



Gatwick Airport Northern Runway Project

Environmental Statement

Appendix 5.3.2: Code of Construction Practice Annex 5 - Construction Resources and Waste Management Plan

Book 5

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1 Introduction

1.1 Background

1.1.1 This document forms part of the **ES Appendix 5.3.2: Code of Construction Practice (CoCP)**, as **Annex 5 - Construction Resources and Waste Management Plan** (Doc Ref. 5.3) prepared on behalf of Gatwick Airport Limited (GAL). Details regarding the components of the Project can be found in **ES Chapter 5: Project Description** (Doc Ref. 5.1).

1.2 Purpose of the Construction Resources and Waste Management Plan

1.2.1 The purpose of this Construction Resources and Waste Management Plan is to demonstrate how waste and the use of resources have been considered during the Project and to set out measures for managing waste and resources during construction to meet legislative and policy requirements.

1.2.2 The measures within this Construction Resources and Waste Management Plan must be complied with through all construction activities required to deliver the Project. It sits as an annex to **ES Appendix 5.3.2: Code of Construction Practice** (Doc Ref. 5.3) which is secured by a requirement in the Development Consent Order (DCO).

1.3 Scope and Structure of the Construction Resources and Waste Management Plan

1.3.1 The scope of this Construction Resources and Waste Management Plan includes the resources required and anticipated to be used and the wastes anticipated to be generated during construction of the Project. It does not consider the management of wastewater, which is set out in **ES Appendix 5.3.2: CoCP Annex 1 - Water Management Plan** (Doc Ref. 5.3).

1.3.2 The Construction Resources and Waste Management Plan does not consider waste generated from the operation of the airport and the on-site waste facilities that are used to manage this waste. Operational waste is considered in **ES Chapter 5: Project Description** (Doc Ref. 5.1) and the **Design and Access Statement** (Doc Ref. 7.3).

1.3.3 The waste management measures set out in this Construction Resources and Waste Management Plan are in accordance with legislative obligations, planning policy and best practice

guidance. Information on the materials and resources required for the construction of the Project are taken from **ES Appendix 5.3.1: Buildability Report** (Doc Ref. 5.3). The estimates of waste types and quantities are based on information within **ES Chapter 5: Project Description** (Doc Ref. 5.1) of the ES.

1.3.4 This Construction Resources and Waste Management Plan is structured as follows:

- Section 2 sets out the regulatory framework for managing waste in the UK and also considers national and local policy requirements to provide the context for how the wastes will be managed. Section 2 also summarises the key principles for sustainable waste management (ie the waste hierarchy principle and the self-sufficiency principle) and resource management.
- Section 3 describes the key resources that are anticipated to be required for the construction of the Project.
- Section 4 describes the anticipated waste arisings during the construction phase and the proposed approach for managing wastes in accordance with the waste hierarchy principle. This also includes waste from the demolition/relocation of buildings and structures; a schedule of the buildings/structures has been provided that has been used to identify the key types of waste that will be generated from these works.
- Section 5 summarises the existing waste management facilities available to GAL and the predicted capacity in the future.

1.4 Implementation of the Construction Resources and Waste Management Plan

1.4.1 The information within the Construction Resources and Waste Management Plan as approved through the granting of a development consent order will be implemented through the preparation of site waste management plans ("SWMP") using the template in Annex A. The SWMP will be the principal mechanism for demonstrating how waste minimisation will be applied and achieved throughout the detailed design and construction stages. Measures that will be included in the SWMP to manage construction waste are outlined in Section 5.

1.4.2 The SWMPs will be prepared for each project area during the detailed design stage by GAL and updated throughout the construction period by GAL and its Principal Contractor. The SWMPs will be internal documents but will be made available to the local authorities for information during the construction

process on request. Resource management during construction will be identified using the resource management template in Annex B.

1.4.3 GAL will retain overall responsibility for implementing the Construction Resources and Waste Management Plan during construction and the Principal Contractor(s) would be responsible for recording movements of waste from the Project site in the SWMP.

1.4.4 GAL will undertake periodic audits of the waste management facilities used during the construction of the Project. This is to ensure that GAL's duty of care obligations are met.

1.5 Resources and waste management approach

1.5.1 Construction resources and wastes from the Project will be managed in accordance with the principles of sustainable waste management. The priority will be to use resources efficiently and for longer to minimise waste and to reduce the impacts of waste by promoting reuse and recycling wherever practicable.

1.5.2 This Construction Resources and Waste Management Plan will sit alongside **ES Appendix 5.4.2: Carbon Action Plan (CAP)** (Doc Ref. 5.3). The CAP contains measures that will mitigate the emissions arising in respect of the Project. It commits to key outcomes and outlines the actions that GAL could take in order to achieve such outcomes and in doing so, play a part in the global transition to a low carbon future for the aviation sector. The CAP includes a commitment to a carbon budget for the Project. The CAP also contains a number of potential ways in which the budget could be achieved including some measures relating to resource use and waste.

1.5.3 A **Sustainability Statement** for the Project accompanies the DCO application (see **Planning Statement Appendix D – Sustainability Statement** (Doc Ref 7.1)). The purpose of the **Sustainability Statement** is to demonstrate that the principles of sustainability have been considered during the design of the Project and how these principles would be embedded throughout the lifecycle of the Project. The **Sustainability Statement** considers GAL's sustainability strategy (Second Decade of Change to 2030) (GAL, 2023) which sets a number of sustainability targets. Performance against these targets and other initiatives undertaken are reported on an annual basis.

2 Regulatory Framework and Guidance

2.1 Definition of Waste

2.1.1 The definition of waste is important because the classification of substances as a waste is the basis for the application of regulatory controls to protect the environment and human health.

2.1.2 For the purpose of this Construction Resources and Waste Management Plan, 'waste' has been defined in accordance with Article 3(1) of the revised European Waste Framework Directive (2008/98/EC), which states that waste is:

"any substance or object which the holder discards or intends to discard or is required to discard".

2.1.3 'Discard' includes the recovery and recycling of a substance as well as its disposal in order to ensure that recovery operations are carried out in a way which protects the environment and human health. The decision on whether something is discarded must take account of all the circumstances (for example, the nature of the material, how it was produced and how it will be used) and have regard to the aims of the Waste Framework Directive, which are:

"the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste".

2.1.4 This definition is still applicable in the UK and was not amended as part of the Waste (Miscellaneous Amendments) (EU Exit) Regulations 2019.

2.1.5 Guidance on the interpretation of the definition of 'waste' is taken from the Environment Agency's online guidance 'Check if your material is waste' (Environment Agency, 2022) which provides a practical guide to help organisations make decisions about whether a material is a waste, is a by-product or meets 'end of waste' status. The Environment Agency also provides a 'definition of waste service' to provide an opinion if a material is a waste.

2.1.6 This Construction Resources and Waste Management Plan also takes into account the definition of waste by Contaminated Land: Applications in Real Environments (CL:AIRE) 'Definition of Waste: Development Industry Code of Practice (CoP) (CL:AIRE, 2011). CL:AIRE is an independent body that promotes the sustainable remediation of contaminated land. The CoP provides a consistent and transparent process which enables the reuse of

excavated materials on site or their movement between sites. It sets out good practice for the development industry to use when:

"Assessing on a site-specific basis whether excavated materials are classified as waste or not; and

Determining on a site-specific basis when excavated waste can cease to be waste for a particular use."

2.1.7 The Environment Agency will take the CoP into account when deciding whether to regard materials as a waste. If materials are dealt with in accordance with the CoP, the Environment Agency considers that those materials are unlikely to be waste if they are used for the purpose of 'land development'.

2.1.8 The CoP requires that a CL:AIRE Materials Management Plan (MMP) is prepared to demonstrate that the material will not harm human health or the environment. A MMP will be prepared post consent that is in accordance with the CL:AIRE CoP and will be approved by the Environment Agency and CL:AIRE.

2.1.9 The CL:AIRE MMPs will relate to excavated material, which will include:

- soil, both topsoil and subsoil, parent material and underlying geology;
- ground based infrastructure that is capable of reuse within earthworks projects (e.g. road base, concrete floors);
- made ground;
- source segregated aggregate material arising from demolition activities, such as crushed brick and concrete, to be reused on the site of production within earthworks projects or as a sub-base or drainage materials; and
- stockpiled excavated materials that include the above.

2.2 Legislative Framework

2.2.1 The UK legislative framework for the management of construction wastes comprises the following:

- Environmental Protection Act 1990;
- Environment Act 1995;
- Hazardous Waste (England and Wales) Regulations 2005 (as amended);
- Waste Management (England and Wales) Regulations 2006;
- Waste (England and Wales) Regulations 2011 (as amended);
- Environmental Permitting (England and Wales) Regulations 2016 (as amended);

- Waste (Circular Economy) (Amendment) Regulations 2020;
- Environment Act 2021.

2.2.2 The framework of waste management legislation in the UK is currently shaped by the Waste (England and Wales) Regulations 2011 (as amended). These regulations require all businesses and organisations that produce waste to take all reasonable measures to prevent waste, to apply the waste hierarchy (refer to Section 2.5) when transferring waste using the definitions in Article 3 of Directive 2008/98/EC and include a declaration on their waste transfer notes or consignment notes to that effect. Standard Industry Classification (SIC) Codes (Companies House, 2018) of the waste producer will also be provided in the waste transfer note. The SIC is a system for classifying industries by a five-digit code.

2.2.3 The Waste Regulations 2011 (as amended) also require that any organisation which collects waste paper, metal, plastic or glass must do so using separate collections to facilitate or improve recovery of these materials and where it is technically, environmentally and economically practicable.

2.2.4 The Environment Act 2021 provides a legal framework for environmental governance and makes specific provision for the improvement of the environment. With regards to waste and resources, the Act provides the legislative framework needed to deliver on many of the commitments in 'Our Waste, Our Resources: A Strategy for England' (Defra, 2018) by introducing new powers and amending existing legislation such as the Environment Act 1995 and the Environmental Protection Act 1990. This includes extending producer responsibility to make producers pay for 100% of cost of disposal of products, starting with plastic packaging; a deposit Return Scheme for single use drinks containers; and obligations to be placed on producers in relation to the re-use, redistribution, recovery and recycling of products.

2.2.5 The Hazardous Waste (England and Wales) Regulations 2005 (as amended) set out the requirements for controlling and tracking the movement of hazardous waste and bans the mixing of different types of waste. Under the Regulations 'mixing' includes mixing of different categories of hazardous waste, non-hazardous wastes or any other substance or material.

2.2.6 The Waste (Circular Economy) (Amendment) Regulations 2020 amends legislation that transposed waste-related EU Directives (including the Waste Framework Directive 2008/98/EU) and makes the legislative changes required to transpose the 2020

<p>Circular Economy Package (CEP) measures. The CEP identifies steps for the reduction of waste and establishes a long-term plan for waste management and recycling.</p>	<p>2.3.3 The application must provide assurances that waste from the proposed development can be dealt with by the existing or proposed waste infrastructure, whilst not having an adverse effect on the capacity of the infrastructure.</p>	<p>reduce and manage their waste in the future and to follow a more considered approach to procurement.</p>
<p>2.2.7 One of the CEP measures relates to preparing waste for reuse and recycling. It states that legislative changes and industry guidance will be implemented to:</p>	<p>2.3.4 The National Networks NPS (Department for Transport, 2014) considers waste management impacts associated with the construction of nationally significant infrastructure projects on the national road and rail networks in England¹. It states that Government policy on waste management is intended to protect human health and the environment by generating less waste, and to use waste as a resource wherever possible.</p>	<p>2.3.8 The RWS will contribute to the delivery of five strategic ambitions:</p>
<ul style="list-style-type: none"> ▪ promote the selective demolition to enable the removal and safe handling of hazardous substances; ▪ facilitate the reuse and high-quality recycling by selective removal of materials; and ▪ ensure the establishment of sorting systems for construction and demolition waste at least for wood, mineral fractions, metal, glass, plastic and plaster. 	<p>2.3.5 According to the National Networks NPS, applications for development consent should identify the measures for managing waste produced by the development and include information on the proposed recovery and disposal system for all wastes generated by the development. The application should describe the steps taken to minimise the volume of waste produced and how the existing or proposed waste infrastructure can manage waste that is generated. In accordance with the waste hierarchy, the volume of waste sent for disposal should be minimised unless it is demonstrated that it is the best overall environmental outcome.</p>	<ul style="list-style-type: none"> ▪ to work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2023; ▪ to work towards eliminating food waste to landfill by 2030; ▪ to eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan; ▪ to double resource productivity by 2050; and ▪ to eliminate avoidable waste of all kinds by 2050.
<p>2.2.8 The CEP also requires that records must be kept of the material and product quantities resulting from preparing for reuse, recycling or other recovery of hazardous waste. These records must also be made available to relevant regulators (Environment Agency) through the electronic registry.</p>	<p>2.3.6 The Government published 'Our Waste, Our Resources: A Strategy for England' (the Resources and Waste Strategy (RWS)) in December 2018 (Defra, 2018). It builds on the commitments in the 25 Year Environment Plan and sets out the policies that will help achieve the vision of moving to a circular economy. The RWS is underpinned by natural capital thinking and is guided by two overarching objectives:</p>	<p>2.3.9 Progress of the RWS will be monitored against a suite of indicators including resource productivity and recycling, waste production and waste disposal. These indicators are defined in the first Monitoring Progress document (2020) and were refined and updated with the latest available data in the second Monitoring Progress document (2021) (eg the recovery rate for non-hazardous construction and demolition waste in England increased from 92.2% in 2010 to 93.6% in 2018).</p>
<p>2.3 Planning Policy</p> <p>National Planning Statement for Airports</p>	<p>2.3.7 The RWS sets out the Government's priorities for preserving material resources, minimising waste, promoting resource efficiency and moving towards a circular economy. The priorities provide a useful insight into how organisations will be required to</p>	<p>National Planning Policy for Waste (2014)</p>
<p>2.3.1 The Airports National Policy Statement (NPS) (Department for Transport, 2018) considers resource and waste management impacts associated with the construction and operation of airport infrastructure. It refers to the waste hierarchy (see Section 2.5 of this report) and states that the Waste Framework Directive (2008/98/EC) targets to divert construction and demolition waste from landfill (by preparing for re-use and recycling) should be considered as the 'minimum acceptable practice' for the construction and operation of any new airport infrastructure.</p>	<p>2.3.6 The Government published 'Our Waste, Our Resources: A Strategy for England' (the Resources and Waste Strategy (RWS)) in December 2018 (Defra, 2018). It builds on the commitments in the 25 Year Environment Plan and sets out the policies that will help achieve the vision of moving to a circular economy. The RWS is underpinned by natural capital thinking and is guided by two overarching objectives:</p>	<p>2.3.10 The National Planning Policy for Waste (Department for Communities and Local Government now Ministry for Housing, Communities and Local Government), 2014) provides guidance to local planning authorities when determining applications for non-waste related development. Local planning authorities are required to ensure that the 'likely impact of proposed non-waste related development on existing waste management facilities and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities'.</p>
<p>2.3.2 According to the Airports NPS, applications for development consent should set out the proposed arrangements for managing any waste produced and include information on the proposed waste recovery and disposal system for all waste generated by the development. The application should seek to minimise the volume of waste sent for disposal and set out a suite of mitigations to eliminate or significantly reduce the risk of adverse impacts associated with resource and waste management.</p>	<ul style="list-style-type: none"> ▪ to maximise the value of resource use; and ▪ to minimise waste and its impact on the environment. 	<p>2.3.11 Local planning authorities are also recommended to consider the following factors during determination:</p> <ul style="list-style-type: none"> ▪ new, non-waste development makes sufficient provision for waste management and promotes good design with the integration of waste management within the rest of the development (for example, providing adequate storage facilities); and

¹ It is noted that the Transport Decarbonisation Plan published by Department for Transport (DfT) on 14 July 2021 announced DfT's intention to review the NPS for National Networks in due course once demand patterns post-pandemic become clearer. It is understood DfT intends

to commence the review by the end of 2021 and complete it by Spring 2023. In the interim and whilst the review is undertaken, DfT has confirmed the NPS for National Networks remains

relevant government policy and has full force and effect for the purposes of the Planning Act 2008.

- the handling of waste arising from the construction and operation of the development maximises reuse and recovery opportunities and minimises off-site disposal.

Waste Management Plan for England (2021)

2.3.12 The Waste Management Plan for England (Defra, 2021) fulfils the requirements of the Waste (England and Wales) Regulations 2011 (as amended) for the waste management plan to be reviewed every six years. It provides an analysis of the current waste management situation in England and evaluates how it will support the implementation of the objectives and provisions of the Waste (England and Wales) Regulations 2011 (as amended). The Plan also provides an overview of the type, quantity and source of waste generated within England; existing waste collection schemes and major disposal and recovery installations; an assessment of the need for new collection schemes; and general waste management policies. The 2021 Plan supersedes the previous waste management plan for England and includes changes to waste management plan requirements which have been made by the Waste (Circular Economy) (Amendment) Regulations 2020 where appropriate.

West Sussex Waste Local Plan (2014)

2.3.13 The West Sussex Waste Local Plan (2014) is a collaboration between West Sussex County Council (WSCC) and the South Downs National Park Authority (SDNPA). It was adopted in April 2014 and is part of the statutory 'development plan'. The Plan provides a background to waste in West Sussex including the types of waste, assumptions about waste arisings, current waste management capacity within the county and any shortfalls in capacity.

2.3.14 The Waste Local Plan covers the period to 2031 and sets out a vision and strategic objectives. It allocates strategic waste sites and includes a monitoring and implementation framework.

2.3.15 The existing and proposed waste management infrastructure are discussed in section 4 of this report.

2.3.16 The Waste Local Plan was subject to a five-year review in 2019 as required by national policy, which identified that there had been no substantive changes in national or local circumstances and the policies have generally performed as expected. Therefore, the policies within the Plan remain consistent and effective.

Surrey Waste Local Plan 2019 – 2033

2.3.17 The Surrey Waste Local Plan 2019-2033 (Surrey County Council, 2020) was adopted by Surrey County Council in December 2020 and replaces the Surrey Waste plan adopted in 2008. The Plan shows how and where waste will be managed in Surrey in the future. It sets out the planning framework for the development of waste management facilities and provides policies to ensure that these facilities are well located (i.e. do not result in significant adverse impacts on amenity and the environment).

2.3.18 Targets set in the plan for wastes relevant to the Project are:

- from a baseline of 58% in 2017, the target for recycling construction, demolition and excavation (CD&E) waste increases to 65% by 2020; 70% by 2025 and 75% by 2030;
- from a baseline of 62% in 2017, the target for recycling commercial and industrial (C&I) waste increases to 65% by 2020; to 70% by 2025 and remains at 70% for 2030;
- from a baseline of 25% in 2017, the target for disposing of CD&E waste to landfill decreases to 15% by 2020; 10% by 2025 and 5% by 2030; and
- from a baseline of 30% in 2017, the target for disposing of C&I waste to landfill decreases to 20% by 2020, 10% by 2025 and 5% by 2030.

2.4 Guidance Documents

2.4.1 The following guidance documents relevant to waste management have been considered:

- Waste Duty of Care: Code of Practice (Defra and Environment Agency, 2018);
- Definition of Waste: Development Industry Code of Practice version 2 (CL:AIRE, 2011);
- Designing Out Waste: A Design Team Guide for Civil Engineering (WRAP, 2010);
- IEMA guide to: Materials and Waste in Environmental Impact Assessment (IEMA, 2020);
- Building Research Establishment Environmental Assessment Methodology BREEAM New Construction Manual (BRE Global Ltd, 2018);
- London Plan Circular Economy Statement Guidance (Greater London Authority, 2022);
- Embedding circular economy principles into infrastructure operator procurement activities (Major Infrastructure – Resource Optimisation Group (MI-ROG), 2016).

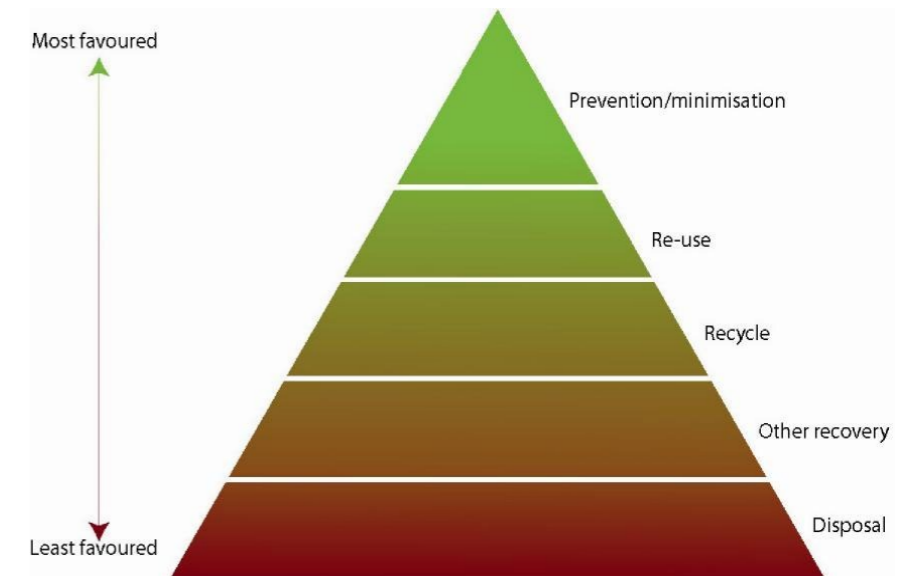
2.5 Waste Hierarchy

2.5.1 The waste hierarchy ranks waste management options according to what is best for the environment. It gives top place to waste prevention. When waste has been generated, priority is given to preparing it for re-use, then recycling, then recovery, and last of all disposal (for example, landfill). The waste hierarchy is a key element of sustainable waste management and following the hierarchy is a legal requirement of the Waste (England and Wales) Regulations 2011 (as amended).

2.5.2 Defra has published guidance on how the waste hierarchy should be applied to a range of common wastes (Guidance on applying the Waste Hierarchy, Defra, 2011). It summarises the findings of current scientific research on the environmental impacts of various waste management options for a range of materials and products. The guidance states that for most materials the waste hierarchy ranking applies. However, the evidence suggests that for some materials, the preferred waste management option (ie with the lowest environmental impact) does not follow the waste hierarchy order. This is true for lower grades of wood, where energy recovery options are more suitable than recycling.

2.5.3 All waste generated by the Project would be managed in accordance with the waste hierarchy unless it can be demonstrated that an alternative option lower down the hierarchy is the best overall environmental outcome (for example, waste wood is often used for biomass heat recovery rather than being recycled).

Diagram 2.5.1: Waste Hierarchy



2.6 Gatwick Airport Sustainability Strategy

2.6.1 Gatwick Airport's Sustainability Strategy (Second Decade of Change to 2030) was published in June 2021 (and updated in March 2023). It is GAL's sustainability policy. The Second Decade of Change builds on the commitments made in GAL's previous Sustainability Strategy (launched in 2010). The Sustainability Strategy focuses on 10 issues covering both social and environmental subjects. The issue with most relevance to this Construction Resources and Waste Management Plan is Goal 9 Waste that states that GAL will:

"Ensure that by 2030 all materials used at Gatwick in operations, commercial activity and construction, are repurposed for beneficial use ie repaired, reused, donated, recycled, composted or converted to fuel for heating or transport."

2.6.2 This Construction Resources and Waste Management Plan takes into account the Second Decade of Change in terms of its overall target and the initiatives currently underway to achieve this.

3 Anticipated Resource Use

3.1 Key Resource Categories

3.1.1 The key resources that will be required for the construction of the Project are categorised into the following groups:

- imported materials
- internally resourced materials
- exported materials

3.1.2 Imported materials will be brought to site as needed to support construction activities. These materials include aggregates, bitumen, cement, granular and cohesive materials and components for structures and buildings.

3.1.3 Internally resourced materials will be obtained or generated within the Project boundary through activities such as excavation (eg soil and earth); recycling/processing of demolition materials (eg crushed concrete); and fabrication (eg construction components).

3.1.4 Exported materials are surplus construction materials that are generated during construction and are transported off-site for re-use, recycling, recovery or disposal.

3.2 Resource Storage and Processing

3.2.1 All imported and internally resourced materials for the Project will be stored in designated storage and laydown areas located within the Project boundary.

3.2.2 The key resources will be stored at the following construction compounds:

- Main Contractor Compound (known as MA1)
- Airfield Satellite Compound
- South Terminal Roundabout Compound
- Car Park Y Compound

3.2.3 Where topsoil is retained for reuse on site as part of the landscape restoration, stockpiles will be created at convenient locations to the works and incorporated as work progresses. Topsoil stockpiles requiring longer term storage will be located at the Airfield Satellite Compound or the South Terminal Roundabout Compound. Soils will be managed, stored and reinstated in accordance with the Soils Management Strategy (see **ES Appendix 5.3.2: CoCP Annex 4 -Soil Management Strategy** (Doc Ref. 5.3)).

3.2.4 Aggregates for batching plants and those from recycling demolition materials will be stored in stockpiles sited on concrete or asphalt surfaces. Different grades of aggregate materials will be stored in separate stockpiles.

3.2.5 Granular material stockpiles (particularly fine aggregate) will be sited with due regard to the prevailing winds and relative position to existing car pavements.

3.2.6 Stockpiles will be sited away from watercourses and sensitive receptors. Temporary site drainage and measures to control dust impacts from the storage of materials are set out in the **ES Appendix 5.3.2: Code of Construction Practice** and **ES Appendix 5.3.2: CoCP Annex 1 - Water Management Plan** (both Doc. Ref. 5.3).

Cement and Bitumen

3.2.7 Cement will be delivered to site in articulated tankers and stored in silos. Measures will be put in place to ensure that cement does not escape during delivery. Bitumen will be delivered to site in articulated road tankers: the tankers will be insulated and heated to allow for the bitumen to be transported at high temperatures. On delivery at site, bitumen will either be discharged into a storage tank or the trailer of the tanker will be connected directly to the batching plant.

Concrete

3.2.8 The use of concrete on the Project is divided into two categories: paving concrete, and structural concrete. The paving concrete will be required for the airside works such as new taxiways and extensions, rapid exit taxiways, new aircraft stands and Charlie Box. The structural concrete will be required for the works such as surface access improvements and new buildings and structures within the airport and surface access.

3.2.9 The peak monthly production for combined concrete production, will require two batching plants for the works within the airport and one plant for the surface access improvement. These plants are situated at the Main Contractor compound, the Airfield Satellite Compound, and the South Terminal Roundabout compound

Asphalt Paving and Granular Subbase

3.2.10 Asphalt paving and granular subbase will be required for airside works such as the repositioning and resurfacing of the Northern Runway, reconfiguration of taxiways, the realignment of Taxiway and Larkins Road and Surface Access Improvements.

3.2.11 The peak monthly production for asphalt paving will require two mixing plants at the Airfield Satellite Compound and the Main Contractor Compound.

Excavated Materials

3.2.12 The Project will generate excavated materials classified into primary categories: 'soft' materials consisting of cohesive clays and other soils, and 'hard' materials consisting of concrete or asphalt breakout.

3.2.13 The majority volume of the "soft" material, including cohesive and other soils, will be generated from various earthwork excavation activities such as the Museum Field Flood Compensation Area, River Mole reconfiguration, Car Park X Y flood storage areas, Northern Runway realignment, taxiways, and Charlie Box.

3.2.14 The total volume of the "hard" material arising from the breakouts will be produced from the works to relocate the Northern Runway and reconfigure the taxiways, piers, and stands.

3.2.15 The reuse and processing of this material is discussed in section 4.5.10

4 Anticipated Waste Arisings

4.1 Schedule of Buildings/Structures to be Demolished

4.1.1 The buildings and structures to be demolished or relocated as part of the Project include:

- Decommissioned airfield operations building, including emergency air traffic control tower.
- Central Area Recycling Enclosure (CARE) and motor transport, surface transport and ground maintenance facilities.
- Former TCR Snowbase building.
- Substations A, BK, J, BP, BR, BJ and BM.
- Pumping stations 2, 3, 4, 5, 17 and 45.
- Part of Purple Parking decked structure Pond A (removal and infill).
- Parts of the existing fire training area.
- Summer Special Parking and Flying Pan Parking.
- Car Park W, Car Park B and Car Park H.

4.1.2 In addition to the above, redundant areas of hardstanding across the site, including those that currently form part of the northern runway and existing taxiways, will be removed.

4.2 Schedule of Buildings/Structures to be Constructed

4.2.1 The buildings and structures to be constructed as part of the Project include:

- alterations to the existing northern runway, including construction of a new 12 metre strip to the north of the northern runway and resurfacing of the 33 metre wide strip of retained existing runway;
- reconfiguration of taxiways, including extension/alterations to Taxiways Juliet, Lima, Tango, Whiskey, Victor and Uniform and Zulu;
- reconfiguration of an existing apron area (Charlie Box);
- new/alterd exit taxiways;
- new end around taxiways;
- new Pier 7;
- reconfiguration of existing aircraft stands and construction of new intermediate hold/remote stands;
- relocation of CARE, motor transport, grounds maintenance and surface transport facilities;
- relocation of fire training ground and training equipment;
- construction of new satellite airport fire service;
- construction of new hangar;

- construction of noise mitigation bund/barrier;
- changes to internal access routes;
- highway improvements;
- extensions to North and South Terminals and forecourt enhancements;
- new hotel and commercial facilities - including a new hotel at the South Terminal and at the existing car rental location; and three new office blocks to serve internal airport uses;
- new car parks – including new multi-storey car parks, decked car parks and surface car parking;
- Substations (A, BK, J, BP and BR); and
- new pumping stations (2a and 7a).

4.3 Other Works

4.3.1 In addition to the reconfiguration of buildings and structures within Gatwick Airport, the Project involves other works that would also generate waste. These works include:

- Water management – including realignment of the existing surface water drainage infrastructure along Taxiway Yankee to connect to Pond D, creation of additional runoff treatment and storage area (ie underground storage area under car park Y).
- New treatment works south of the pollution storage lagoons.
- Provision of additional floodplain capacity – including lowering Museum Field, diverting the River Mole and creating a flood compensation area, lowering car park X and creating a new attenuation facility at car park Y.
- Improvements to foul drainage system – including new pumping stations.
- Surface access improvements – including a new junction at the South Terminal providing full grade separation, a new grade-separated junction at the North Terminal removing the A23 westbound traffic from the North Terminal roundabout and improvements to the Longbridge roundabout.

4.4 Estimated Waste Arisings

Waste Categories

4.4.1 At a strategic level, the key waste types generated from the construction of the Project can be classified as follows.

- INERT – wastes that will not cause adverse effects to the environment when disposed of, or do not decompose and they have no potentially hazardous content when deposited in a landfill. Examples of inert wastes are rocks, concrete, mortar, glass, uncontaminated soils and aggregates.

- NON-HAZARDOUS – wastes that will decompose when buried resulting in the production of methane and carbon dioxide. Examples of non-hazardous wastes include timber, paper and cardboard.
- HAZARDOUS – wastes that are harmful to human health or the environment (for example, causing pollution of watercourses) if they are incorrectly handled, stored, treated or disposed of. Hazardous wastes may have one or more of the following properties: explosive, corrosive, flammable, highly flammable, infectious, oxidising or sensitising.

4.4.2 As a requirement of the CEP, the definitions of these waste types have been amended in line with the wording from Article 2(a) of the Landfill Directive.

4.4.3 Construction and demolition wastes will be described according to the general List of Waste Categories (also known as the waste classification codes) as set out in Annex 1. The list has been taken from the 'Guidance on the classification and assessment of waste (1st Edition v1.2.GB). Technical Guidance WM3' (Environment Agency *et al.* 2021). The waste code, together with any other relevant observations about the waste will be recorded on the waste transfer note.

4.4.4 Prior to construction, the types and quantity of wastes likely to be generated during the demolition and construction of buildings, structures and other works (see Sections 4.1, 4.2 and 4.3 above) will be set out in the Waste Forecast sheets of the SWMP (see Annex 1). The forecast is a useful internal planning tool to record the types of waste that would be generated. Internal targets will be set for different waste types and entered into a Waste Estimates Data Sheet. This provides a more detailed breakdown of how the wastes would be managed (e.g. reused on site, recycled on site, recycled off site). Waste estimates will be reviewed and updated accordingly to reflect changes to detailed design decisions, or construction methodologies. Any updates to the waste estimates will be recorded together with an explanation of the changes.

4.4.5 Once construction is underway, the Principal Contractors will complete the Waste Management Data Sheet (see Annex 1). These sheets will be updated every time waste is removed from the site and will record:

- the types and quantities of waste produced;
- the types and quantities of waste that have been re-used/ recycled/ recovered/ landfilled or otherwise disposed of on or off site;

<ul style="list-style-type: none"> ▪ the registration number of the waste carrier; ▪ a copy of or reference to the written description of the waste; and ▪ details of the site where the waste is taken to and its permit number. 	<p>4.5.3 Waste will be minimised by removing components products and materials suitable for reuse/recycling/recovery prior to demolition. A pre-demolition audit will be undertaken for all buildings and structures to identify opportunities for assets, products and materials to be reused, recycled or recovered. The type, quantity and condition of materials will be recorded. A similar record of hazardous materials will also be prepared.</p>	<p>stored in separate, secured containers and sent off to a registered waste facility.</p>
<p>4.4.6 Waste management data will be compiled into monthly reports to monitor progress toward achieving the targets and corrective action will be taken as required.</p>	<p>4.5.4 Prior to demolition, these materials will be removed and movements of waste from the site will be recorded in the SWMP.</p>	<p>4.5.10 The overall objective for managing earthwork materials is to maximise material reuse, reduce truck movements as far as possible in handling materials, and reduce the amount of material that must be taken for management off-site. The fundamental principles of material reuse are set out below.</p>
<p>4.4.7 On completion of construction, a comparison of the estimated waste arisings and the actual waste management data will be undertaken. Any differences between the estimated and actual waste arisings will be used to assess the effectiveness of the waste minimisation and management measures. Variances of 5% or greater between the waste estimates and actual data will be fed into a lessons learnt exercise.</p>	<p>4.5.5 Bulk materials from the demolition of buildings and structures on site will be stockpiled to allow pre-treatment (i.e. crushing) for reuse on or off- site, or they would be removed off-site for recycling or disposal.</p>	<ul style="list-style-type: none"> ▪ Maximise reuse of materials <ul style="list-style-type: none"> – Plan for including the excavated material in the construction of new elements, including the on-site crushing of materials obtained from the demolition of structures and pavement. – Plan for the additional testing of the materials to validate the reuse assumptions.
<p>4.5 Resource and Waste Management Measures</p>		
<p>4.5.1 The majority of opportunities to minimise the amount of waste generated by a development occur during the design stage. The detailed design of the new buildings and structures will seek to maximise resource efficiency by considering the following circular economy principles:</p>	<p>4.5.6 During construction, wastes will be segregated into waste types to facilitate off-site recycling (for example, metals, wood, plastic). The layout of the construction site has been designed to allow sufficient space for separate containers of key waste materials to be stored. These containers will be clearly labelled and construction staff will be given training on waste segregation.</p>	<ul style="list-style-type: none"> ▪ Minimise handling of materials <ul style="list-style-type: none"> – Keep material on-site, wherever possible, as close to the excavation and deposit sites as feasible. – Make use of stockpiles on site to store the material until it is needed.
<ul style="list-style-type: none"> ▪ Building in layers (ensuring that different parts of the building are accessible and can be maintained and replaced where necessary). ▪ Designing out waste – ensuring that waste reduction is planned in from project inception to completion. ▪ Designing for longevity. ▪ Designing for adaptability or flexibility. ▪ Designing for disassembly. ▪ Using systems, elements of materials that can be reused or recycled. 	<p>4.5.7 Concrete from the redundant areas of hardstanding, including the redundant strip of runway/redundant sections of taxiways would be excavated to an agreed depth. Uncontaminated concrete and asphalt layers will be crushed and screened on site for re-use in the construction process. A temporary mobile crushing unit will be set up on the site alongside the laydown area. An environmental permit will be obtained from the relevant planning authority to manage the dust emissions from the crushing process. The reprocessed material will be used on site under a waste exemption. Crushed and screened hard excavation materials will be used as a high-quality granular material suitable for construction purposes including:</p> <ul style="list-style-type: none"> ▪ Aggregate for wet lean concrete in pavements, taxiways, and aprons ▪ Granular material for haul roads and new surface car parks ▪ Granular fill for future Gatwick Surface Access Road projects. 	<ul style="list-style-type: none"> ▪ Minimise the amount of material sent for management offsite <ul style="list-style-type: none"> – Stockpile material on site to supply the right kind of material for use in the construction of new elements. – Where possible, provide remediation on-site to remove contaminants before the beneficial reuse of the material.
<p>4.5.2 Designing out waste opportunities that have been identified and investigated by the Project to date are as follows and will be contained within the SWMPs prepared post consent:</p>	<p>4.5.8 Any surplus material will be exported offsite to be reused, recycled or recovered.</p>	<p>4.5.11 Non-hazardous excavated spoil will be reused on site where possible. The re-use of this material will be managed in accordance with the CL:AIRE Code of Practice. The process will include a soil assessment to demonstrate its suitability for reuse, a volumetric study to calculate the volume of material that can be reused on the site, a tracking system to record the movement of material and a verification plan. The process will be documented in a Materials Management Plan that will be prepared post consent and prior to construction. It will set out the management of excavated material on the site and provides the evidence needed to avoid this material being deemed to be a waste.</p>
<ul style="list-style-type: none"> ▪ designing the Project that facilitates the reuse of components, products and materials e.g. window frames, doors, structural steel and non-hazardous excavated materials etc. ▪ designing compounds to enable segregation and storage of waste, to facilitate offsite recycling or recovery. ▪ setting overall targets to divert waste from landfill ▪ setting overall resource efficiency targets. 	<p>4.5.9 In addition to concrete, blocks and bricks, demolition arisings from structures may also contain contaminants such as asbestos. Such materials will be managed as hazardous waste and will be</p>	<p>4.5.12 However, due to a lack of available space for storing spoil and the indicative sequencing of construction, it is likely that the remainder of spoil will have to be taken off site. At this point, the</p>

spoil will be considered to be a waste. Where spoil has to be removed from the site, measures will be taken to keep the amounts to a minimum; the priority will be to reuse, recycle or recover the material in the local area where possible.

- 4.5.13 Cohesive material generated from excavation works will be reused at Pentagon Field for landscaping and to improve the ecological habitat and biodiversity. The field is located to the east of the airport along Balcombe Road and an estimated total of 100,000 m³ of cohesive material will be reused in this location
- 4.5.14 Opportunities will be explored to reuse offsite the surplus cohesive material of the Weald Clay Formation which cannot be retained on site, including potential for brickworks operators within the county to receive incidentally recovered brick clay.
- 4.5.15 The designing out waste opportunities that will be investigated further during detailed design are described below and will be reported in the SWMPs:
 - using off site manufacture of design elements;
 - incorporating temporary working platforms (created during the construction phase to allow plant and vehicles to travel and operate) into the final structure;
 - improving wastage rates during procurement;
 - purchase requirements.
- 4.5.16 Waste will also be minimised by improving wastage rates when ordering materials. Waste allowances are generally included within material orders to take into account design waste and construction process waste. These waste allowances are often generic and not project specific and, therefore, run the risk of being inaccurate. This can lead to a surplus of materials, which typically ends up being discarded (i.e. waste). A system would be put in place to improve on existing estimates of material requirements (and waste allowances) at the detailed design stage.
- 4.5.17 Opportunities will be considered for offsite manufacture of design elements and using pre-fabricated materials for on-site assembly. Buildings/structures will be designed to standard dimensions of blocks or frames to minimise off-cuts; and internal materials and fittings would be pre-cut to reduce the need for site cutting.
- 4.5.18 On appointment of the construction team, the buyer would discuss the purchasing requirements with the site manager to identify priorities and review the quotations received. Materials would be checked against the material specifications as part of the quality control system. During procurement the buyer will

agree minimum allowed variances in the delivered quantities of material compared to the design quantity (i.e the quantity ordered). Where possible, hazardous materials will be substituted for less hazardous alternatives.

- 4.5.19 The following measures will be implemented during construction to minimise the quantities of waste requiring disposal:
 - a logistics system which allows 'just-in-time' deliveries to minimise the length of time materials are stored on site which increases the risk of damage and disposal as waste;
 - providing suitable and secure storage for materials where 'just-in-time' deliveries cannot be set up;
 - agreements with material suppliers to reduce the amount of packaging
 - mechanical systems and machinery would be considered for moving materials to reduce the risk of damage; and
 - where possible, programming and monitoring construction activities to avoid overlap of incompatible trades working in the same area and to reduce the potential for waste to be generated from replacing damaged work.
- 4.5.20 Clearance of vegetation will be undertaken during the winter months where practicable (and compatible with ecological constraints) to minimise the quantities of material to be removed. Green waste will be composted off-site at an appropriate facility. Opportunities would be investigated to retain woody material on site for landscaping and ecological planting.
- 4.5.21 The Principal Contractor will consider the use of recycled materials where possible, subject to cost and availability (for example, recycled aggregate and secondary aggregates for use in concrete, or granular fill). Any recycled content materials will also have to meet GAL technical standards.
- 4.5.22 A responsible approach would be taken in managing resources in the construction phase. Specification of construction materials would follow best practice in selecting material that is responsibly sourced with low environmental impact and maximising efficient use of resources. All timber products would be responsibly sourced from reputable suppliers as per the UK Government's Timber procurement policy.
- 4.5.23 All waste that cannot be reused, recycled or recovered would be collected by the licensed waste management contractor and disposed of at a permitted site suitable for the type of waste. Burning of surplus material or material arising from the site construction would not be permitted.

Setting Targets for Resource Efficiency and to Divert Waste from Landfill

- 4.5.24 Resource efficiency targets will be set during the detailed designed stage for specific materials. This will include targets for alternative aggregates (comprising secondary aggregates and recycled aggregates) and recycled content materials such as steel reinforcement subject to the appropriate specifications for the Project being met.
- 4.5.25 The Project will aim to achieve the following targets for construction and demolition waste (excluding spoil) generated by the Project:
 - divert 90% (by weight) of non-hazardous demolition materials from landfill; and
 - divert 80% (by weight) of non-hazardous construction waste (ie non-demolition waste) from landfill.
- 4.5.26 Diversion from landfill will be achieved through a combination of on site and off site reuse, recycling and recovery opportunities subject to the construction programme and available capacity on the site.
- 4.5.27 The targets exceed the target set by the Waste (England and Wales) Regulations 2011 (as amended), which requires that a minimum of 70% of construction and demolition waste should be prepared for reuse, recycling or other material recovery.
- 4.5.28 Where applicable, further targets would be set during the detailed design stage to reduce, reuse or recycle key waste materials on and off site. The targets will be incorporated into the contract specifications with contractors post consent.
- 4.5.29 Non-hazardous excavated spoil will primarily be re-used on the site and managed through the CL:AIRE Code of Practice (see paragraph 4.5.12). The Project will aim to maximise re-use of the non-hazardous excavated spoil on site. The remaining material will be taken off site: the Project will aim to divert all of this material from landfill where possible.

Storage of Waste

- 4.5.30 Waste storage areas would be provided at the construction site. Each skip/container would be clearly marked to indicate the intended contents and would be suitable for the storage of the specified contents. All skips/containers would be covered to prevent the escape of waste by wind blow or vandalism. If liquid

waste is being stored, an appropriate bund and drip pans would be in place.

4.5.31 Storage areas would be located away from potential contaminant pathways such as drains, and excavations and trenches. Any hazardous waste would be stored safely in a designated area away from non-hazardous and inert wastes and labelled accordingly.

Registered Carriers

4.5.32 To meet the requirements of Section 34 of the Environmental Protection Act 1990, waste materials arising from the construction of the Project will only be transported by waste carriers and hazardous waste carriers holding a valid registration with the Environment Agency. All waste on site will be characterised and recorded: the waste streams would be classified in line with technical guidance (see Annex A). Each consignment of waste removed from the construction site would be accompanied by a waste transfer note (or hazardous waste consignment note as appropriate), which correctly describes the waste using the European Waste Catalogue code, identifies the waste carrier and where the waste will be transported to. Requirements for transferring waste and registered waste carriers are set out in Part 8 and 9 of the Waste (England and Wales) Regulations 2011. The waste would only be transferred to facilities that have the benefit of a registered waste exemption, or an environmental permit and appropriate planning consent. Due diligence of planning consent and environmental permit would be undertaken before waste from the Project is taken to waste facilities. Periodic audits would be undertaken of these facilities.

Invasive species

4.5.33 Himalayan Balsam was identified on the banks of the watercourses on site. This invasive species and any others encountered will be managed in accordance with Natural England and Defra guidance (Natural England and Defra, 2019). Guidance is also available from the Environment Agency (Environment Agency, 2013 Managing Japanese Knotweed on Development Sites: The Knotweed Code of Practice) and whilst the document has been withdrawn, it still remains a useful source of information.

5 Existing Waste Management Infrastructure

5.1 Existing Waste Facilities

5.1.1 The Environment Agency were asked to provide details of the existing waste management facilities within 15 km of Gatwick Airport. Table 5.1.1 lists these facilities and their location is shown on Figure 5.1. All of these facilities have secured planning consent in addition to having an environmental permit.

Table 5.1.1: Existing Waste Management Facilities

Existing Waste Management Facilities within 15 km of the Site				
Ref	Permit	Operator	Site Name	Site Type
1	83609	Viridor Waste Management Ltd	Crawley Recycling Site	Household and C&I waste transfer station
2	400201	United Grab Hire	United Yard	Physical treatment yard
3	83315	UK Power Networks	Stephenson Way	Special waste transfer station
4	101261	DHL Supply Chain Ltd	Gatwick Waste Care Centre	Special waste transfer station
5	403702	Platinum International Ltd	Platinum International Ltd	Metal recycling site
6	103454	Day Group Ltd	Day Aggregates Depot	Treatment of waste to produce soil
7	103736	Cook and Son Ltd	Rowley Farm	Treatment of waste to produce soil
8	83157	Simmonds	Elliott Metals	Metal recycling site
9	401997	Britaniacrest Recycling Ltd	Former Wealden Brickworks	Household and C&I waste transfer station
10	400796	Biffa Waste Services Ltd	Brookhurst Wood	Physical treatment facility
11	19668	Langridge	Parsonage Farm	Metal recycling site
12	404639	Bell & Sons	Bell & Sons Construction Yard	Treatment of waste to produce soil

Existing Waste Management Facilities within 15 km of the Site				
Ref	Permit	Operator	Site Name	Site Type
13	19584	Cox Skips Ltd	Burleigh Oaks Farm	Household and C&I waste transfer station
14	102086	TJS Services	Copthorne Yard	Physical treatment facility
15	104417	Royal Botanical Gardens Kew	Royal Botanical Gardens, Wakehurst	Composting facility
16	103488	Cook & Son Ltd	Holmsted Farm	Deposit of waste to land as recovery
17	100690	Sustainable Cabin Services	Sustainable Cabin Services	HCl waste transfer & treatment
18	19674	Suez Recycling	Capel Landfill Site	Co-disposal landfill site
19	83195	J&J Franks Ltd	Reigate Road Sandpit Landfill	Landfill taking non-biodegradable waste
20	83667	J&J Franks Ltd	Reigate Road Quarry	Special waste transfer station
21	402284	Ford	Swires Farm	Composting biodegradable waste
22	83594	Fuller Grab Hite Ltd	Hurstridge	Physical treatment facility
23	405037	Enlightened Lamp Recycling	Mercury Recovery	Physico- chemical treatment facility
24	402355	J&J Franks Ltd	Mercers South Quarry	Deposit of waste onto land as recovery
25	83204	Britaniacrest Recycling Ltd	Britaniacrest Recycling Ltd	Special waste transfer station
26	83596	J&J Franks Ltd	Betchworth Sand Quarry Ltd	Inert landfill
27	83202	Reigate & Banstead Council	Earlswood Depot	Household and C&I waste transfer station

Existing Waste Management Facilities within 15 km of the Site				
Ref	Permit	Operator	Site Name	Site Type
28	402814	PJ Brown	Lomond Equestrian Centre	Deposit of waste onto land as recovery
29	103661	Motion Hire Ltd	Perrylands Lane	Treatment of waste to produce soil
30	104457	Biffa Waste	Redhill Landfill	Treatment of waste to produce soil
31	83374	Etherington Ltd	Materials Recycling Facility	Household and C&I waste transfer station
32	104100	Egap Recycling Ltd	Egap Recycling Centre	Transfer station
33	403284	Blockade Services Ltd	South Godstone Quarry	Transfer station
34	10038/19578	County clean Waste Recycling	Unit 35, Hobbs Ind. Estate	Physical treatment facility
35	402432	DJ Grab Services	Ellerton Yard	Physical treatment facility
36	402329	Cook & Son Ltd	Churchill Farn	Deposit of land as recovery
37	403172	J&J Franks Ltd	Glebe Lake	Deposit of waste as recovery
38	403470	Blockade Services Ltd	South Godstone Brickworks	Deposit of waste as recovery
39	104918	R Exall & Sons	R Exall and Sons	Treatment of waste to produce soil
40	120003	Fisher Recycling Ltd	Fisher Recycling Ltd	Treatment of waste to produce soil

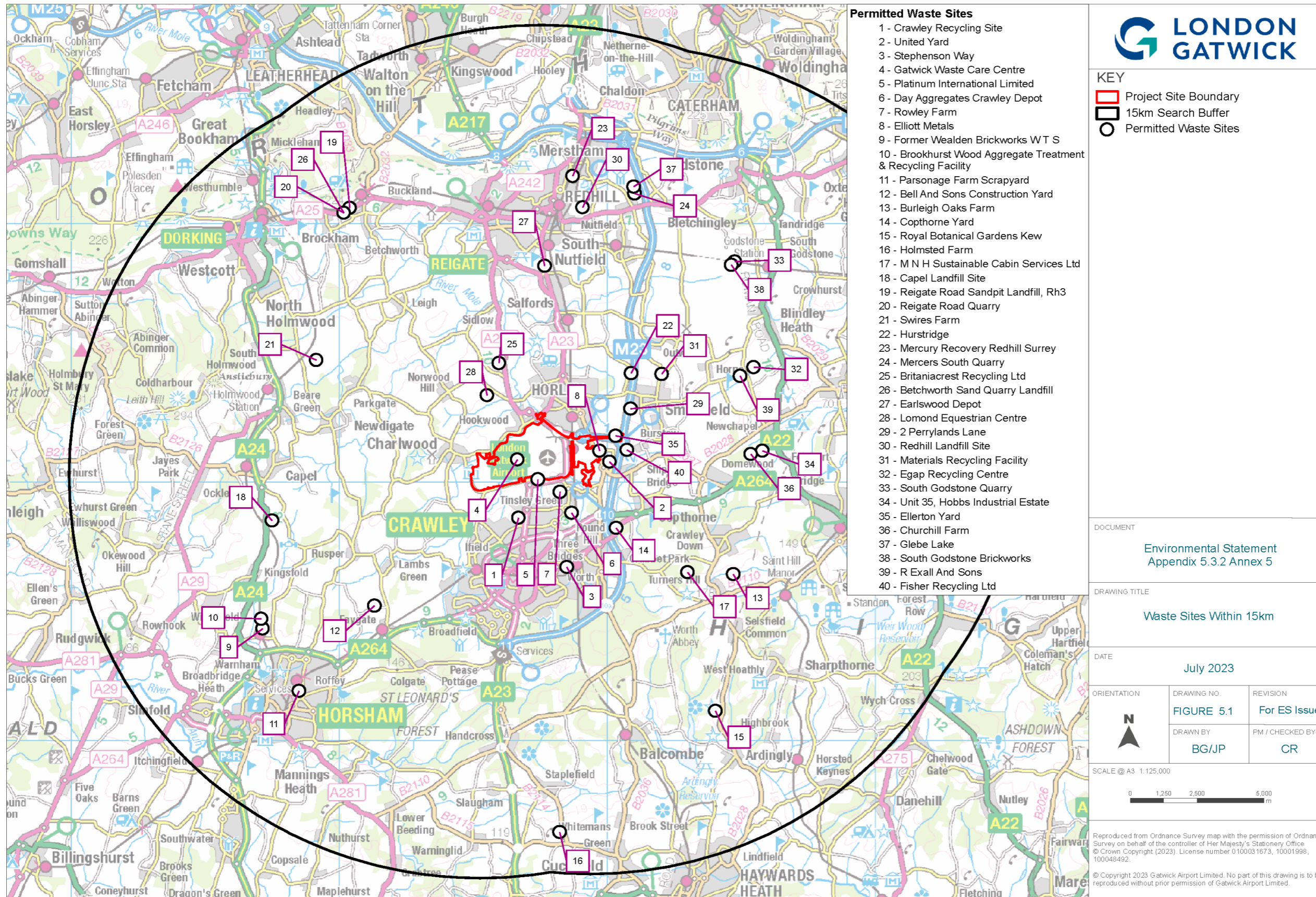


Figure 5.1: Waste Sites within 15km in 2019

5.2 Waste Streams

Existing

<p>5.2.1 The waste streams identified in the Waste Local Plan (West Sussex County Council (WSCC) and South Downs National Park Authority (SDNPA),2014) and updated by the Monitoring Report 2021/2022 which are relevant to the Project are as follows.</p> <ul style="list-style-type: none"> ▪ Construction, Demolition and Excavation (CD&E) waste: arisings for this waste stream in 2021/22 were 979,000 tonnes. Arisings have increased compared to a drop in the previous monitoring year which has been attributed to reduced levels of construction during COVID. It predominantly comprises inert materials such as soils, concrete and rubble much of which can be recycled on site using mobile plant. In 2021/22, the percentage of CD&E waste that was recycled had increased to 36% (from 29% during the previous monitoring period). Where inert waste was not recycled, the majority was used in recovery operations (e.g. landfill restoration) and therefore, can be classed as 'recovered'. ▪ Commercial and Industrial (C&I) waste: this includes a wide range of waste types from shops, industrial and business premises (e.g. waste food and waste packaging). Total C&I arisings for 2021/22 were 294,000 tonnes. The amount of C&I waste being sent to landfill has been decreasing since 2013 and recycling rates for this monitoring year were 55%. ▪ Hazardous waste: this includes waste which has hazardous properties or requires specialist techniques to avoid handling or disposal problems. Approximately 30,400 tonnes of hazardous waste were generated in West Sussex in 2010, of which around 25,000 tonnes were exported out of the county. This waste stream has been included in the figures for CDE and C&I waste above. No updates to hazardous wastes were reported in the 2021/22 monitoring report. 			
<p>5.2.2 According to the Review of the Waste Local Plan (WSCC and SDNPA, 2019) and the 2021/22 monitoring report West Sussex was a net-importer of all waste, with approximately 36,433 tonnes more imported than exported. For overall landfill and recovery of inert waste, recycling and treatment, West Sussex was a net importer (net import of 123,884 tonnes). This is largely due to inert waste recovery.</p>	<p>5.2.4 With regards to imports and exports of waste, the 2021/22 monitoring report goes onto state that <i>'although West Sussex did not achieve neutral imports and exports for recycling during 2021/22, it is expected that this will continue to change as the waste industry continue to move waste according to markets'</i>.</p>	<p>5.2.10 CD&E waste will continue to be managed via a combination of permanent and temporary recycling sites and inert recovery projects which are not included in the Waste Local Plan's list of allocated sites.</p>	<p>5.2.11 The 2021/22 monitoring report confirms that there are no active inert landfills within the county. However, inert waste that cannot be recycled is typically recovered through engineering projects. In 2021/22 there were seven sites with permitted capacity to accept inert waste for 'recovery' representing a 'recovery capacity' of 3.25mt. It is estimated that the remaining inert 'recovery capacity' will run out in 2025/26, however the monitoring report states that <i>'experience has shown that new proposals generally come forward to meet demand'</i>.</p>
<p>5.2.3 Transfer and metal recycling have largely remained stable with small deviations from neutral imports and exports.</p>	<p>5.2.5 West Sussex County Council, together with other Waste Planning Authorities in the South East, has agreed to plan for net self-sufficiency allowing for waste to continue to move as required.</p> <p>Forecast</p> <p>5.2.6 Waste arisings to 2031 have been forecast in the West Sussex Waste Local Plan (WSCC and SDNPA, 2019) taking into account factors such as the impact of economic recession and the impact of waste reduction initiatives. The methodology used in the Waste Local Plan to forecast waste growth was based on the 'point of production' method. Since then, a more accurate method (the 'reconcile method') has been applied and the updated forecasts reported in the Review of the Waste Local Plan (WSCC and SDNPA, 2019) are as follows (noting that the forecasts exclude wastes from the Project):</p> <ul style="list-style-type: none"> ▪ in 2031, CD&E waste arisings (under the high growth scenario) are predicted to be up to 1.028 million tonnes (this is 21,000 tonnes lower than the original high growth forecast that underpinned the Waste Local Plan); and ▪ in 2031, C&I waste arisings (at the highest growth rates) are predicted to be 325,000 tonnes. <p>Capacity</p> <p>5.2.7 According to the West Sussex Waste Local Plan (WSCC and SDNPA, 2014) there is insufficient capacity at existing waste management facilities in West Sussex to secure the maximum recovery of waste through recycling, composting or energy generation.</p> <p>5.2.8 The aspiration of the Waste Local Plan is to become a 'zero waste to landfill' county. However, it acknowledges that there will continue to be a need for some landfill capacity to deal with residual waste before new recycling waste and treatment facilities are commissioned.</p> <p>5.2.9 The Waste Local Plan (WSCC and SDNPA, 2014) has identified a number of potential sites within the county for future waste management infrastructure, which will be safeguarded from future development.</p>	<p>5.2.12 New transfer capacity has been permitted at the Former Wealden Brickworks for a recycling, recovery and renewable energy facility, which will meet some of the shortfall identified in the 2021/22 monitoring plan. Additional capacity has also been permitted for the recycling and composting of non-inert waste together with an additional 50,000 tonnes of capacity that is 'not operational'. For aggregate recycling, the 2021/22 plan identifies a 'headroom' capacity of 222,000 tonnes per annum at 'operational' sites. The temporary nature of aggregate recycling means that capacity generally fluctuates on an annual basis, however the need to restore quarries requires new sites to be permitted as temporary sites close.</p> <p>5.2.13 There are currently no active non-inert landfill sites in the county, however an extension to Brookhurst Wood landfill site has been allocated and could provide 0.86mt of additional capacity if required. Consent has recently been granted for a soil washing facility for a three-year period, after which WSCC will consider if the land is required for landfill.</p> <p>5.2.14 Although shortfalls in capacity have been identified for some waste facilities in the county, the 2021/22 monitoring plan indicates that additional capacity has become available or will become available in the short term. There is also an understanding that there will a greater movement of waste in response to waste markets. This suggests that there will be additional waste management capacity within West Sussex, however as the waste forecasts for the Project have not yet been defined, it cannot be confirmed if this capacity is sufficient to manage waste from the Project in line with the principle of net self-sufficiency.</p>	

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7 Glossary

7.1 Glossary of terms

Table 7.1.1: Glossary of Terms

Term	Description
C&I	Commercial and Industrial
CARE	Central Area Recycling Enclosure
CD&E	Construction, Demolition and Excavation
CEP	Circular Economy Package
CL:AIRE	Contaminated Land: Applications in Real Environments
CoP	Code of Practice
Defra	Department for Environment and Rural Affairs
EfW	Energy from Waste
ES	Environmental Statement
MMP	Materials Management Plan
mppa	Million passengers per annum
MRF	Material Recovery Facility
mtpa	Million tonnes per annum
NPS	National Policy Statement
PEIR	Preliminary Environmental Information Report
RWS	Resources and Waste Strategy
SDNPA	South Downs National Park Authority
SIC	Standard Industry Classification
SWMP	Site Waste Management Plan
SWRMP	Site Waste and Resource Management Plan
WEEE	Waste electronic and electrical equipment
WRAP	Waste and Resources Action Programme
WSCC	West Sussex County Council

Annex A

Template for Site Waste Management Plan Minimisation

A.1 Waste Minimisation

A.1.1 Decisions taken during the design process to minimise waste will be recorded in the table below

Table A1. 1: Waste Minimisation Measures Template

Approach to designing our waste	Measures to be implemented
Reuse and recovery	
Off site construction	
Materials optimization	
Waste efficient procurement	
Deconstruction and flexibility	

A.2 Waste Forecasts

A.2.1 The Waste Forecast tables and the Waste Estimates Data Sheet will be completed by the designers and updated by the Principal Contractor prior to construction to document how waste has been considered with regard to the likely types and quantities of waste to be generated during construction and how they will be managed.

Table A2. 1: Waste Forecast Table Template

Building or Structure	Waste Category	Type of Waste	EWC Code	Estimated Quantity (m ³)	Target for Reuse/Recycling %
Pavement Demolition	Hazardous	Bituminous mixtures containing coal tar	17 03 01		
	Non-hazardous	Other bituminous mixtures	17 03 02		
Structure demolition	Hazardous	Coal tar and tarred products	07 03 03		
	Inert	Concrete	17 01 01		
	Inert	Bricks	17 01 02		
	Inert	Tiles and ceramics	17 01 03		
	Hazardous	Concrete, bricks, tiles and ceramics (alone or in mixtures) containing hazardous substances	17 01 06		
	Non-hazardous	Concrete, bricks, tiles and ceramics (alone or in mixtures) containing no hazardous substances	17 01 07		
	Inert	Mixed metals	17 04 07		
	Hazardous	Gypsum materials containing hazardous substances	17 08 01		
	Non-hazardous	Other gypsum materials	17 08 02		
	Non-hazardous	Timber			
	Hazardous	Materials containing asbestos	17 06 05		
Earthworks (soft dig from excavations)	Non-hazardous	Other soil and stones	17 05 04		
	Hazardous	Soil and stones containing hazardous substances	17 05 03		
Site clearance	Hazardous	Soil and stones containing hazardous substances	17 05 03		
	Non-hazardous	Other soil and stones	17 05 04		
	Non-hazardous	Vegetation			

A.3 Waste Estimates Data Sheet (to be completed pre-construction)

Table A3. 1: Waste Estimates Data Sheet Template

Project Component:									
Waste Category & Type	EWC Code	Reused On Site (m ³)	Reused Off Site (m ³)	Recycled On Site (m ³)	Treatment Required (Y/N & Type)	Recycled Off Site (m ³)	Recovered (On/Off Site) (m ³)	Sent to Permit Exempt Site	Sent to Landfill Site for Disposal
INERT									
Sub TOTAL									
NON-HAZARDOUS									
Sub TOTAL:									
HAZARDOUS									
Sub TOTAL									
TOTAL VOLUMES									

A.4 Waste Categories

A.4.1 The waste generated during construction will be assigned a European Waste Catalogue code. A list of relevant codes is provided in the table below. These codes will be provided on each waste transfer note that will accompany every movement of waste from the site.

Table A4. 1: List of Waste Categories for Construction Wastes

17 Construction and demolition wastes (including excavated soil from contaminated soils)	
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances
17 01 07	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics
17 02	Wood, glass and plastic
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substance
17 03	Bituminous mixtures, coal tar and tarred products
17 03 01*	Bituminous mixtures containing coal tar
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 03 03*	Coal tar and tarred products
17 04	Metals (including their alloys)
17 04 01	Copper, bronze, brass
17 04 02	Aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 09*	Metal waste contaminated with hazardous substances
17 04 10*	Cables containing oil, coal tar and other hazardous substances
17 04 11	Cables other than those mentioned in 17 04 10
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil

17 Construction and demolition wastes (including excavated soil from contaminated soils)	
17 05 03*	Soil and stones containing hazardous substances
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 05 05*	Dredging spoil containing hazardous substances
17 05 06	Dredging spoil other than those mentioned in 17 05 05
17 05 07*	Track ballast containing hazardous substances
17 05 08	Track ballast other than those mentioned in 17 05 07
17 06	Insulation materials and asbestos-containing construction materials
17 06 01*	Insulation materials containing asbestos
17 06 03*	Other insulation materials consisting of or containing hazardous substances
17 06 04	Insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	Construction materials containing asbestos
17 08	Gypsum-based construction materials
17 08 01*	Gypsum-based construction materials contaminated with hazardous substances
17 08 02	Gypsum-based construction materials other than those mentioned in 17 08 01
17 09	Other construction and demolition wastes
17 09 01*	Construction and demolition wastes containing mercury
17 09 02*	Construction and demolition wastes containing PCB (for example, PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)
17 09 03*	Other construction and demolition wastes (including mixed-wastes) containing hazardous substances
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

*denotes a hazardous waste

A.5 Waste Management Data Sheet (to be completed each time waste is removed off site/track reuse on site)

A.5.1 The Waste Management Data Sheet will be completed during construction to document every consignment of waste removed from the site and how it is being managed. It will also record where waste has been reused and/or recycled on the site.

Table A5. 1: Waste Management Data Sheet Template

Project Component:														
Waste Category & Type	EWC Code	Date	Waste Transfer Note (Y/N)	Waste Carrier Registration Number	Name and Location of Waste Site	Permit number	Reused On Site	Reused Off Site	Recycled On Site	Treatment Required	Recycled Off Site	Recovered On/Off Site	Landfill	Load Cost
INERT														
Sub TOTAL NON-HAZARDOUS														
Sub TOTAL HAZARDOUS														
Sub TOTAL TOTAL														

:

Annex B

Template for Resource Management Plan

B.1 Main types and quantities of material resources, wastage and potential recycled content

Table B1. 1: Main Types and Quantities of Material Resources, Wastage and Potential Recycled Content Template

Material Category	Material density	Quantity to be used in construction		Wastage rate	Wastage		Potential recycled content (% by weight)	Potential recycled content (tonnes)
	(tonnes/m ³)	m ³	tonnes	%	m ³	tonnes		
TOTAL								