

Foreword

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This Waste Local Plan has been prepared to help ensure we can deal with all types of waste arising in Essex and Southend, now and in the future, in a way which is least damaging to the environment and helps maintain the best possible quality of life for our residents. The

Plan forms part of the statutory development plan and provides the policies for planning decisions for all forms of waste management development in the administrative areas of both authorities.

All households, businesses and industries in Essex and Southend-on-Sea produce waste. Much is already being done to reduce, re-use or recycle that waste wherever possible or to find some other beneficial use for the materials we throw away. The continuing challenge we have is to introduce better, more sustainable, ways of dealing with waste whilst continuing to reduce the historical dependence we have had on landfill.

Throughout its preparation this Plan has been shaped by comments from a large variety of interests – be it residents, businesses, public bodies and organisations. We are extremely grateful for all your contributions and your feedback has been used to inform this final version of the Plan. In particular we have placed great emphasis on local communities taking part in policy making and significant efforts have been made to ensure all those likely to be affected by the Plan have the opportunity to be involved in its preparation.

The Waste Local Plan will help ensure that future waste needs of Essex and Southend-on-Sea can be appropriately met through sites situated in the most appropriate locations and with minimal impact on communities and the environment. The waste planning policies found in this document provide up-to-date planning policy for waste development in Essex and Southend-on-Sea until 2032. We will annually monitor the effectiveness of these policies to ensure that they are implemented successfully and publish the results.

The Plan provides an approach that provides some certainty over the location of future waste management development. We believe the vision, strategies, policies and sites outlined in the Plan put us in a good position to be able to manage all the waste we produce, now and in the future, in the most sustainable way possible.



Sue Lissimore, Cabinet Member for Housing,
Property and Planning, Essex County Council



Mark Flewitt, Executive Councillor for
Housing, Planning and Sustainability,
Southend-on-Sea Borough Council

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1 Introduction

1.1 Sustainable waste management is a key challenge facing Essex and Southend-on-Sea now and in the future. There is a need to move away from traditional forms of waste management towards greater levels of re-use, recycling and recovery.

1.2 The planning system has an important role to play in achieving this goal. Planning helps to ensure the new facilities required are sited in the most suitable locations and are well designed and carefully managed. Furthermore, the Planning Authorities have to take into account the need to minimise the amount of waste produced and existing targets for recycling, recovery and the amount of residual waste being landfilled.

1.3 Essex County Council (ECC) and Southend-on-Sea Borough Council (SBC) are Waste Planning Authorities (WPAs) and as such are required to prepare a Waste Local Plan to replace the existing joint Plan that was adopted in 2001. ECC and SBC have worked jointly to produce a Waste Local Plan (WLP) to cover both administrative areas (hereafter referred to as the “Plan area”). Producing a Waste Local Plan is required under the Planning and Compulsory Purchase Act (2004) and the EU Waste Framework Directive.

What is ‘Waste’?

1.4 The legal definition of waste in the UK is derived from the EU Waste Framework Directive (Directive 2008/98/EC). The Directive states that ‘waste’ is:- “Any substance or object which the holder discards or intends or is required to discard”.

1.5 In basic terms ‘waste’ is anything that you decide to, or are required to, throw away. Even if the substance is given to someone else to be reused or recycled, it is still legally considered waste if it is no longer required by the person who produced it. Materials that are technically ‘waste’ are, however, increasingly being seen as a potential resource for use in manufacturing or other processes. Such an approach helps to reduce the amount of waste requiring disposal.

1.6 The WLP provides the framework for determining planning applications for new waste facilities and changes to existing waste facilities.

1.7 The Plan provides the key principles and policies to guide the future management of waste in the Plan area up until 2032. Primarily, this includes the spatial vision, strategic objectives, spatial strategy, core policies, development management policies and a monitoring framework. A full schedule of all of the policies included in this Plan are set out in [H 'Appendix H - Policy Schedule'](#).

1.8 Within the Plan area there are a number of organisations involved in planning for waste, the management of waste, and the regulation of waste. The different roles of the organisations and their responsibilities are outlined in [G 'Appendix G - Roles and Responsibilities'](#).

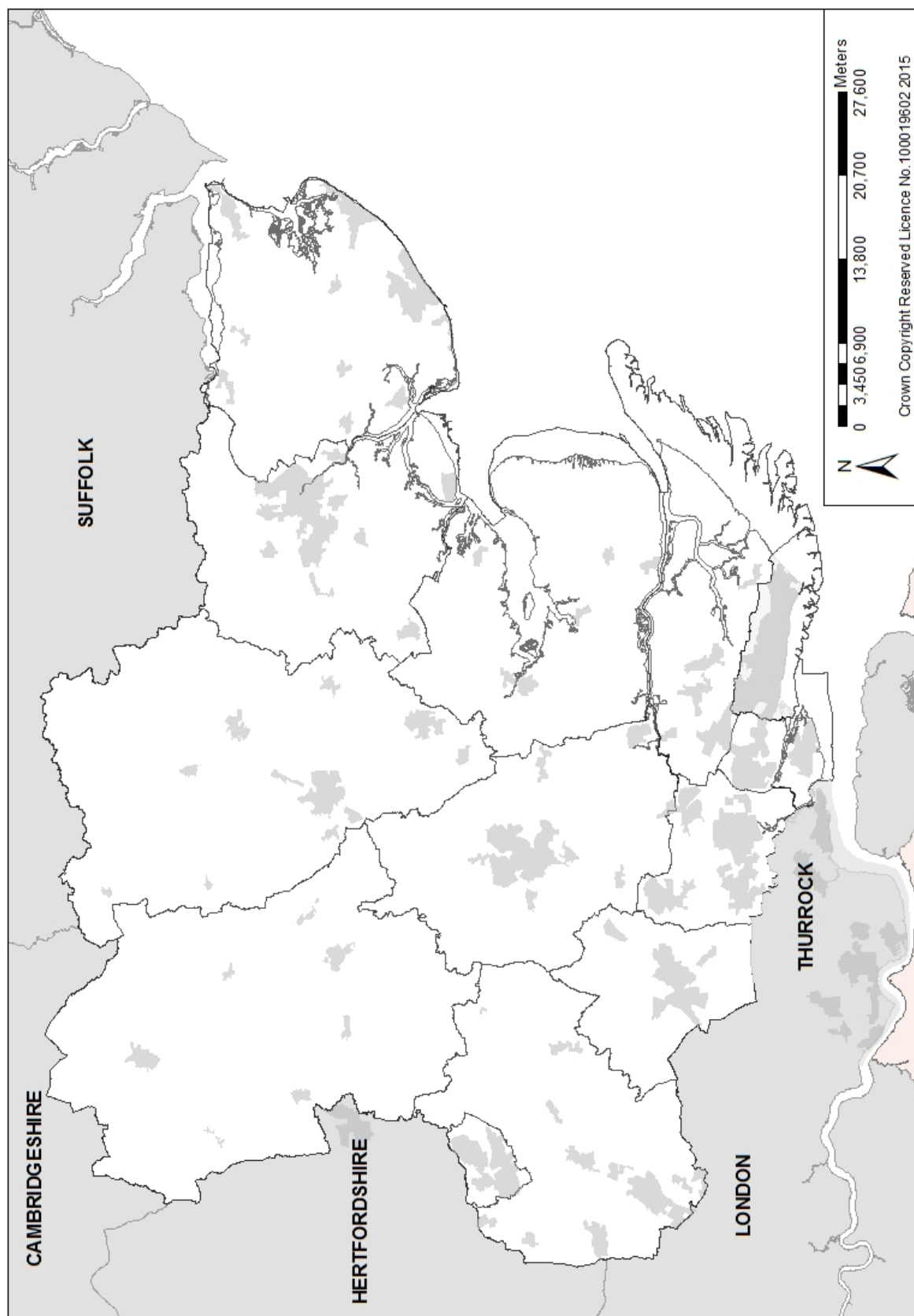
2 Spatial Context

2.1 The purpose of this chapter is to set out the spatial and policy context for the Waste Local Plan by providing a summary of the Plan area characteristics that have an influence on waste arisings, and how and where this waste can be managed.

2.2 The Plan area comprises the administrative areas of Essex County Council and the unitary authority of Southend-on-Sea Borough Council. Essex is located to the northeast of London, within the East of England region, and borders the counties of Hertfordshire, Suffolk and Cambridgeshire. Within the County of Essex, the two-tier administrative system includes 12 District, Borough and City Councils. Southend-on-Sea is located to the south east of Essex and borders Rochford District to the north and Castle Point to the west, while the southern and eastern boundaries of the Borough are formed by the Thames Estuary.

2.3 The Plan area therefore includes 13 District, Borough and City Councils and covers an area of 3,737km². The Plan area adjoins the Unitary Authority of Thurrock, the London Boroughs of Enfield, Waltham Forest, Redbridge and Havering, and the Counties of Hertfordshire, Cambridgeshire, Suffolk and Kent.

Map 1 Waste Local Plan Area



A summary of the Plan area is provided in the information box below:

Portrait of the Plan Area - at a glance

2.4 Population

Most people live in the main urban areas, consisting of the large/key settlements and more dispersed smaller settlements. The population of Essex is estimated to be 1.61 million (mid-2014); an increase of 17,600 on the preceding year.

As of mid-2014, Basildon continues to have the largest population within Essex at 180,500 people, followed by Colchester (180,400). The smallest population is in Maldon where it was estimated to be 62,800. Southend-on-Sea's population was estimated to be 177,900 and, due to its tightly constrained administrative boundary, is the most densely populated authority area in Greater Essex.

2.5 Households

National Government is committed to significant growth in the southeast area, in part due to its close proximity to London. District, Borough and City Councils continue to take account of national household projections in adopted and emerging local development plan documents. It is expected that housing growth will occur in all districts within Essex and Southend-on-Sea, with a particular focus in Chelmsford, Colchester, Basildon, Harlow and Southend-on-Sea. This growth will include regeneration of previously developed (brown-field) land whilst there is a general presumption against inappropriate development in the London Metropolitan Green Belt, which covers a significant portion of the south of the Plan Area.

Table 1 : Indicative Housing Growth in Essex to 2032

Emerging Plans	Average Actual Build (2001/02 to 2014/15)	Projected Annual Requirement		
		Adopted Core Strategy	Emerging Local Plans	Total
8 emerging 5 adopted	61446 ⁽¹⁾	525**	6172***	6,697

Source:

**Adopted Core Strategy Documents (Rochford/Southend)

***Adopted/Emerging Objectively Assessed Housing Need Requirements as at December 2015

1 Data excludes net completions for 2014/15 (Rochford/Southend)

2.6 Development Trends

In addition to housing growth across the county, there are also several major existing and future infrastructure projects located in the Plan area or in neighbouring areas, which may produce quantities of waste that may result in an increase in waste arisings within the Plan area or within adjacent areas. These projects include:

- the current construction of Crossrail with excavation materials transported to Wallasea Island (Rochford District) to create an RSPB wetland reserve;
- Bathside Bay in Harwich, (Tendring District) has secured planning permission, but is yet to begin construction;
- potentially, there may be development of a new Lower Thames Crossing between Greater Essex and Kent during the WLP Period;
- similarly, Crossrail 2 may be developed during the WLP Period, which could generate significant quantities of waste to be managed in the Plan area;
- Bradwell-on-Sea (Maldon District) has been identified by central Government as a potentially suitable location for the construction of a new nuclear power station. Any decisions regarding nuclear power delivery is considered a Nationally Significant Infrastructure Project (NSIP) and therefore applications are made directly to the Planning Inspectorate and not Essex or Southend-on-Sea Councils⁽²⁾.

2.7 Economy

The economy of Essex and Southend-on-Sea is large and generally prosperous, with high standards of living. Although unemployment remains high at 5.4% in 2013, it is below the national average (7.0%). Wages are higher than the national averages for residence based (£574.9 per week in Essex) earnings and lower for workplace based (£517.2 per week) earnings. Higher value earnings are found in the west of Essex largely due to greater connections into London.

2.8 Transport

The strategic road network in the Plan area is heavily influenced by the proximity of London, with key trunk routes such as the M11, A12, A127 and A13 radiating out from the city and into Essex. The M11 runs down the western boundary of the Plan area and the M25 cuts across the south-western corner. Four main railway lines travel through the Plan area from London, with two going north to Cambridge and Ipswich and two going east to Southend-on-Sea.

Despite the potential impacts to the road network as a consequence of waste development, there are limitations with alternative transport modes as the rail network is also under pressure and mainly geared for passengers. Transporting waste by water is another alternative to road transport but opportunities in the Plan area are small due to the need to manage waste close to its source of arisings. Water transport is generally also more appropriate for transporting waste over longer distances, contrary to the principle of treating and managing waste close to its source in order to reduce transport distances.

2 Further information about the NSIP process can be found on the [Planning Portal](#)

2.9 Environment

Despite most of the population living in urban areas, three quarters of Essex's land area is rural, consisting of undulating countryside, rolling fields, picturesque and historic villages, internationally significant coastline, ancient woodlands and a number of important rivers that meander through the low-lying topography of the county eastwards towards the coast.

Protection of the environment is a key objective with significant areas of land designated to safeguard landscapes, open spaces, and areas of ecological, historical and geological value.

The Metropolitan Green Belt encircles Greater London and covers most of the districts of Epping, Brentwood, Basildon and Rochford, about a third of Chelmsford City and parts of the administrative areas of Castle Point, Harlow, Uttlesford and Southend-on-Sea. The Green Belt covers approximately 86,000 hectares; approximately 22% of the County.

Essex hosts a variety of important lowland habitats, which are protected nationally and internationally. In particular, the Essex coast is recognised as a significant area, with great importance also attached to the wood-pasture of Epping Forest and the wetlands of Abberton Reservoir and the Lee Valley.

In total there are 85 Sites of Special Scientific Interest (SSSI) covering 36,322 hectares of the Plan area, 17 European sites (Special Protection Areas and Special Areas for Conservation) designated for wildlife covering 78,271 hectares and fourteen other international sites (Ramsars) covering 30,524 hectares. There is also a single Area of Outstanding National Beauty located at Dedham Vale on the Essex and Suffolk border. These protected areas are supported by a network of sites of county value for nature conservation which are known as Local Wildlife Sites (LoWS).

2.10 Historic Environment

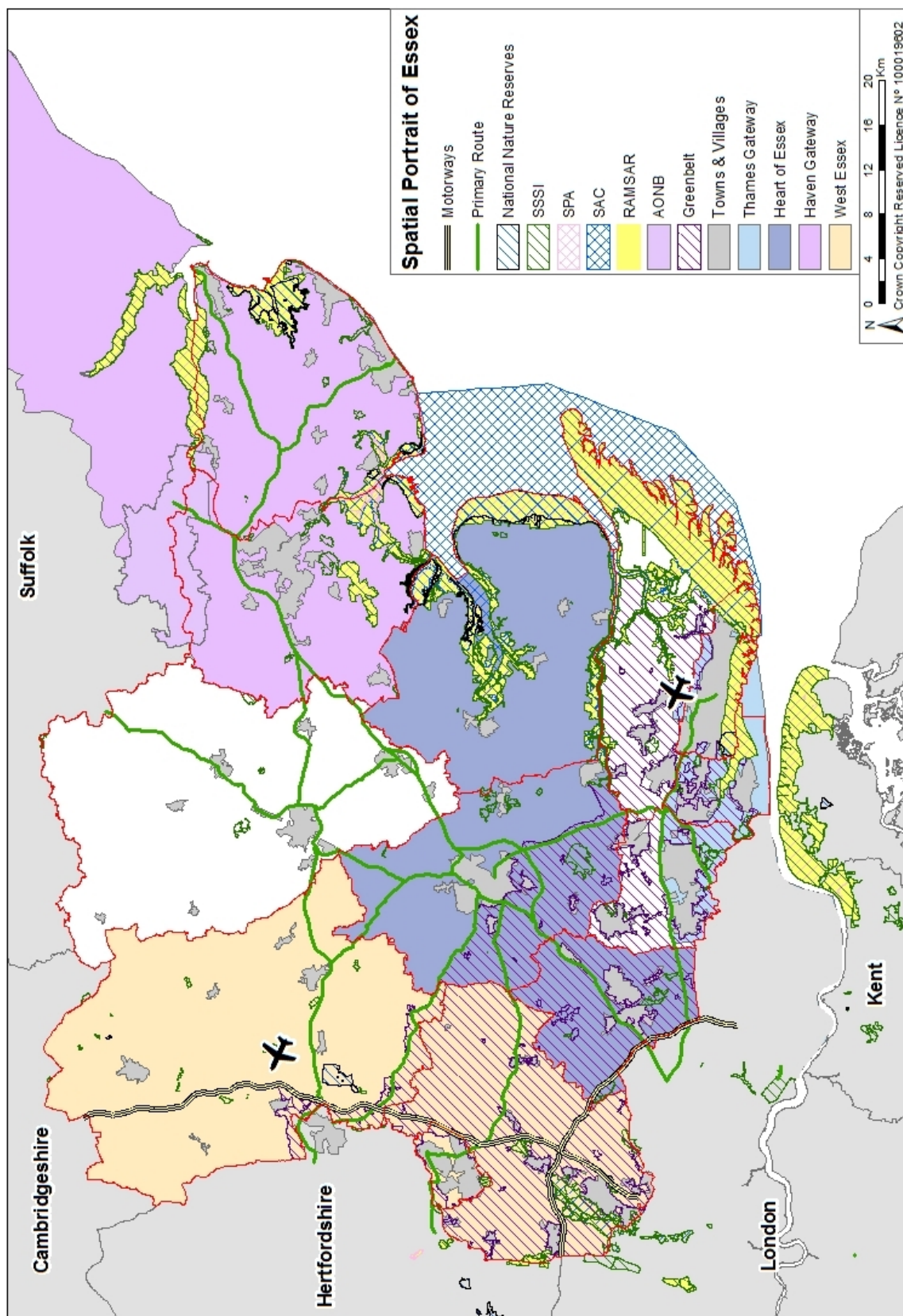
Essex has an exceptionally rich historic environment, contributing significantly to the character of the County. There are just under 55,000 records on the Essex Historic Environment Record, comprising 40,312 known archaeological sites, 14,075 listed buildings, 304 scheduled monuments and 38 historic parks and gardens. These have a date range from the early Palaeolithic, with the first humans arriving in Essex, through to modern military installations of both World Wars and the following Cold War. Essex's identity and sense of place is closely linked with its rich heritage.

2.11 Climate Issues

Essex and Southend-on-Sea lie within a particularly dry part of the country, with an average rainfall that is 35% less than that of England and Wales as a whole. However, the low-lying coastline is susceptible to flooding and the many coastal estuaries spread this risk inland. The risk of flooding is likely to increase with climate change because of rising sea levels, climatic instability and more frequent extreme weather events.

The key spatial constraints as noted in the box above are illustrated in the map below:

Map 2 Spatial Portrait of the Plan Area. Source: ECC (2015)



3 Policy Context

3.1 The range of key strategies and policies that are relevant to the WLP are summarised in A 'Appendix A - Policy Context'. A significant element of the policy context for the Plan is the Waste Hierarchy. The intention is that, in making decisions about waste management, greater weight should be attributed to those waste management methods that are towards the top of the Hierarchy. Essex and Southend-on-Sea have previously followed the principles of the Waste Hierarchy through the Waste Local Plan (2001).

3.2 The principles of the Hierarchy have been used to inform the requirements for new waste management capacity. Through the policies in the WLP, the WPAs actively support the movement of waste management up the Waste Hierarchy. The other element of National Planning Guidance considered to be key for the WLP is the principle of self-sufficiency in waste capacity. This is the concept of providing enough waste capacity to handle the forecasted amount of waste arising in the Plan area. The Guidance indicates that waste planning authorities are not expected to deal solely with their own waste to meet the requirements of self-sufficiency. This is because planning for waste must also demonstrate an adherence to the 'proximity principle' which is the principle of treating waste close to the source of where it is created. Waste generated close to an administrative border may be treated across that border and therefore cross border movements of waste are acceptable and are taken account under the term 'net self-sufficiency'. Further, this Plan is based on net self-sufficiency where this is practicable. Certain waste types, such as low-level radioactive wastes, are generated in such small quantities that it is not practicable to manage this waste on a local basis as insufficient waste is produced to justify the development of specialist facilities. On-going discussions with other Waste Planning Authorities as part of the Duty to Co-operate, establish existing spare capacities both inside and outside the Plan area to manage such waste.

3.3 With regard to the scope of this Plan, policy considerations for guiding non-waste development are set out in national and other local planning policy documents and are not a feature of this Plan. As such, Essex County Council and Southend-on-Sea Borough Council will continue to work with district and borough Councils, particularly through the Duty to Co-operate process, to support the preparation and implementation of their Local Plans in respect of ensuring adequate waste collection facilities are provided and as far as possible waste is managed at source.

Picture 1 Waste Hierarchy



4 Waste Management Context

Existing Waste Management Capacity

4.1 Waste is created from a range of different sources called waste streams, which often include similar types of waste materials. As the WPAs, Essex County Council and Southend-on-Sea Borough Council have responsibility to address, through the planning system, the waste management of all controlled waste streams produced within the Plan area.

Waste Prevention

4.2 Waste prevention is at the top of the Waste Hierarchy. These principles are fundamental to the WLP as they seek to address our unsustainable consumption of resources. The benefits of waste prevention are three-fold as they result in:

- a reduction in the use of material resources, water and energy that go into the production of what becomes waste in the first instance (be this plastic packaging or food waste);
- a reduction in the resources that are required for management and/or disposal of waste (for waste management infrastructure, water and energy);
- a reduction in what is emitted from these processes (e.g. wastewater and greenhouse gases).

4.3 While the WLP can only go so far towards achieving waste prevention and re-use in new development, it can support the many existing waste reduction, education and awareness initiatives. Many of these initiatives form an integral element of the work of the Essex Waste Partnership, who have a number of partnership waste reduction schemes in place (such as home composting, real nappy campaigns, and scrap and swap-it schemes), described in detail in the [Joint Municipal Waste Management Strategy for Essex 2007-2032](#) and the [Southend Municipal Waste Management Strategy 2004-2020](#).

4.4 These initiatives are not only good for the environment, they are also financially beneficial. For every tonne of waste that is managed and disposed of there is a financial cost, borne by the government, businesses and individuals.

4.5 The benefits of waste prevention were recognised by the European Commission who launched 'Europe 2020' with a goal to encourage 'smart, sustainable, inclusive' growth. A need to 'decouple' economic growth from resource use, and the amount of waste being generated, was also identified. Nationally the need for decoupling waste generated from economic growth (in all sectors) was seen as a key objective of the [National Waste Management Plan for England \(2013\)](#), and the decoupling of growth from waste generation and waste prevention has been investigated in more detail in the [Waste prevention programme for England \(2013\)](#). The aim of the programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth. To do this, the document references the requirement to move towards a more resource efficient, circular economy. This contains a number of priority areas⁽³⁾ that need to be addressed to assist in reducing the amount of waste produced.

3 Consisting of plastic, food, textile, electrical, paper and board, furniture and bulky waste, construction and demolition, healthcare and chemical wastes

4.6 To deliver waste prevention, there are a number of actions that can be taken, including more efficient manufacturing and ordering processes by businesses, encouraging behavioural change to reduce overall consumption and improving home composting, sorting and recycling of waste by public sector bodies. Additional measures could include the requirement for new developments to put in place practicable measures to achieve greater waste minimisation through a waste management audit and strategy. Some of these actions can be encouraged through the WLP, but others need to be addressed through other parts of the Local Development Framework including Essex District, Borough and City Councils and Southend-on-Sea Borough Council's Local Plan policies.

Main Waste Streams in the Plan area

4.7 Waste is classified into different types depending on the nature and source of the material. The box below sets out the different waste streams that arise within the Plan area:

Main Waste Streams in the Plan area

4.8 Non-Hazardous Waste

Non-Hazardous waste is split into two types of waste: 'organic' which includes compostable material such as food and green wastes and 'non organic' which includes recyclables such as glass and plastic. There are two sources of non-hazardous waste, as shown below:

- Local Authority Collected Waste (LACW) - Waste from households and some commercial properties that is collected by the local authority, including waste from public gardens and public bins. This is closely monitored by the Waste Disposal Authority and therefore available data is relatively comprehensive.
- Commercial and Industrial Waste - Waste from shops, industrial and business premises; this covers a wide range of waste types from food waste to packaging.

4.9 Construction, Demolition and Excavation waste (CD&E)

Waste that is typically inert, meaning it is biologically stable and does not undergo any significant physical, chemical or biological transformations. Where soils are present, these may not be inert and may require further treatment. CD&E waste can be in the form of certain types of:

- Construction wastes (e.g. surplus supplies of bricks specifically required for a single project);
- Demolition wastes (e.g. used material resulting from demolition activities); or
- Excavation wastes (e.g. usually consisting of soils and stones which cannot be used beneficially, such as from tunnelling projects or 'overburden' from removing soils from an area in preparation for mineral excavation. The soil component may not be inert).

4.10 Hazardous waste

Waste that poses potential threats to public health or the environment (when improperly treated, stored, transported or disposed). This can be due to the quantity, concentration, or characteristics of the waste. This type of waste includes elements of healthcare waste.

4.11 Radioactive waste

Radioactive wastes are categorised into nuclear and non-nuclear wastes. Nuclear wastes are from the nuclear power industry while “non-nuclear” wastes are generally from medical facilities and educational establishments.

4.12 Wastewater (sewage)

Comprises liquid and solid waste discharged by domestic residences, commercial properties, industry, and agricultural activities, which is then carried to Water Recycling Centres via a network of foul sewers.

4.13 Agricultural waste

Waste that is specifically generated by agricultural activities which can include organic matter, pesticide containers and old machinery. Agricultural waste arisings data is not captured in any systematic way, particularly as any waste can often be reused within the agricultural holding it is generated within. This results in many 'permitted development' rights afforded to agricultural holdings, which mean they do not need express planning permission from the Waste Planning Authority. It is therefore the case that the knowledge of this waste stream is limited.

Waste Management Capacity in Essex and Southend-on-Sea

4.14 In order to ensure that there is adequate provision for the management of waste it has been essential to establish how much waste is being managed now and how much waste is likely to need to be managed in the period to 2032. The table below sets out the current capacity in the Plan area:

Table 2 Summary of Existing Waste Management Capacity

Facility Type	Operating and Under Construction	
	Number	Estimated Capacity (Tonnes)
Transfer	116	1,776,928
Non-Inert Materials Recovery	120	2,262,963
Biological Treatment	13	280,938
Inert Materials Recovery	39	2,072,073
Energy Recovery	2	21,792
Disposal (Landfill)	12	17,964,802

Facility Type	Operating and Under Construction	
	Number	Estimated Capacity (Tonnes)
Hazardous Landfill	0	The previous facility closed as of April 2014
Total ⁴	186	22,602,560

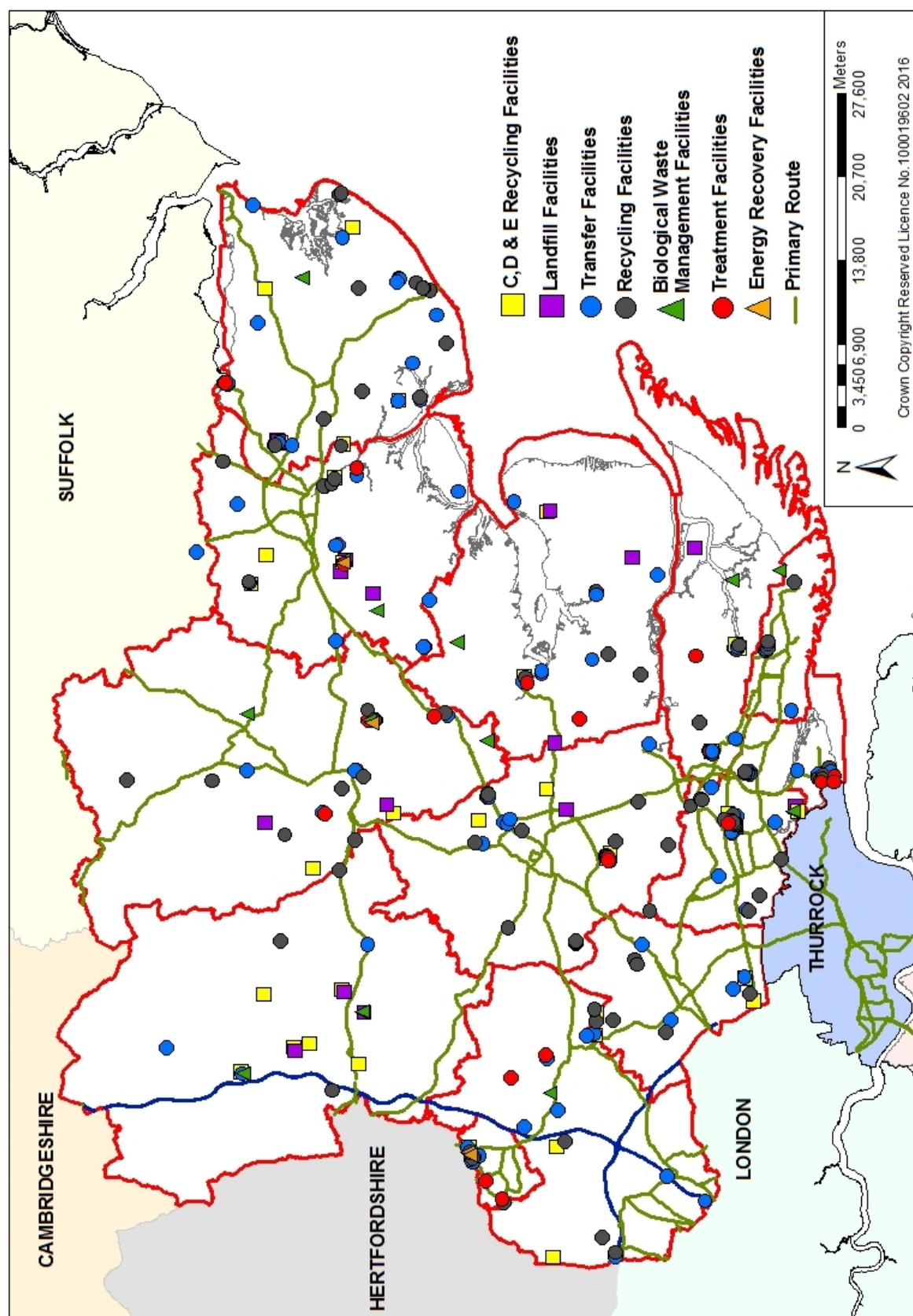
Source: Essex County Council (2015)

4.15 Map 3 highlights the distribution of all 186 waste facilities across Essex and Southend-on-Sea, not including the 153 Waste Water Treatment Facilities also operating in the Plan area. Their location can be found within the Waste Water Treatment Needs Assessment 2014 report. In parallel with other forms of waste development, waste water treatment facilities are dispersed throughout the Plan area although there are clusters which correlate with urban densities, which results in greater clustering in the northeast and southeast as well as a smaller cluster around Harlow in the west.

4.16 A full list of all permitted waste facilities in operation in the administrative areas of Essex and Southend-on-Sea can be found in the respective Annual Monitoring Reports.

4 *The number of facilities and estimated capacity described under 'Total' does not include the facilities and estimated capacity included within Transfer facilities, as this would effectively result in double counting of available estimated capacity.

Map 3 All Existing and Under Construction Facilities within the Plan Area (ECC 2015)



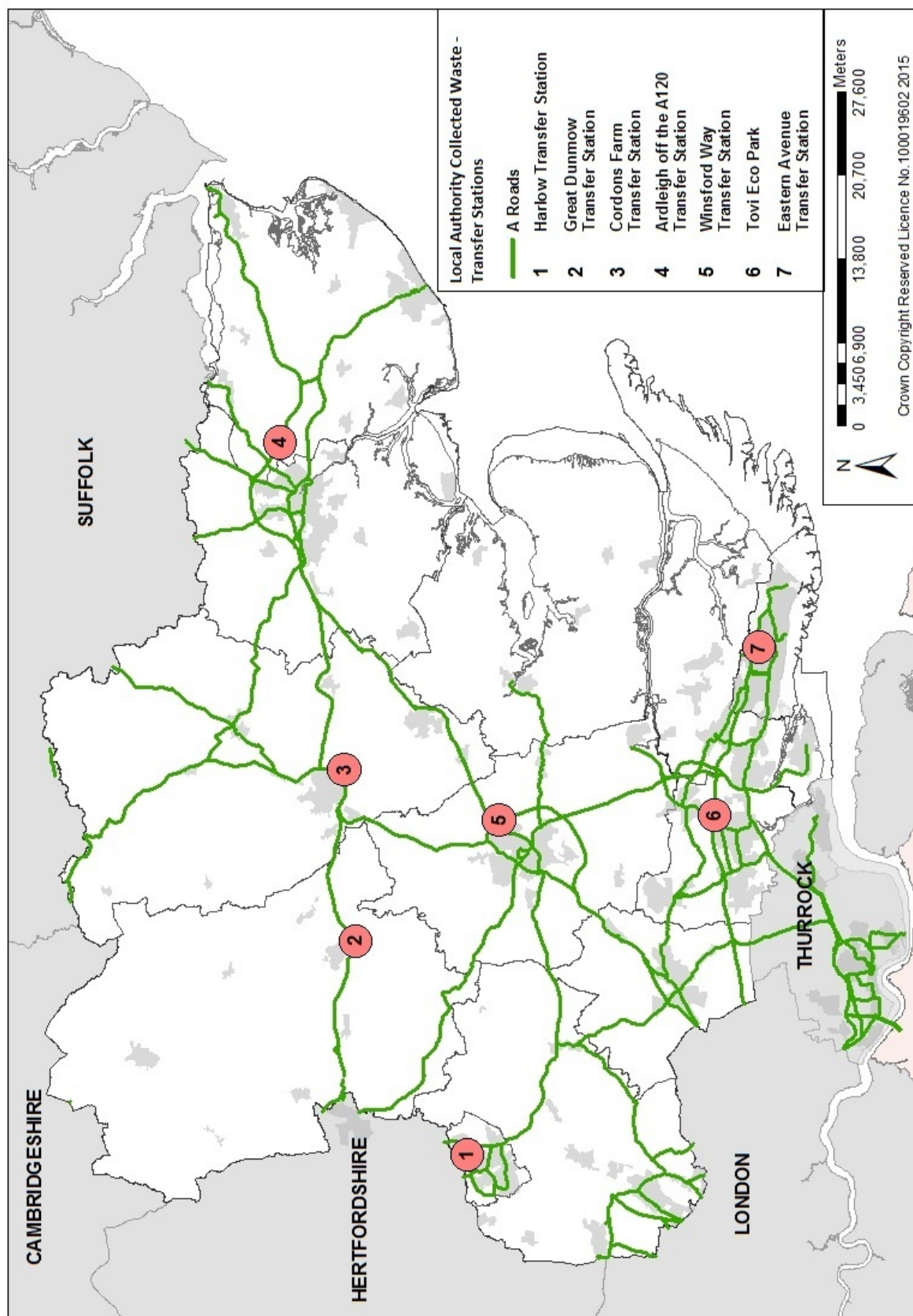
Local Authority Collected Waste

4.17 Local Authority Collected Waste, making up approximately 20% of the total amount of waste created in the Plan area, is managed through a network of sites which comprises of the Mechanical Biological Treatment Facility at Tovi EcoPark, a network of Recycling Centres for Household Waste and six supporting municipal waste transfer stations, as set out below.

Table 3 Main Local Authority Collected Waste Sites

Site Name	District
IWMF Tovi EcoPark (Courtauld Road)	Basildon
Harlow	Harlow
Winsford Way	Chelmsford
Eastern Avenue	Southend-on-Sea
Great Dunmow	Uttlesford
Cordons Farm	Braintree
Ardleigh off A120	Tendring

Map 4 Local Authority Collected Waste Transfer Stations



4.18 Commissioning of the Mechanical and Biological Treatment Facility at Tovi Eco Park began in November 2014 with full service commencement expected during 2016. This facility, coupled with its associated network of supporting waste transfer sites, provides sufficient capacity to recover materials from the residual waste fraction of LACW in the Plan area. At present, the Waste Disposal Authority is exploring long term options surrounding the final destination for the stabilised residual waste output of the Tovi Eco Park Facility; this programme of work will be developed after the facility has achieved full service commencement. Currently the output of the facility is exported from the Plan area via Tilbury Docks and utilised in energy plants in the Netherlands.

4.19 In respect of the source segregated bio-waste fraction of LACW (i.e. kerbside collected food waste and garden waste), much of this is managed within the Plan area under short term contracts utilising merchant facilities. The Essex County Council Waste Disposal Authority is in the process of procuring a long-term bio-waste solution to address this need, which may result in even higher levels of county self-sufficiency. To ensure that capacity is available for the sustainable management of this waste in the long term, the WLP makes provision for LACW bio-waste treatment through allocated sites.

Non Local Authority Collected Waste

4.20 Non-Local Authority Collected Waste totals approximately 80% of the waste that requires managing in the Plan area, and is formed of all the waste streams set out in 'Main Waste Streams in the Plan area', excluding LACW. Despite waste prevention and reduction initiatives implemented across the Plan area, the evidence associated with this WLP shows that in order to meet national policies and waste targets, the Waste Planning Authorities will need to make provision for some new waste management facilities during the Plan period. These new facilities will address the shortfall in existing waste management capacity identified for those waste streams not controlled by the Waste Planning Authorities, as outlined in The Waste Challenge - At a Glance.

The Waste Challenge - At a Glance

4.21 Non Hazardous Waste

There has been and will continue to be cross-boundary movements of waste. Planning Practice Guidance states that imports of waste from Greater London require specific consideration. The Vision & Strategic Objectives of this Plan therefore recognises the need to continue to make provision for imports from London, albeit at a reducing rate. After 2026, imports of non-hazardous waste to landfill should only be of non-recyclable and non-biodegradable wastes, while some provision may also be made for the management of residues suitable for energy recovery at consented plant.

Non-organic, non-hazardous waste arisings within the Plan area are expected to moderately increase during the Plan period. In 2015, it was estimated there were 1.57mt of this type of waste arising in the Plan area. By 2031/32, arisings are estimated to be 1.67mtpa. Imports of non-hazardous waste from London have been estimated to be in the region of 375,000 tpa in the early years of the Plan reducing down to around 150,000 tpa at the end of the Plan period.

Organic non-hazardous waste arisings within the Plan area are also expected to increase slightly during the Plan period. In 2015, it was estimated that there was 331,000t of organic non-hazardous waste arising in the Plan area. By 2031/32, arisings are estimated to be 349,000tpa.

Consented operational capacity is expected to decline from 221,000tpa to 131,000tpa should no further planning permissions be granted over the Plan period. Consequently there will be a requirement for 218,000tpa of new organic treatment capacity by 2031/32.

At present, the Waste Disposal Authority is considering long term management options for the stabilised residual waste output of the Tovi Eco Park Facility. In 2016, the annual 200,000t output from this facility was exported from the Plan area. In line with the Plan's Strategy for the Plan area to become net self-sufficient with regard to its waste management needs where practicable, the Plan includes a site allocation which has capacity to potentially manage this residual waste in the Plan area in the longer term.

Assuming that suitable facilities are delivered on the sites allocated in this Plan, it is forecast that some non-hazardous landfill void space will exist at the end of the Plan period. However, in accordance with the waste hierarchy, this remains the option of last resort and is not considered to be a substitute for developing further treatment capacity that will move waste up the hierarchy.

4.22 Construction, Demolition and Excavation Waste

It is estimated that local Construction, Demolition and Excavation waste arisings was 3.62mtpa in 2014 (including 0.31mt of waste imported from London).

It is identified that there is a need for an additional 1.95mtpa of Construction, Demolition and Excavation management (recycling or disposal) capacity by 2031/32, partly due to the expiry of existing temporary planning permissions.

Locally collected evidence suggests that there is further diversion from landfill through beneficial re-use of inert waste, which equated to approximately 765,000tpa in 2014.

It is estimated that there is a current inert landfill void space of approximately 3.25 million m³, which would equate to approximately 5.1 million tonnes of capacity. This is, however, not sufficient to accommodate the forecasted need for inert waste management capacity over the Plan period, to accommodate both the needs of the Plan area and the inert waste projected to be imported from London. To address this, sites capable of providing 490,000 tpa of inert waste recycling capacity and inert waste landfill sites capable of accommodating 14.08million tonnes in total is allocated in the Plan. It is, however, recognised that a proportion of the total inert waste recycling capacity is temporary in nature, and without further permissions, the total inert recycling capacity is likely to reduce to 340,000tpa at the end of the Plan period.

Nonetheless, even after the allocation of all sites suitable for inert waste recycling and inert waste landfill, there is a further need to find management solutions for a total of 7.05mt of inert waste. Since no other submitted sites have been deemed suitable for the management of inert waste in the Plan area, locational criteria policies would be used to assess any additional future inert waste management proposals.

4.23 Hazardous Waste

In 2014, most of the 113,000tpa of hazardous waste requiring management was exported from the Plan area for final management. Of this around 23,000 tpa was disposed to landfill.

The only landfill accepting hazardous waste (Stable Non-Reactive Hazardous Waste -SNRHW) within the Plan area closed in April 2014, so, in 2016, waste was being disposed of at sites beyond the Plan area. This facility, on average, accepted approximately 50,000 tonnes of SNRHW per annum, which included imports from other authority areas as well as waste generated within the Plan area.

Hazardous waste is not subject to net self-sufficiency within this Plan due to the specialist nature of the facility type and the relatively small quantities generated within the Plan area.

A new site for a Stable Non-Reactive Hazardous Waste Landfill with a total capacity for 30,000 tonnes is allocated in the Plan. No other proposals for the management of hazardous waste in the Plan area were submitted. Locational criteria policies would be used to assess any future hazardous waste proposals should the market identify a need for further facilities in the Plan area.

4.24 Radioactive Waste

Bradwell Nuclear Power Station is a licensed Nuclear Site and is the principal source of radioactive waste arisings within the Plan area whilst the Power Station is decommissioned. At present, there is sufficient national LLW disposal capacity and sufficient local ILW interim storage capacity for this decommissioning process.

The Replacement Waste Local Plan needs to be flexible regarding this waste stream as there is the potential for a new nuclear power plant to be constructed at the Bradwell site.

Radioactive waste from non-nuclear sources represents a very small waste stream largely managed within the wider non-hazardous waste stream. No proposals for the management of nuclear or non-nuclear radioactive waste in the Plan area were submitted as part of the preparation of the Plan.

Locational criteria policies provide the means by which future nuclear and non-nuclear waste proposals will be assessed should the market identify a need for further facilities in the Plan area.

4.25 Wastewater

Currently, wastewater treatment across Essex and Southend-on-Sea is provided via a total of 153 Water Recycling Centres (WRC);

The vast majority of WRCs have capacity to accept wastewater from proposed growth in the Plan area without the need for improvements to existing facilities;

Sludge generated in the WRC can be sent for further treatment for use as agricultural fertiliser or power generation. The sludge treatment strategies provided by operators, indicate that there is adequate capacity for sludge treatment and disposal during the Plan period.

Future Waste Capacity Requirements

4.26 Progress has been made on the provision of new and more sustainable facilities in the Plan area, including those provided in connection with the contracts for recycling and treatment of Local Authority Collected Waste. There remains, however, a need for further new facilities for the recycling, treatment and disposal of other waste streams. An enhanced provision of Recycling Centres for Household Waste will also be required to reflect changes in local population and demand.

4.27 Ongoing economic growth including regeneration, construction and development, will affect the future volumes of waste generated in Essex and Southend-on-Sea. Through this Plan, the Waste Planning Authorities of Essex and Southend-on-Sea must ensure that adequate waste management capacity is delivered to meet future needs for the waste that is produced. This must be carried out in the context of the Plan area, whilst protecting and enhancing the local environment, supporting economic growth and people's quality of life as summed up in Portrait of the Plan Area - at a glance. Although landfill has traditionally been a significant form of waste management within the Plan area, capacity is reducing and there needs to be a move away from landfill and up the Waste Hierarchy. These new private waste facilities will be essential to a more sustainable approach to dealing with waste in the Plan area, and to enable a move away from reliance on landfill in future.

4.28 The future waste management capacity requirements of the Plan area have been calculated through the Waste Capacity Topic Paper 2015 which builds on the analysis originally presented in the Capacity Gap Report 2014. The reports model future waste arisings alongside existing operational waste capacity to identify future waste treatment and disposal requirements in the Plan area to 2032.

Biological waste treatment

4.29 A capacity gap has been identified for biological waste treatment, increasing to 217,000tpa by 2031/32. Biological treatment involves the harnessing of microorganisms to break down organic waste. Such waste can include food waste, green waste and paper waste. The products of biological treatment are typically useful, with all biological treatment facilities producing a compost type material or soil improver. As such, biological treatment is considered to be in the 'Recovery' section of the Waste Hierarchy as whilst the product is useful, it is not the same as the feedstock which is delivered to the facility. Composting facilities break down the organic waste aerobically (in the presence of oxygen). In the case of anaerobic digestion, this process takes place anaerobically (without oxygen), and along with a composting material, produces biogas which can be used to generate heat and electricity.

4.30 The following waste management facility types are considered to contribute to the biological treatment of waste:

- In-Vessel Composting facilities (enclosed);
- Open Windrow Composting facilities (outdoor) and
- Anaerobic Digestion (AD).

Inert Waste Management

4.31 A capacity gap has been identified for inert waste management, of 1.5mtpa by 2031/32. Construction, Demolition and Excavation waste can be processed and reused/recycled as a construction material. Whilst the resultant material is typically lower grade, recycled inert material can still often act as a substitute for freshly excavated material. Due to the fact that this waste can be processed and/or reused for its original use, it can fall under the 'Re-use' or 'Recycling' tier of the Waste Hierarchy. Recycling processes involve the removal of materials such as wood, plastic and metal, a process that can be carried out at both enclosed and open-air facilities. Should insufficient recycling capacity be delivered, the waste can be sent for disposal by way of inert landfill. Final disposal as a means of managing waste is recognised as the least desirable solution and should only be explored when other options are not appropriate. However, there will continue to be a need for an element of inert landfill as it is not possible to recycle all of this waste.

Hazardous Waste Management

4.32 A capacity gap has been identified for hazardous waste management of 50,250tpa by 2031/32. Hazardous waste disposal involves the disposal of waste that can pose a potential threat to public health when improperly treated, stored, transported or disposed of.

5 The Strategy

5.1 This chapter sets out the Plan Vision, Strategic Objectives, and Spatial Strategy for Essex and Southend-on-Sea up to 2032. The 'Vision' sets an aspiration for how waste will be managed in the Plan area by the end of the Plan period. From the Vision, a number of 'Strategic Objectives' are defined. These are the issues and opportunities that must be addressed in order to achieve the Vision. Finally, the 'Spatial Strategy' provides the means by which the Strategic Objectives are proposed to be met within the context of the Plan area.

5.2 The Plan is based on the principle of net self-sufficiency, where practicable. This means having sufficient waste transfer, recycling, recovery, and disposal capacity within the Plan area to manage the amount of waste generated, with only limited cross border movements with other authorities. Such an approach recognises that waste travels across administrative boundaries, with the distance travelled being, at least in part, related to the volume of waste required to make a facility economically viable set against the amount of waste expected to arise in a given area. The smaller the quantity of a waste type generated, the less practical it is to be net self-sufficient due to economies of scale making small, purely local facilities unviable. Particularly specialist types of waste travel beyond one or more administrative boundaries.

5.3 The principle of net self-sufficiency does not apply to hazardous waste or radioactive waste as it is not considered practical to provide for such specialist facilities on the basis of net self-sufficiency within the Plan area.

5.4 The Vision is predicated on the Waste Hierarchy which sets out the five different methods for the management of waste, ranked according to environmental impact. The Hierarchy focuses on the prevention of waste in the first instance, followed by a preference for preparing waste for re-use, recycling and other types of recovery in that order, with disposal to landfill as a last resort.

5.5 The Vision also sets out an approach to climatic issues reflective of national policy. The NPPW (Section 1) recognises the role that driving waste up the Waste Hierarchy has on mitigating and adapting to climate change. The NPPF also states (para 93) that planning plays a key role in providing resilience to the impacts of climate change. The Vision therefore states that the design and location of future facilities will be sympathetic to climate change.

5.6 The co-location of complementary waste treatment facilities with other waste and non-waste developments, which could utilise waste as a resource, aligns the Plan with the notion of a 'circular economy'. In November 2015, the UK government provided a response to the European Commission public consultation on the circular economy. The principle of a circular economy is incorporated into the Vision and any future plan review will assess the implications.

5.7 The Vision reflects the reducing provision made for London's waste exports to Essex and Southend-on-Sea in line with the waste forecasts in the adopted London Plan (2015). This respects the Duty to Co-operate process that Essex, Southend-on-Sea and London entered into to aid the formation of both the London Plan (2015) and this WLP.

Vision

By 2032, Essex and Southend-on-Sea, will be net self-sufficient⁽⁵⁾ in waste management, where practicable. Households, businesses, the public sector and voluntary organisations within the Plan area will be taking responsibility for waste prevention, re-use and recycling. Where waste is unavoidably created, all opportunities to recover the value from waste will be explored in order to minimise the amount of waste sent to landfill to help achieve a 'circular economy'.

The Plan will provide sufficient waste management infrastructure in Essex and Southend-on-Sea to meet the existing and forecasted amount of waste expected to arise over the Plan period. The forecast includes a decreasing proportion of London's waste exports into the Plan Area, as informed by the adopted London Plan (2015).

Waste management facilities will be located, designed and operated without adverse impacts on the amenity of local communities, the natural and historic environment, the landscape and the townscape of Essex and Southend-on-Sea. Opportunities to enhance such features will be supported.

The Plan will offer a degree of flexibility whilst still maintaining a Plan-led approach to the delivery of waste management facilities, which is sympathetic to the Waste Hierarchy. The co-location of complementary waste facilities and non-waste developments (e.g. housing and employment) will be encouraged, where appropriate, to facilitate synergies and efficiencies in waste management and transport, whilst recognising the potential for cumulative impacts.

Waste management within the Plan area will be undertaken in ways that minimise the impact on climate change, primarily through the minimisation of waste transportation distances and landfilling. Facilities will also be designed and located to reduce the risk from climatic effects such as flooding, particularly in the low-lying coastal areas of Essex and Southend-on-Sea.

5 Net self-sufficiency recognises that there will be some cross boundary movement of waste, as it is often more sustainable to take waste to a facility out of the Plan area to reduce waste miles where the source of waste arisings is close to an administrative boundary. Therefore, the premise is to provide for the equivalent quantity of waste arising within the Plan area, irrespective of where it arises.

5.8 The Vision is to be achieved through the following Strategic Objectives.

Strategic Objectives

SO1. To support the work of partner organisations, including District, Borough and City Councils, the Waste Disposal Authorities, Waste Collection Authorities, the Environment Agency, the waste industry, the business sector and voluntary organisations to promote and maximise waste prevention measures amongst all waste producers, both from the business sector as well as consumers.

SO2. To support an increase in the proportion and the quantity of waste that is re-used, recycled and recovered within the Plan area to meet local targets for recycling and recovery.

SO3. To safeguard and encourage opportunities to enhance existing waste infrastructure which provide an important contribution to waste management at sites that serve the Plan area.

SO4. To achieve net self-sufficiency in waste management by 2032, where practicable, with an associated reduction in the amount of waste from London that is disposed of in the Plan area, in line with the London Plan.

SO5. To make provision, through site allocations, to meet the need for new waste management facilities, and ensure flexibility through the inclusion of Areas of Search and 'criteria-based' locational policies.

SO6. To support the reduction of greenhouse gas emissions, primarily by moving waste up the hierarchy to minimise the need for landfill and by minimising waste transport and distance by locating new waste facilities in proximity to key growth centres.

SO7. To maximise opportunities for sustainable economic growth through the co-location of waste facilities with other waste uses and/or complimentary non-waste development. This encourages the use of waste as a resource, such as considering it as a potential source of heat and energy.

SO8. To ensure waste facilities and their proposed locations are sustainably designed, constructed and operated to reduce potential adverse effects on human health, amenity and the natural and historic environment.

Justification for these Strategic Objectives can be found below:

SO1 – Whilst the Waste Planning Authority cannot directly require a reduction in waste, it will seek to work with those partner organisations that can influence this objective.

SO2 – The Plan can make provision for facilities considered necessary to move the management of waste further up the Waste Hierarchy.

SO3 – Waste facilities can be problematic to locate due to their size and/or potential impact on local amenity. For existing facilities it is vital that such facilities can continue to operate and contribute to the waste management needs of the Plan area.

SO4 – In line with the adopted London Plan 2015, the WLP makes provision for a decreasing amount of waste exports from London (excluding excavation waste). With the exception of the need to take a proportion of London's waste, the WLP only makes provision for sites required to manage the amount of waste arising in the Plan area on a net self-sufficiency basis (where practicable) in conformity with the proximity principle.

SO5 – Direct site allocations aim to offer sufficient capacity to deliver waste management requirements during the Plan period. These allocations are supported by Areas of Search to accommodate local needs as well as locational criteria which allow the market flexibility.

SO6 – Demonstrates conformity with the NPPW and National Waste Management Plan for England (2013), which recognises that effective waste management reduces potential climatic impacts.

SO7 – Co-location offers the opportunity for efficient use of waste as a resource and offers a potential reduction in waste transportation. Ensuring opportunities for 'other recovery' acts as another and final potential diversion from landfill, as supported by the Waste Hierarchy.

SO8 – Section 5 of the NPPW requires, inter-alia, Waste Planning Authorities to assess the suitability of sites and/or areas for new or enhanced waste management facilities against "the cumulative impact of existing and proposed waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential."

5.9 The Spatial Strategy sets out how the over-arching Vision and Strategic Objectives can be implemented in the Plan area. It reflects the complexities of addressing waste issues in a Plan area which incorporates both dense urban areas and those which are very rural. It provides a steer for waste development to be focused in those areas expected to see most growth, and therefore an increased demand for waste management capacity, throughout the Plan period (as defined in the Essex Outcomes Framework 2014 and the Economic Plan for Essex 2014). Such an approach facilitates a reduction in the transportation distance of waste, and therefore aligns the Plan with the Proximity Principle.

5.10 The Spatial Strategy is supported by the **Picture 2 'Key Diagram'** This diagram sets out the key transport routes in the Plan area and the location of the new sites allocated to accommodate new facilities to meet future waste capacity requirements.

Spatial Strategy

The Waste Planning Authorities are planning on the basis of net self-sufficiency, where practicable, in their waste management by 2032. New waste development should be principally directed towards the key urban centres of Basildon, Chelmsford, Colchester, Harlow and Southend-on-Sea. This approach reflects the location of the main population centres and where growth and employment is concentrated in the Plan area. This ensures that the majority of waste arising can be managed and treated as close as possible to its source. There is a recognised need to ensure that other settlements are also adequately served whilst being sympathetic to the infrastructure and amenity constraints in such localities.

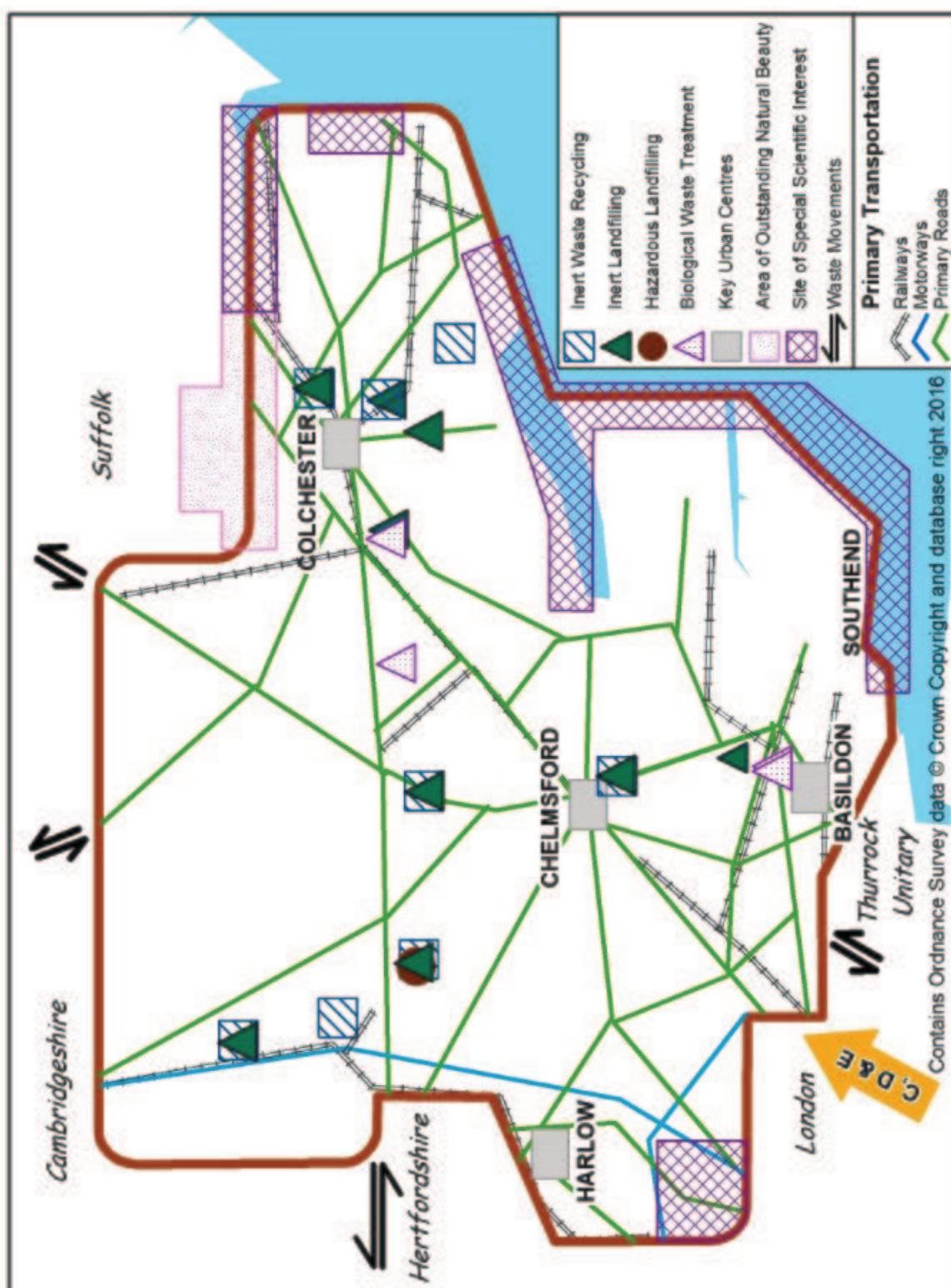
The Waste Planning Authorities will continue to rely on a network of strategic waste management facilities to manage Local Authority Collected Waste arising in the Plan area. Primarily this is based on the strategic Integrated Waste Management Facility at Tovi EcoPark in Basildon and the supporting network of six Local Authority Collected Waste transfer stations located across the Plan area.

In recognition of the complexities of securing appropriate sites for waste management, the allocated and existing sites within the Plan area have been safeguarded. This ensures that the continued operation of these facilities is not adversely affected by other development. New sites have been allocated to meet the forecasted increase in waste management needs for waste streams up to 2032.

In order to offer a degree of flexibility within the Plan area, and to direct waste management facilities serving a predominantly local need towards appropriate locations, Areas of Search have been designated. These Areas have been designated around employment areas allocated in Local Development Plan documents which are considered to be suitable for waste development in principle. In recognition that not all waste facility types would be appropriate in employment areas, and to afford further flexibility, locational criteria policies are included to guide the location of waste development proposed during the Plan period.

Opportunities to co-locate facilities on existing waste management sites, or alongside compatible non-waste development, will be supported when appropriate to do so. Opportunities to support sustainable waste practises, including the use of waste as a resource will be supported through close working with Local Planning Authorities in the Plan area.

Picture 2 Key Diagram



6 Need and Safeguarding

6.1 This chapter sets out the policies for addressing the key waste issues and challenges that have been identified in Essex and Southend-on-Sea. These policies enable the Vision and Strategic Objectives to be achieved by delivering the Spatial Strategy. In addition, the policies within this chapter have been influenced by the Sustainability Appraisal which supports the Plan. Allocations and designations referred to in the policies are identified on Key Diagram.

6.2 Cross referencing within the individual policies has been kept to a minimum and has only been used to avoid misunderstandings. The planning system requires applications to be determined in accordance with the statutory 'development plan' unless material considerations indicate otherwise. This means assessing the applicability of all the policies within this Plan that may apply to specific development proposals, including the development management policies. It also includes the need to consider the supporting text to the policies and the policies and supporting text in other adopted Plans that apply to the Plan area within which the development is proposed.

6.3 It should be noted that other, non-land use planning controls, may apply to development proposals. These include the environmental permitting regime managed by the Environment Agency.

6.4 The Plan makes provision for the capacity requirements identified through the Waste Capacity Gap analysis, seeking to deliver net self-sufficiency where practicable and reflecting local circumstances. This is achieved by:

- safeguarding existing waste management capacity (see Safeguarding Waste Management Sites and Infrastructure);
- allocating strategic sites for new facilities (see Strategic Site Allocations) to meet shortfalls in capacity; and
- providing a policy framework for other sites to be considered where there is a proven need for them in the Plan area.

6.5 Limited cross border waste movements would need to be justified on their merits. They may be acceptable if they would help to enable waste to be dealt with in one of the nearest appropriate installations and would not prejudice the achievement of net self-sufficiency for Essex and Southend-on-Sea.

6.6 The principle of net self-sufficiency does not apply to hazardous and radioactive waste. This is because the management of the relatively small amounts of such waste generated will usually take place at either specialist facilities for a particular industry or larger facilities to meet a national or regional need.

Policy 1

Need for Waste Management Facilities

In order to meet the future needs of the Plan area, waste development will be permitted to meet the shortfall in capacity of:

- a. *Up to 218,000 tones per annum by 2031/32 of biological treatment for non-hazardous organic waste;*
- b. *Up to 1.95 million tonnes per annum by 2031/32 for the management of inert waste;*
- c. *Up to 200,000 tonnes per annum by 2031/32 for the further management of non-hazardous residual waste; and*
- d. *Up to 50,250 tonnes per annum by 2031/32 for the management of hazardous waste.*

Waste Consultation Areas

6.7 Safeguarding will be implemented through Waste Consultation Areas which are defined around all permitted waste developments (as indicated in the Annual Monitoring Report) and sites allocated in this Plan. Proposed development, including that proposed in Local Plans, within 250m of a safeguarded site (or 400m of a Water Recycling Centre - WRC); will be subject to consultation with the Waste Planning Authority. Waste Consultation Areas will be communicated to the Essex districts and the unitary authority of Southend-on-Sea Borough Council. Sensitive uses should not be located adjacent to, or within, 250 metres (or 400m of a WRC) of any part of a safeguarded site. However, the actual buffer needed around each site will depend upon the nature of the proposed 'sensitive' use and on the specific impacts of the current waste operation.

6.8 There will be instances where a proposed non-waste use may not compromise the operation of an existing or future waste management facility operating within that safeguarded site. As such, Development in Waste Consultation Area sets out those development types which, when coming forward in Waste Consultation Areas, the Waste Planning Authority would not need to be consulted.

6.9 Existing and allocated waste sites and infrastructure will be protected from inappropriate neighbouring developments that may prejudice their continuing efficient operation. Waste development is not normally a high-value use in comparison with other land uses and as such the existing and allocated sites and facilities are safeguarded as they make an important contribution to the management of waste arising in Essex and Southend-on-Sea. Without a safeguarding policy, sites required to achieve a sustainable distribution of waste management facilities could be lost to other development. Sites covered by this policy that become vacant or where the existing waste use ceases operation, will continue to be subject to safeguarding. In some cases, the loss of a site or facility may be acceptable, for example where it would enable the implementation of a town centre improvement strategy and it can be demonstrated that the wider social and/or economic benefits resulting from such a scheme outweigh the retention of the waste use. In such instances, alternative provision for the displaced waste use will be required should such capacity continue to be necessary.

6.10 In some cases, the potential adverse impact on a waste site or operation of a waste facility may not be contested by the WPAs. Such instances could include scenarios where it can be ascertained that there are wider social, environmental and/or economic benefits resulting from new development that may outweigh the retention of the waste use. In such instances, alternative site provision for the displaced waste use could be required should such capacity continue to be necessary.

6.11 Whilst Waste Consultation Zones apply to all permitted waste facilities in the Plan area, the WPAs are unlikely to object to development in close proximity to a small scale, non-specialist facility, defined in this Plan as those with an annual capacity of 10,000tpa or less.

6.12 The identification of alternative provision could be made by the relevant Local Planning Authority, the applicant for the non-waste development or potentially be considered through a focused review of this Waste Local Plan. This aims to ensure that no shortfall in equivalent waste management capacity occurs in Essex and Southend-on-Sea during the Plan period. Any loss of waste capacity in the Plan area will be monitored through the Annual Monitoring Report.

6.13 The network of Local Authority Collected Waste facilities comprising the Integrated Waste Management Facility at Tovi EcoPark, Basildon and the six supporting transfer stations are integral for the sustainable management of household waste arising in the Plan area. As such, these sites (listed in Table 2 'Summary of Existing Waste Management Capacity') are to be safeguarded unless it can be demonstrated that they are no longer required for the delivery of the Joint Municipal Waste Management Strategy.

6.14 Waste management infrastructure includes facilities such as wharves and railheads, which play an important role in the movement of waste materials. All current and any future facilities that come forward for this purpose during the plan period will be safeguarded under this policy.

Policy 2

Safeguarding Waste Management Sites and Infrastructure

Waste Consultation Areas

Where non-waste development is proposed within 250m of safeguarded sites, or within 400m of a Water Recycling Centre, the relevant Local Planning Authority is required to consult the Waste Planning Authority on the proposed non-waste development (except for those developments defined as 'Excluded' in 'Appendix C - Development Excluded from Safeguarding Provisions').

Proposals which are considered to have the potential to adversely impact on the operation of a safeguarded waste site or infrastructure, including the site allocations within this Plan, are unlikely to be opposed where:

- a. a temporary permission for a waste use has expired, or the waste management use has otherwise ceased and the site or infrastructure is considered unsuitable for a subsequent waste use; or*
- b. redevelopment of the waste site or loss of the waste infrastructure would form part of a strategy or scheme that has wider environmental, social and/or economic benefits that outweigh the retention of the site or the infrastructure for the waste use, and alternative provision is made for the displaced waste use; or*
- c. a suitable replacement site or infrastructure has otherwise been identified and permitted.*

7 Strategic Waste Management Allocations

7.1 This chapter sets out the policy for locating waste management facilities required to manage waste in the Plan area to 2032. Although it is recognised that capacity gaps remain in all waste streams other than for biological treatment, it is considered that all suitable sites submitted to the Waste Planning Authorities have been allocated.

7.2 Strategic site allocations have been made to manage the following waste streams in the Plan area:

- biological waste;
- inert waste;
- Non-hazardous residual waste;
- hazardous waste.

7.3 There will be no requirement for applicants to demonstrate a quantitative or market need for a proposal on a site allocated in Policy 3; this is because they have been allocated to meet identified shortfalls in waste management capacity in order to deliver the objective of net self-sufficiency. The Authorities will keep the allocated sites under review to ensure that they are deliverable and continue to be required to meet identified shortfalls in capacity. This information will be reported annually in the Minerals and Waste Annual Monitoring Report.

7.4 To encourage more efficient use of existing waste capacity, existing permitted waste sites are considered suitable, in principle, for the intensification of existing uses and the co-location of new waste facilities. There may also be instances where land adjoining existing waste sites could be satisfactorily incorporated as part of proposals. In some cases, however, it may not be appropriate to locate new built facilities at sites that are operating under a temporary consent or at sites in the countryside. There may also be cases where the existing waste use is inappropriately located and should not be perpetuated. Therefore, any proposal for an extension beyond the boundary of an existing site will be treated as a new site.

Policy 3

Strategic Site Allocations

Waste management development at the following locations (see Strategic Site Allocations Map) will be permitted where proposals take into account the requirements identified in the relevant development principles:

1. *For biological waste management at:*

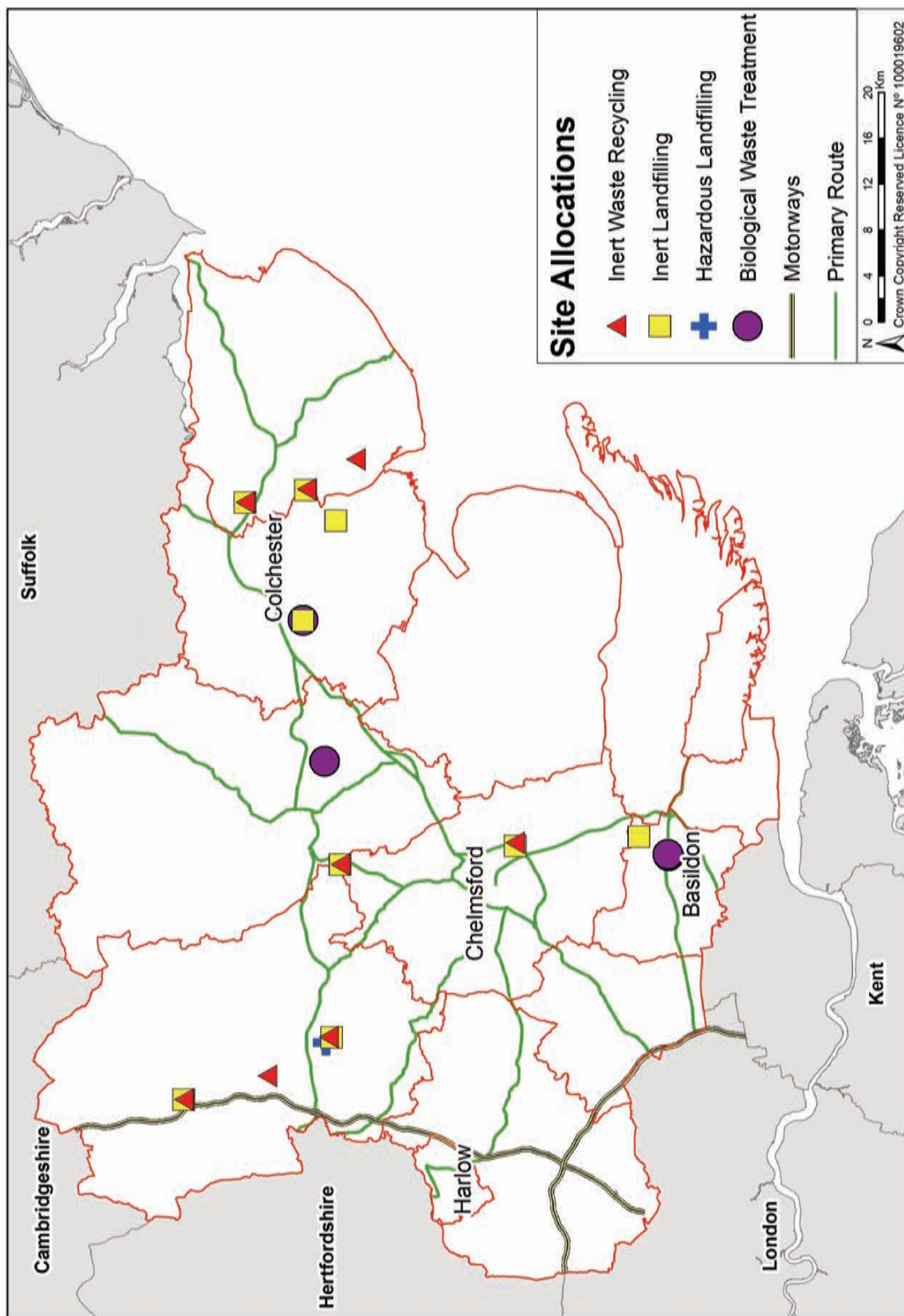
- *Basildon Water Recycling Centre, Basildon (W3);*
- *Bellhouse Landfill Site, Colchester (W29);*
- *Courtauld Road, Basildon (W20); and*
- *Rivenhall, Braintree (IWMF2).*

2. *For inert waste recycling at:*

- *Blackley Quarry, Gt Leighs, Chelmsford (L(i)10R);*
- *Crumps Farm, Gt and Lt Canfield, Uttlesford (W32);*
- *Elsenham, Uttlesford (W8);*

- *Morses Lane, Brightlingsea, Tendring (W31);*
 - *Newport Quarry, Uttlesford (L(i)17R).*
 - *Sandon East, Chelmsford (W7);*
 - *Slough Farm, Ardleigh, Tendring (L(n)1R); and*
 - *Sunnymead, Elmstead & Heath Farms, Tendring (W36).*
3. *For residual non hazardous waste management at:*
- *Rivenhall, Braintree (IWMF2).*
4. *For inert landfill at:*
- *Blackley Quarry, Gt Leighs, Chelmsford (L(i)10R);*
 - *Bellhouse Landfill Site, Colchester (L(n)5);*
 - *Little Bullocks Farm, Gt and Lt Canfield, Uttlesford (L(n)7R);*
 - *Dollymans Farm, Basildon/Rochford (L(i)16)*
 - *Fingringhoe Quarry, Colchester (L(i)15);*
 - *Newport Quarry, Uttlesford (L(i)17R);*
 - *Sandon, Chelmsford (L(i)6);*
 - *Slough Farm, Ardleigh, Tendring (L(n)1R); and*
 - *Sunnymead, Elmstead & Heath Farms, Tendring (L(i)5).*
5. *For hazardous landfill at:*
- *Little Bullocks Farm, Gt and Lt Canfield, Uttlesford (L(n)8R).*

Map 5 Strategic Site Allocations



8 Areas of Search and Locational Criteria

Introduction

8.1 Areas of Search and the locational criteria policies are included to afford the Plan greater flexibility than a reliance on allocated sites only. Areas of Search comprise existing employment areas considered to be suitable, in principle, for a waste management use. Locational criteria policies identify where waste management development may also be appropriately located within the Plan area when proposals are brought forward on non-allocated sites or outside of an Area of Search.

8.2 It is recognised that both Areas of Search and the locational criteria policies offer less certainty than site allocations in terms of where waste development may occur in future. However, it is important that this Plan is able to respond flexibly to any potential change in demand from the waste industry. This could be future changes in terms of the number of facilities required as well as changing circumstances influencing the suitability or viability of any direct site allocation – such as changes in site ownership. Areas of Search and locational criteria thereby expand the scope of potential sites that are considered suitable for waste management, whilst still retaining a plan-led approach to support the delivery of waste management facilities in the Plan area.

8.3 Areas of Search may be able to provide an alternative to site allocations, should some of these allocations become undeliverable in the future. Areas of Search also provide a policy steer for those waste management sites that serve a more local need to be located on existing employment areas over other, less sustainable locations. Proposals coming forward in an Area of Search will still be subject to a full planning application and assessed against the policies in this Plan.

8.4 Locational criteria policies allow the Waste Planning Authorities to consider planning applications for developments of any size coming forward on any non-allocated site or outside of an Area of Search, to ensure that waste management development takes place without an unacceptable impact.

8.5 In accordance with a Plan-led approach, it is intended that waste management facilities be developed on sites that have been allocated within the Plan or within an employment area designated as an Area of Search. Where it can be demonstrated that a site allocation and Area of Search is not suitable, recourse will then be made to the locational criteria policies, which set out the type of land uses considered suitable for different types of waste management facilities. Waste management development proposed anywhere other than upon site allocations or Areas of Search will be expected to justify why the proposed unallocated site is at least as suitable for such development as the site allocations or Areas of Search, with reference made to the site assessment methodology. Such proposals will also be required to justify the need for that facility to be located within the Plan area, based on the principle of net self-sufficiency.

Areas of Search

8.6 Areas of Search are designated where, in principle, the Waste Planning Authorities may support waste management development outside of the allocated sites.

8.7 The focus for the Areas of Search has been on employment land within industrial estates that have existing planning policy support for B2 (General Industry) and B8 (Storage or Distribution) uses under the Use Class Order.⁽⁶⁾ Under this Order, waste management facilities are generally considered as sui generis ('in a class of its own') and therefore do not fit under a specific use class. It is, however, considered that employment land designated for B2 and B8 uses represent the most suitable land as many waste management operations are similar in nature and impact to industrial activities and storage and distribution facilities. Many of the Areas of Search are also near to the key centres for growth and so support the overarching Spatial Strategy. The Waste Planning Authority has a preference for waste management facilities to come forward in these locations over those which may be less suitable such as Greenfield sites or sites less well connected to main transport infrastructure or close to sensitive areas.

8.8 Areas of Search have not been promoted by landowners for a particular waste management use, unlike site allocations. They are also unlike site allocations as exact site boundaries are not defined, nor are they proposed to manage a specific waste stream. As such, Areas of Search have been chosen using bespoke selection criteria.⁽⁷⁾

8.9 As highlighted above, the intention is for these Areas of Search to act as a guide for waste operators seeking to develop a site within the Plan area. By virtue of showing a preference for proposals coming forward in employment areas, the Areas of Search act to help move waste up the Waste Hierarchy as it is a land use type which precludes landfill.

8.10 Proposals within the Areas of Search will normally require express planning permission and will be considered against other relevant policies in the WLP, including Policy 10 – Development Management, and the wider Development Plan as a whole. The need to consider the wider Development Plan is important as it is the relevant Local Plan which determines whether an Area of Search designation remains relevant. Should a Local Plan seek to re-allocate land pertaining to an Area of Search away from B2/B8 uses, the criteria upon which Areas of Search are based would no longer be fulfilled. In such instances, the location would cease to be an Area of Search and Policy 4 would no longer apply. The design and operation of waste management facilities proposed within Areas of Search should be compatible with existing uses in the employment area.

8.11 Maps showing each of the Areas of Search designated are set out in [E 'Appendix E - Areas of Search: Development Principles'](#)

6 The Town and Country Planning (Use Classes) Order 1987 (as amended) puts uses of land and buildings into various categories known as 'Use Classes'.

7 Further information on the methodology used for designating Areas of Search can be found in the ['Areas of Search: Assessment and Methodology'](#).

Policy 4

Areas of Search

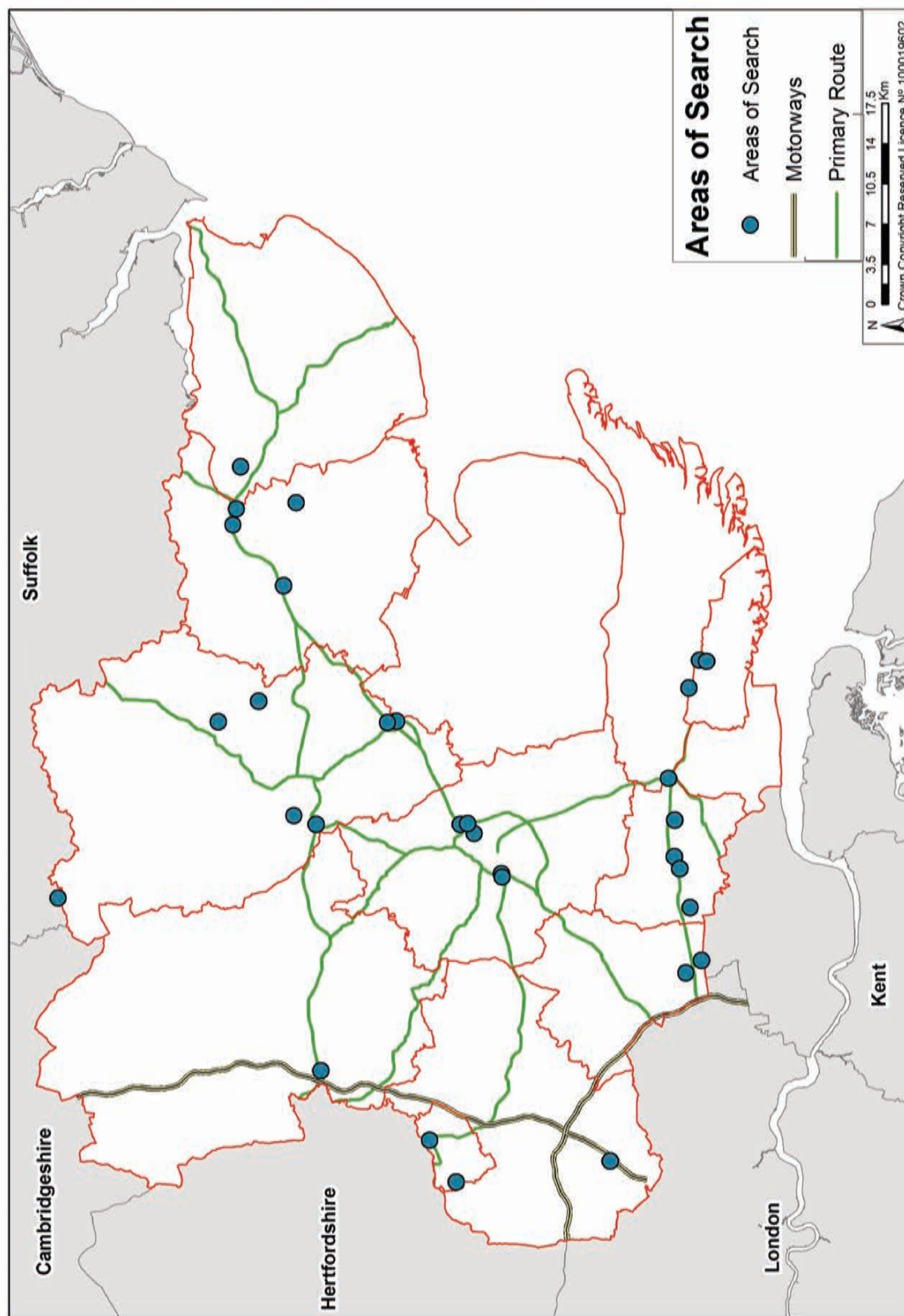
Proposals for waste management development in the following Areas of Search, as defined on the Policies Map, will be supported in principle provided that the design and use of the facility is compatible with existing uses in the employment area.

Proposals will be considered against other relevant policies of this Plan and the wider Development Plan.

Area of Search	District	Area of Search	District
Burnt Mills Central	Basildon	Westways	Chelmsford
Festival Business Park	Basildon	Widford Industrial Estate	Chelmsford
Pipps Hill	Basildon	Land off Axial Way, Myland	Colchester
Southfield Business Park	Basildon	Severalls Industry Park	Colchester
Bluebridge Industrial Estate	Braintree	Tollgate, Stanway	Colchester
Earls Colne Airfield	Braintree	Whitehall Road Industrial Estate	Colchester
Eastways-Crittall Road, Waterside Park	Braintree	Langston Road/Oakwood Hill, Loughton	Epping Forest
Freebournes Industrial Estate	Braintree	Pinnacles and Roydenbury Industrial Estate	Harlow
Skyline 120	Braintree	Temple Fields	Harlow
Springwood Industrial Estate	Braintree	Rochford Business Park	Rochford
Sturmer Industrial Estate Area 1	Braintree	Michelins Farm	Rochford
Childerditch Industrial Estate	Brentwood	Stock Road	Southend-on-Sea

Area of Search	District	Area of Search	District
West Horndon	Brentwood	Temple Farm	Southend-on-Sea
Drovers Way	Chelmsford	Martell's Farm Industrial Area	Tendring
Dukes Park Industrial Estate	Chelmsford	Springfield Business Park	Chelmsford
Start Hill, Great Hallingbury	Uttlesford		

Map 6 Areas of Search



Locational Criteria for Waste Management Facilities

8.12 Locational criteria establish guiding principles for locating new waste development outside allocated sites or designated Areas of Search outlined in this Plan. As with the Areas of Search, locational criteria seek to provide greater flexibility to the waste industry to react to change and meet demand. They support the Plan-led approach to providing sustainable waste management opportunities to meet the identified future capacity needs in the Plan area.

8.13 As stated throughout the Plan, there is a strong preference for waste development to be delivered on site allocations and Areas of Search before alternative (unallocated) locations are considered, thereby helping achieve the Plan's Vision and Spatial Strategy. In contrast to allocated sites or Areas of Search, proposals for waste management development on unallocated or non-designated sites would need to evidence:

- that the proposal would deliver the capacity to provide for Essex and Southend-on-Sea's waste management needs;
- that the site allocations and Areas of Search are not appropriate sites for the delivery and operation of the proposed facility, and/or are unavailable.

8.14 In conjunction with 9 'Development Management Policies' the Locational Criteria seek to ensure that proposals on new, non-allocated, sites are as suitable for waste development as the allocated sites identified in this Plan. A summary of the methodology used to select the allocated sites is included at D 'Appendix D - Summary of Site Identification and Assessment Methodology'

8.15 Waste management development can, depending on its type, be delivered in either enclosed or open facilities. Enclosed facilities can be broadly similar in appearance to other industrial processes which take place within warehouses. Some examples are listed in the table below. Open facilities, which although occasionally can also be partially enclosed, largely deal with waste in the open air. Examples of open waste facilities include inert waste recycling and open windrow composting developments.

Table 4 - Waste Facility Types

Broad Waste Facility Type	Example Waste Facility
Enclosed Waste Facilities (housed in buildings)	Transfer Station
	Storage
	Materials Recovery Facility (MRF)
	Metal Recycling Facility
	End of Life Vehicle (ELV) Recycling Facilities
	In-vessel Composting Facility
	Mechanical Biological Treatment Facility (MBT)

Broad Waste Facility Type	Example Waste Facility
Enclosed Thermal Facilities (housed in buildings with flues and/or digestate piping)	Combined Heat and Power Facilities (CHP)
	Gasification and Pyrolysis Facilities
	Anaerobic Digestion (AD)
	Autoclaving Facilities
Open Air Facilities	Construction, Demolition and Excavation (CD&E) Recycling Facilities (or inert recycling)
	Metal Recycling Facility
	End of Life Vehicle (ELC) Recycling Facilities
	Windrow Composting Facilities
	Water Recycling Facilities (WRCs)
	Inert Landfill Sites
	Non-Hazardous Landfill Sites
	Hazardous Landfill Sites

Enclosed Waste Facilities

8.16 Most types of enclosed waste facilities, regardless of the technology used or waste type being processed, have similar locational requirements due to their potential to impact on local amenity and the environment. Such facilities are therefore directed towards specific suitable locations where these impacts can be more easily accommodated.

8.17 This policy also covers proposals for specialised enclosed facilities such as clinical waste treatment or energy from waste facilities.

Policy 5

Enclosed Waste Facilities on unallocated sites or outside Areas of Search

Proposals for new enclosed waste management facilities will be permitted where:

- 1. the waste site allocations and the Areas of Search in this Plan are shown to be unsuitable or unavailable for the proposed development;*
- 2. although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea; and*
- 3. it is demonstrated that the site is at least as suitable for such development as Site Allocations or Areas of Search, with reference to the overall spatial strategy and site assessment methodology associated with this Plan.*

In addition, proposals should be located at or in:

- a. employment areas that are existing or allocated in a Local Plan for general industry (B2) and storage and distribution (B8); or*
- b. existing permitted waste management sites or co-located with other waste management development; or*
- c. the same site or co-located in close proximity to where the waste arises; or*
- d. the curtilages of Waste Water Treatment Works (in the case of biological waste); or,*
- e. areas of Previously Developed Land; or*
- f. redundant agricultural or forestry buildings and their curtilages (in the case of green waste and/or biological waste).*

Proposals for energy recovery facilities with combined heat and power are expected to demonstrate that the heat produced will be supplied to a district heat network or direct to commercial or industrial users.

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

Open Waste Facilities

8.18 Waste management facilities that deal with waste in the open air can give rise to specific impacts such as noise and dust which can influence where such development should take place. Open waste operations include aggregate recycling facilities and open windrow composting.

8.19 Aggregate recycling facilities are often temporary facilities and are likely to be best located on mineral extraction sites or close to the source of waste, to minimise transport distances.

8.20 Open windrow composting facilities are likely to be suitable in more rural locations due to their similarity with other agricultural developments (e.g. farms). They can produce odours because of the biodegrading process and therefore, rural, less populated locations for these facilities are preferred. Any particular requirements for minimising potential adverse effects on residential amenity and rural character will be expected to be demonstrated through a planning application.

Policy 6

Open Waste Facilities on unallocated sites or outside Areas of Search

Proposals for new open waste management facilities will be permitted where:

- 1. the waste site allocations and the Areas of Search in this Plan are shown to be unsuitable or unavailable for the proposed development;*
- 2. although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea; and*
- 3. it is demonstrated that the site is at least as suitable for such development as Site Allocations or Areas of Search, with reference to the overall spatial strategy and site assessment methodology associated with this Plan.*

In addition, proposals should be located at or in:

- a. redundant farm land (in the case of green waste and/or biological waste); or*
- b. demolition and construction sites, where the inert waste materials are to be used on the construction project on that site; or*
- c. existing permitted waste management sites or co-located with other waste management development; or*
- d. the curtilages of Waste Water Treatment Works (in the case of biological waste); or*
- e. mineral and landfill sites where waste material is used in conjunction with restoration, or proposed waste operations are temporary and linked to the completion of the mineral/landfill operation; or*

- f. *areas of Previously Developed Land; or*
- g. *employment areas that are existing or allocated in a Local Plan for general industry (B2) and storage and distribution (B8).*

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

Nuclear Radioactive Waste

8.21 Bradwell-on-Sea Nuclear Power Station is a licensed Nuclear Site and is the principal source of radioactive waste arisings within the Plan area whilst the Power Station is decommissioned.

8.22 The nuclear waste arisings from this process comprise Very Low Level (VLLW), Low Level (LLW) and Intermediate Level (ILW) Radioactive Wastes. A key element of the decommissioning is to manage the waste arising, to enable the waste to be safely retrieved from the facility, stored and processed whilst having regard to the level of radioactivity and long term options available.

8.23 The Bradwell-on-Sea site is one of the first UK nuclear reactor sites to be decommissioned. Within the period covered by this policy document, the site will enter into an extended period of care and maintenance prior to which the site will be secured as appropriate, and packaged ILW placed in storage within the dedicated on-site interim ILW Storage facility. The packaged ILW will remain in the store until a national Geological Disposal Facility (GDF) is available to receive the packages. This process is in accordance with DECC's UK's waste management strategy for LLW and ILW (dated 2010). Following the extended period of care and maintenance, the site will be decommissioned and remediation activities undertaken which when completed will allow the site to reach end state and enable the next planned use.

8.24 The Government is separately pursuing its strategy (Implementing Geological Disposal: A framework for the long-term management of higher activity radioactive waste, 2014) for a long term national Geological Disposal Facility (GDF) which is scheduled to be operational by 2040. It proposes a range of activities to be taken forward between 2014 and 2016 to set the framework for the GDF site selection process. The GDF is a "Nationally Significant Infrastructure Project" (NSIP) and the future siting is still to be determined. NSIPs are a national consideration and therefore outside of the remit of the WLP.

8.25 It is noted that although the Plan cannot rule out any type of development, it was held in the Waste Local Plan 2001 that the geology of the Plan area does not support the disposal and containment of nuclear waste and that it was therefore likely that any such facility would be located beyond the Plan area. However, evidence contained in the Radioactive Waste Management Ltd consultation on [National Geological Screening Guidance – Providing information on Geology' \(September 2015\)](#) indicates that there is not a specific type of geology to accommodate a national GDF. This is due to the number of possible design solutions to accommodate different types of geology and the respective safety issues. The location of a GDF will be addressed through a public consultation, managed by Government, to determine an appropriate strategy. Any new GDF will receive the ILW waste that is currently stored at Bradwell-on-Sea.

8.26 The NDA was established as a Non-Departmental Public Body under the Energy Act (2004) to ensure that the UK's nuclear legacy sites are decommissioned and cleaned up safely, securely, cost-effectively and in ways that protect people and the environment. The NDA is responsible for developing nuclear decommissioning plans and implementing them through an estate-wide strategy. The Strategies are to develop a clear understanding of what is required to deliver the decommissioning agenda with a strategic focus and coherent approach to decommissioning. The third Strategy "NDA Strategy III" was published in April 2016 and takes into account best practise and new procedures as a result of decommissioning activities at Bradwell-on-Sea and other licenced sites across the UK. Proposals that are consistent with the current strategy (or its subsequent revisions) will be supported in line with Policy 7. This includes the application of the Waste Hierarchy to reduce the quantity of waste to be disposed and the beneficial reuse of material and waste to achieve the site end state and enable the next planned use.

8.27 The Government's National Policy Statement (NPS) for Nuclear Power Generation⁽⁸⁾ is considering the Bradwell-on-Sea site, alongside seven other sites nationally, for future nuclear energy development. If the Bradwell-on-Sea site is selected as one of the suitable sites for nuclear energy development, then there would be further arisings of ILW in the Plan area. The fate of these materials ultimately depends upon the progress of the GDF and would need to be considered in the context of future national policy.

8.28 Given the formative status of this process any potential waste arisings cannot be planned for at this stage. Such a new nuclear power station would be considered an NSIP and therefore outside of the remit of this Plan.

Policy 7

Radioactive Waste Management at Bradwell-on-Sea

Proposals for facilities for the management of nuclear radioactive Intermediate Level Waste (ILW), Low Level Waste (LLW) or Very Low Level Waste (VLLW) will be supported within the Nuclear Licensed Areas at Bradwell-on-Sea, where:

- a. the proposals are consistent with the national strategy for managing ILW, LLW and VLLW as well as the decommissioning plans for the Bradwell-on-Sea power station;*
- b. the proposals are informed by the outcome of economic and environmental assessments that support and justify the management of radioactive waste at this location, and;*
- c. the proposals would not cause any unacceptable adverse impacts to the environment, human health or local amenity.*

8 Two volumes:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47859/2009-nps-for-nuclear-volume1.pdf
and
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47860/1943-nps-nuclear-power-annex-vol11.pdf

Non-Nuclear Radioactive Waste

8.29 In addition to radioactive waste from the nuclear industry, small volumes of Low Level Radioactive Waste (LLW) and Very Low Level Radioactive Waste (VLLW) are produced in the Plan area, principally from hospitals and universities.

8.30 The '[UK Strategy for the management of solid low level radioactive waste from the non-nuclear industry \(2012\)](#)' (UK Strategy 2012) looks to waste planning authorities to take account of non-nuclear industry radioactive waste disposal requirements.

Very Low Level Radioactive Waste (VLLW)

8.31 As stated in the UK Strategy 2012, exempt low volume VLLW ⁽⁹⁾ is currently disposed to landfills and incinerators used for handling other non-radioactive waste. No special provisions need to be addressed in environmental permits, and no extra provisions need to be made by Waste Planning Authorities to allow this practice to continue.

Low Level Radioactive Waste (LLW)

8.32 Most disposal of LLW requires permits to be held by both the waste producer that consigns the waste and the operator of the waste management facility that receives it. Some LLW may go to landfills permitted by the Environment Agency to accept LLW for disposal, some to the national Low Level Waste Repository (LLWR) near Drigg in Cumbria, some to decontamination or recycling facilities in the UK or abroad and some to incineration facilities. Only radioactive waste from the lower spectrum of LLW can be sent to permitted landfill. The LLWR site, which generally receives waste higher in the LLW spectrum, is part of the NDA's estate and as such it is covered by both the UK LLW Strategy 2016 and the NDA's own Strategy (as referred to above). Operators within the NDA estate such as Magnox have diverted more than 85% of LLW away from the LLWR through a wide range of more environmentally sustainable options such as waste prevention, re-use and recycling.

8.33 The UK Strategy 2012 also confirms that data has shown that the majority of non-nuclear industry wastes are of very small volume in comparison to the annual volumes of municipal waste, stating that they are very unlikely to exceed 0.1% by volume. Therefore, it is considered there is no need to make any special provisions to address the volumes of radioactive waste produced by the non-nuclear sector within Essex and Southend-on-Sea during the Plan period.

9 Very low level waste (VLLW) is defined as either low volume VLLW or high volume VLLW. The principal difference between the two definitions is the need for controls on the total volumes of high volume VLLW being deposited at any one particular landfill or other waste management facilities. A site producing or managing less than 50m³ of VLLW per year is classed as low volume VLLW and is exempt from reporting. Any landfill or incinerator in the UK may accept low volume VLLW mixed in with the other wastes. On that basis it is assumed that any landfill or incinerator could also be receiving low volume VLLW. The Government considers that the present arrangements for low volumes of exempt VLLW are satisfactory and does not expect waste planning authorities to make specific provision for the management of VLLW in their waste plans. Guidance on the scope of and exemptions from the radioactive substances legislation in the UK (2011) sets out more detail on exemptions.

8.34 The Environment Agency does not hold any data on the volumes of non-nuclear radioactive waste arising in Essex and Southend-on-Sea and the [UK Radioactive Waste Inventory 2013](#)⁽¹⁰⁾ excludes small quantities of nuclear materials with very low concentrations of radioactivity typically produced by research establishments, universities and the non-nuclear industry ('small users').

8.35 A Government commissioned report⁽¹¹⁾ stated that this stream is likely to reduce over the Plan period, and because there was sufficient capacity nationally to treat the non-nuclear LLW arising in Essex and Southend-on-Sea⁽¹²⁾, there is no requirement to make further provision for non-nuclear radioactive waste facilities. However, in order for the Waste Local Plan to be able to respond to any changing circumstances, there is a requirement to set out a policy stance.

8.36 The ongoing availability of capacity for receipt of LLW and VLLW will also be monitored during the period of the Plan.⁽¹³⁾

Policy 8

Non-Nuclear Very Low-Level and Low-Level Radioactive Waste

Proposals for the management of non-nuclear low-level and very low-level radioactive waste will be permitted where:

- a. a requirement to manage waste arising from within Essex and Southend-on-Sea has been identified; and*
- b. the proposed development (including landfill) has been demonstrated to be the most appropriate and acceptable development in relation to the Waste Hierarchy, and;*
- c. the proposal would not cause any unacceptable adverse impacts to the environment, human health or local amenity.*

10 Most radioactive waste produced by minor producers is not reported in the UK Inventory as it is either low volumes of LLW that can be disposed of at permitted at landfill sites, or low volume VLLW that can be disposed of with municipal, commercial and industrial wastes at landfill sites. Most LLW reported in the 2010 Inventory is consigned to the LLWR near Drigg. Production of future arisings of LLW is assumed to remain the same as current arisings, and is estimated for the UK as a whole up to 2080 (The 2010 UK Radioactive Waste Inventory Main Report Report prepared for the Department of Energy & Climate Change (DECC) and the Nuclear Decommissioning Authority (NDA) by Pöyry Energy Limited.

11 Data collection on solid low-level waste from the non-nuclear sector DECC (2008)

12 21.90m³ by volume and 2,742kg by mass at 2008.

13 This would involve the monitoring of LLW capacity via reports produced by NuLEAF and others.

Locational Criteria for Waste Disposal Facilities

8.37 Extant guidance states that Waste Planning Authorities “*may wish to plan for a ‘close fit’ of land allocations with planned waste management capacity for landfill sites, given that landfill is at the bottom of the Waste Hierarchy*”. There is therefore a requirement for a capacity need to be demonstrated as part of any landfill application for this facility type where such proposals come forward outside of the site allocations. Proposals are required to demonstrate the capturing of landfill gas from a safety point of view and to ensure that the energy locked in waste is captured.

8.38 With regard to inert landfills specifically, these facilities are typically required both as a way of disposing of inert waste and as a means to ensure the satisfactory restoration of existing mineral voids. The inert landfill allocations have been identified on the basis of both geographic distribution, to reflect that inert waste is normally uneconomic to transport long distances, and their restoration requirements.

8.39 The evidence supporting the Plan indicates that there is sufficient capacity for non-hazardous landfill capacity in the Plan area.

Policy 9

Waste Disposal Facilities

Proposals for landfill facilities will be permitted where:

1. *the landfill site allocations in this Plan are shown to be unsuitable or unavailable for the proposed development;*
2. *Although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea;*
3. *it is demonstrated that the site is at least as suitable for such development as the landfill site allocations, with reference to the site assessment methodology associated with this Plan; and*
4. *that the proposed landfill has been demonstrated to be the most appropriate and acceptable development in relation to the Waste Hierarchy.*

In addition, preference will be given to proposals:

- a. *for the restoration of a preferred or reserve site in the Minerals Local Plan; or*
- b. *for an extension of time to complete the permitted restoration within the boundary of an existing landfill site.*

Proposals for non-inert landfill are required to demonstrate the capture of landfill gas for energy generation by the most efficient means.

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

9 Development Management Policies

Introduction

9.1 Waste developments can have a detrimental impact on their surroundings if they are not properly operated and monitored, and this must be carefully considered. The impacts on the quality of life of local residents, businesses and on the environment are key considerations when deciding where to locate new waste development. A wide range of potential adverse impacts can arise and the specific nature of these impacts and the ways of addressing them will vary case by case. The planning policy framework provided by this Plan is considered flexible and robust enough to ensure that facilities can be brought forward in sustainable locations, either on those sites directly allocated or at other locations, through criteria-based policies.

9.2 A number of the potential impacts of waste facilities are addressed by the pollution control regime regulated by the Environment Agency. The regime is concerned with preventing pollution using measures to prohibit or limit the release of substances to the environment to the lowest practicable level, which is also not harmful to the environment. It also ensures that ambient air and water quality meet standards that guard against impacts to the environment and human health. The NPPW reinforces the stance that in considering planning applications for waste management facilities, waste planning authorities should concern themselves with implementing the planning strategy in the Development Plan and not with the control of processes, which are a matter for the pollution control authorities. The NPPW states that the planning and pollution control regimes are separate but complementary, and a facility will not be permitted by the Waste Planning Authority, nor be allowed to continue to operate, if it does not conform to the pollution control regime.

9.3 Waste Planning Authorities are instructed to manage the development and use of land for waste management in the public interest, focus on whether waste development is an acceptable use of land and work on the assumption that the relevant pollution control regime will be properly applied and enforced.

9.4 Waste planning and pollution control authorities therefore work closely to ensure integrated and timely decisions under the complementary regimes. This can be assisted by applicants preparing and submitting planning and pollution control applications in parallel.

9.5 New waste management facilities to meet waste capacity requirements must be located in suitable locations and seek to avoid or mitigate adverse impacts that may arise. This has been set out through national and international waste policy and these are supported by the policies, general locational criteria and site allocations/Areas of Search made within this Plan.

9.6 It is therefore considered that, only a limited range of policies are required in the WLP to manage and control the effects of new waste management facilities within the Plan area. National guidance is clear that Local Plans do not need to repeat or reformulate existing national, regional or local policy, or duplicate the existing pollution control regime.

The Application Process

9.7 The Planning and Compulsory Purchase Act 2004 and Localism Act 2011 introduced major changes to the planning system, including greater public involvement throughout the planning process.

9.8 The relevant Waste Planning Authority's Statement of Community Involvement states that pre-application discussions between the potential operator and Waste Planning Authority is good practice, and proposes that applicants with significant development proposals should carry out pre-application public consultation. This is supported within the relevant provisions of the Localism Act 2011. Pre-application discussion will also continue to be encouraged when not statutorily required. In respect of the submission of sufficient information, the applicant is directed to the adopted Local Validation List that sets out the minimum level of information that is required to accompany a planning application.

9.9 Other supporting documents that may be required at the point of application are contained within the adopted Supplementary Guidance Note for the Requirements of a Valid Planning Application.

Environmental Impact Assessment

9.10 All planning applications for waste development are screened as part of the Environmental Impact Assessment (EIA) process to determine whether or not they require an Environmental Statement. This is required by EU and UK law. The sequential screening / scoping process helps to identify whether a proposal is likely to have significant environmental effects, and if so, an Environmental Statement must accompany the planning application.

9.11 If required, the Environmental Statement would identify the likelihood of significant impacts occurring. It will show how these impacts can be avoided, mitigated and compensated for, and consider alternative ways the development could be carried out.

9.12 In cases where an Environmental Statement is not required, the applicant must still consider all the impacts arising from the proposed waste development and supply information to demonstrate that these have been addressed within their planning application.

Planning Conditions

9.13 Planning conditions are always attached to planning approvals to regulate the operation of the proposed waste development. Planning conditions can only be applied when they meet certain tests (e.g. are they reasonable and enforceable) and are used to agree specific details about the proposal (such as a landscape scheme) and to ensure the effects on local people and the environment are kept within acceptable levels (for example by limiting working hours).

9.14 Where significant adverse effects cannot be adequately controlled or prevented, or insufficient evidence has been supplied to demonstrate whether impacts can be adequately mitigated, planning permission will be refused. It is important to note that this process applies to all proposals being brought forward on preferred allocations, Areas of Search and through the locational criteria. An allocation of a site through this Plan does not equate to a planning permission, nor does it circumvent any of the statutory processes or controls that govern the granting of planning permission.

9.15 When determining planning applications, the WPA will examine each application against all the policies of the WLP, whether or not it is proposed on a preferred site for allocation, or within an Area of Search. The major issues of climate change and transportation of waste is explored in some detail, followed by other general issues, which should be addressed in any planning application.

General Considerations for Waste Management Proposals

9.16 Waste management development can result in a range of potential benefits and operational impacts that need to be considered. The planning policy framework provided by this Plan is considered flexible enough to deal with a number of issues that may arise from different development, as well as take into account the local circumstances of each proposal.

9.17 The Local Validation Lists adopted by the relevant Waste Planning Authority provides guidance about the particular information that may be required to validate a planning application before it can be determined. Advice on the information to support an application should be sought on a case-by-case basis, normally through pre-application discussions with the relevant Authority. For any proposal for waste management development that comes forward for determination, the impact of the proposal on the environment and amenity, as described below, will be carefully assessed and considered before a decision is made.

9.18 Where the impact of the proposal is unacceptable, and such impacts can't be controlled, then planning permission could be refused. Specific measures can, however, be sometimes undertaken to mitigate any potential adverse impact to either local amenity or the environment. Such measures could include, for example, additional landscaping, sustainable drainage schemes, protection of historic assets, noise attenuation, the design of lighting (including avoidance of light pollution of the night sky), dust and vibration control, nature conservation, good building and site design and restrictions on working hours and lorry movements. The appropriate mitigation will depend on the characteristics of the proposal, the site and the surrounding area.

9.19 Waste is part of the economy – it is a by-product of economic activity, by businesses, government and households. Waste is also an input to economic activity – whether through material or energy recovery. The management of that waste has economic implications – for productivity, government expenditure, and the environment⁽¹⁴⁾. The waste industry contributes to the economy of the Plan area as an employer and businesses require effective waste management to offset costs associated with disposing of the waste it produces. Waste management is therefore important to the economic growth of the Plan area and this needs to be taken into consideration when assessing planning applications for waste management development.

9.20 In conjunction with the locational criteria policies, these Development Management considerations seek to ensure that any new, non-allocated, sites that come forward reflect the methodology and criteria used to select the preferred allocated sites in this Plan. This will help ensure that any new non-allocated sites perform at least as well as the allocated sites identified, whilst also offering a degree of flexibility. A summary of the methodology used to select the allocated sites is included at **D 'Appendix D - Summary of Site Identification and Assessment Methodology'**.

14 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69500/pb13548-economic-principles-wr110613.pdf.

Pollution and Local Amenity Impacts

9.21 “Local amenity impact” is usually understood to mean the effect of the proposed development on the existing visual and aural characteristics of the immediate neighbourhood, including the impact on any residential and non-residential uses in the vicinity. Impacts on amenity can cover a range of potential pollution and disturbance from, for example, light, noise, dust, and odour as well as concerns of the possible effects on human health from the development.

9.22 Detailed controls are exercised through specific pollution prevention and control regimes primarily regulated by the Environment Agency (EA) and Local Authority Environmental Health Officers (EHOs). However, potential pollution and health impacts can be ‘material considerations’ when determining applications and an assessment of the likely environmental impacts of a proposal could be required. The Environment Agency’s ‘Guidance for development requiring planning permission and environmental permits’, states that “new development within 250m of an existing composting activity could result in people being exposed to odour and bio-aerosol emissions”. The same document states that new development within 250m of a combustion facility might, in some cases, mean people are exposed to odour, dust or noise emissions. Whilst this Guidance is aimed at the development of new sensitive receptors within proximity to waste management development, rather than new waste management development itself, it is considered appropriate to apply this buffer when locating new waste management development in proximity to existing sensitive receptors. As such, waste management facilities generating bio-aerosols or contaminants from thermal processes (e.g. pyrolysis / gasification) should not be located within 250m of sensitive receptors and proposals for waste facilities generating bio-aerosols will be expected to have regard to this separation distance. The EA and EHOs will be consulted on waste planning applications, where appropriate.

9.23 The impact on human health is also material consideration in making planning decisions. However, national policy expects that in determining applications Waste Planning Authorities should not be concerned with “the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced.” If permission is granted, planning conditions may be imposed to help mitigate any impact on local amenity.

Biodiversity and Geological Conservation

9.24 The Plan Area has a range of sites recognised for their environmental quality, a number of which have international designations. These are identified on Map 3.

9.25 Within national planning policy, individual sites designated for their importance to biological or geological diversity at an international or national level receive statutory protection, whilst those designated at a local level gain protection through District, Borough or City Local Plans. The Plan seeks to ensure that there are no unacceptable adverse impacts on these important assets. Planning permission for waste management development within or otherwise affecting an international site (Natura 2000 site) will only be granted where the conclusions of a project-level Habitats Regulations Assessment (HRA), as required for those proposals highlighted within the HRA of the Plan, demonstrate that the proposal will have no adverse impacts on the integrity of any site, either alone or in combination with other plans or projects. Screening distances are provided below as a guide for potential applicants in relation to the triggers for project-level HRA.

Table 5 HRA Screening distances

Pathway	Screening distance	Relevant European Sites
Air quality - vehicle exhaust emissions	200m from European site	All sites
Air quality - Energy from Waste	10km from European site	All sites
Air quality - landfill gas flares	1km from European site	All sites
Air quality dust	500m from European site	All sites
Air quality - Biopathogens (composting facilities only)	1km from European site	Principally Epping Forest SAC
Water quality	No standard distance - use Source/Pathway/Receptor approach	All sites except Epping Forest SAC and Wormley-Hoddesdonpark Woods SAC
Disturbance (noise/visual)	1km from European site supporting disturbance sensitive species/populations	All SPAs and Ramsar sites
Gull/corvid predation (non inert landfill only)	5km from European site supporting sensitive ground-nesting breeding species (e.g. Terns)	All SPAs
Coastal squeeze	No standard distance - evaluate on case by case basis	All coastal sites

9.26 Waste management development which impacts on Sites of Special Scientific Interest, National Nature Reserves and irreplaceable priority habitats such as ancient woodland and aged or veteran trees will only be permitted where the impact does not conflict with the wildlife or geological conservation interests of that asset. Locally designated sites form a significant and important part of the Plan Area's natural resource, often contributing to ecological connectivity and landscape linkages. Waste management development that will impact on Local Wildlife Sites Local, Geological Sites, Local Nature Reserves, other priority habitats and protected and priority species will only be permitted where it can be demonstrated that the proposal will not significantly harm the site or the benefits of the development outweigh any adverse effects and such effects can be satisfactorily mitigated or, as a last resort, compensated for, eg through offsetting. Proposals that can show a positive contribution to the restoration, creation, protection, enhancement and management of ecological networks at the landscape scale will be encouraged.

9.27 Although protecting biodiversity is most often associated with the countryside, biodiversity occurs everywhere, including more built-up urban areas. Indeed, some unique and varied habitats have successfully been established on previously developed (or 'brownfield') land.

9.28 Natural assets and resources cannot be easily replaced once lost, especially those that thrive in very specific conditions (whether on ‘greenfield’ or ‘brownfield’ land). Protection and enhancement of such assets may be required, however in all cases the impact should be fully understood before a decision is made that the development, in principle, is acceptable at the proposed location.

9.29 In the case of a demonstrated overriding need for the development, any impacts would be required to be mitigated or compensated for in order to provide a net gain for wildlife proportionate to the nature and scale of the proposal. Where loss of sites, habitats and other features can be justified, appropriate compensatory measures should normally be provided. In certain circumstances, a new asset or resource should be provided which is of at least equivalent value, where possible, to an asset or resource which is lost as a result of development. This could include the creation of a new habitat within or in close proximity to the site or elsewhere if this is more appropriate. Use of the Defra Biodiversity Metric will be encouraged as a method of calculating the extent of habitats lost and created.

Countryside, Landscape, Townscape Character Impacts and Green Belt

9.30 The character of the Plan Area is important to residents and visitors alike. The visual impact experienced as a result of the development of waste management facilities on the landscape and townscape is a key consideration when deciding planning applications. It is important to protect Essex and Southend-on-Sea’s landscape and townscape for the sake of their intrinsic character and beauty.

9.31 Most of the Plan Area is covered by Landscape Character Assessments that consider where locally designated landscapes of importance are situated. Particular features that create local distinctiveness or character should be protected from future loss; this includes features such as topography, habitats that are unique to an area, geology (e.g. unique formations or preserved quarry geology) and historic landscapes (which may contain features such as ancient hedgerows and historic field boundaries).

9.32 The Metropolitan Green Belt is a specific land use constraint. The NPPF (and its guidance) places special importance on protection of the Green Belt. Generally waste management development in the Green Belt will be considered to be inappropriate development.

Recreation

9.33 The Public Rights of Way (PROW) network provides an important means of accessing the countryside. Where relevant, applications for waste management will be required to ensure that PROW remain usable at all times or provide satisfactory alternative routes. Alternative paths and any necessary diversions of existing paths will be required to be in place prior to the closure of the existing PROW. Restoration schemes should, in the first instance, be seen as an opportunity to enhance and upgrade PROW where possible, especially with regard to the provision of Bridleways as multi-user paths as part of any permission granted. In all cases, restoration schemes should provide for access which is at least as good as that existing before workings began. The closure of a PROW, where no alternative route is provided, will not normally be acceptable.

9.34 Local recreation assets, including Public Open Space and other outdoor facilities such as country parks, are protected in District, Borough and City Local Plans. Waste management proposals will be expected to mitigate any unacceptable impact on such designations.

Heritage Assets

9.35 The historic environment contributes towards creating local distinctiveness and a sense of place by understanding our past. Heritage assets (and their setting) are an irreplaceable resource and should be conserved in a manner appropriate to their significance. Within the existing policy hierarchy, individual heritage assets designated at an international or national level receive statutory protection (under specific heritage legislation, such as Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens and Registered Battlefields) whilst others designated at a local level are subject to protection through District, Borough and City Local Plans.

9.36 It is acknowledged that some assets may not yet be identified (such as archaeological remains). These may present an important resource in terms of place-making and developing an understanding of our history, which if ignored may be lost.

Land and Soil Resources

9.37 The presence of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) should be taken into account, alongside other sustainability considerations, when waste management proposals affect such land. Weight will be given to protecting such land from development, although the amount of weight will depend of the development proposed and the agricultural classification of the land affected. In cases where development is temporary, it is normally expected that the land is restored to at least its previous agricultural land quality.

Potential Hazard to Aircraft from Bird Strike (open air facilities)

9.38 Waste management development may have an impact on the use of aviation facilities within the Plan Area if it is proposed within a 13km radius of an aerodrome. This is due to the potential for some waste facilities, especially non-hazardous landfill sites, to attract birds, as well as the potential for certain species of plants to attract birds when a landfill or landraising site is being restored. The restoration of sites at a lower level than the original landform could also attract birds if water bodies are proposed or subsequently form.

9.39 Aerodrome safeguarding guidance is set out in the [DfT/ODPM Circular 1/2003 – ‘Advice to local planning authorities on safeguarding aerodromes and military explosives storage areas’](#). In instances where a waste proposal is within 13km of an aerodrome, the relevant aviation authority will be consulted, to ensure that the proposed development does not adversely affect aircraft safety.

The Transport Network

9.40 Opportunities to transport waste by more sustainable modes, such as rail and water, are encouraged wherever possible, although opportunities in the Plan area are rare due to a lack of suitable infrastructure. It is therefore recognised that waste will continue to primarily be transported by road, as this is currently the most feasible mode of transport. The possibility of using rail and water for the transportation of materials to and from the site should be investigated, proportionate to the scale and nature of the development. The use of such means of transportation should be shown to be inappropriate in terms of both practicality and viability before transportation by road is considered.

9.41 As further highlighted in Policy 12 'Transport and Access' it is anticipated that most waste developments proposing reliance on the road network will be accompanied by a Transport Assessment. Such assessments should address the issue of road safety, including potential impact on all road users including pedestrians, cyclists, and equestrians. Any potential impact should be satisfactorily mitigated, including those on users of Public Rights of Way that may cross the site. This may require the provision of safe routes for vulnerable users. It may also be necessary to impose restrictions on the number of vehicles and the routes used, in order to mitigate against any potential impacts on local amenity.

Flooding, Water Resources and Water Quality

9.42 The risk of flooding should be minimised for people, property and the natural environment. Development can increase surface water run-off to streams and rivers, through increasing built development in the local environment. To prevent or minimise this risk, proposals should incorporate effective surface water management, such as sustainable drainage systems, where necessary to ensure flood risk is not increased.

9.43 In general terms, waste treatment (excluding landfill or the management of hazardous waste) is defined as a 'less vulnerable' land-use in the NPPF; therefore, it may be compatible in Flood Zones 2 and 3a (subject to certain conditions). A 'sequential test', as set out in the NPPF, is applied to new developments to steer these to areas with the lowest probability of flooding.

9.44 In 2010, Essex County Council and Southend-on-Sea Borough Council became the Lead Local Flood Authorities for the Plan Area. These authorities have responsibility for ensuring that major development proposals do not compromise the aquatic environment through the effective installation of sustainable drainage systems (SuDS). SuDS reduce the quantity and slow down the rate of surface water run-off from sites as well as assist in treating any pollutants as waters drain from the development. SuDS can also contribute greatly to improving the amenity and wildlife interest of new development through the introduction of water bodies and habitats. SuDS in new development should be in the most appropriate location, be well-designed and have a continued maintenance regime to ensure their continued effectiveness.

9.45 As well as flood risk, the effect of waste management development on all water bodies should be addressed. This includes surface waters, ground waters, coastal waters, and the potential use of voids for floodwater storage, which has further potential land flooding implications – especially if the proposed development takes up the space that flood waters would have otherwise drained into. A further consideration could be the protection of sources of drinking water, identified via designated Source Protection Zones.

Layout and Design Quality

9.46 The layout and design of waste development can help to reduce potential impacts, create positive impacts with regard to the public perception of such activities, improve safety and security, as well as increasing operational and/or energy efficiency.

9.47 Strategic site layout can also allow for greater opportunities to incorporate elements of visual interest, reflect local identity in the design or provide for effective buffers. Visual design elements of such developments can either seek to facilitate integration into the surrounding landscape or townscape, or create visual interest and highlight innovation.

9.48 As part of the pre-application advice service from the relevant Waste Planning Authority, the expectation with regard to any Design and Access Statement (if applicable) will be advised.

Cumulative Impacts

9.49 It is also appropriate to consider the cumulative impact of any proposed waste management development especially upon amenity, the economy, the natural and built environment and the local road network. In determining an application for a new waste management facility, account will normally be taken of the potential cumulative impact of waste management and other development within the locality and in particular the area's capacity to absorb that change.

9.50 In some instances, the combined impact of development over a sustained period of time may be sufficient to warrant refusal of planning permission.

Policy 10

Development Management Criteria

Proposals for waste management development will be permitted where it can be demonstrated that the development would not have an unacceptable impact (including cumulative impact in combination with other existing or permitted development) on:

- a. local amenity (including noise levels, odour, air quality, dust, litter, light pollution and vibration);*
- b. water resources with particular regard to:*
 - the quality of water within water bodies:*
 - Preventing the deterioration of their existing status; or*
 - Failure to achieve the objective of 'good status' and*
 - the quantity of water for resource purposes within water bodies.*
- c. the capacity of existing drainage systems;*
- d. the best and most versatile agricultural land;*
- e. farming, horticulture and forestry;*
- f. aircraft safety due to the risk of bird strike and/or building height and position;*
- g. the safety and capacity of the road and other transport networks;*
- h. the appearance, quality and character of the landscape, countryside and visual environment and any local features that contribute to its local distinctiveness;*
- i. the openness and purpose of the Metropolitan Green Belt;*

- j. Public Open Space, the definitive Public Rights of Way network and outdoor recreation facilities;*
- k. land stability;*
- l. the natural and geological environment (including internationally, nationally or locally designated sites and irreplaceable habitats);*
- m. the historic environment including heritage and archaeological assets and their settings; and*
- n. the character and quality of the area, in which the development is situated, through poor design.*

Where appropriate, enhancement of the environment would be sought, including, but not exclusively, the enhancement of the Public Rights of Way network, creation of recreation opportunities and enhancement of the natural, historic and built environment and surrounding landscape.

Mitigating and Adapting to Climate Change

9.51 There is a need to reduce the contribution to climate change from waste management activities, while also adapting to its potential effects.

9.52 The Plan area is one of the driest areas in the country and there is a need to minimise demands on potable water resources, particularly in the context of climate change. Large parts of the Plan area are at risk from flooding, particularly coastal and river localities, and particularly from surface water run-off after storm events; again an issue that will be compounded by climate change. The design and siting of new development can contribute to mitigation and adaptation to climate change.

9.53 New waste management proposals should therefore include appropriate measures to ensure mitigation and adaptation to climate change.

Policy 11

Mitigating and Adapting to Climate Change

Proposals for waste management development, through their construction and operation, are required to minimise their potential contribution to climate change by reducing greenhouse gas emissions, incorporating energy and water efficient design measures and being adaptable to future climatic conditions.

1. *Proposals for waste management development will:*
 - a. *demonstrate how the location, design (including associated buildings) and transportation related to the development will limit greenhouse gas emissions;*
 - b. *support opportunities for decentralised and renewable or low-carbon energy supply, subject to compliance with other policies in the Development Framework;*
 - c. *demonstrate the use of sustainable drainage systems, water harvesting from impermeable surfaces and layouts that accommodate waste water recycling; and*
 - d. *incorporate proposals for sustainable travel including travel plans where appropriate.*
2. *Proposals for waste management development will only be permitted where:*
 - a. *there would not be an unacceptable risk of flooding on site or elsewhere as a result of impediment to the flow of storage or surface water, as demonstrated by a Flood Risk Assessment, where required by the National Planning Policy Framework.*
 - b. *existing and proposed flood defences are protected and there is no interference with the ability of responsible bodies to carry out flood defence works and maintenance where applicable*
 - c. *there would not be an unacceptable risk to the quantity and quality of surface and ground waters, or impediment to groundwater flow.*

3. *Proposals which are capable of directly producing energy or a fuel from waste should, where reasonably practicable, demonstrate that:*
 - a. *excess heat can be supplied locally to a district heat network or directed to commercial or industrial users of heat;*
 - b. *for anaerobic digestion proposals there is an ability to inject refined gas produced as part of the process into the gas pipeline network or to be stored for use as a fuel;*
 - c. *for advanced thermal treatment there is an ability to convert syngas for use as a fuel;*
 - d. *for Mechanical Heat Treatment or Mechanical Biological Treatment, development can supply the heat produced as part of the process to a district heating scheme;*
 - e. *for non-hazardous landfill, the landfill gas is captured for the recovery of energy by the most efficient methods and consideration has been given to the ability to connect to a district heat network or for converting recovered gas for injection to the gas pipeline network;*
 - f. *where the provision of e. (above) is not feasible or technically practicable, the development shall not preclude the future implementation of such systems.*

Transportation of Waste

9.54 The transportation of waste within the Plan area should be as sustainable as practicable. The impact of transporting materials to and from waste sites is one of the most important concerns to communities and every effort should be made to reduce the quantity of waste materials that have to be transported whilst minimising the distance over which they must be transported. This means locating waste management facilities close to the source of the waste. This approach is in accordance with the 'Proximity Principle', a concept derived from EU legislation, which requires waste to be treated as close to the point of its arising as practicable.

9.55 Opportunities to transport waste by more sustainable modes, such as rail and water, are encouraged wherever possible, although such opportunities in the Plan area are rare due to a lack of suitable infrastructure. It is therefore recognised that waste will continue to primarily be transported by road, as this is currently the most feasible mode of transport. The possibility of using rail and water for the transportation of materials to and from the site should however not be discounted. The use of such means of transportation should be investigated in terms of both practicality and viability before transportation by road is considered.

9.56 Sustainable transport is not just a matter of the distance that waste vehicles have to travel and the mode of transport utilised; the suitability of access into and out of any site and the nature of the roads that the vehicles use are also important considerations. Transport associated with waste development should be in line with the transport policies contained within the [Essex Transport Strategy \(2011\)](#), particularly Policy 6 – Freight Movement. In Southend-on-Sea, an equivalent policy can be found in the [Southend-on-Sea Local Transport Plan 3 \(2015\)](#), Policy 7 – Freight Distribution.

9.57 Appendix D of the refreshed ECC Highways Development Management Policies document (expected in early 2016) sets out a Route Hierarchy Plan that defines the appropriate transport hierarchy applicable to the WLP. This route hierarchy is a reproduction of Appendix A of the [ECC Highways Development Management Policies 2011](#) document. Further, the 2016 Highways Development Management Policies document defines Priority 1 and Priority 2 routes for the safe and effective movement of goods. Proposals for development will be required to have regard to this policy. Southend-on-Sea has a Route Hierarchy set out in association with its LTP3. These hierarchies reduce the potential amenity impacts from HGVs and contribute towards managing safety on the highway network. Where highway and/or access works are sought, such works will be required to meet standards acceptable to the Highway Authorities as well as the Policy in this Plan.

9.58 Sites allocated in this Plan have been subject to assessment at a strategic level, including access to the Route Hierarchy and are considered to be acceptable in principle. The Areas of Search consist exclusively of land allocated for employment uses and the locational criteria for waste facilities lend preference to appropriate previously developed locations, such as industrial estates. It is considered that the majority of industrial estates in the Plan area, including all those allocated as Areas of Search in this Plan, have satisfactory access to the Strategic and Main Distributor route network and are therefore likely to be suitable for HGVs. However, all waste management proposals will be required to show that they are acceptable in terms of their transport and highway impact, normally through either a Transport Statement or Assessment.

9.59 Such assessments should address the achievement of safe and suitable access by all modes of transport. The impact on all road users, including pedestrians, cyclists and other users, should be acceptable or satisfactorily mitigated where appropriate. It may also be necessary to impose restrictions on the number of vehicles and as well as agree the routes

used with the Highways Authority. Where highway or access improvements are considered necessary to make the proposed development acceptable, such improvements will be required to meet the relevant standards of the Highways Authority.

9.60 Please note that the potential impacts of waste traffic on local residential amenity and safety is further addressed in [Policy 10 'Development Management Criteria'](#).

Policy 12

Transport and Access

Proposals for waste management development will be permitted where it is demonstrated that the development would not have an unacceptable impact on the efficiency and effective operation of the road network, including safety and capacity, local amenity and the environment.

Proposals for the transportation of waste by rail and/or water will be encouraged subject to other policies in this Plan. Where transportation by road is proposed, this will be permitted where the road network is suitable for use by Heavy Goods Vehicles or can be improved to accommodate such vehicles.

The following hierarchy of preference for transportation will be applied:

- a. the transport of waste by rail or water;*
- b. where it is demonstrated that (a) above is not feasible or practicable, access will be required to a suitable existing junction with the main road network (not including secondary distributor roads, estate roads and other routes that provide local access), via a suitable section of existing road, as short as possible, without causing a detrimental impact upon the safety and efficiency of the network; or*
- c. where it is demonstrated (b) above is not feasible, direct access to the main road network involving the construction of a new access and/or junction where there is no suitable existing access point and/or junction.*
- d. Where access to the main road network in accordance with (b) and (c) above is not feasible, road access via a suitable existing road prior to gaining access onto the main road network will exceptionally be permitted, having regard to the scale of the development, the proximity of sensitive receptors, the capacity of the road and an assessment of the impact on road safety.*

Landraising

9.61 The Government is seeking to encourage the ‘recovery’ of waste, including its use in construction. The Waste Framework Directive defines recovery as:

“any operation the principal result of which is waste serving a useful purpose by replacing other materials which would have otherwise been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or wider economy.”

9.62 The overriding objective is to ensure that waste recovery and disposal are carried out so as to prevent harm to human health or pollution of the environment in accordance with the Waste Framework Directive.

9.63 This definition is sometimes referred to as the ‘substitution’ principle because in waste recovery operations waste is used as a substitute for a non-waste raw material that would otherwise be used, thereby conserving natural resources. Activities that do not include the re-use and recycling of waste is normally considered as waste disposal.

9.64 Landraising, to raise the ground levels of a site, will be only supported in the Plan area if the development provides a significant benefit that would outweigh any adverse impact caused. Landraising, above the level considered necessary to achieve a beneficial use or land restoration, is not acceptable.

9.65 The Waste Planning Authorities will consider whether the proposed landraising development is needed for the purpose of ‘recovery’ (associated with a genuine use in construction), engineering or is for the ‘disposal’ of waste on land for any other reason.

9.66 Landraising activities can be district or county matters. The test of whether such a development should be determined by a district or county authority depends on whether the proposal constitutes a ‘waste disposal activity’ or is a genuine engineering operation (operational development). Landraising will be considered as an engineering project if it is to achieve a particular development (for example coastal defence works or engineering works for highways provision). Essex County Council are required to deal with proposals for waste disposal, as Waste Planning Authority, and the relevant District/Borough/City Council with engineering/recovery proposals as Local Planning Authority. Southend-on-Sea has complete responsibility as a Unitary Authority.

9.67 A judgement would normally have to be made as to whether the predominant purpose of the development (or substantial element) involves either waste disposal (for its own sake) or engineering. The quantity/volume of materials which are proposed to be imported and deposited (often identified from the proposed contour/level drawings) would provide an indication of the scale of that development.

9.68 Large scale landraising, as opposed to infilling with inert waste for mineral site restoration purposes, does not generally take place if the material used to construct the proposal is not waste. Therefore, it is considered that such development is unlikely to constitute a recovery operation.

9.69 Large scale landraising projects could divert inert waste materials from other sites, such as quarries that require such material for restoration, as well as having the potential to cause significant environmental impacts. Any application would therefore need to demonstrate the

amount of material imported and deposited would be the minimum necessary to bring about any perceived improvement or benefit and not cause an unreasonable delay in the restoration of mineral sites.

9.70 The provisions of this policy are not intended to apply to proposals seeking to achieve post-settlement contouring to existing ground levels associated with landfill operations.

Policy 13

Landraising

Proposals for landraising with waste will only be permitted where it is demonstrated that there are no feasible or practicable alternative means to achieve the proposed development.

Proposals will also demonstrate that:

- a. there is a proven significant benefit that outweighs any harm caused by the proposal;*
- b. the amount of waste materials used to raise the level of the land is the minimum amount of material necessary and is essential for the restoration of the site; and*
- c. in the case of land remediation and other projects, will provide a significant improvement to damaged or degraded land and/or provide a greater environmental or agricultural value than the previous land use.*

Proposals for landraising that are considered to constitute a waste disposal activity, for its own sake, will not be permitted.

Landfill mining and Reclamation

9.71 Historically the options for waste management were limited to what would be called ‘final disposal’ today with little or no recycling or re-use of base materials. Over time, uncontrolled landfilling has been phased out, and more stringent regulatory requirements were imposed to ensure the environment and human health impacts were effectively managed. Landfill is now recognised as the least preferred form of waste management through the waste hierarchy and legislative drivers such as the incrementally increasing Landfill Tax are acting to reduce the viability of landfilling as a means of managing waste. However, the Plan area has a legacy associated with historic landfilling operations, with almost 400 historic landfills of various types located across Essex.

9.72 As resources become scarcer, the value in previously disposed wastes is being increasingly recognised. With the notion of the circular economy gaining momentum, attention is turning towards the potential resource and energy value that could be recovered through extracting material from historic landfills, through a process known as Landfill Mining and Reclamation.

9.73 At present, landfill mining schemes are little more than trials, as it is not yet considered to be cost effective at a significant scale⁽¹⁵⁾. In 2012, Zero Waste Scotland, commissioned Ricardo-AEA, to undertake a Scoping Study ‘[Feasibility and Viability of Landfill Mining and Reclamation in Scotland](#)’. This identified more barriers than drivers for this process at present, although this may change towards the latter parts of this Plan period. In order for the Waste Local Plan to be able to respond to any technological advancement in landfill mining, there is a requirement to set out a policy stance.

9.74 Landfill mining and reclamation may be required in the Plan area for reasons not linked to purely economic concerns. Examples could include where the historic landfill site suffers from poor engineering, or if it is currently the cause of significant pollution, environmental or health impacts which justifies its re-opening.

9.75 However, the mining of waste often causes environmental disturbance and any proposal will need to demonstrate mitigation of any impact on the local environment and amenity in accordance with other policies in this Plan. Further, landfills are normally a temporary use of land, which is subsequently returned to its former, or an alternative use, such as agriculture, biodiversity or improvements to local amenity.

15 The only significant landfill mining project in Europe is projected to commence in 2017 (following the acquisition of relevant permits, expected 2015) at the Remo Milieubeheer landfill in Belgium. This would look to recover materials for recycling and to capture and generate 75 MW to 100 MW of electricity from the residual waste by way of gasification technology developed by a company based in the UK.

Policy 14

Landfill Mining and Reclamation

Proposals for the mining of landfill sites will be permitted where:

- a. the site (without intervention) is demonstrated to be endangering or has the potential to endanger human health or harm the environment;*
- b. removal is required to facilitate major infrastructure projects and it is demonstrated that there are no other locations which are suitable for the infrastructure; and/or*
- c. the waste is demonstrated as suitable for recovery and/or the waste will be captured for fuel/energy as part of the mining operation.*

Proposals will be considered in terms of their impact on the restored use, and whether there would be an unacceptable impact on any development which has taken place since the closure of the old landfill. Proposals should not cause unacceptable adverse impact on the local environment and amenity.

10 Implementation, monitoring and review

10.1 The Policies and Site Specific allocations included in the Plan will mainly be implemented through the development management function of the Authorities. However, some of the policies will be implemented through on-going dialogue with the District, Borough and City councils within the Plan area, which takes place through established work practises.

10.2 Implementation of the Waste Local Plan will be monitored and captured in the Authorities' Annual Monitoring Reports, unless otherwise indicated. If the monitoring identifies any significant divergence from a trend or target required, some intervention by the Authorities will be required. The targets and trigger points for further consideration/action are set out in the tables below. Monitoring will seek to establish the reason(s) for the divergence from the target and, as a consequence, an intervention may be required. Intervention could include a review of the evidence base, a specific policy, or the Plan as whole and will be reported in the Annual Monitoring Report.

Table 6 Monitoring Framework

Indicator	Related Policy / strategic objective	Target	Data source	Trigger level(s)
1 Amount of waste arisings, split by waste stream, in the Plan area	Strategic Objectives: 1, 2 & 5 Policy 1	The adopted national targets as specified in the National Waste Management Plan for England (2013) as based on the WFD: Waste arisings in line with forecasts from evidence base	Waste Disposal Authority Environment Agency - Waste Data Interrogator	Waste arisings not in line with waste forecasts. Failure to achieve a national target.
2 Net amount of waste imported/exported per annum	Strategic Objective(s): 4 Policy: 1	Net self-sufficiency, where practicable, by 2032	Environment Agency - Waste Data Interrogator	Waste capacity in the Plan area increases/decreases in comparison with waste arising for each relevant waste stream.
3 Net amount of waste accepted from London	Strategic Objectives: 4 Policy: 1	Zero net importation of waste from Greater London by 2026 (excluding excavation waste)	Environment Agency - Waste Data Interrogator	Importation of waste increases beyond levels included in capacity forecasts and set out within the London Plan.

Indicator	Related Policy / strategic objective	Target	Data source	Trigger level(s)
<p>4</p> <p>a. Transfer, recycling and treatment capacity (tonnes)</p> <p>b. Number of safeguarded waste sites redeveloped for other uses (contrary to advice from WPA)</p>	<p>Strategic Objectives: 1, 3, 4, 7 & 8.</p> <p>Policy: 1 and 2</p>	<p>No net loss of capacity (tonnes)</p> <p>Zero waste sites lost, contrary to advice</p>	<p>EEC and Local Planning Authorities</p>	<p>A loss of capacity occurs, with less waste being processed at facilities.</p> <p>A significant number of safeguarded sites are redeveloped for other uses, contrary to advice.</p> <p>Waste sites lost to competing land uses, resulting in inadequate provision of management capacity across the County.</p>
<p>5</p> <p>a. Number of new waste facilities delivered in accordance with site allocations;</p> <p>b. Number of facilities delivered on unallocated sites.</p>	<p>Strategic Objectives: 3 & 4</p> <p>Policy: 2, 5, 6, 7, 8 & 9</p>	<p>Permissions granted in accordance with site allocations</p>	<p>Planning Applications and Decisions</p>	<p>Site allocations not coming forward for development and a significant number of non allocated sites are developed.</p>
<p>6</p> <p>a. Number of new waste facilities delivered in accordance with Areas of Search designations</p> <p>b. Number of waste facilities delivered on</p>	<p>Strategic Objectives: 3 & 4</p> <p>Policy: 2, 5, 6, 7, 8 & 9</p>	<p>Permissions granted in accordance with Area of Search designations.</p>	<p>Planning Applications and Decisions</p>	<p>Waste development on Areas of Search not coming forward for development.</p> <p>A significant number of non designated industrial areas are developed.</p>

Indicator	Related Policy / strategic objective	Target	Data source	Trigger level(s)
<p>non-designated industrial land</p> <p>c. Area of land within Areas of Search permitted for non B2/B8 development</p>				Any loss of land designated as an Area of Search.
7 Number of planning permissions granted contrary to specialist advice from statutory bodies	Strategic Objectives: 6 Policy: 10, 11	None	Planning Applications and Decisions	A significant proportion of waste developments are permitted against statutory advice.
8 Proposals for waste water treatment capacity are permitted beyond existing Waste Water Treatment Work sites	Strategic Objectives: 3 Policy: 1, 2 & 6	None	Planning Applications and Decisions	A significant number of proposals for waste water treatment capacity are permitted beyond existing Waste Water Treatment Work sites- signalling a possible increase in demand for capacity.
9 Number of permissions for landraising, which are contrary to policy	Strategic Objectives: 8 Policy: 13	Zero		A significant number of proposals for landraising are granted, signalling a possible increased demand for inert waste disposal capacity in the Plan area.

Appendices

Appendix A - Policy Context

A Appendix A - Policy Context

A.1 The WLP is predicated on the requirements of European, national and local strategies and policies. The range of key strategies and policies that are relevant to the Plan are summarised below.

A.2 Of particular relevance are the targets for recycling, recovery and diversion of waste from landfill contained in European legislation, which are summarised below. All available targets have been used to calculate the capacity requirements for the Plan area (as summarised in 'The Waste Challenge - At a Glance').

INTERNATIONAL POLICY AND STRATEGY

The revised Waste Framework Directive

A.3 The revised Waste Framework Directive (2008/98/EC) came into force in 2010, bringing together all extant EU legislation on waste at that time. The 'waste hierarchy' is the key principle of the Directive and is embodied in the WLP. Picture 3 illustrates this principle, which prioritises waste prevention re-use and recycling (including composting) before other types of recovery and finally with disposal. The aim is for the majority of waste to be prevented and re-used, with the least amount of residual waste being sent to landfill.

A.5 The waste hierarchy is a sequential order of preference for different approaches to waste management, within which prevention of waste arisings is the first priority, through using resources and raw materials efficiently (for example, reducing the packaging on products). After waste prevention the next approach in the hierarchy is to make best use of waste (i.e. re-using a product for the same or different use, such as clothing, books and furniture), followed by recovering materials in order to reduce the volume of residual waste. Materials recovery can take the form of recycling materials such as paper, glass and plastic into new products, or more intensive treatment processes to recover materials value from the waste. The waste hierarchy then identifies a need for energy recovery (i.e. using residual waste as a fuel) to further reduce the amount of waste requiring disposal. Although there will always be a need disposal of some residual waste this should be minimised as much as practical.

A.6 The hierarchy also confirms that planning authorities should recognise the particular locational needs of some types of waste management facilities in preparing local plans, but waste planning authorities should work in collaboration with other authorities to identify, in the first case, suitable sites and areas outside the green belt for waste management.

A.7 Essex and Southend-on-Sea already follow the principles of the waste hierarchy through the Waste Local Plan (2001) and this is carried through into this Plan.

Picture 3 Waste Hierarchy



A.8 The Waste Framework Directive 2008 further requires Member States to draw up one or more waste management plans that cover its entire geographical area. The Government has made it clear that local waste plans are needed as part of the implementation of this Directive. There is a potential risk that in the event of non-compliance a Member state, such as the UK, could be fined by the EU and in theory such an infraction could be re-directed to the Local Planning Authorities responsible for the infringement.

A.9 The revised Waste Framework Directive contains the following recycling and recovery targets, which have been adopted by the UK government and provide a framework for the WLP:

- By 2020 to recycle 50% of waste from households, (this includes composting and reuse of waste); and
- By 2020 to recover at least 70% of construction and demolition waste.

EU Landfill Directive

A.10 The EU Landfill Directive 99/31/EC aims to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste, by introducing stringent technical requirements for waste and landfill facilities and through setting targets for the reduction of biodegradable municipal waste going to landfill. This is implemented in the UK through the Waste and Emissions Trading Act 2003. European Directives such as the EU Landfill Directive will continue to influence the management and disposal of waste in the Plan area and the country as a whole whilst the United Kingdom remains a Member State of the European Union.

NATIONAL POLICY AND STRATEGY

A.11 There have been significant changes in National Policy with regards to waste planning, following the Conservative Government's 'red tape challenge' to reduce the complexity of the planning system. The key national policy documents are summarised below.

National Planning Policy Framework (NPPF) and National Planning Policy for Waste (NPPW)

A.12 The NPPF was adopted in March 2012, which reinforced sustainability focus on economic, environmental and social impacts. It focuses on preventing planning regulations from unreasonably stifling the local and national economy. The NPPF combined and streamlined all planning policy except for waste, which is contained within the NPPW.

A.13 The NPPW provides the context around how local authorities are expected to manage the waste arising in the Plan area. This requires all local authorities to carry out certain activities including estimation of existing waste capacity and forecasting waste needs for the duration of the Plan period to ensure that sufficient facilities can be provided to sustainably manage the waste that arises. To undertake this task certain assumptions have to be made, where the relevant raw data is not available. The Waste Planning Authorities have planned future provision under a scenario which includes waste capacity that is either already operational, or currently under construction, as described in the ECC (2015) Non-Technical Capacity Summary.

A.14 The NPPW further sets out detailed waste planning policies, effectively transposing the European Waste Framework Directive into national policy. The NPPW emphasises the need to minimise the amount of waste arising and to treat that waste created as a resource that can be recycled or reused where possible.

A.15 The NPPW also sets out the considerations that waste authorities should apply when determining waste planning applications and during the planning policy development process. These include considering likely impacts on the local environment and amenity, taking advice from health bodies and ensuring the delivery of well-designed facilities that contribute positively to the character and quality of the Plan area. The NPPW supports the use of waste as a replacement for other materials that would otherwise have been used, i.e. recovering both material and energy value from the waste. A Zero Waste society is one where waste is managed at the top end of the waste hierarchy, with disposal being the option of last resort. In this way, waste should be seen as a resource rather than a burden. Indeed, sustainable waste management practises present significant opportunities, particularly for the economy (through reducing the use of primary resources and energy costs) and socially (through job creation and providing more pleasant environments to live). Sustainable waste management protects the environment from the unnecessary depletion of raw materials and help to mitigate against environmental impacts such as climate change and flooding.

A.16 Further, the NPPW also provides guidance on the following:

- Ensuring that waste management is considered alongside other spatial planning concerns, and particularly ensuring that the design of non-waste development complements sustainable waste management;
- Identifying land for waste management facilities to meet waste management needs; and
- Identifying suitable sites and areas, taking into consideration opportunities for on-site management of waste where it occurs and a broad range of locations including industrial sites (including opportunities for the co-location of facilities).

NATIONAL POLICY STATEMENTS

A.17 National Policy Statements provide the basis for decisions on applications for Nationally Significant Infrastructure Projects (NSIPs). The following National Policy Statements set the policy framework for the WLP:

EN-1 Overarching National Policy Statement for Energy

A.18 The statement sets out how the energy sector can help to deliver the Government's climate change objectives and contribute to a diverse and affordable energy supply for the UK. It covers Government policy on energy and energy infrastructure development, the need for new national significant energy infrastructure projects, the assessment principles for deciding applications and how impacts from new energy infrastructure should be considered in applications.

EN-3 National Policy Statement for Renewable Energy Infrastructure

A.19 The statement sets out that electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy. Energy from waste is part of the renewable energy infrastructure of the Country, energy derived from the biodegradable fraction of waste is an important part of meeting the UK's renewable energy needs

National Waste Management Plan for England

A.20 The 2013 National Waste Management Plan for England (NWMPE) is the overarching National Plan for waste management and it provides an analysis on waste management in England, bringing current and planned waste management policies together in one place. NWMPE has not reviewed the existing targets which were set out in the Waste Strategy for England (2007) or presented targets beyond 2020.

Anaerobic Digestion (AD) Strategy

A.21 The Government published an Anaerobic Digestion Strategy and Action Plan for England (2011) which commits to substantially increasing energy from waste through AD. The document states that the main way this can be achieved is by breaking down the barriers and unnecessary obstacles faced by this technology, which is already well established in Europe. These barriers include a lack of knowledge, lack of market for the end product and an absence of financial incentives. The third and final annual report on the anaerobic digestion strategy and action plan 2011 was published in February 2015. This report also indicates where work should continue over the next few years.

LOCAL POLICY & STRATEGY

Municipal Waste Management Strategies

A.22 Municipal Waste Management Strategies set out how household waste is to be managed over the period of the respective strategy. They set out targets for waste reduction and the technologies that will be used, based on the Best Practicable Environmental Option. Costs are presented alongside strategies for partnership working with both industry and local communities.

A.23 The Municipal Waste Management Strategy for Essex (2007-2032) was developed by the 13 waste authorities of Essex, comprising Essex County Council as the Waste Disposal Authority (WDA) and the 12 district and borough councils as the Waste Collection Authorities (WCA). The Municipal Waste Management Strategy of Southend-on-Sea Borough Council runs from 2004-2020. The key objectives of the two strategies are broadly similar and include encouraging waste minimisation, increasing recycling of household waste, favouring composting technologies such as anaerobic digestion (AD) for source segregated organic wastes and exploring innovative solutions for dealing with residual waste (including Mechanical Biological Treatment). The WLP provides the spatial dimension for these objectives through the safeguarding of existing facilities considered necessary to support the achievement of the Municipal Waste Management Strategies. The Essex Waste Partnership, which includes both the Waste Disposal Authorities of ECC and Southend-on-Sea BC, and the 12 Essex Waste Collection Authorities, was set up to deliver the Essex and Southend-on-Sea Municipal Waste Management Strategy by a number of joint working initiatives. Further information can be found on the [ECC Website](#).

Essex Minerals Local Plan (2014)

A.24 The adopted Minerals Local Plan (2014) has linkages to waste but the approach was taken to de-couple the historically close relationship between mineral extraction and landfill sites in accordance with national policy to increase the recycling and re-use of aggregates from construction and demolition waste and the diversion away from landfill. There remains a requirement for additional inert landfill capacity and site allocations have been included to address this shortfall, providing an appropriate capacity consistent with the waste hierarchy.

Neighbouring Waste Planning Authorities' Plans

A.25 The waste authorities bordering Essex and Southend-on-Sea's (Hertfordshire, Cambridgeshire, Suffolk, Kent, Thurrock, and several North and East London Boroughs) and the policies in their local waste planning documents will have an influence on waste planning in the Plan area. Historically, London and Kent (and to a lesser extent Hertfordshire) have exported significant volumes of waste to Essex for disposal to landfill. In common with this WLP, these authorities' plans recognise that cross-boundary movements of waste are likely to continue, but generally they are aiming towards net self-sufficiency, where practicable, and plan for a reduced import of residual waste from London.

Other Local Plans in Essex and Southend-on-Sea

A.26 The districts, boroughs and city Councils in Essex and Southend-on-Sea are at various stages of Local Plan preparation. A number of these authorities have adopted Local Plans consistent with the NPPF, whilst others are still in the process of preparing or updating future iterations of their Local Plans. The WLP sits alongside these Local Plans and form part of the Development Plan for each Authority. As a strategic plan, the WLP provides the overarching spatial strategy for waste for Essex and Southend-on-Sea, and sets out a consistent strategic planning framework to enable the provision of adequate waste facilities, as well as identifying sites for the development of residual waste management facilities as part of the provision of wider development aspirations contained in each Local Plan.

The Essex Transport Strategy (2011)

A.27 The Essex Transport Strategy (2011) seeks to achieve five broad outcomes that have been developed in parallel with those being sought from the Council's Highways Strategic Transformation (HST) programme. It has an overall vision to achieve a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex. The WLP is consistent with the requirement of the Transport Strategy.

The Southend-on-Sea's Local Transport Plan (2015)

A.28 Southend-on-Sea's Local Transport Plan's four key themes include:

- ensuring a thriving and sustainable local economy within Southend-on-Sea minimising environmental impact and promoting sustainability.
- improving safety within the borough, and
- reduce existing inequality in health and wellbeing.

A.29 The WLP will contribute to the achievement of these aims.

Dedham Vale AONB and River Stour

A.30 The Dedham Vale AONB and River Stour Joint Advisory Committee and partnership adopted the Dedham Vale AONB and River Stour Management Plan in 2010. The Management Plan seeks to coordinate the management of the AONB and Stour Valley and to bring together individuals and representatives of all those organisations that have an interest in the area, to maintain and enhance its natural beauty. The Management Plan is a material consideration and, as such, the WLP is consistent with the aims and objectives of the Management Plan.

Local Enterprise Partnership (LEP)

A.31 The South East Local Enterprise Partnership, which covers East Sussex, Essex, Kent, Medway, Southend-on-Sea and Thurrock, was approved by the Coalition Government in November 2010. The LEP is a strategic body which focuses its efforts on areas of economic importance which cross administrative borders, where there is added value in working together. The single goal for the LEP is to promote steady, sustained economic growth over the next two decades. In order to support the joint business and public sector overarching goal, the LEP Board has agreed four strategic objectives:

- Secure the growth of the Thames Gateway;
- Promote investment in our coastal communities;
- Strengthen our rural economy; and
- Strengthen the competitive advantage of strategic growth locations.

A.32 The WLP contributes to the achievement of the objectives by enabling waste to be sustainably managed. The production of waste and its management is a business cost. Providing the right facilities in the right locations will reduce some of this financial burden, making Essex businesses more competitive.

A.33 Please note that it is not considered appropriate to include policies in this Plan which guiding non-waste development in respect of waste management considerations, particularly as this is set out in national planning policy. Instead, the Authorities will continue to work with district and borough Councils to support the preparation and implementation of their Local Plans. Due to the increasing importance of integrating waste management into other developments, particularly for waste minimisation purposes, the Authorities will consider the preparation of guidance to support district and borough planning processes.

Appendix B - Allocated Sites: Development Principles

B Appendix B - Allocated Sites: Development Principles

All sites outlined below are allocated in accordance with Strategic Site Allocations.

Table 7 Basildon Water Recycling Centre

District	Basildon
Area	1.73ha
Indicative Facility Scale	25,000tpa
Link to Waste and Mineral Activities	Adjacent to existing water treatment works. Planning permission for sewage treatment works in 1994 (ESX/43/93/BAS)
Site Allocation For	Biological Waste Management Capacity
Access	Courtauld Road
Estimated Availability	Up to 5 years
Life	Permanent

This site comprising brown-field land adjoins the existing waste water treatment works. To the east is the Tovi Eco Park IWMF. The following specific issues and opportunities are to be addressed:

- Confirmation needed how internal access to Courtauld Road would work.
- Address any potential impact of the proposal on badgers in the locality.
- To demonstrate that there would not be an adverse effect on a European site through HRA.
- Due to the important nature of the archaeological deposits to the north of the A127 a programme of trial trenching will be required to assess for prehistoric or later occupation extending onto this site. Depending on the results of the evaluation work there is the potential for open area excavation in advance of development.
- Remediation of any contaminated soils should accompany any proposal.
- Flood risk to be re-assessed due to re-alignment of Nevendon Bushes Brook as part of the permission for the Tovi Eco Park IWMF.

Notes:

- Any potential odour issues will be addressed by the Environment Agency in the interests of protecting local amenity.

Map 7 W3 Basildon WRC

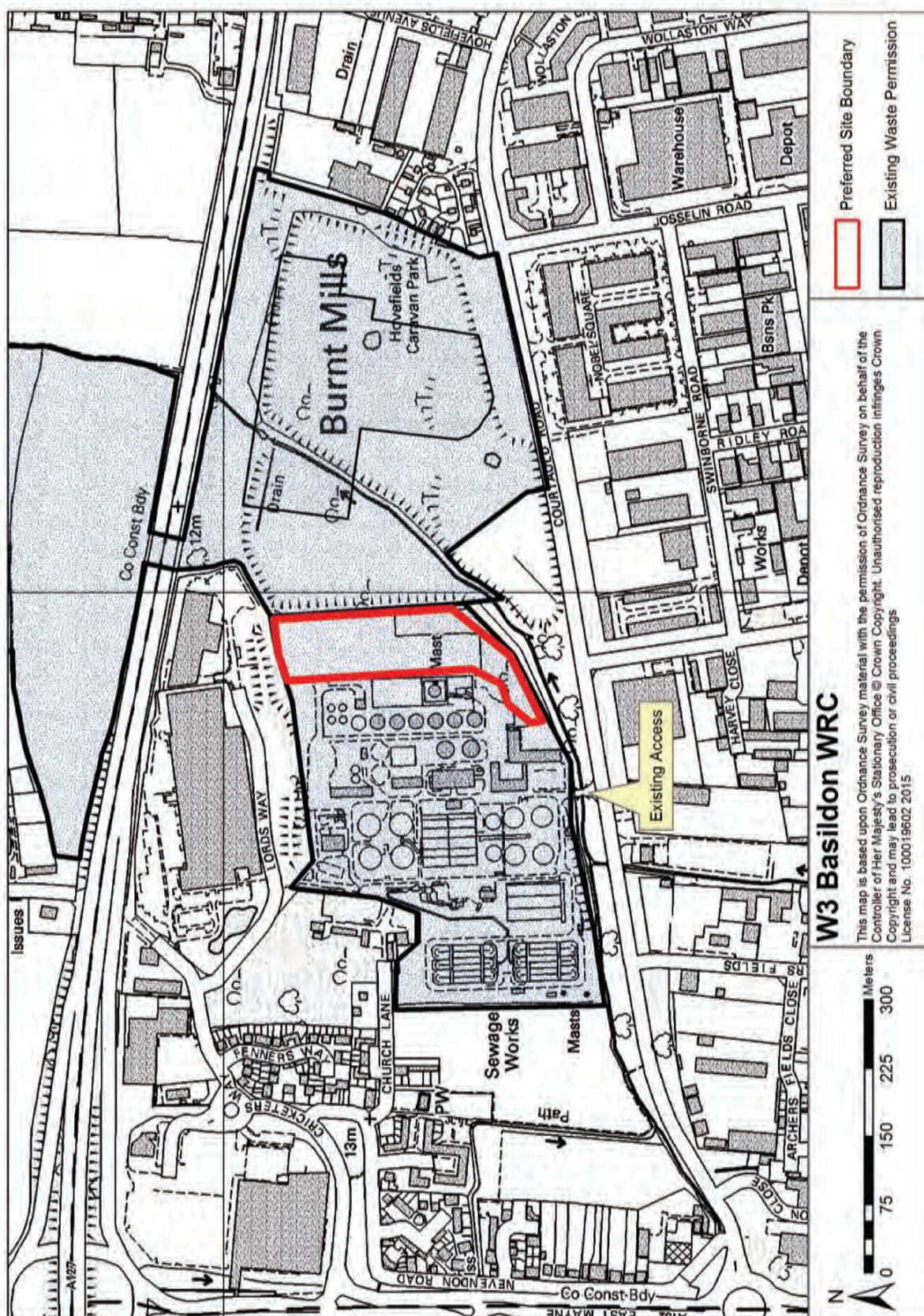


Table 8 Bellhouse Landfill Site

District	Colchester
Area	53.82ha
Indicative Facility Scale	75,000tpa - Biological Treatment Facility 250,000tpa - Inert Landfill
Link to Waste and Minerals Activities	ESS/07/01/COL/REV Landfill cessation by 31/03/2022
Site Allocation For	Biological Waste Management Capacity Inert Landfill Capacity
Access	Warren Lane
Estimated Availability	Upon adoption (2017)
Life	Throughout life of the Plan

This site encompasses an existing landfill, concrete batching plant, coated stone plant and operators offices. The following specific issues and opportunities are to be addressed:

- The exact location within the site is important from a visual perspective. The area to the north east of the site would, for instance, be inappropriate due to the relatively high elevation.
- An appropriate buffer of at least 15m would be provided around CO5 8 Gol Grove and Hanging Wood Local Wildlife Sites and the Roman River. Any new scheme will need to be consistent with the approved restoration scheme for the existing landfill site.
- That the biological treatment proposal demonstrate there would not be an adverse effect on a European site through HRA.
- The visual and noise impacts from the proposal need to be addressed on the setting and significance of the listed buildings near the site to the west at Bellhouse Farm and Upper Hill Farm and to the south at Heckfordbridge.
- Limits on duration (hours of operation) and noise standards (from noise sensitive properties including Bellhouse Farm) would be required in the interests of protecting local amenity.
- The siting of a waste management facility should not prejudice the restoration of the site as approved.

Notes:

- Any potential odour issues will be addressed by the Environment Agency in the interests of protecting local amenity.

Map 8 L(n)5 and W29 Bellhouse Landfill Site

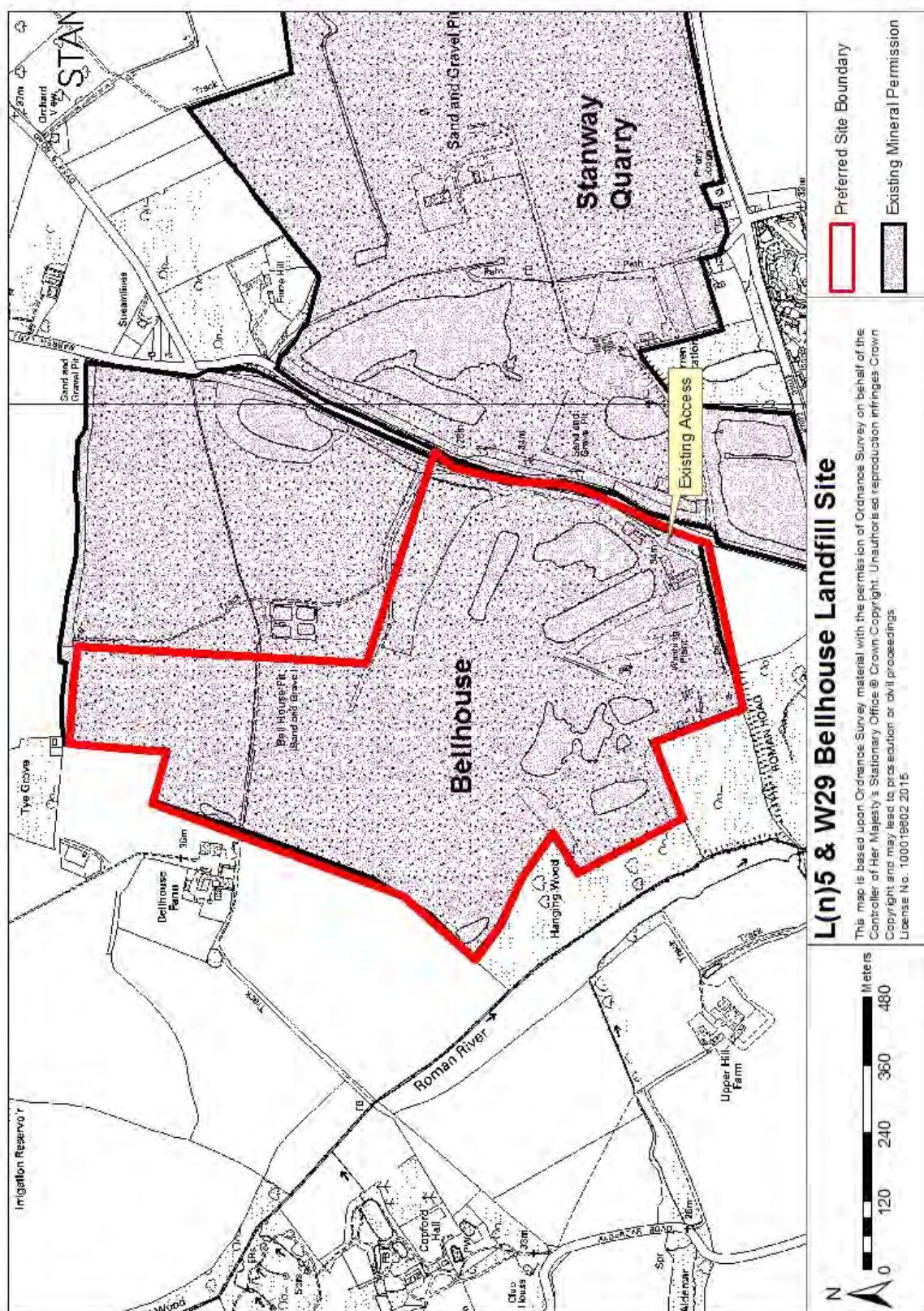


Table 9 Blackley Quarry, Gt Leighs

District	Chelmsford
Area	35.12ha
Indicative Facility Scale	75,000tpa - Inert Waste Recycling 1,400,000m3 - Inert Landfill
Link to Waste and Mineral Activities	Site is allocated for extraction within the MLP 2014. ESS/48/08/CHL granted planning permission for extraction of sand and gravel and inert landfill (2011) on the adjacent site. Planning application ESS/16/15/CHL submitted for mineral extraction, inert landfilling and inert recycling is awaiting determination.
Site Allocation For	Inert Waste Recycling Inert Landfill Capacity
Access	Direct access onto A131 via existing Blackley Quarry
Estimated Availability	Up to 5 years
Life	20-25 years

This site would be an extension to the existing mineral and inert landfill site at Blackley Quarry. The following specific issues and opportunities are to be addressed:

- This site would be an extension to the existing site at Blackley Quarry and would make use of an internal haul road route to the junction on the A131.
- Gaps in existing hedgerows along Blackley Lane should be filled in, a belt of trees planted along Moulsham Hall Lane and gaps in the boundary planting with A131 infilled.
- Inert waste recycling should be located below natural ground levels in north-east segment of site south of Blackley Lane rather than the south-west segment north of Blackley Lane.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- The aggregate recycling operation should be tied to the life of inert landfilling and hence be able to be removed at the cessation of landfilling operations.
- Those areas of archaeological deposits preserved in-situ from the extraction phase shall be included as part of any restoration scheme.
- The impacts from the proposal need to be addressed on the designated heritage assets on the edge of the application site. This should inform a proposed scheme of mitigation to alleviate the harm to the setting of the listed buildings especially along Moulsham Hall Lane.
- Careful consideration must be given to the final restoration contours to ensure the final landform blends with the surrounding topography and the restoration would be predominantly back to agricultural use.

Map 9 L(i)10R - Blackley Quarry, Gt Leighs

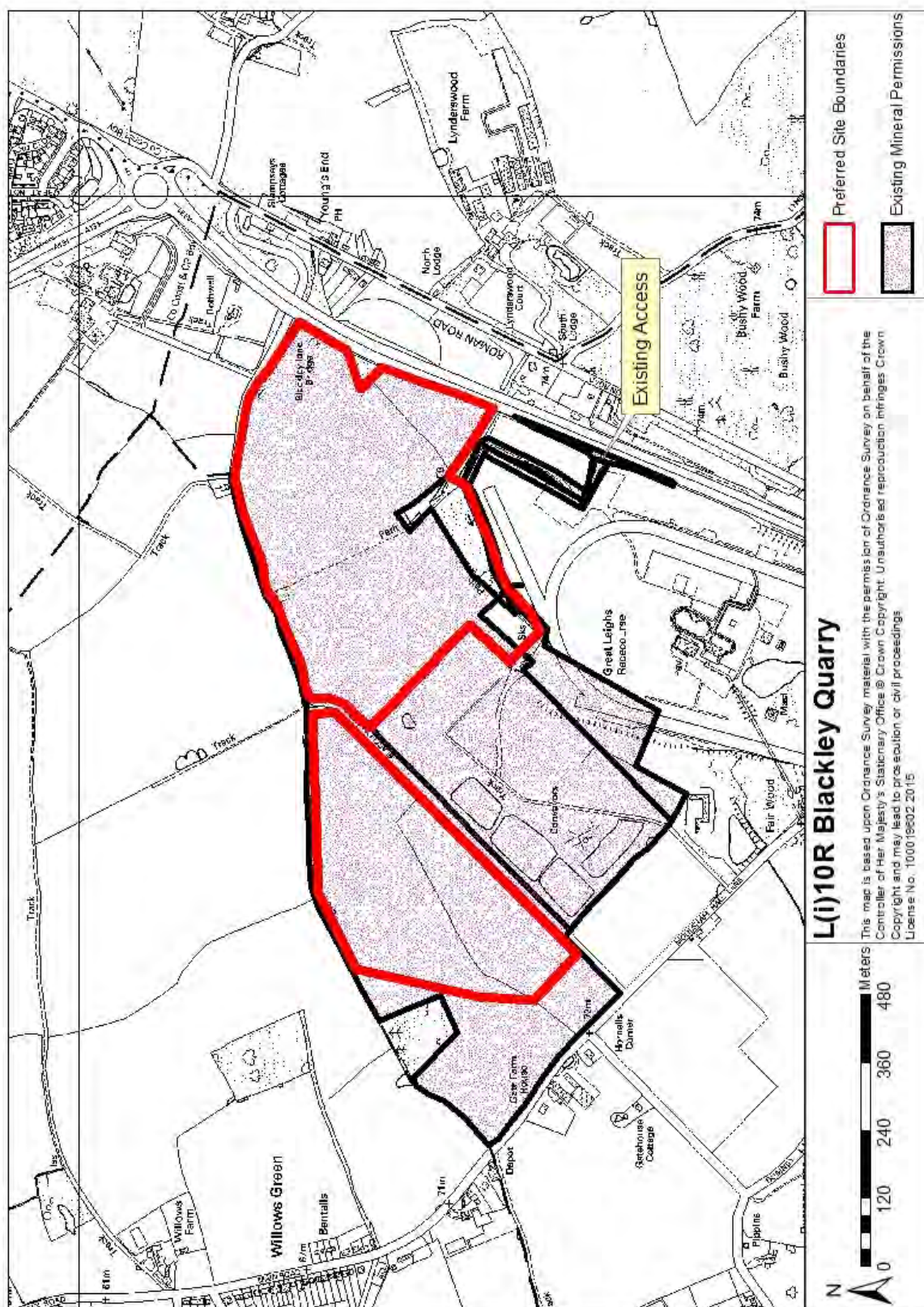


Table 10 Courtauld Road, Basildon

District	Basildon
Area	5.05ha
Indicative Facility Scale	34,000tpa
Link to Waste and Mineral Activities	ESS/22/12/BAS granted planning permission for integrated waste management facility
Site Allocation For	Biological Waste Management Capacity
Access	Courtauld Road
Estimated Availability	Up to 5 years
Life	Permanent

This site comprises rough grassland adjoining the Tovi Eco Park IWMF. To the west is the existing waste water treatment works. The following specific issues and opportunities are to be addressed:

- A small piece of land, fronting onto the A127, at the northern edge of the site may contain archaeological deposits. If approved this small area may need trial trench in this one small plot but this would be undertaken post consent. The remainder of the site has been reduced and the archaeological deposits removed.
- To demonstrate that there would not be an adverse effect on a European site through HRA.

Notes:

- Any potential odour issues will be addressed by the Environment Agency in the interests of protecting local amenity.
- Nevendon Brook has been diverted around the western boundary and is no longer at risk of flooding.

Map 10 W20 - Courtauld Road

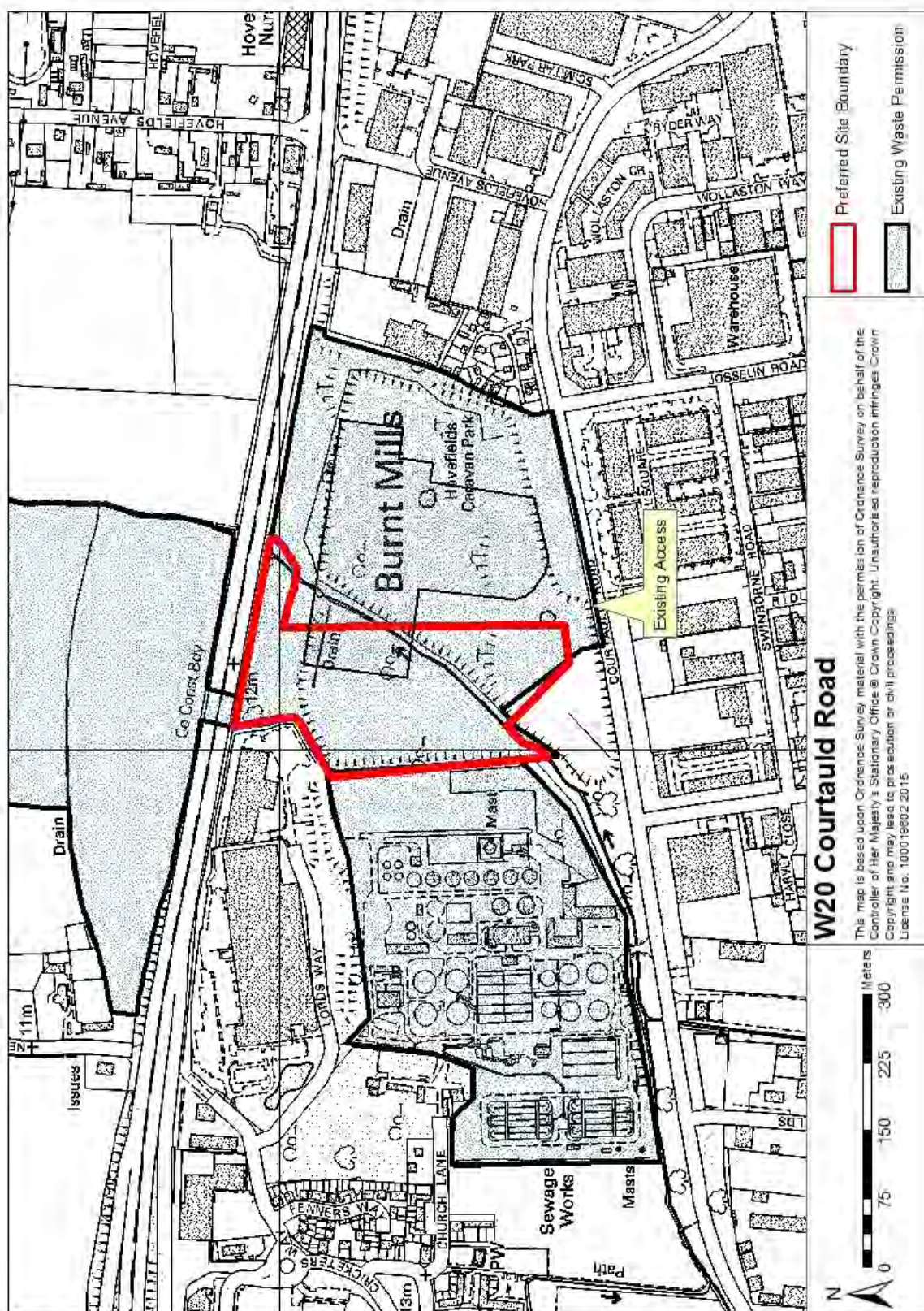


Table 11 Little Bullocks and Crumps Farm, Great and Little Canfield

District	Uttlesford
Area	6.90ha - Site 1 6.15ha - Site 2 3.52 ha - Site 3
Indicative Facility Scale	420,000m ³ - Inert Landfill (Site 1) 45,000m ³ - Hazardous Landfill (Site 2) 80,000tpa - Inert Recycling Capacity (Site 3)
Link to Waste and Mineral Activities	Site 1 is allocated for extraction within the MLP 2014 as site A22. Site 2 is allocated for extraction within the MLP 2014 as site A23.
Site Allocation For	Inert Landfill Capacity (Site 1) Hazardous Landfill Capacity (Site 2) Inert Waste Recycling Capacity (Site 3)
Access	Via haul road through existing Crumps Farm site to B1256
Estimated Availability	Site 1 - 5 to 10 years Site 2 - Upon adoption of WLP Site 3 - 5 to 10 years
Life	Site 1 - 12 years Site 2 - 15 years Site 3 - 15 years

These sites would be extensions to the existing mineral/waste site at Crumps Farm. The following issues apply to all three sites:

- A vehicle routing agreement is required to ensure the site would be accessed via the existing access for Crumps Farm onto Stortford Road (B1256) to travel via the A120/M11. An internal haul road would be required between the site and the Crumps Farm access.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.

The following specific issues and opportunities are to be addressed for Site 1:

- The eastern end of the site lies in a small secluded valley with a small river and nearby woodland. Advanced planting should screen views of the area from this direction, including views from the PRoW Lt Canfield 19.
- The river and Local Wildlife Site (LoWS) require protection for example through an appropriate buffer of at least 15m and through the assessment of potential hydrological impacts with appropriate protection. Existing vegetation to the south of the site should be protected and retained.
- Those areas of archaeological deposits preserved in-situ from the extraction phase shall be included as part of any restoration scheme.
- The impacts from the proposal need to be addressed on the designated buildings located in the vicinity - especially on the setting of the Church of All Saints.
- The site layout should ensure a sequential approach is adopted whereby areas of greater vulnerability, such as buildings and stockpiles are located in Flood Zone 1.
- Careful consideration must be given to the final restoration contours to ensure the final landform blends with the surrounding topography and the restoration would be predominantly back to agricultural use given the presence of Grade 2 agricultural soil.

The following specific issues and opportunities are to be addressed for Site 2:

- Residential property off Canfield Drive with views of the site should be protected by appropriate bunding/screening. Gaps in hedging on the boundary should be addressed to screen views.
- The site is adjacent to a Local Wildlife Site (UFD 172 – Runnels Hey), and area of Ancient Woodland. This site must be protected for example, through an appropriate buffer.
- To demonstrate that there would not be an adverse effect on a European site through HRA. Any development would need to ensure that there would not be an adverse impact on water quality.
- A hydrological assessment should be undertaken.
- Those areas of archaeological deposits preserved in-situ from the extraction phase shall be included as part of any restoration scheme.
- The impacts from the proposal need to be addressed on the designated buildings located in the vicinity - especially on the setting of Church of All Saints.
- PRoW footpaths Great Canfield 2 and Little Canfield 8 cross the site and would require temporary diversion during operations.
- Careful consideration must be given to the final restoration contours to ensure the final landform blends with the surrounding topography and the restoration would be predominantly back to agricultural use given the presence of Grade 2 agricultural.

The following specific issues and opportunities are to be addressed for Site 3:

- An archaeological evaluation should be undertaken to assess the area for surviving archaeological deposits. This should comprise a programme of trial trenching covering the total area of development. If deposits are identified then an appropriate mitigation strategy for preservation in situ or preservation by excavation should be submitted.
- Any proposal shall include planting to screen development on south and east boundaries of the site.

Map 11 L(n)7R and L(n)8R - Little Bullocks Farm and W32 - Crumps Farm, Gt and Lt Canfield

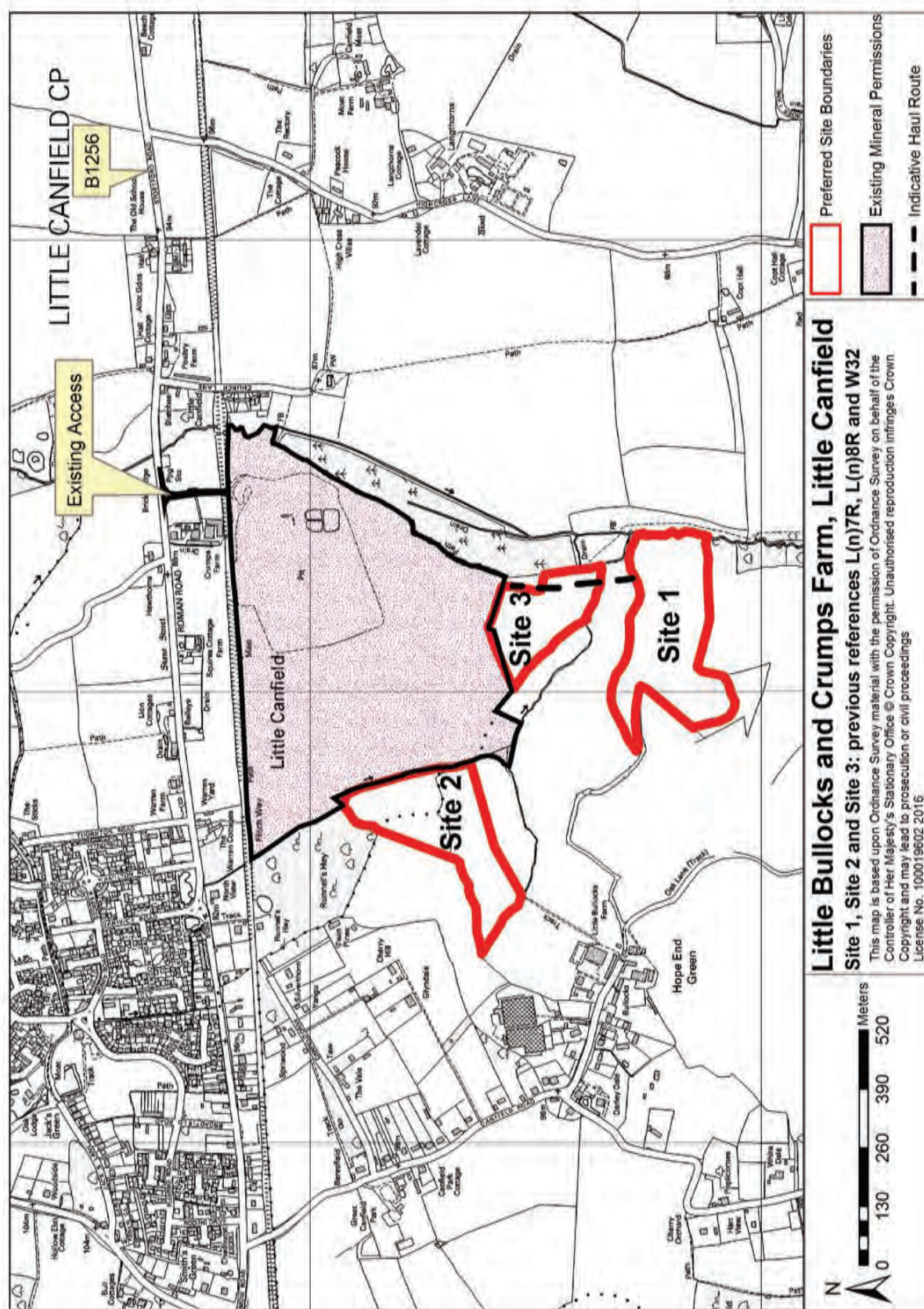


Table 12 Dollymans Farm

District	Basildon/Rochford
Area	16.09ha
Indicative Facility Scale	500,000 tonnes
Link to Waste and Minerals Activities	The site constitutes a former mineral borrow pit
Site Allocation For	Inert Landfill Capacity
Access	Via private road adjoining A129
Estimated Availability	2017
Life	Up to 5 years

This site would culminate in the restoration of a former mineral void. The following specific issues and opportunities are to be addressed:

- All access should be via the A129. A Transport Assessment would be required at the planning application stage to review access arrangements and examine safety and capacity of the local road network. This may result in the diversion of bridleway to segregate users from vehicles or other mitigation works.
- The proposal should demonstrate that there would not be an adverse effect on a European site through HRA. Such an assessment should include consideration of functionally linked land, and must demonstrate no adverse effects on the integrity of any international site. Evidence will change over time regarding the preferences of species such as the Dark-bellied Brent Geese, so appropriate foraging distances should be reviewed as part of any HRA.
- Chichester Hall Brook requires protection, for example through an appropriate buffer of at least 15m and through the assessment of potential hydrological impacts with appropriate protection.
- Restoration of the site through this allocation provides the significant opportunity for biodiversity, landscape, visual enhancement and historic asset preservation. Careful consideration of the environmental impacts of the waste development will be necessary as part of a planning application with proportionate levels of mitigation to be established. Specifically, the WPA would seek the overall landscape improvement of the site, with the final restoration and long-term aftercare to be beneficial to the Green Belt and biodiversity with particular reference to habitat creation in line with the Northern Thames Basin National Character Area.
- Retain trees and shrubs to screen plant and materials from the road. Consider new planting and bunding to screen views into the site prior to commencement of landfilling operations
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- An Archaeological Desk Based Assessment should be carried out to identify the extent of preservation within the northern part of the site and preservation requirements around war memorials.

- Areas of archaeological deposits preserved in situ will require excavation if working is likely to cause ground disturbance in the north western part of the site
- A management proposal for the survival and maintenance of the memorial for the burial sites should be submitted with any application.

Essex County Council & Southend-On-Sea Borough Council

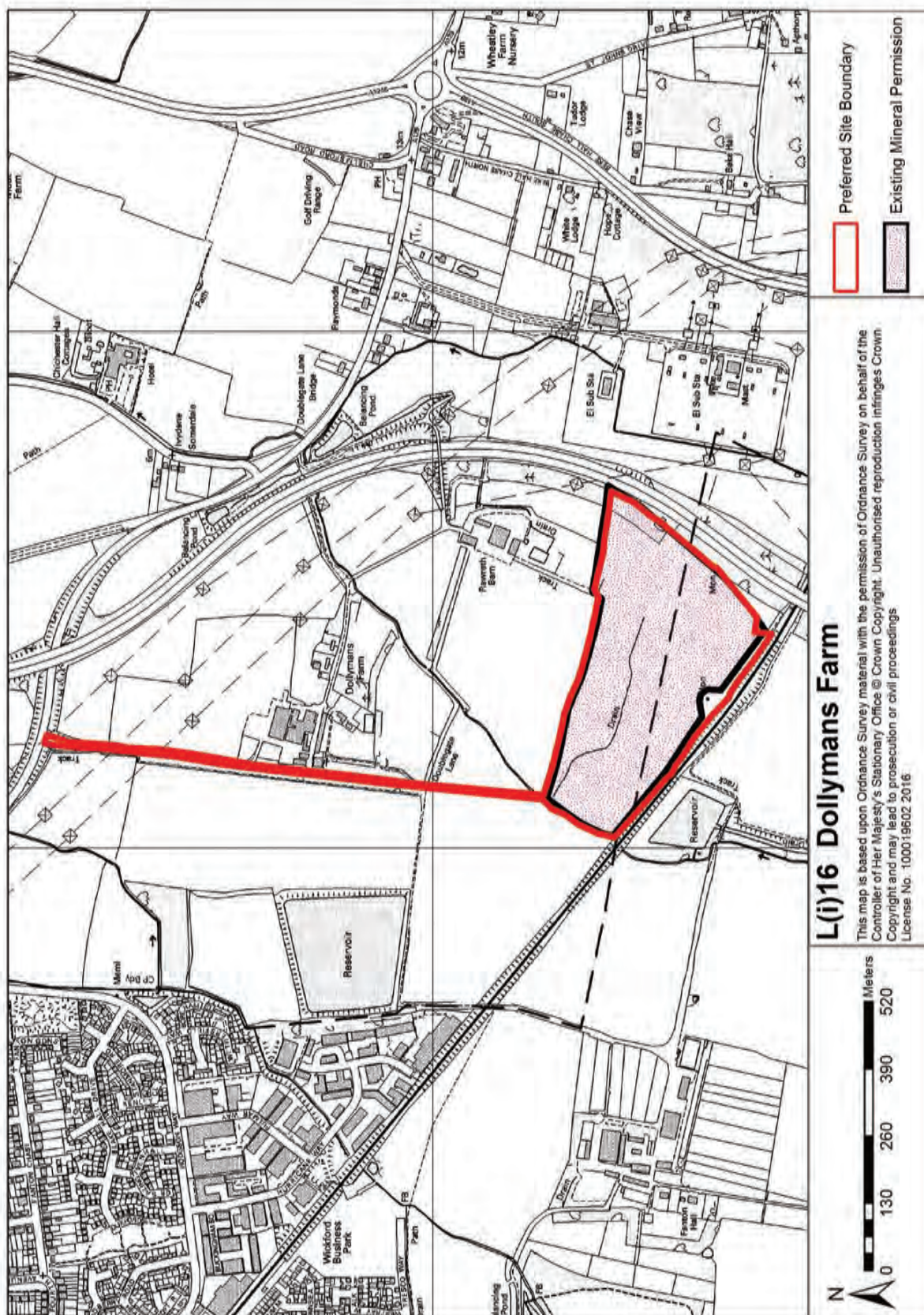


Table 13 Elsenham

District	Uttlesford
Area	15.65ha
Indicative Facility Scale	40,000tpa
Link to Waste and Mineral Activities	Adjoins Quarry Access
Site Allocation For	Inert Waste Recycling Capacity
Access	Haul Road, Elsenham Quarry
Estimated Availability	Adoption of WLP (2017)
Life	Permanent

This undeveloped site lies either side of the existing haul road to Elsenham Quarry. The following specific issues and opportunities are to be addressed:

- A vehicle routing agreement is required to ensure use of the appropriate road network.
- Retain existing woodland and screen development with new planting.
- The proposed development site falls within the setting of the Grade I listed Church of St. Mary the Virgin, the Grade II listed Elsenham Hall, and a group of non-designated heritage assets directly to the east of the church. The land to the west of the haul road should be retained for mitigation purposes only (including a robust scheme of landscaping) with the waste management facility being located entirely within land to the east of the haul road.
- The impacts from the proposal on designated assets as well as assessing the significance of previously unidentified undesignated assets should address: (1) the setting and significance of the listed buildings in the vicinity of the site; (2) the relationship and impact on the historic parkland including surviving elements such as boundary ditches, earthworks original trees etc. A trial trenching exercise should be undertaken to assess the area for surviving archaeological deposits. If deposits are identified then an appropriate mitigation strategy should be submitted.
- The adjoining habitat to the west would require mitigation proportional to the quality of the adjacent habitat and the nature and scale of the impacts. Should the adjoining land to the west be assessed at the DM stage as being of Local Wildlife Sites (LoWS) quality, there would need to be substantial mitigation including an enclosed facility being preferable to an open air facility. If it is not of LoWS quality there should still be appropriate levels of mitigation, including a significant buffer on the western boundary.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.

Map 13 W8 - Elsenham

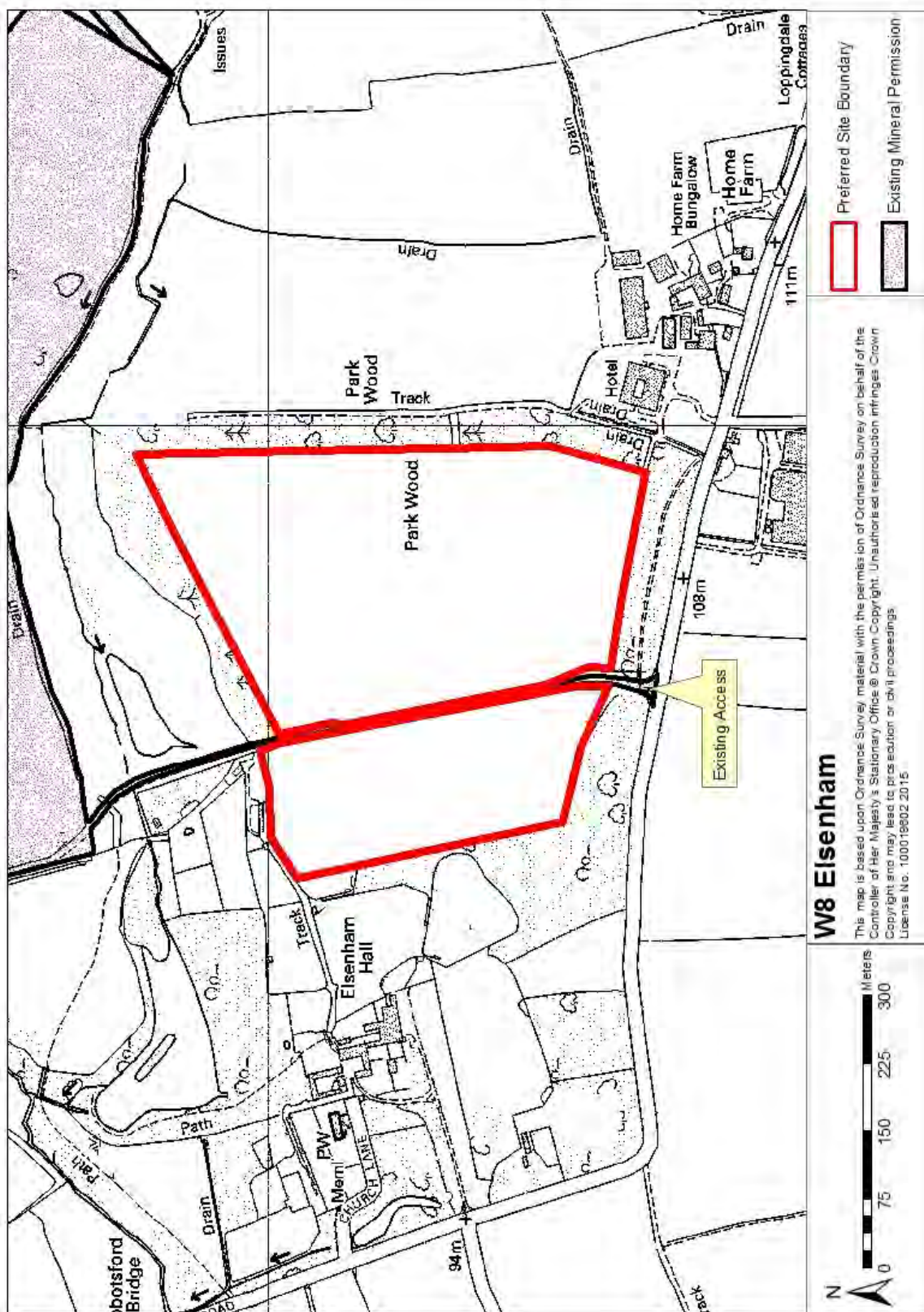


Table 14 Fingringhoe Quarry

District	Colchester
Area	13.17ha
Indicative Facility Scale	600,000m ³
Link to Waste and Minerals Activities	ESS/22/00/COL mineral extraction
Site Allocation For	Inert Landfill Capacity
Access	Via adjoining Ballast Quay Wharf
Estimated Availability	Immediately
Life	10 years

This site is within a former operational quarry undergoing restoration. The following specific issues and opportunities are to be addressed:

- A reasonable proportion of waste material shall be sourced from within the Plan area.
- Waste to be used to create gentle slopes on the restored landfill site. Views from rights of way to be kept open.
- Retain trees and shrubs to screen plant and materials at Ballast Quay. Consider new planting to screen views into site.
- Any restoration plan needs to take into account the views to and from the listed Dovecote and conservation area of Fingringhoe.
- To demonstrate that there would not be an adverse effect on a European site through HRA. Most likely potential impacts to consider would be caused by disturbance and water pollution.
- There is a block of woodland in close proximity to the northwest corner of the site. Appropriate mitigation will need to be provided such as an adequate buffer.
- Restoration provides the opportunity for significant biodiversity enhancement and habitat creation on site, using upon the sandy substrate. Appropriate sized vertical, south facing sandy faces should be retained or created for wildlife, e.g. invertebrates and sand martins.

Table 15 Morses Lane, Brightlingsea

District	Tendring
Area	1.82ha
Indicative Facility Scale	75,000tpa
Link to Waste and Mineral Activities	N/A
Site Allocation For	Inert Waste Recycling Capacity
Access	Morses Lane
Estimated Availability	Immediately
Life	Permanent

This undeveloped site on the edge of an urban area adjoins an existing waste operation. The following specific issues and opportunities are to be addressed:

- To demonstrate that it could not have an adverse effect on European sites through HRA. Most likely potential impacts would be by exhaust emissions (from the road into Brightlingsea) and disturbance to birds.
- Site should be screened by planting on the north, south and west sides of the site to mitigate visual and landscape effects.
- A trial trenching evaluation should be undertaken to assess the area for surviving archaeological deposits. If deposits are identified then an appropriate mitigation strategy should be submitted.
- It is expected that operations would be enclosed within an appropriate building. Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- The configuration and operation of the proposed facility shall have regard to impacts on neighbouring land uses, including the potential impacts on the adjacent retail use.

Map 15 W31 - Morses Lane, Brightlingsea

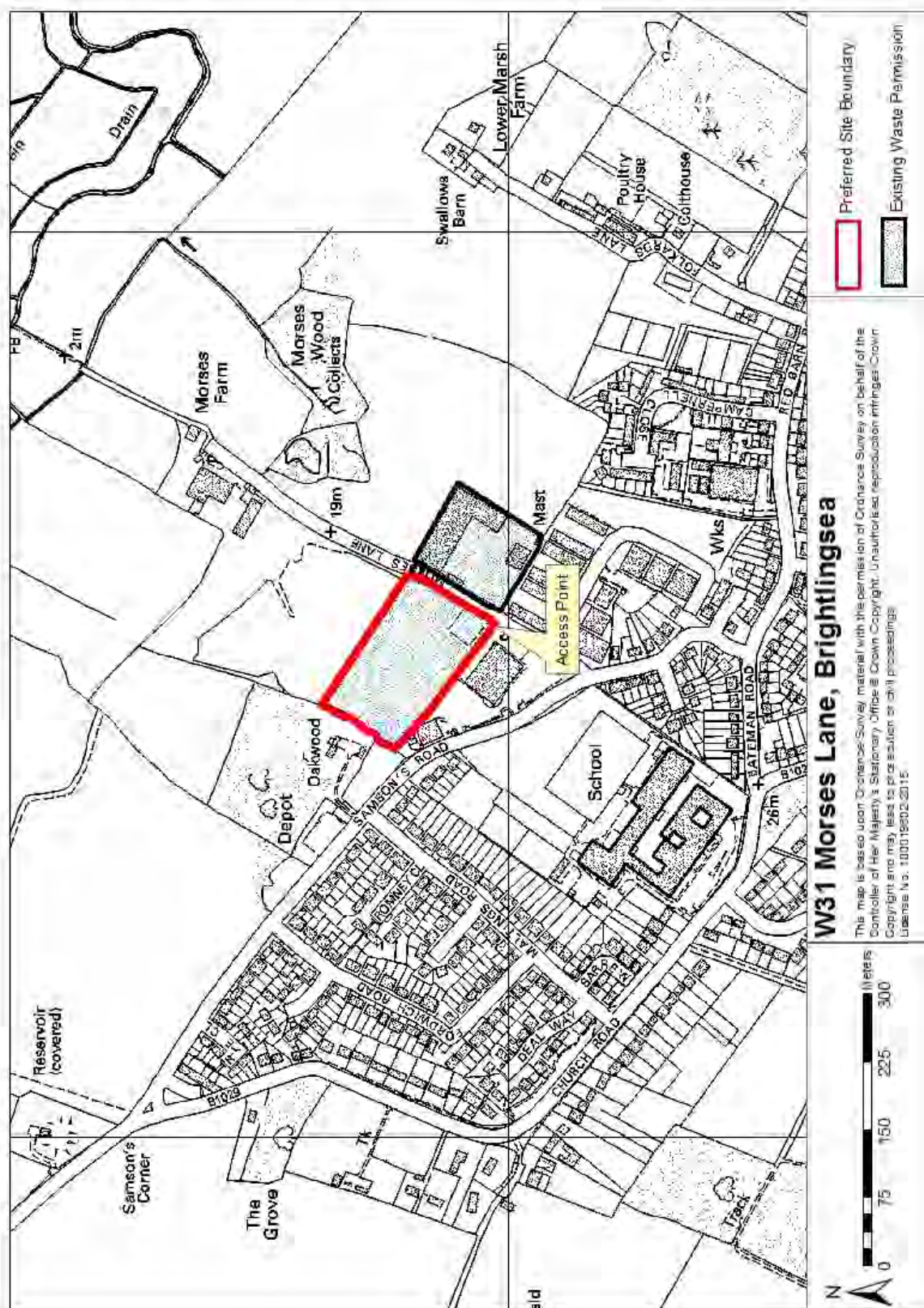


Table 16 Newport Quarry

District	Uttlesford
Area	8.4ha
Indicative Facility Scale	15,000tpa - Inert Waste Recycling Capacity 300,000m ³ - Inert Landfill Capacity
Link to Waste and Minerals Activities	ESS/17/12/UTT granted planning permission for chalk extraction
Site Allocation For	Inert Landfill Capacity Inert Waste Recycling Capacity
Access	Via Unnamed Road to B1383 London Road
Estimated Availability	Up to 5 years
Life	Until 2042

This site is within an existing quarry. The following specific issues and opportunities are to be addressed:

- The site should continue to be restored to lowland calcareous grassland, with areas also retained to demonstrate its geological importance.
- Careful consideration of the environmental and visual impacts of the waste development will be necessary as part of a planning application, particularly if a proposal relates to already restored areas. Specifically, ecological enhancement of the site would be sought, with the final restoration and long-term aftercare expected to result in the creation of lowland calcareous grassland priority habitat. It will be necessary to consider phased working to avoid the loss of existing species.
- Retain existing trees and hedges to screen views of site. Consider new planting to screen views into site.
- No development should occur outside the quarried areas as this will have the potential to impact important archaeological deposits.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- A vehicle routing agreement is required to ensure the site would be accessed via the existing access to Newport Quarry and via the Main Road Network (B1383). The number of heavy vehicle movements to and from the east shall be limited to those serving Widdington only.
- Consideration would need to be given at the planning application stage to the safe operation of the road bridge over the railway line west of the site access and the requirement for any additional traffic management.

Map 16 L(i)17R - Newport Quarry

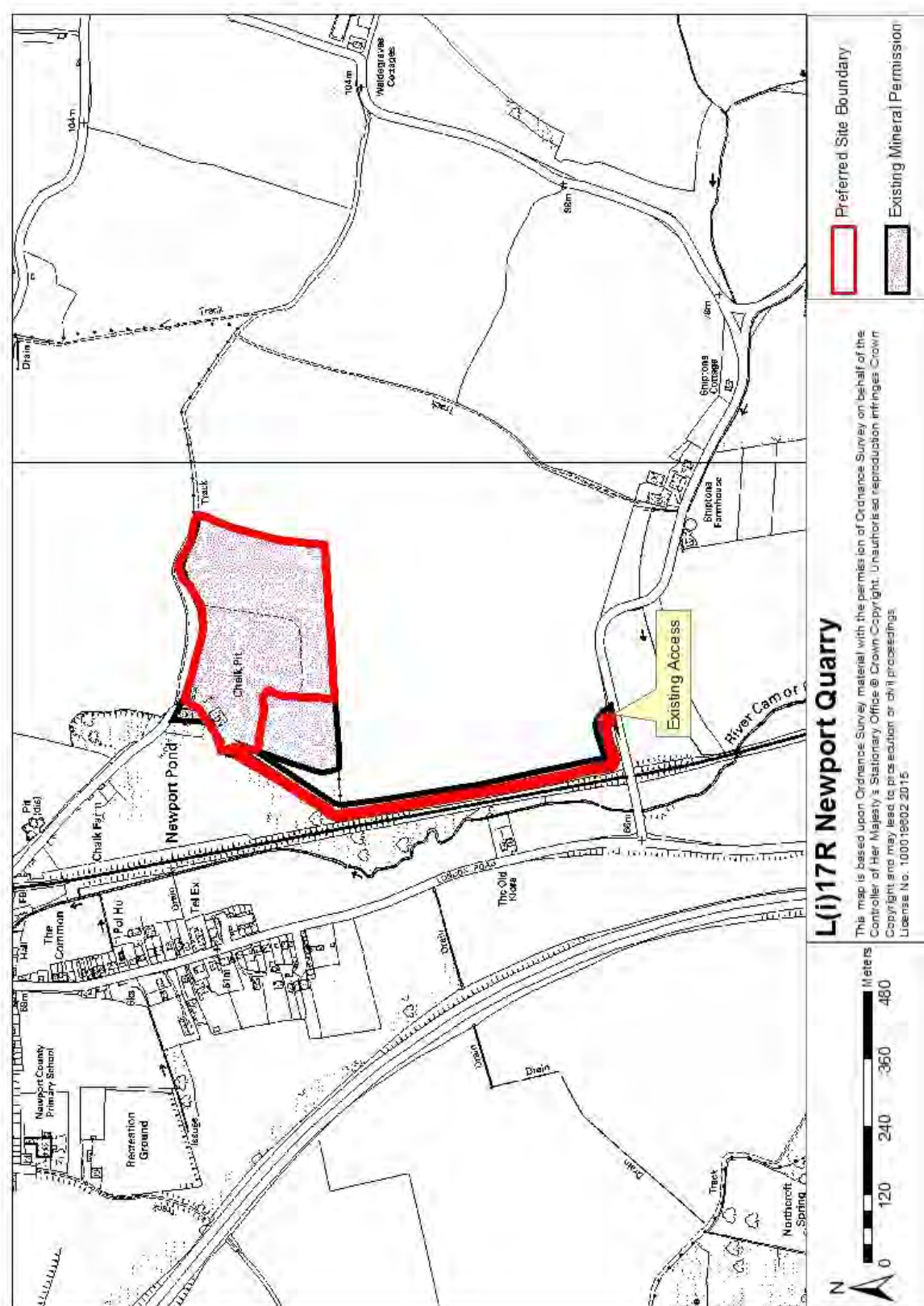


Table 17 Rivenhall

District	Braintree
Area	25.51ha
Indicative Facility Scale	AD 30,000tpa CHP 595,000tpa
Link to Waste and Mineral Activities	ESS/55/14/BTE granted planning permission for integrated waste management facility, including mineral extraction
Site Allocation For	Biological and Residual Non-Hazardous Waste Management Capacity
Access	Via Coggeshall Road (A120)
Estimated Availability	Can be implemented immediately
Life	Permanent

This site is located on the former Rivenhall Airfield, which is now an active quarry accessed off the A120 highway. Part of the site is within the active quarry. The following specific issues and opportunities are to be addressed:

- Any development of the site would need to ensure mineral traffic associated with the quarry (MLP sites A3, A4, A5, A6 and A7) is still able to utilise the existing access road to the A120.
- Widening of private haul road to two way working and improvement of minor road crossings (as identified in S106 attached to extant planning consent for IWMF)
- Waste traffic would use the existing access, which would be required to made to a standard suitable for road traffic from the existing mineral processing area to the waste site. HGV movements would be restricted in line with current permitted movements to avoid adverse impacts to the A120. Provision of screening on south-west, south-east and northern boundaries would be important. Views from the Essex Way should be screened. The access road to the facility should be at low level with planting on both sides of the access road.
- Future built development to be at low level, with the bulk of any structure to be below ground level. Tree Preservation Order (TPO) to be protected as much as possible and management of surrounding TPO woodland suggested to maximise screening and biodiversity value.
- The impacts from the proposal need to be addressed on the designated buildings located in the vicinity - especially on the setting of the Woodhouse Farm Listed Building
- Right of Ways – Kelvedon footpath 8 runs close to the site and its route should be protected.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- If the proposed site layout cannot accommodate the statutory easements (relevant to existing infrastructure on the site) the diversion of the existing assets may need to be considered. Any activity that requires excavation should only proceed with caution, and

the existing underground infrastructure must be supported and protected and not be put at risk from disturbance.

Notes:

- Any potential odour issues from a proposal involving organic waste would be addressed by the Environment Agency in the interests of protecting local amenity.

Map 17 IWMF 2 - Rivenhall

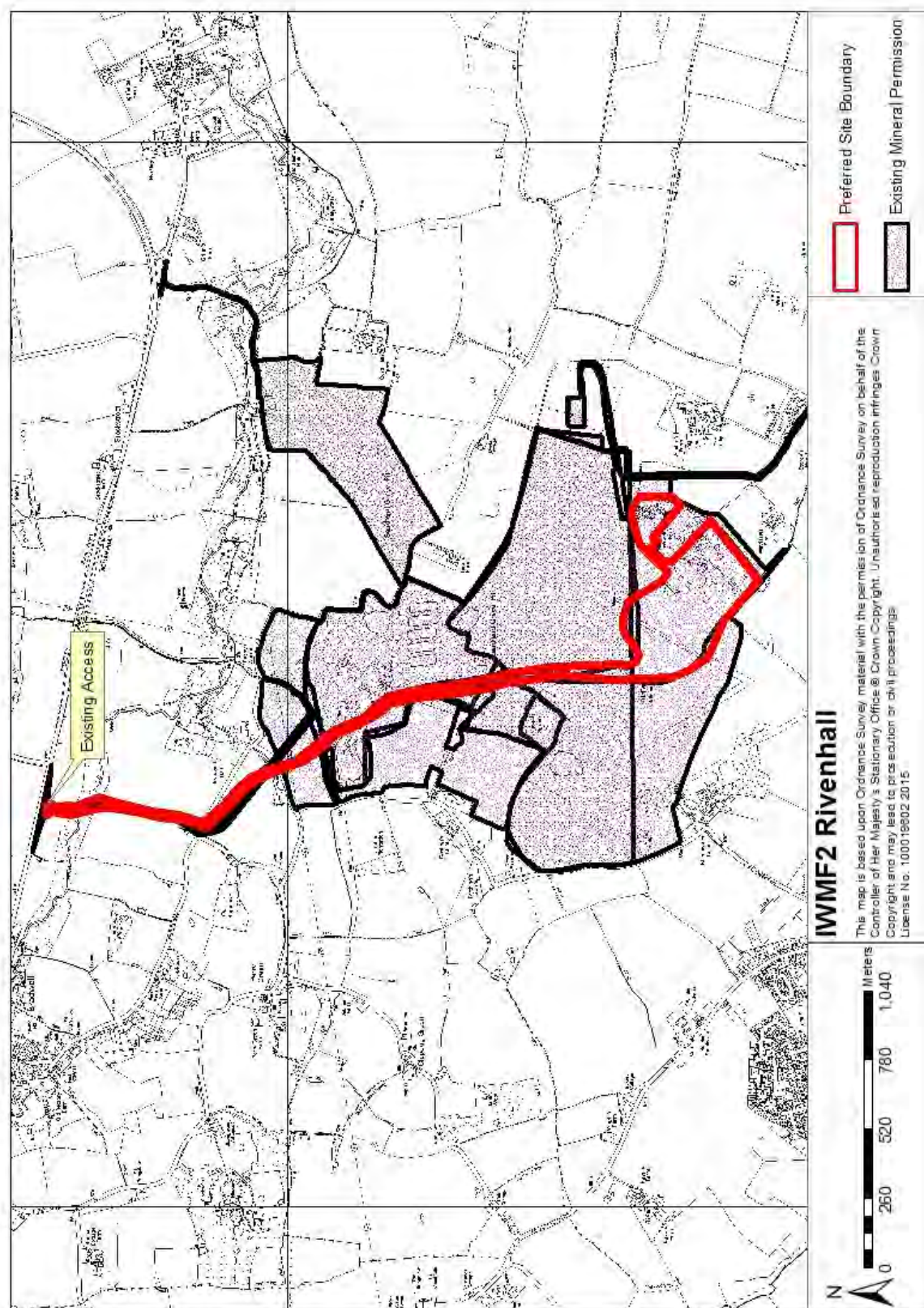


Table 18 Sandon

District	Chelmsford
Area	7ha - Sandon East 25ha - Sandon
Indicative Facility Scale	150,000tpa - Inert Waste Recycling Capacity 1,000,000m ³ (northern void)
Link to Waste and Mineral Activities	East Sandon - Various extant mineral and waste planning permissions. Mineral processing plant has permission to remain until 2042. The mineral area beneath the plant is still to be worked. Sandon - Various relevant mineral and waste planning permissions. ESS/30/11/CHL for the continuation of infilling of the existing southern void
Site Allocation For	Sandon East -Inert Waste Recycling Capacity Sandon - Inert Landfill Capacity
Access	A1114 Southend Road
Estimated Availability	Adoption of WLP (2017)
Life	East Sandon - Permanent Sandon - Full restoration within 5 years

This site making use of the existing haul road onto the A12 has a number of permitted waste/mineral activities with active landfilling in the western half. The following issues and opportunities are to be addressed:

- Improvements to the A1114 (Essex Yeomanry Way) /Southend Road southbound off slip road.
- A traffic management/priority control system to manage the single width private haul road in the vicinity of the site access, or alternative solution e.g road widening/passing bays.
- A heritage assessment needs to: (1) identify those areas of the proposed site that have the potential to retain archaeological deposits; (2) Identify the nature of the archaeological deposits that are likely to survive and (3) identify the areas potential of surviving palaeo-environmental/ geo-archaeological deposits. Following on from the work above an intrusive evaluation will be required to assess for below ground archaeological deposits and to assess for geological and palaeo-environmental sequences within the site.
- The impacts from the proposal need to be addressed on the designated buildings on the edge of the application site (Sandon Hall and Mayes Farmhouse). Limits on duration (hours

of operation) and noise standards would be required in the interests of protecting local amenity.

- If the proposed site layout cannot accommodate the statutory easements (relevant to existing infrastructure on the site) the diversion of the existing assets may need to be considered.

The following specific issues and opportunities are to be addressed for Sandon East:

- Existing on-site landscaping including southern and northern shelter belts should be retained.
- Control of total height of structure to be compatible with existing height of shelter belts.

The following specific issues and opportunities are to be addressed for Sandon West:

- Filling of the northern void (a County Wildlife Site) would require some form of biodiversity offsetting or compensation land (since mitigation is unlikely to be possible for the proposed damage to habitats).
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- Any activity that requires excavation should only proceed with caution, and the existing underground infrastructure must be supported and protected and not be put at risk from disturbance.

Essex County Council & Southend-On-Sea Borough Council

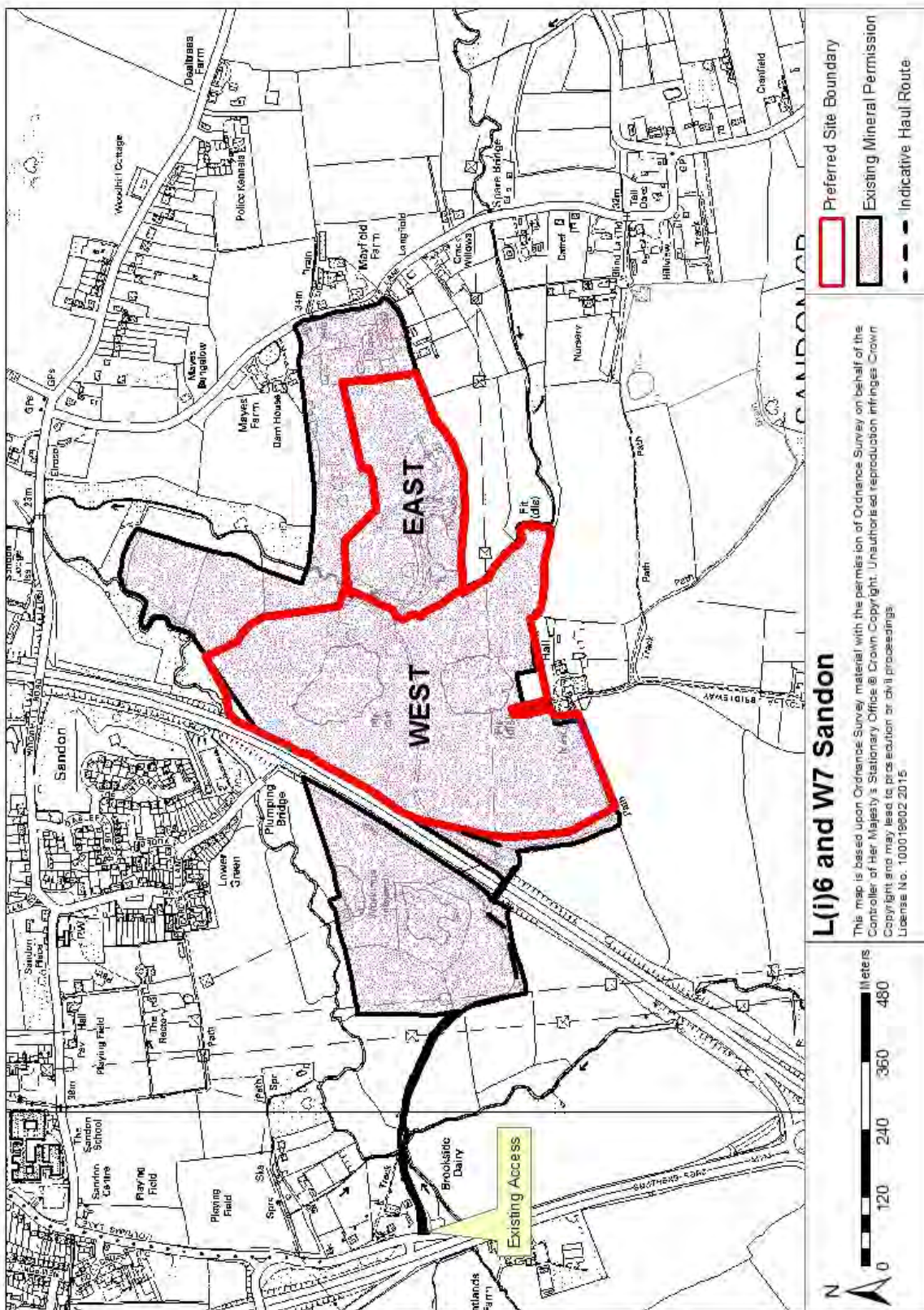


Table 19 Slough Farm, Ardleigh

District	Tendring
Area	15.65ha
Indicative Facility Scale	40,000tpa - Inert Waste Recycling 1,000,000m ³ - Inert Landfill Capacity
Link to Waste and Mineral Activities	Relevant Planning history as it is allocated for mineral extraction in the MLP (B1)
Site Allocation For	Inert Waste Recycling Inert landfill Capacity
Access	Road using Slough Lane
Estimated Availability	5-10 years
Life	19 years

This site would be an extension to the existing waste / mineral site at Martells Quarry. The following specific issues and opportunities are to be addressed:

- Access to the road network to be by way of continued use of the private track access to the A120, via the lorry park.
- Performance of the A120 junction is to be monitored and any need to improve it to accommodate traffic from the proposed development to be identified as early as possible in the planning process.
- Trees which provide screening on the north, south and west boundaries should be protected from the effects of landfilling.
- Those areas of archaeological deposits preserved in-situ from the extraction phase shall be included as part of any restoration scheme.
- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- The aggregate recycling operation should be tied to the life of landfilling within the Slough Farm site and hence be able to be removed at the cessation of landfilling operations.
- Careful consideration must be given to the final restoration contours to ensure the final landform blends with the surrounding topography and the restoration would be predominantly back to agricultural use.

Essex County Council & Southend-On-Sea Borough Council

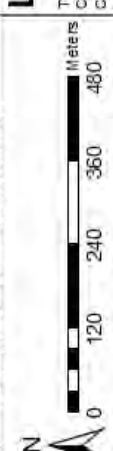


Table 20 Sunnymeade, Elmstead & Heath Farms

District	Tendring
Area	63.74ha - Site 1 7ha - Site 2
Indicative Facility Scale	1,800,000m ³ - Inert Landfilling Capacity (Site 1) 40,000tpa - Inert Waste Recycling (Site 2)
Link to Waste and Minerals Activities	Site is allocated for extraction within the MLP 2014 (site A20)
Site Allocation For	Inert Landfill Capacity (Site 1) Inert Waste Recycling (Site 2)
Access	Current Haul road extended in from currently operational processing area where the existing access off Keelers Tye & B1027 will be used
Estimated Availability	2018
Life	17 years

These sites would be an extension to the existing mineral site at Wivenhoe Quarry. The following specific issues and opportunities are to be addressed:

- The site would be an extension to the existing Wivenhoe Quarry, linked by a haul route to the existing processing plant and utilising the existing highway access onto the B1027.
- Improvements required to visibility at the junction of the private access and Keelers Tye.
- Restoration provides the opportunity for significant biodiversity enhancement and habitat creation on site. In-filling and restoration should be in line with habitat creation and outcomes sought in the Minerals Local Plan and any associated documents.
- Cockaynes Wood Local Wildlife Site adjoins the southern boundary and would require protection during operations.
- An archaeological desk based assessment would be required to investigate the gravels to establish their potential for archaeological remains and trial trench evaluation will be required, along with a mitigation strategy, to form part of the Environmental Statement.
- Those areas of archaeological deposits preserved in-situ from the extraction phase shall be included as part of any restoration scheme.
- PRoW footpath Elmstead 24 crosses site 1 and is adjacent to site 2, and requires sufficient stand-off distance and protection during operations (e.g., satisfactory crossing point(s) provided for quarry vehicles).

- Dust mitigation measures, limits on duration (hours of operation) and noise standards (from noise sensitive properties) will be established in the interests of protecting local amenity.
- Careful consideration must be given to the final restoration contours used to ensure the final landform blends with the surrounding topography and to ensure Grade 2 agricultural soils are retained on site.

The following specific issues and opportunities are to be addressed for Site 1:

- A minimum of 100m standoff should be provided for all residential properties and effective screening provided to screen views of the site.
- Cockaynes Wood Local Wildlife Site adjoins the southern boundary and would require protection during operations.
- Footpaths Elmstead 19 and Alresford 2 also run along the southern boundary and through Cockaynes Wood and need protection during operations. The ability to reinstate these fully needs to be investigated as part of the suggested restoration scheme.

The following specific issues and opportunities are to be addressed for Site 2:

- Bunding will be required around those parts of the site which are not adequately screened by natural vegetation.



Appendix C - Development Excluded from Safeguarding Provisions

C Appendix C - Development Excluded from Safeguarding Provisions

C.1 District/Borough/City councils in the Plan area should consult the Waste Planning Authorities on planning applications made on land within Waste Consultation Areas to ensure that waste management facilities are not compromised by non-waste development.

C.2 However, it is neither practicable nor necessary for consultation to occur on all developments proposed through planning applications. The table below sets the developments proposed to be subject to consultation with the Waste Planning Authorities. The development types below include those relating to temporary structures and uses:

Table 21 Development in Waste Consultation Areas

Nature of Development	Included or Excluded from consultation with the Waste Planning Authority
Applications for development on land, which is already allocated in adopted local development plan documents.	Included
Proposals for minor infilling of development within the defined settlement limits for towns, villages and hamlets identified in adopted local development plan documents.	Included
Applications for householder development including: <ul style="list-style-type: none"> Construction of a replacement dwelling where the new dwelling occupies the same or similar footprint to the building being replaced; Minor extensions to existing dwellings or properties where they lie within the immediate curtilage and would not bring the building within 250m of the boundary of an existing strategic facility or preferred site allocation; Proposals for the provision of incidental and non-habitable structures lying within the curtilage of an existing dwelling (such as driveways, garages, car parks and hard standing). 	Excluded
Proposals for the erection of agricultural buildings immediately adjacent to an existing working farmstead.	Excluded
Applications <ul style="list-style-type: none"> From B2/B8 to any other use To Class A and C, from any other use. 	Included
Other applications for change of use.	Excluded
Applications related to existing permissions such as for reserved matters, or for minor amendments to current permissions.	Excluded

Nature of Development	Included or Excluded from consultation with the Waste Planning Authority
Applications for other kinds of consent – advertisements; listed building consent; Conservation Area consent and proposals for work to trees or removal of hedgerows.	Excluded
Proposals for the demolition of a residential or other building.	Excluded
Proposals for minor works such as fencing or bus shelters.	Excluded
Proposal for any extension of and/or change to the curtilage of property.	Included
Proposals for B2 and B8 development on land allocated for such uses.	Excluded

Appendix D - Summary of Site Identification and Assessment Methodology

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D.1 A detailed and bespoke methodology was developed to guide the assessment of potential site allocations for waste development to inform the WLP. The methodology is summarised below.

Stage 1 – Assessment against five ‘Exclusionary’ criteria.

D.2 For proposals to successfully move to subsequent stages the following criteria were to be satisfied:

- Capable of being satisfactorily accommodated in terms of site size, area and shape;
- Deliverable in planning terms;
- Outside Flood Zone 3;
- Outside SPZ1 (in the case of landfills only);
- Able to be located beyond 250m from international and national ecological designations, Areas of Outstanding Natural Beauty, National Parks and Grade I & II* heritage designations;

Stage 2 – Initial assessment of sites under Green Belt and Transport Terms.

D.3 Proposals which failed either of these two following criteria were held back from subsequent stages:

- Outside the green belt;
- Suitable in transport policy, or in highways terms (even if it must be achieved through adequate mitigation);

D.4 Unlike Stage 1 proposals that contravened these criteria were not entirely removed from any further consideration. Should there still be a need for additional facilities at the final stage exist and ‘very special circumstances’ be demonstrable then such proposals would be able to be reconsidered at the end of the process.

Stage 3 – Detailed assessment of the sites successfully passing Stages 1 and 2 against 12 site selection criteria.

D.5 Proposals were scored against how well they performed according to the following matters:

- Their association with positive, or at least an absence of, waste management proposals or non-waste incompatible development, permission or policy history;
- Their compatibility with neighbouring land uses (e.g., adjacent to industry or other waste facilities in the case of enclosed waste management facilities);
- The extent to which their site location is on previously developed land;
- Their set-back distance from sensitive properties given the type of facility intended (at least 250m from any residential dwelling or other sensitive land uses in the case of non-hazardous landfill unless special measures are included to control dust, noise and odour);
- The stability of the land in question (even if its achieved through stabilisation measures incorporated into the proposal);
- Suitability in terms of landscape or visual effects;
- Suitability in terms of the impact it is having on biodiversity and ecology;

- Suitability in terms of the impact on designated heritage assets and archaeological remains so that if it is severe it can be mitigated;
- Proximity to key centres of growth (Basildon, Chelmsford, Colchester, Harlow and Southend-on-Sea) depending upon the type of facility intended.

Stage 4 - Cross-checking and moderation of all site assessments/scores.

To ensure a consistent approach throughout the site assessment process, a review of the site scores and subsequent modifications were undertaken.

Stage 5 – Identification of the most suitable sites which could meet the over-arching spatial strategy for the WLP.

D.6 Following cross-checking and moderation of all site assessments/scores (stage 4), sites were selected according to their ability to meet the needs of the Plan area and the spatial strategy.

Appendix E - Areas of Search: Development Principles

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E.1 The following information identifies 'development principles' for the Areas of Search; that is, specific issues that will need to be addressed at the planning application stage, as and when proposals come forward. Areas of Search designates the following employment land areas.

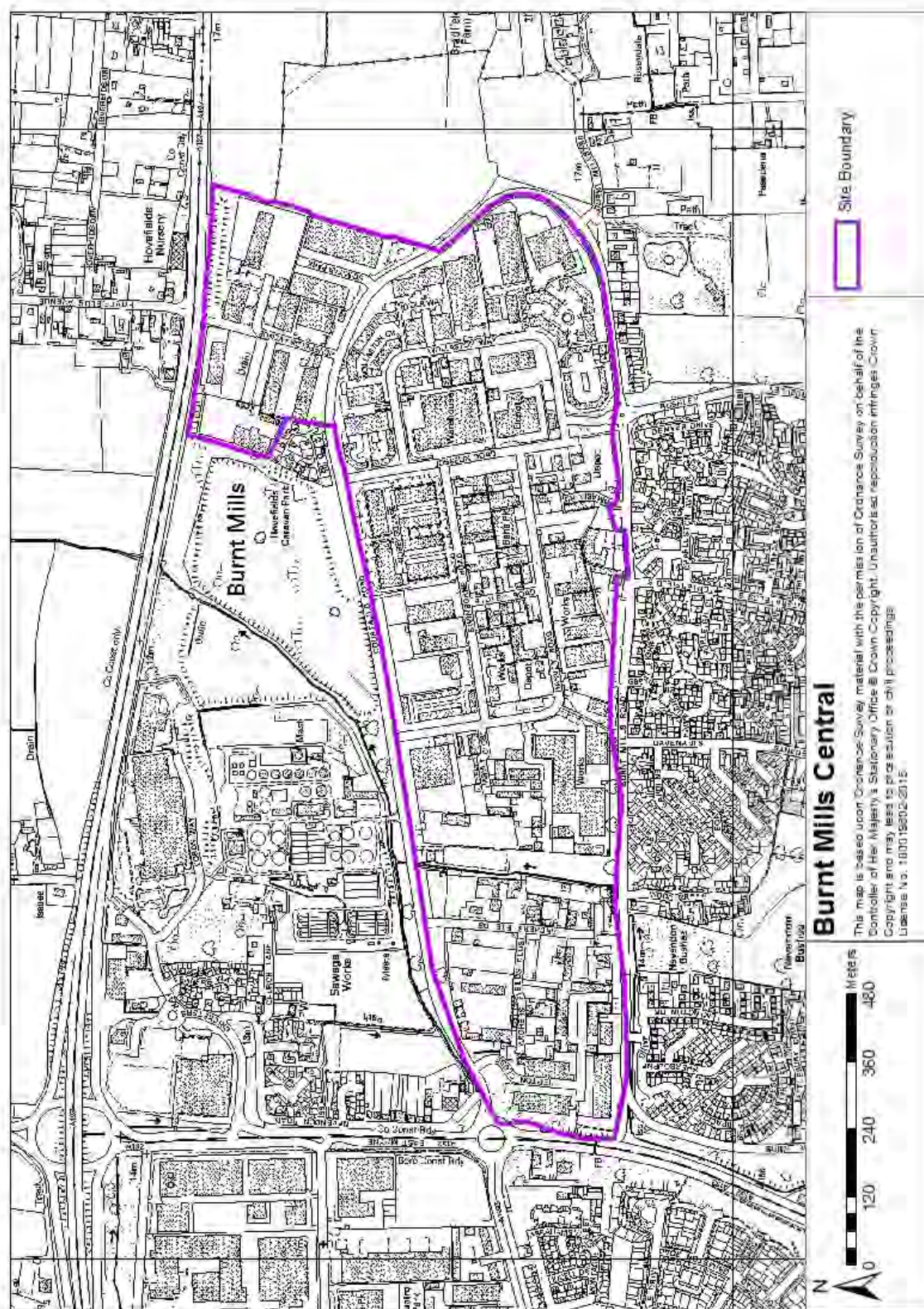
E.2 The Environment Agency's 'Guidance for development requiring planning permission and environmental permits', states that "*new development within 250m of an existing composting activity could result in people being exposed to odour and bio-aerosol emissions*". The same document states that new development within 250m of a combustion facility might, in some cases, mean people are exposed to odour, dust or noise emissions. Whilst this Guidance is aimed at the development of new sensitive receptors within proximity to waste management development, rather than new waste management development itself, it is considered appropriate to apply this buffer when locating new waste management development in proximity to existing sensitive receptors. As such, proposals for waste facilities within Areas of Search generating bio-aerosols, through biological and/or thermal processes, will be expected to have regard to this separation distance.

E.3 However, where waste management proposals do not include thermal processes or do not generate bio-aerosols, a reduced distance of 100m is considered more reasonable in terms of their location from sensitive receptors. This is because these facilities are not considered to generate significant air, odour or noise impacts and any impacts can often be fully contained within the site. Proposals for enclosed waste facilities within Areas of Search will be expected to have regard to this separation distance.

E.4 These separation distances are shown on the aerial photographs found within the pro-formas associated with the Areas of Search Assessment and Methodology Report. It is noted that these measures are intended as a guide only for the purpose of this exercise. The suitability of any waste development on a designated Area of Search, or otherwise, will be judged on its merits through a planning application, where the proposal would be considered against all relevant extant policy and guidance.

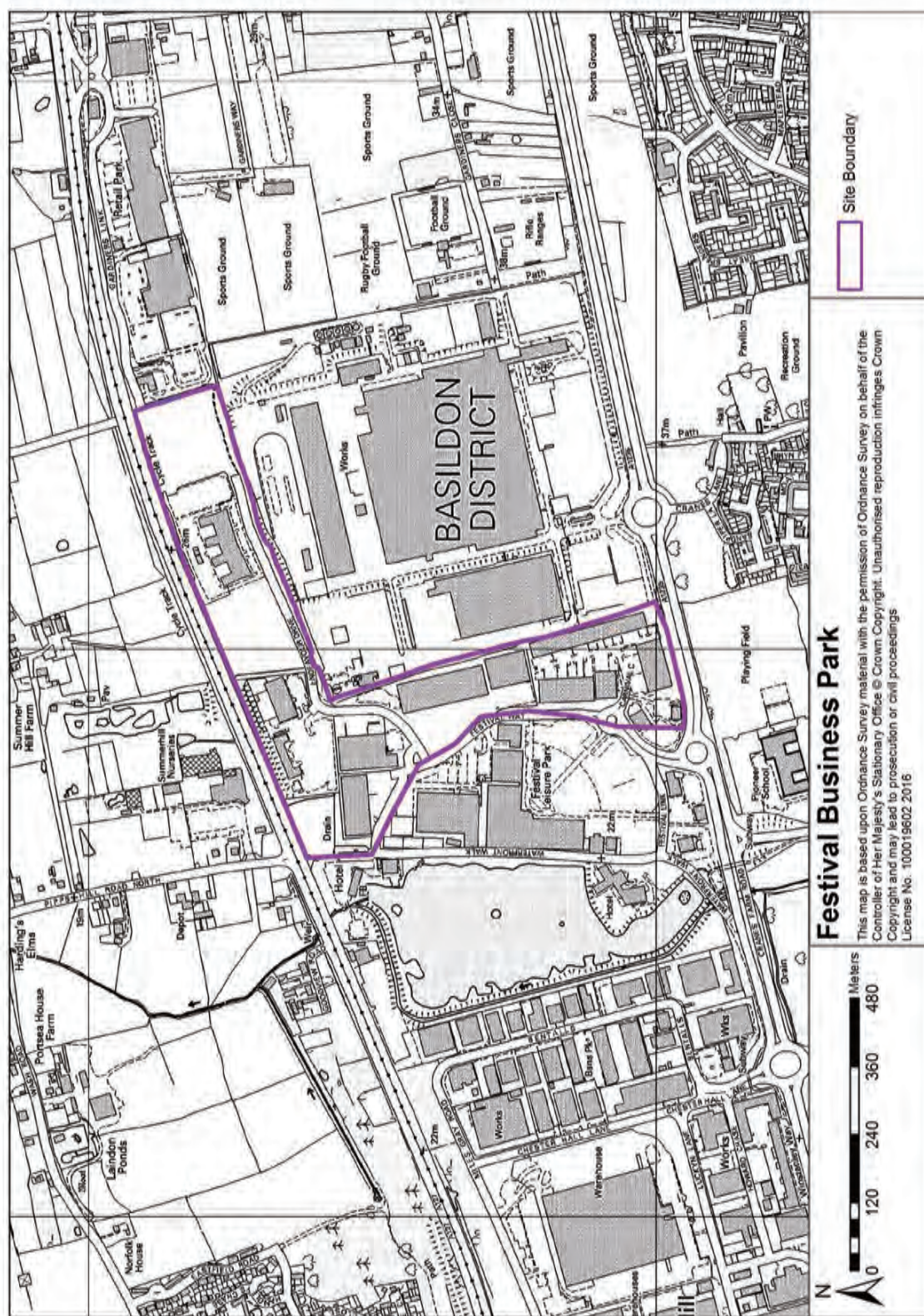
Burnt Mills Central, Basildon

Map 21 Burnt Mills Central



Festival Business Park, Basildon

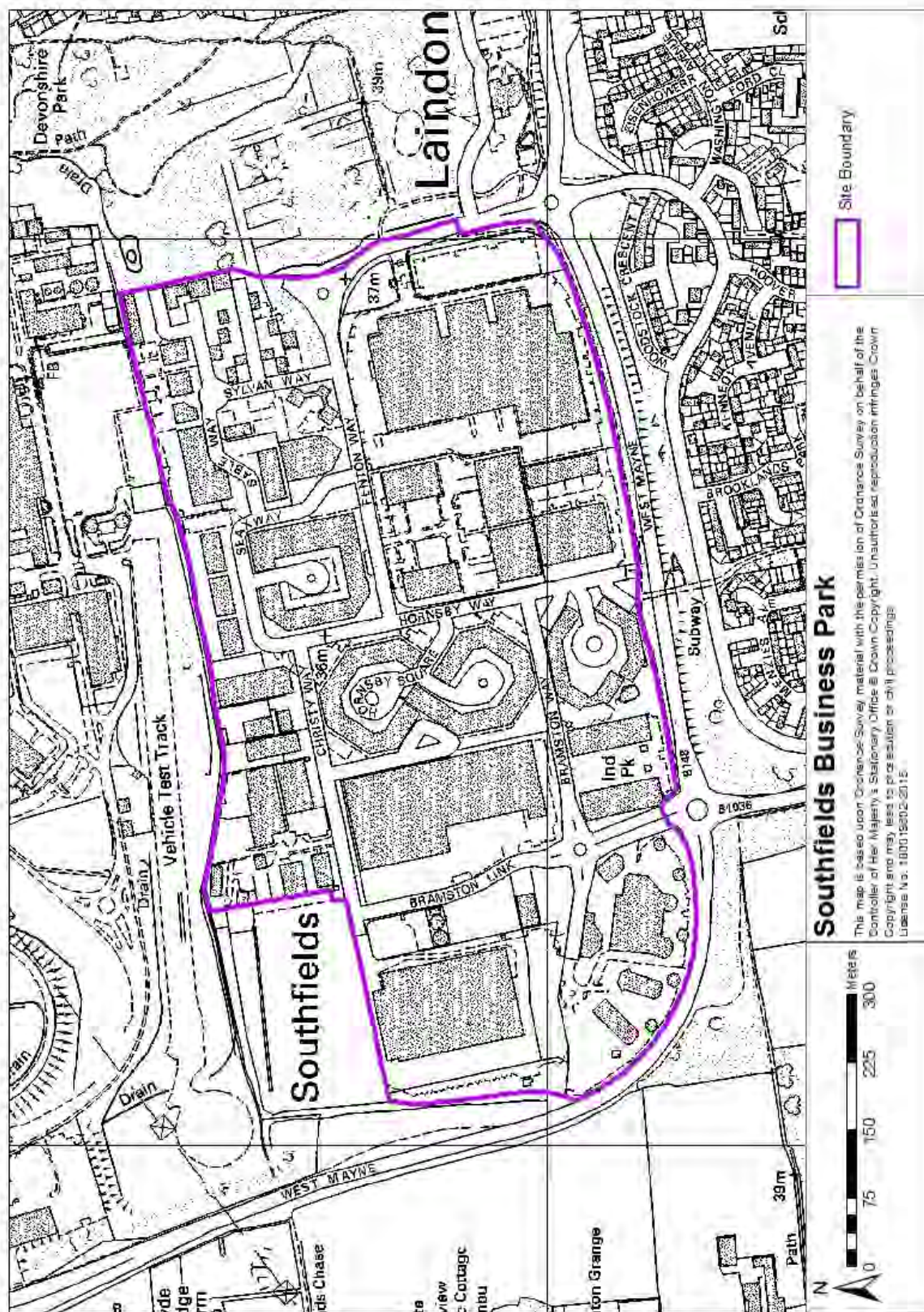
Map 22 Festival Business Park





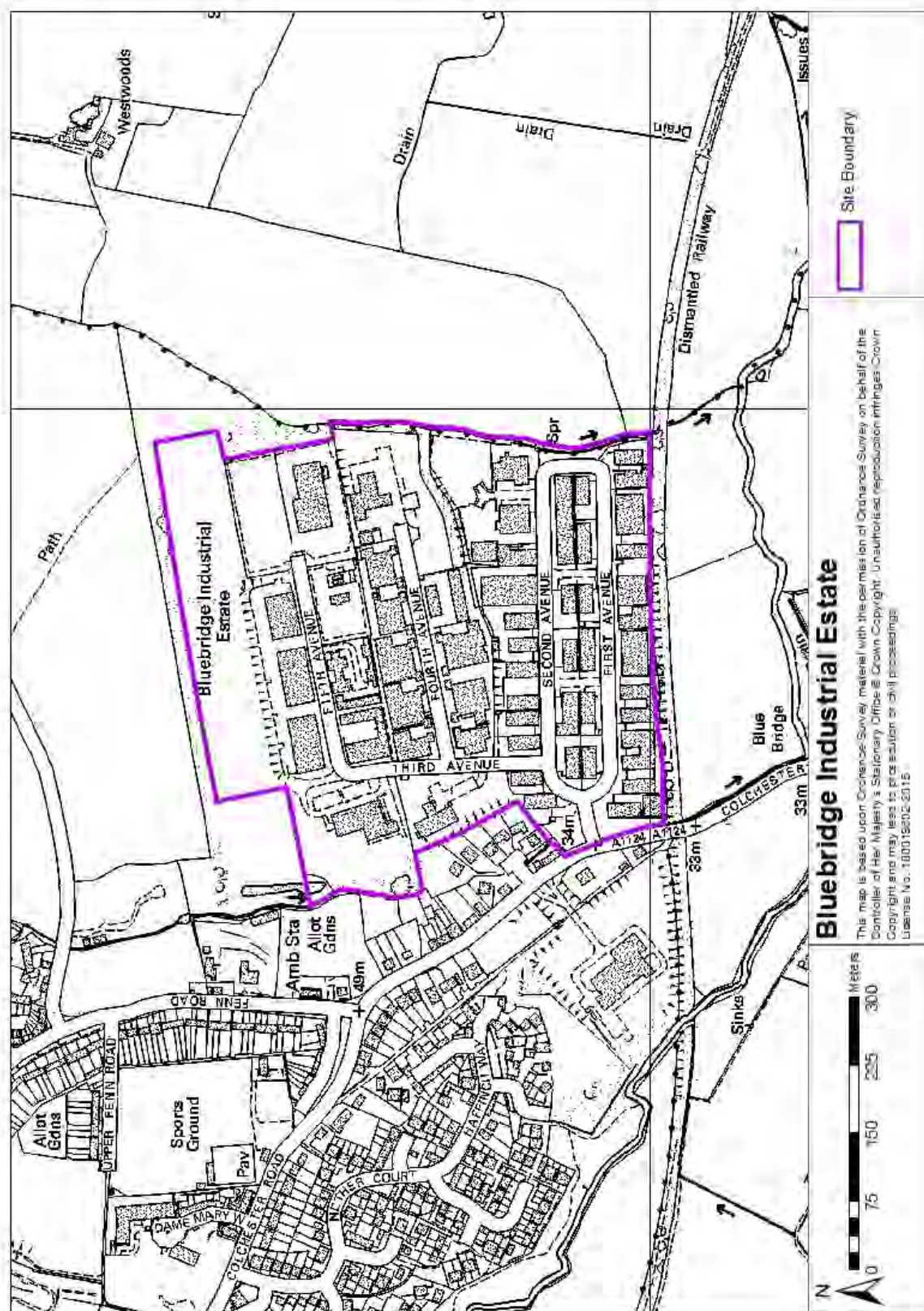
Southfields Business Park, Basildon

Map 24 Southfields Buisness Park

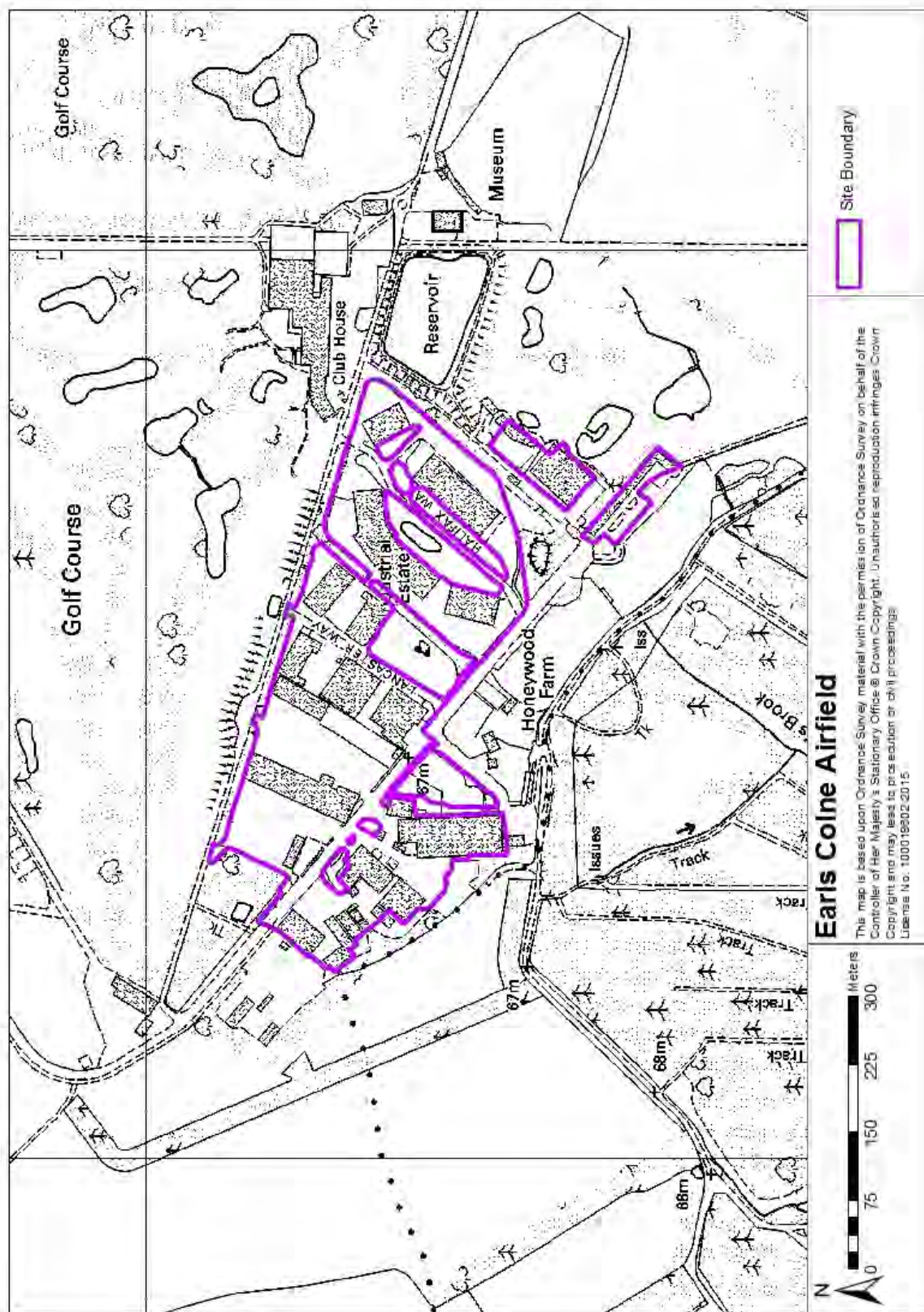


Bluebridge Industrial Estate, Braintree

Map 25 Bluebridge Industrial Estate



Map 26 Earls Colne Airfield

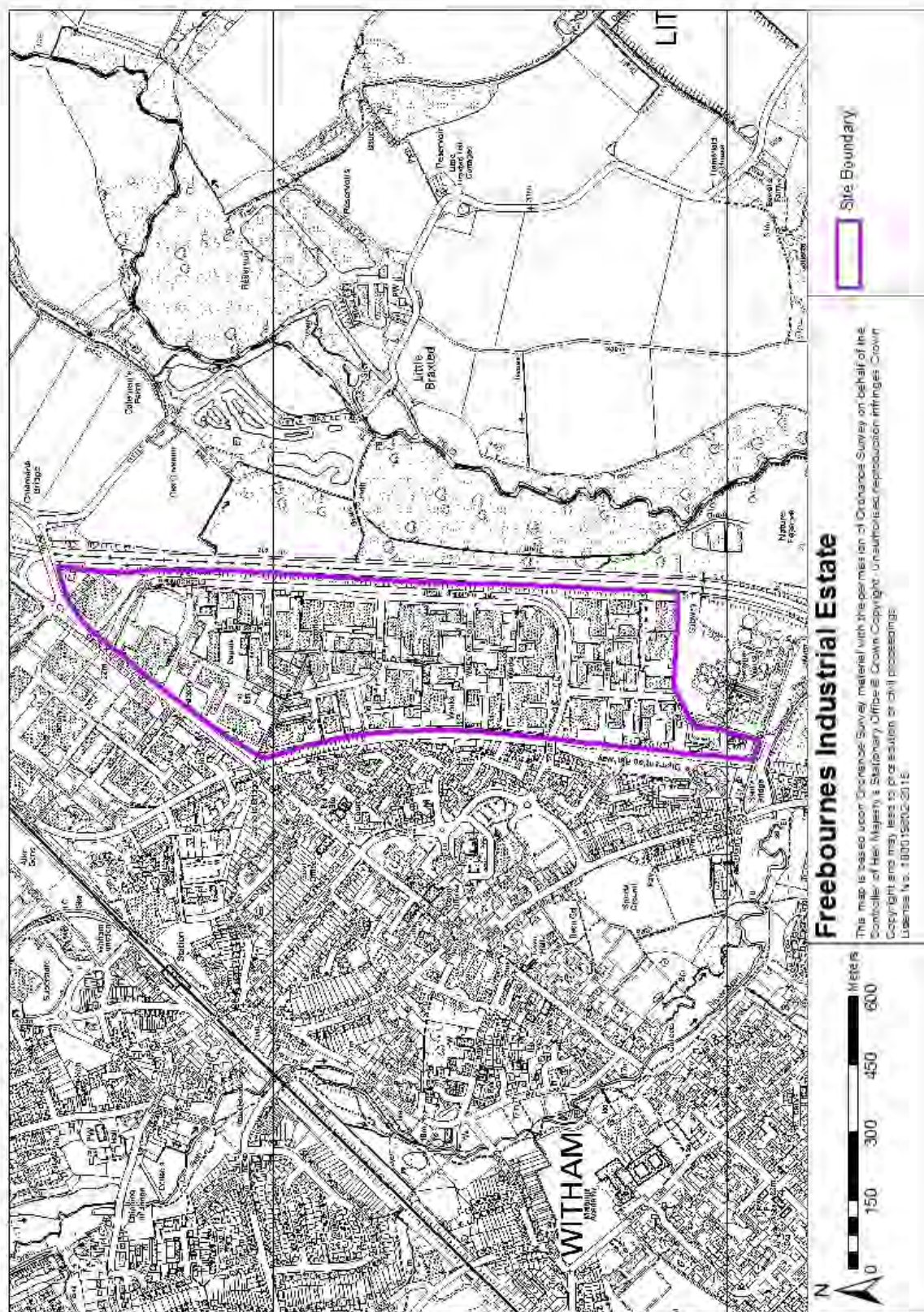


Map 27 Eastways, Crittal Road



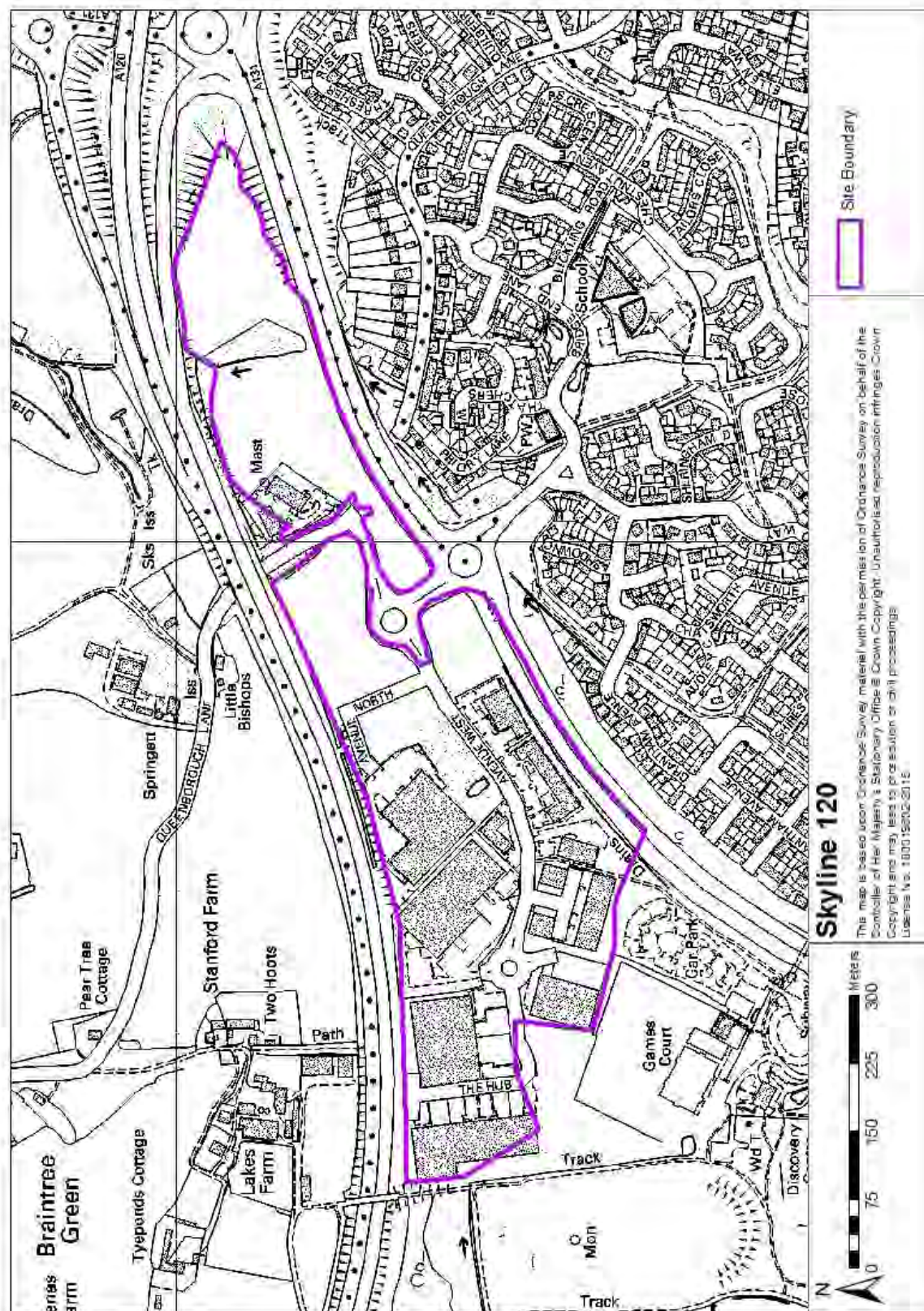
Freebournes Industrial Estate, Braintree

Map 28 Freebournes Industrial Estate



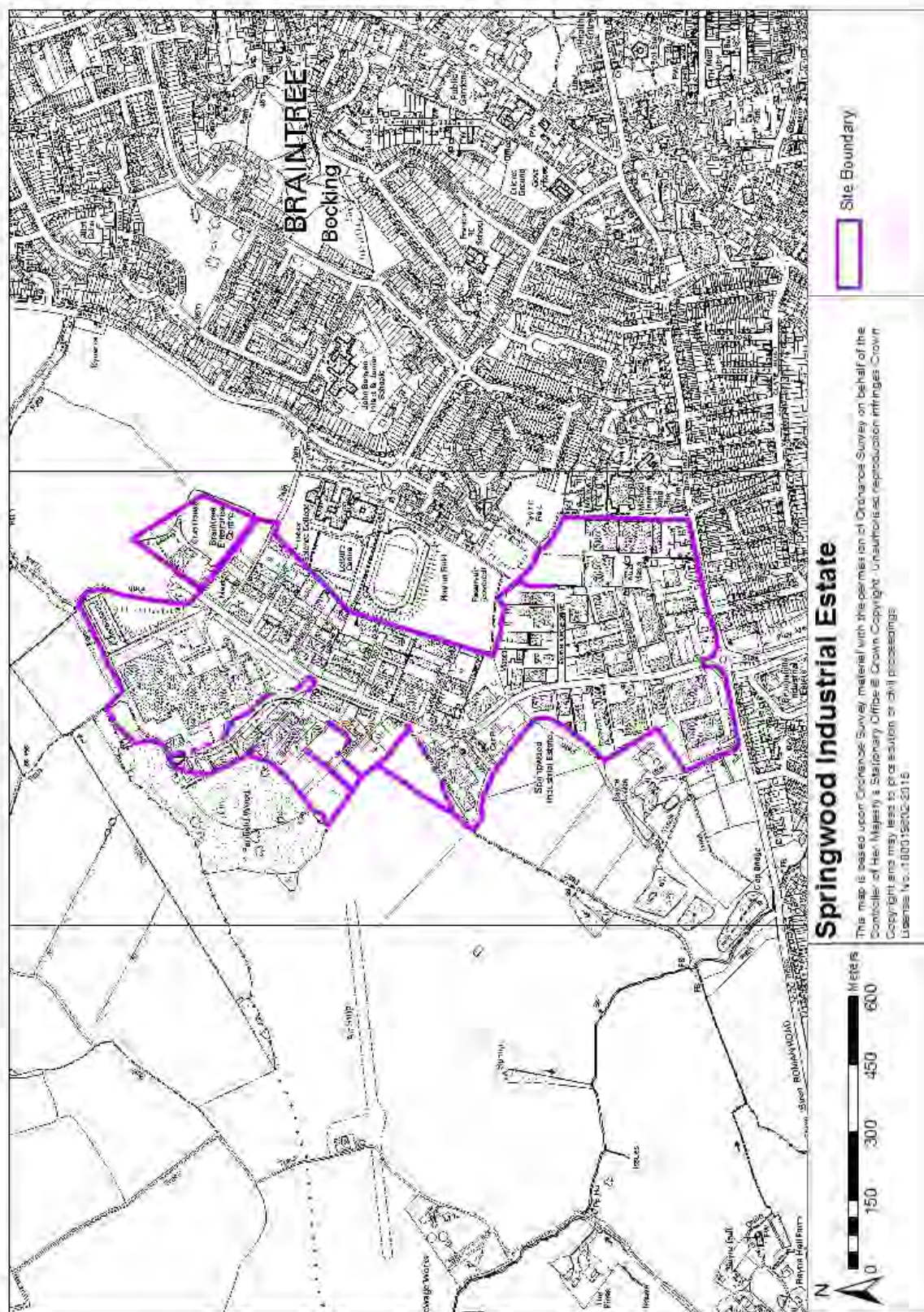
Skyline 120, Braintree

Map 29 Skyline 120



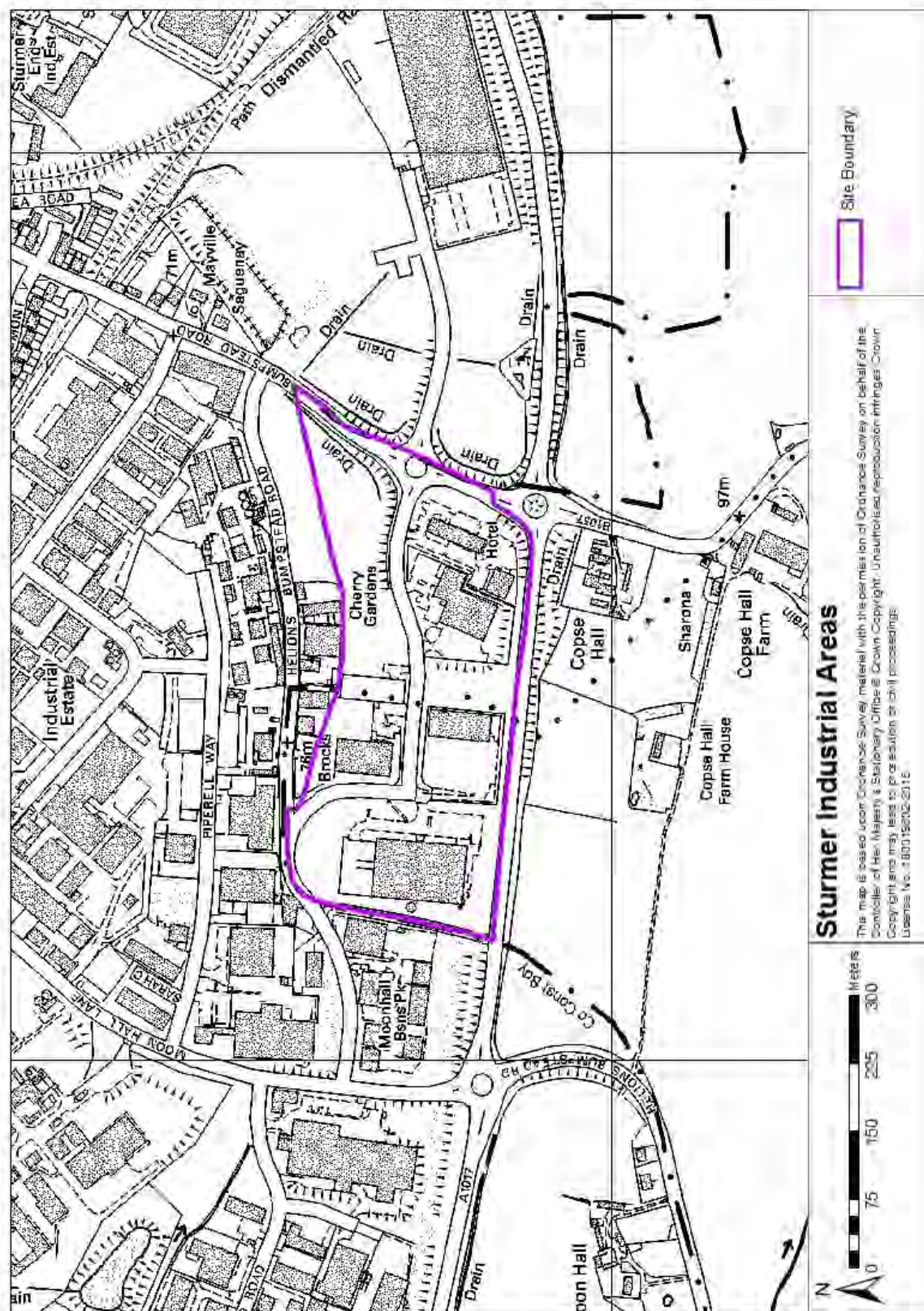
Springwood Industrial Estate, Braintree

Map 30 Springwood Industrial Estate

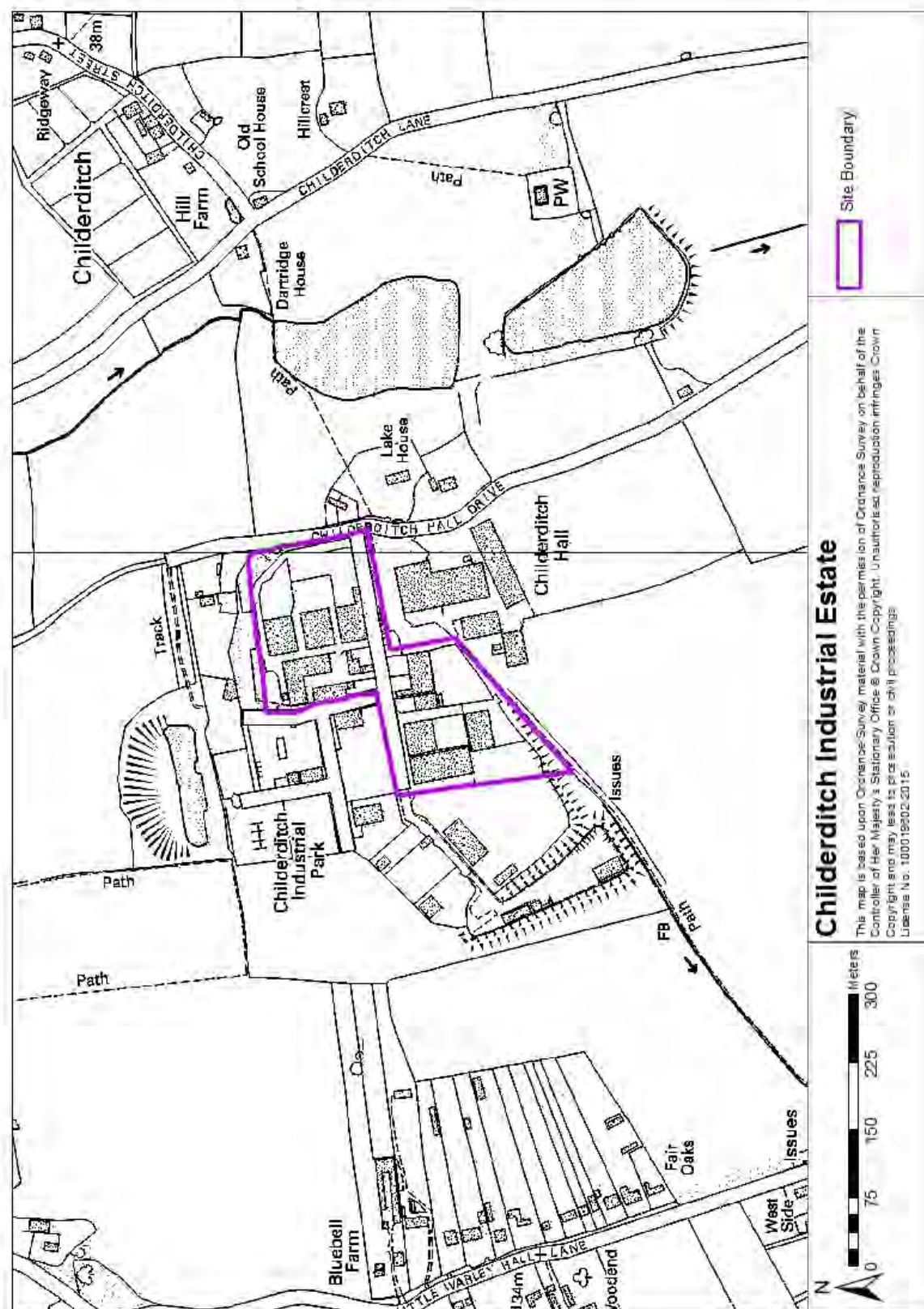


Sturmer Industrial Area 1, Braintree

Map 31 Sturmer Industrial Area 1

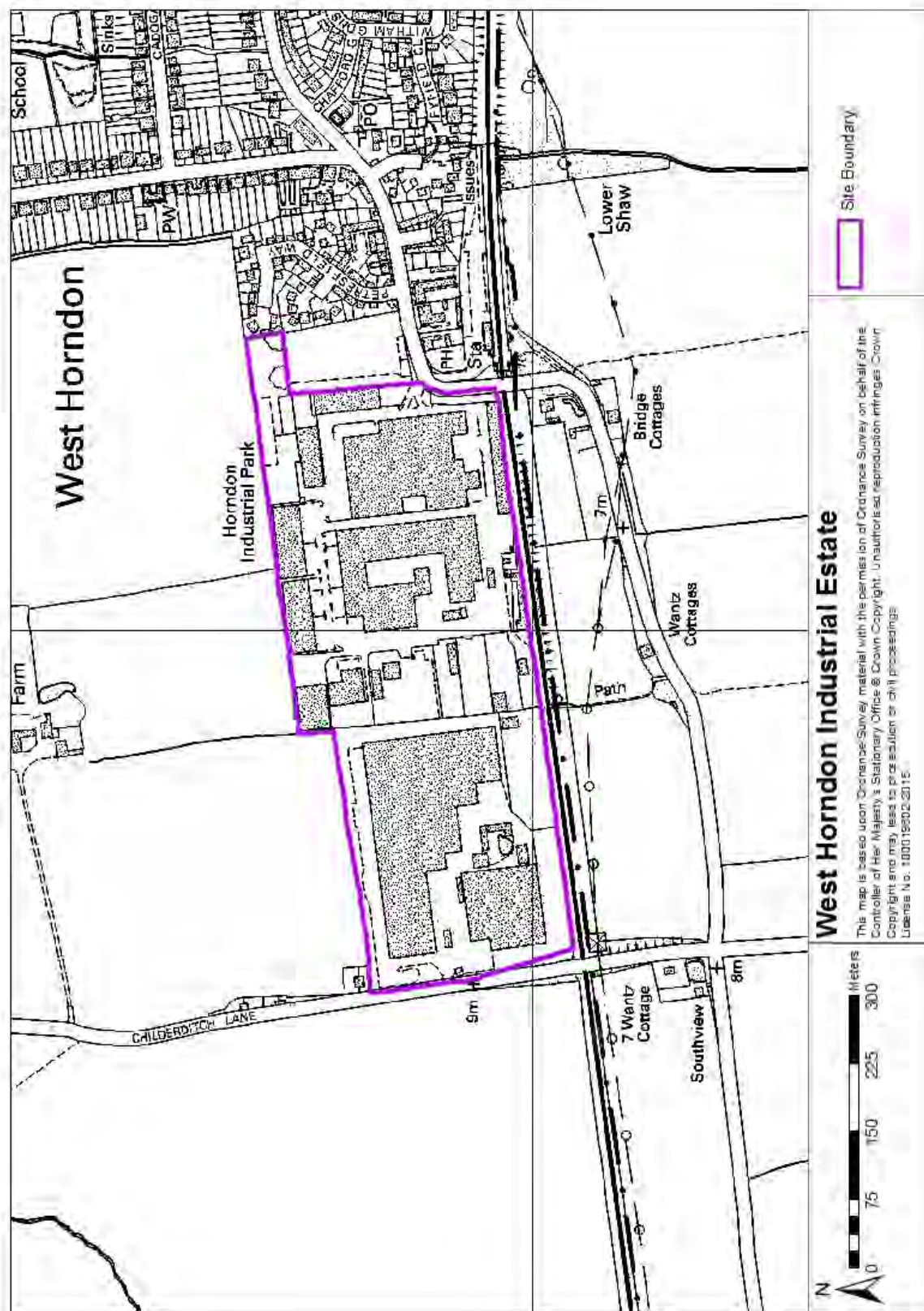


Map 32 Childerditch Industrial Estate

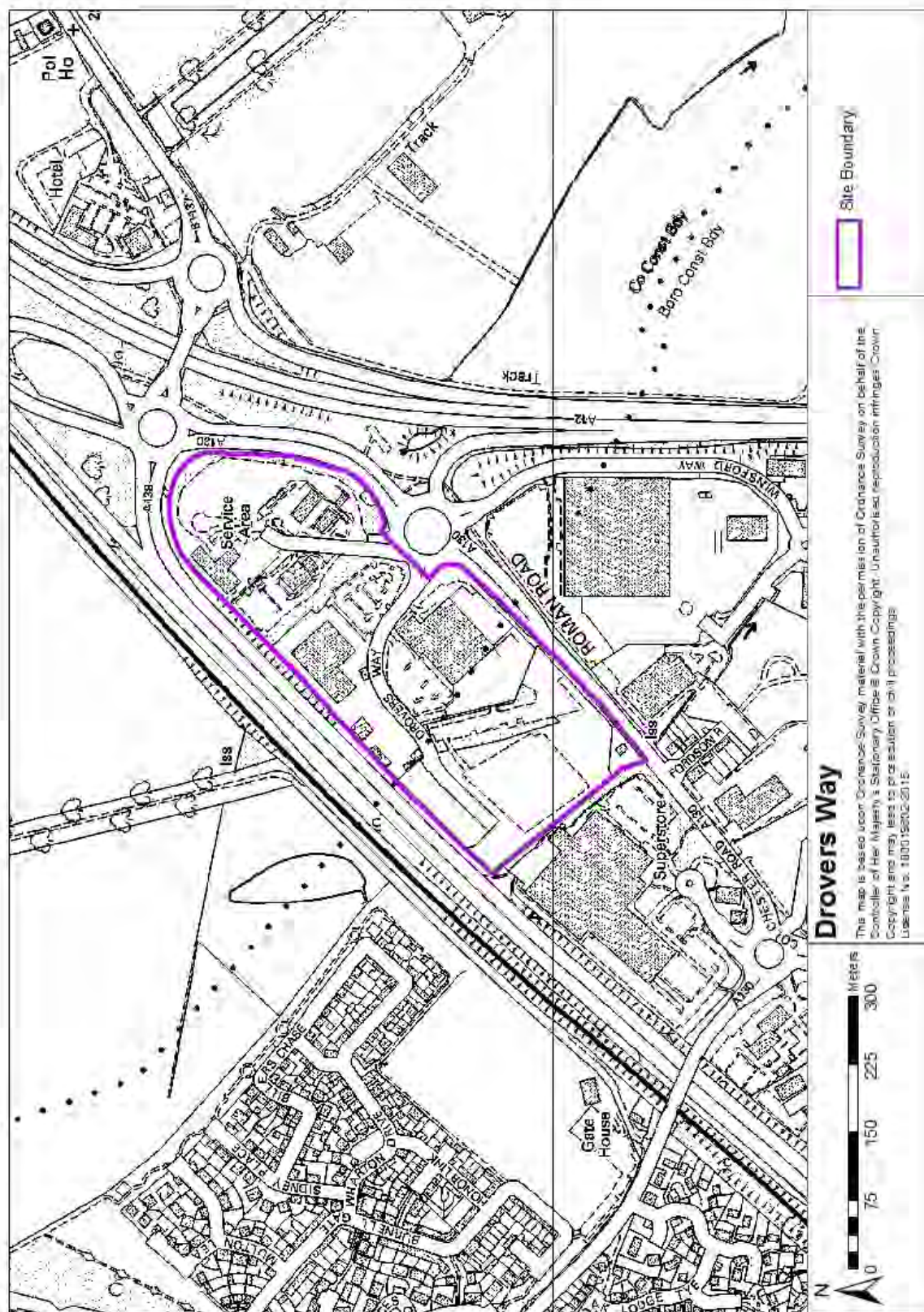


West Horndon Industrial Estate, Brentwood

Map 33 West Horndon Industrial Estate

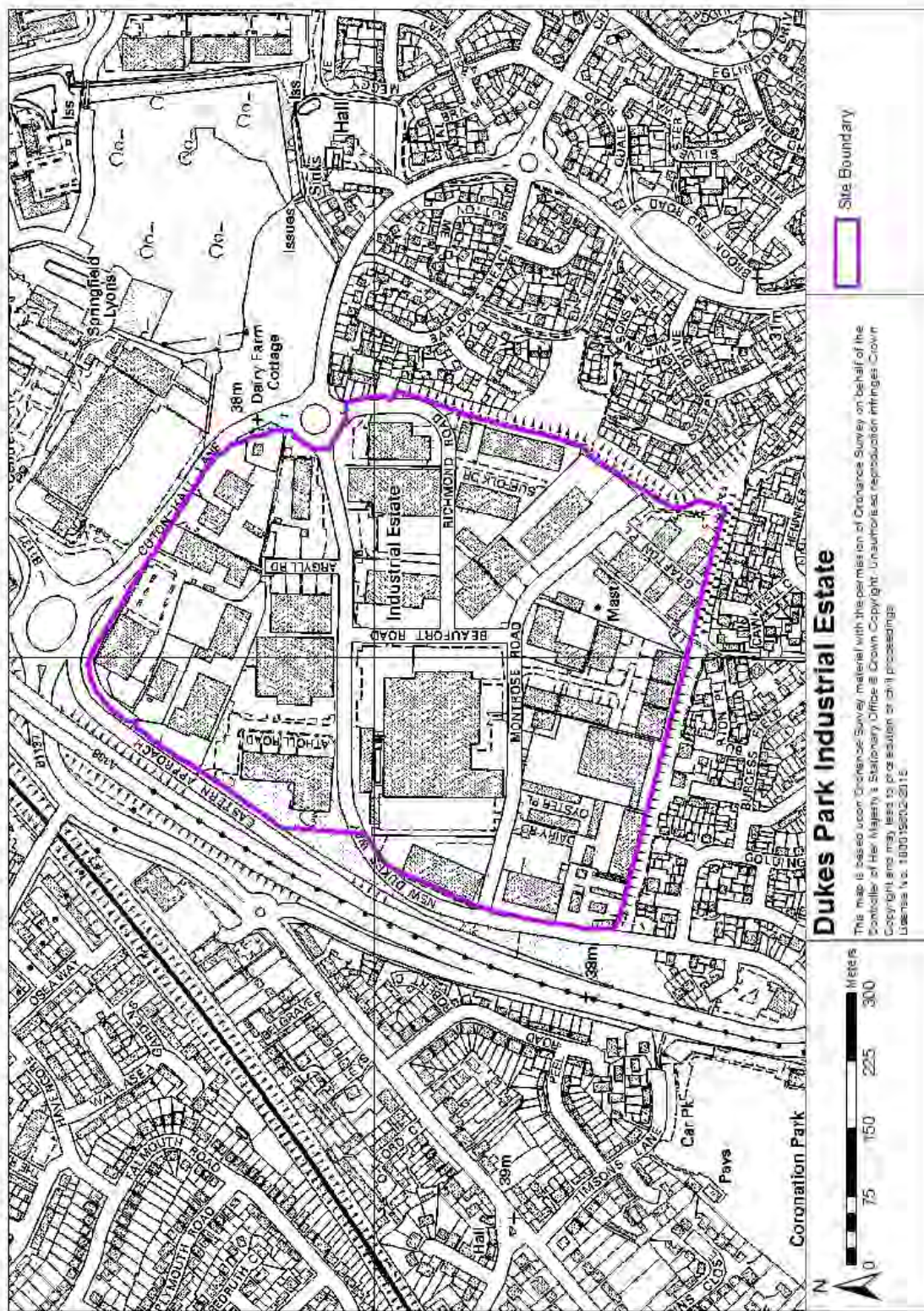


Map 34 Drovers Way



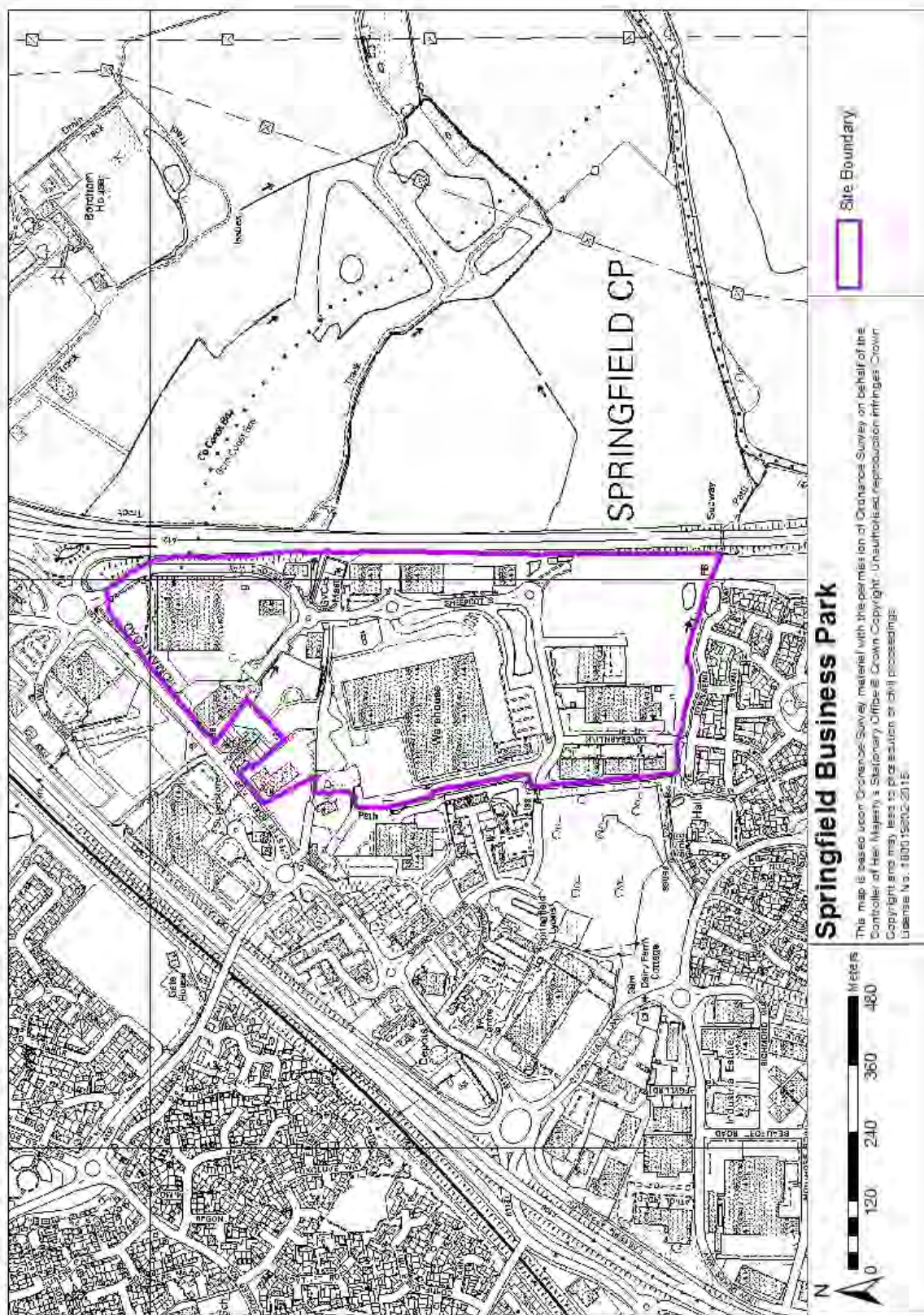
Dukes Park Industrial Estate, Chelmsford

Map 35 Dukes Park Industrial Estate



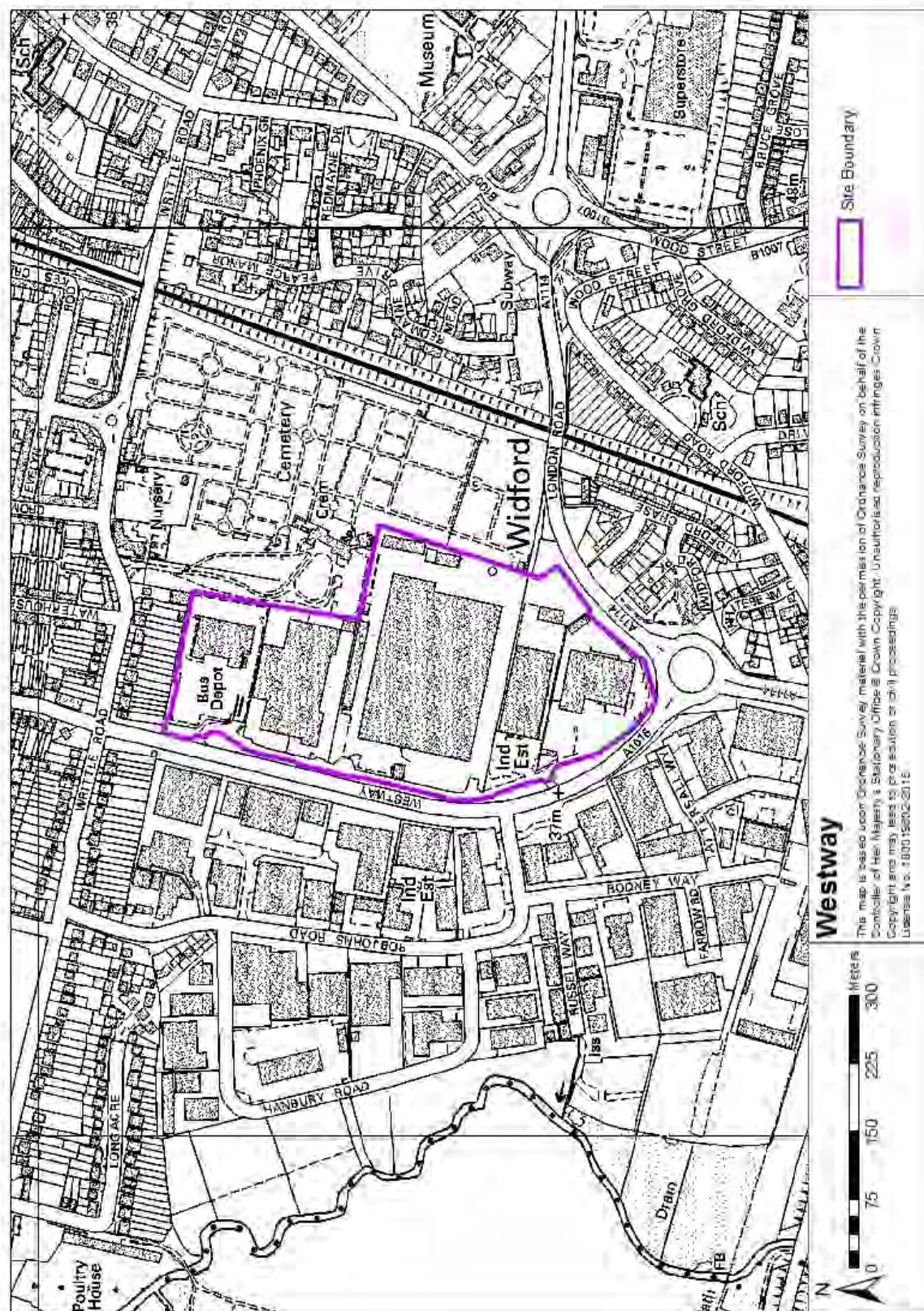
Springfield Business Park, Chelmsford

Map 36 Springfield Business Park



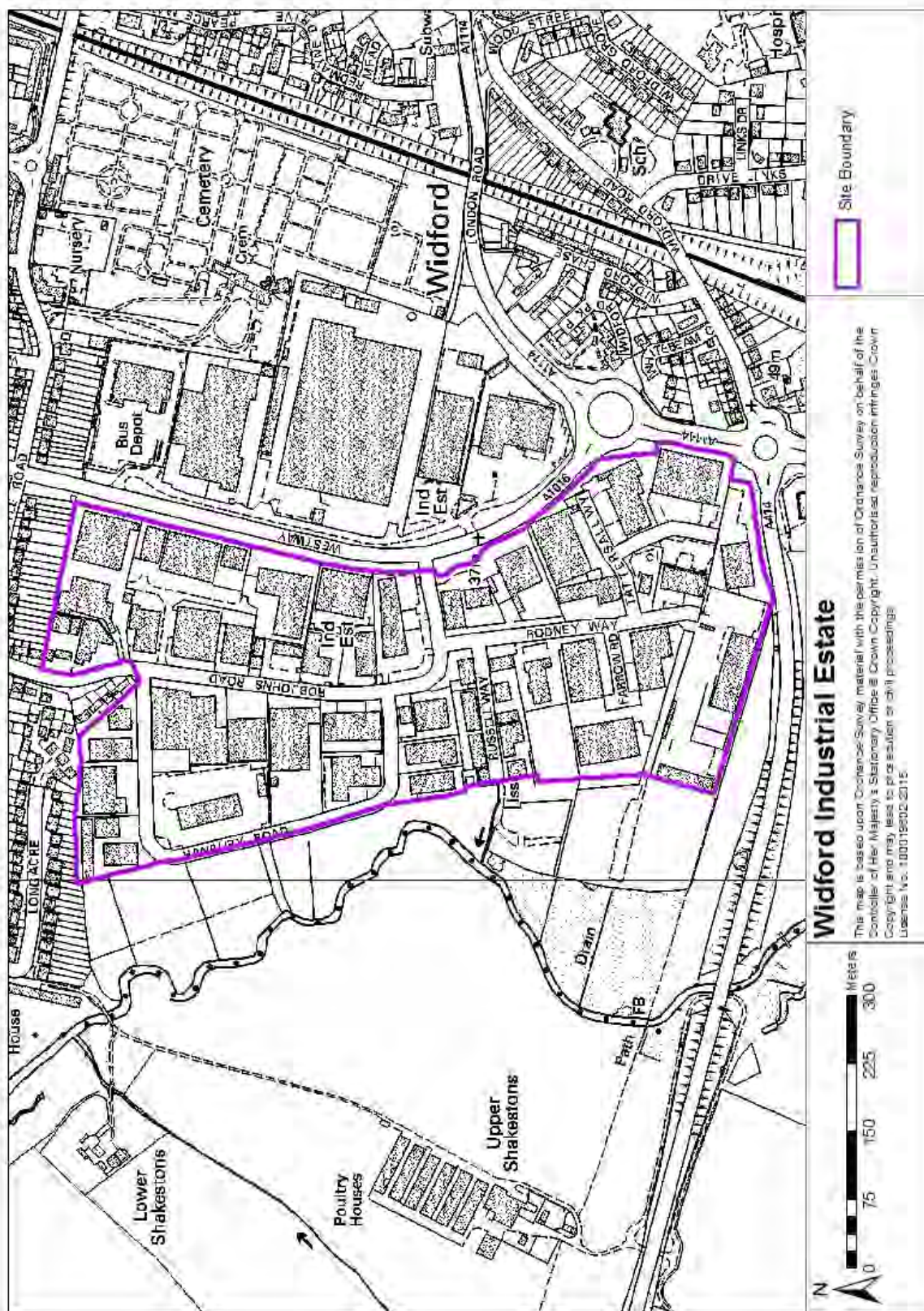
Westways, Chelmsford

Map 37 Westways



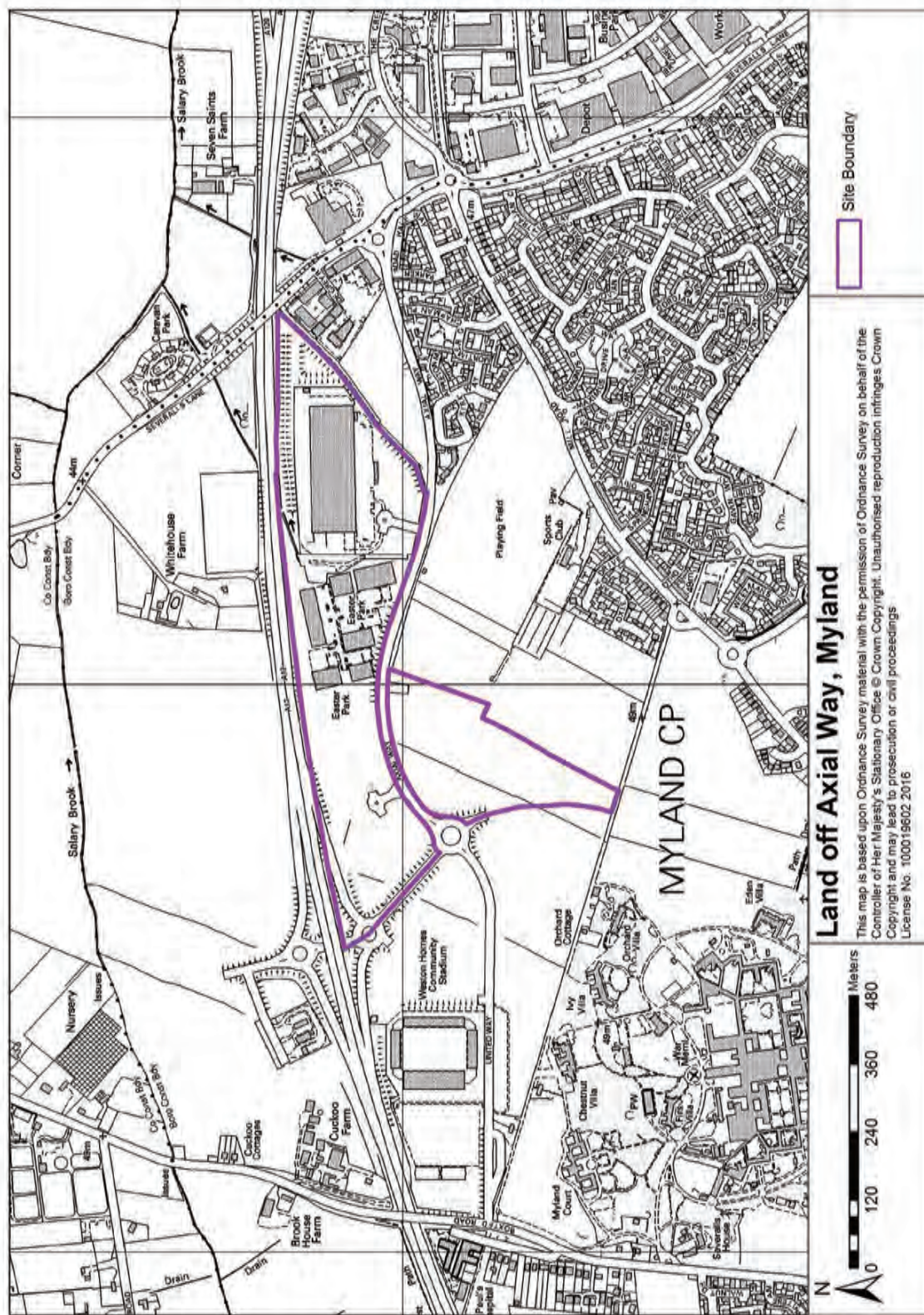
Widford Industrial Estate, Chelmsford

Map 38 Widford Industrial Estate

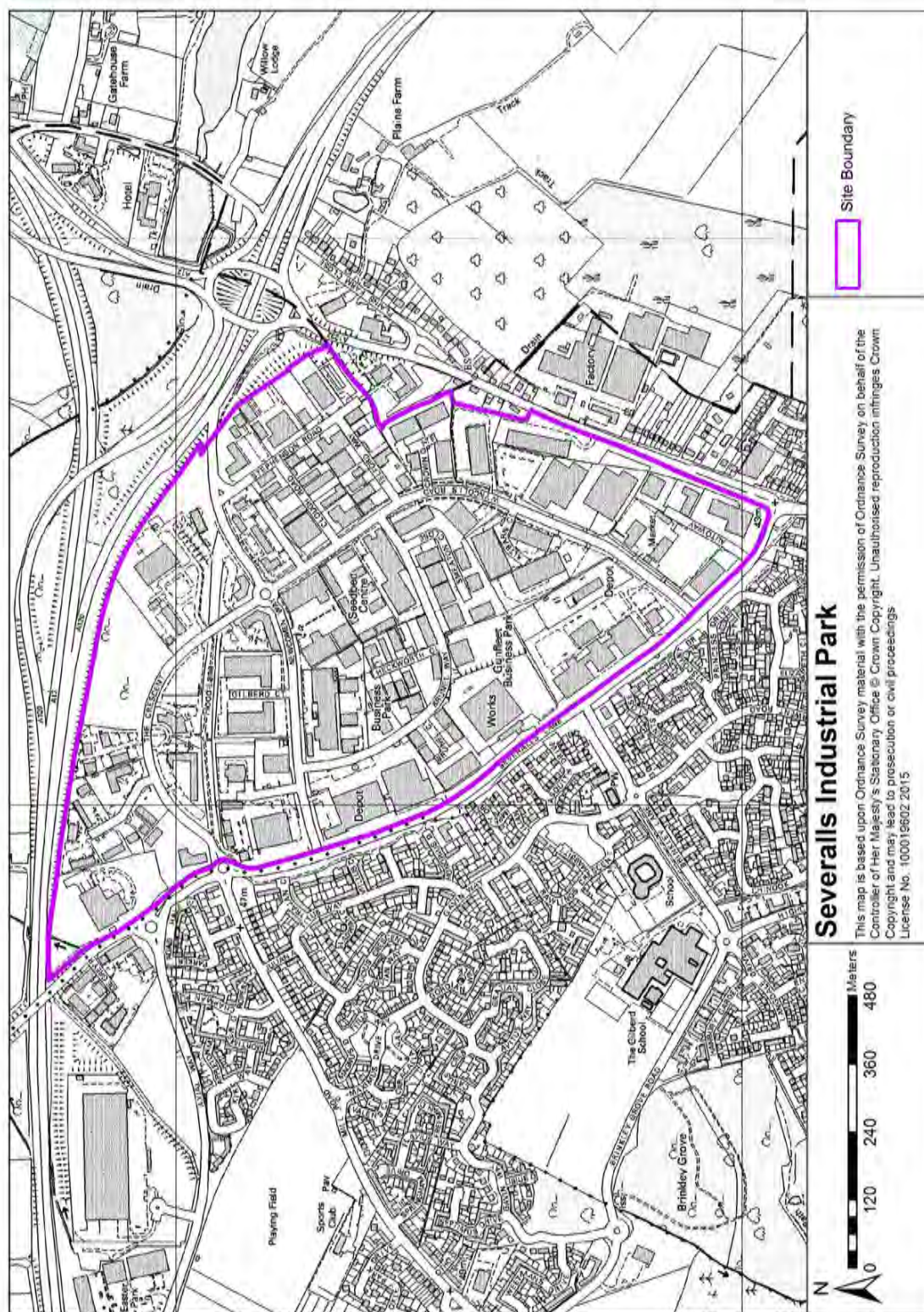


Land off Axial Way, Myland, Colchester

Map 39 Land off Axial Way, Colchester

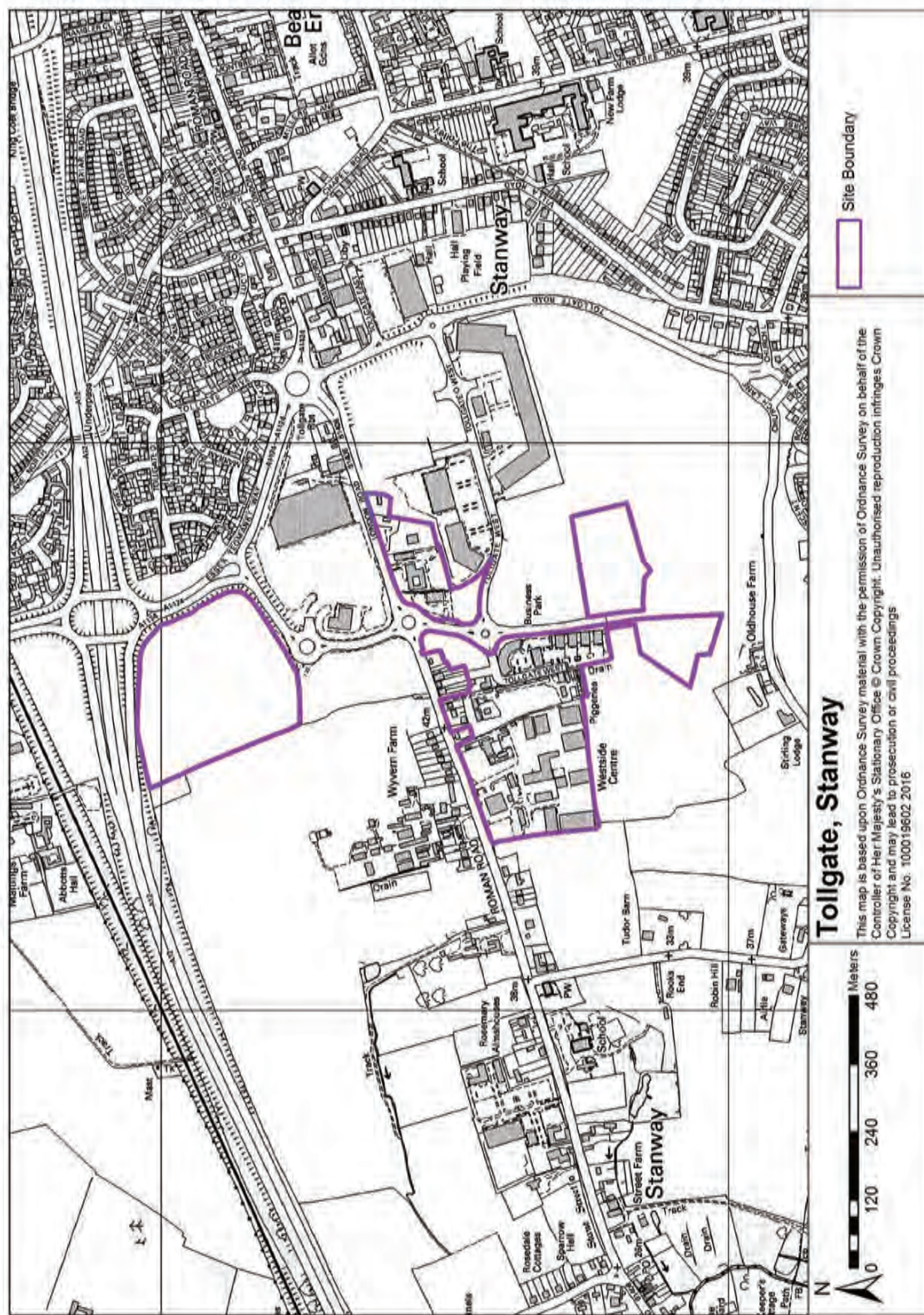


Map 40 Severalls Industrial Park



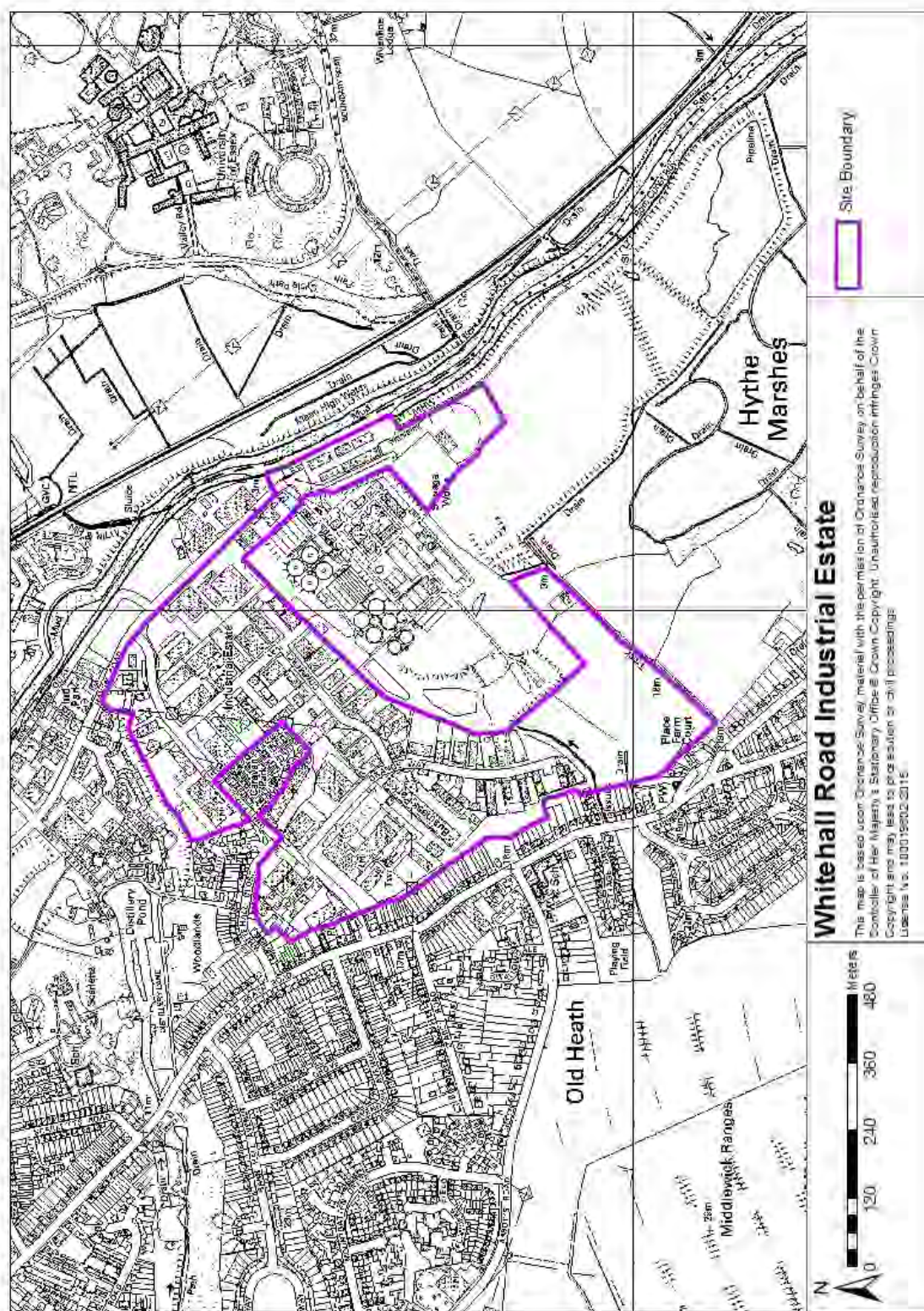
Tollgate, Stanway, Colchester

Map 41 Tollgate, Stanway, Colchester



Whitehall Road Industrial Estate, Colchester

Map 42 Whitehall Road Industrial Estate

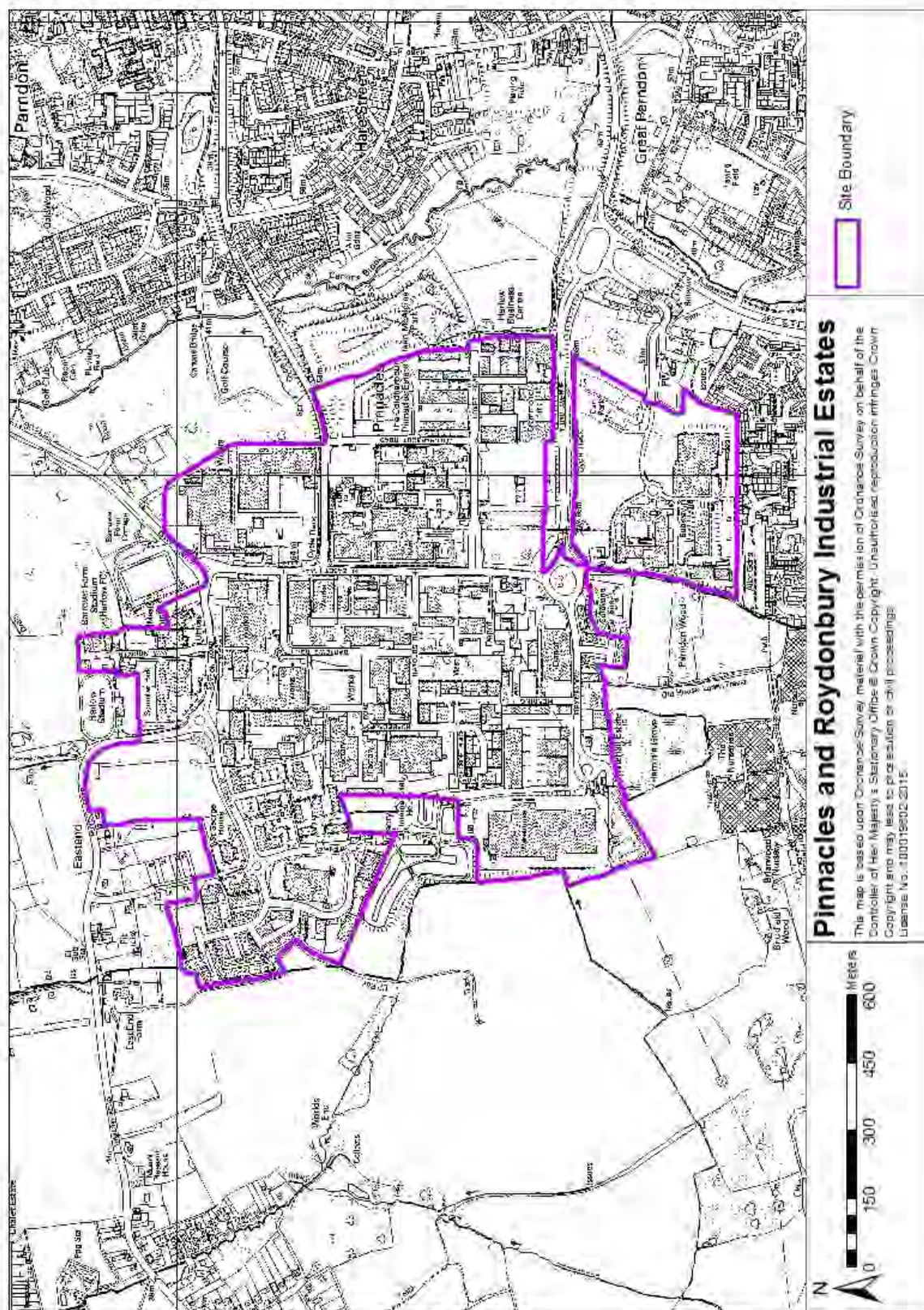


Map 43 Langston Road/Oakwood Hill, Loughton, Epping Forest



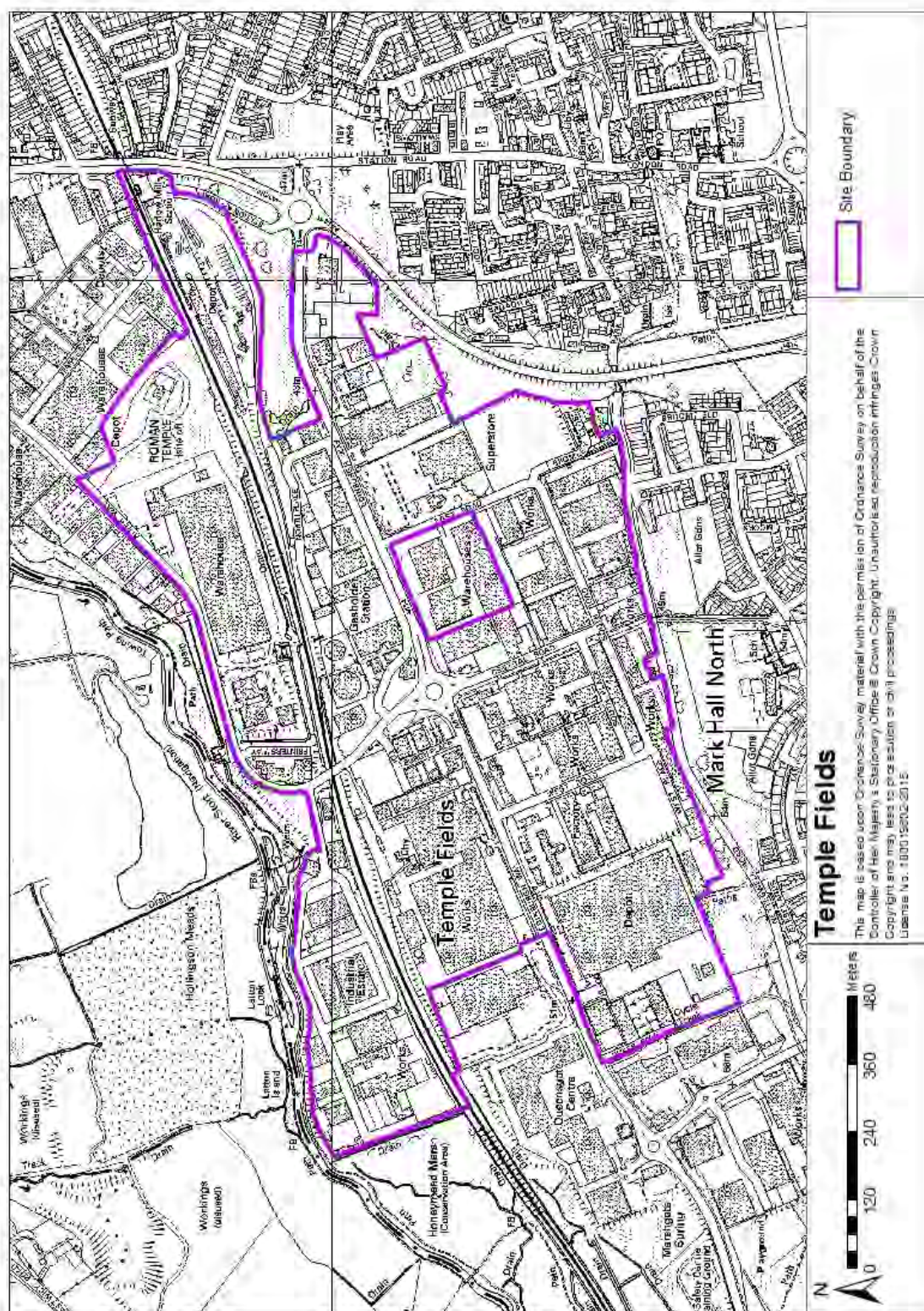
Pinnacles and Roydonbury Industrial Estates, Harlow

Map 44 Pinnacles Roydonbury Industrial Estates



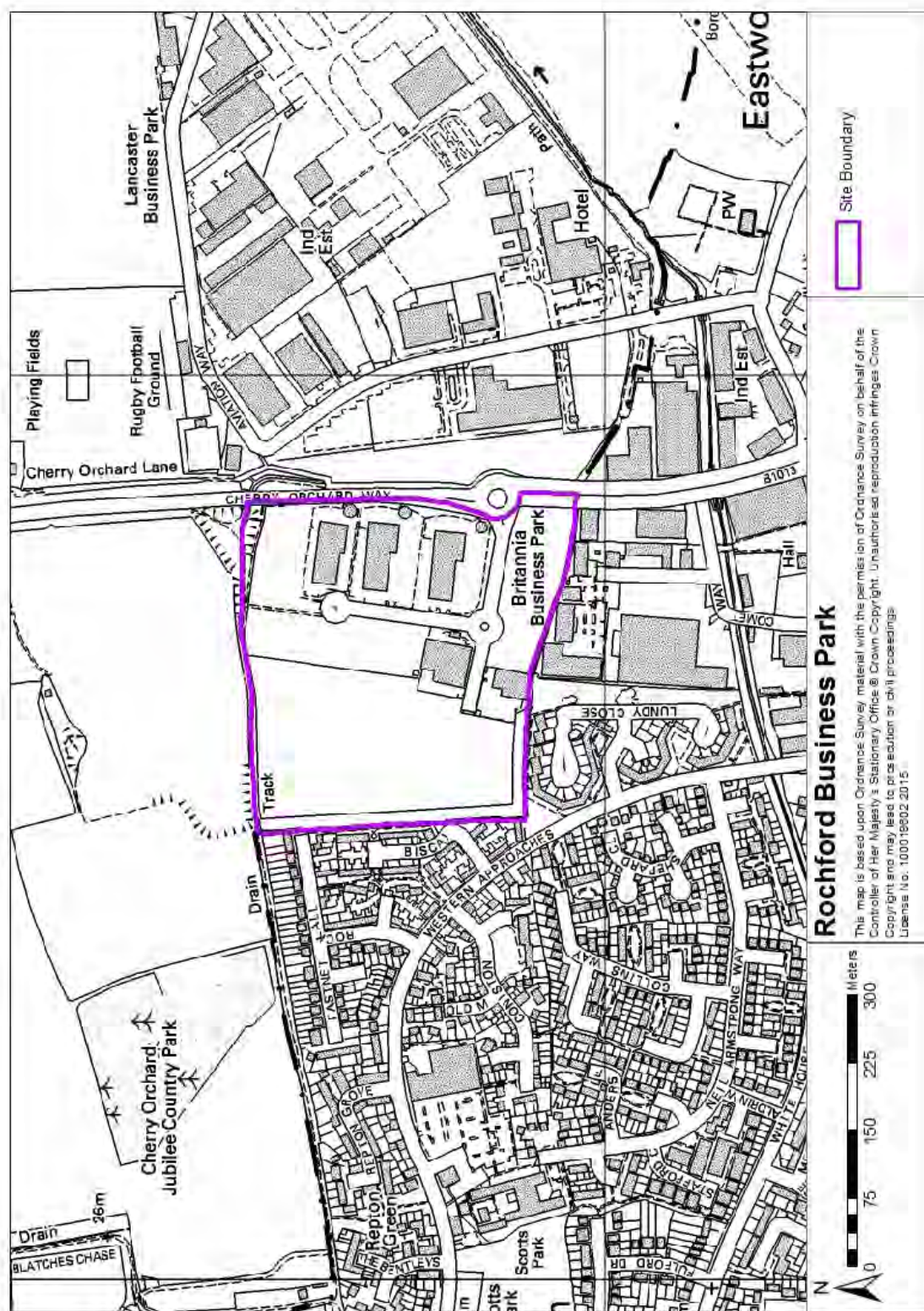
Temple Fields, Harlow

Map 45 Temple Fields



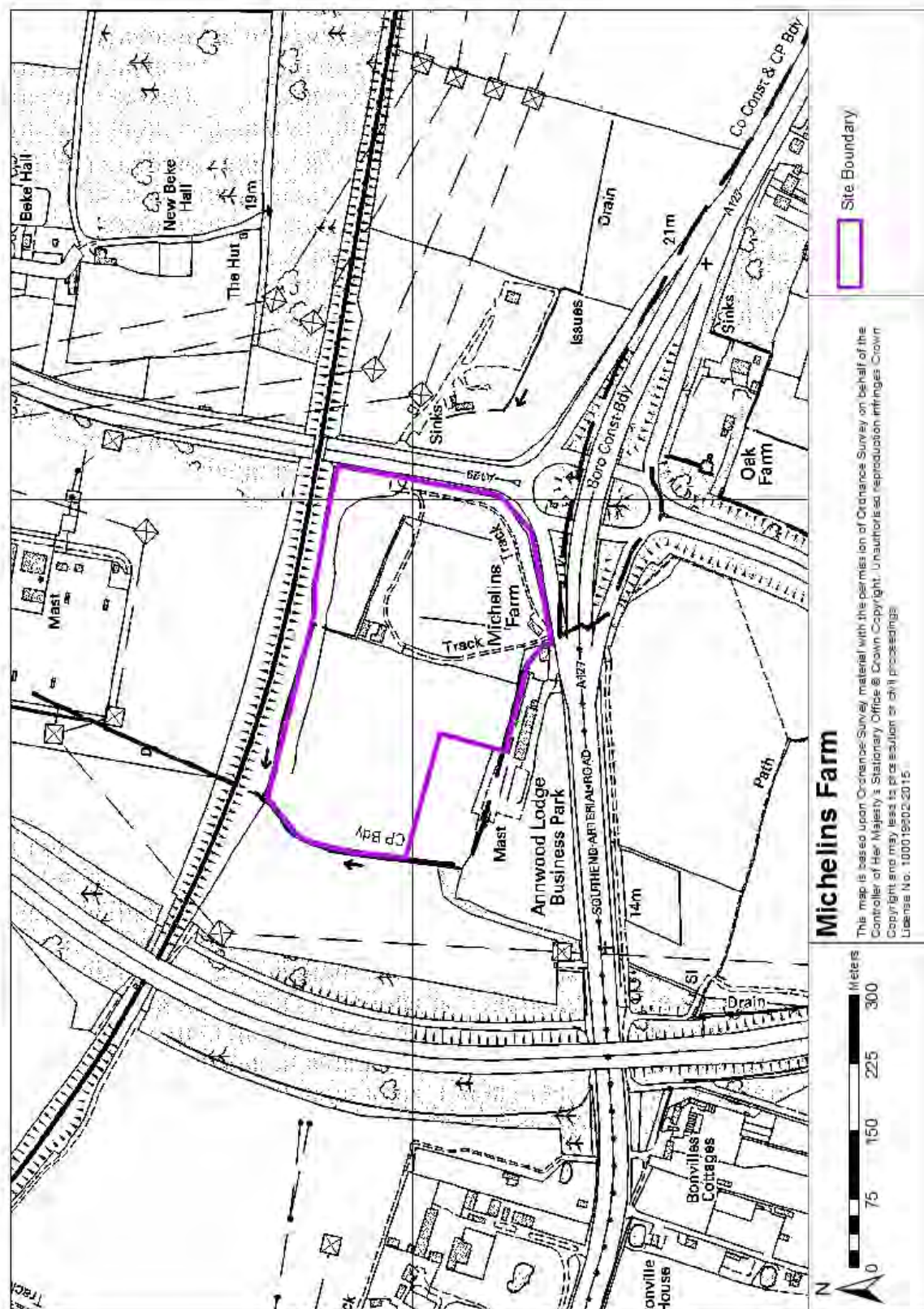
Rochford Business Park, Rochford

Map 46 Rochford Business Park

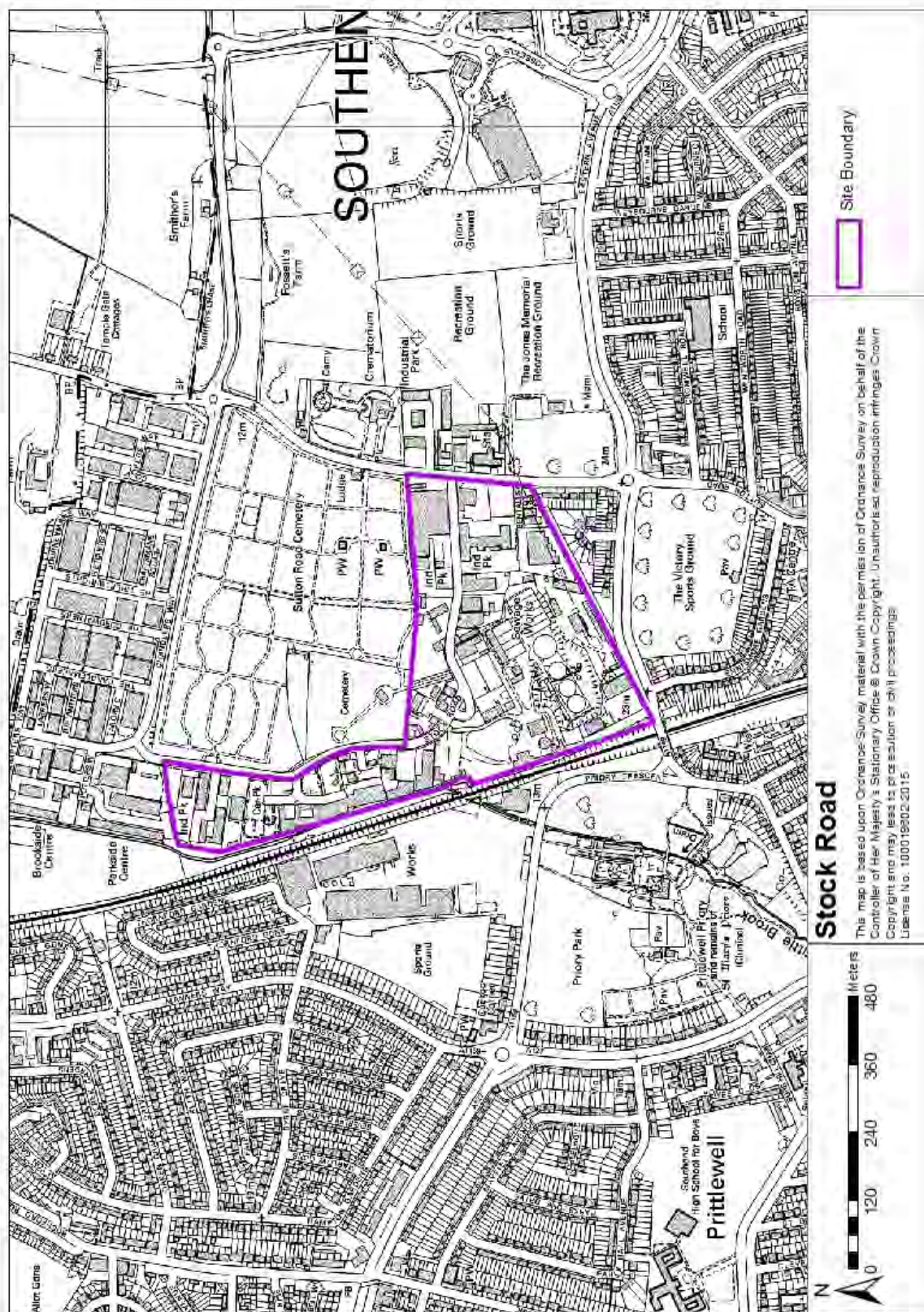


Michelins Farm, Rochford

Map 47 Michelins Farm

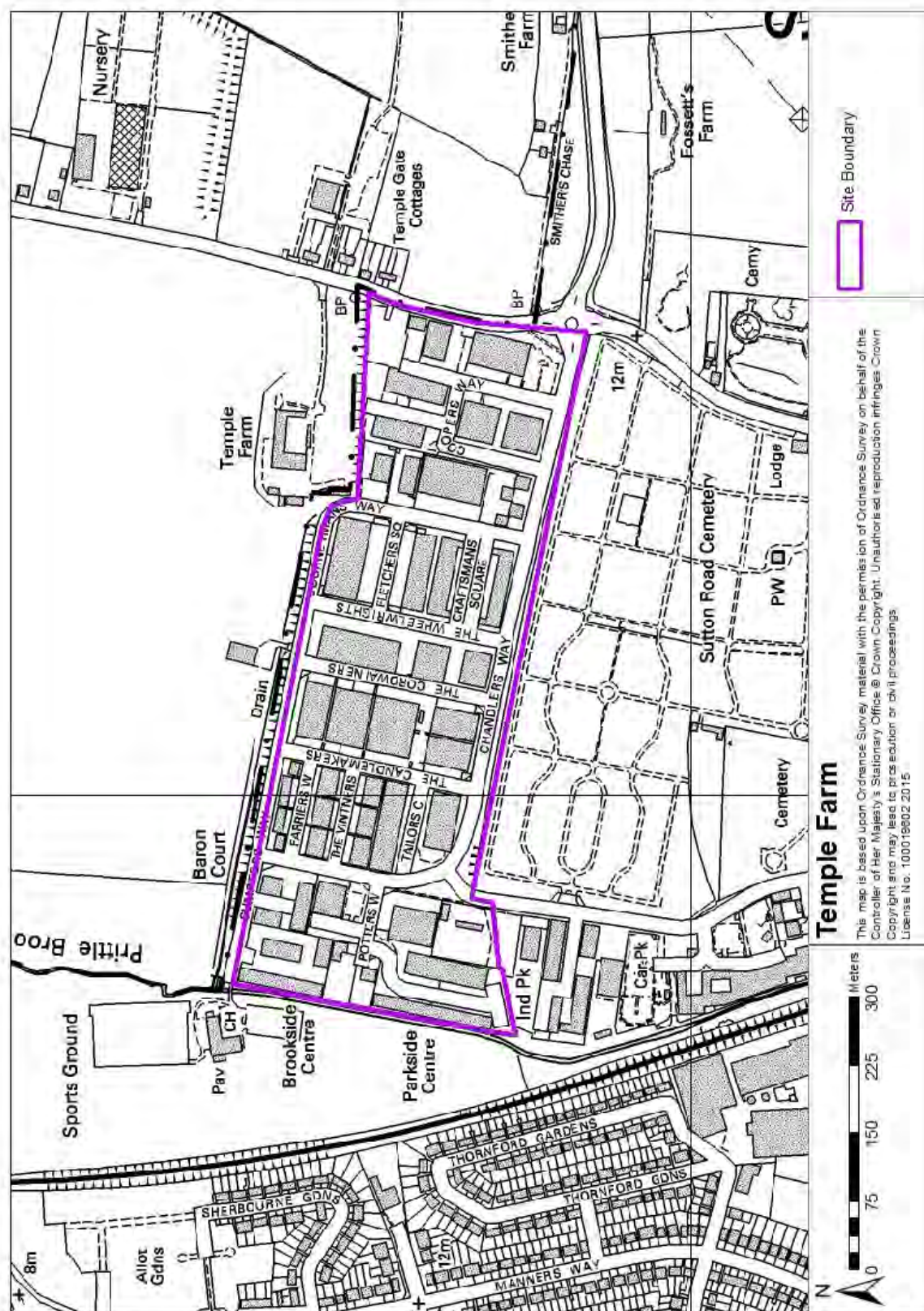


Map 48 Stock Road

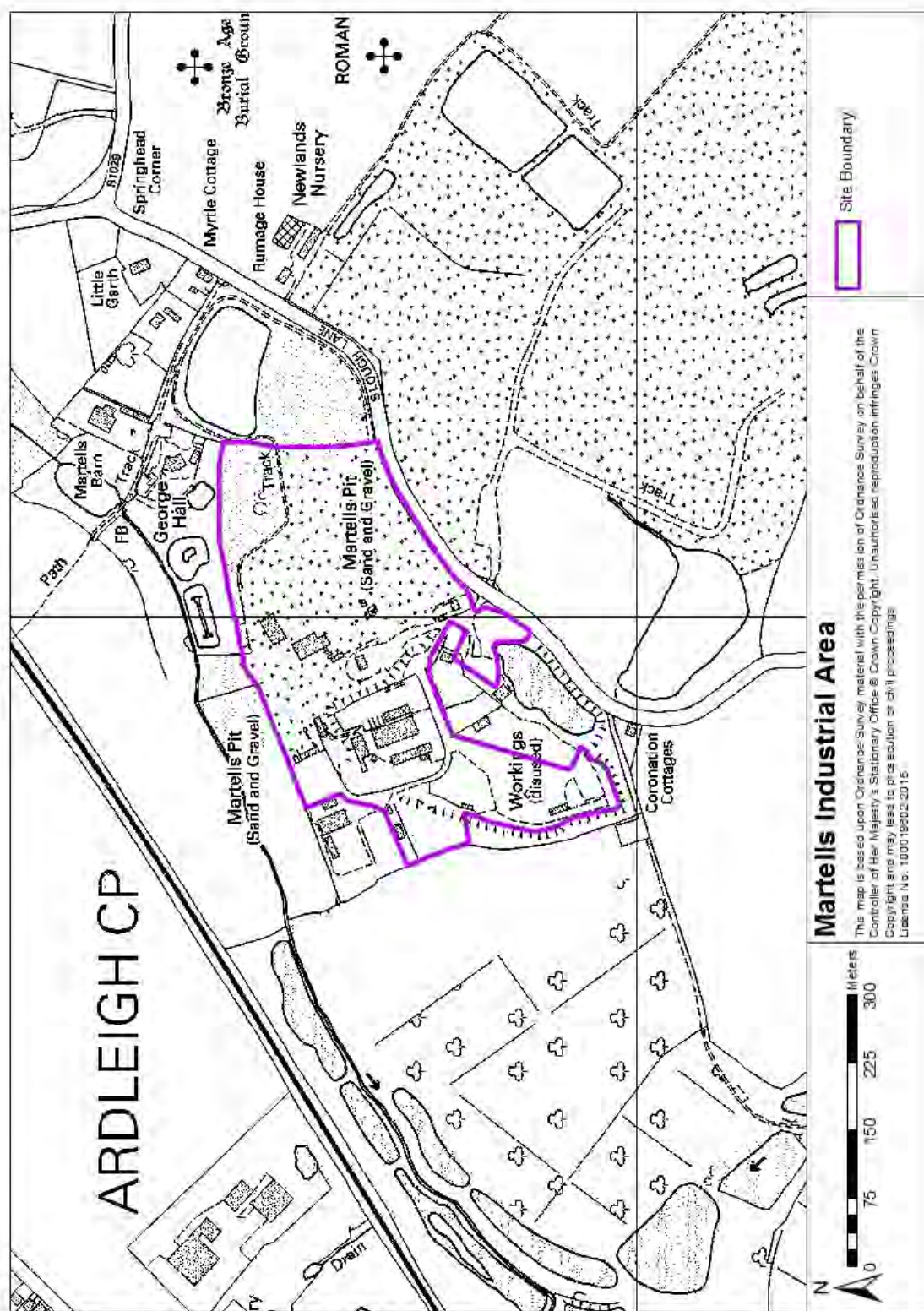


Temple Farm, Southend-on-Sea

Map 49 Temple Farm

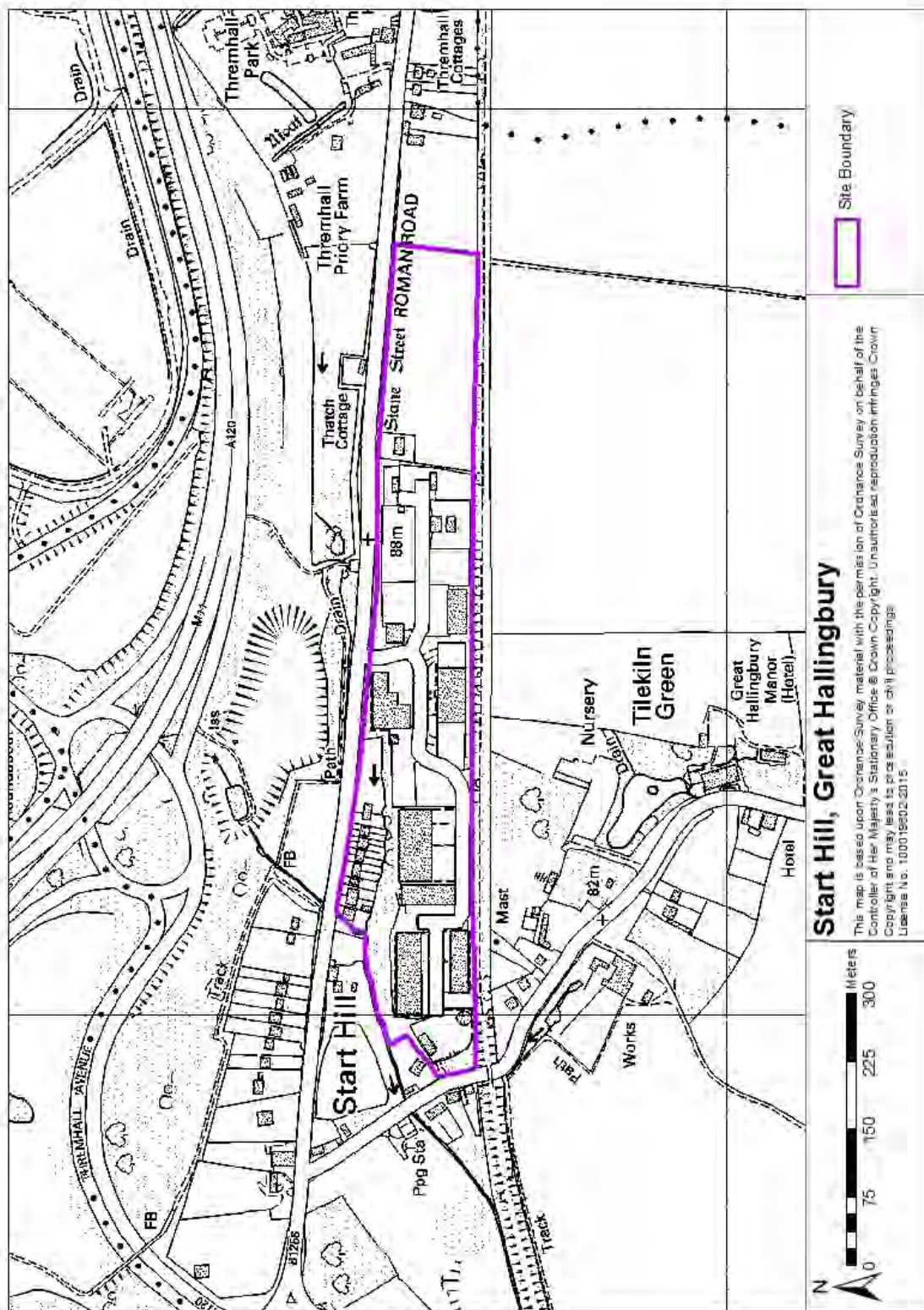


Map 50 Martells Industrial Area



Start Hill, Great Hallingbury, Uttlesford

Map 51 Start Hill, Great Hallingbury



Appendix F - Glossary

F Appendix F - Glossary

Word/Phrase	Description/Definition
Agricultural Waste:	Waste that is specifically generated by agricultural activities. This includes empty pesticide containers; old silage wrap; used tyres and even surplus milk.
Amenity:	A positive element or elements that contribute to the overall character or enjoyment of an area.
Anaerobic Digestion (AD):	Biological treatment of biodegradable organic waste in the absence of oxygen. Results in the generation of biogas (rich in methane and can be used to generate heat and/or electricity), fibre (can potentially be used as a soil conditioner) and liquor (can potentially be used as a liquid fertiliser).
Area(s) of Search:	See Section 10. Areas of Search establish where, in principle, the Waste Planning Authorities could support the development of waste facilities but are not essential to the delivery of waste capacity to meet the needs of the Plan area.
Biological Waste:	Waste that is capable of breaking down naturally, such as food and garden waste.
Brownfield Land/Sites:	Abandoned or underused industrial and commercial facilities available for re-use.
Circular Economy	The circular economy (being an alternative to a traditional linear economy of make, use and dispose) is one in which resources are kept in use for as long as possible, extracting the maximum value from them whilst in use, and then recovering and regenerating products and materials at the end of each service life.
Climate Change:	Changes in climate resulting from human activities. More specifically, human activities which have resulted in an increase in greenhouse gases in the atmosphere (e.g. emissions from transport and industry), global changes to land surface, such as from deforestation, and an increase in atmospheric concentrations of aerosols, all of which have resulted in spatially distinct climatic changes (e.g. higher average temperatures, lower rainfall rates).
Healthcare Waste:	Mainly arises from medical, dental, veterinary, pharmaceutical or similar practice, but also arises from residential or nursing homes and private households. Unless the waste is rendered safe, it may prove hazardous to any person encountering it.
Combined Heat and Power (CHP):	The use of a heat engine or power station to simultaneously generate both electricity and useful heat. Conventional power plants emit the heat created as a by-product of electricity generation into the natural

Word/Phrase	Description/Definition
	environment. In contrast, CHP captures the heat for use in domestic or industrial heating.
Commercial and Industrial waste (C&I):	Waste arising from wholesalers, catering establishments, shops and offices (in both the public and private sector), factories and industrial plants. It can include a number of materials such as food, paper, card, wood, glass, plastics and metals.
Composting:	Break down of biodegradable waste using oxygen, leaving a residue (compost), water and carbon dioxide.
Construction, Demolition and Excavation Waste (CD&E):	Arises from the construction, repair, maintenance and demolition of buildings and structures and the excavation of sites. It mostly includes brick, concrete, hard core, subsoil and topsoil, but can include timber, metal, plastics and occasionally special hazardous waste materials.
Controlled Wastes:	Household, industrial and commercial wastes, the deposition, recovery and disposal of which are subject to the licensing system established through the Environmental Protection Act (1990). There are exemptions from the requirement for a licence (e.g. individuals depositing personal garden waste), and these are detailed in the Controlled Waste Regulations (1992).
Core Strategy:	The central strategy of a Local Plan, setting out the key drivers and policy approaches relevant to the local area.
Development Management:	The process whereby a Local Planning Authority receives and considers the merits of a planning application and whether it should be given permission having regard to the development plan and all other material considerations.
Development Plan Document (DPD):	Development Plan Documents are prepared by local planning authorities and outline the key development goals of the local development framework. They include the core strategy, site-specific allocations of land and, where needed, area action plans. There will also be an adopted proposals map which illustrates the spatial extent of policies that must be prepared and maintained to accompany all DPDs.
Employment Land:	Land allocated by local planning authorities for industrial and business use.
Energy from Waste Facility:	A facility which burns waste material at high temperatures, directly releasing the energy in the waste. The heat energy from the combustion can be recycled and use to heat buildings such as factories. Alternatively, electricity or a combustible fuel, such as methane or ethanol, can be produced from the combustion process.
Examination in Public:	The method of considering public views on a local development plan document, or proposed changes to it.

Word/Phrase	Description/Definition
Gasification and Pyrolysis Facility:	Treatment of organic waste at high temperatures in conditions of limited or no oxygen to produce a mixture of gaseous and liquid fuels and a solid inert residue (mainly carbon).
Greenhouse Gas:	Gases that contribute to climate change. Naturally occurring examples include water vapour, carbon dioxide, methane, nitrous oxide and ozone. Some human activities increase these gases, including fossil fuel combustion within motor vehicles and some power stations.
Hazardous Waste:	Waste that poses substantial or potential threats to public health or the environment (when improperly treated, stored, transported or disposed). This can be due to quantity, concentration, or characteristics of the waste. Hazardous waste possesses one or more hazardous properties, as detailed in the Hazardous Waste Directive, for example explosive, oxidising, highly flammable, irritant etc.
Inert Waste:	Inert waste is that which is neither chemically or biologically reactive and will not decompose (e.g. sand and concrete).
Inspector's Report:	A report issued by a Planning Inspector regarding the planning issues debated at the independent examination of a development plan or a planning inquiry.
Integrated Waste Management Facility (IWMF):	A facility that incorporates a number of individual elements that work together to effectively process waste. For example, an IWMF could include recycling, paper pulping and energy from waste capabilities.
In-Vessel Composting:	Composting that is undertaken in enclosed reactors (e.g. metal tanks or concrete bunkers) to allow for a greater degree of control of the process, such as through regulating airflow and temperature.
Issues and Options:	The first "pre-submission" consultation stage on Development Plan Documents with the objective of gaining public consensus over proposals prior to submission to government for independent examination.
Joint Municipal Waste Management Strategy:	These strategies set out a strategic framework for the management of municipal waste, jointly developed and subscribed to by the waste collection authorities and waste disposal authority in an area.
Landfill:	A landfill is a disposal method for waste. These are sites where local authorities and industry can take waste to be buried and compacted with other wastes. The Environment Agency licenses and regulates landfill sites to ensure that their impact on the environment is minimised. These can be specifically for inert waste, non-hazardous waste and/or hazardous waste.
Landraise:	Also generically referred to as landfill, refers to waste disposal that occurs above pre-existing ground levels.

Word/Phrase	Description/Definition
Local Plan (or Local Development Framework (LDF)):	The Local Plan provides the essential framework for planning in the local authority's area.
Local Enterprise Partnership (LEP):	Local enterprise partnerships are partnerships between local authorities and businesses. They decide what the priorities should be for investment in roads, buildings and facilities in the area. The plan area is covered within the South East LEP comprising Kent, Medway, Southend, Thurrock and Essex.
Local Authority Collected Waste (LACW):	Includes household waste and any other waste collected by waste collection authorities (or their agents) such as municipal parks and garden waste, commercial or industrial waste and waste resulting from the clearance of fly tipped material. It can include a number of materials such as food, paper, card, wood, glass, plastics and metals.
Low Level Radioactive Waste (LLW):	A by-product of certain industrial and commercial processes, such as contaminated equipment and protective clothing from the nuclear industry, research and medicine; soil and rubble from the decontamination and decommissioning of nuclear sites; and residues from industrial processing of some minerals.
Materials Recycling Facility (MRF):	A facility for sorting, separating and packing or baling recyclable materials into individual materials prior to reprocessors who wash and prepare the materials for manufacturing into new recycled products. MRFs can also be referred to as materials recovery or reclamation facilities.
Mechanical Biological Treatment Facility (MBT):	A facility containing a hybrid treatment process that uses both mechanical and biological techniques to sort and separate mixed waste.
National Planning Policy Framework (NPPF):	The National Planning Policy for Waste was published on 16th October 2014, and sets out detailed waste planning policies, to achieve this aim. This encompasses the Government's ambition is to work towards a more sustainable and efficient approach to resource use and management.
National Planning Practice Guidance for Waste:	The National Planning Practice Guidance for Waste provides further information in support of the implementation of the waste planning policy. Contains various documents surrounding the preparation, identification, implementation, and management of local waste plans.
Net Self-Sufficiency:	A principle resulting in the provision of waste management capacity equivalent to both the amount of waste arising and requiring management in the Plan area, whilst respecting this waste will travel across administrative boundaries. For the purposes of the Waste Local Plan, the principle will not be applicable to all waste types, specifically excluding hazardous and radioactive waste.

Word/Phrase	Description/Definition
Non-Hazardous Landfill:	A landfill which can accept non-inert (biodegradable) wastes e.g. municipal and commercial and Industrial waste and other non-hazardous wastes (including inert), that meet the relevant waste acceptance criteria.
Non-Inert Waste:	Waste that is potentially biodegradable or may undergo significant physical, chemical or biological change once landfilled.
Open Windrow Composting (OWC):	Open air composting whereby the organic waste is shredded into fine particles before being piled into open linear heaps known as 'windrows', which are approximately three metres high and four to six metres across.
Planning Condition:	Condition attached to a planning permission setting out requirements under which the development can take place. For example, the use of specific methods of construction, or hours of operation at a development.
Preferred Approach:	The second "pre-submission" consultation stage on Development Plan Documents with the objective of gaining public consensus over proposals prior to submission to government for independent examination.
Previously Developed Land:	Previously developed land is that which is or was occupied by a permanent structure (excluding agricultural or forestry buildings), and associated fixed-surface infrastructure.
Residual Waste:	'Residual Waste' is waste that has undergone treatment of some kind, with treatment being that as defined under the European Landfill Directive 1999/31/EC. The Directive defines "treatment" as "physical thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery".
Strategic Environmental Assessment:	An environmental assessment of certain plans and programmes, including those in the field of planning and land use, which complies with the EU Directive 2001/42/EC.
Sustainable Community Strategy:	Community Strategies are 10-year vision statements for a given area, produced by the Local Strategy Partnership and required by national government. Local Area Agreement targets have to reflect the vision, priorities and challenges set out in Sustainable Community Strategies.
Sustainability Appraisal:	An appraisal of the economic, environmental and social effects of a plan from the outset of the preparation process to allow decisions to be made that accord with sustainable development.
Sustainable Transport:	Transport that has a reduced impact on the natural environment, as compared with road-based transport. In the context of waste transport, this includes rail and water-based transport. More generally, sustainable transport includes walking, cycling and vehicle sharing.
Tonnes Per Annum (tpa):	The number of tonnes accepted, processed, disposed of, or otherwise handled at waste management sites. Due to the volume of waste arising in the Plan area this may be referred to as 'Thousand tonnes per annum' (ktpa) or 'million tonnes per annum' (mtpa).

Word/Phrase	Description/Definition
Townscape:	The general appearance of a built-up area, for example a street, a town or city.
Transfer Station:	A transfer station is a facility where waste materials are transferred from small vehicles to large trucks to be bulked up for efficient transport to treatment or disposal sites over a large distance.
Waste Local Plan (WLP):	Waste Local Plans are produced by Waste Planning Authorities and detail a long-term plan for the management of the waste within that authority for a specified period.
Waste Hierarchy:	This concept suggests that the most effective environmental option is to reduce the amount of waste generated (reduction); where further reduction is not practicable, products and materials can sometimes be used again, either for the same or different purpose (reuse); failing that, value should be recovered from waste (through recycling, composting or energy recovery from waste); only if none of the above offer an appropriate solution should waste be disposed of (e.g. to landfill).
Waste Water:	Water that has been adversely affected in quality by human activities. Comprises liquid waste discharged by domestic residences, commercial properties, industry, and agricultural activities and can encompass a wide range of potential contaminants and concentrations.
Water Bodies:	Collective term for water within watercourses (rivers, ditches, drains), groundwater (held in geological strata such as chalk) and surface water (ponds, lakes, coastal waters).

Appendix G - Roles and Responsibilities

G Appendix G - Roles and Responsibilities

Within Essex and Southend-on-Sea there are a number of organisations that are involved in waste planning, management, and regulation. The different roles of the organisations and their responsibilities are briefly outlined below.

1. **Waste Planning:** Essex County Council and Southend-on-Sea Borough Council, as the waste planning authorities (WPA) for Essex, have specific responsibility for strategic and local waste land-use planning policy. This includes the preparation of local plans. They are also responsible for the determination of planning applications for the management of waste and for ensuring compliance with planning permissions.
2. **Waste Collection:** This is the responsibility of the Districts, Boroughs and Cities Councils, the waste collection authorities (WCA), who collect the municipal waste for their areas. Some Districts/Boroughs/Cities also collect some C&I waste.
3. **Waste Disposal:** Essex County Council and Southend-on-Sea Borough Council, as the waste disposal authority (WDA), is responsible for co-ordinating and managing the disposal of municipal waste, which includes household, some commercial or industrial waste, and waste deposited at Household Waste Recycling Sites. A Municipal Waste Management Strategy for Essex and Southend-on-Sea is prepared jointly with the WCA and the Environment Agency.
4. **Waste Recycling:** The WCA and WDA are responsible for the recycling of household waste. C&I waste recycling and CDEW recycling is mainly carried out by the private sector.
5. **Waste Management Facilities:** The private sector, the waste industry, provides facilities for waste transfer, recycling, treatment and disposal. Most landfill sites are privately owned. Contracts are entered into with the WDA for the treatment and disposal of municipal waste and with business for the collection and disposal of their wastes.
6. **Waste Regulation:** This is undertaken by the Environment Agency (EA) which aims to prevent or minimise the effects of pollution on the environment. It issues Environmental Permits (previously Waste Management Licences and Pollution Prevention and Control permits) and is responsible for the enforcement of any conditions it imposes.

Appendix H - Policy Schedule

H Appendix H - Policy Schedule

Policy 1

Need for Waste Management Facilities

In order to meet the future needs of the Plan area, waste development will be permitted to meet the shortfall in capacity of:

- a. Up to 218,000 tones per annum by 2031/32 of biological treatment for non-hazardous organic waste;*
- b. Up to 1.95 million tonnes per annum by 2031/32 for the management of inert waste;*
- c. Up to 200,000 tonnes per annum by 2031/32 for the further management of non-hazardous residual waste; and*
- d. Up to 50,250 tonnes per annum by 2031/32 for the management of hazardous waste.*

Policy 2

Safeguarding Waste Management Sites and Infrastructure

Waste Consultation Areas

Where non-waste development is proposed within 250m of safeguarded sites, or within 400m of a Water Recycling Centre, the relevant Local Planning Authority is required to consult the Waste Planning Authority on the proposed non-waste development (except for those developments defined as 'Excluded' in 'Appendix C - Development Excluded from Safeguarding Provisions').

Proposals which are considered to have the potential to adversely impact on the operation of a safeguarded waste site or infrastructure, including the site allocations within this Plan, are unlikely to be opposed where:

- a. a temporary permission for a waste use has expired, or the waste management use has otherwise ceased and the site or infrastructure is considered unsuitable for a subsequent waste use; or*
- b. redevelopment of the waste site or loss of the waste infrastructure would form part of a strategy or scheme that has wider environmental, social and/or economic benefits that outweigh the retention of the site or the infrastructure for the waste use, and alternative provision is made for the displaced waste use; or*
- c. a suitable replacement site or infrastructure has otherwise been identified and permitted.*

Policy 3

Strategic Site Allocations

Waste management development at the following locations (see Strategic Site Allocations Map) will be permitted where proposals take into account the requirements identified in the relevant development principles:

1. *For biological waste management at:*
 - *Basildon Water Recycling Centre, Basildon (W3);*
 - *Bellhouse Landfill Site, Colchester (W29);*
 - *Courtauld Road, Basildon (W20); and*
 - *Rivenhall, Braintree (IWMF2).*
2. *For inert waste recycling at:*
 - *Blackley Quarry, Gt Leighs, Chelmsford (L(i)10R);*
 - *Crumps Farm, Gt and Lt Canfield, Uttlesford (W32);*
 - *Elsenham, Uttlesford (W8);*
 - *Morses Lane, Brightlingsea, Tendring (W31);*
 - *Newport Quarry, Uttlesford (L(i)17R).*
 - *Sandon East, Chelmsford (W7);*
 - *Slough Farm, Ardleigh, Tendring (L(n)1R); and*
 - *Sunnymead, Elmstead & Heath Farms, Tendring (W36).*
3. *For residual non hazardous waste management at:*
 - *Rivenhall, Braintree (IWMF2).*
4. *For inert landfill at:*
 - *Blackley Quarry, Gt Leighs, Chelmsford (L(i)10R);*
 - *Bellhouse Landfill Site, Colchester (L(n)5);*
 - *Little Bullocks Farm, Gt and Lt Canfield, Uttlesford (L(n)7R);*
 - *Dollymans Farm, Basildon/Rochford (L(i)16)*
 - *Fingringhoe Quarry, Colchester (L(i)15);*
 - *Newport Quarry, Uttlesford (L(i)17R);*
 - *Sandon, Chelmsford (L(i)6);*
 - *Slough Farm, Ardleigh, Tendring (L(n)1R); and*
 - *Sunnymead, Elmstead & Heath Farms, Tendring (L(i)5).*
5. *For hazardous landfill at:*
 - *Little Bullocks Farm, Gt and Lt Canfield, Uttlesford (L(n)8R).*

Policy 4

Areas of Search

Proposals for waste management development in the following Areas of Search, as defined on the Policies Map, will be supported in principle provided that the design and use of the facility is compatible with existing uses in the employment area.

Proposals will be considered against other relevant policies of this Plan and the wider Development Plan.

Table 22

Area of Search	District	Area of Search	District
<i>Burnt Mills Central</i>	<i>Basildon</i>	<i>Westways</i>	<i>Chelmsford</i>
<i>Festival Business Park</i>	<i>Basildon</i>	<i>Widford Industrial Estate</i>	<i>Chelmsford</i>
<i>Pipps Hill</i>	<i>Basildon</i>	<i>Land off Axial Way, Myland</i>	<i>Colchester</i>
<i>Southfield Business Park</i>	<i>Basildon</i>	<i>Severalls Industry Park</i>	<i>Colchester</i>
<i>Bluebridge Industrial Estate</i>	<i>Braintree</i>	<i>Tollgate, Stanway</i>	<i>Colchester</i>
<i>Earls Colne Airfield</i>	<i>Braintree</i>	<i>Whitehall Road Industrial Estate</i>	<i>Colchester</i>
<i>Eastways-Crittall Road, Waterside Park</i>	<i>Braintree</i>	<i>Langston Road/Oakwood Hill, Loughton</i>	<i>Epping Forest</i>
<i>Freebournes Industrial Estate</i>	<i>Braintree</i>	<i>Pinnacles and Roydenbury Industrial Estate</i>	<i>Harlow</i>
<i>Skyline 120</i>	<i>Braintree</i>	<i>Temple Fields</i>	<i>Harlow</i>
<i>Springwood Industrial Estate</i>	<i>Braintree</i>	<i>Rochford Business Park</i>	<i>Rochford</i>
<i>Sturmer Industrial Estate Area 1</i>	<i>Braintree</i>	<i>Michelins Farm</i>	<i>Rochford</i>
<i>Childerditch Industrial Estate</i>	<i>Brentwood</i>	<i>Stock Road</i>	<i>Southend-on-Sea</i>
<i>West Horndon</i>	<i>Brentwood</i>	<i>Temple Farm</i>	<i>Southend-on-Sea</i>
<i>Drovers Way</i>	<i>Chelmsford</i>	<i>Martell's Farm Industrial Area</i>	<i>Tendring</i>

Area of Search	District	Area of Search	District
<i>Dukes Park Industrial Estate</i>	<i>Chelmsford</i>	<i>Springfield Business Park</i>	<i>Chelmsford</i>
<i>Start Hill, Great Hallingbury</i>	<i>Uttlesford</i>		

Policy 5

Enclosed Waste Facilities on unallocated sites or outside Areas of Search

Proposals for new enclosed waste management facilities will be permitted where:

- 1. the waste site allocations and the Areas of Search in this Plan are shown to be unsuitable or unavailable for the proposed development;*
- 2. although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea; and*
- 3. it is demonstrated that the site is at least as suitable for such development as Site Allocations or Areas of Search, with reference to the overall spatial strategy and site assessment methodology associated with this Plan.*

In addition, proposals should be located at or in:

- a. employment areas that are existing or allocated in a Local Plan for general industry (B2) and storage and distribution (B8); or*
- b. existing permitted waste management sites or co-located with other waste management development; or*
- c. the same site or co-located in close proximity to where the waste arises; or*
- d. the curtilages of Waste Water Treatment Works (in the case of biological waste); or,*
- e. areas of Previously Developed Land; or*
- f. redundant agricultural or forestry buildings and their curtilages (in the case of green waste and/or biological waste).*

Proposals for energy recovery facilities with combined heat and power are expected to demonstrate that the heat produced will be supplied to a district heat network or direct to commercial or industrial users.

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

Policy 6

Open Waste Facilities on unallocated sites or outside Areas of Search

Proposals for new open waste management facilities will be permitted where:

- 1. the waste site allocations and the Areas of Search in this Plan are shown to be unsuitable or unavailable for the proposed development;*
- 2. although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea; and*
- 3. it is demonstrated that the site is at least as suitable for such development as Site Allocations or Areas of Search, with reference to the overall spatial strategy and site assessment methodology associated with this Plan.*

In addition, proposals should be located at or in:

- a. redundant farm land (in the case of green waste and/or biological waste); or*
- b. demolition and construction sites, where the inert waste materials are to be used on the construction project on that site; or*
- c. existing permitted waste management sites or co-located with other waste management development; or*
- d. the curtilages of Waste Water Treatment Works (in the case of biological waste); or*
- e. mineral and landfill sites where waste material is used in conjunction with restoration, or proposed waste operations are temporary and linked to the completion of the mineral/landfill operation; or*
- f. areas of Previously Developed Land; or*
- g. employment areas that are existing or allocated in a Local Plan for general industry (B2) and storage and distribution (B8).*

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

Policy 7

Radioactive Waste Management at Bradwell-on-Sea

Proposals for facilities for the management of nuclear radioactive Intermediate Level Waste (ILW), Low Level Waste (LLW) or Very Low Level Waste (VLLW) will be supported within the Nuclear Licensed Areas at Bradwell-on-Sea, where:

- a. the proposals are consistent with the national strategy for managing ILW, LLW and VLLW as well as the decommissioning plans for the Bradwell-on-Sea power station;*
- b. the proposals are informed by the outcome of economic and environmental assessments that support and justify the management of radioactive waste at this location, and;*
- c. the proposals would not cause any unacceptable adverse impacts to the environment, human health or local amenity.*

Policy 8

Non-Nuclear Very Low-Level and Low-Level Radioactive Waste

Proposals for the management of non-nuclear low-level and very low-level radioactive waste will be permitted where:

- a. a requirement to manage waste arising from within Essex and Southend-on-Sea has been identified; and*
- b. the proposed development (including landfill) has been demonstrated to be the most appropriate and acceptable development in relation to the Waste Hierarchy, and;*
- c. the proposal would not cause any unacceptable adverse impacts to the environment, human health or local amenity.*

Policy 9

Waste Disposal Facilities

Proposals for landfill facilities will be permitted where:

- 1. the landfill site allocations in this Plan are shown to be unsuitable or unavailable for the proposed development;*
- 2. Although not exclusively, a need for the capacity of the proposed development has been demonstrated to manage waste arising from within the administrative areas of Essex and Southend-on-Sea;*

3. *it is demonstrated that the site is at least as suitable for such development as the landfill site allocations, with reference to the site assessment methodology associated with this Plan; and*
4. *that the proposed landfill has been demonstrated to be the most appropriate and acceptable development in relation to the Waste Hierarchy.*

In addition, preference will be given to proposals:

- a. *for the restoration of a preferred or reserve site in the Minerals Local Plan; or*
- b. *for an extension of time to complete the permitted restoration within the boundary of an existing landfill site.*

Proposals for non-inert landfill are required to demonstrate the capture of landfill gas for energy generation by the most efficient means.

Any proposals that come forward on land use types not identified above will be assessed on their merits, based on the policies in this Plan.

Policy 10

Development Management Criteria

Proposals for waste management development will be permitted where it can be demonstrated that the development would not have an unacceptable impact (including cumulative impact in combination with other existing or permitted development) on:

- a. *local amenity (including noise levels, odour, air quality, dust, litter, light pollution and vibration);*
- b. *water resources with particular regard to:*
 - *the quality of water within water bodies:*
 - *Preventing the deterioration of their existing status; or*
 - *Failure to achieve the objective of 'good status' and*
 - *the quantity of water for resource purposes within water bodies.*
- c. *the capacity of existing drainage systems;*
- d. *the best and most versatile agricultural land;*
- e. *farming, horticulture and forestry;*

- f. aircraft safety due to the risk of bird strike and/or building height and position;*
- g. the safety and capacity of the road and other transport networks;*
- h. the appearance, quality and character of the landscape, countryside and visual environment and any local features that contribute to its local distinctiveness;*
- i. the openness and purpose of the Metropolitan Green Belt;*
- j. Public Open Space, the definitive Public Rights of Way network and outdoor recreation facilities;*
- k. land stability;*
- l. the natural and geological environment (including internationally, nationally or locally designated sites and irreplaceable habitats);*
- m. the historic environment including heritage and archaeological assets and their settings; and*
- n. the character and quality of the area, in which the development is situated, through poor design.*

Where appropriate, enhancement of the environment would be sought, including, but not exclusively, the enhancement of the Public Rights of Way network, creation of recreation opportunities and enhancement of the natural, historic and built environment and surrounding landscape.

Policy 11

Mitigating and Adapting to Climate Change

Proposals for waste management development, through their construction and operation, are required to minimise their potential contribution to climate change by reducing greenhouse gas emissions, incorporating energy and water efficient design measures and being adaptable to future climatic conditions.

1. *Proposals for waste management development will:*
 - a. *demonstrate how the location, design (including associated buildings) and transportation related to the development will limit greenhouse gas emissions;*
 - b. *support opportunities for decentralised and renewable or low-carbon energy supply, subject to compliance with other policies in the Development Framework;*
 - c. *demonstrate the use of sustainable drainage systems, water harvesting from impermeable surfaces and layouts that accommodate waste water recycling; and*
 - d. *incorporate proposals for sustainable travel including travel plans where appropriate.*
2. *Proposals for waste management development will only be permitted where:*
 - a. *there would not be an unacceptable risk of flooding on site or elsewhere as a result of impediment to the flow of storage or surface water, as demonstrated by a Flood Risk Assessment, where required by the National Planning Policy Framework.*
 - b. *existing and proposed flood defences are protected and there is no interference with the ability of responsible bodies to carry out flood defence works and maintenance where applicable*
 - c. *there would not be an unacceptable risk to the quantity and quality of surface and ground waters, or impediment to groundwater flow.*
3. *Proposals which are capable of directly producing energy or a fuel from waste should, where reasonably practicable, demonstrate that:*
 - a. *excess heat can be supplied locally to a district heat network or directed to commercial or industrial users of heat;*
 - b. *for anaerobic digestion proposals there is an ability to inject refined gas produced as part of the process into the gas pipeline network or to be stored for use as a fuel;*
 - c. *for advanced thermal treatment there is an ability to convert syngas for use as a fuel;*
 - d. *for Mechanical Heat Treatment or Mechanical Biological Treatment, development can supply the heat produced as part of the process to a district heating scheme;*

- e. *for non-hazardous landfill, the landfill gas is captured for the recovery of energy by the most efficient methods and consideration has been given to the ability to connect to a district heat network or for converting recovered gas for injection to the gas pipeline network;*
- f. *where the provision of e. (above) is not feasible or technically practicable, the development shall not preclude the future implementation of such systems.*

Policy 12

Transport and Access

Proposals for waste management development will be permitted where it is demonstrated that the development would not have an unacceptable impact on the efficiency and effective operation of the road network, including safety and capacity, local amenity and the environment.

Proposals for the transportation of waste by rail and/or water will be encouraged subject to other policies in this Plan. Where transportation by road is proposed, this will be permitted where the road network is suitable for use by Heavy Goods Vehicles or can be improved to accommodate such vehicles.

The following hierarchy of preference for transportation will be applied:

- a. *the transport of waste by rail or water;*
- b. *where it is demonstrated that (a) above is not feasible or practicable, access will be required to a suitable existing junction with the main road network (not including secondary distributor roads, estate roads and other routes that provide local access), via a suitable section of existing road, as short as possible, without causing a detrimental impact upon the safety and efficiency of the network; or*
- c. *where it is demonstrated (b) above is not feasible, direct access to the main road network involving the construction of a new access and/or junction where there is no suitable existing access point and/or junction.*
- d. *Where access to the main road network in accordance with (b) and (c) above is not feasible, road access via a suitable existing road prior to gaining access onto the main road network will exceptionally be permitted, having regard to the scale of the development, the proximity of sensitive receptors, the capacity of the road and an assessment of the impact on road safety*

Policy 13

Landraising

Proposals for landraising with waste will only be permitted where it is demonstrated that there are no feasible or practicable alternative means to achieve the proposed development.

Proposals will also demonstrate that:

- a. there is a proven significant benefit that outweighs any harm caused by the proposal;*
- b. the amount of waste materials used to raise the level of the land is the minimum amount of material necessary and is essential for the restoration of the site; and*
- c. in the case of land remediation and other projects, will provide a significant improvement to damaged or degraded land and/or provide a greater environmental or agricultural value than the previous land use.*

Proposals for landraising that are considered to constitute a waste disposal activity, for its own sake, will not be permitted.

Policy 14

Landfill Mining and Reclamation

Proposals for the mining of landfill sites will be permitted where:

- a. the site (without intervention) is demonstrated to be endangering or has the potential to endanger human health or harm the environment;*
- b. removal is required to facilitate major infrastructure projects and it is demonstrated that there are no other locations which are suitable for the infrastructure; and/or*
- c. the waste is demonstrated as suitable for recovery and/or the waste will be captured for fuel/energy as part of the mining operation.*

Proposals will be considered in terms of their impact on the restored use, and whether there would be an unacceptable impact on any development which has taken place since the closure of the old landfill. Proposals should not cause unacceptable adverse impact on the local environment and amenity.