

# Waste Storage, Collection and Management Guide for New Developments





January 2019

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### Glossary

- \* 'The Council' refers to Southend-on-Sea Borough Council
- \* 'Multi Occupancy Premises' refers to flats or dwellings that result from the conversion of existing properties
- \* 'Multi Occupancy Developments' refers to purpose built flatted developments

## 1. Introduction

The purpose of this Guide is to provide an outline of the waste storage, collection and management criteria that developers should be applying to new developments. Incorrect or inadequate waste storage or collection arrangements can have a detrimental impact on residents and their quality of life in addition to undermining the aesthetics of the street scene.

This Guide is intended to set out the expectations of Southend-on-Sea Borough Council (the Council) with an emphasis on new residential developments and the planned storage and collection of waste and recycling. As such it seeks to provide baseline information to the developer in order to assist them both in the planning process and the delivery of effective waste management within residential developments once constructed. The Council does not currently deliver commercial waste collections to businesses; however parts of this guide will equally apply to proposed commercial development.

If specific detailed information is required beyond which is in this Guide then the developer should contact Waste Management, Waste and Environmental Care Team, Department for Place on 01702 215006.

The Council, as a Unitary Authority is both a Waste Collection and Waste Disposal Authority. As a Waste Collection Authority it has powers to require residents to present their waste in the receptacles it specifies and at a frequency specified; this guide seeks to outline the issues which should be taken into account by designers and developers to enable occupiers of premises to comply with the Council's requirements.

It is recommended that designers engage at an early stage in respect of this guidance and speak to appropriate Officers within the Planning Department, if necessary, before any design is finalised. Designs should have regard for the guidance set out within the Council's adopted Design and Townscape Guide SPD (2009) and forthcoming Streetscape Manual SPD once adopted.

There are a number of national targets and drivers that the Council must meet and therefore it must



Warrior Square Regeneration Project

ensure that all developments requiring planning permission contain suitable accommodation for the storage of wastes in its various forms before its removal, or provide infrastructure on the site to safely use particular waste streams (i.e. composting of food /garden wastes). This will increasingly minimise the amount of wastes deposited to landfill and improve the quality of the environment. Further details can be found in Appendix 2.

All standards or requirements proposed in this Guide either meet or exceed the current relevant British Standards and Code for Sustainable Homes requirements. The Council expects that developers will familiarise themselves with the standards or requirements and ensure that developments reflect those mentioned in this Guide. Non-adherence to the standards or requirements proposed may potentially impact on either; planning applications received or those passed to the Waste Management section for comment.

This Guide can be used freely in order to check that adequate waste provisions are included within development proposals. British Standard BS5906 2005 gives technical guidance on the provision and location of a variety of facilities for the storage and collection of waste. Developers are also recommended to refer to *Making Space for Waste*, Designing Waste Management in New Developments, Association of Directors of Environment, Economy and Transport (ADEPT) June 2010 as the Guide also uses this as a baseline for waste management arrangements in new developments.

## 2. Southend-on-Sea Borough Councils Responsibilities

The Council as a Waste Collection and Waste Disposal Authority is required under Part II of the *Environmental Protection Act* 1990 to collect wastes from residential properties (household waste) within the borough and make arrangements to dispose of it. This Guide seeks to ensure that this responsibility can be effectively met.

Under section 46 (Receptacles for Household Waste) and section 47 (Receptacles for the Commercial or Industrial waste of the Act) the Council can specify the type of container(s) to be used for placing segregated waste types and prescribe a collection point(s) where such wastes are to be placed on a given day for collection. This Guide identifies the receptacles prescribed by the Council

The Council has a responsibility to meet both National and European targets for the reduction of waste going to landfill and increasing recycling and composting. A brief summary can be found in Appendix 2. When any new development, extension, or change of use is proposed, it is important that storage/collection arrangements waste are considered. Provision should be made at an early stage and details shall be included on drawings, with an attached Recyling and Waste Management Strategy (RWMS) at the time a planning application is submitted to the Council. The RWMS will be considered by the Council.

## 3. Planning Context

Planning law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise. The development plan for Southend consists of a number of national and local planning policy documents. The Council is the Planning Authority for the Borough.

National Planning Policy refers to design and layout in new developments being able to help secure opportunities for sustainable waste management. New development should make sufficient provision for waste management and promote designs and layouts that secure the integration of waste management facilities without adverse impact on the street scene or local landscape. The *Southend-on-Sea Core Strategy* 2007 establishes key development principles for all new development that must be addressed by developers, including how new development will provide for the collection of re-usable and recyclable waste. The *Southend Design and Townscape Guide* 2009 provides further guidance on the design and layout of waste storage and recycling within residential developments:

"Refuse storage and recycling should be integral to the development, not an afterthought. Designers must consider and demonstrate the type and quantity of waste and recycling which is likely to be produced by the building and how it will be stored and collected. Storage should be accessible within reasonable carrying distance from the highway but should not appear to dominate the frontage. Where possible arrangements for refuse and recycling facilities storage should be made within the building where they can be integral to the design and hidden from public view. Where this is not achievable external storage facilities must be well designed, conveniently located, screened and ventilated. If new streets are formed there must be adequate access for waste collection vehicles." (Para 181)

The Council's *Streetscape Manual SPD* has detailed guidance on product specifications and design options for street furniture such as recycling/ litter bins.

Recycling requirements are constantly evolving. Developers will need to demonstrate that their development will meet the current requirements and be flexible so that they can be adapted for the future. A RWMS will be required for all planning applications (except householder applications, e.g. extensions).

The Government and the Council attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people. Developers and designers should ensure that waste collection and storage requirements are an integral part of a development's design and achieved in ways that do not compromise quality of place. Guidance and the baseline information provided in this guide will assist towards producing a RWMS that must accompany relevant planning applications.

## 4. Waste Producer's Responsibilities

All waste producers are responsible for managing their own wastes and they must not allow wastes to escape onto, or store their wastes on, the Public Highway for the Council to collect. The *Clean Neighbourhoods and EnvironmentAct*2005 (CNEA 2005) sets out penalties for depositing waste on the Public Highway or on any land that is open to the air. Therefore space for the safe storage of recyclables and waste is needed to comply both with the CNEA 2005 and the objectives of this Guide.

## 5. Designer and Developer Responsibilities

The Council requires that designers and developers refer to this Guide, together with the adopted *Design and Townscape SPD* (2009) and S*treetscape Manual SPD*, during all stages of the preparation of development proposals and before submitting a planning application. The Council requires that a RWMS is prepared and submitted as part of any planning application (except for householder applications e.g. extensions).

Developers must consider and demonstrate the type and quantity of recycling and waste which is likely to be produced by the building and how it will be stored and collected. The wider design context of the development proposal must be considered when determining how this can be appropriately achieved. This should be integral to the development proposal, not an afterthought.

A 'Developer Checklist' can be found attached as Appendix 1. It contains a summary of notable requirements of this Guide. It may also be useful during the early stages of designing a new development. A copy of the checklist can also be included in the RWMS submitted to the Council for its consideration. Where a development proposal departs from the criteria provided in this guide adequate justification should be provided within the RWMS.

A RWMS must outline:

- An assessment of the types and quantities of household waste which will be created by occupiers of the development,
- An identification of the waste storage and collection requirements for the completed development and how the Wastes generated can be collected. Waste separation and storage also needs to be considered at the places where wastes may be created such as kitchens, with an emphasis on ensuring adequate space is provided for temporary storage until collection,
- An assessment of how waste storage and collection arrangements have been integrated into the overall design development proposal,
- The provision of details of any other waste management requirements highlighted in this Guide, and
- Whenever possible, the submission of a written intent to minimise wastes created, the segregation of recyclable elements for waste created during the building process and how the recycling of such wastes will be undertaken.

Sustainable construction methods should be adopted in order to minimise the use of raw materials and maximise opportunities for the use of recycled aggregates. The re-use of aggregates and demolished material from redevelopment on- site will be necessary in order to reduce the amount of waste created and transported. Where it is not possible to process and subsequently re-use the material within the site it should be processed onsite before re-use at another site, with measures to minimise dust and noise.

Developments will also need to have regard to the previous Government's *Waste Strategy* 2007, the *Government Review of Waste Policy in England* 2011 and Waste Management Plan for England 2013.

There are many organisations that publish guides on best practice in construction; a few are detailed in Appendix 3.

The Council currently offers a residential "edge of property" recycling and waste collection service. Therefore, developers must take into consideration



Southend has a weekly collection of food waste.

the need to design any waste storage facilities for individual properties in such a way that, if the waste is required to be stored outside, it is as close as possible to the edge of the property, but not on the Public Highway. In the event of multi-occupancy properties developers must consider and adhere to the carrying distances and other key transportation distances identified in this Guide.

When considering how the treatment of waste is incorporated into a new development, it is important not to under estimate how poor planning and design can have a detrimental effect on the quality, character and function of that space. The operation of recycling and waste collection services should be an integral part of street design and achieved in ways that do not compromise quality of place. The design of residential roads should accommodate waste collection vehicles without allowing their requirements to dominate the layout.

## 6. Current Collection Services for Low Level Residential Developments

#### 6.1 Frequency of Collection.

The Council currently provides a weekly free collection service to all properties. The weekly collection frequency applies to recycling, food waste and residual waste (refuse) collections. Collections are normally undertaken over four days between, 7.00am and 6.00pm, Tuesday to Friday. In the event of a bank holiday, Saturday may be used as a catch-up day.

Additional collections, i.e. more than the weekly service, can be arranged. However the additional

collections are a chargeable service. This would normally only apply to multiple occupancy dwellings where storage options are insufficient or inadequate.

Garden waste collections may also be arranged for the property owner; however this is also a chargeable service available for 52 weeks. Compostable sacks can also be purchased.

#### 6.2 Collection Location

The Council currently operates an 'edge of property' kerbside collection scheme. This mean that residents should present their recycling, food waste and residual waste (refuse) on the boundary of their property nearest the public highway, however, in practice all materials can be presented anywhere on the property (within the "curtilage") for collection as long as it is visible and accessible by the collection staff.

The householder is responsible for transporting their sacks and bins to the presentation point at 'edge or property' or depositing the material into a communal bin in a communal storage area in the event of multiple occupancy dwellings.

#### 6.3 Method of Collection and Containers

The following Table 1 demonstrates the current collection services<sup>\*</sup> for individual residential properties:

The Council operates a chargeable collection service for large/bulky wastes i.e. furniture, white goods, etc. (waste which will not fit into a black sack). Residents from individual properties must contact the Council to book a collection of the items with the waste collection contractor. Developers are



Southend has a weekly collection for recycling, food waste and residual waste (black sack).

reminded that at no time should the temporary storage of bulky waste items interfere, block or otherwise impede access and emptying of communal waste or recycling containers.

\*Current collection services – the services described are current at the time of publication of this document. It is the developer's responsibility to check if there have been any recent material changes to collection services.

Table 1: Colle	Table 1: Collection method and type of receptacles for individual residential properties						
Collection	Receptacle	Dimensions (H x W x D)	Frequency	Notes			
Residual waste	Black sack		Weekly	Black sacks purchased directly by the householder			
Recycling	Pink sack	370 x 735 x 870mm (20 microns thick)	Weekly				
Food waste	Blue bin	20-21 litres	Weekly	Small caddy (5-7 litre) supplied for kitchen			
Paper & Card	Blue paperbox	55 litres	Weekly	Large cardboard items flattened and left under box			
Textiles	White sack	450 x 735 x 870mm (30 microns thick)	Weekly				
Garden waste	Compostable sack or wheeled bin	Biodegradable sack: 650 x 650 x 800mm (30 microns thick). Wheeled bin: 240 litres	Once registered sack is weekly. Wheeled bin is weekly for 52 weeks	Chargeable service: resident pays for collection either by purchasing sacks or paying annually for wheeled bin collection			
Bulky items	n/a	n/a	As requested	Chargeable service: resident pays per item for collection			

The Council delivers low level residential properties an allocation of recycling sacks every 6 months, free of charge, as follows in Table 2;

Table 2: Sack allocations*								
Service Rolls per delivery Sacks per Roll Total sacks per year								
Pink recycling sacks	3	26	156					
White textile sacks	1	6	12					
Food waste liners	3	26	156					
* Sack allocations described are current at the time of publication								

## 7. Current Collection Services for Residential Multiple Occupancy Developments

#### 7.1 Frequency of Collection

The Council currently provides a weekly free collection service to all properties. Collections are normally undertaken between 7.00am and 6.00pm, Tuesday to Friday. In the event of a bank holiday Saturday, may be used as a catch-up day.

Additional collections, i.e. more than the weekly service, can be arranged. However the additional collections are a chargeable service. This would normally only apply to multiple occupancy dwellings where storage options are insufficient or inadequate. Charges for the hire of the bin will also usually apply, see 7.4.

#### 7.2 Collection Location

The householder is responsible for transporting and depositing their recycling and waste (sacks) or food waste (bin) into communal bins in a communal storage area in multiple occupancy dwellings. The waste collection service does not usually operate on bank holidays. Therefore enough storage space needs to be allocated for safe storage of additional recycling/wastes until collection. As a general rule the Council does not recommend the use of waste and/or recycling chutes in any new development.

#### 7.3 Method of Collection and Containers

The Councils waste contractor utilises euro-bins for multiple occupancy premises (properties with five or more dwellings). Euro-bins are commonly 660 and 1100 litre dedicated wheeled bins for either recycling or waste. As there is an expectation that residents will actively participate in all recycling services, the Council therefore requires space for both recycling and waste containers.

In exceptional circumstances smaller euro-bin receptacles may be considered (see Table 4 below), however, it is usually advisable to over-provide capacity in order to prevent overflowing of bins. Waste or recycling will not normally be collected from the floor or around the bin (commonly called 'side waste') and could potentially physically interfere with the movement and emptying of the container. Careful consideration therefore should be given to the quantity and position of bins to ensure that collection is not interrupted due to side waste.

Table 3: Collect	Table 3: Collection method and type of waste receptacles for multiple occupancy properties						
Collection	Receptacle	Dimensions (H x W x D)	Frequency	Notes			
Residual waste	1100 litre	1470 x 1370 x 1115mm	Weekly	In the event a weekly collection is insufficient then additional collections can be arranged for an extra charge			
Recycling	1100 litre	1470 x 1370 x 1115mm	Weekly	In the event a weekly collection is insufficient then additional collections can be arranged for an extra charge			
Food waste	140 litre	1080 x 480 x 570mm	Weekly				
Bulky items	n/a	n/a		Chargeable service: resident pays per item for collection			
Paper and Card	varies		Weekly	Receptacle size will depend on number of properties and space available			

Table 4: Euro-bin receptacle dimensions				
Bins	Size (mm) H x W x D			
360 litre	1100 x 590 x 880			
660 litre	1235 x 1360 x 800			
1100 litre	1470 x 1370 x 1115			

Similarly bulk items dumped in front of communal bins may also interfere with collection services.

#### 7.4 Quantities of Waste Containers

Euro bins can be hired from the Council's waste contractor or can be purchased by the developer or managing agents – however – checks must be made to ensure that the euro-bin design is compatible with the lifting mechanism on the freighters operated by the contractor. Failure to provide compatible eurobins may result in non-collection of recycling /waste. The following Table 5 sets out the recommended minimum number of containers required for each size of development. It should be noted that these quantities are the minimum required and as mentioned previously it is usually advisable to overprovide capacity in order to prevent over spilling of bins. Additional space also accommodates further storage containers in the event of additional services being offered in the future. However, waste containers must be appropriately sited to ensure the impact on the character of the local street scene is not adversely impacted. For listed buildings and properties in conservation areas, waste management needs to be sensitively considered to ensure their heritage value is not harmed.

## 8. General Considerations for Residential Developments

#### 8.1 Storage of Recycling and Waste

The UK has radically altered its approach to recycling and waste over the last few years, as a



A number of euro-bins may be required for storing recycling and waste in communal buildings.

result most householders automatically expect to manage their waste in a more sustainable manner. This includes being given opportunities to recycle materials wherever practicable. This requires space being allocated for multiple recycling and waste receptacles (sacks or bins) at each property, in kitchens or other areas of the living accommodation, as well as in communal bin stores and collection points. Internal sorting stations such as split waste containers in an internal cupboard could be located in a kitchen for ease of use.

Requirements will vary depending on the different property types, design criteria and site context, however it is essential that developments seek to satisfy the requirements of this Guide. Where a development proposal departs from the criteria

Table 5: Recommended Number of containers per size of multiple occupancy development						
Number of dwellings	Recycling (1100 litre)* Containers	Waste (1100 litre)* Containers	Paper and Card	Food Waste (140 litre)* Containers		
1-4	Edge of property sacks	Edge of property sacks	Paper/Card box	Edge of property 20 litre collection bin		
5-7	1	1	As required	1		
8-14	2	2	As required	1		
15-21	2	3	As required	As required		
22-30	3	4	As required	As required		
31-35	3	4	As required	As required		
36-40	4	5	As required	As required		
41-50	4	6	As required	As required		
50	4	6	As required	As required		
*Figures based on an estimated yield for a three person dwelling unit, food waste generation fluctuates						

\*Figures based on an estimated yield for a three person dwelling unit, food waste generation fluctuates greatly and a minimum of a 140 litre container will be needed. In the event of high use a second 140 litre container may be required.

provided in this guide adequate justification should be provided within the RWMS.

Waste containers, whether individual bins, eurobins, sacks, or boxes are unsightly and can cause nuisance. They should be stored within enclosures. These enclosures should be constructed of materials in keeping with their surroundings and screened as much as possible by using boundary walls, fencing or planting, with a safe unobstructed level accessto them. No doors should open over the highway.

#### 8.2 Collection points - Multiple Occupancy Dwelling Bin Stores

Where Multiple Occupancy Dwellings require a number of bins for waste storage, a bin store will be required. The store must hold all containers for collection. The Developer or his agent must ensure householders are aware of which bin store has been allocated to them, and who is responsible for the ongoing management and maintenance of the storage area. The store itself should have sufficient height to allow any bin lids to be fully opened, it should allow a minimum of 1.50 metres between containers for ease of movement and access into the store should be a minimum width of 2 metres and 2 metres in height to allow for safe removal and return of containers. All bin stores must have adequate lighting both artificial and natural.

Where developments are mixed, i.e. both single dwellings that receive an 'edge of property' collection and multiple occupancy dwellings that use a bin store, it is imperative that 'edge of property' collection dwellings do not have access to the multiple occupancy bin store areas. Access will encourage single dwellings to make use of the recycling/waste storage area and may result in overfilling of bins provided. A wash down facility within the bin store with adequate drainage must be provided.

# 8.3 Storage provision - Multiple Occupancy Dwellings

Each individual property within a Multiple Occupancy Dwelling must be provided with adequate storage for any wastes generated. Properties containing 1 – 4 dwellings must be provided with individual enclosed storage areas for sacks/individual bins. Where properties contain 5 or more dwellings, the use of communal Euro-bin storage containers will be required – please see 7.4 for more details.

Table 6: Key carry distances & waste movement distances						
Waste Producer						
Consideration	Reason	Distance				
Distance from residential dwelling to waste storage area	Ease of transportation of waste from home to shared waste storage area by resident	No more than 30 metres				
Waste Collector						
Consideration	Reason	Distance				
Paths between container store and collection vehicle must not have a gradient of more than 1:12	Safe and easy movement of waste/ recycling containers between store and collection vehicle	No more than 1:12 gradient on whole of routes between container store and collection vehicle				
Distance between collection point and collection vehicle (two wheeled containers)	1	No more than 15 metres				
Distance between collection point and collection vehicle (four wheeled containers)	1	No more than 10 metres				
point and collection vehicle	Collectors should not normally be required to carry individual receptacles (bags or recycling bins) further than this distance.	No more than 25 metres				

#### 8.4 Carry Distances

A waste producer (householder) is not expected to carry their wastes more than 30 meters from their property to the designated waste storage/collection point. For safety reasons, wherever possible, there should be no steps, kerbs, steep gradients or other obstructions along the route that are likely to impede the householder carrying their recycling or waste. The waste collection contractor is not expected to collect and carry wastes more than 25 meters from the public highway. For safety reasons, wherever possible, there should be no steps, kerbs, steep gradients or other obstructions along the route that are likely to impede the collector carrying the householder's recycling and waste. Table 6 sets out key carry distances and waste movement distances.

#### 8.5 Storage Security & Safety

To ensure only householders allocated to use the bin storage areas have access, a lockable system should be designed. The waste collection contractor will need to be provided with keys/access arrangements for collection purposes. It is the Managing Agent's responsibility to advise the waste collection contractor of any changes to codes and to provide them with new keys if the lock is changed.

To enable users to see inside the bin store prior to entering, a viewing panel, or open area within the design may be advisable. Where communal waste storage accommodation is proposed as an enclosed building, or part of a building, it must have the necessary adequate head room, ventilation and artificial lighting in accordance with current legislation. CCTV strategically placed could act as a deterrent to anti-social behaviour and/or monitor and identify illegal waste dumping, whilst providing security to occupiers.

#### 8.6 Vermin

The walls, floor and ceiling of the wastes storage accommodation must be secured against access by vermin, as far as is reasonably practicable. There must also be provision for washing down and draining the floor into a wastewater drainage system.

#### 8.7 Fire

Very large quantities of recycling and/or waste stored together presents potential fire risks, as a result storage areas created integrally to residential buildings should have precautions, for example sprinklers, fire extinguishers or smoke alarms. Separate storage areas are preferable for this reason. The risk of fire shall be considered as part of the design process.

#### 8.8 Property Conversions

A premises conversion provides the opportunity to design suitable wastes storage where it may not have existed previously. Suitable and adequate storage is of increased importance where dwelling space or external space is limited within the conversion. Provision must be made for the storage of recyclables and waste in all schemes including the conversion of single dwelling properties into two or more units.

#### 8.9 Key Distances for waste movement

Key distances and measurements for consideration within the development design are shown in Table 6.



When bin stores are accessible to people outside of the development a lockable system may be more appropriate



Where access into bin store is not restricted flytipping can become a problem.



Bin store is insufficent for the number of bins installed and a lack of natural or artifical lighting, other than from the entrance doorway, makes it awkward for residents to use.

#### 8.10 Signage

In an external store that will be used by more than four dwellings, an internal notice board area must be provided; this will enable up-to-date information to be displayed, i.e. what materials can be recycled, collection day, any change to scheduled collection day because of holidays, contact details in case of problems.

#### 8.11 Kerbing

Dropped kerbs are essential when planning waste management infrastructure. This enables any bins to be safely moved to the collection point or to be taken safely from the storage point to the parked collection vehicle. Where Euro-bins are to be moved to the public highway for loading, the highway kerb shall be dropped, over a distance of 1.5m to facilitate the movement of containers between the carriageway and footway. The work may be carried out by the Council at the expense of the developer or operator of the site. Gradients throughout the infrastructure of the development that are likely to experience bin movements must not exceed 1:12.

#### 8.12 Bulky Items

Householders can request the chargeable collection of large 'bulky items', for example broken furniture, white goods, etc. Anything that is not able to be contained in a black sack would be classed as a bulky waste item and would not usually be included in the normal sack collection. Developers and managing agents should be mindful that in multiple occupancy developments space to temporarily store these items may be required. Any blocking of access in bin store rooms or inappropriate overfilling of bins may mean suspension of collection services and lead to further problems with bin rooms or outside areas overflowing with excess bags. In order to manage these bulky waste items the provision of a bulk storage room which is accessible by waste collectors should be considered.

#### 8.13 Use of Public Highways

Any provision for wastes storage/collection in the development must not result in the deposit of containers on the public highway at any time.

#### 8.14 Refuse chutes in Multi-Occupancy Dwellings

Refuse chutes are not compatible with separated wastes recovery. It is recommended that recycling storage and collection points are made available on each floor of the dwelling, ready for the Managing Agent/Site Manager to move to the bin store area for collection. Alternatively easy access to communal bin stores that are readily available to residents is needed.

#### 8.15 Homezones

A Homezone is a private shared surface street that is designed to allow safe mixing of vehicle and pedestrian movements. It may be created as part of a new development or to improve a residential environment by redevelopment within an existing community. These types of schemes benefit from carefully designed storage that compliment the street scene.

#### 8.16 Litter Bins

In some circumstances it may be necessary to consider public litter bins, particularly if desire lines or public



Sufficent provision for storage and collection of bulky items should be considered

footpaths will cross the development site. There is an expectation that any new development will increase footfall in the area surrounding the development site, particularly in shared areas or areas that will inevitably draw people, examples could include local shopping centres or public transport links. As a result the Council may seek contributions from developers, unless this requirement is waived by the Council, in order to purchase and install public litter bins that are of a design suitable and appropriate for the immediate environs in accordance with the Councils Streetscape Manual SPD, once adopted. Where possible this design will include separate compartments for recyclables in order to capture 'recycling on the go'. Developers should also refer to the Council's Litter Bin Strategy.

#### 8.17 Private Roads

The Council's contractor may be required to enter a private road, and therefore it must be built to a minimum specification, as agreed by the Highway Engineers to reduce potential liabilities in relation to any damage or wear and tear caused by recycling/waste collection vehicles. In some proposed developments waste collection points can be made accessible from the public highway but within the contractor 'carry distance' for individual receptacles (sacks or recycling bins) – no more than 25 metres between collection point and collection vehicle. Where highway conditions are such that it is undesirable or unlawful for a collection freighter to stand at the kerbside for extended lengths of time during loading, adequate provision may be required within the curtilage of the site to accommodate the freighter, and such provision shall include turning facilities.

In some circumstances the freighter may be able to safely and conveniently reverse from the public highway over a distance not exceeding 12m, to a point within the prescribed "carry distance". The construction of all private access ways or private roads including manhole covers, gulley gratings etc., must be suitable to carry freighter axle loads up to at least those shown in Table 8. Also no obstruction shall exist, i.e. parked vehicles, etc. on any route used by the contractor.

# 8.18 Mixed Use Development – Household and Non-household

All non-household waste must be kept completely separate from household waste.

#### 9. Access

#### 9.1 Freighter Access to Development

Existing highway parking immediately close to the entrance or exit of the development site should be considered and whether there is adequate space for vehicular entrance or exit from the site. There may be a need to introduce parking restrictions through negotiation with the Council if resident parking on the public highway will interfere with access.

#### 9.2 Freighter Access in Development

A number of freighters may be required to collect various waste streams, and it is vital that collections undertaken without obstruction. can be Consideration must be given to vehicle movement, whether the development design would force collection vehicles to stop on the public highway and if parked cars inside the development itself would prevent collections. Consideration should be given on how to stop cars parking inappropriately within the development site, this could include by design or by imposing parking restrictions, and how on private land parking enforcement may be undertaken. Key access measurements are shown in Table 7.

#### 9.3 Collection of Euro-bins

There should not be a need to move containers close to, or through, parked cars. Design should allow space collection vehicles to reverse and collect containers or park sufficiently close to the kerb with no obstructions to collection. Drop kerbs may be required to facilitate container movements. For domestic properties a vehicle loading area with



Private roads that are not adopted as public highway must be constructed to allow use by recycling/waste vehicles

a clear space of a minimum of 3.5m wide and 4m in length behind the collection vehicles is needed for collection of standard 2 or 4 wheeled containers.

#### 9.4 Turning Circles and turning bays

A list of turning circle dimensions from vehicles currently used in Southend-on-Sea is shown in Table 8. If turning circles are included in the development then these are provided as a minimum requirement.

It is essential from both an operational and safety point of view that adequate turning bays shall be provided to accommodate collection vehicles. Approved turning bays are detailed in Figure 1 but designers should contact the Council in order to determine if the layout is appropriate for the development.

#### 9.5 Weight

A list of vehicle weights is shown in Table 8. Any developments must take into account the maximum laden weight of collection vehicles which can be **at least** those shown in Table 8.

#### 9.6 Height of collection vehicle

A list of vehicle heights are shown in Table 8 and developers are reminded that heights shown are a minimum and where consideration is being given to built arches a further 300mm clearance above the height of the largest collection vehicle is required.

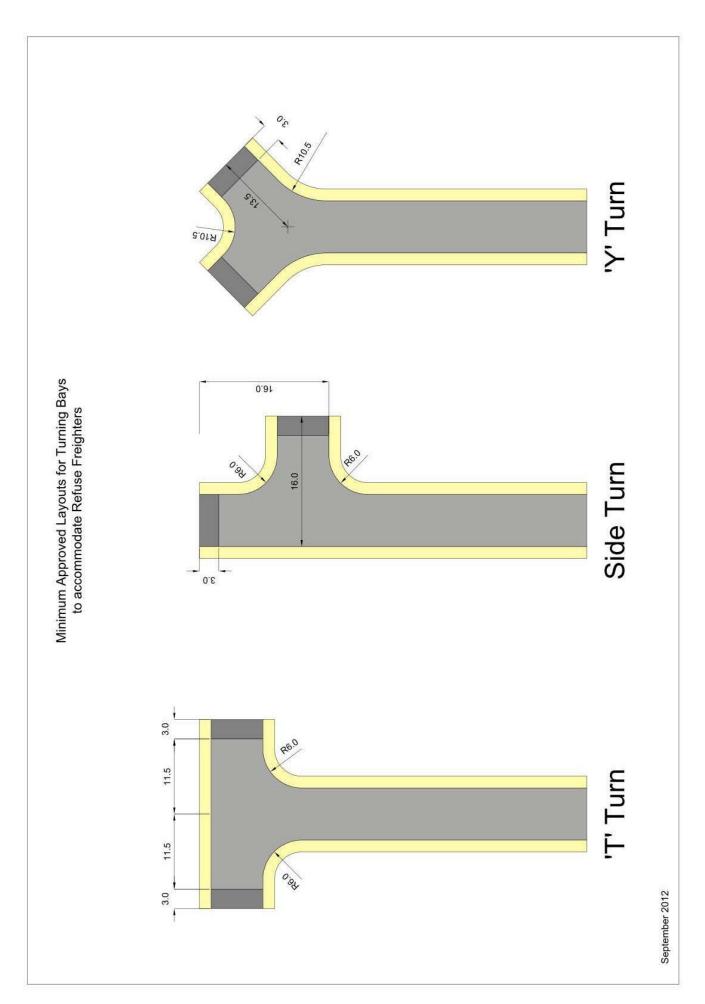


Compostable bags suitable for garden waste can be purchased by residents



Alternatively a wheeled bin collection service is available for garden waste

Table 7: Key access measurements	
Working space at rear of freighter	For domestic properties a vehicle loading area with a clear space of a minimum of 3.5m wide and 4m in length behind the collection vehicles is needed for collection of standard 2 or 4 wheeled containers.
Reversing distances	In most development situations a maximum reversing distance of 12 metres is permitted, however, longer distances may be permitted in designs that have wider benefits. However, all routes must be straight and free from obstacles and visual obstructions.
Street width	A minimum street width of 5 metres is required unless on-street parking is not permitted or discouraged, in which case smaller widths may be acceptable. Road narrowing through traffic calming measures is not anticipated to create a problem as long as it is for short distances only.



## Figure 1: Turning Circles / Turning Bays

Table 8: Vehicles	Table 8: Vehicles dimensions and access requirements						
Vehicle make	Vehicle type and Use	Height (Metres)	Width (Metres)	Length (Metres)	Turning Circle (Metres)	Gross Vehicle Weight	Centre of Axles (Metres)
Mitsubishi	Canter street/litter bins	2.5	2.06	5.13	13	3500	4
DAF	Ro-Ro Gritter (demountable bodies)	3.4	2.4	8.54	13.19	32000	3.8
DAF	DAF 55 Gully machine Gritter (demountable bodies)	3.86	2.2	7.3	14.22	18000	4.14
Dennis	Rear steer RCV	3.13	2.65	8.3	19.8	26000	5.7
Johnston	201 Path sweeper	1.98	1.31	4.27	5020k to k	4000	1.55
DAF	45 Scarab Merlin mech broom	2970	2220	5640	12	7500	3.45
vw	Caddy supervisor vehicle	2.14	2.14	4.32	11	Plg	3
DENNIS	RCV non rear steer	3.5	2.9	10.85	23	26000	5.7
Mitsubishi	Canter Fuso 7.5t bulky item collection	3	1995	6685	13.6	7500	4

#### Examples of developer bin stores





Insufficient space can make access difficult for residents and collection crew.



Whilst a larger space aids access for residents and collection crew.



Collection vehicles are unable to get close to the bin store (through the arch) meaning bins are pushed from bin store to waiting vehicle



Bin store is at the rear of properties meaning potential disturbance to residents during collection and traffic hold ups.



Wider access allows vehicles to park adjacent to bin stores and minimise inconvenience to residents

## 10. Other Considerations within Developments

#### 10.1 Fly-tipping/Graffiti/Fly-posting

Fly-tipping can create an eye-sore and nuisance. Providing adequate waste storage should alleviate flytipping activities. Secluded areas and storage areas can be prime locations for fly-tipping. Dumping of bulky items by residents can interfere with the emptying of communal recycling and waste containers, developers are advised to have sufficient space within storage areas for bulky items or arrangements with Managing Agents for bulky item removal.

External waste stores accessible from outside the development site could be defaced by graffiti and/ or fly-posting. The surface owner is responsible for the removal of this defacement. Therefore, the design of stores could incorporate practical steps to discourage this, for example, the inclusion of antigraffiti paint, planting, open design and uneven surfaces, and help to maintain a clean and pleasant surrounding for the future.

#### 10.2 Littering

Multiple occupation areas often suffer from build up of litter etc. and the design shall minimise where litter can be trapped causing an eyesore, together with infrastructure to facilitate the picking up and containment of litter and waste which has escaped into the environment. If the proposed development includes a route likely to be used by non-residents as a short-cut or 'cut through' then consideration shall be given to installation of street litter bins in order to reduce dropped litter.

#### 10.3 Nuisance

Wastes can cause nuisance when they are not adequately contained. Design should also take into account that the method of waste storage does not obstruct natural light into premises, for example by being placed under a window, or creating inconvenience to other persons.

#### 10.4 Managing Agents/Site Managers

All Managing Agents/Site Managers have a responsibility to arrange for the management of wastes generated from their site management activities and wastes generated from those contracted to conduct any works which produces wastes. This waste is classed as non-household waste and should be disposed of appropriately at



Sites with openly accessible communal areas can experience fly-tipping incidents.

a licensed disposal facility, using a licensed waste management company. Non-household waste must be stored and kept separate from any household waste stored on the site.

The Council expects the Agent to make all new residents aware of recycling/waste requirements upon their arrival and to keep them updated on any changes. Information is available for distribution upon request to the Waste Management section at the Council. If wastes have been illegally or irresponsibly deposited on communal areas, the must independently make necessary Agent arrangements to see to its swift removal so as to maintain clean and tidy communal spaces. The Agent shall communicate recycling information on site, for example by using notices or making noticeboards available in bin stores or communal areas, with the objective of encouraging separation of waste for recycling etc., and provide information on any alterations to scheduled collections, for example alternative collection days due to bank holidays.

The Agent is also expected to communicate to householders that incorrect use of communal recycling and/or waste storage containers may disrupt collection operations, for example landfill wastes being placed in recycling containers could be 'rejected' for collection by recycling crews, requiring an additional collection.

Large/bulky waste items i.e. furniture, white goods, etc., require specific collection and will not be collected free of charge, the Agent must ensure that householders requiring large/bulky wastes collection are aware of correct disposal procedures and fees if applicable.

#### 10.5 Property Welcome Pack

Agents should provide details of all recycling and waste management arrangements to all residents. This must detail all aspects of correct wastes handling in preparation for the scheduled recycling and wastes collection. The Council will provide recycling and waste information packs or leaflets upon request.

#### 10.6 Occupancy of a New Multiple Occupancy Development

Residents moving into a new property can create additional wastes, i.e. cardboard boxes, packaging material, delivery of new furniture, etc., which may require additional collections to reduce overflow issues where bin stores with limited space are used. The Managing Agent/Site Manager will be required to ensure that any overflow of waste is dealt with promptly.

#### 10.7 Communal Areas

Consideration must be given to areas which are not part of the residential dwelling i.e. landscaped areas, communal hallways, etc. Wastes generated from communal areas must be managed separately from household wastes. Wastes generated from communal areas are generally defined as nonhousehold waste and must be kept separately and arrangements made for its collection via appropriate waste contractors to ensure compliance with legislation.

#### **10.8 Composting Facilities**

The amount of biodegradable green garden waste disposed into landfill is restricted by legislation that requires organic wastes i.e. food, unrecyclable paper, etc., to be diverted from landfill and managed in a more sustainable way. Wherever possible, green



Communal garden areas may generate waste suitable for home composting

garden waste should be separated out of the waste stream if generated from communal areas, and must have separate arrangements for its disposal.

Home composting is the best option for treatment of garden and other organic waste (raw fruit and vegetable peelings only and not cooked food) at source. Home composting areas should be designed into all new residential developments with communal gardens. However, these must be carefully designed as part of the garden and not merely placed in a convenient area, which may be inappropriate. A 2m x 1m area should be provided with a suitable sized composter and adequate drainage considered. Householders should have easy access to the composting area from the kitchen or utility room.

Community compost sites where the community has responsibility for maintenance and for conveying biodegradable waste to the site are encouraged. However, proposals for such sites must identify a clear source of year on year funding and a suitable community body to take responsibility for long term maintenance.

#### 10.9 Use of Recycled Materials

Developers are encouraged, where practicable and appropriate, to use locally sourced recycled or reused materials. For example, paths and driveways can be made from recycled aggregate. Recycled bricks or stone could add character to a development. This approach can minimise the 'carbon footprint' of the construction, potentially support the local economy, and encourage sustainable development.

## 11. Retail, Industrial and Commercial Developments

Businesses vary widely in activity and scale, but all commercial premises will be expected to recycle waste and so multiple storage containers are likely to be required. Businesses will usually find the financial incentive of reduced costs for recycling against those of disposing of waste attractive. As with residential properties, areas of hard standing at storage and collection points are required and dropped kerbs along routes where waste will be moved in wheeled containers.

The Council does not currently deliver commercial waste or recycling collections.

The occupier or owner of the trade premises shall make arrangements independently with authorised waste collection an contractor. Upon request the Council can provide a list of contractors that it is aware of. Commercial or industrial waste collection will be undertaken at the frequency requested by the business. The collection and payment arrangements shall be agreed between the contractor and the person requesting the service. Where premises are accessible to the public, safe pedestrian movement must beensured.

Whilst the Council does not currently deliver commercial collections to businesses, and the services will be provided by the private sector, it is recommended that the advice this Guide contains is applied to any new proposed commercial development. Each individual development will require assessment to decide on the type of waste management provisions to be introduced. This may range from an individual wheeled bin, communal Euro-bin, skip, or compaction container collection.

## 12. Other Waste Streams

#### 12.1 Hazardous Waste

Waste of a hazardous nature cannot be collected by the Councils usual waste collection contractor as part of the weekly collection. This waste includes some electronic equipment (for example fridges or freezers), certain types of fluorescent light bulbs, toxic materials, liquid tar based chemicals, garden chemicals, asbestos wastes, etc. These wastes must be collected separately for disposal at specialist facilities. Residents will arrange for collection directly with the Council. In the event that the development is likely to generate these then storage facilities capable of being used for hazardous waste must be considered.

#### 12.2 Clinical wastes

Waste that is infectious waste - commonly referred to as clinical wastes – may need to be separately stored and collected. Examples of clinical wastes include dressings, bandages and potentially sharps. These wastes are potentially hazardous to human health and cannot be mixed with 'normal' household wastes – residents will arrange for collection directly with the Council. Provision for storage facilities suitable for clinical waste must be considered for those developments likely to generate any.

## 13. Liquid Waste

#### 13.1 Commercial or Industrial Liquid Waste

When premise plans are deposited for planning or building regulation approval, the applicant should declare the nature of the effluent to be produced.

#### 13.2 Removal of Liquid Waste

Liquid Waste is removed from a premise by either of the following methods:

- transferred in pipes to a public sewer; (subject to the written approval of Anglian Water Services)
- stored in tanks (and removed subsequently by road tanker)

The latter method requires the occupier of the premises to arrange for the collection and removal of stored liquids. Suitable access is required for collection and removal. For the regular emptying of cesspools, petrol interceptors or other tanks the occupier should contact the Council's contractor or other competent contractor directly in order to request a (chargeable) collection service.

#### 13.3 Liquid Waste

Effluent must be disposed of in the form and manner required by the Authority responsible for the sewage system. Further advice in respect of Liquid Waste can be obtained from Anglian Water Services or the Environment Agency.

# Appendices

## Appendix 1

<b>Developer Check List</b> (Developers are advised to review <b>ALL</b> of the Guide – the points in this check list are a selection of key requirements)	Met? Yes/No	Main Reference Section(s)
Waste Management Plan	,	
Has a Recycling/Waste Management Strategy (RWMS) been completed for the development?		2, 5
Storage area		
Has enough space been allocated for the number of Euro-bins required in multiple occupancy developments?		7.4, 8.2, 8.4
Can collection vehicles get close enough to facilitate easy movement of Euro-bin waste containers required in multiple		8.4, 9.2, 9.3,
occupancy developments?		9.4, 9.5, 9.6
Does the communal bin store meet requirements?		7.4, 8.2, 8.4, 8.5, 8.6, 8.7, 9.3
Waste movements		
When waste is carried by the contractor from individual properties to collection vehicles does the carry distance fall within the maximum distances specified in the Guide?		8.1, 8.4, 8.18
Communal bins		
Have sufficient Euro-bins been allocated to the multiple occupancy development?		7.4
Will Euro-bins need to be hired from the waste contractor?		7.4
If they are not hired have checks taken place to ensure that the Euro-bins being purchased are compatible with collection vehicle?		7.4
Are gradients between Euro-bin store and collection point no more than 1:12?		8.4, 8.11
Are steps avoided between the Euro-bin store and collection point?		8.4, 8.11
Is sufficient working area allocated for the emptying of Euro-bins?		8.2, 9.3
General Access		
Is the communal storage areas sufficiently close for ease of residents transporting waste between the residential property and the bin store?		8.4, 8.11
Are steps avoided between the residential properties and the bin store?		8.4, 8.11
Vehicle Access		·
Are access routes both wide and high enough to accommodate all collection vehicles?		9.2, 9.3, 9.4, 9.5, 9.6
Has development design taken into account the risk of residential parking (either on the public highway outside the development site or inside the development) impeding collection vehicle access?		9.1
Are there restrictions on vehicle parking along access routes used by collection vehicles in the development?		9.1
Can collection vehicles turn round in the development or reverse in line with the guidance?		9.2, 9.4, 8.18
Mixed Use		, ,
Has segregated waste storage been provided for the commercial and residential elements of the development?		8.19, 11, 12
Are Private roads being constructed as part of the developments?		8.18

## Appendix 2 - Legislative, Environmental and Financial Drivers

The 1999 EU Landfill Directive has fundamentally changed the approach that the UK has to waste and the way waste is disposed of. Historically, cheap and easy disposal of waste into landfill was by far the most preferred option in the UK. A series of Regulations (in response to European Directives) introduced into UK legislation, and financial drivers such as the Landfill Tax, has meant that there is a significant change in the way the UK deals with waste. The whole emphasis of future waste management now being the diversion of waste from landfill, as a country we will be required to manage wastes in more sustainable ways, such as:

- Reducing the amount of waste produced,
- Re-using materials no longer wanted,
- Re-cycling goods and materials,
- Recovering as much value out of the remaining goods and materials as possible, where appropriate this may include recovering energy from some waste treatment processes,
- Landfilling only the elements of the materials and goods that cannot be dealt with as above, or are residues from reuse or recycling. However, due to the significant increase in the cost of the Landfill Tax over the coming years, landfill should not be regarded as a long term option for dealing with waste.

Southend Borough Council therefore wishes to ensure that all developments requiring planning permission contain suitable accommodation for the storage of wastes in all its various forms before its removal.

Where possible this includes allowing separation of material streams in order to facilitate collection and recycling or composting. Or alternatively to provide infrastructure on the site to safely use particular waste streams (i.e. composting of food /garden wastes). The emphasis at all times being the minimisation of wastes deposited to landfill and the protection of the environment. This has implications for the design, layout and construction (as well as the operation) of all buildings, and the way users of the building behave.

The [revised] **2008 Waste Framework Directive** sets targets for the recycling of 50% of specific materials from households.

The **1999 Landfill Directive** sets targets for reductions in the amount of biodegradable waste deposited into landfill

The Waste Strategy for England 2007 Government Review of Waste Policy in England 2011 and Waste Management Plan for England 2013 both set national targets reflecting the requirements of the two Directives mentioned above.

The Landfill Tax, a tax applied to every tonne of waste deposited into landfill, is expected to continue to increase from the current rate to at least 2018/19 when it will reach £88.95 per tonne. This adds substantially to the cost of handling and disposing of waste into a landfill site. As a result it should become increasingly cost effective to remove materials from the waste stream and co-ordinate their re-use or recycling.

## Appendix 3 - Reference Guides

Making Space For Waste, Designing Waste Management in New Developments, A practical Guide for Developers and Local Authorities, ADEPT (Association of Directors of Environment, Economy and Transport), June 2010. Discusses new developments in greater detail than this Guide and is used as a source of reference.

**BS 5906:2005 Waste Management in Buildings** – Code of Practice, British Standards Institute, December 2005.

Building Research Establishment (BRE) www.bre.co.uk

Construction Industry Research Information (CIRIA) www.ciria.org

Waste Resources Action Programme (WRAP) www.wrap.org.uk

For larger projects applicants may also wish to refer to The Department of Trade and Industry Voluntary Code of Practice – Site Waste Management Plans. http://www.constructingexcellence.org.uk//resources/publications/view.jsp?id=2568

The Building Regulations (Amendment) 2001 Approved Document H (2002 edition) (Part H6) - Basic requirements for solid waste storage are set out.

The Environmental Protection Act 1990 (Section 46 and 47) provides details related to the Councils powers with respect to requiring waste producers to present wastes in prescribed containers at a prescribed location(s) at a prescribed time.

The Waste Strategy for England 2007 (Defra) Government Review of Waste Policy in England 2011 (Defra)