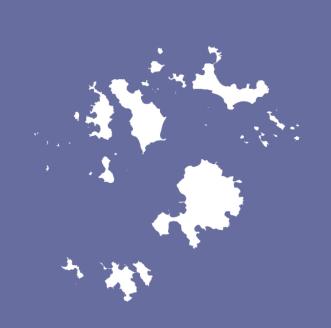
Isles of Scilly



# Isles of Scilly Capital Delivery Programme

Design Stage Site Waste Management Plan St Mary's Welfare Compound This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.

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Appendix A: SWMP Flow Chart



### 1 Introduction

South West Water (SWW) has appointed Trant and Pell Frischmann to design and deliver the Isles of Scilly Capital Delivery Programme. This programme includes new potable and wastewater systems distributed across the five archipelago islands. To enable programme delivery and effective construction management, construction of a temporary welfare compound at St Mary's is being proposed.

Pell Frischmann has been commissioned by Trant Engineering Limited on behalf of SWW to prepare a design stage Site Waste Management Plan (SWMP). The SWMP is to support the Planning Application for a temporary welfare compound on the Island of St. Mary's.

This design stage SWMP aims to:

- present the high-level site waste management objectives for the proposed temporary welfare compound;
- provide design stage information for inclusion in the pre-construction stage SWMP, which will be
  produced by the construction contractor, for the management of construction waste associated with the
  proposed development; and
- satisfy the planning validation requirements for a SWMP to be provided.

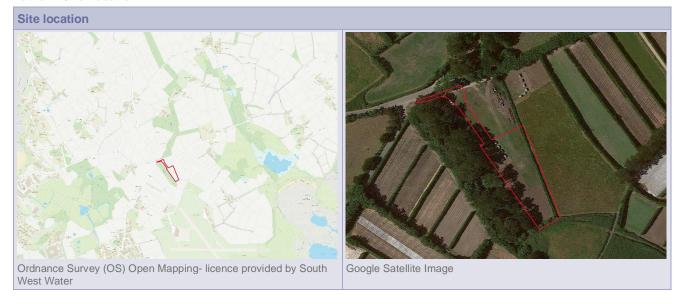
## 1.1 Site Location and Description

The site of the temporary welfare compound (hereafter referred to as the 'site') is located on land south of the A3110 Parting Carn Lane (National Grid Reference - SV 91762 10782). The site location is marked in red on the plans presented in Table 1 below. The footprint of the application site occupies area of 0.39 hectares and is bound to the north, east, and south by hedgerows (traditional stone-faced hedgebanks) and to the west by an area of woodland.

The application site is situated approximately 400m north of runway 14 at the Isles of Scilly Airport, in a relatively rural setting with very few residential properties in local vicinity. The nearest neighbouring residential properties are located approximately 170m / 200m west / southwest of the site on Parting Carn Lane (the A3110) and Old Town Lane respectively.

The application site is owned by the Duchy of Cornwall, and it provides land for the grazing and rearing of livestock.

**Table 1: Site Location** 



Site information	Details
Site area	0.39 Ha
National Grid Reference (centre of the site) (NGR)	SV 91762 10782
Nearest (central) postcode	TR21 0NG

### 1.2 Proposed Development

The welfare compound will consist of an access road, parking and laydown area, recreation room, canteen, smoking shelter, meeting room, drying room, ten sleep units, toilets with cess pit and power supply.

After the temporary welfare compound has fulfilled its purpose, the structures will be removed, and the site will be reverted to an arable field.

The site layout disaggregated by area is as follows:

- Access, parking and laydown, including:
  - Internal site access track running north-south parallel to the western field boundary.
  - o Parking spaces;
  - o Laydown area; and,
  - Vehicle turning area.
- Offices and amenities, including:
  - o Generator;
  - o Offices:
  - Meeting room;
  - o Recreation room;
  - o Canteen;
  - Drying room;
  - o Material storage area; and
  - Toilet / cess pit.
- Habitation, including:
  - Ten cabin-type sleep units.

# 1.3 Key Construction Activities

Construction of the proposed development will include the following key activities, considered within this SWMP, which have the potential to produce waste:

- Site preparation works including:
  - o power supply connections;
  - o stripping of topsoil for vehicle parking and materials laydown and storage area;
  - o setting out an access track; and
  - o perimeter fencing.
- Installation of the welfare compound facilities.
- Decommissioning of the welfare compound and site re-instatement.



# 2 Waste Management Requirements

The Isles of Scilly Local Plan (2021) has an aim to Promote a "Sustainable Scilly". Aim 7 of the Local Plan is to '...minimise carbon dioxide and other greenhouse gases and supporting measures that contribute to carbon neutrality and mitigate against the effects of climate change.'

Policy OE5, which relates to the management of waste, sets out the planning requirement to (i) reduce waste; (ii) manage solutions; and (ii) submit a SWMP.

The Isles of Scilly Waste Reduction Strategy (2020) details ambitions to "manage resources that effectively, efficiently and sustainably".

Details of the Isles of Scilly Local Plan and the Isles of Scilly Waste Reduction Strategy are presented in Table 2 and Table 3 respectively.

#### Table 2: Summary of Isles of Scilly Local Plan requirements

### Isles of Scilly Local Plan Including Mineral and Waste (adopted 2021)<sup>1</sup>

#### Aim 7

#### Promoting a Sustainable Scilly

- "Maintaining an outstanding and world-class environment and ensuring that its distinctive and significant seascape and landscape, heritage and nature conservation assets are protected, valued, and enhanced.
- Ensuring the provision of infrastructure and utilities to create a more sustainable, resilient, and self-sufficient Isles of Scilly.
- Creating a balanced local housing market that provides housing choice and meets the existing and future needs of the community, enabling economic prosperity.
- Creating a more competitive, diverse and resilient economy based on an exceptional and inspirational
  environment that can adapt to change and challenges and maximise opportunities by building on its
  strengths and underpinned by effective infrastructure and an appropriately available and skilled workforce.
- Engendering and supporting a strong, vibrant and healthy island community with an improved quality of life for its residents.
- Adapting to the effects of climate change on people, wildlife and places by increasing resilience, matching the vulnerability of land uses to flood risk, and managing surface water in the most sustainable way.
- Minimising carbon dioxide and other greenhouse gases and supporting measures that contribute to carbon neutrality and mitigate against the effects of climate change."

### Policy OE5

### **Managing Waste**

- "Existing waste sites are identified on the Policies Map. Development proposals that could prejudice use of these sites for the essential processing of waste for the islands, will be refused.
- All development proposals must demonstrate best practice in addressing waste management solutions, must align with the waste hierarchy, and a site waste management plan (SWMP) must be submitted to support planning applications.
- Construction and demolition waste should be minimised and must be managed and re-used on-island where there will be no harmful impacts. Where re-use on-island would result in an environmental risk to human health, biodiversity, the historic environment, the amenity of neighbouring properties or land uses, or the water environment, then appropriate off-island management or disposal will be required.
- Significant proposals, including for major development, must demonstrate how the construction and operational phases of the development will be consistent with the principle of sustainable waste management, through a waste management plan to include a waste audit, which should be submitted with the application.
- Waste facilities for re-use, recycling, composting and the generation of heat/energy, or the co-location of such uses, will be permitted where they improve the sustainable management of waste on the islands and accord with other relevant policies in the Local Plan."

### Policy OE6

### Minerals

"Support will be given to the use of construction materials and minerals already on the islands, using recycled and secondary materials to minimise the requirement for any direct extraction. Site Waste Management Plans (SWMPs) will be required to support development proposals and will include measures to recycle and recover inert construction, demolition and excavation materials for reuse in building works, thereby also reducing transportation costs and carbon emissions."



### Table 3: Summary of the Isles of Scilly Waste Reduction Strategy requirements

### The Isles of Scilly Waste Reduction Strategy (2020)<sup>2</sup>

The ambitions of this plan are:

#### "Manage resources that effectively, efficiently, and sustainably":

- Enhance the Isles of Scilly's historic character and outstanding natural environment;
- Reduce carbon emissions; and
- Help deliver social and economic growth and adding value to the communities of the Isles of Scilly.

#### Encourage the use of materials that:

- Are reusable and are made from recycled materials;
- Reduce the amount of single-use plastic; and
- Are kept for as long as possible and are re-used or recycled when they reach the end of their life.

#### Work with partners, businesses, and the community to:

- Develop a shared vision for managing resources across the islands, and provide opportunities for the community and businesses to be more involved in waste management;
- Provide value for money through services; and
- Improve existing infrastructure and services.

#### Ensure as a community we use materials sustainably to:

- Reduce the amount of waste generated by all; and
- Increase re-use and recycling of material."

### In this Strategy, it is also said that:

"There is also a licenced site, which is under permit from the Environment Agency, at Pendrathen Quarry on St Marys for processing inert construction and demolition waste. Both these facilities provide a valuable service to the island's community and businesses. By enabling the recycling of waste streams locally, these businesses provide sustainable services that mitigate the additional cost of shipping and disposing of these materials on the mainland.

To deliver the Strategy the following actions are proposed, that could be relevant for the proposed development:

#### "Action 1: Reduce the overall volume of waste across the islands.

2025 Target: 15% reduction in the volume of waste produced.

2030 Target: 25% reduction in the volume of waste produced.

- Delivery Plan 1: Collect and publish waste data to target waste reduction.
- Delivery Plan 2: Improve communications with residents, visitors & businesses to help reduce waste across the
- Delivery Plan 3: Support initiatives that prevent and reduce waste with particular focus on key suppliers' businesses, partners and residents.

#### Action 2: Increase the amount of material that is reused.

2025 Target: Volume re-used increased by 15%.

2030 Target: Volume re-used increased by 25% in 2030.

- Delivery Plan 4: Develop initiatives and measures that encourage re-use of materials, keeping them for as long as possible.
- Delivery Plan 5: Ensure that all new developments on the islands minimise waste and re-use materials where possible."



# 3 Site Waste Management Plans

### 3.1 Introduction

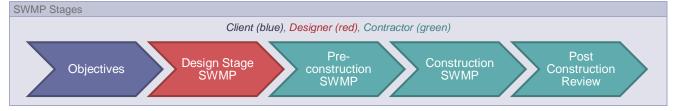
SWMPs naturally reference and centre on waste, however SWMPs also place a strong focus on material and material resource efficiency. From the earliest stages of a project, the project team will need to consider the types of materials specified and the ways in which these materials will be used to optimise material resource efficiency and identify opportunities to avoid or minimise waste (including reference to the waste hierarchy).

Clients, Designer and Contractors will need to work together towards common goals of optimising material resource efficiency and minimising waste. SWMPs provide a valuable tool for capturing and collating resource efficiency and waste data and for demonstrating compliance with key waste legislation practices, in particular the use/application of the Waste Hierarchy and Duty of Care practices during construction.

### 3.2 SWMP Stages

The development of a SWMP is an iterative process that evolves throughout a project. The steps for implementing a SWMP run sequentially, with different parties taking the lead at different stages of the project, 'like a relay race'. Pell Frischmann's example SWMP process flow chart (Appendix A) shows how a SWMP may evolve throughout a typical project. The flow chart also shows when the Client, Designer or Contractor will be responsible for the SWMP. A simplified version of the 'relay process' flow chart, including SWMP stages and responsibilities, is presented in Figure 1. This design stage SWMP represented in red on the flow chart.

Figure 1: SWMP Stages



### 3.3 Waste Hierarchy

By challenging the way in which resources are used and by reducing the quantity of waste produced on site, SWMPs can help to reduce project costs and increase the sustainability of construction. As stated by the Waste & Resources Action Programme (WRAP): "By encouraging Clients and Contractors to think about waste minimisation and management, improvements will be achieved in overall material resource efficiency, through reduction of the overall quantities of materials used, reduction in waste produced, greater reuse and recycling of waste and reduction in material disposed of to landfill. All of these outcomes can also result in cost savings".

The Waste Hierarchy should be applied when considering potential wastes at any stage of the project. A version of the Waste Hierarchy (published by Envirowise) is presented in Figure 2 below.

Figure 2: Waste Hierarchy



### 3.4 Roles and responsibilities

Site Waste Management Plans require action throughout a project from initial conception through demolition and construction to post completion. 'Non-Statutory Guidance for SWMPs' (Defra, 2008) includes a flow chart outlining a 'Resource Efficient Approach to using SWMPs and Project Stage'. This is presented in Figure 3.

Figure 3: Resource efficient approach to using SWMPs and project stages

Design & Conception

- · Client in conjunction with Designers & Planners.
- · Consider waste efficient materials and methods of construction.

Design & Tendering

- Client in conjunction with designers, planners and once appointed the contractor.
- · Draft SWMP identifying waste types.
- · Record Design Stage considerations.
- · Build waste management targets in to tender specifications.

Construction Phase

- Principal Contractor, in conjunction with all contractors on site.
- · Regular toolbox talks with workers.
- · Adequate ordering, delivery, and storage of materials.
- Update SWMP as waste is processed or removed.

Post Completion

- · Principal Contractor & for lessons learnt, all parties.
- · Reconcile final waste with SWMP.
- · Calculate resource savings.
- · Apply lessons learnt for future projects.

Table 4 summarises the aims of SWMPs against project stages and outlines roles and responsibilities for the Client, Designer and Contractor (extracted from Defra's non-statutory guidance).

**Table 4: Project Stages and Responsibilities** 

Project stage	SWMP Aims	Primary responsibilities
Pre-Design	Plan the management and performance indicators of waste and resource use throughout the project.	Client
Design	Incorporate material resource efficiency and waste reduction, reuse and recycling techniques within the project design, construction, and operation.	Design team (Client & Principal Contractor)
Procurement	Implement contracts which facilitate material resource efficiency, waste reduction, reuse, and recycling techniques throughout the construction phase.	Designer, (Principal Contractor) & Client
On-site	Implement and monitor material use and waste reduction, reuse, and recycling techniques during the construction of the project.	Principal Contractor
Project Completion	To assess actual project performance against planned performance demonstrating the management of wastes at the completion of project.	All

# 3.5 Waste arisings

Pre-construction SWMPs typically include a list of the anticipated waste streams, anticipated volumes and suitable management options prior to construction commencing. This information is not typically available at the design stage. Therefore, the following information is provided as an initial indication of potential waste considerations based on the information available at the time.

Construction arisings are expected to comprise the largest proportion of waste arisings on the scheme. The SWMP activities will consider reuse or recycling opportunities for all materials to comply with the waste hierarchy.

### 3.5.1 Pre-construction / Site Preparation

The application site is occupied by an open agricultural field, therefore demolition is not required however, it is anticipated that existing livestock fence will be removed prior to construction. The waste from removal will be reused / recycled, likely offsite. The site comprises of existing agricultural land and there are few potential waste sources on the site. Therefore, minimal material is required to be removed during site preparation. The overall waste arising from site is anticipated to be **less than 1 tonne**.

### 3.5.2 Excavation arisings

The application site is characterised as an open area of grazing pasture. It is therefore anticipated that excavated arising will predominantly comprise of topsoil and subsoil. Segregation of excavated soil arisings during excavation is recommended to maximise the potential for reuse/recycle. It is anticipated that the soils arising are to be reused on site for the construction of berms.

It is currently anticipated that excavation arisings will be circa **57 tonnes**. It is currently proposed that this will be reused onsite for the construction on berms.

### 3.5.3 Construction

### **Anticipated waste types**

A list of common construction waste codes is available online from the Gov.uk website<sup>1</sup>. Additional 'List of Waste' codes for other waste and advice on how to apply these codes can also be found in the Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste.

### **Anticipated arisings**

The WRAP methodology has been adopted to estimate types and quantities of construction waste that may be generated by the proposed scheme. Opportunities to reduce waste during the design process have been implemented, such as using prefabricated containers. Designing out waste before it arises is one of the most efficient ways to reduce waste. And as such decisions need to be taken early to truly reduce waste and encourage a sustainable design.

The estimation of waste involves identifying and recording the quantity and final location of each waste stream that will be generated onsite. Given the stage of design development, high level estimates have been made to calculate the waste quantities at this early stage in the project. The data represented in

<sup>&</sup>lt;sup>1</sup> Classify different types of waste: Construction and demolition waste - GOV.UK (www.gov.uk)



Table 5 should be used for guide purposes only.

To give a preliminary estimate, for every ten tonnes of material used in construction, one tonne of packaging waste material is anticipated to be produced. It is currently thought that the Type 1 Subbase will be brought over in a large container due to the large volume required. As a result, packaging of the Type 1 Subbase Aggregate has not been included. The packaging quantities in this document should be updated by the contractor when this information becomes available.

Table 5: Estimated construction waste types and quantities

Materials during Construction	Waste estimations calculated (tonnes)		
Mixed construction	729		
Concrete, Bricks, tiles and ceramics	128		
Packaging – (incl. wooden, plastic and paper)	17		
Wood - Timber	11		
Total	885		

Table 6 provides a forecast of waste arisings during construction as per the WRAP guidance:

Table 6: Forecast % waste from construction (C) waste

Forecast Construction Waste	Units		
Total Waste	885 tonnes		
Total Waste to landfill	7 tonnes		
% Waste diverted from landfill	97%		
% Materials reused on site or off site	97%		

### 3.5.4 Site decommissioning

The temporary welfare compound will be in use for up to four years, after which it is intended that it will be decommissioned and re-instated to its current use as grazing pasture. Waste types and quantities from the decommissioning of the welfare compound are presented in Table 7 below. Where quantities are known, they have been included within the values (tonnes).

Table 7: Estimated decommissioning waste types and quantities

Materials during Decommissioning	Waste estimations calculated (tonnes)		
Mixed construction	691		
Concrete, Bricks, tiles and ceramics	128		
Wood – Timber	11		
Total	830		

Table 8 provides a forecast of waste arisings during decommissioning. Materials that are proposed to be reused after decommissioning, will be reused offsite except for the topsoil. This is to enable restoration of the site to an arable field. It is currently thought that the suppliers may take back the cabins after their use, however, this should be confirmed and updated by the Contractor once this information becomes available. The following information is currently not known, and will need to be clarified before decommissioning commences:

- Whether the new double gate be decommissioned;
- Whether the sand and shingle used around the cess pit be reused or recycled; and
- The material quantities of the cess pit.

Table 8: Forecast % waste from decommissioning waste

g							
Forecast Decommissioning Waste	Units						
Total Waste	830 tonnes						
Total Waste to landfill	139 tonnes						
% Waste diverted from landfill	83%						
% Materials reused off site	83%						

# 3.6 Waste minimisation and management measures, targets and monitoring

It is recognised there will be opportunities to reduce the use of natural resources through the detailed design processes, procurement, and construction.

Waste produced during all construction activities on site will be subject to the 'Duty of Care' under The Waste (England and Wales) Regulations 2011. It is the joint responsibility between the Principal Contractor and the Client to ensure that waste produced onsite is disposed of in accordance with legislation. The Waste Duty of Care Practice (November 2018) sets out practical guidance on how to meet waste duty of care requirements. This has been covered in more detail under section 2.7 of this report. It is issued under section 34(7) of the Environmental Protection Act 1990 (the EPA) in relation to the duty of care set out in Section 34(1) of that Act.

The Principal Contractor will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met. A register of waste carriers, disposal sites (including transfer stations) and relevant licensing details will be produced and maintained on site.

An area for waste collection and materials delivery and storage will be provided within the site boundary. Materials that can be beneficially used in the future development of the site will be segregated directly on site.

Waste storage areas will be relocated at different stages of the construction process and multiple areas may be allotted for the purpose of waste storage and removal at peak turnovers. Waste management will also be dependent on the final Construction Logistics Plan and a waste segregation plan will be developed by the contractor. Once all this information is agreed and approved, this section of the SWMP will be updated with a corresponding proposed site layout plan.

For the unused waste, procedures will be put in place to handle and transfer waste safely to nearby local waste management companies that would help manage the waste arising. Each waste carriers (WC) licence details will be recorded by the Principal Contractor's WC and appended to the SWMP. The transportation of waste from site will comply with the 'Duty of Care' requirements. This includes ensuring waste is transported by registered waste carriers to appropriately licensed sites for processing or disposal.

A summary of potential waste types and waste actions/opportunities are presented in Table 9. The following measures and targets are applicable to all phases of the proposed development.

### 3.6.1 Waste disposal

Waste disposal will be minimised as much as possible, in line with the waste hierarchy. However, if excavation, or construction waste is to be disposed of, it requires pre-treatment before disposal to landfill. Pre-treatment must be a physical, thermal, chemical, or biological process (including sorting on-site) that changes the characteristics of the waste to reduce its volume, reduce its hazardous nature, facilitate its handling, and enhance its recovery. Waste classification technical guidance requires that within a mixed waste the separately identifiable wastes are assessed separately.

Table 9: Potential waste streams from site preparation and construction

Waste type	Details	Reduce	Reuse	Recycle	Dispose	Resource/waste management options	Quantity order	Divert from landfill targets
Mixed construction	Geomembrane, Type 1 Sub Base Aggregate, black top and shingle and sand.		<b>√</b>	✓	<b>√</b>	Potential to reuse onsite or offsite. Depending on the condition of the geomembrane it might be reused or disposed of.	Minimal	80%
Concrete, brick, rubble	From residual below ground structures, foundations, hardstanding, Made Ground		<b>√</b>	<b>√</b>		Limited onsite reuse. Consider processing into secondary aggregates onsite to increase re-use potential (permits and MMP required).  For all off-site disposals seek waste treatment recycling facilities to avoid/minimise landfill.	Minimal	85 - 95%
Packaging waste (including paper, plastic, wood)	For the transportation of materials and prefabricated components		<b>√</b>	<b>√</b>		Specify that suppliers should 'take back' packaging where possible, segregate each different waste type to optimise Re-use/recycling opportunities.	Minimal	85-90%
Soil and stones	Excavation of topsoil for geomembrane installation, fence posts, the cess pit, transformer and pipelines		<b>√</b>			Onsite reuse potential high. It is proposed the soil is reused for the construction of the berms.	Minimal	85-95%
General site waste	From welfare compound and office including for example food waste, paper, plastic, metal, mixed waste	<b>√</b>	<b>√</b>	<b>√</b>		Likely to comprise small quantities of recyclable and non-recyclable materials. Provide separate bins and promote segregation. Identify local waste collection and recycling facilities.	Minimal	95%

### 3.6.2 Design Objectives

During the design process the following are typically considered:

- Design and material specification that seeks to minimise waste and enables the use of recycled products.
- Opportunities where materials can be recovered and re-used as part of the design.
- Changes to construction methods to improve resource efficiency.
- Considerations of off-site manufacturing to minimise waste during construction have already been incorporated into the design and forms part of the proposal.
- Use of materials that can be recycled offsite or reused onsite after decommissioning.

#### 3.6.3 Additional Considerations

- Where applicable/ appropriate, the Designer may find it useful to consider the following to optimise resource efficiency, reduce costs and aid compliance for the project.
- Consider structure/ building form and shape to reduce the use of building materials.
- Consider sizing of structures and components to eliminate unnecessary elements.
- Consider compatibility between design specifications and market supply (e.g., designing in line with standard supply measurements).
- Consider end of life implications of design and material decisions (e.g., select designs/materials that will be easier to recycle/re-use in the future).
- Consider off-site manufacturing to minimise waste during construction.
- Consider involving contractor and whole supply chain at pre-design and design stages in particular for larger schemes and/or packages of schemes.
- Consider undertaking material evaluation in terms of their recyclability and reclamation before specifying.

Where appropriate, the designer may consider the following (is should be noted that types and in particular quantities of waste are more likely to be available at the pre-construction SWMP stage):

- The types and quantities of waste that will result from the design along with any waste management actions for example re-use on-site/off-site.
- Details of materials, that may become redundant/be displaced by the new design, that could be re-used, recycled and/ or recovered off-site or elsewhere even if not within the specific scheme.

### 3.6.4 Best and Good Practice Recovery Rates

WRAP guidance details standard, good practice, and best recovery rates. These are summarised

. Before works start, waste targets will be set by the Client/ Designer. Due consideration will be given to the rates below. Standard recovery rates should be adopted as the minimum.

Table 10: Standard, good and best practice recovery rates by material, extracted from WRAP guidance.

Materials	Standard Recovery rate (%)	Good practice quick win rate (%)	Best practice Recovery rate (%)
Timber	57	90	95
Metal	95	100	100
Plasterboard	30	90	95
Packaging	60	85	95
Ceramics	75	85	100
Concrete	75	95	100
Inert	75	95	100
Plastics	60	80	95
Electrical equipment	Limited information	70*	95
Insulation	12	50	75
Cement	Limited information	75	95
Liquids and Oils	100	100	100
Hazardous	50	Limited information**	Limited information**

Notes from the WRAP guidance:

### 3.6.5 Monitoring

The Principal Contractor will review the SWMP at least every month. They will check it meets the needs of the project's waste management and recycling rates. Quantities of waste reused, recycled, recovered, incinerated, or landfilled will be recorded. A comparison should be made with estimated waste arisings where relevant. Targets should be adjusted / improved where possible.

### 3.6.6 Contractor Responsibility

Before, during and after construction the Contractor will be responsible for implementing, updating and reviewing the SWMP and should complete a post-construction review or summary report (including comparison of the estimated and actual waste quantities) to be cascaded to the project team including lessons learnt.

The Principal Contractor will be responsible for carrying out appropriate checks on sub-contractors before they start work to ensure they are legally compliant and ensuring all parties involved in the site works:

- Are aware of the details and requirements of the project SWMP (training to be provided where required),
- Comply with the SWMP, and
- Provide the required information/details for inclusion within the SWMP (including Duty of Care records).

Where applicable or appropriate, the Contractor may find it useful to consider the following to aid compliance and reduce costs:

- Seek materials/options that would help to optimise resource efficiency and minimise waste (if these deviate from the design the Designer will need to be consulted).
- Identify/use recycled materials in place of new materials.
- Ensure effective storage of new and recovered materials to minimise deterioration.
- Identify materials to be recycled/recovered/reused.



<sup>\* &</sup>quot;This is a required recovery target for the type of WEEE likely to be produced from construction sites e.g., lighting (Waste Electrical and Electronic Equipment (WEEE) Regulations 2013)"

<sup>\*\* &</sup>quot;This cannot be 100%, as some hazardous waste (e.g., asbestos) must be landfilled."

- Segregate wastes to improve recovery potential and minimise waste production.
- Seek opportunities for material that may not be suitable for re-use/recycling within the scheme to be recovered and re-used in other schemes this may include sale to a third party.
- Seek alternatives to landfill for example soil recovery centres; waste transfer stations; 'black-top' recycling companies.
- Consider construction methodologies/options.
- Consider arranging for suppliers to 'take back' leftovers and/or packaging.
- Consider using long term partnerships within supply chains to encourage standardisation to meet project/design requirements for frequently required goods/materials.

# 4 Duty of Care

Waste is defined by the Waste Framework Directive as any substance or object which the holder discards, intends to discard, or is required to discard. The contractor will need to comply with Duty of Care legislation (issued under the Environmental Protection Act) and the associated 'Statutory guidance. Waste duty of care: code of practice', Defra and Environment Agency, 2018 for the safe management of waste to protect human health and the environment.

Useful Definitions including Waste Producer:

- Waste holder: 'producer(s) of the waste or the natural or legal person who is in possession of it'.
- **Waste producer**: 'anyone whose activities produce waste and anyone who carries out pre-processing, mixing or other operations resulting in a change in the nature or composition of this waste'.
- It is the responsibility of the 'holder' to decide whether or not they are handling waste.

Waste classification is an important part of Duty of Care. Waste must be described and classified by the contractor (including all sub-contractors) *prior* to transfer in line with Duty of Care. This includes:

- determining whether the waste is hazardous or non-hazardous (in line with TGWM3, Reference 4.4) and
- applying the most appropriate List of Waste (LoW) code/s (in line with the List of Waste Regulations).

Waste classification must be undertaken before handing over the waste to a third party for example to be collected and transported offsite.

List of Waste codes refers to a catalogue of six-digit waste codes that are grouped into 20 chapters by the industry/process that produces the waste. The first two-digits represent the LoW Chapter, the second two-digits represent the sub-chapter or waste type and the last two-digits define the waste type or whether the waste contains hazardous substances. There are two classifications of waste: hazardous and non-hazardous.

Mirror entries: When waste falls within one or more linked mirror LoW entries the waste producer **must** determine if the mirror hazardous or mirror non-hazardous entry applies.

- This requires assessment of the 'hazardous substance consent' of the waste i.e. sampling and laboratory analysis followed by Hazardous Property Assessment.
- The non-hazardous codes can only be used where assessment has determined that the mirror hazardous codes does **not** apply (and vice versa).

Several waste types including soil arisings are represented by mirror entries. With respect to excavated arisings, materials are required to have a defined use before being excavated and processed, if not, it will be legally classed as waste as soon as it is excavated.

The Environment Agency (EA) guidance on 'how to classify different types of waste' states "you'll always need to assess the soil before you hand it over to be collected". See TGWM3 for additional information including instructions on how to us the List of Waste, a copy of the LoW entries and their order or precedence.

# 5 Summary and Conclusions

**Removal**: Demolition is not required however; the existing livestock fence must be removed. The waste from removal will be reused / recycled, likely offsite. The removal arising is anticipated to be **less than 1 tonne**.

**Excavation**: Excavation waste arisings that will be generated will be approximately **57 tonnes**. The soil arisings are to be reused on site for construction of the berms.

**Construction:** It is currently anticipated that the largest waste volumes will be from construction activities, which are expected to be approximately **885 tonnes.** The largest contributors will be mixed construction waste and concrete. Therefore, the SWMP activities must identify suitable reuse or recycling opportunities for the materials and must be dealt with in compliance with the waste hierarchy.

**Decommissioning:** Materials that are proposed to be reused after decommissioning, will be reused offsite except for the topsoil. This is to enable restoration of the site to an arable field. Demolition waste arisings are expected to be approximately **830 tonnes.** 

The Contractor will be responsible for SWMP activities pre-construction, during construction, post construction and decommissioning including capturing all relevant documentation that is legally required (e.g., for Duty of Care) and the additional requirement as specified in the Clients Sustainability Design Guide.

### 6 Limitations and Liabilities

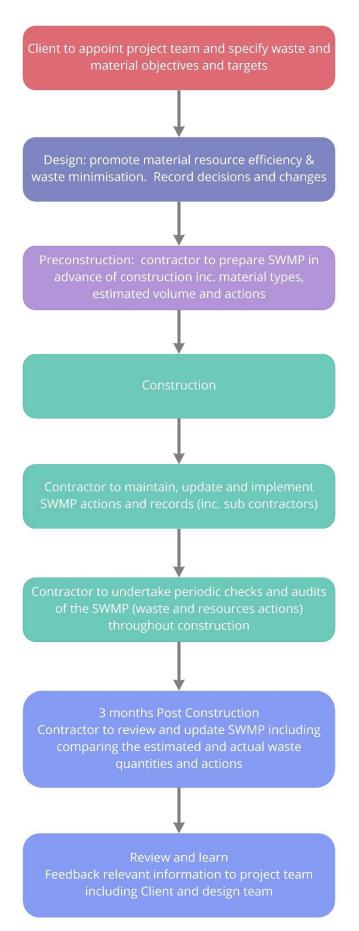
This report has been prepared by Pell Frischmann with reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the Client in accordance with the agreed scope of services.

This report has been prepared to provide design/preliminary SWMP information for the subject site. The report contents should only be used in that context and Pell Frischmann disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

The report details the findings of work carried out by Pell Frischmann during a study period between January and February 2023. The report has been prepared on the basis of available information obtained during that study period. Information provided by the referenced third parties has been used in good faith and is taken at face value; however, Pell Frischmann cannot guarantee its accuracy or completeness.

Although every reasonable effort has been made to gather all relevant information within the context of the agreed scope of work, should additional information become available (including new legislation and changed practices), after the date of the report submission, Pell Frischmann reserves the right to reconsider the recommendations and alter the report accordingly.

# Appendix A SWMP Flow Chart



### References

<sup>&</sup>lt;sup>1</sup> Isles of Scilly Local Plan Including Minerals and Waste 2015-2030 (2021) Isles of Scilly Local Plan Including Minerals and Waste 2015 to 2030

<sup>&</sup>lt;sup>2</sup> Isles of Scilly Waste Reduction Strategy 2020-2030 (2020) Waste Reduction Strategy.pdf (scilly.gov.uk)