Planning Technical Advice Note:

Waste Storage Requirements for New and Change-of-Use Developments

September 2017

Contents

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1. Introduction

The provision of suitable facilities for the storage of waste together with appropriate access arrangements for waste collection vehicles are important aspects of any new or change-of-use development. Careful consideration of requirements at the design and planning stages can make the difference between an effective waste storage and collection system and one which creates needless difficulties and frustration for both building users and the waste collection authority or contractor.

The purpose of this document is to provide information to developers on Coventry City Council's specific requirements on arrangements for waste storage and access for collection vehicles. It applies to the following types of development:

- all new dwellings, including single and multiple-occupancy residential developments, inclusive of private and social housing, residential care homes and educational establishments
- non-domestic development
- development involving change-of-use, particularly where the nature and / or volumes of waste produced are likely to differ from the previous use

The following areas are covered:

- Policy context (Section 2)
- Requirements for waste storage – for individual dwellings, multiple occupancy dwellings, non-domestic buildings, and developments involving a change of use (Section 3)
- Requirements for access roads and approaches (Section 4)
- Containment provisions (Section 5)
- What needs to be done next (Section 6)
- Contacts – how to get in touch with us (Section 7)

This note should be read in conjunction with current legislation and published national guidance on waste storage and access for waste collection vehicles, including the following:

- *Building Regulations 2000: Drainage and Waste Disposal. Approved Document H6 (Office of the Deputy Prime Minister, 2006);*
- *Environmental Protection Act 1990, Section 45 (Collection of controlled waste) and Section 46 (Receptacles for household and commercial or industrial waste);*
- *BS 5906: 2005: Waste Management in Buildings. Code of Practice (British Standards Institute, 2005).*
- *National Planning Policy Framework, 2012*
- *National Planning Policy Framework for Waste, 2014*

2. Policy context

There are a number of documents setting out local policies relevant to waste storage and collection, including:

Coventry Local Plan (2016)[1]

[1] Coventry City Council (2001*). The Coventry Development Plan 2001*.
[Available at www.coventry.gov.uk/download/downloads/id/1236/coventry_development_plan]

Policy EM7 (Waste Strategy) of the Plan states:
Policy EM7 Waste Management

1. The Council's Waste Management Strategy will be supported through:

- encouraging less consumption of raw materials through the reduction and re-use of waste products;
- a requirement for development proposals to incorporate adequate storage for waste and recycling services along with safe access for collection vehicles;
- encouragement of new methods of processing and recycling at waste management sites;
- a requirement for development proposals to incorporate adequate storage for waste and recycling services along with safe access for collection vehicles; and
- supporting recycling proposals for aggregate materials subject to the criteria in part 2 of this policy.

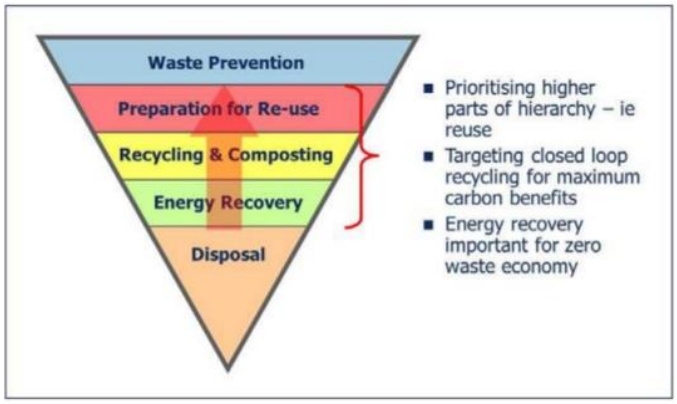
2. Proposed new or expanded waste management facilities will be assessed against the following criteria:

- The effect of the proposed waste facility upon the environment and neighbouring land uses;
- The impact of traffic generated by the proposal and the availability of alternative transit modes, such as rail and waterways;
- The need for pollution control measures appropriate to the type of waste to be processed or handled;
- The impact of proposals on residential amenity. New waste facilities will not normally be approved adjacent to existing housing and proposals for anaerobic digestion will not be approved in close proximity to existing housing;
- The effect of proposals on aircraft safety; and
- The design of the proposal. Careful consideration should be given to the need to minimise environmental and visual impact. Wherever feasible, waste operations should be enclosed within buildings or sealed structures in order to minimise impacts on adjacent uses from noise, ordure, vermin and wildlife. Proposals advocating open air unenclosed storage of organic odour producing material will not be supported.

3. Proposals will be supported where it is demonstrated that these criteria are satisfied.

4. Development proposals should demonstrate measures to minimise the generation of waste in the construction, use and life of buildings and promote more sustainable approaches to waste management, including the reuse and recycling of construction waste and the promotion of layouts and designs that provide adequate space to facilitate waste storage, reuse, recycling and composting.

Waste Hierarchy:



Setting requirements for waste storage facilities and the provision of suitable access for waste collection vehicles is consistent with this policy, representing one important means by which the prevention, re-use, recycling, recovery and safe disposal of waste can be promoted and encouraged.

Supplementary Planning Document: Delivering a More Sustainable City (2009)[2]. Requirements relating to the storage of waste are detailed in Table 6, which states:

'All major developments must make provision for the discreet storing of recycling and waste storage bins. Space for bins/boxes awaiting collection should be provided within the development and not on the footway, to prevent physical obstruction and pollution of the waterway from windblow, seepage and run off'.

Coventry's Municipal Waste Strategy 2008-2020 (2008)[3]

The strategy for municipal waste sets the following recycling targets:

- 50% of household waste to be recycled by 2019/20

If this target is to be met it is important that suitable provision for waste storage, containment and removal is made at an individual development level.

3. Requirements for waste storage

3.1. Individual dwellings

For individual low-rise dwellings, including houses, bungalows and Homes in Multiple Occupation (HIMO) the requirements are as follows:

- Sufficient space must be provided to accommodate a minimum of three standard 240L wheeled bins
- The bins should not be left on the public footway street
- The bins must be readily wheelable from the storage area to the collection point (usually the boundary of the property).

3.2. Multiple occupancy dwellings

Purpose-built multiple occupancy dwellings should provide a communal waste storage and collection system employing large containers housed in one or more storage chambers. Requirements relating to the location, sizing and construction of such chambers are described below.

Location, size and construction of waste storage chambers

Chambers should be sited such that the following requirements are met:

- The chamber should be positioned away from the main entrance and should not be visible from the front of the premises.
- The distance from the residents' entrance or exit to the chamber should not exceed 25 metres.
- The chamber should be located at street level.

[2] Coventry City Council (2009*). Delivering a More Sustainable City. Supplementary Planning Document*. [Available at: http://www.coventry.gov.uk/info/1004/planning_policy/702/delivering_a_more_sustainable_city_supplementary_planning_document]

[3] Coventry City Council (2008). *Coventry's Municipal Waste Strategy 2008-2020*. [Available at: http://www.coventry.gov.uk/downloads/download/1195/waste_strategy]

- The chamber should be located to enable waste containers to be moved directly to the designated collection point. That is, without requiring them to be taken through a building.
- Surface water should not be permitted to flow into the chamber.

Chambers must be able to accommodate containers for all waste streams available to households. The size of the chamber is determined by the number, type and size of containers to be housed and their height above floor level. Please refer to the www.coventry.gov.uk/ourbins for waste streams available to households.

Total required bin volume should be calculated in line with BS5906:2005[4], the following formulae can be used:

> Total weekly volume of waste generated*, in litres = [number of dwellings x average number of bedrooms per dwelling x volume of waste arising per bedroom] +30,
>
> *where the volume of waste arising per bedroom is set at 70 litres.

Of the total volume generated, 50% is assumed to be recyclable waste and 50% residual (i.e. non-recyclable) waste. Details of frequency of collections and therefore bin requirements are detailed in Annex 1.

Suitable containers, which should be of the wheeled bin type, can then be selected in line with these minimum size requirements. Annex 2 details current wheeled bin sizes suitable for use by Coventry City Council waste collection vehicles.

Size requirements for chambers:

- They must be large enough to allow a minimum clear space of 150 mm between individual containers
- There should be sufficient space within the chamber to enable positioning, removal and replacement of containers. Annex 2 gives dimensions of containers.
- The ceiling-to-floor height of the chamber should be at least 2 metres. Where the chamber is subdivided into individual enclosures there should be sufficient space within each to allow for the bin lid to be opened for filling.
- The chamber should not be used for other purposes, such as cycle storage.

For further guidance on sizing of chambers refer to BS 5906:2005: Waste Management in Buildings. Code of Practice (British Standards Institute, 2005).

The following minimum construction requirements for chambers should be met:

- The walls and roof should be constructed of materials which are both non-combustible and impervious, such as concrete or steel.
- The door(s) should be made of steel or other material with a minimum fire-resistance rating of 30 minutes and should comply with BS476-22:1987: Fire tests on building materials and structures. Methods for determination of the fire resistance of non-loadbearing elements of construction or BS EN 1634-1:2008: Fire resistance and smoke control tests for door, shutter and open-able window assemblies and elements of building hardware.
- The floor should have a thickness of at least 100mm, be constructed of a hard impervious material such as concrete, and have a smooth finish, with no steps or inclines at the entrance
- Wall junctions should be coved.

[4] BS 5906:2005 Waste management in buildings: Code of practice (British Standards Institute, 2005)

- Adequate ventilation, sufficient to prevent the build-up of odour within the chamber and protected against ingress of flies and vermin, should be provided.
- Artificial lighting should be contained within sealed bulkheads.
- Door frame sizes should be sufficient to allow containers to be moved freely in and out of the chamber, and should allow for the maximum size container suitable for use (see 3.2 for capacity requirements and Annex 2 for bin size details).

3.3. Additional requirements for multiple occupancy dwellings of 5 or more storeys

In the case of high-rise developments requirements additional to those outlined in section 3.2 above will apply. Please contact Waste Services for further information and to discuss your plans. Contact details are shown in Section 7.

3.4. Non-domestic development

For non-domestic developments, the required provision will depend on a number of factors, including: the size and type of the development (which will to a large extent determine the types and quantities of waste produced); the planned amount of segregation and treatment to be carried out on site[5]; and the intended frequency of collection. In all cases there will be an expectation that commercial waste will be stored within the curtilage of the business property.

Consideration must be given to all types of waste that are likely to be generated during the sites use, including any hazardous and clinical wastes. Planning for storage and disposal of clinical wastes is particularly relevant for developments such as medical centres, veterinary surgeries, residential care homes and day care centres.

It is therefore crucial that proposals are discussed with Waste Services at the first opportunity and in any case prior to the submission of a planning application.

3.5. Developments involving change of use

Where planning permission is being sought in respect of a change of use of a development, it is essential that suitable provision is made for waste storage and collection. Particular attention must be given to this in cases where:

- The types and / or quantities of waste will increase in comparison with the previous use of the development
- Food and food packaging waste will be produced, for instance where the application involves Use Classes A1 (shops), A3 (restaurants and cafes), A4 (drinking establishments), A5 (hot food takeaways) and D2 (assembly and leisure).

In all cases the onus is on the developer to demonstrate that the proposed change of use will not result in health and safety, nuisance or operational issues arising from the storage and collection of waste. Where the development is for mixed use, i.e. housing and commercial, there should be sufficient storage capacity for both purposes.

Much of the guidance detailed elsewhere in this document is applicable to change of use applications, but particular attention should be paid to the following requirements:

- Waste should be stored in a designated storage area within the boundary of the property (or allocated shared area). The storage area should not be visible from the front of the building.

[5] Waste should be segregated in accordance with the waste hierarchy https://www.gov.uk/managing-your-waste-an-overview/your-responsibilities

Under no circumstances should any waste or waste storage containers be stored on the street.

- Consideration should be given to whether the location of the storage area is likely to give rise to noise or odour issues for neighbouring properties. For instance, if a waste chamber is positioned adjacent to residual residential properties and the nature of the business is such that the bins are routinely accessed for filling (or emptying) during antisocial hours – as may occur, for instance, in the case of a takeaway or restaurant – a noise issue is likely to occur. Another common source of nuisance is odour from bins located under or close to a neighbour's window.
- Waste storage facilities should be vandal-proof and secure, such that waste cannot escape or cause pollution.
- The location of the waste storage area should be such that it is not necessary for bins to be brought through the building for emptying.
- The storage area should be sufficiently large to accommodate the predicted types and volumes of waste to be produced by the development. Sufficient space should be allocated to accommodate the segregation of waste for recycling.
- The waste collection point should not be on the public highway. There should be suitable access and egress to the collection point for waste collection vehicles (see Section 4 for further details) and the waste operatives must be able to readily transport bins from the storage area to the collection point.

Where catering facilities for hot food are included within the development, grease traps must be installed in all drains to prevent blockages and the flooding of properties.

4. Requirements for access roads and approaches

4.1 Where collection vehicles are required to use access roads and approaches, they must meet the following minimum requirements:

- Foundations and surfaces should be suitably hard-wearing and capable of taking a gross vehicle weight of at least 26 tonnes.
- The road should have a minimum width of 5 metres and be constructed such that refuse vehicle movements are mainly in a forward direction, eliminating or reducing as far as possible the need to reverse.
- Where provided, turning circles should be capable of accommodating the largest vehicle which will be using them, for details of requirements please refer to Annex 3.
- All roads and approaches should be level, unless the gradient falls away from the storage area in which case the gradient should not be steeper than 1 in 12.
- Paths between collection vehicles and container chambers must: be free from kerbs and steps; be a minimum of 2 metres wide; and, have a surface which is sufficiently hard-wearing to be able to withstand load bearing weight by wheeled containers.
- The distance between the chamber and the collection point should not exceed 25 metres.
- Access / approach roads should be designed to provide reasonable convenience for collection vehicles and operatives, ensuring that collections can be undertaken without problems or delays, for example arising from:
    - obstacles such as street furniture and trees;
    - poor pavement design;
    - inappropriate siting of parking spaces; and,
    - inability of crews to access the premises due to presence of locked gates.

4.2 Where access is required over private land the Council accepts no liability for potential damage caused by the collection vehicle to the road surface.

5. Containment Provisions

5.1 Collection services are property based; a summary of provisions are detailed in the table below:

	Refuse Collection (fortnightly)	**Recycling Collection** (fortnightly)	**Food and Garden Waste Collection** (fortnightly)
Single Household (Individual property)	240 litre green lidded wheeled bin	240 litre blue lidded wheeled bin	240 litre brown lidded wheeled bin, 5 litre food waste caddy
HMO (As defined in the Waste Policy)	240 litre green lidded wheeled bin	240 litre blue lidded wheeled bin	240 litre brown lidded wheeled bin, 5 litre food waste caddy
Flats or Apartments (Properties containing several individual properties within one building)	Share Euro style containers (See Annex 2)	Share Euro style containers (See Annex 2)	240 litre brown lidded wheeled bin (shared use of residents – not for commercial use i.e. by paid gardener)

5.2 Storage Requirements

The requirements regarding the provision of adequate recycling and residual storage, vehicle access, will need to be demonstrated through planning applications submitted to the Local Planning Authority.

5.3 Container types and dimensions

See Annex 2.

5.4 Charging for containers

Coventry City Council conveys a charge for the provision of containers for all new developments of 10 or more abodes. Developers are expected to cover the whole cost of Waste and Recycling infrastructure arising from new developments. This includes container provision for all waste streams and collection provisions.

These charges are a one off cost for initial provision; the containers will remain the property of Coventry City Council. When occupants move, the containers must remain for the next occupants to make use of. Containers must not be moved between properties by residents and if containers are removed from a previous property to provide additional capacity they will not be emptied.

Containers may be purchased from the Council or directly from manufacturers, although it should be noted that all items must be fully compliant with the Councils specifications and carry the Council logo.

Container prices and a copy of the specifications are available in Annex 2 and 4.

6. What you need to do now

In all cases it is important that you discuss your proposals with Waste Services and Planning prior to submitting a planning application. Contact details are given in Section 7.

Planning applications should be accompanied by full details of how the requirements detailed in this document will be met. The information submitted should include clearly marked up plans and drawings showing the location, extent and design of all waste storage facilities to be provided.

7. Contacts

Waste Services

Whitley Depot, 259 London Road, Whitley, Coventry CV3 4AR
Tel: 024 7683 3633
e-mail: wasteservices@coventry.gov.uk

Development Management

Floor 3, Civic Centre 4, Much Park Street, Coventry CV1 2PY
Telephone: 024 7683 1212 or 1213
Email: planning@coventry.gov.uk

Sustainability Services

Floor 1, Civic Centre 4, Much Park Street, Coventry CV1 2PY
Telephone: 024 7683 2320
Email: climate.change@coventry.gov.uk

Annex 1

Frequency of household waste collections:

- Residual waste (green lidded bins): fortnightly collections
- Recycling waste (blue lidded bins): fortnightly collections
- Garden waste (brown lidded bins): fortnightly collections between March and November

Required minimum bin size for **residual waste** = total weekly volume of waste generated x 0.5
Required minimum bin size for **recyclable waste** = total weekly volume of waste generated x 0.5

Please refer to www.coventry.gov.uk/bins for details of collections days

Annex 2

Suitable containers, which should be of the wheeled bin type, may be selected in line with those suitable for collection by Coventry City Council waste collection vehicles, namely of the following denominations and dimensions[6]:

Capacity		Dimensions
5 L		210 mm (H) 260 mm (W) 200 mm (D)
140 L		1055 mm (H) 480 mm (W) 550 mm (D)
240 L		1062 mm (H) 715 mm (W) 577 mm (D)

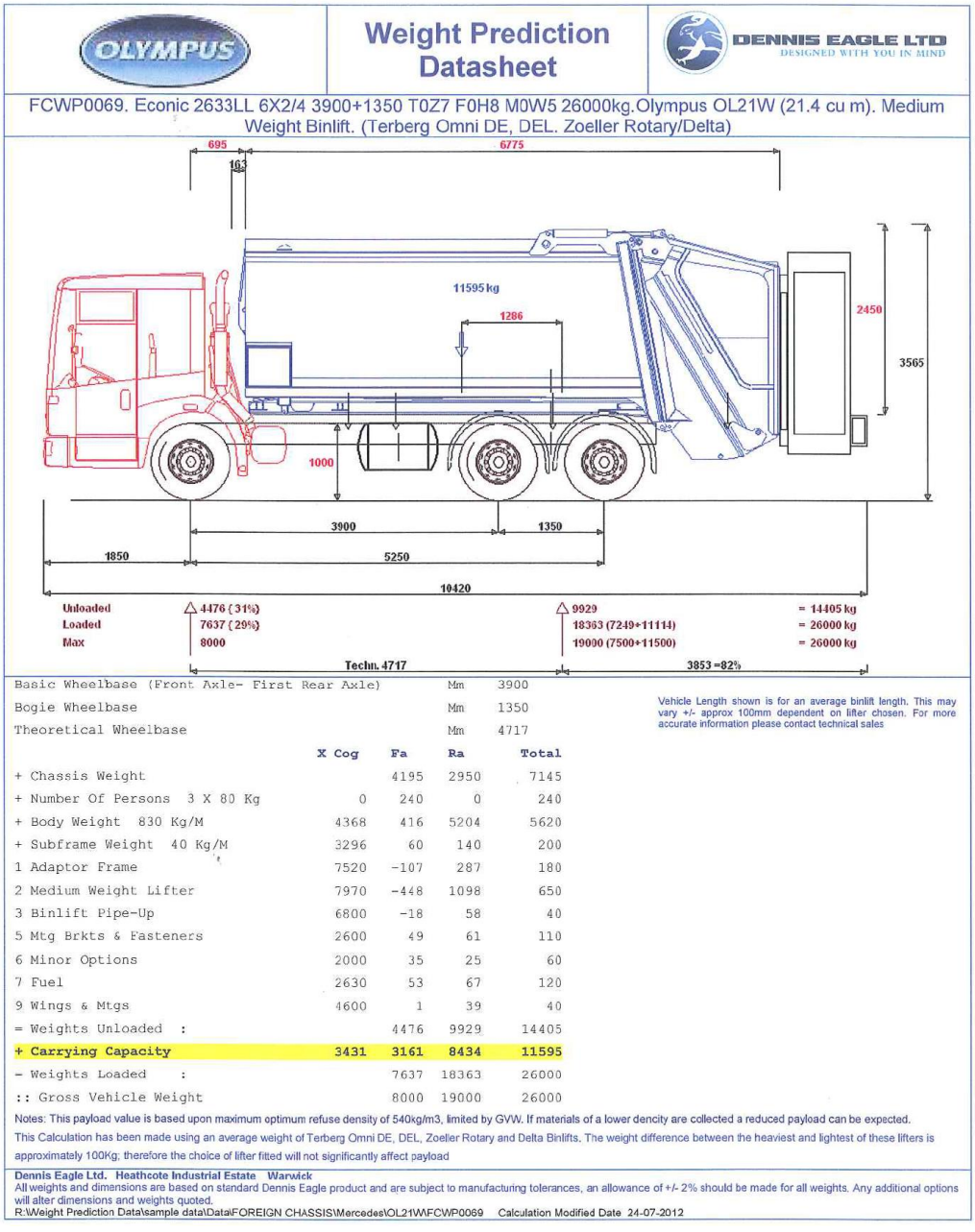
[6] Coventry City Council (2012). *Waste Storage Planning Technical Advice*. [Available at: http://www.coventry.gov.uk/download/downloads/id/6839/waste_storage_technical_advice_note_2012.pdf]

360 L		1120 mm (H) 600 mm (W) 880 mm (D)
660 L		1190 mm (H) 1360 mm (W) 770 mm (D)
1100 L		Flat lid: 1300 mm (H) 1360mm (W) 1070 mm (D) Domed lid: 1470 mm (H) 1380 mm (W) 1090 mm (D)

Annex 3

Vehicle Specifications[7]:

Spec:	- 26 ton 3-axle Mercedes Econic 2629, 6x2 mid steer chassis, with an Olympus 21W body. - The bin lifts are rear end Terberg split lifts.
Dimensions:	- The full length is 11.15m, and the measurements split by axle (in mm) are 1850/3900/1350/4050. - The Width is 2280mm
Turning circle:	- The Turning Circle is 21.1m



OLYMPUS

Weight Prediction Datasheet

DENNIS EAGLE LTD
DESIGNED WITH YOU IN MIND

FCWP0069. Econic 2633LL 6X2/4 3900+1350 T0Z7 F0H8 M0W5 26000kg.Olympus OL21W (21.4 cu m). Medium Weight Binlift. (Terberg Omni DE, DEL. Zoeller Rotary/Delta)

Unloaded	△ 4476 (31%)	△ 9929	= 14405 kg
Loaded	7637 (29%)	18363 (7249+11114)	= 26000 kg
Max	8000	19000 (7500+11500)	= 26000 kg

Techn. 4717 — 3853 =82%

Basic Wheelbase (Front Axle- First Rear Axle)	Mm	3900
Bogie Wheelbase	Mm	1350
Theoretical Wheelbase	Mm	4717

Vehicle Length shown is for an average binlift length. This may vary +/- approx 100mm dependent on lifter chosen. For more accurate information please contact technical sales

	X Cog	Fa	Ra	Total
+ Chassis Weight		4195	2950	7145
+ Number Of Persons 3 X 80 Kg	0	240	0	240
+ Body Weight 830 Kg/M	4368	416	5204	5620
+ Subframe Weight 40 Kg/M	3296	60	140	200
1 Adaptor Frame	7520	-107	287	180
2 Medium Weight Lifter	7970	-448	1098	650
3 Binlift Pipe-Up	6800	-18	58	40
5 Mtg Brkts & Fasteners	2600	49	61	110
6 Minor Options	2000	35	25	60
7 Fuel	2630	53	67	120
9 Wings & Mtgs	4600	1	39	40
= Weights Unloaded :		4476	9929	14405
+ Carrying Capacity	3431	3161	8434	11595
- Weights Loaded :		7637	18363	26000
:: Gross Vehicle Weight		8000	19000	26000

Notes: This payload value is based upon maximum optimum refuse density of 540kg/m3, limited by GVW. If materials of a lower dencity are collected a reduced payload can be expected.
This Calculation has been made using an average weight of Terberg Omni DE, DEL, Zoeller Rotary and Delta Binlifts. The weight difference between the heaviest and lightest of these lifters is approximately 100Kg; therefore the choice of lifter fitted will not significantly affect payload

Dennis Eagle Ltd. Heathcote Industrial Estate Warwick
All weights and dimensions are based on standard Dennis Eagle product and are subject to manufacturing tolerances, an allowance of +/- 2% should be made for all weights. Any additional options will alter dimensions and weights quoted.
R:\Weight Prediction Data\sample data\Data\FOREIGN CHASSIS\Mercedes\OL21W\FCWP0069 Calculation Modified Date 24-07-2012

[7] Dennis Eagle (2016). WVTA Appendix 1.

Annex 4

Individual bin and delivery costs

Bin size	Bin costs (per bin)	Delivery Charges
5 L	£2.00	£10*
140 L	£17.14	£10*
240 L	£19.91	£10*
360 L	£36.30	
660 L	£106.70	
1,100 L	£132.00	
Chamberlain (950 L)	£251.90	

*Delivery charge based on individual property, per full set of bins. Where delivery is to more than 10 dwellings cost to be agreed.