Department of the Environment
Supplementary Planning Guidance

**Draft advice note**

States of Jersey



**Consultation draft**

# *Site Waste Management Plans*

**May 2012**

## About supplementary planning guidance

The Minister for Planning and Environment may publish guidelines and policies (supplementary planning guidance) in respect of; development generally; any class of development; the development of any area of land; or the development of a specified site[1].

Supplementary planning guidance may cover a range of issues, both thematic and site specific, and provides further detail about either, policies and proposals in the Island Plan, or other issues relevant to the planning process. It can also be used to provide information about how the planning system operates.

Where relevant, supplementary planning guidance will be taken into account, as a material consideration, in making decisions.

Supplementary planning guidance is issued in a number of different forms including:

- **Advice notes**, which offer more detailed information and guidance about the ways in which Island Plan policies are likely to be operated, interpreted and applied in decision making;

- **Policy notes**, which can be issued by the Minister, following consultation with key stakeholders, in-between reviews of the Island Plan, to supplement and complement the existing planning policy framework;

- **Masterplans, development frameworks and planning briefs** provide more detailed information and guidance about the development of specific sites and areas of the Island; and

- **Practice notes**, which aim to provide information about how the planning system's protocols and procedures operate.

The current supplementary planning guidance is listed and can be viewed on the States of Jersey website at www.gov.je/planningguidance.

Hard copies of all supplementary planning guidance can be obtained from Planning and Building Services, Department of the Environment, South Hill, St Helier, JE2 4US, telephone: 01534 445 508 email: planning@gov.je

[1] Under Article 6 of the Planning and Building (Jersey) Law

# Contents

## 1. Introduction

1.1 The requirement to submit Site Waste Management Plans (SWMPs) with development applications which generate a significant quantity of waste was introduced in Jersey with the adoption of the 2002 Island Plan, in order to help improve waste management.

1.2 SWMPs are primarily intended to:

- identify the volume and type of waste materials generated during the development process (e.g. materials from demolition and excavation works and from construction activities);
- establish opportunities for reuse, recycling and recovery of materials (i.e. promote the waste hierarchy);
- demonstrate how off-site disposal of waste will be minimised and managed; and
- generally assist in improving materials resource efficiency on construction sites.

1.3 The 2011 Island Plan seeks to tighten the controls surrounding SWMPs to ensure they are treated as **'living documents'** which are regularly updated, monitored and properly implemented throughout the construction project and reviewed at completion.

1.4 The requirement for developers to prepare and implement SWMPs is set out in Policy WM1 of the 2011 Island Plan. The policy is set out in full in Section 2.

1.5 This guidance has been prepared in accordance with Proposal 23 of the 2011 Island Plan, to *"provide additional advice and assist with development control considerations"*. It elaborates on Island Plan Policy WM1, explains in more detail the purpose behind 'Site Waste Management Plans' and what is required in preparing, updating and implementing these plans throughout the various stages in the construction project.

## 2. Status of this Guidance

2.1 This is currently draft guidance produced for consultation with key stakeholders and interested parties. It will be reviewed and amended in response to consultation.

## 3. What is the guidance for?

3.1 The main purposes of this guidance are to:

- explain and interpret the policy requirements for SWMPs;
- explain what developers need to consider and why, when writing their SWMPs;
- set out the information and procedures needed to comply with the related policy requirements;
- help prevent / reduce illegal disposal of waste (e.g. fly-tipping) by providing an audit trail of any waste that is removed from construction sites; and
- assist in providing for a more consistent and effective approach to waste management on construction sites.

## 4. Who is the guidance intended for?

4.1 This guidance is principally intended to assist developers, builders, architects, designers, surveyors, suppliers, sub contractors / specialist contractors and all those who are associated with construction projects where waste material will be generated. It is also intended to help planners who may require the development of SWMPs and other officers of the States who may be engaged in monitoring compliance with SWMPs.

## 5. What type of development does this guidance apply to?

5.1 This guidance is presently aimed specifically at 'major developments' (see Section 10), developments which would involve the demolition of major structures and/or other developments which generate a significant amount of waste material during construction.

5.2 SWMPs apply to all aspects of construction work, including preparatory enabling works such as demolition, excavation and site clearance.

## 6. Island Plan Policy for Waste Minimisation and New Development

6.1 For ease of reference, Island Plan Policy WM1 is set out in full below.

**Policy WM1 – Waste Minimisation and new development**

In considering proposals for new development and in accordance with the principles of sustainable development, the Minister for Planning and Environment will encourage the minimisation of waste generated as part of construction activity and an increase in the recycling, reuse and recovery of resources.

The Minister will only permit major new developments and/or developments which would involve the demolition of major structures or the potential generation of significant quantities of waste material (including developments of 10 or more dwellings, or with a floorspace of more than 1,000m², or where the development is on a site of more than 1 hectare), where:

- measures are taken to minimise the wastes arising and to recycle, reuse and recover as much as possible of the generated waste material; and
- opportunities are taken to maximise on-site management of waste.

Where inert waste generated in these developments cannot be reused on the site, it should, as far as possible, be diverted for recycling with a licensed contractor and only the residual unusable material should be disposed of to landfill.

The Minister will require a 'Site Waste Management Plan' to be submitted with all planning applications for these developments, setting out the steps to be taken to minimise and manage waste generation both on and off the site during construction. The measures contained in the 'Site Waste Management Plan' shall be approved by or on behalf of the Minister and may be secured by planning conditions and obligations, where appropriate. Where such plans are not acceptable, permission will not be granted.

'Site Waste Management Plans' should be continually evolving plans, which are implemented and updated by the developer or an appointed contractor throughout the construction phase. All waste transactions shall be accurately and clearly recorded in the Plan to maintain a continuously up-to-date record of how work is progressing in comparison with waste management estimates.

On completion of the development, the developer must make available the final

version of the Plan for review and provide the Minister with:

- evidence that the Plan has been satisfactorily monitored;
- the reasons for any revisions made to the Plan; and
- an explanation of the differences between the initially approved Plan and actual performance.

Where planning controls associated with approved 'Site Waste Management Plans' are being breached, the developer will be asked to agree to implement remedial steps to resolve the breach.

The Minister will consider formal enforcement action where developers or responsible contractors have:

- intentionally not complied with a 'Site Waste Management Plan', or
- not taken required remedial action within the given time-frame.

## 7. Background

7.1 As well as being a major consumer of materials, the construction industry in Jersey is a major generator of waste. Construction and demolition waste represents by far the largest amount of solid waste (by weight) that needs to be managed, typically ranging from 65% to 75% of annual production in recent years. In addition, virtually all the inert wastes destined for landfill are derived from construction and demolition activities.

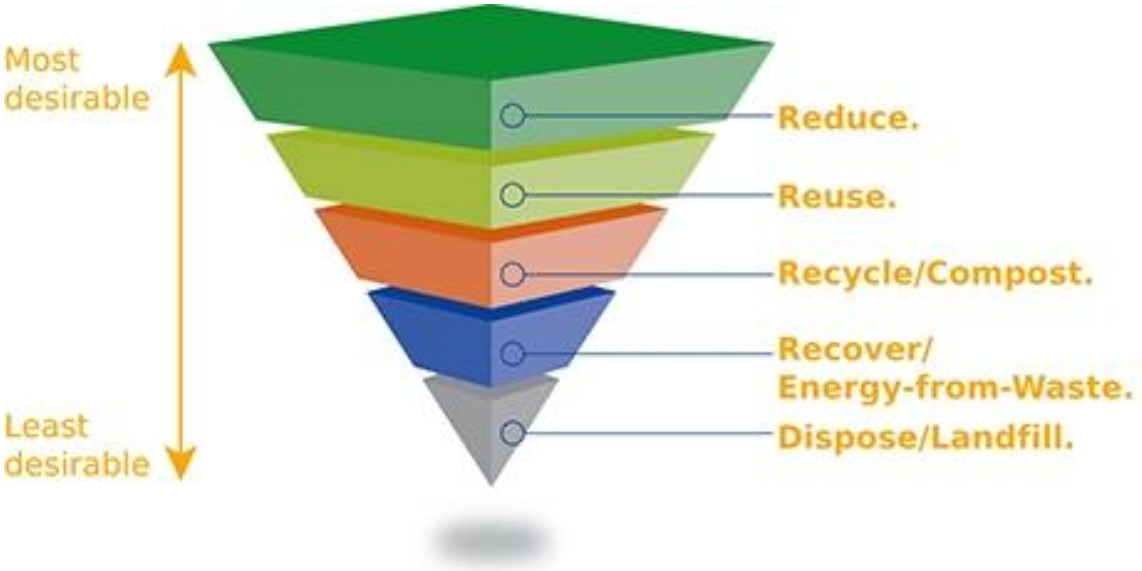
7.2 The major components of construction and demolition waste include soils, concrete, masonry, stone, metal, glass, plasterboard and bitumous materials, although there are a wide variety of other wastes which are referred to elsewhere in this document. Waste materials that are generated on a construction site come from a number of sources. Major sources include demolition of buildings, structures and fixtures, and the excavation of spoil in preparing land for development (e.g. excavating foundations, service trenches, roadways and sewers). Waste can also occur, however, due to factors such as:

- over-ordering;
- poor design;
- felling of trees and clearing vegetation;
- material imported to the site for inclusion into the permanent works;
- packaging; and
- inefficient working practices (e.g. using incorrect materials because it is easier to do so, or wasteful cutting of materials).

7.3 This waste amounts to a misuse of valuable resources, which is increasingly expensive to collect and dispose of and which has significant impacts on the environment. It is also clear that a significant proportion of materials that end up as waste on construction sites can be more effectively managed. In view of this, it is considered essential that steps are taken by the construction industry to control and regulate the amount of waste produced during building projects and to encourage more innovative and effective waste management practices.

7.4 Island Plan Policy WM1 seeks to 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 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.




**The Waste Hierarchy**

## 8. Waste Management Considerations throughout the Project

8.1 There are a number of waste management factors that should be considered at various stages of a development project.

**Site Selection and Project Inception Stage**

8.2 Opportunities for waste minimisation should be considered at a very early stage, when the site is being chosen and purchased. It will be important to have regard to factors such as the site topography, soil type and potential levels of ground contamination, to help determine the amount of soil that will need to removed or managed on-site. For example: steep-sloping sites may require large amounts of excavation to enable the construction of accessible buildings; certain soil types will require greater excavation to enable secure foundations; and contamination may necessitate soil removal or remedial measures to decontaminate the soil. Where contamination is suspected, the developer must follow supplementary planning guidance on contaminated land.[2]

8.3 At this stage, initial consideration might also be given to whether there are any buildings or structures on the site which could potentially be incorporated into any new design to reduce or avoid the production of demolition waste (see Minister's forthcoming guidance on 'demolition and replacement of buildings).

**Design Stage**

8.4 In designing the new development it would be appropriate to consider among other things whether:

[2] For specific advice on dealing with land contamination, applicants are directed to Planning Advice Note 2 'Development of potentially contaminated land', October 2005.

- there are existing buildings that could be adapted and reused;
- there is scope to employ methods of construction that will minimise waste production (e.g. off-site prefabrication, or modular construction);
- waste materials can be re-used or recycled elsewhere on the development (e.g. in providing aggregate or material for ground level changes which are necessary as part of the development);
- existing trees and vegetation can be incorporated into the landscape design;
- the development can be designed to incorporate second hand, recycled or renewable materials; and/or
- room designs and sizes can be designed to correspond to standard dimensions for sheet materials and modules of components.

**Project Planning Stage**

8.5 For project planning purposes, developers should:

- allocate readily accessible space on site for the storage and recycling of waste materials;
- consider modifications to the design to reduce the amount of waste produced;
- make provision for dedicated material recycling skips;
- allocate space for the storage of specialised equipment required to recycle materials on-site;
- identify and award contracts to suitable waste management contractors who will remove waste for recycling or disposal at authorised sites (i.e. sites which have a waste management licence or are exempt from the need to have a licence – see Annex 1on the Waste Management (Jersey) Law, 2005);
- make sure that any contracts awarded to other companies for carrying out work on site include provisions for waste minimisation;
- introduce correct ordering to reduce surplus waste;
- consider introducing 'just-in-time' delivery of materials to reduce damage to materials;
- inspect materials delivered to site for damage prior to unloading;
- seek to reduce packaging waste from construction materials (e.g. by entering deals with suppliers to: send materials with minimal packaging; use re-usable and recyclable packaging; and/or take back packaging).

**The Planning Application Stage**

8.6 For development proposals which will generate a significant amount of waste and major new developments (see Section 6 on Island Plan Policy WM1 and Section 10 on when a SWMP is required), the application must include a detailed Site Waste Management Plan included with the application.

## 9. What is a Site Waste Management Plan?

9.1 A Site Waste Management Plan is a written document which provides a structure for how waste materials are managed at all stages during a construction project. It should be signed by the client, principal contractor and, where appropriate, specified sub-contractors.

9.2 Typically, such plans will record:

- the location of the site;
- a description of the construction works;
- waste minimisation proposals;
- who is responsible for preparing the plan;
- who is responsible for waste management;
- proposals for plan distribution, instruction and training;
- the estimated type and amount of waste likely to be generated throughout the project;
- details of how each waste type is to be managed (including priorities for larger developments and targets);
- the contractors to be used to help ensure that waste is correctly and efficiently managed (including the responsible and legal disposal of residual waste, see Annex 1 on the Waste Management (Jersey) Law, 2005);
- details of the quantities of waste estimated to be and following updates actually generated from the construction project;
- proposals put in place for the separation and storage of waste materials.

9.3 SWMPs should also include undertakings that waste materials will be handled in compliance with them.

9.4 An example SWMP template is provided in Annex 3, to assist the writing process and help ensure the production of suitable plans. However, this is intended as a guide only, to be amended and modified as appropriate. SWMPs are site-specific and each plan must be carefully developed to suit the particular construction projects in question, to ensure that they work. Much will depend on the character of the site, the size and nature of the project and the procedures and practices adopted by the company in question (including existing methods used for keeping site management records). Whilst many elements in a Plan template will be common and transferable to a variety of projects, others will be of little relevance to specific projects. For example, where there are no demolition operations on a site, the sections relating to enabling works may be restricted and in some instances ignored.

9.5 In any event, whatever format is adopted, the plans must be clear, accurate and easy to follow by all users and easy to monitor and update. They must also be readily accessible at all times (either electronically or on paper) to those involved in implementing and updating the plan, or carrying out regulatory checks.

## 10. When is a Site Waste Management Plan required?

10.1 The Minister will expect a SWMP to be submitted in support of any planning application for ‘major development’, or development which involves the demolition of major structures, or development that is likely to generate significant quantities of waste material. Major developments include developments of 10 or more dwellings, or with a floorspace of more than 1,000m², or which involve a site of more than 1 hectare.

10.2 Notwithstanding the above, in the interests of good practice and achieving sustainability objectives, the Minister would wish to encourage the application of site waste management planning to <u>all</u> development proposals that generate waste.

## 11. The Benefits of a Site Waste Management Plan

11.1 There are considerable environmental benefits to be gained for the Island from better construction waste management. A reduction in the amount of waste produced and greater take-up of recycled materials will mean less waste going to landfill, less quarrying, less transportation of materials, less energy consumption, less fly tipping and less harm to the environment.

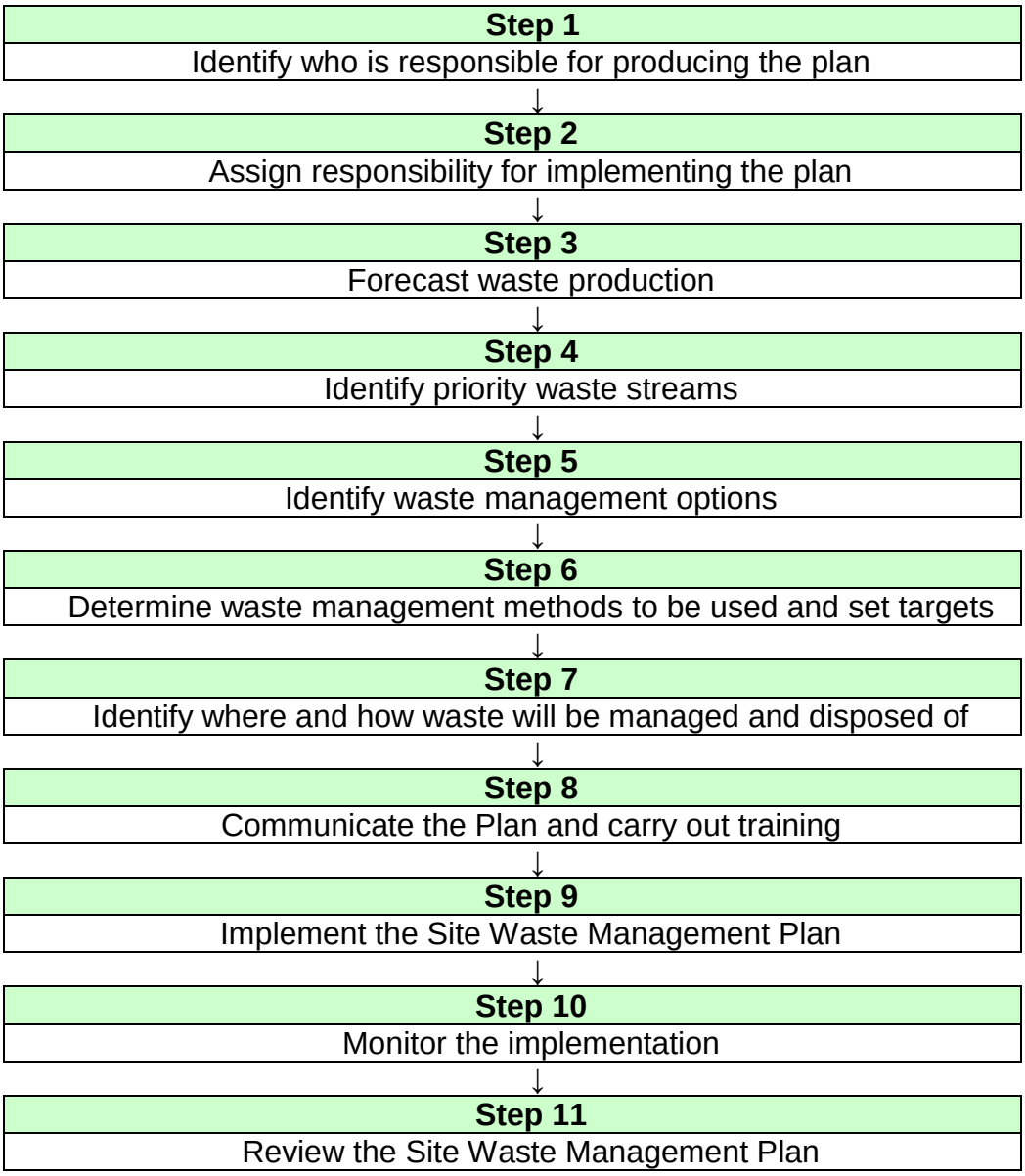
11.2 There are also significant cost savings and other benefits to be had for the client and the construction industry by adopting site waste management plans, including:

- reductions in the amount of material used and subsequent saving on purchasing costs (e.g. primary aggregate);
- lower waste disposal costs (e.g. skip hire, landfill charges);
- reductions in handling and transport costs (e.g. associated with lorry journeys for waste and primary materials);
- potential revenues from materials that are able to be reused or recycled;
- the provision of documentary evidence to answer queries from environmental regulators;
- avoiding potential prosecution, by making sure that waste leaving sites is responsibly managed;
- opportunities to enhance environmental credibility, public reputation and market position;
- providing evidence of compliance with contractual obligations (e.g. between the contractor and the client);
- the creation of a useful tool which shows how resources have been used and waste managed and which provides valuable information for future projects.

11.3 There is a wealth of information and guidance available on construction site waste management and SWMPs and some of the main sources are listed in Section 15 of this document.

## 12. Site Waste Management Plan Process

12.1 Producing a successful SWMP requires careful planning and preparation from the outset, when the project is being planned. Typically this involves a number of basic steps, as set out in the following chart.




**Step 1: Identify who is responsible for producing the plan**

12.2 The client is ultimately responsible for ensuring that a SWMP is prepared and an individual/s should be made responsible for drafting it. Given that most Plans will be written at pre-planning stage for submission (and approval) with the planning application, it is likely that responsibility for writing will fall on the designer or his representative. (N.B. This may need to be developed further by the contractor when construction begins).

12.3 Preparing SWMPs at an early pre-planning stage will enable proper consideration of design and waste minimisation issues (including materials and methods of construction that minimise the production of waste) and opportunities for reusing, recycling and recovering waste materials.

12.4 The author/s of the Plan should be fully aware of with waste issues and the construction programme for the project. In formulating the Plan, he or she should engage with and gain the acceptance of the wider project team (e.g. client, designers, demolition contractors, other sub-contractors, supply chains).

**Step 2: Assign responsibility for implementing the Plan**

12.5 Responsibility for compliance with the SWMP will rest with the client or the principal contractor. To help in meeting this obligation, it is appropriate to appoint someone on-site to take overall responsibility for implementing the SWMP and updating it throughout the life of the project. This person must have sufficient authority to ensure that others co-operate and comply with the SWMP and might be, for example, the site manager or site foreman. He or she will need the skills and knowledge to:

- motivate everyone working on the site to follow the SWMP; and
- arrange for any necessary training or resource provision.

12.6 There may also be merit, particularly on larger sites, in appointing another person on-site to act as a 'waste champion'. This person should have an interest in and be knowledgeable about waste management issues and should report directly to the person responsible for the SWMP. His or her role would include: promoting awareness of the SWMP among the workforce; monitoring and reporting on waste generation, waste management activities and the effectiveness of the SWMP; ensuring everyone sticks to the plan; and collecting ideas for improved waste management.

12.7 Of course, if the SWMP is to be an effective tool for managing waste, it will need to be supported and embraced by management, the project team (including sub-contractors and waste management contractors) and everyone working on-site.

**Step 3: Forecast waste production**

12.8 The SWMP must identify the quantity of each type of waste material that is likely to be produced on-site throughout the project, during enabling works (including demolition) and the construction phase. The quantity of waste should usually be specified as $m^3$ or tonnes.

12.9 The waste materials should be divided into the following categories (in order of increasing environmental hazard):

- ***Inert wastes*** – wastes which will not harm or cause adverse effects to the environment when disposed of, or do not decompose when buried (e.g. concrete, bricks, blocks, mortar, plaster (not plasterboard), tiles, aggregates, glass, uncontaminated soils, sand, gravel and rocks). These generally tend to be generated in the initial phases of a project.
- ***Non-hazardous wastes*** – wastes that will break down / decompose when buried, resulting in the production of landfill gases such as methane and carbon dioxide (e.g. timber, paper, cardboard, plasterboard, green waste, food, metal and plastics). These may be generated throughout the project.
- ***Hazardous wastes*** – wastes that are harmful to human health or the environment if improperly stored, contained, handled, treated or disposed of. It includes wastes which are corrosive, explosive, flammable, infectious, carcinogenic, teratogenic, mutagenic, ecotoxic and prone to releasing toxic gases of producing leachate after disposal (e.g. asbestos, contaminated soil, paint tins, mastic, surplus chemicals).

12.10 Identifying the quantities of each waste type arising throughout the project will help site managers to determine:

- the number, type and size of containers needed for waste during the different phases of the project; and
- when or whether different waste streams should be segregated.

12.11 Where there is a lack of space on-site to undertake appropriate segregation, agreements will need to be reached with waste management operators to ensure that the waste is sorted for recycling off-site (e.g. at an authorised waste management facility).

**Step 4: Identify priority waste streams**

12.12 For larger developments it will be appropriate to prioritise the most significant waste streams generated (i.e. by volume, weight or cost) in order to focus the SWMP on those issues where there is most to be gained from effective waste management.

**Step 5: Identify waste management options**

12.13 Having estimated the quantity of different waste streams likely to be produced, it is then necessary to identify waste management options which might be available on- and off-site. For this purpose, reference should be made to the Waste Hierarchy. Examples of possible waste management options that might be considered are set out in tables 1, 2 and 3.

***Table 1: Waste management options for inert waste***

| Waste Material | Onsite recycling/ reuse | Offsite recycling/reuse | Incineration and energy recovery | Disposal |
|---|---|---|---|---|
| Aggregates | Reuse as hardcore and fill. | -Segregate and reuse as hardcore or fill<br>-Segregate and sell to building or waste management contractor for recycling and onward sale to the construction industry. | | Final option |
| Blockwork and Concrete | Crush & reuse as hardcore and fill | -Segregate, reprocess and reuse as hardcore or fill.<br>-Segregate and sell to building or waste management contractor for recycling and onward sale to the construction industry | | Final option |
| Glass | | -Segregate and send to waste management contractor at La Collette for crushing and recycling as an aggregate.<br>-Segregate and sell to concrete and road surface asphalt providers for crushing to use as aggregate replacement. | | Final option |
| Sand | Reuse as fill | -Segregate and reuse as fill.<br>-Sell to building or waste management contractor for recycling and onward sale to the construction industry. | | Final option |
| Soil (uncontam-inated) | Set aside for reuse in gardens and landscaped areas, or as backfill. | -Segregate and reuse for landscaping and as backfill.<br>-Sell to waste management contractor for recycling.<br>-Sell to landscape gardener, or quarry operator for reuse in landscaping and land restoration. | | Final option |

| | | | | |
|---|---|---|---|---|
| Stone | -Reuse in walls and other built features.<br>-Crush and reuse as hardcore | -Segregate and reuse in walls and built features.<br>-Sell to building or waste management contractor for recycling and reuse in construction industry, or land restoration. | | Final option |
| Tarmac | Use planings in new tarmac | -Sell to building or waste management contractor for recycling<br>- Sell to a road surface asphalt provider for reuse in tarmac manufacture. | | Final option |

***Table 2: Waste management options for non-hazardous waste***

| **Waste Material** | **Onsite recycling/ reuse** | **Offsite recycling/reuse** | **Incineration and energy recovery** | **Disposal** |
|---|---|---|---|---|
| Cable wiring | | Segregate and send for recycling to recover high value metals. | | … |
| Canteen Waste | Composting of food waste - removal of meat residues and composting on-site (in suitable composters) for planting / landscaping | Segregating and sending to farmers for animal feed or to waste management contractor for composting. | Store food waste in closed top bins and send to La Collette for incineration. | |
| Cardboard | | Segregate (compacting and baling is advisable if there are large quantities) and send to waste recycling contractor. | Final option | |
| Metals | Reuse in temporary works on-site. | Segregate ferrous and non-ferrous metals and send to scrap merchants for recycling. | | |
| Pallets | Re-use pallets for storage and movement of materials on-site. | -Reuse pallets elsewhere<br>-Sell to a pallet recovery operator to separate out reusable pallets and break down others into kindling wood<br>-Send for shredding and recycling. | Final option | |
| Paper | Use for scrap notepaper | -Segregate and send to waste recycling contractor. | Final option | |
| Plasterboard | Provide dedicated space for off-cuts and reuse | -Return waste to supplier<br>-Possible future options for sending to waste management operator 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). | | Final option |
| Timber (also see pallets)<br><br>Not tanalised | -Salvage more valuable timber for reuse (e.g. roof and floor joists, floorboards).<br>-reuse onsite for shuttering, shoring, framing, temporary hoardings etc. | -Segregate and send to a centralised reuse and recycling centre.<br>-De-nail more valuable timber and sell to builders for reuse.<br>-Sell to waste management contractor for recycling or onward sale of reclaimed timber. | Final option | |
| Trees & vegetation | -Shred / chip onsite for landscaping (e.g. mulch for planting areas)<br>-Compost on site for landscaping | -Send to La Collette for shredding and composting (for soil improver). | | |
| Re-useable items and furnishings (e.g. soft furnishings radiators, sanitaryware) | | - Sell to second-hand dealers<br>- Organise “giveaway” event before any buildings are demolished.*1 | Final option, depending on item | Final option, depending on item |

**Notes:** *1 The waste recycling team at Transport and Technical Services organised a successful ‘giveaway’ event at the former Ann Court in 2011. An ad was placed in the paper and the demolition contractor was required to:

- include time for removing radiators, baths etc before the building was demolished; and
- make provision for a Saturday morning giveaway session.

***Table 3: Waste management options for hazardous waste***

| Waste Material | Onsite recycling/ reuse | Offsite recycling/reuse | Inciner-ation and energy recovery | Disposal |
|---|---|---|---|---|
| Asbestos | N/A | N/A | | Landfill in specially lined and sealed pits. |
| Contaminated soil | Remediate onsite and reuse material | Segregate and send off-Island to a licensed waste management contractor to remediate.*1 | | Controlled landfill, off-Island |
| Flammable | Original producer's responsibility to provide details on the treatment required | | | |
| Toxic | Original producer's responsibility to provide details on the treatment required | | | |
| Hazardous paints and redundant chemicals | | | Segregate and send to secure compound at Bellozanne for shipping to UK for safe disposal e.g. specialised incineration | |

**Notes:** *1 There are currently no contractors licensed in Jersey to remediate or dispose of contaminated soil.

**Step 6: Determine waste management methods to be used and set targets**

12.14 Once the options have been examined, the best routes can be chosen as waste management actions for each waste stream. These should be as close as possible to the top of the Waste Hierarchy.

12.15 Starting with the most beneficial and preferred waste management options, ways should be looked at to avoid or minimise waste through the design and procurement processes. After that, consideration should be given in turn to reuse and recycling of the waste that cannot be avoided (on- and off-site). Where appropriate, any remaining value should then be recovered from the residual waste. This might include, for example: physical sorting of waste to recover one of the components; composting; remedial treatment of soil; or incineration to recover energy, using the Island's Energy from Waste Plant. Off-site disposal to landfill should be considered as the last option.

12.16 At this stage, it would be appropriate to set and record indicative / realistic targets for managing each waste stream (e.g. to recycle 90% of concrete waste on-site, or to re-use 100% of soil waste off-site).

12.17 The determination of waste management solutions will assist in ensuring that appropriate provision is made for a waste compound, waste containers, specialised equipment (e.g. mobile crushers for recycling aggregates) and waste materials requiring licensed sites and/or registered waste carriers.

12.18 In considering waste management actions on-site, particular care will be needed to avoid the creation of nuisance issues, such as noise, vibration, fumes, odour, dust and contaminated dust. Nuisance issues might arise, for example, where a site is close to existing residential property and it is proposed to crush rock, or remediate contaminated material on-site.

**Stage 7: Identify where and how waste will be managed and disposed of**

12.19 The client or principal contractor should assign responsibility for waste management of the various waste streams to ensure delivery of the Plan. This may include a variety of appropriate parties involved in the project (e.g. the principal contractor, trade contractors and waste management contractors). These responsibilities should be acknowledged as part of the tendering process and written into the terms of contracts.

12.20 It is the role of the client or principal contractor to take reasonable steps to ensure that all waste from the site is managed responsibly and legally. Particularly important, is the need to prevent unauthorised handling or disposal of wastes by others. Under Article 23 of the Waste Management (Jersey) Law 2005[3] those carrying out waste management activities (e.g. depositing, keeping, treating, recovering or disposing of controlled waste) must do so in accordance with a waste management licence issued by the Minister for Planning and Environment, unless the activity is specifically exempt from the requirement for a licence. This law also makes provision for the registration of waste carriers involved in transport of hazardous (or health care) wastes on roads and a movement control system for such wastes (see further detail in Annex 1 on the Waste Management (Jersey) Law, 2005).

12.21 Where wastes are to be managed or disposed of off-site, therefore, the client or principal contractor should identify contractors for removing the wastes and ensure that they will be delivered to a suitable site / facility, which is licensed (or exempt from the need for a licence) to accept the wastes (i.e. by verifying licence numbers and making enquiries with Environmental Protection). In the case of hazardous waste such as asbestos, chemicals, oils or contaminated soils, checks should be carried out to ensure that the waste carrier is registered for the purpose. It is especially important to ensure that the amounts of contaminated material managed in this way is accurately monitored and recorded. Contracts should be put in place accordingly.

12.22 The client or principal contractor should also make provision for:

- an on-site waste compound where containers for segregated and mixed use waste can be located without giving rise to pollution (including materials suitable for reuse and recycling and non-recyclable materials);
- other suitable areas for storing specific waste materials, where appropriate;
- monitoring general site conditions in terms of waste management; and
- addressing problems resulting in unexpectedly large volumes of waste.

12.23 The responsibilities of waste management contractors might typically include:

- providing skips and containers and weighing systems at the waste compound;
- managing the compound;
- ensuring proper segregation of waste;
- monitoring waste streams to ensure the reuse and recycling potential is maximised;
- transport arrangements for skips; and
- reporting on the quantities of waste and recycled materials generated each week/month.

12.24 The main responsibilities of trade contractors will be to:

- maintain a tidy work area;

[3] See full law online at: www.jerseylaw.je/

- minimise waste production;
- undertake required waste material segregation on-site; and
- minimise pollution to land, water and air.

**Stage 8: Communicate the plan and carry out training**

12.25 Once the SWMP has been formulated, it is necessary to let all relevant parties (including in-house and sub-contract staff) know about it and explain its requirements, why it is important and what the benefits will be. In addition to using induction programmes, talks, meetings, posters and signage to raise awareness of the SWMP and develop the required level of knowledge, there may also be a requirement to develop a training programme to ensure that everyone understands how to report the use of waste and materials.

**Stage 9: Implement the Site Waste Management Plan**

12.26 Implementation of the SWMP should begin as soon as work commences on-site. This is key to the process and critical to ensuring that the SWMP is a 'living document', as required by Island Plan Policy WM1. Effective implementation will involve updating the plan as often as necessary to give a current picture of how work is progressing, using appropriate data sheets.

12.27 For waste that is re-used or recycled on-site, the updates should record how much of the estimated amount for each waste type has been processed. For waste that is removed from the site, the up-dates should record the date waste is removed, the type and quantity of waste removed, the person / company removing the waste, the site the waste is being taken to and whether it is licensed or exempt from the need for such a licence. Waste should only be handled or dealt with by individuals or businesses that are authorised to deal with it.

12.28 During the implementation stage, the evolving SWMP must be kept somewhere accessible on the site to allow for periodic checks and audits by the developer and officials carrying out compliance checks.

**Stage 10: Monitor the implementation**

12.29 The implementation of the SWMP should be regularly monitored by an appropriate person to measure the progress being made and establish how this compares with:

- waste estimates contained in the plan; and
- waste management actions and targets.

12.30 This will help flag up where any significant waste management changes are made / occur during the course of the project, the effectiveness of the SWMP and whether other remedial actions need to be taken to ensure compliance with the SWMP. There may be unforeseen circumstances which make it difficult to comply with the approved SWMP and, in some cases, this might warrant a substantial revision to the plan. Any proposals for substantial changes to a SWMP during the construction process should be submitted to and approved by, or on behalf of, the Minister for Planning and Environment.

**Step 11: Review the site waste management plan.**

12.31 At the end of the project, there should be a review of how waste has been managed throughout the construction and how the SWMP has performed. The completed SWMP and the records of all waste management actions should be reconciled with what was

planned before work commenced. This will enable the construction company to identify where there have been deviations from waste forecasts, waste targets and planned waste management arrangements. Companies can use the information and any lessons learnt in planning their next project.

12.32 In accordance with Island Plan Policy WM1, at this post-construction stage (within 3 months of completion), the final version of the SWMP must be made available for review and the Minister for Planning and Environment must be provided with:

- evidence that the plan has been satisfactorily monitored;
- the reasons for any revisions made to the plan; and
- an explanation of the differences between the initially approved plan and actual performance (e.g. where and why initial forecasts were exceeded or missed).

12.33 This will enable the Minister to monitor and review the performance of Policy WM1 and the effectiveness of SWMPs in helping to meet waste management objectives. It should also highlight issues that might require changes to the current policy and associated guidance.

## 13. Planning conditions and enforcement

13.1 Ensuring that requirements for proper waste management are carried out is a key concern for the Minister for Planning and Environment. Planning conditions will be attached to planning permits requiring approval of SWMPs prior to commencement on site, regular updating to demonstrate progress and overall compliance with SWMPs. The following draft standard condition is proposed:

**Condition - Site waste management plan**

No development hereby approved shall take place until a satisfactory Site Waste Management Plan (SWMP), confirming the steps to be taken to minimise and manage waste generation both on and off site during construction, has been submitted to and approved by the Minister for Planning and Environment. The approved SWMP and/or any substantive revision agreed by or on behalf of the Minister shall be implemented in full to the satisfaction of the Minister.

During the construction process, the approved SWMP shall be updated as often as is necessary to give a current picture of how work is progressing against the waste estimates contained in the plan.

Within three months of completion of the project, the developer shall submit to the Minister a copy of the completed SWMP, together with:

(1) confirmation that the plan has been monitored on a regular basis to ensure that work was progressing according to the plan and that the plan was updated appropriately;
(2) the reasons for any revisions made to the plan; and
(3) an explanation of any differences between the approved plan and actual performance.

***Reason:*** *To ensure that the proposed development minimises waste production and optimises the reuse, recycling and recovery of waste resources generated during construction, in accordance with Policy WM1*

*of the Jersey Island Plan 2011.*

13.2 In some cases, it may also be appropriate to use planning conditions to control individual waste management activities in developments, where they might have an impact on neighbouring land use and amenities (e.g. crushing of waste materials to form aggregates). These conditions might be used, for example, in respect of hours of operation, transport modes and movement, timescale of operations, and impacts such as noise, vibrations, odour and dust.

13.3 The control of construction work is also undertaken by Environmental Health, which has powers under the Statutory Nuisance (Jersey) Law, 1999[4] to address construction and demolition activities that can result in nuisance type complaints. It has also published a document covering best practice on building sites[5]. Any requirements of Environmental Health in this regard may be added to a planning permit, either as a planning condition or as an 'informative comment'.

13.4 Where appropriate, in the interests of amenity, planning conditions may be attached to permits, requiring the submission of a 'Construction Environmental Management Plan' (CEMP) detailing measures proposed to minimise noise, dust, and vibration etc during site preparation and construction phases of the proposed development. A CEMP is only likely to be required for large scale developments which are in close proximity to residential premises and may also involve the remediation/removal of contaminated land. Typically, a planning condition will require a CEMP to be submitted to and approved by the Minister for Planning and Environment (following consultation with Environmental Health) prior to the commencement of development. It will also require implementation of the CEMP in full until completion of the development.

13.5 The Minister for Planning and Environment has a number of powers available to him to enforce planning control, under Part 5 of the Planning and Building (Jersey) Law, 2002. These powers apply equally to non-compliance with conditional requirements relating directly or indirectly to waste management in new developments.

13.6 Island Plan Policy WM1 makes it clear that the use of enforcement powers will be considered in appropriate circumstances where it becomes clear that the planning controls associated with SWMPs are being breached and there is intentional non-compliance with the SWMP or any required remedial action.

13.7 Depending on the circumstances, enforcement action could also be taken under separate legislation, including the Waste Management (Jersey) Law 2005 (see Annex 1).

[4] The Statutory Nuisance (Jersey) Law deals with complaints from occupiers of domestic housing who are seriously affected by nuisance, such as noise, dust, fumes, odour and smoke, which can originate from construction site activities. Further information can be found at www.gov.je/healthprotection .

[5] Draft Guidance on information to be provided in a Construction Environmental Management Plan for Health Protection (CEMP), Version 2, 2011.

# 14. Glossary of Terms

**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 left over 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.

## 15. Selected Sources

### Websites

14.1 There are a number of organisations which provide information and guidance on best practice in the preparation of SWMPs, including the following:

**Building Research Establishment** (BRE)
www.bre.co.uk

**Carillion**
www.carillionplc.com

**The Construction Industry Research and Information** (CIRIA)
www.ciria.org.uk

**Constructing Excellence (in the built environment)**
www.constructingexcellence.org.uk

**Construction Industry Environment Forum**
www.cief.org.uk

**Department for Business, Innovation and Skills** (BIS) – created June 2009
www.bis.gov.uk

**Department of Environment, Food and Rural Affairs** (Defra)
www.defra.gov.uk/environment (+ issue covered)

**Environment Agency**
www.environment-agency.gov.uk

**Envirowise**
www.envirowise.gov.uk

**NetRegs** (Plain English guidance on environmental regulations for business)
www.netregs.gov.uk

**SMARTWaste**
www.smartwaste.co.uk

**Waste and Resources Action Plan** (WRAP)
www.wrap.org.uk

## States of Jersey – Publications

***The Jersey Island Plan*** (2011),
States of Jersey – Department of the Environment
(available on-line, www.consult.gov.je/portal/ipr/rdp)

***Solid Waste Strategy*** (2005),
Former Environment and Public Services Committee,
(available on-line, www.gov.je/)

***Waste Management (Jersey) Law*** (2005)
(available on-line, www.jerseylaw.je/ )

***Statutory Nuisances (Jersey) Law*** (1999)
(available on-line, www.jerseylaw.je/ )

***Planning Advice Note 2: 'Development of potentially contaminated land'*** (2005)
(available on-line, www.govje/PlanningBuilding/LawsRegs/SPG/AdviceNotes/)

***DRAFT Guidance on information to be provided in a Construction Environmental Management Plan for Health Protection*** (2011)
(available on-line, www.gov.je/Industry/Construction/Pages/ConstructionSite.aspx )

## Other Useful Publications

***An introduction to Site Waste Management Plans*** *(*2007),
Envirowise
(available on-line, www.envirowise.gov.uk)

***Non-Statutory Guidance for Site Waste Management Plans*** (2008),
Department of Environment, Food and Rural Affairs (Defra).
(available on-line www.defra.gov.uk)

***Site Waste – It's Criminal – A simple guide to site waste management plans,***
NetRegs
(available on-line www.netregs.gov.uk)

***Site Waste Management – Guidance and templates for effective site waste management plans*** (2008),
NHBC Foundation
(available on-line www.nhbcfoundation.org)

***Site Waste Management Plans – Guidance for Construction Contractors and Clients*** (2004), Department of Trade and Industry

## 16. Useful contacts

**Planning and Building Services**
Department of the Environment,
South Hill, St. Helier, Jersey JE2 4US
t: .01534 445508 f: 01534 445528
e: planning@gov.je w: www.gov.je/planningbuilding

**Environmental Protection**
Environment Division, Department of the Environment,
Howard Davis Farm, Trinity, Jersey JE3 5SF
t: 01534 441600 f: 01534 441601
w: www.gov.je/Environment/ProtectingEnvironment

***Head of Waste Regulation***
t: 01534 441616

***Head of Water Resources***
t: 01534 441621

**Environmental Health**
Maison Le Pape, The Parade, St. Helier, Jersey JE2 3PU
t: 01544 443712 f: 01534 445772
w: www.gov.je/environmentalhealth

**Transport and Technical Services Department**
PO Box 412,
States Offices, South Hill, St. Helier, Jersey JE4 8UY
t: 01534 445509 f: 01534 445529
e: tts@gov.je
w: www.gov.je/GOVERNMENT/DEPARTMENTS/TRANSPORTTECHNICALSERVICES/

***Assistant Director – Solid Waste***
t. 01534 448586

***Recycling Manager***
t. 01534 448589
e: recycle@gov.je w: www.gov.je/recycling

***Manager – Materials recycling***
t: 01534 448555

## ANNEX 1: WASTE MANAGEMENT (JERSEY) LAW, 2005 AND THE LINKS WITH THE PLANNING APPLICATION PROCESS

The Waste Management (Jersey) Law, 2005 is the primary legislation governing the control and management of waste operations within Jersey. Its broad aims are:

- to protect the environment and people from the harmful effects of waste management operations; and
- to ensure that the Island has legislation to regulate international waste movements.

The law is administered by Environmental Protection at the Department of the Environment and its waste regulatory functions include:

- issuing of waste management licences to permit waste management activities and prevent any potential negative impacts on the environment and human health;
- undertaking inspections of licensed, exempt and unlicensed waste activities (including fly tipping), to ensure compliance with licence conditions and the waste legislation;
- taking enforcement action where necessary;
- registering persons who transport hazardous or healthcare wastes on roads;
- administering and advising on the system of movement control procedures for the transport of hazardous or healthcare wastes;
- responding and advising to consultations on planning applications.

It is an offence under the law for a person to cause or knowingly permit the deposit, keeping, treating, disposal or recovery of controlled waste on any land, unless it is in accordance with a valid waste management licence, or is specifically exempt from the need for a licence. It is also an offence for a person to carry out such activities in a manner that is likely to cause pollution.

Environmental Protection, as a consultee in the development planning process, will normally only support large scale development proposals which are in close proximity to residential areas or involve removal of contaminated land, where SWMP proposals are to be supported by adequate environmental management plans, in the form of a CEMP.

For the purposes of the Waste Law, “Waste” means any substance or object, that is discarded, or any substance or object, in a person’s possession or control, that the person intends to discard or is required by a national law to discard.

“Controlled waste” means hazardous, healthcare and municipal wastes. It includes waste from any business or trade and ashes/residues from incineration. It also covers construction and demolition wastes, including excavated sub-soils and made ground/infill, concrete, bricks, stones, rubble, blocks, plaster and tarmac.

Where excavated ground or demolition gives rise to waste which is contaminated with other substances (from past industrial use of the land or leaking underground fuel tanks for example) then special consideration is needed for the re-development of these sites and the management of wastes arising on them. Separate supplementary planning guidance is available for the development of contaminated land (see Planning Advice Note 2: ‘Development of potentially contaminated land’, October 2005.

The Waste Law defines which waste activities:

- must be authorised by a waste management licence;
- are exempt from the requirement for a licence.

## Crushing suitable wastes to create recycled aggregate

One such exemption from licensing is crushing as specified in the Exemption Order (the Waste Management (Exemptions from Licensing) (Jersey) Order, 2006). The activity is exempt from requiring a licence under Article 23, as follows:

> "Exempt activity – paragraph 10
> (1) Any crushing, grinding or other size reduction process, when applied to controlled waste that consists of bricks, tiles, concrete, stone or similar materials.
> (2) The storage of such waste at a place where an activity described in sub-paragraph (1) is to be carried out, if –
> (a) the waste is to be used in that activity; and
> (b) the total quantity of all wastes specified in sub-paragraph (1) that are for the time being at that place does not exceed 5,000 tonnes.
> (3) In this paragraph, "controlled waste" does not include hazardous waste or health care waste."

The crushing on a development site of suitable waste (e.g. bricks, tiles, concrete, stone or similar materials) either produced at the site by demolition, or imported to the site, is exempt from the need to be authorised by a licence.

Developers who are seeking to minimise offsite disposal of demolition waste by **crushing suitable demolition waste for use as aggregate** either on site or as part of the development or for export and re-use off site, should ensure that these proposals are included as part of both the planning application details and the SWMP. The environmental controls which are necessary can then be considered as part of the planning application process. Developers may be required to produce a CEMP through the planning permit conditions, in order to manage emissions of dust and noise and minimise the environmental impact of crushing plant activity.

Developers who are seeking to minimise the use of primary aggregates by the **importation of suitable waste (e.g. bricks, tiles, concrete, stone or similar materials) to be crushed on site for use as recycled aggregate** should ensure that these proposals are included as part of the planning application and the SWMP. The environmental controls which are necessary can again be considered as a part of the planning application process.

The use of crushing plant to produce aggregates will, by necessity, involve a certain amount of associated screening to grade and size the material which has been crushed (i.e. the recycled aggregate) for a particular application or use.

Where the **material imported to a development site is mixed construction and demolition and excavation wastes** which needs pre-screening to extract the "bricks, tiles, concrete, stone or similar materials" from soils and fine particle size materials so that it can be crushed, then this activity is not exempt and will require a waste management licence. Such activity on a development site effectively makes it a waste treatment site and a waste transfer station if processed and segregated wastes are then re-exported from the site.

Where **material is produced on a development site as mixed construction and demolition and excavation wastes** which needs pre-screening to extract the "bricks, tiles, concrete, stone or similar materials" from soils and fine particle size materials so that it can be crushed, then such activity will need to be considered in the planning process and be controlled through the planning process.

## The use of waste soils and aggregates for site level changes and landscaping

Development may require the re-use of waste soils or other inert materials generated on site or require imported waste materials for landscaping or changing levels and ground profiles on site. If this is necessary for the development and the deposit and use of the material will be or is authorised through the planning permit and associated development plans, then the deposit and use of the waste materials will be exempt from the licensing requirements of the Waste Management (Jersey) Law, 2005.

Such a use would be exempt from licensing under paragraph 5 as specified in the Exemptions Order (the Waste Management (Exemptions from Licensing) (Jersey) Order, 2006). The activity is exempt from requiring a licence under Article 23, as follows:

"Exemption activity – paragraph 5

(1) The use of a controlled waste in a way that is beneficial to the environment, if –
  (a) it is put to use without further treatment; and
  (b) the use does not amount to disposal.

(2) The storage of a controlled waste at any place, if –
  (a) the waste is to be beneficially used in accordance with subparagraph (1); and
  (b) the quantity that is for the time being stored at that place does not exceed 100 tonnes.

(3) In this paragraph, "controlled waste" does not include health care waste."

This exemption can be relied upon where the use of waste material is demonstrated to be necessary for a particular development site through the planning application. If the purpose of depositing material arising from a development site at the same development site is purely to **dispose** of it and avoid having to export it, then the exemption would not apply and a waste management licence would be required.

Where it is necessary to import material, auditable records should be kept of the sources of such material and verification of its clean, uncontaminated and inert nature. In consultation with Environmental Health through the planning application process, a risk assessment of the hydrogeological setting in which the material is to be deposited may be necessary, in order to protect the environment (e.g. nearby groundwater, abstraction boreholes, surface water courses).

If a development has a planning permit and the importation of material is necessary for the development, then it should be controlled through the planning permit and not have to be licensed as a waste management site.

In order to comply with the Waste Management (Jersey) Law, 2005, there is an important point to remember for developers seeking to reduce off site waste disposal by leaving materials on site. There must be a reason for the deposit of the material on site and this

should form part of the development proposal and be permitted by the planning permit (i.e. by reference to the application plans and subsequently agreed development details). It is not acceptable for disposal of on site waste to take place – for this a waste management licence must be in force permitting the disposal.

## ANNEX 2: CHECKLIST

This checklist is provided to assist all those involved in waste management planning to help ensure compliance with Island Plan Policy WM1 and the principles set out in this supplementary guidance.

| Questions to consider | Tick if 'Yes' ✓ | If 'no', why not? |
|---|---|---|
| | | |
| **Responsibility, Planning and Preparation for the SWMP** | | |
| Has someone been made responsible for writing the SWMP? ***(→ 12.2)*** | | |
| Has adequate time been set aside from the outset to plan and prepare the SWMP? | | |
| Has someone been assigned overall responsibility for implementing the SWMP? ***(→ 12.5)*** | | |
| Has any one else been appointed to act as a 'waste champion', where appropriate? ***(→ 12.6)*** | | |
| **Design, Procurement and Waste Minimisation** | | |
| Has consideration been given during the conception, design and specification phases of the project to methods for reducing the amount of waste arising? ***(→ 8.2 to 8.5)*** | | |
| Where there are buildings and structures on the site, has consideration been given to the potential for adapting, rehabilitating and incorporating them into the design (in-situ) to reduce demolition waste? ***(→ 8.4)*** | | |
| Does the design provide for the use of second hand, recycled or renewable materials? ***(→ 8.4)*** | | |
| Has consideration been given in the design to the use of construction methods that will minimise waste, such as off-site pre-fabrication and modular construction? ***(→ 8.4)*** | | |
| Have room sizes been designed to sizes that correspond to standard dimensions for sheet materials to reduce the need for off cuts? ***(→ 8.4)*** | | |
| Has a careful evaluation of materials requirements been made so that over-ordering and site wastage is reduced? ***(→ 8.5)*** | | |
| Have you thought about ordering materials that have less or reusable packaging? ***(→ 8.5)*** | | |
| Is unwanted packaging to be returned to the supplier for recycling or re-use? ***(→ 8.5)*** | | |
| Are unused materials to be returned to the supplier or used on another job? ***(→ 8.5)*** | | |
| Has consideration been made to introducing 'just-in-time' delivery of materials to reduce the potential for damage? ***(→ 8.5)*** | | |
| **Project Planning** | | |
| Has a thorough assessment taken place to identify the waste that is likely to be produced throughout the project – how much, when and what types? ***(→ 12.8)*** | | |
| As part of the above assessment, has the waste (e.g. soil) been tested to determine if it is contaminated? ***(→ 12.9)*** | | |
| Have the most significant waste streams been prioritised? ***(→ 12.12)*** | | |
| Have targets been set for the different types of waste likely to arise from the project? ***(→ 12.16)*** | | |
| Has a suitable accessible area of the site been set aside for waste management, including segregation of waste and provisions for collection? ***(→ 8.5 and 12.21)*** | | |

| | | |
|---|---|---|
| Has consideration been given to modifying the development design, to reduce the amount of waste? ***(→ 8.5)*** | | |
| Have opportunities been considered for the reuse of materials on-site and off-site? ***(→ 12.15)*** | | |
| Have opportunities been considered for the recycling of materials on-site and off-site? ***(→ 12.15)*** | | |
| Have opportunities been considered for recovering value from residual waste? ***(→ 12.15)*** | | |
| Have you evaluated the options available before determining the waste management methods to be used for each waste stream? ***(→ 12.13)*** | | |
| Have you considered where the most appropriate sites / facilities are (licensed or exempt) for the planned off-site management and disposal of waste materials from the project? ***(→ 12.20 and 12.21)*** | | |
| Have measures been put in place to ensure that hazardous waste is transported from the site by registered waste carriers? ***(→ 12.20 and 12.21)*** | | |
| **Communicating the SWMP** | | |
| Are there plans to use an induction programme to explain waste management on-site? ***(→ 12.25)*** | | |
| Have talks been planned for all site personnel about the requirements for waste management on-site? ***(→ 12.25)*** | | |
| Are site personnel, contractors and sub-contractors sufficiently trained and aware of their responsibilities and will additional training be provided as necessary? ***(→ 12.25)*** | | |
| Have the contractors and sub-contractors understood and agreed the SWMP? ***(→ 12.19)*** | | |
| Are the relevant requirements of the SWMP built into contracts? ***(→ 12.19)*** | | |
| Has the area set aside for waste management been adequately signposted? | | |
| **Waste Handling** | | |
| Have arrangements been made for selected waste materials to be segregated to help get best value from good waste management practices? ***(→ 12.22 to 12.24)*** | | |
| Are containers/skips for waste materials to be clearly labelled to avoid confusion? | | |
| Has everyone who will be handling waste been told about the requirements of the SWMP? ***(→ 12.25)*** | | |
| Will systems be in place to check that waste materials are removed from the site by authorised / registered carriers and are received at the intended licensed or exempt waste management facilities? ***(→ 12.21)*** | | |
| **Measuring and Monitoring Waste** | | |
| Have data reporting procedures, document controls and filing / recording procedures been set up? ***(→ 12.26 and 12.27)*** | | |
| Are there plans to check and monitor the implementation of agreed waste management procedures on a regular basis? ***(→ 12.26 and 12.27)*** | | |
| Are plans in place to regularly update the SWMP by recording the quantities of waste generated and managed throughout the project? ***(→ 12.26 and 12.27)*** | | |
| Are there plans in place to note and record any problems which occur? ***(→ 12.29 and 12.30)*** | | |
| Are regular checks to be made to ensure that waste management actions and targets are being achieved? ***(→12.29 and 12.30)*** | | |
| Are there plans in place to regularly report on / review waste quantities and treatment/disposal routes and any problems arising which present barriers to planned waste management? | | |

| | | |
|---|---|---|
| Are plans in place to ensure the evolving up-to-date SWMP is kept in an accessible location on-site to allow for periodic checks and audits? ***(→ 12.28)*** | | |
| **Planning Application** | | |
| Has the SWMP been submitted with the application? ***(→ 10.1 and 10.2)*** | | |
| Has the SWMP been signed by the client, principal contractor and, where appropriate, specified sub-contractors? ***(→ 9.1)*** | | |
| Does the submitted SWMP include forecasts of each type of waste that will be produced on site at all stages throughout the project and how it will be managed? ***(→ 9.2)*** | | |
| Does the submitted SWMP also include:<br>▪ the site location?<br>▪ a description of the works?<br>▪ the individuals responsible for preparing and implementing the plan?<br>▪ a declaration / undertaking that waste materials will be handled in compliance with the plan?<br>▪ details of the intended distribution of the plan and proposals for training and instruction?<br>▪ a description of each waste type expected to be produced during the project and estimated quantities?<br>▪ a prioritised list of the most significant waste streams requiring waste management, where appropriate?<br>▪ a statement on waste minimisation decisions taken before the SWMP was drafted and planned through procurement etc, to reduce the quantity of waste produced on site?<br>▪ targets for the managing key waste materials – i.e. percentage to be reused, recycled and recovered?<br>▪ details of the waste management actions proposed for each waste type – i.e. quantities to be reused, recycled and recovered (and whether on or off-site) or sent to landfill?<br>▪ a statement of the plans to be put in place for the separation and storage of waste materials?<br>***(→ 9.2 to 9.5)*** | | |
| **Post-Project Reporting and Review** | | |
| Are plans in place to complete a final version of the SWMP for submission to the Minister for Planning and Environment within three months of project completion? ***(→ 12.31 and 12.33)*** | | |
| Will this final version of the SWMP include:<br>▪ confirmation that the plan has been satisfactorily monitored and updated on a regular basis?<br>▪ accurate records of the types and quantities of waste materials that have actually been generated and managed?<br>▪ comparisons between actual waste generation and waste management performance and what was originally planned before work began?<br>▪ an explanation of any significant deviations from the planned arrangements?<br>▪ the signatures of the client, principal contractor and, where appropriate, specified sub-contractors?<br>***(→ 12.31 and 12.33)*** | | |
| Are there plans in place to review the performance of the SWMP and consider the key waste management issues arising for action at future projects? ***(→ 12.31)*** | | |

## ANNEX 3: EXAMPLE PROFORMA FOR SITE WASTE MANAGEMENT PLAN

| SITE WASTE MANAGEMENT PLAN |
|---|

| Version Number | | Date | |
|---|---|---|---|

| Author | |
|---|---|

## SUMMARY OF CONSTRUCTION PROJECT

| | | | | | | |
|---|---|---|---|---|---|---|
| Project Name / Reference: | | | | | | |
| Project Address / Location: | | | | | | |
| Description of Project: | | | | | | |
| Estimated Project Cost: | | | | | | |
| Assumed Contract Period (months): | | | | | | |
| Start Date: | Day | | Month | | Year | |
| Completion Date: | Day | | Month | | Year | |
| Project scope (please tick) ✓ | Demolition | | | Block and render | | |
| | Timber frame construction | | | Modern methods of construction | | |
| | Concrete frame construction | | | Other (describe) | | |
| Notes, amendments | | | | | | |

## MANAGEMENT RESPONSIBILITY

| Position | Name | Contact Details |
|---|---|---|
| Client: | | |
| Principal Contractor: | | |
| Project Manager: | | |
| Waste Management Co-ordinator (i.e. person responsible for waste management on-site): | | |
| Waste Champion (if applicable): | | |
| Document Controller: | | |
| Notes, amendments | | |

## WASTE MANAGEMENT UNDERTAKING

| **Declaration** |
| --- |
| The client and principal contractor will take all reasonable steps to ensure that:<br>(i) all waste from the site is dealt with in accordance with the 'Waste Management (Jersey) Law', 2005; and<br>(ii) materials will be handled efficiently and waste managed appropriately in accordance with this Site Waste Management Plan. |
| **Signatures** |

## DISTRIBUTION STATEMENT

e.g. The Principal Contractor shall distribute copies of this plan to the Client, the Project Manager, the Waste Management Co-ordinator, the Waste Champion and each Subcontractor. This will be undertaken every time the plan is updated.

## INSTRUCTION AND TRAINING STATEMENT

e.g. The Principal Contractor will provide on-site instruction of appropriate waste separation, handling, recycling, reuse and return methods to be used by all parties at all appropriate stages of the project.

Toolbox talks will be carried out every month on waste issues and all subcontractors will be expected to attend. The SWMP will also be mentioned in the site induction process. This will ensure that everyone feels they are included and that their participation is meaningful.

## FORECAST WASTE PRODUCTION CHECKLIST

| Waste Material | Enabling Works (including demolition) | | Construction Works | |
|---|---|---|---|---|
| | Tick ✓ | Estimated Quantity ($m^3$ or tonnes) | Tick ✓ | Estimated Quantity ($m^3$ or tonnes) |
| | | | | |
| **Inert** | | | | |
| e.g. | | | | |
| Stone | | | | |
| Aggregates | | | | |
| Blocks / bricks | | | | |
| Concrete | | | | |
| Glass | | | | |
| Sand | | | | |
| Tarmac | | | | |
| Top soil (uncontaminated) | | | | |
| Sub soil (uncontaminated) | | | | |
| Bulk excavated (uncontaminated) | | | | |
| Polystyrene | | | | |
| Other | | | | |
| ***Sub-total*** | | | | |
| **Non - hazardous** | | | | |
| e.g. | | | | |
| Cable wiring | | | | |
| Canteen waste | | | | |
| Cardboard | | | | |
| Gypsum products | | | | |
| Metals | | | | |
| Mixed Waste | | | | |
| Pallets | | | | |
| Paper | | | | |
| Plasterboard | | | | |
| Plastics (biodegradable) | | | | |
| Timber (not tanalised) | | | | |
| Trees & vegetation | | | | |
| Other | | | | |
| ***Sub-total*** | | | | |
| **Hazardous** | | | | |
| e.g. | | | | |
| Top soil (contaminated) | | | | |
| Sub soil (contaminated) | | | | |
| Bulk excavated (contaminated) | | | | |
| Asbestos | | | | |
| Explosive | | | | |
| Flammable | | | | |
| Toxic | | | | |
| Other | | | | |
| ***Sub-total*** | | | | |
| **TOTAL VOLUMES** | | | | |

**PRIORITISED WASTE REQUIRING MANAGEMENT – ENABLING WORKS (INCLUDING DEMOLITION)**

| Waste Material | Waste Type | Origin of Waste | Quantity ($m^3$ or tonnes) |
|---|---|---|---|
| e.g. | | | |
| Asbestos | Hazardous | Demolition works | |
| Bricks/blocks | Inert | Demolition of buildings & walls | |
| Concrete | Inert | Site strip & demolition of buildings | |
| Metals | Non-hazardous | Site strip & demolition of buildings | |
| Plasterboard | Non-hazardous | Demolition of buildings | |
| Subsoils (uncontaminated) | Inert | Site strip | |
| Tarmac | Inert | Site strip | |
| Trees and Vegetation | Non-hazardous | Site strip | |

**PRIORITISED WASTE REQUIRING MANAGEMENT – CONSTRUCTION WORKS**

| Waste Material | Waste Type | Origin of Waste | Quantity ($m^3$ or tonnes) |
|---|---|---|---|
| e.g. | | | |
| Bricks/blocks | Inert | Blocklayers | |
| Canteen | Non-hazardous | All contractors | |
| Cardboard | Non-hazardous | Fitting out | |
| Metal | Non-hazardous | Superstructure | |
| Paints | Hazardous | Painters | |
| Pallets | Non-hazardous | Product Suppliers | |
| Plasterboard | Non-hazardous | Drylining | |
| Timber | Non-hazardous | Joinery | |

**WASTE MINIMISATION STATEMENT AND RECORDED ACTIONS TO REDUCE THE AMOUNT OF WASTE ARISING.**

e.g. From the earliest stages of the project, consideration has been given to minimising the waste produced, in order to reduce the amount of waste that must be removed from the site. The Design Team, Subcontractors and Suppliers are all being encouraged to examine ways in which the amount of waste produced on the site can be minimised. Up-to-date actions are set out in the following table and this will be expanded as new waste minimisation actions are identified:

| Actions | Responsibility | Date Action Started |
|---|---|---|
| e.g. | | |
| Adapting and rehabilitating existing buildings and features as part of the overall design | Design Team | |
| Making use of off-site prefabrication / pre-assembly as part of the overall design | Design Team | |
| Designing to sizes that correspond to standard dimensions for sheet materials (e.g. plasterboard) and modules of components. | Design Team | |
| Allowing specification of recycled materials in the design. | Design Team | |
| Designing for future recycling and ease of disassembly. | Design Team | |
| 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). | Design Team | |
| Incorporate existing trees and vegetation into landscape design. | Design Team | |
| Containing and managing contaminated land in situ, where practicable. | Design Team | |
| Segregate excavated contaminated soils to avoid cross contamination. | Site Foreman | |
| Using contract specifications for subcontractors that require implementation of waste minimisation practices | Principal Contractor | |
| Using staff induction to promote waste minimisation | Project Manager | |
| Storing pallets which arrive with imported materials until there are sufficient numbers to make collection or return to supplier economical. | Site Foreman | |
| Minimising timber waste by using re-useable steel shuttering for concrete work (or re-using timber for shuttering). | Project Manager | |
| Planning base excavations and concrete pours so that any surplus concrete can be used as blinding. | Project Manager | |
| Reduce surplus / waste materials by correct ordering (i.e. specifying correct volume, amount, size etc). | Project Manager | |
| Set up just-in-time delivery of materials arriving to site, to help prevent damage through inadequate storage and weather conditions. | Project Manager | |
| Reduce packaging waste by asking suppliers to send product with minimal packaging | Project Manager | |
| Reduce packaging waste by buying in bulk, rather than individually wrapped products. | Project Manager | |
| Return packaging to suppliers. | Site Foreman | |
| Procure sheet materials pre-cut to design specifications. | Project Manager | |
| Return damaged products to suppliers. | Site Foreman | |

## TARGET SETTING FOR RE-USE/ RECYCLING / RECOVERY – ENABLING WORKS

| Waste Material | Quantity ($m^3$ or tonnes) | Target |
|---|---|---|
| e.g. | | |
| Concrete | 250$m^3$ | Recycle on-site – 90% |
| Green Waste | 400$m^3$ | Recover off-site – 70% |
| Bricks/blocks | 500$m^3$ | Recycle onsite – 90% |
| Soils (uncontaminated) | 500$m^3$ | Reuse on- and off-site – 100% |
| Other | | |
| Other | | |

## TARGET SETTING FOR RE-USE / RECYCLING / RECOVERY – CONSTRUCTION WORKS

| Waste Material | Quantity ($m^3$ or tonnes) | Target |
|---|---|---|
| e.g. | | |
| Cable Wiring | 15$m^3$ | Recycle – 90% |
| Metal | 40$m^3$ | Recycle off-site – 100% |
| Packaging | 100$m^3$ | Recycle – 50% |
| Pallets | 25$m^3$ | Reuse on- and off-site – 100% |
| Timber | 200$m^3$ | Recycle offsite – 70% |
| Other | | |
| Other | | |

## WASTE SEGREGATION STATEMENT

e.g. An area of the site will be laid out to provide for the separation and storage of materials for reuse and recycling (on- and off-site) and for return. Recycling and waste containers will be kept clean, clearly labelled and emptied regularly to avoid cross-contamination of materials and prevent lack of space. Skips for segregation of waste currently identified include:

- Rubble
- Timber
- Metal

As the development progresses additional skips will be placed in the designated area for other waste materials, including:

- Cardboard
- Plasterboard

## PROPOSED WASTE MANAGEMENT ACTIONS - FOR ENABLING WORKS

| Waste Material Type | Quantity (in tonnes, m³) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Re-use on-site | Re-use off-site | Re-cycled on-site | Re-cycled off-site | Other form of Recovery on-site | Other form of Recovery off-site | Sent to landfill for disposal |
| ***Estimates*** | | | | | | | |
| **Inert** | | | | | | | |
| e.g. | | | | | | | |
| Concrete | | | | | | | |
| Rubble | | | | | | | |
| Subsoil (uncontam-inated) | | | | | | | |
| Tarmac | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Non-hazardous** | | | | | | | |
| e.g. | | | | | | | |
| Cable and wiring | | | | | | | |
| Metal | | | | | | | |
| Mixed waste | | | | | | | |
| Plaster-board | | | | | | | |
| Timber | | | | | | | |
| Trees and vegetation | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Hazardous** | | | | | | | |
| e.g. | | | | | | | |
| asbestos | | | | | | | |
| Soil (Contamin-ated) | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **TOTAL** | | | | | | | |

## PROPOSED WASTE MANAGEMENT ACTIONS - FOR CONSTRUCTION WORKS

| **Material / Waste type** | **Quantity (in tonnes, m³)** | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Re-use On-site** | **Re-use off-site** | **Recycled on-site** | **Recycled off-site** | **Other form of Recovery on-site** | **Other form of Recovery off-site** | **Sent to landfill for disposal** |
| ***Estimates*** | | | | | | | |
| **Inert** | | | | | | | |
| e.g. | | | | | | | |
| Concrete | | | | | | | |
| Blocks | | | | | | | |
| Subsoil (uncontam-inated) | | | | | | | |
| Tarmac | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Non-hazardous** | | | | | | | |
| e.g. | | | | | | | |
| Cable & wiring | | | | | | | |
| Metal | | | | | | | |
| Mixed waste | | | | | | | |
| Plaster-board | | | | | | | |
| Timber | | | | | | | |
| Trees and vegetation | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Hazardous** | | | | | | | |
| e.g. | | | | | | | |
| asbestos | | | | | | | |
| Soil (Contamin-ated) | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **TOTAL** | | | | | | | |

## MONITORING - WASTE MOVEMENT RECORDS

| Date removed | Waste Material + *(Type)* | Quantity<br>m³ or tonnes | Site the waste is being taken to & whether licensed / exempt | Waste Carrier + (Licence No.)* | Waste Management Route |
|---|---|---|---|---|---|
| e.g. | | | | | |
| 05/05/12 | Vegetation *(non-hazardous)* | ½ tonne | La Collette Composting Facility (licensed) | Waste Ltd | Recovery – Shredded and composted for use as soil improver. |
| 11/06/12 | Concrete *(inert)* | 9 tonnes | La Collette Inert Waste Recycling Centre (licensed) | Waste Ltd | Recycled as hardcore offsite. |
| 20/06/12 | Asbestos *(hazardous)* | 1 tonne | La Collette Reclamation Site (licensed) | Waste Ltd (L77777) | Disposal - Sent to Landfill. |
| 23/06/12 | Mixed Waste *(non-hazardous)* | 4 tonnes | Waste Ltd<br>(licensed) | Waste Ltd | Recovery – sorted off-site by waste management contractor. |
| 04/07/12 | Scrap timber *(non-hazardous)* | ¼ tonne | EfW Plant, La Collette (licensed) | Waste Ltd | Recovery – Energy from waste. |
| 10/07/12 | Roof tiles (inert) | 3 tonnes | La Collette Reclamation Site (licensed) | Waste Ltd | Disposal - Sent to Landfill |
| 17/09/12 | Iron and steel *(non-hazardous)* | ½ tonne | Bellozanne Scrap Yard (licensed) | Waste Ltd | Recycled off-site – sorted, separated into ferrous and non-ferrous metals, cut up and sold for recycling. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

* if hazardous waste is being transported.

**MONITORING - ACTUAL TYPES AND QUANTITIES OF WASTE AND ITS MANAGEMENT @ .....**

| Material / Waste type | Quantity (in tonnes, m³) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Re-use On-site | Re-use off-site | Re-cycled on-site | Re-cycled off-site | Other form of Recovery on-site | Other form of Recovery off-site | Sent to landfill for disposal |
| ***Estimates*** | | | | | | | |
| **Inert** | | | | | | | |
| e.g. | | | | | | | |
| Concrete | | | | | | | |
| Blocks | | | | | | | |
| Subsoil (uncontam-inated) | | | | | | | |
| Tarmac | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Non-hazardous** | | | | | | | |
| e.g. | | | | | | | |
| Cable & wiring | | | | | | | |
| Metal | | | | | | | |
| Mixed waste | | | | | | | |
| Plaster-board | | | | | | | |
| Timber | | | | | | | |
| Trees and vegetation | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **Hazardous** | | | | | | | |
| e.g. | | | | | | | |
| asbestos | | | | | | | |
| Soil (Contamin-ated) | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| ***Sub total*** | | | | | | | |
| **TOTAL** | | | | | | | |

Note: separate tables could be created for enabling and construction works.

## POST COMPLETION STATEMENT ON PLAN IMPLEMENTATION

*(N.B. This should be included in the final version of the Plan. It is anticipated that in most instances, the final version of the plan will be completed and submitted to the Minister within three months of the construction work being completed).*

| **Confirmation** |
|---|
| This plan has been monitored and updated on a regular basis throughout the enabling and construction phases, in compliance with Island Plan Policy WM1, to ensure that work was progressing according to the plan and that the plan has been updated to record details of the actual waste management actions and waste transfers which have taken place. |
| **Signature/s** |

## POST-COMPLETION REVIEW OF SITE WASTE MANAGEMENT PLAN

In accordance with the requirements of Island Plan Policy WM1, the plan and how waste has been managed throughout the project has been reviewed. An explanation of deviations from the planned arrangements is set out below.

**Variation from Waste Forecasts**

| **Waste Material** | **Est. Quantity ($m^3$)** | **Actual Quantity ($m^3$)** | **Difference (+/-)** | **Reason for Variance** |
|---|---|---|---|---|
| | | | | |
| **Enabling Works (including demolition)** | | | | |
| e.g. | | | | |
| Bricks / Blocks | 500 | 400 | -100 | Less material than anticipated in demolition of buildings. |
| Concrete | 250 | 300 | +50 | More concrete than anticipated in demolition of buildings. |
| Trees and vegetation | 400 | 350 | -50 | Less vegetation than expected. Late requirement to retain hedgerow plants. |
| Soils (uncontam-inated) | 500 | 700 | +200 | Late requirement for more cut to reduce visual impact. |
| **Construction Works** | | | | |
| e.g. | | | | |
| Cable-wiring | 10 | 7 | -3 | Efficiencies in use of materials. |
| Insulation | 40 | 50 | +10 | Partial reworking undertaken. |
| Packaging | 180 | 140 | -40 | Less packaging than anticipated from fit-out stage. |
| Pallets | 25 | 35 | +10 | More material supplied on pallets than anticipated. |

**Variation from Waste Targets**

| Waste Material | Target | Actual | Reason for Variance |
|---|---|---|---|
| | | | |
| **Enabling Works (including demolition)** | | | |
| e.g. | | | |
| Bricks/Blocks | Recycle on-site 90% | 100% | Less material than anticipated in demolition of buildings. |
| Concrete | Recycle on-site 90% | 70% | More concrete than anticipated in demolition of buildings. |
| Trees and vegetation | Recover off-site – 70% | 80% | Less vegetation than expected. Higher proportion of material suitable for composting. |
| **Construction Works** | | | |
| e.g. | | | |
| Packaging | Recycle 50% | 60% | More recyclable material and better separation on site than anticipated. |
| Pallets | Re-use on- and off-site – 100% | 90% | More material than anticipated supplied on pallets. Storage limitations leading to more damaged pallets. |

**Variation from Proposed Waste Management Actions**

| Material | Issue | Reason for Variation |
|---|---|---|
| | | |
| **Enabling Works (including demolition)** | | |
| e.g. | | |
| Asbestos | More sent to landfill than estimated. | More asbestos discovered in old buildings than was anticipated. |
| Concrete | More sent to landfill than estimated. | More concrete than anticipated in demolition of buildings. |
| Trees and vegetation | Less vegetation recovered off-site. | Less vegetation than expected. Late requirement to retain hedgerow plants. |
| Timber | More reused on-site and less sent for recovery off-site (at EfW plant). | More of timber floors, ceiling joists and rafters than anticipated able to be reused in the new buildings – less scrapped. |
| **Construction Works** | | |
| e.g. | | |
| Plasterboard | Less sent to landfill than estimated. | The specification of pre-cut materials reduced volume of waste. |
| Packaging | Less sent for recovery off-site (at EfW plant). | Able to return more packaging than anticipated to suppliers and to separate more cardboard for recycling off-site. |
| Pallets | More sent for recovery off-site (at EfW plant). | More material than anticipated supplied on pallets. Storage limitations leading to more damaged pallets. |

**Relevant Signatures**

| Signed on behalf of: | Signature | Date |
|---|---|---|
| Client | | |
| Principal Contractor | | |
| Identified Sub-contractor | | |
| Identified Sub-contractor | | |