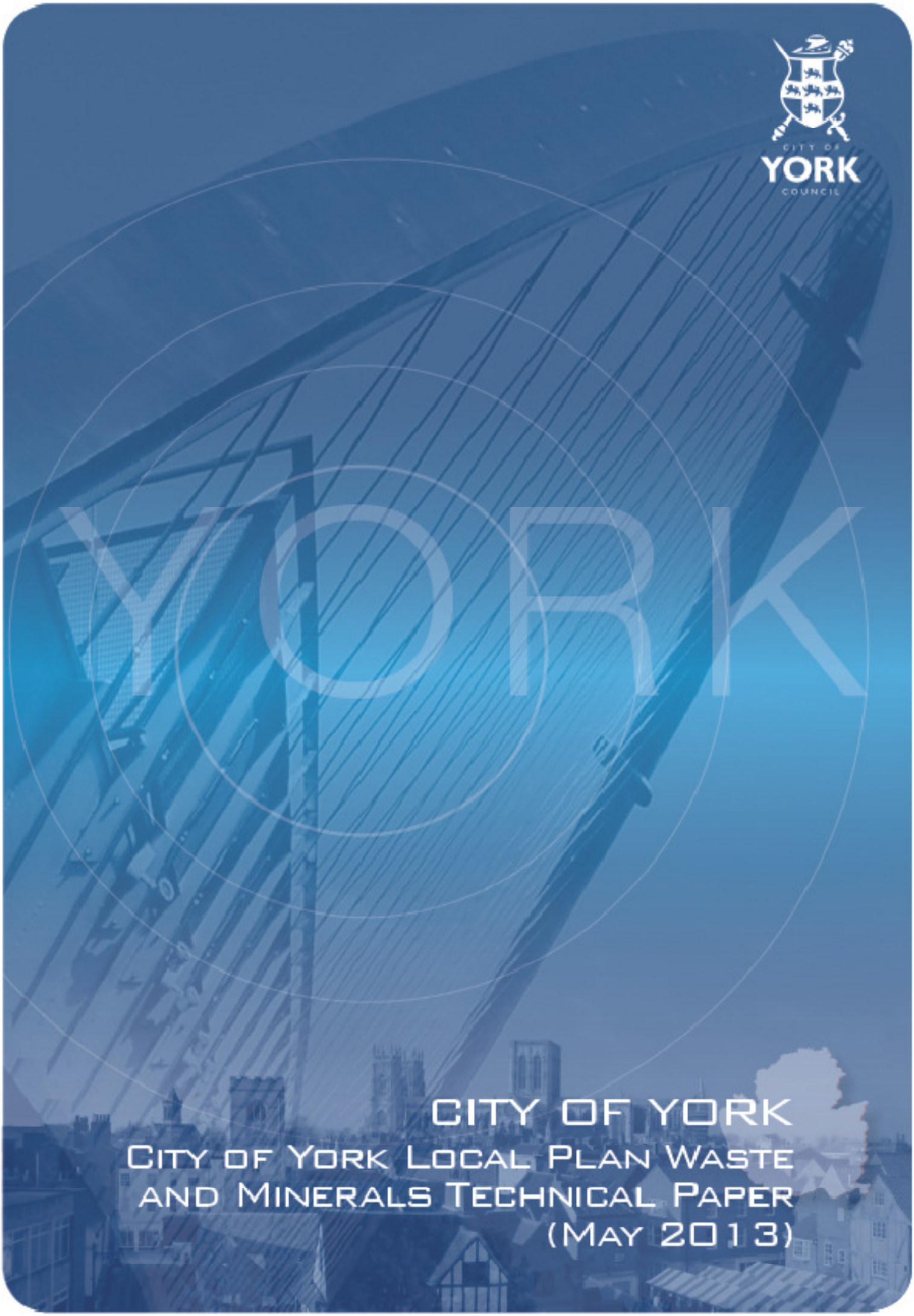


CITY OF YORK

City of York Local Plan Waste and Minerals Technical Paper (May 2013)

CONTENTS

1. INTRODUCTION

1.1 Background

1.1.1 On 12 July 2012 the Council withdrew the Local Development Framework Core Strategy from the examination process. This followed the identification of significant concerns regarding potential soundness and legal compliance by the Inspector appointed to examine the document. Although the Council initially decided to undertake further work on the various issues identified by the Inspector, on 17 May 2012 the Planning Committee resolved to grant planning permission for a community stadium and retail scheme at Monks Cross. This led the Inspector to raise concerns that a substantially different set of strategic policies and direction for York would result from those submitted.

1.1.2 The concerns identified by the Inspector included a number relating to the waste and minerals policies and proposals. These were that:

- the Core Strategy did not seem to deal adequately with the strategic issues of waste disposal;
- how and where (including cross-boundary) waste was to be disposed of or otherwise treated or handled was not clear;
- in particular what was planned for commercial and industrial waste and construction, demolition and excavation waste;
- no clear guidance or timetable was given for the proposed waste and minerals development plan document;
- what minerals will actually be required during the plan period;
- is coalbed methane required;
- what mineral reserves are there and where;
- do they need to be safeguarded and are Mineral safeguarding areas and landbanks required:
- are sites for future mineral working needed and identified;
- where are the criteria based policies against which planning applications for mineral working will be considered and specific sites allocated;
- are policies required on safeguarding potential storage, handling and processing facilities for the bulk transport of minerals;
- what monitoring targets are necessary.

1.1.3 The Council identified further work which would be carried out to address these issues as follows. The timeframe for all of these tasks was stated as July-December 2012.

Minerals

Task	Resources
Audit of current mineral sites.	Internal
Survey of mineral resources and existing consents including potential for working, infrastructure requirements, linkages with construction/demolition practices and secondary aggregate production/use.	Internal
Identification of likely future requirements for minerals.	Internal/Contractor
Production of a Local Aggregate Assessment	Internal jointly with other MPAs.
Provide for supply of relevant aggregate, industrial and energy minerals.	Internal
Identification of the distribution of mineral resources.	BGS
Development of potential approach to safeguarding of minerals and defining Mineral Consultation Areas.	BGS
Re-evaluation of the distribution of sand and gravel resources.	BGS

Waste

Task	Resources
Audit of current waste sites	Internal
Analysis of waste interrogator data on arisings and movements	Internal
Identification of likely future requirements for waste.	Internal/Contractor
Survey to identify local and sub-regional waste arisings for all waste streams	Internal/Contractor
Understand apportionment requirements	Internal
Undertake a waste facility capacity survey including the identification of annual waste treatment and management needs and likely new capacity over the plan period	Internal (with waste management team)
Identify where capacity could be located and criteria for determining areas/locations	Internal (with waste management team)
Establish strategy for required waste management facilities within and outside Council area	internal
Estimate future waste arisings for all waste streams except MSW and likely capacity requirements	Contractor

1.1.4 In October 2012 the Council agreed to prepare a Local Plan rather than continue with the Core Strategy. It also agreed to explore with North Yorkshire

County Council the opportunities for the production of a Joint Waste and Minerals DPD. These investigations have resulted in the preferred approach being to incorporate strategic policies on waste and minerals in the City of York Local Plan with detailed policies and proposals to be brought forward in a joint Waste and Minerals Local Plan to be prepared with North Yorkshire County Council and North York Moors National Park Authority. Formal member approval for the joint Local Plan is likely to be given in April 2013.

1.1.5 This approach recognises that it would not be possible to complete the entire necessary evidence base work in time to meet the timetable proposed for the City of York Local Plan. However, it is also a realistic approach to take. Waste and minerals are specialist topics and it is usual for such plans to cover a larger geographical area than that covered by the City of York. There are also strong functional links for many aspects of waste and minerals especially between City of York and North Yorkshire. The minerals and waste joint plan first consultation is currently running and the joint plan is programmed for adoption in October 2015.

1.1.6 The joint plan will provide a mechanism for formally addressing strategic cross-boundary issues and it will also contain detailed policies for waste and minerals. It is not appropriate therefore to duplicate these policies in the City of York Local Plan. However, it is necessary to provide the strategic context for these policies in the City of York Local Plan.

1.1.7 A number of specialist studies will be carried out for the joint plan to expand the existing evidence base for both waste and minerals. The studies currently in progress or planned include a study to identify non-municipal waste arisings and projected future arisings, a waste capacity study and a study to identify the distribution of mineral resources and Mineral Safeguarding Areas. Whilst these studies will provide information that will primarily be of benefit for the detailed policies and proposals in the joint plan, the results will also be available in time to support the justification for the strategic policies in the City of York Local Plan before it is submitted to the Secretary of State.

1.1.8 One study which has made significant progress is the Local Aggregate Assessment for the North Yorkshire sub-region. The LAA is being prepared on behalf of North Yorkshire County Council, City of York Council, North York Moors National Park authority and Yorkshire Dales National Park authority. The LAA was published in January 2013 and relevant details are provided later in this technical paper.

1.2 Purpose of Technical Paper

1.2.1 This technical paper is one of a series of papers which are being prepared to provide the evidence base for the City of York Local Plan. It summarises information on waste and minerals which is available at this stage. The key sources of this information are the following reports.

Waste

- Report of the Director of Commercial Services, Director of Resources and Deputy Chief Executive to Council's Executive. Waste Management Strategy 2002-2020 reviewed and amended. 9 November 2004.
- Report of the Director of Neighbourhood Services to Council Executive. Waste Management Strategy 2008-2014. 23 September 2008.
- York and North Yorkshire Waste Partnership. Let's Talk Less Rubbish. Headline Strategy. A Municipal Waste Management Strategy for the City of York and North Yorkshire 2006-2026. June 2006.

Minerals

- British Geological Survey. Yorkshire and the Humber Region: Sand and gravel resources and environmental assets. 2005.
- British Geological Survey. Mineral resource Information in Support of National, Regional and Local Planning: North Yorkshire (comprising North Yorkshire, Yorkshire Dales, North york Moors and City of York). 2006
- Land Use Consultants for Yorkshire and Humberside Regional Assembly. Phase 2 Sand and Gravel Study for Yorkshire and Humber appraisal of environmental options. November 2007.
- British Geological Survey. West Yorkshire sand and gravel resources. Investigating the potential for an increased sub-regional apportionment. 2009.
- CLG. National and regional guidelines for aggregates provision in England 2005-2020. June 2009.
- North Yorkshire County Council, City of York Council, Yorkshire Dales National Park Authority and North York Moors National Park Authority. Local Aggregate Assessment for the North Yorkshire Sub-region. January 2013.
- The Coal Authority. Coal Bed Methane Licensing Maps. June 2010.

1.2.2 It is recognised that further evidence gathering will be necessary to support the Joint Local Plan, as described in paragraph 1.1.7. The content of this Report is not intended for formal consultation as it is derived primarily from factual sources. In addition, it is an evolving document which will be updated as more information becomes available.

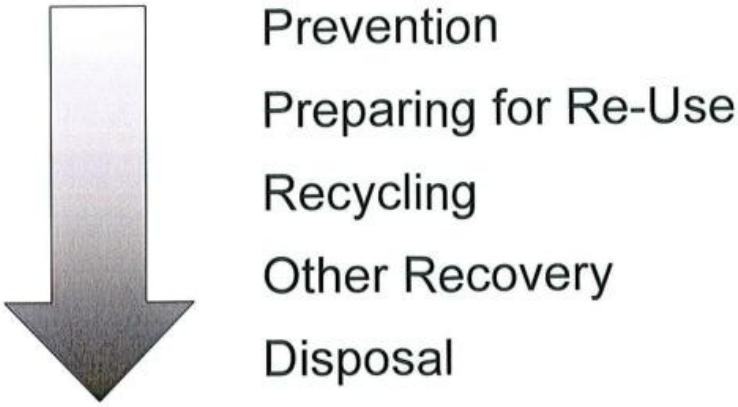
1.2.3 It is also recognised that waste management and minerals planning should be considered alongside other spatial planning matters such as transport, housing, the economy and employment and the built and natural environment. Waste and minerals can make a positive contribution towards sustainable development and the development of sustainable communities. They also have impacts for communities and the natural and built environment. It is important to recognise therefore that there are strong linkages between this technical paper and other evidence base studies which underpin and support the Local Plan. These studies can be found on the Council's web site.

2. WASTE

2.1 Policy Context

2.1.1 The Waste Framework Directive (75/445/EEC) introduced the Waste Hierarchy as a means of protecting the environment and human health. This has been at the heart of all subsequent policy and legislation on waste management. It is focused on looking at means to reduce, recycle and recover waste, before options for recovery of energy from waste, and then disposal of residues are considered.

Figure 1: The Waste Hierarchy



2.1.2 The EU Landfill Directive 1991 was the key driver behind most national legislation aimed at making waste management more sustainable. The Directive aimed to reduce biodegradable waste being landfilled and to drive waste management up the waste hierarchy. The Directive set binding and demanding targets to achieve this. It also required the pre-treatment of all wastes being landfilled where this is technically feasible; banned certain types of waste from landfill and required the classification of landfill sites for inert waste, hazardous waste or non-hazardous waste with standards that waste must meet to be accepted at these classes of site. The Directive has had very significant financial consequences for local authorities if they fail to achieve its overall objectives and individual targets. The Directive's overall aim was *'to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill'.*

2.1.3 Among the various requirements, the Directive set demanding targets to reduce the amount of biodegradable municipal waste landfilled (see paragraph 2.2 - the National context). The Landfill Directive also required waste to be pre-treated prior to disposal.

2.1.4 Article 7 of the Landfill Directive set out a particular requirement in the EU Waste Framework Directive for the waste management plan to identify suitable disposal sites or installations. In the UK, Planning Policy Statement 10 (PPS10) sets out relevant national policies for waste management facilities, including location criteria to inform local planning policy and planning decisions. The Government's Waste Strategy 2007 emphasised the obligation under the Waste Management Licensing Regulations 1994 for Waste Planning Authorities to produce detailed policies in respect of suitable waste management facilities when producing local development documents, and their obligation to have regard to national policies including the strategy itself.

2.1.5 PPS10 provides that local planning authorities should, among other things, identify in Development Plan Documents (DPDs) sites and areas suitable for new or enhanced waste management facilities for the waste management needs of their areas, and in particular, to allocate sites to support the pattern of waste management facilities set out in the Regional Spatial Strategy (RSS), in accordance with the broad locations it identifies. DPDs drawn up to reflect the expectations set out in PPS10 will demonstrate compliance with Article 7 of the Waste Framework Directive, provided they are in place within a reasonable timescale.

2.1.6 The Waste Strategy for England 2007 introduced challenging new national targets, as shown in Table 1.

Table 1: National Waste Targets

Activity	**Target**
Annual Greenhouse Gas Emissions	Reduction of 10 million tonnes of CO2 equivalents by 2020
Household Waste Reuse, Recycling and Composting	40% by 2010 45% by 2015 50% by 2020
Household Residual Waste	29% reduction from 2000 levels by 2010 35% reduction from 2000 levels by 2015 45% reduction from 2000 levels by 2020
Municipal Waste Recovery	53% by 2010 67% by 2015 75% by 2020
Commercial and Industrial Waste Landfilled	20% reduction from 2004 levels by 2010

. Source: Waste Strategy for England. 2007

. 2.1.7 The Landfill Directive / Regulations sets three targets at the national level aimed at reducing the amount of Biodegradable Municipal Waste (BMW) disposed of to landfill: by 2010, reduce the amount of BMW landfilled to 75 percent of that produced in 1995; by 2013, reduce the amount of BMW landfilled to 50 percent of that produced in 1995; and by 2020, reduce the

amount of BMW landfilled to 35 percent of that produced in 1995.

2.1.8 In June 2011 the Government was announced that the UK had met the 2010 target for the diversion of BMW from landfill and that the 2013 target was on target to be met.

. 2.1.9 The Waste and Emissions Trading Act (2003) provides the legal framework for the scheme and for the allocation of tradable landfill allowances to each waste disposal authority in England. (The Landfill Allowance Trading Scheme, (LATS)). These allowances convey the right for a waste disposal authority to landfill a certain amount of biodegradable municipal waste in a specified scheme year. Each waste disposal authority is able to determine how to use its allocation of allowances in the most effective way. It can trade allowances with other authorities, save them for future years (bank) or use some of its future allowances in advance (borrow). This allows individual waste disposal authorities to use their allowances in accordance with their investment strategy.

2.1.10 In 2011 the Government announced the ending of the Landfill Allowance Trading Scheme (LATS) after the 2012/13 scheme year in England, with reliance remaining on the Landfill tax system as a key incentive for local authorities to reduce the waste they send to landfill

2.1.11 Since 1996 the Landfill Tax has been a tax on the disposal of waste. It aims to encourage waste producers to produce less waste, recover more value from waste, for example through recycling or composting and to use more environmentally friendly methods of waste disposal. There are 2 rates with inert or inactive waste being subject to a lower rate, currently £2.50 per tonne. The standard rate increases each year and is currently (2012/13) £64 per tonne. It is a key driver in diverting waste from landfill.

2.1.12 In June 2011 the Government published '*Government Review of Waste Policy in England 2011'*, which constitutes the most up-to-date and comprehensive document setting out the Coalition's approach to national waste policy. The document sets out the vision for waste management policy where it states that England *'needs to move beyond our current throwaway society to a "zero waste economy" in which material resources are re-used, recycled or recovered wherever possible, and only disposed of as the option of very last resort. This requires a new public awareness in our attitude to waste. It means reducing the amount of waste we produce and ensuring that all material resources are fully valued – financially and environmentally – both during their productive life, and at 'end-of-life' as waste. We will see the benefits not only in a healthier natural environment and reduced impacts on climate change, but also in the competitiveness of our businesses through better resource efficiency and innovation – a truly green economy' (paragraph 28).*

2.1.13 The Government review did not substantially change national policy towards waste but served to emphasise its commitment to such aspects as waste prevention, recycling re-use and minimising landfill disposal.

2.1.14 The Government published the National Planning Policy Framework (NPPF) in 2012. The NPPF does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England which is not expected before late 2013. PPS 10 'Planning for Sustainable Waste Management' (July 2005) therefore remains in force and says that waste planning authorities in their development plan documents should: identify sites and areas suitable for new or enhanced waste management facilities for the waste management needs of the area (paragraph 17); identify the type or types of waste management facility that would be appropriately located on the allocated site or area taking care to avoid stifling innovation in line with the waste hierarchy (paragraph 18); avoid unrealistic assumptions on the prospects for the development of waste management facilities, sites or areas (paragraph 18); consider a broad range of locations including industrial sites, looking for opportunities to co-locate facilities together and with complementary activities (paragraph 20; and in deciding which sites and areas to identify, assess their suitability against a range of locational criteria (paragraph 21 and Annex E).

2.1.15 PPS 10 was accompanied by a companion guide 'Planning for Sustainable Waste Management: A Companion Guide to PSS 10' which was published in June 2006. This guide supports the implementation of the policy in PPS 10 by providing advice, ideas and examples of good practice to assist planning authorities in the preparation of development plan documents.

2.1.16 The Planning Act 2008 provided for the production of National Planning Statements (NPS) on Nationally Significant Infrastructure Projects (NSIPs) such as major energy from waste facilities, wastewater treatment plants and hazardous waste facilities. The *National Policy Statement for Waste Water* was published in February 2012 and consultation take place on the hazardous waste NPS in October 2011.

2.1.17 The Yorkshire and Humber Plan (the Regional Spatial Strategy) was published in 2008 and provided a broad development strategy for Yorkshire and the Humber for 15 to 20 years. It included policies to address housing, environmental protection, transport, infrastructure, economic development, agriculture, minerals, energy and waste, as well as sub regional policies. The plan contains 3 waste management policies. Policy ENV12 aims to reduce, reuse, recycle and recover as much waste as possible, by ensuring the integration of strategies and proposals for sustainable waste management. It states that local authorities should support the urgent provision of a combination of facilities and other waste management initiatives which best meets environmental, social and economic needs for their areas. Policy ENV13 requires waste planning authorities to ensure that adequate sites and facilities are available to manage the various waste streams taking into account benchmark figures set out in the Plan. It also aims to support the provision of additional recycling infrastructure and businesses. Policy ENV14 sets out broad strategic locational criteria for waste management facilities, which should be considered when Waste Planning Authorities choose site-specific site allocations or criteria based approaches.

2.1.18 The Yorkshire and Humber Plan, except for policies which relate to the Green Belt around York, was revoked by the Government in January 2013. The abolition of regional strategies makes the local plan the keystone of the planning system. The abolition of the Regional Strategy for Yorkshire and Humber (with the exception of the York Green Belt policies) places the responsibility for strategic planning upon local councils, including City of York. Local councils in the region are now responsible for planning for cross-boundary, strategic matters in local plans through the duty to co-operate. City of York Council recognises that waste has significant cross-boundary linkages with other councils, in particular North Yorkshire County Council. A Joint City of York, North Yorkshire and North York Moors Waste and Minerals Local Plan is being prepared in recognition of these functional linkages and to satisfy the duty to co-operate.

2.2 Waste Arisings and Deposits*

2.2.1 The quality, reliability and detail of waste data for different waste streams varies considerably. Data on Municipal Solid Waste (MSW) is monitored in detail on a regular basis and good quality data is available. Data on Commercial and Industrial Waste (C&I) is less well documented. Occasional surveys are undertaken and national estimates are produced. Other than PPC regulated businesses, there are currently no formal reporting requirements for businesses with respect to material flows or waste arisings. Other sources of information, e.g. waste transfer notes or regulatory returns from permitted waste management facilities, are not centrally collated and are not detailed or wide ranging enough to provide a reliable measure of the scale of C&I waste arisings, methods of treatment or movements.

2.2.2 Construction and Demolition Waste (C&D) is poorly understood. Periodic surveys are undertaken at a national level. A large and growing proportion of C&D waste is re-used or recycled on site and does not therefore enter the waste stream. Data on Hazardous Waste is monitored on a regular basis and reported through the Environment Agency's Special Waste Tracking database which holds information on arisings, movements and treatment/disposal of hazardous waste. Agricultural Waste became classed as a controlled waste in 2006 and data is poor, although it is hoped that estimates of the controlled element will be improved in the future.

2.2.3 Total waste arisings dealt with by City of York Council and their disposal methods are shown in Table 2. 2.2.4 This shows that City of York generally is both reducing the amount of waste arisings and is increasing the amount which is recycled.

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* An early revision of this Technical Paper will include additional information available from the Environment Agency's Waste Data Interrogator.

Table 2: Waste Arisings and Disposal Methods

Year	Total Waste Arisings* (tonnes)	Waste Landfilled (tonnes)	Waste Recycled (%)
2006/07	122,380	74,210	39.9
2007/08	118,600	68,040	43.4
2008/09	113,780	62,750	45.2
2009/10	106,290	60,300	43.3
2010/11			
2011/12	101,070	53,490	46.4

* includes MSW and Hazardous Waste

2.2.5 Defra commissioned a national survey of C&I waste arisings which determined the total tonnage of C&I waste produced in England and its 8 regions in 2009. The resulting report (The Jacobs Report) *Commercial and industrial waste Survey 2009* was published in December 2010. The results of this survey represent the most up-to-date, reliable and comprehensive set of national data on C&I waste.

2.2.6 The survey found that the total C&I waste arisings in England in 2009 was 48 million tonnes, split evenly between commercial and industrial businesses. In addition it was estimated that a further 2.5 million tonnes of blast furnace slag and virgin timber were not captured by the survey.

2.2.7 The previous national C&I national survey in 2002/03 had found a total of 67.9 million tonnes, so the decrease in 2009 was 29%, despite the total business population increasing by 10%. The data on management methods showed the significant effect of fiscal and regulatory policy on waste arisings since 2002/03, with landfilling decreasing from 41% to 23% and recycling increasing from 15% to 48%.

2.2.8 The survey found that 15% of the total arisings (6.94 million tonnes) were in the Yorkshire & Humber Region, the highest percentage of the nine regions. Mineral waste accounted for 2.7 million tonnes. 2 million tonnes were disposed of in landfill sites whilst 3.1 million tonnes were recycled.

2.2.9 Two regions (London and the South West) funded additional surveys and for these regions the results were broken down by Waste Planning Authority area. Unfortunately WPA results are not available for Yorkshire and Humber region.

2.3 Waste Management Facilities

2.3.1 The major waste facility in City of York is at Harewood Whin, located near Rufforth and owned and operated by the council's existing waste

contractor, Yorwaste. The site includes a non-hazardous landfill, leachate treatment plant, landfill gas generation plant, recycling plant and wind-row composting facility. The landfill site is the only such facility within the City of York area and has planning permission until 2017 to accept up to 300,000 tonnes of waste per annum. However, reduced volumes of waste are being disposed to landfill which may mean that the site is not full by 2017, hence enabling the operators to seek planning permission to allow operations to continue for a longer period.

2.3.2 The Council also operates two household waste recycling centres at Hazel Court and Towthorpe. A third recycling centre at Beckfield Lane was closed in 2012 following an evaluation of provision in York.

2.5 Managing Individual Waste Streams

2.5.1 For municipal waste City of York Council works closely with North Yorkshire County Council through an Inter-Authority Agreement. The councils are currently working jointly to secure a waste treatment facility to divert biodegradable municipal waste from landfill. In 2007 the Councils received a provisional allocation of £65 million of Private Finance Initiative credits from DEFRA. Following a procurement exercise, the preferred bidder for the contract to design, build manage and operate the new facility is AmeyCespa. In 2012 North Yorkshire County Council resolved to grant planning permission for a new mechanical treatment, anaerobic digestor, energy from waste and incinerator bottom ash plant at the Allerton aggregates quarry and landfill site. The new facility would reduce the amount of waste going to landfill by over 90%. The Secretary of State is currently reviewing the application so planning permission has not yet been granted. If this facility is delivered no other sites will be required for the treatment of municipal waste in the City of York Council area in the plan period.

2.5.2 On 21 February 2013 the Government withdrew the provisional allocation of Waste Infrastructure Credits following an assessment of the amount of residual waste treatment infrastructure required nationally to meet the national obligation to reduce the amount of biodegradable waste that is sent to landfill. The two councils are currently considering the implications of this decision for waste management provision.

2.5.3 Information is not available on the management of other waste streams in York.

2.6 Waste Movements

2.6.1 Most waste is transported some distance for disposal and recovery. In general inert wastes that cause least risk are dealt with close to the point of arising whereas more difficult wastes need to be transported further to specialist facilities. This is particularly the case for hazardous waste. Information on waste movements, including the types and quantities of waste deposited and their origin, can be obtained from the returns which operators of waste management facilities submit to the Environment Agency. Whilst some operators do not consistently record waste origins, in Yorkshire and

Humber this is only 4% of the tonnage so good information is available. At this stage information only regional information is available and this is summarised in the following paragraphs.

2.6.2 In 2010 14.9 million tonnes of waste was deposited at sites in the region, of which over 80% arose from within the region. Imports were mainly from the North West, North East and East Midlands regions. 9.5 million tonnes were household, commercial and industrial waste of which over 70 0riginated from within the region. 5 million tonners were inert, construction and demolition waste of which over 90% originated from within the region. 460,000 tonnes of hazardous waste were deposited of which just over 50% originated from within the region.

2.6.3 Over 90% of landfill deposits, over 80% of transfer station deposits and just under 80% of treatment deposits originated from within the region.

2.6.4 At least 508,000 tonnes of waste were exported from the Yorkshire and Humber Region in 2010 and the Environment Agency considers that this is likely to be a significant under-estimate. The main regions receiving waste from Yorkshire and Humber were East Midlands (208,000 tonnes), the North West (115,000 tonnes) and the North East (108,000 tonnes).

2.7 Future Waste Management Needs

2.7.1 The CLG Companion Guide to PPS10 provides valuable advice on forecasting waste □data for different waste streams. □ It recognises that data for waste streams other than MSW is poor, but emphasises that there are similar factors that are likely to influence waste arisings, such as the landfill tax and its escalator, which makes it increasingly cost-effective to minimise, re-use or recycle C&I and C&D wastes, and the effect of the Aggregates Levy, which encourages re-use of C&D waste. There is also the impact of producer responsibility measures, such as the Packaging, ELV and Batteries Directives, and of integrated product policy initiatives to be considered. Similarly, the Landfill (England and Wales) Regulations require pre-treatment and encourage diversion whilst the costs of disposal of hazardous waste have increased. These influences all encourage producers to minimise, reuse or recycle waste.

2.7.2 The Guide advises that although continued economic growth will tend to lead to increases in waste arisings, through greater activity in the provision of goods and services all of which will produce waste, the correlation need not be linear because the instruments mentioned above are largely acting to break the link between growth and waste arisings. This is an explicit policy aim in government waste policy e.g. Waste Strategy 2007.

2.7.3 Assumptions must be made for further growth, or otherwise, for different waste streams and projections will vary according to the waste stream being considered. Key assumptions were made in setting sub-regional waste apportionment in the RSS (Policy 46), for MSW and C&I waste.

2.7.4 The Yorkshire and Humber Plan (RSS) contains growth forecasts for

MSW and C&I waste for the period up to 2021. As well as regional figures, there are forecasts for each Waste Planning Authority area including City of York. It is stressed that these are not intended to be a detailed forecast but to provide a suitable benchmark for the preparation of local development documents. The relevant figures are set out in Tables 3 and 4.

Table 3: Forecasts for Municipal Solid Waste

Area	**Tonnes to be managed 2005 ('000 tonnes/pa)**	**Tonnes to be managed 2010 ('000 tonnes/pa)**	**Tonnes to be managed 2015 ('000 tonnes/pa)**	**Tonnes to be managed 2021 ('000 tonnes/pa)**
Y&H Region	2,908	3,033	3,183	3,384
North Yorkshire	494	522	551	589
NYCC	375	395	416	443
City of York	119	127	135	146

Source: The Yorkshire and Humber Plan. May 2008

Table 4: Forecasts for Commercial and Industrial Waste*

Area	**Tonnes to be managed 2005 ('000 tonnes/pa)**	**Tonnes to be managed 2010 ('000 tonnes/pa)**	**Tonnes to be managed 2021 ('000 tonnes/pa)**	**Tonnes to be managed 2021 ('000 tonnes/pa)**
Y&H Region	8,936	8,869	8,8913	8,985
North Yorkshire	954	969	995	1,029
NYCC	678	688	706	730
City of York	276	281	289	299

*excludes closed gate

Source: The Yorkshire and Humber Plan. May 2008

2.7.5 Forecasts of capacity requirements to manage the forecast C&I waste by disposal/treatment method are set out in Tables 5 and 6.

Table 5: Landfill Capacity Required for C&I Waste*

Area	2005 ('000 tonnes)	2010 ('000 tonnes)	2015 ('000 tonnes)	2021 ('000 tonnes)
Y&H Region	2,949	2,927	2,941	2,965
North Yorkshire	315	320	328	340
NYCC	224	227	233	241
City of York	91	93	95	99

*excludes closed gate

Source: The Yorkshire and Humber Plan. May 2008

Table 6: Treatment Capacity Required for C&I Waste*

Area	2005 ('000 tonnes)	2010 ('000 tonnes)	2015 ('000 tonnes)	2021 ('000 tonnes)
Y&H Region	5,987	5,942	5,972	6,020
North Yorkshire	639	649	667	689
NYCC	454	461	473	489
City of York	185	188	194	200

*excludes closed gate

Source: The Yorkshire and Humber Plan. May 2008

2.7.6 The RSS notes that whilst a limit should be put on the provision of landfill capacity, there will still be a need to landfill the residual elements of MSW and C&I waste after treatment.

2.7.7 Waste Planning Authorities should allocate sites to support the pattern of waste management facilities set out in RSS Policy ENV 13 and the apportionments set out in the above tables. In addition the RSS states that where a WPA is unable to identify sufficient appropriate sites to meet these apportionments, it should seek to reach agreement with a neighbouring authority regarding making appropriate provision. Historically City of York has worked with North Yorkshire County Council on waste management, in recognition of the significant constraints in making provision for the full range of facilities in York.

2.7.8 The RSS also estimates the additional waste capacity required in the region to manage these quantities of MSW and C&I waste. Relevant figures are set out in Table 7 which show the additional capacity needed. However, these estimates were not broken down to Waste Planning Authority area.

Table 7: Additional capacity required to manage MSW and C&I Waste

Area	Required capacity 2010 ('000 tonnes p/a)	Required capacity 2015 ('000 tonnes p/a)	Required capacity 2021 ('000 tonnes p/a)
Y&H Region	3,682	1,554	4,690
North Yorkshire	864	1,554	1,069

Source: The Yorkshire and Humber Plan. May 2008

2.7.9 City of York Council has previously produced projections for the amount of MSW and hazardous waste that will need to be managed by the Council over the next two decades. The figures are based on zero growth in existing domestic properties but allow for additional waste arisings from new households. In addition there will be further such arisings not managed by the Council and further work is needed to identify the levels of these arisings. The Council's waste projections are shown in Table 8. These projections require updating to take account of new information available since the original projections were made.

Table 8: Projections of Waste Arisings

Year	Total Waste Arisings (tonnes)	Residual Waste (tonnes)
2011/12	103,877	53,000
2012/13	104,627	52,855
2013/14	105,374	53,383
2014/15	106,120	53,917
2015/16	106,862	54,456
2016/17	107,602	54,802
2017/18	108,340	55,146
2018/19	109,075	55,488
2019/20	109,808	55,829
2020/21	110,539	56,167

2021/22	111,267	56,504
2022/23	111,992	56,840
2023/24	112,716	57,174
2024/25	113,436	57,506
2025/26	114,155	57,836
2026/27	114,871	58,165
2027/28	115,585	58,492
2028/29	116,296	58,818
2029/30	117,005	59,142
2030/31	117,712	59,464

Source: City of York Council. Core Strategy Submission Document. 2011

2.7.10 There are no similar projections for other waste streams. PPS 10 requires that such projections are carried out for C&I waste. There is a need therefore to update the work carried out for the RSS in relation to C&I waste projections.

3. MINERALS

3.1 Policy Context

3.1.1 Minerals underpin our modern economy. They are essential for manufacturing and energy supply. They also provide the materials to build the homes, schools, hospitals and infrastructure needed by sustainable communities. Minerals extraction is one of many pressures on land-use in the UK and it is the purpose of our planning system to address these competing demands.

3.1.2 Mineral working is different from other forms of development as it can only take place where the mineral occurs. Mineral planning determines when and where minerals are extracted by providing a framework integrating protection of the environment with the need for the minerals industry to maintain our economy and way of life. The planning system addresses national, regional and local issues and encourages public involvement throughout. It has an important role to play in contributing to the Government's strategy for promoting sustainable development.

3.1.3 Government policies for mineral planning are contained in the National Planning Policy Framework published in March 2012. The special place of mineral planning is recognised by the NPPF devoting a separate chapter to the subject of 'Facilitating the sustainable use of minerals'. The policy states

that ‘minerals are essential to support sustainable economic growth and our quality of life. It is therefore important that there is sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs. However, since minerals are a finite natural resource, and can only be worked where they are found, it is important to make the best use of them to secure their long-term conservation’ (paragraph 142). The NPPF then sets out a list of requirements for local planning authorities in preparing Local Plans and a similar list of requirements for them in determining planning applications. Mineral planning authorities are required to plan for a steady and adequate supply of aggregates and industrial minerals.

3.1.4 The Government also published ‘Technical Guidance to the National Planning Policy Framework’ in March 2012. This contains additional policy on the proximity of mineral working to communities, dust emissions from mineral workings including the health effects of dust, noise emissions from mineral workings, stability in surface mine workings and tips, the restoration and aftercare of mineral sites and landbanks for industrial minerals.

3.1.5 The emphasis placed on minerals in the NPPF and the need for additional technical guidance reflects the specialist nature of mineral planning and the fact that before the publication of the NPPF, previous Governments had published very extensive policy and guidance on minerals, through a series of Mineral Policy Statements (MPSs), separate from the main series of Planning Policy Statements. The over-arching MPS (Planning and Minerals – MPS 1) was published in 2006 and was accompanied by a practice guide offering examples and principles of good practice and background information. Before this, MPS 2 (Environmental Effects of Mineral Working) had been published in 2005.

3.1.6 Previously mineral planning policy and advice was provided in a series of 15 Minerals Planning Guidance Notes which were published between 1988 and 2004. These covered general mineral planning matters; guidance on specific minerals including coal (MPG 3), aggregates (MPG 6), peat (MPG 13) and silica sand (MPG 15); and guidance on specific topics such as reclamation (MPG 7) and noise control (MPG 11). All these MPSs and MPGs have now been superceded by the new NPPF.

3.1.7 There are currently no active mineral workings in City of York. However, the British Geological Survey has identified areas within York offering potential resources of sand and gravel. Aggregates are the most commonly extracted and used construction materials in the UK, comprising about 75% by tonnage of all land-won mineral extraction. In 2005 216.1 million tonnes were consumed in England including 11.9 m tonnes from marine landings. Although the mineral planning system in the UK applies to all minerals, the foundations of the system relate to aggregates.

3.1.8 The managed supply system for aggregates has been an important part of minerals planning policy and practice for 40 years. Regional Aggregates Working Parties (RAWPs) were established in all regions in England and in Wales in the 1970s. The system included the periodic

collection and analysis of the RAWPs' findings as the basis for national policy guidelines and national integration of the work of the RAWPs by a National Coordinating Group. This led to the publication of the first national supply *Guidelines* for aggregates provision in England and Wales in 1982.

3.1.9 From 1982 until 2012 the fundamentals of the system remained largely intact. The *Guidelines* became part of *Mineral Planning Guidance Note 6: Aggregates* in 1989 and updated in 1994. They were then detached as a separate document again in 2003 before being included within the Aggregates Annex to MPS 1 in 2006 and new *Guidelines* were issued by Government in June 2009.

3.1.10 One of the immediate policy objectives of the new Government in 2009 was to remove the regional tier of Government in England. A number of developments have ensued, including the abolition of Regional Strategies, Regional Development Agencies and regional Government Offices. This has had an impact on the managed aggregates supply system and the NPPF makes no reference to the word "Region' or 'Regional'. RAWPS have been replaced by 'Aggregate Working Parties' and the sub-regional apportionment has been replaced by a '*Local Aggregate Assessment'*. The NPPF states that Mineral Planning Authorities should *'plan for a steady and adequate supply of aggregates by making provision for the land-won and other elements of their Local Aggregate Assessment'* (paragraph 145).

3.1.11 In accordance with the NPPF, a Local Aggregate Assessment for the North Yorkshire sub-region is being prepared. A consultation document, published in January 2013, confirms that no sand and gravel sites have been worked in the City of York during the last 10 years, there are currently no reserves with planning permission and states in paragraph 92 that: 'in the current absence of knowledge of the existence of potentially viable resources of sand and gravel (and the known absence of resources of crushed rock) in the City of York area, it would not be appropriate to seek to identify separately any potential future requirements for sand and gravel, to be provided specifically by City of York'.

3.1.12 RSS Policy ENV4 aims to safeguard mineral deposits by maximising use of secondary aggregates, and where this is not possible, undertake primary extraction as needed. It seeks to reduce aggregate production from National Parks and Areas of Outstanding Natural Beauty and to make provision for the extraction of sand and gravel based on the regional sand and gravel study. The RSS anticipates that a total of 73 million tonnes of land-won sand and gravel will be required for the period 2001-2016 and makes a sub-regional apportionment to deliver this tonnage. There is no apportionment to City of York. As noted in paragraph 2.1.12 the RSS was formally revoked in January 2013.

3.1.13 The regional sand and gravel study referred to in Policy ENV14 was carried out by Land Use Consultants who developed and appraised spatial options for revised sub-regional apportionments but these were not accepted by either the industry or the local authorities. The study effectively has been

superceded by the Local Aggregate Assessment for the North Yorkshire Sub-region.

3.1.14 The City of York Local Plan Deposit Draft 1998 identified an Area of Search for sand and gravel extraction between Upper Poppleton, Rufforth and the north western boundary of the district. This was part of a wider Area of Search identified in the North Yorkshire Minerals Local Plan. It was stated that its primary purpose was to offer long-term flexibility and that any prospective developers would be encouraged to investigate the possibility of moving extracted materials by rail. The 1998 Local Plan also included policies on the sterilisation of unworked minerals, on criteria against which any proposals for sites would be assessed and on after-use of mineral workings.

3.1.15 The 1998 Local Plan also noted that the planning permission for the Selby Coalfield extended into the southern part of the District as far as Copmanthorpe, Bishopthorpe and Elvington. Apart from an access shaft to the coal seam there was no working in or below City of York. The Selby mine ceased production in 2004.

3.2 Mineral Resources

3.2.1 Mineral resources are natural concentrations of minerals that are or may become of potential economic interest as a basis for the extraction of a mineral product. Areas that are of potential economic interest may change with time.

3.2.2 A study by the British Geological Survey (BGS) in 2005 identified broad areas of sand and gravel resources in the Yorkshire and Humber region, including resources potentially suitable for use as aggregate in concrete. These glacial, glacio-fluvial and river terrace deposits occur principally in the central and northern parts of North Yorkshire, including the valleys of the Rivers Swale and Ure, the Vales of Mowbray and York, the Derwent and Leven valleys and in the area of the City of York.

3.2.3 The above study helped to inform another BGS report *Mineral resource Information in Support of National, Regional and Local Planning: North Yorkshire (comprising North Yorkshire, Yorkshire Dales, North york Moors and City of York),* published in 2006. The purpose of this report was to assist all interested parties involved in the preparation and review of development plans both in relation to the extraction of minerals and the protection of mineral resources from sterilization. It provides a knowledge base, in a consistent format, on the nature and extent of mineral resources and the environmental constraints which may affect their extraction. It covers sand and gravel, crushed rock aggregate, chalk, brick clay, industrial limestone, silica sand, potash, salt, building stone, coal and hydrocarbons.

3.2.4 The report and accompanying maps show that the majority of the area of the City of York is underlain by mineral resources. Taking this information and subsequent information supplied by the Coal Authority on coal-bed methane into account, the mineral resources in York can be summarised as follows.

(i) **Sand and gravel**. Glaciolacustrine deposits occur to the south of York. These are too fine grained to be used as concrete aggregate, for which there is the larges demand. Glaciofluvial deposits occur in pockets throughout the district while river terrace deposits occur in the northern part of the district. The LAA states that 'minerals resource information suggests that sand and gravel resources are likely to exist within the CYC area although up to date information on their potential economic viability is not available. There has not been any apparent interest from the minerals industry in the development of resources within York (paragraph 68).

(ii) **Brick clay**. Deposits of brick clays occur in the Heworth, Layerthorpe, Dringhouses and Acomb areas. They were formerly extensively worked for the manufacture of bricks as early as Roman times and throughout the 19th and into the 20th century. However, there has been no brick making industry in York for over 50 years.

(iii) **Coal.** Deep coal below 50 metres underlies much of the district. As noted above, the planning permission for the Selby Coalfield extended into the district and more recently a prospect area for deep coal mining, the North Ouse Prospect, was identified to the north of the city. This would require the development of a new deep coal mine and there is no record of any interest in taking forward such a proposal. There are no shallow coal resources capable of being worked by surface mining methods.

(iv) **Hydrocarbons.** A hydrocarbon exploration well was drilled at Wheldrake in 1973 but this was plugged and abandoned and there has been no recent interest in drilling in the district.

(v) **Coal-bed Methane.** Associated with the coal seams that underlie the district there is potential for extraction of coal-bed methane which is recognised in the NPPF as a potential source of energy. The Coal Authority has granted licenses for exploration in extensive areas in the west of the Council area and a smaller area on the eastern boundary. There are currently no commercially active sites in operation in the UK and exploration nationally is at a very early stage.

3.2.5 Whilst there are mineral resources within and below the City of York, there are no current workings, nor has there been any working within the last 50 years. The potential for future working is considered in the next section of this technical paper.

3.3 Future Mineral Requirements

Sand and Gravel

3.3.1 The Local Aggregate Assessment (LAA) for the North Yorkshire Sub-region:

(i) summarises available information on the supply of aggregate within, and

movements of aggregates into and out of, the sub-region;

(ii) identifies a basis for establishing future requirements for aggregates from the region over the period to 2030;

(iii) summarises key issues which may impact on the supply of aggregates and identifies the extent to which it is likely that future supply requirements can be met; and

(iv) identifies a range of factors which may need to be considered in the preparation of minerals plans, addressed through co-ordination with other planning authorities, or may require on-going review.

3.3.2 The key conclusions from the LAA are:

(i) currently all aggregates produced in the sub-region are from the North Yorkshire County Council and Yorkshire Dales National Park areas, with no production from the City of York and North York Moors National Park areas;

(ii) aggregates supplied from the sub-region are of significance at a regional level and beyond;

(iii) although there has been a decline in production over the past few years, in response to economic conditions, the strategic significance of aggregate supply from the sub-region is likely to remain high and may increase;

(iv) the sub-region has high overall reserves of crushed rock but reserves of sand and gravel are more limited and there is likely to be a need to identify further resources suitable for working;

(v) identification of potential future requirements for aggregate based on historic sales over the past 10 years would be appropriate as a starting point for local minerals plans outside the National Park areas;

(vi) there is potential for shortfall in supply of sand and gravel and Magnesian Limestone in the mid term in the absence of release of further reserves;

(vii) unless new permissions are granted, and if recent levels of sales are maintained, there is potential for reserves of high PSV aggregate to be significantly reduced in the mid term;

(viii) there is no expectation of a substantial near term shift in the overall balance of supply from the main sources of aggregate produced in the sub-region (i.e. crushed rock, land won sand and gravel and secondary and recycled aggregate) although a number of factors, discussed further in the LAA, have been identified which could impact on this in the mid to long term;

(ix) a range of factors including matters relating to resource distribution and the presence of substantial areas of National Park and other important designations are likely to place increasing constraints on the supply of

aggregates in the longer term;

(x) a number of significant cross-boundary movements of aggregate to/from other areas have been identified which should be considered further through preparation of local minerals plans; and

(xi) a number of matters relating to aggregate supply and demand have been identified which should be kept under review through future updates to the LAA.

3.3.3 Available information of the sales of primary land-won aggregates in the sub-region is summarized in the following table.

Table 9: Historic sales of land-won aggregate by MPA and aggregate type 2002 – 2011

	Sand and Gravel (m. tonnes)				Crushed Rock (m. Tonnes)			
	NYCC	YDNP	NYMNP	CYC	NYCC	YDNP	NYMNP	CYC
2002	2.5	0	0	0	4.1	4.0	0.3	0
2003	2.5	0	0	0	3.7	3.9	0.3	0
2004	2.8	0	0	0	4.2	3.8	0.2	0
2005	2.8	0	0	0	3.9	4.0	0.1	0
2006	2.7	0	0	0	3.8	3.8	0.1	0
2007	2.7	0	0	0	4.3	4.0	0.1	0
2008	2.3	0	0	0	3.8	3.8	0	0
2009	1.7	0	0	0	2.6	2.6	0	0
2010	1.6	0	0	0	2.9	2.6	0	0
2011	1.7	0	0	0	1.9	2.6	0	0
Average	2.3	0	0	0	3.5	3.5	0.1	0

Source: Local Aggregate Assessment for the North Yorkshire Sub-region. January 2013

3.3.4 Data on sales of marine aggregate into the sub-region are not available on a year by year basis, although some data on consumption of marine sand and gravel for the Yorkshire and Humber region has been published by the British Geological Survey and is shown in Table 10 below.

Table 10: Consumption of marine aggregate in Yorkshire and Humber 2002 – 2011 (tonnes)

2002	277,000	2008	322,000
2003	300,000	2009	322,000
2004	277,000	2010	234,000
2005	277,000	2011	234,000
2006	322,000	Average	288,700
2007	322,000		

Source: Local Aggregate Assessment for the North Yorkshire Sub-region. January 2013

3.3.5 A briefing note published by the Crown Estate *Marine Aggregates Opportunities, Region: Humber* published in May 2012 notes that over the preceding 10 years, on average only 76% of the permitted tonnage was dredged from the Humber Region and there is an opportunity to dredge approximately 2.1mt more per annum. It is also noted that that wharf infrastructure in the Region is well established and can cope with the tonnage currently delivered and any future tonnage uplift.

3.3.6 The LAA therefore concludes that there may be some potential for an increase in the proportion of supply from marine dredged sources. Mineral planning authorities in the Yorkshire and Humber Region are in the process of procuring research into the potential deliverability of an increased volume of marine aggregate into the Region. The LAA states 'until this work has been completed it would not be appropriate to make any assumptions about the potential scale of supply (if any) which could be derived from such sources and the extent to which any increase in supply into the Region may impact on the overall balance of supply derived from the North Yorkshire sub-region' (paragraph 93).

3.3.7 As stated in paragraphs 3.1.8 and 3.1.9 guidelines for aggregates supply in England have been published by central Government and have provided a basis for the identification of future requirements for aggregate minerals at the national and regional levels, as part of a managed system of aggregates supply. The most recent figures were published in the National and Regional Guidelines for Aggregate Supply in England 2005-2020, published in June 2009 and these Guidelines remain extant. The key Regional guideline figures are reproduced in Table 11 below. These figures differ from those contained in the RSS, which were based on the previous Guidelines issued in 2003. As the RSS has now been revoked its apportionment figures no longer have any planning status.

Table 11: Apportionment to Yorkshire and Humber Region

Source	2005-2020 (million tonnes)
Land-won sand & gravel	78
Land-won crushed rock	212
Marine sand & gravel	5
Alternative materials	133
Net imports to England	3

Source: CLG. National and regional guidelines for aggregates provision in England 2005-2020. June 2009.

3.3.8 New Government guidance on the Managed Aggregate Supply System (MASS), published in October 2012, indicates that the Government considers there is still a role for forecasts of aggregate provision in England and that it will continue to publish National and Sub-national Guidelines using an econometric model and continue to make assumptions on the likely contribution of demand for alternatives, imports and marine dredged sand and gravel. This Guidance reflects the policy approach in the NPPF, which states that MPAs should still take into account published National and Sub-national Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates.

3.3.9 The 2009 Guidelines have not yet been subject to apportionment in the Yorkshire and Humber area and it is not yet clear whether there will be any agreed regional apportionment in future. The approach taken in the LAA is to use the 2009 Guidelines as an indicator against which any other sources of information about possible future requirements can be compared. The NPPF recommended using 10 years average sales as an initial basis for future apportionment exercises. However, the LAA notes that in recent years sales of both crushed rock and sand and gravel in North Yorkshire have been significantly below the 10 year average, e.g. 1.9 and 1.7 m. tonnes respectively in 2011, compared to 3.5 and 2.3 m. tonnes respectively for the 10 year average. It concludes that it is very unlikely that sales will increase to the 10-year average levels in the short-term although there is less certainty about the longer term trend in demand.

3.3.10 However, in the absence of any other relevant local information, the LAA concludes that it would be appropriate to assess future requirements on the basis of average sales over the past 10 years, except in the National Parks where special policy considerations exist. The implications of this for future supply requirements are that 43.7 m. tonnes of sand and gravel and 66.5 m. tonnes of crushed rock will be required from North Yorkshire for the period 2012-2030. This is then compared with current reserve figures (taking into account reserves of crushed rock in the Yorkshire Dales National Park) to identify potential shortfalls in supply. The conclusion is that for crushed rock

overall there are adequate reserves with permission to ensure adequate supply though to 2030 but that further reserves of sand and gravel would need to be made available to ensure an adequate and steady supply over the period to 2030.

3.3.11 It is anticipated that the large majority of the 27.5 m. tonnes shortfall would need to be sourced from the North Yorkshire County Council area, primarily for geological reasons, although it is also considered that there is some potential for an increase in supply from secondary and recycled aggregates and from marine dredged sources.

3.3.12 With regard to the contribution which production from sites within City of York might make, as noted earlier in this technical paper, the LAA states in paragraph 92 that: 'in the current absence of knowledge of the existence of potentially viable resources of sand and gravel (and the known absence of resources of crushed rock) in the City of York area, it would not be appropriate to seek to identify separately any potential future requirements for sand and gravel, to be provided specifically by City of York.' Notwithstanding this, however, it is concluded that there may be potential for contribution to meeting this shortfall from the City of York. It states, 'updated assessment of potentially viable sand and gravel resources for the City of York area, in order to further evaluate the potential for the supply of sand and gravel from that authority area, would be beneficial in informing the evidence base for minerals plans'. Such an assessment is proposed for the joint Waste and Minerals Local Plan to be prepared with North Yorkshire County Council and North York Moors National Park Authority.

Brick Clay

3.3.13 Brick is a traditional building material within City of York and it is likely that there will continue to be a demand for bricks for new building and refurbishing existing buildings throughout the plan period. As pointed out in paragraph 3.2.4 there has been no brick making industry in York for over 50 years.

3.3.14 The NPPF states that mineral planning authorities (MPAs) should plan for a steady and adequate supply of industrial minerals by co-operating with neighbouring authorities and for brick clay, providing a stock of permitted reserves of at least 25 years supply. There has been no interest expressed by mineral operators during the preparation of the Local Plan (or the Core Strategy) in the extraction of brick clay and with no recent extraction it is considered highly unlikely that there will be any requirement from the City of York area during the plan period. However, this issue will be considered further through the evidence base work for the joint Waste and Minerals Local Plan.

Coal

3.3.15 As stated in paragraph 3.2.4 whilst it is known that deep coal resources underlie much of the City of York area there has been no recent interest expressed by the industry in working. The NPPF does not require MPAs to

make provision for energy minerals in their local plans but states that MPAs should indicate any areas where coal extraction and the disposal of colliery spoil may be acceptable. It is considered highly unlikely that there will be any requirement from the City of York area during the plan period, however, this issue will be considered further through the evidence base work for the joint Waste and Minerals Local Plan.

Hydrocarbons

3.3.16 The NPPF states that MPAs should distinguish between the three phases of development when planning for on-shore oil and gas development and address constraints on production and processing within areas that are licensed for exploration or production. It is not considered that these requirements apply in the City of York area where there has been no proven existence of resources or licenses.

Coal-bed Methane

3.3.17 As stated in paragraph 3.2.4 the Coal Authority has granted licenses for exploration in extensive areas in the west of the Council area and a smaller area on the eastern boundary. The NPPF states that MPAs should encourage the capture and use of methane from coal mines in active and abandoned coalfield areas. Although there has been no interest expressed by the coal industry in exploration in the licensed areas, this issue will be considered further through the evidence base work for the joint Waste and Minerals Local Plan.

4. NEXT STEPS

4.1.1 As stated in paragraph this technical paper is an evolving document which will be updated as more information becomes available. An early revision will include additional information available from the Environment Agency's Waste Data Interrogator. Further information will become available over the next 12 months as new evidence base studies for the Joint Waste and Minerals Local Plan to be prepared with North Yorkshire County Council and North York Moors National Park Authority are completed. This technical paper will be updated to include relevant information from these studies. In addition information on the joint plan can be found on North Yorkshire County Council's website at www.northyorks.gov.uk/mwjointplan.