This is also economically sensible for the developer as any materials that can be re-used provide a financial benefit as well as reducing the impact through waste disposal.

Through this the promotion of environmental philosophy shall be demonstrated.

The control of waste forms part of every direct employees and subcontractors (those who use materials provided by Dandara) contract.

The developer will also develop a waste strategy for the project on the basis of this document and will develop ideas with the design team for minimising site arising's. This will include giving consideration to the programme and site establishment to facilitate on site storage and recycling where possible. This will include practices such as separation of recyclable waste into specific skips on site. All key operatives and gangers that are not of English speaking background will be made aware of the system according to Dandara's 'Non-English Speaking Persons on Site' policy. Section 7.2 considers this in detail.

#### **Design Team**

The design team will aid site waste minimisation through considered design and off-site manufacture and by promoting the use of reclaimed materials by appropriate specification. This will involve sizing structural components based on the materials available rather than minimum weight design (e.g. use of oversized timbers in floor and partition construction if locally available rather than importing smaller section sizes). When specifying products, the designers must be aware of the 'green' credentials of the materials chosen i.e. low embodied energy, locally sourced etc. Section 7.2 considers this in detail.

## **Site Management**

The main contractor will develop a waste strategy for the project on the basis of this document and will develop ideas with the design team for minimising site arisings. This will include giving consideration to the programme and site establishment to facilitate on site storage and recycling where possible. This would include practices such as separation of recyclable waste into specific skips on site. All key operatives and gangers that are not of English speaking background will be made aware of the system according to Dandara's 'Non-English Speaking Persons on Site' policy. Section 7.2 considers this in detail.

## **Sub-Contractor**

All sub-contractors will prepare a method statement for their activities on site taking into account the philosophy promoted by this document and the procedures stated below. They will liaise with the main contractor to ensure that materials suitable for re-use in the new buildings are handled and stored appropriately. Acceptable wastage levels are pre-agreed with subcontractors where materials are provided by Dandara to ensure the efficient use of materials and the mitigation of wastage. Section 7.2 considers this in detail.

## Procedures

- C: Client/Developer/Designer  
 MC: Main Contractor  
 SC: Sub-Contractor  
 SO: Site Operatives (All)  
 ✓✓ Lead Responsibility  
 ✓ Assisting

Procedures		Responsibility			
		MC	SC	SO	C
1	Co-ordinate the identification of materials for re-use or recycling as set out in this document.	✓✓			
2	Identify new opportunities for waste reduction	✓✓			
3	Liaise with sub-contractors and suppliers to reduce unnecessary packaging and waste from being delivered to site.	✓✓	✓		
4	Ensure all waste storage containers/ areas are accurately labelled in order that all site workers are aware of where to deposit specific materials.	✓✓		✓	
5	Protect waste against; <ul style="list-style-type: none"> <li>• Corrosion or wear of waste containers</li> <li>• Accidental spillage or leaking or inadvertent leaching from waste unprotected from rainfall</li> <li>• Waste blowing away or falling whilst being stored or transported</li> <li>• Scavenging by unauthorised persons or animals</li> </ul>	✓✓	✓	✓	
6	Ensure that proper records are maintained	✓✓	✓		
7	Prepare specific method statements incorporating measures detailed in this document.	✓✓	✓		
8	Ensure that waste is segregated and placed in appropriate containers/areas	✓✓	✓	✓	
9	Ensure that containers are properly secured and banded	✓	✓✓	✓	
10	Cover loose waste if transferred in a vehicle	✓	✓✓	✓✓	
11	Identify and confirm suitability of all destinations for waste leaving the site	✓✓	✓✓		

It is considered unlikely that any Special Waste will be encountered at the site however, in the event that any of the following materials are found they should also be dealt with by an appropriately licensed contractor;

- Acids
- Asbestos
- Pharmaceutical compounds
- Waste oils
- Alkaline Solutions
- Batteries
- Oily fly ash
- Wood preservatives
- Oily sludge's
- Industrial Solvents
- Pesticides

## **10.0 Type and Suggested Provisions for Operational Waste**

### **10.1 General**

The Revised Island Plan 2011 emphasises the need for the promotion and support of recycling initiatives.

In July 2005, the States approved a 'Solid Waste Strategy' (P.95/2005). This aims to change Community attitudes towards waste production and, in particular, encourage individuals and organisations to address the 'non-inert' waste issue.

The policy 'WM1-Waste minimisation and new development' (Island Plan 2011) seeks that new developments assess and, where appropriate, detail provisions for operational waste collection, as well as managing resources and waste during construction.

### **10.2 Existing Municipal Waste Services**

Municipal waste collection on Jersey Island falls under the responsibility of each of the twelve parishes – collectively known as the Comité des Connétables. This proposed site lies within the parish boundaries of St Helier.

Recycling is a core strategy of the States and there are multiple bring bank collection points St Helier for the following items;

- Paper
- Food
- Glass
- No Recyclables
- Plastic bottles
- Metal cans
- E waste
- Special
- Expired Drugs

St Helier operate a weekly kerbside household refuse collection which includes glass. Properties in the Parish are receive their collection receptacles from Premier Waste. Each different coloured box or bin is collected on a separate week on the same day as the normal refuse collection.

The Public commercial recycling facilities at La Collette now are also now able to accept a multitude of waste streams for segregation and recycling such as:-

- Household organic (green) waste for composting
- Clean plasterboard for recycling. This is used in advanced trials to produce a gypsum enhanced agricompost for local agricultural use.
- Asbestos (for safe disposal)
- Recyclable aggregates – stone, sand and concrete
- Glass
- Topsoil
- Non-recyclable inert waste (for disposal)
- Metals
- Plastics
- Pallet boards

St Helier recycling facilities are plentiful and are detailed further on the Gov website:-

<https://parishrecycling.je/>

### **10.3 Domestic Provisions**

Provision has been allowed within the development for secure communal refuse stores for domestic household waste within the development. Occupants will take their bagged waste to these refuse stores.

These will act as holding areas for the waste produced by each of the units.

Space for separate receptacles for the collection of glass, paper and cardboard and plastics and aluminium has also been conveniently located within the general refuse stores for future parish or private contractor recycling arrangements.

These refuse and recycling stores will allow the occupants of the development to segregate their waste accordingly, maximising the recycling opportunities.

### **10.4 Refuse Strategy**

Access to the development for servicing and refuse vehicles is afforded from Ann Street. The outline strategy proposed is that the tenant or resident takes their waste, glass and paper/cardboard and plastics/aluminium to the refuse and recycling stores. The Parish refuse collection vehicle will collect the general refuse and glass from this location weekly.

The refuse stores will have a water point and wash down gulley for the sake of cleanliness.

### **10.5 Off-site destinations of Domestic Waste**

Presently the majority of domestic waste is processed and incinerated at the La Collette Energy from Waste Plant. The Island Plan 2011 also seeks to pilot more sustainable practices of waste management; improve on recycling and to continue raising awareness in reducing amounts of waste generated on the island.

## **11.0 Conclusions**

Throughout all stages of this development, the provisions to be design, implemented and thereafter maintained afford a wide range of sustainable waste management practices to be employed.

The demolition process has been assessed and a quantified estimation of the likely waste streams for recycling, reuse or disposal have been identified.

The management of the construction process can be appropriately controlled by Dandara's management staff and own directly employed tradesmen. Relevant provisions for the minimisation of waste production and waste management are include within any third-party subcontracts or material procurement instructions and the quantity of these ordered materials, their specification and sizing is efficiently administered by Dandara's design, quantity surveying and procurement teams.

Appropriate provisions for the collection of domestic waste and recycling provisions have been designed for current Parish waste collection services and futureproofed for any expansion of this into further recyclable materials.