

THE STATES OF DELIBERATION
of the
ISLAND OF GUERNSEY

COMMITTEE *FOR THE* ENVIRONMENT & INFRASTRUCTURE
AND
STATES' TRADING SUPERVISORY BOARD

PLANNING FOR A NEW FACILITY FOR MANAGING RESIDUAL INERT WASTE

The States are asked to decide: -

Whether, after consideration of the policy letter entitled 'Planning for a New Facility for Managing Residual Inert Waste' of the Committee *for the* Environment & Infrastructure and the States' Trading Supervisory Board, they are of the opinion:-

1. To direct the Development & Planning Authority to prepare proposals for a Local Planning Brief for a new residual inert waste facility at Longue Hougue South and to direct the Development & Planning Authority and the Committee *for the* Environment & Infrastructure to take all necessary steps under the Land Planning legislation to lay such proposals before the States for adoption.
2. To rescind Resolutions 1 to 3 on Article XIV of Billet d'État No. XXIV of 2017 insofar as they:
 - a. direct the Committee *for the* Environment & Infrastructure and the States' Trading Supervisory Board to take steps, and
 - b. delegate authority to the Policy & Resources Committee to approve expenditure,in relation to a second site from the short list of possible options presented to the States in December, 2017 for inert waste management with the intent that those Resolutions just apply to the identified site at Longue Hougue South, as set out in paragraphs 3.1. to 3.7 of the policy letter.
3. To approve the Inert Waste Strategy as set out in Appendix 2 to the policy letter.

The above Propositions have been submitted to Her Majesty's Procureur for advice on any legal or constitutional implications in accordance with Rule 4(1) of the Rules of Procedure of the States of Deliberation and their Committees.

THE STATES OF DELIBERATION
of the
ISLAND OF GUERNSEY

COMMITTEE *FOR THE* ENVIRONMENT & INFRASTRUCTURE
AND
STATES' TRADING SUPERVISORY BOARD

PLANNING FOR A NEW FACILITY FOR MANAGING RESIDUAL INERT WASTE

The Presiding Officer
States of Guernsey
Royal Court House
St Peter Port

2 March 2020

Dear Sir

1 Executive Summary

- 1.1 The Committee *for the* Environment & Infrastructure (CfE&I) has considered and supports the recommendations made to it by the States' Trading Supervisory Board (STSB) as the Waste Disposal Authority (WDA). This joint policy letter recommends: -
- (a) To direct the Development & Planning Authority (D&PA) to prepare a Local Planning Brief for a new residual inert waste facility at Longue Hougue South, and for directing the D&PA and the Committee *for the* Environment & Infrastructure to take all necessary steps under the Land Planning legislation to lay such proposals before the States for adoption;
 - (b) To formally approve the Inert Waste Strategy set out in Appendix 2.
- 1.2 Currently, residual inert waste is disposed of at the Longue Hougue Reclamation Site. This site will reach the end of its operational life when it reaches capacity and the latest estimates are that this will be by around the end of 2022. While there scope to reduce the amount of residual waste produced - through better prevention, reuse and recycling - there will be an ongoing requirement for a replacement recovery or disposal facility.
- 1.3 The current project timeline indicates a new facility at Longue Hougue South could be operational by the summer of 2024. While ongoing reuse and recycling initiatives could extend the remaining life of the current facility, it is likely that some stockpiling of residual inert waste will be required, in the short term, after the existing site is full. It is therefore proposed that Guernsey Waste seeks the necessary planning approvals from the DPA and a waste licence from the Office of Environmental Health and Pollution Regulation (OEHPR) to stockpile inert waste for a limited period, at the Longue Hougue Reclamation site, until the new facility is operational.

- 1.4 This policy letter also provides an update on progress with the project since December 2017¹, when proposals for a replacement facility for managing inert waste were considered by the Assembly. The 2017 policy letter outlined the strategic case, and provided a short-list of options and a preferred way forward, to go forward for an Environmental Impact Assessment (EIA).
- 1.5 An EIA is required to be carried out and an accompanying Environmental Statement (ES) setting out the finding of the EIA is required to be submitted in relation to development plan policies and planning applications relating to waste disposal or processing of waste (other than small scale recycling or sorting facilities).
- 1.6 In accordance with the planning requirements², the STSB has carried out a detailed Environmental Impact Assessment (EIA) for the site at Longue Hougue South. This identifies the extent of the potential impacts of the proposed use on the site, and what mitigation may be required. A Non-Technical Summary of the EIA is included at Appendix 1. The EIA fulfils, in part, the Resolutions following the policy letter of December 2017. Paragraphs 3.1 to 3.7 of this policy letter explain further why Resolutions 1 to 3 of December 2017, requiring or authorising steps to be taken in relation to two EIAs for two sites - are proposed to be rescinded, insofar as they apply to a second site.
- 1.7 This is also a timely opportunity to request the States formally adopt the Inert Waste Strategy (Appendix 2), which was previously considered at the December 2017 States meeting. This sets out the high level strategic direction for the management of inert waste in Guernsey, and complements the island's Solid Waste Strategy.

2 Introduction

- 2.1 In December 2017, States Members considered a joint policy letter from CfE&I and STSB, which set out proposals for the future management of inert waste. This included the outcome of a detailed options appraisal, which began with a list of around 50 potential solutions and possible sites. These had been assessed against various criteria, including capacity, practicality, value for money, potential future uses and environmental factors. That evaluation process was subject to extensive consultation with relevant local organisations, environmental groups, the construction industry, site users, and the general public.
- 2.2 The process was carried out in accordance with legislative requirements, to arrive at a short list of the Best Practical Environmental Options. These were set out in the 2017 policy letter, which recommended the development of Longue Hougue South as the 'preferred way forward' for inert waste management.

¹ Inert Waste Strategy and a Proposal for a New Facility for Managing Residual Inert Waste, Article XIV of Billet d'État No XXIV of 2017.

² Schedule 1 of The Land Planning and Development (Environmental Impact Assessment) Ordinance, 2007.

- 2.3 Following a successful amendment to the original propositions, the States directed the CfE&I and STSB to identify a second site from the shortlist to undergo a detailed EIA along with Longue Hougue South. The CfE&I and STSB were also directed to present the findings of both EIAs to the States as soon as practicable, and recommend a preferred way forward for the management of inert waste in the medium term.

Roles and functions

- 2.4 The CfE&I is responsible for waste policy and strategy development, and also for the periodic review of the Waste Management Plan, following recommendations made to it by the Waste Disposal Authority (WDA). The Committee is mandated to advise the States on strategic level land use planning, and environmental and infrastructure policy matters, including solid waste. The Committee is also responsible for the setting up and administration of Planning Inquiries.
- 2.5 The STSB, as the WDA, has various statutory functions. It is responsible, inter alia, for ensuring provision of waste and recycling services and facilities, including for the management of inert waste. These functions are delivered, operationally, through Guernsey Waste.
- 2.6 The DPA is responsible for advising the States on land use policy and developing and implementing those policies. This includes the preparation of development plans, subject plans, local planning briefs, and other relevant instruments.
- 2.7 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.
- 2.8 This policy letter :
- Provides a report on the EIA undertaken at Longue Hougue South (as required under Resolution 2, following the December 2017 policy letter);
 - Recommends that the States now direct the D&PA to prepare a LPB in relation to the site, allowing for it to be developed as a new residual inert waste management facility;
 - Recommends that the D&PA, together with the CfE&I, take all necessary steps to bring this forward for the States to consider for adoption; including laying such proposals before the States (i.e. the LPB, the Inspector's Report, the EIA and the D&PA response to the Inspector's Report);
 - Requests the formal approval of the proposed Inert Waste Strategy, considered previously by the States in December 2017 but not formally adopted; and
 - Sets out the plans for the Longue Hougue (North) existing Reclamation Site to be used for stockpiling inert waste as an interim measure, subject to obtaining any necessary statutory consents, including planning permission and waste licencing.

3 Residual Inert Waste Replacement Facility Environmental Impact Assessment (EIA)

- 3.1 Following the States' direction in December 2017 to identify a second option from the shortlist, further analysis was subsequently carried out to identify which of the other shortlisted options should be taken forward.
- 3.2 Les Vardes Quarry had been considered a potential longer term option, but not a viable alternative within the timescales required. The site is still an operational quarry, and is currently safeguarded for future water storage, as required by the island's Strategic Land Use Plan.
- 3.3 The remaining options included three small former quarries and a potential coastal land reclamation site to the north of Mont Cuët.
- 3.4 The site near Mont Cuët is more exposed to wave action than Longue Hougue South. It would therefore involve significantly more engineering to construct a suitable breakwater for land reclamation in this location. This would make it a much more costly option, to provide a site with significant less capacity, and likely to have little beneficial value for future development uses, compared to Longue Hougue South. This option was therefore considered to not represent good value for money.
- 3.5 Of the three small former quarries, two are in private ownership. One of the owners of La Paradis declined permission for further investigation, which just left L'Épine and Guillotin quarries. These are relatively close, and in combination would still only provide a short-term solution – following which the most likely follow-on site would be Longue Hougue South. However, they represented the most viable available option for further analysis.
- 3.6 The CfE&I and the STSB therefore requested £500,000 funding to carry out a detailed EIA on the two former quarries and Longue Hougue South. The Policy & Resources Committee, in exercising its delegated authority, declined the funding for the EIA on the quarries. It did not consider it to be good value considering as it was unlikely they would emerge as a preferred alternative to Longue Hougue South.
- 3.7 The President of STSB subsequently updated the Assembly on 24th October 2018³, setting out that the project was proceeding with an EIA on one site only. In summary, having re-evaluated all the shortlisted options, Longue Hougue South remains the preferred way forward.
 - It offers the best fit in terms of meeting the agreed Critical Success Factors and Investment Objectives.
 - It could be constructed to be available for operation by 2024 and has the largest capacity of all options that are available in the necessary timeframe.

³ Statement on the Inert Waste Project, given by Deputy Peter Ferbrache, President of STSB, 24th October 2018.

- It is also likely to have beneficial value for future development uses, once it has reached capacity.
 - It is expected to meet the definition of recovery, which is preferred to disposal in the Waste Hierarchy.
- 3.8 The value of any land created, taking into account possible future uses and detailed design options, will be explored as part of a future Outline Business Case (OBC). That will be prepared following the States decision on adoption of the LPB.
- 4 Completion of the EIA for Longue Hougue South**
- 4.1 The extent of the potential Longue Hougue South development is detailed in Appendix 1, Longue Hougue South EIA, Non-Technical Summary (fig 4).
- 4.2 Following the statement by the STSB President in October 2018, Royal HaskoningDHV was commissioned to undertake an EIA for Longue Hougue South. The subsequent studies and preparation of the Environmental Statement took just over one year to complete.
- 4.3 An EIA is a formal process of evaluating the likely environmental impacts of a project, positive or negative. This considers all relevant topics, under three areas: physical environment, biological environment and human environment. A detailed EIA is required to be able to satisfy the requirements of Policy S5: Development of Strategic Importance which requires demonstration that the particular choice of location for the proposed development can be clearly justified and that the proposals represent the best practicable option, taking into account all relevant economic, social and environmental considerations.
- 4.4 This will be a key consideration of the independent planning inspector at the Planning Inquiry into the Local Planning Brief (LPB) required for the site, in accordance with the statutory requirements which is the next stage. The States will then consider the LPB and the report of the independent inspector and decide whether to approve the LPB for the site. If the States approves the LPB it will be formally adopted and will become an additional policy to the Island Development Plan (IDP) and will enable detailed planning applications to be submitted for the facility.
- 4.5 The EIA for Longue Hougue South involved a wide range of environmental studies. Relevant expert advice, drawing extensively on local knowledge, was used to assess what changes or impacts might arise due to the construction and operation of an inert waste facility. Where adverse impacts are anticipated, measures to reduce these have been proposed. The final or residual impacts take into account the suggested mitigations.
- 4.6 Royal HaskoningDHV has produced an independent report - called the Environmental Statement (ES) - setting out the findings of the completed EIA. This is available on the States of Guernsey's website at www.gov.gg/inertwaste, and will be submitted to the DPA for the development of a LPB. A non-technical summary is attached at Appendix 1, and is also available on the website.

- 4.7 The potential cumulative impacts of the project are summarised in the Non-Technical Summary. A range of mitigation measures have been identified to reduce the severity of potential impacts during construction and operation of the site. The long-term impacts after mitigation are limited to significant local visual change and smothering of geological deposits, with minor traffic noise and habitat loss impacts; potentially significant ecological impacts are proposed to be mitigated by translocation exercises. The ES clearly identifies the residual impacts after mitigation. The evidence suggests that, on the basis of the environmental impact assessment findings, there is no reason why the project should not proceed to the next stage.
- 4.8 The CfE&I and the STSB recommend the States now direct the DPA to prepare a local planning brief, allowing for the development as required by the Island Development Plan. This would include a planning inquiry, providing a further opportunity for consultation with key stakeholders, including the public, and be overseen by an independent inspector.

5 Forecast Inert Waste Tonnages and Expected Operational Life of Facilities

- 5.1 Forecasts of the remaining life for the current reclamation site and the anticipated operational life of Longue Hougue South are based on estimated future tonnages of residual inert waste that are expected. These take account of a number of factors, but are largely based on the long-term average of historical data and more recent changes in recycling. See Appendix 3, Actual and Forecast Volumes Chart for further information.
- 5.2 The forecast tonnages have been impacted by several recent changes in the last few years. These include the diversion of significant quantities of inert waste material to cover Mont Cuët landfill site, and an improvement in the recycling of some inert waste material (e.g. aggregate). Both have reduced inputs into Longue Hougue.
- 5.3 Diversion of non-recyclable material to Mont Cuët is coming to an end, which will result in more material reverting to Longue Hougue for disposal.
- 5.4 As the same time, a significant amount of material arriving at Longue Hougue is now being recycled, rather than being used for land reclamation. This is as a result of a new contract that began in April 2019, which has resulted in some types of inert waste being diverted. It is anticipated this will continue, helping to reduce the amount of material requiring disposal (or recovery) in the future.
- 5.5 These factors have impacted on the amount of material being disposed of (one contributing to an increase and the other a decrease) and have been taken into account in the latest forecast. The upper, lower and conservative forecasts have therefore been updated with the latest data, since the completion of the annual survey at Longue Hougue in the summer of 2019. This forecast constitutes an update to the figures provided in the ES.

- 5.6 The prediction for the end of operational life of the current Longue Hougue Reclamation Site (i.e. when the site reaches capacity, conservative case) is now estimated to be December 2022. See below, Figure 1: Aerial Photo of Longue Hougue, taken in April 2019, showing the remaining void area left to be filled at the north of the site.



Fig. 1: Aerial Photo of Longue Hougue Reclamation Site, April 2019

© States of Guernsey, Digimap Ltd.

- 5.7 However, the trend on inert waste volumes can change significantly, depending on a number of different factors, which will impact on the above estimates. These include:
- the buoyancy of the construction industry;
 - the number of large construction projects requiring demolition and excavation; and
 - the amount of inert waste re-used and recycled.
- 5.8 The estimated fill rate is therefore forecast as a range, taking into account the above factors. The mid-range is at around 80,000 tonnes per annum (tpa), whilst the upper level is estimated at 120,000 tpa and the lower level at 55,000 tpa. These fill rates would result in an operational life of a new site at Longue Hougue South of between 10 years and 21 years, with a mid-point estimate of 14 years.

- 5.9 If the fill rate for the new residual inert waste site is slower than predicted, that could extend the payback on the capital investment. This could extend the length of time for the loan agreement and consequently a higher gate fee to the end user. Initial sensitivity testing has been carried out and further work will be done during the assessment for the Outline Business Case, which will be prepared for consideration, subject to the adoption of the LPB.
- 5.10 Some types of inert waste material, where it is required, could be diverted to other strategic projects, provided they are formally identified as such. These may take immediate priority and will help to divert inert waste (if only for a short period of time) from the residual inert waste facility, consistent with the Inert Waste Strategy. This would have an effect on the time period for the recovery of capital investment for the core facility, and whilst diverting some types of inert waste material to strategic projects may provide other benefits for the States, a different economic model may be required as a result.

6 St Peter Port Harbour Development and Inert Waste

- 6.1 In May 2019, the States considered a Requête⁴ in relation to the Development of the St Peter Port Harbour. This proposed in effect a land reclamation site to the east of the QE2 marina with potentially two drivers for the creation of land through reclamation, namely:
- to provide land for additional port infrastructure; and
 - to provide a site for the disposal of the island's inert waste.
- 6.2 Following a successful Amendment (detailed in an Amendment Report)⁵ the States agreed to carry out a detailed analysis of the harbour's requirements, and whether such a land reclamation east of the QE2 Marina should be the optimum solution for the harbour's needs.
- 6.3 The Amendment Report set out why a land reclamation site at this location *should not be considered as an inert waste facility*. This included why the proposals in the Requête did not provide the necessary evidence to satisfy the requirements of planning and environmental policy and legislation within the available timescales. In summary, Longue Hougue South was identified as the best option to provide a site for inert waste disposal following a comprehensive site selection process that took more than 18 months and was carried out in accordance with statutory requirements and best practice, and there remains an urgent need to progress such a solution for inert waste.

⁵ Amendment Report at Amendment 1, Requête (as above)

- 6.4 The Amendment Report provides further details as to why an inert waste land reclamation facility at St Peter Port would not satisfy the requirements of planning and environmental policy and legislation. The Island Development Plan would allow an inert waste management facility to be considered as a Development of Strategic Importance⁶, provided it could be clearly demonstrated as in the public interest. However, a wide-ranging review has already identified Longue Hougue South as the best location. To comply with the States land use policy, a similar comprehensive study would have to indicate the St Peter Port Harbour option is better or at least equal to Longue Hougue South for it to be considered principally as an inert waste site. The previous in-depth evaluation process did not support such a conclusion.
- 6.5 There are other considerations as to why a facility in the area of St Peter Port Harbour would not be ideal in terms of its location, including the potential impacts of long-lasting disruption of around ten years or more, both to port operations and other aspects of the island's 'capital', including impacts on traffic and congestion.
- 6.6 The IDP would also allow land reclamation to provide ports and harbour infrastructure to be considered as Development of Strategic Importance. This requires a comprehensive study to identify the best site, having considered all the alternatives and a detailed analysis of future port requirements and options for locating any new infrastructure, taking account of all relevant economic, social and environmental considerations. The STSB has established a Harbour Development Programme which has commenced a detailed analysis of the future harbour requirements. Progress on the harbour requirements and options will be reported to the States by December 2020. The D&PA are working with the relevant Committees and stakeholders to develop a Local Planning Brief (LPB) for the St Peter Port Harbour Action Area (SPPHAA).
- 6.7 In addition, an EIA has now commenced in relation to a potential land reclamation and its potential future development uses at a site east of the QE2 marina at St Peter Port, and will include a wider baseline review to encompass the St Peter Port harbour area. That will help inform the D&PA's work on a LPB for the SPPHAA and will support the objectives of the Harbour Development and any potential future land reclamation scheme.

7 Stockpiling

- 7.1 The Amendment Report recognised that some inert waste could have commercial and strategic value if able to be used for an identified strategic development, for example for future land reclamation or land raising or other enabling development and that therefore there may be a benefit to stockpiling some suitable inert waste material for a limited period. As such, it was subsequently resolved⁷ that the STSB be directed,

⁶ Island Development Plan, Policy S5.

⁷ Resolution 6 of the 23rd May 2019, on Article VI of Billet d'État No VIII of 2019.

“... in consultation with the Development & Planning Authority, to consider options, including potential locations, to enable the temporary stockpiling of residual inert waste; and to make recommendations to the Committee for the Environment & Infrastructure on such options, as well as estimates of any associated costs, by December 2019...”

- 7.2 The Project Team has identified that there is likely to be a short-term need for stockpiling of unsorted residual inert waste material prior to the commissioning of the new inert waste facility, as set out in the Inert Waste Strategy. It is anticipated that a new residual inert waste facility will not be available until 2024, due to the statutory processes and approval and construction timescales. In the meantime, it is anticipated that the current site at Longue Hougue will be full by December 2022. Therefore it is likely that there will be a need for some stock piling of residual inert waste, as a mitigating measure.
- 7.3 The merits of stockpiling inert waste for use for particular strategic development and the identification of a site for stockpiling for a temporary period for these purposes, can only be assessed once a strategic need and site has been formally identified. This will then determine the type of inert waste materials that might be suitable for the proposed development and if further processing, for example sorting, may be required. The processes required may influence the choice of stockpiling site. Relevant approvals would also be needed for such material to be processed and then stored. If processing such as sorting is needed (other than small scale sorting and recycling), an EIA is required as part of the planning process. Depending on the location and scale of stockpiling, a Development Framework may also be necessary. The costs of these assessments and processes could be in the region of £150k to £200k. Should strategic developments require it, then a funding source for the stockpiling assessments and processes would need to be identified.
- 7.4 The policies of the IDP allow for the principle of stockpiling of inert material on some sites and the temporary stockpiling of inert waste material on other sites may be possible, subject to planning approval and appropriate waste licences being granted. Consideration has been given to potential sites for the stockpiling of residual inert waste for a temporary period of up to four years.
- 7.5 Informal advice received from the Planning Service in relation to stockpiling inert material is that, subject to planning permission, this may in principle be possible on land which is designated as a Key Industrial Area (KIA) or a Key Industrial Expansion Area (KIEA) in the IDP8.

⁸ The most relevant planning policies in this instance are Policy MC5(A): Industry, Storage and Distribution Uses in Main Centres and Main Centre Outer Areas - Within KIAs and KIEAs, and Policy MC5(B): Industry Storage and Distribution Uses in Main Centres and Main Centre Outer Areas - Outside of the KIAs and KIEAs and Policy IP2: Solid Waste Strategy.

- 7.6 KIAs have been identified as areas where industrial and storage and distribution development should be consolidated. There are four KIAs identified in the IDP (Pitronnerie Road, Northside, Saltpans and Longue Hougue). KIEAs are identified on land adjacent to the KIAs and also at La Villiaze, St. Saviour's.
- 7.7 The IDP states that a Development Framework will be required for each KIEA and for the undeveloped part of the Saltpans KIA. The Plan also states that development may be supported prior to the approval of a Development Framework where it is unlikely to inhibit the implementation of industrial or storage and distribution development and would not prejudice the comprehensive development of the site and that a KIEA will only be released for development where it has been demonstrated that no alternative sites are available within any of the KIAs or Main Centres and Main Centre Outer Areas.
- 7.8 The IDP states that the Longue Hougue Key Industrial Area is reserved for heavy and specialist industrial development which cannot be easily located on other industrial sites owing to its potential negative impacts on neighbours, such as through the noise, dust, vibration, smells and emissions associated with the processes undertaken, and for strategic infrastructure, including development associated with the processing of waste.
- 7.9 In this policy context, there is considered to be potential scope under the policies of the IDP, subject to planning permission, for the use of an area designated as a KIA or a KIEA for the stockpiling of inert waste. However, having regard to the likely impacts of such use, albeit of relatively short duration, it is considered that the Longue Hougue Key Industrial Area, or KIEA where the use would not prejudice the comprehensive development of the site, would represent the best potential option for the stockpiling of inert waste.
- 7.10 In addition, an EIA would be required in respect of a proposal for stockpiling involving any processing of inert waste, for example to meet a materials specification for the proposed site or use. This is because it would amount to processing of waste, rather than storage, with the only exemption to this being for small-scale sorting.

Costs of Stockpiling

- 7.11 Assuming a new facility is available by the summer of 2024, it is estimated that there may be a requirement to stockpile residual inert waste at the existing Longue Hougue site for a period of approximately 18 months, until a new facility becomes available. Based on current forecasts, it is estimated that between 80,000 and 180,000 tonnes will need to be stock piled and then subsequently moved to the new site. This would entail a cost of approximately £0.4m to move the material from Longue Hougue to Longue Hougue South (based on 120,000 tonnes). The maximum capacity allowable within the site area has been estimated (based on a number of assumptions) to be in the region of 180,000 tonnes. The cost to move the material would be included within the overall capital cost for the project.

- 7.12 The costs associated with stock piling inert waste material for use on identified strategic development sites will differ according to the location, including transportation distances, access and other logistical factors.

8 Funding Options for the new Residual Inert Waste Facility

- 8.1 The initial investment proposal for a residual inert waste facility was set out in the December 2017 policy letter, following the completion of the first stage business case phase, the Strategic Outline Case (“SOC”). The project will be subject to a more detailed financial and economic appraisal at the Outline Business Case stage, subject to adoption of the LPB. It is anticipated that a policy letter outlining these investment proposals and the recommendation to commence a procurement process may come forward in the first half of 2021.

Longer Term Funding

- 8.2 The Inert Waste Project has been identified in the Medium-Term Financial Plan⁹ as a Large ‘Pipeline’ project in the ‘Maintain Category’. The SOC originally set out an indicative capital investment figure in the region of circa £30m, potentially to be funded by a loan from the States Capital Reserves and funded by gate fee income.
- 8.3 In the statement to the States by the President of STSB in October 2018, an update on the potential cost of the land reclamation project was provided. This provisional estimate was given as in the region of £45 million. This followed some initial work in 2018 on market testing costs for the materials, supply and build for a breakwater for the land reclamation site.
- 8.4 During 2019, further value engineering and design optimisation has been carried out with breakwater engineering design experts at Royal HaskoningDHV. This work and other assessments indicate at this juncture that the substantive capital costs, taking into account the build and completion of the site, are still within this range.
- 8.5 The financial estimates will continue to be refined in the work towards the Outline Business Case. The estimates remain provisional until such time as a procurement process has been undertaken.

Shorter Term Funding Arrangements

- 8.6 The December 2017 policy letter included a budget of £1.1m for the Design and Analysis stage to take the project forward to a Full Business Case. Following the completion of the EIA, the work in 2020 and 2021 will include the preparation and drafting of an LPB, a planning inquiry on the LPB, and consultancy support and expert witnesses to support this process. Further design and site analysis and professional fees will also be needed before the Outline Business Case (OBC) can be prepared and authorisation sought from the States to tender the required contracts and services.

⁹ Policy & Resources Plan, Phase 2, Appendix 1: Medium-Term Financial Plan, 2017-2021, p101

- 8.7 As a result of the successful Amendment in December 2017, Resolution 3 increased the Design and Analysis budget from £1.1m to £1.6m to allow up to an additional £500k to be expended on a second EIA and further assessment of the 'preferred way forward'. The Policy & Resources Committee were delegated authority to approve expenditure for this stage. As P&RC did not approve the second EIA proposal, the Project is currently working to a budget estimate of £1.1m for the Design and Analysis stage.
- 8.8 Following expenditure on the completion of the EIA and Environmental Statement in 2019, the balance of budget remaining for the Design and Analysis stage (for 2020 and 2021 inclusive) is approximately up to a maximum of £800k. The budget estimate is set out as follows:

Remaining Analysis and Design Phase Costs for 2020 to 2021

Design and Analysis phase costs							
£000's	Paid	Remaining spend			Grand Total	Risk	
	2018/19	2020	2021	Total			
EIA Professional fees	230	-	-	-	230	0%	-
Communications prof' fees	-	25	-	25	25	0%	-
Prep'n local planning brief	-	100	50	150	150	20%	30
Planning Inspector	-	-	52	52	52	50%	26
Site Evaluation Fees	-	30	-	30	30	25%	8
Other Professional fees	68	108	-	108	176	30%	32
Site Design	-	150	62	212	212	50%	106
External Legal Counsel	-	9	9	18	18	20%	4
Subtotal before risk adj	298	422	173	595	893		205
Risk		137	69	205	205		
Grand Total Costs, incl risk	298	559	242	800	1,098		

Table 1: Design & Analysis Budget 2020 & 2021 and Expenditure for 2018/19

- 8.9 The budget includes an element of risk, which has been applied across each line item, according to the anticipated level of uncertainty as to the estimated cost of professional fees likely to be incurred. Where some initial quotations or indicative amounts have been provided, the risk adjustment percentage applied is lower. There are unknown risks regarding the extent or type of professional fees that may be required over the next two years. Part of the figure is likely to include Quantity Surveyor expertise, Project assurance and internal financial team cost recovery, during the OBC and FBC stages, in order to manage costs throughout the whole procurement process.

- 8.10 Additional costs have now been included for expert resources to develop the LPB and to provide support for the D&PA at the Planning Inquiry. Since the December 2017 budget estimate it has been identified that the D&PA now has insufficient resources to prepare an LPB in the timeframe required, given other priorities and requirements placed upon it for 2020 and 2021. The estimate for the cost of the LPB has a level of risk uncertainty, depending on how the Planning Inquiry proceeds.

9 Timescale and Implementation Plan for the Inert Waste Strategy

- 9.1 The Inert Waste Strategy provides an implementation plan for all inert waste streams across the Waste Hierarchy. The aspects of the implementation plan relating to the provision of facilities for the management of residual material will take the form of three phases: short, medium and long term.

- **Short Term:** Stockpiling of inert waste at the existing facility which can then either be:
 - utilised, where it is required, for strategic or other projects that may come forward; or
 - deposited at the new facility when available.
- **Medium Term:** Provision of services and facilities at the proposed preferred first site, currently identified as Longue Hougue South.
- **Long Term:** Further work will be required to explore a long-term solution or solutions which will be informed by monitoring and review and considered in the context of other strategic projects.

- 9.2 The Inert Waste Project to deliver the medium-term facilities has the following key milestones and outline target dates for delivery :

Key Milestones

Key Milestone	Completion Date
Detailed EIA for the preferred way forward	November 2019
States decision on propositions/policy letter	March 2020
Local planning brief (including Public Inquiry)	Q2 2020/Q1 2021
Procurement for design of site	Q2 2021
Outline Business Case - phase 2 and policy letter decision on investment	Q2/Q3 2021
Tender construction contract	Q3 2021
Full Business Case approval to tender solution (assuming delegated to P&RC)	Q1 2022
Award construction contract and final design	Q2 2022
Planning application	Q3 2022
Waste management licence & FEPA ¹⁰ licence	Q3 2022
Existing Land Reclamation reaches capacity and stockpiling commences	Q4 2022
Site construction likely to complete (Based on commencement in Q3 2022)	Q2 2024

Table 2: Key milestones

- 9.3 The key date for commencement of site construction has been delayed by approximately 9 months, due to some delays in the approval process relating to the potential second option for an EIA and the St Peter Port Harbour Requête. The likely time to complete construction may be 6 months longer than the previous estimated 12 month construction period. For these reasons, the new facility is not likely to be commissioned until Q2 of 2024. Going forward, there are a number of risks to the project which may impact on key milestones, particularly if the requisite approvals are not granted within the timescales required.
- 9.4 Assuming the new facility at Longue Hougue South commences in 2024, it is forecast that the site may reach the end of its operational life by around 2039, and potentially as late as 2045, which is close to or beyond the original 20-year strategy time frame.

¹⁰ Any land reclamation proposal will require a licence under the Food & Environmental Protection Act 1985 , as extended with modifications to the Bailiwick, before rock armour can be deposited on the sea bed.

10 Strategic & Legislative Context

- 10.1 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 Policy & Resources Plan.
- 10.2 The States of Guernsey has legislation and policy in place to ensure that an EIA in relation to a new inert waste land reclamation site, is carried out in a consistent way to meet the needs of the island. The Land Planning and Development (Environmental Impact Assessment) Ordinance, 2007 sets out the requirements for EIA in relation to developments with potential for significant environmental impacts. The type of development that the Longue Hougue South falls into means that an ES is required to accompany the planning application. The ES is the documentary evidence of the entire EIA process. Further legislation and best practice and guidance used to approach the EIA in this case is documented in section 1.5.3 at Appendix 1: Non-Technical Summary.
- 10.3 In developing the Inert Waste Strategy, the policy approach has taken into account the existing related strategic policy and legislative framework. The work on the proposed Strategy and actions arising out of it have been influenced by the States' Policy & Resource Plan (now the "Future Guernsey Plan"), the Solid Waste Strategy, the Strategic Land Use Plan and the IDP, and developed consistent with the provisions of the Environmental Pollution (Guernsey) Law, 2004 ("the Environmental Pollution Law").

Solid Waste Strategy

- 10.4 The island's Solid Waste Strategy is based on the Waste Hierarchy¹¹, an internationally accepted principle and guide to sustainable waste management. It identifies the preferred order for managing waste, with the aim of extracting maximum practical benefits from products and materials and generating the least amount of waste, namely:
- Prevention;
 - Reuse;
 - Recycling;
 - Recovery; and then finally
 - Disposal.

¹¹ Waste Hierarchy: Directive 2008/98/EC on Waste (Waste Framework Directive), Article 4.

Island Development Plan

- 10.5 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. These are explained in further detail in the Inert Waste Strategy (see Appendix 2).

Environmental Pollution Law, 2004

- 10.6 The Environmental Pollution Law¹² requires the STSB as the Waste Disposal Authority to identify the Best Practical Environmental Options (BPEOs) for the selection of appropriate waste facilities¹³. The methodology adopted by the STSB, as the WDA, has at its core the protection of the environment. 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*". Therefore, the STSB has adopted a process 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.

11 The Inert Waste Strategy

- 11.1 The Inert Waste Strategy was developed as part of the CfE&I's priorities for Phase 2 of the Policy and Resource Plan (June 2017), which was endorsed by the States of Deliberation. The Strategy (see **Appendix 1**) contains some minor updates since it was originally considered and noted by the States in December 2017.
- 11.2 The CfE&I's Policy Priority Plan¹⁴ included a commitment to bring to the States an Inert Waste Strategy for the identification and delivery of optimal solution(s) for the management, use and disposal of Guernsey's inert waste over the next 20 years. The States of Deliberation agreed to develop a strategy for inert waste to provide a more detailed framework for the inert waste stream for each level of the waste hierarchy. The States noted the principles as set out in the Inert Waste Strategy, which informed the final Resolutions as Amended of December 2017; however, it is recommended that the Strategy is now formally adopted.
- 11.3 In the Guernsey context, land created by land reclamation and infilling existing quarries can have a significant beneficial value in the future. Such development can therefore be considered to be situated higher up the hierarchy than a site with no or little potential future value which would simply be considered a disposal site. Provided they meet the requirements specified in the Inert Waste Strategy and can deliver the best overall environmental outcome, this does not conflict with the overall aims and objectives of the waste hierarchy or of the Solid Waste Strategy.

¹² Environmental Pollution (Guernsey) Law, 2004

¹³ See section 30 (I) (d) of the Environmental Pollution Law

¹⁴ Included in Phase 2 of the Policy & Resources Plan, June 2017

11.4 The Strategy therefore proposes the following waste hierarchy for inert waste on Guernsey:

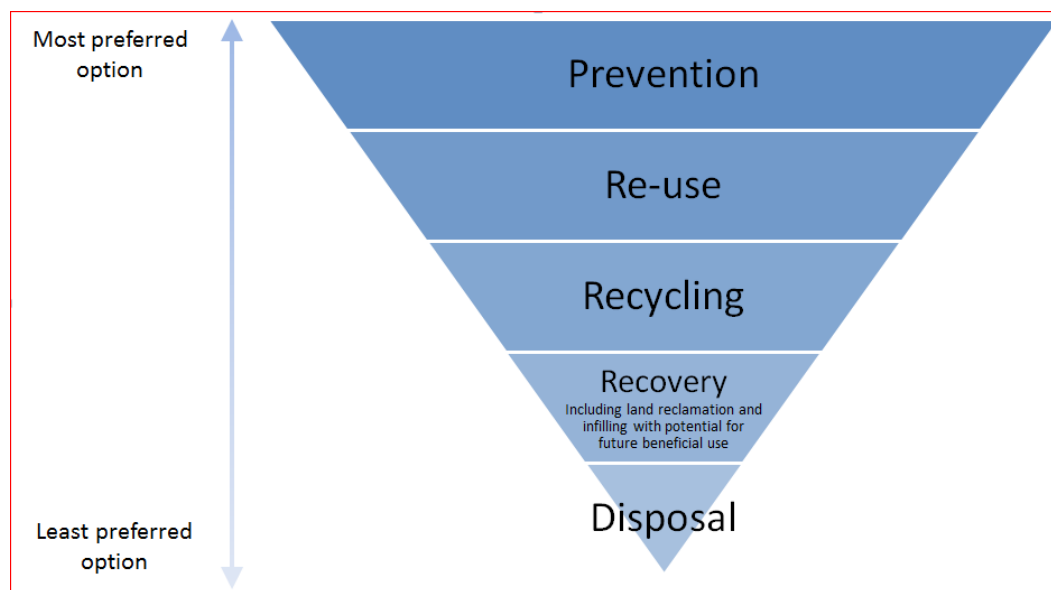


Fig. 2. The Waste Hierarchy for Inert Waste

11.5 The Inert Waste Strategy recommends that in certain circumstances, coastal land reclamation or quarry infill using residual inert waste could be treated as 'recovery' rather than 'disposal'.

11.6 The implementation of the short- and medium-term phases of the Strategy for managing Inert Waste involves:

- (a) continuing to dispose of residual inert waste at the current Longue Hougue Reclamation Site until the site reaches capacity;
- (b) the provision of guidance to parties involved in construction and demolition on the implementation of site waste management plans;
- (c) collecting and compiling data from site waste management plans to better establish a baseline, with a view to setting targets for recycling and re-use;
- (d) providing temporary solutions at the current Longue Hougue Reclamation Site, prior to the new facility becoming available;
- (e) provision of a new on-island facility for residual inert waste through recovery (as defined in the Strategy, where for example, land reclamation has a beneficial value) firstly, and then to disposal via land reclamation or quarry infill with no beneficial value; and
- (f) any strategic projects, including land reclamation projects that could require inert waste could be actively identified for the diversion and use of material, prolonging 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 hierarchical uses for inert waste.

- 11.7 Since drafting the Inert Waste Strategy, further work has progressed on re-use and recycling initiatives. The D&PA have proceeded with the development of Site Waste Management Plans, guidance and monitoring arrangements. In April 2019, States Works commissioned a recycling contract to recycle aggregates at the Longue Hougue site.

12 Engagement and Consultation

- 12.1 The Inert Waste Project has consulted stakeholders at various stages and key milestones of the project. Stakeholders were involved in the process to identify the preferred way forward for an inert waste facility, commencing with workshops held in early 2017. Stakeholders provided input into an options review, by assessing the environmental, social and economic criteria to be considered in the high level BPEO assessment and their relative weightings. The process was iterative, with output from workshops fed back to consultees and shared with stakeholders for further comment. A public drop-in was also held in November 2017 where the results of the BPEO process were available.
- 12.2 The Inert Waste Strategy has also been subject to the appropriate consultation to ensure that States bodies, non-Governmental Organisations (NGOs) and the private sector, including the construction and demolition industry, were involved in developing the Strategy. This included stakeholder workshops and requests for feedback on a consultation document covering the evidence base and approach to developing the Strategy, the Strategy itself, and the options which comprise the Strategy.
- 12.3 A number of presentations and reports have since been provided to States Members and to the STSB, CfE&I and P&RC meetings. The Strategic Outline Business Case was considered by the P&RC on 31st October 2017, before the December 2017 policy letter.
- 12.4 The STSB President provided a Statement at the October 2018 States meeting, providing Members with an update on progress with the Inert Waste Project and the intention to progress with one EIA on the Longue Hougue South Site.
- 12.5 A Stakeholder Engagement Plan (SEP) was produced as part of the Environmental Statement for the EIA and is available online at www.gov.gg/inertwaste. This sets out all the stakeholder and consultee engagement undertaken as part of the initial scoping for the EIA and the subsequent communications on the findings of the EIA. The Environmental Statement is précised in a Non-Technical Summary, which provides a useful communication tool for engagement and is a standalone document.

- 12.6 The general approach to engagement for the EIA work stream of the Inert Waste Project included a range of workshops, drop-ins/public forums and formal presentations to suit the different stakeholder groups. The Stakeholder list is detailed in the SEP and includes: experts/technical consultees such as States bodies and Ecology/Environment Non-Government Organisations; general businesses and business representatives; users of inert waste management facilities – including the construction industry and other representatives of waste producers; neighbours including near neighbours; the general public, and the media.
- 12.7 The most recent engagement took place in November 2019, on the outcomes of the EIA and publication of the ES. This included presentations to Douzainiers and consultees and a public drop-in event. The Planning Inquiry and any publicity in connections with any subsequent planning application will provide a further opportunity for engagement with key stakeholders, including the public.

13 Conclusions

- 13.1 Since the December 2017 policy letter, the STSB on behalf of the States of Guernsey commissioned Royal HaskoningDHV to carry out a detailed EIA of the site at Longue Hougue South. The assessment findings, including the potential cumulative impacts of the project, are summarised in the Non-Technical Summary at Appendix 1. A range of mitigation measures have been identified to reduce the severity of potential impacts during construction and operation of the site. The long-term impacts *after mitigation* are limited to significant local visual change and smothering of geological deposits, with minor traffic noise and habitat loss impacts; potentially significant ecological impacts are proposed to be mitigated by translocation exercises. **The EIA and the residual impacts identified after mitigation have provided the evidence to suggest that there is no reason with respect to the environmental assessment why the project should not proceed to the next stage, allowing for more consideration.**
- 13.2 In view of the remaining capacity at the current residual inert waste site at Longue Hougue and in line with the proposed Inert Waste Strategy and the legislative requirements for the WDA to identify Best Practical Environmental Options, work on the preferred way forward at Longue Hougue South needs to continue urgently. This includes: the preparation of an LPB and related public inquiry into that brief; adoption of the LPB by the States; consideration of the potential future use of land created and its value; and further work on the design and site analysis. It is then intended to bring forward an Outline Business Case before seeking approval from the States to tender for building construction. These next steps are expected to cost up to £800k to bring the project up to the OBC stage.
- 13.3 At this juncture, the States are being asked to direct the D&PA and the CfE&I (which has responsibility for planning inquiries) to prepare a Local Planning Brief and to take all necessary steps, including the holding of a Planning Inquiry, in accordance with Planning legislation to lay the proposals before the States for adoption.

- 13.4 The proposed Inert Waste Strategy sets out the approach to the Waste Hierarchy for the inert waste stream. The States are asked to formally adopt this strategy, to ensure a robust and comprehensive framework for the sustainable and appropriate management of the inert waste stream.

14 Compliance with Rule 4

- 14.1 Rule 4 of the Rules of Procedure of the States of Deliberation and their Committees sets out the information which must be included to, or appended to, motions laid before the States.
- 14.2 In accordance with Rule 4(4) of the Rules of Procedure of the States of Deliberation and their Committees, it is confirmed that all the propositions above has the unanimous support of the Committee *for the* Environment & Infrastructure and of the States' Trading Supervisory Board. The policy letter was approved by the States' Trading Supervisory Board on the 13th February 2020, which was carrying one vacancy at the time.
- 14.3 In accordance with Rule 4(5), the preparation and agreement of the propositions and content of the policy letter relate to the duties of the STSB and the CfE&I and has involved joint working between the Committee *for the* Environment & Infrastructure, and the States' Trading Supervisory Board. The Development & Planning Authority have been consulted on the 22nd January 2020 and the Policy & Resources Committee have also been consulted on the 25th February 2020, in relation to the propositions and policy letter.

Yours faithfully

Committee *for the* Environment & Infrastructure

B L Brehaut
President, CfE&I

M H Dorey
Vice President, CfE&I

S L Langlois
H L de Sausmarez
S T Hansmann Rouxel
Members, CfE&I

States' Trading Supervisory Board

P T R Ferbrache

President, STSB

J C S F Smithies

Vice President, STSB

S J Falla MBE

J C Hollis

Non-States Members, STSB

Appendix 1

REPORT

Longue Hougue South EIA

Non-Technical Summary

Client: States of Guernsey

Reference: PB5312-RHD-ZZ-XX-RP-Z-0001

Status: Final/01

Date: 15 November 2019

HASKONINGDHV UK LTD.

Stratus House
Emperor Way
Exeter
EX1 3QS
Industry & Buildings
VAT registration number: 792428892

+44 1392 447999 **T**
+44 1392 446148 **F**
info.exeter@uk.rhdhv.com **E**
royalHaskoning.com/documents **W**

Document title: Longue Hougue South EIA

Document short title: LHS EIA NTS
Reference: PB5312-RHD-ZZ-XX-RP-Z-0001
Status: 01/Final
Date: 15 November 2019
Project name: Guernsey Inert Waste Management Strategy
Project number: PB5312
Author(s): Simon Thomas, Lorelei Smith, Peter Thornton

Drafted by: Laura Covington

Checked by: Peter Thornton

Date / initials: 15/11/2019 PT

Approved by: Gary Bower

Date / initials: 15/11/2019 GB

Classification

Open



Disclaimer

No part of these specifications/printed matter may be reproduced and/or published by print, photocopy, microfilm or by any other means, without the prior written permission of HaskoningDHV UK Ltd.; nor may they be used, without such permission, for any purposes other than that for which they were produced. HaskoningDHV UK Ltd. accepts no responsibility or liability for these specifications/printed matter to any party other than the persons by whom it was commissioned and as concluded under that Appointment. The integrated QHSE management system of HaskoningDHV UK Ltd. has been certified in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

Table of Contents

1	Introduction	1
1.1	Purpose of this Non-Technical Summary.....	1
1.2	Need for the Project.....	1
1.3	The Project and its Location	1
1.4	Alternatives	6
1.5	Legal Requirements	7
2	Environmental Impact Assessment	9
2.1	The EIA Process	9
2.2	Assessment.....	9
2.3	Coastal and Marine Processes	10
2.4	Marine Sediment and Water Quality	12
2.5	Surface Water and Flooding	13
2.6	Land Use, Land Quality, Soil Quality, Geology and Hydrology	15
2.7	Traffic and Transport	16
2.8	Air Quality.....	18
2.9	Noise and Vibration	19
2.10	Population and Human Health.....	21
2.11	Material Assets (Archaeology, Built and Cultural Heritage).....	22
2.12	Landscape and Visual Character.....	24
2.13	Marine Ecology.....	25
2.14	Terrestrial Ecology and Ornithology.....	26
2.15	Natural Capital.....	28
3	Summary	28
3.2	Cumulative Impact Assessment.....	33
3.3	Mitigation.....	33
3.4	Monitoring	34
4	References	35

Table of Tables

Table 1	Construction Phase Residual Impacts	29
Table 2	Operation Phase Residual Impacts	30

Table of Tables

Figure 1	Location of Longue Hougue South	2
Figure 2	The Outline Extent of the Project.....	3
Figure 3	Current Site Characteristics.....	4
Figure 4	Site Layout during Construction and Operation	5
Figure 5	Shortlist of Inert Waste Management Options Considered	7
Figure 6	Photograph of the shore at Longue Hougue South.....	10
Figure 7	Predicted changes in local tidal current velocity caused by the presence of the Project during and incoming spring tide (top) and during an outgoing spring tide (bottom).....	11
Figure 8	Flood risk map for Guernsey	14
Figure 9	Location of Traffic Counters and Traffic and Transport Study Area	17
Figure 10	Air Quality Monitoring Locations	19
Figure 11	Baseline Noise Monitoring Positions/Study Area Assessment Receptors	20
Figure 12	Heritage Assets within 2km of the Site	23

1 Introduction

1.1 Purpose of this Non-Technical Summary

1.1.1 This report is a non-technical summary of the findings of the Environmental Impact Assessment (EIA) for a new inert waste management facility at **Longue Hougue South**, Guernsey. What an EIA is and what it does is described in **Section 2**. It will be used to support a planning application, and this non-technical summary is provided as part of the EIA and is meant to be read as a stand-alone document.

1.1.2 Inert waste comes from construction, demolition and excavation activity. It is material that does not dissolve, burn or otherwise physically or chemically react or biodegrade when it comes into contact with other matter, therefore the potential to cause pollution is insignificant. Examples are bricks, tiles, concrete and glass.

1.2 Need for the Project

1.2.1 In recent years, the States of Guernsey has relied on coastal land reclamation at Longue Hougue for the disposal of inert waste. The site, which has been operational since 1995, is nearing the end of its life. It is estimated to have less than five years' capacity remaining, depending on demand.

1.2.2 Royal HaskoningDHV was commissioned to develop a long-term strategy for future inert waste management for Guernsey. Multiple options were assessed, and an extension to the current coastal land reclamation site, to the south of Longue Hougue, was identified as the preferred option for future containment of residual inert waste.

1.3 The Project and its Location

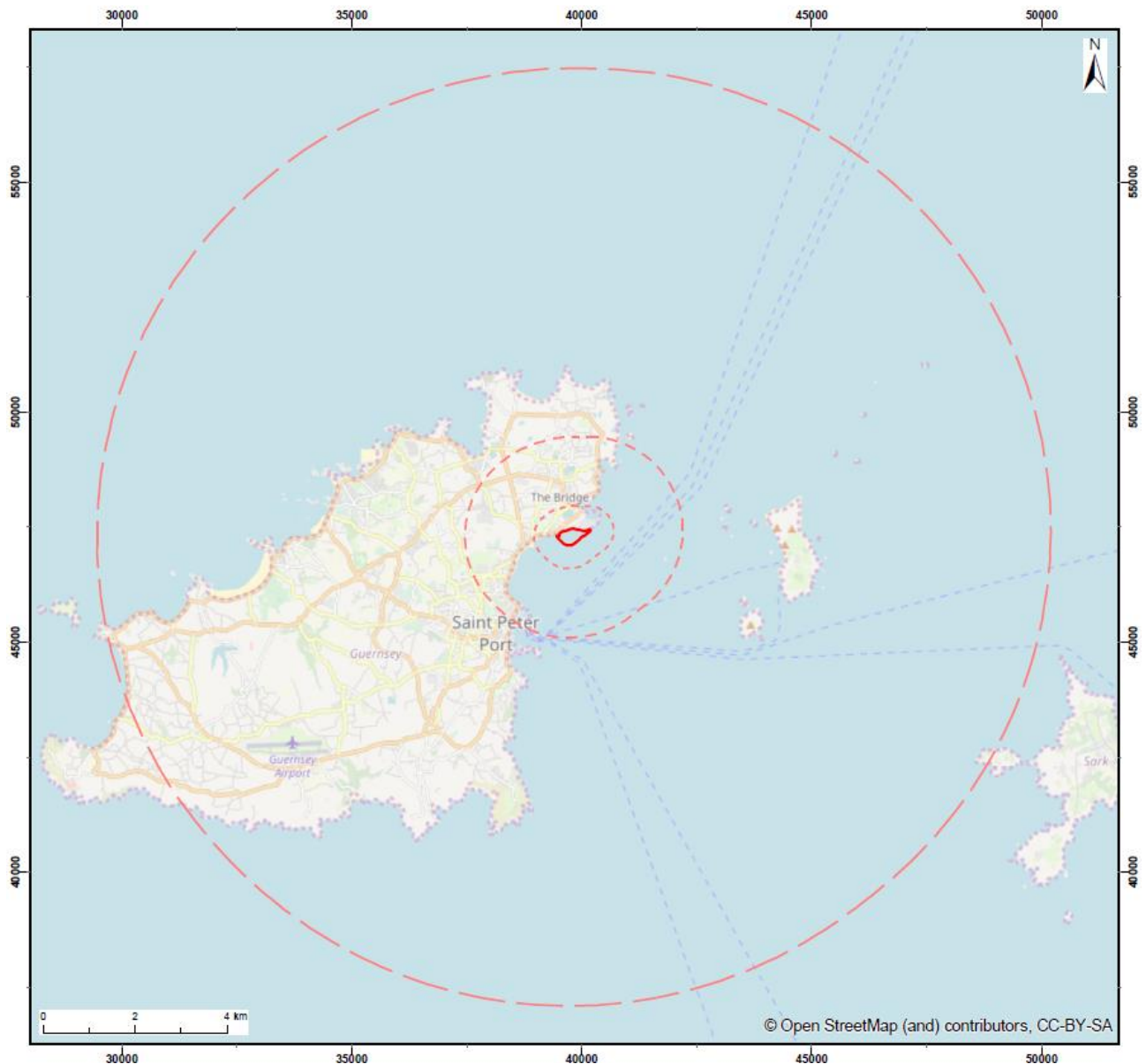
1.3.1 The project will claim an area of land from the sea between Spur Point and the current Longue Hougue facility. This will be done by building a breakwater structure that will gradually be filled with Guernsey's inert waste.

1.3.2 The location is provided in **Figure 1**, and the site surroundings shown in **Figure 2**.

1.3.3 **Figure 3** presents the characteristics of the site and surrounding area.

1.3.4 The site will be adjacent to the current residual inert waste facility, the Longue Hougue reclamation site (see **Figure 4**), to the south and south-west.

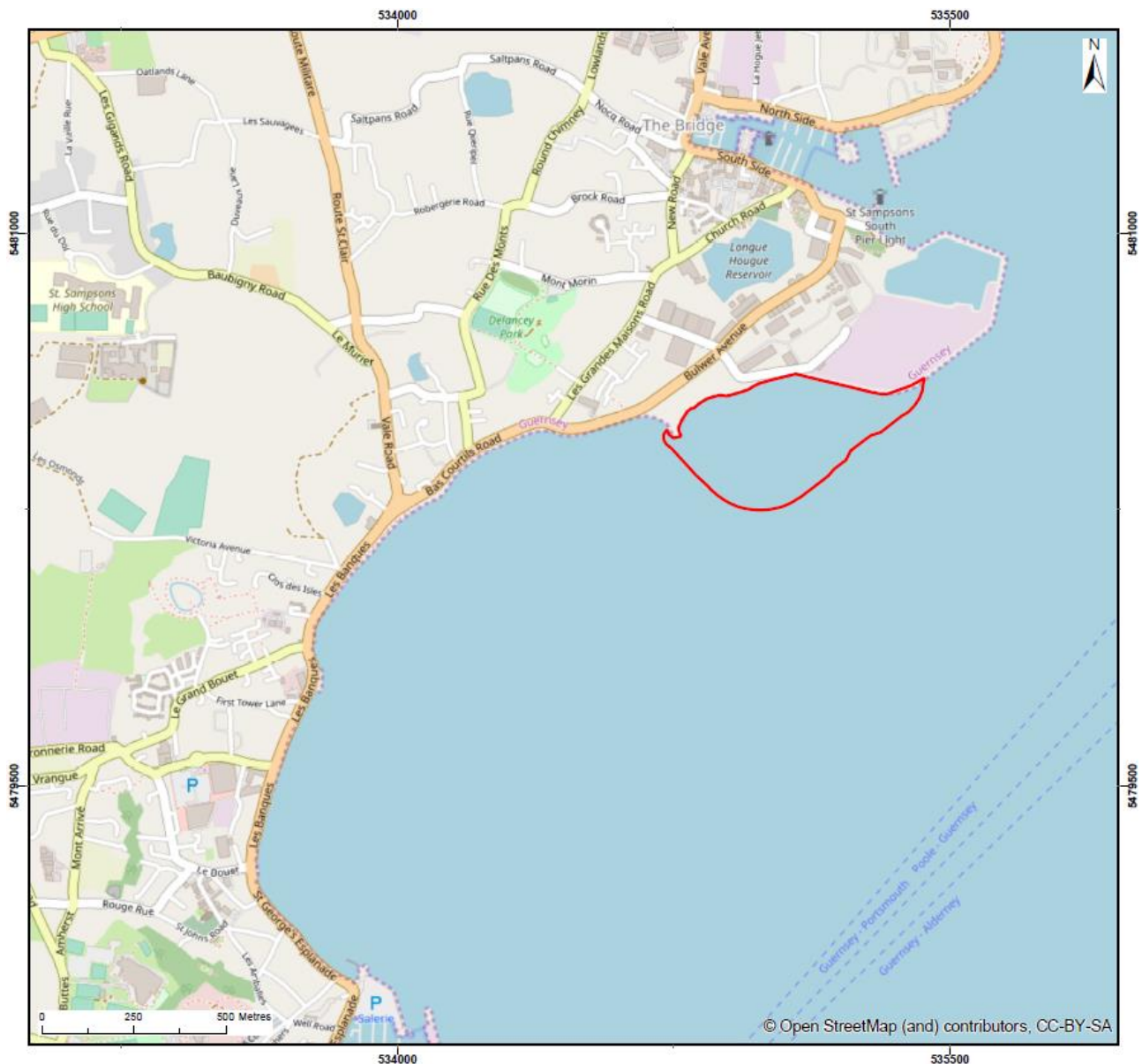
Figure 1 Location of Longue Hougue South



Note: Dotted lines indicate distances of 0.5km, 2km and 10km. These are called “buffer zones” and are used in the assessment process

- 1.3.5 The site includes a beach approximately 35m wide, and the headland of Spur Point. The southern part can be reached from the footpath to Spur Point via Bulwer Avenue. The site can also be accessed from a States-owned (but not public) access road in the industrial area of St Sampson. To the north and north-west of the site, there are residential properties in the small strip of land between Bulwer Avenue and the beach area which forms the site boundary.

Figure 2 The Outline Extent of the Project



Note: the red line represents the outer boundary of the project.

- 1.3.6 To build the breakwater, large rocks will be imported to Guernsey by ship. They will be brought to the site by barge, which will anchor on either the north side of the existing Longue Hougue site or offshore of Belle Greve Bay. The rocks will be transported from the barge to the site by dumper truck or small barge. The breakwater will be constructed by gradually piling the rocks on top of one another in a controlled way until there is a link from the Longue Hougue site to Spur Point. This will create a wall to the sea.
- 1.3.7 This phase is anticipated to take a maximum of 36 months. The layout of the site during construction and operation is shown in **Figure 4**.

Figure 3 *Current Site Characteristics*

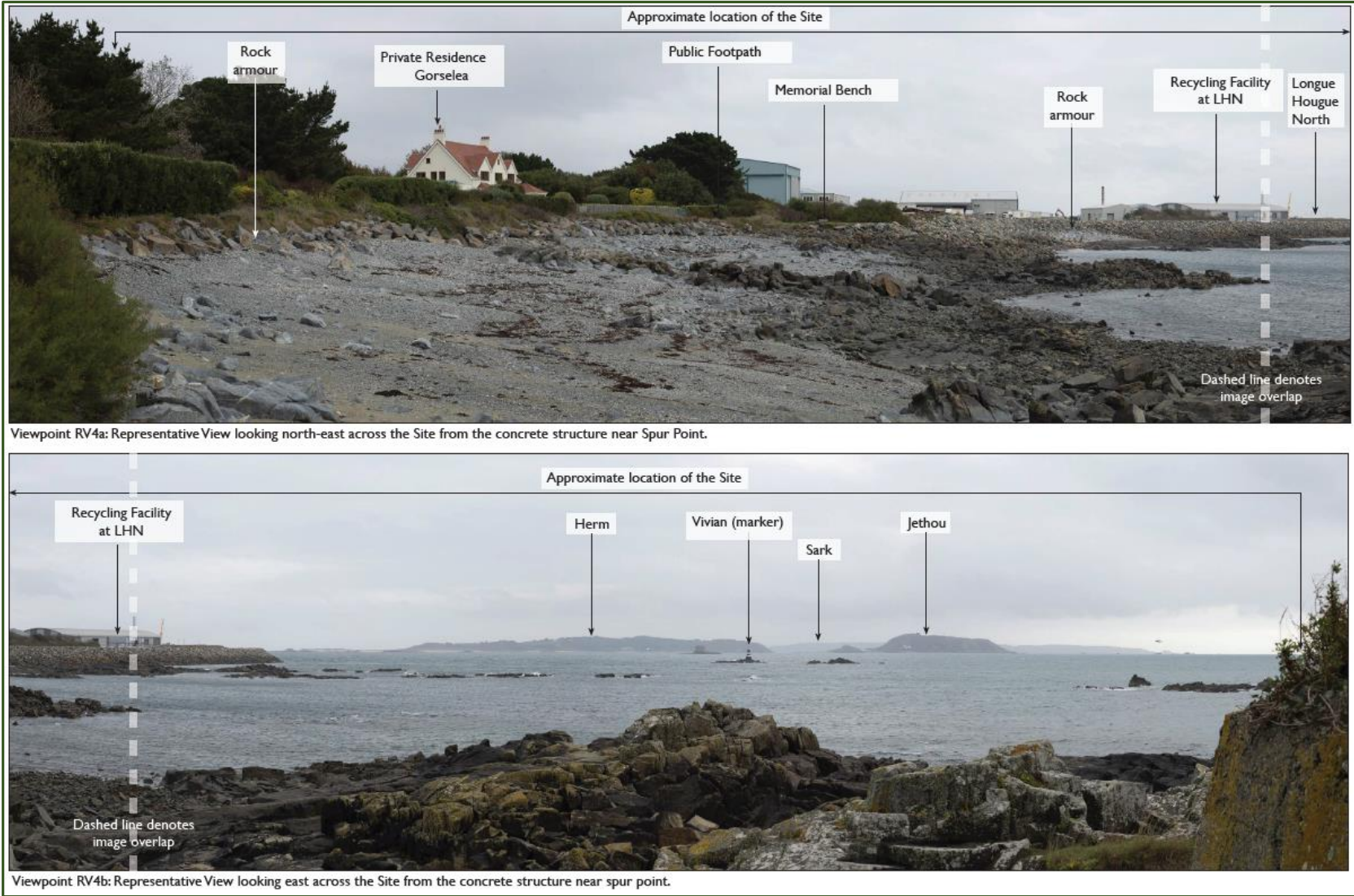
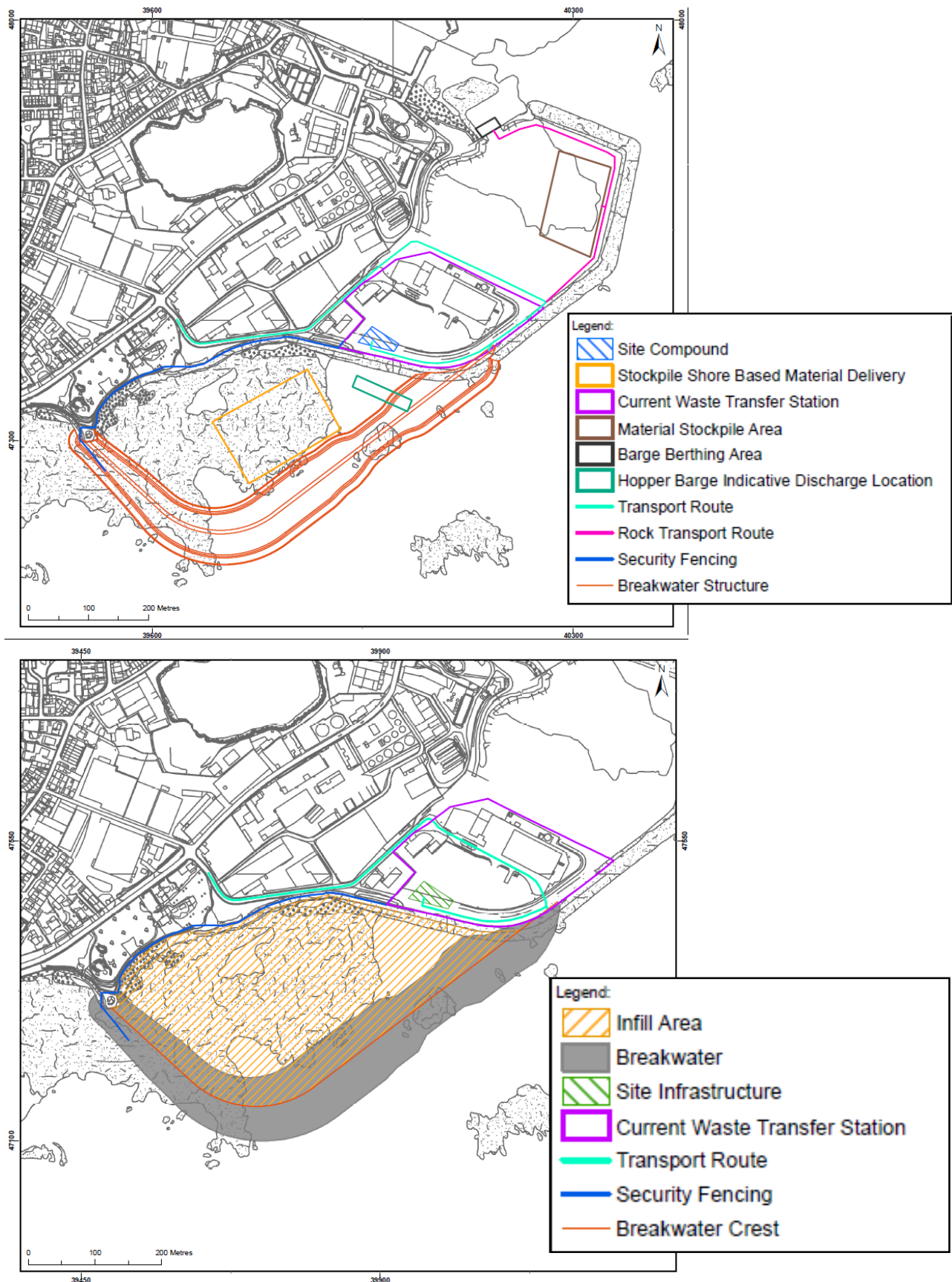


Figure 4 Site Layout during Construction and Operation

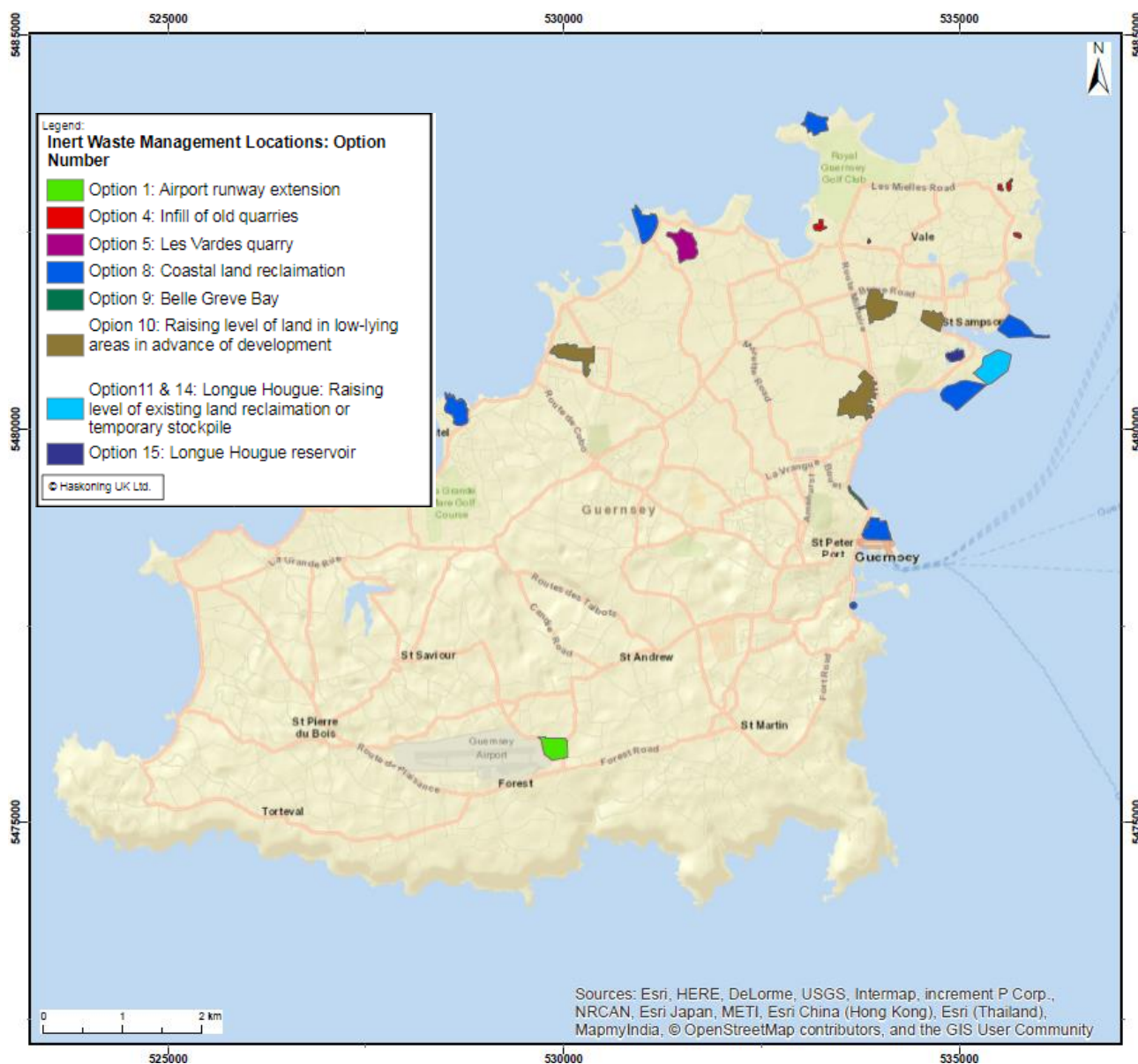


- 1.3.8 After the breakwater is constructed, the site will gradually be filled with Guernsey's inert waste. The capacity will be approximately 715,000 cubic metres, and how long it will take to fill will depend on the volume of inert waste generated each year. The prediction of 12 years is based upon the current amount produced, whilst improvements to recycling and re-using inert waste will help to extend the life of the facility.
- 1.3.9 It is expected that the site will be open in 2023/4.
- 1.3.10 The expected opening hours will be between 0800 to 1600 Monday to Friday. The site will not be open on weekends or Bank Holidays.
- 1.3.11 An alternative use will be found for the site once its function as an inert waste facility is complete. This has not yet been determined and will depend on the future requirements of the States of Guernsey. The EIA does not therefore consider the future use of the site, which will be subject to planning requirements and may require a separate EIA.

1.4 Alternatives

- 1.4.1 An assessment of alternative options and locations for inert waste management was carried out. This considered more than 50 potential options. From this 'long-list' of options, a number of potential options were screened out based upon practical and legal factors, to deliver an initial shortlist for more detailed consideration.
- 1.4.2 The shortlisted waste management options were evaluated for their environmental constraints, benefits and costs. The locations of potential disposal sites that were considered are shown on **Figure 5**. Alternative designs within the site were also assessed.
- 1.4.3 A high level impact assessment on the shortlist of options was carried out. It showed Longue Hougue South to have limited and manageable environmental impacts compared to other options. It also offers the largest capacity of the sites available in the necessary timeframe, and thus the cheapest cost per cubic metre of inert waste of any of the available options.
- 1.4.4 An added benefit will be increased coastal defence for properties behind Belle Greve Bay. Once full, it could provide added space for mixed or industrial use or other valuable uses required in the future. Land available for these uses is typically in very short supply in Guernsey.

Figure 5 Shortlist of Inert Waste Management Options Considered¹⁵



1.4.5 It should be noted that any future development at the site when it is completed may be subject to a separate EIA.

1.5 Legal Requirements

1.5.1 Guernsey has legislation and policy in place to ensure that an EIA is carried out in a consistent way to meet the needs of the island.

1.5.2 The Land Planning and Development (Environmental Impact Assessment) Ordinance, 2007 sets out the requirements for EIA for developments and policies relating to proposed developments. The type of development that the Longue

¹⁵ See Chapter 4 – references: Royal HaskoningDHV, 2017

Hougue South project falls into means that an Environmental Statement (ES) is required to accompany the application for consent to build it. The ES is the documentary evidence of the entire EIA process.

1.5.3 The approach to the EIA and the production of the ES must follow other legislation and consider other relevant best practice and guidance including:

- Land Planning and Development (Guernsey) Law 2005;
- Land Planning and Development (General Provisions) Ordinance 2007;
- Strategic Land Use Plan 2011 and the Island Development Plan 2016; and
- Relevant UK and EU Directives for environmental quality standards (such as The Bathing Water Directive, Directive on Environmental Quality Standards, Conservation of Habitat and Species Regulations 2017, Marine and Coastal Access Act 2009 and The Air Quality Directive).

2 Environmental Impact Assessment

2.1 The EIA Process

- 2.1.1 An EIA is a process of evaluating the likely environmental impacts (positive and negative) of a project to identify what the consequences (i.e. the effects) of it will be.
- 2.1.2 This is done by collecting information before the project starts, to set a baseline. Studies and expert advice are then used to predict what the change (i.e. **impact**) will be because of the project. The significance of that change determines the environmental **effect**. This is carried out over a wide range of environmental studies to ensure the project is fully considered.
- 2.1.3 A process known as ‘scoping’ is used to identify what environmental studies are required in the EIA for a project. Relevant topics fall under the three general areas of physical environment, biological environment, and human environment.
- 2.1.4 An informal scoping report was prepared and consulted on in February 2019 to inform the assessment.
- 2.1.5 A report is produced at the end of the EIA process. This is called the Environmental Statement (ES). The full Environmental Statement for this project will be submitted to the Development & Planning Authority for the development of a local planning brief and subsequent consideration of planning approval.
- 2.1.6 This non-technical summary is a separate document to the ES and summarises the EIA process and conclusions.

2.2 Assessment

- 2.2.1 To accurately assess the potential impacts of the development, the environmental parameters that might be impacted are identified and a baseline established. This is usually undertaken using existing data from a wide variety of sources, with site specific survey information to fill any gaps.
- 2.2.2 Impacts of the project are then assessed against this baseline. Receptors are identified as those that may be influenced by any effect. The assessment will consider the size or magnitude of the impact, the sensitivity and value of who or what will be impacted, and for what duration. This identifies the significance of an impact on a variety of receptors.
- 2.2.3 Where the effect of any impact is identified as significantly adverse, mitigation measures must be provided to reduce this. The assessment is then repeated with mitigation in place to identify what the ‘residual’ impact would be.

2.2.4 The EIA must also consider other plans or projects where impacts could overlap and/or affect the same environmental receptors. This is called a cumulative impact assessment.

2.2.5 The following sections describe the baseline environment and key impacts identified for each topic.

2.3 Coastal and Marine Processes

2.3.1 The site sits within a rocky bay exposed to waves and very strong tidal currents. A 570 million year old geological feature called St Peter Port Gabbro rock is present within the bay (**Figure 6**).

Figure 6 Photograph of the shore at Longue Hougue South

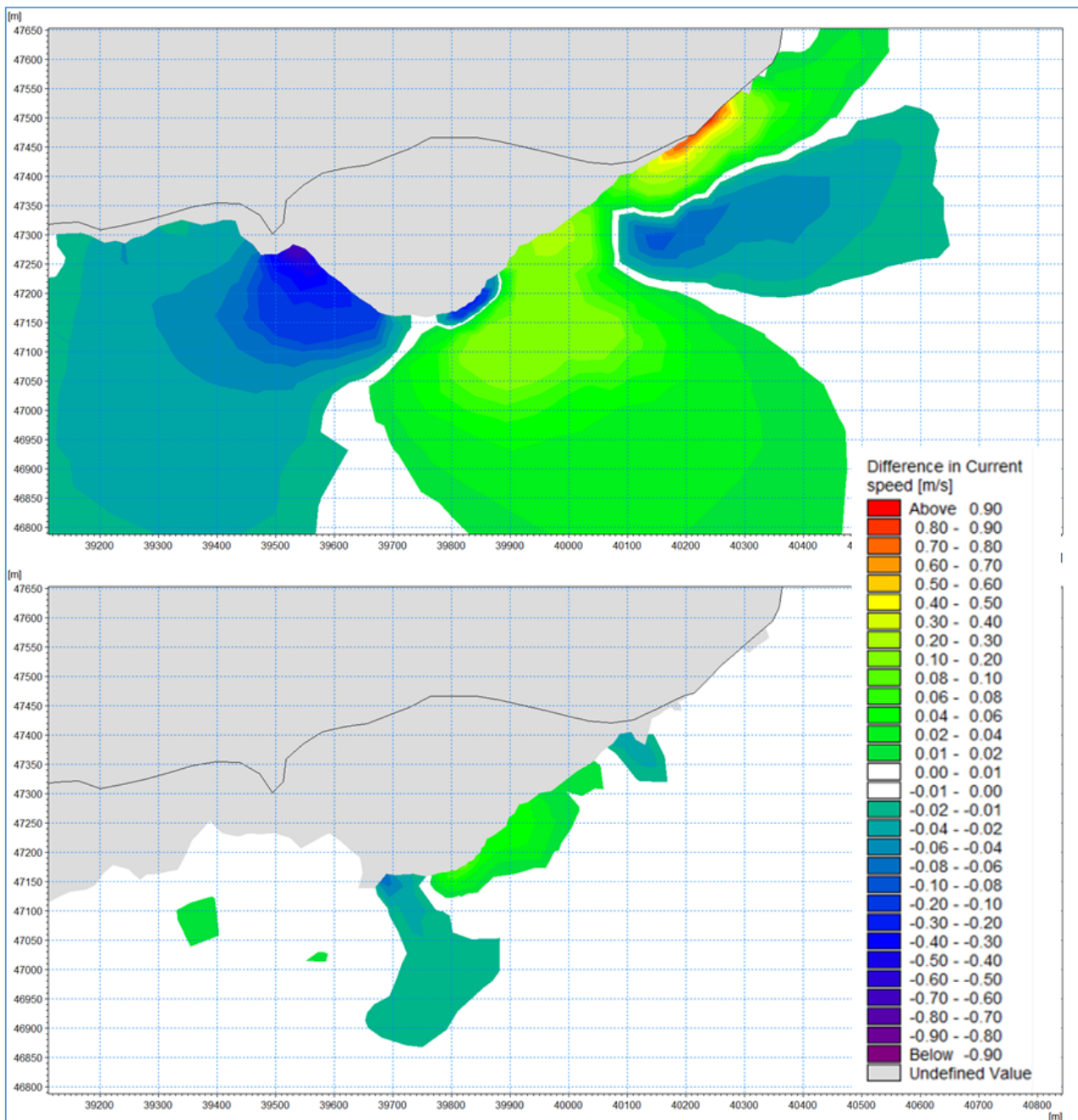


Note: The large dark grey boulder (centre) is St Peter Port Gabbro bedrock.

2.3.2 The interaction of the depth of the sea bed, the tides and local currents are complex. Experts therefore use computer modelling to establish the baseline and identify how the project will influence the coastal system. It uses data local to the area, including depths, wave conditions, current speed and direction, and predicted future sea level rise. A sea bed survey was also carried out at locations in and around the site.

2.3.3 First the model predicts what the current coastal environment is. Then, the project is introduced, and the model is re-run to see if there would be any changes to the local tidal currents, waves, and movement of sediment during and after construction. The results are shown in **Figure 7**.

Figure 7 Predicted changes in local tidal current velocity caused by the presence of the Project during and incoming spring tide (top) and during an outgoing spring tide (bottom)



2.3.4 The model predicts some potential changes to wave and tidal processes, but not sufficient to have a significant adverse impact to coastal and marine processes.

- 2.3.5 It shows both an increase and decrease in the speed of tidal currents after the breakwater has been constructed.
- 2.3.6 The current speed will increase in two areas - next to the breakwater and next to the existing Longue Hougue facility. The maximum increase in tidal current speed next to the breakwater is 20cm/sec. This speed increase rapidly decreases to 5cm/sec as you travel out to sea. Next to the existing Longue Hougue facility the maximum increase is 80cm/sec, which also decreases to 5cm/sec around 300m offshore.
- 2.3.7 The maximum decrease in tidal current speed was 60cm/sec at Spur Point.
- 2.3.8 These changes are very small compared to the normal current speeds seen around the site, which can be up to 270cm/sec. Any change is only felt very close to the site boundary and reduces towards the centre of Belle Greve Bay. There is no change predicted to the waters surrounding the Herm Ramsar site or across the approaches to St Sampson's Harbour.

2.4 Marine Sediment and Water Quality

- 2.4.1 There is potential for an increase in suspended sediment during the placement of the first layers of rock for the breakwater. However, given the lack of fine sediment in and around the construction area and the temporary nature of the impact, its effect is considered to be minor adverse and no mitigation is required.
- 2.4.2 Any contaminants present within seabed sediments could also be released if the sediment is disturbed during construction.
- 2.4.3 The project area comprises mostly bedrock. Samples were taken from the few small sandy areas present within and around the construction area and analysed to identify if there were any contaminants of concern. Only one sample point had an exceedance against the relevant standards¹⁶. It showed a marginally higher concentration of chromium compared to the trigger value. This was the only substance that exceeded the relevant trigger threshold.
- 2.4.4 At this sampling point, sediments containing low concentrations of chromium could be released into the surrounding marine environment. However, it is approximately 300m from the closest construction work, therefore unlikely to be affected by construction of the breakwater. The impact is therefore considered minor adverse, so no mitigation is required.

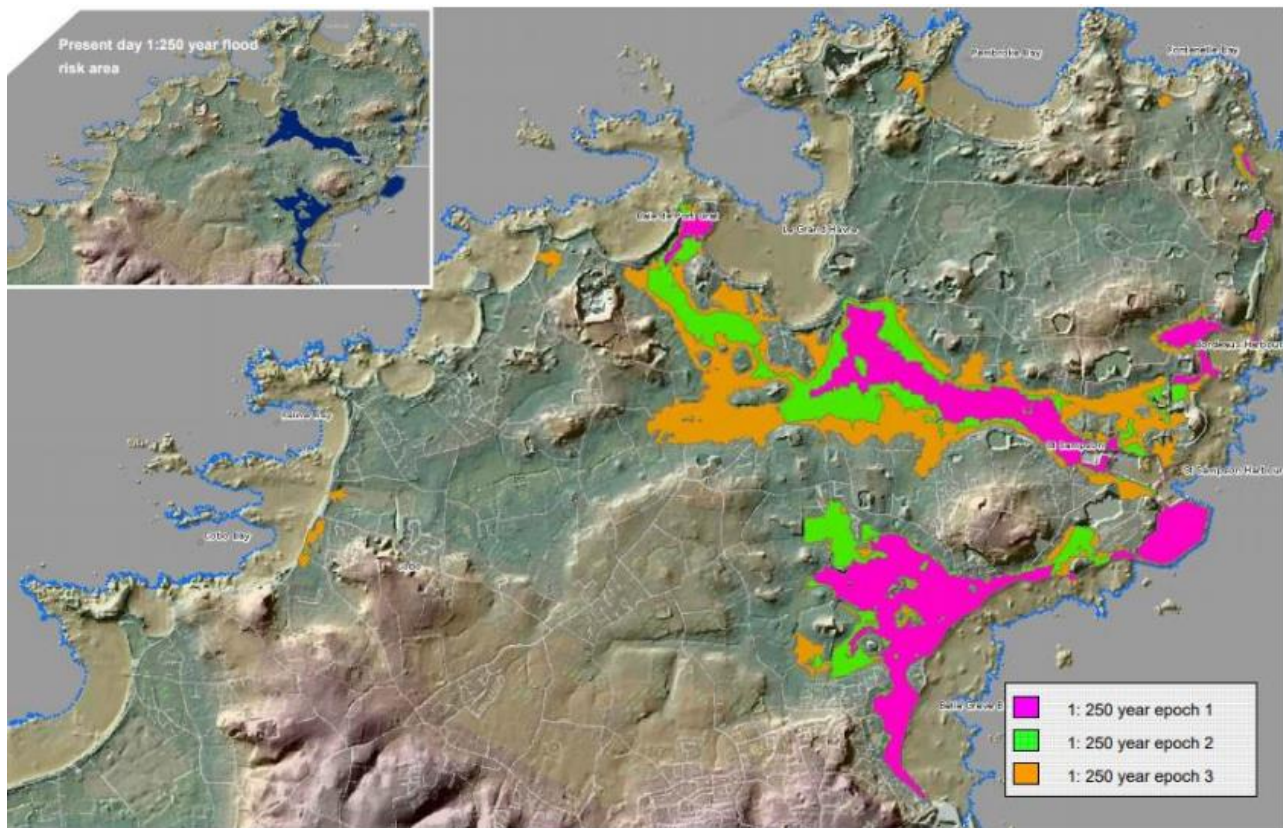
¹⁶ The Centre for Environment, Fisheries and Aquaculture Science Action Level 1

- 2.4.5 Marine vessels will be used for some elements of the breakwater construction. The spillage of mobile liquid pollutants (such as fuels and lubricants) is therefore possible. However, these will be carried in small quantities.
- 2.4.6 On land, good construction management measures will ensure the proper storage of potential pollutants. Emergency response procedures and equipment such as oil booms and silt traps will be kept onsite, with staff trained in their use. A Construction Environmental Management Plan (CEMP) will be produced to identify appropriate procedures to ensure there is no unacceptable harm to human health or the environment. No planned direct discharges are expected during construction so the risk of accidental pollution of the marine environment is deemed to be low.
- 2.4.7 Due to the nature of the waste facility, there is potential for fine inert material to seep through the gaps between the rocks in the breakwater into the marine environment, increasing suspended sediment and lowering water quality. A geotextile lining within the breakwater could be used to prevent this. In addition, or if use of a geotextile is not possible, selective placement of fine material further from the breakwater would reduce this risk. However, the coastal processes assessment has identified that if fine material does pass through the breakwater, the strong tidal currents around the site would disperse it very quickly. Therefore, the impact is predicted to be negligible.

2.5 Surface Water and Flooding

- 2.5.1 The site sits within an urban area and will be bordered by residential properties and Bulwer Avenue. Longue Hougue Reservoir is 300 metres to the north east. The project consists of reclaiming from the current land boundary out to sea, increasing the area of land present during the operation phase. This will be permeable so rain water and run-off will travel down through the site directly into the sea.
- 2.5.2 Although Guernsey is at risk from coastal flooding, the site is not within a current flood risk area (as it is located within the subtidal or intertidal zones). However, it is within an area similar to the existing Longue Hougue reclamation area that could be subject to coastal flooding in 2061 with sea level rise (**Figure 8**).
- 2.5.3 The receptors within the Surface Water and Flooding study area are of varying sensitivity and value. The marine water body is the most sensitive because of the species that are present within it.

Figure 8 Flood risk map for Guernsey¹⁷



- 2.5.4 In the current proposal, there is no intention for hard standing to be installed on the Longue Hougue South site itself. However, there are three outfalls that discharge into the Longue Hougue South area (two surface water and one combined sewer). Over time, infilling works could cause the obstruction or damage to these outfalls and subsequent backing up of surface water drains in and around the Household Waste Recycling Plant and/or around the Longue Hougue Lane area, and even overflow sewerage discharges in the Longue Hougue area. The flooding resulting from these would be an intermittent major adverse impact. An operational approach will be adopted to protect the outfalls. They will need to be re-routed or extended, either during the construction phase for Longue Hougue South, to discharge through the new breakwater, or at some point during the operation phase.
- 2.5.5 The assessment considered impacts from an accidental pollution event during construction and from an increased flow of surface water from the land surrounding the site following a rainfall event (run-off). The assessment concluded that there will be no flooding impacts, hence no mitigation is needed. However, there is a risk of flooding in the event the surface water outfall from the Household Waste & Recycling

¹⁷ See Chapter 4 – references: Royal Haskoning (2012)

Centre at Longue Hougue is obstructed (over time), which would be prevented by extending the outfall.

- 2.5.6 Surface water changes from the site will have a minor impact to the marine water body through accidental release of contaminants.
- 2.5.7 The project will build upon the existing defences along the island's east coast. This will provide a positive impact through the raising of the current coastal defences, which is considered to be a minor beneficial impact based on professional opinion.

2.6 Land Use, Land Quality, Soil Quality, Geology and Hydrology

- 2.6.1 The site is within an area of foreshore and offshore and surrounded by an urban area, a key industrial expansion area, a harbour action area and an area of biodiversity importance (ABI) at Spur Point (see **Section 2.13**). Three residential properties sit adjacent to the project area and another is approximately 200m away. There are no sources of contamination or soils within the site. Beneath the land next to the site, water is found underground in pores and soil or pores and crevices in rock (groundwater), as the rocks are porous and saline water moves inland from the sea. No groundwater pathways between the coast and Longue Hougue Reservoir are anticipated.
- 2.6.2 Local and UK guidance¹⁸ regarding management of land contamination, control of asbestos, and management of health and safety in construction was used in preparing the EIA.
- 2.6.3 The assessment considered the known history of the site, its past use and the proposed future end-use (for the purpose of this EIA, 'end-use' has been assumed to be the site filled to completed levels, but with no subsequent operational activities on it). Impacts on construction workers and the general public from disturbance of potentially contaminated sites were considered to be of minor adverse significance. The use of Personal Protective Equipment (PPE) will mitigate any adverse impact on construction workers, and the CEMP will detail how the contractor will protect the environment during construction. This will be approved before work starts.
- 2.6.4 The St Peter Port Gabbro rock is unusual and is only found on the south east coast of Guernsey. The example at Spur Point will be lost as a result of the project, therefore the impact to geology is high. It is proposed that chunks / small boulders are removed from the site during the construction phase and placed around the southern boundary of the site. This will allow the public to see the interesting geology and maintain geologist access to the rock. The residual impact is therefore considered to be moderate adverse.

¹⁸ See chapter 4 – References: OEHPR, 2017; Environment Agency, 2016; SoG, 2013.

- 2.6.5 There will also be a loss of an ABI at Spur Point. Over the lifetime of the site as an operational inert waste management facility, with infilling activities occurring, there will be a change from coastal habitat used for recreation to open land with potential for other uses. Impacts on the ABI are considered in **Section 2.13 Marine Ecology** and **Section 2.14 Terrestrial Ecology and Ornithology**. Following the mitigation discussed in these sections and given that open land on the island is a finite resource, the residual impact is considered to be moderate beneficial.

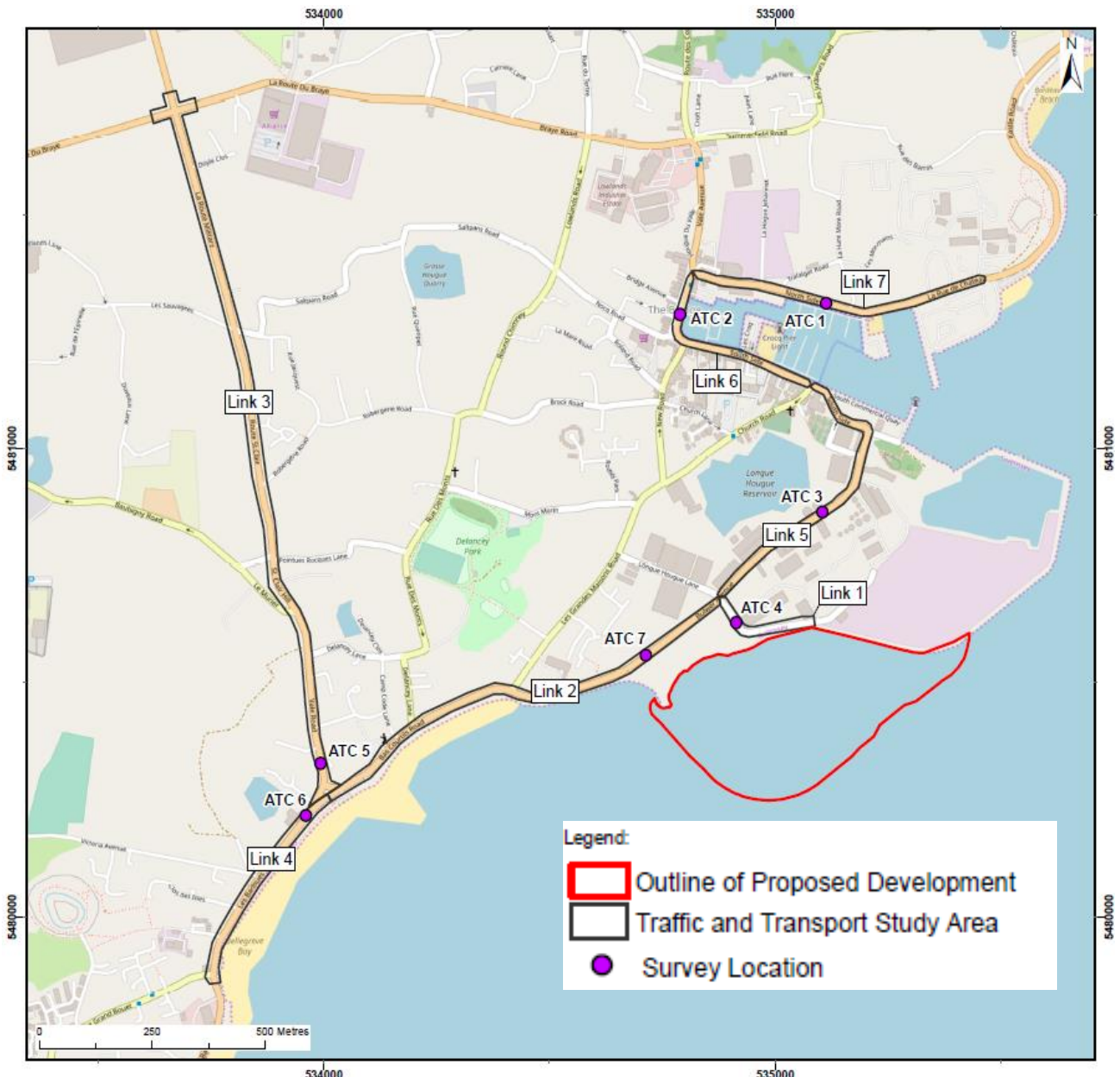
2.7 Traffic and Transport

- 2.7.1 Baseline traffic surveys were undertaken over seven days in April 2019, using automatic counters in a number of locations (**Figure 9**). Vehicle type, volume and speed were recorded 24 hours per day.
- 2.7.2 A prediction of future traffic volumes was produced using data provided by the States of Guernsey for the current Longue Hougue reclamation site. This was used to assess the potential increases on existing vehicle movements in the traffic and transport study area. These background traffic flows were obtained through a series of surveys in March 2019.
- 2.7.3 The assessment concluded that during the construction phase, the greatest daily increase in vehicles would be in Longue Hougue Access Road (a 6.2% increase in total vehicles and 9.7% increase in HGVs). For other roads this ranges from 0.3% to 0.8% and 2.5% to 6.9% for total traffic and HGVs respectively. Overall this would result in a temporary (and intermittent) minor adverse impact, and driver delays would not be discernible from current daily traffic fluctuations.
- 2.7.4 The maximum increase in vehicles during the operational phase of the facility is expected in the early years, with the volume of traffic subsequently decreasing in line with reductions in waste. In the worst case year, the maximum daily increase on the Longue Hougue Access Road is 9.4% for total vehicles and 36.6% for HGVs. The next largest increase is on Bulwer Avenue where the maximum daily increase would be 1.1% for all vehicles and 11.2% for HGVs.
- 2.7.5 The data was assessed in accordance with industry guidance¹⁹ to determine the potential environmental impacts from the introduction of the project.
- 2.7.6 An increase in traffic during construction and operation could increase road accidents. To understand the number of incidents that occur around the site, data on collisions reported to Guernsey Police in the last five years (2013-2018) was analysed. This showed 123 collisions within the assessment area - 5.7% involved HGVs, 76.4% caused damage only and 14.6% involved vulnerable road users. A

¹⁹ Guidelines for the Environmental Assessment of Road Traffic

concentration of collisions is present at the Halfway junction of Les Banques and Vale Road. This allowed the assessment to predict how an increase in traffic as a result of the project would affect the nearby road network.

Figure 9 Location of Traffic Counters and Traffic and Transport Study Area



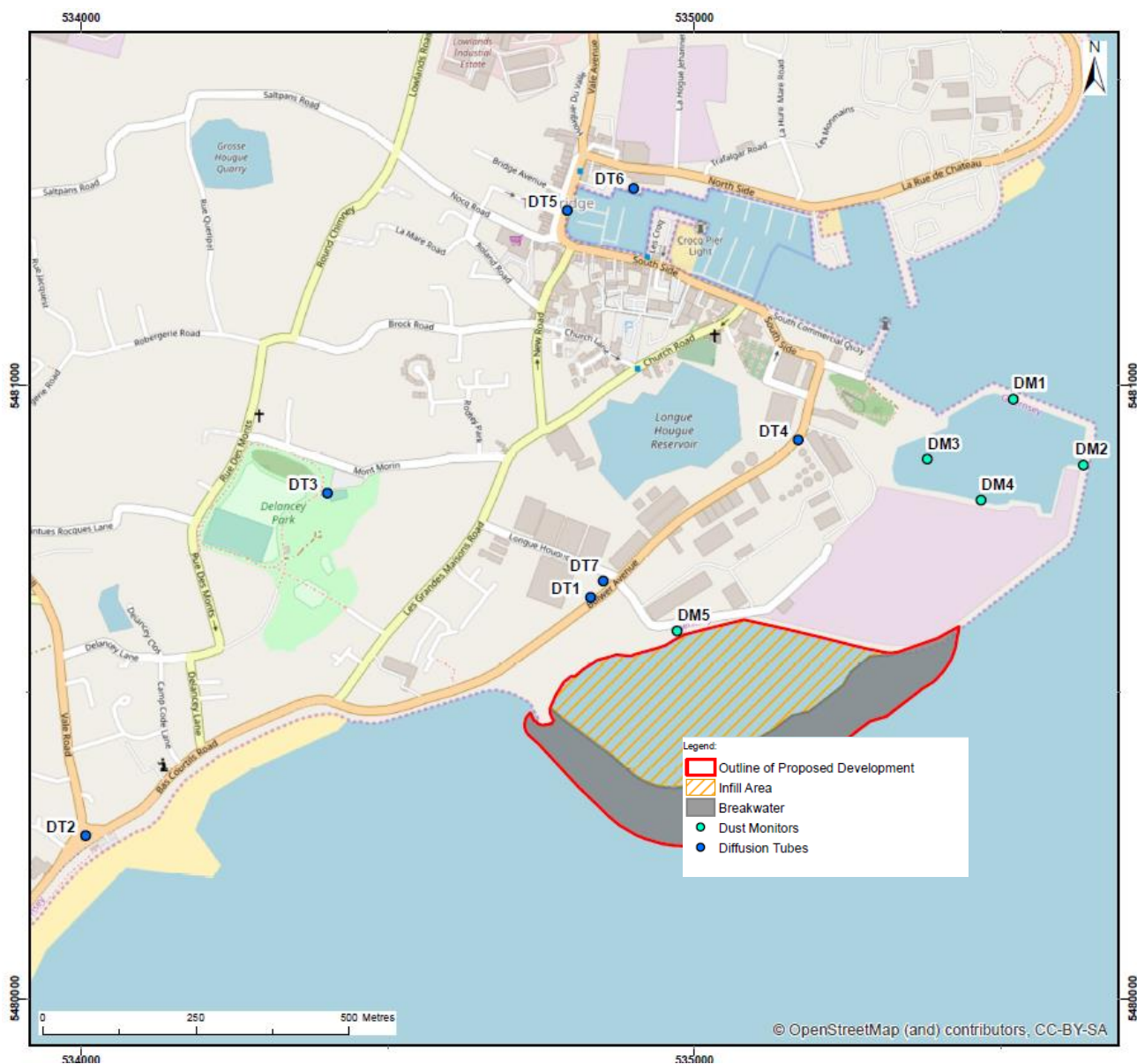
2.7.7 The assessments showed that a minor adverse impact on road safety (i.e. a slight increase in number of collisions) would be experienced. A minor adverse impact on driver delay is also predicted, but this is not likely to be distinguishable from current baseline traffic patterns. The impact on pedestrian and cycling amenity is considered to be negligible.

2.8 Air Quality

- 2.8.1 The air quality assessment covers chemicals, small particles and dust in the air. These are mostly caused by traffic and industrial activity. Guernsey does not have specific air quality standards and objectives, so the standards and objectives set in UK Law have been used in this assessment.
- 2.8.2 Sensitive receptors identified include local houses, human receptors and ecological sites.
- 2.8.3 Air quality at Bulwer Avenue, adjacent to the site is good, with both nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}) recorded as being 'well below' the objective identified in the UK guidelines.
- 2.8.4 Site specific monitoring of NO₂, PM₁₀ and PM_{2.5}, and dust was carried out for three months in seven locations in and around the site (**Figure 10**). Predicting future air quality around the project site is a complex process that must consider many factors such as wind direction and speed, and vehicle type and numbers. A computer-based model was therefore used. Any uncertainty in the model's predictions was minimised by following UK guidance²⁰.
- 2.8.5 Emission increases from road traffic during both construction and operation phases are predicted to be insignificant.
- 2.8.6 The dust assessment considers the abundance of sensitive receptors and their proximity to the site as well as the extent of dust-causing activities during construction and operation. It determined that without mitigation measures there was a high risk of impacts resulting from construction activities.
- 2.8.7 However, the project should have no impact on sensitive receptors if standard dust mitigation measures for a 'high risk' site are followed during construction and operation. These may include recording all dust or air quality-related complaints or incidents; a stakeholder engagement plan; erection of solid screens to minimise dust spread; and locating dust-causing activities as far from sensitive receptors as practically possible. These will be detailed in a Dust Management Plan.

²⁰ Defra, *Institute of Air Quality Management (IAQM) and Environmental Protection UK*

Figure 10 Air Quality Monitoring Locations



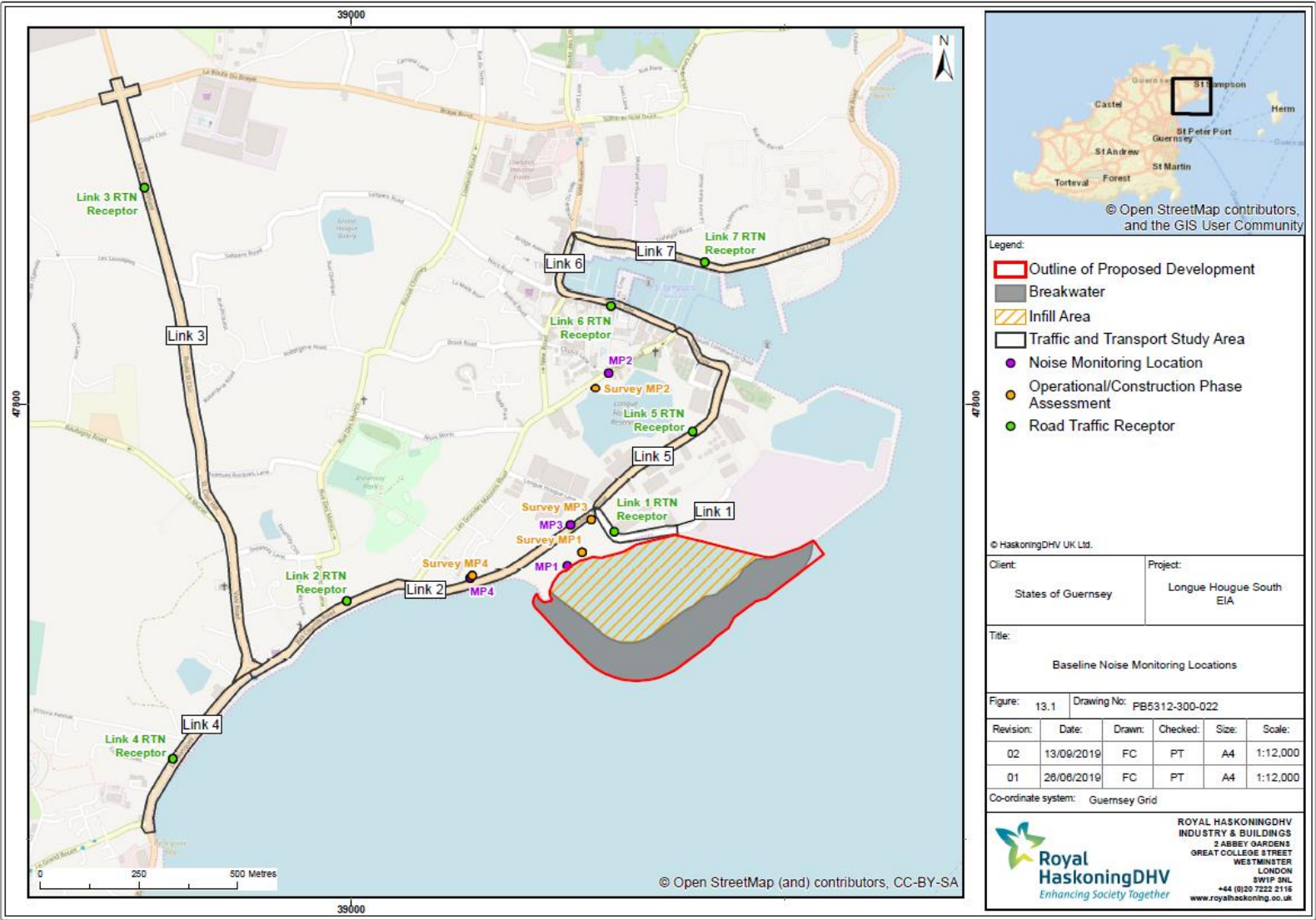
2.9 Noise and Vibration

2.9.1 The noise and vibration assessment was carried out in accordance with the relevant British Standard²¹, and traffic noise calculated in accordance with industry standard²². Noise monitoring points (MPs) were assigned at four locations that could potentially experience impacts (**Figure 11**), to measure the baseline and assess noise impacts resulting from the project.

²¹ BS 4142:2014+A1:2019 – Method for Rating and Assessing Industrial and Commercial Sound

²² The Calculation of Traffic Noise, 1988

Figure 11 Baseline Noise Monitoring Positions/Study Area Assessment Receptors



- 2.9.2 Without mitigation, a minor adverse impact was predicted for MP1 and MP2 during the construction phase for night-time work only. To mitigate this, a construction noise management plan will be implemented. This could include physical measures, such as locating on-site structures (e.g. cabins and walls) to screen sensitive receptors; logistical measures, such as restricting noisy deliveries to daytime where possible; and a community engagement process. Following these mitigation measures, the residual impact is considered negligible.
- 2.9.3 Changes in road traffic levels during construction and operation are predicted to have, at worst, a minor adverse impact on noise-sensitive receptors, so no mitigation is required.
- 2.9.4 Construction of the breakwater at its closest location is approximately 130m from receptor MP1. Vibration impacts from large construction vehicles driving over rough ground may occur. The impact on MP1 will be no worse than minor adverse.
- 2.9.5 During operation, various activities associated with both the site compound (e.g. crushing plant) and the infill zone (e.g. excavators, waste transporters) will produce noise that could have adverse impacts on adjacent residential areas. The operational noise from the site is predicted to have a minor adverse impact on MP1 (**Figure 11**), and of lesser significance for other residential receptors. To mitigate this, a 1.8m moveable barrier will be erected to attenuate noise that could be experienced at MP1 from infill tipping works. The residual impact is not considered to be significant.

2.10 Population and Human Health

- 2.10.1 The assessment of impacts on Population and Human Health was carried out in line with best practice guidance from the World Health Organisation (WHO) and Public Health England (PHE).
- 2.10.2 Impacts of increased industrialisation are discussed in **Section 2.12**, with respect to the landscape character change.
- 2.10.3 The infill of Spur Bay will result in the loss of habitat for birds and may therefore reduce birdwatching in the area. Some angling frontage along the seaward perimeter will also be lost. However, all birds recorded on site are common and there are many better birdwatching and angling locations around Guernsey, so these impacts are considered to be minor adverse.
- 2.10.4 The coastal path around the site is used to access the foreshore for ormering and for walking and would be lost as a result of the development. This length is a 0.56km stretch that ends on public highway. This is considered to be a minor adverse

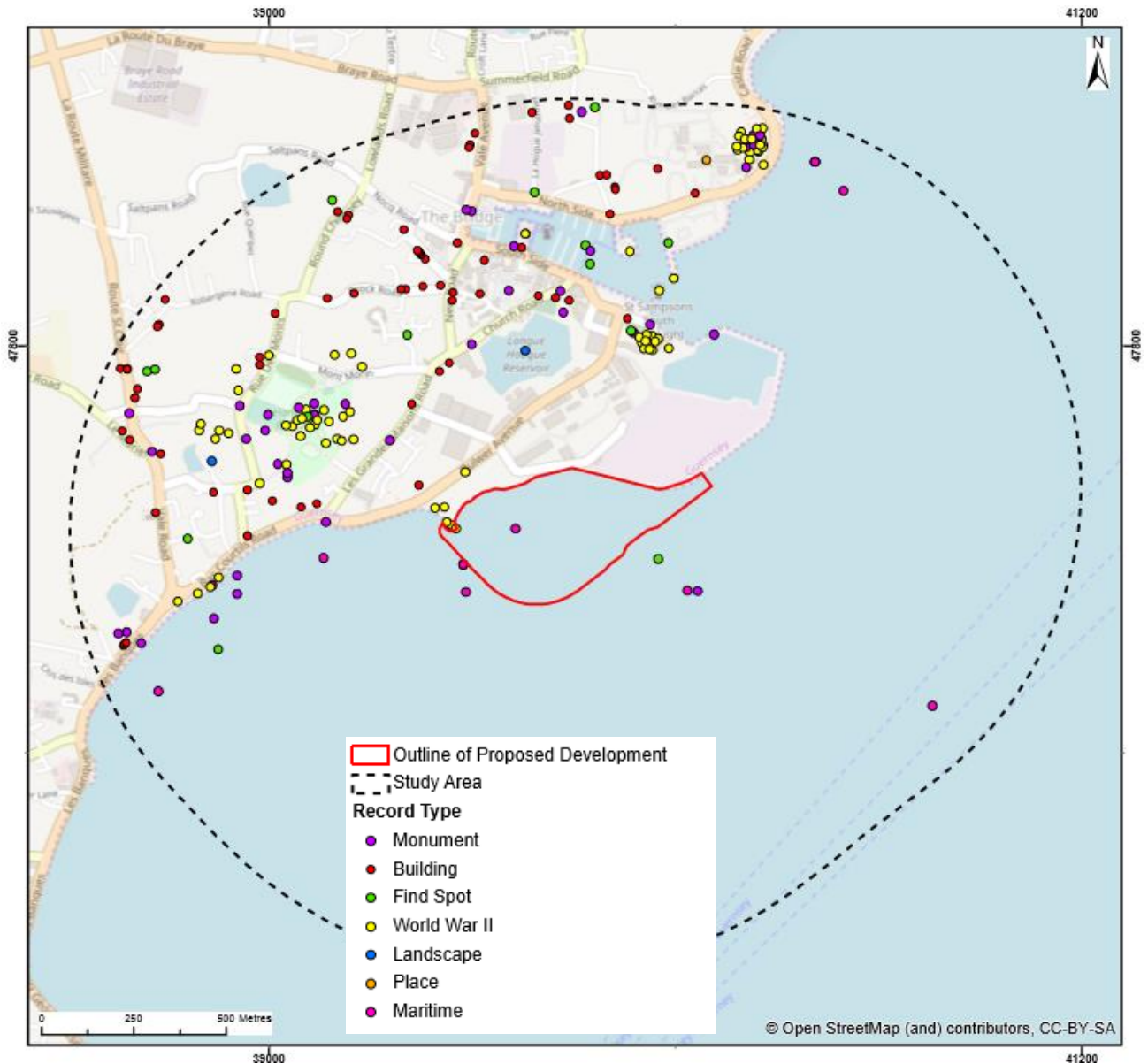
impact, along with the remainder of impacts on recreational resources which are considered to be negligible or of no significance.

- 2.10.5 There is a doctors surgery approximately 210m north of the site boundary. Presence of the construction site could potentially deter visitors from attending. However, the surgery is within a residential area and does not overlook the site, and there will be no barriers to access. The vast majority are therefore unlikely to change their behaviour therefore the impact is considered to be minor adverse.
- 2.10.6 Impacts on human health from traffic and transport impacts are predicted to be, at worst, minor adverse. These are discussed in further detail in **Section 2.7**.
- 2.10.7 Impacts on human health from air quality impacts are not predicted to be significant. These are discussed in further detail in **Section 2.8**.
- 2.10.8 Impacts on human health from noise and vibration impacts are predicted to be of minor adverse significance and are discussed in further detail in **Section 2.9**.

2.11 Material Assets (Archaeology, Built and Cultural Heritage)

- 2.11.1 The assessment of impacts on material assets was carried out based on the principles of the Guernsey historic environment policy.
- 2.11.2 There is no potential for prehistoric remains to be buried within the project area because the site is made up of rocks and very little sediment. There is also no geology recorded from the two most recent geologically significant time periods (Pleistocene and early Holocene epochs).
- 2.11.3 A search of the Guernsey Sites and Monuments Record found 215 heritage assets within a 1km study area (**Figure 12**). The majority were World War II military sites, followed by historic buildings and monuments.
- 2.11.4 The brig “*Sovereign*” is reported to have been wrecked near Spur Point in 1843, and although the exact location of any remains is unknown, documentary evidence suggests they could be located within the development site.
- 2.11.5 Construction of the breakwater will destroy the fragmented remains of a gun emplacement on the foreshore and change the physical context of its surviving foundation. However, it is currently in a poor state and without intervention will likely be lost to the sea in the near future. It has been suggested this asset could be recorded and preserved as part of the scheme, which would constitute a major positive impact.

Figure 12 Heritage Assets within 2km of the Site



- 2.11.6 A 'Protocol for Archaeological Discoveries' will be implemented during construction. This will ensure good practice is used to retain any finds in the best condition for further assessment and conservation where necessary.
- 2.11.7 During operation, there will be a minor adverse impact to previously undiscovered archaeological remains. There will also be a minor adverse effect on the surroundings in which nearby heritage assets are experienced (their 'setting').

2.12 Landscape and Visual Character

- 2.12.1 Site visits were undertaken to survey the site and its context to inform the landscape baseline and identify receptors and viewpoints. Potential impacts to views, setting and character areas were assessed through a Landscape / Townscape / Seascape and Visual Assessment, in accordance with best practice²³.
- 2.12.2 Effects from construction, such as lifting and other machinery, would not be out of context with the industrial setting of the surrounding area. The most affected receptors were the local rocky shore landscape, the adjacent residential properties, and users of the public footpath around the edge of the site. These would experience significant adverse landscape and visual effects during construction and operation.
- 2.12.3 It was concluded that road users, recreational users of Belle Greve Bay, ferry users, fishermen and recreational boat users will experience moderate adverse visual effects during construction and operation. Moderate and minor visual effects could be experienced by those that can see the site from their properties, the nearby road, boats or ferries, and from Salerie Battery, Beau Sejour leisure centre and Delancey Park. Minor adverse effects are expected on those that can see the site from Vale Castle or Fort George.
- 2.12.4 Receptors in and around the residential properties, along the coastal path, and on the road immediately adjacent may experience substantial adverse impacts on landscape and visual amenity. This is because views of the cove/sea will be progressively walled off and movement of machinery will reduce the peacefulness of the gardens, footpath and open space.
- 2.12.5 To reduce the magnitude of visual impact on Spur Point from other viewpoints, a recommendation has been made for the breakwater crest to tie in at the north-east corner of Spur Point. The crest and breakwater would then be situated behind Spur Point from views from the west. This would prevent the breakwater overwhelming and supplanting Spur Point, leaving the natural landscape feature. This measure would not perceptibly reduce the infill capacity within Longue Hougue South. The final design would incorporate this recommendation.
- 2.12.6 In addition, planting on the boundary of the site is recommended to further reduce visual impacts. This would entail low level salt-tolerant planting on the current coastline and tree planting on the private access road leading in to the site. Excavated St Peter Port Gabbro could also be placed on the boundary. It is recommended that the planting is monitored annually for several years, to ensure

²³ Landscape Institute and Institute of Environmental Management and Assessment 'Guidelines for Landscape and Visual Assessment' (third edition)

vegetation is established, and to review planting / landscaping opportunities as the site is infilled over time, in line with the potential end use.

2.13 Marine Ecology

- 2.13.1 The site sits within the Foreshore Area of Biodiversity Importance (ABI), which encompasses all intertidal habitat in the north of the island. It includes both terrestrial and marine habitats in the intertidal area and is an important consideration for the Project, because the area to be reclaimed is partly within the ABI. Some of this protected area will therefore be permanently lost.
- 2.13.2 An intertidal survey by Environment Guernsey in 2015 documented 20 different habitat types in the site area. These are typical of rocky shores that are exposed to waves and include lichens; red, brown and green seaweeds; barnacles; and limpets.
- 2.13.3 An intertidal and boat-based survey was undertaken in July 2019, using drop-down video and grab sampling to determine the subtidal and intertidal habitats in and around the site. The survey found broadly the same habitats. Maerl, a red coralline algae, was documented (290m) outside of the proposed breakwater structure.
- 2.13.4 A subsequent, more detailed series of surveys confirmed the presence of a moderate-size eelgrass bed within the site footprint. This is a rare and ecologically important habitat and provides nursery grounds for various fish species. There are however two other confirmed large eelgrass beds nearby in Belle Greve Bay, and eelgrass has been recorded in a further 37 locations around the coast. The bed within the site footprint represents less than 8% of confirmed eelgrass habitat (totalling more the 150,000m² at other surveyed locations around the island).
- 2.13.5 To mitigate for the potential habitat loss of eelgrass within the site, the current eelgrass beds should be translocated to an adjacent site, potentially within Belle Greve Bay, to provide compensatory habitat. The survival rate of eelgrass beds following initial translocation is considered to be 35%²⁴, although the bed may expand to its current size in the future. When the translocated eelgrass has been given time to recolonise to its original size or greater, the impact is considered to be negligible. Less than 5% of the eelgrass habitat present in Guernsey is expected to be lost temporarily, but the full extent is expected to be restored over time.
- 2.13.6 An Eelgrass Translocation Plan should be developed prior to any construction commencing, and a monitoring plan (for a period of at least 3 years following translocation) should be put in place to ascertain its success. Re-seeding can be implemented if significant areas die off within the translocated bed.

²⁴ See chapter 4 – References: MMO, 2019

- 2.13.7 Marine mammals, including common dolphin and grey seal, are occasionally seen in the waters around Guernsey, and there is a grey seal haul-out site on Herm. A key impact to all marine mammals from any marine activity is underwater noise. However, the activities associated with construction of the breakwater, including the placement of rock on the seabed, have not been found to generate underwater noise levels loud enough to cause any impact on marine mammals.
- 2.13.8 Another important factor to consider is the risk of collision with vessels. Due to the close proximity of the site to St Peter Port, any marine mammals would be accustomed to the presence of vessels and well adapted to avoiding collision. No significant impacts are expected.
- 2.13.9 Some of the ABI will be lost due to construction of the breakwater and infill area. As this will affect less than 1% of the overall Foreshore ABI, this impact is considered minor adverse and no mitigation will be required other than that mentioned above for specific species within this ABI.
- 2.13.10 Some intertidal habitat will be disturbed or lost as a result of the development, but it is a very small proportion of Guernsey's intertidal habitat and has not been identified as ecologically important. The impact is therefore classed as negligible, so no mitigation is required.

2.14 Terrestrial Ecology and Ornithology

- 2.14.1 There is potential for the loss of 500m² of scrub and grassland, and a length of dry-stone wall during operation as they lie within the site boundary. These form part of the Spur Point ABI, so this would be considered a major adverse impact. However, the majority of this habitat can be retained by agreeing an operational boundary for the infill and retaining a vegetated buffer. This would limit the loss to a small area of tamarisk on the shoreline only, so the residual impact would be negligible.
- 2.14.2 There are trees with potential bat roosts as close as 75m from the breakwater. Due to tidal constraints, some construction work must take place at night, during which light spill may prevent bats from foraging. This would be classed as a medium-term major adverse impact. However, positioning of lights will be considered during the detailed design phase to ensure no light spills onto the possible roosting area, so there will be no residual impact.
- 2.14.3 There is potential for some bat-foraging area to be lost (terrestrial and intertidal habitats). However, the intertidal area is not the preferred foraging area for pipistrelle and grey long-eared bats, the two species known to be present in the surrounding area. The impact is therefore considered negligible. Furthermore, agreeing an operational boundary for the infill and retaining a vegetated buffer (as detailed above) would result in no residual impact.

- 2.14.4 Grey long-eared bats avoid lit areas while foraging and are therefore susceptible to foraging disruption from light from night-time construction. This would be classed as a medium term major adverse impact. Consideration of light positioning in the detailed design phase will ensure light spill over avoids potential foraging areas so there would be no residual impact.
- 2.14.5 The construction and operation of the facility would result in the loss of 2,000m² of habitat for the scaly cricket, which is only found at a few locations through the UK and Channel Islands. Spur Point is one of 12 known sites across Guernsey with scaly cricket populations. The permanent loss of a rare, high-value species is considered as a major adverse impact. However, scaly crickets would be translocated to suitable alternative locations, thus maintaining overall population levels. Shingle from Spur Point would also be used to re-nourish other shingle habitats in Guernsey. The residual impact following these mitigation measures is considered as minor adverse.
- 2.14.6 There is no suitable habitat for slow worm within the site boundary, but some is present in the gardens adjacent to the site. Slow worm could therefore potentially be basking within the site during construction. They are of high ecological value so construction could cause a major adverse impact. A precautionary method of working will be prepared which advises contractors on what to do if a slow worm is discovered on site during construction. It would also be highly likely to move away from the site unaided if disturbed. Overall this will mean there is no residual impact.
- 2.14.7 There is potential for dust and particulate matter smothering during construction to have an adverse effect on coastal habitat that provides a feeding area for wintering birds. However, any dust will be washed away by the tide, so this is considered to be of negligible significance.
- 2.14.8 Construction works have the potential to indirectly disturb breeding birds in the scrub habitat around Spur Point. All wild birds are protected under the Animal Welfare Ordinance so any disturbance would be classed as a major adverse impact. If possible, works close to the scrub habitat will take place outside of the breeding season. If this is not possible, a 30m buffer of scrub adjacent to the working area will be removed, to prevent birds nesting before the season begins.
- 2.14.9 The noise impact assessment (see **Section 2.9**) suggested construction activities could have a moderate adverse disturbance effect on shag, oystercatchers, curlews, and sandwich terns. These are high value species, but the level of noise that would occur would only result in a low level behavioural response such as birds moving slightly to find suitable alternative habitat, which is available across Belle Greve Bay. To mitigate this disturbance, work on the westernmost 200m of the site could be

undertaken between May and September, avoiding the wintering birds season. If this schedule is followed, there would be no impact on these species.

- 2.14.10 Cormorant, a medium-value species, are also predicted to experience low-level noise disturbance. The impact of this is considered to be minor adverse.

2.15 Natural Capital

- 2.15.1 Natural capital is the world's stock of natural resources, which includes geology, soils, air, water and living organisms. It is from this natural capital that humans derive a wide range of benefits, often called ecosystem services, which make human life possible. The project is predicted to have both positive and negative impacts.
- 2.15.2 Small scale losses of angling frontage and coastal bird watching habitat are predicted as a result of the development. There will also be a small-scale loss of shell and stone resource and carbon sequestration (from eelgrass reduction).
- 2.15.3 A medium scale loss of landscape is predicted (see **Section 2.12**). Medium scale damage to a heritage asset will be offset by its preservation via protection from sea-level rise (see **Section 2.11**).
- 2.15.4 A small-scale improvement to flood defence is predicted because the breakwater will raise current flood defences and provide greater protection to infrastructure and properties adjacent to the site.

3 Summary

- 3.1.1 Significant impacts as a result of the construction and operation phases of the project identified in the ES are described in **Table 1** and **Table 2**.

Table 1 *Construction Phase Residual Impacts*

Topic	Impact	Residual Impact Significance
Marine Sediment and Water Quality	Deterioration in water quality due to increase in suspended sediment	Minor Adverse
	Release of contaminated sediments	Minor Adverse
	Accidental release of contaminants	Low Risk
Land Use, Land Quality, Soil Quality, Geology and Hydrogeology	Disturbance to potentially contaminated sites	Minor Adverse
	Disturbance to geological sites	Moderate Adverse
	Disruption to land use	Moderate Adverse
Traffic and Transport	Road safety	Minor Adverse
	Driver delay	Minor Adverse
Noise and Vibration	Road traffic noise	Minor Adverse
	Vibration from construction works	Minor Adverse
Population and Human Health	Recreational resources	Minor Adverse
	Community assets	Minor Adverse
	Human Health	Minor Adverse
Material Assets (Archaeology, Built & Cultural Heritage)	Impact on the setting of gun emplacement at Spur Point	Major Positive
	Impacts on the setting of heritage assets	Minor Adverse
Landscape Character and Visual Amenity	Effects on landscape character areas	Minor Adverse to Substantial Adverse
	Visual effects on viewers at recognised views	Negligible to Moderate Adverse
	Visual effects on receptor groups	Negligible to Substantial Adverse
	Visual effects from Conservation Areas	Minor Adverse
Marine Ecology	Habitat alteration	Negligible to Minor Adverse
	Changes to water quality and impacts on habitats and species	Negligible to Minor Adverse
	Collision risk with marine mammals	Minor Adverse

Table 2 *Operation Phase Residual Impacts*

Topic	Impact	Residual Impact Significance
Surface Water and Flooding	Reduced flood risk – surface waterbody, Infrastructure and property properties with and adjacent to the site	Minor Positive
	Alteration to land use	Moderate Positive
Traffic and Transport	Road safety	Minor Adverse
	Driver delay	Minor Adverse
Noise and Vibration	Road traffic noise	Minor Adverse
Population and Human Health	Recreational resources	Negligible and Minor Adverse
	Human health	Minor Adverse
Material Assets (Archaeology, Built & Cultural Heritage)	Direct impact on maritime and aviation archaeology below high water	Minor Adverse
	Impacts on the setting of heritage assets	Minor Adverse
Landscape Character and Visual Amenity	Effects on landscape character areas	Minor Adverse to Substantial Adverse
	Visual effects on viewers at recognised views	Negligible to Moderate Adverse
	Visual effects on receptor groups	Negligible to Substantial Adverse
	Visual effects on viewers in Conservation Areas	Minor Adverse
Marine Ecology	Loss of habitat in the Foreshore ABI	Minor Adverse
	Loss of intertidal habitat	Negligible to Minor Adverse
	Loss of eelgrass	Minor Adverse
Terrestrial Ecology and Ornithology	Loss of wintering bird foraging habitat	Minor Adverse
	Reduction in scaly cricket population	Minor Adverse

Topic	Impact	Residual Impact Significance
Natural Capital	Damage to a heritage asset offset by its preservation asset via protection from sea-level rise	Major Positive
	Loss of shell and stone resource	Small-scale Adverse
	Loss of angling locations	Small-scale Adverse
	Loss of bird watching habitat	Small-scale Adverse
	Loss of carbon sequestration	Small-scale Adverse
	Improvement in flood defence	Small-scale Positive
	Loss of bird watching habitat	Small-scale Adverse
	Loss of landscape	Small-scale adverse

3.1.2 The following impacts were found to be negligible or no impact, following the mitigation described where appropriate:

- Construction phase dust and particulate matter.
- Construction phase road traffic emissions.
- Operational phase road traffic emissions.
- Operational phase dust.
- Changes in suspended sediment concentrations due to the construction of the breakwater.
- Changes in sea-bed level due to the construction of the breakwater.
- Changes to the tidal current regime due to the presence of the facility.
- Changes to sediment transport and erosion / accretion patterns due to the project.
- Changes to the wave regime due to the presence of the facility.
- Increased suspended sediments – habitats.
- Increased suspended sediments – fish species.
- Increased suspended sediments – Maerl beds.

- Direct impact on maritime and aviation archaeology below high water.
- Direct impact on buried archaeology and cultural heritage assets above high water.
- Direct impact on all other World War II heritage assets.
- Direct impact conservation areas and built heritage assets.
- Indirect impact associated with changes to coastal processes.
- Direct impact on World War II heritage assets.
- Temporary habitat loss within Spur Point ABI.
- Indirect disturbance to terrestrial and coastal habitats from dust and particulate matter emissions.
- Direct impact to potential bat roosts.
- Visual disturbance to wintering birds.
- Noise disturbance to birds.
- Impacts upon prey species.
- Loss of intertidal and terrestrial bat foraging habitat.
- Potential for increased surface run-off – surface waterbody, infrastructure and property properties with and adjacent to the site.
- Reduced flood risk – surface waterbody, Infrastructure and property properties with and adjacent to the site.
- Pollution of surface waterbody due to accidental release of fuels, oils, lubricants and construction materials.
- Potential for increased surface run-off.
- Reduced flood risk.
- Temporary habitat loss / disturbance within Spur Point ABI.
- Terrestrial habitat loss within Spur Point ABI.
- Change to habitats in Herm, Jethou and the Humps Ramsar.
- Severance (the separation of people from other people and places by a major traffic route).
- Pedestrian and cycling amenity.
- Deterioration in water quality due to long-term changes in the hydrodynamic regime.
- Release of contaminated sediment during operation phase.

- Increase in suspended sediment concentrations during operation phase.
- Loss of small mammal, wall lizard and wintering bird habitat.
- Operation phase noise.
- Disturbance to fish habitats.
- Loss of eelgrass beds.
- Changes to marine habitats due to a change in tidal flow rates.

3.2 Cumulative Impact Assessment

- 3.2.1 Potential cumulative impacts have been considered with reference to other known proposed developments in the surrounding area. All key developments that are currently within the planning system have been screened. Most of the cumulative impacts are limited to noise, visual and traffic disturbance, if construction periods overlap.

3.3 Mitigation

- 3.3.1 Where possible, mitigation measures have been identified to reduce the severity of potential impacts during construction. A summary of these is provided below:
- Implementation of Construction Environmental Management Plan to prevent or respond to accidental spills and leaks;
 - Implement Asbestos Management Strategy and adopt cover layers;
 - Excavation and placement of St Peter Port Gabbro on the edge of the site;
 - Best practice dust minimisation and suppression techniques via the implementation of a Dust Management Plan;
 - Implementation of a construction noise management plan;
 - Use of a protocol for archaeological discoveries during construction;
 - Preservation of the World War II gun emplacement during construction;
 - Rock deposition by barge to occur at north-east end of the site;
 - Translocation and, if necessary, re-seeding of eelgrass in a suitable location;
 - Positioning of any lighting to avoid light spills along the landward boundary;
 - Precautionary method of working to be used;
 - Translocation of scaly cricket habitat to suitable location;
 - Consideration of timing to avoid the wintering bird period;
 - Management of breeding bird habitat to avoid disturbance.

3.3.2 Where possible, mitigation measures have been identified to reduce the severity of potential impacts during the operation phase. These are summarised below:

- Use of geotextile or prioritising placement of fines away from breakwater in the Site Operational Plan;
- Re-routing/protection of waste transfer station drainage;
- Best practice dust minimisation and suppression techniques
- Use of moveable 1.8m high acoustic barrier(s) when infilling activities are located within 100m of MP1;
- Planting of salt-tolerant trees and shrubs on the landward boundary of the site to reduce landscape impact;
- Revise design so the breakwater ties in to the north-east / east of Spur Point to reduce landscape impact.

3.4 Monitoring

3.4.1 It is recommended that the following is undertaken:

- Monitoring of the Construction Environmental Management Plan;
- Daily visual inspections of suspended sediment concentrations;
- Off-site visual inspections for dust; and
- Monitoring of the future use, site infilling activities and potential landscaping enhancements every five years;
- Eelgrass growth and health should be monitored annually for three years post translocation;
- Two years' monitoring of scaly cricket translocation.
- Noise monitoring when infilling activities are closer than 100m to the nearest receptor (MP1).

4 References

Environment Agency (2016). Land contaminated: technical guidance available here: <https://www.gov.uk/government/collections/land-contamination-technical-guidance>

MMO (2019). Identifying sites suitable for marine habitat restoration or creation. A report produced for the Marine Management Organisation by ABPmer and AER, MMO Project No: 1135, February 2019, 93pp

Royal HaskoningDHV (2017). Guernsey Inert Waste Management Strategy High Level EIA.

Royal Haskoning (2012). Guernsey Coastal Defences Flood Risk Assessment Studies. Volume I – Report. Report to States of Guernsey, March 2012.

Royal HaskoningDHV (2019). Longue Hougue South Environmental Statement.

States of Guernsey (2016). Health and Safety Executive Control of Asbestos Approved Code of Practice - The Health and Safety at Work (General) (Guernsey) Ordinance, 1987. Available here: <https://www.gov.gg/CHttpHandler.ashx?id=75204&p=0>

The office of Environmental Health and Pollution (OEHPR) (2017). Guidance - Planning Application: Contaminated land available here: <https://www.gov.gg/CHttpHandler.ashx?id=105675&p=0>

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.²⁵

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 legislation²⁶ i.e. “waste” which:

- 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*
- 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.

²⁵ 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.

²⁶ Waste Disposal and Recovery Charges (No. 2) Regulations, 2019 as revoked and replaced

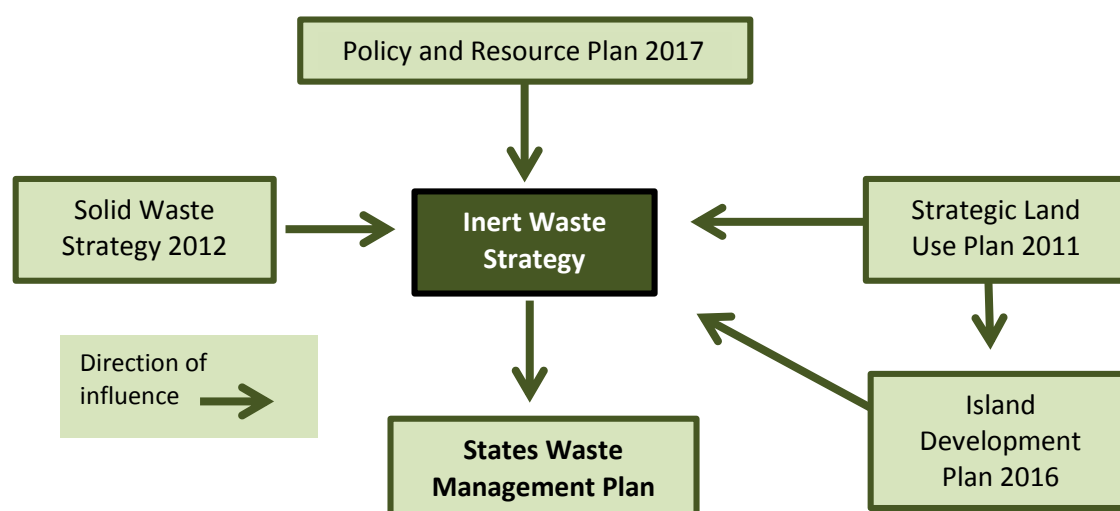
1.3 Why does the States of Guernsey need an Inert Waste Strategy?

- 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"*²⁷, 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.



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

²⁷ Billet D'État No IV of 2012

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 Hierarchy²⁸ 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.

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 Group²⁹ and approved by the States³⁰ 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.

²⁸ Waste Hierarchy: Directive 2008/98/EC on Waste (Waste Framework Directive), Article 4.

²⁹ 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.

³⁰ Billet d'État No. XIX of 2011.

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.

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 be 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 Plans³¹ 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 tonnes per annum.

³¹ 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, 2004³².
- 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.
- 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.

³² See section 30 (l) (d)

- 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.
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 uncertainties 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
<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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
<p>BPEOs process</p> <ul style="list-style-type: none"> • 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. <p>Waste hierarchy & the Strategy</p> <ul style="list-style-type: none"> • 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. <p>Options for inert waste management</p> <ul style="list-style-type: none"> • 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 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 Hogue 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:

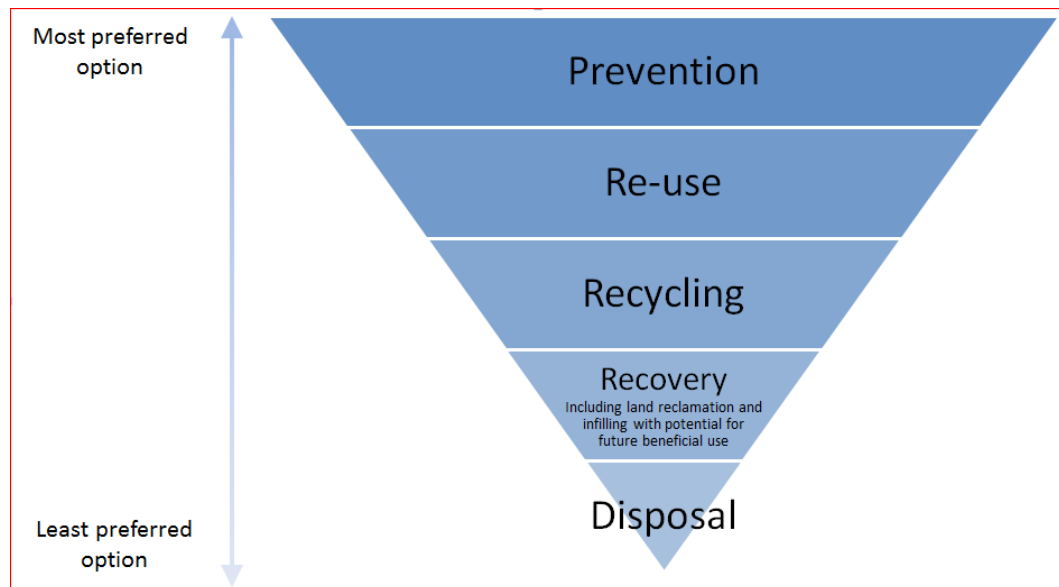
- Striking an appropriate balance for Guernsey between delivering sustainable levels of waste minimisation/reduction, reuse and recycling and minimising residual inert waste for disposal;
- Identifying the best practical environmental options;
- Satisfying the needs of the island;
- Taking into account 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 Directive³³; 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.
- 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.

³³ European Directive 2008/98/EC on Waste, Article 4

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 recycling³⁴ 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 Hogue.

³⁴ 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.

5.3.18 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.

5.3.22 Where excavated material is used in construction, this may be considered ‘recovery’ and is a lower hierarchical option than recycling. Recovery is defined for the purposes of the relevant part of the European Pollution Law³⁵, 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 that³⁶ *“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.

³⁵ Abfall case (Abfall Service AG ASA) C-6/00, the European Court.

³⁶ Section 30 (3) (b), Environmental Pollution Law

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.

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 legislation³⁷.
- 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.

³⁷ The Land Planning and Development (Environmental Impact Assessment) Ordinance, 2007

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 2020³⁸. 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.

³⁸ 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)

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.
- 6.2.3 Progress on the implementation and delivery of the Inert Waste Strategy and achieving targets will be reviewed and reported on an annual basis.

Appendix 3

