Appendix 2 Draft Inert Waste Strategy

1 Introduction

1.1 The States of Guernsey Inert Waste Strategy

- 1.1.1 This document sets out the strategy for the management of inert waste in Guernsey. This will complement the already approved Solid Waste Strategy. ¹
- 1.1.2 The following sections set out:-
 - The strategic context;
 - A summary of the background research that has been used to inform the Strategy;
 - The Strategy objectives and proposals; and
 - Recommendations for monitoring and review.

1.2 What is Inert Waste?

- 1.2.1 There is a definition of inert waste contained in legislation² i.e. "waste" which:
 - a) does not undergo any significant physical, chemical or biological transformations,
 - does not dissolve, burn or otherwise physically or chemically react,
 biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution, and
 - c) has insignificant total leachability and pollutant content and the leachate of which has insignificant ecotoxicity (and, in particular, does not endanger the quality of any water)."
- 1.2.2 Inert waste is produced from **excavation, construction and demolition** activities, and mainly comprises rubble, hard-core, concrete, bricks, tiles and other ceramics, clean soil, and mixtures of these items.

¹ Billet d'Etat IV 2012; Billet d'Etat II and XXVI, 2014; Billet d'Etat V and XXIV, 2017; and Billet d'Etat XI of 2018.

²Waste Disposal and Recovery Charges (No. 2) Regulations, 2019 as revoked and replaced

1.3 Why does the States of Guernsey need an Inert Waste Strategy?

- 1.3.1 In recent years, Guernsey has relied on coastal land reclamation to dispose of inert waste from construction and demolition activity. The Longue Hougue Reclamation Site, on the east coast of Guernsey, has received the island's inert waste since 1995. Recent surveys have indicated that the site is likely to be full by December 2022.
- 1.3.2 The Solid Waste Strategy is primarily focussed on the management of household and commercial waste. It focusses on disposal of inert waste and states that "Future inert waste disposal will be reliant on further land reclamation projects"³, which is limited in outlook and does not provide a strategic or sustainable direction for the future management of inert waste. A Strategy is therefore required to formalise the States' position in relation to inert waste, which complements the approved Solid Waste Strategy 2012, and which will provide a framework for the future which can be taken into account by Islanders and businesses and against which sound investment decisions can be made.

2 Strategic context

2.1 The Strategic Framework

2.1.1 The Inert Waste Strategy sits within the existing related strategic policy and legislative framework that applies to the States of Guernsey (the States). This is summarised in the diagram below, along with the high-level relationships between individual elements.



³ Billet D'État No IVof 2012

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2.1.2 The key policy instruments within the strategic framework, which have influenced the Inert Waste Strategy, are summarised below.

2.2 The Policy & Resource Plan

- 2.2.1 The Policy & Resource Plan (P&R Plan), is a high-level strategic plan, developed in two phases, which lays down a framework of policy direction to guide the planning and coordination of the work of the States. It is the overarching policy tool which guides decision-making within the States.
- 2.2.2 Phase One of the P&R Plan was approved by the States in November 2016. This set out, at a high level, the vision for the Island in 20 years' time and what needs to be focused on over the next 5 years towards achieving the vision. Phase two of the P&R Plan was approved by the States in June 2017 and focuses in more detail on the priorities of the Principal Committees over the next 5 years to achieve the outcomes identified in Phase One.
- 2.2.3 The mandate of the (CfE&I) includes advising the States, and developing and implementing policy and strategy, regarding infrastructure and solid waste. Waste policy is one of five priority areas the Committee has identified as significant and critical to the delivery of the themes/outcomes in Phase One of the P&R Plan.
- 2.2.4 The CfE&I Policy Plan recognises the need for an overarching strategy for the management of inert waste which identifies optimal solutions for the management, use and disposal of Guernsey's inert waste over the next 20 years including waste minimisation and prevention, reuse, recycling and recovery as well as disposal. It promotes the waste hierarchy for the management of inert waste.
- 2.2.5 This CfE&I key priority is underpinned by a number of P&R Plan Phase One themes and objectives, including:
 - "Strong, sustainable and growing economy"
 - "Mature International Identity"
 - "Ensure we have fit-for-purpose infrastructure to deliver services appropriately"
 - "Protect and enhance our natural environment".
- 2.2.6 The Inert Waste Strategy will also support the delivery of a key priority identified in the Committee *for* Economic Development's Policy Plan to: "Provide support to the construction industry through the active encouragement of strategic development and assisting in the removal of barriers to business, so that it can assist in the competitive and efficient delivery of sustainable economic growth"

2.3 Solid Waste Strategy

- 2.3.1 In light of best practice, the States have adopted the Waste Hierarchy⁴ which is an internationally accepted principle and guide to sustainable waste management, as an overall approach to the management of all solid waste.
- 2.3.2 The Waste Hierarchy sets a high level priority order for the management of waste as: Prevention Re-use Recycling Recovery Disposal. (See diagram in section 5.4)
- 2.3.3 The States Solid Waste Strategy focuses on reducing residual waste (gradually increasing up to a 70% recycling target by the end of 2030) and prioritises measures to minimise the amount of household and commercial waste that requires treatment and disposal.
- 2.3.4 The Solid Waste Strategy sets out the objectives for the island's waste management, and as such sets the framework for management of inert waste.
 - 2.3.5 The key provisions within the Solid Waste Strategy that are pertinent to the development of the Inert Waste Strategy are:
 - Consider the waste hierarchy specifically for inert waste and adopt the most appropriate methods to manage inert waste;
 - Land reclamation will likely be required for future inert waste disposal;
 - A need to develop an environmentally, economically and socially sustainable waste strategy that is practicable and adaptable to meet Guernsey's needs currently and in the foreseeable future; and
 - Ensure the Inert Waste Strategy complies with the legislative and planning processes for securing future sites.

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⁴ Waste Hierarchy: Directive 2008/98/EC on Waste (Waste Framework Directive), Article 4.

2.4 Strategic Land Use Plan

- 2.4.1 The Strategic Land Use Plan (SLUP), issued in 2011, is a statutory document prepared by the former Strategic Land Planning Group⁵ and approved by the States⁶ and which formed part of the former States Strategic Plan. Responsibility for the review and preparation of the SLUP now rests with the CfE&I.
- 2.4.2 The SLUP sets out a 20-year agenda for land use planning in Guernsey, and provides a high-level spatial planning framework to guide the preparation of Development Plans, setting out detailed, specific policies in relation to the management of development under those Development Plans. Any options for the management of inert waste which are to be included within the Strategy must be consistent with the policies of the SLUP.
- 2.4.3 Specifically, the following, reflecting the purpose, core objectives and certain specific policies of the SLUP, have helped shaped the Strategy:
 - Enable the wise management of island resources;
 - Enable support for policies relating to conservation of energy and reduction of the carbon footprint;
 - Development is undertaken in a sustainable manner ensuring care for the island's physical environment;
 - Identify more sustainable approaches to waste management to reduce greenhouse gas emissions;
 - Minimise the production of waste;
 - Areas of land reclamation can enhance the roles of the Main Centres or be required to accommodate strategic development with a high environmental impact;
 - Provide additional capacity by extending existing or providing new infrastructure;
 - The location of strategically essential development should have first priority in existing and new areas of land reclamation
 - Development plans must identify sufficient land for future solid waste treatment solutions and associated infrastructure.

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⁵ Under the terms of the 2005 Planning Law (Part II, Section 5). It was prepared by the former Strategic Land Planning Group; this function transferred to the CfE&I in the reorganisation of States' Affairs in 2016.

⁶ Billet d'État No. XIX of 2011.

2.5 Island Development Plan

2.5.1 The Island Development Plan (IDP), approved by the States in November 2016, sets out detailed land planning policies for the whole of Guernsey. It translates the high level SLUP policies into practice. The IDP's principal aim is:

"To ensure land planning policies are in place that are consistent with the Strategic Land Use Plan and which help maintain and create a socially inclusive, healthy and economically strong island, while balancing these objectives with the protection and enhancement of Guernsey's built and natural environment and the need to use land wisely."

- 2.5.2 As such, the IDP contains a number of policies with which the Inert Waste Strategy must be consistent, particularly regarding options for the management of inert waste:
 - Development required to implement the State's Waste Strategy will be supported where it is in accordance with all relevant policies of the Island Development Plan.
 - The IDP recognises that Longue Hougue Key Industrial Area is an established location for waste management, including disposal of residual inert waste and proposals for facilities at this existing site would, in principle, be supported provided they do not prejudice the long-term development of St Sampson's Harbour Action Area and accord with all other relevant policies of the Island Development Plan.
 - Other than proposals for waste facilities at the current Longue Hougue Key Industrial Area, proposals for new waste facilities required as part of the States' Waste Strategy, including land reclamation will be considered Development of Strategic Importance and so would have to considered, on a case by case basis, under the particular policies relating to such development.
 - The IDP seeks to direct the development of other new waste management
 facilities towards designated Key Industrial Areas or Key Industrial Expansion
 Areas mainly within the Main Centres and Main Centre Outer Areas.
 However, under the policy for Development of Strategic Importance,
 proposals for waste management facilities required as part of the States'
 Waste Strategy located elsewhere on the Island can also be considered on a
 case by case basis.
 - IDP policies for sustainable design and construction and minimisation of
 waste at construction sites require the production of site specific waste
 management plans for some developments. These plans provide a key tool
 in the implementation of this Strategy.

3 Current Situation and Challenges

3.1 Current Situation

Approach to Waste Management

- 3.1.1 The Solid Waste Strategy reflects the waste hierarchy. However this is currently focussed on the management of household and commercial waste, and provides limited information or guidance relating specifically to the inert waste stream. It states that "Future inert waste disposal will be reliant on further land reclamation projects". It is recognised that this focusses on disposal and doesn't provide a strategic or sustainable direction for the future management of inert waste for each of the levels of the waste hierarchy.
- 3.1.2 The local construction industry currently reuses, recycles and recovers some inert waste that is generated by building projects. However, data is only starting to be captured by which to quantify these activities, or to identify any waste prevention measures that may be being implemented.
- 3.1.3 The Inert Waste Strategy aims to resolve this via the effective use of data collected through the site Waste Management Plans⁷ required for some developments by IDP policies (see 3.1.20 below).
- 3.1.4 Residual inert waste is inert waste that cannot be reused or recovered and which cannot be recycled. This material is currently deposited at the Longue Hougue Reclamation Site.

Capacity and trends at Longue Hougue

3.1.5 The States has collected data on inputs into the Longue Hougue residual inert waste facility since 1998. To determine the remaining life of the site, a capacity assessment was carried out in spring 2017. This predicted a 'best case' future arisings of 70,000 tonnes per annum. The latest survey (at July 2019) has revised this figure to an average conservative estimate for future residual inert waste of around 80,000 tonees per annum.

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⁷ The site waste management plans described in the Island Development Plan are mandatory for some development projects during the demolition and construction phases on particular development sites. These are different from the Waste Management Plan which relates to the management of the disposal and recovery of waste on the whole Island.

- 3.1.6 The amount of residual inert waste arising is linked to activity in the construction industry. The volumes entering Longue Hougue have declined in recent years, and this trend is expected to continue due to a number of factors. These include uncertainty associated with general market conditions and the consequences of the UK leaving the European Union. However, it is acknowledged that an upturn in development generally and/or the identification and commencement of major strategic development requirements could significantly alter the trends. Furthermore, the cost of primary materials being produced locally and those being imported, and the costs associated with disposal, means developers are likely to re-use as much inert material for construction purposes as possible. This will be further influenced by waste prevention, minimisation, recycling and recovery measures introduced by this Inert Waste Strategy.
- 3.1.7 The most recent capacity assessment for the current residual disposal site at Longue Hougue predicted that the current site may reach the end of its operational life by December 2022. No matter how much of the inert waste stream is reduced, re-used or recycled, there is a strong business need for a recovery or disposal service for residual inert waste, as the Longue Hougue Reclamation Site is nearing capacity. There is an urgent need therefore to secure a replacement facility for the recovery or disposal of residual inert waste.
- 3.1.8 The States may also wish to divert residual inert waste, where it is required, to strategic projects that may come forward including land reclamation. These may take immediate priority and will help to divert inert waste (if only for a short period of time) from more permanent solutions but a different economic model may be required as a result as this could affect the time period for the recovery of capital investment for a core facility.

Best Practicable Environmental Option process

3.1.9 To fulfil the requirement for inert waste management, a wide range of potential options have been considered to identify preferred future solutions. This optioneering process provided the methodology for the formulation of the Inert Waste Strategy, and used the Best Practicable Environmental Option (BPEO) process to identify the most appropriate approach. The methodology adopted to identify the BPEOs has at its core the protection of the environment. This is consistent with the general scheme of the Environmental Pollution (Guernsey) Law, 2004 ("the Environmental Pollution Law") which relates to protection of the environment across land, air and water and defines pollution of the environment to include harm to human health and other living organisms. In the UK, the

accepted interpretation of the similar term "Best Practicable Environmental Option" is "the option that provides the most benefits or the least damage to the environment, as a whole, at acceptable cost, in the long term as well as in the short term". A process was, therefore, adopted in identifying the BPEOs for management of inert waste, which is broadly based on the UK BPEOs process whilst taking into account the differences in the local legislation and circumstances.

- 3.1.10 The BPEOs procedure establishes, for a given set of objectives, the option that provides the most benefits or the least damage to the environment, as a whole, at acceptable cost, in the long term as well as in the short term. It is important to note that the designated States Waste Disposal Authority (WDA) (the STSB is currently designated) has a legal responsibility to identify the 'Best Practical Environmental Options' (BPEOs) for the recovery or disposal of waste, as required by the Environmental Pollution (Guernsey) Law, 2004⁸.
- 3.1.11 The WDA appointed Royal HaskoningDHV to undertake a High Level Environmental Impact Assessment and options assessment to assist in identifying a short list of options and a 'preferred way forward', using established 'BPEOs' methodology.
- 3.1.12 An original long list of 50 indicative options, ranging from off island solutions of exporting the waste or disposing of it at sea to on island solutions including a review of all existing quarries were independently assessed and screened against local constraints such as existing use, capacity and whether any protected designations or particular constraints apply to the site. This initially identified those options that were unviable due to capacity limitations, land use limitations, and/or a policy, regulatory, financial and logistical restrictions. This initial screening ruled out certain options, including export of residual inert waste and disposal at sea.
- 3.1.13 The remaining on island options were then assessed using BPEOs evaluation criteria. These criteria included the economic, social and environmental implications of each option, using an appropriate assessment framework for Guernsey. This enabled the initial long list to be filtered down into a short list and a preferred way forward identified for the Inert Waste Strategy.
- 3.1.14 The criteria used for the BPEOs assessment, and the weighting factors applied to each criteria, were reviewed at stakeholder workshops in April 2017. The feedback from these were considered and appropriate adjustments were made to the criteria and weighting.

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⁸ See section 30 (I) (d)

- 3.1.15 Based on the environmental and cost and affordability criteria selected options were identified as 'leading options' by virtue of their BPEOs score. None contained a major negative environmental constraint.
- 3.1.16 The options were further evaluated by a sensitivity analysis; and a workshop was staged for stakeholders in July 2017 to conclude a short-list of strategic options.
- 3.1.17 The sensitivity analysis has led to a revised ranking of the medium list of options, which consists of new residual site options, behavioural change options and temporary measures.
- 3.1.18 The management of inert waste will not focus on one residual site as a sole 20 year solution. The objectives of the Inert Waste Strategy will be achieved by a combination of solutions that take into account behavioral changes and new facilities in the most appropriate location.
- 3.1.19 The BPEOs process is reported in the States of Guernsey Inert Waste Management Strategy the States of Guernsey Inert Waste Management Strategy Options Report Stage 1, Task 3 (Royal HaskoningDHV, 2017). The recommendation of the evaluation was that on-Island land reclamation and infilling existing quarries would be the most appropriate method for residual inert waste management for Guernsey.

The Role of Site Waste Management Plans

- 3.1.20 The IDP sets out a requirement for the mandatory use of site waste management plans for some development projects during the demolition and construction phases. These include demolition and rebuild of dwellings on a one for one basis, the demolition and rebuilding of redundant buildings or dwellings that have permission to be subdivided, or where development is for five or more dwellings or for any development of a minimum of 1,000 square metres floor area. These plans demonstrate how waste associated with the development process is to be dealt with and will provide a detailed breakdown of estimated waste arisings, and demonstrate how it will be minimised, reused or recycled / recovered (on or off the site), and how any residual will be dealt with.
- 3.1.21 The site waste management plans are fundamental to the implementation of the inert waste hierarchy and recording of inert waste data and therefore the success of the Strategy. They will help establish a baseline of how inert waste is managed in accordance with each step of the hierarchy.
- 3.1.22 Guidance has been issued by the Development & Planning Authority on how these plans should be completed.

3.2 Challenges

3.2.1 The development of the Inert Waste Strategy has presented a number of challenges, some of which have had an influence on the eventual outcome. Some of the key issues encountered are summarised below, along with any impacts.

Table 3.2 Challenges encountered in the development of the Inert Waste Strategy

Challenge	How this influenced the Strategy
Absence of data	There is no baseline data for inert waste other than residual deposits at Longue Hougue and recycled aggregates produced by Island Aggregates. The Strategy has identified the use of site waste management plans as the primary means of future data gathering.
Timescales for implementation	The estimated remaining lifespan for the Longue Hougue site of approximately 2 years means an 'interim' solution is likely to be required to maintain residual inert waste management until a new solution is available. Consequently the Strategy has also identified options for the short term.
Regulation	The existing strategic framework for waste management sets the context for the Strategy. It will fill a perceived gap in the Solid Waste Strategy regarding inert waste. The consideration of options must follow the required environmental impact assessment processes.
Waste hierarchy	Currently, inert waste is managed across all elements of the hierarchy, but there is a lack of information on how much is managed through prevention, reuse, recycling and recovery. The standard waste hierarchy definition of disposal would include land reclamation. However, in the Guernsey context, it is considered that there is overlap with recovery due to the potential benefits associated with land created through reclamation (see below). The Strategy addresses this by adjusting the hierarchy in relation to inert waste.
Market	By adopting the waste hierarchy, the Solid Waste Strategy has provided a framework for increasing reuse and recycling options on the island. The Inert Waste Strategy will include an inert waste hierarchy. New opportunities may become available for the construction industry as a consequence.
Best Practice	Learning from best practice in other islands, such as setting realistic targets, providing temporary facilities to provide interim solutions and adopting relevant approaches to the waste hierarchy in accordance with Guernsey legislation having regard to EU law and guidance on the principle which derives from EU legislation.

Challenge	How this influenced the Strategy
Strategy lifespan	Prior to stakeholder engagement, an initial Strategy period of 20 years was proposed. Feedback from consultation asked for a much longer timeframe (i.e. 50-60 years) to ensure the Strategy was aligned with estimated lifespans for buildings. It was decided to retain the 20 year plan due to the major uncertaintys in planning at such a protracted timescale.

3.2.2 The existing situation regarding inert waste management on the island and the challenges which the island faces present a series of drivers for change which have influenced the development of the Inert Waste Strategy.

Table 3.3 Main drivers influencing development of the Inert Waste Strategy

Main drivers influencing development of the Strategy

- A gap in the strategic policy for waste management for Guernsey meaning inert waste is not adequately covered by the existing strategic framework;
- Uncertainty over the future scenarios for inert waste management brought on by a lack of robust data on the issue;
- A lack of understanding of the potential value of residual inert waste to strategic projects and the potential value of land created;
- An absence of public awareness of the need to manage inert waste higher up the waste hierarchy;
- Inconsistency in how the industry adopts the waste hierarchy for inert waste;
- A finite life for the existing residual inert waste management facility at Longue Hougue and the need for the development of a new solution.

4 Consultation & Learning from Best Practice

4.1 Consultation

4.1.1 The Inert Waste Strategy has been subject to a consultation process in order to ensure that States bodies, non-Governmental Organisations (NGOs) and the private sector are involved in the process of developing the Strategy. Consultation has taken the form of stakeholder workshops and requests for feedback on a stakeholder consultation document covering the evidence base and approach to developing the Strategy, the Strategy itself, and the options which comprise the Strategy. The following stakeholder consultation activities have been conducted during the development of the Inert Waste Strategy:

Table 4.1 Stakeholder consultation undertaken to inform the Strategy

Activity	Dates (2017)	Stakeholder Groups involved	Focus
Options Appraisal workshop	6 April	States bodies, NGOs, private sector representatives	 Presentation of the long-list of options to stakeholders. Priorities when selecting preferred options. Stakeholder comments on the long-list of options. Stakeholder comments on the methodology used to achieve the long-list.
Stakeholder Consultation Document	15 May to 5 June	States bodies, NGOs, private sector representatives	 Identification of weighting for environmental criteria used in the BPEOs process. Formal written feedback on the appraisal process.
Inert Waste Strategy development workshop	26 July	Members of the STSB and CfE&I, States bodies, NGOs, Construction Industry & other private sector representatives.	 Presentation of the approach to the Strategy to stakeholders. Assessment of current positions regarding inert waste management. Review of hierarchical options for inert waste. Identification of constraints to inert waste management.

4.1.2 The stakeholder consultation process was used to influence decisions made during the development of the Inert Waste Strategy, especially decisions surrounding the selection of the short list of options and the relative importance of the environmental and technical criteria used to make this selection. The table below summarises the key recommendations from the stakeholder workshop which have influence decisions made with the Strategy.

Table 4.2 Outcomes of stakeholder consultation on the Inert Waste Strategy

Outcomes of stakeholder consultation on the Strategy

BPEOs process

- Weighting for environmental criteria used in the BPEOs were modified, with affordability being given greater weighting.
- Socio-economic value was seen as important, but there were questions about how this is valued and how it can be measured.

Waste hierarchy & the Strategy

- Requests for allowance to be built into the adoption of the waste hierarchy to 'flex' it for inert waste.
- Recycling material is not always available when needed.
- Targets for site-specific development were not identified as important, but collection of inert waste data was. It was anticipated that 2-3 years' worth of data should be collected before targets can be developed.
- Timescales 20 years is considered relevant for a Strategic purpose, but there needs to be a longer-focussed vision in the strategy up to 60 years hence factor in a 5 year review to consider the lifecycle of buildings and lack of natural stone or raw materials as a critical factor for the future.

Options for inert waste management

- The lead-in time for the options is important.
- The need for industrial land in selected areas is identified as part of the 10 year plan.
- Consideration of whether inert waste can be diverted to States strategic development/projects
- Impact on quarrying by any strategic approach is viewed to be negligible.

4.2 Learning from Best Practice

- 4.2.1 Lessons can be learnt from the approach to inert waste management adopted by other island communities. Research into the waste management strategies was undertaken to determine if there were any island related best practice measures that could be adapted to suit the issues on Guernsey. The islands considered were:
 - Iceland
 - Isle of Man
 - Jersey
 - Malta

St Helena

4.2.2 The following observations relevant to inert waste management on Guernsey were derived from the review of policies adopted by other island communities:

- None of the islands had a dedicated inert waste strategy upon which Guernsey could model its approach. Only one island included reference to inert waste within its strategic waste management policies. Therefore, the adoption of this Strategy for inert waste would be considered best practice amongst its peers;
- In all islands reviewed, there appeared to be links between waste policy and planning policy;
- Only those islands which referred to EU legislation had targets for both
 waste and inert waste and these were the same as the EU targets for 2020
 set at 70% for reuse, recycling or recovery by other means (with one
 exception which had a 90% diversion from landfill target);
- All islands referred to a waste hierarchy;
- Research shows that there is evidence that others have made reference to amending the internationally accepted waste hierarchy to suit the requirements of specific island communities, and the environmental impacts of each option;
- A number of islands have seen a shift change in promotion of the waste hierarchy via targeted education;
- An option to consider is the use of temporary residual inert waste facilities if any new residual facility cannot be brought on line by the time the current Longue Hougue facility becomes full; and
- Research indicates that development led site waste management plans are likely to result in decreased in quantities of residual inert waste sent to reclamation facilities.

5 The Inert Waste Strategy

5.1 Overview

- 5.1.1 Although the Inert Waste Strategy generally promotes the waste hierarchy adopted for household and commercial waste set out in the Solid Waste Strategy this does not fit exactly to the circumstances for inert waste for Guernsey. Therefore, this Strategy includes a revision to the waste hierarchy for inert waste for Guernsey, to adjust it to facilitate the sustainable management of this waste stream over the next 20 years.
- 5.1.2 In doing so it recognises the potential value of land created through land reclamation and infilling quarries and of the potential value of residual inert waste to strategic developments, where it is required, and other development projects. The reasons for the changes to the hierarchy for inert waste are set out below. The Strategy includes solutions to manage residual inert waste which cannot be prevented, reused, recycled or otherwise recovered when the current Longue Hougue facility becomes full.
- 5.1.3 The Strategy is set out to include short term interim solutions and a medium and long-term phase to cover the next 20 years. Although feedback from consultation workshops considered a much longer timeframe (i.e. 50-60 years) was appropriate it is considered that the 20 year horizon of the Strategy is nevertheless appropriate due to the major uncertainties involved with planning at such a protracted scale. The Strategy does include, however, recommendations for regular monitoring and review which will inform the future needs beyond the 20 year timeframe.
- 5.1.4 The approach has been informed through consultation and feedback with stakeholders and through careful consideration of current policy and legislative requirements as core principles.
- 5.1.5 The development of the Inert Waste Strategy has been particularly mindful of current ongoing work on other strategic projects and programmes, for example the Hydrocarbons Programme and the development of St Peter Port Harbour Action Area. The Strategy is intended to compliment and facilitate other Strategic projects and ensure that the potential benefits and value of land created to other strategic projects is taken into consideration when identifying future preferred ways forward.

5.2 Objectives

The key objective of the Inert Waste Strategy is to identify a preferred way forward that achieves the following:

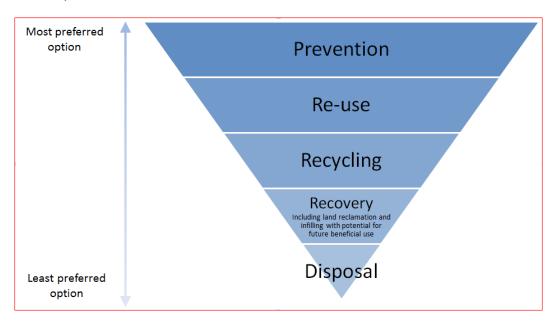
- Striking an appropriate balance for Guernsey between delivering sustainable levels of waste minimisation/reduction, reuse and recycling and minimising residual inert waste for disposal;
- Identifying the best practical environmental options;
- Satisfying the needs of the island;
- Taking into account the views of stakeholders and interested parties; and
- Representing best value for money.

5.3 The Inert Waste Hierarchy

- 5.3.1 As explained above the waste hierarchy adopted for household and commercial waste set out in the Solid Waste Strategy does not fit exactly the circumstances for inert waste for Guernsey.
- 5.3.2 In the Guernsey context, it is recognised that, even if not identified at the project's inception, land created by land reclamation and infilling existing quarries potentially has a significant beneficial value in the future, and therefore where land reclamation and infilling existing quarries has potential future value these should be situated higher up the hierarchy than a site with no or little potential for future use which is simply a disposal site.
- 5.3.3 The waste hierarchy reflects international best practice as defined in the European Waste Framework Directive⁹; however, this also provides scope for deviation from the hierarchy to encourage the options that deliver the best overall environmental outcome. In developing the Inert Waste Strategy, the specific set of circumstances (i.e. the needs of Guernsey) for a specific waste stream (inert waste) have been taken into account to recognise that this waste is a potential resource in the island context.

⁹ European Directive 2008/98/EC on Waste, Article 4

- 5.3.4 Based on all the research undertaken it is considered that there is latitude to depart from the hierarchy for land reclamation and infilling of existing quarries where there is beneficial value so that they are treated as elevated up the hierarchy and prioritised where they meet the requirements that are specified in the Inert Waste Strategy and would deliver the best overall environmental outcome and that this will not conflict with the overall aims and objectives of the waste hierarchy or of the Solid Waste Strategy.
- 5.3.5 This approach also reflects the references to land reclamation in the SLUP which highlights the potential to enhance the roles of the Main Centres or to accommodate strategically essential development or otherwise enable the objectives of the SLUP to be met through land reclamation.
- 5.3.6 Similarly where inert waste can be diverted to strategic developments, or other developments, where it is required, it has a beneficial value which should be reflected in the position in the hierarchy.
- 5.3.7 The Strategy therefore proposes the following waste hierarchy for inert waste on Guernsey:



Site Waste Management Plans

- 5.3.8 Site waste management plans will be the main tool to promote the inert waste hierarchy. They will focus on providing measures to manage construction projects so that waste is managed in accordance with the hierarchy to encourage:
 - Effective design and stock control;
 - Reuse and refurbishment of existing infrastructure;
 - Use of reclaimed materials and products;

- Use of renewable materials;
- Recycling of construction, demolition and excavation waste; and
- Procurement of products and materials with good practice levels of recycled materials.
- 5.3.9 Guidance has been issued by the Development & Planning Authority (DPA) to engage and inform the construction industry and other parties involved with building projects to ensure that these plans are completed in a consistent way. This has been developed in consultation with the Construction Industry Forum.
- 5.3.10 This will not only deliver a consistent approach to the inert waste hierarchy but will enable the collection of data that will further influence decision-making on future targets and management options for inert waste as the Strategy beds in.
- 5.3.11 The Strategy promotes the following hierarchical approach for inert waste:

Prevention

- 5.3.12 Waste minimisation in the construction industry involves measures to design out waste prior to construction to minimise the consumption of finite natural resources as well as planning to limit waste arisings during the construction phase of a project.
- 5.3.13 It is recognised that measures for prevention can only go so far and that there will be inert waste arisings that require management according to other hierarchical options.

Re-use

- 5.3.14 The relevant approaches to re-use would be where an item or materials have carefully been removed with a specific purpose of being reused again for the same purpose, following minor treatment. This would include cleaning mortar from bricks and granite, or grout from fully intact tiles to enable these items to be used again, particularly where there is a specific characteristic of the materials that would support maintaining the relevant character of a building.
- 5.3.15 There is some limited evidence that this approach is already carried out on the island but further measures are required to collect data and improve this where practical.
- 5.3.16 However, reuse cannot be applied to mixed inert wastes, such as general hard-core and clean soil. These represent the majority of inert waste arisings, so hierarchical measures would need to focus on maximising recycling and recovery measures, in accordance with the needs of the island.

Recycling

- 5.3.17 The aggregates industry on the island are actively involved in recycling inert material as part of construction and demolition projects, particularly the recycling of 'above-ground' materials, such as rubble, hard-core and mixtures of concrete, bricks, tiles and other ceramics. Such activities are covered by the waste licensing regulations to ensure the recycling is carried out in a manner that does not pose an unacceptable risk to human health or the environment. The States of Guernsey have contracted a company to carry out recycling on site at Longue Hougue.
- 5.3.18 The Inert Waste Strategy promotes this practice by providing a framework via the effective use of site waste management plans.
- 5.3.19 These recycling activities do not apply to clean soils or mixed inert wastes that cannot be processed to appropriate Technical Standards for a defined market use. However, such material can be used beneficially where the development allows via recovery.

Recovery

- 5.3.20 Naturally occurring material that is excavated within a development can be used on a site for construction purposes. In reality, this already happens on the island. This Strategy for inert waste recommends that this practice continues because it is in the best interests of the islands sustainability to make the best use of materials excavated from the site and also it preserves natural resources that would have to be imported from elsewhere.
- 5.3.21 Excavated material that is not naturally-occurring, or other mixed inert waste, can be used for construction purposes, e.g. as low grade fill where it is demonstrated to be suitable for use.

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¹⁰ These recycling processes are implemented to generate low-grade fill material that aligns with specifications for secondary aggregate or low-grade primary material as provided for in Guernsey Technical Standards issued in accordance with the Building (Guernsey) Regulations, 2012.

5.3.22 Where excavated material is used in construction, this maybe considered 'recovery' and is a lower hierarchical option than recycling. Recovery is defined for the purposes of the relevant part of the European Pollution Law¹¹, using a very similar definition to that in European Union waste legislation i.e. "recovery" means "any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in a plant or in the wider economy". This definition also reflects Court of Justice of the European Union case law on earlier related waste legislation, where that court held, on the basis of wording in legislation at that time that¹² "the essential characteristic of a waste recovery operation is that its principal objective is that the waste serves a useful purpose in replacing other materials which would have been used for that purpose, thereby conserving natural resources".

Land Reclamation/Quarry Infill and diversion of inert waste to strategic developments

- 5.3.23 In the Island context, there is potential benefit to land reclamation/quarry infill to provide future land, particularly where the location of such reclamation can be demonstrated to provide land of value (socially, economically or environmentally), or a specific need for the land has been identified at a strategic level.
- 5.3.24 Land reclamation has in the recent past, been the option provided for the disposal of residual inert waste (i.e. inert waste that cannot be prevented, reused directly, recycled or otherwise recovered).
- 5.3.25 The use of residual inert waste for land reclamation/quarry infill is most usually considered to be disposal. However, it is considered that, in the Guernsey context, this does not attach sufficient value appropriate to the creation of potentially beneficial land, or to the value of inert waste where it is required for a strategic development project. Therefore, for the purpose of this Strategy, the 'recovery' tier of the waste hierarchy shall also include:
 - 1. Inert waste materials required and specified for a strategic development project,
 - 2. Land reclamation/quarry infill with an identified future development use, and
 - 3. Land reclamation/quarry infill, which has a potential for future beneficial use in accordance with States approved policies.

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¹¹ Abfall case (Abfall Service AG ASA) C-6/00), the European Court.

¹² Section 30 (3) (b), Environmental Pollution Law

Disposal

- 5.3.26 The requirements for handling residual inert waste at any new land reclamation or quarry infill site under recovery, as at the current Longue Hougue facility, will be subject to stringent waste acceptance criteria to ensure the waste is appropriate for the purpose. Where residual inert waste fails to achieve these criteria, it will require disposal e.g. as specially controlled waste at an appropriate site.
- 5.3.27 Disposal of inert waste sits at the very bottom of the hierarchy. This Strategy identifies that an appropriate approach to the disposal of inert waste that cannot be prevented, reused, recycled or otherwise recovered is through quarry infill or land reclamation with no future beneficial use.

5.4 Phasing of the Inert Waste Strategy Implementation

The Strategy proposes a phased approach to implementation of the Strategy.

Short term (five years)

- 5.4.1 Continuing to dispose of residual inert waste at the current Longue Hougue Reclamation Site until the site reaches capacity.
- 5.4.2 The implementation of site waste management plans through the policies of the IDP which will provide the initial method by which the inert waste hierarchy will be applied to the activities and practices of parties involved with construction and demolition. This will be alongside the provision of guidance to parties involved in construction and demolition on the implementation of site waste management plans including:
 - Consistency in how the site waste management plans will be compiled for each project;
 - A simple tool for collating inert waste quantities in a consistent manner according to inert waste hierarchical options to facilitate data collection;
 - Advice about when the site waste management plans will need to be submitted to the DPA; and
 - Details about how the DPA will monitor and review such plans.
- 5.4.3 Collecting and compiling data from site waste management plans to better establish a baseline, with a review after three years with a view to setting targets for recycling and re-use. Data from site waste management plans will be compiled and published annually to enable the island's inert waste baseline to be established.

- 5.4.4 An increased level of information sharing will be promoted to ensure that the Strategy is implemented effectively. This will include:
 - Circulation of inert waste management guidance and a range of other engagement, advice and education initiatives, to the Guernsey Building Trades Employers Association; Construction Industry Forum and other key stakeholders;
 - Formalising an annual review and publication of data from site waste management plans and any site for the management of residual inert waste, to allow the construction industry to make informed decisions; and
 - An annual survey of the construction industry to find out barriers/opportunities to effective management of inert waste according to the inert waste hierarchy as a consequence of implementing the Inert Waste Strategy.
- 5.4.5 Effective implementation of site waste management plans will be monitored by regular feedback with the construction industry to refine and improve data collection and consistency in application from practical experience. The Inert Waste Strategy promotes the roll-out supported by an education and awareness campaign to ensure that these plans continue to be deployed effectively on new construction projects.
- 5.4.6 Provide temporary solutions at the current Longue Hougue Reclamation Site, prior to the new facility becoming available if required. This Strategy concludes that stockpiling material at the existing land reclamation site at Longue Hougue is the most appropriate temporary solution for managing residual inert waste, until another solution becomes available.

Medium term (up to 15 years)

5.4.7 Whilst the amount of inert waste that is recycled and re-used can be maximised, there will remain a need to manage a proportion of residual inert waste on island either through recovery or disposal. The Inert Waste Strategy is to provide a new on-island facility for residual inert waste through recovery (as defined in the Strategy) firstly, then to disposal via land reclamation or quarry infill with no beneficial value. As part of any planning application process for waste disposal or processing facilities (other than small scale recycling or sorting facilities), it is recognised that Environmental Impact Assessments (EIA) and Environmental Statements will need to be undertaken in accordance with relevant legislation 13.

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¹³ The Land Planning and Development (Environmental Impact Assessment) Ordinance, 2007

- 5.4.8 Data will also be used to determine the future life of facilities that have been developed for the management of residual inert waste and the effectiveness of the inert waste hierarchy.
- 5.4.9 Once established, targets for recycling and re-use will be monitored annually.
- 5.4.10 Effective implementation of site waste management plans will continue to be monitored by regular feedback with the construction industry to refine and improve data collection and consistency in application from practical experience.
- 5.4.11 The Inert Waste Strategy assumes that in the first instance, the operation of the residual inert waste facility is the responsibility of the States but recognises that other potential services achieved by partnering with the private sector should also be explored.
- 5.4.12 Any strategic projects, including land reclamation, that could require inert waste should be actively identified as the use of material in this way would prolong the lifetime of any residual inert waste facility. The principles of the Inert Waste Strategy should be taken into account when developing all future States policy and strategic projects in terms of potential beneficial uses for inert waste.

Long term (15 years plus)

- 5.4.13 The data collated during the short and medium term implementation of the Inert Waste Strategy will allow the States to review and update targets. Long-term monitoring and review of the Strategy will be measured against the metrics that will have been developed according to the baseline.
- 5.4.14 There may be a requirement to identify more than one site for residual inert waste management within the Strategy period (i.e. 20 years), and the selection of any further site/s should also take into consideration the longer term strategic requirements of the States both during and beyond the existing strategy period.

6 Monitoring and Review

6.1 Performance targets

- 6.1.1 Under the EU Circular Economy Package of legislation, there is an EU target, set at 70%, for re-use, recycling and other material recovery of non-hazardous construction and demolition waste by the end of 2020¹⁴. Although the Inert Waste Strategy considers that this target could potentially be achieved in Guernsey if some land reclamation and quarry infill is considered recovery (in line with the principles identified in this Strategy), more data is required on the total amount of inert material that is generated at source, and how this is dealt with, before any performance targets can be determined which are appropriate for Guernsey.
- 6.1.2 The site waste management plans will provide the mechanism to collect data. Guidance will be provided by the DPA to set the appropriate format for the construction industry to provide inert waste data to enable effective establishment of the baseline.
- 6.1.3 Targets for each tier of the inert waste hierarchy should be implemented following three years of data collection after the adoption of the Strategy.
- 6.1.4 Data on inert waste management will be published annually and will be reviewed to enable more refined reporting once the baseline is established and effective monitoring targets are set.

6.2 Review

6.2.1 This Inert Waste Strategy is for a period of 20 years. Estimates and assumptions made to inform this Strategy will be monitored on an ongoing basis to ensure that the Strategy remains appropriate to Guernsey's needs.

6.2.2 A formal Inert Waste Strategy review will be undertaken every five years following the implementation of this Strategy. This review will take into account the evidence used in compiling this Strategy, and consider any insight gained from experience, including performance monitored against future targets that will be established once the baseline inert waste management data is better understood and a review of the appropriateness of those targets.

¹⁴ See Article 11 (2) of the EU Waste Framework Directive. This excludes naturally occurring material defined in the European Waste Catalogue code 17 05 04 (i.e. soil and stone not containing dangerous substances)

achieving targets will be reviewed and reported on an annual basis.

6.2.3 Progress on the implementation and delivery of the Inert Waste Strategy and

Appendix 3

