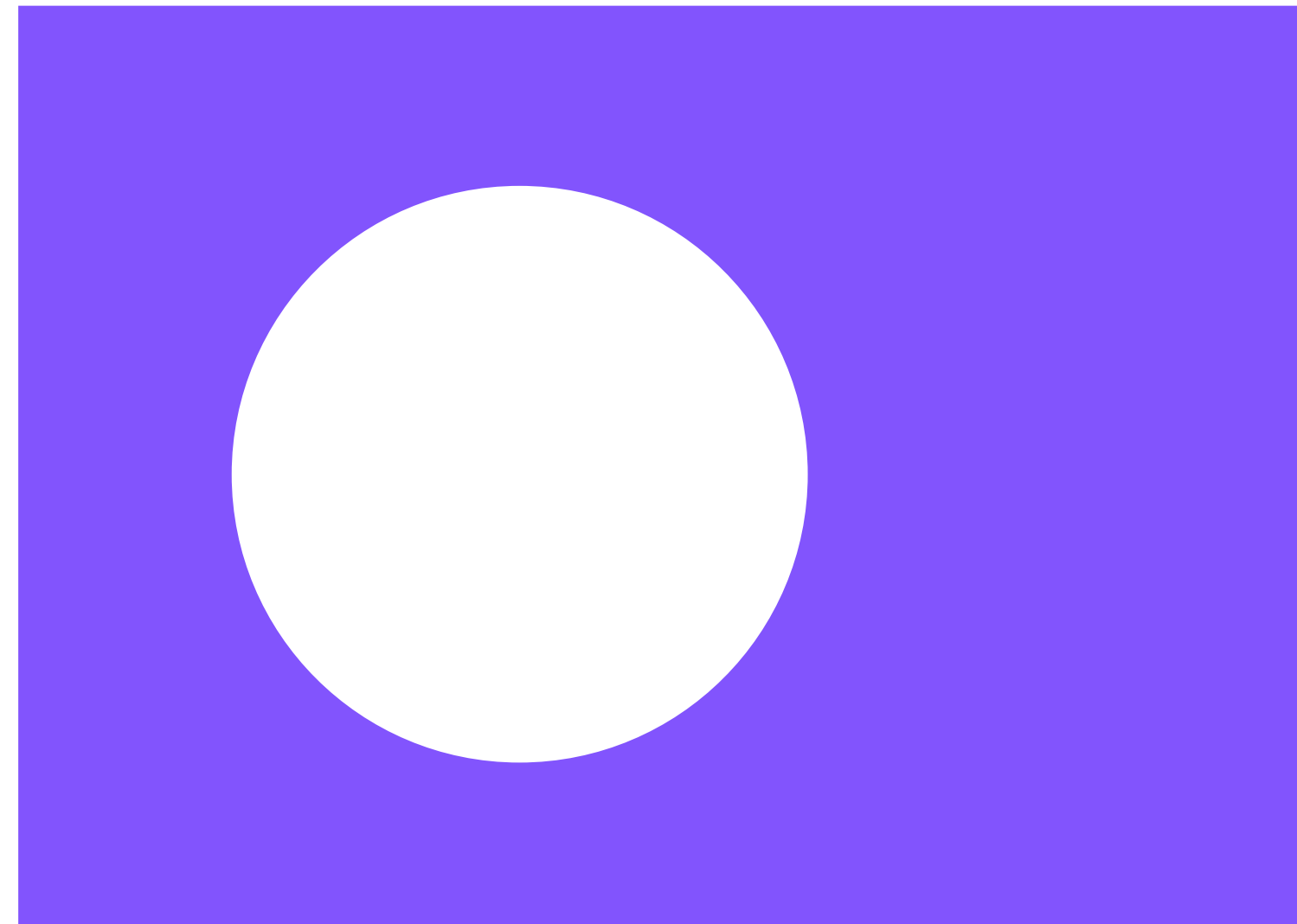


Salisbury Diagnostic and Surgical Hub

Waste Audit

July 2026



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Salisbury Diagnostic and Surgical Hub

Waste Audit

July 2026

Issue and Revision Record

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01	07/07/2026	G Berry	P Barton	A Rolf	First Issue
02	15/07/2026	G Berry	P Barton	A Rolf	Update to address comments, issued for planning submission

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1 Introduction and project description

This Waste Audit Statement has been prepared to support the planning application for the Salisbury Diagnostic and Surgical Hub (DASH) at Salisbury District Hospital.

It responds to the planning waste audit requirements by setting out how demolition, construction and operational waste will be minimised, reused, recycled, recovered or disposed of. Where project-specific information is not yet available, this report identifies actions to be confirmed by the appointed Principal Contractor, Trust facilities team and specialist waste contractors.

The report demonstrates the application of the waste hierarchy and sets out the intended approach for construction and operational waste streams. The assumptions in this audit are based on the latest available information for the project. It should be updated by the Principal Contractor as the Construction Phase Plan is developed.

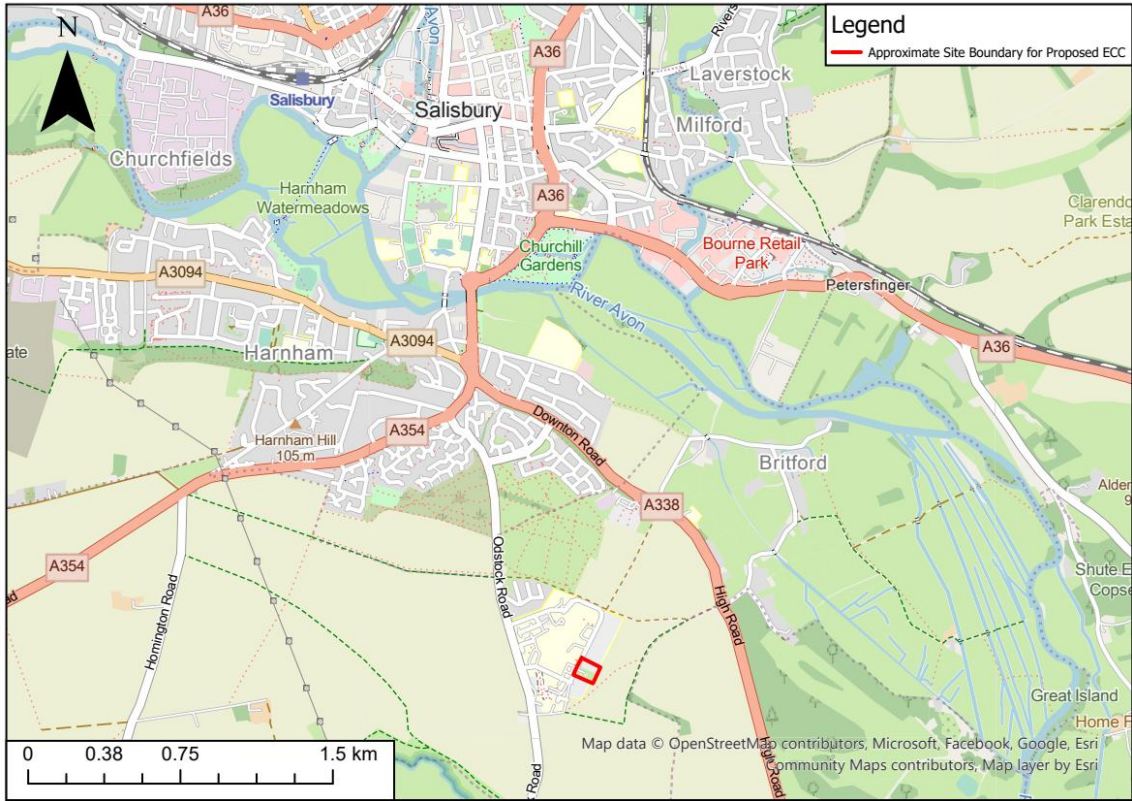
1.1 Project summary and overview

Salisbury NHS Foundation Trust is planning to build a new Diagnostic and Surgical Hub within the grounds of Salisbury District Hospital. The new facility will comprise a two-to-three-storey building with diagnostics and endoscopy to the lower ground floor, theatre and recovery space to the ground floor, and plant spaces to the first floor. Externally, a small number of parking spaces will be provided, with remaining external space landscaped to support wayfinding and provide garden spaces for staff and patients.

1.2 Site location

The proposed development is located within the grounds of Salisbury District Hospital which is approximately 3km south of the centre of the city of Salisbury. The site is bordered to the west by the Victoria Drive East Road, to the north and south by the hospital's Car Park 8, 9 and 10 respectively, and the east by underdeveloped agricultural land. The site is centred at an approximate National Grid Reference of 415060E and 127250N. Figure 1.1 shows the site's Location.

Figure 1.1: Site location



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1.3 Site description

The existing land use in the southern half of the site comprises of the hospital's emergency helipad surrounded by grassland and some containers are present in the southwestern corner. The hospital's Car Park 8 and 9 are in the northern half of the site with some dense tree vegetation present at the northeastern boundary. Review of aerial imagery indicates some reworked areas around the helipad in the southern half of the site.

2 Pre-Demolition Waste Audit and Design Considerations

2.1 Pre-demolition waste audit

A pre-demolition audit has been undertaken to support “WST-01 – Construction Waste Management” assessment as part of the Building Research Establishment Environmental Assessment Method BREEAM New Construction Version 6.1 requirements.

The pre-demolition audit includes a desk top study to identify the anticipated waste volumes and management options:

Table 2.1: Initial review of anticipated waste

Anticipated waste stream	Estimated volume (m3)	Recovery potential	Overall priority for recovery	Indicative recovery target	Management option
Excavated material (made ground and/or chalk)	3,500	Medium	Medium	60%	Opportunities for reuse the excavated materials could be explored when technically and economically feasible, such as reuse as infill or as a base material, as infill material prior to the laying of another layer, or in landscaping activities. Excavated material that cannot be reused on site will be removed by licensed contractors and recovered at appropriately permitted waste facilities.
Fencing	360	Low	Low	20%	Low potential for reuse. Alternatively, they can be transferred to a recycler to produce wood chips or to an energy recovery facility
Signage	>1	Low	Low	20%	Low potential for reuse. Alternatively, they can be segregated and sent off for off site recycling.

It also outlines potential opportunities for reuse and recycling of materials.

Please refer to appendix A for a copy of the Pre-demolition Waste Audit (ref STECC-MMD-XX-XX-RP-DD-040001) for full details.

2.2 Design for disassembly and adaptability

A study has been undertaken to describe how the design of the Salisbury Diagnostic and Surgical Hub has consider the potential for adaptation to meet future functional changes throughout the buildings life and ease of disassembly and recover of materials at the end of the buildings functional life.

Please refer to appendix B for a copy of the “Design for disassembly and adaptability” report (ref STECC-MMD-XX-XX-RP-MD-080003).

3 Construction Waste Management

Following appointment of the Principal Contractor, a Construction Phase Plan will be developed which will include a detailed waste management plan. This should provide detailed construction waste quantities, confirm arrangement for waste storage, disposal and management of hazardous waste, detail offsite waste management and transport and outline site staff awareness, monitoring and training.

Given the timescales associated with the delivery of this project, and in order to avoid the need for pre-commencement conditions, it is proposed that the Construction Management Plan will be prepared and submitted to Wilshire Council during the determination period.

4 Operational Waste Management

Salisbury NHS Foundation Trust have existing Waste Management Policy that will be adopted for the new DASH building. This Policy is in the process of being revised.

A copy of the current Clinical Waste and Domestic Waste Policy is included in Appendix C for reference.

A copy of the revised Waste Management Policy will be submitted to Wiltshire Council upon completion, The Trust would be willing to accept a planning condition requiring adherence to its Waste Management Plan.

5 Conclusion

The planned enabling and construction activities for the Salisbury Diagnostic and Surgical Hub have been assessed using available project information and the pre-demolition audit. The key anticipated waste streams are excavated material, fencing and signage, with the most significant quantity associated with excavated material. The design provides space and safe access for general, recyclable and healthcare-specific waste streams, including clinical waste, sharps, offensive waste and other specialist streams.

The report(s) identifies opportunities to reuse excavated material on site where technically and economically feasible, and to recycle or recover materials that cannot be reused. The Principal Contractor should use this Waste Audit Statement to inform the construction-stage Waste Management Plan and compare actual waste arisings and waste management routes against the forecasts and targets in this report.

Operational waste arrangements will be developed with the Trust facilities team and appointed waste contractors in line with their existing Waste Policy.

Appendices

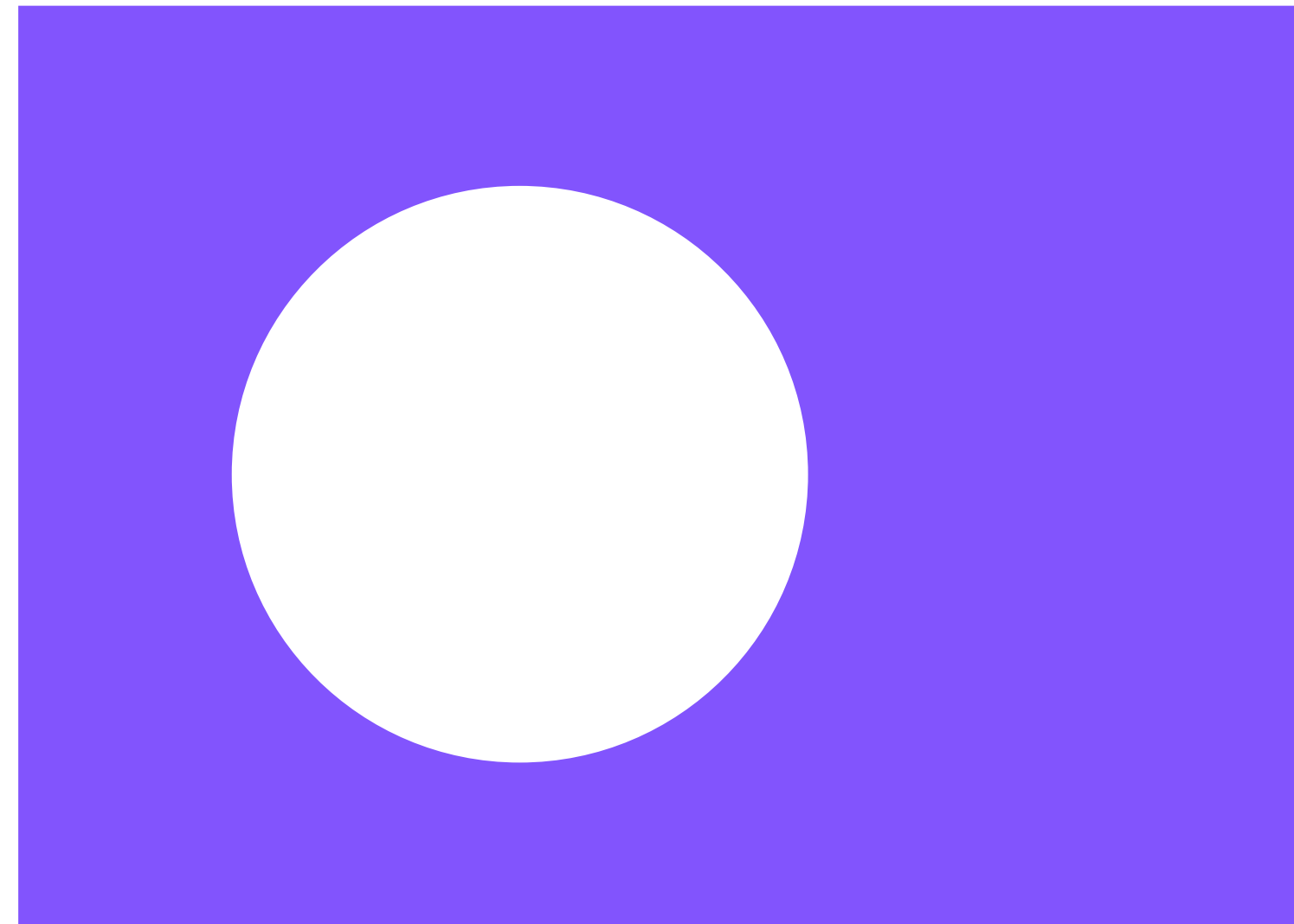
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A. Pre-demolition Audit

Salisbury Diagnostic and Surgical Hub

Pre-demolition audit

May 2026



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Salisbury Diagnostic and Surgical Hub

Pre-demolition audit

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1 Introduction

1.1 Project Summary and overview

Salisbury NHS Foundation Trust is planning to build a new Diagnostic and Surgical Hub (DASH) to the south of Salisbury city centre, within the grounds of Salisbury District Hospital. Mott MacDonald Limited has been appointed to undertake the engineering design for the new facility. The assumptions presented in this audit are based on the latest available RIBA Stage 2 information for the project.

The new facility will comprise a two-to-three-storey building with diagnostics and endoscopy to the lower ground floor, theatre and recovery space to the ground floor, and plant spaces to the first floor.

Externally, a small number of parking spaces will be provided. The remaining external space is to be landscaped to support wayfinding and provide garden spaces for staff and patients.

1.2 Scope and objectives

A pre-demolition audit is undertaken to support the “Wst 01 – Construction Waste Management” assessment as part of the Building Research Establishment Environmental Assessment Method BREEAM New Construction Version 6.1 requirements. The overarching aim is to:

- Improve resource efficiency through a pre-demolition audit and Resource Management Plan (RMP); and
- Maximise the recovery of material during demolition and diverting non-hazardous and inert waste from landfill.

This pre-demolition audit includes the following ‘Wst 01’ requirements, which are to:

- Be carried out at Concept Design stage by a competent person prior to strip-out or demolition works;
- Guide the design, consider materials for reuse and set targets for waste management; and,
- Engage all contractors in the process of maximising high-grade reuse and recycling opportunities.

The remaining ‘Wst 01’ criteria listed below are the responsibility of the contractor (to be confirmed). They are to:

- Make reference to the audit in the RMP; and
- Compare actual waste arisings and waste management routes used with those forecasts and investigate significant deviations from planned targets.

In line with BREEAM New Construction Version 6.1 the scope for this pre-demolition audit report is as follows:

- Identification and quantification of the key materials where present on the project;
- Potential applications and any related issues for the reuse and recycling of the key materials in accordance with the waste hierarchy;
- Opportunities for reuse and recycling within the same development;
- Identification of local reprocessors, or recyclers, for recycling of materials;
- Identification of overall recycling targets, where appropriate;
- Identification of reuse targets, where appropriate; and

- Identification of overall landfill diversion rate for all key materials.

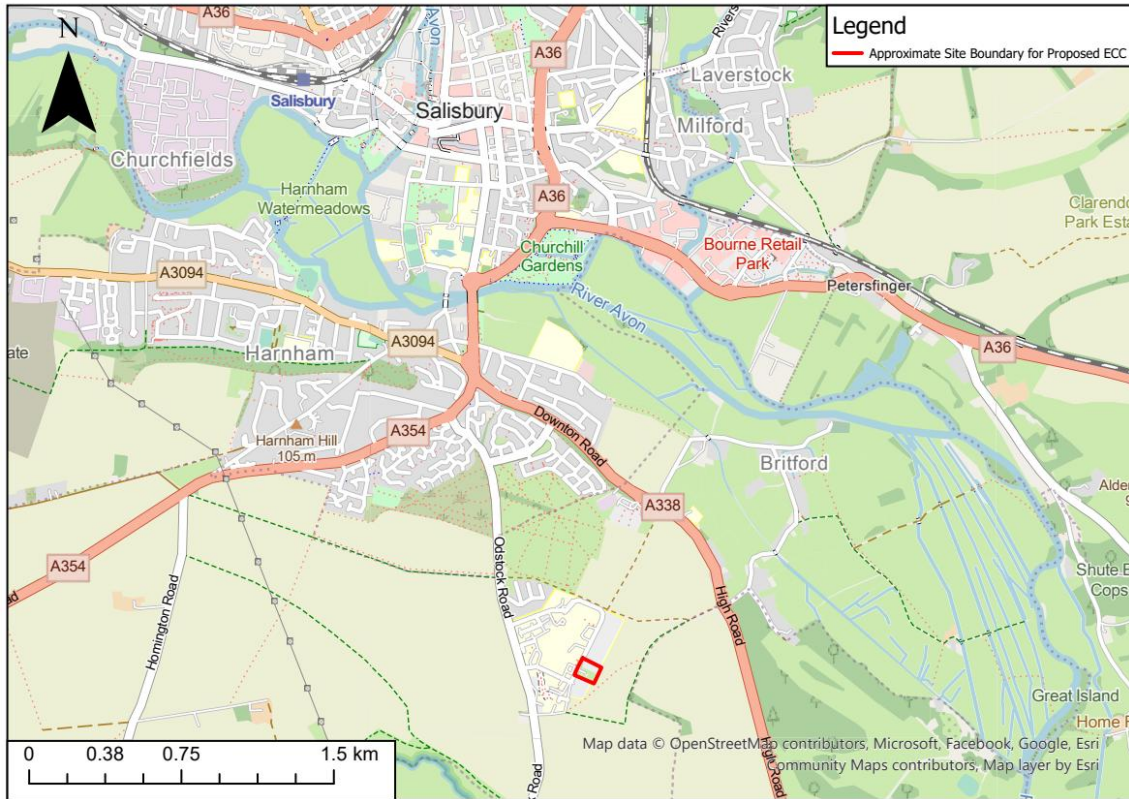
The first revision of this report was originally produced for the previous elective care centre design in July 2025, and has been updated based on the RIBA Stage 2 redesign, which took place in March-April 2026.

2 Site description and setting

2.1 Site location

The proposed development is located within the grounds of Salisbury District Hospital which is approximately 3km south of the centre of the city of Salisbury. The site is bordered to the west by the Victoria Drive East Road, to the north and south by the hospital's Car Park 8 & 9 and 10 respectively, and the east by underdeveloped agricultural land. The site is centred at an approximate National Grid Reference of 415060E and 127250N. Figure 2.1 shows the site's Location.

Figure 2.1: Site location



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2.2 Site description

The land use in the southern half of the site comprises of the hospital's emergency helipad surrounded by grassland and some containers are present in the southwestern corner. The hospital's Car Park 8 and 9 are in the northern half of the site with some dense tree vegetation present at the northeastern boundary. Review of aerial imagery indicates some reworked areas around the helipad in the southern half of the site. Figure 2.2 shows the site's layout.

Figure 2.2: Site Layout



Source: Produced by Mott MacDonald Ltd (2025), Contains OS Data © Crown Copyright and database right 2023. Contains data from OS Zoomstack, Esri UK, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS.

3 Materials generated

3.1 Initial review of waste arising

The assessment is based on a desktop study using available information including, publicly available satellite imagery and plans, as well as information on the proposed development general arrangement drawings. Information on the pad foundation sizes and proposed building layout has been used to inform excavated volumes based on the latest available RIBA 2 design information.

A site visit was not required as the current site is a car park and helipad with no fixed structures. This information has been used to produce an estimate of the anticipated waste arisings (as set out in Table 3.1).

The ‘recovery potential’ is based on the diversion from landfill definition within BREEAM New Construction Version 6.1, this includes all actions to avoid disposal of waste at landfill, including:

- Reusing the material on site (in situ or for new applications);
- Reusing the material on other sites;
- Community reuse and recycling;
- Salvaging or reclaiming the material for reuse;
- Returning material to the supplier via a ‘take-back’ scheme;
- Direct recycling of materials via specialist material reprocessor or recycler;
- Recovery of the material from site by an approved waste management contractor and recycled or sent for energy recovery; and
- Utilising waste in exempt or permitted applications (not landfill).

The following assumptions were made to calculate the waste arisings:

- The geotechnical desk study has identified that the ground conditions are anticipated to comprise of Made Ground up to 1m thick underlain by the bedrock which is composed of possible reworked Culver Chalk Formation (between 0.8 and 0.9m thick) and Structureless Culver Chalk Formation (Grade Dc) up to 8m thick
- The site level ranges from 87.3m AOD to 83m AOD
- The proposed development is 4,616m², based on the current RIBA 2 design
- Based on publicly available satellite imagery from June 2025:
 - External fencing (wooden posts and wire fence) is assumed to be 1.2m high, 300m in length
 - Hospital signage within the red line boundary for the proposed development is expected to be removed during construction and reinstated as part of the proposed development
 - Helipad signage would not be suitable for reuse and therefore is regarded as scrap metal for recycling

Table 3.1: Initial review of anticipated waste

Anticipated waste stream	Estimated volume (m3)	Recovery potential	Overall priority for recovery	Indicative recovery target	Management option
Excavated material (made ground and/or chalk)	3,500	Medium	Medium	60%	Opportunities for reuse the excavated materials could be explored when technically and economically feasible, such as reuse as infill or as a base material, as infill material prior to the laying of another layer, or in landscaping activities. Excavated material that cannot be reused on site will be removed by licensed contractors and recovered at appropriately permitted waste facilities.
Fencing	360	Low	Low	20%	Low potential for reuse. Alternatively, they can be transferred to a recycler to produce wood chips or to an energy recovery facility
Signage	>1	Low	Low	20%	Low potential for reuse. Alternatively, they can be segregated and sent off for off site recycling.

3.2 Potential implications for material reuse and recycling

Material arising from the activities at the proposed development shall be carefully stored in segregated piles for reuse on site, where it has been deemed acceptable or has significant potential to be reused in the construction of the proposed development. Not only is this best practice for waste handling, but it also minimises the risk of further material contamination, which could reduce opportunities for reuse and recycling. If the segregation of other mixed construction and demolition (C&D) materials is not practicable the mixed waste can be sent to a C&D materials recycling facility (MRF) for mechanical and manual separation. Once separated each material type can be recycled.

If during the demolition activities, the gravel and/or excavated material is contaminated with hazardous materials such as chemicals or other substances, it is likely to affect the potential for reuse and recyclability of the gravel. It is, therefore, imperative that demolition and removal activities are undertaken in a controlled manner, which prioritises the integrity and condition of the waste material being removed so as not to jeopardise reuse and recycling potential.

Excavated material and waste materials that cannot be reused on site should be removed by licensed contractors to an appropriate recycling or treatment facility. It is likely that excavated materials and waste materials, as outlined in Table 3.1, can be transferred to a specialist recycling or treatment site rather than be disposed of to landfill.

4 Opportunities for reuse and recycling of waste

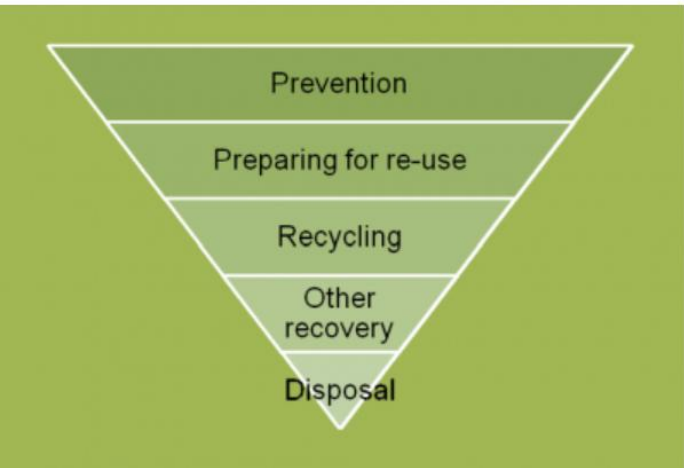
4.1 General measures

All construction and demolition activities should follow the waste hierarchy, which guides the most appropriate waste management options according to what is best for the environment.

It gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for reuse, then recycling, then recovery, and last of all disposal (e.g. landfill). The higher up the waste hierarchy waste is managed, the greater the likely savings in both costs and resources.

The waste hierarchy is explained in Figure 4.1.

Figure 4.1: The waste hierarchy



Source: Department of Environment, Food and Rural Affairs (DEFRA), 2011¹

Eliminating waste at source is the best way to make savings in waste costs and reduce impact on the environment. This can be achieved through:

- Better utilisation of materials already available onsite;
- Reducing the amount of waste generated where it cannot be eliminated completely; and
- Reusing and then recycling as much as possible once it is not possible to reduce the waste any further.

Disposal of waste to landfill or incineration should be a last resort after all the above options have been considered.

Waste minimisation is at the top of the waste hierarchy, and this should continue to be a priority throughout the project. The objective of the proposed development is to ensure that the waste

hierarchy is implemented as set in order of preference; the highest options will be adopted, where reasonably practicable, but usually a combination of options will be appropriate.

The contractor will be required to identify appropriately permitted facilities that can accept and treat the waste materials produced, in order to divert them from landfill. Actions to be taken to facilitate resource efficiency throughout the project, and therefore, minimise waste produced, are detailed in the subsequent sections.

Potentially contaminated materials, if any, should be kept separate from clean materials and sent for either recycling or recovery at appropriately permitted facilities.

Unsuitable waste materials will be separated, where possible, and collected in receptacles for subsequent recycling and treatment at offsite facilities.

4.2 Opportunities for reuse

The demolition of the car park and helipad area of the proposed development involves the removal of excavated material, which is expected to comprise main ground, hard standing and chalk. This material could be considered for reuse within the site of construction of the DASH, if technically and economically feasible. Excavated materials could be used as infill or base material, as backfill or within landscaping activities.

It is recommended that the contractor consider the excavated materials which can be incorporated into the proposed development and if suitable, carefully removed and stored appropriately to retain integrity and avoid contamination. Alternatively, material that cannot be reused on site may be suitable for reuse at other developments locally, where demand may be present.

4.3 Opportunities for recycling

Excavated materials can be sent to be recovered and reprocessed in order to be turned into a recycled aggregate, or suitable soil for reuse. This can be used in other construction projects and activities, including infill activities, stabilising slopes, drainage and road construction, golf courses, screening bunds, and agricultural improvement schemes, etc.

Wooden materials, such as the temporary wooden fencing, which cannot be reused, can be transferred to a recycling facility to produce wood chips or sent to energy recovery facilities. Similarly, metal materials arising from the fencing or signage that cannot be reused, can be transferred to a recycling facility or to energy recovery facilities.

¹ DEFRA (2011) Guidance on applying the waste hierarchy [online] available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf Last accessed March 2023.

5 Waste management facilities

The appointed waste contractor should contact the relevant treatment/recycling facilities or Environment Agency directly to determine the most appropriate waste management facility to handle the waste material being produced.

For demolition materials that are confirmed to be suitable for reuse within the proposed development, this should be prioritised in line with the waste hierarchy when considering recycling and recovery options.

There are no local authority recorded landfill sites within 1km of the site.

There is one recorded licensed waste management facility within 500m of the site, located 116m to the west, comprising a Clinical Waste Transfer Station for the hospital, with a current licence status of Surrendered [10].

There is one registered waste transfer site within 500m of the site, located 57m to the west of the site boundary, comprising an operational Clinical Waste transfer site for the hospital.

6 Targets

The BREEAM sustainability assessment method does not include demolition and excavation (D&E) waste in its resource efficiency benchmark, despite it often representing the largest volume of waste produced in such activities. The amount of D&E waste produced is site-dependant. Furthermore, it is not necessarily possible to reduce the amount of demolition waste (unless a decision is taken to retain and not demolish an element of the works in the first place).

Including D&E waste in an overall construction resource efficiency benchmark would:

- Not encourage sites with unavoidably large amounts of D&E waste to focus on reducing waste arising from construction materials (which would have further knock-on environmental impacts); and
- Mean that sites with little or no D&E waste would find compliance with the benchmark more straightforward, which would weaken the drivers for reducing construction waste resulting from the specification and use of new building materials.

BREEAM aims to ensure that, where D&E waste is generated, it is diverted from landfill and, where possible, reused for high grade use on site to reduce the volume of new materials produced/required in the supply chain (which themselves may go on to generate additional waste).

6.1 Reuse targets

As BREEAM does not set targets, guidelines or best practice on the reuse of demolition wastes, an assessment has been made based on the volume and type of material which is anticipated to be produced. As a result, specific targets for reuse have not been set, but key opportunities have been discussed and identified in section 4.2.

6.2 Recycling targets

As BREEAM does not set targets, guidelines or best practice on the recycling of demolition wastes, an assessment has been made based on the volume and type of waste material which is anticipated to be produced. As a result, specific targets for recycling have not been set, but key opportunities have been discussed and identified in section 4.3.

Although there are no set targets for the recycling and reuse of construction and demolition waste outlined in BREEAM, under the Waste Framework Directive (WFD)², C&D waste is a priority waste stream. The WFD set the objective that by 2020, a minimum of 70% by weight of non-hazardous C&D waste should be prepared for reuse, recycled or recovered, including backfilling operations.

6.3 Landfill diversion target

The BREEAM sustainability manual includes specific targets for landfill diversion rates, across both demolition and construction waste of any infrastructure project. As detailed in Table 6.1, the minimum standard for demolition waste is to divert 80% of the total volume and 90% of the

total tonnage from disposal at landfill, by prioritising reuse, recycling and recovery activities. The landfill diversion rate only applies to non-hazardous materials.

Table 6.1: Landfill diversion rate targets

BREEAM Credits	Type of waste	Volume	Tonnage
One credit	Demolition	80%	90%
	Non demolition	70%	80%
	Excavation	N/A	N/A
Exemplary level	Demolition	85%	95%
	Non demolition	85%	90%
	Excavation	95%	95%

Source: BREEAM New Construction Version 6.1³

The exemplary level targets depicted above should be strived for during the demolition phase of the project and the high standard carried through into the construction phase.

² European Union (2008). Waste Framework Directive. Available at https://ec.europa.eu/environment/topics/waste-and-recycling/waste-framework-directive_en Last accessed March 2023.

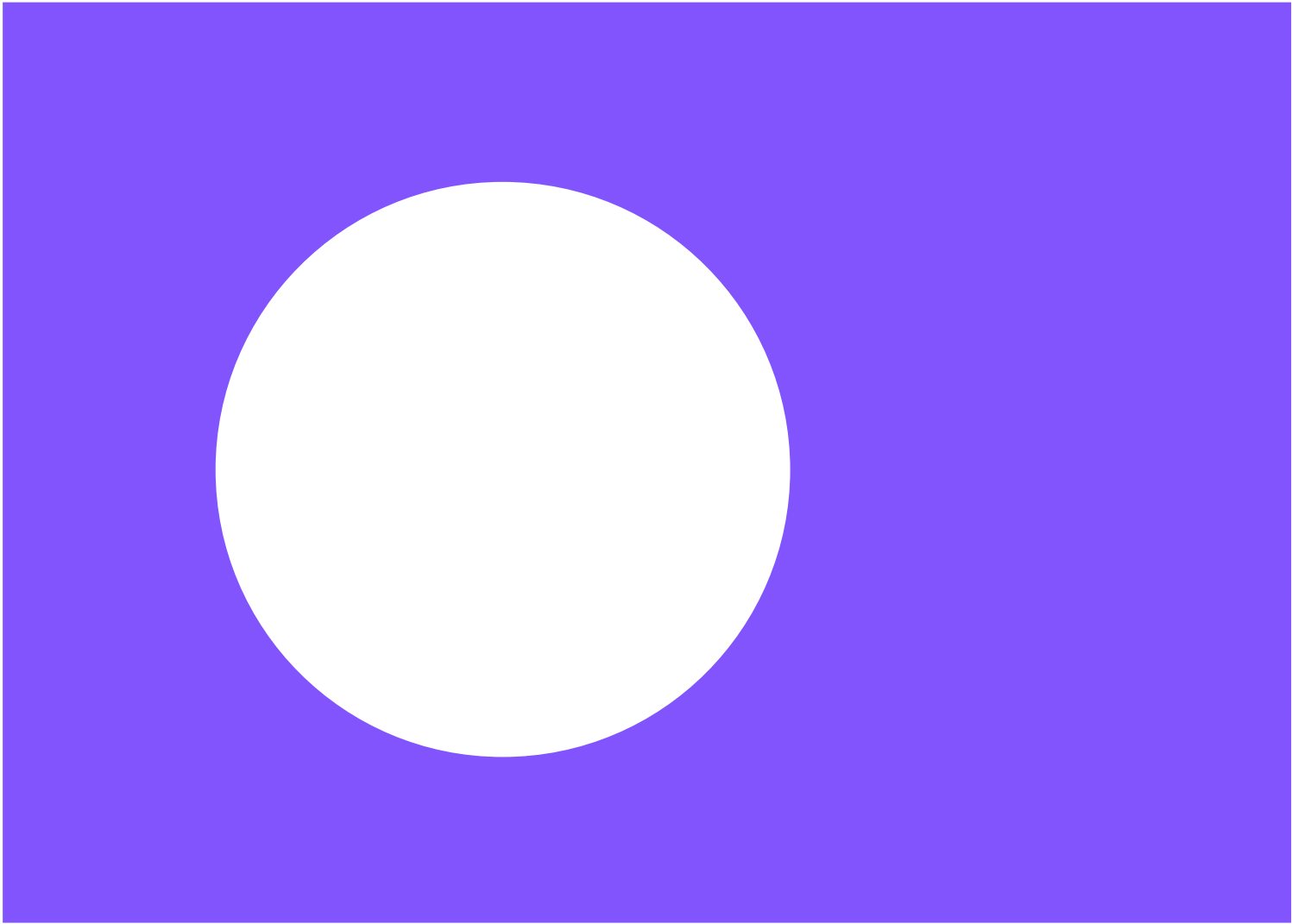
³ BRE Global Ltd (2023). *BREEAM UK New Construction Version 6.1: Technical Manual*. Building Research Establishment (BRE), Watford. Available at: <https://breeam.com> (accessed May 2026).

7 Conclusions

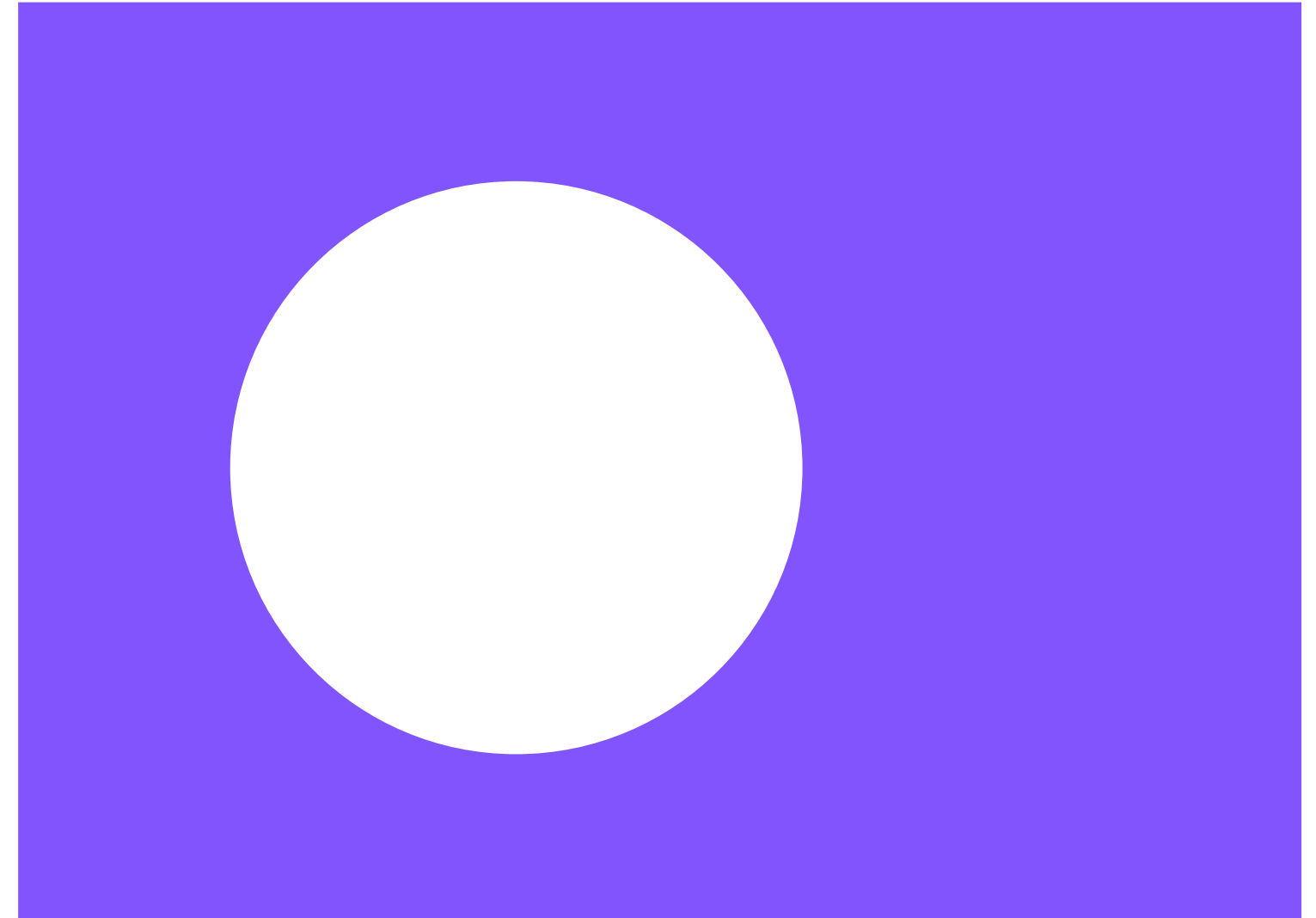
The planned demolition activities at Salisbury Diagnostic and Surgical Hub (DASH) have been assessed to determine the approximate waste arisings from the proposed development. On review, based on the waste type anticipated to arise from site from the demolition activities, the BREEAM New Construction Version 6.1 minimum criteria, stipulating an 80% of total volume of demolition material to be diverted from landfill, is likely to be achievable. The excavated material has been identified to have some potential reuse options on site, and recycling or recovery routes available within the UK. It is, therefore, advised that this project strives to achieve the exemplary level criteria outlined in Table 6.1.

Specific targets for reuse and recovery of demolition materials have not been set in line with the BREEAM New Construction Version 6.1 guidance. However, key opportunities for reuse and recycling of excavated material have been discussed to encourage the contractor to follow the waste hierarchy and minimise waste where appropriate.

This report should be used to inform the contractor’s resource management plan prior to the beginning of the construction phase.



B. Design for disassembly and adaptability



Salisbury Diagnostic and Surgical Hub

Wst 06 Design for disassembly and adaptability

April 2026

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Salisbury Diagnostic and Surgical Hub

Wst 06 Design for disassembly and adaptability

April 2026

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Executive summary

This study has been prepared to describe how the design of the Salisbury Diagnostic and Surgical Hub project has considered the potential for adaptation to meet future functional changes throughout the building's life and the ease of disassembly and recovery of materials at the end of the building's functional life. This report was originally produced for the proposed Elective Care Centre in August 2025 and was reviewed and revised in April 2026 to account for the revision of the RIBA 2 design to include additional diagnostic services.

The following opportunities have been identified at the Concept Design stage to enable future functional changes and disassembly at end of life:

- The architectural design has considered the benefits of:
 - Demountable ceilings to enable replacement of services.
 - Modular standardisation to prevent waste and aid deconstruction at end of life.
- The structural design of the building has considered the benefits of
 - Standardised grids to create flexible and adaptable spaces.
 - The potential for an enhanced durability
 - A strategy for connection details to increase the ease of disassembly.
- The MEP design has considered the benefits of:
 - Sizing of pipework and plant to enable future expansion.
 - Ensuring access to plant rooms for ease of maintenance.

It is noted that due to the buildings function as a healthcare facility, there are limited opportunities for alternative uses, and that site-wide electrical capacity constraints may limit expansion potential of the building in the short term.

A further report shall be produced by the design team at Technical Design stage to describe how the measures proposed within this report have been implemented into the design of the building.

The project is being assessed under BREEAM UK New Construction Version 6.1 for fully fitted buildings, targeting a rating of Excellent. This report identifies opportunities for future adaptation and disassembly in line with the requirements of Wst 06 Design for disassembly and adaptability.

1 Introduction

1.1 Aim

This study has been prepared to describe how the design of the Salisbury Diagnostic and Surgical Hub project has considered the potential for adaptation to meet future functional changes throughout the building's life and the ease of disassembly and recovery of materials at the end of the building's functional life. The aim of this is to avoid unnecessary materials use, cost and disruption arising from the need for future adaptation works because of changing functional demands and to maximise the ability to reclaim and reuse materials at final demolition in line with the principles of a circular economy. This will add value through:

- Reduced waste and cost associated with future refurbishment or fit-out works and ultimately in demolition.
- Improved ability to cost-effectively reuse and recycle materials.
- Increased lifetime value of materials and products.
- Encouraging consideration of circular economy principles during design and construction.
- Reduced costs and disruption associated with the need for future adaptation, demolition, and strip-out, thereby reducing the associated waste and costs.

1.2 Context

The construction industry is responsible for approximately 60% of total UK materials use and one-third of all waste produced¹. Typically, buildings are stripped out or in many cases demolished considerably earlier than their design life would predict, or structural stability require. In most cases only high value materials are reclaimed or reused and many resources are either used for low grade uses, taken to landfill or, in some cases, illegally dumped leading to increased environmental damage and costs to local authorities and society. This risk can be reduced by considering building adaptability and future disassembly to allow easy material separation and reuse. This includes exposed and reversible connections, layer independence and standardisation which can facilitate disassembly.

1.3 BREEAM Credits and Requirements

The project is being assessed under BREEAM UK New Construction Version 6.1 for fully fitted buildings, targeting a rating of Excellent.

Adhering to guidance set out in the BREEAM manual under the credit Waste 06 Design for disassembly and functional adaptability, this document demonstrates the design approach taken to facilitate the building being adapted and disassembled with ease. The following sections will consider both the potential for functional adaptability of key building elements and will demonstrate the approach to specifying design measures that meet the ease of disassembly criteria.

It will then set out recommendations or solutions for the remaining design stages that aim to enable and facilitate disassembly and functional adaptation.

¹ BREEAM UK New Construction Version 6.1 Technical Manual, BRE (2023)

2 Functional adaptability of building elements

This study will consider the following with regard to functional adaptability:

- **Feasibility:** The likelihood to contain multiple or alternative building uses, area functions, and different tenancies over the expected life cycle, e.g. does the structural design of the building enable alternate use, is the architectural planning grid suitable for alternate use, etc.
- **Accessibility:** Design aspects that facilitate the replacement of all major plant within the life of the building, e.g. panels in floors and walls that can be removed without affecting the structure, providing lifting beams and hoists. Accessibility also involves access to local services, such as local power, data infrastructure etc.
- **Versatility:** The degree of adaptability of the internal environment to accommodate changes in working practices.
- **Adaptability:** The potential of the building ventilation strategy to adapt to future building occupant needs and climatic scenarios. The potential for the structural frame to be altered in the future to enable an alternate use.
- **Convertibility:** The degree of adaptability of the internal physical space and external shell to accommodate changes of in-use.
- **Expandability:** The potential for the building to be extended horizontally.
- **'Refurbishment potential':** The potential for major refurbishment, including replacing the façade.

2.1 Feasibility

The feasibility considerations for alternative building uses identified at Concept Design stage are as follows:

- The proposed building is a purpose healthcare unit with operating facilities and support spaces, as such alternative uses for the building itself are limited to those undertaking the same function.
- There is smaller potential for alternative building uses, by way of expansion but sharing some of the same facilities in the existing building.
- The structural design of the building is zoned such that each zone could support alternative functions with the same (or lessor) performance requirements as designed.

2.2 Accessibility

The following measures are proposed to ensure accessibility of services for replacement:

- Hardstanding routes to building perimeter to be considered during design development to potentially enable the replacement of large plant units where it is not feasible to do this via internal stair access routes to the plant room.
- All central ASHP in dedicated plant room and engineering compound.
- Services internally remain mostly accessible via demountable ceiling tiles and access panels where solid ceilings required.
- Large Air Handling Units to be in the first-floor plantroom area can be delivered in smaller sections, and some sections can be flat pack to allow for easier replacement.

- Access for routine servicing and maintenance is provided to the roof plantroom via staircase and goods lift.
- Electrical switchgear to be located within dedicated plantrooms and cupboards. Key considerations include the placement of equipment, the availability of space around it, and the design of controls. Space provided for access for electrical testing, inspections, maintenance, and repairs.
- Large thermal store tanks, pumps, and other large MEP equipment to be on the ground floor of the engineering compound with full-serviced access, thereby designing out the challenges involved with moving large plant through the building.
- Hot water plant Units to be in the first-floor plantroom area can be delivered in component parts. This will allow easier access to the plant room for installation or replacement.

2.3 Versatility

The following measures are proposed at Concept Design stage to enable versatility to accommodate future changes in working practices:

- Internal walls will be predominantly non-loadbearing and therefore have an easy degree of adaption availability for future remodelling.
- A regularised structural grid will assist in future adaption versatility. The building has been zoned so that grids that suit certain uses are grouped together. Therefore, versatility is limited to an extent because theatres would need to expand from the Theatre Zone and general clinical or day ward type spaces would need to expand from the Pod and Prep & Recovery Zone.
- Structural stability systems have been positioned in favourable locations, such as external walls, around stairs and lifts, and along edges of corridors to limit intrusion on space planning.
- An electrical system's versatility is evident in its ability to power a wide range of devices and applications, from simple household appliances to complex machinery. Furthermore, electrical systems can be scaled up or down, from powering a single device to powering entire buildings.

2.4 Adaptability

The following measures are proposed at Concept Design stage to enable adaptability to future occupant needs and climate scenarios.

- To facilitate flexibility and adaptability without excessive conservatism a blended value for imposed load has been calculated for the RIBA Stage 2 structural design development.
- Building to be fully mechanically ventilated, therefore all adaptability will be required via the mechanical plant specification. Plant will be sized with margin in mind.
- Heating will be provided through a low temperature hot water system which connects to a series of LST radiators or radiant panels. The system to be accessible throughout the building and can be adjusted or expanded to suit changing requirements.
- The electrical system can adjust to various changes, such as fluctuating energy sources, changing loads, or even different voltage levels. This adaptability is crucial for maintaining a reliable and efficient power supply. This includes design that can be adjusted to accommodate renewable energy sources, modular designs that allow for easy expansion or modification, and systems with backup power options like batteries or generators.
- The hot water system has separated zoning for theatres and other clinical areas. The system can support future reconfiguration of hospital spaces.

Air handling unit's coils shall be sized to deliver 100% load accommodating for the 50 years extreme cold temperature within current ASHREA handbook. The cooling coil within AHU shall be designed based on 50th percentile DSY 2 and DSY 3 and the period 2050s. All ventilation plant to be designed to accommodate for the future climate scenarios.

2.5 Convertibility

The following have been identified relating to convertibility of the building for alternative uses:

- The proposed building is a purpose healthcare unit with operating facilities and support spaces, as such convertibility to alternative uses for the building itself are limited to those undertaking the same function.
- The actions taken (described above) to facilitate versatility, adaptability, and flexibility such as blended imposed loads, regularised structural grids, and future proofing for future expansion all benefit convertibility from a structural perspective.

2.6 Expandability

The following measures are could enable future horizontal expansion of the building

- The building has reasonable expansion potential in the horizontal plane into adjacent land. The design at RIBA Stage 2 considers the potential outcomes and has considered the impacts on structure, services, and circulation.
- Provision of capacity in infrastructure to enable future expansion and adaptability was considered during RIBA Stage 2 and shall be further developed in the next stages. (e.g. space in the engineering compound for extra pumps, space on the roof for additional ASHPs, capacity in the LTHW and CHW pipework to allow for additional load.)
- The electrical system will be designed with additional rated capacity, spare ways, and space in the main electrical switch panels to accommodate future additions like new circuits, additional solar panels, or EV charging stations. Any additions will become viable once the power has been upgraded to the site in the future, however the electrical infrastructure will be designed to cater for this upgrade once available. This includes planning for potential needs by oversizing the panels and incorporating scalable components, rather than just meeting current requirements and choosing electrical components, with a wide range of capabilities allowing for easier upgrades and expansions in the future. By incorporating these strategies, a building's electrical system can be made much more adaptable to changing needs over time, avoiding costly and disruptive upgrades down the line.
- The domestic water system will be designed with flexibility to allow for potential expansion, such as incorporating variable level controls on the cold-water storage tank or allocating space in the cold-water plant room for additional equipment.
- The building will be designed with flexibility to allow for potential expansion, with consideration given to additional riser space to accommodate the extra drain stacks required for future expansion.

At this stage, no specific structural allowance has been made for vertical expansion due to capital cost constraints and restrictions on the height of the building.

It is noted that expansion potential is limited in the short term by electrical capacity constraints on the site; expansion of the building may not be possible until grid capacity upgrades are completed in the late 2030s.

2.7 Refurbishment Potential

The following features are proposed to ensure future ease of refurbishment.

- External façade materials are currently under consideration. SFS infill to structural frame is proposed which would allow for reasonable alteration to external façade whilst retaining the building's weather-tightness.
- The MEP equipment, pipework and ductwork are all copper, steel, or similar and can be all recycled.
- The pipework will be used push-fit or flanged joints where appropriate to simplify disassembly.

3 Ease of disassembly

This section will set out the approach to ease of disassembly for the Salisbury Diagnostic and Surgical Hub building components, guided by the following principles:

- **Accessibility:** Design aspects that facilitate the replacement of all major plant within the life of the building, e.g. panels in floors and walls that can be removed without affecting the structure, providing lifting beams and hoists. Accessibility also involves access to local services, such as local power, data infrastructure etc.
- **Durability:** Use materials which require less frequent maintenance, repair, or replacement, considering them within the context of the life span of the building.
- **Exposed and reversible connections:** Making the connections more visible provides opportunities to optimise material and product reuse.
- **Layer independence:** Designing building systems and components in layers so that removal, adjustment, or replacement of some elements is feasible, especially when different components have different life spans and maintenance needs.
- **Avoidance of unnecessary toxic treatments and finishes.**
- **Standardisation and modularity of building components.**

3.1 Accessibility

The following measures are proposed to ensure accessibility of services

- Hardstanding routes to building perimeter to be considered during design development to potentially enable the replacement of large plant units where it is not feasible to do this via internal stair access routes to the plant room.
- All central ASHPs clustered in dedicated plant room and engineering compound.
- Services internally remain mostly accessible via demountable ceiling tiles and access panels where solid ceilings required.
- Large Air Handling Units to be in the first-floor plantroom area can be delivered in smaller sections, and some sections can be flat pack to allow for easier replacement.
- Access for routine servicing and maintenance is provided to the roof plantroom via staircase and goods lift.
- Electrical switchgear to be located within dedicated plantrooms and cupboards. Key considerations include the placement of equipment, the availability of space around it, and the design of controls. Space provided for access for electrical testing, inspections, maintenance, and repairs.
- Large thermal store tanks, pumps, and other large MEP equipment to be on the ground floor of the engineering compound with full-serviced access, thereby designing out the challenges involved with moving large plant through the building.
- Hot water plant units to be in the first-floor plantroom area can be delivered in component parts. This will allow easier access to the plant room for installation or replacement.

3.2 Durability

The following is proposed to ensure durability of building elements

- The durability of the structural elements meets the requirements of the Eurocodes for buildings with a design service life of 50 years. It is proposed at the next stage to discuss

with the client the benefits versus costs of implementing an enhanced durability for a design service life of 100 years.

3.3 Exposed and Reversible Connections

The following is proposed in relation to connections:

- The building is split into zones and appropriate materials to suit the performance of these zones are proposed. The project will aim to use simple bolted connections wherever possible, and the stability system should be optimised so that the number of friction grip connections can be reduced (these connections are more specialist to undo). Dowelled connections should be designed to avoid the need for reinforcing, such as gluing, to make them easier to dissemble.

3.4 Layer Independence

The following proposals have been identified to enable layer independence

- All the building systems and components are designed in layers so that removal, adjustment, or replacement of some elements is feasible, especially when different components have different life spans and maintenance needs (corridor distribution in the layers).
- Roofing to allow waterproof top later to be removed and replaced during the lifespan of the building.
- Little scope for layer independence of internal walls given infection prevention requirements for impervious surfaces as far as possible.

3.5 Avoidance of unnecessary toxic treatments and finishes

The following is proposed to avoid toxic treatments and finishes:

- Toxic treatments and finishes will be avoided wherever possible. Furthermore, low-VOC products will be preferred wherever possible in line with BREEAM requirements.

3.6 Standardisation

The following is proposed in relation to standardisation and modularity of building elements

- The building follows a modular standardised design as far as practicable, to aid a reduction of waste material, and for future adaption. To improve the ease of disassembly and encourage reuse of building components, modular, prefabricated elements will be considered.
- Standard sizes for MEP equipment were considered in stage 2 and should be used in detail design, which can accommodate multiple uses, reuse and upgrading. Standard type of connections can be separated and reused more easily.

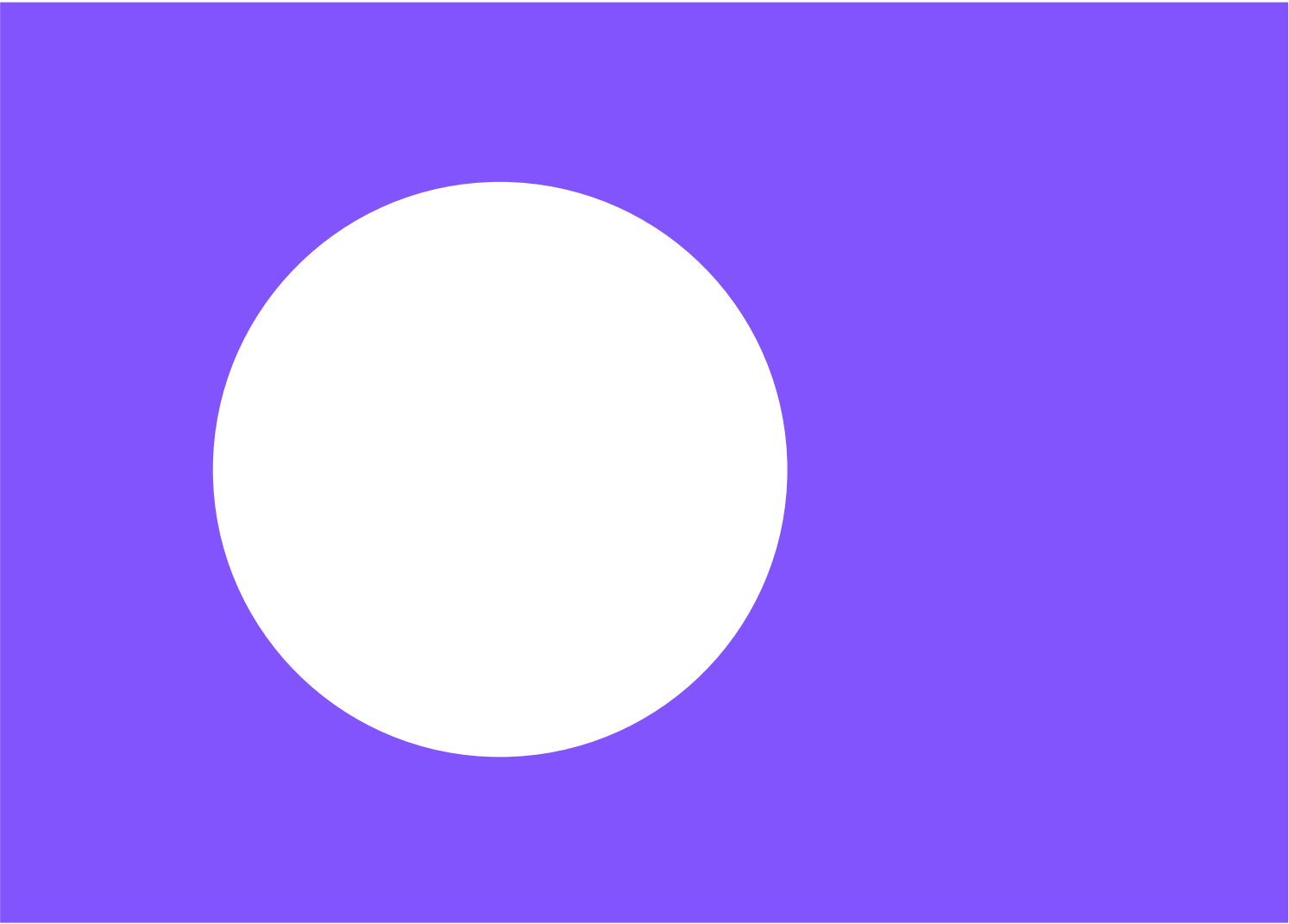
4 Implementation and recommendations

The following key opportunities have been identified to enable future flexibility, adaptability, and end of life disassembly of the Salisbury Diagnostic and Surgical Hub:

- The architectural design has considered the benefits of:
 - Demountable ceilings to enable replacement of services.
 - Modular standardisation to prevent waste and aid deconstruction at end of life.
- The structural design of the building has considered the benefits of
 - Standardised grids to create flexible and adaptable spaces
 - The potential for an enhanced durability
 - A strategy for connection details to increase the ease of disassembly.
- The MEP design has considered the benefits of:
 - Sizing of pipework and plant to enable future expansion.
 - Ensuring access to plant rooms for ease of maintenance.

It is noted that due to the buildings function as a healthcare facility, there are limited opportunities for alternative uses.

This report shall be updated at Technical Design stage to demonstrate how the above recommendations have been implemented.

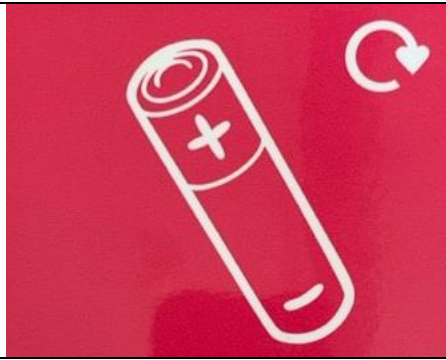


C. Trust Waste Strategies

SEGREGATION OF CLINICAL WASTE 2022

Tiger Stripe Sack £380/tonne	Orange Sack £495/tonne	Yellow Sack £950/tonne	Orange Lidded Sharps Container £8.88/£13.18	Yellow Lidded Sharps Container £9.40/£13.72	Purple Lidded Sharps Container £9.40/£13.72	Blue Lidded Sharps Container £9.40/£13.72
						
Offensive Soft Waste (Non-infectious)	Infectious/Potentially Infectious Soft Waste	Highly Infectious Soft Waste	Non-Medicinally Contaminated Sharps	Medicinally Contaminated Sharps	Cytotoxic Sharps	Waste Medicines
Waste from non-infectious patients. ✓ Nappies ✓ Dressings ✓ Non-infected PPE ✓ Gloves, gowns, aprons ✓ Empty saline bags. This healthcare waste can be put into a Tiger bag and includes bodily fluids ✗ NEVER mix with sacks of any other colour	Waste from infectious or potentially infectious patients. ✓ Dressings ✓ Gloves ✓ Gowns ✓ Aprons ✓ Swabs ✓ Sealed blood bags, chest drains etc. must be double-bagged ✓ Waste from Covid-19 patients ✗ NEVER mix with sacks of any other colour ✗ NO medicines, chemicals, sharps or metal instruments	Waste contaminated with blood / bodily fluids ✓ Discarded diagnostic samples ✓ Cultures / stocks of infectious agents from Lab Work ✓ Autopsy waste ✓ Waste from patients in isolation wards e.g. swabs, bandages, disposable medical devices ✗ NEVER mix with sacks of any other colour	✓ Full/partially full Blood bags, tubing ✓ Phlebotomy sharps ✓ Razors/Scissors ✓ Instruments Recognisable Anatomical Waste Theatres & Maternity Cardboard Clinical Waste Container  Red bordered cardboard 'bio bin' Place in HA 770L cart	✓ Syringes ✓ Vials ✓ Cannulae ✓ Razors ✓ Scissors/Blades Use 30 Litre Container for: ✓ IV bags/giving sets ✓ Medicinal bottles ✓ Large instruments ✗ NO sharps contaminated with cytostatic/cytotoxic medicines	✓ Cytotoxic and Cytostatic contaminated Sharps ✓ IV bags, tubing ✓ Syringes ✓ Vials ✓ Oxytocin contaminated sharps ✗ NO soft waste contaminated with cytotoxic products, this must go in yellow/purple striped sack	✓ Out of date or returned medicines ✓ Medicinal bottles and vials ✓ Waste Tablets ✗ NO waste cytostatic/cytotoxic medicines New 40% recycled plastic bins – various lid colours – for sharps unsuited to Biosystem Bins 

DOMESTIC WASTE & RECYCLING

Black Sack	Clear Sack	Brown Paper Sack	White Rafia Sack	Cardboard Packaging	Batteries
					
Domestic Waste	Dry Mixed Recycling	Glass, Crockery, Aerosols	Confidential Paper	Large Cardboard Items	Dry-Cell Batteries
✓ General household waste ✓ Paper towels ✓ Food Packaging Contaminated with food ✓ Flowers ✓ Face Masks Worn in Non-Clinical Areas Procedure: ✓ Fill 2/3rds black sack. Collected by House-keeping.	✓ Dry packaging waste: no food contamination ✓ Non-confidential papers / printouts ✓ Junk mail / flyers ✓ Shredded paper ✓ Coloured paper ✓ Cardboard - flat ✓ Plastic / carrier bags ✓ Plastic film / shrink wrap/ bubble wrap Clean & Dry: ✓ Plastic milk / drinks bottles / Food Trays ✓ Yoghurt pots ✓ Steel / aluminium food & drink cans (crushed) ✓ Aluminium foil Procedure: ✓ Fill 2/3rds clear sack within DMR Box. Collected by Housekeeping.	✓ Glass – rinsed clean ✓ Aerosol cans ✓ Broken crockery Procedure: • Collected by Housekeeping.	✓ Confidential Documents ✓ Confidential Discs & Tapes go in white sacks SEPARATELY & contact sft.waste-grounds-recycling@nhs.net to arrange collection. Procedure: ✓ Only fill 2/3rds of white sack ✓ Use numbered tag to seal the neck of the bag. ✓ Store in secure area for collection by Estates Waste Team. ✓ White sack contents are security shredded onsite. ✓ Contractor recycles. ▪ Do not place shredded paper in white sacks, use DMR box.	✓ Large cardboard items Procedure: ✓ Flatten large boxes & place in cage / tie in bundle ✓ Flatten & place small cardboard items in Dry Mixed Recycling Box. ✓ Take to designated Waste Store for collection by Waste & Grounds Team. ✓ Cardboard is baled on site ready for Contractor. ▪ DO NOT ALLOW CARDBOARD TO GET WET, OR RECYCLING REVENUE IS LOST *	✓ Spent Dry-Cell Batteries (AA,AAA) ✓ Failed Electrical Kit Procedure: ✓ Tape over terminals on these batteries before placing in your collecting receptacle: Coin / button ~ Small 9V ~ Large 9V Lantern ✓ No need to tape these batteries: AA ~ AAA ~ AAAA ~ C ~ D ✓ Place in designated waste store in an airtight container for collection / bring to Waste Store SDH South. ✓ Battery Recycling Stickers available contact: sft.waste-grounds-recycling@nhs.net
Disposal Costs £154/tonne Recycled as Fuel	Revenue Received for Recycling	Cost Neutral Glass recycled	Disposal Costs £210/tonne Recycled as tissue paper/loo rolls	Revenue Received for Recycling *	Cost Neutral Batteries recycled