Waste Management

Waste Storage and Collection Guidance for Domestic and Commercial Developments

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TERMS & DEFINITIONS

Bulky Waste	Waste materials too large to be disposed of in the normal waste receptacles such as fridges, furniture, mattresses and IT equipment etc.
Commercial Waste	Waste Collection Authorities (WCA) have a responsibility to arrange the collection of commercial (trade) waste if requested to by the producer, though they may charge for this service.
Dry Recyclable(s)	Material that is processed through either a materials recycling facility, mill or some other form of processor such as plastic, cardboard, paper, newspaper, cans and glass.
Euro Bin	Large metal bins (660 litre, 1100 litre and 1280 litre) used primarily in commercial properties or communal waste storage areas.
Landfill	The permanent disposal of waste into the ground, by the filling of man-made voids or similar features, or the construction of landforms above ground level.
Materials Recycling Facility (MRF)	A specialised plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers.
Mechanical Biological Treatment (MBT)	A type of waste processing facility that combines a sorting facility with a form of biological treatment such as composting or anaerobic digestion.
Municipal Waste	Waste collected by waste collection authorities, predominantly household waste but also including any trade waste collected under the WCA's Environmental Protection Act responsibilities, together with street sweepings.
Residual Waste	Waste that is collected and is unable to be recycled or processed under current arrangements.
Schedule II Properties	Properties whereby a charge may be made for the collection of waste but not the disposal as designated in Schedule II of The Controlled Waste Regulations 1992.
Waste Collection Authority (WCA)	The council, usually a district or borough council, charged with the responsibility to collect household waste.
Waste Compactor	Permanent or semi-permanent installation comprising of a compactor with receiving chamber and a facility for attaching a removable compacted waste container.
Waste Hierarchy	A framework for securing a sustainable approach to waste management. Wherever possible, waste production should be minimised. If waste cannot be avoided then it should be re-used; after this value recovered through recycling and composting; waste to energy; and finally landfill disposal.

1 INTRODUCTION

1.1 As part of the ongoing sustainable development in the city, one of Preston City Council's key priorities is to increase recycling and reduce the need for landfill. This commitment, as well as our legal obligations as a local authority, involves focusing on how we manage our waste and promoting waste management which takes into account the principles of the waste hierarchy.

1.2 The Environment Act 2021 sets out the required arrangements local authorities must provide in regards to the separate collection of household waste. Unless exceptional circumstances apply with regards to collections, recyclable household waste must be collected separately from other household waste. This includes glass, metal, plastic, paper/card, food waste and garden waste.

1.3 This new legislation also applies to commercial properties and requires these premises to separate recyclable waste from "relevant waste", ie. general waste sent to landfill. Recyclable waste includes glass, metal, plastic, paper/card and food waste. Preston City Council would like to see non-residential buildings designed and managed in a way that better facilitates the recycling of waste.

1.4 This document will help all those involved in the design and management of buildings to produce waste management strategies that best facilitate the storage of waste and maximise the amount which can be sent for recycling. It is a material planning consideration that developers are conscious of the waste that will be generated by their developments and that their proposals satisfy all the requirements of this document.

1.5 This guidance was developed by the City Council's Waste Management and Planning Department. Feedback from planners and architects has also been incorporated to ensure that the guidance is useable and useful for all parties.

1.6 This document is part of an evolving process to develop best practice guidance for the design and management of buildings in Preston and should be read within the context of other Council policies and legislation. The guidance offered also serves to ensure that developments have adequate storage capacity and access to be in line with the domestic refuse and recycling services offered by Preston City Council. Developers must ensure any bin storage areas have enough space to successfully facilitate separate collections of recyclable waste. It is also prudent to anticipate further additions in the waste streams that will be required to be collected in future and allow additional space for these potential additions.

1.7 Following the guidance in this document is intended to help you produce successful waste management strategies and will also assist in complying with Schedule 1, Part H, of the Building Regulations 2010.

1.8 This guidance applies to proposals for all new builds, commercial and domestic, and any developments to existing properties affecting the refuse and recycling storage and collection facilities as outlined in **Section 2 – 8**.

2 PLANNING APPLICATIONS

2.1 Planning applications should include a waste management strategy incorporating all areas covered in this document. This guide is designed to help in the production of a strategy and a template can be found in **appendix H**.

2.2 The guidance should be used from the earliest stages of building design. Adequate bin storage areas, access for collection crews and vehicles, and other aspects of waste management are potentially difficult and costly to apply retrospectively. The recommendations made within this document are integral to the design of a building and provide information that is useful for building designers. Compliance with these guidelines assures planning officers that a suitable waste management strategy has been developed.

2.3 Waste storage areas and proposed kerbside collection points (where applicable) should be clearly identified on plans.

2.4 Planned residential development is undergoing an unprecedented expansion in the Preston area. It is imperative that best practice is employed to ensure a robust and sustainable waste management strategy. Provision of an effective and efficient refuse and recycling service is a key council operation which may come under increasing pressure without due consideration at the planning stage, and with subsequent knock-on effects to residents and services.

2.5 Preston City Council Waste Management acting as the waste collection authority are happy to informally advise developers with respect to their waste management strategy at the pre-planning stage, and are especially keen to encourage dialogue with regard to larger developments where impact on services is most keenly felt. For further information please contact us on **01772 906905** or email **wastemanagement@preston.gov.uk**.

2.6 Waste Management recommend that developers use this opportunity to produce cohesive plans, that includes the integration of a considered and sustainable waste management strategy within the context of the development, and receive advice at the pre-planning stage before committing to designs. For further information please refer to the Preston City Council website at https://www.preston.gov.uk/majordevelopmentadvice

2.7 After planning permission has been granted the developer must notify Waste Management one month before a development is due to be occupied. Developers should note that there is a charge for all new and replacement refuse and recycling containers which is required to be paid in full prior to delivery. Current rates can be found on the council website or by contacting the department directly. To arrange payment and delivery please contact Waste Management on **01772 906905** or email **wastemanagement@preston.gov.uk**.

2.8 Developers of large housing developments should provide an accommodation schedule which details the site plot numbers and associated addresses of properties where bins are to be delivered. Developers should notify the department of any apartment blocks on site to ensure an officer can assess the appropriate number, size and type of bins to be purchased. An invoice address and contact details including phone number and email will be required. Delivery

can be arranged to a central point on site but allocation details of bins will still be required. See **Appendix H** with regard to incorporating this into a simple waste management strategy.

3 SITE HEALTH & SAFETY

3.1 Increasingly properties are occupied before other phases or stages of construction are complete. Waste Management must be informed of the Site Health & Safety Policy to inform us of safe working procedures to comply with the site assessment in order to access areas where construction may still be ongoing.

3.2 This includes areas where road surfaces and footpaths may be incomplete or of unsuitable nature.

3.3 Where new developments are built in stages, access roads serving the first occupiers on the site must have a suitable turning point before waste collections can begin. If Waste Management are not satisfied that crews or vehicles can access occupied residencies safely, a collection point(s) must be created in an area safe to access to enable properties to deposit bins or waste for collection. Failing this the developer will have to make alternative collection arrangements, or advise the householder of disposal options such as taking their waste to a Household Waste Recycling Centre. All roads must be finished and built to adoptable standards following the completion of all stages of the development.

3.4 If the Site Health & Safety Policy is not supplied, Preston City Council reserves the right to refuse to send crews or vehicles to occupied properties, areas of developments under construction or the development as a whole.

4 PRESTON CITY COUNCIL COLLECTION POINTS POLICY

4.1 As of June 2018, Preston City Council have formally adopted a policy whereby refuse and recycling crews and vehicles will **NOT** be sent on to private land, private or shared driveways, or private roads to collect waste and recycling containers.

4.2 Residents will have to present bins for collection kerbside immediately adjacent to the highway at the point closest to the property. Bins should not be presented on footpaths or in a way that blocks vehicular or pedestrian access.

4.3 Residents may be asked to present 3 or more containers for collection on any given day.

4.4 Consideration should be given to balancing the collection policy with the constraints of Schedule 1, Part H, of the Building Regulations, 2010, and Approved Document H: Requirement H Solid waste storage, 2014, which stipulates the distance over which residents should be expected to move waste containers to the collection point should be no more than 25m. To exceed this distance, especially given the cumulative effect of having to move 3 or more containers to and from kerbside, would result in severe inconvenience to residents, lead to severe operational difficulties and unsustainable waste collections, and may fail an inspection by Building Control post-development.

4.4.1 Point 4.4 should be borne in mind with particular regard to the design and use of shared driveways; their ultimate length or the number of properties sharing the access may be limited. Also the design, routing and length of "bin runs" should be carefully planned.

4.4.2 The use of temporary bin storage locations where residents can place their bins on collection days may have to be considered where numbers of bins presented may otherwise block access or blight the aesthetic. Any temporary storage location must be created directly adjacent to the highway, and be large enough to contain a minimum of 3 containers per property served by a shared driveway.

5 INTERNAL SEGREGATION AND STORAGE OF WASTE

5.1 To encourage occupants to recycle waste, internal storage areas should ideally be designed into each unit of a new development. This will enable occupants to segregate their waste into refuse and recyclables, and store it temporarily, until it can be transferred to external bins.

5.2 It is highly recommended that occupants be supplied with container(s) for the internal segregation of waste for recycling. **Preston City Council does not provide such containers**.

5.2.1 Options that developers & architects may wish to consider are kitchen units with pull out drawers with separate containers. There are several such products on the market.

5.3 Home composting is the ideal way for householders to reduce their waste and save money by placing most kitchen and garden waste into a compost bin. This will produce a free supply of rich brown compost that may be used in the garden. An area for home composting should be considered in each plot in all new residential developments, with easy access from the kitchen or utility room.

5.4 The council actively promotes the use of home composters which may be ordered via the *GetComposting.com* website – https://getcomposting.com/ - at specially reduced rates.

6 HOUSING DEVELOPMENTS

6.1 Containers

6.1.1 Developers will be expected to obtain waste receptacles for domestic waste from the City Council by contacting Waste Management. There is a charge for the provision of residual waste and recycling containers, the current charge can be found at www.preston.gov.uk. Please see the council's "Charging Policy for the Supply of New Bins" for more information. To arrange payment and delivery contact Waste Management on **01772 906905** or email **wastemanagement@preston.gov.uk**.

6.1.2 All domestic properties should have, as a minimum, the following waste receptacles. The dimensions for these containers can be found in **Appendix A.**

Waste Type	Refuse (Non-recyclable waste)	Garden Waste*	Paper & Cardboard	Glass, Cans & Plastic Bottles	Food Waste
Container Type	**Wheeled Bin**	**Wheeled Bin**	**Wheeled Bin**	**Wheeled Bin**	**Indoor Caddy plus Outdoor Caddy**
Capacity (ltr)	**240†**	**240**	**240**	**240**	**7 - Indoor 23 – Outdoor**

Table 1: Domestic Waste Receptacles
*Brown bin areas only. Subscription required. †360ltrs for eligible households only.

6.2 Storage areas

6.2.1 Containers should be accommodated within the boundary of each property, and should have designated storage areas which are sensitively located and designed, taking into account the aesthetics of the area.

6.2.2 Storage areas should be large enough to house up to, at least, a 360 litre refuse bin, 240 litre garden waste bin, two 240 litre wheeled recycling bins and a 23 litre outdoor food waste caddy. Storage area capacity must bear relation to property size.

6.2.3 Capacity must also be sufficient to allow for the storage of additional materials that may be collected by Preston City Council in the future (e.g. batteries etc.).

6.2.4 Container storage areas should be in a position that makes it convenient for the householder to present them to the kerbside for collection. Storage areas should also be accessible to collection crews in order to accommodate any assistance which may be required by current or future occupants.

6.2.5 As per BS5906:2005 the maximum distance bins will be moved by collection crews should be no more than 15m for two wheel bins, and no more than 10m for the larger four wheel containers. This should be noted when deciding the location of bin stores.

6.2.6 In new housing developments storage areas must be provided that allows residents to store bins off the street outside of collection periods.

6.3 Collections

6.3.1 The Waste Collection Authority, namely Preston City Council, has a Duty to collect household waste. The city council offers an alternate week collection service for domestic waste, whereby residual waste is

collected one week and recyclables along with garden waste are collected on the same day the following week and so on.

6.3.2 Under Section 46 of the Environmental Protection Act 1990, householders are required to present their waste receptacles at the kerbside on collection day and return them to the storage area, as soon as possible following collection. Waste receptacles should not be presented for collection any earlier than 6pm on the day before collection.

6.3.3 New developments and their access roads should be designed to accommodate refuse collection vehicles (RCVs). Reversing a waste collection vehicle is one of the most dangerous activities carried out by the collection crews. Accidents involving waste vehicles are invariably severe or fatal. Therefore the development must be designed to allow the RCV to operate in a forward gear only wherever possible.

6.3.4 Adequate turning facilities, large enough to accommodate the RCV, will be acceptable where the RCV is unable to drive a circuitous route. Vehicles must be able to turn within the confines of the highway without obstruction from obstacles such as hedges, trees or fences.

6.3.5 Collections are from the point of the property nearest to the adopted highway (or proposed adopted highway). Collection crews and vehicles **do not** go on to private driveways, this includes shared driveways.

6.3.6 The collection vehicles used by Preston City Council are described in **Appendix B**. Developers should take particular note of the axle and chassis design.

7 APARTMENT DEVELOPMENTS

7.1 Containers

7.1.1 It is particularly important that the right number and size of refuse and recycling containers are provided. See **Appendix D** for how to calculate in detail the numbers and types of bins required for apartment developments. We have included our recommendations for developments up to 20no. apartments as a starting off point.

7.1.2 General domestic waste is collected in communal containers up to a maximum size of 1280 litres. Due to current operational practices the largest domestic communal recycling containers Preston City Council currently collect are 360 litre two-wheeled bins. Domestic recycling cannot be collected in 1100 litre or 1280 litre four-wheeled Eurobins. This should be taken into account when calculating space for adequate bin provision.

7.2 Storage areas

7.2.1 The city council offers an alternate week collection service for domestic waste, whereby for most properties across Preston, refuse along with garden waste are collected on the same day one week and recyclables

collected the following week and so on. Storage areas should be designed to accommodate the containers calculated in **Appendix D.**

7.2.2 Where appropriate, an internal access door from the residential part of the development should be provided to allow residents internal access to the storage area. This door should be connected to the residential area by a lobby, so as to prevent nuisance odours entering the residence.

7.2.3 The distance that residents will be required to travel to waste storage areas from their apartments should not exceed 30m (excluding any vertical distance), in line with the Building Regulations 2010, Schedule 1, Part H, and Approved Document H: Requirement H6 solid waste storage, 2014.

7.2.4 External bin stores should be well illuminated so residents may continue to use the area in the evenings and feel safe in doing so. Communal bin areas have been known to attract anti-social behaviour and poor design, siting and lack of lighting often contribute to this. Their location should provide natural surveillance balanced against the need for integrated screening.

7.2.5 External bin stores, where possible, should be provided with a covered roof to help prevent unauthorised waste being deposited and further encourage residents to recycle.

7.2.6 Gates on external bin stores should open outward so as to maximise storage space and allow for unobstructed extraction of waste containers. Bin stores should be lockable, preferably by the use of pin code and this must be communicated to the department prior to first occupation.

7.2.7 Signage should be provided in communal bin storage in line with WRAP iconography – http://www.wrap.org.uk/ - to encourage correct separation of waste and maximise recycling potential.

7.2.8 An area must be provided for residents to place items of domestic bulky waste for collection, such as fridges, mattresses etc, Please see **section 7.6**.

7.2.9 Additional storage area requirements are given in **Appendix E.**

7.3 Collections

7.3.1 Container collection requirements are given in **Appendix E.**

7.3.2 Ideally bin stores should be situated where there is direct access from the public highway. Whilst bins can be collected from bin storage areas in apartment developments, rather than being placed at the kerbside for collection it should be remembered that any access roads should be designed for vehicles of up to 32 tonnes, there should be enough room for vehicles to access and to turn around, if necessary, and bin stores should never be blocked by car parking spaces.

7.3.3 Where sites are mixed e.g. individual housing and apartments there should be no conflict between the collection arrangements. The main principle should always be that collection staff and vehicles do not travel on private land/roads/driveways.

7.3.4 Most residents residing in an apartment building may not choose to participate in the garden waste collection service. However, should a resident contact the council to request a bin for garden waste, each dwelling is entitled to one bin. Therefore, provision should be made for this within communal bin storage areas.

7.4 Mixed Use Developments

7.4.1 Requirements in mixed-use developments are given in **Appendix E.**

7.5 Waste Compaction

7.5.1 The use of an on-site waste compacter is **not** an option for residential developments as it presents problems for collection.

7.6 Bulky Waste

7.6.1 Preston City Council currently offers a chargeable collection service for the removal of bulky waste from residential properties.

7.6.2 An area must be provided for residents to place items of bulky waste, on an appointment day issued by the Council.

7.6.3 The area provided must cover an area of approximately $10m^2$. The area does not have to be designated solely for the purpose of bulky waste collection (e.g. hatched area to the car park etc.) but must be made clear on collection days.

7.6.4 The area must satisfy all of the requirements of **Appendix B and E.**

7.6.5 Collection can be arranged with Waste Management. Contact details are in **Section 7**.

7.7 Chutes

7.7.1 Chutes **should not** be included in apartment developments for either refuse or recycling as they can create problems for the segregation and storage of waste.

7.8 Schedule 2 Properties

7.8.1 Schedule 2 properties should maximise the number of refuse and recycling containers in order to reduce the number of collections and therefore collection vehicle traffic as with commercial developments (See **Section 6** and **Appendix E**).

7.8.2 In addition recycling provision must be based upon details given in **Appendix D**. Properties affected by these regulations include student accommodation, schools, residential homes or halls used predominantly for public meetings.

8 COMMERCIAL DEVELOPMENTS

8.1 Containers

8.1.1 The volume of waste generated and thus the number and type of containers that a commercial development requires is ultimately dependent on the activity of the occupant. However, in most cases, there **must be** storage provision for a minimum of 1280 litres of refuse capacity.

8.1.2 Containers should be provided to maximise the amount of recyclable material that is segregated and sent for recycling.

8.1.3 The number of containers should be maximised in order to reduce the number of collections and therefore collection vehicle traffic.

8.1.4 More information about business and commercial waste can be found at https://www.gov.uk/managing-your-waste-an-overview/overview.

8.2 Storage areas

8.2.1 Storage areas should be within the confines of the development, additional requirements for commercial developments are given in **Appendix E**.

8.2.2 New commercial developments should have (a) storage area(s) that allows bins to be brought off the street outside of collection periods. If existing properties are unable to remove their bins from the street a gold sack collection may be arranged but this should be avoided where at all possible. Bins will not be provided to customers who are unable to remove them from the street.

8.3 Collections

8.3.1 Commercial properties have a duty of care to manage their waste responsibly and are required to arrange waste collections with a registered waste carrier.

8.3.2 Business rates **do not** cover waste collection or disposal.

8.3.3 Where Preston City Council is employed as the registered waste carrier, container collection requirements should meet the specifications outlined in **Appendix E**.

8.3.4 For collection rates, and to discuss any other trade waste requirements, Preston City Council's trade waste department can be contacted on 01772 906275 or c.tyrer@preston.gov.uk. Preston City Council offer both general waste and recycling collections for trade.

8.4 Mixed Use Developments

8.4.1 Requirements for mixed use developments are given in **Appendix E**.

8.5 Waste Compaction

8.5.1 On-site waste compaction is an option for commercial developments; however the City Council does not provide a collection service for compacted waste. Adopting this approach must not discourage occupants from segregating their waste for recycling.

8.6 Food Waste

8.6.1 Developments which generate food waste will have to comply with the requirements of the Animal By-Products Regulations 2003.

8.6.2 The regulations place controls on the collection, handling, transport, storage and disposal of animal by-products. This may have implications for the design of the building.

8.6.3 Further information on The Animal By-Products Regulations 2003 should be sought from https://www.legislation.gov.uk/uksi/2003/1482/contents/made

8.7 Tenant Contracts

8.7.1 Clauses should be written into tenant contracts to ensure that they commit to segregating and sending their waste for recycling.

8.8 Schedule 2 Properties

8.8.1 See **Section 7.8.**

9 CONTACTS

9.1 **Waste Management, Preston City Council**
01772 906905
wastemanagement@preston.gov.uk

9.2 **Planning Department, Preston City Council**
01772 906912
planningdept@preston.gov.uk

9.3 **Building Control, Preston City Council**
01772 906913
buildingcontrol@preston.gov.uk

10 FURTHER GUIDANCE

10.1 Department for Transport (2007) *Manual for Streets* - https://www.gov.uk/government/publications/manual-for-streets

Lancashire County Council, Road Adoptions – http://www.lancashire.gov.uk/roads-parking-and-travel/roads/road-adoption.aspx

British Standards Institute (2005) *5906:2005 Waste Management in Buildings - Code of Practice* - https://shop.bsigroup.com/ProductDetail/?pid=000000000030050097

TSO (1990) *Environmental Protection Act* - http://www.legislation.gov.uk/ukpga/1990/43/pdfs/ukpga_19900043_en.pdf

TSO (2003) *Household Waste Recycling Act* - http://www.legislation.gov.uk/ukpga/2003/29/pdfs/ukpga_20030029_en.pdf

Department for Environment, Food & Rural Affairs (2007) *Waste Strategy for England* - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228536/7086.pdf

Lancashire County Council, *Waste Management Strategy for Lancashire* - http://www.lancashire.gov.uk/media/347661/wmstrategy-1-.pdf

ADEPT (2010) *Making Space for Waste. Designing Waste Management in New Developments* - https://www.lgcplus.com/Journals/3/Files/2010/7/14/ADEPTMakingspaceforwaste_000.pdf

TSO (2010) *Building and Buildings, England and Wales: The Building Regulations 2010* http://www.legislation.gov.uk/uksi/2010/2214/pdfs/uksi_20102214_en.pdf

TSO (2014) *Approved Document H: Requirement H6 Solid waste storage* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/354090/140910_HSR_Supporting_Doc5_H6_Waste.pdf

TSO (2021) *Environment Act* - *https://www.legislation.gov.uk/ukpga/2021/30/pdfs/ukpga_20210030_en.pdf*

*All links are correct at time of publication

11 APPENDICES

A CONTAINER DIMENSIONS

Container	Dimensions (mm)*Approx		Floor space Req. (mm) *Approx	
1280ltr Eurobin	Width	1280	1480 x 1200	
	Depth	1000		
	Height	1445		
	Height (with open lid)	2455		
1100ltr Eurobin	Width	1270	1470 x 1200	
	Depth	1000		
	Height	1380		
	Height (with open lid)	2370		
820ltr Eurobin™	Width	1250	1450 x 985	
	Depth	785		
	Height	1360		
	Height (with open lid)	2145		
660ltr Eurobin	Width	1250	1450 x 920	
	Depth	720		
	Height	1330		
	Height (with open lid)	2060		
360ltr Wheeled Bin	Width	580	780 x 1080	
	Depth	880		
	Height	1100		
	Height (with open lid)	1690		

240ltr Wheeled Bin	Width	580	780 x 940	
	Depth	740		
	Height	1100		
	Height (with open lid)	1750		
23ltr Outdoor Food Caddy	Width	320	400 x 480	
	Depth	400		
	Height	405		
	Height (with handle)	630		
Gold Sacks[ᵀ]				
Pink Sacks[€]				

[ᵀ] Commercial Waste Collections Only. [€] Domestic Waste Collections Only

B COLLECTION VEHICLE DIMENSIONS

The figures below are based on the vehicles used by Preston City Council.

I. Waste Management must be able to verify the suitability of a proposal in terms of collection vehicle access. Sufficient room should be allowed to manoeuvre and load a vehicle of the following dimensions:
- **a.** Length – 11m
- **b.** Length, when loading – 13.1m
- **c.** Width – 2.49m
- **d.** Height – 6m (including toploader arms)
- **e.** Gross vehicle weight – 32t
- **f.** Turning Circle, between kerbs – 21.1m approx.
- **g.** Turning Circle, between walls – 24.5m approx.
- **h.** Wheelbase – 5100mm (1st steer axle to first driven axle)
- **i.** Chassis – 8x4 mid steer
- **j.** Bogie spread – 1350mm
- **k.** Rear overhang – 3800mm

II. Our largest collection vehicles when fully laden can weigh approximately 32 tonnes, service manholes and road surfaces should be constructed with this in mind.

III. Overhead service cables, pipes, archways and other potential obstacles must be at least 7 metres from ground level.

IV. It should be noted that refuse and recycling are picked up from the rear of the waste collection vehicles. This should also be reflected in the proposed routes of the collection vehicles.

V. Collection vehicles must not reverse into the development from a major road, or reverse onto a major road when exiting the development.

VI. Reverses in any instance should be avoided where possible. If reversing is unavoidable this shall be of a distance of no more than 12 metres, including travel within turning heads (BS 5906:2005).

C SWEPT PATH ANALYSIS REQUIREMENTS

I. Swept path analysis can be used to assess layouts for accessibility. Accurate technical drawings detailing the proposed route of collection vehicles around the development should be included in plans submitted to Preston City Council.

II. Refuse collection vehicles (RCVs) should be able to manoeuvre a turn entirely within the confines of the highway. RCVs should not overhang the public footpath.

III. There must be no obstruction from landscaping features such as trees or hedges and developers should consider that RCVs are greater in height and length than an average vehicle. If landscaping is not properly maintained there will be branches overhanging and hitting the top of the vehicle.

IV. When designing turning heads, developers should consider the impact parked vehicles can have on manoeuvring an RCV. We suggest that turning heads are designed larger in size to accommodate additional clearance space at locations where there is a possibility of on-street parking issues.

V. The correct chassis and wheel design must be used to conduct the swept path analysis to give an accurate representation of collections.

D CONTAINERS REQUIRED FOR APARTMENT DEVELOPMENTS

In order to calculate the number of containers that will be provided for an apartment development, follow the steps below:

I. N = the number of apartments being built.
II. Calculate the volume of each part of the waste stream that will be generated by the development (V).
III. Calculate the number of Eurobins (EB) or Wheeled Bins (WB) required.
IV. Repeat these steps until you have the number of bins required for each waste stream.

Waste Type		N (No. flat/apartment units)				
		<6	6 - 20	21 - 50	50 - 99	>100
Refuse	**Approx %**	-	**80%**	**80%**	**80%**	**80%**
	V (Volume of refuse generated)	240	V = N x 240 x 0.8	V = N x 240 x 0.8	V = N x 240 x 0.8	V = N x 240 x 0.8
	EB (Eurobins required)	N/A	EB = V ÷ 1100 or 660	EB = V ÷ 1100 or 660	EB = V ÷ 1100 or 660	EB = V ÷ 1100 or 660
	360 Ltrs (Wheeled bin required)	Assigned individual bins	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360
	240 Ltrs (Wheeled bins required)	Assigned individual bins				
Paper & Cardboard	**Approx %**	-	**30%**	**30%**	**30%**	**30%**
	V (Volume of recycling generated)	240	V = N x 240 x 0.3	V = N x 240 x 0.3	V = N x 240 x 0.3	V = N x 240 x 0.3
	360 Ltrs (Wheeled bin required)	Assigned individual bins	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360
	240 Ltrs (Wheeled bins required)	Assigned individual bins	WB = V ÷ 240			
Plastics, Glass & Cans	**Approx %**	-	**30%**	**30%**	**30%**	**30%**
	V (Volume of recycling generated)	240	V = N x 240 x 0.3	V = N x 240 x 0.3	V = N x 240 x 0.3	V = N x 240 x 0.3
	360 Ltrs (Wheeled bin required)	Assigned individual bins	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360	WB = V ÷ 360
	240 Ltrs (Wheeled bins required)	Assigned individual bins	WB = V ÷ 240			
Food Waste	**Approx %**	**100%**	**100%**	**100%**	**100%**	**100%**
	V (Volume of food waste generated)	23	V = N x 23	V = N x 23	V = N x 23	V = N x 23
	240 Ltrs (Wheeled bins required)	Assigned individual caddies	WB = V ÷ 240	WB = V ÷ 240	WB = V ÷ 240	WB = V ÷ 240

The recommended number and type of containers for up to 20no. apartments is provided below. However, this may vary dependent on the site location, and this can be discussed with an Officer during the pre-planning process.

No. of Apartments	Advisory bin requirements (ltr)			
	Refuse	**Plastic, Cans & Glass**	**Paper & Card**	**Food Waste**
1	Individual	Individual	Individual	Individual
2	Individual	Individual	Individual	Individual
3	Individual	Individual	Individual	Individual
4	Individual	Individual	Individual	Individual
5	Individual	Individual	Individual	Individual
6	1 x 1100	2 x 240	2 x 240	240
7	2 x 660	2 x 360	2 x 360	240
8	1100 + 660	2 x 360	2 x 360	240
9	1100 + 660	2 x 360	2 x 360	240
10	2 x 1100	3 x 360	3 x 360	2 x 240
11	2 x 1100	3 x 360	3 x 360	2 x 240
12	2 x 1100 + 660	3 x 360	3 x 360	2 x 240
13	2 x 1100 + 660	3 x 360	3 x 360	2 x 240
14	2 x 1100 + 660	3 x 360	3 x 360	2 x 240
15	3 x 1100	4 x 360	4 x 360	2 x 240
16	3 x 1100	4 x 360	4 x 360	2 x 240
17	3 x 1100	4 x 360	4 x 360	2 x 240
18	2 x 1100 + 2 x 660	4 x 360	4 x 360	2 x 240
19	3 x 1100 + 660	4 x 360	4 x 360	2 x 240
20	3 x 1100 + 660	5 x 360	5 x 360	2 x 240

E STORAGE AREAS AND CONTAINER COLLECTION FOR APARTMENT, COMMERCIAL AND MIXED USE DEVELOPMENTS

I. Storage areas for containers

a) Containers should have designated storage areas which are sensitively located and designed.
b) Container storage areas should be in a position that is mutually convenient and easily accessible for the occupants and the collection crew (see **container collection** section below).
c) Containers should be stored within an external storage area unless there is limited room within an application site, or there are circumstances where an internal storage area proves more suitable.
d) The design of storage areas should allow for easy removal of the containers, over smooth, continuous surfaces.
e) 150mm clearance should be provided around individual bins.
f) Doorways should provide at least 1.3m clearance (including thickness of doors). Ideally doors should be fitted with a retainer and should open outwards.
g) A walkway at least 1.3m wide should be provided within the store that allows access to each of the individual containers and ensures that an individual container can be removed from the store without the need to move any other containers.
h) Separate storage areas for refuse and recycling should be avoided where possible. However where there are separate storage areas for refuse and recycling, the recycling store should be the easiest to access (e.g. closest, least restricted access etc.)
i) Containers should be located away from windows and ventilators, to avoid any nuisance odours entering the premises.

II. Container Collection

a) Generally access for collection of containers should be from the public highway, whether adopted or proposed to be adopted
b) Two options exist for the collection of containers:
  i. Containers are collected directly from the containers store, in line with the points below, or
  ii. Containers are collected from an agreed collection point, in line with the points below
c) It is the responsibility of the caretaker/management company (or similar) to allow the collection crews access to the container stores/collection point on collection day and to ensure that access is not restricted, for example by parked cars.
d) Collection crews will generally not be expected to hold keys, codes or electronic fobs in order to collect bins. However subject to approval from Waste Management, where necessary, arrangements such as these may be made. This must be discussed prior to the submission of plans.
e) The collection vehicle shall be able to approach to within a maximum distance of 8m of the bins store/agreed collection point.
f) Collection vehicles cannot collect containers that are presented on a slope exceeding 1:12. Also the gradient of a slope that containers need to be moved over shall not exceed 1:12 (in line with Part H of the Building Regulations 2010).

g) Surfaces that containers need to move over shall be of a smooth continuous finish and free from steps or other obstacles. A drop-kerb should be incorporated if required. Bins will not be moved over inappropriate surfaces (eg. grass, gravel etc.).

h) Paths shall be wide enough to comfortably accommodate the size of containers in use, and have foundations and a hardwearing surface that will withstand the loading imposed by wheeled containers. Paths should be at least 2m wide as per BS 5906:2005.

i) Following collection, containers should be returned to storage as promptly as possible. There should be clear responsibility for who carries out the task (i.e. management company, caretaker, waste contractor etc.)

III. Mixed Use Developments

a) In the event of mixed use developments separate stores for refuse and recycling containers should be provided for the commercial aspects of a development and the residential aspects. No mixing of commercial waste and residential waste is permitted.

F EXAMPLES OF GOOD PRACTICE

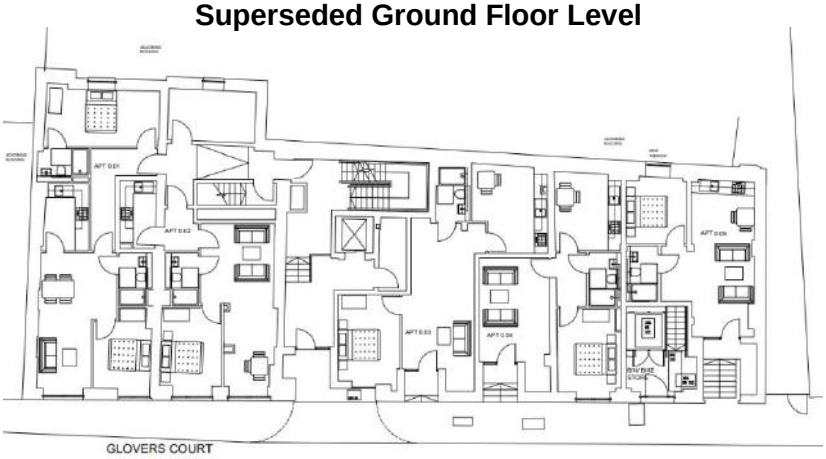
I. Good Practice

a. There are a number of factors which need to be taken into consideration when designing refuse and recycling storage facilities for flats or apartments, commercial and housing developments to ensure efficient collection by the collection vehicles and operatives, and as a means of encouraging effective use by residents. Adhering to methods of good practice and following guidelines laid out in this document will help to achieve both of these aims.

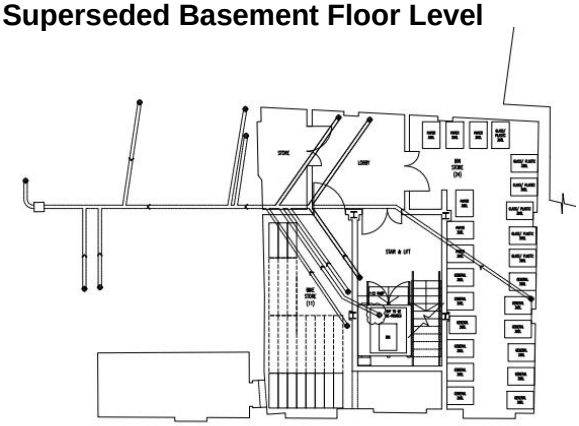
b. Forward planning with regards to refuse and recycling storage and collection will provide benefits to developers, residents and the council. Developers are able to disguise and screen bin areas making developments more attractive to potential buyers, and residents are provided with a secure bin area for communal or individual use which decreases the risk of contamination and vandalism allowing a more effective collection operation.

c. The following example illustrates some of the problems in the initial design of a city centre apartment block. Individual problems are described, and details of how such problems were resolved are also provided.

Superseded Ground Floor Level



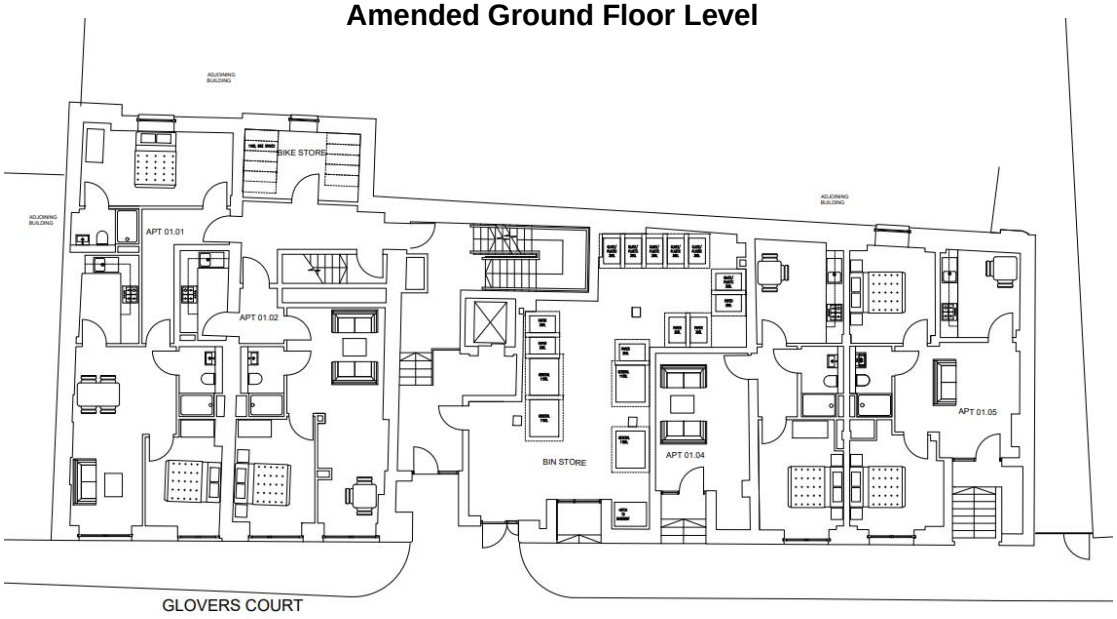
Superseded Basement Floor Level



Drawings provided by Reid Architects

- Bins are located in the basement, which is very inaccessible to both collection crews and residents.
- Preston City Council collection crews would not go down stairs, lifts or multiple doors within a property to access bins. However, the Council has a duty of care to collect household waste and therefore the applicant must demonstrate that an accessible bin store can be provided.
- Glovers Court is a busy one way road with car parking along one side of the highway. The amount of bins proposed and method of collection would result in significant delays to traffic.
- Bins cannot be left at kerbside as this would block pedestrian access.
- No provision has been made for future food waste collections.

Amended Ground Floor Level



Drawing provided by Reid Architects

- The bin store has been relocated to ground floor level with direct external access for collection crews. This should be secured by pin code.
- Access is step free and there is a dropped kerb directly outside of the bin store.
- An internal door from the communal corridor has been created for residents to access the bin store without needing to exit the main building.
- Large 4-wheeled Eurobins for refuse can now be used which ensures the waiting time on Glovers Court is significantly lessened.
- The external door opens outwards, increasing the space within the store and allowing for easy extraction of containers.
- Room has been left for future food waste provisions.

II. Flats/Apartment Developments (Example 1)

The bin store pictured below is an example of good planning and considerate provision for storage of waste generated by the apartments which it serves.

a. The store is designed to be in sympathy with its surroundings, blending in very unobtrusively.
b. It is located within a few metres of the communal access door to the apartments, and it is also overlooked by the apartments to help provide a level of security and deter anti-social behaviour.
c. The access path is paved and smooth without steps or excessive gradients, and with drop kerb access provided to manoeuvre containers to the rear of the collection vehicle.
d. The doors to the store are more than wide enough for sufficient access, and open outwards to maximise space and provide unhindered movement within the store.
e. There is enough capacity within the bin store for the necessary number of containers, and there is also enough free space to comfortably house containers for any future waste streams.
f. All containers can be accessed individually without the need to move any others, and there is the sufficient space around each container in the store.
g. The containers for recycling and domestic waste are separated well to encourage and maximise recycling potential.
h. The RCV is able to approach within six metres of the store to facilitate simple and speedy collection.




G EXAMPLES OF BAD PRACTICE

I. Bad Practice

The following examples illustrate some of the problems encountered by the domestic refuse and recycling collection service across Preston. Individual problems are described, and details of how such problems could have been avoided are also provided.

II. Flat/Apartment Developments (Example 1)

a. Problem

This storage area does not meet the requirements laid out in section 5. The floor space is insufficient for the bins required. A walkway is not provided within the store that allows access to each of the individual containers. It is also not possible to remove individual containers without the need to move all other containers.

b. Solution

The necessary amount of floor space should be allowed for each receptacle as detailed in section 5.2 and appendix A. A walkway of at least 1.3m wide should also be provided. Developers should use the table in appendix D in order to calculate the containers required for refuse and recyclables and subsequently the appropriate floor space required.

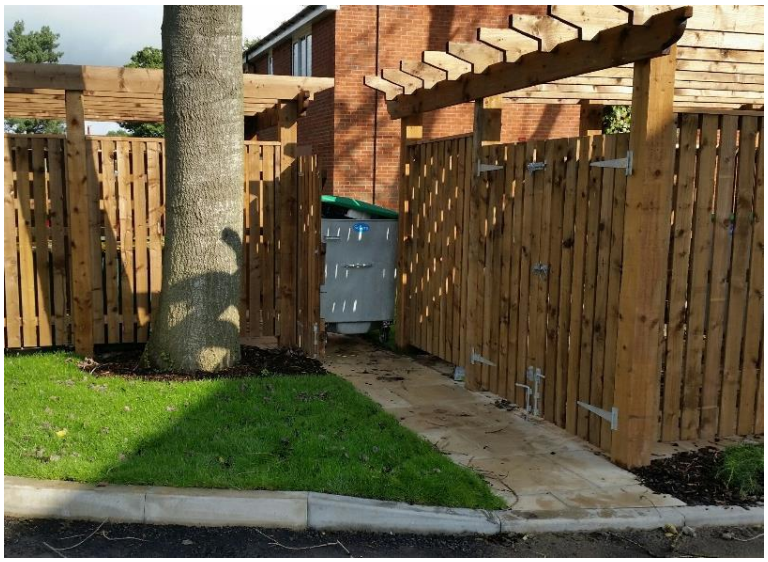
III. Flat/Apartment Developments (Example 2)

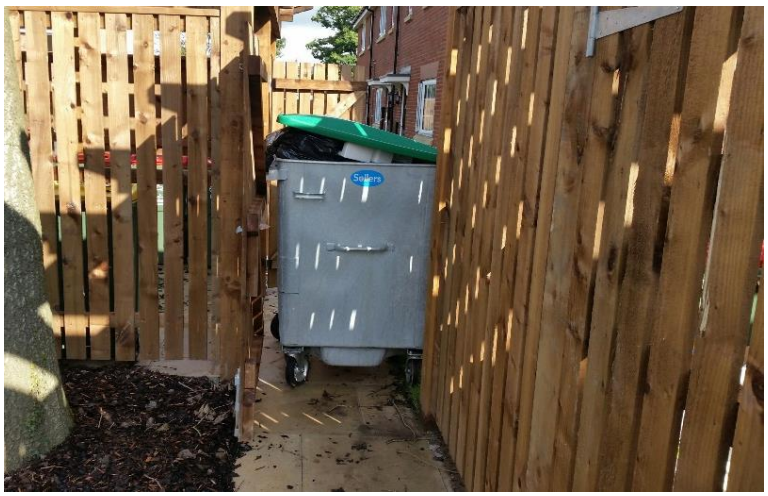
a. Problem

The two storage areas are internally well laid out with adequate space for all containers. The doors are wide enough for the wheeled Eurobins to manoeuvre without hinderance, and there is space set aside to provide capacity for future collections (eg. batteries etc.). However, access to the store is inadequate. The path is not wide enough to manoeuvre the containers over a suitable surface. Eurobins located in the store furthest from kerbside are also too wide to fit through the gap between the two stores, and cannot be taken in the opposite direction as the path is again too narrow whilst also being a private pathway to a domestic residence.

b. Solution

The width of the pathway to the kerbside and between the two stores needs to be increased to at least 2 metres in accordance with Appendix E, Part II., section h. Developers should give consideration to communal bin stores and the size and type of containers that will be employed. Provision should be made for Eurobins of at least 1100l capacity. Appendix D gives details of the type of containers that may be employed and Appendix A lists container dimensions.





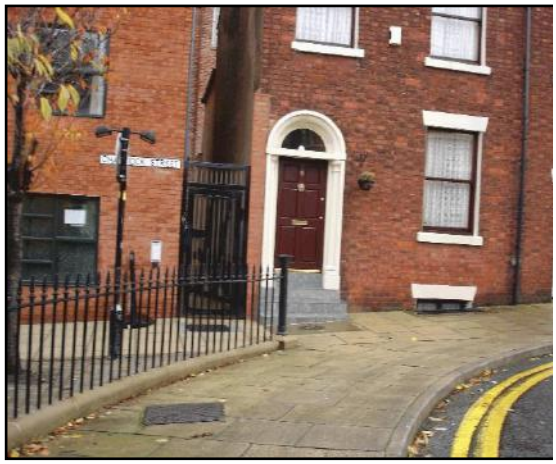
IV. Flat/Apartment Developments (Example 3)

a. Problem

This storage area is located in a central courtyard area of the development. To access this area it is necessary to manoeuvre bins over a distance greater than 8m through a narrow alleyway. Additionally in order for the bins to be taken to the collection vehicle they must be moved over a surface which is not smooth or free of steps and other obstacles. Also steps which the bins must be moved over do not incorporate a drop kerb.

b. Solution

The collection vehicle must be able to approach to within a maximum distance of 8m of the bin store/agreed collection point, and wherever possible the actual distance will be less than this figure. Where this is not possible a collection point must be proposed and agreed by Preston City Council. Additionally steps such as this can easily be avoided by proper planning and design in the early stages of a proposal. Steps in new developments must incorporate drop-kerbs.



V. Flat/Apartment Developments (Example 4)

a. Problem

This development is at the bottom of a steep winding slope on a private road. Consequently access to the bins stores is inadequate and the room available is not sufficient to allow full manoeuvrability of the collection vehicle. Additionally the surface that the containers need to be moved over is not smooth and continuous. It is not possible for Preston City Council to move the containers up the slope, greater than 1:12, over a distance greater than 8m.

b. Solution

The bin stores should be placed at ground level, within 8m of the vehicle access road. If this is not possible then the developer needs to be aware that a private arrangement is necessary to present the containers to ground level for collection by Preston City Council. Developers must also take into consideration the room necessary to manoeuvre the collection vehicles. See appendix B.

VI. Flat/Apartment Developments (Example 5)

a. Problem

The bin store is very badly designed. It is only large enough to incorporate one bin which is accessed by residents through the use of chutes. Additionally there are no drop kerbs and the bin store is blocked by several cars.

b. Solution

Proper planning and design in the early stages of a proposal will avoid having badly designed bin storage areas. Chutes are not permitted in flat/apartment developments as they create problems for segregating and sorting materials for recycling. It is also the responsibility of the caretaker/management company (or similar) to ensure that access to the bin store/collection point is not restricted on collection day (e.g. by parked cars.)

VII. Flat/Apartment Developments (Example 6)

a. Problem

The bin store is blocked by parked cars. Additionally, the surface that the containers need to be moved over is not smooth and continuous. Bin areas are also located internally without natural ventilation and outside access in a secured building. Consequently there is no access for collection vehicles or crews and private arrangements are required to be made in association with the management company.

b. Solution

Where parking areas are located close to bin stores, it must be ensured that parked vehicles do not prevent access to the bin store. The surface that the containers are moved over must be smooth and continuous, and designed for vehicles of up to 32 tonnes. Storage areas must also have natural ventilation and must be adjacent to an external wall where joined to a habitable part of the development.

VIII. Housing Developments

a. Problem

The storage area provided is not a suitable size to accommodate all the necessary refuse and recycling receptacles. Additionally the area is shared by three properties. *Please note, properties are now provided with recycling bins as standard and not recycling boxes.*

b. Solution

All containers required should be accommodated within the boundary of each property. Storage areas should also be large enough house up to, at least, a 360 litre refuse bin, 240 litre garden waste bin and two 240 litre wheeled recycling bins and be sufficient to allow for the storage of additional materials that may be collected by Preston City Council in the future (e.g. food, batteries etc.)

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IX. Commercial Developments (Example 1)

a. Problem

This commercial property has been extended to its boundaries leaving no storage area for the necessary refuse/recycling receptacles. Consequently bins are stored on the back street causing access problems for collection vehicles and creating litter issues.

b. Solutions

Storage areas should be within the confines of the developments. Any external storage areas should be sensitively designed and located, and should be in a position which is mutually convenient and accessible to the collection crew. Properties without an external storage area may be required to go on a bagged commercial collection.

X. Commercial Developments (Example 2)

a. Problem

The collections from these commercial properties take place from the rear where access for collection vehicles is restricted. Parked cars limit access even further and reduce bin storage areas.

b. Solution

Commercial properties should have designated external storage areas which are sensitively located and designed. Additionally it is the responsibility of the caretaker/management company (or similar) to allow the collection crews access to the containers stores/collection point on collection day and to ensure that access is not restricted, for example by parked cars.

H WASTE MANAGEMENT STRATEGY TEMPLATE

Waste Management Strategy

Planning application number	
Development location	
Development description	
Strategy prepared by	
Date prepared	

Notes: The following strategy should be prepared using Preston City Council's *Waste Storage and Collection Guidance for Domestic and Commercial Developments.*

1. Number of bins

- Please provide details of the number, types and sizes of containers proposed and how this was calculated.
- Please show separate figures for flats, apartment buildings or single dwellings within the development.

2. Bin storage area

- Please include layout and elevation plans of the proposed bin storage area(s), showing proposed containers.
- Please describe how occupants will transfer waste to the bin storage area(s) (where appropriate) and the travelling distance required to do so.
- Please indicate the route of the bins from the bin storage area(s) to the collection point(s)

3. Bin collection arrangements

- Please indicate the bin collection point(s), including the route of the bins to reach the collection vehicle if this is not kerbside on an adoptable highway.
- Please include a suggested route plan of how the refuse collection vehicles will traverse the roads on site (if applicable).

4. Other arrangements

- Where appropriate include details of waste compaction, bulky waste collection areas etc.
- Please indicate whether it is intended to use Preston City Council or a private licensed waste carrier to collect the waste streams.
- Please include any other relevant waste management information in support of your application.