1. Introduction

1.1 This guide sets out the minimum standards that are required when planning and designing waste management facilities for the storage and collection of refuse/recycling in domestic and commercial properties. It is intended to assist developers, landowners, planners, architects and property managers to ensure that their facilities accord with Bristol Waste Company’s (BWC) recycling and waste management strategies and collection arrangements.

1.2 The guide was developed by Bristol City Council and adopted in 2010, but has recently been updated by Bristol Waste Company (BWC) to bring it into line with the current collection practices. It provides supplementary guidance to Bristol City Council’s Core Strategy Policies BSC15 and BSC21 and Site Allocations and Development Management Policies DM23 and DM32. It also supports central government’s National Planning Policy for Waste (October 2014).

1.3 The guide will be used by Bristol City Council’s Planning and Transport Departments and BWC when assessing any planning applications, as well as proposals for Houses in Multiple Occupation (HMO’s). As part of any planning application (including conversions and change of use) details must be submitted of the location, layout, design, volume, management and collection arrangements for domestic/non-domestic waste and recyclable materials.
1.4 Throughout this Guide, the term “development” includes any new, extended or altered building, any redevelopment, and any change of use or conversion of existing buildings. Bristol City Council’s requirements are that when a building is erected, rebuilt, altered or adapted in any way, or when changes are made in the use or occupation of the building in such a way that the refuse storage accommodation and its access will be rendered insufficient or unsuitable, then the refuse storage accommodation must be approved by Bristol City Council as part of any necessary planning application for the development.

1.5 All refuse should be separated within the premises and must be stored off the highway and out of public view, in purpose built refuse stores, designated areas or in a bulk containerized system held within the boundary of the property. Access must not exceed the maximum distance of travel from the roadway, thus reducing the opportunity for spillage. The storage of all waste until collected by BWC, is the responsibility of the property owner. Consideration should also be given to ensuring stores meet fire H&S requirements to ensure stored materials do provide a potential source of flammable material.

1.6 This guide affords an opportunity to adopt sustainable waste management practices and to design out frequently occurring difficulties. It is hoped that by working with BWC, mutual advantages can be gained in ensuring a clean and therefore safer environment.

1.7 BWC will work in partnership with developers to implement guidance on waste collection and storage facilities. However, where refuse storage accommodation is not provided in accordance with this guide, or with any agreed alternative arrangements, Bristol City Council has a variety of powers either to secure compliance or to decline, accept or to adopt waste collection proposals from developers. These include enforcement powers under Town and Country Planning legislation, where specific conditions of planning permission are breached or where development is not carried out in accordance with the approved proposals, and the refusal to grant planning permission in the first place.

1.8 Where developers implement waste management proposals which fail to meet current collection or disposal standards Bristol City Council may expect developers to fund such costs to accommodate special arrangements or provide and maintain appropriate facilities. Alternatively, where BWC is unable to collect waste directly from individual properties, nearby public highway collection points may be arranged with Bristol City Council’s agreement. Where developers offer roads and infrastructure for adoption, proposals that depart from this Guide will not be agreed.

1.9 Where a specific issue is not covered, or clarification is required, technical enquiries can be made as follows:

Bristol Waste Company Albert Road, Bristol BS2 0XS
For Domestic Waste (including change of use/flat conversions)
Tel: 0117 304 9508 email: BWCPPlanning@bristolwastecompany.co.uk

For Commercial Waste (including mixed developments)
Tel: 0117 9222100 email: commercial@bristolwastecompany.co.uk

Development Management, City Hall, Bristol City Council, PO Box 3176, Bristol, BS3 9FS
Tel: 0117 922 3000 email: development.management@bristol.gov.uk

2. Waste legislation

2.1 Through the European Waste Framework Directive (2008/98/EC) and Central Government’s Waste Management Plan for England 2013, the national context of waste management has changed significantly. In particular, the Waste Management Plan for England 2013 sets many targets designed to achieve a more
sustainable approach to how we deal with waste. The strategy, therefore promotes the principles of the “Waste Hierarchy” to prevent, reduce, reuse, recycle and recover.

2.2 In order to deliver these challenging objectives, Bristol City Council has within its Waste and Resource Management Strategy (2016) set itself a number of challenging targets, which include:

2.3 Produce the lowest amount of residual waste per person per year of any UK Core City and aims for a target of below 150kg per person per year by 2025

2.4 Send less than 5% of waste to landfill by 2030

2.5 Recycle and prepare for re-use (including composting) 50% by 2020 and 70% by 2025

2.6 Increase overall satisfaction with the street scene by 10% in Bristol neighbourhoods identified as having the most significant issues by 2018

2.7 These targets will not be met unless Bristol City Council and BWC acts in conjunction with developers and others, to ensure new developments are designed to encourage waste reduction, recycling, composting and separation at source. Bristol City Council will therefore use all powers at its disposal to insist upon modern, well-designed storage, collection and treatment facilities whenever new development is planned.

3. Planning Policy and key principles for waste storage and management

3.1 This guide provides supplementary guidance to the following policies within Bristol City Council’s Core Strategy and Site Allocations and Development Management Policies, which need to be read in conjunction with this document and taken into consideration when planning and designing waste storage facilities:

BSC15: Sustainable Design and Construction

All new development will be required to provide satisfactory arrangements for the storage of refuse and recyclable materials as an integral part of its design. Major developments should include communal facilities for waste collection and recycling where appropriate.

BSC21: Quality Urban Design

New development in Bristol should deliver high quality urban design. Development in Bristol will be expected to: safeguard the amenity of existing development and create a high quality environment for future occupiers.

DM23: Transport Development Management

In accordance with the standards set out in the parking schedule at Appendix 2, development proposals will be expected to: provide appropriate servicing and loading facilities.

DM32: Recycling and Refuse Provision in New Development

Recycling and Refuse in New Development

All new development will be expected to provide, as a minimum:

- In the case of non-residential developments, shared housing and major flatted development, shared recycling facilities and refuse bins of sufficient capacity to serve the proposed development.
- In the case of other residential development:
  - Sufficient spare capacity for the storage of individual recycling and refuse containers to reflect the current recycling regime; or
  - Communal recycling facilities and refuse bins of sufficient capacity to serve the proposed development as a whole (this could include whole street solutions).

Residential properties with private garden areas should also include provision for the separate storage of
garden waste for collection or composting.

**Design and Access Requirements**

- The location and design of recycling and refuse provision should be integral to the design of the proposed development. In assessing recycling and refuse provision, regard will be made to the following considerations:
  - The level and type of provision, having regard to the above requirements and relevant space standards; and
  - The location of the provision, having regard to the need to provide and maintain safe and convenient access for occupants, while also providing satisfactory access for collection vehicles and operatives; and
  - The impact of the provision of visual amenity, having regard to the need to minimise the prominence of the facilities and screen any external provision; and
  - The impact of the provision on the health and amenity of neighbouring development and the proposed development; and
  - The security of the provision against scavenging pests, vandalism and unauthorised use.
- Recycling and refuse storage should be separate from cycle storage, car parking and key circulation areas.

**Recycling Provision for Public Use**

Major developments which draw large number of visitors will be expected to provide an element of appropriately sited and designed recycling provision for public use.

3.2 At the design stage of all developments as an integral part of the scheme, provision must be made to collect, compost and recycle either at individual buildings, or at easily accessible sites within the development site itself. Waste minimization and recovery efforts at the design, construction and demolition stage, must be made by developers and information regarding such efforts is required for all planning applications.

4. **Residential development**

4.1 Residential developments must include adequate and appropriate means of storing refuse and recyclable materials, providing sufficient storage space to contain all waste produced over a 15 day period on the premises.

4.2 Provisions for storing refuse and/or organic and dry recyclable materials is an increasingly important factor in considering sustainable waste strategies and the wider environmental effects of new development. This guide does not aim to address all the problems associated with existing development, but rather to ensure that they are not made worse as a result of permitting new developments, alterations, extensions and change of use of properties that generate refuse.

4.3 This guide applies to all new developments, but is especially relevant for proposals involving flats (including new build, changes of use, sub-divisions and conversions of existing residential or other uses) and mixed use developments (flats and commercial uses in one building).

4.4 Domestic waste collection services are currently provided as follows:
  - i. Weekly food collections.
  - ii. Weekly dry (paper, plastics, cans, glass and cardboard) recycling, unless otherwise specified.
  - iii. Fortnightly collection of residual waste, unless otherwise specified.

Some households opt to choose to have a charged for subscription garden waste wheeled bin collection service.
No waste left by the side of the bin will be collected unless previously agreed with BWC.

Any future changes to collection services may give rise to a review of the storage and collection facilities incorporated into new development schemes.

5. Bin storage requirements

5.1 All new development (including houses, flats, and conversions) must provide accommodation for the external or ventilated internal storage of waste, organic and dry recyclables. A minimum footprint size of 0.6m x 1.5m, or a volume of 1.5m$^3$ must be provided where each dwelling or flat has individual storage enabling the following to be stored:
  - 25 litre capacity storage for organic waste (additional capacity can be provided if required)
  - 2 kerbside boxes (minimum 40 litre capacity each) storage for dry recyclables (additional capacity can be provided if required). This may be altered if any service change is to be undertaken, please see www.bristolwastecompany.co.uk for our current collection methodology.

5.2 Future changes to kerbside recycling collections could give rise to the need for additional or a change in storage requirements.

5.3 Storage capacity for general refuse per individual household is a 180L bin, currently collected fortnightly. Additional capacity is provided to large households upon request and pending a waste review (Flatted properties and Houses of Multi Occupation have specific requirements).

5.4 Where properties have gardens, provision must be made for either the composting or storage/collection of garden waste.

5.5 Flatted development can often best be served by communal storage arrangements. Such provision will be expected for schemes with more than 15 units, where developments must incorporate storage for approximately 100 litres per flat on a weekly basis within the development comprising:
  a. For (food) recycling a storage capacity of 4 litres per unit provided in 140 or 180 litre containers.
  b. For dry recyclables a combined storage capacity of up to 50 litres per unit provided in 240 or 360 litre containers, in groups of up to 6 containers.
  c. Dry recycling will be collected separately; normally as paper, card, plastic & cans and separate glass
  d. For general refuse a storage capacity of 65 litres per unit provided in one or more 1100 litre containers.
  e. For cardboard storage the volume required will be assessed for each scheme with 660 litre bins to be used for smaller developments and 1100 litre bins for larger developments.

5.6 All bins must be contained within a dedicated, suitably screened, suitably ventilated and secure area, which will prevent interference by any scavenging pests or any third party. Bin stores must not be used to accommodate cycle parking. Communal refuse and recycling storage facilities (collection points) must be at the edge of the property nearest to where the collection vehicle is able to safely stop. This is normally at the front of the property.

5.7 For secure storage we would recommend that bin stores have coded entries. We do not recommend keys, fobs or swipe cards due to the frequency of access required by BWC. If a coded entry proves to be necessary, BWC will not be held responsible for the security of the building, loss of any keys or damage caused through large containers being taken through doorways. Management Companies are responsible for informing BWC officers of any change to keys or codes to prevent BWC crews being unable to gain access to collect waste and recycling.

5.8 Refuse containers must not be left out on the footway in any circumstances apart from on the day of collection, as footways must be left clear to allow pedestrians to pass.
5.9 As a general guide, Table 1 lists the standard sizes for each material stream collected by BWC:

<table>
<thead>
<tr>
<th>Material</th>
<th>Standard Container size used (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic/Cans</td>
<td>360</td>
</tr>
<tr>
<td>Glass</td>
<td>240</td>
</tr>
<tr>
<td>Card</td>
<td>1100</td>
</tr>
<tr>
<td>Paper</td>
<td>240</td>
</tr>
<tr>
<td>Food</td>
<td>180</td>
</tr>
<tr>
<td>Residual Waste</td>
<td>1100</td>
</tr>
</tbody>
</table>

Table 1 Standard issue bin sizes

6. **Non Residential development**

6.1 Any new, extended or altered building, and any redevelopment, change of use or conversion of existing building, must include adequate and appropriate means of storing refuse and recyclable materials, within the curtilage of the premises. Waste storage on the highway is not acceptable.

6.2 Waste must be stored in a secure area, therefore preventing interference by any scavenging pests or any third party. Storage areas inside the building require a ventilation system.

6.3 Provisions must be made to encourage waste separation and segregation, therefore promoting recycling and preventing cross-contamination between hazardous waste and recyclable/non-recyclable waste types. Cross-contaminated waste types will be disposed of at a premium.

6.4 In view of the diverse range of uses and scale of development falling within the non-residential category and because of options for the type and frequency of collection it is not possible to prescribe a comprehensive set of storage space standards.

6.5 Proposals submitting for planning permission should justify the proposed storage arrangements based on the nature of the use and the planned collection arrangements. However as a rule a proposal that does not plan or provide for at least the storage of two 1100 litre waste receptacles, or equivalent storage volume, are unlikely to be acceptable. Refer to Section 13 for dimensions of bins to assist the planning of storage space and access routes.

6.6 Properties, which cannot accommodate the provisions in 5.5 will require more frequent collections, potentially daily. To consider this option, BCC and BWC must be consulted. Any agreement will then be confirmed as a condition of the planning permission. You are advised to maximize storage on site subject to other considerations because with increasing landfill taxes and disposal charges, contracts for increased waste collections will be at a higher premium.

6.7 This guide does not aim to address all the problems associated with existing development, but rather to ensure that they are not made worse as a result of permitting alteration, extension and change of use of properties that generate refuse. It is strongly recommended that contact be made with BWC at the earliest opportunity to discuss any issues involving commercial waste management issues in non-residential development.

7. **Mixed Use development**

7.1 In a mixed use development such as a commercial property that includes residential dwellings, commercial waste must be strictly separated so that it does not enter the domestic waste stream. Each use within a mixed use should incorporate storage arrangements as set out in sections 5 and 6 respectively. For larger schemes, the potential for providing site-wide communal storage facilities shared by a number of individual business and occupiers, subject to the separation of domestic and commercial waste, should be discussed at an early stage of site space planning.

7.2 Any Mixed-use development must be able to demonstrate the separation of waste to prevent the misuse of either collection methodology. The residential proportion of the site must have a separate
bin storage area with limited access.

8. **Other approaches to encouraging recycling**

8.1 In major developments, in particular, schemes can incorporate facilities that will encourage recycling including:

a. Provision of internal space for safe and convenient storage and collection of recyclables within buildings (e.g. in flats, within each dwelling and possibly each floor; in schools, within each classroom).

b. Provision of recycling facilities within public realm, where applicable on major developments.

c. The promotion of high quality design and materials for recycling storage, particularly in the public realm, where opportunities can be taken to integrate the design with other street furniture, signage and public art.

9. **Access for vehicles**

9.1 Any roads over which collection vehicles will travel must be constructed to Bristol City Council’s adoptable standard and accord with the standards set out in and the Department for Transport’s Manual for Streets. In the case of private roads as collection vehicles cannot access them, a collection point must be provided on the adopted highway.

9.2 Roads and parking areas must be laid out to ensure reasonable convenience for collection vehicles and include turning facilities for an 11.4m long vehicle, to be demonstrated through swept path analysis.

9.3 Any structure under which a collection vehicle has to operate must provide a minimum clearance of 4 metres, with a minimum working area of 3.5 metres width by 4 metres length, where the emptying of the containers will take place.

9.4 Collection vehicles will not reverse over a distance in excess of 12 metres to or from the collection point. Please note the Health and Safety Executive’s publication Workplace Transport: Safety Guidance for Employers. At page 32, relating to examples of safe working practices, it states in paragraph 129 that:

“Nearly a quarter of all deaths involving vehicles at work occur while vehicles are reversing. Many other reversing accidents do not result in injury but cause costly damage to vehicles, equipment and premises.”

and at paragraph 130:

“The most effective way of dealing with the risk of reversing accidents is to remove the need for reversing altogether.”

9.5 The length of a collection vehicle is generally 11.4 metres; the working length should take account of the size of the container, making the length of the vehicle with the container in emptying position 13 metres. A further 2 metres is required for operatives to stand clear of the bin whilst being lifted.

9.6 The emptying position that the vehicle manoeuvres to and operates from should be relatively level and flat for the entire length of vehicle and container. Any slopes or gradients (other than those necessary for surface water drainage) should be avoided.

9.7 Ideally the vehicle should pull into a dedicated off road bay, without the necessity of reversing into or out of the bay.

9.8 Consideration of parking, formalised and informal must be taken into account as must restricted road width as this is a major cause of failure to empty bins.
10. **Access for refuse collectors**

10.1 Refuse and recycling will not be collected from private drives. Where public access paths are to be used from the refuse storage location to the collection vehicle, they should be relatively level (apart from gradients necessary for surface water drainage). Any longitudinal gradient falling away from the storage location must not exceed 1:12.

10.2 Access paths should not be less than 1.5 metres wide and be completely free from kerbs and steps. They must be of a durable construction with a relatively smooth non-slip surface. Where necessary an appropriate drainage system must be incorporated into the design of the access path to prevent surface water discharging from the path onto the adopted highway. Where possible access paths should have sufficient natural light. Any artificial illumination required should be low energy lighting controlled by motion detectors.

10.3 Drop kerbs (with a maximum 6 mm upstand) should be provided where access paths meet the roadway, and appropriate arrangements should be made to keep resulting gradients to a minimum.

10.4 Note - where foundations have eroded and trip hazards have formed, the landowner will be responsible for any and all appropriate repairs. Failure to maintain foundations and surfaces to a satisfactory standard may result in collections being halted due to health and safety requirements.

10.5 Bulky/Commercial Containers – collection operatives will not pull/push a bulky container bin more than 5 metres from the agreed waste collection point to the collection vehicle. Any paths must be free from obstructions. Doors to storage areas and access path must be a minimum of 1.5 metres wide for 660 and 1100 litre containers. Any doors must not open outwards onto the adopted highway. Door thresholds must be ramped and no higher than 20mm high.

10.6 Access paths must exclude difficult turns and bends, especially on slopes, which can produce excessive strains on the upper body to collectors to control containers, to avoid damage to property.

10.7 Wheeled Bins - collection operatives will not pull/push a wheelie bin more than 15 metres from the presentation point to the collection vehicle. The presentation point must be to the front of the premises where practically possible. The access-way must not pass through any part of the dwelling and must be free of obstructions, difficult turns and not involve steps.

10.8 Bagged refuse and recycled kerbside collections - collectors will not carry bagged refuse more than 10 metres from the presentation point to the collection vehicle. The access-way must not pass through any part of the building and must be free of obstructions.

11. **Access for residents and business users to on site storage**

11.1 Routes and pathways for occupants to gain access to and use storage areas should achieve the same good standards of width, gradient and lighting as for refuse collectors. The location and distances to storage areas within the site should encourage their use by occupants and encourage occupants to return containers to the storage areas following collection. As set out within the Department for Transport’s Manual for Streets householders will not be expected to carry/wheel their waste further than 30m from their homes.

12. **Refuse hard-standings and container chambers**

12.1 All storage chambers/housings must be constructed to BS 5906 (1980) and conform to Building Regulations 2000, Part H6.

12.2 Public footpaths, roadways or any other public highways must not be impeded or used as a storage area for containers or bags.

12.3 Ideally chambers/housings/hard-standings should be accessed directly from the roadway but issues of visual impact will also be taken in to account.
12.4 All approaches must have minimum headroom of 2m.
12.5 The chamber/housing should be of adequate height to allow the lid of the bin (if fitted) to be opened to its full height (2.4m for a 1280l bin).
12.6 The design of the chamber/housing should allow the waste receptacle to be withdrawn horizontally, ie use double doors.
12.7 Doors should be fitted with stays or catches to lock back into the open position to allow the refuse collector to manoeuvre the container safely with both hands.
12.8 Doors, door surrounds and walls should be constructed to minimise wear and tear from communal bins with protective rails and edging on exposed corners.

13. Container sizes

<table>
<thead>
<tr>
<th>Capacity (litres)</th>
<th>Height (mm)</th>
<th>Depth (mm)</th>
<th>Width (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>935</td>
<td>555</td>
<td>480</td>
</tr>
<tr>
<td>140</td>
<td>1070</td>
<td>555</td>
<td>480</td>
</tr>
<tr>
<td>180</td>
<td>1070</td>
<td>740</td>
<td>465</td>
</tr>
<tr>
<td>240</td>
<td>1070</td>
<td>740</td>
<td>570</td>
</tr>
<tr>
<td>360*</td>
<td>1110</td>
<td>880</td>
<td>600</td>
</tr>
<tr>
<td>660</td>
<td>1330</td>
<td>715</td>
<td>1230</td>
</tr>
<tr>
<td>1100</td>
<td>1370</td>
<td>985</td>
<td>1260</td>
</tr>
<tr>
<td>Chamberlain</td>
<td>1410</td>
<td>1010</td>
<td>950</td>
</tr>
</tbody>
</table>

* This size of wheeled bin is only used in Mini Recycling Centres (MRC’s) and not in the collection of domestic household waste.

14. Health and safety
14.1 BWC collects household waste within Bristol. The company has a statutory responsibility for their employees' health and safety. Health and safety requirements will always be considered when refuse storage and collection arrangements are being established.
14.2 Joint site meetings between BWC and the developer will be made, in many cases, to establish best practice.
14.3 Manual Handling Operation Regulations 1992 are intended “to eliminate, as far as reasonably practicable all manual handling and where not possible, to reduce handling as far as reasonably practicable”. A common sense approach avoids steps, ramps, slopes, etc over which waste receptacles need to be carried or wheeled.
14.4 The effectiveness of waste storage arrangements will be undermined if occupiers and owners of property do not exercise a duty of care to prevent:
14.5 Corrosion or wear of waste containers;
14.6 Accidental spilling or leaking or inadvertent leaching from waste unprotected from rainfall;
14.7 Accident or weather breaking contained waste open and allowing it to escape;
14.8 Waste blowing away or falling while stored or transported;
14.9 Scavenging of waste by vandals, thieves, children, trespassers or animals (as covered on page 5 of the Document).
14.10 Further guidance regarding duty of care can be found at: