



Bournemouth, Dorset & Poole Draft Waste Plan

Waste Site Options in Blandford and Purbeck



February 2017

www.dorsetforyou.com/waste-plan

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1 Introduction

1.1 Waste is a big issue for us all. If we are going to manage our waste more sustainably, encourage greater recycling and reduce what we dispose of to landfill, we need to plan for the right types of facilities to help us do this. Bournemouth, Dorset and Poole are working together to produce a Waste Plan to establish how and where we manage waste over the next 15 years. This includes looking at how much waste might be produced and identifying locations for facilities to manage recyclables, green waste and residual waste from households, businesses and industry.

The Waste Plan so far

1.2 The first stage in developing the Waste Plan was the publication of the Waste Plan Issues Paper in December 2013. This document highlighted the main waste planning issues facing Bournemouth, Dorset and Poole, including identifying a need for replacement household recycling centres and additional capacity to manage certain types of waste. The consultation set out potential options for addressing the issues. Comments received from local communities, businesses, the waste industry and environmental groups were considered in preparing a Draft Waste Plan.

1.3 The Draft Waste Plan contained a range of policies and options for sites to meet the waste management needs that had been identified. Public consultation on the Draft Waste Plan took place during summer 2015. Generally, respondents were supportive of the levels of waste growth forecast and the proposed policies, subject to minor changes and updates. Detailed comments were received in relation to the site options.

1.4 In May 2016, an additional consultation took place on a Draft Waste Plan Update. This gave people an opportunity to comment on a series of additional potential sites that had come forward. It also set out the emerging preferred waste sites proposed to be allocated in the final Waste Plan.

What is this document?

1.5 Three additional sites have been put forward for consideration. This document provides details of these sites and the waste management activities that are being considered. People can comment on the additional sites to help inform the final Waste Plan.

1.6 The sites being considered are for two different waste management needs for the county, summarised below.

A new waste management centre for Blandford

1.7 A new and improved household recycling centre and waste transfer facility (together known as a waste management centre) is needed to serve the Blandford area. The existing facility in Blandford is too small and a modern facility is required. Additionally, a waste vehicle depot for the storage of waste related vehicles is needed.

1.8 Two additional site options have been put forward - see Chapter 2.

Management of residual waste

1.9 There is a need for us to make provision for the management of residual (black bag) waste in the county. Our forecasting of how much waste is likely to be produced compared with how much capacity we already have shows a significant shortfall. Ensuring we can manage the majority of our waste within the county is important to reduce the environmental impacts of waste management, although it is accepted that some will continue to be managed out of the county.

1.10 An additional site, located near Wareham, has been put forward and is being considered for a range of possible types of waste treatment - see Chapter 3.

How to comment on this Plan

1.11 You can view and comment on this document online at:
http://consult.dorsetforyou.com/portal/waste_site_options

1.12 Alternatively you can email your comments to: mwdf@dorsetcc.gov.uk

1.13 If you do not have access to a computer you can complete a paper response form and send it to:

Environment and Economy Directorate, Dorset County Council, County Hall, Colliton Park, Dorchester, DT1 1XJ

1.14 Hard copies of this document are available to view at Dorset County Council (County Hall, Dorchester). Response forms are also available.

1.15 **Please comment by Wednesday 5 April 2017.**

1.16 You may find it helpful to read this document alongside the Draft Waste Plan (July 2015) and the Draft Waste Plan Update - Additional and Emerging Preferred Waste Site Allocations (May 2016). Both documents are available to view on our website <http://www.dorsetforyou.com/waste-plan> and include greater context on the need for new waste facilities and site options being considered. ⁽¹⁾

You can comment on this document between:

23 February - 5 April 2017

What happens next?

1.17 Following this period of consultation the issues raised will be considered, alongside the comments made during previous consultations on the Waste Plan. A final draft Waste Plan (called a Pre-Submission Draft) will then be prepared and published. This will be subject to a six week consultation and will be the version of the Plan that the Waste Planning Authority

¹ Please note that these documents are not part of this consultation.

Waste Site Options in Blandford and Purbeck

intends to submit to the Secretary of State for independent examination by a planning inspector. Comments at the pre-submission stage should be restricted to matters of 'soundness' or 'legal compliance' (see our website for further details). The Plan and any responses received will be submitted to the Secretary of State, following the timetable set out below.

Key Stage	When
Waste Plan Issues Paper	December 2013 - February 2014
Consultation on the Draft Waste Plan	July 2015 - September 2015
Consultation on the Draft Waste Plan Update - Additional Sites and Proposed Site Allocations	May - July 2016
Consultation on Site Options for Blandford and Binnegar	February - April 2017
Publication of the Pre-Submission Draft Waste Plan	October 2017
Submission of the Waste Plan to the Secretary of State	December 2017
Examination in Public	April 2018
Adoption of the Waste Plan	November 2018

**Note that these dates are consistent with the up to date Local Development Scheme, however they may be subject to change.*

Please note: the identification of potential sites within this document does not imply support by the three authorities, or grant of planning permission.

2 Waste management centre for Blandford

Why do we need a new waste management centre in Blandford?

2.1 The Draft Waste Plan identified a need for a waste management centre in Blandford.

2.2 A new waste management centre would replace the existing facility, located on Holland Way Industrial Estate. A household recycling centre and transfer facility are both required and ideally would be located together to create a new, modern waste management centre to serve the growing population. This would include an area for the public to use and an area for waste and recyclables collected from households to be brought to and bulked up before being moved onwards. It would also enable a 'split level' facility to be built so that people and HGVs are separated, improving safety and reducing congestion. The current site has uncertainty of tenure and limited space to make the improvements needed.

2.3 The household recycling centre would serve the residents of Blandford and surrounding villages whilst the transfer facility would be part of a network of strategic sites covering the county.

2.4 There is also a need for a vehicle depot for refuse lorries, road sweepers and other vehicles, which would ideally be located with the waste management centre.

Where should the waste management centre be located?

2.5 A number of sites in the Blandford area have previously been considered for a new waste management centre.

2.6 However, we identified land to the south of Sunrise Business Park (Site Ref WP06) as our emerging preferred site in the Draft Waste Plan Update (2016). This site would accommodate a waste management centre with vehicle depot.

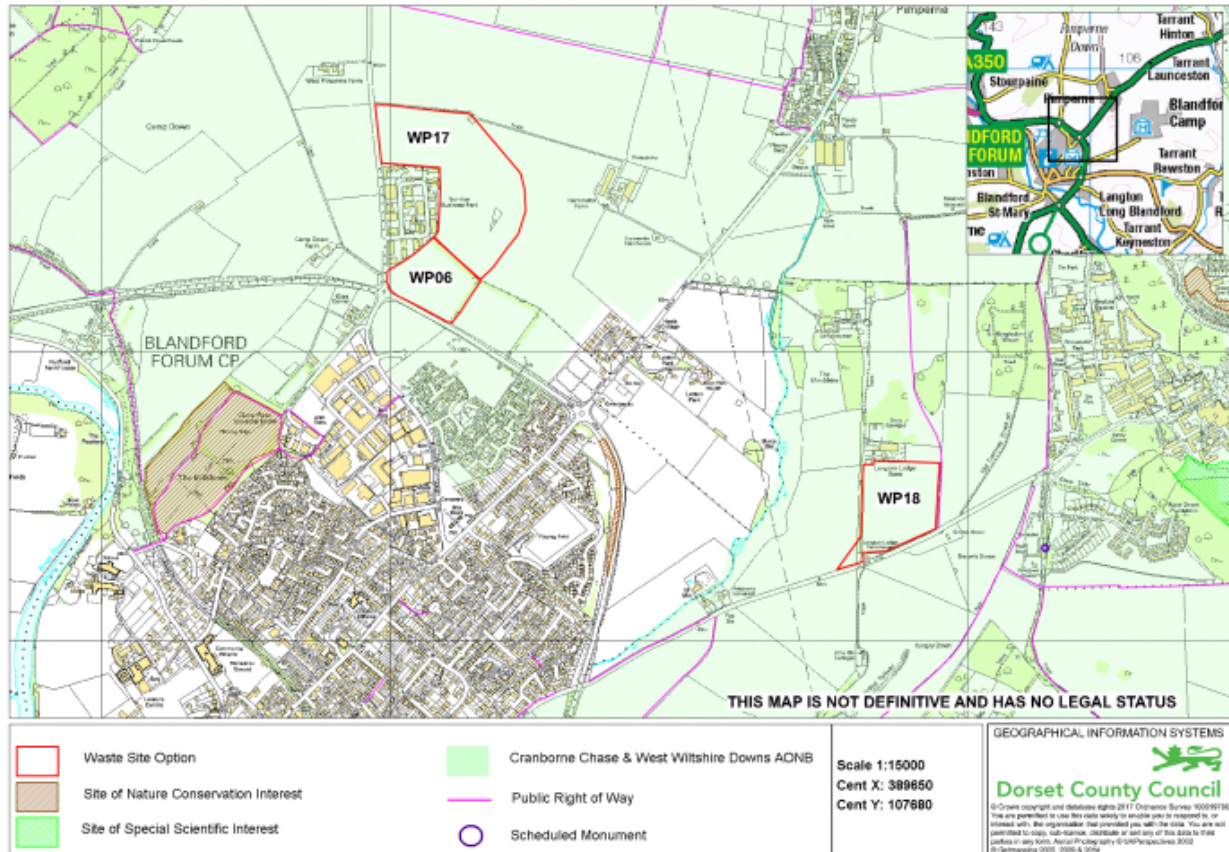
2.7 Since publication of the Draft Waste Plan Update in 2016, two alternative site options have been brought to the attention of the Waste Planning Authority.

2.8 The two new sites are:

- WP17 - Land East of Sunrise Business Park, Blandford
- WP18 - Langton Lodge Farm, Blandford

2.9 Figure 1 shows the locations of these two sites, along with land to the south of Sunrise Business Park (WP06).

Figure 1 Site options for a waste management centre



2.10 Maps and details of the two new sites are provided below. You can comment on these sites.

2.11 The sites have been assessed in relation to their suitability for a waste use and potential impacts on landscape, traffic, local communities and other matters. Detailed site assessments, sustainability appraisal and habitats regulations assessment are available on our website.

2.12 As we have already consulted on land to the south of Sunrise Business Park (Site WP06) in 2015 and 2016, we are not inviting comments on this site through this consultation.

2.13 Any new issues raised regarding the two new sites will be fully considered prior to publication of the final Plan.

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WP17 - Land East of Sunrise Business Park, Blandford

This site lies to the east of Sunrise Business Park and north east of the A350. The site is situated in a location that could serve Blandford and surrounding villages. There is the potential to provide a new access to the site from the C13 Shaftesbury Lane, running along the north of the existing Sunrise Business Park. The site lies within Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty (AONB).

The land is currently in agricultural use. It is not allocated as employment land. The site would form an extension to Sunrise Business Park. The site would meet an identified need for a waste management centre if no other suitable alternative could be found. However, our landscape assessment work has indicated that developing the site would have significant adverse landscape, visual and recreational amenity impacts.

Sustainability Appraisal

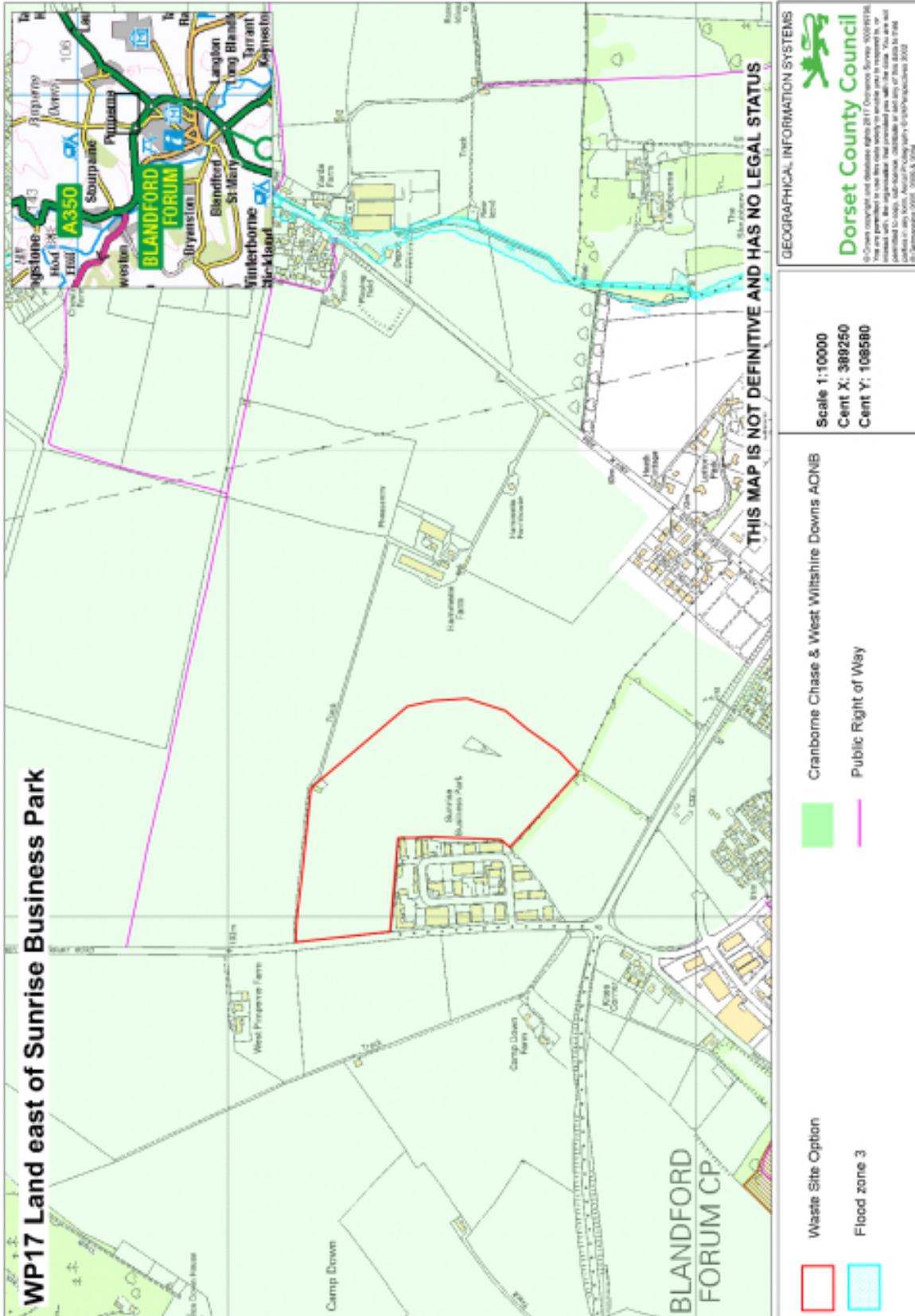
This site is located at a high point of the Area of Outstanding Natural Beauty (AONB), considered to be of high visual and landscape sensitivity. The site would have a significant impact on the character and setting of the AONB. Mitigation of impacts and/or enhancement is not possible or appropriate.

It is not proposed to take this site forward for inclusion in the Waste Plan given the high level of landscape sensitivity and lack of appropriate mitigation.

Parish Council/Ward	Pimperne Parish Council
Site area	Site adjoins Blandford Forum Town Council 16.82ha
Existing land use	Greenfield, currently in agricultural use
Potential waste facilities being considered	Waste management centre & waste vehicle depot
Access	C13 Shaftesbury Lane
Sensitive receptors / designations	Within Cranborne Chase and West Wiltshire Downs AONB
Deliverability / Viability	The landowner is supportive of the provision of a new waste facility.

Question 1

Due to the expected adverse landscape impacts of developing this site, we don't think the site should be taken forward as an option for developing a waste management centre. Do you agree? Why/Why not?



Key Development Considerations

- The design, layout and landscaping of the site and access improvements would need to ensure any adverse impacts upon the AONB are minimised.

Parish Council/Ward	Langton Long Blandford Parish Council
Site area	7.74ha
Existing land use	Greenfield, currently in agricultural use
Potential waste facilities being considered	Waste management centre & waste vehicle depot
Access	Access would be via Black Lane
Sensitive receptors / designations	Site lies within Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty (AONB)
Deliverability / Viability	The landowner is supportive of the provision of a new waste facility. Restrictions on HGVs at peak times could cause operational difficulties.

Question 2

Do you think this site would be appropriate for a new waste management centre for Blandford? Why/Why not?

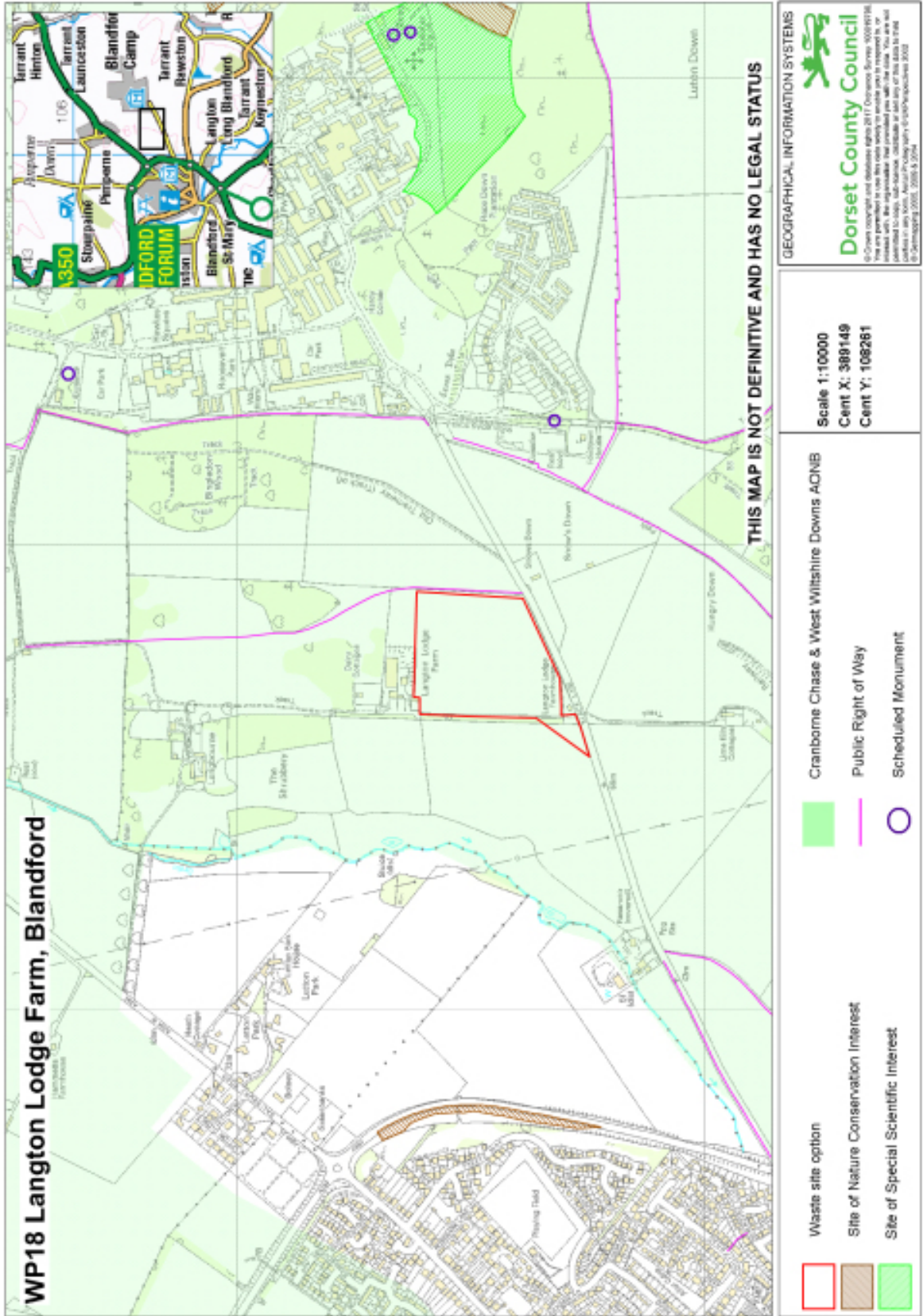
WP18 - Langton Lodge Farm, Blandford

This site is located approximately 0.8km to the east of Blandford off Black Lane, the road leading to Blandford Camp. The site is surrounded by agricultural land, with Langton Lodge Farm buildings adjoining the northern boundary of the site. The village of Pimperne lies to the north east. The site lies within Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty (AONB).

The land is currently in agricultural use. It is not allocated as employment land. Access to the site would be from Black Lane, through a residential area and past a primary school. A sufficient area of land is available for the development of a waste management centre and waste vehicle depot, with land available to screen the facility to minimise views from the AONB.

Sustainability Appraisal

The site is fairly well located to serve the town, however the access past a school and residential area could give rise to amenity impacts. There is the potential for adverse impacts on the Area of Outstanding Natural Beauty, however it is possible that these impacts could be mitigated.



Both Langton Lodge Farm (WP18) and Land South of Sunrise Business Park (WP06) could provide suitable options for developing a waste management centre. Following assessment, Land East of Sunrise Business Park (WP17) is unlikely to be taken forward.

Following this consultation, the Waste Planning Authority will consider all issues raised.

The Waste Plan will aim to allocate a site for a waste management centre to serve the Blandford area.

3 Management of residual waste - new site option in Purbeck

Why do we need facilities to manage our residual waste?

3.1 The Draft Waste Plan identified a significant shortfall in capacity for managing non-hazardous residual waste - black bag waste from households, businesses and industry. This means we won't have enough facilities for managing this type of waste. This is partly because landfill sites are closing and partly because we are expecting increased amounts of waste to be produced over the plan period.

3.2 Ensuring we can manage the majority of our waste within the county, known as 'net self-sufficiency', is important to reduce the environmental impacts of waste management. The Waste Plan therefore needs to make provision for additional capacity for the management of residual waste within the county. This could be through a number of different energy recovery technologies, such as energy from waste, mechanical biological treatment or advanced thermal treatment. The Plan will need to allocate sites for additional facilities and/or allow for increased capacity at existing facilities.

3.3 We have estimated how much residual waste is likely to be produced over the plan period (up to 2032), building in growth in arisings for waste produced from households and commercial and industrial sources. Comparing this with how much capacity already exists at waste management facilities, there is a significant shortfall of over 220,000 tonnes per annum by the end of the plan period. ⁽²⁾

Spatial strategy - how we plan to address the issue

3.4 We need to make provision for waste treatment (energy recovery) facilities within Bournemouth, Dorset and Poole in order to aim for net self-sufficiency in the management of residual waste. The Draft Waste Plan (2015) set out a proposed Spatial Strategy stating how the Plan would meet this need. This was to allocate appropriate facilities to manage the significant shortfall in residual waste management capacity. The strategy suggested that such a facility would be best located in south east Dorset, supported by a network of transfer facilities.

3.5 It is not known how many facilities will be needed as it will depend on the scale of facilities coming forward. It is likely that at least one new treatment facility will be required, supported by increases in capacity at existing or permitted facilities. We therefore aim to identify at least one site suitable for such a facility. In order to remain as flexible as possible, new site allocations should be large enough to accommodate a large scale waste management facility.

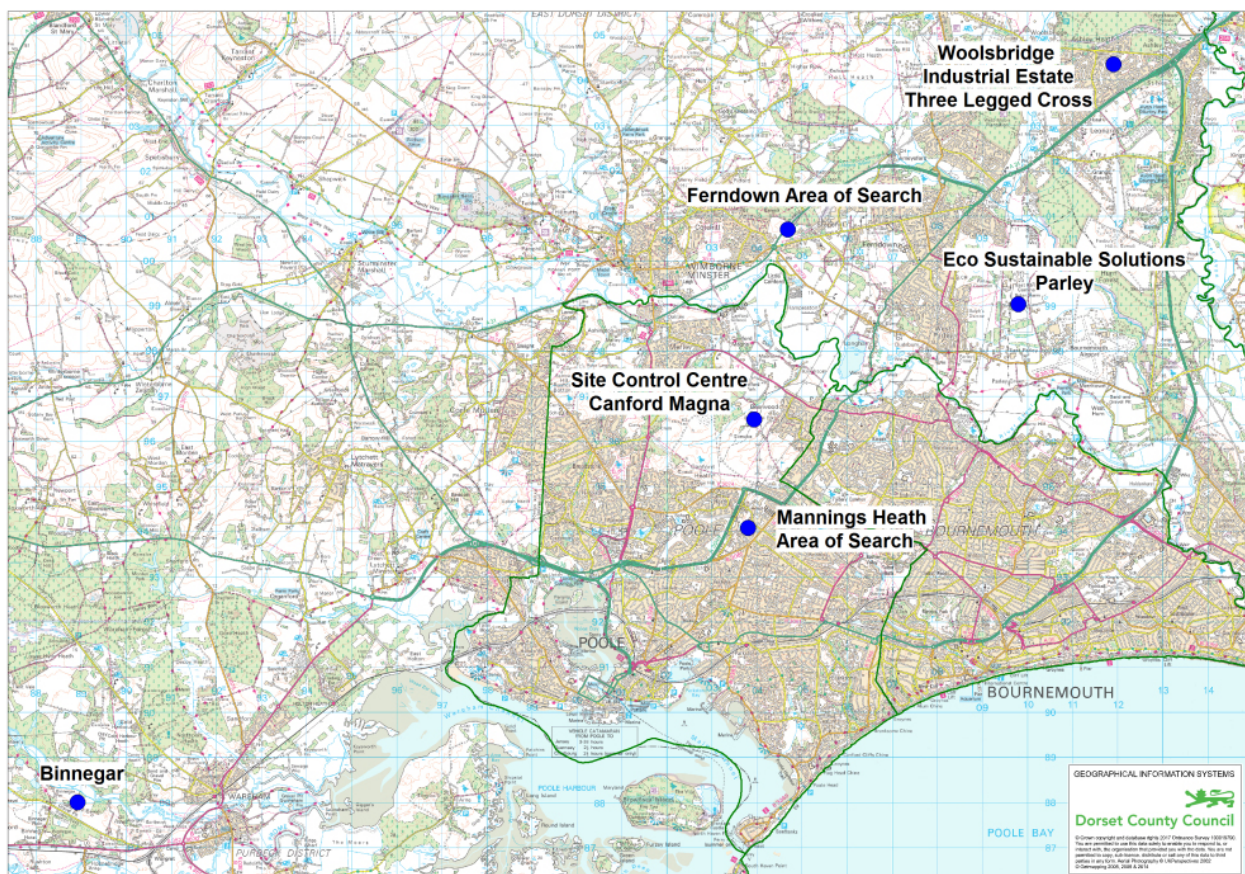
2 The Draft Waste Plan Update 2016 showed a shortfall in residual waste management capacity from 2021. However, the Waste Planning Authority has recently become aware that Dorset's two landfill sites will close earlier than expected. In addition, two additional sites managing residual waste are available. The figures will therefore be updated and presented in the Pre-Submission Waste Plan.

Where should residual waste management facilities be located?

3.6 A number of sites have previously been considered for a waste treatment facility. The 2016 Draft Waste Plan Update explained that a combination of expansion of existing facilities and at least one new site was considered the best option to meet the shortfall in capacity for residual waste management.

3.7 Five site options considered to have potential to address the shortfall were identified, all of which were located in south east Dorset. These are shown in Figure 2 for information. As we have already consulted on these sites in 2015 and 2016, we are not inviting comments on them now.

Figure 2 Site options for a residual waste treatment facility



3.8 Since publication of the 2016 Draft Waste Plan Update, one alternative site option has been brought to the attention of the Waste Planning Authority. The site is located in Purbeck, in the western part of the plan area (as shown in Figure 2). This new site is:

WP19 - Binnegar Environmental Park, East Stoke (nr. Wareham)

3.9 A map and details of the site is provided below. You can comment on the site and any new issues raised will be fully considered prior to publication of the final Waste Plan.

3.10 This site has been fully assessed taking account of its suitability for a waste use and potential impacts on landscape, traffic, local communities and other matters. A full site assessment can be viewed on our website, as well as sustainability appraisal and Habitats Regulations Assessment.

WP19 - Binnegar Environmental Park

Binnegar Environmental Park lies to the north of an active sand and gravel quarry, located on Puddletown Road at East Stoke. The site is on an area of previously worked land. The park was granted planning permission for a variety of waste uses in 2010. A materials recycling facility has been built, but has since been mothballed. There is also permission for an in-vessel composting facility and inert waste recycling facility but these have not been constructed. The current proposals would be in place of these facilities.

The site has been suggested for a range of processes for the management of up to 100,000 tonnes per annum (tpa) of residual waste or 60,000 tonnes per annum of wood waste. There would be no change in the maximum consented throughput of the Binnegar Environmental Park.

Four separate proposals are being considered - only one of which would be developed. The four proposals are outlined below and include options for a solid recovered fuel (SRF) and/or refuse derived fuel (RDF) production facility, potentially with a gasification plant. SRF and RDF are 'fuels', usually in the form of pellets or larger 'bricks', produced by shredding the waste. They are then combusted to produce energy, which can be at an energy recovery facility at the same location, such as a gasification plant, or elsewhere.

Four options for a treatment facility at Binnegar:

1. Advanced thermal treatment facility treating Refuse Derived Fuel and some Solid Recovered Fuel

At the larger end of the scale, the existing materials recycling facility would be converted internally into a facility that produces RDF/SRF. This would then be fed into a new gasification plant onsite, therefore managing the waste and producing energy all at the same location.

Alternatively, a new gasification plant would encompass RDF production within the same building, leaving the existing materials recycling facility as it is.

2. Solid Recovered Fuel (SRF) facility

Either the existing materials recycling facility would be converted internally into an SRF production facility, or the consented inert waste recycling building would be built as an SRF production facility. The SRF would be sent to recovery facilities elsewhere.

3. Refuse Derived Fuel (RDF) facility

Either the existing materials recycling facility would be converted internally into an RDF production facility, or the consented inert waste recycling building would be built as an RDF production facility. The RDF would then be sent to recovery facilities elsewhere.

Options 1-3 would receive and manage 60,000 - 100,000 tonnes a year of dry non-hazardous residual wastes from the commercial and industrial sector.

4. Waste wood processing facility

The consented inert waste recycling building would be constructed and fitted out as a waste wood processing facility, managing 60,000 tonnes a year.

Waste wood from commercial and industrial sources and potentially segregated household waste (e.g. from household recycling centres) would be brought to the site and converted into a wood fuel. This would then be taken to biomass recovery facilities out of the county and used for the production of heat and electricity.

Sustainability Appraisal

This is an existing waste site with the potential for alternative waste management uses. Strategically – if managing waste from the whole area - this site is in a poor location. However, if a smaller facility is developed managing waste from the local area the site could contribute to minimising waste movements.

The site is in a fairly remote location with few residential properties in the immediate vicinity. However the site is close to environmental designations and there is the potential for waste treatment to adversely impact habitats.

Key Development Considerations

- Emissions and dust from the development should have no significant adverse effects on the designated heathlands.⁽³⁾

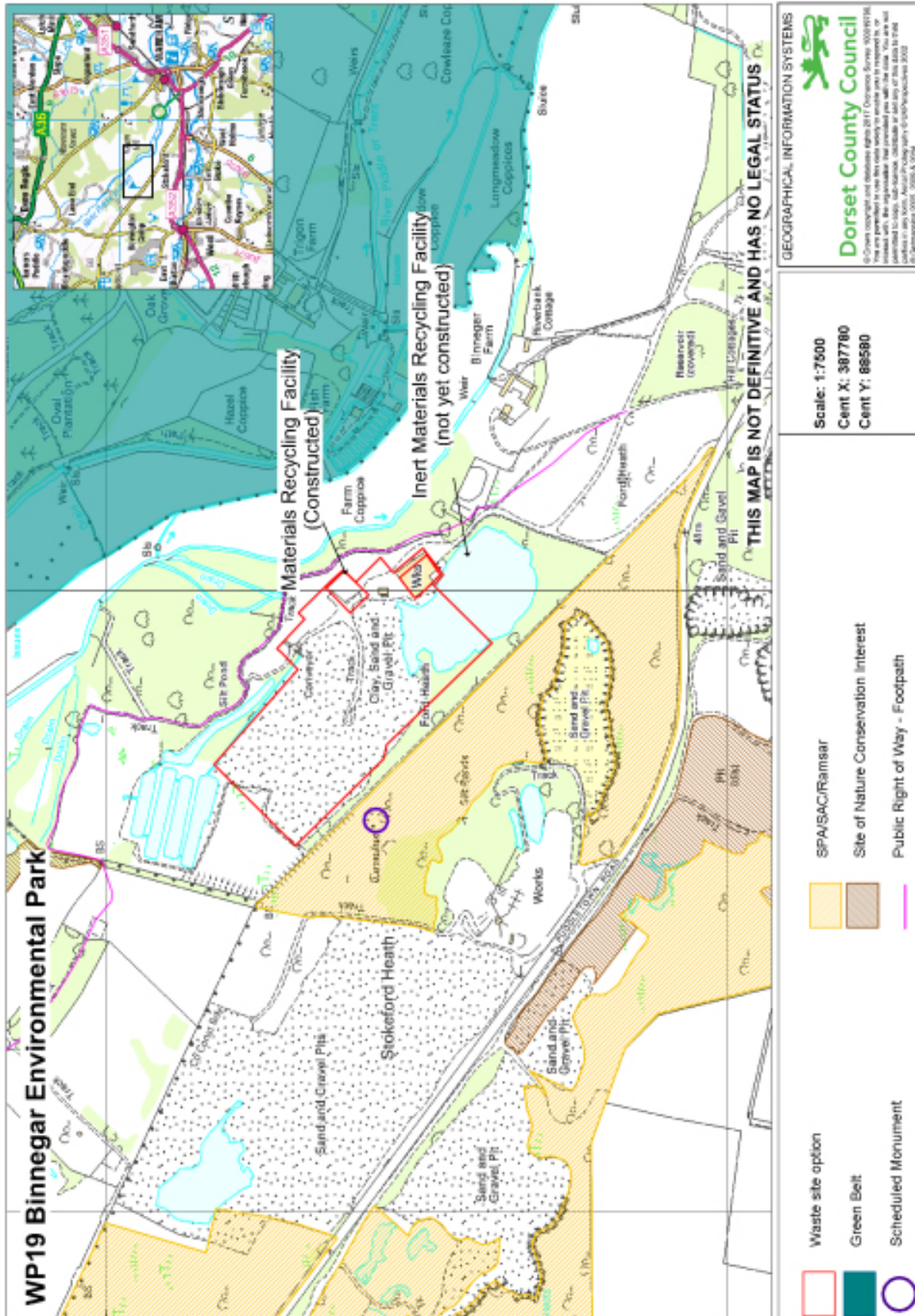
Parish Council/Ward	East Stoke Parish Council
District Council	Purbeck
Site area	9.9 ha
Existing land use	Quarry and site with permission for waste management activities
Potential waste facilities being considered	Residual waste management: Solid recovered fuel/refuse derived fuel production; gasification; wood waste recycling.
Access	As existing
Sensitive receptors / designations	Dorset Heaths Special Area of Conservation/Dorset Heathlands Special Protection Area/ Stokeford Heaths Site of Special Scientific Interest adjacent.
Deliverability / Viability	The landowner (SUEZ) is promoting the site.

Question 3

Do you think Binnegar would be appropriate for a waste treatment facility? Why/Why not?

3 In accordance with the Conservation of Habitats and Species Regulations 2010.

Waste Site Options in Blandford and Purbeck



The 2016 Draft Waste Plan Update included five site options for managing residual waste, all located within south east Dorset. Binnegar is also being considered as an option to manage part of this waste stream.

A decision as to which sites should be included in the final Waste Plan will be made following this consultation, upon publication of the pre-submission Plan.

4 Glossary

Advanced thermal treatment/conversion: refers to technologies that employ pyrolysis or gasification to process residual wastes. Both pyrolysis and gasification turn wastes into energy rich fuels by heating the waste under controlled conditions. These processes deliberately limit the conversion so that combustion does not take place directly. Instead, they convert the waste into valuable intermediates that can be further processed for materials recycling or energy recovery e.g. syngas, oils and char. These two processes are often combined in the operation of a single plant. The gas produced can be cleaned and used as a fuel for a Combined Heat and Power engine.

Anaerobic digestion: the natural breakdown of organic materials into methane and carbon dioxide gas and fertiliser. In the context of waste, this takes place in an anaerobic digester, which is typically a sealed vessel, or series of vessels, in which bacteria act without oxygen.

Autoclave plant - facility for treatment of waste with high temperature steam to recover recyclable material. Any residue remaining may be reused (e.g. In the form of refuse-derived fuel) or sent for disposal.

Bulky waste: any article of waste which exceeds 25 kilograms in weight; and/or any article of waste which does not fit, or cannot be fitted into a receptacle for household waste or, where no such receptacle is provided, a cylindrical container 750 millimetres in diameter and 1 metre in length. Bulky waste is typically items that you would take with you when you move house, such as furniture, electrical appliances such as white goods, bicycles, rugs, garden furniture and other portable household items.

Combined Heat and Power: the combined production of heat (usually in the form of steam) and power (usually in the form of electricity). In waste-fired facilities, the heat would normally be used to serve a district heating scheme or to provide heating to an adjacent industrial use.

Energy from Waste (energy recovery): includes a number of established and emerging technologies through which energy is recovered from waste. Many wastes are combustible, with relatively high calorific values - this energy can be recovered through (for instance) incineration with electricity generation or advanced thermal treatment methods such as gasification and pyrolysis.

Energy from Waste (EfW) Plant - incineration (burning) of waste to produce energy, possibly as part of a combined heat and power (CHP) plant. The residue consists of bottom ash (which can be reused as secondary aggregate), metals that can be recycled, and other materials that, in most cases, currently need to be sent for disposal.

Gasification: a form of advanced thermal treatment which turns wastes into energy rich fuels by heating the waste under controlled conditions. Gasification is the breakdown of hydrocarbons into a syngas by carefully controlling the amount of oxygen present. This is the same process as was used for the conversion of coal into town gas.

Household Recycling Centre: A site with facilities for recycling a range of household and garden waste, which can be deposited by residents living in the vicinity of the centre.

Inert waste: has no hazardous properties and does not undergo any significant physical chemical or biological transformations when disposed of. Examples of inert waste include concrete and sand. This waste category includes the majority of construction and demolition waste.

Materials Recycling Facility (MRF): a facility where mixed recyclables are sorted and separated into different types of materials by hand or machine (or both) before being sent to manufacturers who make it into new products. The machinery, processes and the materials that each MRF can accept vary. Once materials have been sorted, recycled materials become valuable commodities in the worldwide market.

Mechanical Biological Treatment (MBT): Mechanical Biological Treatment is a waste treatment process that is used to treat residual waste. MBT involves both mechanical and biological methods. The 'mechanical' part refers to the processes used for preparing and separating waste. There are a number of waste preparation techniques, such as shredding, sieving, and screening which are used to reduce the size of the waste and separate it. Metals are also removed by magnets and eddy current separators to maximise recycling. The 'biological' part of MBT refers to the anaerobic digestion or composting of the organic elements of the waste.

Non-hazardous waste: waste that does not have any significant hazardous properties and so does not fall under the definition of hazardous waste, and that does not meet the waste acceptance criteria for inert waste. It may be biodegradable. This waste category includes household, commercial and industrial waste. Examples of non-hazardous waste include paper, cardboard, plastic and organic wastes.

Pyrolysis: a form of advanced thermal treatment which turns wastes into energy rich fuels by heating the waste under controlled conditions. Pyrolysis is the thermal degradation of waste in the absence of air to produce char, pyrolysis oil and/or syngas. This is the same process as used for charcoal production.

Refuse Derived Fuel (RDF): A fuel produced by shredding municipal solid waste (MSW). RDF consists largely of combustible components of municipal waste such as plastics and biodegradable waste. Non-combustible materials such as glass and metals are generally removed prior to making RDF. The residual material is sold as-is or compressed into pellets, bricks, or logs and can be combusted to produce energy.

Residual waste: refers to waste that cannot be or is not separated for recycling or composting. It therefore comprises 'black-bag' waste containing all waste that is left after materials for recycling and composting have been removed by the householder or producer.

Solid Recovered Fuel (SRF): a solid fuel produced by shredding and dehydrating non-hazardous solid waste with a waste conversion technology. SRF can be distinguished from RDF in the fact that it is produced to reach certain standards/specification requirements. It is utilised for energy recovery in incineration or co-incineration plants.

Transfer station/facility: a waste management facility to which waste is delivered for separation or bulking up before being transferred onwards to another waste facility for recycling, recovery or disposal.

Treatment: facilities for the recovery or disposal of waste, including preparation prior to recovery or disposal.

Waste: any substance or object which the holder discards or intends or is required to discard⁽⁴⁾

Waste Management Centre: a site that has both a household recycling centre and a waste transfer station. These centres therefore have a facility for householders to deposit their waste and a facility for the bulking and sorting of delivered waste from municipal, commercial or industrial sources.

4 Waste Framework Directive (Directive 2008/98/EC)