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Bicester Eco Development

Covering Report: Sustainable Waste and Resource Plan

Application 1 - North of Railway

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1 Overview

This Covering Report relates to the Sustainable Waste and Resources Plan (SWRP) for the Bicester Masterplan Eco-development and is specific for the Application 1: North of Railway. It has been prepared in accordance with the requirements of Planning Policy Statement (PPS1): Eco-towns (A supplement to PPS1), ET19 –Waste.

The SWRP is applicable to Application 1 as it presents the waste capture rate and total recycling and residual waste per household. It also sets targets for recycling and residual waste levels for the NW Bicester Masterplan Eco-development, the overall concept for waste management, and presents specific measures that if implemented will facilitate these targets being achieved (as required by PPS1). Progression of these measures will require ownership and support.

The underlying assumption behind this SWRP is that support will be gained from Cherwell District Council and Oxfordshire County Council. There may be opportunities to partner with third party organisations to implement some measures such as pilot projects in the future.

2 Background

The Development Site covers approximately 159 hectares (ha) and comprises the majority of the land within the masterplan area to the north of the railway line. The development proposals for the Site include provision for the following:

- Circa 2,600 Residential dwellings (Class C3)
- Commercial floor space (Class A1, A2, A3, B1 and B2)
- Leisure facilities (Class D2)
- Social and community facilities (Class D1)
- A new Primary School (Class D1) and extension of exemplar primary school
- Extra Care Housing (Class C3)
- Green Infrastructure
- New Vehicular, cycle and pedestrian routes
- Water Treatment Plant and Energy Centre
- Bus only routes direct and fast links to the Bicester Town Centre and train stations
- Amenity space, including formal and informal play and recreation
- Service infrastructure

The proposed Development will result in the generation of solid waste from the demolition, excavation and construction phases and from the operation of the site due to the residential and commercial uses of the site.

3 Application1: North of Railway waste and recycling targets

The SWRP recognises the opportunity to design a showcase waste management system across the Development in accordance with:

- The requirements set out in PPS1
- The existing high recycling performance achieved by CDC;
- Relevant waste targets already set, including those present in the Oxford Waste Partnership Joint Municipal Waste Management Strategy

Against this context, this SWRP sets out ambitious waste and recycling targets:

- For the percentage recycled/composted/reused: 70% from initial occupation; 80% by 2025
- For residual waste levels: 300 kg per household per year from initial occupation; 200 kg per household per year by 2025

To deliver the high sustainability credentials, the Development must not only meet and exceed the WSE 2007 and OWP targets, but must also achieve and seek to exceed the high performance already being achieved within the district.

A number of material capture scenarios were investigated to assess potential performance (see Table 3-1 below).

Scenario 1

This is estimated to be the current scenario: with all material recovery rates as per Table 3-1 below and organic waste recovery increased to achieve the overall recycling rate; including recent improvement to the food waste collection service.

Scenario 2

This scenario assumes material capture rates equivalent to the current maximum dry recyclables capture rate (65%) are achieved, with the exception of organic waste where capture is 84%, and 'other' (which includes WEEE and household hazardous wastes) where capture is increased to 12%.

Scenario 3

This scenario assumes a 100% participation, and that both organics streams (garden waste and food) achieve 92% capture (as estimated to be the current capture rate for garden waste, and that 'other' waste achieve a 22% capture rate. A capture rate of 80% is assumed for all other scenarios.

Additional information to the Masterplan SWRP submitted as an Appendix in the August 2014 ES are as follows:

- Total recycling waste (t) from the 2600* units planned for Application 1: North of Railway
- Total residual waste (t) from the 2600* units planned for Application 1: North of Railway

Table 3-1 Material capture rate scenarios

Material	2012/13	Scenario 1 (Current)	Scenario 2	Scenario 3
Organic	67%	88%	84%	92%
Paper/card	70%	65%	65%	80%
Glass	63%	36%	65%	80%
Metals	37%	38%	65%	80%
Plastics	33%	30%	65%	80%
Textiles	16%	16%	65%	80%
Wood	0%	0%	65%	80%
Other	2%	2%	12%	22%
Bulky	0%	0%	65%	80%
Recycling rate	55%	60%	68%	80%
Total recycling (kg/hh)	506.12	560.95	632.08	739.22
Total recycling waste (t)	**1,315.92**	**1,458.46**	**1,643.40**	**1,921.96**
Total residual (kg/hh)	421.75	366.92	295.79	190.48
Total residual waste (t)	**1,096.54**	**954.00**	**769.06**	**490.50**

**Please note that approximately 250 of the 2600 residential units planned for Application 1 are expected to be 'Extra-care Housing'. The waste arising from these units is likely to differ slightly in volume, type and frequency when compared to the other residential units.*

4 Summary of Sustainable Waste and Resources Plans

The SWRP sets targets for recycling and residual waste levels for the Development , the overall concept for waste management, and presents specific measures that if implemented will facilitate these targets being achieved (as required by PPS1). The targets in the SWRP and measures to achieve them take into account the existing waste management system provided by CDC and OCC and its performance.

Currently an alternating weekly collection system for the properties in CDC is provided. In 2012 this represented 59,240 households. For households, residual waste is collected on one week and co-mingled dry recyclables and mixed organics are collected the following week.

A chargeable bulky waste collections service is provided to all residents for items such as furniture and white goods. Most dry recyclables are currently delivered to M&M Materials Recovery Facility (MRF) in Witney, Oxfordshire (approximately 90%). The other 10% to Cheshire transfer station from where it is transferred to UPM MRF in Deeside.

CDC rolled out food collection services in October 2009, with everyone in the district being served by April 2010. The mixed garden waste and food waste goes to an in vessel composting facility (IVC) at Ardley (operated by Agrivert).

WasteDataFlow data included in the SWRP demonstrates that CDC achieved a recycling, composting and reuse rate of 54.85% in 2012/13. From this it is clear that CDC recycling, composting and reuse rates are well above the England average of 42%.

In 2012/13 CDC achieved a recycling, composting and reuse rate of 55%. This is a drop of nearly 3% from the 57% recycling rate achieved in 2011/12. Despite this recent drop in recycling, composting and reuse rates, CDC has already exceeded all targets as detailed in the WSE 2007.

In 2012/13, CDC achieved a residual household wastage rate of 436 kg per household. Despite an increase from 413 kg per household in 2011/12, current performance is still meeting the targets detailed in the WSE 2007.

It has been estimated that the total recycling waste (t) from the 2600 units planned for Application 1: North of Railway, using 2012/2013 CDC figures, would be 1,315.92 tonnes and the total residual waste (t) from the 2600 units planned for Application 1: North of Railway would be 1,096.54 tonnes.