

122 OLD HALL STREET, LIVERPOOL

WASTE MANAGEMENT STRATEGY

NOVEMBER 2016

**122 OLD HALL STREET,
LIVERPOOL**
WASTE MANAGEMENT STRATEGY
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Project no: 70023367
Date: November 2016

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QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
Remarks	Draft	Final		
Date	31 st October 2016	14 th November 2016		
Prepared by	Christopher Parr	Christopher Parr		
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Signature				
Project number	70023367	70023367		
Report number	001	002		
File reference	M:\E27 - Waste\Projects\122 Old Hall Street, Liverpool	M:\E27 - Waste\Projects\122 Old Hall Street, Liverpool		

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1 INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 WSP | Parsons Brinkerhoff has been commissioned by 122 Old Hall Street Limited to prepare a Waste Management Strategy for Ovatus I, Liverpool (hereafter referred to as the 'Proposed Development').

1.1.2 This Waste Management Strategy considers the potential impacts that may arise from waste generated during the construction and operational phases with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage, collection, treatment and/or disposal of waste arising.

1.1.3 The report also outlines the opportunities for implementing waste mitigation measures for the potential impacts arising during each phase of the development in order to ensure that such measures are consistent with both Government and local authority waste policies and targets.

1.2 PROPOSED DEVELOPMENT

1.2.1 The development assessed within this report is part of a wider proposed scheme which consists of two separate residential towers within the site, named Tower 1 (T1) and Tower 2 (T2). T1 is proposed for the area of the site currently occupied by the car park accessed off Back Leeds Street. T2 is currently proposed to be situated in the location of the existing datacentre.

1.2.2 It is understood that all proposals for T2 will be assessed under a separate planning application; therefore this report considers the assessment for T1 only.

1.2.3 The proposals for T1 consist of a 27 storey residential tower comprising a reception area with mezzanine level at ground floor, one level for transfer (cycle parking) and 26 levels of residential development of which there are a mix of 168 studio, one-bed, two-bed and three-bed apartments.

1.3 REPORT STRUCTURE

1.3.1 This report is set out in the following format:

- **Section 2: Waste Legislation** – details of the national legislation that have relevance to the Proposed Development.
- **Section 3: Management of Construction Waste** – provides an estimate of construction waste arising and details how overarching waste prevention, minimisation and management practices would be undertaken during the construction phase of the Proposed Development.
- **Section 4: Management of Operational Waste** – provides an estimate of household waste arising and outlines the plan which will be adopted to successfully manage the waste arising from the Proposed Development once operational.
- **Section 5: Summary & Conclusion.**
- **Appendix I: National and Local Waste Policy & Guidance.**

2 WASTE LEGISLATION, POLICY & GUIDANCE

2.1 INTRODUCTION

- 2.1.1 This section contains details of the national legislation that have relevance to the Proposed Development. National and local waste policy and guidance reviewed during the preparation of this Waste Management Strategy are listed below.

2.2 NATIONAL LEGISLATION

- 2.2.1 A list of relevant items of national waste legislation is outlined below in reverse chronological order:

- **The Waste (England and Wales) Regulations 2011 (as amended)** – These regulations implement the revised EU Waste Framework Directive which sets requirements for the collection, transport, recovery and disposal of waste. Waste producers or those handling waste must apply the waste hierarchy as specified in the Waste Framework Directive (prevention, prepare for reuse, recycling, recovery, disposal), unless it can be justified on environmental or technical grounds that this is not appropriate. From **1 January 2015**, waste collection authorities must collect waste paper, metal, plastic and glass separately. It also imposes a duty on waste collection authorities, from that date, when making arrangements for the collection of such waste, to ensure that those arrangements are by way of separate collection.
- **Revised Waste Framework Directive (2008)** – The RWFD clarifies the definition of ‘waste’ and of other concepts such as ‘recycling’ and ‘recovery’. It implements a revised Waste Hierarchy, expands the ‘polluter pays’ principle by emphasising producer responsibility and applies more stringent waste reduction and waste management targets for Member States. It also requires Member States to take measures to promote high quality recycling and to set up separate collections of paper, plastic, metal and glass. Annex III lays out the properties of waste that render it hazardous and in 2014, a revised version was introduced setting out a new classification system for hazardous waste in line with the Classification, Labelling and Packaging (CLP) Regulations.
- **Hazardous Waste (England and Wales) Regulations 2005 (as amended)** – The regulations apply the European Waste Catalogue (EWC) or List of Wastes (LoW) and the hazardous properties set out in the WFD to classify waste as hazardous and places specific obligations on producers of such wastes.
- **Environmental Protection Act 1990. Waste Management, The Duty of Care Code of Practice 1996** – This code of practice consists of the guidance in Sections 1-7 together with their related Annexes. It was issued in accordance with section 34 (7) and (8) of the Environmental Protection Act 1990. It superseded the original guidance issued in December 1991 and is at time of writing, subject to review by DEFRA who recently undertook a public consultation on how the code could be updated to better reflect current legislation and best practice.
- **Environmental Protection Act 1990 (EPA 1990)** – Part II of the act was originally implemented by the Duty of Care Regulations 1991. The Duty of Care is a legal requirement for those dealing with certain types of waste to take all reasonable steps to keep it safe and is set out in Section 34 of the Act. The Waste (England and Wales) Regulations 2011 repealed the Environmental Protection (Duty of Care) Regulations 1991 and apply the Duty of Care requirements brought in by the Environmental Protection Act 1990.

2.3 NATIONAL & LOCAL WASTE POLICY

2.3.1

The relevant national, London and local waste policy that was reviewed during the preparation of this Waste Management Strategy is outlined below and further detail provided in **Appendix 1**:

- National Planning Policy Framework (2012);
- National Planning Policy for Waste (2014);
- Waste Management Plan for England (2013);
- Joint Merseyside and Halton Waste Local Plan- Adopted July 2013;
- The Joint Waste Recycling and Waste Management Strategy for Merseyside: Resources Merseyside 2011-2041; and
- Liverpool Core Strategy Submission Draft (2012).

3 MANAGEMENT OF CONSTRUCTION WASTE

3.1 INTRODUCTION

- 3.1.1 The following sections detail how overarching waste management practices would be undertaken during the construction phase of the Proposed Development.

3.2 CONSIDERATE CONSTRUCTORS SCHEME

- 3.2.1 In the first instance, the Principal Contractor will register with the 'Considerate Constructors Scheme'¹. This is a national initiative, set up by the construction industry. Sites that register with the Scheme sign up and are monitored against a Code of Considerate Practice, designed to encourage best practice beyond statutory requirements.
- 3.2.2 The Scheme is concerned about any area of construction activity that may have a direct or indirect impact on the image of the industry as a whole. The main areas of concern fall into three main categories: the environment, the workforce and the general public. Waste management is a key area of focus and on-site considerations may include:
- How waste is avoided, reduced, reused and/or recycled;
 - Whether there is a waste management plan/ strategy and how this monitored; and
 - The type of feedback received (if any) as to how much waste on-site is diverted to landfill.
- 3.2.3 It is expected that registered construction sites work in an environmentally conscious, sustainable manner.

3.3 SITE WASTE MANAGEMENT PLAN

- 3.3.1 As part of a drive to cut red tape, the Government revoked the requirement for Site Waste Management Plans (SWMPs) for construction projects costing over £300,000 as of 1 December 2013 and they are no longer statutory.
- 3.3.2 SWMPs remain good practice during construction, however, and allow waste credits to be achieved under the Code for Sustainable Homes and BREEAM, although SWMPs can be prepared by the Principal Contractors post planning consent.

3.4 SITE PREPARATION & EARTHWORKS

- 3.4.1 Waste arising from site clearance, primary infrastructure and earthworks is expected to comprise topsoil, rubble, tarmac from former hard standing/s, gravel and clay material.
- 3.4.2 Any clean excavated material that cannot be reused on-site would be removed by licensed waste carriers and sent for reuse at another development site or sent for disposal at appropriately licensed facilities (these are expected to be inert waste landfill sites).

¹ Considerate Constructors Scheme <http://www.ccscheme.org.uk/>

Management of Contaminated Material

- 3.4.3 Any contaminated material that would require removal from the Site would be collected by suitable waste carriers and sent for disposal at appropriately licensed hazardous waste facilities.

3.5 CONSTRUCTION WASTE

- 3.5.1 The Building Research Establishment (BRE) has developed indicators to aid in the calculation of construction waste arising at the design stage of a new development. The Environmental Performance Indicator (EPI) measures tonnes of construction waste/100m² of floor area. **Table 3.1** shows the relevant EPI for the Proposed Development.

Table 3.1: Waste benchmarks

PROJECT TYPE	TONNES/100M ² GROSS INTERNAL FLOOR AREA
Residential	16.8
Commercial Other	7.0
Healthcare	12.0
Leisure	21.6
Education	23.3
Commercial Offices	23.8
Commercial Retail	27.5

Source: BRE Waste Benchmark Data (issued June 2012)

- 3.5.2 The indicators above have been used to start measuring construction waste generated from the Proposed Development and relates to waste generation rates where no minimisation, reuse or recycling of materials has taken place. It would be the baseline figure for which a reduction in waste arising would be undertaken.
- 3.5.3 **Tables 3.2** shows the estimated construction waste arising for the Proposed Development. These figures are based on floor area of the Proposed Development and the applicable construction waste benchmark from the BRE.

Table 3.2: Estimated construction waste arising

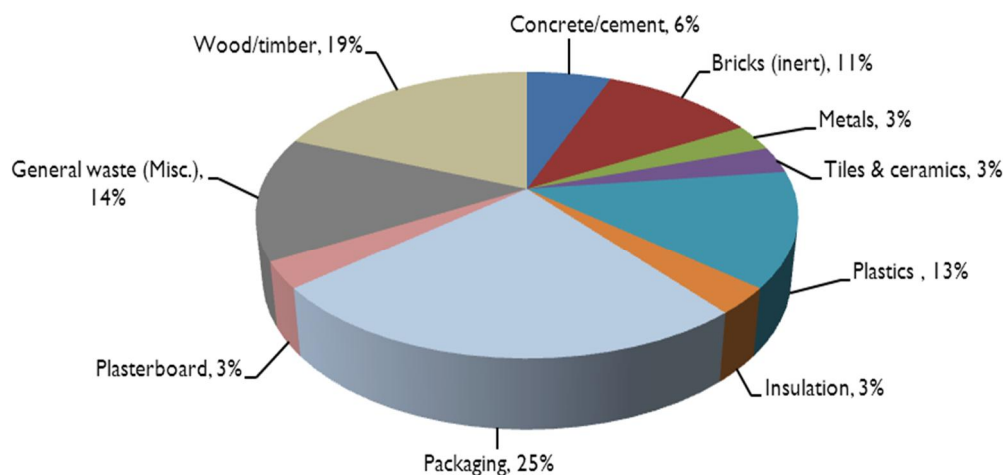
INDICATIVE LAND USE	INDICATIVE TOTAL FLOOR AREA (M ²)	BRE BENCHMARK CATEGORY	BRE BENCHMARK	CONSTRUCTION WASTE (TONNES)
Residential	9,026	Residential	16.8	1,516

3.5.4 It is estimated that around 1,516 tonnes of waste may arise from the Proposed Development.

3.5.5 It should be noted that the estimated total figures do not include waste from infrastructure development, such as utilities and pavements, which will add to the total construction waste volume. This is due to the fact that infrastructure development cannot be easily calculated using benchmarking data; and the BRE have no applicable information on this area of construction.

3.5.6 **Figure 3.1** illustrates the estimated composition of construction waste arising for the Proposed Development, based on data from UK construction projects of a similar nature.

Figure 3.1: Estimated construction waste composition (Source: SmartWaste)



3.5.7 The figures above are based on standard construction operations in the UK and the estimated volumes identified above can be lowered through on-site good waste management practice. Opportunities to prevent and reduce the generation of construction waste are detailed in the following sub-sections.

3.6 RAW MATERIALS AND WASTE STORAGE

3.6.1 The location and provision of raw materials and waste storage on-site would be clearly labelled, identifying the materials that can be received. Provisions that would be made would include:

- Temporary offices retaining all details relating to health and safety and waste management monitoring and reporting details;
- Storage areas for raw materials and assembly areas for construction components would be located away from sensitive receptors;
- Colour-coded skips/containers would be provided for segregated waste streams for reuse and recycling;
- Dedicated skips would be provided for any waste that requires off-site disposal;
- Hazardous waste materials would be stored in secure bunded compounds in appropriate containers which are clearly labelled to identify their hazardous properties and are accompanied by the appropriate Control of Substances Hazardous to Health (COSHH) assessment sheets; and
- Any fuels, oils and chemicals would be stored in appropriate containers within secure bunded compounds in accordance with good site practice and regulatory guidelines and located away from sensitive receptors.

3.6.2 The provision of effective and secure storage areas for raw materials is important to ensure that potential loss of material from damage, vandalism or theft is avoided. These measures would be supported by:

- Ensuring deliveries to the site are, as far as reasonably practicable, on a 'just in time' basis;
- Providing on-site security; and
- Installing temporary security fencing.

3.6.3 Temporary site waste segregation areas would be provided to ensure construction waste materials were securely stored prior to recycling or disposal. It is acknowledged, however, that construction sites can be space constrained; therefore the segregation of waste may not separate the full suite of materials suitable for recycling and this may be done off-site by appropriately licensed waste contractor(s).

3.6.4 Implementation of good practice measures in terms of on-site storage and security practices would assist in reducing unnecessary wastage of material and ensure that high standards are maintained throughout the development process.

3.7 SETTING TARGETS

3.7.1 Appropriate targets and objectives need to be set in relation to the minimisation and recycling of any waste materials. This would ensure that a clear action plan is generated for the management of specified types and quantities of materials identified.

3.7.2 The findings of any site audits would assist in the development of suitable material-specific targets and these would be agreed at the inaugural meetings with the contractors.

3.7.3 **Table 3.3** provides an overview of the government's Waste and Resources Action Programme (WRAP) Standard, Good, and Best Practice recovery rates by material:

Table 3.3: Standard, good and best practice recovery rates by material

MATERIAL	STANDARD RECOVERY* %	GOOD PRACTICE RECOVERY* %	BEST PRACTICE RECOVERY* %
Timber	57	90	95
Metals	95	100	100
Plasterboard	30	90	95
Packaging	60	85	95
Ceramics	75	85	100
Concrete	75	95	100
Inert	75	95	100
Plastics	60	80	95
Miscellaneous	12	50	75
Electrical Equipment	Limited information	70**	95
Furniture	0-15	25	50
Insulation	12	50	75
Cement	Limited information	75	95
Liquids and Oils	100	100	100
Hazardous	50	Limited information***	Limited information***

* Proposed waste management actions

'Reuse' and 'recycling' are forms of waste recovery.

** This is a required recovery target for the type of Waste Electrical and Electronic Equipment (WEEE) likely to be produced from construction sites, e.g. lighting (the WEEE Regulations).

*** This cannot be 100% as most hazardous waste streams (e.g. asbestos) must be landfilled.

3.7.4

To ensure that the system of waste minimisation, reuse and recycling is effective, consideration would be given to the setting of on-site waste targets for the Proposed Development and a suitable programme of monitoring at regular intervals to focus upon:

- Quantifying raw material wastage;
- Quantifying the generation of each waste stream;
- Any improvements in current working practices;
- Methods by which the waste streams are being handled and stored; and
- The available waste disposal routes used, e.g. landfill, waste transfer stations.

3.7.5

The Principal Contractor would be responsible for the setting and review of waste targets from the outset to ensure that high standards are maintained with the emphasis being on continual improvement.

3.7.6

Specific waste quantification and monitoring would assist in determining the success of waste management initiatives employed and progress against these targets should be relayed back to the Project Team.

3.8 PROMOTION OF BEST PRACTICE

- 3.8.1 As part of the encouragement of on-site best practice, there would also be a need to ensure that suppliers of raw materials for the projects are committed to reducing surplus packaging associated with the supply of any raw materials. This includes the reduction of plastics (i.e. shrink wrap and bubble wrap), cardboard and wooden pallets. This may involve improved procurement and consultation with selected suppliers regarding commitments to waste minimisation, recycling and the emphasis on continual improvement in environmental performance.
- 3.8.2 **Table 3.4** summarises the most important mitigation measures to minimise the potential waste of on-site materials during the proposed works. It is important to note, however, that not all raw materials would be provided by local suppliers.

Table 3.4: Measures to reduce wastage of raw materials

ORDERING	DELIVERY
Avoid:	Avoid:
<ul style="list-style-type: none"> Over-ordering (order just-in-time) Ordering standard lengths rather than lengths required Ordering for delivery at the wrong time (update programme regularly) 	<ul style="list-style-type: none"> Over-ordering (order just-in-time) Ordering standard lengths rather than lengths required Ordering for delivery at the wrong time (update programme regularly)
STORAGE	HANDLING
Avoid:	Avoid:
<ul style="list-style-type: none"> Damage to material from incorrect storage Loss, theft or vandalism through secure storage and on-site security 	<ul style="list-style-type: none"> Damage or spillage through incorrect or repetitive handling

- 3.8.3 Where practicable, waste streams that have the potential to be reused on-site or transported off-site for recycling would need to be segregated. Although every effort would be made to retain all suitable materials on-site, it is possible that some of these materials cannot be reused or recycled during the proposed works. In these situations, the Site Manager would work to identify suitably licensed waste facilities in order for material to be redistributed to other suitable sites. This represents the most sustainable alternative to landfill disposal.

3.9 MONITORING AND REPORTING

- 3.9.1 It would be a condition of contract for the Principal Contractor to discuss and agree any recovery rates (see **Table 3.3** above) to be targeted at the inaugural meetings. A monitoring report would then be generated on a monthly basis which would include details of the progress made in diverting waste materials from landfill, against these pre-agreed targets.
- 3.9.2 On completion of the proposed works, the contractors would report on the site performance against the agreed waste targets to the Project Team and LCC. This would be demonstrated through providing evidence of the actual volume of waste collected for disposal and the volume collected for reuse and recycling.
- 3.9.3 Contractors would be expected to provide evidence through the collation of waste transfer notes and invoices.

3.10 TRANSPORT AND TRAFFIC IMPACTS

- 3.10.1** The logistics associated with waste from the proposed works would be affected by a wide range of factors. The quantity and types of waste materials generated would fluctuate during this period and the resulting number of waste collections would be dictated by a range of variables, including the amount of storage space for waste, the capacity of containers used, the materials segregated for recycling and whether any on-site processes would be used for reducing the volume of waste (compactors/balers/shredders etc.).
- 3.10.2** The Principal Contractor would provide construction waste logistics forecasts, which would be discussed with waste contractors and Liverpool City Council (LCC) following appointment of relevant parties.
- 3.10.3** The impact of traffic associated with the movement of raw and waste materials during the proposed works on surrounding neighbourhoods and the local road network would be minimised by a combination of factors. Options include minimising, where possible, the off-site removal of waste to landfill and adoption of vehicle backhauling.

4 MANAGEMENT OF OPERATIONAL WASTE – RESIDENTIAL

4.1 INTRODUCTION

- 4.1.1 This section details the strategy which will be adopted to successfully manage the waste arising from the residential units at the Proposed Development once operational.

4.2 HOUSEHOLD WASTE GENERATION MODELLING

- 4.2.1 LCC does not provide waste generation metrics for household waste. The estimated household waste generation levels have been quantified based on metrics for weekly waste arising sourced from BS 5906:2005 *Waste Management in Buildings – Code of practice*. The British Standard stipulates the following household waste generation metric, as detailed in **Table 4.1**.

Table 4.1: BS 5906:2005 household waste generation metric (weekly)

DESCRIPTION	WASTE GENERATION METRIC
Residential	Number of dwellings x {(volume arising per bedroom [70 l] x average number of bedrooms) + 30}

- 4.2.2 **Table 4.2** provides a summary of the accommodation schedule for the Proposed Development.

Table 4.2: Summary of accommodation schedule

DESCRIPTION	NO. OF UNITS	NO. OF BEDROOMS
Tower 1	168	254

- 4.2.3 **Table 4.3** details the estimated household waste arising from the Proposed Development based on the above accommodation schedule and British Standard waste generation metric.

Table 4.3: Estimated household waste arising

DESCRIPTION	TOTAL REFUSE STORAGE CAPACITY REQUIRED (LITRES)	TOTAL RECYCLING STORAGE CAPACITY REQUIRED (LITRES)
Tower 1	11,410	11,410

- 4.2.4 It has been assumed that household refuse and recycling will be stored in 1,100 litre bins at the Proposed Development.

4.3 PROPOSED HOUSEHOLD WASTE MANAGEMENT STRATEGY – GENERAL

- 4.3.1 The proposed waste management strategy has been prepared to provide a high quality service to residents whilst also complying with the relevant design requirements.

4.3.2 The strategy has been split into the following sections:

- Individual Residential Properties (Section 4.4);
- Building Waste Strategy (Section 4.5); and
- Management of Bulky Waste (Section 4.6).

4.4 INDIVIDUAL RESIDENTIAL PROPERTIES

4.4.1 Each residential property will be provided with a segregated waste bin, which will be fixed into an appropriate kitchen unit.

4.4.2 An example of a suitable segregated waste bins is shown in **Figure 4.1**.

Figure 4.1: Example of segregated kitchen bin unit



4.4.3 The segregated waste bin shown in **Figure 4.1** includes the following bin capacities:

- Recycling: 30 litres; and
- Refuse: 19 litres.

4.5 BUILDING WASTE STRATEGY

4.5.1 It is proposed that a waste storage area will be provided in close proximity to the service core at basement level 1. The waste storage area will be the location that all residential refuse and recycling generated within the Proposed Development will be stored prior to collection.

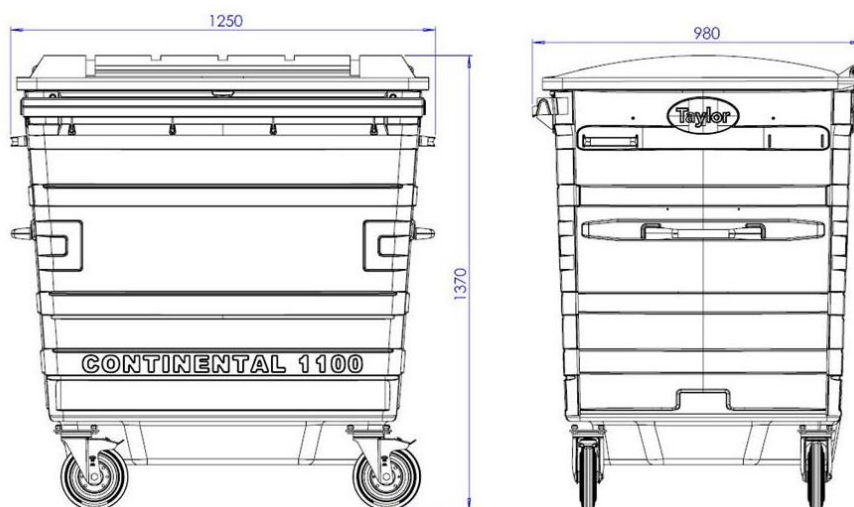
4.5.2 Based on the estimated household waste arising outlined in **Table 4.3**, **Table 4.4** outlines the quantum and types of bins that that will be required at the Proposed Development.

Table 4.4: Bin requirements

DESCRIPTION	1,100 LITRE BIN
Refuse	11
Recycling	11

4.5.3 The dimensions of a 1,100 litre bin are provided in **Figure 4.2**.

Figure 4.2: Bin dimensions

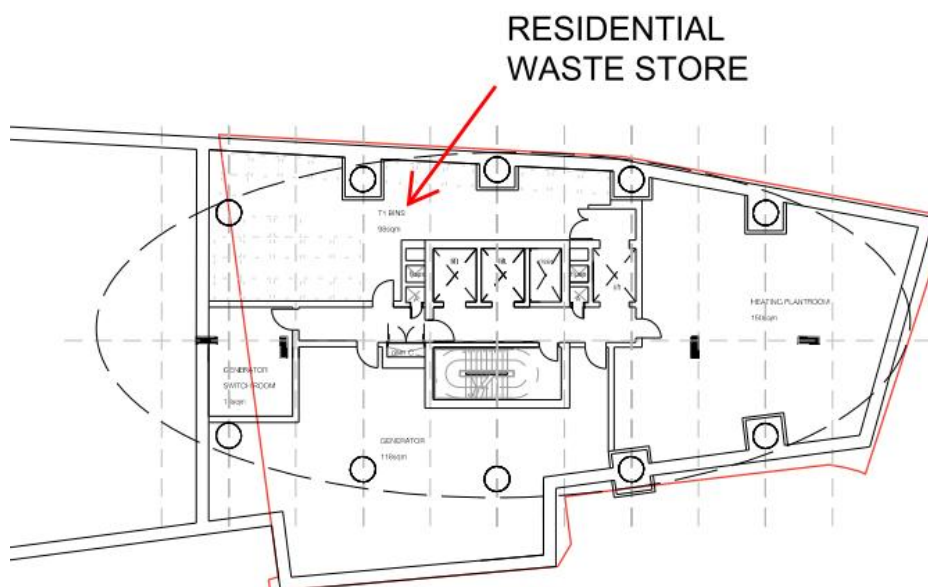


4.5.4 It is proposed that the waste storage area provided within the Proposed Development will have sufficient space to accommodate the number of bins detailed in **Table 4.4**.

4.5.5 Residents will be required to transport their waste from their own individual apartments directly to the waste storage area using the residential passenger lifts where they will segregate their waste into the appropriately labelled bins.

4.5.6 The location of the proposed waste storage area is shown in **Figure 4.3**.

Figure 4.3: Waste storage area location



4.5.7 The waste storage area will be designed to BS 5906:2005 *Waste Management in Buildings – Code of practice*. In summary the facility will include the following:

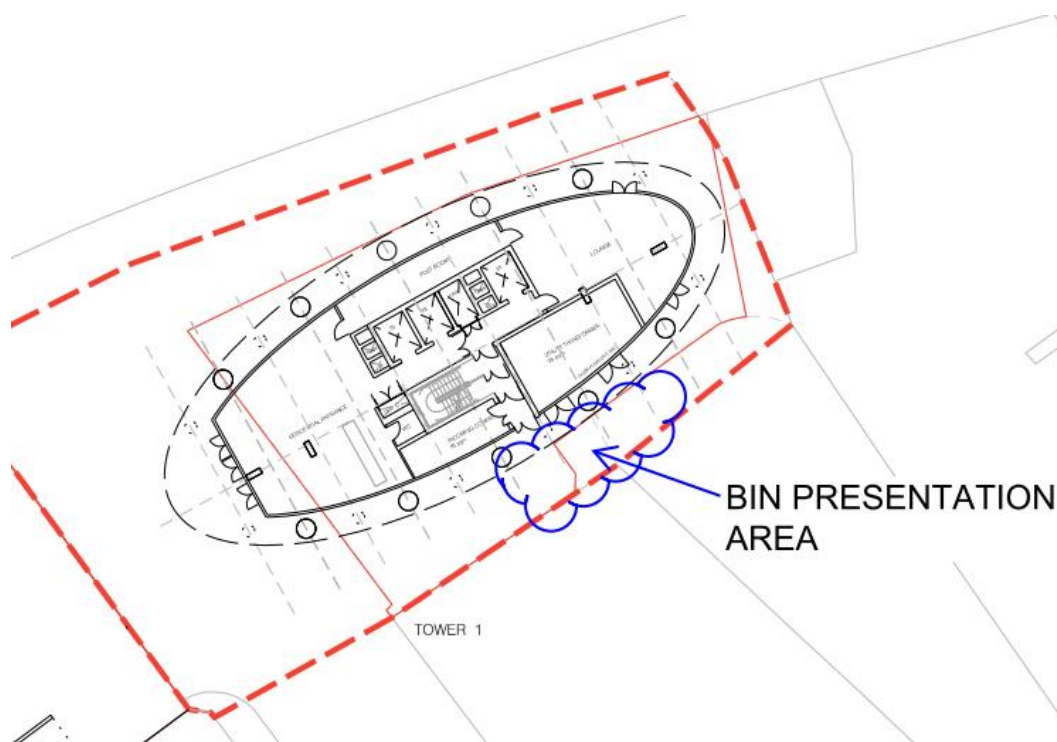
- A suitable water point will be provide in close proximity to allow washing down;
- All surfaces will be sealed with a suitable wash proof finish (vinyl, tiles etc.);
- All surfaces will be easy to clean
- Suitable floor drain will be provided; and
- Suitable lighting and ventilation will be provided.

4.5.8 Residents will not be required to travel a distance (excluding vertical distances) greater than 30m from their units to the waste storage area when depositing waste.

4.5.9 On nominated collection days, the on-site Facilities Management (FM) team will transfer the bins from the waste storage area to the bin presentation area which is located on a section of the public realm (within the red line boundary of the Proposed Development) at ground floor level in close proximity to Back Leeds Street.

4.5.10 The location of the bin presentation area is illustrated in **Figure 4.4**.

Figure 4.4: Bin presentation area



4.5.11 The bin presentation area will be the location from which LCC will collect the waste generated from the Proposed Development. The distance from the bin presentation area to the Refuse Collection Vehicle (RCV) will be less than 10m. The tracking of the RCV accessing bins presented in the bin presentation area is illustrated in **Figures 4.5 and 4.6**.

Figure 4.5: RCV tracking

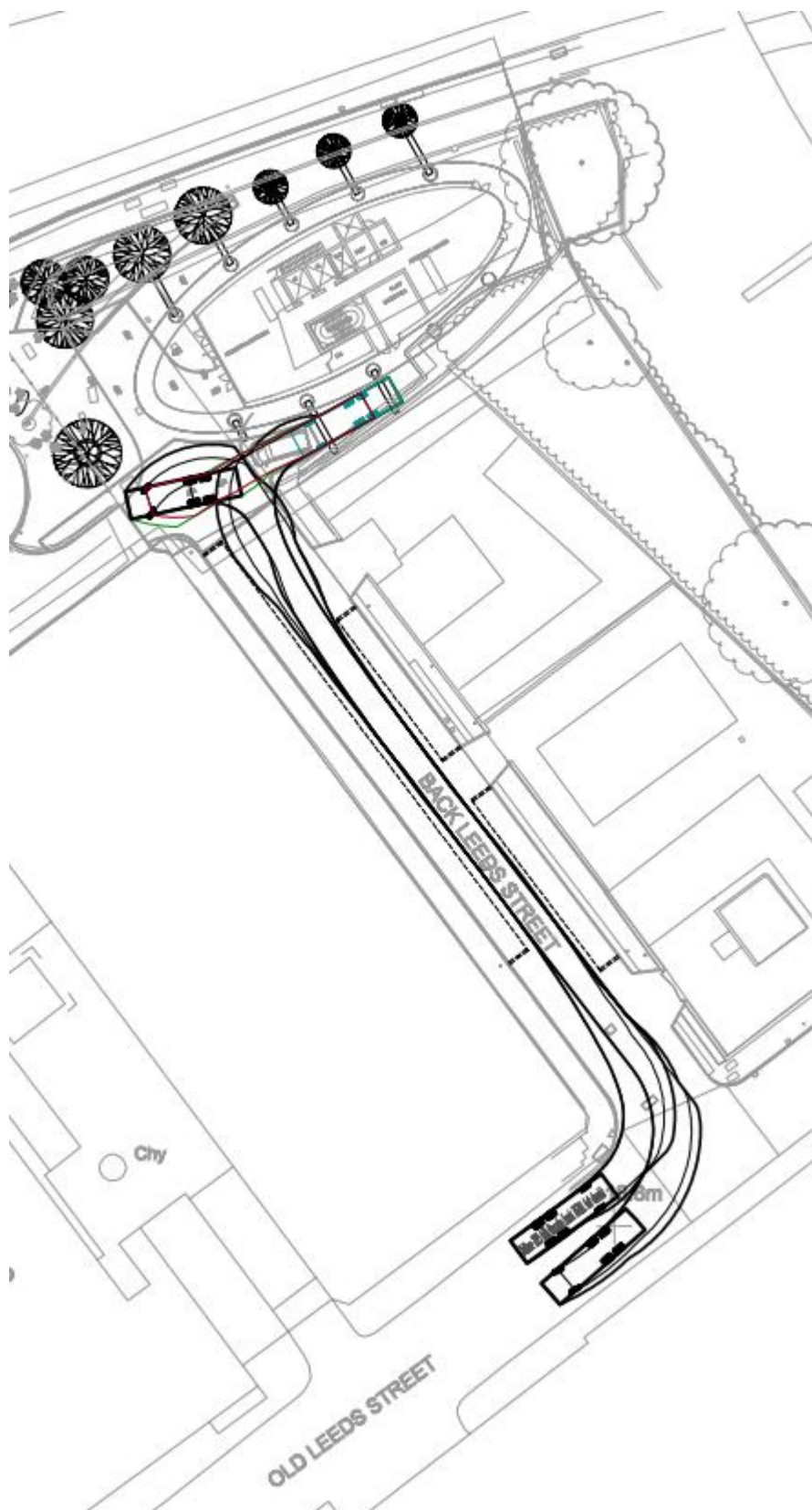
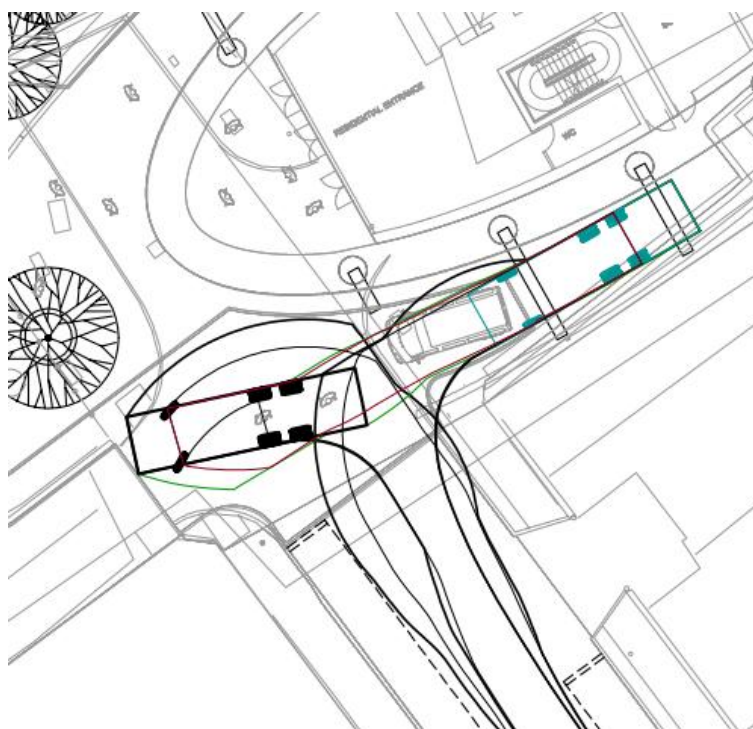


Figure 4.6: RCV tracking

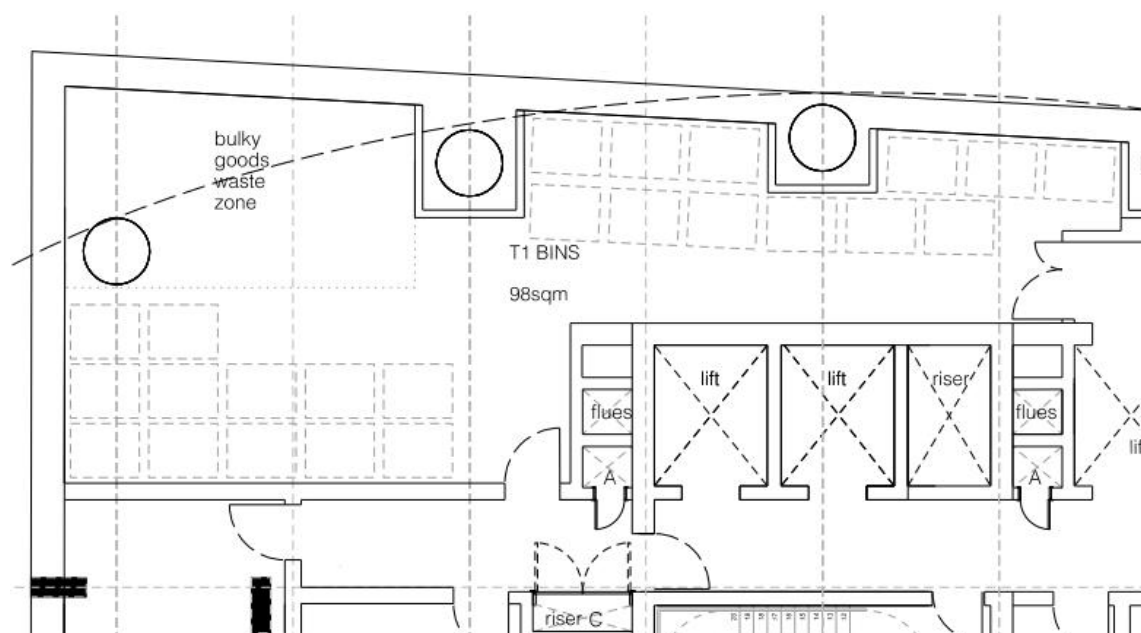


4.6 MANAGEMENT OF BULKY WASTE

4.6.1 Space will be provided for the storage of bulky waste generated by the Proposed Development.

4.6.2 It is proposed to provide a single bulky waste store that will service all residential properties within the Proposed Development. The location of this bulky waste store is illustrated in **Figure 4.6**.

Figure 4.6: Bulky waste store



- 4.6.3 The on-site FM team will proactively manage the bulky waste store to minimise misuse and fly-tipping, and residents will be required to contact the FM team to arrange for the bulky waste store to be unlocked. Residents will be required to pay the appropriate fee to LCC prior to depositing their waste.
- 4.6.4 The FM team will assist the tenants to move their bulky waste from their apartments to the store.
- 4.6.5 When sufficient bulky waste has accumulated in the bulky waste store, the on-site FM team will arrange collection through LCC.
- 4.6.6 The LCC waste management contractor will collect the bulky waste directly from the bulky waste store.

5 SUMMARY & CONCLUSION

5.1 SUMMARY OF THE STRATEGY

- 5.1.1 Residential units will incorporate sufficient internal waste storage containers to promote the separation of recyclable materials at source.
- 5.1.2 Container numbers have been quantified using residential waste generation metrics detailed within BS 5906:2005.
- 5.1.3 Residents will manually transport their waste down to the refuse and recycling bins located in the waste storage area at basement level 1 via the lifts.
- 5.1.4 On collection day, the on-site FM team will transport bins from waste storage area at basement level 1 to the bin presentation point at ground floor level.

5.2 CONCLUSION

- 5.2.1 This Waste Management Strategy has taken into account the need to lessen the overall impact of waste generation through recycling of materials from the operational phase of the Proposed Development.
- 5.2.2 The proposals set out in this Strategy meet the requirements of relevant waste policy and follow applicable guidance.

Appendix I

APPENDIX I-1

NATIONAL AND LOCAL WASTE POLICY

NATIONAL WASTE POLICY

National Planning Policy Framework (2012)²

The National Planning Policy Framework ('the Framework') sets out the Government's economic, environmental and social planning policies for England and provides a framework within which local people and councils can produce local and neighbourhood plans. Most of the existing Planning Policy Statements (PPSs) have been abolished and replaced by 12 'core' planning principles.

Unfortunately, the Framework does not provide much clarity on planning policy for the development of waste infrastructure and states that:

'This Framework does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Prevention Plan for England. However, local authorities preparing waste plans and taking decisions on waste applications should have regard to policies in this Framework so far as relevant'.

Further guidance is included in the Waste Management Plan for England (2013) which superseded Waste Strategy for England 2007 for these purposes.

National Planning Policy for Waste (2014)³

The National Planning Policy for Waste replaces 'Planning Policy Statement 10: Planning for Sustainable Waste Management' (PPS 10) and is to be considered alongside other national planning policy for England - such as in the NPPF and the Waste Management Plan for England. As its primary focus is on planning for waste management facilities, it is not considered relevant to the Proposed Development.

Waste Management Plan for England (2013)

The Waste Management Plan for England, published in December 2013, provides an analysis of the current waste management situation in England and fulfils the mandatory requirements of Article 28 of the revised Waste Framework Directive (WFD). The WFD required that Member States ensure that their competent authorities, in this instance Defra, establish one or more waste management plans covering all of their territory.

The Plan does not introduce new policies or change the landscape of how waste is managed in England. Its core aim is to bring current waste management policies under the umbrella of one national plan. It supersedes the previous waste management plan, the Waste Strategy for England 2007.

The mandatory requirements of Article 28 of the revised WFD specify that waste management plans must contain the following information:

- *'An analysis of the current waste management situation in the geographical entity concerned, as well as the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste and an evaluation of how*

² Department for Communities and Local Government (DCLG) (2012) *National Planning Policy Framework*
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/2115939.pdf>

³ DCLG (2014) *National Planning Policy for Waste*
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

the plan will support the implementation of the objectives and provisions of the revised WFD.

- *The type, quantity and source of waste generated within the territory, the waste likely to be shipped from or to the national territory, and an evaluation of the development of waste streams in the future;*
- *Existing waste collection schemes and major disposal and recovery installations, including any special arrangements for waste oils, hazardous waste or waste streams addressed by specific Community legislation;*
- *An assessment of the need for new collection schemes, the closure of existing waste installations, additional waste installation infrastructure in accordance with Article 16 (on the proximity principle), and, if necessary, the investments related thereto;*
- *Sufficient information on the location criteria for site identification and on the capacity of future disposal or major recovery installations, if necessary; and*
- *General waste management policies, including planned waste management technologies and methods, or policies for waste posing specific management problems.*

In addition, Schedule 1 to the Waste (England and Wales) Regulations 2011 sets out other obligations for the Plan which have been transposed from the revised WFD. These other obligations include:

- *In pursuance of the objectives and measures in Directive 94/62/EC (on packaging and packaging waste), a chapter on the management of packaging and packaging waste, including measures taken pursuant to Articles 4 and 5 of that Directive.*
- *Measures to promote high quality recycling including the setting up of separate collections of waste where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors.*
- *As appropriate, measures to encourage the separate collection of bio-waste with a view to the composting and digestion of bio-waste.*
- *As appropriate, measures to be taken to promote the reuse of products and preparing for reuse activities, in particular -*
 - (a) measures to encourage the establishment and support of reuse and repair networks;*
 - (b) the use of economic instruments;*
 - (c) the use of procurement criteria; and*
 - (d) the setting of quantitative objectives.*
- *Measures to be taken to ensure that by 2020*
 - (a) at least 50% by weight of waste from households is prepared for reuse or recycled.'*

Waste Hierarchy

The Waste Hierarchy requires avoidance of waste in the first instance followed by reducing the volume that requires disposal after it has been generated.

It gives an order of preference for waste management options to minimise the volume for disposal, as shown in **Figure A1**.

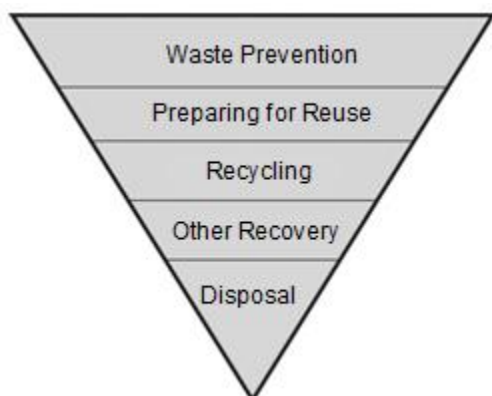


Figure A-1 The waste hierarchy

Source: *Waste Framework Directive*

The main principles of the Waste Hierarchy are:

- Waste should be prevented or reduced at source as far as possible;
- Where waste cannot be prevented, waste materials or products should be reused directly or refurbished and then reused;
- Waste materials should be recycled or reprocessed into a form that allows them to be reclaimed as a secondary raw material;
- Where useful secondary materials cannot be reclaimed, the energy content of the waste should be recovered and used as a substitute for non-renewable energy resources; and
- Only if waste cannot be prevented, reclaimed or recovered, should it be disposed of into the environment and this should only be undertaken in a controlled manner.

The Waste Hierarchy has been implemented in England and Wales by the *Waste (England and Wales) Regulations 2011*. These regulations require that an establishment or undertaking that imports, produces, collects, transports, recovers or disposes of waste must take reasonable steps to apply the Waste Hierarchy when waste is transferred or disposed of.

LOCAL WASTE POLICY

Joint Merseyside and Halton Waste Local Plan- Adopted July 2013⁴

The Joint Merseyside and Halton Waste Local Plan (formerly Waste DPD) is the first Local Plan which has been successfully produced as a result of collaborated working between Halton, Knowsley, Liverpool, St. Helens, Sefton and Wirral Councils. The Waste Local Plan provides the conditions to enable these opportunities to be delivered through the development of a network of sustainable waste management facilities, as a key part of the ambition of Liverpool City Region to become a low carbon economy by 2027. The plan provides a clear direction for waste management development to 2027,

⁴ Merseyside and Halton Joint Waste Local Plan - Adopted 2013

both in terms of site allocations and detailed development management policies. It forms part of statutory development plans for each of the partner districts.

The overarching approach for the Waste Local Plan will be a Resource Recovery-led strategy with the following objectives:

1. To seek to minimise waste arisings
2. To maximise recycling, resource recovery and re-processing
3. To ensure that residential waste is minimised and the processed in a way that seeks to:
 - a. Maximise the economic and environmental benefits to local communities and businesses
 - b. Minimise export of residual wastes for landfill disposal
 - c. Minimising the need for new landfill/ landraise and reserving capacity for the greatest disposal needs; and,
 - d. Balance the overall export of landfill tonnages with provisions for secondary treatment and recycling of imported waste tonnages of an equivalent amount to ensure that Merseyside and Halton are as self-sufficient as possible in waste management capacity.

With regards to waste management the following policies are of relevance to the proposed development:

Policy WM 8- Waste Prevention and Resource Management

Any development involving demolition and/or construction must implement measure to achieve the efficient use of resources, taking particular account of:

- *Construction and demolition methods that minimise waste production and encourage re-use and recycling materials, as far as practicable on-site*
- *Designing out waste by using design principles and construction methods that prevent and minimise the use of resources and make provision for the use of high quality building materials made from recycled and secondary sources*
- *Use of waste audits or site waste management plans (SWMP), where applicable, to monitor waste minimisation, recycling, management and disposal.*

Evidence demonstrating how this will be achieved must be submitted with development proposals of this type.

Policy WM 9- Sustainable Waste Management Design and Layout for New Development

The design and layout of new built developments and uses must, where relevant, provide measures as part of their design strategy to address the following:

1. *Facilitation of collection and storage of waste, including separated recyclable materials*
2. *Provide sufficient access to enable waste and recyclable materials to be easily collected and transported for treatment*
3. *Accommodation of home composting in dwelling with individual gardens*
4. *Facilitate small scale, low carbon combined heat and power in major new employment and residential scheme, where appropriate.*

The Joint Waste Recycling and Waste Management Strategy for Merseyside: Resources Merseyside 2011-2041⁵

The Strategy has been developed by Merseyside Recycling and Waste Authority (MRWA). The focus of the strategy is to move waste up the Waste Hierarchy by supporting activities on waste prevention, re-use, recycling and composting whilst recognising the impact these actions have on the amount of residual waste requiring treatment or disposal. This programme of work will be cost effective, affordable and deliver value for money whilst optimising environmental benefits.

Liverpool Core Strategy Submission Draft 2012⁶

The Core Strategy is at the heart of Liverpool's Local Plan. Its central approach is to capitalise on Liverpool's assets and resources to achieve urban and economic growth prioritising those areas of the City with the greatest development potential. It aims to stimulate, support and deliver economic growth and address regeneration needs.

With regards to waste management the following policies are of relevance to the proposed development:

'Strategic Policy 1- Sustainable Development Principles

To ensure the sustainable growth of the City new development should be located and designed so that resources are used prudently, the local and wider environment is protected, the challenges of climate change are addressed and the needs of the whole community are taken into account. New development should:

- *Deliver high quality design including efficiency in the use of resources, using sustainable materials and minimising waste.*

Strategic Policy 31- Sustainable Growth

To ensure the sustainable growth of the City development proposals should:

- *Have regard to the waste hierarchy and minimise and manage the quantity and nature of waste generated during both construction and operation. This includes providing for the sources separation, recycling and safe storage of different types of waste awaiting collection, temporary materials recycling facilities on major demolition or construction problems and, where appropriate, facilities for public use.*

⁵ The Joint Waste Recycling and Waste Management Strategy for Merseyside: Resources Merseyside 2011-2041

⁶ Liverpool Core Strategy Submission Draft (2012)